

NOTICE OF MEETING AND AGENDA

Pursuant to the Massachusetts Open Meeting Law, G.L. c. 30A, §§ 18-25, and Chapter 22 of the Acts of 2022, notice is hereby given of a meeting of the **Massachusetts Gaming Commission**. The meeting will take place:

Wednesday | June 22, 2022 | 10:00 a.m.
VIA CONFERENCE CALL NUMBER: 1-646-741-5292
MEETING ID/ PARTICIPANT CODE: 111 608 5663

Please note that the Commission will conduct this public meeting remotely utilizing collaboration technology. Use of this technology is intended to ensure an adequate, alternative means of public access to the Commission’s deliberations for any interested member of the public. If there is any technical problem with the Commission’s remote connection, an alternative conference line will be noticed immediately on www.massgaming.com.

All documents and presentations related to this agenda will be available for your review on the morning of the meeting date by visiting our website and clicking on the News header, under the Meeting Archives drop-down.

PUBLIC MEETING - #383

1. Call to Order
2. Approval of Meeting Minutes **VOTE**
3. Administrative Update - Karen Wells, Executive Director
 - a. On-site Casino Updates – Bruce Band, Assistant Director, Gaming Agents Division Chief
 - b. Spirit of Massachusetts and Racing Update – Dr. Alex Lightbown, Director of Racing and Chief Veterinarian
4. Research and Responsible Gaming – Mark Vander Linden, Director
 - a. “Bridging the Research to Practice Gap: Context Matters! Understanding the Life Circumstances of Hispanic Residents of a Casino Neighborhood.” - Dr. Rodolfo R. Vega, Senior Consultant at John Snow, Inc.; Zulmalee Rivera, Member Support & Event Coordinator at Neighbor to Neighbor
5. Finance Division – Derek Lennon, Chief Financial Officer
 - a. FY23 Budget and Public Comment Update **VOTE**

6. Community Affairs Division – Joe Delaney, Chief of Community Affairs; Mary Thurlow, Senior Program Manager
 - a. Encore Boston Harbor East Broadway Development -Extension of Time Request **VOTE**
 - b. Community Mitigation Fund Applications **VOTE**
 - c. Holyoke Community College Workforce Grant Amendment – Lily Wallace, Program Assistant **VOTE**

7. Legal Division – Todd Grossman, General Counsel
 - a. Public Records Request Policy, Procedure and Technology – Karen Wells, Executive Director; Carrie Torrissi, Associate General Counsel; Katrina Jagroop-Gomes, Chief Information Officer **VOTE**
 - b. 205 CMR 133: Voluntary Self Exclusion – and Amended Small Business Impact Statement, for approval to finalize the promulgation process – Carrie Torrissi, Associate General Counsel **VOTE**
 - c. 205 CMR 103: Access to and Confidentiality of Commission Records - and Small Business Impact Statement, for approval to begin the promulgation process — Carrie Torrissi, Associate General Counsel **VOTE**
 - d. 205 CMR 115.01 (4): Continuing Duty — Todd Grossman, General Counsel

8. Approach to Determining Technical Standards and Conducting Compliance Testing in Sports Wagering - Karen Wells, Executive Director **VOTE**

9. Commissioner Updates

10. Other Business - Reserved for matters the Chair did not reasonably anticipate at the time of posting.

I certify that on this date, this Notice was posted as “Massachusetts Gaming Commission Meeting” at www.massgaming.com and emailed to regs@sec.state.ma.us. Posted to Website: June 16, 2022 | 4:30 p.m.

June 15, 2022

Cathy Judd-Stein
Chair

This meeting is open to all interested individuals. If there are any questions pertaining to accessibility and/or further assistance is needed, please email crystal.beauchemin@massgaming.gov.

2022 Plainridge Park Casino Calendar

April						
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★ Sunday, July 24 ★
First Post 2:00pm ET

Spirit of Massachusetts Trot

Clara Barton Pace

- 4:00pm ET
- 2:00pm ET
- 1:00pm ET

MGC Research Snapshot

Understanding the Life Circumstances of Hispanic Residents of a Casino Neighborhood May 2022

What you need to know

This community-based participatory study explores the relationship between gambling and the life context of Hispanics living in proximity to a casino. This study supports the implementation of evidence-based interventions by incorporating the life experiences of members of under-resourced communities in effort to mitigate the harmful effects of problem gambling.

What is this research about?

The purpose of this study was:

- 1) To describe the life context of Hispanic individuals residing in Springfield, Massachusetts, to advance the implementation of evidence-based, culturally responsive intervention to mitigate the effects of problem gambling,
- 2) To find ways to incorporate the voices of Hispanics, a group disproportionately impacted by problem gambling, into the design of evidence-based interventions, and
- 3) To uncover the theoretical implications of an understanding of life context on the effective implementation of evidence-based interventions with minoritized groups.

- The JSI team got to know the community and built the research capacity to form a community research team (CRT).
- Recruited eight (two men and six women) community residents to form the CRT and built their research capacity through participatory learning activities.
- The CRT conducted a variety of research activities, including: formulating a method to map out gun violence incidents in their community, conducting interviews with 24 Hispanic community residents, and conducting a visual analysis of the physical environment surrounding the MGM casino, located within their community.

What did the researchers do?

The study used a community-based participatory research approach to explore the relationship between gambling and the life context of Hispanics living in Springfield, Massachusetts. This study lays the groundwork in incorporating the life experiences of members of under-resourced communities in efforts to mitigate the harmful effects of problem gambling.

What did the researchers find?

Findings revealed a community overwhelmed by numerous stressors. These include food and job insecurity, housing unaffordability and inaccessibility to local residents, chronic disease, mental health problems, crime, unemployment, fear of becoming homeless because of inability to pay rent, as well as the impact of the COVID-19 pandemic.

What characterizes the life context in which study participants reside?



- **Intersectionality:** Interconnected life events and circumstances
- **Intergenerational component:** Past experiences of family members with problem gambling
- **Historical:** Past events that continue to exert their influence in current generations
- **Cultural:** Values and beliefs that individuals use to develop a sense of agency
- **Ethical/Moral:** Personal beliefs about what is right or wrong
- **Force Majeure:** Unpredictable events that have a major impact on the community
- **Safety:** The desire to be free from harm
- **Leisure:** The quality of free time to engage in recreational or social activities
- **Societal:** Extensive documentation of structural racism in Springfield

Other key findings:

- Stress and trauma are pervasive in the respondents’ life context, manifesting itself in the areas of family, neighborhood, employment, and housing.
- Respondents held distinct and often opposing views about the presence of the MGM casino in their community.
- Responders noted the normative aspects of gambling, particularly as a family activity, as well as its negative consequences
- COVID-19 had an impact on Respondents’ lives.

How does the life context relate to gambling and problem gambling?

A thorough understanding of the life context of the participants uncovered a community-level stress model to theorize a mechanism by which the life context of the respondents relates to gambling. Findings revealed that Springfield residents experiencing chronic stress might visit a casino for distraction, to seek relief, to leave worries behind, and to escape an unpleasant reality, among other reasons. Exposure to gambling opportunities to relieve stress could plausibly lead to problem gambling.

How can components of the life context be incorporated into successful strategies to reduce the effects of problem gambling?

- Incorporate a trauma-informed approach
- Use multi-level, multi-domain interventions
- Embrace culture
- Place matters
- Incorporate social support
- Address racism

Study findings also recommend providing resources or strengthening existing ones to improve the community’s ability to cope with stress and building capacity of community-based organizations to advocate for strategies to address health equity.

About the researchers

Rodolfo R. Vega, (JSI), Andrea Royo (JSI) , Zulmalee Rivera, (Neighbor to Neighbor) Alexandra Bonnet (JSI), Kieto Mahania (JSI) and Jaqueline Velez (Neighbor to Neighbor). For more information about this study, please contact Rudy at rodolfo_vega@jsi.com.

Citation

Vega, R. R.; Royo, A.; Rivera Z.; Bonnet, A., Mahania, K., & Velez, J. (2022). Bridging the Research to Practice Gap: Context Matters! Understanding the Life Circumstances of Hispanic Residents of a Casino Neighborhood. Massachusetts Gaming Commission, Boston, MA.

Key Words

Community-engaged research; Implementation science, Context, Problem Gambling; Springfield; Hispanic.

Acknowledgements

Financial support for this study comes from the Massachusetts Gaming Commission through the Public Health Trust Fund. This multi-year project was competitively bid and awarded to the JSI Research and Training Institute in September 2020.

About this Snapshot

MGC Snapshots are intended to translate lengthy and sometimes technical reports into an easily understandable overview of the research. The findings and recommendations in the Snapshot are those of the researchers and do not necessarily reflect the position of the MGC.





MAY 2022

**BRIDGING THE RESEARCH TO PRACTICE GAP:
CONTEXT MATTERS: UNDERSTANDING THE
LIFE CIRCUMSTANCES OF HISPANIC
RESIDENTS OF A CASINO NEIGHBORHOOD IN
SPRINGFIELD, MA**

Acknowledgements

The authors would like to gratefully acknowledge the Neighbor to Neighbor Community Research Team- Zulmalee Rivera, Jaqueline Velez, Jordan Hawkins- Dordon, Bexie Lopez, Ivelisse Rodriguez, Yolanda Cancel, Haydee Lambert-Rodrigues, and Juan Machicote- who welcomed us to the City of Springfield and worked relentlessly toward justice.

We would also like to thank Mark Vander Linden, Director of Research and Responsible Gaming, and Marie-Claire Flores-Pajot, Research Manager at the Massachusetts Gaming Commission, for their leadership and support; Victor Ortiz, Director MA Department of Public Health, Office of Problem Gambling Services for his guidance, and Christopher Bruce for his contribution to GIS data, and Neryna Cuadrado for report formatting. In appreciation, we acknowledge the JSI Team- Corina Pinto for her valuable insights, and Angel Maldonado Tejada for copy editing. We also thank the three anonymous reviewers that offered their useful suggestions.

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Executive Summary

Purpose. This study aims to lay the groundwork for a call to action for researchers and policymakers to incorporate the life experiences of members of under-resourced communities in their efforts to mitigate the harmful effects of problem gambling.

Methods. The study used a community-based participatory research (CBPR) approach within a qualitative descriptive exploratory research design involving a small purposive sample. The study consisted of three phases. The first phase was devoted to getting to know the community and building the research capacity to form a community research team (CRT) through participatory learning activities. Recruitment and capacity building assistance on the basics of research and problem gambling comprised the second stage. During the third and last stage of the study, the CRT conducted a variety of research activities that included formulating a method to map out gun violence incidents in their community, conducting interviews with community residents, and conducting visual analysis of the physical environment surrounding the MGM casino, located within their community.

Findings. Data analysis revealed a community besieged by numerous stressors throughout many life contexts, such as food and job insecurity, housing unaffordability, suicide, chronic disease, mental health problems, crime, unemployment, fear of becoming homeless because of the inability to pay rent, as well as the impact of the COVID-19 pandemic.

Discussion. The study addressed three overarching questions:

Y **What characterizes the life context in which study participants reside?**

The data yielded a detailed and complex description of a textured life context.

Ten characteristics of participants' life context were identified.

Y **How does the life context relate to gambling and problem gambling?**

We employed a community-level stress model to theorize a mechanism by which the life context of the respondents relates to gambling. Stress becomes chronic when ongoing adverse events overwhelm an individual's psychological, material, and biological resources. We hypothesized that Springfield residents experiencing chronic stress might visit a casino for distraction, to seek relief, to leave worries behind, and to escape an unpleasant reality, among other reasons.

Y **How can components of the life context be incorporated into successful strategies to reduce the effects of problem gambling?**

The following strategies emerged from the contextual features identified in the study: incorporate a trauma-informed approach; use multi-level, multi-domain interventions; embrace culture; place matters; incorporate social support; and address racism.

Recommendations. A community-level stress model lends itself to actions well aligned with a public health response. For instance, if the experience of stress entails the depletion of the person's material, psychological and biological resources because of the strains created by adverse life events, an appropriate solution— at the community level— would be to provide needed resources or strengthen existing ones to improve the community's ability to cope with such stress. The gaming network— the casino industry, state lottery, community leaders, and policymakers— has needed social, financial, and political capital to support interventions at multiple eco-systemic levels.

Introduction

On November 22, 2011, Governor Deval Patrick signed An Act Establishing Expanded Gaming in the Commonwealth- legislation that allowed for the construction of three casinos, which was expected to “create thousands of jobs for Massachusetts residents in the areas of construction, hospitality, and tourism while also generating \$300-\$500 million in new revenue for the Commonwealth”.¹ The Massachusetts Gaming Commission (MGC) is a five-member independent body created by the state legislature to guide the implementation of this expanded gaming law. The Commission was also charged with the development of an annual research agenda to understand the social and economic effects of expanding gaming in the Commonwealth and with carrying out a study on problem gambling, existing prevention, and treatment programs.²

The MGC funded this study with the purpose of advancing understanding of the impact of the introduction of casino gambling in Massachusetts’s communities through a community participatory mechanism. The study focuses on Hispanics/Latinos³ living in Springfield, MA, a host casino community. Among all Massachusetts racial and ethnic groups, Hispanics represent the largest number of people living under the poverty level⁴. The voices, experiences, and perspectives of marginalized populations have a very limited presence in the field of gambling and problem gambling research. (Ortiz, 2017; Ortiz & Hernández, 2019; Ortiz et al., 2021). It is known that communities of color are disproportionately affected by gambling. Further, problem gambling is also directly associated with social and economic conditions that shape the lives of folks in poor communities, namely social, educational, and economic disadvantages. (Alegria et al., 2009; Hahmann et al., 2020; Hahmann & Matheson, 2017; Ortiz & Hernández, 2019; Welte et al., 2015) This dearth of knowledge about the roles of race and ethnicity in gambling among marginalized populations has resulted in an incongruous state of affairs for gambling researchers and policymakers: knowledge is lacking about the populations that are more likely to experience disproportionate negative consequences from gambling

¹ <https://massgaming.com/about/expanded-gaming-act/>

² <https://massgaming.com/the-commission/mission-values/>

³ The terms “Hispanic” and “Latino(s)” will be use interchangeably to denote Hispanics or Latino refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.

⁴ <https://www.kff.org/other/state-indicator/poverty-rate-by-raceethnicity/?dataView=1¤tTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

and problem gambling. The exclusion of sociocultural perspectives and experiences of members of disadvantaged groups from this research and policymaking leaves out a fundamental component when designing much-needed evidence-based interventions to reduce the risk of gambling: the life context that may be contributing to problem gambling. The lack of knowledge about the life context of those impacted by gambling and problem gambling also limits the discourse on the mechanisms by which social determinants of health result in health inequities. The purpose of this study is to lay the groundwork to nudge researchers and policymakers into resolute efforts to incorporate into their work the life experiences of members of oppressed and under-resourced communities in relation to gambling and problem gambling.

Importance of including contextual variables in research studies and social interventions

Implementation sciences have long advocated for the inclusion of context in developing cost-effective, evidence-based interventions that work for everyone. (Craig et al., 2018; Daniels, 2018; Edwards et al., 2014; Nilsen & Bernhardsson, 2019). In fact, implementation scientists point out that a large percentage of preventive therapies that succeed in clinical trials or laboratories fail in real-world settings (Tyler, 2018). In addition, the lack of understanding of the context where implementation will happen contributes to the long delay (up to 17 years) in moving evidence-based interventions from a research setting to the community for implementation (Morris et al., 2011).

The inclusion of context in research studies and policy interventions contributes to the creation of “more appropriate, implementable, effective, and sustainable interventions that either work well in a specific context or have sufficient flexibility built into their design to work across a range of contexts” (Craig et al., 2018). In addition, it:

- ✓ Helps explain how an intervention works or why it fails
- ✓ Yields an explanation of causes of differential impact across race, gender, ethnicity
- ✓ Facilitates the replicability and sustainability of interventions.
- ✓ Ensures alignment with the priorities of the community
- ✓ Engages key community stakeholders who will lead and champion an intervention.

In this study, we focused on the concept of life context. As employed in this study, it refers to the physical and psychosocial features of the places where people live (i.e., housing, neighborhood), work (i.e., employment), and play (i.e., entertainment). Context is the stage where social determinants of health, culture, and behavior play out. This context also includes elements of culture, history, and the intersection of individual and environmental factors that are likely to shape the gambling experience of those living in those settings.

The study population

This community-based participatory study represents a modest effort at closing the knowledge gap about the relationship between gambling and the life context of Hispanics living in Springfield, Massachusetts, one of the Commonwealth's casino host communities. Located in Western Massachusetts, Springfield is the second-largest city in the state and is the seat of Hampden County. Most Hispanics living in Springfield are Puerto Rican. Many of them live in or in proximity to the poorest zip code in the Commonwealth, as Springfield sits in Hampden County, which also reports the poorest health outcomes among Massachusetts residents.⁵ In 2010, Springfield's Hispanic population was the most segregated in the United States.⁶ Springfield's residents have also endured numerous adverse events throughout the decades, including redlining⁷ in the 1930s, the Puerto Rican riots in the 1970s⁸, and a tornado in 2011⁹. The city has also earned unwanted designations such as the asthma capital of the United States and the second most segregated school district in the nation for Hispanics¹⁰ and the most segregated city in the nation for Hispanics.¹¹ Few communities in the United States experience as many adversities as those faced by the Hispanic community in Springfield.

In recent years, the MGC has sponsored several studies in Springfield that shed light on the socio-economic conditions of the city as it relates to the presence of the MGM casino. Salient findings from these previous studies include the following:

*Employment*¹²:

- Y Residents from other towns hold 60 percent of the jobs in Springfield.
- Y In 2013, the unemployment rate in Springfield was 11.1 percent, markedly higher than the Massachusetts rate of 7.1 percent.

⁵ <https://www.publichealthwm.org/what-we-do/coalition-building/chip>

⁶ <https://www.psc.isr.umich.edu/dis/census/segregation2010.html>

⁷ https://www.springfield-ma.gov/planning/fileadmin/community_dev/Fair%20Housing%20AI%20FINAL.pdf

⁸ <https://www.newenglandhistoricalsociety.com/new-englands-forgotten-puerto-rican-riots/>

⁹ <https://storymaps.arcgis.com/stories/272ead74dfe348a4a0f10b3b619c9003>

¹⁰ https://www.masslive.com/news/2010/09/segregation_in_springfield_boston_manchester_massachusetts_schools.html

¹¹ <http://www.census.gov/2010Census/FREY2010HSP100MetroSeg.xls>

¹² https://massgaming.com/wp-content/uploads/Host-Community-Economic-Profiles-Springfield_10.20.2015_Report.pdf

Crime most likely influenced by the casino¹³:

- ∨ A fairly small increase in drunk driving.
- ∨ An increase in shoplifting and other crimes at 24-hour facilities in the immediate block of the casino, including a CVS pharmacy and a Pride gas station.
- ∨ Increases in traffic-related complaints in some communities and along Interstate Highways
- ∨ An increase in criminal activity at Union Station in Springfield.

Economic Impact by Casino¹⁴:

- ∨ Upon opening, MGM Springfield employed just over 3,000 employees, and this number fell by over 30 percent over the course of MGM Springfield’s first year of operation.
- ∨ Three-quarters of MGM Springfield workers held full-time positions at the casino.
- ∨ The majority of MGM Springfield’s employees live in the Pioneer Valley region of Massachusetts (i.e., the portion of the Connecticut River Valley located in Massachusetts which corresponds to Springfield), with the remainder of workers are mostly located out of state, primarily in Northern Connecticut.
- ∨ MGM Springfield employees living in the Pioneer Valley had a lower average hourly wage than employees living in other places, which might be explained by a concentration of lower-wage workers living closer to the casino and in Springfield.
- ∨ Payroll employment, visitation, and gaming revenue have fallen since the opening of the casino.

Purpose of the study

The purpose of this qualitative study was threefold:

- 1) to describe the life context of Hispanic individuals residing in Springfield, Massachusetts, and its relevance towards mitigating problem gambling;
- 2) to find ways to incorporate the voices of Hispanics, a group disproportionately impacted by problem gambling in the design of evidence-based interventions, and
- 3) to propose a theoretical approach aligned with the way contextual life factors influence problem gambling.

Informed by the community-based participatory research (CBPR), a longstanding anthropological and sociological approach, this study zeroed in on the participants' lived experiences; participants were considered subject matter experts, and thus their opinions and experiences were vital elements to inform future research. Participants' statements and viewpoints do not imply causality but invite the reader to explore new alternatives to longstanding streams of research that do not include these perspectives.

¹³ <https://massgaming.com/wp-content/uploads/Analysis-of-Changes-in-Police-Data-Following-18-Months-of-Activity-at-MGM-Springfield-3.24.21.pdf>

¹⁴ https://massgaming.com/wp-content/uploads/MGM-Springfield-First-Year-of-Operation-Economic-Impacts-Report-9.20_Report.pdf

Theoretical approach

This study borrows elements from the socio-ecological theory of prevention (Bronfenbrenner, Urie 1979) and implementation science. The socio-ecological theory recognizes that behavior is affected and subsequently displayed in multiple contexts (referred to as “ecological systems” in the parlance of socio-ecological theory) that include three systems: the individual (and family), community, and society. Within a socio-ecological approach, these systems are interconnected and impact one another. For example, a person's or a community's well-being is seen as the result of numerous effects and interactions happening among various systems or contexts, including people, families, communities, and the political landscape. When applied to the study of problem gambling, the socio-ecological approach acknowledges that the effects of problem gambling extend beyond the individual and could also impact the family, workplace, and community in which the participants live. Thus, in this study, we explored the relationship between problem gambling and contexts such as the family, work, housing, and neighborhood.

Implementation sciences is the field of study that delves into how to bridge the gap between what is known by science and what can be done or implemented by practitioners. In other words, it is concerned with identifying strategies to bring evidence-based interventions from the research setting to the community. Implementation science aims at answering questions such as: what works, how it works, for whom, and under what contextual circumstances (Roger, Fitzpatrick & Conner, 2012; Squires et al., 2019).

Methods

The study used a community-based participatory research (CBPR) method within a qualitative descriptive exploratory research design, which involves the use of purposive small samples. The integration of CBPR methodology into the chosen research design serves two purposes: it is aligned with the Massachusetts Gaming Commission (MGC) mission of involving communities, and it is the recommended methodology for understanding a research subject from the perspective of individuals who are touched by

the problem (Tremblay, Martin, McComber, et al., 2018). Accordingly, CBPR gives voice to members of a community who have endured and resisted structural racism and its many consequences for generations. The community members of the research team have been affected by the presence of the casino (located in their neighborhood) and the negative consequences associated with gambling. The study's direction and boundaries were defined by the lead investigator. The exact research questions, however, were fine-tuned by the team of community researchers hired for this project.

The study consisted of three phases. The first phase (months 1-6) was devoted to getting to know the community. This process involved reviewing community needs assessments conducted in the past and other archival publications. The team also contacted community leaders and reached out to residents, inviting them to participate in this study. All these efforts culminated with the involvement of Neighbor to Neighbor, Inc. (N2N), a social justice organization dedicated to advocate for the rights of disenfranchised residents. N2N facilitated the recruitment and engagement of what turned out to be the community research team (CRT).

The second phase (months 7-12) began with the recruitment of the eight (two men and six women) community residents to form the CRT. They met with JSI staff on a weekly basis for one-to-two-hour sessions for 3 consecutive months. The meetings took place at N2N facilities, and each participant was compensated \$20 per hour. The goal of this phase was to build the research capacity of the CRT through participatory learning activities. The capacity building activities were delivered using five modules: Basics of Research; Introduction to Problem Gambling; The Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) study; Responsible Gambling; and The Social History of Springfield. At the end of the second phase, the CRT selected a research topic that they wanted to add to the study. The topic they chose was an exploration of community residents' beliefs, perceptions, and life experiences related to gambling.

The CRT spent the next 8 months implementing research activities. During this stage the CRT conducted a variety of research activities that included devising a method to map out gun violence incidents in their community, interviews with community residents, and a visual analysis of the physical environment surrounding the casino. For the interviews, the CRT developed an interview guide and protocol and applied for IRB approval. They were granted an exemption because the inclusion criteria did not call for the participation of minors and there was no collection of personal identifying information.

Sample description

The final sample consisted of 24 Hispanic residents of zip codes 01103 and 01105 in Springfield, MA. There were four males and 20 females, all over 18-year of age. They completed the Problem Gambling Severity Index Mini-Screen--a 3-item scale developed by Volberg and Williams (2012) derived from the original 9-item PGSI. The profiles yielded by this measure depicted ten respondents as non-gamblers, two as low-risk gamblers, three as moderate-risk gamblers, and one as a high-risk gambler. Four participants did not answer the profile.

Sample selection and distribution

N2N provided contact information for all Springfield residents through their VAN software, the leading political campaigning technology provider to Democratic and progressive campaigns and organizations. This software is built on a database that contains voter registration contact information. The CRT compiled a list of 684 Hispanic residents of zip codes 01103 (where the MGM casino is located) and zip code 01105 (contiguous to 01103, and the poorest zip code in Massachusetts). The list was distributed among 4 CRT members. It took numerous calls of effort to recruit participants over the phone. Sometimes it took up to 60 phone calls to get one call answered. And often, that one person that answered would refuse participation.

At the onset of the interview, the participants provided verbal consent to both the interview and the recording of the interview for eventual transcription. The research team provided an overview of the content of the interview and notified the participants that they will receive a \$20 stipend upon completion of the interview.

Data collection took place in the Fall/Winter 2020-2021. During this period, the number of COVID-19 infections was beginning to climb and the epidemic was reaching its peak. At that time, Springfield, MA was also designated as a red/high-risk community.¹⁵ All interviews were conducted over the telephone in Spanish and/or English by members of the Community Research Team during the Fall and Winter of 2020. Members of the CRT received formal training on the nature and purpose of the key questions and on how to conduct an interview. The interview script contained the following elements:

- Current concerns regarding their family, neighborhood, employment
- Dealing with COVID-19
- Perceptions of the MGM Casino
- Perceptions of Gambling
- How do they define Responsible Gambling?
- IRB approval

¹⁵ <https://www.springfield-ma.gov/cos/covid/city-of-springfield-covid-19-coronavirus-situational-timeline>

IRB approval

The JSI Institutional Review Board (OHRP IRB00009069 John Snow, Inc.) determined that this study is exempt from human subjects' oversight. The basis of this exemption is CFR 46.101 (b) (2), which covers survey activities without identifiers or sensitive questions that could result in harm; no participants in the study were younger than 18 years of age.

Data analysis

The transcribed interviews were coded by Dr. Vega and Ms. Andrea Royo using MAXQDA, a mixed-method data analysis software program. The data coding process followed the six-step thematic analytical approach recommended by Braun & Clarke (2006). The first two steps involved becoming familiar with the data and generating initial codes. The third coding step entailed connecting codes to generate themes and clustering codes into layered themes. To illustrate, as shown in the textbox, the first theme that emerged was Overall Stress. Within that theme there were quotes related to family, neighborhood crime, and employment context. Those quotes were organized as subthemes within the main theme (Overall Stress). Within each subtheme (e.g., Stress within family context) there were other layers or subthemes (i.e., stress related to childcare, food insecurity and problem gambling). The final coding scheme emerged from a combination of a deductive approach (using codes developed in advance from interview guides) and an inductive approach (using open coding). Upon completion of the coding process, the senior qualitative researcher searched, reviewed, and defined themes. These themes are presented in the results section below.

Theme 1. Overall Stress

Subtheme 1.1 - Stress within family context

- Childcare-related stress
- Food insecurity-related stress
- Problem gambling and relation to drug use as a longstanding problem in the family

Subtheme 1.2 - Stress related to neighborhood crime

- Crime is a daily occurrence
Stealing, prostitution, and shootings not far from casino
- Community members living in fear

Subtheme 1.3. - Stress related to employment context

- Income loss
- Jobs available below living wage
- Job creation, low paying jobs

Subtheme 1.4 - Stress related to housing

- Residents afraid of losing their homes due casino presence
- Home prices going up due to casino presence
- Fear of becoming homeless

Data management

The interviews were audio-recorded and fully transcribed verbatim by a professional transcriber. The recorded interviews have no personal identifiers. Transcripts included speaker identification (i.e., interviewer and respondent, but no personal identifiers), repetition of phrases, overlapping speech, and interruptions. Transcribed data was saved as a Word document and then entered in MAXQDA, which assisted with coding and sorting of qualitative data. To ensure that the data collected is valid, reliable, and accurate, during the interview process, we probed for content and used paraphrasing and reflective listening techniques to confirm reports and understanding of the narratives provided by the respondents.

In the results sections below, we show salient quotes from the participants that exemplify the themes that emerged from the analysis. Because each quote is shown verbatim, it is literally unique to the person. However, the quotes represent clusters of meaning or illustrative themes of lived experiences and views shared by research participants.

Results

The coding schema developed for this study was organized around four overarching themes: 1) Description of the life context of the respondents. This one theme comprises four subthemes (family, neighborhood, employment, and housing) 2) Perceptions and beliefs about gambling and problem gambling; 3) Presence of the MGM casino and 4) Experiences with COVID-19. Please note that the identified themes are not mutually exclusive. For instance, COVID-19 might impact employment which subsequently impacts the person’s finances which simultaneously has an adverse impact on the well-being of the family.

Theme 1. Stress and trauma are pervasive in the respondents' life context, manifesting itself in the areas of family, neighborhood, employment, and housing.

Two respondents succinctly summarized and described the life context of people in the community. Their comments evoke an image of a community besieged by numerous stressors throughout many life contexts, such as food and work insecurity, housing, suicide, chronic disease, mental health problems, and crime. They perceived their current circumstances as a matter of life and death.

Theme: Overall Stress	Interview Quotes
Stress infiltrates many contexts: food, work, housing	The stress is happening, the stress from the COVID, on food, on work, on housing, on all of these other things is compounding. And we have to be able to talk about it. And as a community, we have to come together and say the past being strong men don't need that anymore. Our people are dying, our people are taking their lives. And we need to understand that just like we're now learning about taking care of diabetes, we need to learn to take care of our mental health and have not only the conversations but give people the language to be able to normalize supporting each other, supporting themselves to get that mental health help.
Stress is all pervasive	It's just the whole housing environment. Living in the projects, and all the crime, and all the people. It's just too much, so I guess as I get older and I'm getting my life together to get ready to get myself a house, just to get out of this area.

Subtheme 1.1: Family context

From the perspective of the respondents, all stressors ultimately affected the family. For instance, if a housing or employment issue was discussed, the respondent implied that the main concern was how it would affect the family. Unemployment was also a family stressor; some respondents lost their jobs and were afraid of becoming homeless because they were unable to pay rent. Regarding gambling, many participants mentioned how their family had a history of problem gambling, which affected the younger generation either positively (avoiding gambling activities all together) or negatively (association with problem gambling). Regarding the COVID-19 pandemic, participants were worried about the consistent stress of managing a pandemic. Specifically, they spoke about the impact of stress on their family related to homeschooling; managing online learning was a serious stressor for families.

Theme: Family Context	Interview Quotes
<p>Problem gambling and relation to drug use as a longstanding problem in the family. The quote also depicts intergenerational aspects of problem gambling</p>	<p>Well, actually in my family, they had ... In my father's side of the family, they had two pass times. One of them was gambling on horses and numbers and the other was shooting heroin, right, sniffing and shooting heroin. So, a lot of my family was affected by AIDS, but because I knew this growing up, I avoided gambling. You know what I'm saying? And I avoided heavy hard drugs because of that. But my family basically still has habit and they still gamble, very heavily.</p>
<p>Stress of childcare</p>	<p>he wants to stop [working?] because of the stress of childcare, but then that's a financial burden to the family. A huge loss if she were to stop. So, for me personally, I'm okay right now.</p>
<p>Stress of food insecurity</p>	<p>For me, it's horrible, because if you think about it, just to get the money, just to get the food, sometimes you got to be asking other people, family members, just for food. You know what I mean? ...most of the time, you got to go places to get the food, like church and stuff like that. We got to go... I asked my other family members for food so you can have in your house. You know what I mean? And most of these people that listen to us, and [inaudible projects, they can tell you about it. Everybody can tell you about it, just for the food supplies, and people are scared about the COVID-19, fighting over food and fighting over things.</p>
<p>Family losses due to COVID</p>	<p>I lost some family, some family survived, some friends.</p>
<p>Stress of crime in the neighborhood forcing families to move out of state</p>	<p>You know what I mean? And they're scared to say something They see something, they don't want to say whatever they see because it's guns, drugs, all type of stuff, police involved. And this is a tough neighborhood. That's the reason why some of my family move out from Springfield, Massachusetts to Pennsylvania.</p>

Subtheme 1.2: Neighborhood Crime

The main stressor present in the neighborhood context is crime—a participant perceived crime as a daily occurrence. The crime was characterized by stealing, sex work, shootings, break-ins, and drug use. Crime and drug use occurred quite close to the area regarding the casino. Below are specific quotes showing the relationship between neighborhoods and crime.

Theme: Neighborhood Crime Context	Interview Quotes
Crime is a daily occurrence	I feel like the crime, it's something that really happens daily.
Stealing, prostitution, shootings, not far from casino. Locus St as a hotspot	It's a little far from the new casino, but from Locust St. and down, you can see all these people walking back and forth, the same people every day, the same people every day, up and down selling stuff, stealing, prostitution. And what I live is, you got to live quietly. You cannot be saying, "Oh, this person shoot somebody." You got to be quiet in here. You can't even say anything to the police officer. "Listen, now, I see this person shooting," blah, blah, blah, because they're hunting you down for it to kill you.
Community members live in fear.	So, that's why the whole neighborhood is scared to say something most of the time. Everybody's scared to say something, especially my neighborhood. You know what I mean? And they're scared to say something. They see something, they don't want to say whatever they see because it's guns, drugs, all type of stuff, police involved. And this is a tough neighborhood. That's the reason why some of my family move out from Springfield, Massachusetts to Pennsylvania. And even Pennsylvania is one of the worst places to live, anyways. But it's all depending where you live at. They're trying to do a better life. That's what they're trying to do.
Drug use continues away from the casino	Now in that area over there, they manicured the area, but I think that the substance abuse and all the crime that was there before continue to the same magnitude. The only thing is they have kept it away from the casino
Break-ins and substance use concerns among Latinos	So, I was very concerned about break in crimes, not so much in downtown because there's not physical home houses in that area. But further down into main street or up into state street, I live, yes, I'm closer to St. James, but it's a [hop] skip and a jump ...literally the exit is four blocks from my house. So, I was concerned about crime in that sense. In terms of health, I was concerned for particularly the community of color and Latinos, because alcoholism is very high.

Crime	Sometimes it was people on motorcycle. I mean, I never seen them, but I hear them, that there was a motorcycle and shooting the air, boom, boom, boom, boom. And then next thing you know, about a wink, somebody gets shot and killed, and this is crazy, because we got kids around. We got people, innocent people, walking around.] You know what I mean?
Drug activity, shootings, prostitution	That's another thing. That's another thing, about the crime scene, drugs, people walking back and forth with the drugs, drug activities everywhere, shootouts... The neighborhood that I live right now is not a good neighborhood. I'm thinking about to move on, get myself either a house or something, something that I can feel safe, especially when I hang out. I hang out, like, in Belmont or Locust Street. That's one of the area you can see... I don't want to say, because sounds awkward. I don't want to put any women down, because I don't like the way I look the women up there selling themselves, people... Or either guys selling their women. It's crazy.
Prostitution, police doing their job	... like I told you, down the hill, you see prostitution, police officers everywhere. I don't know if they're doing the right job or not. I'm [inaudible 00:19:48] going to leave everything to the police, but it's crazy, like where you can see a lot of things. So, it's nothing really changed. Everything going worse. ... Everything going worse and worse and worse.
Break-ins	Yeah. We've noticed that since the pandemic there's been a lot more random break-ins in our neighborhood. A lot more petty crime going on in our city.

Subtheme 1.3. Respondents are concerned about employment

The main concerns related to employment were low-paying jobs, general job loss and income reduction due to COVID-19.

Theme: Employment	Interview Quotes
Many low paying jobs and part time opportunities available	Honestly, the job situation for our community is harsh. There's a lot of part-time, minimum wage jobs, but those are requiring two jobs to do that and, in the marketplace, now is a lot of places closing. I have concerns that people aren't able to make the money that helps them meet their needs, basic needs food, shelter, transportation.
Unemployment, income loss	Well, I'm working from home 100%. I lost my part-time job, so my income has been reduced and I don't get to see my loved ones as much as I wish I could.
Unemployment	I was being cut back at work. My daughter being out of school, family members being unemployed.
Jobs available, without a living wage	To me, I feel like it's a major impact for an individual who already is living paycheck to paycheck. In regard to those that are

	being employed, again, I don't feel like their benefits are there even hourly wages are enough for, to improve the poverty line.
Job creation, low paying	So, I'm not a super fan of the casino. I'm not a gambler... I just don't see the benefit of it. I mean, a lot of people say, but it brought a lot of jobs and, I guess my counter is, yeah, it brought a lot of jobs, but at the same time, they did bring jobs where that people were making significant salaries and had great benefits and were able to still take care of their families. Like, I don't see that. I see it still, I'm like very minimum wage. You're providing jobs, but how, how is that changing or creating an impact in our communities?

Subtheme 1.4: Concerns related to housing

Most participants shared the belief that all housing prices continue to increase, making it difficult for families to afford buying a home. Participants also shared that price increase is attributed to the presence of the casino.

Theme: Housing	Interview Quotes
Afraid people will lose their homes because of casino presence	I feel people are going to lose their apartments, they are going to lose their [friends]
Home prices going up because of the casino presence	Everything went up, everything went up, even though rent, like I said, they don't want to fix. This is one of them things. Housing don't want to fix anything, and these houses need it.
Fear of becoming homeless	I was worried about losing my home. I was homeless, time ago I was living in a shelter for a year, 20 something years ago. And that is one of my biggest fears of having a little kid with me and becoming homeless again. And I bought this house two years ago. So, when I lost my job, at some point I wasn't able to keep paying the mortgage. So now I'll be able to catch up on my bills and stuff like that. And they instituted a forbearance program. So, it basically stops the payments for six months without affecting my credit and without people calling me to harass me about the mortgage, you know what I mean

Theme 2. Respondents held distinct and often opposing views about the presence of the MGM casino in their community.

Some participants perceived the casino in a positive light; they acknowledged the casino’s contribution to the beautification of Springfield, the entertainment opportunities, and the new job opportunities. Other respondents viewed the casino negatively. They discussed the perceived increase in crime, sex work, and low paying jobs.

Theme: Positive impact of casino	Interview Quotes
Esthetics Value	I feel like the whole area of Springfield looks better now. They did the whole outside of the buildings, they made Springfield look better. And I'd say they're making the revenue better for Springfield. They're making more money for the businesses. And I see some people talk about that they come a little bit far from like Connecticut or a little bit farther to go to the casino, but so far so good. No bad people, no bad vibes. Nothing. So it seems pretty good.
Entertainment value	But yeah, I've been there a couple times, birthday celebrations, and things for other folks, because it was something new to do locally, and have dinner. I've been there for the democratic convention, they had it at one of the restaurants. They're after party thing. Yeah. And I've been there this year too, because again, there's very little to do, and when they opened, that was the activity my family wanted to go to. And I was like, "Really? Okay." First, they went there without me, "but it's fine, it's safe". It's still a pandemic...
Job creation	So do you think in a good way, it's beneficial for the community because? Speaker 2: It helps give people jobs, because now the way everything is, people are losing their jobs. Small businesses are losing their jobs. So, the casino can help them because they need a lot of people, but I know some of them are going to be losing their job because of the

Subtheme 2.1. Some respondents associated the presence of the MGM casino with an increase in crime.

Theme: Increase in crime	Interview Quotes
Increased police presence, prostitution, environment is worsening	It's never been good. Well, the only thing different is Springfield is looking a little better. That's it. But other than that, nothing. Nothing else. Because, like I told you, down the hill, you see prostitution, police officers everywhere. I don't know if they're doing the right job or not. ... So, it's nothing really changed. Everything going worse. That's my. Everything going worse and worse and worse.
Increased crime	It was supposed to have a very big economic impact. I don't think it did have that economic impact in Springfield. It didn't... I believe that crime has been hidden under the rug because in that area there, the crime still continues. If they didn't build, they have all those little police stations and everything. But it's only limited to some areas, but not all the crime [inaudible]. I think that there's more to the social economic piece of it. The increase of the crime rate here in Springfield.
Redistribution of crime	Now in that area over there, they manicured the area, but I think that the substance abuse and all the crime that was there before continuing to the same magnitude. The only thing is they have kept it away from the casino.
Prostitution and health consequences	<p>And I knew there was going to be an increase in sex trafficking in that trade. And if there's trafficking, that is not only the victims who were being traffic, but it's not a victimless crime, because let's say that a man is from here, Springfield goes and he sleeps with one of these women and buys a sexual into mood with that person.</p> <p>Now they go back home, now they're exposing their partner to a potential, sexually transmitted infection. Are we going to see increased rates of those types of things from outside of the community? Are we going to see young women be enticed to work the life? I'm sure they can make a quick buck. I sat in a couple of company meetings and those types of meetings where we were being asked if you see these things.</p> <p>The health from the drinking, the health from the gambling, the health from potential exposure to STIs and trafficking, I had those health concerns...</p> <p>Speaker 1: Has that increased, that last segment you- Speaker 2: Yes.</p>
Prostitution business transition from streets to casino	So, it's not an illusion that there's less women on the street. There are less women on this [street] because they're physically in the casino and in the casino parking garage, and in the restaurants meeting people and going back to the hotel, they are, they were, I don't know if they are now with corona happening. But it was myself and a group of other [colleagues] who were sitting down...and we were looking, and one of the other [colleagues]

	<p>made a comment and said, "Well, that couple looks really different. They look kind of awkward they're... It clearly is a first date." And ' I looked over at my friend and she looked at me and we looked at the [colleague] who said it, and we at the same time, we're like, "That's a hooker."</p> <p>And she looked at me and the other [colleagues] that we all have to hold. I think there were six of us looked at each other and they, the light bulb went off in their head. I said that man is in a three-piece suit, that lady is not.</p> <p>And when you're saying that they look kind of awkward, and that is the first date. I said, "I want you to do some math," and not that two people from different backgrounds don't get together, but I was like, "You know a casino right?" it isn't that it is not happening. It is I think now out of the view of the public, and it is much easier through Craigslist, and Facebook to advertise these, I'm going to say services, but I know that that's not the right word, in code. And if there... I mean, I've sat through multiple meetings where I'm like, "Is that what they're doing now?" And before it was this, and now it's this. So, it is 100% happening is just not happening where people get, they're not on main street anymore, they're not near the bus terminal. They're not near these are-</p>
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Theme 3. Responders noted the normative aspects of gambling, particularly as a family activity, as well as its negative consequences.

There were several quotes demonstrating how gambling activities are part of the family lore, often used as a form of leisure or recreation. Most importantly, one of the quotes shows the intergenerational aspects of gambling in the sense that gambling began with the grandmother. Interviewees would share that intergenerational gambling, that is, grandmother-grandchildren; parents-children dyads, occurs at home. Here it is especially important to note the relation between the Hispanic value of family unity with activities such as gambling.

Theme: Gambling and the Family

Interview Quotes

Gambling as part of family lore	<p>Yeah. And I think also culturally, we, I can say even for my family, we grew up with either playing the numbers. There was the, I don't know if you want to call it illegal, but there was always some sense of..when it came to money, and some people see that as savings because they didn't use the banks. And some people just see it as like a way of ..trying to get quick money.</p>
Gambling as a mean of recreation	<p>In my family, they even bought a table. They did that. When they moved to the States...And before, as you said, it was very low bets, and just for fun. And then it got...It was a regular meeting, each Friday, or each Saturday. Four people, five people. They would even schedule it.</p>

<p>Gambling part of the family lore. Includes extended family.</p>	<p>Well it's happened a lot, ever since I was a little girl, my boy cousins, my brothers, they'll all participate in, like, let's say there's a family gathering, and the cards come out, and they're playing cards, whether that's spades or something, and a couple of hours into it, they'll start playing blackjack</p>
<p>Gambling as an example of family activities</p>	<p>Right, right, right. And the thing is that it's everywhere. Like it doesn't matter if I go to like a Latin family, or a black family. If there's people who like to gamble, especially with blackjack, it's going to happen. It's really a form of entertainment, but they can get hooked on it so bad. I've seen men lose thousands of dollars in one night</p>
<p>Gambling as an intergenerational issue</p>	<p>I would say that my family has had a lot of money and they basically squandered it and I don't really know of any of them owning a home or anything like that, which is disappointing. Right? I don't think that anyone owns their home. So, they would spend thousands and thousands of dollars on horses, but yet don't have ... they insecure any property or bring their kids out of the gutter by paying their college education. I don't really know of anybody in the family that has done that. And it's a pretty big family. And unfortunately, my grandmother grew up ... but I don't know about her growing up, but all the time I've known her, she's also had a gambling problem and she pretty much passed down the gambling problem to all her fruits, to her kids.</p>

Subtheme Theme 3.1 Respondents recognized the signs of problem gambling in self and others

Participants were able to recognize problem gambling in themselves and in others. They were also able to identify specific symptoms of problem gambling (chasing the money, betting more than what they could afford), problem gambling in the life context of the respondents was evident.

Theme: Perceptions of gambling

Interview Quotes

<p>Recognizes gambling problem in self</p>	<p>So unfortunately, I have a serious gambling problem. I mean, I have been doing a lot better, but I had a Keno addiction. And that was probably spending six, \$700 a week on Keno for too, too long. And it did, it affected me a lot because I mean, I could have been doing a lot of other things with my money. It brought me to a place where I had been at paycheck to paycheck because I was so involved in gambling that every single dollar that I came across, I gambled.</p>
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<p>Recognizes gambling problem in others</p>	<p>I think it's kind of a little scary because that's not a... It's scary because some people don't know when to stop. You know what I mean? And people use their mortgage money. Because I see people crying sometimes when I went there, and you will ask them what's wrong. And they said, I just wasted all my mortgage money. That's sad.</p>
<p>Recognizes urge to gamble and chasing the money</p>	<p>I'm always chasing the money. If I'm gambling, I'm chasing the money. And for me, it's not greed, it's just some is not enough So for instance, the other day I went, I put \$20 in the machine and I was up, I think it was three, \$400. And there three, 400, because I was like, oh, at 300 I'm going to stop. Then when I got to 300, I'm like, no because I could get a little more, I could get a little more. I'm like, no, I'm going to play to 250. And that just kept with the 50 and the 50 and the 50 until I had nothing, because I was thinking a little more.</p>

Theme 4. Impact of COVID-19 on Respondents' Lives.

As of the writing of this report, Hampden County, Springfield, had the highest COVID-19 positivity rates and COVID-19 incidence rates in the state of Massachusetts.¹⁶ (Granberry, Valentino, 2020) In Springfield, the Hispanic population had the lowest vaccination rate amongst all racial and ethnic groups.¹⁷

Our data shows that the COVID-19 pandemic has had a significant and disproportionate impact on the lives of the study population. This impact is reflected in the generalized stress and anxiety that participants experience in the areas of employment (loss of income, fear of getting infected); resource access (food, income technology, care) family (isolation, death of a family member; digital divide of remote learning), environment (neighborhood crime) and self (mental health, worsening of problem gambling behavior).

COVID-19 continues to have a dual impact on family and school contexts (remote learning requirements stresses family life) or family and employment context (losing a job leads to reduced family income, which threatens access to food.) The table below shows some salient examples shared by our participants on how COVID-19 impacts life contexts.

¹⁶ <https://www.mass.gov/doc/county-level-positivity-rates-october-6-2021/download>

¹⁷ <https://www.publichealthwm.org/COVID-19/data/Hampden#Dash>

Theme 4: Impact of COVID-19 on different life contexts

Code

Interview Quotes

Community	Disproportionately negative health outcomes for Latinos	I think, and particularly for, besides visitation and things like that, but my concern, I think more in merge for the Latino community is that Latinos and people of color are more likely to have severe outcomes or very bad outcomes, let's say, get COVID. So, they're prone to having, being on the bed longer, having more respiratory issues and increased rates of death as we have seen. My concern would be for the people who survive and actually get better after, because we don't know what any potential long-term complications might be. If this justice is passed, if she is confirmed and they do strike down the ACA and the preexisting conditions clause that many Hispanics were already at a socioeconomic and so disadvantaged will be further harmed by not just the virus itself, but the government by taking away those protections against preexisting conditions which it's very serious possibility.
Employment	Fear of getting infected	we're shut down as of today for two weeks because a couple of employees had tested positive. Seeing that and the fear in everybody's eyes last night, it's sad. You know what I mean. For people to go through that, those emotions. It's almost a tough scene because I go in there, I actually enjoy going in there because everybody's happy. Yeah, last night was a totally different scene.
Employment	People getting laid off and losing jobs	The only thing I worried about was the jobs that we lost when it came to the casino? Honestly. Not that we couldn't go and gamble. I wasn't heartbroken that we couldn't go and gamble. I was just more worried that people got laid off and lost their jobs.
Employment/ Schooling	Stress related to employment, COVID-19 and online schooling	And even now with the school, if you are dependent on working two jobs and you have children... who is at home teaching those children and making sure that they're paying attention to the lessons that are

		going on, and that they're focusing if you're busy being able just trying and keep your family afloat and surviving that's... I'm very, very concerned
Family	Stress supporting the family while a digital gap exists, and COVID-19 restrictions demand of online education	Our kids, our youth, the whole education system, the digital divide. Those are huge concerns for me because even though, I mean, we already have some educational gaps that exist, and I think that COVID is going to make it more of an extreme and our kids are going to be behind even more than ever. And it really impacts kids of color, especially the Latino community. And so how do we support those kids and even family members that can't even help them?
Family: COVID-19 infection	Relative infected with COVID-19	Well, my husband had COVID.
Family: Finance	Reduced income	I was being cut back at work. My daughter being out of school, family members being unemployed.
Family: Food	Access to food	Everybody can tell you about it, just for the food supplies, and people are scared about the COVID-19, fighting over food and fighting over things.
Family	Access to care	So, with my parents, my father has VA health insurance, and I've just been having difficulties working with them through COVID. They don't issue medications unless the doctor sees the patients, but the doctors are not seeing the patients right now because of the pandemic. So, we've just been running into a challenge with getting important medications and it's been a month already. So, that's already stressful.
Family/School	Virtual setting is challenging and reduced social engagement	It's been horrible. I'm staying home. I don't go out, and it's a big change for me and my kids. And then this whole remote learning is really stressful as well.

Family/Work	Death, unemployment	It's highs and lows, it's been a long year. I lost some family, some family survived, some friends. Personally, I am unemployed right now, but I'm okay. I am good, doing a lot of mutual aid work, and whatnot, and I'm good.
Government	Mistrust in government re: COVID-19	I see a lot of distrust in the government from a lot of folks for reasons with the COVID stuff. So even when folks are getting information, there's a certain degree of distrust there. We've continued to have services, social distance, and folks with mask on at the church and everything like that. But I mean, it's just different, it's very different, and the political climate hasn't helped at all, again, with the level of distrust that folks have got with the government.
Mental health	Generalized anxiety	It looks like the world is going to end now, something like that. That's what it feels like. Worried about, hospital-wise, you don't want to go to a hospital because, for example, you think about COVID-19, that's it. And you don't want to go to a hospital, even if you sick or you got a cut or you.... Or, I feel like a prisoner, too, in the same time, because they want to give you fine for a mask or gloves or whatever,
Neighborhood	Crime	since the pandemic there's been a lot more random break-ins in our neighborhood. A lot more petty crime going on in our city. I have to be more vigilant about locking up my house and watching what the kids are doing. Have me more vigilant about keeping an eye on my properties.
Schooling	Stress supporting the family while a digital gap exists, and COVID-19 restrictions demand of online education	Our kids, our youth, the whole education system, the digital divide. Those are huge concerns for me because even though, I mean, we already have some educational gaps that exist, and I think that COVID is going to make it more of an extreme and our kids are going to be behind even more than ever. And it really impacts kids of color, especially the Latino community. And so how do we support those kids and even family members that can't even help them?

Self	Social isolation	Well, it just stopped me from doing a lot of things, like going to the gym, going out, spending time with my family and friends.
Self	Reduced social engagement	Well, it's boring. You got to be in your house. You can't do much. You only go to a couple stores and everything. So yeah, affected a lot and people's lives, definitely.
Self	Fear of getting infected	And I don't come out and I don't come out because I'm afraid of COVID-19.
Self/Family/Work	Financial impact and lack of social engagement	Speaker 2: Well, it just stopped me from doing a lot of things, like going to the gym, going out, spending time with my family and friends. Speaker 1: Yeah. Yeah. Definitely. Did it impact your job? Speaker 2: Yeah. Cut my hours.

Discussion

This study was implemented using a community-based participatory research approach with Hispanic residents of Springfield, MA. They reside in or around one of the most underserved and under-resourced neighborhoods in the state. These participants unreservedly shared their life circumstances, beliefs about gambling, and perceptions of the MGM casino with the research team. In doing so, they actively participated in the knowledge co-creation process and provided answers to important research questions to inform implementation science strategies to address problem gambling:

- √ What characterizes the life context in which study participants reside?
- √ How does the life context relate to gambling and problem gambling?
- √ How can components of the life context be incorporated into successful strategies to reduce the effects of problem gambling?

The questions followed a logical sequence, beginning with examining the overall context. The second question explored contextual features that influence gambling. The third question addresses how to inform evidence-based interventions using knowledge generated from this study.

What characterizes the life context in which study participants reside?

The data yielded a rich and complex description of a textured life context. Nine features and characteristics of the participants’ life context were derived from the data. One of them, the Historical Feature was obtained from archival data and discussed with the CRT during the early part of this research. The table below lists them along with definitions and examples culled from the data. As the table below illustrates, one feature—the built environment—is physically tangible, and the rest are not. Also, the overwhelming majority of the identified features (except leisure, ethics and cultural components), are external factors and adverse events outside of individual's control.

Table 1. Features and characteristics of the life context of study participants		
Features and characteristics	Definition	Examples
Physical	The built environment is the man-made space in which people live, work and recreate themselves on a day-to-day basis (Roof & Oleru 2008)	<ul style="list-style-type: none"> • Neighborhood decay • Tornado damage • Presence of the MGM casino in their neighborhood
Intersectionality	Interconnected life events and circumstances	<ul style="list-style-type: none"> • COVID-19’s multiple impacts on family life • Unemployment leading to financial challenges (e.g., inability to pay rent, food insecurity)
Intergenerational	Past experiences of family members with problem gambling	Problem gambling across family generations
Historical	Past events that keep exerting their influence in current generations	<ul style="list-style-type: none"> • Bisection of the community through the creation of I-91 • Redlining • 1970’s Puerto Rican Riots
Cultural	Values and beliefs that individuals use to develop a sense of agency (i.e., taking responsibilities, making decisions, and establishing priorities)	<ul style="list-style-type: none"> • Familism • Religiosity
Ethical/Moral	Personal beliefs about what is right or wrong	<ul style="list-style-type: none"> • Views about gambling

Table 1. Features and characteristics of the life context of study participants		
Features and characteristics	Definition	Examples
Force Majeure	Unpredictable events that have a major impact on the community	<ul style="list-style-type: none"> • 2011 Tornado • COVID-19 pandemic
Safety	Wanting to be free from harm (Maslow, 1943).	<ul style="list-style-type: none"> • Gun violence • Fear of crime
Leisure	The quality of free time to engage in recreational or social activities	<ul style="list-style-type: none"> • Limited leisure options within the community outside of the casino
Societal	Extensive documentation of structural racism in Springfield	<ul style="list-style-type: none"> • Respondents' first-hand experiences with racism

Specific external and adverse events impacting participants' lives are listed in the table below. They are organized under four clusters: Family, Neighborhood, Employment, and Housing. On a typical day, participants indicated being concerned about many of these events at once: food security, fear of losing a job, ability to pay the rent, street crime, homeschooling due to COVID-19, or losing their home, among others. Note that many of those events impact the community at large rather than a few individuals as concerns about unemployment, housing affordability, fear of crime, food accessibility, lack of childcare plague underserved communities. The fact that many of the external and adverse events identified in the study are widespread in the community is particularly relevant to the answer to the next question.

How does the life context relate to gambling and problem gambling?

The experience of daily external and adverse life events and other circumstances conforms to the conceptualization of the stress experience. The research literature customarily defines stress as the process in which environmental demands strain the individual's capacity to adapt, thus taxing their psychological and biological resources (Cohen, Kessler & Gordon, 1995). When adverse events are ongoing and they overwhelm an individual's psychological, material and biological resources, stress becomes chronic (Mariotti, 2015). In light of the data collected, it could be hypothesized that Springfield residents experiencing chronic stress might visit a casino for distraction, to seek relief, to leave worries behind, and to escape an unpleasant reality, among other reasons.

This plausible explanation is supported by research indicating that chronic stress is linked to two types of gambling: problem gambling (Bergevin et al., 2006; Elman et al., 2010; Felsher et al.,

2010; Greco and Cucci, 2017; Kaufman et al., 2002; McCormick, et al., 2012; Santaella et al., 2013; Taber et al.,1987) and escape gambling (Richard, Blaszczyński, and Nower, 2013).

Because the entire community, defined in this case by a geographical area, is subjected to ongoing, pervasive, persistent, never-ending stressful events, we deem it reasonable to advance the use of community-level stress as a guiding explanatory concept to understand and address problem gambling among Hispanics in Springfield. In doing so, we are calling upon the idea of community-level stress— defined as a pervasive disruption caused by a sequence of stressful events and conditions (Hobfoll et al., 1995 cited by Beehler and colleagues 2021). This community-level stress concept has been successfully used in environmental sciences (Cutter et al., 2003) to address the impact of technological disasters (Couch et al., 2011) and natural disasters (Tierny et al., 2006) in community residents. Figure 1 below illustrates an explanatory model that could be used as a framework to guide the development of both interventions and policies to mitigate the presence of casinos and to reduce problem gambling in underserved communities.

Table 2. External and adverse events impacting the life contexts of the respondents

Family

- Online schooling due to COVID-19
- Lack of childcare
- Food insecurity
- Family losses due to COVID
- Crime in the neighborhood forcing families to move out of state

Neighborhood

- Crime is a daily occurrence
- Robberies, prostitution, shootings, not far from casino.
- Locus St as a hotspot
- Community members living in fear
- Drug use continues away from the casino
- Break-ins
- Drug activity
- Gun shootings
- Prostitution

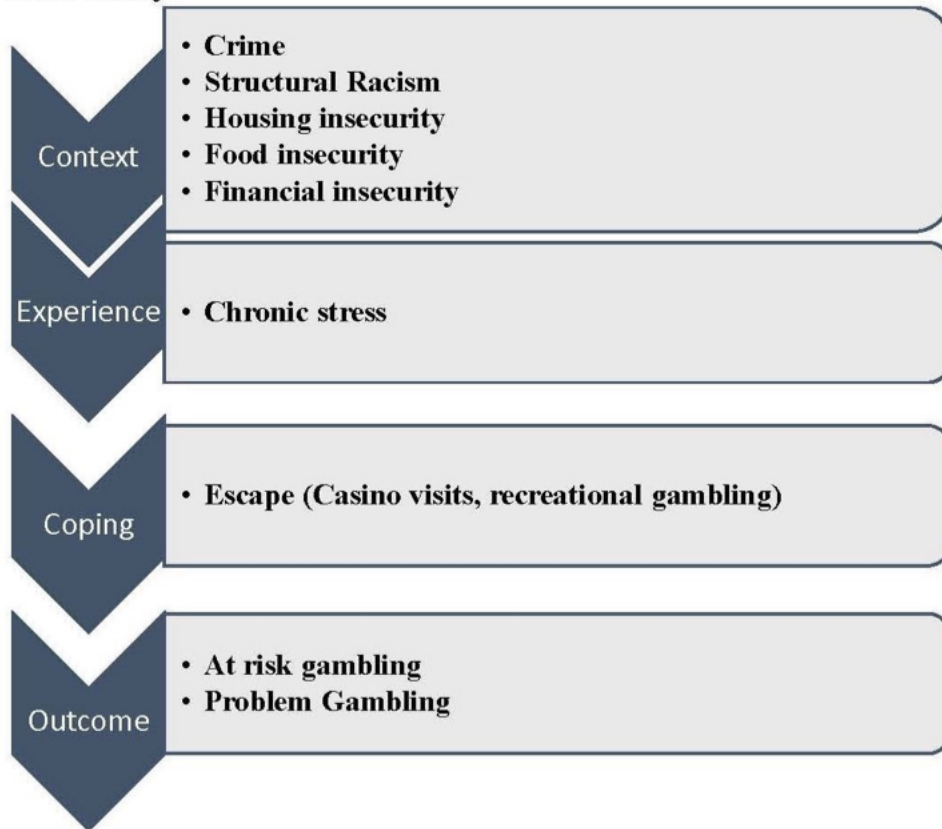
Employment

- Low paying and part- time jobs
- Unemployment, income loss
- Below-living wages
- Fear of losing their jobs
- Going to work during epidemic

Housing

- Fear of losing their homes due to casino presence
- Home prices going up because of the casino presence
- Fear of becoming homeless

Figure 1. An explanatory model of problem gambling based on the concept of community-stress theory



Applying this explanatory model to the data collected in this study, the following could be stated:

The life context of Hispanic residents in under-resourced neighborhoods in Springfield experiences a myriad of widespread external and adverse events. Prolonged exposure to those events results in chronic stress. The MGM casino, located in Springfield, uses advertisement and marketing strategies to offer hope combined with leisure and entertainment opportunities. These offerings could help release stress. A visit to the casino can be an escape to cope with stress for some residents. Exposure to gambling opportunities by visiting a casino could lead to problem gambling.

How can components of the life context be incorporated into successful strategies to reduce the effects of problem gambling?

An in-depth understanding of the context where an intervention will be deployed is a core principle of implementation sciences. In this study, we identified a number of features of the study population’s life context. With this knowledge in hand and using principles of implementation sciences as a tool, we recommend the following ways to address the role of life context when developing future evidence-based interventions to mitigate the deleterious effects of problem gambling.

- Y **Incorporate a trauma-informed approach**
 Problem gambling interventions should incorporate a trauma-informed approach to acknowledge and address the many stressors experienced by its residents.
- Y **Use multi-leveled interventions**
 Interventions should be transportable, flexible, and adaptable to effectively operate at different levels: individual, family, community
- Y **Embrace culture**
 Interventions should integrate core elements of culture. In the case of Hispanic core values such as familism and religiosity may be key to enhance the acceptability of the interventions.
- Y **Place matters**
 The features, strengths, challenges, and opportunities shaping a geographical setting need to be taken into account when developing interventions.
- Y **Incorporate social support**
 Create spaces, events, and opportunities that further strengthen social support and create a sense of community.
- Y **Address racism**
 Identify the pathways by which racism impacts the lives of people of color.

Recommendations

The findings of this study can be viewed as a strong call to members of the gambling stakeholders, i.e., researchers, casino/Lotto executives program planners, community leaders and policymakers to embrace specific context-level actions that can be taken to mitigate the impact of social and health inequities on problem-gambling in underserved and under-resourced communities. The findings presented here shed light on mechanisms by which contextual features can become actionable: incorporation of trauma within psychosocial interventions, the need to address multiple contexts in community-level intervention, as well as the relevance of culture, social support, and structural racism in developing recommendations to mitigate social and health inequities that impact problem gambling.

The MGM Casino is an important and influential component of the life context of Springfield residents. Gambling stakeholders in Massachusetts have the political, financial, and social capital to push through many innovations. They can bring key leaders and decision-makers to the table to ensure ; build capacity of community-based organizations to advocate for strategies to address health equity; join neighborhood redevelopment and revitalization efforts to address blight and physical deterioration of existing structures; address food insecurity, housing affordability, employment, and leisure activities. It could also leverage community benefit dollars from hospitals and health care systems to support resources, interventions, and strategies to address the challenges that Springfield residents face in the contexts of the neighborhood (transportation, crime and safety), family (childcare and food security) housing (affordability), and finances (job creation). In partnership with stakeholders in the public and private sectors, the MGM Casino is well positioned to promote place-based strategies that foster a sense of community and ensure the safety and security of host communities.

In terms of research, the identification and inclusion of contextual features invite the consideration of research theories that can explain how structural racism and social determinants of health result in health inequities. In this study, we proposed a community-level stress model to explain how contextual features are related to problem gambling and a mechanism to address them. For instance, if the experience of stress entails depletion of an individual's material, psychological and biological resources because of the strains created by adverse life events, an appropriate solution— at the community level— would be to provide needed resources or strengthen existing ones to improve the community's ability to cope with stress. In this scenario, a stress model serves as the explanatory variable, while ways for dealing with the individual stressors serve as the intervention.

Limitations

The findings of this study have to be seen in the light of some limitations. Due to the unique circumstances in which the data was collected (in the midst of the COVID-19 epidemic) and due to the specificity of the sample (Hispanics living in proximity to the Springfield MGM Casino), the final number of participants was smaller than anticipated. Because of its small size, the sample might not be representative of the population, thus limiting generalization. In addition, the participants were mostly Puerto Rican and American citizens by birth which grants access to publicly-funded services not available to certain individuals by virtue of their immigration status. In addition, there are other limitations related to the qualitative methodology used in this study such as inability to verify the results objectively. Other than the gun violence incident data, no other quantitative data were collected to verify findings emerging from participant interviews.

Appendices

This study is accompanied by two community led supplementary studies: The Casino's Impact: Community Photovoice Study. The first is a Photovoice, an idea borrowed from Mr. Victor Ortiz, Director, Massachusetts Department of Public Health Office of Problem Gambling Services.^{^1} Photovoice is a community participatory method for visual storytelling to promote positive social change. ^{^2} The second study- Gun Violence Incidents in Springfield 2010-2019 was conducted in collaboration with Mr. Christopher W. Bruce, Crime Analysis Consultant to the Massachusetts Gaming Commission Assistant Professor of Criminal Justice, Husson University. Both studies supplement the conducted interviews to provide a holistic view of the life context of residents in Springfield, as well as the consequences of the MGM Casino.

<https://www.basisonline.org/2020/03/gambling-expansion-public-health-equity-massachusetts.html>

<https://photovoice.org/about-us/>

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Appendix 1.

The Casino's Impact: A Community Photovoice Study

Fall 2020

The Casino's Impact: A Community Photovoice Study

Introduction to Project

Throughout this project, we engaged the community in discussing the MGM Casino's impact in Springfield neighborhoods. We have engaged in two main forms of research: community interviews and environmental scans. Regarding the latter, we hired a member of our research team – Jacqueline Velez- who is a photographer and advocate, to take photos of the areas surrounding the casino using a methodology inspired by Photovoice. This process of storytelling brings visual life to the issues discussed in the interviews. It mirrors the general themes of the casino's proximity and, arguably, contribution to poverty, as well as the community's dedication to continued justice. There is also the foundation of neighborhood stress, which can be measured in line with access to the social determinants of health- economic stability, education access, and quality, healthcare access and quality, social community context, and finally, neighborhood and built environment. This report focuses on the last element. Ms. Velez took over 500 photographs, and selected the below 7 for illustrative purposes. The remaining photographs will be used for future studies including one that is underway presently with the Neighbor to Neighbor Team. The below photographs were selected to highlight the five main findings of this Photovoice Project: (1) the proximity of law and addiction, (2) the parallel of Covid's devastation and the luxury and continued profit of the casino (3) community activism in the wake of racial and economic injustice (4) the detrimental financial impact the casino had on local businesses, and the displacement of residents of color (5) the resiliency of the community.

Casino Proximity to Courthouse

This photo shows the relative proximity of the MGM casino to the Roderick L. Ireland Courthouse in Springfield. In conversation with community members, folks have shared that this image represents not only the physical proximity of issues of addiction and poverty, but also the existential reality that there is a fine line between escapism and hope, and gambling addiction. The issue of the casino attracting crime and taking safety resources away from other areas in the city has been raised in our conversations and can be reflected here. A community member notes this image is “telling of how things are structured for our demise.”



COVID Treatment

Ms. Velez took this photo at the height of the pandemic. The City had set up tents to treat individuals who were COVID positive. She notes that these tents were just a few blocks away from the MGM Casino and right across Friends of the Homeless. A community member shares, “while people are enjoying themselves at the slot machines and poker tables, people are suffering [a few blocks away] from homelessness and this pandemic.”. This image reflects the parallel and duality of two quite different worlds



Community Activism



This image was taken shortly after the murder of George Floyd. Here, community members are joining in on the wave of protests for racial equity. Velez notes, times like these are when folks “see why people stand up and stand out for others... we are disenfranchised, marginalized, and oppressed.” This image mirrors the community activism that exists daily

in Springfield. Numerous residents led groups provide resources, information, and space to advocate for change.

Empty Buildings

Upon walking around downtown Springfield, one notes the numerous empty buildings that surround the casino area. Community members remember the mom and pop shops that have gone out of business or were pushed out by the casino. Velez says: it is “hard to believe there’s a multi-million dollar facility in the middle of all of this.” The proximity of homelessness, poverty, and crime to the casino has been frequently noted and many are frustrated that that, with “so much money flowing through the casino”, buildings such as these haven’t been rehabilitated and made accessible to the residents who need it.



Surviving Businesses



There are few businesses that have survived MGM's downtown development. Increases in property prices are one of the many reasons why businesses have been pushed out. This picture shows a small franchise that made it through. Adjacent to empty lots and spaces for lease, this photo evokes the very real sadness that community residents have shared, as well as the minimal hope that remains.

Discussion

While these photos give just a flavor of the catalogue Ms. Velez put together, the parallel of luxury and poverty is one that transcends across most interviews and photographs. While many of these photos evoke sadness, further investigation shows that they ultimately represent the physical consequence of broken promises. Many community members have expressed that, at the onset, the casino committed to bolstering the economy of Springfield through the building of this development, the hiring of residents, and the annual \$7 million allocation to the City. The broad sentiment of community members, however, is that the casino has fallen short of these promises- residents have not been employed on a large scale, businesses were forced to close down, the community is not feeling an economic boost, and resources have been pulled away from neighborhoods and towards the casino. Further, folks argue that the casino has actually made their life contexts quite worse- prices have increased making housing, food, and resources unaffordable, external developers are buying property that residents have had in their families for generations, there is a lack of community investment with the funds from the casino, and there a feeling that people's hope- their desire for a better life- is being taken advantage of for profit.

In sum, we are- through the avenues of interviews and a community scan- studying the allostatic load of community residents in Springfield. Allostatic load, defined as "the cumulative burden of chronic stress and life events" (Guidi et al., 2020), is influenced by a

number of factors including income levels (Daly et al., 2015; Evans, 2016; Hounkpatin, 2016; Seeman et al., 2008; Upchurch et al., 2015) , impoverished neighborhood residence (Bird et al., 2009; Jiménez et al., 2015; Prior et al., 2018; Schulz et al., 2012; Ribeiro et al., 2019; Robinette et al., 2016; Wallace et al., 2013) , and racial (O'Campo, 2016) and social inequalities (Seeman, 2014; Schwartz, 2017). It is important to recognize that this allostatic load is being described by the individuals in this study who are primarily Latinx and individuals of color.

Most of the individuals interviewed were experiencing socio-economic injustice before the casino was built, and note that the consequences of the casino, along with the COVID-19 pandemic, have overwhelmingly exacerbated and added to these issues. The consequences of allostatic load include mental health challenges as well as alcohol dependence (Adinoff et al., 2017), which, as one participant noted, are interwoven in the fabric of stigma, making these struggles difficult to address. It is evident through our conversations with community members and the results of our neighborhood scan, that the residents of Springfield are experiencing significant chronic stress, which has been further emphasized through the economic, emotional, and physical consequences of the MGM Casino.

Appendix 2.

Gun Violence Incidence in the Springfield Area 2010-2019

Fall, 2020

Gun Violence Incidence in the Springfield Area 2010-2019

Question at Hand

This study analyzes the gun violence data collected over the past ten years to see where and what the effects could have been from gun-related incidences, focusing on Hispanic communities. It is known that gun-related incidences are a form of and contribute significantly to community-based toxic stress (Corburn et al., 2021). In a 2016 report by the Urban Institute, in collaboration with the Joyce Foundation and the Joint Center for Political and Economic Studies, they found that the rate of Hispanic boys and men being victims of gun homicides was four times greater than their white counterparts (Bieler et al., April 2016). This study aims to analyze those rates in the Springfield, MA area.

Study Area

The city of Springfield is split into multiple neighborhoods, of which each have different denominations of Hispanic populations. Those with the highest Hispanic populations are the North End (purple), McKnight Area (black), South End (yellow), and Liberty Street (orange) areas. Those were the areas we decided to focus on. The gun violence data collected had distinctions between the types of incidences, but all very distinctively had reports of firearm involvement. (see Table 1), however, we decided not to distinguish between them because a gun incidence has an impact regardless of circumstance.

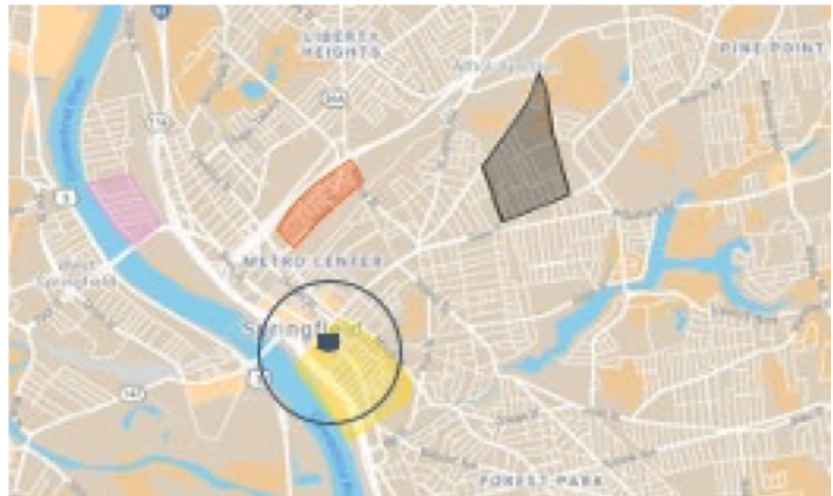


Figure 1: Highlighting the areas of focus in this study. Note 800m radius circle around MGM Casino. See Appendix 2.1 for larger version.

Methods and Data Collection

The data collected for this analysis is a combination of data from different locations. The demographic data, as well as regional distributions of people are collected from the Census Bureau’s 2010 census. The Gun Violence incidents are a data set collected and provided by the Springfield Police Department in collaboration with the Massachusetts Gambling Commission. The gun incidents included were police reports that fell into the categories listed to the left. No distinctions were made between incidence types as all involved gun violence. The analysis was done through GIS mapping software on ArcGIS, Google MyMaps, and Tableau, where trends and visual connections were verified. (Investigation 2011)

Incidence Based Reporting	Offense Description	Definition
13A	Aggravated Assault	The FBI’s Uniform Crime Reporting (UCR) Program defines aggravated assault as an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury.
120	Robbery	armed robbery as the event in which an another person and individual assaults either robs, steals or takes money or other property while armed with a dangerous weapon.
09A	Murder & Nonnegligent Manslaughter	The willful killing of one human being by another. Any death caused by injuries received in a fight, argument, quarrel, assault or the commission of a crime.

Table 1: As stated in the Uniform Crime Reporting Program National Incident-Based

Discussion

The above findings tell what kind of toxic stress those communities are experiencing. To further analyze the maps, we decided to focus on a small region just north of the Casino to see just what the impact was. In Figure 3, an outline of the Brightwood region can be seen, a subsection of the North End. In the past ten years, there have been 50 gun-related incidents, which is the highest of any region of this size. Moving further from this region, the number of incidents slowly declined (see Map in Appendix 2.2). For more perspective, from 2016-to 2019, there were 20+ incidents. That is the equivalent of one student going through their entire high school career, a quite formative time, and having 5+ incidences per school year. This high number of incidences can cause toxic stress and damage community health at every level.



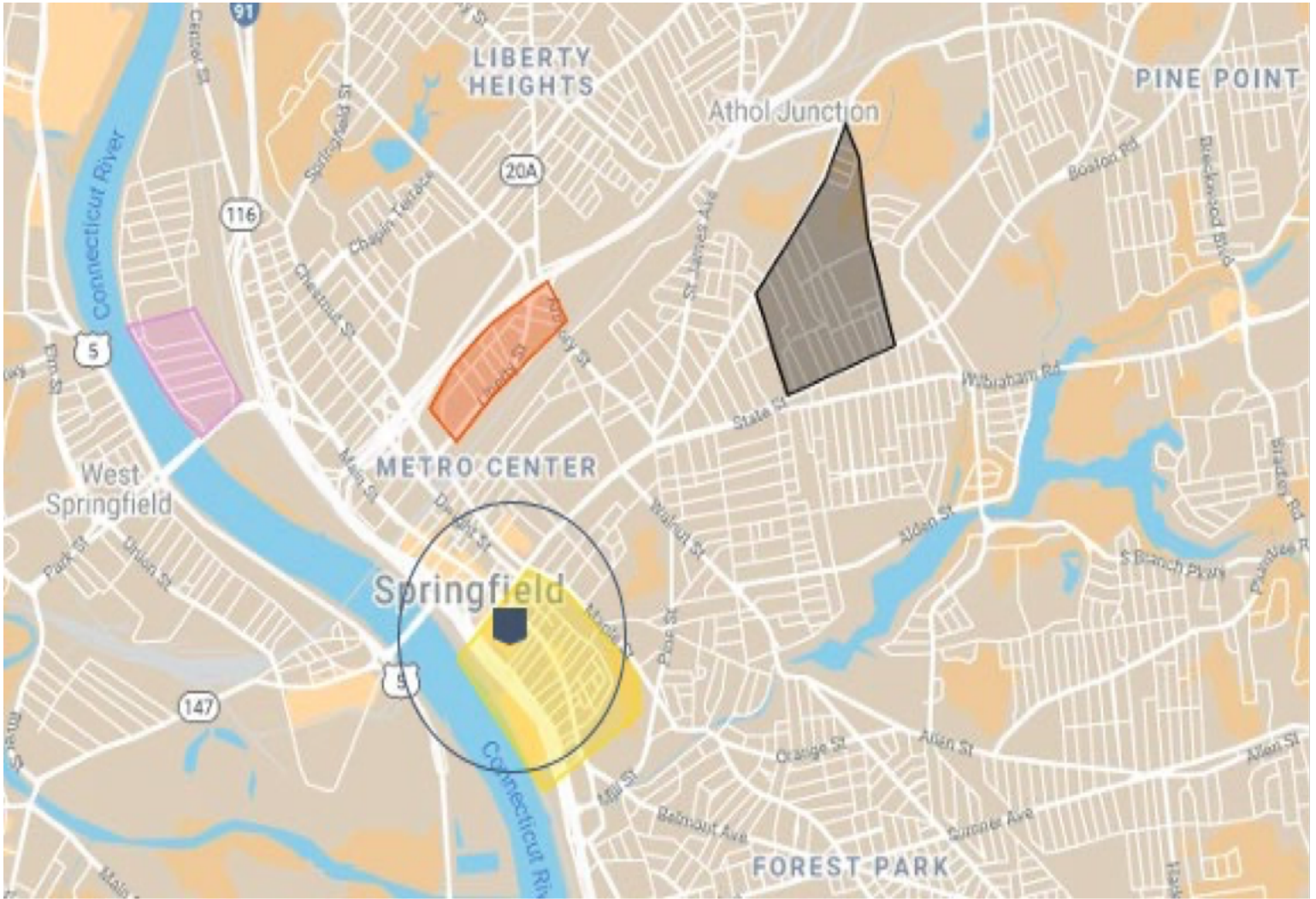
Figure 3: Brightwood Area in the last 10 years about Gun Violence Incidences.

Future Work to be Done

This research is not comprehensive. There is still more research that could be done on the individual impacts of the gun violence in Springfield, although that has been researched much in greater contexts outside of the Springfield region. More long-term trauma research could be done on those members of the community who have experienced the incidences as they occurred to understand the direct effect. Now with the more recent Census data coming out, there would also be an opportunity to analyze any changes in location of the gun violence with recent population trends, as well as trends that correspond with the development of the MGM Casino.

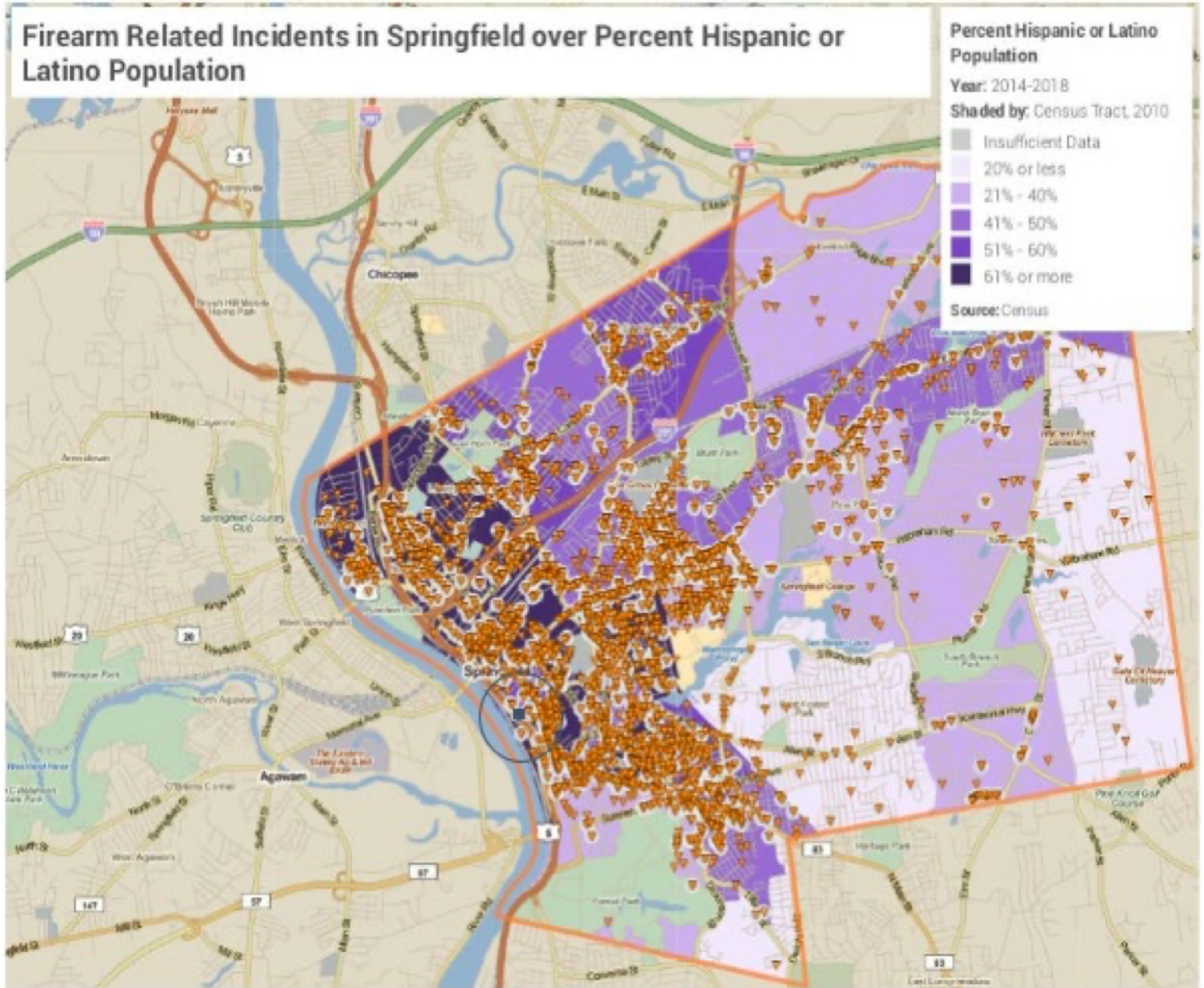
Appendix 2.1

Enlarged image of the regions of Springfield focused on in the study. Note 800m radius circle around MGM Casino. North End (purple), McKnight Area (black), South End (yellow), and Liberty Street (orange).



Appendix 2.2

Enlarged image of the firearm related incidents in Springfield over Percentage Hispanic of Latino Populations. Note 800m radius circle around MGM Casino.



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Corburn, Jason, DeVone Boggan, Khaalid Muttaqi, Sam Vaughn, James Houston, Julius Thibodeaux, and Brian Muhammad. 2021. "A healing-centered approach to preventing urban gun violence: The Advance Peace Method." Humanities and Social Sciences Communication.

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Appendix 3.

Interview Guide:

Life Context of Springfield Latino Community: Relevance to Gambling

Fall, 2020

My name is _____.

I work/volunteer for N2N here in Springfield. We are conducting a study funded by the MA Gaming Commission. The purpose of the study is to describe the impact of problem gambling on the Latinx community in Springfield. These questions will take between 10 and 15 minutes. In appreciation for your time, we will give you \$20 for the interview, is this okay with you?

Please know that I will do everything I can to protect your privacy. I am asking for your permission to record our conversation to avoid taking notes while we talk. Can I record the conversation? (wait for a response). Once we get the recording transcribed, we will delete the recordings. Your name or any personal information will not be published in the report. Saying no to the recording will not prevent you from doing this interview. Can we start the interview?" (START RECORDING)

First let me ask, how are you doing?

How has COVID impacted your life? (I hope you and your loved ones are safe.)

Besides COVID, what other issues are you worried about?

I will be asking you about the things/concerns that are going on in your life. For instance: Some people are concerned about crime in the community, food security, employment, online classes for the children, housing, financial security, etc...

- What concerns you right now?
- How does the [identified concern] affect(s) you?

If it's okay with you, I'd like to transition to the topic of gambling.

- Do you know of a person (friend or relative) that has been impacted by gambling?
- How were they affected?
- If that person were to reach out to you, would you know what to do or where to send them for help?

Do you know of a person (friend or relative) that has been impacted by gambling?

- How have they been affected?
- What have they been doing since the casino closed?
- If that person were to reach out to you for help with his/her gambling issues, would you know what to do or where to send them for help?

The casino industry and some public health officials encourage people to gamble responsibly.

- What does the term "responsible" mean to you?
- What do you think about it?

The casino opened about 2 years ago....August 2018.

- Have you been to the casino?
- Tell me about your visits to the casino. What do you usually do there (dining, attending concerts, gambling, hanging out)?
- How do you feel about having a casino in Springfield as it relates to people in general?
- What about jobs, housing, and the economy?
- In what ways has the casino been good for Springfield?

Bridging the Research to Practice Gap: Context Matters; Understanding the Life Circumstances of Hispanic Residents of a Casino Neighborhood.



Zulmalee Rivera, Neighbor to Neighbor, Inc

Andrea Royo, JSI

Rodolfo R Vega, JSI

Neighbor to Neighbor, Inc.

+ “We do things.”



We are the New Majority: People of Color, Women, Immigrants, and the Working-Class with a NEW agenda for Massachusetts

Implications of
“doing things”

+ “Brings about
“implementing”

Implementation Science

- + “Implementation science is the study of methods to promote the adoption and integration of evidence-based practices, interventions, and policies into routine health care and public health settings to improve the impact on population health

+ . <https://cancercontrol.cancer.gov/is/about>

Implementation Science



“Bridge gap between research and practice : takes up to 17-years



Avoid implementation failures



Establishes accountability

Implementation Failures: Examples

(failed due to lack of understanding of community context)

- + The New York City Voucher Experiment
- + The Comprehensive Child Development Program
- + Scared Straight (now known as Juvenile Awareness Program)
 - + Low-birth weight prevention programs

Implementation Sciences: Relevance and Importance

Helps explain how an intervention works or why it fails

Yields an explanation of causes of differential impact across race, gender, ethnicity

Facilitates the replicability and sustainability of interventions.

Ensures alignment with the priorities of the community

Engages key community stakeholders who will lead and champion an intervention.

A Core Tenet of Implementation Science



UNDERSTANDING THE CONTEXT OF THE INTERVENTION

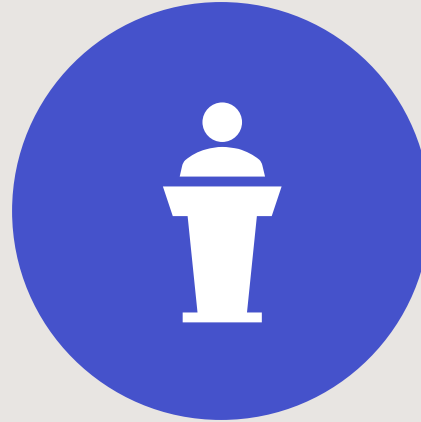


SOCIAL SCIENCES HAS DONE A POOR JOB UNDERSTANDING THE LIFE CONTEXT OF THOSE MOST AFFECTED BY INEQUITIES IN OUR SOCIETY

Considering Context Makes Intuitive Sense



ARCHITECTURE BEFORE
CONSTRUCTION



BEFORE A PUBLIC
PRESENTATION



LONG DISTANCE RUNNER
GOING OVER THE COURSE

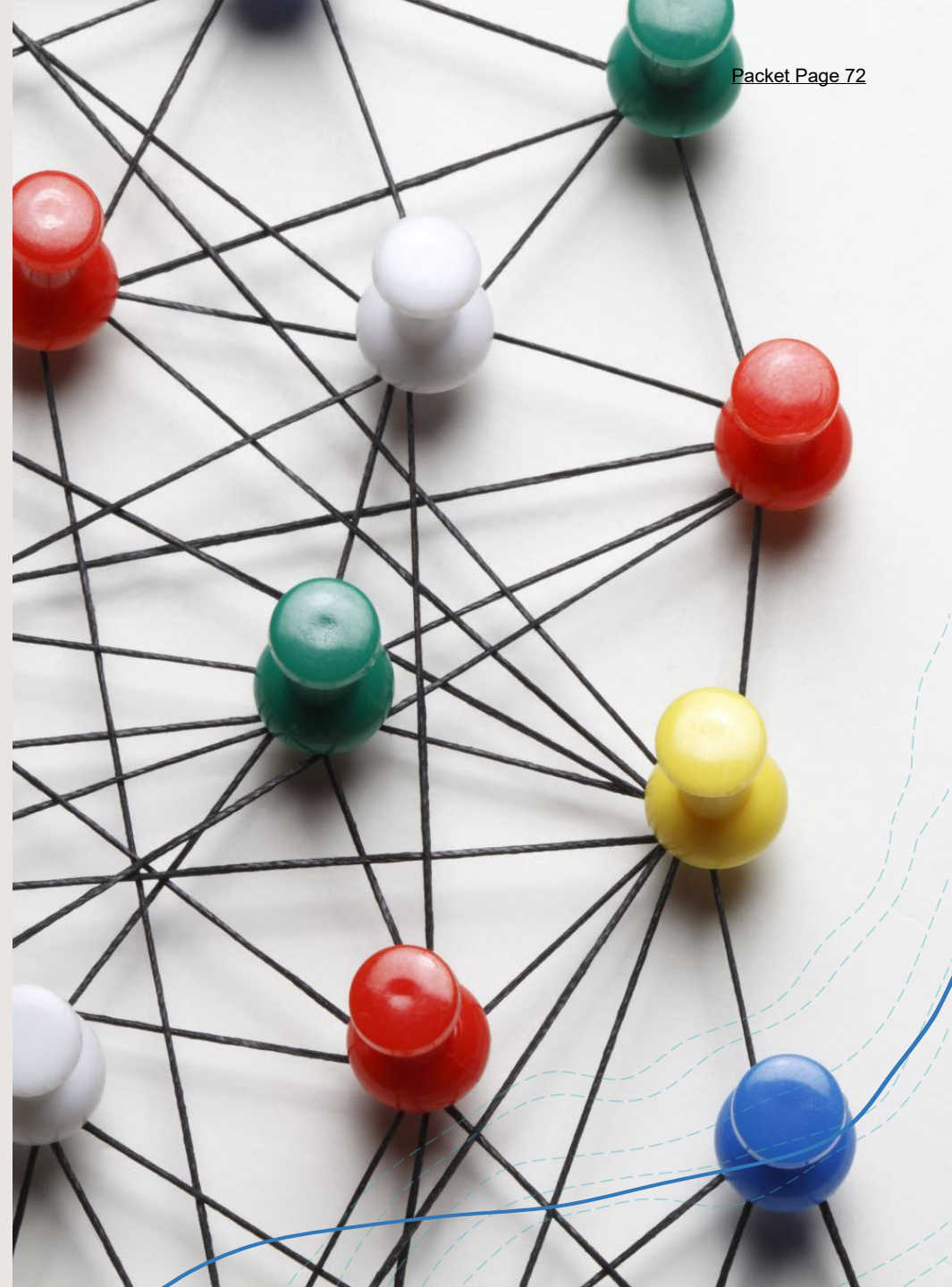
Life Context: Definition

- + As employed in this study, it refers to the physical and psychosocial features of the places where people live (i.e., housing, neighborhood), work (i.e., employment), and play (i.e., entertainment).



Life Context: Definition

- + Context is the stage where social determinants of health, culture, and behavior play out.
- + This context also includes elements of culture, history, and the intersection of individual and environmental factors that are likely to shape the gambling experience of those living in those settings.



Importance of Including Context

- + The inclusion of context in research studies and policy interventions contributes to the creation of “more appropriate, implementable, effective, and sustainable interventions that either work well in a specific context or have sufficient flexibility built into their design to work across a range of contexts” (Craig et al., 2018).
- + Helps explain how an intervention works or why it fails

Importance of Including Context

Yields an explanation of causes of differential impact across race, gender, and ethnicity

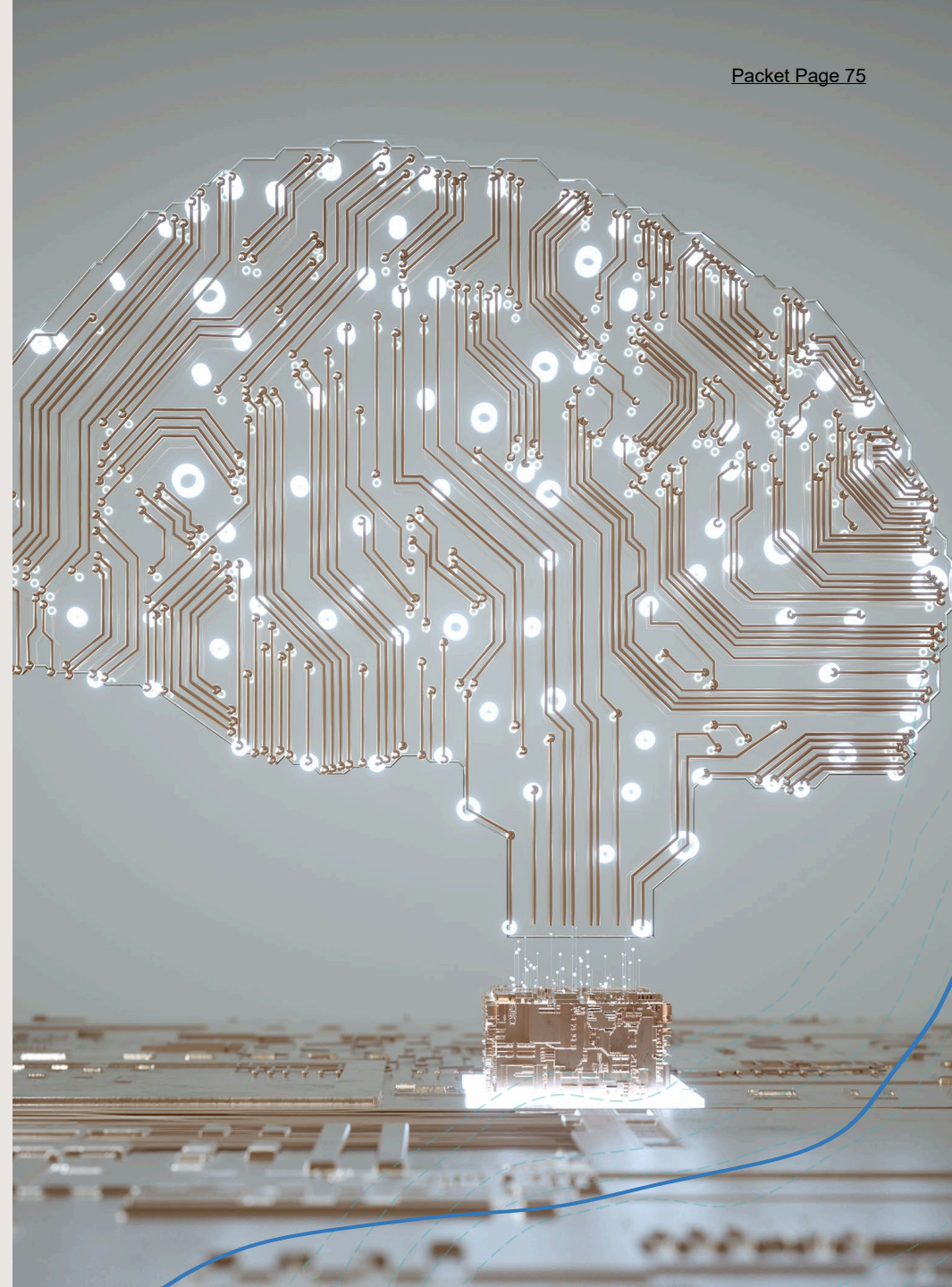
Facilitates the replicability and sustainability of interventions.

Ensures alignment with the priorities of the community

Engages key community stakeholders who will lead and champion an intervention.

Methods

- + The study used a community-based participatory research (CBPR) method within a qualitative descriptive exploratory research design, which involves the use of purposive small samples.



Sample Description

The final sample consisted of 24 Hispanic residents of zip codes 01103 and 01105 in Springfield, MA.

There were four males and 20 females, all over 18-year of age. They completed the Problem Gambling

Sample Description

- + Severity Index Mini-Screen--a 3-item scale developed by Volberg and Williams (2012) derived from the original 9-item PGSI. The profiles yielded by this measure depicted ten respondents as non-gamblers, two as low-risk gamblers, three as moderate-risk gamblers, and one as a high-risk gambler. Four participants did not answer the profile

Findings

+

Theme 1. Stress and trauma are pervasive in the respondents' life context, manifesting itself in the areas of family, neighborhood, employment, and housing

Problem gambling and relation to drug use as a longstanding problem in the family

Crime is a daily occurrence. Stealing, prostitution, shootings are not far from casino.

While jobs are available, livable wages are not.

Respondents perceived some prices are going up because of the casino presence

Theme 2: Respondents held distinct and often opposing views about the presence of the MGM casino in their community.

The casino has improved the aesthetic of its location

The casino has the opportunity to help underemployed residents and businesses that are closing down through hiring and engagement

Increased police presence, prostitution, environment is worsening

Crime has been redistributed

Theme 3. Responders noted the normative aspects of gambling, particularly as a family activity, as well as its negative consequences.

Respondents recognized the signs of problem gambling in self and others

Gambling as an intergenerational issue

**Theme 4. Impact of COVID-19 on Respondents' Lives.
Disproportionately negative health outcomes for Latinos.**

People getting laid off and losing jobs

Stress supporting the family while a digital gap exists

Mistrust in government re: COVID

Features of the participants' life context

Intersectionality →
Interconnected life
events and
circumstances

Intergenerational
component → Past
experiences of
family members with
problem gambling

Historical → Past
events that continue
to exert their
influence in current
generations

Cultural → Values
and beliefs that
individuals use to
develop a sense of
agency

Ethical/Moral →
Personal beliefs
about what is right or
wrong

Force Majeure →
Unpredictable
events that have a
major impact on the
community

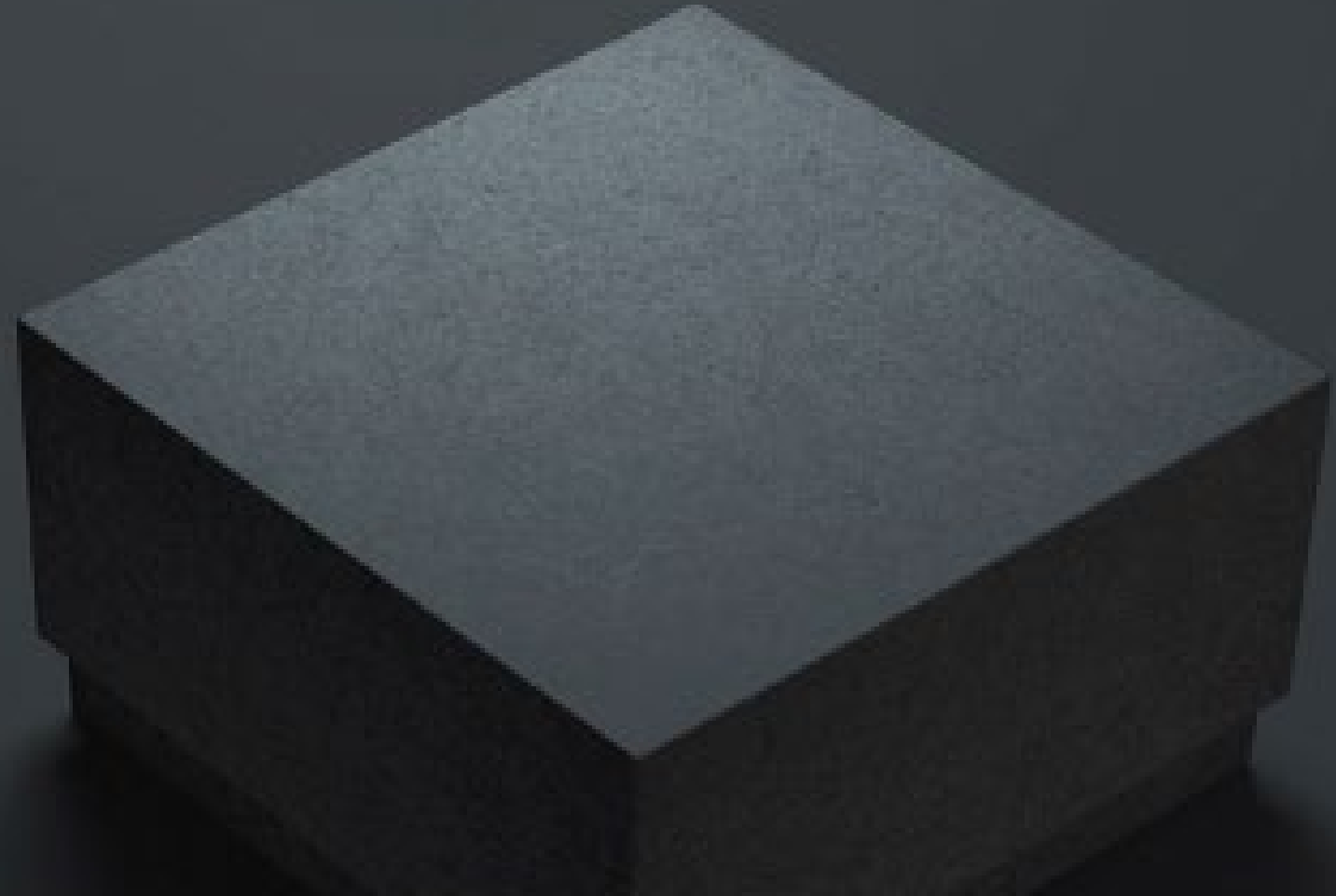
Safety → The desire
to be free from harm

Leisure → The
quality of free time to
engage in
recreational or social
activities

Societal →
Extensive
documentation of
structural racism in
Springfield

Implications

- + Responsible gambling-Drug use
- + Family-intergenerational component-
Inclusion
- + When you know how gambling is expressed
you rethink interventions such as exclusions
- + Community members, get to know them, you
would count on them more
- + Proud about their culture: include their
cultural expressions
- + Uncovering theoretical directions



Between Racism and health outcomes stands a backbox



Nancy Krieger:
Embodiment



+

David Williams: Toxic Stress

Theoretical Direction

Figure 1. An explanatory model of problem gambling based on the concept of community-stress theory





Questions/comments?

MASSACHUSETTS GAMING COMMISSION

To: Chair Judd-Stein and Commissioners Hill, O'Brien, and Skinner
From: Karen Wells, Douglas O'Donnell, John Scully, Agnes Beaulieu, and Derek Lennon
Date: June 22, 2022
Re: Fiscal Year 2023 (FY23) Budget Recommendations

Summary

The Massachusetts Gaming Commission's (MGC) initial Fiscal Year 2023 (FY23) budget and assessment projections are composed of the following:

- **Gaming**
 - \$29.34M for gaming regulatory costs, including funding for 89.94 full-time equivalents (FTEs) and 4 contract positions;
 - \$2.42M for the Commonwealth's indirect costs;
 - \$3.87M for the Office of the Attorney General's (AGO) gaming operations, inclusive of Massachusetts State Police (MSP) assigned to the AGO;
 - \$75K for the Alcohol and Beverage Control Commission (ABCC); resulting in,
 - \$35.7M total funding of the Gaming Control Fund
 - The budget is funded from \$5.18M in fees and an assessment of \$30.52M on licensees.
- **Racing**
 - \$2.9M for racing regulatory costs, including funding for 9.06 FTEs;
 - \$209.18K for the Commonwealth's indirect costs;
 - \$3.1M combined total of regulated racing costs.
- **Community Mitigation Fund**
 - \$310K for grant review and sub-recipient monitoring costs, including funding for 2 FTEs
- **Public Health Trust Fund**
 - \$5.27M for the research and responsible gaming agenda, inclusive of 3 FTEs. The Commission's research and responsible gaming office will be funded by the Public Health Trust Fund (PHTF)

Total Budget

The total budget presented today, excluding racing capital and promotional trust funds that benefit licensees and grants from the Community Mitigation Fund, is \$44.39M and funds 104 FTES and 4 contract employees.

Fund	Grouping Name	Fiscal Year 23		
		Budget	FTEs	Contractors
10500001 Gaming Control Fund	MGC Regulatory Costs	29,343,551.47	89.94	4.00
	Indirect	2,419,852.48		
	Office of Attorney General and AGO MSP	3,866,497.12		
	Alcohol and Beverage Control Commission	75,000.00		
Gaming Control Fund Total		35,704,901.07		
MGC Mass Racing Development and Oversight Trust	MGC Regulatory Costs	2,898,624.44	9.06	-
	Indirect	209,178.18		
MGC Mass Racing Development and Oversight Trust Total		3,107,802.62		
10500004 Community Mitigation	MGC Regulatory Costs	310,057.34	2.00	
Community Mitigation Total		310,057.34		
40001101 Public Health Trust Fund	Research and Responsible Gaming/PHTF	5,267,001.23	3.00	-
Public Health Trust Fund Total		5,267,001.23		
		44,389,762.26	104.00	4.00

Gaming Control Fund Regulatory vs. Statutory Costs

It is important to distinguish among the different components of the proposed budget for FY23 and understand the difference between regulatory and statutory costs. The composition of the Gaming Control Fund budget can be broken up into two areas. The first area comprises the regulatory costs of the Massachusetts Gaming Commission to regulate category 1 and 2 facilities. These regulatory costs are directly within control of the Gaming Commission. The second area comprises statutory costs that are assessments contained in the Expanded Gaming Act but are not within the budgetary discretion of the Gaming Commission. The statutory costs are the responsibility of our licensees to pay. Most of this memorandum focuses on the regulatory costs of the MGC. Below is a summary of the ~\$6.36M statutorily required costs:

- \$3.87M for the costs of the Attorney General’s Office (C. 12 § 11M),
- \$75K for the Alcoholic Beverage Control Commission (C. 10 § 72A), and
- \$2.42M for Commonwealth of Massachusetts Assessed Indirect Costs (ANF Bulletin 5).

The Commission’s regulatory FY23 budget projections total \$29.34M, and fund 10 divisions. The funding level of each division, along with the change from the previous year, is laid out in further detail later in this memorandum.

FY23 Regulatory Budget Development Process and Recommendations

In FY23, the MGC will continue allocating funds to each division/bureau and tracking contractual commitments, expenditures, and salaries against each division/bureau budget. The Commission will be using the expense budget feature in the Massachusetts Management and Accounting Reporting System (MMARS) to establish these budgets and automate the process of tracking each budget to actual expenditures and commitments.

The MGC’s annual budget building process begins in February and concludes once the Commission approves a budget in June. The MGC Office of Finance met with each division/bureau head within the MGC and developed spending and revenue projections that are best estimate representations of what will be needed in FY23 to operate the Commission, as well as what can be expected for revenue based on the Commission’s current fee structures. These requests were then reviewed by the CFAO, the Executive Director, and the Treasurer of the Commission. A third review was conducted by

representatives of the current gaming licensees (Penn, Encore, and MGM) in a virtual meeting on May 19, 2022. The meeting included a comprehensive review of the Commission’s budget, as well as a review of each division’s staffing levels by employee and anticipated hires.

The following section of this memorandum is a summary by appropriation of spending anticipated for: the Gaming Control Fund, the Community Mitigation Fund, the Racing Oversight and Development Fund, and the Public Health Trust Fund. Immediately following each summary is a chart that demonstrates significant variances between FY22 and FY23 for each division/bureau. Attachment B to this document provides a view of each division’s budget by object class, object code, and then specific budget item. This same information can be found in Attachment C, but the view is ordered first by object class, then object code, then division, and finally by specific budget item.

Gaming Control Fund 1050-0001

The MGC’s currently approved FY22 budget for the Gaming Control Fund is \$33.08M. The MGC is recommending an FY23 budget of \$35.7M, which is an 7.9% increase over the currently approved FY22 budget. The MGC’s regulatory costs funded by the Gaming Control Fund increased by 7.9% from \$27.2M in FY22 to \$29.34M in FY23, the statutorily required costs increased by 8.04% from \$5.89M in FY22 to \$6.36M in FY23. The table below summarizes significant changes by regulatory vs statutorily required costs between fiscal years:

Fund	Grouping Name	Object Class	object_class_name	Fiscal Year 2022	Fiscal Year 2023	Variance	Variance %	Variance Notes
10500001 Gaming Control Fund								
	MGC Regulatory Costs	AA	REGULAR EMPLOYEE COMPENSATION	\$6,951,959.00	\$7,982,768.03	\$1,030,809.03	14.83%	High turnover in FY22 which is not expected to continue in FY23. 3% COLA built in.
		BB	REGULAR EMPLOYEE RELATED EXPEN	\$43,700.00	\$81,197.00	\$37,497.00	85.81%	Partial restoration of travel
		CC	SPECIAL EMPLOYEES	\$205,000.00	\$248,022.52	\$43,022.52	20.99%	
		DD	PENSION & INSURANCE RELATED EX	\$2,570,782.97	\$3,198,108.43	\$627,325.46	24.40%	Fringe rate increase of 2% and lower turnover expected
		EE	ADMINISTRATIVE EXPENSES	\$523,003.92	\$634,974.92	\$111,971.00	21.41%	Partial restoration of travel
		FF	FACILITY OPERATIONAL EXPENSES	\$20,000.00	\$20,000.00	\$0.00	0.00%	
		GG	ENERGY COSTS AND SPACE RENTAL	\$1,333,102.02	\$1,347,958.08	\$14,856.06	1.11%	
		HH	CONSULTANT SVCS (TO DEPTS)	\$1,170,881.10	\$818,500.00	-\$352,381.10	-30.10%	Independent monitor not built into FY23 figures
		JJ	OPERATIONAL SERVICES	\$10,047,804.73	\$10,510,400.56	\$462,595.83	4.60%	GEU turnover/vacancies not expected to continue in FY23
		KK	EQUIPMENT PURCHASE	\$59,500.00	\$62,000.00	\$2,500.00	4.20%	
		LL	EQUIPMENT LEASE- MAINTAIN/REPAR	\$40,494.25	\$41,707.90	\$1,213.65	3.00%	
		NN	INFRASTRUCTURE:	\$25,000.00	\$25,000.00	\$0.00	0.00%	
		PP	STATE AID/POL SUB	\$175,000.00	\$150,000.00	-\$25,000.00	-14.29%	
		UU	IT Non-Payroll Expenses	\$4,025,680.24	\$4,222,914.03	\$197,233.79	4.90%	Increase to maintenance agreement for LMS
	MGC Regulatory Costs Total			\$27,191,908.23	\$29,343,551.47	\$2,151,643.24	7.91%	
	Indirect	EE	ADMINISTRATIVE EXPENSES	\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%	
	Indirect Total			\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%	
	Office of Attorney General and AGO MSP	JJ	OPERATIONAL SERVICES	\$937,971.46	\$939,113.12	\$1,141.66	0.12%	
		OO	(blank)	\$2,630,034.15	\$2,927,384.00	\$297,349.85	11.31%	
	Office of Attorney General and AGO MSP Total			\$3,568,005.61	\$3,866,497.12	\$298,491.51	8.37%	
	Alcohol and Beverage Control Commission	OO	(blank)	\$75,000.00	\$75,000.00	\$0.00	0.00%	
	Alcohol and Beverage Control Commission Total			\$75,000.00	\$75,000.00	\$0.00	0.00%	
10500001	Total			\$33,080,091.95	\$35,704,901.07	\$2,624,809.12	7.93%	

The MGC Regulatory portion of the Gaming Control Trust supports 10 divisions/bureaus. Each division's/bureau's costs of providing regulatory oversight to expanded gaming are built into the spending figures in the table below, which represents, at a macro level, the anticipated spending. This item funds ~90 FTEs and 4 contract positions. The overall regulatory spending increased by 7.9% from \$27.2M in FY22 to \$29.34 in FY23. Most of the increases came as anticipated decrease in turnover savings both in FTEs as well as the GEU. We have also included a 3% COLA for FY23.

Below is a chart that compares each division by the currently approved FY22 budget and the proposed FY23 budget, for the Regulatory portion of the Gaming Control Fund, along with a brief explanation for any significant funding variances. Further details for budgets by each division are provided in attachments B and C:

Fund	Grouping Name	Unit	Unit Name	Fiscal Year		Variance	Variance %	Variance Notes
				Fiscal Year 2022	2023			
10500001	Gaming Control Fund							
	MGC Regulatory Costs	1000	Finance and Administration	\$2,348,584.88	\$2,459,233.49	\$110,648.61	4.71%	Annualization of backfill contractual escalators
		1100	Human Resources	\$725,554.95	\$1,119,587.61	\$394,032.66	54.31%	Consolidation of HR and Supplier and Workforce Development Offices
		1200	Legal	\$1,154,051.07	\$1,280,435.37	\$126,384.30	10.95%	One additional FTE
		1300	Executive Director	\$580,665.06	\$660,461.04	\$79,795.98	13.74%	Shift of one position from finance to E.D.
		1400	Information Technology	\$5,167,470.01	\$5,485,898.26	\$318,428.25	6.16%	Annualization of hires and increase of LMS maintenance agreement
		1500	Commissioners	\$1,372,290.01	\$1,272,011.74	-\$100,278.27	-7.31%	Annualization of hires and independent monitor budgeted as incurred.
		1600	Workforce and Supplier Diversity	\$502,499.35	\$0.00	-\$502,499.35	-100.00%	Consolidated into HR budget
		1800	Communications	\$349,340.07	\$371,697.36	\$22,357.29	6.40%	Annualization of backfill
		1900	Ombudsman	\$133,768.06	\$147,806.91	\$14,038.85	10.49%	Annualization of hire
		5000	Investigations and Enforcement Bureau	\$15,246,066.45	\$16,170,826.52	\$924,760.07	6.07%	Less turnover expected
		7000	Licensing Division	\$649,103.00	\$872,208.17	\$223,105.17	34.37%	Including an FTE for a licensing manager.
		All	All Divisions	-\$1,037,484.68	-\$496,615.00	\$540,869.68	-52.13%	Less Turnover expected
	MGC Regulatory Costs Total			\$27,191,908.23	\$29,343,551.47	\$2,151,643.24	7.91%	

Racing Development and Oversight Trust Fund 1050-0003

This item funds the operations of the Racing division. Most of the funding from this appropriation is payroll, seasonal payroll, and fringe related costs. Costs of the division are payroll (seasonal, and full time), fringe costs, drug and laboratory testing, ISA to DPH, and purchased client services for economic hardship payments, eighth pole payments, and the jockey guild. In addition, the costs of the Massachusetts State Police associated with regulating racing is charged to this item, salaries of staff that work on racing matters at the MGC (Finance, HR, Legal, Commissioners and IT), and the Commonwealth assessed indirect costs.

Below is a chart that compares the currently approved FY22 budget and the proposed FY23 budget for the Racing Oversight and Development Fund, along with a brief explanation for any large discrepancies. Further details for budgets by each division are provided in attachments B and C:

Fund	Grouping Name	Unit	Unit Name	Fiscal Year		Variance	Variance %	Variance Notes
				Fiscal Year 2022	2023			
10500003	MGC Mass Racing Development and Oversight Trust							
	MGC Regulatory Costs	1000	Administration	\$312,270.44	\$296,796.17	-\$15,474.27	-4.96%	
		1100	Human Resources	\$70,342.22	\$150,072.13	\$79,729.91	113.35%	Annualization of new hire
		1200	Legal	\$29,260.84	\$50,600.30	\$21,339.46	72.93%	Annualization of new hire
		1300	Executive Director	\$9,515.11	\$39,969.63	\$30,454.52	320.06%	Allocation of support staff to this item.
		1400	Information Technology	\$203,650.57	\$279,588.03	\$75,937.46	37.29%	Annualization of backfills and new hires
		1500	Commissioners	\$86,434.90	\$91,988.74	\$5,553.84	6.43%	Annualization of backfills .
		1800	Communications	\$16,258.61	\$25,310.37	\$9,051.76	55.67%	Annualization of backfill
		3000	Racing Division	\$1,850,576.30	\$1,959,451.41	\$108,875.11	5.88%	COLA
		7000	Licensing Division	\$4,166.08	\$4,847.66	\$681.58	16.36%	
	MGC Regulatory Costs Total			\$2,582,475.07	\$2,898,624.44	\$316,149.37	12.24%	
	Indirect	2000	MGC Indirect	\$209,178.18	\$209,178.18	\$0.00	0.00%	
	Indirect Total			\$209,178.18	\$209,178.18	\$0.00	0.00%	
10500003	Total			\$2,791,653.25	\$3,107,802.62	\$316,149.37	11.32%	

Community Mitigation Fund 1050-0004

In a public meeting on December 27, 2020, the Commission approved Regulations for the Community Mitigation Fund (205 CMR 153). 205 CMR 153.05 allows the Commission to expend funds for the administration and oversight of the program. The regulation requires the Commission to annually approve a budget not to exceed 10% of the funds available in the account for the fiscal year. The proposed budget, as shown in the chart below, would fund 2 FTEs, in-state travel for subrecipient monitoring purposes, and the maintenance of a grant management database.

Fund	Grouping Name	Object Class	object_class_name	Fiscal Year		Variance	Variance %	Variance Notes
				2022	2023			
10500004	Community Mitigation							
	MGC Regulatory Costs	AA	REGULAR EMPLOYEE COMPENSATION	\$156,872.17	\$170,463.12	\$13,590.95	8.66%	3% COLA and annualized FY22 hire
		BB	REGULAR EMPLOYEE RELATED EXPEN	\$2,500.00	\$5,000.00	\$2,500.00	100.00%	Partial restoration of travel
		DD	PENSION & INSURANCE RELATED EX	\$61,964.51	\$71,407.00	\$9,442.49	15.24%	Fringe rate increase
		EE	ADMINISTRATIVE EXPENSES	\$20,687.22	\$20,687.22	\$0.00	0.00%	
		GG	ENERGY COSTS AND SPACE RENTAL	\$2,500.00	\$2,500.00	\$0.00	0.00%	
		UU	IT Non-Payroll Expenses	\$130,000.00	\$40,000.00	-\$90,000.00	-69.23%	FY22 CMF one-time database build.
	MGC Regulatory Costs Total			\$374,523.90	\$310,057.34	-\$64,466.56	-17.21%	
10500004	Total			\$374,523.90	\$310,057.34	-\$64,466.56	-17.21%	

Public Health Trust Fund 4000-1101

The Research and Responsible Gaming (RRG) office is a statutorily required component of the MGC and was funded from the Public Health Trust Fund beginning in FY20. Through a collaborative process with DPH and EOHHS, the MGC's RRG will continue to be funded from the PHTF in FY23. Funding for the office has been decreased by 18.9% from an approved FY22 budget of \$6.49M to an FY23 proposal of \$5.26M, with most of the increases restoring cuts to the Game Sense program and funding a follow-up research project to the baseline study. Below is a chart comparing FY22 to the FY23 proposal.

Fund	Grouping Name	Object Class	object_class_name	Fiscal Year 2022	Fiscal Year 2023	Variance	Variance %	Variance Notes
40001101	Public HealthTrust Fund							
	Research and Responsible Gaming/PHTF	AA	REGULAR EMPLOYEE COMPENSATION	\$300,984.03	\$313,023.39	\$12,039.36	4.00%	
		BB	REGULAR EMPLOYEE RELATED EXPEN	\$5,000.00	\$7,250.00	\$2,250.00	45.00%	Partial restoration of travel
		DD	PENSION & INSURANCE RELATED EX	\$118,888.70	\$131,125.50	\$12,236.80	10.29%	Fringe rate increase
		EE	ADMINISTRATIVE EXPENSES	\$352,500.00	\$352,602.34	\$102.34	0.03%	
		FF	FACILITY OPERATIONAL EXPENSES	\$1,000.00	\$0.00	-\$1,000.00	-100.00%	
		HH	CONSULTANT SVCS (TO DEPTS)	\$3,090,000.00	\$3,091,000.00	\$1,000.00	0.03%	
		JJ	OPERATIONAL SERVICES	\$10,000.00	\$10,000.00	\$0.00	0.00%	
		PP	STATE AID/POL SUB	\$2,613,000.00	\$1,360,000.00	-\$1,253,000.00	-47.95%	FY22 baseline follow-up study completed.
		UU	IT Non-Payroll Expenses	\$2,000.00	\$2,000.00	\$0.00	0.00%	
	Research and Responsible Gaming/PHTF Total			\$6,493,372.73	\$5,267,001.23	-\$1,226,371.50	-18.89%	
40001101	Total			\$6,493,372.73	\$5,267,001.23	-\$1,226,371.50	-18.89%	

Exposures in the FY23 Budget Proposal

FY23 was another challenging budget to develop. We are hopeful we will not see the same turnover as we did in FY22, and we are cautiously optimistic we may see some additional travel in the coming year. The FY23 budget does have some potential exposures. The following are a brief list of exposures:

- Funded the minimum required by our insurance policy for litigation costs in the legal budget.
- Funded MSP overtime at the FY21 funding levels.
- Travel and training budgets are still below pre-pandemic levels.

Assessment on Licensees

Chapter 23K §56 (a)-(c) define how the MGC will fund its annual costs related to Gaming/non-racing activities. This chapter was further defined through 205 CMR 121.00. Section 56 (a) requires that the Commission assess a \$600 per machine fee to each licensee for every slot machine approved to be used in the facility on July 1. Staff would then combine the slot fees with any other fees we were projecting to generate in the fiscal year (primarily licensing fees) to determine the total fee revenue for the Gaming Control Fund. Section 56 (c) directs the Commission to determine the difference between the projected budget and the projected fees and assess that difference on licensees in proportion to each licensee’s share of the total gaming positions.

The numbers in the chart below are estimates and will be used to generate a bill so the Commission can begin the fiscal year. When final numbers are determined, staff will revise the figures to reflect the actual gaming positions as of July 1, 2022.

Licensee	Slots Machines	Table Games	Table Gaming Positions	Total Gaming Positions	Percentage of Gaming Positions	FY23 Gaming Control Fund Assessment	FY23 PHTF Assessment
MGM	1,550	50	300	1,850	24.83%	7,579,761	1,241,611
Encore	2,750	250	1,750	4,500	60.40%	18,437,256	3,020,134
Penn	1,025	-	-	1,100	14.77%	4,506,885	738,255
TOTAL	5,325	300	2,050	7,450	100.00%	30,523,901	5,000,000

Section 56 (e) requires the Commission to annually assess a minimum of \$5M on licensees to be deposited into the Public Health Trust Fund in the same proportion as the annual assessment for the Gaming Control Fund.

Conclusion

We are seeking approval of an FY23 Gaming Control Fund budget of \$35.7M requiring a \$30.52M assessment on licensees, a Research and Responsible Gaming budget funded from the Public Health Trust Fund of \$5.27M and an additional annual assessment of \$5M from licensees to be deposited in the PHTF, a Community Mitigation Fund administration and oversight budget of \$310K, and an FY23 Racing Oversight and Development Fund budget of \$3.1M. We posted the budget documents for public comment on June 10th and have not received any comments as of the writing of this memorandum. The posting is scheduled to close on June 24th. If we receive any comments between this vote and Friday the 24th we will bring the comments back to the Commission for consideration.

Attachments:

Attachment A: FY23 Listing of Accounts Spending and Revenue

Attachment B: Next Year Budget All Departments for Commission

Attachment C: Next Year Budget by Object Class for Commission

Row Labels	Initial Projection
10500001--Gaming Control Fund	
MGC Regulatory Cost	
AA REGULAR EMPLOYEE COMPENSATION	7,982,768.03
BB REGULAR EMPLOYEE RELATED EXPEN	81,197.00
CC SPECIAL EMPLOYEES	248,022.52
DD PENSION & INSURANCE RELATED EX	3,198,108.43
EE ADMINISTRATIVE EXPENSES	634,974.92
FF PROGRAM, FACILITY, OPERATIONAL SUPPIES	20,000.00
GG ENERGY COSTS AND SPACE RENTAL	1,347,958.08
HH CONSULTANT SVCS (TO DEPTS)	818,500.00
JJ OPERATIONAL SERVICES	10,510,400.56
KK Equipment Purchase	62,000.00
LL EQUIPMENT LEASE-MAINTAIN/REPAR	41,707.90
NN NON-MAJOR FACILITY MAINTENANCE REPAIR	25,000.00
PP STATE AID/POL SUB/OSD	150,000.00
TT PAYMENTS & REFUNDS	-
UU IT Non-Payroll Expenses	4,222,914.03
MGC Regulatory Cost Subtotal:	\$ 29,343,551.47
EE--Indirect Costs	\$ 2,419,852.48
Office of Attorney General	
ISA to AGO	\$ 2,927,384.00
TT Reimbursement for AGO 0810-1024	\$ -
AGO State Police	\$ 939,113.12
Office of Attorney General Subtotal:	\$ 3,866,497.12
ISA to ABCC	\$ 75,000.00
Gaming Control Fund Total Costs	\$ 35,704,901.07
Revenue Projections	
Revenues	Initial Projection
Gaming Control Fund Beginning Balance 0500	\$ -
EBH Security Fees 0500/Monitoring	\$ 75,000.00
IEB Background/Investigative Collections 3000	\$ 50,000.00
Category/Region Collection Fees 0500	\$ -
Phase 1 Refunds 0500	\$ 1,200,000.00
Phase 2 Category 1 Collections (restricted) 0500	\$ -
Region C Phase 1 Investigation Collections 0500	\$ -
Region C Phase 2 Category 1 Collections 0500	\$ -
Grant Collections (restricted) 0500	\$ -
Region A slot Machine Fee 0500	\$ 1,650,000.00
Region B Slot Machine Fee 0500	\$ 930,000.00
Slots Parlor Slot Machine Fee 0500	\$ 615,000.00

Gaming Employee License Fees (GEL) 3000	\$	300,000.00
Key Gaming Executive (GKE) 3000	\$	10,000.00
Key Gaming Employee (GKS) 3000	\$	50,000.00
Non-Gaming Vendor (NGV) 3000	\$	50,000.00
Vendor Gaming Primary (VGP) 3000	\$	100,000.00
Vendor Gaming Secondary (VGS) 3000	\$	-
Gaming School License (GSB)/(LIQ)	\$	15,000.00
Gaming Service Employee License (SER) 3000	\$	75,000.00
Subcontractor ID Initial License (SUB) 3000	\$	15,000.00
Temporary License Initial License (TEM) 3000	\$	10,000.00
Assessment for PHTF	\$	5,000,000.00
Transfer PHTF Assessment to PHTF	\$	(5,000,000.00)
Veterans Initial License (VET) 3000	\$	-
Transfer of Licensing Fees to CMF 0500	\$	-
Assessment 0500	\$	30,523,901.07
Misc/MCC Grant	\$	25,000.00
Bank Interest 2700	\$	1,000.00
Misc/Bank Interest 0500	\$	10,000.00
Grand Total	\$	35,704,901.07

Row Labels	Budget Projections	
	Initial Projection	
4000-1101 Research and Responsible Gaming/Public Health Trust Fund		
AA REGULAR EMPLOYEE COMPENSATION		313,023.39
BB REGULAR EMPLOYEE RELATED EXPEN		7,250.00
CC SPECIAL EMPLOYEES		0
DD PENSION & INSURANCE RELATED EX		131,125.50
EE ADMINISTRATIVE EXPENSES		352,602.34
FF PROGRAMMATIC FACILITY OPERATONAL SUPPLIES		-
HH CONSULTANT SVCS (TO DEPTS)		3,091,000.00
JJ OPERATIONAL SERVICES		10,000.00
MM PURCHASED CLIENT/PROGRAM SVCS		-
PP STATE AID/POL SUB		1,360,000.00
UU IT Non-Payroll Expenses		2,000.00
Research and Responsible Gaming/Public Health Trust Fund		
Subtotal:	\$	5,267,001.23

Revenues	Revenue Projections	
	Initial Projection	
Public Health Trust Fund ISA	\$	5,267,001.23

Row Labels		Initial Projection
10500002		
TT LOANS AND SPECIAL PAYMENTS		\$ -
RSF		
		Revenue Projections
RSF	Revenues	Initial Projection
Greyhound Balance Forward Simulcast 7200		\$ -
Plainridge Greyhound Import Simulcast 7200		\$ 20,000.00
Raynham Greyhound Import Simulcast 7200		\$ 50,000.00
Suffolk Greyhound Import Simulcast 7200		\$ 15,000.00
TVG Greyhound Import Simulcast 7200		\$ 25,000.00
TWS Greyhound Import Simulcast 7200		\$ 10,000.00
Wonderland Greyhound Import Simulcast 7200		\$ 1,500.00
		\$ 121,500.00

Row Labels		Budget Projections
Row Labels		Initial Projection
1050003		
AA REGULAR EMPLOYEE COMPENSATION		955,163.30
BB REGULAR EMPLOYEE RELATED EXPEN		13,000.00
CC SPECIAL EMPLOYEES		468,000.00
DD PENSION & INSURANCE RELATED EX		409,038.88
EE ADMINISTRATIVE EXPENSES		42,385.00
FF PROGRAMMATIC FACILITY OPERATONAL SUPPLIES		42,000.00
HH CONSULTANT SVCS (TO DEPTS)		25,000.00
JJ OPERATIONAL SERVICES		773,122.26
KK EQUIPMENT PURCHASES		-
LL EQUIPMENT LEASE-MAINTAIN/REPAR		915.00
MM PURCHASED CLIENT/PROGRAM SVCS		85,000.00
NN INFRASTRUCTURE:		-
TT LOANS AND SPECIAL PAYMENTS		-
UU IT Non-Payroll Expenses		15,000.00
EE --Indirect Costs	\$	209,178.18
ISA to DPH	\$	70,000.00
Grand Total	\$	3,107,802.62
		Revenue Projections
Revenues		Initial Projection
Racing Oversight and Development Balance Forward 0131	\$	-
Plainridge Assessment 4800	\$	75,000.00
Plainridge Daily License Fee 3003	\$	120,000.00
Plainridge Occupational License 3003/3004	\$	50,000.00
Plainridge Racing Development Oversight Live 0131	\$	20,000.00
Plainridge Racing Development Oversight Simulcast 0131	\$	100,000.00
Raynham Assessment 4800	\$	50,000.00

Raynham Daily License Fee 3003	\$	85,000.00
Raynham Racing Development Oversight Simulcast 0131	\$	85,000.00
Suffolk Assessment 4800	\$	620,000.00
Suffolk Commission Racing Development Oversight Simulcast 0131	\$	10,000.00
Suffolk Daily License Fee 3003	\$	85,000.00
Suffolk Occupational License 3003/3004	\$	5,000.00
Suffolk Racing Development Oversight Live 0131	\$	-
Suffolk TVG Commission Live 0131	\$	-
Suffolk TVG Commission Simulcast 0131	\$	500,000.00
Suffolk Twin Spires Commission Live 0131	\$	-
Suffolk Twin Spires Commission Simulcast 0131	\$	220,000.00
Suffolk Xpress Bet Commission Live 0131	\$	-
Suffolk Xpress Bet Commission Simulcast 0131	\$	100,000.00
Suffolk NYRA Bet Commission Live 0131	\$	-
Suffolk NYRA Bet Commission Simulcast 0131	\$	120,000.00
Transfer to General Fund 10500140 0000	\$	-
Wonderland Assessment 4800	\$	5,000.00
Wonderland Daily License Fee 3003	\$	60,000.00
Wonderland Racing Development Oversight Simulcast 0131	\$	2,000.00
Plainridge fine 2700	\$	25,000.00
Suffolk Fine 2700	\$	-
Plainridge Unclaimed wagers 5009	\$	180,000.00
Suffolk Unclaimed wagers 5009	\$	250,000.00
Raynham Unclaimed wagers 5009	\$	150,000.00
Wonderland Unclaimed wagers 5009	\$	5,000.00
Return of Unclaimed wagers	\$	(585,000.00)
Misc/Bank Interest 0131	\$	500.00
Grand Total		\$2,337,500.00

		Budget Projections
Row Labels		Initial Projection
10500004		
AA REGULAR EMPLOYEE COMPENSATION		170,463.12
BB REGULAR EMPLOYEE RELATED EXPEN		5,000.00
DD PENSION & INSURANCE RELATED EX		71,407.00
EE ADMINISTRATIVE EXPENSES		20,687.22
GG ENERGY COSTS AND SPACE RENTAL		2,500.00
UU IT Non-Payroll Expenses	\$	40,000.00
Grand Total		\$310,057.34
		Revenue Projections
Revenues		Initial Projection
Balance forward prior year	\$	-
Grand Total	\$	-

		Budget Projections
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Row Labels		Initial Projection
10500005		
TT LOANS AND SPECIAL PAYMENTS (Race Horse Dev Fund)		
		Revenue Projections
Revenues		Initial Projection
Balance forward prior year 3003		
Race Horse Development Fund assessment 3003	\$	20,000,000.00
Grand Total	\$	20,000,000.00

10500008		
Row Labels		Initial Projection
Casino forfeited money MGC Trust MGL 267A S4	\$	-
Grand Total	\$	-

		Budget Projections
Row Labels		Initial Projection
10500012/ P promo		
TT LOANS AND SPECIAL PAYMENTS	\$	-
		Revenue Projections
Revenues		Initial Projection
Plainridge Import Harness Horse Simulcast 0131	\$	18,000.00
Plainridge Racing Harness Horse Live 0131	\$	10,000.00
Raynham Import Plainridge Simulcast 0131	\$	5,000.00
Suffolk Import Plainridge Simulcast 0131	\$	2,000.00
Plainridge Racecourse Promo Fund Beginning Balance 7205	\$	-
TVG Live 0131	\$	-
TVG Simulcast 0131	\$	20,000.00
Twin Spires Live 0131	\$	-
Twin Spires Simulcast 0131	\$	10,000.00
Xpress Bets Live 0131	\$	-
Xpress Bets Simulcast 0131	\$	5,000.00
NYRA Live 0131	\$	-
NYRA Simulcast 0131	\$	5,000.00
Grand Total	\$	75,000.00

		Budget Projections
Row Labels		Initial Projection
10500013/ P Cap		
TT LOANS AND SPECIAL PAYMENTS	\$	-
		Revenue Projections
Revenues		Initial Projection

Plainridge Import Harness Horse Simulcast 0131	\$	25,000.00
Plainridge Racing Harness Horse Live 0131	\$	20,000.00
Raynham Import Plainridge Simulcast 0131	\$	7,000.00
Suffolk Import Plainridge Simulcast 0131	\$	5,000.00
Plainridge Capital Improvement Fund Beginning Balance 7205	\$	-
TVG Live 0131	\$	-
TVG Simulcast 0131	\$	50,000.00
Twin Spires Live 0131	\$	-
Twin Spires Simulcast 0131	\$	25,000.00
Xpress Bets Live 0131	\$	-
Xpress Bets Simulcast 0131	\$	10,000.00
NYRA Live 0131	\$	-
NYRA Simulcast 0131	\$	15,000.00
Grand Total		\$157,000.00

		Budget Projections
Row Labels		Initial Projection
10500021/ S promo		
TT LOANS AND SPECIAL PAYMENTS	\$	-
		Revenue Projections
Revenues		Initial Projection
Plainridge Import Suffolk Simulcast 0131	\$	25,000.00
Raynham Import Suffolk Simulcast 0131	\$	20,000.00
Suffolk Import Running Horse Simulcast 0131	\$	30,000.00
Suffolk Racing Running Horse Live 0131	\$	-
Suffolk Promotional Fund Beginning Balance 7205	\$	-
TVG Live 0131	\$	-
TVG Simulcast 0131	\$	125,000.00
Twin Spires Live 0131	\$	-
Twin Spires Simulcast 0131	\$	75,000.00
Xpress Bets Live 0131	\$	-
Xpress Bets Simulcast 0131	\$	-
NYRA Live 0131	\$	-
NYRA Simulcast 0131	\$	50,000.00
Grand Total		\$325,000.00

		Budget Projections
Row Labels		Initial Projection
10500022/ S Cap		
TT LOANS AND SPECIAL PAYMENTS	\$	-
		Revenue Projections
Revenues		Initial Projection
Plainridge Import Suffolk Simulcast 0131	\$	100,000.00
Raynham Import Suffolk Simulcast 0131	\$	70,000.00

Suffolk Import Running Horse Simulcast 0131	\$	150,000.00
Suffolk Racing Running Horse Live 0131	\$	-
Suffolk Capital Improvement Fund Beginning Balance 7205	\$	-
TVG Live 0131	\$	-
TVG Simulcast 0131	\$	450,000.00
Twin Spires Live 0131	\$	-
Twin Spires Simulcast 0131	\$	225,000.00
Xpress Bets Live 0131	\$	-
Xpress Bets Simulcast 0131	\$	-
NYRA Live 0131	\$	-
NYRA Simulcast 0131	\$	150,000.00
Grand Total		\$1,145,000.00

Row Labels	Budget Projections
10500140	
TT LOANS AND SPECIAL PAYMENTS	

Next Year Budget All Departments for Commission

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1000	Finance and Administration							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Employee Salaries	\$434,875.04	\$441,410.91	\$6,535.87	1.50%
			Obj Class Totals:				\$434,875.04	\$441,410.91	\$6,535.87	1.50%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Out of State Travel	\$1,000.00	\$1,500.00	\$500.00	50.00%
		B02	In-State Travel		Travel	In-State Travel	\$1,000.00	\$1,330.00	\$330.00	33.00%
			Obj Class Totals:				\$2,000.00	\$2,830.00	\$830.00	41.50%
		CC	SPECIAL EMPLOYEES							
		C23	Management, Business Professionals & Admin Services		Contract Employee	Administrative Help 960	\$0.00	\$43,022.52	\$43,022.52	#Div/0!
			Obj Class Totals:				\$0.00	\$43,022.52	\$43,022.52	#Div/0!
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$163,208.61	\$176,564.37	\$13,355.76	8.18%
					Taxes	Tax rate of 1.89%	\$8,567.04	\$9,155.79	\$588.75	6.87%
			Obj Class Totals:				\$171,775.65	\$185,720.16	\$13,944.51	8.12%
		EE	ADMINISTRATIVE EXPENSES							
		E01	Office & Administrative Supplies		Supplies	Adoni Spring Water/Milhench	\$4,000.00	\$4,000.00	\$0.00	0.00%
					Supplies	Cam Office Supplies	\$9,500.00	\$9,500.00	\$0.00	0.00%
					Supplies	W.B. Mason/Veteran's Business Supply	\$40,000.00	\$40,000.00	\$0.00	0.00%
		E02	Printing Expenses & Supplies		Printing	Millenium/RazzMTazz/MG Products	\$2,500.00	\$2,500.00	\$0.00	0.00%
		E05	Postage Chargeback		Postage	ITD PAD Chargeback for postal Services	\$2,743.92	\$2,743.92	\$0.00	0.00%
		E06	Postage		Postage	Postage for Ashburton Mail Room	\$2,400.00	\$2,400.00	\$0.00	0.00%
					Postage	Postage for Pitney Bowes, Fed Ex, UPS	\$1,500.00	\$3,000.00	\$1,500.00	100.00%
		E12	Subscriptions, Memberships & Licensing Fees		Subscriptions	Go To Meeting	\$0.00	\$0.00	\$0.00	#Num!
		E15	Bottled Water		Water	Quench	\$1,500.00	\$1,500.00	\$0.00	0.00%
		E18	State Single Audit Chargeback		Chargeback	Chargeback Single State Audit	\$500.00	\$500.00	\$0.00	0.00%
		E19	Fees, Fines, Licenses, Permits & Chargebacks		Fees, Fines, Licensed, Chargebakcs	EZ Pass/Occupancy/Commissions	\$1,700.00	\$1,700.00	\$0.00	0.00%
		E20	Motor Vehicle Chargeback		OVM	Motorized Vehicle Chargeback--Lease of ford fusion	\$0.00	\$0.00	\$0.00	#Num!
		E22	Temp Use Space/Confer-Incidental Includes Reservation Fees		Laz Parking/VPNE	Parking at 33 Arch St.	\$40,000.00	\$54,000.00	\$14,000.00	35.00%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1000	Finance and Administration							
		E22	Temp Use Space/Confer-Incidental Includes Reservation Fees		Parking	NA	\$0.00	\$0.00	\$0.00	#Num!
		E30	Credit Card Purchases		Credit Card	Credit Card Incidental Purchases	\$2,000.00	\$2,000.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ		Travel	Travel Agency Fees	\$0.00	\$2,500.00	\$2,500.00	#Div/0!
		EE2	Conference, Training and Registration Fees		Conference Registrations	Registration Fees	\$750.00	\$1,125.00	\$375.00	50.00%
			Obj Class Totals:				\$109,093.92	\$127,468.92	\$18,375.00	16.84%
		GG	ENERGY COSTS AND SPACE RENTAL							
		G01	Space Rental		Office Lease	101 Federal St. 12 months	\$1,297,466.58	\$1,312,322.64	\$14,856.06	1.15%
		G03	Electricity		Electricity	101 Federal St. 12 months	\$32,635.44	\$32,635.44	\$0.00	0.00%
		G05	Fuel For Vehicles		Gas	Wex Bank/Gulf	\$3,000.00	\$3,000.00	\$0.00	0.00%
			Obj Class Totals:				\$1,333,102.02	\$1,347,958.08	\$14,856.06	1.11%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H09	Attorneys/Legal Services		Insurance	Comprehensive Insurance Policy	\$151,629.00	\$163,500.00	\$11,871.00	7.83%
		H19	Management Consultants		Outside Consultant	CPA Firm for Annual Audits consistent with Generally Accepted Auditing Standards	\$70,000.00	\$70,000.00	\$0.00	0.00%
			Obj Class Totals:				\$221,629.00	\$233,500.00	\$11,871.00	5.36%
		JJ	OPERATIONAL SERVICES							
		J10	Auxiliary Financial Services		Auxiliary Financial Services	Credit Card Fees/BillMatrix	\$200.00	\$200.00	\$0.00	0.00%
		JJ2	Auxiliary Services		Courier	USA Couriers	\$300.00	\$300.00	\$0.00	0.00%
					Shredding	ProShred	\$1,615.00	\$1,615.00	\$0.00	0.00%
			Obj Class Totals:				\$2,115.00	\$2,115.00	\$0.00	0.00%
		LL	EQUIPMENT LEASE-MAINTAIN/REPAR							
		L24	Motorized Vehicle Equipment Rental or Lease		Rental Cars	Enterprise Car Rental	\$500.00	\$500.00	\$0.00	0.00%
		L25	Office Equipment Rental or Lease		Printing	Pitney Bowes	\$607.90	\$607.90	\$0.00	0.00%
		L26	Printing/Photocopy & Micrographics Equip Rent/Lease		Copier	Canon Financial Services Recurring Payments for 13th floor and IEB Per Click costs of \$2.5K	\$10,031.50	\$10,100.00	\$68.50	0.68%
		L46	Print, Photocopying & Micrograph Equipment Maint/Repair		Copier	Canon USA/Maintenance & Repair--Initial Contract Rate Ended	\$5,000.00	\$5,000.00	\$0.00	0.00%
					Xerox Leases	Xerox Leases Recurring Payments of \$11.1K for 3 machines Per Click costs of \$3.2K (avg of this year)	\$14,354.85	\$15,500.00	\$1,145.15	7.98%
			Obj Class Totals:				\$30,494.25	\$31,707.90	\$1,213.65	3.98%
		NN	INFRASTRUCTURE:							

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1000	Finance and Administration							
		N50	Non-Major Facility Infrastructure Maintenance and Repair		Repairs	Office/Building Repairs	\$5,000.00	\$5,000.00	\$0.00	0.00%
			Obj Class Totals:				\$5,000.00	\$5,000.00	\$0.00	0.00%
		UU	IT Non-Payroll Expenses							
		U05	Information Technology (IT) Temp Staff Augmentation Profs		IT Consultants	Diversity Consultants	\$25,000.00	\$25,000.00	\$0.00	0.00%
					IT Consultants	Web penetration Testing	\$8,000.00	\$8,000.00	\$0.00	0.00%
		U10	Information Tech (IT) Equipment Maintenance & Repair		Cable	Cable/Comcast	\$5,500.00	\$5,500.00	\$0.00	0.00%
			Obj Class Totals:				\$38,500.00	\$38,500.00	\$0.00	0.00%
			Division/Bureau Totals:				\$2,348,584.88	\$2,459,233.49	\$110,648.61	4.71%
		1100	Human Resources							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Employee Salaries	\$181,896.51	\$358,979.39	\$177,082.88	97.35%
					Raises	3% COLA/Incentives/Equity Agency Wide	\$287,809.32	\$231,746.75	(\$56,062.57)	-19.48%
		A13	Vacation-In-Lieu		Employee Compensation	Buyouts	\$40,000.00	\$40,000.00	\$0.00	0.00%
			Obj Class Totals:				\$509,705.83	\$630,726.14	\$121,020.31	23.74%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Other Out of State Travel-Inclusive Airfare, Hotel, Lodging Gaming Conference *Consolidated into HR 1100 from 1600	\$0.00	\$500.00	\$500.00	#Div/0!
		B02	In-State Travel		Travel	In State Travel	\$1,000.00	\$1,995.00	\$995.00	99.50%
					Travel	In-state Travel AOC as well as site visits of licensees *Consolidated into HR 1100 from 1600	\$0.00	\$3,990.00	\$3,990.00	#Div/0!
			Obj Class Totals:				\$1,000.00	\$6,485.00	\$5,485.00	548.50%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$68,265.76	\$143,591.76	\$75,326.00	110.34%
					Taxes	Tax rate of 1.89%	\$3,583.36	\$6,784.71	\$3,201.35	89.34%
		D15	Workers' Compensation Chargebacks		Worker's Comp Chargeback	Worker's Comp Chargeback	\$5,000.00	\$5,000.00	\$0.00	0.00%
			Obj Class Totals:				\$76,849.12	\$155,376.47	\$78,527.35	102.18%
		EE	ADMINISTRATIVE EXPENSES							
		E02	Printing Expenses & Supplies		Printing	Printing of Reports and Best Practices *Consolidated into HR 1100 from 1600	\$0.00	\$5,000.00	\$5,000.00	#Div/0!

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1100	Human Resources							
		E12	Subscriptions, Memberships & Licensing Fees	Administrative Expenses	Marketing Sponsorships of Diversity and Opportunity Events GNEMSCD, UMASS, Collette Philips *Consolidated into HR 1100 from 1600		\$0.00	\$15,000.00	\$15,000.00	#Div/0!
				Subscriptions	Human Resource Information System		\$5,000.00	\$5,000.00	\$0.00	0.00%
				Subscriptions	Subscriptions, Memberships & Licensing Fees SHRM, NEHRA, The Partnership		\$20,000.00	\$20,000.00	\$0.00	0.00%
		E19	Fees, Fines, Licenses, Permits & Chargebacks	Licenses	Fees, Fines, Licenses, Permits & Chargebacks for HRCMS and HRD		\$9,000.00	\$9,000.00	\$0.00	0.00%
		E22	Temp Use Space/Confer-Incidental Includes Reservation Fees	Conference Incidentals	Conference Incidentals		\$0.00	\$5,000.00	\$5,000.00	#Div/0!
				Conferences	Workforce/Diversity Meetings--Digital also *Consolidated into HR 1100 from 1600		\$0.00	\$7,000.00	\$7,000.00	#Div/0!
		E30	Credit Card Purchases	Credit Card Charges	FIA Card		\$1,000.00	\$1,000.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ	Travel	Travel Agent *Consolidated into HR 1100 from 1600		\$0.00	\$1,000.00	\$1,000.00	#Div/0!
		EE2	Conference, Training and Registration Fees	Conference, Training Registration Fees	GNEMSDC, Umass, Colette Phillips *Consolidated into HR 1100 from 1600		\$0.00	\$5,500.00	\$5,500.00	#Div/0!
				Training	Conference, Training and Registration Fees		\$0.00	\$500.00	\$500.00	#Div/0!
		EE9	Employee Recognition Chargeback	Employee Morale	Employee Recognition Program		\$5,000.00	\$5,000.00	\$0.00	0.00%
			Obj Class Totals:				\$40,000.00	\$79,000.00	\$39,000.00	97.50%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H09	Attorneys/Legal Services	Legal Consultants	Employment Laywers		\$5,000.00	\$5,000.00	\$0.00	0.00%
				Worker's Comp	Workers Comp Litigation Fees		\$5,000.00	\$5,000.00	\$0.00	0.00%
			Obj Class Totals:				\$10,000.00	\$10,000.00	\$0.00	0.00%
		JJ	OPERATIONAL SERVICES							
		J46	Temporary Help Services	Temp Help	Temp help/interns/diversity		\$75,000.00	\$75,000.00	\$0.00	0.00%
		JJ2	Auxiliary Services	HR Investigations	HR Investigations		\$10,000.00	\$10,000.00	\$0.00	0.00%
				Testing	All One Health Resouces		\$3,000.00	\$3,000.00	\$0.00	0.00%
			Obj Class Totals:				\$88,000.00	\$88,000.00	\$0.00	0.00%
		PP	STATE AID/POL SUB							
		P01	Grants To Public Entities	Grants	Worforce Development and Diversity Grants --Business Technical Assistance --Women in Construction --Regional WF Collaborations *Consolidated into HR 1100 from 1600		\$0.00	\$150,000.00	\$150,000.00	#Div/0!
			Obj Class Totals:				\$0.00	\$150,000.00	\$150,000.00	#Div/0!
			Division/Bureau Totals:				\$725,554.95	\$1,119,587.61	\$394,032.66	54.31%
		1200	Legal							

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1200	Legal							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Employee Salaries	\$412,402.20	\$486,845.71	\$74,443.51	18.05%
			Obj Class Totals:				\$412,402.20	\$486,845.71	\$74,443.51	18.05%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Out of State Travel and Training	\$2,500.00	\$6,250.00	\$3,750.00	150.00%
		B02	In-State Travel		Travel	In State Travel	\$1,000.00	\$2,400.00	\$1,400.00	140.00%
		B05	Conference, Training, Registration and Membership Dues and L		Professional Licenses	Professional and Bar Licenses	\$1,000.00	\$1,500.00	\$500.00	50.00%
			Obj Class Totals:				\$4,500.00	\$10,150.00	\$5,650.00	125.56%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$154,774.55	\$194,738.28	\$39,963.73	25.82%
					Taxes	Tax rate of 1.89%	\$8,124.32	\$9,201.38	\$1,077.06	13.26%
			Obj Class Totals:				\$162,898.87	\$203,939.66	\$41,040.79	25.19%
		EE	ADMINISTRATIVE EXPENSES							
		E01	Office & Administrative Supplies		Supplies	Office Supplies	\$5,000.00	\$5,000.00	\$0.00	0.00%
		E12	Subscriptions, Memberships & Licensing Fees		Subscriptions	Subscriptions and Memberships Westlaw ABA (increased by 300/month)	\$15,000.00	\$15,000.00	\$0.00	0.00%
		E13	Advertising Expenses		Reg Advertising	Advertising of Regs and Meetings	\$10,000.00	\$10,000.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ		Conference, Training, Registion Fees	Conference, Training, Registion Fees	\$2,500.00	\$6,250.00	\$3,750.00	150.00%
					Travel	Conference/Trainings Travel and Lodging for 4 FTE	\$1,000.00	\$2,500.00	\$1,500.00	150.00%
			Obj Class Totals:				\$33,500.00	\$38,750.00	\$5,250.00	15.67%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H09	Attorneys/Legal Services		Legal	NA	\$0.00	\$0.00	\$0.00	#Num!
					Litigation Defense	Outside Counsel Litigation Defense	\$400,000.00	\$400,000.00	\$0.00	0.00%
					Outside Counsel	General Practice, Regulations, Laws, etc.	\$75,000.00	\$75,000.00	\$0.00	0.00%
					Outside Counsel	Labor Employment Law	\$25,000.00	\$25,000.00	\$0.00	0.00%
		H19	Management Consultants		Hearing Officer	Hearing Officer	\$40,000.00	\$40,000.00	\$0.00	0.00%
			Obj Class Totals:				\$540,000.00	\$540,000.00	\$0.00	0.00%
		JJ	OPERATIONAL SERVICES							
		JJ1	Legal Support Services		Operational Services	Offsite Storage - \$50 per month charge if boxes are pulled	\$750.00	\$750.00	\$0.00	0.00%
			Obj Class Totals:				\$750.00	\$750.00	\$0.00	0.00%
			Division/Bureau Totals:				\$1,154,051.07	\$1,280,435.37	\$126,384.30	10.95%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1300	Executive Director							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Employee Salaries	\$401,516.17	\$441,495.38	\$39,979.21	9.96%
			Obj Class Totals:				\$401,516.17	\$441,495.38	\$39,979.21	9.96%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Conferences Out of State	\$3,000.00	\$4,500.00	\$1,500.00	50.00%
		B02	In-State Travel		Travel	In-State Mileage and Reimbursements	\$2,050.00	\$4,023.25	\$1,973.25	96.26%
			Obj Class Totals:				\$5,050.00	\$8,523.25	\$3,473.25	68.78%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$150,689.02	\$176,598.15	\$25,909.13	17.19%
					Taxes	Tax rate of 1.89%	\$7,909.87	\$8,344.26	\$434.39	5.49%
			Obj Class Totals:				\$158,598.89	\$184,942.41	\$26,343.52	16.61%
		EE	ADMINISTRATIVE EXPENSES							
		E12	Subscriptions, Memberships & Licensing Fees		Memberships	NAGR	\$500.00	\$500.00	\$0.00	0.00%
		E30	Credit Card Purchases		Credit Card	Credit Card Purchases	\$5,000.00	\$5,000.00	\$0.00	0.00%
		EE2	Conference, Training and Registration Fees		Gaming Forum	Travel allocated to divisions	\$0.00	\$0.00	\$0.00	#Num!
					Travel	NA	\$0.00	\$0.00	\$0.00	#Num!
					Travel and Conf	Conference, Training and Registration Fees	\$0.00	\$5,000.00	\$5,000.00	#Div/0!
			Obj Class Totals:				\$5,500.00	\$10,500.00	\$5,000.00	90.91%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H19	Management Consultants		Strategic Consultant	General Consultant needs for Commissioners or Executive Director	\$10,000.00	\$10,000.00	\$0.00	0.00%
			Obj Class Totals:				\$10,000.00	\$10,000.00	\$0.00	0.00%
		JJ	OPERATIONAL SERVICES							
		J50	Instructors/Lecturers/Trainers		Training	Upper Management Training	\$0.00	\$5,000.00	\$5,000.00	#Div/0!
			Obj Class Totals:				\$0.00	\$5,000.00	\$5,000.00	#Div/0!
			Division/Bureau Totals:				\$580,665.06	\$660,461.04	\$79,795.98	13.74%
		1400	Information Technology							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Employee Salaries	\$829,849.30	\$891,382.92	\$61,533.62	7.42%
			Obj Class Totals:				\$829,849.30	\$891,382.92	\$61,533.62	7.42%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Out of State Travel G2E/Gartner	\$1,250.00	\$1,875.00	\$625.00	50.00%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1400	Information Technology							
		B02	In-State Travel		Travel	In-state travel	\$2,500.00	\$3,750.00	\$1,250.00	50.00%
		B10	Exigent Job Related Expenses		Travel	Exigent Job Related Expenses	\$100.00	\$0.00	(\$100.00)	-100.00%
		B11	Employer Refund of Non-Tax Benefits		Travel	Employer Refund of Non-Tax Benefits	\$300.00	\$0.00	(\$300.00)	-100.00%
			Obj Class Totals:				\$4,150.00	\$5,625.00	\$1,475.00	35.54%
		DD	<i>PENSION & INSURANCE RELATED EX</i>							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$311,442.44	\$356,553.17	\$45,110.73	14.48%
					Taxes	Tax rate of 1.89%	\$16,348.03	\$16,847.14	\$499.11	3.05%
			Obj Class Totals:				\$327,790.47	\$373,400.31	\$45,609.84	13.91%
		EE	<i>ADMINISTRATIVE EXPENSES</i>							
		E01	Office & Administrative Supplies		Supplies	Office and Administrative Supplies	\$200.00	\$300.00	\$100.00	50.00%
		E02	Printing Expenses & Supplies		Printers	Printers @\$250/printer	\$300.00	\$300.00	\$0.00	0.00%
		E12	Subscriptions, Memberships & Licensing Fees		Subscriptions	Pagefreezer, Gaming Compliance	\$8,700.00	\$18,676.00	\$9,976.00	114.67%
		E30	Credit Card Purchases		Credit Card	Credit Card Purchases; \$400 Domain GOV Renewal	\$1,000.00	\$1,000.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ		Travel	Travel Agent Expenses	\$0.00	\$0.00	\$0.00	#Num!
		E42	In-State Travel & Related Expen on Behalf of State Employees		Travel Agent	In-State Travel and Related Expenses	\$0.00	\$0.00	\$0.00	#Num!
		EE2	Conference, Training and Registration Fees		Conference	Conference, Training and Registrations Fees	\$0.00	\$2,500.00	\$2,500.00	#Div/0!
			Obj Class Totals:				\$10,200.00	\$22,776.00	\$12,576.00	123.29%
		GG	<i>ENERGY COSTS AND SPACE RENTAL</i>							
		G01	Space Rental		Data Center	Markley Data Center Costs (Rack Space \$10.8K, Electricity \$13.2K, and Fiber \$4K)	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
		JJ	<i>OPERATIONAL SERVICES</i>							
		J50	Instructors/Lecturers/Trainers		Training	Technical Training not available on LinkedIn	\$5,000.00	\$5,000.00	\$0.00	0.00%
		JJ1	Legal Support Services		Litigation	Target Litigation Backup	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$5,000.00	\$5,000.00	\$0.00	0.00%
		KK	<i>EQUIPMENT PURCHASE</i>							
		K07	Office Furnishings		Office Equipment	Creative Office Pavillion	\$5,000.00	\$5,000.00	\$0.00	0.00%
			Obj Class Totals:				\$5,000.00	\$5,000.00	\$0.00	0.00%
		LL	<i>EQUIPMENT LEASE-MAINTAIN/REPAR</i>							
		L24	Motorized Vehicle Equipment Rental or Lease		Rental Cars	Enterprise	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
		NN	<i>INFRASTRUCTURE:</i>							

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
10500001	Mass. Gaming Commission										
	MGC Regulatory Costs										
	1400	Information Technology									
	N50	Non-Major Facility Infrastructure Maintenance and Repair	Facilities Maintenance		\$4,450 Annual Main & Support, Parts/HVAC monitoring; Viscom \$1,500 Building Security		\$10,000.00	\$10,000.00	\$0.00	0.00%	
	Obj Class Totals:							\$10,000.00	\$10,000.00	\$0.00	0.00%
	UU	<i>IT Non-Payroll Expenses</i>									
	U01	Telecommunications Services Data	TELECOMMUNICATIONS SERVICES DATA		Surveillance, CMS Primary/Backup Circuits, Lab Line, Windstream Services (VPN, LAN, WAN redundancy) etc		\$266,268.28	\$278,584.06	\$12,315.78	4.63%	
	U02	Telecommunications Services - Voice	TELECOMMUNICATIONS SERVICES - VOICE		OfficeSuite (Voice, HD Meeting, WeConnect), Verizon Wireless, Multi-location fax lines		\$117,855.44	\$112,710.12	(\$5,145.32)	-4.37%	
	U03	Software & Information Technology Licenses (IT)	SOFTWARE & INFORMATION TECHNOLOGY LICENSES (IT)		Adobe, Sharepoint, O365, Azure, JIRA, MDM etc		\$401,420.71	\$455,310.48	\$53,889.77	13.42%	
	U04	Information Technology Chargeback	INFORMATION TECHNOLOGY CHARGEBACK		ITD/BCS Chargeback		\$97,931.00	\$63,226.34	(\$34,704.66)	-35.44%	
	U05	Information Technology (IT) Temp Staff Augmentation Profs	CMS - \$2,484,206.46		CMS - IGT Intelligen (PPC, MGM, EBH)		\$2,326,368.27	\$2,326,368.27	\$0.00	0.00%	
			CONSULTING - \$75,000		IT Consulting Support (TBD)		\$50,000.00	\$50,000.00	\$0.00	0.00%	
			Staff Augmentations Professionals		McInnis Consulting Jira Expert		\$10,000.00	\$10,000.00	\$0.00	0.00%	
	U06	Information Technology (IT) Cabling	IT Cabling		Runs/Cabling		\$3,000.00	\$3,000.00	\$0.00	0.00%	
	U07	Information Technology (IT) Equipment	Cloud Migration		Prior Year Adjustment		\$0.00	\$0.00	\$0.00	#Num!	
			IT Equipment		IT Equipment, emergency replacements (switches, routers, firewalls) etc		\$120,000.00	\$145,000.00	\$25,000.00	20.83%	
	U09	Information Technology (IT) Equip Rental Or Lease	INFORMATION TECHNOLOGY (IT) EQUIP RENTAL OR LEASE		ACS Leases (Refresh)		\$76,200.00	\$125,695.00	\$49,495.00	64.95%	
	U10	Information Tech (IT) Equipment Maintenance & Repair	IT Maintenance and Repair		Annual M&S Equipment/Services		\$106,436.54	\$131,802.76	\$25,366.22	23.83%	
	U11	Information Technology (IT) Contract Services	IT Contract Services		LMS, Gartner, Tallan Services		\$400,000.00	\$471,017.00	\$71,017.00	17.75%	
	Obj Class Totals:							\$3,975,480.24	\$4,172,714.03	\$197,233.79	4.96%
	Division/Bureau Totals:							\$5,167,470.01	\$5,485,898.26	\$318,428.25	6.16%
	1500	Commissioners									
	AA	<i>REGULAR EMPLOYEE COMPENSATION</i>									
	A01	Salaries: Inclusive	Employee Compensation		Employee Compensation		\$664,292.41	\$815,872.68	\$151,580.27	22.82%	

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1500	Commissioners							
			Obj Class Totals:				\$664,292.41	\$815,872.68	\$151,580.27	22.82%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	Travel Reimbursements	Travel Reimbursements	Travel Reimbursements --In State (6 Commission Meetings a Year, Site Visits) --Out of Pocket Out of State Expenses	\$7,500.00	\$18,000.00	\$10,500.00	140.00%
			Obj Class Totals:				\$7,500.00	\$18,000.00	\$10,500.00	140.00%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment	Fringe	Fringe	Fringe rate of 40%	\$249,308.94	\$326,349.07	\$77,040.13	30.90%
				Taxes	Taxes	Tax rate of 1.89%	\$13,086.56	\$15,419.99	\$2,333.43	17.83%
			Obj Class Totals:				\$262,395.50	\$341,769.06	\$79,373.56	30.25%
		EE	ADMINISTRATIVE EXPENSES							
		E02	Printing Expenses & Supplies	Office Supplies	Office Supplies	Lane Printing, etc.	\$200.00	\$200.00	\$0.00	0.00%
		E12	Subscriptions, Memberships & Licensing Fees	Subscriptions	Subscriptions	Trade Journals	\$5,950.00	\$5,950.00	\$0.00	0.00%
		E22	Temp Use Space/Confer-Incidental Includes Reservation Fees	75-101 Parking Garage	75-101 Parking Garage	Parking 75-101--5 spaces. Two of the spaces are included in the lease. This item pays for 3 of the spaces.	\$28,200.00	\$18,720.00	(\$9,480.00)	-33.62%
				Meeting Space	Meeting Space	Temporary Space @ 6mtgs - \$2K meeting space 6 mtgs and \$5k to stream for 4 of the meetings	\$0.00	\$32,000.00	\$32,000.00	#Div/0!
		E30	Credit Card Purchases	Credit Card	Credit Card	Allowable Credit Card Expenses	\$7,500.00	\$7,500.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ	Travel Agency Fees	Travel Agency Fees	Travel	\$10,000.00	\$10,000.00	\$0.00	0.00%
		EE2	Conference, Training and Registration Fees	Registration Fees	Registration Fees	Conference/Trainings	\$7,000.00	\$7,000.00	\$0.00	0.00%
			Obj Class Totals:				\$58,850.00	\$81,370.00	\$22,520.00	38.27%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H23	Program Coordinators	Consultant	Consultant	NA	\$0.00	\$0.00	\$0.00	#Num!
				Monitor	Monitor	Independent Monitor bills paid in 2nd quarter of FY22	\$281,227.70	\$0.00	(\$281,227.70)	-100.00%
				Monitor	Monitor	Independent Monitor bills paid in first quarter of FY22	\$73,024.40	\$0.00	(\$73,024.40)	-100.00%
				Monitor	Monitor	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$354,252.10	\$0.00	(\$354,252.10)	-100.00%
		JJ	OPERATIONAL SERVICES							
		J33	Photographic & Micrographic Services	Stenographer	Stenographer	Transcriptions services	\$20,000.00	\$10,000.00	(\$10,000.00)	-50.00%
			Obj Class Totals:				\$20,000.00	\$10,000.00	(\$10,000.00)	-50.00%
		KK	EQUIPMENT PURCHASE							
		K07	Office Furnishings	Office Equipment	Office Equipment	Office Furnishings	\$5,000.00	\$5,000.00	\$0.00	0.00%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1500	Commissioners							
			Obj Class Totals:				\$5,000.00	\$5,000.00	\$0.00	0.00%
			Division/Bureau Totals:				\$1,372,290.01	\$1,272,011.74	(\$100,278.27)	-7.31%
		1600	Workforce and Supplier Diversity							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Employee Salaries consolidated into HR	\$208,243.26	\$0.00	(\$208,243.26)	-100.00%
			Obj Class Totals:				\$208,243.26	\$0.00	(\$208,243.26)	-100.00%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Other Out of State Travel-Inclusive Airfare, Hotel, Lodging --Las Vegas Gaming Conference G2E	\$500.00	\$0.00	(\$500.00)	-100.00%
		B02	In-State Travel		Travel	In-state Travel AOC as well as site visits of licensees	\$3,000.00	\$0.00	(\$3,000.00)	-100.00%
			Obj Class Totals:				\$3,500.00	\$0.00	(\$3,500.00)	-100.00%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe consolidated into HR	\$78,153.70	\$0.00	(\$78,153.70)	-100.00%
					Taxes	Tax rate consolidated into HR	\$4,102.39	\$0.00	(\$4,102.39)	-100.00%
			Obj Class Totals:				\$82,256.09	\$0.00	(\$82,256.09)	-100.00%
		EE	ADMINISTRATIVE EXPENSES							
		E02	Printing Expenses & Supplies		Printing	Printing of Reports and Best Practices	\$5,000.00	\$0.00	(\$5,000.00)	-100.00%
		E12	Subscriptions, Memberships & Licensing Fees		Administrative Expenses	Marketing Sponsorships of Diversity and Opportunity Events GNEMSCD, UMASS, Collette Phillips	\$15,000.00	\$0.00	(\$15,000.00)	-100.00%
		E22	Temp Use Space/Confer-Incidental Includes Reservation Fees		Conferences	Workforce/Diversity Meetings--Digital also	\$3,500.00	\$0.00	(\$3,500.00)	-100.00%
		E41	Out Of State Travel Expen on Behalf of State Employ		Travel	Travel Agent	\$0.00	\$0.00	\$0.00	#Num!
		EE2	Conference, Training and Registration Fees		Conference, Training Registration Fees	GNEMSDC, Umass, Colette Phillips	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$23,500.00	\$0.00	(\$23,500.00)	-100.00%
		HH	CONSULTANT SVCS (TO DEPTS)							
		HH3	Media Design, Editorial and Communication		Media Design	One Time Instance - Impact Report Design	\$10,000.00	\$0.00	(\$10,000.00)	-100.00%
			Obj Class Totals:				\$10,000.00	\$0.00	(\$10,000.00)	-100.00%
		PP	STATE AID/POL SUB							
		P01	Grants To Public Entities		Grants	Completed - MCCA contibution to Workforce Development	\$25,000.00	\$0.00	(\$25,000.00)	-100.00%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1600	Workforce and Supplier Diversity							
		P01	Grants To Public Entities		Grants	Worforce Development and Diversity Grants --Business Technical Assistance --Women in Construction --Regional WF Collaborations	\$150,000.00	\$0.00	(\$150,000.00)	-100.00%
			Obj Class Totals:				\$175,000.00	\$0.00	(\$175,000.00)	-100.00%
			Division/Bureau Totals:				\$502,499.35	\$0.00	(\$502,499.35)	-100.00%
		1800	Communications							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Regular Salaries	\$182,681.05	\$192,021.01	\$9,339.96	5.11%
			Obj Class Totals:				\$182,681.05	\$192,021.01	\$9,339.96	5.11%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B02	In-State Travel		Travel Reimbursement	In-State Travel Reimbursement	\$2,250.00	\$4,488.75	\$2,238.75	99.50%
			Obj Class Totals:				\$2,250.00	\$4,488.75	\$2,238.75	99.50%
		CC	SPECIAL EMPLOYEES							
		C05	Contracted Student Interns		Intern	Student Intern-Co-op	\$0.00	\$0.00	\$0.00	#Num!
		C23	Management, Business Professionals & Admin Services		Contract Employee	Contract Employee	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$68,560.20	\$76,808.40	\$8,248.20	12.03%
					Taxes	Tax rate of 1.89%	\$3,598.82	\$3,629.20	\$30.38	0.84%
			Obj Class Totals:				\$72,159.02	\$80,437.60	\$8,278.58	11.47%
		EE	ADMINISTRATIVE EXPENSES							
		E02	Printing Expenses & Supplies		Printing	Printing	\$6,100.00	\$6,100.00	\$0.00	0.00%
		E12	Subscriptions, Memberships & Licensing Fees		Subscriptions	Subscriptions, Licensing, Memberships	\$35,650.00	\$35,650.00	\$0.00	0.00%
			Obj Class Totals:				\$41,750.00	\$41,750.00	\$0.00	0.00%
		HH	CONSULTANT SVCS (TO DEPTS)							
		HH3	Media Design, Editorial and Communication		Website Design	Marketing & Website Design	\$25,000.00	\$25,000.00	\$0.00	0.00%
			Obj Class Totals:				\$25,000.00	\$25,000.00	\$0.00	0.00%
		JJ	OPERATIONAL SERVICES							
		JJ2	Auxiliary Services		Streaming	Streaming & Production of Public Meetings	\$23,000.00	\$23,000.00	\$0.00	0.00%
			Obj Class Totals:				\$23,000.00	\$23,000.00	\$0.00	0.00%
		KK	EQUIPMENT PURCHASE							

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		1800	Communications							
			K05	Office Equipment	Equipment Purchases	Increased to purchase additional Photography/Streaming Equipment Net Zero Purchase	\$2,500.00	\$5,000.00	\$2,500.00	100.00%
			Obj Class Totals:				\$2,500.00	\$5,000.00	\$2,500.00	100.00%
			UU	IT Non-Payroll Expenses						
			U07	Information Technology (IT) Equipment	Database	Customer Relationship management tool	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
		Division/Bureau Totals:				\$349,340.07	\$371,697.36	\$22,357.29	6.40%	
		1900	Ombudsman							
			AA	REGULAR EMPLOYEE COMPENSATION						
			A01	Salaries: Inclusive	Employee Compensation	Regular Employees	\$95,790.72	\$102,061.04	\$6,270.32	6.55%
			Obj Class Totals:				\$95,790.72	\$102,061.04	\$6,270.32	6.55%
			BB	REGULAR EMPLOYEE RELATED EXPEN						
			B02	In-State Travel	In State Travel Reimbursement	In-State Travel Reimbursement and Out of State --Visits to Other Licensee Sites *Increase post pandemic to account for increase in mileage reimbursements	\$500.00	\$2,992.50	\$2,492.50	498.50%
			Obj Class Totals:				\$500.00	\$2,992.50	\$2,492.50	498.50%
			DD	PENSION & INSURANCE RELATED EX						
			D09	Fringe Benefit Cost Recoupment	Fringe	Fringe rate of 40%	\$35,590.26	\$40,824.42	\$5,234.16	14.71%
					Taxes	Tax rate of 1.89%	\$1,887.08	\$1,928.95	\$41.87	2.22%
			Obj Class Totals:				\$37,477.34	\$42,753.37	\$5,276.03	14.08%
			EE	ADMINISTRATIVE EXPENSES						
			E12	Subscriptions, Memberships & Licensing Fees	Subscriptions/Memberships	Instatrac subscription	\$0.00	\$0.00	\$0.00	#Num!
			E22	Temp Use Space/Confer-Incidental Includes Reservation Fees	Conferences and Incidentals	Gaming Policy Advisory Committee	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
			UU	IT Non-Payroll Expenses						
			U07	Information Technology (IT) Equipment	IT Software	Grant Software	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
		Division/Bureau Totals:				\$133,768.06	\$147,806.91	\$14,038.85	10.49%	
		5000	Investigations and Enforcement Bureau							
			AA	REGULAR EMPLOYEE COMPENSATION						
			A01	Salaries: Inclusive	Employee Compensation	Employee Salaries	\$3,357,188.68	\$3,639,412.54	\$282,223.86	8.41%
			A08	Overtime Pay	Overtime	Overtime for Gaming Agents.	\$100,000.00	\$100,000.00	\$0.00	0.00%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		5000	Investigations and Enforcement Bureau							
		A08	Overtime Pay		Overtime	Overtime increase for 2nd half of fiscal year Gaming Agents	\$60,000.00	\$0.00	(\$60,000.00)	-100.00%
			Obj Class Totals:				\$3,517,188.68	\$3,739,412.54	\$222,223.86	6.32%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI		Travel	Out of state travel reimbursements for gaming enforcement agents and non-state police staff	\$7,500.00	\$11,250.00	\$3,750.00	50.00%
		B02	In-State Travel		Travel	In-state-travel reimbursements for gaming enforcement agents and non-state police staff	\$4,000.00	\$7,980.00	\$3,980.00	99.50%
			Obj Class Totals:				\$11,500.00	\$19,230.00	\$7,730.00	67.22%
		CC	SPECIAL EMPLOYEES							
		C23	Management, Business Professionals & Admin Services		Contract Employee	Contracted Civilian Investigators	\$205,000.00	\$205,000.00	\$0.00	0.00%
					Contract	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$205,000.00	\$205,000.00	\$0.00	0.00%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$1,259,952.92	\$1,455,765.02	\$195,812.10	15.54%
					Taxes	Tax rate of 1.89%	\$66,136.62	\$68,784.90	\$2,648.28	4.00%
					Taxes	Taxes on CC Employees 1.89%	\$4,038.50	\$4,038.50	\$0.00	0.00%
			Obj Class Totals:				\$1,330,128.04	\$1,528,588.42	\$198,460.38	14.92%
		EE	ADMINISTRATIVE EXPENSES							
		E01	Office & Administrative Supplies		Supplies	Supplies	\$5,000.00	\$5,000.00	\$0.00	0.00%
		E12	Subscriptions, Memberships & Licensing Fees		Subscriptions	Lexis Nexis,Hire Authority, Nat.Student Loan Increase of \$500/month for GOLD Subscription Service	\$86,000.00	\$86,000.00	\$0.00	0.00%
		E20	Motor Vehicle Chargeback		Motor Vehcile Lease	OVM Chargeback	\$6,110.00	\$6,110.00	\$0.00	0.00%
		E30	Credit Card Purchases		Credit Card	Credit Card Purchases	\$15,000.00	\$15,000.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ		Travel Agent	Travel Agent for Trainings and Investigations	\$50,000.00	\$75,000.00	\$25,000.00	50.00%
		EE2	Conference, Training and Registration Fees		Registrations	Training/Conference Registration Fees.	\$22,500.00	\$26,250.00	\$3,750.00	16.67%
			Obj Class Totals:				\$184,610.00	\$213,360.00	\$28,750.00	15.57%
		FF	FACILITY OPERATIONAL EXPENSES							
		F09	Clothing & Footwear		Programatic Supplies	Clothing and Footwear	\$20,000.00	\$20,000.00	\$0.00	0.00%
			Obj Class Totals:				\$20,000.00	\$20,000.00	\$0.00	0.00%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H23	Program Coordinators		Outside Consultant	HLT Background	\$0.00	\$0.00	\$0.00	#Num!

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Packet Page	Percent Change
10500001	Mass. Gaming Commission			MGC Regulatory Costs							
		5000	Investigations and Enforcement Bureau								
			Obj Class Totals:				\$0.00	\$0.00	\$0.00		#Num!
		JJ	OPERATIONAL SERVICES								
		J25	Laboratory & Pharmaceutical Services	Everett Police	EPD	Everett Police GEU 7FTE's	\$1,062,872.00	\$1,333,235.00	\$270,363.00		25.44%
				Finger Prints State Police		Chargeback for Finger Print Costs for Licenses @ \$50/set and ~4.5K prints	\$50,000.00	\$50,000.00	\$0.00		0.00%
				Plainville Police Salaries		Plainville Local Police	\$225,000.00	\$411,044.56	\$186,044.56		82.69%
				Plainville Police Salaries		Plainville Local Police amendment for unpaid invoice from FY19	\$58,528.46	\$0.00	(\$58,528.46)		-100.00%
				Springfield Police Salaries	SPD	Springfield Police GEU 6 FTEs Amendment for FY21 costs billed in FY22	\$271,539.12	\$0.00	(\$271,539.12)		-100.00%
				Springfield Police Salaries	SPD	Springfield Police GEU 7 FTEs	\$821,169.00	\$1,014,612.49	\$193,443.49		23.56%
				State Police	MSP	MGC Salaries for MGC Investigations and Background Unit	\$939,199.89	\$961,673.22	\$22,473.33		2.39%
				State Police	MSP	MGC State Police Troopers Plainville Straight Time and Payroll Taxes	\$1,236,429.79	\$1,193,336.14	(\$43,093.65)		-3.49%
				State Police	MSP	MGC State Troopers Everett	\$1,672,292.60	\$1,646,713.44	(\$25,579.16)		-1.53%
				State Police	MSP	MSP Staff Costs at MGM 16 FTEs	\$1,693,031.48	\$1,830,943.32	\$137,911.84		8.15%
				State Police		Prior Year Adjustment	\$0.00	\$0.00	\$0.00		#Num!
				State Police OT & Travel		OT and Travel for Troopers assigned to MGC GEU	\$1,870,000.00	\$1,926,100.00	\$56,100.00		3.00%
		J28	Law Enforcement	Lease Vehicles		Plainville Law Enforcement Vehicles	\$8,877.39	\$8,877.39	\$0.00		0.00%
			Obj Class Totals:				\$9,908,939.73	\$10,376,535.56	\$467,595.83		4.72%
		KK	EQUIPMENT PURCHASE								
		K07	Office Furnishings	Equipment Purchase		Current year Qtr1 budget adjustment	\$0.00	\$0.00	\$0.00		#Num!
				Office Equipment		Patrol Rifles/Active Shooter Gear-- Replacement/Upgrade of Fingerprint Machines to be Windows Compliant	\$47,000.00	\$47,000.00	\$0.00		0.00%
			Obj Class Totals:				\$47,000.00	\$47,000.00	\$0.00		0.00%
		NN	INFRASTRUCTURE:								
		N50	Non-Major Facility Infrastructure Maintenance and Repair	Non-Major Facility Maintenance & Repair		Office Reconfiguration	\$10,000.00	\$10,000.00	\$0.00		0.00%
			Obj Class Totals:				\$10,000.00	\$10,000.00	\$0.00		0.00%
		UU	IT Non-Payroll Expenses								
		U03	Software & Information Technology Licenses (IT)	Software		ITRACK	\$11,700.00	\$11,700.00	\$0.00		0.00%
			Obj Class Totals:				\$11,700.00	\$11,700.00	\$0.00		0.00%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		5000	Investigations and Enforcement Bureau							
		Division/Bureau Totals:					\$15,246,066.45	\$16,170,826.52	\$924,760.07	6.07%
		7000	Licensing Division							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive	Employee Compensation	Employee Compensation	Regular Employee Salaries	\$445,414.34	\$591,539.70	\$146,125.36	32.81%
		Obj Class Totals:					\$445,414.34	\$591,539.70	\$146,125.36	32.81%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	Travel	Travel	Out-of State Travel Reimbursements	\$1,250.00	\$1,875.00	\$625.00	50.00%
		B02	In-State Travel	Travel	Travel	In-State Travel Reimbursements--Fingerprinting Reimbursements	\$500.00	\$997.50	\$497.50	99.50%
		Obj Class Totals:					\$1,750.00	\$2,872.50	\$1,122.50	64.14%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment	Fringe	Fringe	Fringe rate of 40%	\$167,164.00	\$236,615.87	\$69,451.87	41.55%
				Taxes	Taxes	Tax rate of 1.89%	\$8,774.66	\$11,180.10	\$2,405.44	27.41%
		Obj Class Totals:					\$175,938.66	\$247,795.97	\$71,857.31	40.84%
		EE	ADMINISTRATIVE EXPENSES							
		E02	Printing Expenses & Supplies	Supplies	Supplies	Supplies	\$7,500.00	\$7,500.00	\$0.00	0.00%
		E06	Postage	Postage	Postage	Federal Express Charges	\$1,500.00	\$1,500.00	\$0.00	0.00%
		E41	Out Of State Travel Expen on Behalf of State Employ	Travel Agent	Travel Agent	Travel Leaders G2E for meetings with Vendors and Licensing of Primaries	\$4,000.00	\$7,000.00	\$3,000.00	75.00%
		EE2	Conference, Training and Registration Fees	Conferences	Conferences	Conference, Training & Registration.	\$3,000.00	\$4,000.00	\$1,000.00	33.33%
		Obj Class Totals:					\$16,000.00	\$20,000.00	\$4,000.00	25.00%
		LL	EQUIPMENT LEASE-MAINTAIN/REPAR							
		L26	Printing/Photocopy & Micrographics Equip Rent/Lease	Equipment Leases	Equipment Leases	3 Scanner Leases	\$10,000.00	\$10,000.00	\$0.00	0.00%
		Obj Class Totals:					\$10,000.00	\$10,000.00	\$0.00	0.00%
		Division/Bureau Totals:					\$649,103.00	\$872,208.17	\$223,105.17	34.37%
		All	All Divisions							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive	Regular Employee Compensation	Regular Employee Compensation	Turnover Savings	(\$250,000.00)	(\$350,000.00)	(\$100,000.00)	40.00%
				Turnover Savings	Turnover Savings	Projected Turnover in addition to initial \$250K.	(\$500,000.00)	\$0.00	\$500,000.00	-100.00%
		Obj Class Totals:					(\$750,000.00)	(\$350,000.00)	\$400,000.00	-53.33%
		BB	REGULAR EMPLOYEE RELATED EXPEN							

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
	All	All Divisions								
		B01	Other Out Of State Travel - INCLUSIVE:	AIRFARE, HOTEL, LODGI	Travel	NA	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$0.00	\$0.00	\$0.00	#Num!
		DD	<i>PENSION & INSURANCE RELATED EX</i>							
		D09	Fringe Benefit Cost Recoupment		Fringe and Payroll Taxes	Fringe and Payroll Taxes on 2nd quarter turnover savings	(\$173,800.00)	\$0.00	\$173,800.00	-100.00%
					Fringe and Payroll Taxes	Fringe and Payroll Taxes on Turnover Savings	(\$113,684.68)	(\$146,615.00)	(\$32,930.32)	28.97%
			Obj Class Totals:				(\$287,484.68)	(\$146,615.00)	\$140,869.68	-49.00%
			Division/Bureau Totals:				(\$1,037,484.68)	(\$496,615.00)	\$540,869.68	-52.13%
	MGC Regulatory Costs		Totals:				\$27,191,908.23	\$29,343,551.47	\$2,151,643.24	7.91%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	Indirect									
		2000	MGC Indirect							
			EE	ADMINISTRATIVE EXPENSES						
			E16	Indirect Cost Recoupment	Indirect	Indirect adjustments from 2nd quarter revisions	(\$15,877.23)	\$0.00	\$15,877.23	-100.00%
					Indirect	Indirect Expense on Turnover Savings	(\$25,000.00)	\$0.00	\$25,000.00	-100.00%
					Indirect	NA	\$0.00	\$0.00	\$0.00	#Num!
					Indirect	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
					Indirect Agency Wide	Indirect at 10% of AA, CC, HH, JJ and UU excluding U07	\$2,286,055.34	\$2,419,852.48	\$133,797.14	5.85%
				Obj Class Totals:			\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%
				Division/Bureau Totals:			\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%
	Indirect			Totals:			\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	Office of Attorney General and AGO MSP									
		9000	Office of the Attorney General							
		JJ	OPERATIONAL SERVICES							
		J25	Laboratory & Pharmaceutical Services		State Police	MSPAGO State Police OT	\$350,000.00	\$360,500.00	\$10,500.00	3.00%
					State Police	MSPAGO Straight Time Troopers and Payroll Taxes 3FTEs for FY23	\$587,971.46	\$578,613.12	(\$9,358.34)	-1.59%
						Obj Class Totals:	\$937,971.46	\$939,113.12	\$1,141.66	0.12%
		OO								
		O99			Attorney General	Funds FTEs assigned to the unit, various percentages of FTEs of support, and management positions, office space, travel, conferences, and investigative costs.	\$2,630,034.15	\$2,927,384.00	\$297,349.85	11.31%
					Indirect	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
						Obj Class Totals:	\$2,630,034.15	\$2,927,384.00	\$297,349.85	11.31%
						Division/Bureau Totals:	\$3,568,005.61	\$3,866,497.12	\$298,491.51	8.37%
	Office of Attorney General and AGO MSP					Totals:	\$3,568,005.61	\$3,866,497.12	\$298,491.51	8.37%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	Alcohol and Beverage Control Commission									
		9001								
			00							
			001		ISA with ABCC	ABCC	\$75,000.00	\$75,000.00	\$0.00	0.00%
			Obj Class Totals:				\$75,000.00	\$75,000.00	\$0.00	0.00%
			Division/Bureau Totals:				\$75,000.00	\$75,000.00	\$0.00	0.00%
	Alcohol and Beverage Control Commission Totals:						\$75,000.00	\$75,000.00	\$0.00	0.00%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
Appropriation Totals							\$33,080,091.95	\$35,704,901.07	\$2,624,809.12	7.93%
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
	1000	Finance and Administration								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Admin Employees Salaries	\$223,849.78	\$209,120.02	(\$14,729.76)	-6.58%
		Obj Class Totals:					\$223,849.78	\$209,120.02	(\$14,729.76)	-6.58%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$84,010.82	\$83,648.25	(\$362.57)	-0.43%
					Taxes	Tax rate of 1.89%	\$4,409.84	\$4,027.90	(\$381.94)	-8.66%
		Obj Class Totals:					\$88,420.66	\$87,676.15	(\$744.51)	-0.84%
		Division/Bureau Totals:					\$312,270.44	\$296,796.17	(\$15,474.27)	-4.96%
	1100	Human Resources								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	HR Employees Salaries	\$50,424.53	\$105,766.53	\$55,342.00	109.75%
		Obj Class Totals:					\$50,424.53	\$105,766.53	\$55,342.00	109.75%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$18,924.33	\$42,306.61	\$23,382.28	123.56%
					Taxes	Tax rate of 1.89%	\$993.36	\$1,998.99	\$1,005.63	101.24%
		Obj Class Totals:					\$19,917.69	\$44,305.60	\$24,387.91	122.44%
		Division/Bureau Totals:					\$70,342.22	\$150,072.13	\$79,729.91	113.35%
	1200	Legal								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Legal Employees Salaries	\$20,975.51	\$35,661.64	\$14,686.13	70.02%
		Obj Class Totals:					\$20,975.51	\$35,661.64	\$14,686.13	70.02%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$7,872.11	\$14,264.66	\$6,392.55	81.21%
					Taxes	Tax rate of 1.89%	\$413.22	\$674.00	\$260.78	63.11%
		Obj Class Totals:					\$8,285.33	\$14,938.66	\$6,653.33	80.30%
		Division/Bureau Totals:					\$29,260.84	\$50,600.30	\$21,339.46	72.93%
	1300	Executive Director								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Exec. Dir. Employees Salaries	\$6,820.87	\$28,169.45	\$21,348.58	312.99%
		Obj Class Totals:					\$6,820.87	\$28,169.45	\$21,348.58	312.99%
		DD	PENSION & INSURANCE RELATED EX							

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
	1300	Executive Director								
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$2,559.87	\$11,267.78	\$8,707.91	340.17%
					Taxes	Tax rate of 1.89%	\$134.37	\$532.40	\$398.03	296.22%
		Obj Class Totals:					\$2,694.24	\$11,800.18	\$9,105.94	337.98%
		Division/Bureau Totals:					\$9,515.11	\$39,969.63	\$30,454.52	320.06%
	1400	Information Technology								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	IT Employees Salaries	\$145,986.07	\$197,045.62	\$51,059.55	34.98%
		Obj Class Totals:					\$145,986.07	\$197,045.62	\$51,059.55	34.98%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$54,788.57	\$78,818.25	\$24,029.68	43.86%
					Taxes	Tax rate of 1.89%	\$2,875.93	\$3,724.16	\$848.23	29.49%
		Obj Class Totals:					\$57,664.50	\$82,542.41	\$24,877.91	43.14%
		Division/Bureau Totals:					\$203,650.57	\$279,588.03	\$75,937.46	37.29%
	1500	Commissioners								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Commissioners Employees Salaries	\$61,960.50	\$64,831.02	\$2,870.52	4.63%
		Obj Class Totals:					\$61,960.50	\$64,831.02	\$2,870.52	4.63%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$23,253.78	\$25,932.41	\$2,678.63	11.52%
					Taxes	Tax rate of 1.89%	\$1,220.62	\$1,225.31	\$4.69	0.38%
		Obj Class Totals:					\$24,474.40	\$27,157.72	\$2,683.32	10.96%
		Division/Bureau Totals:					\$86,434.90	\$91,988.74	\$5,553.84	6.43%
	1800	Communications								
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive		Employee Compensation	Communications Employees Salaries	\$11,654.92	\$17,838.02	\$6,183.10	53.05%
		Obj Class Totals:					\$11,654.92	\$17,838.02	\$6,183.10	53.05%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment		Fringe	Fringe rate of 40%	\$4,374.09	\$7,135.21	\$2,761.12	63.12%
					Taxes	Tax rate of 1.89%	\$229.60	\$337.14	\$107.54	46.84%
		Obj Class Totals:					\$4,603.69	\$7,472.35	\$2,868.66	62.31%
		Division/Bureau Totals:					\$16,258.61	\$25,310.37	\$9,051.76	55.67%
	3000	Racing Division								
		AA	REGULAR EMPLOYEE COMPENSATION							

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
	3000	Racing Division								
	A01	Salaries: Inclusive			Employee Compensation	Regular Employee Salaries	\$282,033.17	\$293,314.51	\$11,281.34	4.00%
	Obj Class Totals:						\$282,033.17	\$293,314.51	\$11,281.34	4.00%
	BB	REGULAR EMPLOYEE RELATED EXPEN								
	B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI			Travel	Out of State Travel Reimbursement	\$1,250.00	\$10,000.00	\$8,750.00	700.00%
	B02	In-State Travel			Travel	In State Travel Reimbursement	\$500.00	\$3,000.00	\$2,500.00	500.00%
	Obj Class Totals:						\$1,750.00	\$13,000.00	\$11,250.00	642.86%
	CC	SPECIAL EMPLOYEES								
	C04	Contracted Seasonal Employees			Seasonals	4% Increase Seasonal salaries for Plainridge at 35 weeks	\$450,000.00	\$468,000.00	\$18,000.00	4.00%
	Obj Class Totals:						\$450,000.00	\$468,000.00	\$18,000.00	4.00%
	DD	PENSION & INSURANCE RELATED EX								
	D09	Fringe Benefit Cost Recoupment			Fringe	Fringe rate of 40%	\$105,847.05	\$117,325.80	\$11,478.75	10.84%
				Taxes	Tax rate of 1.89%	\$0.00	\$8,845.20	\$8,845.20	#Div/0!	
				Taxes	Tax rate of 1.89%	\$5,556.05	\$5,543.64	(\$12.41)	-0.22%	
	Obj Class Totals:						\$111,403.10	\$131,714.64	\$20,311.54	18.23%
	EE	ADMINISTRATIVE EXPENSES								
	E01	Office & Administrative Supplies			Supplies	W.B. Mason	\$7,500.00	\$7,500.00	\$0.00	0.00%
	E02	Printing Expenses & Supplies			Printing	Millineum Printing	\$500.00	\$500.00	\$0.00	0.00%
	E12	Subscriptions, Memberships & Licensing Fees			Memberships	AA Dority/Organization of Racing Investigators	\$5,625.00	\$5,625.00	\$0.00	0.00%
				Memberships	Assoc. of Racing Regulators	\$18,700.00	\$18,700.00	\$0.00	0.00%	
	E13	Advertising Expenses			Public Hearing Notices	Boston Globe	\$1,000.00	\$1,000.00	\$0.00	0.00%
				Public Hearing Notices	Boston Herald	\$700.00	\$700.00	\$0.00	0.00%	
	E15	Bottled Water			Water	Belmont Springs/DS Waters of America	\$360.00	\$360.00	\$0.00	0.00%
	E41	Out Of State Travel Expen on Behalf of State Employ			Travel Agent	Travel	\$5,000.00	\$5,000.00	\$0.00	0.00%
	EE2	Conference, Training and Registration Fees			Conferences	Assoc. of Racing Comm./Louisiana Racing/Thoroughbred Racing	\$3,000.00	\$3,000.00	\$0.00	0.00%
	Obj Class Totals:						\$42,385.00	\$42,385.00	\$0.00	0.00%
	FF	FACILITY OPERATIONAL EXPENSES								
	F05	Laboratory Supplies			Vet Supplies	Gloves, scrubs etc.	\$2,000.00	\$2,000.00	\$0.00	0.00%
	F09	Clothing & Footwear			Equipment	Misc Facility Equipment	\$25,000.00	\$25,000.00	\$0.00	0.00%
				Uniforms	Racing Uniforms for Seasonal Employees	\$15,000.00	\$15,000.00	\$0.00	0.00%	
	Obj Class Totals:						\$42,000.00	\$42,000.00	\$0.00	0.00%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
	3000	Racing Division								
		HH	CONSULTANT SVCS (TO DEPTS)							
		H19	Management Consultants	Hearing Officer	Hearing Officer for Racing Appeals	\$25,000.00	\$25,000.00	\$0.00	0.00%	
		Obj Class Totals:					\$25,000.00	\$25,000.00	\$0.00	0.00%
		JJ	OPERATIONAL SERVICES							
		J10	Auxiliary Financial Services	Credit Cards	Bank of America credit card terminal fees	\$1,000.00	\$1,000.00	\$0.00	0.00%	
		J25	Laboratory & Pharmaceutical Services	Testing	Health Resources Corp.	\$2,000.00	\$2,000.00	\$0.00	0.00%	
		J28	Law Enforcement	State Police	MSP Racing Straight Time	\$400,590.03	\$378,622.26	(\$21,967.77)	-5.48%	
		JJ1	Legal Support Services	Stenographer	Hardeman RealTime	\$5,000.00	\$5,000.00	\$0.00	0.00%	
		JJ2	Auxiliary Services	Autopsies	Uconn Pathology	\$4,000.00	\$4,000.00	\$0.00	0.00%	
				Testing Lab	Back Up Lab TBD	\$0.00	\$0.00	\$0.00	#Num!	
				Testing Lab	Industrial Laboratories or alternate lab	\$382,500.00	\$382,500.00	\$0.00	0.00%	
		Obj Class Totals:					\$795,090.03	\$773,122.26	(\$21,967.77)	-2.76%
		LL	EQUIPMENT LEASE-MAINTAIN/REPAR							
		L46	Print, Photocopying & Micrograph Equipment Maint/Repair	Maintenance Contract	K & A Industries--Badge Printer	\$915.00	\$915.00	\$0.00	0.00%	
		Obj Class Totals:					\$915.00	\$915.00	\$0.00	0.00%
		MM	PURCHASED CLIENT/PROGRAM SVCS							
		M03	Purchased Human & Social Services For Clients/Non Medical	Hardship Payments	Economic Hardship Payments--Statutorily Required	\$20,000.00	\$20,000.00	\$0.00	0.00%	
				Legislative Mandate	Jockey's Guild--Statutory Requirement	\$65,000.00	\$65,000.00	\$0.00	0.00%	
		M04	Services Purch Support of Human/Social Services for Clients	ISA	ISA with DPH Compulsive Gambling--Statutory Requirement	\$70,000.00	\$70,000.00	\$0.00	0.00%	
				Purchased Client/Program Svcs	Services Purch Support of Human/Social Services for Clients	(\$70,000.00)	\$0.00	\$70,000.00	-100.00%	
		Obj Class Totals:					\$85,000.00	\$155,000.00	\$70,000.00	82.35%
		UU	IT Non-Payroll Expenses							
		U02	Telecommunications Services - Voice	Phones	Verizon/AT&T	\$5,000.00	\$5,000.00	\$0.00	0.00%	
		U05	Information Technology (IT) Temp Staff Augmentation Profs	Database	Racing Licensing System	\$10,000.00	\$10,000.00	\$0.00	0.00%	
		U10	Information Tech (IT) Equipment Maintenance & Repair	Security & Surveillance	Test Barn	\$0.00	\$0.00	\$0.00	#Num!	
		Obj Class Totals:					\$15,000.00	\$15,000.00	\$0.00	0.00%
		Division/Bureau Totals:					\$1,850,576.30	\$1,959,451.41	\$108,875.11	5.88%
	7000	Licensing Division								
		AA	REGULAR EMPLOYEE COMPENSATION							

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
	7000	Licensing Division								
	A01	Salaries: Inclusive	Employee Compensation	Regular Employee Salaries			\$2,986.44	\$3,416.49	\$430.05	14.40%
	Obj Class Totals:						\$2,986.44	\$3,416.49	\$430.05	14.40%
	DD	<i>PENSION & INSURANCE RELATED EX</i>								
	D09	Fringe Benefit Cost Recoupment	Fringe	Fringe rate of 40%			\$1,120.81	\$1,366.60	\$245.79	21.93%
			Taxes	Tax rate of 1.89%			\$58.83	\$64.57	\$5.74	9.76%
	Obj Class Totals:						\$1,179.64	\$1,431.17	\$251.53	21.32%
	Division/Bureau Totals:						\$4,166.08	\$4,847.66	\$681.58	16.36%
	MGC Regulatory Costs	Totals:					\$2,582,475.07	\$2,898,624.44	\$316,149.37	12.24%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight			Indirect						
		2000	MGC Indirect							
			EE	ADMINISTRATIVE EXPENSES						
			E16	Indirect Cost Recoupment	Indirect Agency Wide	Indirect at 10% of AA, CC, HH, JJ and UU excluding U07	\$209,178.18	\$209,178.18	\$0.00	0.00%
			Obj Class Totals:				\$209,178.18	\$209,178.18	\$0.00	0.00%
			Division/Bureau Totals:				\$209,178.18	\$209,178.18	\$0.00	0.00%
	Indirect		Totals:				\$209,178.18	\$209,178.18	\$0.00	0.00%

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
10500003	MGC Mass Racing Development and Oversight										
Appropriation Totals							\$2,791,653.25	\$3,107,802.62	\$316,149.37	11.32%	
10500004	Community Mitigation										
	MGC Regulatory Costs										
	1900 Ombudsman										
	AA	REGULAR EMPLOYEE COMPENSATION									
	A01	Salaries: Inclusive	Employee Compensation	Regular Employee Salaries			\$156,872.17	\$170,463.12	\$13,590.95	8.66%	
	Obj Class Totals:						\$156,872.17	\$170,463.12	\$13,590.95	8.66%	
	BB	REGULAR EMPLOYEE RELATED EXPEN									
	B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	Travel	Increase post pandemic In-State Travel			\$2,500.00	\$5,000.00	\$2,500.00	100.00%	
	Obj Class Totals:						\$2,500.00	\$5,000.00	\$2,500.00	100.00%	
	DD	PENSION & INSURANCE RELATED EX									
	D09	Fringe Benefit Cost Recoupment	Fringe	Fringe rate of 40%			\$58,874.13	\$68,185.25	\$9,311.12	15.82%	
			Taxes	Tax rate of 1.89%			\$3,090.38	\$3,221.75	\$131.37	4.25%	
	Obj Class Totals:						\$61,964.51	\$71,407.00	\$9,442.49	15.24%	
	EE	ADMINISTRATIVE EXPENSES									
	E01	Office & Administrative Supplies	Supplies	Supplies Binders			\$5,000.00	\$5,000.00	\$0.00	0.00%	
	E16	Indirect Cost Recoupment	Indirect	Indirect Rate of 10%			\$15,687.22	\$15,687.22	\$0.00	0.00%	
	Obj Class Totals:						\$20,687.22	\$20,687.22	\$0.00	0.00%	
	GG	ENERGY COSTS AND SPACE RENTAL									
	G01	Space Rental	Rent	UMASS Facility			\$2,500.00	\$2,500.00	\$0.00	0.00%	
	Obj Class Totals:						\$2,500.00	\$2,500.00	\$0.00	0.00%	
	UU	IT Non-Payroll Expenses									
	U07	Information Technology (IT) Equipment	Database	Increase for Additional Services Maintenance of System			\$30,000.00	\$40,000.00	\$10,000.00	33.33%	
			IT Software	Grant Software amendment to balance \$100K from FY21 for development to FY22 (timing issues)			\$100,000.00	\$0.00	(\$100,000.00)	-100.00%	
	Obj Class Totals:						\$130,000.00	\$40,000.00	(\$90,000.00)	-69.23%	
	Division/Bureau Totals:						\$374,523.90	\$310,057.34	(\$64,466.56)	-17.21%	
	MGC Regulatory Costs Totals:						\$374,523.90	\$310,057.34	(\$64,466.56)	-17.21%	

Approp	Budget Grouping	Division/Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
10500004	Community Mitigation										
Appropriation Totals							\$374,523.90	\$310,057.34	(\$64,466.56)	-17.21%	
40001101											
				Research and Responsible Gaming/PHTF							
				1700 Problem Gambling							
			AA	<i>REGULAR EMPLOYEE COMPENSATION</i>							
			A01	Salaries: Inclusive	Employee Compensation	Employee Salaries	\$300,984.03	\$313,023.39	\$12,039.36	4.00%	
			Obj Class Totals:					\$300,984.03	\$313,023.39	\$12,039.36	4.00%
			BB	<i>REGULAR EMPLOYEE RELATED EXPEN</i>							
			B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	Travel	Out of State Travel	\$1,250.00	\$1,250.00	\$0.00	0.00%	
			B02	In-State Travel	Travel	In-State-Travel Reimbursements	\$3,750.00	\$6,000.00	\$2,250.00	60.00%	
			Obj Class Totals:					\$5,000.00	\$7,250.00	\$2,250.00	45.00%
			DD	<i>PENSION & INSURANCE RELATED EX</i>							
			D09	Fringe Benefit Cost Recoupment	Fringe	Fringe rate of 40%	\$112,959.31	\$125,209.36	\$12,250.05	10.84%	
					Taxes	Tax rate of 1.89%	\$5,929.39	\$5,916.14	(\$13.25)	-0.22%	
			Obj Class Totals:					\$118,888.70	\$131,125.50	\$12,236.80	10.29%
			EE	<i>ADMINISTRATIVE EXPENSES</i>							
			E16	Indirect Cost Recoupment	Indirect Charges	Indirect to EHHS	\$350,000.00	\$342,602.34	(\$7,397.66)	-2.11%	
			EE2	Conference, Training and Registration Fees	Conferences	Conference, Training & Registration Fees	\$2,500.00	\$10,000.00	\$7,500.00	300.00%	
			Obj Class Totals:					\$352,500.00	\$352,602.34	\$102.34	0.03%
			FF	<i>FACILITY OPERATIONAL EXPENSES</i>							
			F16	Library & Teaching Supplies & Materials	Books	Library/reference books	\$1,000.00	\$0.00	(\$1,000.00)	-100.00%	
			Obj Class Totals:					\$1,000.00	\$0.00	(\$1,000.00)	-100.00%
			HH	<i>CONSULTANT SVCS (TO DEPTS)</i>							
			H09	Attorneys/Legal Services	Crime Analysis	Crime Analyst	\$30,000.00	\$38,000.00	\$8,000.00	26.67%	
			H23	Program Coordinators	Branding	GameSense media buys etc. KHJ	\$180,000.00	\$150,000.00	(\$30,000.00)	-16.67%	
					GRAC/RDASC/Rese arch Consultants	Bruce Cohen--Joel Weissman/Jeff Moratta/Anthony Roman Other Consultants on Stipends Peer Review process for research agenda	\$65,000.00	\$0.00	(\$65,000.00)	-100.00%	
					Mass Council	Mass Council on Compulsive Gambling including employees to man Game Sense booth at PPC EBH and MGM --Staffed 16 hrs per day PPC and MGM, and 24 Hrs/day EBH --VSE --Play My Way --Required by Statute Chapter 194, Section 9	\$2,555,000.00	\$2,741,000.00	\$186,000.00	7.28%	
					Program manager	Evaluation of GameSense Program	\$125,000.00	\$75,000.00	(\$50,000.00)	-40.00%	
					Program manager	TBD	\$0.00	\$0.00	\$0.00	#Num!	

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
40001101											
			Research and Responsible Gaming/PHTF								
			1700 Problem Gambling								
		H23	Program Coordinators	Research Consultant/ Umass	Research Consultant		\$0.00	\$0.00	\$0.00	#Num!	
				Research Consultant/ Umass	Veterans Services Technical assistance		\$0.00	\$0.00	\$0.00	#Num!	
				Translations	Knowledge Translation and Exchange		\$75,000.00	\$25,000.00	(\$50,000.00)	-66.67%	
				VSE Resource Liaison	VSE Resource Liaison		\$60,000.00	\$62,000.00	\$2,000.00	3.33%	
			Obj Class Totals:					\$3,090,000.00	\$3,091,000.00	\$1,000.00	0.03%
		JJ	<i>OPERATIONAL SERVICES</i>								
		JJ2	Auxiliary Services	Translations	Document Translations		\$10,000.00	\$10,000.00	\$0.00	0.00%	
			Obj Class Totals:					\$10,000.00	\$10,000.00	\$0.00	0.00%
		PP	<i>STATE AID/POL SUB</i>								
		P01	Grants To Public Entities	Community Driven Research	Community Driven Research		\$173,000.00	\$210,000.00	\$37,000.00	21.39%	
				Data Storage Grant	MODE DPH		\$80,000.00	\$75,000.00	(\$5,000.00)	-6.25%	
				SEIGMA	Social & Economic Research(SEIGMA) Follow-up General Population Study		\$2,300,000.00	\$1,015,000.00	(\$1,285,000.00)	-55.87%	
				Umass	Magic Core/Optional--Cohort Study--Complete		\$0.00	\$0.00	\$0.00	#Num!	
		PP1	Grants To Non-Public Entities	PMW	Play My Way Incentives		\$60,000.00	\$60,000.00	\$0.00	0.00%	
			Obj Class Totals:					\$2,613,000.00	\$1,360,000.00	(\$1,253,000.00)	-47.95%
		UU	<i>IT Non-Payroll Expenses</i>								
		U07	Information Technology (IT) Equipment	IT Non-Payroll Expenses	Crime Analysis Software		\$2,000.00	\$2,000.00	\$0.00	0.00%	
				ITRAK	Development of ITRAK and Migration from Current Process		\$0.00	\$0.00	\$0.00	#Num!	
			Obj Class Totals:					\$2,000.00	\$2,000.00	\$0.00	0.00%
			Division/Bureau Totals:					\$6,493,372.73	\$5,267,001.23	(\$1,226,371.50)	-18.89%
			Research and Responsible Gaming/PHTF	Totals:				\$6,493,372.73	\$5,267,001.23	(\$1,226,371.50)	-18.89%

Approp	Budget Grouping	Division/ Bureau	Object Class	Object_name	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
40001101										
Appropriation Totals							\$6,493,372.73	\$5,267,001.23	(\$1,226,371.50)	-18.89%

Next Year Budget By Object Class for Commission

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive	1000	Employee Compensation	Employee Salaries	\$434,875.04	\$441,410.91	\$6,535.87	1.50%
				1100	Employee Compensation	Employee Salaries	\$181,896.51	\$358,979.39	\$177,082.88	97.35%
				1100	Raises	3% COLA/Incentives/Equity Agency Wide	\$287,809.32	\$231,746.75	(\$56,062.57)	-19.48%
				1200	Employee Compensation	Employee Salaries	\$412,402.20	\$486,845.71	\$74,443.51	18.05%
				1300	Employee Compensation	Employee Salaries	\$401,516.17	\$441,495.38	\$39,979.21	9.96%
				1400	Employee Compensation	Employee Salaries	\$829,849.30	\$891,382.92	\$61,533.62	7.42%
				1500	Employee Compensation	Employee Compensation	\$664,292.41	\$815,872.68	\$151,580.27	22.82%
				1600	Employee Compensation	Employee Salaries consolidated into HR	\$208,243.26	\$0.00	(\$208,243.26)	-100.00%
				1800	Employee Compensation	Regular Salaries	\$182,681.05	\$192,021.01	\$9,339.96	5.11%
				1900	Employee Compensation	Regular Employees	\$95,790.72	\$102,061.04	\$6,270.32	6.55%
				5000	Employee Compensation	Employee Salaries	\$3,357,188.68	\$3,639,412.54	\$282,223.86	8.41%
				7000	Employee Compensation	Regular Employee Salaries	\$445,414.34	\$591,539.70	\$146,125.36	32.81%
				All	Regular Employee Compensation	Turnover Savings	(\$250,000.00)	(\$350,000.00)	(\$100,000.00)	40.00%
				All	Turnover Savings	Projected Turnover in addition to initial \$250K.	(\$500,000.00)	\$0.00	\$500,000.00	-100.00%
		A08	Overtime Pay	5000	Overtime	Overtime for Gaming Agents.	\$100,000.00	\$100,000.00	\$0.00	0.00%
				5000	Overtime	Overtime increase for 2nd half of fiscal year Gaming Agents	\$60,000.00	\$0.00	(\$60,000.00)	-100.00%
		A13	Vacation-In-Lieu	1100	Employee Compensation	Buyouts	\$40,000.00	\$40,000.00	\$0.00	0.00%
			Obj Class Totals:				\$6,951,959.00	\$7,982,768.03	\$1,030,809.03	14.83%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	1000	Travel	Out of State Travel	\$1,000.00	\$1,500.00	\$500.00	50.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	1100	Travel	Other Out of State Travel-Inclusive Airfare, Hotel, Lodging Gaming Conference *Consolidated into HR 1100 from 1600	\$0.00	\$500.00	\$500.00	#Div/0!
				1200	Travel	Out of State Travel and Training	\$2,500.00	\$6,250.00	\$3,750.00	150.00%
				1300	Travel	Conferences Out of State	\$3,000.00	\$4,500.00	\$1,500.00	50.00%
				1400	Travel	Out of State Travel G2E/Gartner	\$1,250.00	\$1,875.00	\$625.00	50.00%
				1500	Travel Reimbursements	Travel Reimbursements --In State (6 Commission Meetings a Year, Site Visits) --Out of Pocket Out of State Expenses	\$7,500.00	\$18,000.00	\$10,500.00	140.00%
				1600	Travel	Other Out of State Travel-Inclusive Airfare, Hotel, Lodging --Las Vegas Gaming Conference G2E	\$500.00	\$0.00	(\$500.00)	-100.00%
				5000	Travel	Out of state travel reimbursements for gaming enforcement agents and non-state police staff	\$7,500.00	\$11,250.00	\$3,750.00	50.00%
				7000	Travel	Out-of State Travel Reimbursements	\$1,250.00	\$1,875.00	\$625.00	50.00%
				All	Travel	NA	\$0.00	\$0.00	\$0.00	#Num!
		B02	In-State Travel	1000	Travel	In-State Travel	\$1,000.00	\$1,330.00	\$330.00	33.00%
				1100	Travel	In State Travel	\$1,000.00	\$1,995.00	\$995.00	99.50%
				1100	Travel	In-state Travel AOC as well as site visits of licensees *Consolidated into HR 1100 from 1600	\$0.00	\$3,990.00	\$3,990.00	#Div/0!
				1200	Travel	In State Travel	\$1,000.00	\$2,400.00	\$1,400.00	140.00%
				1300	Travel	In-State Mileage and Reimbursements	\$2,050.00	\$4,023.25	\$1,973.25	96.26%
				1400	Travel	In-state travel	\$2,500.00	\$3,750.00	\$1,250.00	50.00%
				1600	Travel	In-state Travel AOC as well as site visits of licensees	\$3,000.00	\$0.00	(\$3,000.00)	-100.00%
				1800	Travel Reimbursement	In-State Travel Reimbursement	\$2,250.00	\$4,488.75	\$2,238.75	99.50%
				1900	In State Travel Reimbursement	In-State Travel Reimbursement and Out of State --Visits to Other Licensee Sites *Increase post pandemic to account for increase in mileage reimbursements	\$500.00	\$2,992.50	\$2,492.50	498.50%
				5000	Travel	In-state-travel reimbursements for gaming enforcement agents and non-state police staff	\$4,000.00	\$7,980.00	\$3,980.00	99.50%
				7000	Travel	In-State Travel Reimbursements-- Fingerprinting Reimbursements	\$500.00	\$997.50	\$497.50	99.50%
		B05	Conference, Training, Registration and Membership Dues and L	1200	Professional Licenses	Professional and Bar Licenses	\$1,000.00	\$1,500.00	\$500.00	50.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		B10	Exigent Job Related Expenses	1400	Travel	Exigent Job Related Expenses	\$100.00	\$0.00	(\$100.00)	-100.00%
		B11	Employer Refund of Non-Tax Benefits	1400	Travel	Employer Refund of Non-Tax Benefits	\$300.00	\$0.00	(\$300.00)	-100.00%
		Obj Class Totals:					\$43,700.00	\$81,197.00	\$37,497.00	85.81%
		CC	SPECIAL EMPLOYEES							
		C05	Contracted Student Interns	1800	Intern	Student Intern-Co-op	\$0.00	\$0.00	\$0.00	#Num!
		C23	Management, Business Professionals & Admin Services	1000	Contract Employee	Administrative Help 960	\$0.00	\$43,022.52	\$43,022.52	#Div/0!
				1800	Contract Employee	Contract Employee	\$0.00	\$0.00	\$0.00	#Num!
				5000	Contract Employee	Contracted Civilian Investigators	\$205,000.00	\$205,000.00	\$0.00	0.00%
				5000	Contract	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
		Obj Class Totals:					\$205,000.00	\$248,022.52	\$43,022.52	20.99%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment	1000	Fringe	Fringe rate of 40%	\$163,208.61	\$176,564.37	\$13,355.76	8.18%
				1000	Taxes	Tax rate of 1.89%	\$8,567.04	\$9,155.79	\$588.75	6.87%
				1100	Fringe	Fringe rate of 40%	\$68,265.76	\$143,591.76	\$75,326.00	110.34%
				1100	Taxes	Tax rate of 1.89%	\$3,583.36	\$6,784.71	\$3,201.35	89.34%
				1200	Fringe	Fringe rate of 40%	\$154,774.55	\$194,738.28	\$39,963.73	25.82%
				1200	Taxes	Tax rate of 1.89%	\$8,124.32	\$9,201.38	\$1,077.06	13.26%
				1300	Fringe	Fringe rate of 40%	\$150,689.02	\$176,598.15	\$25,909.13	17.19%
				1300	Taxes	Tax rate of 1.89%	\$7,909.87	\$8,344.26	\$434.39	5.49%
				1400	Fringe	Fringe rate of 40%	\$311,442.44	\$356,553.17	\$45,110.73	14.48%
				1400	Taxes	Tax rate of 1.89%	\$16,348.03	\$16,847.14	\$499.11	3.05%
				1500	Fringe	Fringe rate of 40%	\$249,308.94	\$326,349.07	\$77,040.13	30.90%
				1500	Taxes	Tax rate of 1.89%	\$13,086.56	\$15,419.99	\$2,333.43	17.83%
				1600	Fringe	Fringe consolidated into HR	\$78,153.70	\$0.00	(\$78,153.70)	-100.00%
				1600	Taxes	Tax rate consolidated into HR	\$4,102.39	\$0.00	(\$4,102.39)	-100.00%
				1800	Fringe	Fringe rate of 40%	\$68,560.20	\$76,808.40	\$8,248.20	12.03%
				1800	Taxes	Tax rate of 1.89%	\$3,598.82	\$3,629.20	\$30.38	0.84%
				1900	Fringe	Fringe rate of 40%	\$35,590.26	\$40,824.42	\$5,234.16	14.71%
				1900	Taxes	Tax rate of 1.89%	\$1,887.08	\$1,928.95	\$41.87	2.22%
				5000	Fringe	Fringe rate of 40%	\$1,259,952.92	\$1,455,765.02	\$195,812.10	15.54%
				5000	Taxes	Tax rate of 1.89%	\$66,136.62	\$68,784.90	\$2,648.28	4.00%
				5000	Taxes	Taxes on CC Employees 1.89%	\$4,038.50	\$4,038.50	\$0.00	0.00%
				7000	Fringe	Fringe rate of 40%	\$167,164.00	\$236,615.87	\$69,451.87	41.55%
				7000	Taxes	Tax rate of 1.89%	\$8,774.66	\$11,180.10	\$2,405.44	27.41%
				All	Fringe and Payroll Taxes	Fringe and Payroll Taxes on 2nd quarter turnover savings	(\$173,800.00)	\$0.00	\$173,800.00	-100.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		D09	Fringe Benefit Cost Recoupment	All	Fringe and Payroll Taxes	Fringe and Payroll Taxes on Turnover Savings	(\$113,684.68)	(\$146,615.00)	(\$32,930.32)	28.97%
		D15	Workers' Compensation Chargebacks	1100	Worker's Comp Chargeback	Worker's Comp Chargeback	\$5,000.00	\$5,000.00	\$0.00	0.00%
		Obj Class Totals:					\$2,570,782.97	\$3,198,108.43	\$627,325.46	24.40%
	EE	ADMINISTRATIVE EXPENSES								
	E01	Office & Administrative Supplies	1000	Supplies	Adoni Spring Water/Milhench		\$4,000.00	\$4,000.00	\$0.00	0.00%
			1000	Supplies	Cam Office Supplies		\$9,500.00	\$9,500.00	\$0.00	0.00%
			1000	Supplies	W.B. Mason/Veteran's Business Supply		\$40,000.00	\$40,000.00	\$0.00	0.00%
			1200	Supplies	Office Supplies		\$5,000.00	\$5,000.00	\$0.00	0.00%
			1400	Supplies	Office and Administrative Supplies		\$200.00	\$300.00	\$100.00	50.00%
			5000	Supplies	Supplies		\$5,000.00	\$5,000.00	\$0.00	0.00%
	E02	Printing Expenses & Supplies	1000	Printing	Millenium/RazzMTazz/MG Products		\$2,500.00	\$2,500.00	\$0.00	0.00%
			1100	Printing	Printing of Reports and Best Practices *Consolidated into HR 1100 from 1600		\$0.00	\$5,000.00	\$5,000.00	#Div/0!
			1400	Printers	Printers @\$250/printer		\$300.00	\$300.00	\$0.00	0.00%
			1500	Office Supplies	Lane Printing, etc.		\$200.00	\$200.00	\$0.00	0.00%
			1600	Printing	Printing of Reports and Best Practices		\$5,000.00	\$0.00	(\$5,000.00)	-100.00%
			1800	Printing	Printing		\$6,100.00	\$6,100.00	\$0.00	0.00%
			7000	Supplies	Supplies		\$7,500.00	\$7,500.00	\$0.00	0.00%
	E05	Postage Chargeback	1000	Postage	ITD PAD Chargeback for postal Services		\$2,743.92	\$2,743.92	\$0.00	0.00%
	E06	Postage	1000	Postage	Postage for Ashburton Mail Room		\$2,400.00	\$2,400.00	\$0.00	0.00%
			1000	Postage	Postage for Pitney Bowes, Fed Ex, UPS		\$1,500.00	\$3,000.00	\$1,500.00	100.00%
			7000	Postage	Federal Express Charges		\$1,500.00	\$1,500.00	\$0.00	0.00%
	E12	Subscriptions, Memberships & Licensing Fees	1000	Subscriptions	Go To Meeting		\$0.00	\$0.00	\$0.00	#Num!
			1100	Administrative Expenses	Marketing Sponsorships of Diversity and Opportunity Events GNEMSCD, UMASS, Collette Philips *Consolidated into HR 1100 from 1600		\$0.00	\$15,000.00	\$15,000.00	#Div/0!
			1100	Subscriptions	Human Resource Information System		\$5,000.00	\$5,000.00	\$0.00	0.00%
			1100	Subscriptions	Subscriptions, Memberships & Licensing Fees SHRM, NEHRA, The Partnership		\$20,000.00	\$20,000.00	\$0.00	0.00%
			1200	Subscriptions	Subscriptions and Memberships Westlaw ABA (increased by 300/month)		\$15,000.00	\$15,000.00	\$0.00	0.00%
			1300	Memberships	NAGR		\$500.00	\$500.00	\$0.00	0.00%
			1400	Subscriptions	Pagefreezer, Gaming Compliance		\$8,700.00	\$18,676.00	\$9,976.00	114.67%
			1500	Subscriptions	Trade Journals		\$5,950.00	\$5,950.00	\$0.00	0.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		E12	Subscriptions, Memberships & Licensing Fees	1600	Administrative Expenses	Marketing Sponsorships of Diversity and Opportunity Events GNEMSCD, UMASS, Collette Philips	\$15,000.00	\$0.00	(\$15,000.00)	-100.00%
				1800	Subscriptions	Subscriptions, Licensing, Memberships	\$35,650.00	\$35,650.00	\$0.00	0.00%
				1900	Subscriptions/Memberships	Instatrac subscription	\$0.00	\$0.00	\$0.00	#Num!
				5000	Subscriptions	Lexis Nexis,Hire Authority, Nat.Student Loan Increase of \$500/month for GOLD Subscription Service	\$86,000.00	\$86,000.00	\$0.00	0.00%
		E13	Advertising Expenses	1200	Reg Advertising	Advertising of Regs and Meetings	\$10,000.00	\$10,000.00	\$0.00	0.00%
		E15	Bottled Water	1000	Water	Quench	\$1,500.00	\$1,500.00	\$0.00	0.00%
		E18	State Single Audit Chargeback	1000	Chargeback	Chargeback Single State Audit	\$500.00	\$500.00	\$0.00	0.00%
		E19	Fees, Fines, Licenses, Permits & Chargebacks	1000	Fees, Fines, Licensed, Chargebakcs	EZ Pass/Occupancy/Commissions	\$1,700.00	\$1,700.00	\$0.00	0.00%
				1100	Licenses	Fees, Fines, Licenses, Permits & Chargebacks for HRCMS and HRD	\$9,000.00	\$9,000.00	\$0.00	0.00%
		E20	Motor Vehicle Chargeback	1000	OVM	Motorized Vehicle Chargeback--Lease of ford fusion	\$0.00	\$0.00	\$0.00	#Num!
				5000	Motor Vehcile Lease	OVM Chargeback	\$6,110.00	\$6,110.00	\$0.00	0.00%
		E22	Temp Use Space/Confer-Incidental Includes Reservation Fees	1000	Laz Parking/VPNE	Parking at 33 Arch St.	\$40,000.00	\$54,000.00	\$14,000.00	35.00%
				1000	Parking	NA	\$0.00	\$0.00	\$0.00	#Num!
				1100	Conference Incidentals	Conference Incidentals	\$0.00	\$5,000.00	\$5,000.00	#Div/0!
				1100	Conferences	Workforce/Diversity Meetings--Digital also *Consolidated into HR 1100 from 1600	\$0.00	\$7,000.00	\$7,000.00	#Div/0!
				1500	75-101 Parking Garage	Parking 75-101--5 spaces. Two of the spaces are included in the lease. This item pays for 3 of the spaces.	\$28,200.00	\$18,720.00	(\$9,480.00)	-33.62%
				1500	Meeting Space	Temporary Space @ 6mtgs - \$2K meeting space 6 mtgs and \$5k to stream for 4 of the meetings	\$0.00	\$32,000.00	\$32,000.00	#Div/0!
				1600	Conferences	Workforce/Diversity Meetings--Digital also	\$3,500.00	\$0.00	(\$3,500.00)	-100.00%
				1900	Conferences and Incidentals	Gaming Policy Advisory Committee	\$0.00	\$0.00	\$0.00	#Num!
		E30	Credit Card Purchases	1000	Credit Card	Credit Card Incidental Purchases	\$2,000.00	\$2,000.00	\$0.00	0.00%
				1100	Credit Card Charges	FIA Card	\$1,000.00	\$1,000.00	\$0.00	0.00%
				1300	Credit Card	Credit Card Purchases	\$5,000.00	\$5,000.00	\$0.00	0.00%
				1400	Credit Card	Credit Card Purchases; \$400 Domain GOV Renewal	\$1,000.00	\$1,000.00	\$0.00	0.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
10500001	Mass. Gaming Commission										
	MGC Regulatory Costs										
		E30	Credit Card Purchases	1500	Credit Card	Allowable Credit Card Expenses	\$7,500.00	\$7,500.00	\$0.00	0.00%	
				5000	Credit Card	Credit Card Purchases	\$15,000.00	\$15,000.00	\$0.00	0.00%	
		E41	Out Of State Travel Expen on Behalf of State Employ	1000	Travel	Travel Agency Fees	\$0.00	\$2,500.00	\$2,500.00	#Div/0!	
				1100	Travel	Travel Agent *Consolidated into HR 1100 from 1600	\$0.00	\$1,000.00	\$1,000.00	#Div/0!	
				1200	Conference, Training, Registion Fees	Conference, Training, Registion Fees	\$2,500.00	\$6,250.00	\$3,750.00	150.00%	
				1200	Travel	Conference/Trainings Travel and Lodging for 4 FTE	\$1,000.00	\$2,500.00	\$1,500.00	150.00%	
				1400	Travel	Travel Agent Expenses	\$0.00	\$0.00	\$0.00	#Num!	
				1500	Travel Agency Fees	Travel	\$10,000.00	\$10,000.00	\$0.00	0.00%	
				1600	Travel	Travel Agent	\$0.00	\$0.00	\$0.00	#Num!	
				5000	Travel Agent	Travel Agent for Trainings and Investigations	\$50,000.00	\$75,000.00	\$25,000.00	50.00%	
				7000	Travel Agent	Travel Leaders G2E for meetings with Vendors and Licensing of Primaries	\$4,000.00	\$7,000.00	\$3,000.00	75.00%	
		E42	In-State Travel & Related Expen on Behalf of State Employees	1400	Travel Agent	In-State Travel and Related Expenses	\$0.00	\$0.00	\$0.00	#Num!	
		EE2	Conference, Training and Registration Fees	1000	Conference Registrations	Registration Fees	\$750.00	\$1,125.00	\$375.00	50.00%	
				1100	Conference, Training Registration Fees	GNEMSDC, Umass, Colette Phillips *Consolidated into HR 1100 from 1600	\$0.00	\$5,500.00	\$5,500.00	#Div/0!	
				1100	Training	Conference, Training and Registration Fees	\$0.00	\$500.00	\$500.00	#Div/0!	
				1300	Gaming Forum	Travel allocated to divisions	\$0.00	\$0.00	\$0.00	#Num!	
				1300	Travel	NA	\$0.00	\$0.00	\$0.00	#Num!	
				1300	Travel and Conf	Conference, Training and Registration Fees	\$0.00	\$5,000.00	\$5,000.00	#Div/0!	
				1400	Conference	Conference, Training and Registrations Fees	\$0.00	\$2,500.00	\$2,500.00	#Div/0!	
				1500	Registration Fees	Conference/Trainings	\$7,000.00	\$7,000.00	\$0.00	0.00%	
				1600	Conference, Training Registration Fees	GNEMSDC, Umass, Colette Phillips	\$0.00	\$0.00	\$0.00	#Num!	
				5000	Registrations	Training/Conference Registration Fees.	\$22,500.00	\$26,250.00	\$3,750.00	16.67%	
				7000	Conferences	Conference, Training & Registration.	\$3,000.00	\$4,000.00	\$1,000.00	33.33%	
		EE9	Employee Recognition Chargeback	1100	Employee Morale	Employee Recognition Program	\$5,000.00	\$5,000.00	\$0.00	0.00%	
		Obj Class Totals:						\$523,003.92	\$634,974.92	\$111,971.00	21.41%
		FF	<i>FACILITY OPERATIONAL EXPENSES</i>								
		F09	Clothing & Footwear	5000	Programatic Supplies	Clothing and Footwear	\$20,000.00	\$20,000.00	\$0.00	0.00%	

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
			Obj Class Totals:				\$20,000.00	\$20,000.00	\$0.00	0.00%
		GG	ENERGY COSTS AND SPACE RENTAL							
		G01	Space Rental	1000	Office Lease	101 Federal St. 12 months	\$1,297,466.58	\$1,312,322.64	\$14,856.06	1.15%
				1400	Data Center	Markley Data Center Costs (Rack Space \$10.8K, Electricity \$13.2K, and Fiber \$4K)	\$0.00	\$0.00	\$0.00	#Num!
		G03	Electricity	1000	Electricity	101 Federal St. 12 months	\$32,635.44	\$32,635.44	\$0.00	0.00%
		G05	Fuel For Vehicles	1000	Gas	Wex Bank/Gulf	\$3,000.00	\$3,000.00	\$0.00	0.00%
			Obj Class Totals:				\$1,333,102.02	\$1,347,958.08	\$14,856.06	1.11%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H09	Attorneys/Legal Services	1000	Insurance	Comprehensive Insurance Policy	\$151,629.00	\$163,500.00	\$11,871.00	7.83%
				1100	Legal Consultants	Employment Laywers	\$5,000.00	\$5,000.00	\$0.00	0.00%
				1100	Worker's Comp	Workers Comp Litigation Fees	\$5,000.00	\$5,000.00	\$0.00	0.00%
				1200	Legal	NA	\$0.00	\$0.00	\$0.00	#Num!
				1200	Litigation Defense	Outside Counsel Litigation Defense	\$400,000.00	\$400,000.00	\$0.00	0.00%
				1200	Outside Counsel	General Practice, Regulations, Laws, etc.	\$75,000.00	\$75,000.00	\$0.00	0.00%
				1200	Outside Counsel	Labor Employment Law	\$25,000.00	\$25,000.00	\$0.00	0.00%
		H19	Management Consultants	1000	Outside Consultant	CPA Firm for Annual Audits consistent with Generally Accepted Auditing Standards	\$70,000.00	\$70,000.00	\$0.00	0.00%
				1200	Hearing Officer	Hearing Officer	\$40,000.00	\$40,000.00	\$0.00	0.00%
				1300	Strategic Consultant	General Consultant needs for Commissioners or Executive Director	\$10,000.00	\$10,000.00	\$0.00	0.00%
		H23	Program Coordinators	1500	Consultant	NA	\$0.00	\$0.00	\$0.00	#Num!
				1500	Monitor	Independent Monitor bills paid in 2nd quarter of FY22	\$281,227.70	\$0.00	(\$281,227.70)	-100.00%
				1500	Monitor	Independent Monitor bills paid in first quarter of FY22	\$73,024.40	\$0.00	(\$73,024.40)	-100.00%
				1500	Monitor	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
				5000	Outside Consultant	HLT Background	\$0.00	\$0.00	\$0.00	#Num!
		HH3	Media Design, Editorial and Communication	1600	Media Design	One Time Instance - Impact Report Design	\$10,000.00	\$0.00	(\$10,000.00)	-100.00%
				1800	Website Design	Marketing & Website Design	\$25,000.00	\$25,000.00	\$0.00	0.00%
			Obj Class Totals:				\$1,170,881.10	\$818,500.00	(\$352,381.10)	-30.10%
		JJ	OPERATIONAL SERVICES							
		J10	Auxiliary Financial Services	1000	Auxiliary Financial Services	Credit Card Fees/BillMatrix	\$200.00	\$200.00	\$0.00	0.00%
		J25	Laboratory & Pharmaceutical Services	5000	Everett Police	EPDEverett Police GEU 7FTE's	\$1,062,872.00	\$1,333,235.00	\$270,363.00	25.44%
				5000	Finger Prints State Police	Chargeback for Finger Print Costs for Licenses @ \$50/set and ~4.5K prints	\$50,000.00	\$50,000.00	\$0.00	0.00%
				5000	Plainville Police Salaries	Plainville Local Police	\$225,000.00	\$411,044.56	\$186,044.56	82.69%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
			MGC Regulatory Costs							
		J25	Laboratory & Pharmaceutical Services	5000	Plainville Police Salaries	Plainville Local Police amendment for unpaid invoice from FY19	\$58,528.46	\$0.00	(\$58,528.46)	-100.00%
				5000	Springfield Police Salaries	SPDSpringfield Police GEU 6 FTEs Amendment for FY21 costs billed in FY22	\$271,539.12	\$0.00	(\$271,539.12)	-100.00%
				5000	Springfield Police Salaries	SPDSpringfield Police GEU 7 FTEs	\$821,169.00	\$1,014,612.49	\$193,443.49	23.56%
				5000	State Police	MSP MGC Salaries for MGC Investigations and Background Unit	\$939,199.89	\$961,673.22	\$22,473.33	2.39%
				5000	State Police	MSPMGC State Police Troopers Plainville Straight Time and Payroll Taxes	\$1,236,429.79	\$1,193,336.14	(\$43,093.65)	-3.49%
				5000	State Police	MSPMGC State Troopers Everett	\$1,672,292.60	\$1,646,713.44	(\$25,579.16)	-1.53%
				5000	State Police	MSPMSP Staff Costs at MGM 16 FTEs	\$1,693,031.48	\$1,830,943.32	\$137,911.84	8.15%
				5000	State Police	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
				5000	State Police OT & Travel	OT and Travel for Troopers assigned to MGC GEU	\$1,870,000.00	\$1,926,100.00	\$56,100.00	3.00%
		J28	Law Enforcement	5000	Lease Vehicles	Plainville Law Enforcement Vehicles	\$8,877.39	\$8,877.39	\$0.00	0.00%
		J33	Photographic & Micrographic Services	1500	Stenographer	Transcriptions services	\$20,000.00	\$10,000.00	(\$10,000.00)	-50.00%
		J46	Temporary Help Services	1100	Temp Help	Temp help/interns/diversity	\$75,000.00	\$75,000.00	\$0.00	0.00%
		J50	Instructors/Lecturers/Trainers	1300	Training	Upper Management Training	\$0.00	\$5,000.00	\$5,000.00	#Div/0!
				1400	Training	Technical Training not available on LinkedIn	\$5,000.00	\$5,000.00	\$0.00	0.00%
		JJ1	Legal Support Services	1200	Operational Services	Offsite Storage - \$50 per month charge if boxes are pulled	\$750.00	\$750.00	\$0.00	0.00%
				1400	Litigation	Target Litigation Backup	\$0.00	\$0.00	\$0.00	#Num!
		JJ2	Auxiliary Services	1000	Courier	USA Couriers	\$300.00	\$300.00	\$0.00	0.00%
				1000	Shredding	ProShred	\$1,615.00	\$1,615.00	\$0.00	0.00%
				1100	HR Investigations	HR Investigations	\$10,000.00	\$10,000.00	\$0.00	0.00%
				1100	Testing	All One Health Resouces	\$3,000.00	\$3,000.00	\$0.00	0.00%
				1800	Streaming	Streaming & Production of Public Meetings	\$23,000.00	\$23,000.00	\$0.00	0.00%
			Obj Class Totals:				\$10,047,804.73	\$10,510,400.56	\$462,595.83	4.60%
		KK	EQUIPMENT PURCHASE							
		K05	Office Equipment	1800	Equipment Purchases	Increased to purchase additional Photography/Streaming Equipment Net Zero Purchase	\$2,500.00	\$5,000.00	\$2,500.00	100.00%
		K07	Office Furnishings	1400	Office Equipment	Creative Office Pavillion	\$5,000.00	\$5,000.00	\$0.00	0.00%
				1500	Office Equipment	Office Furnishings	\$5,000.00	\$5,000.00	\$0.00	0.00%
				5000	Equipment Purchase	Current year Qtr1 budget adjustment	\$0.00	\$0.00	\$0.00	#Num!
				5000	Office Equipment	Patrol Rifles/Active Shooter Gear-- Replacement/Upgrade of Fingerprint Machines to be Windows Compliant	\$47,000.00	\$47,000.00	\$0.00	0.00%
			Obj Class Totals:				\$59,500.00	\$62,000.00	\$2,500.00	4.20%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		LL	EQUIPMENT LEASE-MAINTAIN/REPAR							
		L24	Motorized Vehicle Equipment Rental or Lease	1000	Rental Cars	Enterprise Car Rental	\$500.00	\$500.00	\$0.00	0.00%
				1400	Rental Cars	Enterprise	\$0.00	\$0.00	\$0.00	#Num!
		L25	Office Equipment Rental or Lease	1000	Printing	Pitney Bowes	\$607.90	\$607.90	\$0.00	0.00%
		L26	Printing/Photocopy & Micrographics Equip Rent/Lease	1000	Copier	Canon Financial Services Recurring Payments for 13th floor and IEB Per Click costs of \$2.5K	\$10,031.50	\$10,100.00	\$68.50	0.68%
				7000	Equipment Leases	3 Scanner Leases	\$10,000.00	\$10,000.00	\$0.00	0.00%
		L46	Print, Photocopying & Micrograph Equipment Maint/Repair	1000	Copier	Canon USA/Maintenance & Repair--Initial Contract Rate Ended	\$5,000.00	\$5,000.00	\$0.00	0.00%
				1000	Xerox Leases	Xerox Leases Recurring Payments of \$11.1K for 3 machines Per Click costs of \$3.2K (avg of this year)	\$14,354.85	\$15,500.00	\$1,145.15	7.98%
			Obj Class Totals:				\$40,494.25	\$41,707.90	\$1,213.65	3.00%
		NN	INFRASTRUCTURE:							
		N50	Non-Major Facility Infrastructure Maintenance and Repair	1000	Repairs	Office/Building Repairs	\$5,000.00	\$5,000.00	\$0.00	0.00%
				1400	Facilities Maintenance	\$4,450 Annual Main & Support, Parts/HVAC monitoring; Viscom \$1,500 Building Security	\$10,000.00	\$10,000.00	\$0.00	0.00%
				5000	Non-Major Facility Maintenance & Repair	Office Reconfiguration	\$10,000.00	\$10,000.00	\$0.00	0.00%
			Obj Class Totals:				\$25,000.00	\$25,000.00	\$0.00	0.00%
		PP	STATE AID/POL SUB							
		P01	Grants To Public Entities	1100	Grants	Worforce Development and Diversity Grants --Business Technical Assistance --Women in Construction --Regional WF Collaborations *Consolidated into HR 1100 from 1600	\$0.00	\$150,000.00	\$150,000.00	#Div/0!
				1600	Grants	Completed - MCCA contibution to Workforce Development	\$25,000.00	\$0.00	(\$25,000.00)	-100.00%
				1600	Grants	Worforce Development and Diversity Grants --Business Technical Assistance --Women in Construction --Regional WF Collaborations	\$150,000.00	\$0.00	(\$150,000.00)	-100.00%
			Obj Class Totals:				\$175,000.00	\$150,000.00	(\$25,000.00)	-14.29%
		UU	IT Non-Payroll Expenses							
		U01	Telecommunications Services Data	1400	TELECOMMUNICAT IONS SERVICES DATA	Surveillance, CMS Primary/Backup Circuits, Lab Line, Windstream Services (VPN, LAN, WAN redundancy) etc	\$266,268.28	\$278,584.06	\$12,315.78	4.63%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	MGC Regulatory Costs									
		U02	Telecommunications Services - Voice	1400	TELECOMMUNICAT IONS SERVICES - VOICE	OfficeSuite (Voice, HD Meeting, WeConnect), Verizon Wireless, Multi-location fax lines	\$117,855.44	\$112,710.12	(\$5,145.32)	-4.37%
		U03	Software & Information Technology Licenses (IT)	1400	SOFTWARE & INFORMATION TECHNOLOGY LICENSES (IT)	Adobe, Sharepoint, O365, Azure, JIRA, MDM etc	\$401,420.71	\$455,310.48	\$53,889.77	13.42%
				5000	Software	ITRACK	\$11,700.00	\$11,700.00	\$0.00	0.00%
		U04	Information Technology Chargeback	1400	INFORMATION TECHNOLOGY CHARGEBACK	ITD/BCS Chargeback	\$97,931.00	\$63,226.34	(\$34,704.66)	-35.44%
		U05	Information Technology (IT) Temp Staff Augmentation Profs	1000	IT Consultants	Diversity Consultants	\$25,000.00	\$25,000.00	\$0.00	0.00%
				1000	IT Consultants	Web penetration Testing	\$8,000.00	\$8,000.00	\$0.00	0.00%
				1400	CMS - \$2,484,206.46	CMS - IGT Intelligen (PPC, MGM, EBH)	\$2,326,368.27	\$2,326,368.27	\$0.00	0.00%
				1400	CONSULTING - \$75,000	IT Consulting Support (TBD)	\$50,000.00	\$50,000.00	\$0.00	0.00%
				1400	Staff Augmentations Professionals	Mclnnis Consulting Jira Expert	\$10,000.00	\$10,000.00	\$0.00	0.00%
		U06	Information Technology (IT) Cabling	1400	IT Cabling	Runs/Cabling	\$3,000.00	\$3,000.00	\$0.00	0.00%
		U07	Information Technology (IT) Equipment	1400	Cloud Migration	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
				1400	IT Equipment	IT Equipment, emergency replacements (switches, routers, firewalls) etc	\$120,000.00	\$145,000.00	\$25,000.00	20.83%
				1800	Database	Customer Relationship management tool	\$0.00	\$0.00	\$0.00	#Num!
				1900	IT Software	Grant Software	\$0.00	\$0.00	\$0.00	#Num!
		U09	Information Technology (IT) Equip Rental Or Lease	1400	INFORMATION TECHNOLOGY (IT) EQUIP RENTAL OR LEASE	ACS Leases (Refresh)	\$76,200.00	\$125,695.00	\$49,495.00	64.95%
		U10	Information Tech (IT) Equipment Maintenance & Repair	1000	Cable	Cable/Comcast	\$5,500.00	\$5,500.00	\$0.00	0.00%
				1400	IT Maintenance and Repair	Annual M&S Equipment/Services	\$106,436.54	\$131,802.76	\$25,366.22	23.83%
		U11	Information Technology (IT) Contract Services	1400	IT Contract Services	LMS, Gartner, Tallan Services	\$400,000.00	\$471,017.00	\$71,017.00	17.75%
			Obj Class Totals:				\$4,025,680.24	\$4,222,914.03	\$197,233.79	4.90%
	MGC Regulatory Costs		Totals:				\$27,191,908.23	\$29,343,551.47	\$2,151,643.24	7.91%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
			Indirect							
		EE	ADMINISTRATIVE EXPENSES							
		E16	Indirect Cost Recoupment	2000	Indirect	Indirect adjustments from 2nd quarter revisions	(\$15,877.23)	\$0.00	\$15,877.23	-100.00%
				2000	Indirect	Indirect Expense on Turnover Savings	(\$25,000.00)	\$0.00	\$25,000.00	-100.00%
				2000	Indirect	NA	\$0.00	\$0.00	\$0.00	#Num!
				2000	Indirect	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
				2000	Indirect Agency Wide	Indirect at 10% of AA, CC, HH, JJ and UU excluding U07	\$2,286,055.34	\$2,419,852.48	\$133,797.14	5.85%
			Obj Class Totals:				\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%
	Indirect		Totals:				\$2,245,178.11	\$2,419,852.48	\$174,674.37	7.78%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	Office of Attorney General and AGO MSP									
		JJ	OPERATIONAL SERVICES							
		J25	Laboratory & Pharmaceutical Services	9000	State Police	MSPAGO State Police OT	\$350,000.00	\$360,500.00	\$10,500.00	3.00%
				9000	State Police	MSPAGO Straight Time Troopers and Payroll Taxes 3FTEs for FY23	\$587,971.46	\$578,613.12	(\$9,358.34)	-1.59%
			Obj Class Totals:				\$937,971.46	\$939,113.12	\$1,141.66	0.12%
		OO								
		O99		9000	Attorney General	Funds FTEs assigned to the unit, various percentages of FTEs of support, and management positions, office space, travel, conferences, and investigative costs.	\$2,630,034.15	\$2,927,384.00	\$297,349.85	11.31%
				9000	Indirect	Prior Year Adjustment	\$0.00	\$0.00	\$0.00	#Num!
			Obj Class Totals:				\$2,630,034.15	\$2,927,384.00	\$297,349.85	11.31%
	Office of Attorney General and AGO MSP		Totals:				\$3,568,005.61	\$3,866,497.12	\$298,491.51	8.37%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
	Alcohol and Beverage Control Commission									
		00								
		001		9001	ISA with ABCC	ABCC	\$75,000.00	\$75,000.00	\$0.00	0.00%
		Obj Class Totals:					\$75,000.00	\$75,000.00	\$0.00	0.00%
	Alcohol and Beverage Control Commission	Totals:					\$75,000.00	\$75,000.00	\$0.00	0.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500001	Mass. Gaming Commission									
Appropriation Totals							\$33,080,091.95	\$35,704,901.07	\$2,624,809.12	7.93%
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
	AA	REGULAR EMPLOYEE COMPENSATION								
	A01	Salaries: Inclusive	1000	Employee Compensation	Admin Employees Salaries	\$223,849.78	\$209,120.02	(\$14,729.76)	-6.58%	
			1100	Employee Compensation	HR Employees Salaries	\$50,424.53	\$105,766.53	\$55,342.00	109.75%	
			1200	Employee Compensation	Legal Employees Salaries	\$20,975.51	\$35,661.64	\$14,686.13	70.02%	
			1300	Employee Compensation	Exec. Dir. Employees Salaries	\$6,820.87	\$28,169.45	\$21,348.58	312.99%	
			1400	Employee Compensation	IT Employees Salaries	\$145,986.07	\$197,045.62	\$51,059.55	34.98%	
			1500	Employee Compensation	Commissioners Employees Salaries	\$61,960.50	\$64,831.02	\$2,870.52	4.63%	
			1800	Employee Compensation	Communications Employees Salaries	\$11,654.92	\$17,838.02	\$6,183.10	53.05%	
			3000	Employee Compensation	Regular Employee Salaries	\$282,033.17	\$293,314.51	\$11,281.34	4.00%	
			7000	Employee Compensation	Regular Employee Salaries	\$2,986.44	\$3,416.49	\$430.05	14.40%	
		Obj Class Totals:				\$806,691.79	\$955,163.30	\$148,471.51	18.40%	
	BB	REGULAR EMPLOYEE RELATED EXPEN								
	B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	3000	Travel	Out of State Travel Reimbursement	\$1,250.00	\$10,000.00	\$8,750.00	700.00%	
	B02	In-State Travel	3000	Travel	In State Travel Reimbursement	\$500.00	\$3,000.00	\$2,500.00	500.00%	
		Obj Class Totals:				\$1,750.00	\$13,000.00	\$11,250.00	642.86%	
	CC	SPECIAL EMPLOYEES								
	C04	Contracted Seasonal Employees	3000	Seasonals	4% Increase Seasonal salaries for Plainridge at 35 weeks	\$450,000.00	\$468,000.00	\$18,000.00	4.00%	
		Obj Class Totals:				\$450,000.00	\$468,000.00	\$18,000.00	4.00%	
	DD	PENSION & INSURANCE RELATED EX								
	D09	Fringe Benefit Cost Recoupment	1000	Fringe	Fringe rate of 40%	\$84,010.82	\$83,648.25	(\$362.57)	-0.43%	
			1000	Taxes	Tax rate of 1.89%	\$4,409.84	\$4,027.90	(\$381.94)	-8.66%	
			1100	Fringe	Fringe rate of 40%	\$18,924.33	\$42,306.61	\$23,382.28	123.56%	
			1100	Taxes	Tax rate of 1.89%	\$993.36	\$1,998.99	\$1,005.63	101.24%	
			1200	Fringe	Fringe rate of 40%	\$7,872.11	\$14,264.66	\$6,392.55	81.21%	
			1200	Taxes	Tax rate of 1.89%	\$413.22	\$674.00	\$260.78	63.11%	
			1300	Fringe	Fringe rate of 40%	\$2,559.87	\$11,267.78	\$8,707.91	340.17%	
			1300	Taxes	Tax rate of 1.89%	\$134.37	\$532.40	\$398.03	296.22%	

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
10500003	MGC Mass Racing Development and Oversight										
	MGC Regulatory Costs										
		D09	Fringe Benefit Cost Recoupment	1400	Fringe	Fringe rate of 40%	\$54,788.57	\$78,818.25	\$24,029.68	43.86%	
				1400	Taxes	Tax rate of 1.89%	\$2,875.93	\$3,724.16	\$848.23	29.49%	
				1500	Fringe	Fringe rate of 40%	\$23,253.78	\$25,932.41	\$2,678.63	11.52%	
				1500	Taxes	Tax rate of 1.89%	\$1,220.62	\$1,225.31	\$4.69	0.38%	
				1800	Fringe	Fringe rate of 40%	\$4,374.09	\$7,135.21	\$2,761.12	63.12%	
				1800	Taxes	Tax rate of 1.89%	\$229.60	\$337.14	\$107.54	46.84%	
				3000	Fringe	Fringe rate of 40%	\$105,847.05	\$117,325.80	\$11,478.75	10.84%	
				3000	Taxes	Tax rate of 1.89%	\$0.00	\$8,845.20	\$8,845.20	#Div/0!	
				3000	Taxes	Tax rate of 1.89%	\$5,556.05	\$5,543.64	(\$12.41)	-0.22%	
				7000	Fringe	Fringe rate of 40%	\$1,120.81	\$1,366.60	\$245.79	21.93%	
				7000	Taxes	Tax rate of 1.89%	\$58.83	\$64.57	\$5.74	9.76%	
		Obj Class Totals:						\$318,643.25	\$409,038.88	\$90,395.63	28.37%
		EE	ADMINISTRATIVE EXPENSES								
		E01	Office & Administrative Supplies	3000	Supplies	W.B. Mason	\$7,500.00	\$7,500.00	\$0.00	0.00%	
		E02	Printing Expenses & Supplies	3000	Printing	Millineum Printing	\$500.00	\$500.00	\$0.00	0.00%	
		E12	Subscriptions, Memberships & Licensing Fees	3000	Memberships	AA Dority/Organization of Racing Investigators	\$5,625.00	\$5,625.00	\$0.00	0.00%	
				3000	Memberships	Assoc. of Racing Regulators	\$18,700.00	\$18,700.00	\$0.00	0.00%	
		E13	Advertising Expenses	3000	Public Hearing Notices	Boston Globe	\$1,000.00	\$1,000.00	\$0.00	0.00%	
				3000	Public Hearing Notices	Boston Herald	\$700.00	\$700.00	\$0.00	0.00%	
		E15	Bottled Water	3000	Water	Belmont Springs/DS Waters of America	\$360.00	\$360.00	\$0.00	0.00%	
		E41	Out Of State Travel Expen on Behalf of State Employ	3000	Travel Agent	Travel	\$5,000.00	\$5,000.00	\$0.00	0.00%	
		EE2	Conference, Training and Registration Fees	3000	Conferences	Assoc. of Racing Comm./Louisiana Racing/Thoroughbred Racing	\$3,000.00	\$3,000.00	\$0.00	0.00%	
		Obj Class Totals:						\$42,385.00	\$42,385.00	\$0.00	0.00%
		FF	FACILITY OPERATIONAL EXPENSES								
		F05	Laboratory Supplies	3000	Vet Supplies	Gloves, scrubs etc.	\$2,000.00	\$2,000.00	\$0.00	0.00%	
		F09	Clothing & Footwear	3000	Equipment	Misc Facility Equipment	\$25,000.00	\$25,000.00	\$0.00	0.00%	
				3000	Uniforms	Racing Uniforms for Seasonal Employees	\$15,000.00	\$15,000.00	\$0.00	0.00%	
		Obj Class Totals:						\$42,000.00	\$42,000.00	\$0.00	0.00%
		HH	CONSULTANT SVCS (TO DEPTS)								
		H19	Management Consultants	3000	Hearing Officer	Hearing Officer for Racing Appeals	\$25,000.00	\$25,000.00	\$0.00	0.00%	
		Obj Class Totals:						\$25,000.00	\$25,000.00	\$0.00	0.00%
		JJ	OPERATIONAL SERVICES								
		J10	Auxiliary Financial Services	3000	Credit Cards	Bank of America credit card terminal fees	\$1,000.00	\$1,000.00	\$0.00	0.00%	
		J25	Laboratory & Pharmaceutical Services	3000	Testing	Health Resources Corp.	\$2,000.00	\$2,000.00	\$0.00	0.00%	

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight									
	MGC Regulatory Costs									
		J28	Law Enforcement	3000	State Police	MSP Racing Straight Time	\$400,590.03	\$378,622.26	(\$21,967.77)	-5.48%
		JJ1	Legal Support Services	3000	Stenographer	Hardeman RealTime	\$5,000.00	\$5,000.00	\$0.00	0.00%
		JJ2	Auxiliary Services	3000	Autopsies	Uconn Pathology	\$4,000.00	\$4,000.00	\$0.00	0.00%
				3000	Testing Lab	Back Up Lab TBD	\$0.00	\$0.00	\$0.00	#Num!
				3000	Testing Lab	Industrial Laboratories or alternate lab	\$382,500.00	\$382,500.00	\$0.00	0.00%
		Obj Class Totals:					\$795,090.03	\$773,122.26	(\$21,967.77)	-2.76%
	LL	EQUIPMENT LEASE-MAINTAIN/REPAR								
		L46	Print, Photocopying & Micrograph Equipment Maint/Repair	3000	Maintenance Contract	K & A Industries--Badge Printer	\$915.00	\$915.00	\$0.00	0.00%
		Obj Class Totals:					\$915.00	\$915.00	\$0.00	0.00%
	MM	PURCHASED CLIENT/PROGRAM SVCS								
		M03	Purchased Human & Social Services For Clients/Non Medical	3000	Hardship Payments	Economic Hardship Payments--Statutorily Required	\$20,000.00	\$20,000.00	\$0.00	0.00%
				3000	Legislative Mandate	Jockey's Guild--Statutory Requirement	\$65,000.00	\$65,000.00	\$0.00	0.00%
		M04	Services Purch Support of Human/Social Services for Clients	3000	ISA	ISA with DPH Compulsive Gambling--Statutory Requirement	\$70,000.00	\$70,000.00	\$0.00	0.00%
				3000	Purchased Client/Program Svcs	Services Purch Support of Human/Social Services for Clients	(\$70,000.00)	\$0.00	\$70,000.00	-100.00%
		Obj Class Totals:					\$85,000.00	\$155,000.00	\$70,000.00	82.35%
	UU	IT Non-Payroll Expenses								
		U02	Telecommunications Services - Voice	3000	Phones	Verizon/AT&T	\$5,000.00	\$5,000.00	\$0.00	0.00%
		U05	Information Technology (IT) Temp Staff Augmentation Profs	3000	Database	Racing Licensing System	\$10,000.00	\$10,000.00	\$0.00	0.00%
		U10	Information Tech (IT) Equipment Maintenance & Repair	3000	Security & Surveillance	Test Barn	\$0.00	\$0.00	\$0.00	#Num!
		Obj Class Totals:					\$15,000.00	\$15,000.00	\$0.00	0.00%
	MGC Regulatory Costs	Totals:					\$2,582,475.07	\$2,898,624.44	\$316,149.37	12.24%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500003	MGC Mass Racing Development and Oversight									
	Indirect									
		EE	ADMINISTRATIVE EXPENSES							
		E16	Indirect Cost Recoupment	2000	Indirect Agency Wide	Indirect at 10% of AA, CC, HH, JJ and UU excluding U07	\$209,178.18	\$209,178.18	\$0.00	0.00%
			Obj Class Totals:				\$209,178.18	\$209,178.18	\$0.00	0.00%
	Indirect		Totals:				\$209,178.18	\$209,178.18	\$0.00	0.00%

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
10500003	MGC Mass Racing Development and Oversight										
Appropriation Totals							\$2,791,653.25	\$3,107,802.62	\$316,149.37	11.32%	
10500004	Community Mitigation										
	MGC Regulatory Costs										
	AA	REGULAR EMPLOYEE COMPENSATION									
	A01	Salaries: Inclusive	1900	Employee Compensation	Regular Employee Salaries	\$156,872.17	\$170,463.12	\$13,590.95	8.66%		
	Obj Class Totals:						\$156,872.17	\$170,463.12	\$13,590.95	8.66%	
	BB	REGULAR EMPLOYEE RELATED EXPEN									
	B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	1900	Travel	Increase post pandemic In-State Travel	\$2,500.00	\$5,000.00	\$2,500.00	100.00%		
	Obj Class Totals:						\$2,500.00	\$5,000.00	\$2,500.00	100.00%	
	DD	PENSION & INSURANCE RELATED EX									
	D09	Fringe Benefit Cost Recoupment	1900	Fringe	Fringe rate of 40%	\$58,874.13	\$68,185.25	\$9,311.12	15.82%		
			1900	Taxes	Tax rate of 1.89%	\$3,090.38	\$3,221.75	\$131.37	4.25%		
	Obj Class Totals:						\$61,964.51	\$71,407.00	\$9,442.49	15.24%	
	EE	ADMINISTRATIVE EXPENSES									
	E01	Office & Administrative Supplies	1900	Supplies	Supplies Binders	\$5,000.00	\$5,000.00	\$0.00	0.00%		
	E16	Indirect Cost Recoupment	1900	Indirect	Indirect Rate of 10%	\$15,687.22	\$15,687.22	\$0.00	0.00%		
	Obj Class Totals:						\$20,687.22	\$20,687.22	\$0.00	0.00%	
	GG	ENERGY COSTS AND SPACE RENTAL									
	G01	Space Rental	1900	Rent	UMASS Facility	\$2,500.00	\$2,500.00	\$0.00	0.00%		
	Obj Class Totals:						\$2,500.00	\$2,500.00	\$0.00	0.00%	
	UU	IT Non-Payroll Expenses									
	U07	Information Technology (IT) Equipment	1900	Database	Increase for Additional Services Maintenance of System	\$30,000.00	\$40,000.00	\$10,000.00	33.33%		
			1900	IT Software	Grant Software amendment to balanace \$100K from FY21 for development to FY22 (timing issues)	\$100,000.00	\$0.00	(\$100,000.00)	-100.00%		
	Obj Class Totals:						\$130,000.00	\$40,000.00	(\$90,000.00)	-69.23%	
MGC Regulatory Costs Totals:							\$374,523.90	\$310,057.34	(\$64,466.56)	-17.21%	

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
10500004	Community Mitigation									
Appropriation Totals							\$374,523.90	\$310,057.34	(\$64,466.56)	-17.21%
40001101										
			Research and Responsible Gaming/PHTF							
		AA	REGULAR EMPLOYEE COMPENSATION							
		A01	Salaries: Inclusive	1700	Employee Compensation	Employee Salaries	\$300,984.03	\$313,023.39	\$12,039.36	4.00%
			Obj Class Totals:				\$300,984.03	\$313,023.39	\$12,039.36	4.00%
		BB	REGULAR EMPLOYEE RELATED EXPEN							
		B01	Other Out Of State Travel - INCLUSIVE: AIRFARE, HOTEL, LODGI	1700	Travel	Out of State Travel	\$1,250.00	\$1,250.00	\$0.00	0.00%
		B02	In-State Travel	1700	Travel	In-State-Travel Reimbursements	\$3,750.00	\$6,000.00	\$2,250.00	60.00%
			Obj Class Totals:				\$5,000.00	\$7,250.00	\$2,250.00	45.00%
		DD	PENSION & INSURANCE RELATED EX							
		D09	Fringe Benefit Cost Recoupment	1700	Fringe	Fringe rate of 40%	\$112,959.31	\$125,209.36	\$12,250.05	10.84%
				1700	Taxes	Tax rate of 1.89%	\$5,929.39	\$5,916.14	(\$13.25)	-0.22%
			Obj Class Totals:				\$118,888.70	\$131,125.50	\$12,236.80	10.29%
		EE	ADMINISTRATIVE EXPENSES							
		E16	Indirect Cost Recoupment	1700	Indirect Charges	Indirect to EHHS	\$350,000.00	\$342,602.34	(\$7,397.66)	-2.11%
		EE2	Conference, Training and Registration Fees	1700	Conferences	Conference, Training & Registration Fees	\$2,500.00	\$10,000.00	\$7,500.00	300.00%
			Obj Class Totals:				\$352,500.00	\$352,602.34	\$102.34	0.03%
		FF	FACILITY OPERATIONAL EXPENSES							
		F16	Library & Teaching Supplies & Materials	1700	Books	Library/reference books	\$1,000.00	\$0.00	(\$1,000.00)	-100.00%
			Obj Class Totals:				\$1,000.00	\$0.00	(\$1,000.00)	-100.00%
		HH	CONSULTANT SVCS (TO DEPTS)							
		H09	Attorneys/Legal Services	1700	Crime Analysis	Crime Analyst	\$30,000.00	\$38,000.00	\$8,000.00	26.67%
		H23	Program Coordinators	1700	Branding	GameSense media buys etc. KHJ	\$180,000.00	\$150,000.00	(\$30,000.00)	-16.67%
				1700	GRAC/RDASC/Research Consultants	Bruce Cohen--Joel Weissman/Jeff Moratta/Anthony Roman Other Consultants on Stipends Peer Review process for research agenda	\$65,000.00	\$0.00	(\$65,000.00)	-100.00%
				1700	Mass Council	Mass Council on Compulsive Gambling including employees to man Game Sense booth at PPC EBH and MGM --Staffed 16 hrs per day PPC and MGM, and 24 Hrs/day EBH --VSE --Play My Way --Required by Statute Chapter 194, Section 9	\$2,555,000.00	\$2,741,000.00	\$186,000.00	7.28%
				1700	Program manager	Evaluation of GameSense Program	\$125,000.00	\$75,000.00	(\$50,000.00)	-40.00%
				1700	Program manager	TBD	\$0.00	\$0.00	\$0.00	#Num!

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change	
40001101											
Research and Responsible Gaming/PHTF											
		H23	Program Coordinators	1700	Research Consultant/ Umass	Research Consultant	\$0.00	\$0.00	\$0.00	#Num!	
				1700	Research Consultant/ Umass	Veterans Services Technical assistance	\$0.00	\$0.00	\$0.00	#Num!	
				1700	Translations	Knowledge Translation and Exchange	\$75,000.00	\$25,000.00	(\$50,000.00)	-66.67%	
				1700	VSE Resource Liaison	VSE Resource Liaison	\$60,000.00	\$62,000.00	\$2,000.00	3.33%	
		Obj Class Totals:						\$3,090,000.00	\$3,091,000.00	\$1,000.00	0.03%
	JJ	OPERATIONAL SERVICES									
	JJ2	Auxiliary Services		1700	Translations	Document Translations	\$10,000.00	\$10,000.00	\$0.00	0.00%	
		Obj Class Totals:						\$10,000.00	\$10,000.00	\$0.00	0.00%
	PP	STATE AID/POL SUB									
	P01	Grants To Public Entities		1700	Community Driven Research	Community Driven Research	\$173,000.00	\$210,000.00	\$37,000.00	21.39%	
				1700	Data Storage Grant	MODE DPH	\$80,000.00	\$75,000.00	(\$5,000.00)	-6.25%	
				1700	SEIGMA	Social & Economic Research(SEIGMA) Follow-up General Population Study	\$2,300,000.00	\$1,015,000.00	(\$1,285,000.00)	-55.87%	
				1700	Umass	Magic Core/Optional--Cohort Study--Complete	\$0.00	\$0.00	\$0.00	#Num!	
	PP1	Grants To Non-Public Entities		1700	PMW	Play My Way Incentives	\$60,000.00	\$60,000.00	\$0.00	0.00%	
		Obj Class Totals:						\$2,613,000.00	\$1,360,000.00	(\$1,253,000.00)	-47.95%
	UU	IT Non-Payroll Expenses									
	U07	Information Technology (IT) Equipment		1700	IT Non-Payroll Expenses	Crime Analysis Software	\$2,000.00	\$2,000.00	\$0.00	0.00%	
				1700	ITRAK	Development of ITRAK and Migration from Current Process	\$0.00	\$0.00	\$0.00	#Num!	
		Obj Class Totals:						\$2,000.00	\$2,000.00	\$0.00	0.00%
	Research and Responsible Gaming/PHTF		Totals:				\$6,493,372.73	\$5,267,001.23	(\$1,226,371.50)	-18.89%	

Approp	Budget Grouping	Obj Class	Object_name	Unit	Item Short Name	New Description	Current Year Amount	Next Year Amount	Variance	Percent Change
40001101										
Appropriation Totals							\$6,493,372.73	\$5,267,001.23	(\$1,226,371.50)	-18.89%

TO: Chair Cathy Judd-Stein and Commissioners Eileen O'Brien, Bradford Hill and Nakisha Skinner

FROM: Joseph E. Delaney, Chief of Community Affairs

CC: Karen Wells, Executive Director

DATE: June 17, 2022

RE: Encore East of Broadway Development Time Extension

Condition Number 7 of the Commission's decision regarding Encore's East of Broadway Development required the submittal of certain information regarding the pedestrian bridge within 90 days of the decision.

Encore notified us that due to some changes in the pedestrian bridge, their designs are not yet complete and therefore will not be able to meet the 90-day deadline. Initially, Encore requested a 30-day extension. After further conversation, they would like to request a 60-day extension to ensure that they will have sufficient time to get the information to the Commission.

They have indicated that if the extension is granted, they will make the necessary submissions to MGC for review before they proceed with any other permits (Planning Board, etc.). These types of delays are not at all uncommon during the design of major venues.

Printed below is the request that came in from Jacqui Krum at Encore.

Joe,

Hope that this email finds you well. As you are aware, Condition 7 from the MGC decision related to the EOB development requires us to submit a plan relative to the proposed pedestrian bridge 90 days from the date of the March 14th decision. If I have my dates right, that would be this coming Sunday. As you know, following the MGC's hearing, we made a determination to move the pedestrian bridge so that it is located solely in the City of Everett. As a result, the plans are still under development and we are not yet ready to submit to either the City of Everett Planning Board or the MGC. We are also waiting for a determination from MEPA that may further influence the design. We anticipate receiving this in the next couple of weeks.

We respectfully request an extension of the deadline to comply with this Condition. We anticipate that we should have the design completed for submission in the next 30 days which will allow us to develop the relevant surveillance and security plans. If the extension is granted, we will agree to submit the requested plans to the MGC prior to submitting to any permitting agency.

Thank you for your consideration.

Regards,

Jacqui

JACQUI KRUM
Senior Vice President and General Counsel

ENCORE BOSTON HARBOR
1 Broadway
Everett, MA 02149


ENCORE
BOSTON HARBOR

TO: Chair Cathy Judd-Stein, Commissioners, Eileen O'Brien, Bradford Hill and Nakis'ia Skinner

FROM: 2022 Community Mitigation Fund Review Team

CC: Karen Wells, Executive Director, Todd Grossman, General Counsel

DATE: June 17, 2022

RE: 2022 Community Mitigation Fund Public Safety and Specific Impact Applications

This memorandum provides an analysis of the remainder of the Public Safety and Specific Impact applications for funding from the 2022 Community Mitigation Fund ("2022 CMF"). Copies of the applications can be found at <https://massgaming.com/about/community-mitigation-fund/>.

The Community Mitigation Fund Review Team ("Review Team") reviewed the applications to ensure that they follow the 2022 Guidelines. As part of this review process, copies of the applications were sent to the licensees for their review and comment. Conference calls and remote meetings were held between the applicants and the Review Team. Requests for supplemental information were submitted to the applicants so they could provide further clarification on their application. Numerous meetings were held by the Review Team to ensure a thorough review of every application.

Basis of Recommendations of the Review Team

To effectuate a consistent and efficient system to analyze the applications, the Review Team utilized the review criteria specified in the 2022 Guidelines. This summary will mention some significant factors for these applications. The Review Team also compiled charts demonstrating how each of the criteria is reflected in the applications. Among the criteria are:

- A demonstration that the impact is being caused by the proposed gaming facility;
- The significance of the impact to be remedied;
- The potential for the proposed mitigation measure to address the impact;
- The potential for the proposal to maximize the economic impact of the gaming facility; and
- The feasibility and reasonableness of the proposed mitigation measure.

	Applications Received	Recommendation of Review Team
Public Safety		
Boston – Police Department	\$256,300	\$106,000
Everett – Fire – Municipal Ambulance	\$250,000	\$0
Malden – Traffic Signal Upgrades	\$200,000	\$0
Medford - Public Safety Vehicles	\$191,100	\$68,300
Plainville - Police Training	\$238,700	\$142,200
Total:	\$1,136,100	\$316,500
Specific Impact		
Everett – Fire Dept Equipment	\$353,000	\$122,600
Everett – Police Public Safety Equipment	\$309,000	\$309,000
Mansfield - Route 106	\$186,200	\$64,500
Plainville – Resource Officer	\$171,600	\$0
Total:	\$1,019,800	\$496,100

Public Safety Applications

BOSTON – Boston Police Department

Summary: The City of Boston requests \$256,300 for increased police patrols in Charlestown and Downtown Boston; additional funding for training and overtime; two vehicles for the Human Trafficking Unit; and accident reconstruction equipment and training for the Fatal Collision Investigative Team.

Analysis: The Review Team recommends partial funding for this project in the amount of \$106,000, with \$81,000 going to the Human Trafficking Unit (HTU) and \$25,000 for additional patrols. The Review does not recommend funding for the accident reconstruction equipment and training.

This application deals with three issues. The first being general increases in calls for service and certain crimes in areas A-1 (Downtown Boston) and A-15 (Charlestown). The second being increased assistance provided by the Boston HTU to the City of Everett and State Police. The third relates to certain increases in collisions in the A-1 and A-15 areas.

In order to address the increase in calls for service and crimes, the City of Boston proposes to increase patrols in the casino area primarily from North Station to Sullivan Square and Alford Street and increase Detective's hours to implement strategies to combat the increase in car theft and larceny. The City provided information that demonstrated these increases, however, they were not able to make a direct connection to Encore. Christopher Bruce's study "Assessing the Influence of Gambling on Public Safety in Massachusetts Cities and Towns," that covered the operation of the Encore casino from its opening until October 2020, did indicate that the region experienced higher than average totals for thefts from vehicles, but could not be traced in any substantial way to Encore. The Review Team does agree that traffic certainly has an impact on Sullivan Square and Rutherford Avenue as about 70 percent of the casino related traffic goes through Sullivan Square. Some additional level of patrols seems to be appropriate during high traffic periods. The application stated that the focus would be 12 hours blocks from 4:00 PM to 4:00 AM during high traffic weekends and weekdays. The Review Team felt that the times should be more targeted to perhaps the peak casino traffic periods or late nights. The City requested \$75,278 for the additional patrols and Detective overtime. The Review Team recommends an award of \$25,000 for the additional patrols.

The Boston HTU has assisted the City of Everett Police Department and the State Police on human trafficking investigations. The Review Team agrees that this work constitutes a nexus to the casino. Boston is requesting funding for training at the MA Attorney General's Office Cyber Conference as well as Internet Crimes Against Children training, funds for Detective's overtime to assist Everett and the State Police, and funding for two undercover vehicles. The Review Team is in full agreement that the training and overtime funds are appropriate. With respect to the vehicles, we need to look at the proportionality of the request relative to the impact. The City currently has four vehicles assigned to the HTU. Regardless of the presence of Encore, the City of Boston would still need to maintain the HTU to address already existing issues in Boston. Replacing 50% of the HTU fleet

seemed out of proportion with the identified impact and therefore, the Review Team recommends one vehicle.

In relation to the third request regarding accident reconstruction, the City provided crash data for areas A-1 and A-15 from 2012 to 2021. Area A-1 showed a slight decrease in accidents between 2018 and 2019 from 914 to 896 while area A-15 showed a slight increase in accidents between 2018 and 2019 from 306 to 312. Data from 2020 and 2021 is skewed due to the pandemic, so was not considered in this evaluation. In Christopher Bruce's study "Assessing the Influence of Gambling on Public Safety in Massachusetts Cities and Towns," he states that "there is no evidence of an Encore-related increase in crashes on local roads." Based on the submitted data and the Christopher Bruce analysis, the Review Team was not convinced that a compelling case was made of a casino related impact and therefore does not recommend funding of the collision investigation equipment and training.

Licensee Response: "Although we do not believe that increases in crime in certain areas of Boston are attributable to Encore Boston Harbor's presence in Everett, Encore Boston Harbor supports the City of Boston's efforts to mitigate criminal activity, specifically human trafficking."

EVERETT – Fire Department Municipal Ambulance

Summary: The City of Everett requests \$250,000 for the purchase of an ambulance to address increased service calls in response to Encore Casino.

Analysis: After careful consideration, the Review Team cannot recommend awarding this grant as this request is fulfilling a general municipal purpose and is not directly correlated to a casino impact.

The City of Everett does not currently provide their own ambulance service. It is contracted through a private ambulance company. The City recently made the decision to provide its own ambulance service and has purchased its first ambulance which is expected to go into service later this summer. According to the application, the state Office of Emergency Medical Services requires the City to have a backup ambulance in place prior to putting any new ambulance in service. The City has an agreement in place with a private ambulance service for that backup. This grant would fund the backup ambulance so that the City could end part of its contract with the private service.

The stated impact in the application is an increase in calls for service from Encore. The City of Everett receives significant funding in its Host Community Agreement which is designed to mitigate the known impacts of Encore and states "the Impact Payments constitute Wynn's mitigation efforts and are in full and complete satisfaction of all local government impacts whether or not identified in this Agreement." Given the scale of the Encore development, the City had to expect a significant increase in calls for service. The primary purpose of the CMF is to address unanticipated impacts of the casinos. The Review Team was not convinced that the increase in calls for service was unanticipated.

The City referenced the difficulty their private ambulance service has had with maintaining their staffing levels and the impact they felt it had on response times. This appears to be an industry-wide issue and would likely affect any ambulance service that the City would hire. The provision of a second ambulance would allow the City to end a part of its contract with the private ambulance service. Regardless of the impact, it appears that the City's decision to provide their own ambulance service was simply a business decision. Therefore, the Review Team does not recommend awarding grant funds.

Licensee Response: "Encore Boston Harbor supports the City of Everett's request for funding to purchase an ambulance to support an increase in service calls."

MALDEN – Traffic Signal Upgrades on Broadway

Summary: The City of Malden requests \$200,000 to replace existing traffic signal equipment at four intersections along the Broadway corridor.

Analysis: After careful analysis, the Review Team cannot recommend funding of this grant as the specifically identified public safety issues appear to have been in existence before the opening of Encore and do not appear to have been exacerbated by the casino.

This application was submitted under the Public Safety category and as such, needs to address safety related issues. The application states that increases in traffic congestion can create unsafe roadway conditions for all modes of travel. The Environmental Impact Report for Encore estimated that about 1% of the casino related traffic would use Broadway in Malden. While the Review Team agrees that this constitutes a small traffic impact, the application did not demonstrate that this small increase in traffic is causing further safety issues.

The Review Team asked the applicant to provide additional information on accidents or other information that would demonstrate a casino related safety impact. Malden provided additional information regarding the number and nature of the crashes on Broadway for 2012-2021 with the exception of 2014. The crash data submitted did not show any particular trends that would indicate that an uptick in traffic from Encore is causing additional problems in the area. The number of crashes from 2012-2015 ranged from 76-86 and from 2016-2021 ranged from 72 to 78 (not including 2020). There are a relatively high number of non-motorist crashes on the route averaging 4 per year from 2012-2015 and 3 per year from 2016-2021. Based on the data submitted, this road appears to have a significant number of vehicular and pedestrian accidents, but these safety issues pre-date the construction and operation of the casino and do not appear to have been exacerbated by the casino. For these reasons, the Review Team does not recommend awarding this grant.

Licensee Response: "Encore Boston Harbor supports the City of Malden's request for funding to upgrade traffic signals along the Broadway Corridor. The safety of all members of our community is our highest priority, and we are happy to support the City of Malden's efforts to help protect the wellbeing of all."

MEDFORD – Fire and Traffic Safety Vehicles and Equipment

Summary: The City of Medford requests \$191,100 to purchase three public safety vehicles, EV charging stations, and a speed trailer.

Analysis: The Review Team recommends awarding partial funding of this grant in the amount of \$68,300 for the purchase of a pickup truck and a speed monitor trailer. The Review Team does not recommend funding for the Fire Department for two detail vehicles and charging stations.

The City of Medford has identified increases in traffic, accidents and traffic complaints as the impact of the casino. The Environmental Impact Report for Encore estimated that about 12 percent of the casino related traffic would use Route 16 in Medford. In addition, about 1 percent of the traffic would use Route 28 in Medford. The most recent traffic study of the casino (Winter 2020) identified the average daily traffic generated by the casino at 24,000 vehicles per day, which would result in about 3,120 vehicles using Medford roads. The Review Team agrees that this constitutes an impact related to the casino. The City also presented data showing increases in calls for service and accidents from 2018 to 2019. The use of speed boards is an effective method of improving safety and having a dedicated vehicle to deploy the boards and other safety equipment will help Medford improve safety for all modes of travel. Therefore, the Review Team recommends funding the pickup truck and speed trailer. Funding of these items is consistent with other grants the Commission has awarded for similar impacts.

With respect to the Fire Department request, the City has attempted to connect the construction of Encore Boston Harbor to an increase in construction activity in Medford which, in turn resulted in an increased demand for fire inspections. No documentation was provided in the application to demonstrate that connection. The Review Team asked for any information available concerning the growth in development in Medford being attributable to Encore. The City responded that “Based on conversations with developers, we know that EBH is a significant demand driver for these developments.” Without any tangible documentation of an impact, it is not possible for the Review Team to parse out what portion of the development in Medford might be attributed to the development of Encore. As such, the Review Team does not recommend awarding funds for this portion of the project.

Licensee Response: “Encore Boston Harbor supports the City of Medford’s request for funding to purchase three new public safety vehicles and equipment. The safety of all members of our community is our highest priority, and we are pleased to support the City of Medford’s efforts to protect the wellbeing of all.”

PLAINVILLE – Training and Equipment

Summary: The Town of Plainville is seeking \$238,700 in CMF funds to provide police officer training as well as hardware and software purchases for virtual training.

Analysis: The Review Team recommends awarding partial funding for this grant in the amount of \$142,200 for the training costs associated with the Plainville Police Department. The Review Team does not recommend funding for overtime costs associated with other Metro-LEC communities or the virtual training hardware and software.

Plainville has requested training funds for fair and impartial policing, human dynamics and conflict resolution, and de-escalation training. In the 2022 CMF Guidelines, certain training costs were specifically identified as being eligible for funding. The rationale behind this is that it is reasonable to assume that police in the host and surrounding communities will come into contact with patrons

or employees of the casino in their regular duties. The Review Team agrees that this training is appropriate and should be funded.

This application also includes funding for training of police personnel in other Metro-LEC communities. Metro-LEC is a consortium of 46 local police departments south of Boston. While the Review Team understands the desire to share training resources, Community Mitigation Funds must be focused on casino related impacts and therefore the Review Team does not recommend funding the Metro-LEC communities. The Review Team recommends funding of \$142,200 for training Plainville Police rather than the \$198,200 requested in the application.

The application also requests \$40,427 in funding for equipment and software. This would be used to augment the training simulator owned by Plainville Police Department. The Review Team understands Plainville's desire to upgrade their training equipment, but there is no particular nexus to the casino that is driving this upgrade and therefore, the Review Team does not recommend this portion of the application.

Licensee Response: "At this time, PPC supports the 2 applications submitted by our Host Community."

Specific Impact Applications

EVERETT – Fire Department – Public Safety Communications Equipment

Summary: The City of Everett requests \$353,000 for the purchase of 72 radios to replace antiquated radios that do not work effectively at Encore Boston Harbor.

Analysis: The Review Team recommends awarding partial funding of this project in the amount of \$122,600 for the funding of up to 25 radios.

The Everett Fire Department (EFD) has had difficulty with its existing radios in the Encore Boston Harbor facility. Even with a signal booster in the building, the older model radios used by EFD do not work effectively. The Review Team agrees that this constitutes an impact of the casino. EFD has 103 total radios of which it considers 72 to be "antiquated." This request is to replace all of the antiquated radios. While the Review Team agrees that there is a casino related impact, it does not agree that the request is proportional to that impact.

There are three fire stations in Everett of which one primarily responds to incidents at Encore. The Review Team agreed that it would be appropriate to replace the radios at that station as well as providing a few spares should an incident at Encore require services from a different station. Based on conversations with EFD, the Review Team determined that 25 radios should provide EFD with sufficient radios to adequately respond to incidents at Encore and would be proportional to the casino related impact.

Licensee Response: "Encore Boston Harbor supports the City of Everett's request for funding to replace the Department's portable radios in order to improve radio communication between responding members of the Everett Fire Department and other responding municipalities."

EVERETT – Police-Public Safety Equipment

Summary: The City of Everett requests \$309,000 for public safety equipment, extra late-night patrols and 20 radios for communication interoperability.

Analysis: The Review Team recommends awarding the full amount of this grant to the City of Everett.

This application deals with three specific impacts. The first is the presence of the parking lots across the street from Encore which requires frequent police details. The second relates to the late-night activity at the casino that is, in part, driven by the 4:00 AM alcohol service. The third is the lack of communication interoperability between Everett Police Department (EPD) and the Gaming Enforcement Unit (GEU).

When the casino was first proposed, Encore only owned the casino site itself. There was no anticipation at that time of Encore developing parking lots on the East side of Broadway. The development of those parking lots created a pedestrian crossing demand that had not been anticipated. As such, EPD provides regular police details at the Encore entrance during peak periods to facilitate pedestrian crossing of Broadway and help ensure safety at that location. The Review Team agrees that this was an unanticipated impact of the casino. To provide additional safety at night, EPD uses portable light towers that are borrowed from the Public Works Department. These are not always available to EPD due to other priorities (water main breaks, night road work, etc.). EPD is requesting two portable light towers that would be dedicated to the intersection of Broadway and the Encore site driveway. In addition, EPD uses other safety equipment at the site (e.g., cones, signs, etc.) that it has to cart back and forth from the site. They are requesting funds for a storage container so that this equipment can be stored securely at the site. The Review Team agrees that these items will help address safety issues that could arise due to the increased pedestrian traffic in the area.

In regard to late night patrols, for the past few years, the Commission has funded additional late-night and peak period police patrols in the casino area. The rationale behind these was the extension of alcohol service to 4:00 AM has extended the peak departure times from the casino, and some events at the casino have resulted in larger than expected crowds and traffic congestion. The Review Team agrees that these continue to constitute and impact of the casino and recommend awarding this portion of the grant.

In regard to the radios, officers assigned to the GEU operate on a multi-band radio system. EPD officers outside of the GEU do not have access to multi-band technology, which creates communication issues when patrol is dispatched for an incident at Encore. The Review Team agrees that this constitutes a casino related impact. EPD is working on updating their radio systems and regularly replaces a few radios per year. Providing 20 radios would allow all of the supervising officers to have multi-band radios, which would move the City a long way towards improving their

communications with the GEU in responding to incidents at Encore. The Review Team recommends awarding this portion of the grant.

Licensee Response: Encore Boston Harbor appreciates the City of Everett Police Department's commitment to protect and serve the community. To that end, Encore Boston Harbor wishes to express its full support for the Everett Police Department's request for funding to secure and store equipment to help aid in pedestrian and traffic safety for guests entering and exiting Encore Boston Harbor, to provide additional units to maintain safety and to purchase new portable radios that will enhance communication between the Gaming Enforcement Unit and the Everett Police Department."

MANSFIELD- Route 106 Traffic Safety Impact Mitigation

Summary: The Town of Mansfield requests \$186,200 for the purchase of a pickup truck, motorcycle, trailer, speed boards, pedestrian crossing beacons and other traffic safety equipment.

Analysis: The Review Team recommends awarding partial funding of this grant in the amount of \$64,500 for the speed boards, traffic safety equipment, and the trailer. The Review Team does not recommend funding for the pickup truck, motorcycle and crossing beacons.

The Town of Mansfield has identified increased traffic volumes, traffic collisions, and calls for service on Route 106 as the impact associated with Plainridge Park Casino. The original Environmental Impact Report (EIR) for PPC estimated that about 13 percent of the traffic from PPC would be from the south with about 4 percent of the traffic using Route 152. While the EIR did not estimate how much of the Route 152 related traffic would then use Route 106, it is certainly reasonable to expect that some portion of that traffic would use Route 106. In addition, many of the patrons and employees of PPC that live in Mansfield would likely use Route 106 to access the casino. Based on the most recent traffic study conducted by PPC (2019), the average daily traffic from the casino was 6,232 vehicles per day. 4 percent of that would be about 250 vehicles per day. If the traffic split evenly between Route 152 and Route 106, that would result in about 125 vehicles per day on Route 106. The Review Team agrees that there is an impact on Mansfield's roads, however it is quite modest.

Given this modest impact, the Review Team evaluated the request to determine whether it was proportional to the casino related impact. The Review Team agreed that the speed board and other safety equipment (cones, signs, etc.) would have a positive impact on traffic operations and would adequately mitigate the minor increases in traffic resulting from the casino. The Review Team also agreed that it was appropriate to provide a storage trailer for transporting this equipment.

The Town of Mansfield already has a pickup truck that can be used to transport speed boards and trailers, so the Review Team did not agree that the provision of a pickup truck was necessary to mitigate any casino related impact. The Town has also requested a new motorcycle which would replace an aging motorcycle. The CMF Guidelines indicate that any funds for public safety related items should be to supplement, not supplant existing programs. The Review team looks at this item as supplanting existing funds and as such, does not recommend funding for this item.

The pedestrian crossing beacons are proposed to be placed near the MBTA Commuter Rail station. Currently, there is a grade separated crossing of Route 106 for pedestrians to access the station. There are several commuter parking lots and higher density residential development in the area resulting in significant pedestrian activity. This pedestrian activity would largely be focused during the morning and afternoon rush hours, which are not the peak activity periods of the casino. The Review Team understands the desirability of having an additional pedestrian crossing in the area, but this is related more to commuters using the train station rather than mitigating a casino impact.

Licensee Response: Plainridge Park Casino did not provide any comments regarding this application.

PLAINVILLE – Community Resource Officer

Summary: The Town of Plainville requests \$171,600 for the funding of a Community Resource Officer for a period of two years.

Analysis: After careful consideration, the Review Team does not recommend awarding funds for this grant.

The Commission requires that any award of Community Mitigation Funds must be in response to an impact from a gaming establishment. As such, one of the first questions we ask in the application is what is the impact that is attributed to the operation of a gaming facility. This application states that “The impact is often, perhaps, unmeasurable or simply reactive without identification and a course of action of intervention when identified. Having a community resource officer will bridge some gaps, allow us to better identify opportunities to be proactive, and further isolate or missed opportunities with patrons that visited or other who were impacted by overindulgence of such activity.” From that description, the Review Team had difficulty trying to ascertain what particular impact of the casino this request is trying to address.

The application goes on to describe numerous incidents that the Plainville Police have responded to outside of the gaming establishment that could be related to PPC. Plainville entered into a Host Community Agreement with PPC which states that “Plainridge desires to mitigate impacts from the development and operation of a gaming establishment through the means described herein.” The intent of the Host Community Agreement is to provide payment to the community for the expected impacts of the casino. The Plainville Host Community Agreement establishes several payments to the Town as mitigation for anticipated impacts. As with any development that attracts a large number of people, increased crime and calls for service should be one of those anticipated impacts.

At each of our licensees, a Gaming Enforcement Unit (GEU) was established to handle crimes that happen on the licensee’s property. Of course, under certain circumstances, the GEU will need to coordinate with the local police department. While the application indicates that the Community

Resource officer can improve communications with the GEU and PPC, there is no indication that the current system is not working effectively or that this proposal addresses any particular deficiencies.

The application describes a number of activities that the Community Resource officer might undertake, some associated with the casino and others for more general municipal purposes. The application also states that "Plainridge keeps us informed about many of the events, but we struggle due to our current environment of reduced staff and increased demands on service." The Review Team sympathizes with the realities of staffing shortages, etc., but the Team does not agree that reduced staffing levels constitutes an impact of the casino.

We have no doubt that the Plainville Police Department could use additional staff and that a Community Resource officer could provide value to Plainville. However, the Review Team was unable to tie this request to a specific impact of the casino and therefore, does not recommend funding of this grant.

2022 APPLICATION DOLLARS BY REGION

	Applications			Total
	Region A	Region B	Cat 2	
Public Safety	\$1,084,400	\$360,900	\$506,810	\$1,952,110
Specific Impact	\$1,162,000	\$774,600	\$357,800	\$2,294,400
Transportation Planning	\$1,051,400			\$1,051,400
Transportation Construction Project(s)	\$1,663,500	\$4,366,600		\$6,030,100
Workforce Development	\$500,000	\$500,000		\$1,000,000
Community Planning	\$500,000	\$390,000	136,000	\$1,026,000
Totals:	<u>\$5,961,300</u>	<u>\$6,392,100</u>	<u>\$1,000,610</u>	<u>\$13,354,010</u>



STATUS OF THE 2022 AWARDS

	Applications			
	Region A	Region B	Cat 2	Total
Public Safety	\$361,300*	\$285,900*	\$213,400*	\$860,600*
Specific Impact	\$431,600*	\$832,300*	\$64,500*	\$1,328,400*
Transportation Planning	\$945,100	0	0	\$945,100
Transportation Construction	\$1,527,500	\$4,200,000	0	\$5,727,500
Workforce Development	\$500,000	\$500,000	0	\$1,000,000
Community Planning	\$400,000	\$75,000	\$136,000	\$611,000
Totals:	\$4,165,500	\$5,893,200	\$413,900	\$10,472,600*

* Based on Recommendations by the Community Mitigation Fund Review Team, pending vote by Commission.



COMPARISON 2021-2022

	2021	2022
Number of Applications:	28	43
Funding Target:	\$12.5M	\$21M
Amount of Funds Requested:	\$5,949,365	\$13,354,610
Awards:	\$4,849,000	\$10,472,600*

***Review Team recommended amount, pending Commission vote**



TO: Chair Cathy Judd-Stein and Commissioners, Eileen O'Brien, Bradford Hill and Nakisha Skinner

FROM: Joseph E. Delaney, Chief of Community Affairs and Mary Thurlow, Senior Program Manager

CC: Karen Wells, Executive Director, Todd Grossman, General Counsel

DATE: June 17, 2022

RE: **Springfield Technical Community College 2021 Work Ready Amendment**

Springfield Technical Community College (STCC) is requesting to amend their 2021 CMF Workforce Development grant to redistribute unused funds. STCC applies jointly with Holyoke Community College and the Springfield Public School for these workforce grants. A portion of STCC funds are currently unspent due to underspending as a result of the inability to fill and staff some programs. There were also unused funds carried over from grant year 2020. STCC's original portion of the Work Ready 2021 grant was for \$104,000 and they are requesting to redistribute \$22,521. **We are recommending the Commission vote to approve the redistribution of \$16,896.**

The best practice for reallocation of funds is for the funds to be used within the original scope of the grant. In this case the \$16,896 of funding we recommend approving would cover a continuation of Hampden Prep workforce development programs previously approved by the Commission. It would also cover the inclusion of a bilingual co-instructor. While this role was not originally included in the 2021 Work Ready program, there is community need for this resource and it would aide in facilitating the programs directly related to the grant and the casino.

The additional \$5,625 requested by STCC that we are not recommending funding would cover a new training for para-educators. After meeting with STCC we did not find a tangible nexus between this funding request and the original scope of the grant and casino mitigation.

Public Records

1. Introduction

As a public instrumentality, ~~the Massachusetts Gaming Commission (MGC) MGC~~ is subject to the Massachusetts Public Records Act, M.G.L. Chapter 66, which governs the retention, disposition, and archiving of public records. Commissioners, Directors and Staff are advised to confer with the MGC's ~~General Counsel Legal Department~~ about which records are public records, how long you may be required to retain those records, the method by which they should be disposed of, and archiving requirements. The Public Records Act also contains provisions which could require the Commission to disclose to the public certain sensitive Information made, received, or maintained by the MGC, its contractors and consultants from time to time. In addition, the MGC may be compelled by legal process to disclose information in its possession, including Sensitive Information about the MGC itself or about its applicants, ~~or recipients, licensees or registrants,~~ or other third parties. Care must be taken to comply with all such legal requirements; however, it should be remembered that, in the absence of a specific legal requirement to disclose ~~(as determined by the General Counsel),~~ all MGC employees, consultants, contractors, and licensees are expected to take appropriate measures to safeguard Sensitive Information from improper disclosure and use at all times. If material is a public record within the meaning of the Public Records Act, it is subject to inspection by the public and cannot be destroyed or returned to those who delivered it to the MGC, other than as specifically permitted under the Public Records Act. If material is deemed not to be a public record, it is subject to some protection from disclosure under the law. ~~MGC Commissioners, Directors, and Staff should presume that all materials are public records.~~

2. What Are Public Records?

For purposes of the Public Records Act, public records include all books, papers, maps, photographs, recorded tapes, financial statements, statistical tabulations, or other documentary materials or data, regardless of physical form or characteristics, made or received by any employee of the MGC. File notes and memoranda created by MGC employees or outside contractors and licensees could be deemed to be public records, and the use of the Commission's Information Technology Resources can create public records which are subject to the retention requirements of and potential disclosure under the Act.

3. Exemptions under the Public Records Act

Public records do not include certain materials or data which fall within one of the specifically enumerated exemptions set forth in the Public Records Act or in other statutes, including MGC's enabling act, M.G.L. c. 23K, ~~nor do they include materials protected by the attorney-client privilege. One such exemption is for certain internal personnel records.~~

4. Public Records Request Policy

In accordance with G.L. c.66, §10 the MGC is required to respond to all requests for access to public records as soon as practicable and within ten business days of receipt of the request. In order to ensure that all requests are processed in a uniform manner in accordance with the law, the following policy shall apply to all Commissioners and employees.

1. Any Commissioner or employee who receives any request for any documentary type information, including any request to inspect or review a record in person, shall ~~refer the request to the Legal~~

~~Department~~ direct the requestor to submit their request via mgcpublicrecords@massgaming.gov or the public records request portal at massgaming.com even if ~~he/she is~~ they are unsure as to whether the information being requested qualifies as a public record. Any such Commissioner or employee will also forward any email request received to mgcpublicrecords@massgaming.gov.

2. Requests are not required to be in writing; oral requests can be accepted. However, in an effort to ensure the accuracy of the Commission's response, ~~requestors should be encouraged any Commissioner or employee who receive such an oral request shall direct the requestor~~ to submit their request in writing to mgcpublicrecords@massgaming.gov or via the public records request portal at massgaming.com and identify the specific information they seek. ~~Requests may be submitted via letter, email, or any other medium, and may be submitted in person.~~

3. Requestors are not required to disclose the reasons for which they seek a public record. Further, requestors are not required to prove their identity prior to obtaining copies of public records.

4. If an individual merely seeks to inspect or review a public record ~~he/she~~ they should be referred to the Legal Department.

5. ~~If received through a medium other than email,~~ the Commissioner or employee who receives a request shall promptly mark it received on (date) reflecting the date the request was received by the Commission.

6. If the requestor is a member of the media, the Legal Department ~~shall promptly forward the request to the Director of Communications, and the Legal Department,~~ the Director of Communications, and any other relevant parties shall coordinate a response.

7. Upon receipt by the Legal Department, the request shall be logged-in such that the name and address of the requestor, the name of the requestor's firm or company (if any), the date the request was received by the Commission, and the nature of the request are identified.

~~8. The Legal Department shall then set an Outlook task to respond with a compliance reminder for 10 business days after the request was received.~~

8. If the request is received by a Commissioner or employee who is in possession of the public records that have been requested, they shall consult with the Legal Department and begin to gather the materials to be provided to the Legal Department.

9. All Commissioners and employees shall cooperate with the Legal Department in the gathering of public records.

10. Commissioners and employees shall not withhold any responsive information or documents from the Legal Department. In the event that a Commissioner or employee believes that certain information or documents being requested are exempt from disclosure under the Public Records Law, ~~he/she~~ they shall provide the material to the Legal Department along with an advisory as to ~~his/her~~ their opinion.

~~11. Recommendations to the appropriate keeper of the records as to whether any documentation or item is a public record or exempt from disclosure under the Public Records Law shall be made by the Legal Department. The keeper of the records shall then make a determination as provided in 205 CMR 103.04(2).~~

11. Where the requested records are not easily identifiable, the Legal Department shall work with the IT Department, or a **Commission-approved** contracted third-party vendor, to run an electronic search of the agency's data storage system to locate responsive records.

12. Within 10 business days of the Commission's receipt of the request for public records, the Legal Department shall either fully respond to the request; send the requestor a good faith estimate for the costs of complying; or send written correspondence acknowledging receipt of the request, **advising that more time is needed to produce a response, and seeking agreement on a timeframe within which the Legal Department will produce responsive records. and advising that a full response is being prepared.** A full response shall be provided no later than 15 business days from the date of receipt of the request unless the requestor agrees to a later date **or the Supervisor of Records grants an extension of time within which to respond.**

13. The Commission will make efforts to accommodate requests without assessing a fee. **However, it reserves the right to assess a fee within the limits of the Public Records Law if the request is so voluminous that it will be overly burdensome to complete.**

14. All responses to public record requests, including the request itself, shall be scanned and indexed in the data storage system. ~~such that the name and address of the requestor, the name of the requestor's firm or company (if any), the date the request was received by the Commission, and the date of the response are identified.~~

15. In the event that documents or other items are being withheld under an exemption to the Public Records Law, the documents or other items shall be marked withheld and scanned into the data storage system ~~in a like manner to that in paragraph 14.~~

16. For information about the Public Records Law, Commissioners and employees are encouraged to review A Guide to the Massachusetts Public Records Law published by the Secretary of the Commonwealth.

~~17.~~

Procedural Considerations and Mandatory Use of Policy and Procedures for the Submission of Sensitive Information

MGC staff may from time to time be exposed to types of information that may contain sensitive information that a submitting party often seeks to protect from public disclosure. While it is understandable that the owner of such information may wish to restrict its disclosure, MGC is a public agency pursuant to the Massachusetts Public Records Act, and the submission of such information to MGC is, generally speaking, subject to public disclosure (without notice and without restriction) upon MGC's receipt of it. In response to the inherent tension between MGC's obligation to honor public records requests in a timely and comprehensive manner, and a submitting party's desire to restrict access to its Sensitive Information, MGC has implemented an Information Security Policy regarding how to properly handle all confidential information.

In addition, all communications seeking inspection or other disclosure of materials under the Public Records Act must be referred promptly to the ~~General Counsel~~ **Legal Department**. Similarly, all subpoenas and other legal process documents requesting or seeking to compel disclosure of materials made or received by MGC, its consultants, or contractors must be delivered or promptly forwarded to the ~~General Counsel~~ **Legal Department** upon receipt.

Approved By ~~Rick Day, Executive Director~~

Date ~~2/26/2015~~

References to other policies/laws/regulations M.G.L. c 23K sec 3 (o); MA Conflict of Interest Law, M.G.L. c. 268 A and B

Created 04/08/2014

Revised

Reviewed 2/4/2016, 5/31/2017

DRAFT

PUBLIC RECORDS REQUEST PROCEDURE

In accordance with G.L. c.66, §10, the Massachusetts Gaming Commission (“Commission”) is required to respond to all requests for access to public records as soon as practicable and within ten business days of receipt of the request. A “public record” means all books, papers, maps, photographs, recorded tapes, financial statements, statistical tabulations, or other documentary materials or data, regardless of physical form or characteristics, made or received by any Commissioner or employee of the Commission.

To ensure that all requests are processed in a uniform manner in accordance with the law, the following procedures shall apply:

Receipt of Requests

1. Any Commissioner or employee who receives any request for any documentary type information shall direct the requestor to submit their request via mgcpublicrecords@massgaming.gov or the public records request portal at massgaming.com even if they are unsure as to whether the information being requested qualifies as a public record. Any such Commissioner or employee shall also forward any email request received to mgcpublicrecords@massgaming.gov.
2. Requests are not required to be in writing; oral requests can be accepted. However, in an effort to ensure the accuracy of the Commission’s response, requestors should be encouraged to submit their request in writing to mgcpublicrecords@massgaming.gov or via the public records request portal at massgaming.com and identify the specific information they seek. Requests may be submitted via letter, email, or any other medium, and may be submitted in person.
3. A Commissioner or employee who receives a hard-copy request shall promptly mark it “received on (date)” reflecting the date the request was received by the Commission. The Commissioner or employee who receives a verbal request shall make a written record of such request and mark it “received on (date)” reflecting the date the request was received by the Commission.
4. Requestors are not required to disclose the reasons for which they seek a public record. Further, requestors are not required to prove their identity prior to obtaining copies of public records. However, they must provide a method by which the records may be provided to them, whether it be an email address or mailing address. In the alternative, a requestor may wish to pick up the records in person.

5. If the requestor is a member of the media, the legal department will promptly forward the request to the Director of Communications and will work with the Director of Communications and any other relevant parties to coordinate a response.
6. Upon receipt by the legal department, the request shall be logged by the legal department in a format that contains, at a minimum, the name and address of the requestor, the name of the requestor's firm or company (if any), the date the request was received by the Commission, and the general subject matter of the request. The legal department shall also create a folder within its Public Records SharePoint file for each new request.
7. Within five business days of receipt of the request, the legal department shall respond to the requestor notifying them that their request was received and is being processed.
8. The legal department shall set a reminder to respond further within 10 business days after the request was received.
9. Upon receipt of the request by the legal department, the legal department shall reach out to appropriate staff to obtain the requested documents and to confirm the existence or nonexistence of any responsive personal notes or hard copies. Where the records are not easily identifiable, the legal department shall work with the IT Department, or a contracted third-party vendor, to run an electronic search of the Commission's email system and/or SharePoint using an eDiscovery platform to locate responsive records. All Commissioners and employees shall cooperate with the legal department in the gathering of public records. No Commissioner or employee is required to create documents or provide answers to questions in response to a public records request. Rather, the Commission is only required to provide copies of existing documents in its possession.
10. Commissioners and employees shall not withhold any responsive information or documents from the legal department. In the event that a Commissioner or employee believes that certain information or documents being requested are overly sensitive or otherwise exempt from disclosure under the Public Records Law, they shall provide the material to the legal department and inform the legal department of such concerns.

Response to Requests

1. Within 10 business days of the Commission's receipt of the request for public records, the legal department shall either respond to the request in full by providing responsive records OR provide a written response that includes the following information, where applicable:

- a. Confirms receipt of the request;
- b. Identifies any public records or categories of public records sought that are not within the possession, custody, or control of the MGC;
- c. Identifies the agency or municipality that may be in possession, custody or control of the public record sought, if known;
- d. Identifies any records, categories of records or portions of records that the MGC intends to withhold, and provides the specific reasons for such withholding, including the specific exemption or exemptions upon which the withholding is based;
- e. Identifies any public records, categories of records, or portions of records that the MGC intends to produce, and provides a detailed statement describing why the magnitude or difficulty of the request unduly burdens the other responsibilities of MGC and therefore requires additional time to produce the public records sought;
- f. Identifies a reasonable timeframe in which the MGC will produce the public records sought provided that the timeframe shall not exceed 15 business days following the initial receipt of the request OR propose a response date beyond that timeframe (which may include proposing a rolling production);
 - (1) **Petition for Extension of Time:** If the response cannot be provided within 15 business days following receipt of the request AND the requestor does not agree to a response date beyond that timeframe, the MGC may petition for an extension of time within which to respond. A petition must be submitted within 20 business days of receipt of the request OR within ten business days after receipt of a determination by the Supervisor that the requested record constitutes a public record. A copy of the petition must be provided to the requestor.
- g. Suggests a reasonable modification of the scope of the request or offers to assist the requestor to modify the scope of the request if doing so would enable the MGC to produce records sought more efficiently and affordably;
 - (1) For large and comprehensive requests requiring searches of the MGC's email system and/or SharePoint, the legal department may propose specific search terms and criteria and receive agreement to those terms and criteria before executing a search;

- (2) For large and comprehensive requests seeking emails, the legal department may propose liming the request to emails only for the initial production and allowing the requestor to follow-up with requests for specific attachments;
 - h. Includes an itemized, good faith estimate of any fees that may be charged to produce the records. ~~For requests that require 100 or more hours of time to complete, the legal department will consult with the Executive Director regarding assessing a fee;~~ and
 - i. Includes a statement informing the requestor of the right of appeal to the supervisor of records under subsection (a) of section 10A and the right to seek judicial review of an unfavorable decision by commencing a civil action in the superior court under subsection (c) of section 10A.
2. Where the response will include records prepared or held by the IEB, the legal department shall notify the Director of the IEB such that the IEB has an opportunity to review the records before they are produced.
 3. Where the response will include production of emails sent by any Commissioner, the legal department shall notify the respective Commissioners and give them an opportunity to review the records before they are produced.
 4. **Denial of Request:** A denial must detail the specific basis for withholding the requested materials and must include a citation to one of the statutory or common law exemptions upon which the records custodian relies, and must explain with specificity why the exemption applies. It must also advise the requestor of the right to seek redress through the administrative process provided by the Supervisor of Records as well as the judicial remedy available in superior court.
 - a. **Exemptions Applicable to Withholding or Redacting Documents**¹
 - i. **Statutory (Exemption (a)):** Applies to records that are specifically or by necessary implication exempted from disclosure by statute.
 - ii. **Internal Personnel Rules and Practices Exemption (Exemption (b)):** Applies to internal personnel rules and practices of the MGC, provided that such records shall be withheld only to the extent that proper performance of necessary government functions requires such

¹ Exemptions that would not apply to the MGC have been omitted.

withholding.

- iii. **Privacy (Exemption (c)):** Applies to personnel and medical files or information and other materials or data relating to a specifically named individual, the disclosure of which may constitute an unwarranted invasion of personal privacy.
- iv. **Deliberative Process (Exemption (d)):** Applies to inter-agency or intra-agency memoranda or letters relating to policy positions being developed by the agency, but shall not apply to reasonably completed factual studies or reports on which the development of such policy positions has been or may be based.
- v. **Personal Notes (Exemption (e)):** Applies to notebooks and other materials prepared by an employee of the MGC which are personal to them and not maintained as part of the files of the agency.
- vi. **Investigatory (Exemption (f)):** Applies to investigatory materials necessarily compiled out of the public view by law enforcement or other investigatory officials, the disclosure of which would probably so prejudice the possibility of effective law enforcement that such disclosure would not be in the public interest.
- vii. **Trade Secrets (Exemption (g)):** Applies to trade secrets or commercial or financial information voluntarily provided to an agency for use in developing governmental policy and upon a promise of confidentiality, but shall not include information submitted as required by law or as a condition of receiving a governmental contract or other benefit.
- viii. **Competitive Bidding (Exemption (h)):** Applies to proposals and bids to enter into any contract or agreement until the time for the opening of bids in the case of proposals or bids to be opened publicly, and until the time for receipt of bids or proposals has expired in all other cases; as well as inter-agency or intra-agency communications made in connection with an evaluation process for reviewing bids or proposals prior to a decision to enter into negotiations with or to award a contract to a particular person.
- ix. **Blueprints and Schematics (Exemption (n)):** Applies to records, including but not limited to blueprints, plans, policies, procedures, and schematic drawings which relate to internal layout and structural elements,

security measures, emergency preparedness, threat or vulnerability assessments, or any other records relating to the security or safety of persons or buildings, structures, facilities, utilities, transportation, cyber security, or other infrastructure located within the Commonwealth, the disclosure of which in the reasonable judgment of the records custodian is likely to jeopardize public safety or cyber security.

- x. **Commonwealth Employee Contact Information (Exemption (o)):** Applies to the home addresses, personal email address, and home telephone number of an employee of the judicial branch, an unelected employee of the general court, an agency, executive office, department, board, commission, bureau, division, or authority of the Commonwealth, or of a political subdivision thereof or of any authority established by the general court to serve a public purpose, in the custody of a government agency which maintains records identifying persons as falling within those categories.
 - xi. **Family Members of Commonwealth Employees' Contact Information (Exemption (p)):** Applies to the name, home address, personal email address, and home telephone number of a family member of a Commonwealth employee contained in a record in the custody of a government agency which maintains records identifying persons as falling within the categories listed in exemption (o).
- b. **Attorney-Client Privilege Docs:** Confidential communications between governmental entities and their legal counsel undertaken for the purpose of obtaining legal advice or assistance are protected under the ordinary rules of the attorney-client privilege.² Where a record is withheld based on a claim of the attorney-client privilege, the MGC shall provide a detailed description of the record, including the names of the author and recipients, and in general terms, the subject matter of the withheld information.
 - c. **Non-Disclosure Agreements (NDAs):** The Commission has entered into NDAs with its licensees to protect material or information that the licensee considers a trade secret or believes would be detrimental to the licensee if it were made public. Upon receipt of a request, the legal department shall review any relevant NDA to determine if the requested information falls within its scope. If it determines that such information does, the legal department shall notify the respective licensee of the request and shall withhold the document/information,

² Suffolk Construction Co. v. Division of Capital Asset Management, 449 Mass. 444 (2007).

citing the Statutory Exemption to the Public Records Law along with the relevant section of the NDA.

5. **Storage of Responses:** All responses to public record requests, including the request itself, shall be scanned and indexed in SharePoint. In the event that documents or other items are being withheld under an exemption to the Public Records Law, the documents or other items shall be marked “withheld” and scanned into SharePoint.

Fees

1. Fees may only be charged if the MGC responded to the requestor within ten business days, as discussed above.
2. The MGC may not charge for the first four hours of search, segregation, redaction, or reproduction time and may not charge more than \$25 per hour.

The MGC will make efforts to accommodate requests without assessing a fee. **However, it reserves the right to assess a fee within the limits of the Public Records Law if the request is so voluminous that it will be overly burdensome to complete. The legal department will consult with the Executive Director on any requests for which it intends to assess a fee.**

- 3.
4. The MGC may delay provision of records until fees are paid.
5. **For segregation³ and redaction time**, the MGC may not charge a fee unless it is “required by law” or is approved by the Secretary of State through a petition.
 - a. Segregation and redaction under the attorney-client privilege has been found to be “required by law,” as well as any information found in statutes that explicitly indicate that certain records or information are not public information (*e.g.*, CORI).
 - b. **Petition to Assess Fees:** Any fee petition must be made within ten business days of receipt of the request and does not affect the MGC’s obligation to respond to the request within ten business days of receipt. The Supervisor may approve a petition to assess a fee for time spent segregating or redacting if the Supervisor determines that: (a) the request is for a commercial purpose, or (b) the fee represents an actual good faith representation by the agency to comply with the request; the fee is necessary such that the request could not have been prudently

³ Segregation time means the time used to review records to determine what portions are subject to redaction or withholding under G. L. c. 4, § 7(26) or other legally applicable privileges.

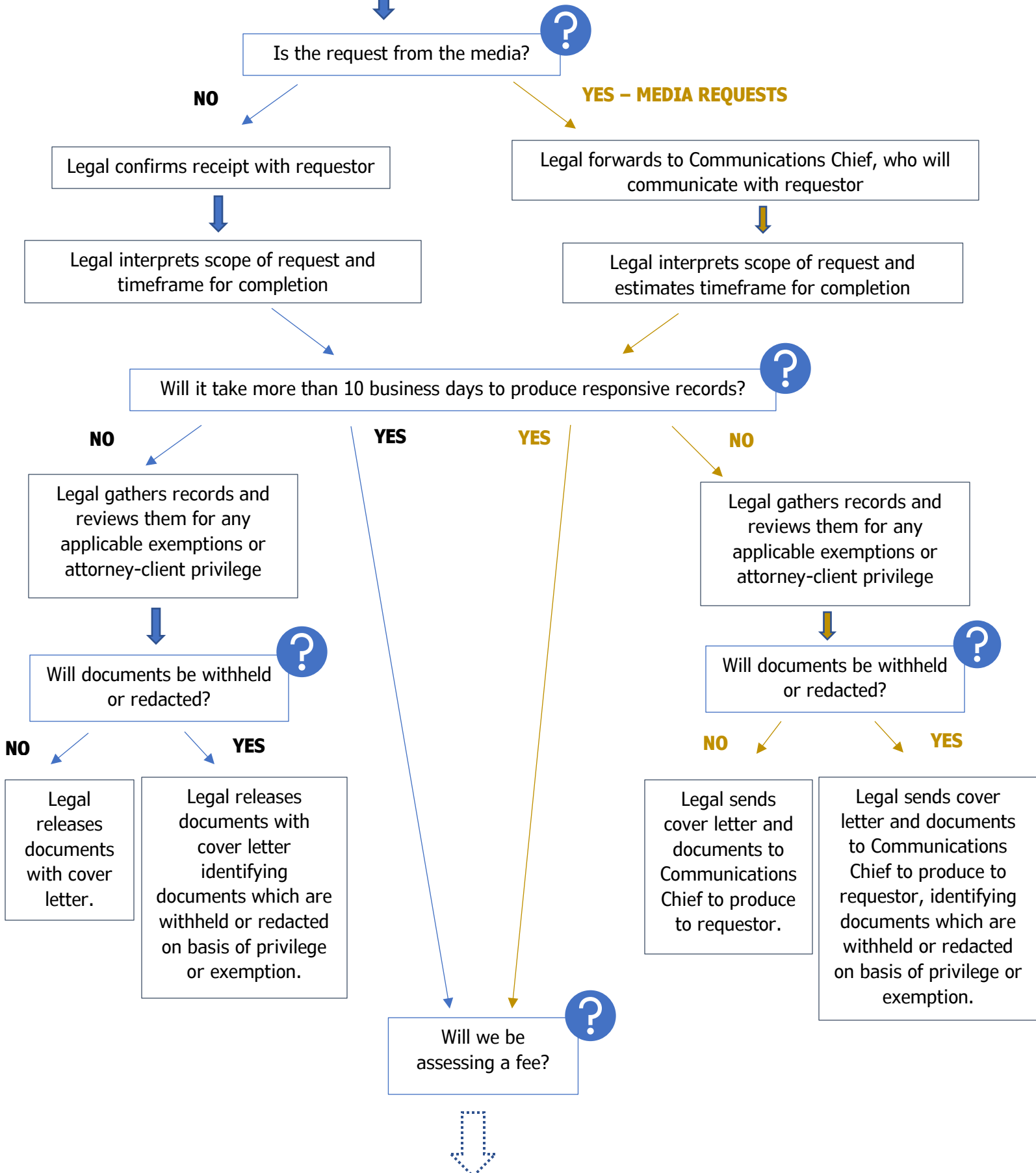
completed without the redaction or segregation; and the amount of the fee is reasonable and not designed to limit, deter, or prevent access to requested public records. The MGC must respond to the requestor within five business days of receiving a determination from the Supervisor of Records on such petition.

6. **Fees for Copies:** The MGC may charge \$0.05 for single and double-sided black and white paper copies or printouts. When the request is for materials that are not susceptible to ordinary means of reproduction, the actual cost of reproduction may be assessed.

* For information about the Public Records Law, Commissioners and employees are encouraged to review [A Guide to the Massachusetts Public Records Law](#) published by the Secretary of the Commonwealth.

DRAFT

Public Records Request Received



Where appropriate, legal reaches out to requestor to see if the scope can be narrowed and a final scope is agreed upon in writing

Will we be assessing a fee?
~~(Will the search and segregation time take 100 or more hours?)~~



MEDIA REQUESTS

NO

YES

NO

YES

Legal sends 10-business day letter proposing production date/timeline and receives confirmation from requestor.

Legal sends 10-business day letter to requestor including all requirements in G.L. c. 66, §10(b), (including identifying fee, proposing production date/timeline, and suggesting narrowed scope where appropriate).

Legal drafts 10-business day letter proposing production date/timeline and sends to Communications Director to produce to requestor. Communications Director may also reach out to requestor via phone or email to discuss proposed production timeline.

Legal drafts 10-business day letter to requestor including all requirements in G.L. c. 66, §10(b), (including identifying fee, proposing production date/timeline, and suggesting narrowed scope where appropriate). Communications Director may also reach out to requestor via phone or email to discuss fee or potentially narrowing the scope of the request.

If requestor does not agree to proposed production date/timeframe and records cannot be produced within 15 business days of receipt of request, legal department submits a petition for extension of time to the Supervisor's office within 20 business days of receipt of request.

If requestor does not agree to proposed production date/timeframe and records cannot be produced within 15 business days of receipt of request, legal department submits a petition for extension of time to the Supervisor's office within 20 business days of receipt of request.

Legal gathers records and reviews them for any applicable exemptions or attorney-client privilege

Upon receipt of payment, legal gathers records and reviews them for any applicable exemptions or attorney-client privilege

Legal gathers records and reviews them for any applicable exemptions or attorney-client privilege

Upon receipt of payment, legal gathers records and reviews them for any applicable exemptions or attorney-client privilege

Legal releases documents with cover letter.
 If any documents are withheld or redacted on basis of privilege or exemption, identify privilege or exemption in cover letter.
 If requestor has agreed to a rolling production, legal repeats this step as necessary.

Legal sends cover letter and documents to Communications Director to produce to requestor. If any documents are withheld or redacted on basis of privilege or exemption, identify privilege or exemption in cover letter. If requestor has agreed to a rolling production, legal repeats this step as necessary.

Agency Contacts for This Specific Regulation		
Name	Email	Phone
Carrie Torrisi		
Mark Vander Linden		
Overview		
CMR Number	205 CMR 133	
Regulation Title	Voluntary Self-Exclusion	
<input type="checkbox"/> Draft Regulation		<input checked="" type="checkbox"/> Final Regulation
Type of Proposed Action		
✓ Please check all that apply		
<input type="checkbox"/> Retain the regulation in the current form.		
<input type="checkbox"/> New regulation (Please provide statutory cite requiring regulation):		
<input type="checkbox"/> Emergency regulation (Please indicate the date regulation must be adopted):		
<input checked="" type="checkbox"/> Amended regulation (Please indicate the date regulation was last revised): 1/8/21		
<input type="checkbox"/> Technical correction		
<input type="checkbox"/> Other Explain:		

Summary of Proposed Action
The proposed amendment will update the regulation to the current practice of using an electronic app for voluntary self-exclusion applications.
Nature of and Reason for the Proposed Action
The purpose of this amendment is to bring the regulation in line with a newly developed app that allows voluntary self-exclusion applications to be submitted electronically.

Additional Comments or Issues Not Earlier Addressed by this Review

Required Attachments	
✓ Please check all that apply	
<input checked="" type="checkbox"/> Redlined version of the proposed amendment to the regulation, including repeals	<input type="checkbox"/> Clean copy of the regulation if it is a new chapter or if there is a recommendation to retain as-is
<input type="checkbox"/> Text of statute or other legal bases for regulation	
<input type="checkbox"/> Small Business Impact Statement (SBIS)	<input checked="" type="checkbox"/> Amended SBIS

205 CMR 133.00: VOLUNTARY SELF-EXCLUSION

133.01: SCOPE AND PURPOSE

133.02: PLACEMENT ON THE SELF-EXCLUSION LIST

133.03: CONTENTS OF THE APPLICATION

133.04: DURATION OF EXCLUSION AND REMOVAL FROM THE LIST

133.05: MAINTENANCE AND CUSTODY OF THE LIST

133.06: RESPONSIBILITIES OF THE GAMING LICENSEES

133.07: SANCTIONS AGAINST A GAMING LICENSEE

133.08: COLLECTION OF DEBTS

133.01: Scope and Purpose

In accordance with M.G.L. c. 23K, § 45(f), 205 CMR 133.00 shall govern the procedures and protocols relative to the list of self-excluded persons from entering the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed. The voluntary self-exclusion list shall consist of the names and information relative to those individuals who have complied with the requirement of 205 CMR 133.00 and have been placed on the list by the commission. Placement of one's name on the voluntary self-exclusion list is intended to offer individuals one means to help address problem gambling behavior or deter an individual with family, religious, or other personal concerns from entering the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed.

For purposes of 205 CMR 133.00, the term ‘problem gambler’ shall mean an individual who believes their gambling behavior is currently, or may in the future without intervention, cause **problems harm** in their life or on the lives of their family, friends, and/or co-workers.

133.02: Placement on the Self-Exclusion List

(1) An individual whose name is placed on the voluntary self-exclusion list shall be prohibited from entering the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed for the duration of the exclusion period, and shall not collect any winnings or recover any losses resulting from any gaming activity at a gaming establishment. Provided, however, that an employee of a gaming licensee or vendor who is licensed or registered as a key gaming employee, gaming employee, or gaming service employee in accordance with 205 CMR 134.00: *Licensing and Registration of Employees, Vendors, Junket Enterprises and Representatives, and Labor Organizations* and who is on the voluntary self-exclusion list may be in the gaming area of a gaming establishment or an area in which pari-mutuel or simulcasting wagers are placed solely for purposes of performing their job functions.

(2) An individual may request to have their name placed on the voluntary self-exclusion list by completing the application and procedure outlined in 205 CMR 133.02. Applications shall be submitted in a format approved by the commission and shall be available on the commission's website and at designated locations on and off the premises of the gaming establishments as determined by the commission.

(3) An application for placement on the voluntary self-exclusion list may only be accepted, and an intake performed, by an available designated agent. An individual may only become a designated agent by successfully completing a course of training approved and administered by the commission or its designee. The course of training shall include, at a minimum, instruction on completion of the application, instruction on maintaining confidentiality of personal protected information, information relative to problem gambling and resources, and an understanding of 205 CMR 133.00. A designated agent is any individual authorized by the commission for the purpose of administering the voluntary self-exclusion program including, but not limited to, a GameSense advisor; a health or mental health professional; or an employee of a gaming licensee, the commission, or other government entity. The commission may refuse to offer training to any individual whose service as a designated agent it determines would be contrary to the aims of 205 CMR 133.00.

(4) Upon submission of an application, a designated agent shall review with the applicant the contents and statements contained in the application, as provided by [205 CMR 133.03](#). If the application is complete, the designated agent shall sign the application indicating that the review has been performed and the application has been accepted.

(5) A designated agent may not sign an application if (a) any required information is not provided or (b) they are of the belief that the applicant is not capable of understanding the responsibilities and consequences of being placed on the self-exclusion list.

(6) ~~The designated agent~~ Designated agents completing an electronic form of the approved application shall deliver electronically forward the signed application for voluntary self-exclusion to the commission immediately upon completion. Designated agents completing a paper form of the approved application shall forward the signed application for voluntary self-exclusion to the commission within 48 hours of immediately upon completion in a manner directed by the commission.

(7) Upon receipt of an application, the commission, or its designee, shall review it for completeness. If the application meets all requirements of 205 CMR 133.02 the application shall be approved and the individual's name shall be added to the voluntary self-exclusion list. If the application is incomplete, the commission, or its designee, may deny the application and make efforts to contact the applicant advising them of such.

(8) If the gaming licensee utilizes an internal management system to track individuals on the self-exclusion list, they shall update that system at least every 72 hours with names of individuals being added or removed from the self-exclusion list.

(9) The commission, or its designee, shall add to the list of voluntarily self-excluded persons the name of any individual provided from a gaming jurisdiction outside of Massachusetts, with which the commission has entered into an interstate compact, upon a determination that the individual voluntarily requested that their name be added to the list of the referring jurisdiction and that they were notified, either directly or by operation of law, that their name may be placed on similar lists in other jurisdictions.

(10) If the applicant has elected the services identified in [205 CMR 133.03\(8\)](#), the commission, or its designee shall contact the designated coordinating organization for the provision of requested services.

133.03: Contents of the Application

The application for voluntary self-exclusion shall require provision of, at a minimum, the following content:

- (1) Name, home address, email address or telephone number, date of birth, and last four digits of social security number of the applicant;
- (2) A passport style photo of the applicant without headwear, unless worn daily for religious purposes and provided that the applicant's facial features are not obscured;
- (3) A statement from the applicant that one or more of the following apply:
 - (a) they identify as a problem gambler as defined in [205 CMR 133.01](#);
 - (b) they feel that their gambling behavior is currently causing problems in their life or may, without intervention, cause problems in their life; or
 - (c) there is some other reason why they wish to add their name to the list.
- (4) Election of the duration of the exclusion in accordance with [205 CMR 133.04](#);
- (5) An acknowledgement by the applicant that the individual will not enter the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed for the duration of the exclusion period (except as provided by [205 CMR 133.02\(1\)](#)) and that it is their sole responsibility to refrain from doing so;
- (6) An acknowledgment by the applicant that the individual shall not collect any winnings or recover any losses resulting from any gaming activity at a gaming establishment for the duration of the exclusion period;
- (7) An acknowledgment by the applicant that he or she will forfeit all rewards or points earned through a player reward card program;
- (8) An offer by the commission or the designated agent completing the self-exclusion application to assist the applicant to access information about gambling disorders, self-guided help, peer-support, or counseling services with a clinician approved by the Massachusetts Department of Public Health or otherwise licensed or certified through a process or program **approved** **recognized** by the Commission;
- (9) An acknowledgment of understanding by the applicant that by placing their name on the voluntary self-exclusion list the prohibitions identified in [205 CMR 133.02\(1\)](#) apply to all gaming establishments licensed by the commission in Massachusetts, any affiliates of the

gaming licensee, whether within Massachusetts or another jurisdiction, and that the commission may share the list with other domestic or international gaming jurisdictions resulting in placement on those lists and may share such portion of the list with designated agents as may be necessary for the purpose of administering the voluntary self-exclusion program;

(10) An acknowledgment by the applicant that he or she is submitting the application freely, knowingly, and voluntarily;

(11) A statement that the individual is not under the influence of a substance or suffering from a health or mental health condition that would impair their ability to make an informed decision;

(12) An acknowledgment by the applicant that if they violate their agreement to refrain from entering a gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed during the exclusion period, the applicant shall notify the commission of such violation within 24 hours of their presence within the gaming area of the gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed; and releasing the Commonwealth of Massachusetts, the commission, the licensee, and all affiliated employees from any claims associated with their breach of the agreement; and

(13) An acknowledgment by the applicant that once their name is placed on the self-exclusion list they may be refused entry and/or ejected from the gaming area of a gaming establishment by the gaming licensee, an agent of the commission, or law enforcement personnel.

133.04: Duration of Exclusion and Removal from the List

(1) As part of the request for voluntary self-exclusion, the individual must select the duration for which they wish to be voluntarily excluded. An individual may select any of the following time periods as a minimum length of exclusion:

- (a) One year;
- (b) Three years;
- (c) Five years; or
- (d) Lifetime (An individual may only select the lifetime duration if their name has previously appeared on the voluntary self-exclusion list for at least six months.)

(2) An individual on the Voluntary Self-exclusion list may not apply to decrease the duration of exclusion. An individual who is on the list may submit a request to increase the minimum length of exclusion.

(3) Upon expiration of the selected duration of exclusion, individuals may request that their name be removed from the list or petition for exclusion for a new duration. Individuals shall remain on the list after the expiration of the selected duration of exclusion until such time as they submit a petition for removal in accordance with 205 CMR 133.04(4) and it is approved by the commission or its designee.

(4) At any time after the expiration of the selected duration of exclusion, an individual may request that their name be removed from the Voluntary Self-exclusion list by submitting a petition for removal to a designated agent. The petition shall include confirmation from a designated agent that the individual completed a reinstatement session in accordance with 205 CMR 133.04(5). Any petition for removal received by a designated agent prior to the expiration of the duration of the selected exclusion period shall be denied.

The commission shall approve a completed petition for removal. An individual who has selected a lifetime duration in accordance with 205 CMR 133.04(1)(e) may not submit a petition for removal of their name from the list. An incomplete application, including one that fails to demonstrate completion of a reinstatement session in accordance with 205 CMR 133.04(5), shall be denied until such time as the application is completed.

(5) To be eligible for removal from the Voluntary Self-exclusion list, the petitioner shall participate in a reinstatement session with a designated agent. The reinstatement session shall include a review of the risks and responsibilities of gambling, budget setting and a review of problem gambling resources should the petitioner wish to seek them. Upon completion of the reinstatement session, the designated agent shall sign the individual's petition for removal from the list attesting to the fact that the reinstatement session was conducted.

(6) Upon approval of a petition for removal from the Voluntary Self-exclusion list, a written notice of removal from the list shall be forwarded by the commission, or its designee, to each gaming licensee. The petitioner shall be deemed to be removed from the Voluntary Self-exclusion list immediately upon completion of the reinstatement session, at which point the petitioner shall be given a receipt verifying said completion and confirming their removal from the Voluntary Self-exclusion list. A petitioner may be asked to present said confirmation of Voluntary Self-exclusion list removal receipt while gaming for seven days following their reinstatement. Failure to do so may result in administrative difficulties in confirming Voluntary Self-exclusion status during that time-period. **The designated agent shall submit an electronic verification to the commission that the petitioner has completed a reinstatement session.**

(7) If a petitioner does not meet the eligibility requirements for removal from the list provided in 205 CMR 133.04(4), the petition shall be denied. The petitioner shall be notified of the denial by email or first class mail to the email address or home address provided by the petitioner in the petition. In the event of a denial of a petition, the individual shall remain on the Voluntary Self-exclusion list until such time as the eligibility requirements have been satisfied.

(8) An individual whose name has been removed from the Voluntary Self-exclusion list may reapply for placement on the list at any time by submitting an application in accordance with [205 CMR 133.02](#).

(9) An individual whose name was added to the Voluntary Self-exclusion list in Massachusetts in accordance with [205 CMR 133.02\(9\)](#) shall be removed from the list notwithstanding 205 CMR 133.04(4) through (6) upon receipt of written notice from the referring jurisdiction that the individual's name has been removed from that jurisdiction's list.

133.05: Maintenance and Custody of the List

(1) The commission shall maintain an up-to-date database of the Voluntary Self-exclusion list. Gaming licensees shall be afforded a minimum of five licenses to access to the Voluntary Self-exclusion list. ~~The Voluntary Self-exclusion list may only be accessed by individuals~~ Persons afforded a license are authorized by the commission for the purpose of administering the voluntary self-exclusion program. ~~This shall include positions identified in accordance with the gaming licensee's approved system of internal controls in accordance with 205 CMR 133.00.~~ All information contained in approved applications for voluntary exclusion may be disclosed to a gaming licensee.

(2) The list of Voluntary Self-exclusion is exempt from disclosure under M.G.L. c. 66 and shall not be publicly disclosed by a gaming licensee. However, a gaming licensee may share the list with its affiliates in other jurisdictions for the purpose of assisting in the proper administration of responsible gaming programs operated by affiliated gaming establishments. Additionally, a gaming licensee shall include the names and contact information of individuals on the Voluntary Self-exclusion list in its aggregated no marketing list to be shared with junket enterprises and junket representatives in accordance with [205 CMR 134.06\(5\)\(b\)](#) for the purpose of effectuating the intent of the Voluntary Self-exclusion program. Such disclosure shall not be a violation of [M.G.L. c. 23K, § 45](#).

(3) The commission may disclose de-identified information from the Self-exclusion list to one or more research entities selected by the commission for the purpose of evaluating the effectiveness and ensuring the proper administration of the Self-exclusion process.

133.06: Responsibilities of the Gaming Licensees

A gaming licensee shall have the following responsibilities relative to the administration of the Voluntary Self-exclusion list:

(1) A gaming licensee shall eject from or refuse entry into the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed any individual whose name appears on the Voluntary Self-exclusion list;

(2) A gaming licensee shall promptly notify the commission, or its designee, if an individual on the Voluntary Self-exclusion list is found in the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed;

(3) A gaming licensee shall not market to individuals on the Voluntary Self-exclusion list;

(4) A gaming licensee shall deny access to complimentary services or items, check cashing privileges, player reward programs, and other similar benefits to persons on the list;

(5) Individuals on the Voluntary Self-exclusion list shall not be permitted to participate in a cashless wagering system. A gaming licensee shall take steps to ensure that it denies entry into

and terminates all access and privileges associated with its cashless wagering program to individuals on the voluntary list of self-excluded persons;

(6) A gaming licensee shall not extend credit to an individual on the Voluntary Self-exclusion list;

(7)(a) A gaming licensee shall not pay any winnings derived from gaming to an individual who is prohibited from gaming in a gaming establishment by virtue of having placed their name on the Voluntary Self-exclusion list in accordance with 205 CMR 133.00. Winnings derived from gaming shall include, but not be limited to, such things as proceeds derived from play on a slot machine/electronic gaming device and a wager, or series of wagers, placed at a table game. Where reasonably possible, the gaming licensee shall confiscate from the individual in a lawful manner, or shall notify a commission agent who shall confiscate, or shall refuse to pay any such winnings derived from gaming or any money or thing of value that the individual has converted or attempted to convert into a wagering instrument whether actually wagered or not. A wagering instrument shall include, but not be limited to, chips, tokens, prizes, non-complimentary pay vouchers, electronic credits on a slot machine/electronic gaming device, and vouchers representing electronic credits/TITO slips. The monetary value of the confiscated winnings and/or wagering instrument shall be paid to the commission for deposit into the Gaming Revenue Fund within 45 days;

(b) If an individual wishes to contest the forfeiture of winnings or things of value, the individual may request a hearing in writing with the commission within 15 days of the date of the forfeiture. The request shall identify the reason why the winnings or things of value should not be forfeited. A hearing shall be conducted in accordance with 205 CMR 101.00: *M.G.L. c. 23K Adjudicatory Proceedings* to determine whether the subject funds were properly forfeited in accordance with 205 CMR 133.06(7)(a); and

(8) In cooperation with the commission, and where reasonably possible, the gaming licensee shall determine the amount wagered and lost by an individual who is prohibited from gaming. The monetary value of the losses shall be paid to the commission for deposit into the Gaming Revenue Fund within 45 days.

(9) A gaming licensee shall submit a written policy for compliance with the Voluntary Self-exclusion program for commission approval at least 60 days before the gaming establishment opening. The commission shall review the plan for compliance with 205 CMR 133.00. If approved, the plan shall be implemented and followed by the gaming licensee. The plan for compliance with the Voluntary Self-exclusion program shall include, at a minimum, procedures to:

- (a) Prevent employees from permitting an individual on the voluntary exclusion list from engaging in gambling activities at the gaming establishment;
- (b) Identify and remove self-excluded individuals from the gaming area of a gaming establishment or any area in which pari-mutuel or simulcasting wagers are placed;
- (c) Remove individuals on the Self-exclusion list from marketing lists and refrain from sending or transmitting to them any advertisement, promotion, or other direct marketing

- mailing from the gaming establishment more than 30 days after receiving notice from commission that the individual has been placed on the Voluntary Self-exclusion list;
- (d) Prevent an individual on the voluntary self-exclusion list from having access to credit, cashless wagering program access, or from receiving complimentary services, check-cashing services, junket participation and other benefits from the gaming establishment;
 - (e) Ensure the confidentiality of the identity and personal information of the voluntarily self-excluded individual;
 - (f) Training of employees relative to the Voluntary Self-exclusion program to be provided in conjunction with its problem gambling training program.

(10) A gaming licensee shall notify the commission within ten days if an employee or agent fails to exclude or eject from its premises any individual on the list of self-excluded persons, or otherwise fails to perform a responsibility of the gaming establishment identified in 205 CMR 133.06, including any provision of its approved written policy for compliance with the voluntary self-exclusion program.

133.07: Sanctions Against a Gaming Licensee

(1) Grounds for Action. A gaming license may be conditioned, suspended, or revoked, and/or the gaming licensee assessed a civil administrative penalty if it is determined that a gaming licensee has:

- (a) knowingly or recklessly failed to exclude or eject from its premises any individual placed on the list of Self-excluded persons. Provided, it shall not be deemed a knowing or reckless failure if an individual on the Voluntary Self-exclusion list shielded their identity or otherwise attempted to avoid identification while present at a gaming establishment; or
- (b) failed to abide by any provision of 205 CMR 133.00, [M.G.L. c. 23K, § 45](#), the gaming licensee's approved written policy for compliance with the Voluntary self-exclusion program pursuant to [205 CMR 133.06\(9\)](#), or any law related to the Voluntary Self-exclusion of patrons in a gaming establishment. Provided, a gaming licensee shall be deemed to have marketed to an individual on the self-exclusion list only if marketing materials are sent directly to an address, email address, telephone number, or other contact identified by the individual on their application.

(2) Finding and Decision. If the bureau finds that a gaming licensee has violated a provision of 205 CMR 133.07(1), it may issue a written notice of decision recommending that the commission suspend, revoke, and or condition said gaming licensee. Either in conjunction with or in *lieu* of such a recommendation, the bureau may issue a written notice assessing a civil administrative penalty upon said licensee. Such notices shall be provided in writing and contain a factual basis and the reasoning in support the decision, including citation to the applicable statute(s) or regulation(s) that supports the decision.

(3) Civil Administrative Penalties. The bureau may assess a civil administrative penalty on a gaming licensee in accordance with [M.G.L. c. 23K, § 36](#) for a violation of 205 CMR 133.07(1).

(4) Review of Decision. A recommendation made by the bureau to the commission that a gaming license be suspended or revoked shall proceed directly to the commission for review in

accordance with [205 CMR 101.01](#): *Hearings before the Commission*. If the gaming licensee is aggrieved by a decision made by the bureau to assess a civil administrative penalty in accordance with 205 CMR 133.07(2) and (3), it may request review of said decision in accordance with 205 CMR 101.00: *M.G.L. c. 23K Adjudicatory Proceedings*.

133.08: Collection of Debts

(1) An individual who is prohibited from gaming in a gaming establishment under 205 CMR 133.00 shall not be entitled to recover losses as a result of prohibited gaming based solely on their inclusion on the list.

(2) Nothing in 205 CMR 133.00 shall be construed so as to prohibit a gaming licensee from seeking payment of a debt from an individual whose name is on the Voluntary Self-exclusion list if the debt was accrued by the individual before their name was placed on the list.

AMENDED SMALL BUSINESS IMPACT STATEMENT

The Massachusetts Gaming Commission (“Commission”) hereby files this amended Small Business Impact Statement in accordance with G.L. c.30A, § 5 relative to the proposed amendments to **205 CMR 133.00: Voluntary Self-Exclusion**, for which a public hearing was held on June 22, 2022.

205 CMR 133.00 was developed as part of the process of promulgating regulations governing the operation of gaming establishments in the Commonwealth. The proposed amendments to the regulations will update the process for accepting voluntary self-exclusion applications to allow for electronic submissions. This regulation is governed largely by G.L. c. 23K, §4(28), 5.

The amendment to 205 CMR 133.00 apply to the gaming licensees and employees, designated agents responsible for intake of self-excluded persons, and individuals placing themselves on the self-exclusion list. Accordingly, this regulation is unlikely to have an impact on small businesses.

In accordance with G.L. c.30A, §5, the Commission offers the following responses on whether any of the following methods of reducing the impact of the proposed regulation on small businesses would hinder achievement of the purpose of the proposed regulation:

1. Establishing less stringent compliance or reporting requirements for small businesses:

As a general matter, no small businesses will be negatively impacted by this amendment as it solely relates to licensees, their employees, designated agents, and individuals placing themselves on the self-exclusion list. Accordingly, there are no less stringent compliance or reporting requirements for small businesses.

2. Establishing less stringent schedules or deadlines for compliance or reporting requirements for small businesses:

There are no schedules or deadlines for compliance or reporting requirements by this amendment.

3. Consolidating or simplifying compliance or reporting requirements for small businesses:

This amendment does not impose any reporting requirements.

4. Establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation:

There are no design or operational standards required in the proposed amendment.

5. An analysis of whether the proposed regulation is likely to deter or encourage the formation of new businesses in the Commonwealth:

This amendment is not likely to deter or encourage the formation of new businesses in the Commonwealth as it is limited in its likely impact on the business community.

6. Minimizing adverse impact on small businesses by using alternative regulatory methods:

This amendment does not create any adverse impact on small businesses.

Massachusetts Gaming Commission
By:

 /s/ Carrie Torrissi
Carrie Torrissi
Associate General Counsel
Legal Division

Dated: June 22, 2022

Agency Contacts for This Specific Regulation		
Name	Email	Phone
Carrie Torrisi		
Overview		
CMR Number	205 CMR 103	
Regulation Title	Access to and Confidentiality of Commission Records	
<input type="checkbox"/> Draft Regulation		<input type="checkbox"/> Final Regulation
Type of Proposed Action		
✓ Please check all that apply		
<input type="checkbox"/> Retain the regulation in the current form.		
<input type="checkbox"/> New regulation (Please provide statutory cite requiring regulation):		
<input type="checkbox"/> Emergency regulation (Please indicate the date regulation must be adopted):		
<input type="checkbox"/> Amended regulation (Please indicate the date regulation was last revised):		
<input type="checkbox"/> Technical correction		
<input checked="" type="checkbox"/> Other Explain: repeal regulation		

Summary of Proposed Action
Repeal regulation in its entirety
Nature of and Reason for the Proposed Action
The existing regulation is either duplicative of other laws, better suited for policy language versus regulatory language, or creates a dual process that may be inconsistent with the Public Records Law

Additional Comments or Issues Not Earlier Addressed by this Review

Required Attachments	
✓ Please check all that apply	
<input type="checkbox"/> Redlined version of the proposed amendment to the regulation, including repeals	<input type="checkbox"/> Clean copy of the regulation if it is a new chapter or if there is a recommendation to retain as-is
<input type="checkbox"/> Text of statute or other legal bases for regulation	
<input checked="" type="checkbox"/> Small Business Impact Statement (SBIS)	<input type="checkbox"/> Amended SBIS

LEGEND:
 Green = unnecessary/duplicative of other laws
 Purple = better suited for policies/procedures v. regulatory language
 Red = inconsistent with Public Records Law and creates redundant/duplicate process

205 CMR 103:00: ACCESS TO AND CONFIDENTIALITY OF COMMISSION RECORDS

- 103.01: PURPOSE, AUTHORITY AND APPLICABILITY
- 103.02: AVAILABILITY OF PUBLIC RECORDS
- 103.03: OFFICIAL CUSTODIANS: INDIVIDUAL RESPONSIBLE FOR PERSONAL DATA SYSTEM
- 103.04: DETERMINATIONS BY THE OFFICIAL CUSTODIAN, THE GENERAL COUNSEL AND THE COMMISSION
- 103.05: EFFECT OF REQUESTS FOR CONFIDENTIALITY
- 103.06: POSTPONING DENIAL OF CONFIDENTIALITY REQUEST PENDING APPEAL
- 103.07: WHEN CONFIDENTIAL OR EXEMPT INFORMATION MAY BE DISCLOSED BY THE COMMISSION
- 103.08: CONFIDENTIAL INFORMATION SUBJECT TO PROMISE OF CONFIDENTIALITY
- 103.09: INFORMATION PROVIDED IN RESPONSE TO REQUEST FOR APPLICATIONS – PHASE I & PHASE II
- 103.10: REQUEST FOR PROTECTING CONFIDENTIAL INFORMATION
- 103.11: PROCEDURE FOR ACTING ON REQUESTS FOR PROTECTING CONFIDENTIAL INFORMATION
- 103.12: RECONSIDERING CONFIDENTIALITY DETERMINATIONS
- 103.13: EXECUTIVE SESSION CONSIDERATION OF CONFIDENTIAL OR EXEMPT INFORMATION
- 103.14: SECURITY PROTOCOLS; RESTRICTED ACCESS
- 103.15: RECORDS RETENTION

103.01: Purpose, Authority and Applicability

205 CMR 103.00 is promulgated pursuant to M.G.L. c. 23K, §§ 4(37), and 5. 205 CMR 103.00 is intended to assure that public access to, and the confidentiality of, records made or received by the commission and the bureau are in conformity with M.G.L. c. 23K, § 9(b) and § 21(a)(7); M.G.L. c. 66, § 10; M.G.L. c. 4, § 7, cl. 26; and 950 CMR 32.00: *Public Records Access*.

103.02: Availability of Public Records

All records made or received by the commission or the bureau shall be public records and shall be available for disclosure on request pursuant to 205 CMR 103.00 and 950 CMR 32.00: *Public*

Records Access, except the following, which shall be exempt from disclosure to the extent permitted by law:

- (1) all records, including without limitation investigatory materials, specifically excluded from the definition of “public record” pursuant to M.G.L. c. 4, § 7, cl. 26;
- (2) all confidential information as defined in 205 CMR 102.02: *Definitions*;
- (3) all records which are or which contain “criminal offender record information”, “evaluative information”, or “intelligence information” pursuant to M.G.L. c. 6, § 167, the disclosure of which would not be in compliance with M.G.L. c. 6, §§ 167 through 178Q;
- (4) all records which are or which contain “personal data” pursuant to M.G.L. c. 66A, § 1, the disclosure of which would not be in compliance with M.G.L. c. 66A; or which are or which contain “personal information” pursuant to M.G.L. c. 93H, § 1, the disclosure of which would not be in compliance with M.G.L. c. 93H; and
- (5) all records specifically or by necessary implication exempted from disclosure by statute including, but not limited to, the exemption statutes listed by the supervisor of public records in the official *Guide to the Massachusetts Public Records Law: Appendix*.

103.03: Official Custodians: Individual Responsible for Personal Data System

(1) Pursuant to M.G.L. c. 66, § 6, and M.G.L. c. 23K § 3(f) and (i), subject to the oversight of the chair, the secretary shall be the official custodian of all books, documents and papers filed by the commission and of its minute book; the chief financial and accounting officer shall be the official custodian of its books of account and accounting records; the deputy director shall be the official custodian of all records of the bureau; and the executive director shall be the official custodian of all other records of the commission. In the case of an absence or vacancy in the office of an official custodian or in the case of disability as determined by the commission, the chair may designate an acting custodian to serve until the vacancy is filled or the absence or disability ceases. Each official custodian may, with the permission of the chair, delegate to another commissioner, employee or employees of the commission or the bureau responsibility for the custody of some or all public records under his or her jurisdiction.

(2) Pursuant to M.G.L. c. 66A, § 2, subject to the oversight of the chair, the executive director shall be the individual immediately responsible for any personal data system maintained by the commission; the deputy director shall be the individual immediately responsible for any personal data system maintained by the bureau; and each shall conform to the requirements of M.G.L. c. 66A and 801 CMR 3.00: *Privacy and Confidentiality* for preventing unauthorized access to or dissemination of personal data under his or her jurisdiction. In the case of an absence or vacancy in the office of an individual immediately responsible for any personal data system, or in the case of disability as determined by the commission, the chair may designate an acting person to serve as the individual immediately responsible for any personal data system until the vacancy is filled or the absence or disability ceases. The executive director or the deputy director may, with the permission of the chair, delegate to another commissioner or employee of the commission or the bureau immediate responsibility for any personal data system under his or her jurisdiction.

103.04: Determinations by the Official Custodian, the General Counsel and the Commission

No information which is exempt from disclosure under 205 CMR 103.02 or which a confidentiality claimant asserts to be confidential information defined in 205 CMR 102.02: *Definitions* shall be disclosed in response to any request for public records unless the Commission has expressly so authorized in accordance with 205 CMR 103.00.

103.05: Effect of Requests for Confidentiality

Whenever a confidentiality claimant requests in writing that particular records be deemed to be or to contain confidential information as defined in 205 CMR 102.02: *Definitions*, such records or information shall be treated as confidential and may not be disclosed until the confidentiality request has been approved or denied pursuant to 205 CMR 103.04, 103.10 and 103.11.

103.06: Postponing Denial of Confidentiality Pending Appeal

Whenever the commission denies a request to deem records to be or to contain confidential information as defined in 205 CMR 102.02: *Definitions* or exempt from disclosure as described in 205 CMR 103.02(1) through (5), such denial shall take effect 14 days after the date thereof so that any person aggrieved by said denial may appeal to a court of competent jurisdiction. During this 14-day period, the records in question shall be treated as confidential and accordingly exempt from public disclosure in accordance with M.G.L. c. 4, § 7(26)(a). This 14-day period may be extended by the commission in extraordinary situations. Any extension shall be in writing and signed by the general counsel.

103.07: When Confidential or Exempt Information May be Disclosed by the Commission

(1) Notwithstanding any provision of 205 CMR 103.00 to the contrary, information otherwise exempt from disclosure as described in 205 CMR 103.02(1) through (5) shall be subject to disclosure by the commission only:

- (a) to the extent necessary to comply with Federal Law;
- (b) to the extent necessary to comply with or carry out the responsibilities contained in M.G.L. c. 23K or other state law;
- (c) to the extent necessary for any enforcement action, whether criminal or civil, judicial or administrative;
- (d) upon presentation of proper identification, to the person who furnished the specific information to the commission or the bureau; or
- (e) upon presentation of a timely and duly executed and notarized authorization by the person who furnished the specific information to the commission or the bureau, to any other person making a written request for the specifically identified information.

(2) If information otherwise exempt from disclosure as described in 205 CMR 103.02(1) through (5) is released or otherwise disclosed to any person under any circumstances other than those

identified in 205 CMR 103.07(1)(d) and (e), written notice of such release or disclosure shall be provided to the last known address the commission has in its records for the person who furnished the confidential information to the commission or the bureau, unless such notice may prejudice the possibility of effective law enforcement or otherwise imperil the integrity of the commission's or the bureau's operations. To the extent known, the notice shall include:

- (a) The name and address of the person to whom the information was released or disclosed;
- (b) A description of the information released or disclosed; and
- (c) The date of the release or disclosure.

(3) Subject to 205 CMR 103.07(2) any such notice of confidential information to be released or disclosed will be given prior to the release or disclosure to provide an opportunity for review.

103.08: Confidential Information Subject to Promise of Confidentiality

For confidential information to be protected from public disclosure by a nondisclosure agreement pursuant to M.G.L. c. 23K, § 21(a)(7) or by other promise of confidentiality pursuant to M.G.L. c. 4, § 7, cl. 26(g), the nondisclosure agreement or other promise of confidentiality must be made in writing and signed by the chair, the secretary or a person designated by the commission.

103.09: Information Provided in Response to Request for Applications – Phase 1 & Phase 2

(1) In accordance with M.G.L. c. 23K, § 9(b), an application for a license in response to the commission's Request for Applications-Phase 1, 205 CMR 110.00: *Issuance of Request for Category 1 and Category 2 License Applications*, and an RFA-2 application submitted in accordance with 205 CMR 118.00: *Phase 2- Applying for a License* shall be a public record except those portions of the application containing information otherwise exempt from disclosure pursuant to 205 CMR 103.02(1) through (5).

(2) As guidance to applicants and the public, the commission shall issue a set of specimen annotated application forms and distribute such forms together with, or incorporated as part thereof, the Request for Applications - Phase 1 pursuant to 205 CMR 111.00: *Phase 1 Application Requirements* and with or part of the Request for Applications- Phase 2 pursuant to 205 CMR 118.00: *Phase 2 - Applying For a License*. These specimen annotated application forms shall designate as “Exempt/Redact” or otherwise identify all information or categories of information which, at a minimum, the commission considers to be exempt from disclosure in accordance with 205 CMR 103.02(1) through (5).

(3) To assist the commission in protecting from inadvertent disclosure information subject to 205 CMR 103.02(1) through (5), applicants shall follow the procedures in 205 CMR 103.10(1) in completing and submitting the required forms pursuant to 205 CMR 111.00: *Phase 1 Application Requirements* and 205 CMR 118.00: *Phase 2-Applying For a License*.

(4) All information submitted by an applicant in the RFA Phase 1 or Phase 2 application, other than that described as “Exempt/Redact” or otherwise so identified in 205 CMR 103.09(2), shall be presumed to be available for public disclosure on request unless a confidentiality claimant

demonstrates or the commission otherwise finds that a separable portion of the information is exempt from disclosure pursuant to 205 CMR 103.02(1) through (5). Confidentiality claimants shall make such a demonstration in accordance with the provisions of 205 CMR 103.10 through 103.12.

103.10: Requests for Protecting Confidential Information

Except as set forth in 205 CMR 103.09, no record shall be deemed to be or to contain confidential information as defined in 205 CMR 102.02: *Definitions* unless a person submits a written request to the commission to deem the information confidential information and accordingly exempt from public disclosure in accordance with M.G.L. c. 4, § 7(26)(a). The request shall be made and substantiated as follows:

(1) Each record containing information that is the subject of a confidentiality request shall be clearly marked "CONFIDENTIAL". To assist the commission in complying with 205 CMR 103.02, persons shall separately submit confidential portions of otherwise non-confidential records. If submitted separately, the record that is the subject of a confidentiality request shall be clearly marked "CONFIDENTIAL" and the record from which confidential information has been redacted shall be clearly marked "REDACTED".

(2) The request for confidentiality shall be supported with the following information, which shall be treated as a public record:

(a) The time period for which confidential treatment is desired.

(b) The reason the record was provided to the commission or the bureau, and the date of submittal.

(c) The basis for the claim that the record contains confidential information and, if applicable, the basis for believing that the criteria in 205 CMR 103.11 are satisfied.

(d) The extent to which the person requesting that the record be kept confidential has disclosed the contents of that record to other persons without a restriction as to confidentiality imposed by agreement or by law.

(e) A statement whether, to the best of the provider's knowledge, the information has previously been provided to a governmental entity that does not treat the information as confidential or that has denied a request for confidential treatment.

(f) A statement that the information is not required to be disclosed or otherwise made available to the public under any other Federal or state law.

(g) How making the record a public record would place the applicant at a competitive disadvantage pursuant to M.G.L. c. 23K, § 9(b), or would be detrimental to a gaming licensee if it were made public pursuant to M.G.L. c. 23K, § 21(a)(7).

(h) If the record was submitted voluntarily for use in developing governmental policy and upon a promise of confidentiality pursuant to M.G.L. c. 4, § 7, cl. 26(g), and not in compliance with a regulation or order of the commission or a court, whether and if so why making the record a

public record would tend to lessen the availability to the commission or the bureau of similar records in the future.

103.11: Procedure for Acting on Requests for Protecting Confidential Information

The commission shall act on a confidentiality request made pursuant to 205 CMR 103.10 subject to the following provisions:

- (1) If the commission has received a request to inspect or copy a record which is the subject of a confidentiality request on which the commission has not made a final decision, the commission shall notify the person who made the request to inspect or copy the record that the record in question is the subject of a pending confidentiality request and a final decision will be made when the commission determines whether the record in question is entitled to confidentiality protection and shall notify the confidentiality claimant of the request to inspect or copy the record.
- (2) The commission shall determine whether the record is confidential information as defined in 205 CMR 102.02: *Definitions*. The Commission shall give notice of its determination(s) to the confidentiality claimant and all persons who requested to inspect or copy the record.
- (3) If the commission determines that a record is confidential information as defined in 205 CMR 102.02: *Definitions*, the record in question, or portion thereof, shall be exempt from public disclosure in accordance with M.G. L. c. 4, § 7(26)(a) for such length of time, and subject to such terms, conditions and limitations, as the commission may include in the determination. The commission shall so notify the person who submitted the record to the commission or the bureau, the confidentiality claimant, and all persons making a request to inspect or copy the record in question.
- (4) All notices given pursuant to 205 CMR 103.11(2) and (3) shall be in writing, shall be delivered by hand, by first class mail, or by electronic mail, and shall include:
 - (a) the reasons for the determination,
 - (b) notice that the determination constitutes a final decision of the commission,
 - (c) notice that the determination may be subject to review by the supervisor of records of the Office of the Secretary of the Commonwealth or by the courts, as applicable.
 - (d) if the determination is that the record in question, or portion thereof is not confidential information as defined in 205 CMR 102.02: *Definitions*, notice that the record in question shall become a public record 14 days after the date of the commission's determination unless, a person aggrieved by said determination appeals the determination to a court of competent jurisdiction. This 14-day period may be extended only in extraordinary situations, and any such extension must be in writing and signed by the commission's general counsel.
- (5) If pursuant to 205 CMR 103.11, the commission denies a request to protect confidential information made pursuant to 205 CMR 103.10, the confidentiality claimant may, within ten days from the date of the commission's notice of such determination, submit to the commission

one request to reconsider such determination, which request to reconsider shall set forth any and all supplemental information supporting the claim of confidentiality and further addressing the criteria of 205 CMR 103.10(2). The commission shall act on the request to reconsider following the procedures in 205 CMR 103.11(1) through (4). The request for reconsideration shall stay the effect of the commission's original denial and the 14-day period set forth in 205 CMR 103.11(4) shall run from the date of the commission's notice of its ruling on the request for reconsideration.

(6) If pursuant to 205 CMR 103.11, the commission denies a request to protect confidential information made pursuant to 205 CMR 103.10, the confidentiality claimant may, at any time before the expiration of the applicable 14 day period set forth in 205 CMR 103.11(4), submit a written request to the commission pursuant to 205 CMR 111.05: Withdrawal of Application, to withdraw with prejudice the application to which the information relates and to order the information permanently sealed or returned to the applicant. If the commission allows the request to withdraw the application with prejudice, the commission may order the information permanently sealed or returned to the applicant to the extent permitted by M.G.L. c. 4, § 7, cl. 26, and M.G.L. c. 23K.

103.12: Reconsidering Confidentiality Determinations

If the commission determines that newly discovered information or changed circumstances make it appropriate for the commission to reconsider and possibly modify a prior grant of confidentiality, the commission shall so notify the person who submitted the record to the commission or the bureau, and the confidentiality claimant. The notice shall give the person and the confidentiality claimant a reasonable period of time to substantiate, pursuant to 205 CMR 103.10, keeping the record in question confidential. The amount of time originally established in the notice maybe reasonably extended by the commission. After this time has passed, or after the commission has received a written response from the confidentiality claimant, whichever occurs first, the commission shall make a new determination whether the record in question shall be deemed either confidential or a public record.

103.13: Executive Session Consideration of Confidential or Exempt Information

Pursuant to M.G.L. c 30A, § 21(a)(7), the commission may meet in executive session to review information which is exempt from disclosure as described in 205 CMR 103.02(1) through (5); or to conduct an in camera inspection of records to enable the commission to resolve matters as to confidentiality or exemption pursuant to 205 CMR 103.04(1) or (2), to act on requests for protecting confidential information pursuant to 205 CMR 103.11, or to reconsider confidentiality determinations pursuant to 205 CMR 103.12.

103.14: Security Protocols; Restricted Access

(1) The executive director, subject to the direction of the commission, shall establish and maintain secure storage areas, methodologies and procedures to protect tangible and electronic information exempt from disclosure as described in 205 CMR 103.02(1) through (5) contained in the records of the commission or the bureau. Records containing such information shall be kept, managed, accessed and used in accordance with the security protocols.

(2) Records for which confidential information claims have been made and related supporting materials, and information for which such claims have been finally adjudicated in favor of the confidentiality claimant, shall be kept, managed, accessed and used in accordance with the security protocols. Materials and information for which such claims have been finally adjudicated against the confidentiality claimant may be permanently removed from the protection of the security protocols.

(3) The executive director the deputy director and the official custodians shall be responsible for implementing the security protocols for records under their respective custody.

(4) Personnel and authorized agents of the commission or the bureau who require information contained within the secure tangible and electronic storage areas for the effective performance of their duties may, upon request to its official custodian, examine documents containing such information in accordance with the security protocols.

(5) The commission and the bureau shall keep the number of tangible and electronic copies of information exempt from disclosure as described in 205 CMR 103.02(1) through (5) to a minimum and shall ensure that all copies of such information are maintained in a manner consistent with the requirements of the security protocols. No copies of such documents or information may be made or transmitted except in accordance with the security protocols; where necessary to the authorized duties and operations of the commission, the bureau, or their employees and authorized agents; or where release of the confidential information is authorized pursuant to 205 CMR 103.00. Any notes concerning such information made by commission or bureau employees or agents shall be treated as confidential pursuant to 205 CMR 103.00.

(6) Commission or bureau employees or authorized agents who violate the procedures required by 205 CMR 103.00 or the security protocols established pursuant thereto shall be subject to disciplinary action.

103.15: Records Retention

The commission shall follow the records retention schedule set forth in the *Massachusetts Statewide Records Retention Schedule* (2011 Edition) published by the Records Conservation Board in conjunction with the Massachusetts Archives and the supervisor of public records, which records retention schedule shall apply to all records within the commission's possession including all records containing information exempt from disclosure as described in 205 CMR 103.02(1) through (5).

SMALL BUSINESS IMPACT STATEMENT

The Massachusetts Gaming Commission (“Commission”) hereby files this Small Business Impact Statement in accordance with G.L. c. 30A, §2 relative to the proposed amendments to 205 CMR 133.00: Voluntary Self-Exclusion; notice of which was filed with the Secretary of the Commonwealth. Specifically, the Commission proposes repealing **205 CMR 103.00: Access to and Confidentiality of Commission Records**.

This regulation was developed as part of the process of promulgating regulations governing the operation of gaming establishments in the Commonwealth, and is primarily governed by G.L. c. 23K, §4(28), 5.

205 CMR 103.00 applies to the gaming licensees and the Commission. Accordingly, repealing this regulation is unlikely to have an impact on small businesses. Under G.L. c.30A, §2, the Commission offers the following responses to the statutory questions:

1. Estimate of the number of small businesses subject to the proposed regulation:

As a general matter, no small businesses are subject to this regulation.

2. State the projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed regulation:

There are no projected reporting, recordkeeping, or other administrative costs required for small businesses to comply with this regulation or the proposed amendment therein.

3. State the appropriateness of performance standards versus design standards:

A specific design standard is required in this situation to ensure clarity of the calculation.

4. Identify regulations of the promulgating agency, or of another agency or department of the Commonwealth, which may duplicate or conflict with the proposed regulation:

There are no conflicting regulations in 205 CMR. The timeline provisions in 950 CMR 32:00: Public Records Access (the Secretary of the Commonwealth’s Public Records regulations) may conflict with certain provisions of the existing regulation.

5. State whether the proposed regulation is likely to deter or encourage the formation of new businesses in the Commonwealth:

This amendment is unlikely to have any impact on the formation of new businesses in the Commonwealth.

Massachusetts Gaming Commission
By:

/s/ Carrie Torrissi
Carrie Torrissi
Associate General Counsel

Dated: June 22, 2022

DRAFT

205 CMR 115.00: PHASE 1 AND NEW QUALIFIER SUITABILITY DETERMINATION, STANDARDS, AND PROCEDURES

115.01: Phase 1 and New Qualifier Determination Standards

.....

(4) Continuing Duty. Once issued a positive determination of suitability, the gaming licensee and all qualifiers shall have a continuing duty to maintain suitability in accordance with 205 CMR 115.01(1) and (2). The gaming licensee and each qualifier shall have a continuing duty to notify and update the IEB, in writing, within ten days of the occurrence, unless an alternative filing time is authorized by the executive director, or where applicable, gaining knowledge of the following:

(a) Any denial, suspension or revocation by a government agency in any jurisdiction of a gaming related license, registration, certification, permit or approval held by or applied for by the gaming licensee or qualifier;

(b) Any discipline, including a fine or warning, related to gaming operations imposed upon the gaming licensee or qualifier by any government agency in any jurisdiction;

(c) Any fine related to gaming operations assessed on any gaming entity owned or operated by the parent to the gaming licensee by any government agency in any jurisdiction.

(d) Any arrest, indictment, charge or criminal conviction of any qualifier in any jurisdiction;

(e) Any complaints, allegations, or notice of investigation thereof made or known to be contemplated by a gaming regulator or other governmental agency against the gaming licensee, qualifier, or any gaming entity owned or operated by the parent to the gaming licensee, of which the gaming licensee, or qualifier is or should reasonably be aware, involving conduct that if substantiated could reasonably lead to potential revocation or suspension of the license or approval held by the gaming licensee, qualifier, or gaming entity owned or operated by the parent to the gaming licensee, in that jurisdiction and/or imposition of a fine of \$50,000 or greater;

(f) Any reports, complaints, allegations, or material legal proceedings made, commenced, or known to be contemplated by a governmental agency against the gaming licensee or qualifier, of which the gaming licensee or qualifier is or should reasonably be aware, involving conduct that if substantiated could reasonably lead to potential criminal charges including, but not limited to, allegations of theft or embezzlement;

(g) Any information known or that should reasonably be known to the gaming licensee or qualifier, including by way of receipt of a subpoena, that the gaming licensee or qualifier is or may be the subject of a criminal investigation by a law enforcement or regulatory agency;

(h) Any exclusion or barring of a qualifier from any casino, gaming establishment or gambling/gaming related entity in any jurisdiction;

(i) The termination, suspension from employment, or other discipline of any key gaming employee licensed in accordance with 205 CMR 134.00: Licensing and Registration of Employees, Vendors, Junket Enterprises and Representatives, and Labor Organizations or qualifier;

(j) Any material pending legal proceedings required to be reported in accordance with 17 CFR 229.103 - (Item 103) Legal proceedings. For purposes of 205 CMR 115.01(4)(j) the registrant referred to in 17 CFR 229.103 - (Item 103) shall be both the gaming licensee and the parent company of the gaming licensee as determined by the IEB. Additionally, the gaming licensee and each qualifier shall provide notice of any pending legal proceeding which includes any allegation of fraudulent conduct by the gaming licensee or a qualifier, that may reasonably threaten the economic viability of the gaming licensee or a qualifier, or that alleges a pattern of improper conduct by the gaming licensee or a qualifier over a sustained period of time;

(k) Any significant financial event related to a gaming licensee or entity qualifier. For purposes of 205 CMR 115.01(4)(k), a significant financial event means a merger, acquisition, consolidation, debt restructuring, material change in debt rating by major credit rating agencies (US/International), legal entity change, material ownership change, the assessment of a fine or penalty of \$250,000 or greater by the SEC or international equivalent, restatement of previously issued financial statement(s), late filing of financial statement(s) with the SEC or international equivalent, US or international equivalent bankruptcy petition, default of financial debt covenants and receivership, disposal of a material business segment or asset, or adverse action(s) taken by the IRS;

(l) Issuance of an "Adverse" or "Qualified" audit opinion, or the international equivalent, by an independent accountant to the gaming licensee or qualifier;

(m) A change in accounting firm engaged to perform attestation and/or assurance services for the gaming licensee or qualifier; and

(n) Issuance of a delisting notice from a United States or international stock exchange relative to the gaming licensee or qualifier.

MEMORANDUM

DATE: June 21, 2022

TO: Chair Cathy Judd-Stein
Commissioner Brad Hill
Commissioner Eileen O'Brien
Commissioner Nakisha Skinner

FROM: Karen Wells, Executive Director

Technical Standards for Sports Wagering

It would be helpful to staff, as we prepare for the possibility of legalized sports wagering in Massachusetts, for the Commission to give some advance direction on certain issues, should the legislation pass and the MGC be designated the regulating body.

One issue which we deem “neutral” (i.e., a matter we expect that the Commission will need to address regardless of certain policy decisions being made in the legislature currently) is the approach to the adoption of technical standards in sports wagering regulations. Different states have used different models for this process which vary from drafting those regulations internally to relying heavily on GLI standards for those regulations.

Staff recommends that, should sports wagering become legalized, and the MGC is deemed the regulator, that Massachusetts generally rely on GLI standards for technical compliance of on-line platforms.

Specifically:

- Gaming Laboratories International, LLC Standard GLI-19: Interactive Gaming Systems, version 3.0
- Gaming Laboratories International, LLC Standard GLI-26: Wireless Systems Standards, version 2.0

- Gaming Laboratories International, LLC Standard GLI-33: Event Wagering Systems, version 1.1
- Gaming Laboratories International, LLC Standard Change Management Program Guide, version 1.0
- Gaming Laboratories International, LLC Standard GLI-20: Kiosks, version 2.0

All of those documents are included in the Commission's packet today. At this time, it would be premature to formally adopt any regulations, but a direction for staff to review and tailor these standards, as best practices, would be helpful in our preliminary preparation.

A second "neutral" issue is the MGC's approach regarding the technical testing of any mobile sports wagering platform to ensure compliance with Massachusetts laws, rules and regulations before that platform is able to operate in the Commonwealth.

The MGC could take one of several approaches to technical testing.

- 1) Require the licensees to contract with an outside vendor to do testing to Massachusetts standards and then provide the results to the MGC. Best practices suggest that the MGC should "audit" those results to ensure compliance and accuracy.
- 2) Hire personnel to conduct all the testing in-house at the MGC.
- 3) Contract with a 3rd party vendor to conduct all the testing directly for the MGC.
- 4) Utilize a hybrid-model where some testing is done by staff, and some is contracted out to a 3rd party vendor.

Staff's recommendation is that, at this point, we explore contracting with a 3rd party vendor for initial testing and then once operations are up and running, we work to migrate to more of a hybrid-model so that we are not completely dependent on a 3rd party vendor and develop certain expertise in-house over time. Any guidance on the approach staff should be considering would be extremely helpful.

GLI STANDARD SERIES

GLI-19:

STANDARDS FOR INTERACTIVE GAMING SYSTEMS

VERSION: 3.0

REVISION DATE: JULY 17, 2020

About This Standard

This technical standard has been produced by **Gaming Laboratories International, LLC (GLI)** for the purpose of providing independent technical analysis and/or certifications to gaming industry stakeholders indicating the state of compliance for gaming operations and systems with the requirements set forth herein.

This document is intended to be used by regulatory bodies, operators, and industry suppliers as a compliance guideline for technologies and procedures pertaining to interactive gaming. This standard is not intended to represent a set of prescriptive requirements that every Interactive Gaming System and operator shall comply with; however, it does establish a standard regarding the technologies and procedures used to facilitate these operations.

Operators and suppliers are expected to provide internal control documentation, credentials and associated access to a production equivalent test environment with a request that it be evaluated in accordance with this technical standard. Upon completion of testing, GLI will provide a certificate of compliance evidencing the certification to this Standard.

GLI-19 should be viewed as a living document that provides a level of guidance that will be tailored periodically to align with this developing industry over time as gaming implementations and operations evolve.

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Chapter 1: Introduction to Interactive Gaming Systems

1.1 Introduction

1.1.1 General Statement

Gaming Laboratories International, LLC (GLI) has been testing gaming equipment since 1989. Over the years, GLI has developed numerous technical standards utilized by jurisdictions all over the world. This document, *GLI-19*, sets forth the technical standards for Interactive Gaming Systems.

1.1.2 Document History

This document is a compilation based upon many standards documents from around the world. Some were written by GLI; others were written by industry regulators with input from independent test laboratories and Interactive Gaming System operators, developers, and suppliers. GLI has taken each of the standards documents and merged the unique rules, eliminated some rules and updated others, to reflect both the change in technology and the purpose of maintaining an objective standard that achieves common regulatory objectives without unnecessarily impeding technological innovation. GLI lists below, and gives credit to, agencies whose documents were reviewed prior to writing this Standard. It is the policy of GLI to update this document as often as warranted to reflect changes in technology and/or testing methods. This document will be distributed without charge and may be obtained by downloading it from the GLI website at www.gaminglabs.com or by contacting GLI at:

Gaming Laboratories International, LLC.

600 Airport Road
Lakewood, NJ 08701
Phone: (732) 942-3999
Fax: (732) 942-0043

1.2 Acknowledgment of Other Standards Reviewed

1.2.1 General Statement

This technical standard has been developed by reviewing and using portions of documents from the following organizations. GLI acknowledges and thanks the regulators and other industry participants who have assembled these documents:

- a) Nevada Gaming Commission and Gaming Control Board.
- b) British Columbia Gaming Policy and Enforcement Branch (GPEB).
- c) Tasmanian Liquor and Gaming Commission.
- d) Danish Gambling Authority.
- e) Spanish Directorate General for the Regulation of Gambling (DGOJ).
- f) Alderney Gambling Control Commission.

- g) Lottery and Gaming Authority, Malta.
- h) United Kingdom Gambling Commission.
- i) World Lottery Association (WLA).

1.3 Purpose of Technical Standards

1.3.1 General Statement

The purpose of this technical standard is as follows:

- a) To eliminate subjective criteria in analyzing and certifying Interactive Gaming Systems.
- b) To test the criteria that impact the credibility and integrity of Interactive Gaming Systems from both the revenue collection and player's perspective.
- c) To create a standard that will ensure interactive gaming is fair, secure, and able to be audited and operated correctly.
- d) To distinguish between local public policy and Independent Test Laboratory criteria. It is up to each local jurisdiction to set its own public policy with respect to gaming.
- e) To recognize that the evaluation of internal control systems (such as Anti-Money Laundering, Financial and Business processes) employed by the operators of the Interactive Gaming System should not be incorporated into the laboratory testing of the standard but instead be included within the operational audit performed for local jurisdictions.
- f) To construct a standard that can be easily revised to allow for new technology.
- g) To construct a standard that does not specify any particular design, method, or algorithm. The intent is to allow a wide range of methods to be used to conform to the standards, while at the same time encourage new methods to be developed.

1.3.2 No Limitation of Technology

One should be cautioned that this document shall not be read in such a way that limits the use of future technology. This document should not be interpreted to mean that if the technology is not mentioned, then it is not allowed. To the contrary, GLI will review this standard and make changes to incorporate minimum standards for any new and related technology.

1.3.3 Adoption and Observance

This technical standard can be adopted in whole or in part by any regulatory body that wishes to implement a comprehensive set of requirements for Interactive Gaming Systems.

1.4 Other Documents That May Apply

1.4.1 Other GLI Standards

This technical standard covers the requirements for Interactive Gaming Systems. Depending on the technology utilized by a system, additional GLI technical standards may also apply.

NOTE: The entire family of GLI Standards is available free of charge at www.gaminglabs.com.

1.4.2 Minimum Internal Control Standards (MICS)

The implementation of an Interactive Gaming System is a complex task, and as such will require the development of internal processes and procedures to ensure that the system is configured and operated with the necessary level of security and control. To that end, it is expected that a set of Minimum Internal Control Specifications (MICS) will be established to define the internal processes for the management and handling of games as well as the requirements for internal control of any system or component software and hardware, and their associated accounts.

1.5 Interpretation of this Document

1.5.1 General Statement

This technical standard applies to systems that support interactive gaming and is intended to be general in nature and not limit or authorize specific game types and functionalities. The intent is to provide a framework to cover those currently known and permitted by law. This document is not intended to define which parties are responsible for meeting the requirements of this technical standard. It is the responsibility of the stakeholders of each operator to determine how to best meet the requirements laid out in this document.

NOTE: This technical standard does NOT apply to systems that support wagering on sports, competitions, matches, and other event types using an Event Wagering System. For detailed standards applicable to these systems, please reference the *GLI-33 Standards for Event Wagering Systems*.

1.5.2 Software Suppliers and Operators

The components of an Interactive Gaming System, although they may be constructed in a modular fashion, are designed to work seamlessly together. In addition, Interactive Gaming Systems may be developed to have configurable features; the final configuration of which depends on the options chosen by the operator. From a testing perspective, it might not be possible to test all of the configurable features of an Interactive Gaming System submitted by a software supplier in the absence of the final configuration chosen by the operator; however, the configuration that will be utilized in the production environment shall be communicated to the independent test laboratory to facilitate creating a functionally equivalent test environment. Because of the integrated nature of an Interactive Gaming System, there are several requirements in this document which may apply to both operators and suppliers. In these cases, where testing is requested for a “white-label” version of the system, a specific configuration will be tested and reported.

1.6 Testing and Auditing

1.6.1 Laboratory Testing

The independent test laboratory will test and certify the components of the Interactive Gaming System in accordance with the chapters of this technical standard within a controlled test environment, as applicable. Any of these requirements which necessitate additional operational

procedures to meet the intent of the requirement shall be documented within the evaluation report and used to supplement the scope of the operational audit.

1.6.2 Operational Audit

The integrity and accuracy of the operation of an Interactive Gaming System is highly dependent upon operational procedures, configurations, and the production environment's network infrastructure. As such, an operational audit is an essential addition to the testing and certification of an Interactive Gaming System. The operational audit, outlined within the following appendices of this technical standard, shall be performed at a frequency specified by the regulatory body:

- a) Appendix A: Operational Audit of Gaming Procedures and Practices. This includes, but is not limited to, review of the internal controls, procedures and practices for gaming operations, including, but not limited to establishing gaming rules, managing games, handling various gaming and financial transactions, creating and managing progressive jackpots, creating and managing jackpots, player account management, fundamental practices relevant to the limitation of risks, and any other objectives established by the regulatory body.
- b) Appendix B: Operational Audit of Technical Security Controls. This includes, but is not limited to, a review of the operational processes that are critical to compliance, penetration testing focused on the external and internal infrastructure as well as the applications transferring, storing and/or processing of personally identifiable information (PII) and/or other sensitive information, and any other objectives established by the regulatory body.
- c) Appendix C: Operational Audit of Service Providers. This includes the assessment of providers of particular services, which may be offered directly by the operator or involve the use of third-party service providers, including, but not limited to evaluation of information security services, cloud services, payment services (financial institutions, payment processors, etc.), location services, live game services, and any other services which may be offered directly by the operator or involve the use of third-party service providers.

Chapter 2: Platform/System Requirements

2.1 Introduction

2.1.1 General Statement

If the Interactive Gaming System is comprised of multiple computer systems at various sites, the system as a whole and all communication between its components shall conform to the applicable technical requirements within this document.

2.2 System Clock Requirements

2.2.1 System Clock

The Interactive Gaming System shall maintain an internal clock that reflects the current date and time that shall be used to provide for the following:

- a) Time stamping of all transactions and games;
- b) Time stamping of significant events; and
- c) Reference clock for reporting.

2.2.2 Time Synchronization

The Interactive Gaming System shall be equipped with a mechanism to ensure the time and dates between all components that comprise the system are synchronized and set correctly.

2.3 Control Program Requirements

2.3.1 General Statement

In addition to the requirements contained within this section, the “Verification Procedures” section of this document shall also be met.

2.3.2 Control Program Self-Verification

The Interactive Gaming System shall be capable of verifying that all critical control program components contained on the system are authentic copies of the approved components of the system, at least once every twenty-four hours and on demand using a method approved by the regulatory body. The critical control program authentication mechanism shall:

- a) Employ a cryptographic hash algorithm which produces a message digest of at least 128 bits. Other test methodologies shall be reviewed on a case-by-case basis;
- b) Include all critical control program components which may affect gaming operations, including but not limited to executables, libraries, gaming or system configurations, operating system files, components that control required system reporting, and database elements that affect

- system operations; and
- c) Provide an indication of the authentication failure if any critical control program component is determined to be invalid.

2.3.3 Control Program Independent Verification

Each critical control program component of the Interactive Gaming System shall have a method to be verified via an independent third-party verification procedure. The third-party verification process shall operate independently of any process or security software within the system. The independent test laboratory, prior to system approval, shall evaluate the integrity check method.

2.4 Gaming Management

2.4.1 Gaming Management

The Interactive Gaming System shall be able to disable the following on demand:

- a) All gaming activity;
- b) Individual game themes/paytables or versions (e.g., desktop, mobile, tablet, etc.); and
- c) Individual player logins.

2.4.2 Changes to Jackpot Parameters

The following requirements apply to modifying progressive jackpot or incrementing jackpot parameter values once the current jackpot's payoff has already had player contributions to it and without requiring it to be decommissioned:

- a) For jackpots with a configurable increment rate which affects the return to player (RTP) of the game(s), changes to the increment rate may not take effect until the current jackpot is won;
- b) For jackpots with a configurable ceiling which does not affect the RTP of the game(s), changes to the ceiling may only be to a value greater than the current payoff. Alternatively, changes to the ceiling may not take effect until the current jackpot is won;
- c) Changes to the parameters shall not affect the probabilities of triggering the current jackpot;
- d) For mystery-triggered jackpots which use a hidden trigger amount to determine the jackpot win:
 - i. The hidden trigger amount shall be reselected when modifying any parameters that could result in an immediate trigger due to the modification; and
 - ii. The reselected amount shall be in the range of the current payoff to the ceiling and shall not result in a trigger without any contribution after the modification.

2.4.3 Jackpot Modifications

The Interactive Gaming System shall contain a secure means for transferring or combining contributions from a decommissioned jackpot (and any overflow or diversion pools specific to that jackpot), correcting errors with a jackpot, or any other reasons required by the regulatory body.

2.5 Player Account Management

2.5.1 General Statement

Player account registration and verification are required by the Interactive Gaming System for a player to participate in interactive gaming. In addition to the requirements contained within this section, the “Player Account Controls” section of this document shall also be met.

2.5.2 Registration and Verification

There shall be a method to collect player’s personally identifiable information (PII) prior to the registration of a player account. Where player account registration and verification are supported by the Interactive Gaming System either directly by the system or in conjunction with a third-party service provider’s software, the following requirements shall be met:

- a) Only players of the legal gaming age for the jurisdiction may register for a player account. During the registration process, the player shall:
 - i. Be denied the ability to register for a player account if they submit a birth date which indicates that they are underage;
 - ii. Be informed on the registration form which information fields are “required”, which are not, and what will be the consequences of not filling in the required fields;
 - iii. Agree to the terms and conditions and privacy policy;
 - iv. Acknowledge that they are prohibited from allowing any unauthorized person to access or use their player account;
 - v. Consent to the monitoring and recording of the use of their player account by the operator and the regulatory body; and
 - vi. Affirm that the PII the player is providing to open the player account is accurate.
- b) Identity verification shall be undertaken before a player is allowed to play a game. Third-party identity verification service providers may be used for identity verification as allowed by the regulatory body.
 - i. Identity verification shall authenticate the legal name, residential address, and date of birth of the individual at a minimum as required by the regulatory body.
 - ii. Identity verification shall also confirm that the player is not on any exclusion lists held by the operator or the regulatory body or prohibited from establishing or maintaining an account for any other reason.
 - iii. Details of identity verification shall be kept in a secure manner.
- c) The player account can only become active once age and identity verification are successfully completed, the player is determined to not be on any exclusion lists or prohibited from establishing or maintaining an account for any other reason, the player has acknowledged the necessary terms and conditions and privacy policy, and the player account registration is complete.
- d) A player shall only be permitted to have one active player account at a time unless specifically authorized by the regulatory body.
- e) The system shall allow the ability to update authentication credentials, registration information and the account used for financial transactions for each player. A multi-factor authentication process shall be employed for these purposes.

2.5.3 Player Access

A player accesses their player account using authentication credentials, such as a username (or similar) and a password or a secure alternative means, for the player to perform authentication to log in to the Interactive Gaming System from a specific Remote Player Device. Allowable authentication credentials are subject to the discretion of the regulatory body as necessary. The requirement does not prohibit the option for more than one method of authentication being available for a player to access their account.

- a) If the system does not recognize the authentication credentials when entered, an explanatory message shall be displayed to the player which prompts the player to try again. The error message shall be the same regardless of which authentication credential is incorrect.
- b) Where a player has forgotten their authentication credentials, a multi-factor authentication process shall be employed for the retrieval or reset of their forgotten authentication credentials.
- c) Current account balance information, including any incentive credits, and transaction options shall be available to the player once authenticated. All restricted incentive credits and incentive credits that have a possible expiration shall be indicated separately.
- d) The system shall support a mechanism that allows for an account to be locked in the event that suspicious activity is detected, such as three consecutive failed access attempts in a thirty-minute period. A multi-factor authentication process shall be employed for the account to be unlocked.

NOTE: Where passwords are used as an authentication credential, it is recommended that they are at least eight characters in length.

2.5.4 Player Inactivity

After thirty minutes of inactivity on that Remote Player Device, or a period determined by the regulatory body, the player shall be required to re-authenticate to access their player account.

- a) No further games or financial transactions on that device are permitted until the player has been re-authenticated.
- b) A simpler means may be offered for a player to re-authenticate on that device, such as operating system-level authentication (e.g., biometrics) or a Personal Identification Number (PIN). Each means for re-authentication will be evaluated on a case-by-case basis by the independent test laboratory.
 - i. This functionality may be disabled based on preference of the player and/or regulatory body.
 - ii. Once every thirty days, or a period specified by the regulatory body, the player will be required to provide full authentication on that device.

2.5.5 Limitations and Exclusions

The Interactive Gaming System shall be able to correctly implement any limitations and/or exclusions put in place by the player and/or operator as required by the regulatory body:

- a) Where the system provides the ability to directly manage limitations and/or exclusions, the applicable requirements within the “Limitations” and “Exclusions” sections of this document shall be evaluated;
- b) The self-imposed limitations set by a player shall not override more restrictive operator-imposed limitations. The more restrictive limitations shall take priority; and
- c) Limitations shall not be compromised by internal status events, such as self-imposed exclusion orders and revocations.

2.5.6 Financial Transactions

Where financial transactions can be performed automatically by the Interactive Gaming System the following requirements shall be met:

- a) The system shall provide confirmation/denial of every financial transaction initiated, including
 - i. The type of transaction (deposit/withdrawal);
 - ii. The transaction value; and
 - iii. For denied transactions, a descriptive message as to why the transaction did not complete as initiated.
- b) A deposit into a player account may be made via a debit instrument transaction, credit card transaction, or other methods which can produce a sufficient audit trail.
- c) Funds shall not be available for wagering until they are received from the issuer or the issuer provides an authorization number indicating that the funds are authorized. The authorization number is to be maintained in an audit log.
- d) Payments from an account are to be paid (including funds transfer) directly to an account with a financial institution in the name of the player or made payable to the player and forwarded to the player’s address using a secure delivery service or through another method that is not prohibited by the regulatory body. The name and address are to be the same as held in player registration details.
- e) If a player initiates a financial transaction and that transaction would exceed limits put in place by the operator and/or regulatory body, this transaction may only be processed provided that the player is clearly notified that they have withdrawn or deposited less than requested.
- f) It shall not be possible to transfer funds between two player accounts.

2.5.7 Transaction Log or Account Statement

The Interactive Gaming System shall be able to provide a transaction log or account statement history to a player upon request. The information provided shall include sufficient information to allow the player to reconcile the statement or log against their own financial records. Information to be provided shall include at a minimum, details on the following types of transactions within the past year or other time period as requested by the player or as required by the regulatory body:

- a) Financial Transactions (time stamped with a unique transaction ID):
 - i. Deposits to the player account;

- ii. Withdrawals from the player account;
- iii. Incentive credits added to/removed from the player account (outside of credits won in a game);
- iv. Manual adjustments or modifications to the player account (e.g., due to refunds);
- v. Any non-wager purchases (if applicable);
- b) Game History (by game theme);
 - i. The name of the game theme and game type (reel, blackjack, poker, table, etc.);
 - ii. Total amount wagered, including any incentive credits (if applicable); and
 - iii. Total amount won for completed games, including, any incentive credits and/or prizes, and any progressive jackpots and/or incrementing jackpots (if applicable).

2.5.8 Player Loyalty Programs

Player loyalty programs are any programs that provide incentive awards for players, typically based on the volume of play or revenue received from a player. If player loyalty programs are supported by the Interactive Gaming System, the following principles shall apply:

- a) All awards shall be equally available to all players who achieve the defined level of qualification for player loyalty points;
- b) Redemption of player loyalty points earned shall be a secure transaction that automatically debits the points balance for the value of the prize redeemed; and
- c) All player loyalty points transactions shall be recorded by the system.

2.6 Player Software

2.6.1 General Statement

Player Software is used to take part in games and financial transactions with the Interactive Gaming System which, based on design, is downloaded to or installed on the Remote Player Device, run from the Interactive Gaming System which is accessed by the Remote Player Device, or a combination of the two.

2.6.2 Software Identification

Player Software shall contain sufficient information to identify the software and its version.

2.6.3 Software Validation

For Player Software installed locally on the Remote Player Device, it shall be possible to authenticate that all critical software components are valid each time the software is loaded for use, and where supported by the system, on demand as required by the regulatory body. Critical software components may include, but are not limited to, gaming rules, pay table information, elements that control the communications between the Remote Player Device and the Interactive Gaming System, or other software components that are needed to ensure proper operation of the software. In the event of a failed authentication (i.e., program mismatch or authentication failure), the software shall prevent gaming operations and display an appropriate error message.

NOTE: Program verification mechanisms will be evaluated on a case-by-case basis and approved by the regulatory body and the independent test laboratory based on industry-standard security practices.

2.6.4 Communications

Player Software shall be designed or programmed such that it may only communicate with authorized components through secure communications. If communication between the Interactive Gaming System and the Remote Player Device is lost, the software shall prevent further gaming operations and display an appropriate error message. It is permissible for the software to detect this error when the device tries to communicate with the system.

2.6.5 Client-Server Interactions

The player may obtain/download an application or software package containing the Player Software or access the software via a browser to take part in gaming and financial transactions with the Interactive Gaming System.

- a) Players shall not be able to use the software to transfer data to one another, other than chat functions (e.g., text, voice, video, etc.) and approved files (e.g., user profile pictures, photos, etc.);
- b) The software shall not automatically disable any virus scanners and/or detection programs or alter any device-specified firewall rules to open ports that are blocked by either a hardware or software firewall;
- c) The software shall not access any TCP/UDP ports (either automatically or by prompting the user to manually access) which are not necessary for the communication between the Remote Player Device and the server;
- d) If the software includes additional non-gaming related functionality, this additional functionality shall not alter the software's integrity in any way;
- e) The software shall not possess the ability to override the volume settings of the Remote Player Device;
- f) The software shall not be used to store sensitive information. It is recommended that auto complete, password caching, or other methods that will fill in the password field are disabled by default for the software; and
- g) The software shall not contain any logic utilized to generate the result of any game. All critical functions including the generation of any game outcome shall be generated by the Gaming Platform and be independent of the Remote Player Device.

2.6.6 Compatibility Verification

During any installation or initialization and prior to commencing gaming operations, the Player Software used in conjunction with the Interactive Gaming System shall detect any incompatibilities or resource limitations with the Remote Player Device that would prevent proper operation of the software (e.g., software version, minimum specifications not met, browser type, browser version, plug-in version, etc.). If any incompatibilities or resource limitations are detected the software shall prevent gaming operations and display an appropriate error message.

2.6.7 Software Content

Player Software shall not contain any malicious code or functionality deemed to be malicious in nature by the regulatory body. This includes, but is not limited to, unauthorized file extraction/transfers, unauthorized device modifications, unauthorized access to any locally stored personal information (e.g., contacts, calendar, etc.) and malware.

2.6.8 Cookies

Where cookies are used, players shall be informed of the cookie use upon Player Software installation or during player registration. When cookies are required for gaming, gaming cannot occur if they are not accepted by the Remote Player Device. All cookies used shall contain no malicious code.

2.6.9 Information Access

In addition to the “Game Requirements” within this document, the Player Software shall be able to display, either directly from the player interface or from a page accessible to the player, the items specified in the following sections of this document:

- a) “Gaming Rules and Content”;
- b) “Player Protection Information”;
- c) “Terms and Conditions”; and
- d) “Privacy Policy”.

2.7 Location Requirements

2.7.1 General Statement

The requirements within this section shall apply for player location detection. In addition to the requirements contained within this section, the operator or third-party service provider maintaining these components, services and/or applications shall meet the operational procedures and controls indicated in the “Location Services” section of this document.

2.7.2 Location Fraud Prevention

The Interactive Gaming System shall incorporate a mechanism to detect the use of remote desktop software, rootkits, virtualization, and/or any other programs identified as having the ability to circumvent location detection. This shall follow best practice security measures to:

- a) Detect and block location data fraud (e.g., fake location apps, virtual machines, remote desktop programs, etc.) prior to initiating each game;
- b) Examine the IP Address upon each Remote Player Device connection to a network to ensure a known Virtual Private Network (VPN) or proxy service is not in use;
- c) Detect and block devices which indicate system-level tampering (e.g., rooting, jailbreaking, etc.);
- d) Stop "Man-In-The-Middle" attacks or similar hacking techniques and prevent code

- manipulation; and
- e) Utilize detection and blocking mechanisms verifiable to an application level.

2.7.3 Location Detection on a Private Network

Where interactive gaming occurs over a private network, such as a Wireless Local Area Network (WLAN), the Interactive Gaming System shall incorporate one of the following methods that can track the locations of all players connected to the network:

- a) A location detection service or application in which each player shall pass a location check prior to initiating each game. This service or application shall meet the requirements specified in the next section for “Location Detection on a Public Network”; or
- b) A location detection component that detects in real-time when any players are no longer in the permitted boundary and prevent further games from being played. This can be accomplished with the use of specific IT hardware such as directional antennas, Bluetooth sensors or other methods to be evaluated on a case-by-case basis by the independent test laboratory.

2.7.4 Location Detection on a Public Network

Where interactive gaming occurs over a public network, such as the internet, the Interactive Gaming System shall incorporate a location detection service or application to reasonably detect and dynamically monitor the location of a player attempting to play a game; and to monitor and enable the blocking of unauthorized attempts to play a game.

- a) Each player shall pass a location check prior to initiating the first game after logging in on a specific Remote Player Device. Subsequent location checks on that device shall occur prior to initiating games after detection of a change to the player’s IP Address, after a period of thirty minutes since the previous location check, or as otherwise specified by the regulatory body:
- i. If the location check indicates the player is outside the permitted boundary or cannot successfully locate the player, the game shall not initiate, and the player shall be notified of this.
 - ii. An entry shall be recorded in a time stamped log any time a location violation is detected, including the unique player ID and the detected location.
- b) A geolocation method shall be used to provide a player’s physical location and an associated confidence radius. The confidence radius shall be entirely located within the permitted boundary.
- c) Accurate location data sources (Wi-Fi, GSM, GPS, etc.) shall be utilized by the geolocation method to confirm the player’s location. If a Remote Player Device’s only available location data source is an IP Address, the location data of a mobile device registered to the player account may be used as a supporting location data source under the following conditions:
- i. The Remote Player Device (where the game is being played) and the mobile device shall be determined to be near one another.
 - ii. If allowed by the regulatory body, carrier-based location data of a mobile device may be used if no other location data sources other than IP Addresses are available.
- d) The geolocation method shall possess the ability to control whether the accuracy radius of the location data source is permitted to overlap or exceed defined buffer zones or the permitted

boundary.

- e) To mitigate and account for discrepancies between mapping sources and variances in geospatial data, boundary polygons based on audited maps approved by the regulatory body as well as overlay location data onto these boundary polygons shall be utilized.
- f) The geolocation method shall monitor and flag for investigation any games played by a single player account from geographically inconsistent locations (e.g., successive player locations were identified that would be impossible to travel between in the time reported).

2.8 Information to be Maintained

2.8.1 Data Retention and Time Stamping

The Interactive Gaming System shall be capable of maintaining and backing up all recorded data as discussed within this section:

- a) The system clock shall be used for all time stamping.
- b) The system shall provide a mechanism to export the data for the purposes of data analysis and auditing/verification (e.g., CSV, XLS).

2.8.2 Game Play Information

For each individual game played by the player, the information to be maintained and backed up by the Interactive Gaming System shall include, as applicable:

- a) The date and time the game was played;
- b) The denomination played for the game, if a multi-denomination game type;
- c) The display associated with the final outcome of the game, either graphically or via a clear text description;
- d) The funds available for wagering at the start of play and/or at the end of play;
- e) Total amount wagered, including any incentive credits;
- f) Total amount won, including:
 - i. Any incentive credits and/or prizes; and
 - ii. Any progressive jackpots or incrementing jackpots;
- g) Any non-wager purchase that occurred between the start of play and the end of play;
- h) Rake, commission, or fees collected;
- i) The results of any player choices involved in the game outcome;
- j) The results of any intermediate game phases, such as double-up/gamble or bonus/feature games;
- k) If a progressive jackpot and/or incrementing jackpot was won, an indication that the jackpot was awarded;
- l) Any player advice that is offered to the player for games with skill;
- m) Contributions to progressive jackpots or incrementing jackpots;
- n) Relevant location information;
- o) The current status of the game (in progress, complete, interrupted, cancelled, etc.);
- p) Unique game cycle ID and/or gaming session ID (if different);
- q) Unique game theme/paytable ID; and

r) Unique player ID.

NOTE: For individual games with multiple players, such information shall be recorded for each player.

2.8.3 Game Theme/Paytable Information

For each individual game theme and paytable available for play, the information to be maintained and backed up by the Interactive Gaming System shall include, as applicable:

- a) Unique game theme/paytable ID;
- b) Game configuration data (e.g., denominations, wager categories, etc.);
- c) The date and time the game theme/paytable was made available for play;
- d) Theoretical return to player (RTP) percentage;
- e) The number of games played;
- f) Total value of all wagers, not including:
 - i. Any incentive credits wagered; and
 - ii. Subsequent wagers of intermediate winnings accumulated during game play such as those acquired from double-up/gamble features;
- g) Total value paid as a result of winning wagers, not including:
 - i. Any incentive credits and/or prizes won; and
 - ii. Any progressive jackpots and/or incrementing jackpots won;
- h) Total value paid as a result of progressive jackpots and/or incrementing jackpots won;
- i) Total amount of incentive credits wagered;
- j) Total amount of incentive credits and/or prizes won;
- k) Total amount of wagers voided or cancelled, including any incentive credits;
- l) Total amount of non-wager purchases made in relation to the game;
- m) The number of times each jackpot is awarded;
- n) For games which support double-up/gamble features:
 - i. Total double-up/gamble amount wagered;
 - ii. Total double-up/gamble amount won;
 - iii. Number of double-up/gamble games played;
 - iv. Number of double-up/gamble games won;
- o) Total rake, commission, or fees collected;
- p) The current status of the game theme/paytable (active, disabled, decommissioned, etc.); and
- q) The date and time the game theme/paytable was or is scheduled to be decommissioned (blank until known).

2.8.4 Contest/Tournament Information

For Interactive Gaming Systems which support contests/tournaments, the information to be maintained and backed up by the Interactive Gaming System shall include for each contest/tournament, as applicable:

- a) Name or identification of the contest/tournament;
- b) The date and time the contest/tournament occurred or will occur (if known);
- c) Participating game theme/paytable ID(s);

- d) For each registered player:
 - i. Unique player ID;
 - ii. Amount of entry fee collected, including any incentive credits, and the date collected;
 - iii. Player scorings/rankings;
 - iv. Amount of winnings paid, including any incentive credits, and the date paid;
- e) Total amount of entry fees collected, including any incentive credits;
- f) Total amount of winnings paid to players, including any incentive credits;
- g) Total rake, commission, or fees collected; and
- h) The current status of the contest/tournament (in progress, complete, interrupted, cancelled, etc.).

2.8.5 Player Account Information

For each player account, the information to be maintained and backed up by the Interactive Gaming System shall include:

- a) Unique player ID and username (if different);
- b) Personally identifiable information (PII) of the player, such as:
 - i. The information collected by the operator to register a player and create the account, including, the legal name, residential address, and date of birth;
 - ii. Encrypted PII, including the government identification number (social security number, taxpayer identification number, passport number, or equivalent), authentication credential (password, PIN, etc.), and personal financial information (debit instrument numbers, credit card numbers, bank account numbers, etc.);
- c) The date and method of identity verification, including, where applicable, a description of the identification credential provided by a player to confirm their identity and its date of expiration;
- d) The date of player agreement to the operator's terms and conditions and privacy policy;
- e) Account details and current balance, including any incentive credits. All restricted incentive credits and incentive credits that have a possible expiration shall be maintained separately;
- f) Previous accounts, if any, and reason for de-activation;
- g) The date and method from which the account was registered (e.g., remote vs. on-site);
- h) The date and time of account is accessed by any person (player or operator), including IP Address;
- i) Exclusions/limitations information as required by the regulatory body:
 - i. The date and time of the request (if applicable);
 - ii. Description and reason of exclusion/limitation;
 - iii. Type of exclusion/limitation (e.g., operator-imposed exclusion, self-imposed deposit limitation);
 - iv. The date exclusion/limitation commenced;
 - v. The date exclusion/limitation ended (if applicable);
- j) Financial transaction information:
 - i. Type of transaction (e.g., deposit, withdrawal, adjustment, non-wager purchase);
 - ii. The date and time of the transaction;
 - iii. Unique transaction ID;
 - iv. Amount of transaction;
 - v. Total account balance before/after transaction;

- vi. Total amount of fees paid for transaction (if applicable);
 - vii. User identification which handled the transaction (if applicable);
 - viii. Transaction status (pending, complete, etc.);
 - ix. Method of deposit/withdrawal (e.g., cash, personal check, cashier's check, wire transfer, money order, debit instrument, credit card, electronic funds transfer, etc.);
 - x. Deposit authorization number;
 - xi. Relevant location information.
- k) Persistence game information, if supported by the Interactive Gaming System:
 - i. Unique game theme/paytable ID, if tied to a particular game theme or payable;
 - ii. Game achievements, capabilities earned, or similar;
 - iii. Last save point, if play from save is supported;
 - l) Identifier information, if supported by the Interactive Gaming System:
 - i. Unique game theme/paytable ID, if tied to a particular game theme or payable;
 - ii. The date and time of the transaction;
 - iii. Unique transaction ID;
 - iv. The criteria for the use of the identifier (skill level of player, subscriptions, account memberships, player tracking information, skill requirements of the game, etc.);
 - v. Type of action taken, or alteration made to the game (e.g., game rule change, payable change, or other configuration change related to game outcome); and
 - m) The current status of the player account (e.g., active, inactive, closed, excluded, etc.).

2.8.6 Incentive Information

For Interactive Gaming Systems which support incentive awards that are redeemable for cash, wagering credits, or merchandise, the information to be maintained and backed up by the Interactive Gaming System for each incentive offered shall include, as applicable:

- a) Unique incentive offer ID;
- b) The date and time the incentive was made available;
- c) Current balance for incentive awards;
- d) Total amount of incentive awards issued;
- e) Total amount of incentive awards redeemed;
- f) Total amount of incentive awards expired;
- g) Total amount of incentive award adjustments;
- h) The current status of the incentive (active, disabled, decommissioned, etc.); and
- i) The date and time the incentive was or is scheduled to be decommissioned (blank until known).

2.8.7 Jackpot Information

For Interactive Gaming Systems which support progressive jackpots or incrementing jackpots, the information to be maintained and backed up by the Interactive Gaming System for each jackpot offered shall include, as applicable:

- a) Unique jackpot ID (if jackpot is not tied to a particular game theme, payable, or player);
- b) The date and time the jackpot was made available;
- c) The participating game theme/paytable ID(s);

- d) Unique Player ID(s), if the jackpot is tied to particular player(s);
- e) Current value of the jackpot (payoff);
- g) Any other pools containing jackpot contributions, as applicable:
 - i. Current value of amount exceeding ceiling, where required by the regulatory body (overflow);
 - ii. Current value of the Jackpot Diversion Scheme (diversion pool);
- h) Reset value of the current jackpot if different from startup value (reset value);
- i) Where such parameters are configurable after initial setup:
 - i. Initial value of the jackpot (startup value);
 - ii. Percentage increment rate (increment);
 - iii. Jackpot limit value (ceiling);
 - iv. Percentage increment rate after ceiling is reached (secondary increment);
 - v. Percentage increment rate for diversion pool (hidden increment);
 - vi. Diversion pool limit value (diversion limit);
 - vii. The odds of triggering the jackpot (odds);
 - viii. Any parameters which indicate time periods the jackpot is available for triggering (time limit);
 - ix. Any additional information needed to properly reconcile the jackpot;
- i) The current status of the jackpot (active, disabled, decommissioned, etc.); and
- j) The date and time the jackpot was or is scheduled to be decommissioned (blank until known).

NOTE: It is expected that for non-configurable parameters not maintained or backed up by the Interactive Gaming System, there will be documentation available to the operator indicating such static values.

2.8.8 Significant Event Information

Significant event information to be maintained and backed up by the Interactive Gaming System shall include, as applicable:

- a) Failed account access attempts, including IP Address;
- b) Program error or authentication mismatch;
- c) Significant periods of unavailability of any critical component of the system (any length of time game play is halted for all players, and/or transactions cannot be successfully completed for any user);
- d) Large wins (single and aggregate over defined time period) in excess of a value specified by the regulatory body, including game play information;
- e) Large wagers (single and aggregate over defined time period) in excess of a value specified by the regulatory body, including game play information;
- f) System voids, overrides, and corrections;
- g) Changes to live data files occurring outside of normal program and operating system execution;
- h) Changes that are made to the download data library, including the addition, changing or deletion of software, where supported;
- i) Changes to policies and parameters for operating systems, databases, networks, and applications (e.g., audit settings, password complexity settings, system security levels, manual updates to databases, etc.);
- j) Changes to date/time on master time server;

- k) Changes to game theme parameters (e.g., game rules, payout schedules, rake percentage, paytables, etc.);
- l) Changes to progressive jackpot or incrementing jackpot parameters;
- m) Changes to incentive parameters (e.g., start/end, value, eligibility, restrictions, etc.);
- n) Player Account Management:
 - i. Adjustments to a player account balance;
 - ii. Changes made to PII and other sensitive information recorded in a player account;
 - iii. Deactivation of a player account;
 - iv. Large financial transactions (single and aggregate over defined time period) in excess of a value specified by the regulatory body, including transaction information;
 - v. Negative player account balance (due to adjustments and/or chargebacks);
- o) Irrecoverable loss of PII and other sensitive information;
- p) Any other activity requiring user intervention and occurring outside of the normal scope of system operation; and
- q) Other significant or unusual events as deemed applicable by the regulatory body.

2.8.9 User Access Information

For each user account, the information to be maintained and backed up by the Interactive Gaming System shall include:

- a) Employee name and title or position;
- b) User identification;
- c) Full list and description of functions that each group or user account may execute;
- d) The date and time the account was created;
- e) The date and time of last access, including IP Address;
- f) The date and time of last password change;
- g) The date and time the account was disabled/deactivated;
- h) Group membership of user account (if applicable); and
- i) The current status of the user account (e.g., active, inactive, closed, suspended, etc.).

2.9 Reporting Requirements

2.9.1 General Reporting Requirements

The Interactive Gaming System shall be capable of generating the information needed to compile reports as required by the regulatory body. In addition to meeting the requirements in the section above for “Data Retention and Time Stamping”, the following requirements shall apply for required reports:

- a) The system shall be able to provide the reporting information on demand, on a daily basis, and for other intervals required by the regulatory body (e.g., month-to-date (MTD), year-to-date (YTD), life-to-date (LTD), etc.).
- b) Each required report shall contain:
 - i. The operator’s name (or other identifier), the title of report, the selected interval and the date/time the report was generated;

- ii. An indication of “No Activity” or similar message if no information appears for the period specified; and
- iii. Labeled fields which can be clearly understood in accordance with their function.

NOTE: In addition to the reports outlined in this section, the regulatory body may also require other reports utilizing the information stored under the “Information to be Maintained” section of this document.

2.9.2 Game Performance Reports

The Interactive Gaming System shall be able to provide the following information needed to compile one or more reports on game performance for each game theme or payable, as applicable:

- a) The name of the game theme and game type (reel, blackjack, poker, table, etc.);
- b) The date and time the game theme/paytable was made available for play;
- c) For house-banked games:
 - i. Theoretical RTP percentage;
 - ii. Actual RTP percentage;
- d) The number of games played;
- e) Total amount of wagers collected, including separate amounts for incentive credits;
- f) Total amount of winnings paid to players, including separate amounts for incentive credits and/or prizes;
- g) Total amount of wagers voided or cancelled, including separate amounts for incentive credits;
- h) Total rake, commission, and fees collected;
- i) Total funds remaining in interrupted games, including separate amounts for incentive credits;
- j) Game theme/paytable ID; and
- k) The current status of the game theme/paytable (active, disabled, decommissioned, etc.).

2.9.3 Operator Liability Reports

The Interactive Gaming System shall be able to provide the following information needed to compile one or more reports on operator liability, as applicable:

- a) Total amount held by the operator for the player accounts; and
- b) Any operational funds used to cover all other operator liability if defined by the regulatory body.

2.9.4 Large Jackpot Payout Reports

For Interactive Gaming Systems which support progressive jackpots or incrementing jackpots, the Interactive Gaming System shall be able to provide the following information needed to compile one or more reports on jackpot payouts which exceed a particular value as defined by the regulatory body, as applicable:

- a) Unique jackpot ID (if jackpot is not tied to a particular game theme, payable, or player);
- b) Winning player ID;
- c) Winning game theme/paytable ID;

- d) Winning game cycle ID and/or gaming session ID (if different);
- e) The date and time of jackpot trigger;
- f) Jackpot hit and payoff amount; and
- g) Identification of user(s) who processed and/or confirmed the win.

2.9.5 Significant Events and Alterations Reports

The Interactive Gaming System shall be able to provide the following information needed to compile one or more reports for each significant event or alteration, as applicable:

- a) The date and time of the significant event or alteration;
- b) Event/component identification;
- c) Identification of user(s) who performed and/or authorized the significant event or alteration;
- d) Reason/description of the significant event or alteration, including data or parameter altered;
- e) Data or parameter value before alteration; and
- f) Data or parameter value after alteration.

Chapter 3: Random Number Generator (RNG) Requirements

3.1 Introduction

3.1.1 General Statement

This chapter sets forth the technical requirements for a Random Number Generator (RNG). The types of RNGs include the following:

- a) Software-based RNGs do not use hardware devices and derive their randomness principally and primarily from a computer-based or software-driven algorithm. They do not incorporate hardware randomness in a significant way.
- b) Hardware-based RNGs derive their randomness from small-scale physical events (e.g., electric circuit feedback, thermal noise, radioactive decay, photon spin, etc.).
- c) Mechanical RNGs generate game outcomes mechanically, employing the laws of physics (e.g., wheels, tumblers, blowers, shufflers, etc.).

NOTE: See also related requirements found in “Game Outcome Using a Random Number Generator” section as contained in the “Game Requirements” chapter of this standard.

3.2 General RNG Requirements

3.2.1 Source Code Review

The independent test laboratory shall review the source code pertaining to any and all core randomness algorithms, scaling algorithms, shuffling algorithms, and other algorithms or functions that play a critical role in the final random outcome selected for use by a game. This review shall include comparison to published references, where applicable, and an examination for sources of bias, errors in implementation, malicious code, code with the potential to corrupt behavior, or undisclosed switches or parameters having a possible influence on randomness and fair play.

3.2.2 Statistical Analysis

The independent test laboratory shall employ statistical tests to assess the outcomes produced by the RNG, after scaling, shuffling, or other mapping (hereafter referred to as “final outcome output”). The independent test laboratory shall choose appropriate tests on a case-by-case basis, depending on the RNG under review and its usage within the game. The tests shall be selected to assure conformance to intended distribution of values, statistical independence between draws, and, if applicable, statistical independence between multiple values within a single draw. The applied tests shall be evaluated, collectively, at a 99% confidence level. The amount of data tested shall be such that significant deviations from applicable RNG testing criteria can be detected with high frequency. In the case of an RNG intended for variable usage, it is the responsibility of the independent test laboratory to select and test a representative set of usages as test cases. Statistical tests may include any one or more of the following:

- a) Total Distribution or Chi-square test;
- b) Overlaps test;
- c) Coupon Collector's test;
- d) Runs test;
- e) Interplay Correlation test;
- f) Serial Correlation test; and
- g) Duplicates test.

3.2.3 Distribution

Each possible RNG selection shall be equally likely to be chosen. Where the game design specifies a non-uniform distribution, the final outcome shall conform to the intended distribution.

- a) All scaling, mapping, and shuffling algorithms used shall be unbiased, as verified by source code review. The discard of RNG values is permissible in this context and may be necessary to eliminate bias.
- b) The final outcome output shall be tested against intended distribution using appropriate statistical tests (e.g., Total Distribution test).

3.2.4 Independence

Knowledge of the numbers chosen in one draw shall not provide information on the numbers that may be chosen in a future draw. If the RNG selects multiple values within the context of a single draw, knowing one or more values shall not provide information on the other values within the draw, unless provided for by the game design.

- a) As verified by source code review, the RNG shall not discard or modify selections based on previous selections, except where intended by game design (e.g., without-replacement functionality).
- b) The final outcome output shall be tested for independence between draws and, as applicable, independence within a draw, using appropriate statistical tests (e.g., Serial or Interplay Correlation tests, and Runs test).

3.2.5 Available Outcomes

As verified by source code review, the set of possible outcomes produced by the RNG solution (i.e., the RNG period), taken as a whole, shall be sufficiently large to ensure that all outcomes shall be available on every draw with the appropriate likelihood, independent of previously produced outcomes, except where specified by the game design.

3.3 RNG Strength and Monitoring

3.3.1 RNG Strength for Outcome Determination

The RNG used in the determination of game outcomes in a Gaming Platform shall be cryptographically strong. "Cryptographically strong" means that the RNG is resistant to attack or

compromise by an intelligent attacker with modern computational resources, and who may have knowledge of the source code of the RNG.

3.3.2 Cryptographic RNG Attacks

A cryptographic RNG cannot be feasibly compromised by a skilled attacker with knowledge of the source code. At a minimum, cryptographic RNGs shall be resistant to the following types of attack:

- a) Direct Cryptanalytic Attack: Given a sequence of past values produced by the RNG, it shall be computationally infeasible to predict or estimate future RNG values. This shall be ensured through the appropriate use of a recognized cryptographic algorithm (RNG algorithm, hash, cipher, etc.). Note that a hardware-based RNG or a mechanical RNGs may potentially qualify as a cryptographic algorithm, provided it passes statistical testing;
- b) Known Input Attack: It shall be infeasible to computationally determine or reasonably estimate the state of the RNG after initial seeding. In particular, the RNG shall not be seeded from a time value alone. The manufacturer shall ensure that games will not have the same initial seed. Seeding methods shall not compromise the cryptographic strength of the RNG; and
- c) State Compromise Extension Attack: The RNG shall periodically modify its state, through the use of external entropy, limiting the effective duration of any potential exploit by a successful attacker.

NOTE: Because of continuous computational improvements and advances in cryptographic research, compliance to this criterion shall be re-evaluated as required by the regulatory body.

3.3.3 Dynamic Output Monitoring for Hardware-Based RNGs

Due to their physical nature, the performance of hardware-based RNGs may deteriorate over time or otherwise malfunction, independent of the Gaming Platform. The failure of a hardware-based RNG could have serious consequences for the intended usage of the RNG. For this reason, if a hardware-based RNG is used, there shall be dynamic monitoring of the output by statistical testing. This monitoring process shall disable game play when malfunction or degradation is detected.

3.4 Mechanical RNG (Physical Randomness Device)

3.4.1 General Statement

The requirements defined within this section apply to mechanical RNGs or “physical randomness devices”. While software may be a part of the device, the software is primarily limited to operating machinery and/or reading and recording game outcome data (the software does not play a deterministic role in determining the game outcome).

NOTE: Devices which faithfully and mechanically create or display a game outcome selected by a computer RNG are not considered physical randomness devices and shall be tested as RNGs once the faithful reproduction of RNG selected outcome has been assured. Physical randomness devices may incorporate RNGs in secondary roles (e.g., rotation speed). Such secondary RNGs need not be evaluated against the RNG requirements contained herein, as they do not directly select the game outcome. Rather, the physical

randomness device shall be tested as a whole as described in this section.

NOTE: The approved components of a physical randomness devices cannot be swapped out or replaced with unapproved components, as they are integral to the behavior and performance of the physical randomness devices. The “approved components” in this context include those physical items that produce the random behavior – e.g., balls in a mixer, cards in a shuffler, etc. As one example, a shuffler certified by the independent test laboratory to utilize plastic cards cannot be viewed as an approved equivalent to the same mechanical shuffler using paper cards.

3.4.2 Data Collection

To provide best assurance of random behavior, the independent test laboratory shall collect game outcome data for at least 10,000 game outcomes. The data collection shall be accomplished in a fashion reasonably similar to the intended use of the device in the field. In particular, the recommended setup and calibration shall be executed initially, and the device and components (cards, balls, etc.) shall be replaced or serviced during the collection period as recommended by the manufacturer.

NOTE: Due to feasibility concerns associated with reasonable data collection on some devices, the regulatory body may elect to accept testing results from a smaller collection amount on a case-by-case basis. Equally possible, a larger data collection sample may be required. Regardless, the independent test laboratory will clearly state in the applicable certification, the amount of data used for testing. When less than 10,000 games are used, a statement on the statistical limitations of reduced testing will be clearly denoted within the certification report.

3.4.3 Durability

All mechanical pieces shall be constructed of materials to prevent degradation of any component over its intended lifespan.

NOTE: The independent test laboratory may recommend a stricter replacement schedule than that suggested by the manufacturer of the device to comply with the ‘Durability’ requirement stated above. In addition, the independent test laboratory may recommend periodic inspection of the device to ensure and maintain its integrity.

3.4.4 Tampering

The players and/or gaming attendants (e.g., dealers, croupiers, etc.) used in live games shall not have the ability to manipulate or influence the physical randomness devices in a physical manner with respect to the production of game outcome data, except as intended by game design.

Chapter 4: Game Requirements

4.1 Introduction

4.1.1 General Statement

This chapter sets forth the technical requirements for the player interface, rules of play, game fairness, game selection, game outcome, related player displays and artwork, payout percentages and odds, bonus/feature games, progressive jackpots, incrementing jackpots game recall, game modes, common features, games with skill, tournaments, and other game requirements.

NOTE: Please reference the “Games with Skill” section of this technical standard for specific and supplemental requirements for games containing one or more skill elements.

4.2 Player Interface

4.2.1 General Statement

The player interface is defined as an interface application or program through which the user views and/or interacts with the Player Software, including the touch screen(s), keyboard, mouse, or other forms of player interaction devices.

4.2.2 Player Interface Requirements

The player interface shall meet the following requirements:

- a) Any resizing or overlay of the player interface screen shall be mapped accurately to reflect the revised display and touch/click points.
- b) All player-selectable touch/click points or buttons represented on the player interface that impact game play and/or the integrity or outcome of the game shall be clearly labeled according to their function and shall operate in accordance with applicable game rules.
- c) There shall be no hidden or undocumented touch/click points or buttons anywhere on the player interface that affect game play and/or that impact the integrity or outcome of the game, except as provided for by the game rules.
- d) The display of the instructions and information shall be adapted to the player interface. For example, where a device uses technologies with a smaller display screen, it is permissible to present an abridged version of the game information accessible directly from within the game screen and make available the full/complete version of the game information via another method, such as a secondary screen, help screen, or other interface that is easily identified on the visual game screen.
- e) Where multiple items of instructions and information are displayed on the player interface, it is acceptable to have this information displayed in an alternating fashion provided that, the rate at which information alternates permits a player a reasonable opportunity to read each item.

4.2.3 Simultaneous Inputs

Simultaneous or sequential activation of various player interaction devices comprising a player interface shall not cause game malfunctions and shall not lead to results that are contrary to a game's design intent.

4.3 Gaming Session Requirements

4.3.1 General Statement

A gaming session is defined as the period of time commencing, at minimum, when a player initiates a game or series of games on a Gaming Platform for a particular game theme by committing a wager and ending at the time of a final game outcome for that game or series of games and coincident with the opportunity for the player to exit the game.

NOTE: This standard is not intended to preclude or prohibit designs that allow the simultaneous play of multiple games themes on a Gaming Platform. Where multiple game themes are accessible simultaneously, players may play more than one game at a time in separate gaming sessions. However, in such a case, metering and applicable limits shall be enforced against each available game, as it is played, and all other requirements within this chapter shall continue to apply to these multiple game-in-play designs.

4.3.2 Selection of Game

The following requirements apply to the selection of a specific game on the player interface:

- a) The Gaming Platform shall clearly inform the player of all games available for play.
- b) The player shall be made aware of which game theme has been selected for play and is being played.
- c) The player shall not be forced to play a game just by selecting a game theme, unless the game screen clearly indicates the game selection is unchangeable. If not disclosed, the player shall be able to return to the main menu or game chooser screen prior to committing a wager.
- d) The default game display upon entering game play mode from a main menu or game chooser screen, shall not correspond to the highest advertised award (unless that was the outcome of the player's last game play). This applies to the primary game only and not to any secondary bonuses/features.

4.3.3 Game Play Requirements

The following requirements apply to game play within a gaming session:

- a) A game cycle consists of all player actions and game play activity that occur from wager to wager. Game cycle initiation shall occur after the player:
 - i. Places a wager or commits a bet; and/or
 - ii. Presses a "play" button or performs a similar action to initiate a game in accordance with the rules of the game.
- b) Amounts wagered or committed at any point at the start of, or within the course of a game cycle

shall be subtracted from the player's credit meter or player account balance. A wager shall not be accepted that could cause the player to have a negative balance.

- c) The following game elements shall be considered to be part of a single game cycle:
 - i. Games that trigger a free game bonus/feature and any subsequent free games;
 - ii. "Second screen" bonuses/features;
 - iii. Games with player choice (e.g., draw poker or blackjack);
 - iv. Games where the rules permit wagering of additional credits (e.g., blackjack insurance, or the second part of a two-part keno game); and
 - v. Double-up/gamble features.
- d) A game cycle shall be considered complete when all funds wagered are lost or when the final transfer to the player's credit meter or player account balance takes place. The value of every award at the end of a game cycle is added to the player's credit meter or player account balance, except for merchandise and large payouts where required by the regulatory body.
- e) It shall not be possible to start a new game within the same gaming session before the current game cycle is completed and the funds available for wagering and the game history have been updated, including the game elements listed above, unless the action to start a new game terminates the current game in an orderly manner. Some exceptions may be granted in instances where, for example, if the operator elects to conduct offline, manual consideration of large payouts, or if a player chooses to continue gaming while a large payout is pending.

4.3.4 Information to be Displayed

A player interface shall display the following information within a gaming session, with the exception of when the player is viewing an informational screen such as a menu or help screen:

- a) Current funds available for wagering;
- b) Denomination being played (if applicable);
- c) Current wager amount and placement of all active wagers, or sufficient display information to otherwise derive these parameters;
- d) Any player wager options that occur prior to game initiation, or during the course of game play;
- e) For the last completed game, the following information until the next game starts, wager options are modified, or the player exits the game;
 - i. Accurate representation of the game outcome;
 - ii. Amount won; and
 - iii. Any player wager options in effect.

NOTE: It is acceptable for the information for the last completed game to be cleared before the above-mentioned conditions occur as long as the same information is clearly available to the player under the "Game Recall" section of this document.

4.3.5 Credit Meter

Depending on the implementation within the Gaming Platform, funds may be transferred from the player account balance to a credit meter for the gaming session. This may be automatic where the player account balance is automatically transferred to the credit meter or the Gaming Platform presents transfer options to the player, which require selection before occurring. Such options

would include how much the player wishes to transfer to the session's credit meter. Once play is complete the player shall have the option to transfer some or all of their funds back to their player account balance. Exiting a gaming session shall cause all funds to be automatically transferred back to their player account balance. Additionally, the credit meter, shall conform to the following requirements when in use:

- a) The credit meter shall be visible to the player at any time a wager may be placed, at any time a transfer to or from the player account balance is allowed, or at any time the meter is actively being incremented or decremented.
- b) The credit meter shall be displayed in credits or local currency format. If the game's credit meter allows for toggling between credits and currency, this functionality shall be easily understood by the player. The credit meter shall clearly indicate whether credits or currency are currently being displayed.
- c) If the current local currency amount is not an even multiple of the denomination for a game, or the credit amount has a fractional value, the credits displayed for that game may be displayed and played as a truncated amount, (i.e., fractional part removed). However, the fractional credit amount shall be made available to the player when the truncated credit balance is zero.
- d) If restricted incentive credits and unrestricted player funds are combined on one credit meter, restricted credits shall be wagered first, as allowed by the rules of the game, before any unrestricted player funds are wagered.

4.4 Game Information and Rules of Play

4.4.1 Game Information and Rules of Play

The following requirements apply to the game information, artwork, paytables, and help screens including any written, graphical, and auditory information provided to the player either directly from the player interface or from a page accessible to the player:

- a) Player interface and player interaction device usage instructions, payable information, and rules of play shall be complete and unambiguous and shall not be misleading or unfair to the player.
- b) Help screen information shall be accessible by a player without the need for funds deposited or commitment of a wager. This information shall include descriptions of unique game bonuses/features, extended play, free spins, double-up, autoplay, countdown timers, symbol transformations, community bonuses, progressive jackpots, incrementing jackpots, etc.).
- c) Minimum, maximum, and other available wagers shall be stated within, or be able to be deduced from, the artwork, with adequate instruction for any available wager option.
- d) Paytable information shall include all possible winning outcomes and combinations, along with their corresponding payouts, for any available modifiers and/or wager options.
- e) The artwork shall clearly indicate whether awards are designated in credits, currency, or some other unit.
- f) For artwork that contains game instructions explicitly advertising a credit award or merchandise prize, it shall be possible to win the advertised award/prize from a single game, or series of games enabled by an initiating game, when including bonuses/features, or other game options, or the artwork shall clearly specify the criteria necessary to win the advertised

award/prize.

- g) The game shall reflect any change in award value, which may occur during the course of play. This may be accomplished with a digital display in a conspicuous location of the player interface. The game shall clearly state the criteria for which any award value is modified.
- h) Game instructions that are presented aurally shall also be presented in written form within the artwork.
- i) Game instructions shall be rendered in a color that contrasts with the background color to ensure that all instructions are clearly visible/readable.
- j) The artwork shall clearly state the rules for payments of awards. If a specific winning combination is paid where multiple wins are possible, then the payment method shall be described.
 - i. The artwork shall clearly communicate the treatment of coinciding game outcomes. For example, whether or not a straight flush is construed as both a flush and a straight, or if 3/4/5 of a kind can be construed as paying all of kind or just the highest. Where a payline may be interpreted to have more than one such winning combination, there shall be a statement if only the highest winning combination is paid per line.
 - ii. Where the same symbol can qualify for a line pay and scatter pay simultaneously or where line and scatter pays occur simultaneously on the same line, the artwork shall indicate if the player will be paid for both wins, or the greater of the two.
 - iii. The artwork shall clearly communicate the treatment of coinciding scattered wins with respect to other possible scattered wins. For example, the artwork shall state whether combinations of scattered symbols pay all possible awards or only the highest award.
- k) Where multiplier instructions are displayed in artwork, it shall be clear what the multiplier does and does not apply to.
- l) All game symbols/objects shall be clearly displayed to the player and shall not be misleading.
 - i. Game instructions that specifically correspond to one or more symbols/awards, shall be clearly associated with those symbols/awards. For example, this may be achieved with appropriate framing or boxing. Additional wording such as “these symbols” may also be used.
 - ii. If game instructions refer to a particular symbol, and the written name for the symbol may be mistaken for another symbol, or may imply other characteristics, then the visual display of the instructions shall clearly indicate to which symbol the instruction refers.
 - iii. Game symbols and objects shall retain their shape throughout all artwork, except while animation is in progress. Any symbol that changes shape or color during an animation process shall not appear in a way that can be misinterpreted to be some other symbol defined in the paytable.
 - iv. If the function of a symbol changes (e.g., a non-substitute symbol becomes a substitute symbol during a feature), or the symbol’s appearance changes, the artwork shall clearly indicate this change of function or appearance and any special conditions that apply to it.
 - v. If limitations exist with respect to the location and/or appearance of any symbol, the limitation shall be disclosed in the artwork. For example, if a symbol is only available in a bonus game, or on a specific reel strip, then the artwork shall disclose this.
- m) The artwork shall clearly state which symbols/objects may act as a substitute or wild, and in which winning combinations the substitute or wild may be applied; this description shall address any/all phases of game play where a wild or substitute symbol operates.
- n) The artwork shall clearly state which symbols/objects may act as a scatter and in which

winning combinations the scatter may be applied.

- o) The artwork shall contain textual and/or graphical information to clearly explain the order in which symbols are to appear, in order for an award to be issued or a feature to be triggered, including numbers to indicate how many correct symbols/objects each pattern corresponds to.
- p) The game shall not advertise 'upcoming wins', for example, "three times pay coming soon", unless the advertisement is accurate and mathematically demonstrable, or unless the player has a direct advertisement of the current progress to that win (e.g., they have two of four tokens collected that are required to win an award).
- q) The game artwork shall clearly explain to the player any non-wager purchase option and its value in credits or local currency.
- r) The artwork shall disclose any restrictive features of game play, such as any play duration limits, maximum win values, etc. which are implemented as an element of game design.
- s) There shall be sufficient information regarding any award payout adjustments such as a rake, commission, or fee taken by the operator, as applicable.

4.4.2 Multi-Wager Games

The following requirements shall apply, as relevant to the specific game design, to games where multiple, independent wagers can simultaneously be applied towards advertised awards:

- a) Each individual wager placed shall be clearly indicated so that the player is in no doubt as to which wagers have been made and the credits bet per wager;
- b) The winning amount for each separate wager, and total winning amount, shall be displayed on the game screen; and
- c) Each winning award obtained shall be displayed to the player in a way that clearly associates the award to the appropriate wager. Where there are wins associated with multiple wagers, each winning wager may be indicated in turn. In cases where there is a multitude of wager information to convey, a summary screen may suffice. Any exceptions will be reviewed by the independent test laboratory on a case-by-case basis.

4.4.3 Line Games

The following requirements apply, as relevant to the specific game design, to line games:

- a) For multi-line games, the game shall provide a summary display of the paylines that are available to form winning combinations;
- b) Each individual line to be played shall be clearly indicated by the game so that the player is in no doubt as to which lines are being wagered upon. Displaying the number of wagered lines shall be sufficient to meet this requirement;
- c) For games that permit multiple credits to be wagered on selected lines, the artwork shall:
 - i. For linear pays, clearly state that the win(s) for each selected line will be multiplied by the bet multiplier; or
 - ii. For non-linear pays, convey all possible wagers and their awards;
- d) The bet multiplier shall be shown. It is acceptable if this may be easily derived from other displayed information;
- e) The artwork shall indicate any rules and/or limitations which pertain to how pays are

evaluated, including an indication of:

- i. How line wins are evaluated (i.e., left to right, right to left, or both ways);
 - ii. How individual symbols are evaluated (i.e., whether pays are awarded on adjacent reels only, or as scatter pays); and
- f) Winning paylines shall be clearly discernible to the player. Where there are wins on multiple lines, each winning payline shall be indicated in turn. This requirement shall not preclude other intuitive methods of displaying line wins such as the grouping of common win types, nor shall it prohibit a player option to bypass a detailed outcome display of line wins, where supported.

4.4.4 Card Games

The following requirements apply, as relevant to the specific game design, to games depicting cards being drawn from one or more card decks:

- a) At the start of each game and/or hand, the cards shall be drawn from a randomly shuffled deck(s). It is acceptable to draw random numbers for replacement cards at the time of the first hand's random number draw, provided that the replacement cards are sequentially used as needed, and so long as any stored RNG values are encrypted;
- b) Cards once removed from the deck(s) shall not be returned to the deck(s) except as provided by the rules of the game;
- c) The deck(s) shall not be reshuffled except as provided by the rules of the game;
- d) The game shall alert the player as to the number of cards in a deck and the number of decks in play;
- e) Card faces shall clearly display the card value and the suit; and
- f) Jokers and wild cards shall be distinguishable from all other cards.

4.4.5 Poker Games

The following requirements apply, as relevant to the specific game design, to simulations of poker games:

- a) The artwork shall provide clear indication of what variant of poker is being played and the rules that apply;
- b) Wild card rules shall be clearly explained in the help screens; and
- c) Held and non-held cards, including recommended holds where allowed, shall be clearly marked on the screen. The method for changing a selected card state shall be clearly displayed to the player.

4.4.6 Blackjack Games

The following requirements apply, as relevant to the specific game design, to simulations of blackjack games:

- a) Insurance rules shall be clearly explained, if insurance is available;
- b) Pair split rules shall be explained to include:
 - i. Split aces have only one card dealt to each ace, if this is the game rule;

- ii. Further splits, if available;
- iii. Double-down after splits, if available;
- c) Double-down rules shall be clearly explained, including limitations of which totals may allow a double-down to be selected;
- d) Any limits on the number of cards that may be drawn by player and/or dealer shall be explained, including winners declared (if any) when the limit is reached (e.g., five under wins);
- e) Surrender rules, if any, shall be explained;
- f) If pair splits have occurred, the results for each hand shall be shown (e.g., total points, resultant win or loss category, amount won, amount wagered);
- g) Special rules, if any, shall be clearly explained; and
- h) All player options that are available at any point in time shall be shown in the artwork.

4.4.7 Roulette Games

The following requirements apply, as relevant to the specific game design, to simulations of roulette games:

- a) The method of selecting individual wagers shall be explained by the game rules;
- b) The wager(s) already selected by the player shall be displayed on the screen; and
- c) The result of each spin of the roulette wheel shall be clearly shown to the player.

4.4.8 Dice Games

The following requirements apply, as relevant to the specific game design, to simulations of dice games:

- a) Each die face shall clearly show the number of spots or other indication of the face value;
- b) It shall be obvious which is the up face on each die, after the dice are thrown; and
- c) The result of each die shall be clearly visible or displayed.

4.4.9 Sports/Racing Games

The following requirements apply, as relevant to the specific game design, to simulations of sports or racing games:

- a) Each participant in a game shall be unique in appearance, where applicable to the wager;
- b) The results of a game shall be clear and not open to misinterpretation by the player;
- c) If awards are to be paid for combinations involving participants other than solely the first-place finisher, the order of the participants that can be involved with these awards shall be clearly shown on the screen (e.g., result 8-4-7); and
- d) The rules for any exotic wagering options (e.g., perfecta, trifecta, quinella, etc.), and the expected payouts, shall be clearly explained in the artwork.

4.4.10 Ball/Number Drawing Games

The following requirements apply, as relevant to the specific game design, to games depicting balls

or numbers being drawn from a pool:

- a) Simulated balls/numbers shall be drawn from a randomly mixed pool consisting of the full set of balls/numbers applicable to the game rules;
- b) At the start of each game, only the balls/numbers applicable to the game are to be depicted. For games with bonuses/features and additional balls/numbers that are selected, they shall be chosen from the original selection unless otherwise allowed for by the game rules;
- c) The pool shall not be re-mixed except as provided by the rules of the game depicted; and
- d) All balls/numbers drawn shall be clearly displayed to the player.

4.4.11 Keno/Bingo/Lottery Games

The following requirements apply, as relevant to the specific game design, to simulations of keno, bingo, or lottery games, where balls or numbers are drawn, and a player tries to pick in advance which of the balls/numbers will be selected:

- a) All of the player's selections shall be clearly identified directly on the game screen. Where the game uses multiple player cards, it is acceptable for the player's selections to be accessible by flipping or switching through the cards;
- b) The drawn numbers shall be clearly identified on the screen;
- c) The game shall highlight numbers drawn which match the player's selections;
- d) Special hits, if any, shall be clearly identified;
- e) The screen shall provide clear indication of how many spots were selected and how many hits were achieved; and
- f) Rules for purchase of additional features of the game, if any, shall be explained.

4.4.12 Scratch Ticket Games

The following requirements apply, as relevant to the specific game design, to simulations of scratch ticket games, where an electronic scratch ticket is purchased by the player:

- a) Electronic scratch ticket games shall rely on randomness as opposed to player skill;
- b) A precise definition of which player choices are required to complete the game shall be shown on the artwork;
- c) For games that leverage popular real-life themes (cards, dice, etc.), but do not mirror actual game play and probabilities a disclaimer shall be added to the artwork that states outcomes are not distributed with the probabilities that would typically be expected from this game; and
- d) After the player purchases an electronic scratch ticket, the outcome and prize of the game shall be revealed to the player. The player may or may not have to interact with the electronic scratch ticket to reveal the win/loss results, as required by the regulatory body.

4.4.13 Multi-Player Games

The following requirements apply, as relevant to the specific game design, to multi-player games:

- a) The multi-player game shall be designed such that the actions of or results obtained by any one

player do not affect the outcome(s) of any other player, unless otherwise denoted by the game rules; and

- b) There shall be a method provided by a multi-player game for each player to know when the next game will begin.

NOTE: Please reference the “Peer-to-Peer (P2P) Gaming Sessions” section of this chapter for specific and supplemental requirements for multi-player games where players compete against one another.

4.5 Game Outcome Using a Random Number Generator (RNG)

4.5.1 RNG and Evaluation of Game Outcome

The evaluation of game outcome using an RNG shall comply with the following rules:

- a) Where more than one RNG is used to determine different game outcomes, each RNG shall be separately evaluated; and
- b) Where each instance of an RNG is identical, but involves a different implementation within the game, each implementation shall be separately evaluated.

4.5.2 Game Selection Process

Determination of events of chance that result in a monetary award shall not be influenced, affected, or controlled by anything other than the values selected by an approved RNG, in accordance with the following requirements:

- a) When making calls to the RNG, the game shall not limit the outcomes available for selection, except as provided for by game design;
- b) The game shall not modify or discard outcomes selected by the RNG due to adaptive behavior. Additionally, outcomes shall be used as directed by the rules of the game;
- c) After selection of the game outcome, the game shall not display a “near miss” where it makes a variable secondary decision which affects the result shown to the player. For example, if the RNG chooses a losing outcome, the game shall not substitute a different losing outcome to show to the player than that originally selected;
- d) Except as provided for by the rules of the game, events of chance shall be independent and shall not correlate with any other events within the same game, or events within previous games:
 - i. A game shall not adjust the likelihood of a bonus/feature occurring, based on the history of awards obtained in previous games;
 - ii. A game shall not adapt its theoretical return to the player based on past payouts;
- e) Any associated equipment used in conjunction with a Gaming Platform shall not influence or modify the behaviors of the game’s RNG and/or random selection process, except as authorized, or intended by design; and
- f) Events of chance shall not be affected by the effective bandwidth, link utilization, bit error rate or other characteristic of the communications channel between the Gaming Platform and the Remote Player Device. The player shall be informed where these characteristics may have, or appear to have, any other effect on the game, such as in decision making where speed is a factor, the update of the jackpot displays, or disconnection from multi-player games.

4.6 Game Fairness

4.6.1 Game Fairness

The following requirements shall apply to the fairness of the game:

- a) Games that are designed to give a player the perception that they have control over the outcome of the game due to skill or dexterity, when they actually do not (i.e., the game outcome is random, and the illusion of skill is for entertainment value only), shall fully disclose this fact within the game help screens. This does not apply to games that have no basis for skill and/or where no strategy applies. An example would be a simple pick-a-bonus game, where it is obvious to the player that the outcome is chance-based;
- b) Games shall not include any hidden source code that can be leveraged by a player to circumvent the rules of play and/or the intended behaviors of game design; this requirement shall not preclude reasonably identifiable “discovery features” offered by a game which are intentional from a design perspective, but which may be undocumented or unknown to the player; and
- c) The final outcome of each game shall be displayed for a sufficient length of time that permits a player a reasonable opportunity to verify the outcome of the game; this requirement shall not preclude an option for the player to bypass the outcome display.

4.6.2 Simulation of Physical Objects

Where a game incorporates a graphical representation or simulation of a physical object that is used to determine game outcome, the behaviors portrayed by the simulation shall be consistent with the real-world object, unless otherwise denoted by the game artwork. This requirement does not apply to graphical representations or simulations that are utilized for entertainment purposes only. The following shall apply to the simulation:

- a) The probability of any event occurring in the simulation that affects the outcome of the game shall be analogous to the properties of the physical object, unless otherwise disclosed to the player;
- b) Where the game simulates multiple physical objects that would normally be expected to be independent of one another based on the rules of the game, each simulation shall be independent of any other simulations; and
- c) Where the game simulates physical objects that have no memory of previous events, the behavior of the simulated objects shall be independent of their previous behavior, so as to be non-adaptive and non-predictable, unless otherwise disclosed to the player.

4.6.3 Physics Engine

Games may utilize a “physics engine” which is specialized software that approximates or simulates a physical environment, including behaviors such as motion, gravity, speed, acceleration, inertia, trajectory, etc. A physics engine shall be designed to maintain consistent play behaviors and game play environment unless an indication is otherwise provided to the player by the game artwork. A physics engine may utilize the random properties of an RNG to impact game outcome, in which

case, the “Random Number Generator (RNG) Requirements” shall apply.

NOTE: Implementations of a physics engine in a game will be evaluated on a case-by-case basis by the independent test laboratory.

4.6.4 Live Game Correlation

Unless otherwise denoted in the game artwork, where the Gaming Platform offers a game that is recognizable as a simulation of a live casino game such as poker, blackjack, roulette, etc., the same probabilities associated with the live game shall be evident in the simulated game. For example, the odds of getting any particular number in roulette where there is a single zero (0) and a double zero (00) on the wheel, shall be 1 in 38; the odds of drawing a specific card or cards in poker shall be the same as in the live game.

4.6.5 Random Event Probability

For games that incorporate a random event or an element of chance that affects the outcome, the mathematical probability of any chance event occurring for a paid game shall be constant, unless otherwise denoted by the game artwork.

4.7 Game Payout Percentages, Odds, and Non-Cash Awards

4.7.1 Software Requirements for Percentage Payout

Each house-banked game shall theoretically payout a minimum of seventy-five percent (75%) during the expected lifetime of the game unless otherwise specified by the regulatory body. Progressive jackpots, incrementing jackpots, incentive awards, merchandise, etc. shall not be included in the percentage payout if they are external to the game, unless required for operation.

- a) The minimum percentage requirement shall be met for all wagering configurations. If a game is continuously played at any single bet level, line configuration, etc. for the life of the game, the minimum percentage requirement shall be satisfied.
- b) Games that may be affected by player skill shall meet the minimum percentage requirement when using an optimal method of play that provides the greatest return to the player over a period of continuous play.
- c) For progressive jackpots and incrementing jackpots used in the return to player (RTP) calculations for the game, the minimum percentage requirement shall be met using the lowest available parameters for the jackpot during the expected lifetime of the game.
- d) Where allowed by the regulatory body for games in which the above minimum percentage requirements are not met (e.g., electronic scratch ticket games or lottery games), the minimum RTP of the game shall be displayed to the player and shall meet the “Return to Player (RTP) Display” requirements.

NOTE: At the discretion of the regulatory body, the independent test laboratory can apply an alternative approach to return percentage calculations.

4.7.2 Return to Player (RTP) Display

At its discretion, a regulatory body may elect to require the artwork to contain the RTP for each house-banked game. If the RTP is displayed, the following requirements shall be met:

- a) The artwork shall fully explain how the displayed RTP was determined (i.e., minimum, maximum, average, etc.) and thus how the player may realize it (i.e., wager requirements).
- b) For games that may be affected by player skill, the displayed RTP shall be based on a strategy specifically advertised in the game rules or an optimal strategy that is derivable from the game rules.
- c) For games that offer progressive jackpots or incrementing jackpots, limited time awards, or other bonuses/features, the variable contribution of such awards to the displayed RTP shall be clearly disclosed.
- d) For games that offer bonus/feature games which require extra credits to be wagered, the displayed RTP shall consider that an additional wager was placed unless otherwise advertised.
- e) If the displayed RTP represents the actual RTP, the number of game plays associated with that calculation shall be advertised along with the period with which the game plays took place.

4.7.3 Odds

The odds of achieving the highest advertised award that is based solely upon chance shall occur at least once in one hundred million (100,000,000) games, unless the game artwork prominently displays the actual odds of that award to the player. This does not apply to multiple awards won together on the same game where the aggregate prize is not advertised. This odds rule shall not apply to games which make it possible for a player to win the highest advertised award multiple times through the use of a bonus/feature. This rule shall apply to all wager categories that can win the highest advertised award. If the highest advertised award can occur within a bonus/feature, the odds calculation shall include the odds of obtaining the bonus/feature including the odds to achieve the award. This rule does not apply towards incentive awards.

4.7.4 Limitations on Awards

Limitations on the award amounts in lieu of merchandise, annuities, or payment plans shall be clearly explained to the player on the game theme that is offering such a prize.

4.8 Bonus/Feature Requirements

4.8.1 Bonus/Feature Games

Games which offer a bonus/feature shall meet the following requirements:

- a) A game which offers a bonus/feature, other than those that occur randomly, shall display to the player sufficient information to indicate the current status towards the triggering of the next bonus/feature;
- b) If a game requires obtaining several achievements towards the activation of a bonus/feature, or the issuance of an award, the number of achievements needed to trigger the bonus/feature, or

- win the award, shall be indicated, along with the number collected at any point;
- c) The game shall make it clear to the player that they are in a bonus/feature mode;
 - d) If a game offers a bonus/feature which allows the player to hold one or more reels/cards/symbols for the purpose of a re-spin or draw, then the held reels/cards/symbols shall be clearly indicated and the method for changing holds shall be clearly explained to the player;
 - e) If a bonus/feature is triggered after accruing a certain number of events/symbols or combination of events/symbols of a different kind over multiple games, the probability of obtaining like events/symbols shall not deteriorate as the bonus/feature progresses, unless otherwise disclosed to the player; and
 - f) If a bonus/feature consists of multiple events or spins, then a counter shall be maintained and displayed to the player to indicate the number of spins initially awarded and the number of spins remaining during bonus/feature play, or alternatively, the number of spins that have been played.

4.8.2 Player Selection or Interaction in a Bonus/Feature

Games which offer a bonus/feature which requires player selection or interaction are prohibited from automatically making selections or initiating the bonus/feature, unless the game meets one of the requirements listed below and explains the mechanism for automatic initiation or selection in the artwork:

- a) The player is presented with a choice and specifically acknowledges their intent to have the game auto-initiate the bonus/feature by means of a button press or another player interaction;
- b) The bonus/feature provides only one choice to the player, i.e., press button to spin wheel. In this case, the bonus/feature may auto-initiate after a time out period of at least two minutes; or
- c) The bonus/feature is offered as part of a community bonus that involves two or more players and where the delay of an offered selection or game initiation will directly impact the ability for other players to continue their bonus/feature. Prior to automatically making selections or initiating a community bonus the player shall be made aware of the time remaining in which they shall make their selection or initiate play.

4.8.3 Extra Credits Wagered During a Bonus/Feature

If a bonus/feature in progress requires extra funds to be wagered in order to continue, the player shall be provided an opportunity not to participate. If all winnings from the game in progress are accumulated to a temporary “win” meter, rather than directly to the credit meter or player account balance, the game shall:

- a) Provide a means where winnings on the temporary “win” meter can be wagered (i.e., add funds to the credit meter or player account balance) to allow for instances where the player has an insufficient amount of funds available to complete the bonus/feature, or allow the player to add funds to the credit meter or player account balance; and
- b) Transfer all funds on the temporary “win” meter to the credit meter or player account balance upon completion of the bonus/feature.

4.8.4 Community Bonuses

Community bonuses, where players collaborate and/or compete for a shared award, shall:

- a) Contain an appropriate description of the rules governing each community bonus, each payout and any conditions regarding player eligibility for the community bonus award(s);
- b) Continuously and conspicuously display the player's eligibility for a community bonus, regardless of the number of credits on the game. For example, if the player has thirty seconds of eligibility time remaining but has run out of credits, the game will continue to display and count down the seconds remaining; and
- c) For community bonuses not dependent on the number of credits available, alert the player of their continued eligibility regardless of whether the player has credits remaining on the game.

4.8.5 Double-Up/Gamble Features

The following requirements apply to games which offer some form of a double-up/gamble feature. Such games may use alternative terminology such as "Triple-Up" or "Take-or-Risk" to describe a double-up/gamble feature:

- a) All double-up/gamble feature instructions shall be fully disclosed in the game's artwork and shall be accessible without committing to the feature;
- b) Entry to a double-up/gamble feature shall only occur upon completion of a winning primary game;
- c) The player shall have a choice as to whether or not they want to participate in the double-up/gamble feature;
- d) The double-up/gamble feature shall have a theoretical return to the player of one hundred percent (100%);
- e) The maximum number of double-ups/gambles available shall be clearly stated, or as a suitable alternative, the award limit for double-up/gamble shall be disclosed to the player;
- f) Only credits won on the primary game shall be available for wagering on a double-up/gamble feature (i.e., it is not possible to wager any funds from the credit meter or player account balance on double-up/gamble);
- g) When the double-up/gamble feature is discontinued automatically before reaching the maximum number of double-ups/gambles available, the reason shall be clearly stated;
- h) Any game conditions during which the double-up/gamble feature is not available shall be specified;
- i) If a double-up/gamble feature offers a choice of multipliers, it shall be clear to the player what the range of choices and payouts are; and
- j) If the player selects a multiplier for a double-up/gamble feature, it shall be clearly stated on the screen which multiplier has been selected.

4.8.6 Mystery Award Features

A mystery award is an award paid by a game that is not associated with a specific payable combination. It is acceptable for games to offer a mystery award; however, the game artwork shall indicate the minimum and maximum amounts that the player could potentially win. If the minimum

amount that could potentially be awarded is zero, then it is not required to be explicitly displayed. If the value of the mystery award depends on credits wagered, or any other factors, the conditions shall be clearly stated.

4.9 Alternative Game Modes

4.9.1 Free Play Mode

Free play mode allows a player to participate in a game without placing a wager. If the game supports a free play mode of operation, the following requirements apply:

- a) Free play games shall accurately represent the normal operation of a paid game. Games played in free play mode shall not mislead the player about the likelihood of winning any awards available in the wagered version of the game;
- b) Free play mode shall be prominently displayed so a player knows at all times if/when this mode is active;
- c) Free play mode shall not increment the credit meter or the player account balance. Specific meters are permissible for this mode provided the meters clearly indicate as such;
- d) Free play mode shall be terminated whenever the player opts to exit this mode, or when the free play game(s) are concluded; and
- e) When free play mode is exited, the game shall return to its previous state.

NOTE: Paid games which may be played with credits received from an incentive award are not considered free play games.

4.9.2 Autoplay Mode

Autoplay mode allows a game to place wagers automatically without player interaction, once a denomination, wager, and other play attributes have been selected by the player. If the game supports an autoplay mode, the following rules apply:

- a) Autoplay mode shall be securely controlled using a function that either allows or disallows the feature, reflective of jurisdictional preference;
- b) Autoplay mode may allow the player to choose the individual game wager, the number of autoplay wagers, and/or the total amount to be wagered;
 - i. All player-defined thresholds shall remain in effect for the duration of autoplay;
 - ii. The game shall display the number of autoplay wagers remaining or the number used, reflective of a player-defined threshold;
 - iii. Autoplay mode shall end automatically and return to manual game play when player-defined thresholds are reached;
- c) Autoplay mode shall offer the player an option to terminate autoplay mode at the completion of a current game, regardless of how many autoplay wagers they initially chose or how many remain; and
- d) If player options are supported for autoplay mode, these options shall default to the manual mode of game play.

4.9.3 Tournament Mode

Tournament mode allows a player to engage in competitive play against other players in an organized, measured event. Play during tournament mode may be in-revenue or out-of-revenue. If the game supports a specific tournament mode, which is separate from regular game play, the following requirements apply:

- a) All of the rules within the “Contests/Tournaments” section of this document shall be disclosed to the player;
- b) The player shall be provided with an option on whether or not to participate. If/when opting in, the player shall be able to complete their non-tournament game prior to entering the tournament mode of play, unless the Gaming Platform supports simultaneous tournament and non-tournament modes of play;
- c) A message shall be prominently displayed on the game informing the player that it is operating in a tournament mode;
- d) For out-of-revenue tournaments, the game shall not accept real money from any source, nor pay out real money in any way. The tournament mode shall utilize tournament-specific credits, points, or chips which shall have no cash value;
- e) For time-based tournaments, a timer shall be displayed to players to indicate the remaining period of play. If a tournament is based on some extended duration of play or is initiated or concluded based upon the occurrence of a specific event, then this information shall be disclosed to the players;
- f) At the conclusion of the tournament, the player rankings shall be displayed, and the winner(s) notified;
- g) When exiting tournament mode, the game shall return to the original state it was in prior to entering the tournament mode; and
- h) Any tournament-specific game meters displayed to the player on the game shall be automatically cleared when the tournament mode is exited.

4.10 Games with Skill

4.10.1 General Statement

A game with skill contains one or more elements in its design which can be leveraged by a player to impact the return percentage. Skill means the human attributes of a player such as knowledge, dexterity, visual recognition, logic, memory, reaction, strength, agility, athleticism, hand-to-eye coordination, numerical and/or lexical ability, or any other ability or expertise relevant to game play. The requirements defined within this section shall apply to games with skill to ensure player fairness and clarity with respect to player notification.

NOTE: This technical standard is not intended to classify a game as a “skill game” or to serve as a legal basis for game classification within the context of skill. Such classifications will be subject to interpretation by the regulatory body.

4.10.2 Display for Games with Skill

A game with skill shall conform to the applicable display requirements found in related sections of this standard for “Game Information and Rules of Play”, “Information to be Displayed”, and “Game Fairness”. In addition, any game with skill other than traditional casino games (e.g., poker, blackjack, etc.) shall prominently disclose that the outcome is affected by player skill. This disclosure shall be prominently displayed on the game prior to committing a wager.

4.10.3 Virtual Opponent

A game with skill may offer a player the opportunity to compete against a virtual opponent provided that the Gaming Platform:

- a) Clearly and prominently discloses when a virtual opponent is participating; and
- b) Prevents the virtual opponent from utilizing privileged information of the live player upon which a decision is made, unless otherwise disclosed to the player.

4.10.4 Outcome for Games with Skill

Except as otherwise disclosed to the player, once a game with skill is initiated, no function of the game related to game outcome shall be altered during play. Additionally, in the event that available paytables or rules of play change between games, notice of the change shall be prominently displayed to the player through the game artwork and shall provide adequate information so a player can make an informed decision. An example of the latter case might be the use of an identifier to change the paytables available to the player during the course of play.

4.10.5 Odds for Skill-Based Awards

If the highest advertised award is a skill-based award, it shall be available to be achieved by a player. If this skill-based award incorporates an element of chance, the opportunity to achieve the award shall meet the “Odds” requirement specified earlier in this chapter.

4.10.6 Player Advice Features

A game with skill may support a feature that offers advice, hints, or suggestions to a player. An illustrative example might be a trivia game that provides hints, clues, or other player assistance in making a selection. A game with skill may support player advice features provided that it conforms to the following requirements:

- a) The player advice feature shall clearly describe to the player that it is available and what options exist for selection;
- b) Any player advice that is offered to the player for purchase shall clearly disclose the cost and benefit;
- c) The player advice shall not be misleading or inaccurate, and shall reflect the rules of play for the game, while noting that the game rules may change as a function of the advice offered, providing any such changes are disclosed to the player prior to acceptance of the advice;
- d) The game design shall prevent access to any “information store” such that data related to the skill element is not readily available through software tampering (for example, a trivia game

- shall prevent access to an answers database);
- e) The player advice feature shall allow the player the option of accepting the advice, and shall not force the player to accept the assistance unless it reflects the only possible option for the player to pursue at the time; and
 - f) The availability and content of player advice shall remain consistent unless otherwise disclosed and shall not adapt in a way that disadvantages the player based upon prior game play or game events.

NOTE: It is recommended that the Gaming Platform support a secure option to enable or disable player advice to accommodate regulatory bodies that may either allow or prohibit this type of feature.

4.10.7 Player Interaction Devices Used with Games Containing Skill

If unique player interaction devices (e.g., joysticks, game controllers, camera systems, sound systems, motion sensors, image sensors, accelerometers, etc.) are employed by the game to support skill, then the game with skill shall provide adequate and clear instruction on their purpose, usage, and effect. If there are multiple player interaction devices able to affect the same player action involving skill, then all such options shall be clearly explained to the player.

4.11 Peer-to-Peer (P2P) Gaming

4.11.1 P2P Gaming Sessions

Peer-to-Peer (P2P) gaming sessions are environments which offer players the opportunity to play with and against each other. In these environments, the operator usually does not engage in the P2P gaming session as a party (e.g., house-banked gaming), but usually provides the environment for use by its players, and may take a rake, commission, or fee for the service. The following requirements apply:

- a) Players shall be prevented from occupying more than one position in any P2P gaming session unless authorized by the rules of the game;
- b) Players shall be provided with the option to join a P2P gaming session where all players have been selected at random;
- c) Any players that are playing with house money (shills) or are proposition players shall be clearly indicated to all other players in that P2P gaming session; and
- d) Players shall be provided with warnings where the use of bots or other unauthorized player software can affect play so that they can make an informed decision whether to participate.

4.11.2 P2P Advantage Feature

A P2P gaming session may contain a feature that allows a player or players to gain an advantage over other players provided that the game:

- a) Clearly describes to all players that the feature is available and the advantage it offers;
- b) Discloses the method for obtaining the feature, including any required wager; and
- c) Provides players with sufficient information to make an informed decision, prior to game play,

as to whether or not to compete against other player(s) who may possess such a feature.

4.11.3 “Away from Play” Status

The Gaming Platform shall support an “Away from Play” status which can be triggered either by player request or upon a period of inactivity, which shall be disclosed to the player and be less than or equal to the inactivity timeout period specified under the “Player Inactivity” section of this document. This status shall be fully described in the help screens or applicable gaming rules.

- a) The player shall be informed when the “Away from Play” status is triggered.
- b) The “Away from Play” status shall disallow all play and cause the player’s turn to be automatically skipped during any round of play which takes place while this status is active.
- c) If the “Away from Play” status is triggered during the middle of a game, that game shall be treated as an interrupted game and meet the requirements under the section entitled “Completion of Interrupted Games”.
- d) If a player performs any game sensitive action while in an “Away from Play” status (i.e., selecting an amount to wager, etc.), the status shall be removed, and the player will be enrolled into the next game. Non-game sensitive actions, such as accessing the help menu do not require this status to be removed.
- e) If a player has been in “Away from Play” status for more than a period of time disclosed to the player, the player shall be automatically removed from the P2P gaming session they are currently enrolled in.

4.12 Persistence Games

4.12.1 General Statement

A persistence game is associated with a unique attribute (e.g., player ID, game theme/paytable ID, etc.) and incorporates a feature that enables progress towards the award of game play enhancements and/or bonuses through the achievement of some designated game outcome. These additional offerings become available when the player has achieved specific thresholds defined for game play. Each designated outcome advances the state of the persistence game. Multiple plays of a game are usually necessary to trigger the persistence award.

4.12.2 Persistence Game Thresholds

A persistence game shall recognize a particular attribute for the purpose of restoring previously earned thresholds during each subsequent visit to a game. A persistence game shall contain in its help screens, a clear description of each persistence game-related feature and/or function, and the requirements for achieving persistence game thresholds, as well as information regarding how the player restores previously earned thresholds. Additionally, players shall be notified each time a persistence game threshold has been achieved.

4.12.3 Play from Save

Play from save is a feature utilized in some persistence game designs where complexity increases,

or additional elements are added to the game, as play continues. Additionally, play from save allows the player to save a persistence game at critical points (i.e., save points), typically after some accomplishment or goal has been achieved. The player can resume game play from that point at a later date and continue on to the next goal. The following requirements apply to play from save:

- a) Awards issued or made available for reaching a save point shall be clearly defined and displayed to the player prior to placing any wager. If a random type award may be won, the details and all possible payouts shall be displayed to the player;
- b) The game shall provide a suitable notification to the player whenever a designated save point is reached during play;
- c) If game rules or awards change as different levels are reached during play from save activity, these changes shall be clearly displayed to the player; and
- d) If the play from save state is not indefinitely maintained, then the game shall provide an indication to the player of any limitation and/or expiration of saved data that is stored for use in supporting game play at a later period in time.

4.13 Progressive Jackpots and Incrementing Jackpots

4.13.1 General Statement

This section applies to monetary jackpot awards or “payoffs” which increase based on game play as follows:

- a) Progressive jackpots awards increase according to the credits wagered in the game.
- b) Incrementing jackpots awards behave identically as progressive jackpots, except they increase based on the occurrence of one or more specific conditions (defined events) established by the rules of the game instead of, or in addition to, increases based on credits wagered.

NOTE: This section does not apply to awards of restrictive incentive credits, bonuses/features which offer awards which may increase over a single game cycle or, static awards whose probabilities of triggering change as the game is played. This section also does not apply to persistence game features which increase as the game is played (e.g., number of free games, multipliers, several achievements towards the activation of a bonus/feature or the issuance of an award, etc.) or “levels” of static awards available to be won based on player experience and/or achievements.

4.13.2 Jackpot Display

The jackpot display is used to indicate the current jackpot award amount or “payoff” for each jackpot in credits or the local currency format to all players who are playing a game which may potentially trigger the jackpot. If the jackpot offers a “mystery payoff” where the actual payoff is not displayed to the player, the “Mystery Award Features” shall apply.

- a) As games are played, the current payoff for each jackpot shall be updated on the jackpot display at least every thirty seconds from the incrementing game event to reasonably reflect the actual size of the payoff. The use of odometer and other “paced” updating displays are allowed.
- b) Where the jackpot display has a maximum display limitation (i.e., it could only display a certain

number of digits), a maximum payoff limit or “ceiling” shall be required and shall meet the requirements for “Maximum Payoff Limits”.

NOTE: The payoff(s) shall be displayed as accurately as possible within the constraints of communication delays and latencies.

4.13.3 Maximum Payoff Limits

If a maximum payoff limit or “ceiling” is supported by the jackpot, once the payoff reaches its ceiling, it shall remain at that value until awarded to a player.

- a) Where required by the regulatory body, all additional contributions shall be credited to an overflow or diversion pool.
- b) Where disclosed to the player in the artwork, the displayed ceiling amount shall be accurate.

4.13.4 Linked Odds

For jackpots linked to multiple game themes, unless otherwise clearly disclosed to the player, the probability of winning the linked jackpot shall be proportional to the player’s monetary wager.

NOTE: For the purposes of this requirement, a variance is acceptable of no greater than five percent (5%) for probability and no greater than a one percent (1%) tolerance on the expected RTP calculation.

4.13.5 Jackpot Diversion

Where allowed by the regulatory body, a Jackpot Diversion Scheme may be used, where a portion of the jackpot contributions are diverted to another pool or “diversion pool” to be used as needed by the design of the jackpot (e.g., the diversion pool may be added to the reset value of the next jackpot or be used to pay simultaneous wins of a jackpot).

- a) A Jackpot Diversion Scheme shall be able to be implemented such that it does not have a mathematical expectation of infinity.
- b) Diversion pools shall not be truncated. Diverted contributions once that diversion pool has reached its upper limit shall be accounted for.
- c) Where a diversion pool is used to fund the reset value of a jackpot, the reset value shall assume an empty diversion pool for the purposes of RTP calculations.

4.13.6 Jackpot Wins

Jackpots may be awarded based on obtaining winning symbols, or by other criteria, such as mystery-triggered jackpots, bad-beat jackpots, etc. When a jackpot is triggered:

- a) A winning player shall be notified of a jackpot win, and its payoff, by the end of the game in play.
- b) Contributions toward the jackpot shall not be lost. Jackpot payoffs when awarded shall not be rounded down or truncated unless carried over to the reset amount.
- c) When in use, the jackpot payoff may be added to the player’s credit meter if either:

- i. The credit meter is maintained in the local currency amount format;
 - ii. The jackpot payoff is incremented in whole credit amounts; or
 - iii. The jackpot payoff in local currency amount format is converted properly to credits upon transfer to the credit meter in a manner that does not mislead the player.
- d) The jackpot payoff shall update to the reset value and continue normal operations.

NOTE: A jackpot may be disabled or decommissioned concurrent with the winning of the jackpot if the game was configured to automatically disable or establish in its place an award which does not increment.

4.13.7 Swapping Jackpot Levels

For jackpots offering multiple levels of awards, when a single winning combination may be evaluated as more than one of the available payable combinations, unless otherwise explicitly defined in the game rules, the player shall always be paid the highest possible value based on all combinations to which the outcome may correlate (e.g., if “Jackpot A” is awarded for five aces on a payline and “Jackpot B” is awarded for four aces on a payline, and “Jackpot B” has a larger award than “Jackpot A”, the player shall be awarded the payoff for “Jackpot B” if the player obtains an outcome of five aces on a payline).

4.13.8 Mystery-Triggered Jackpots

For mystery-triggered jackpots which use a hidden trigger amount to determine the when the jackpot is awarded:

- a) The hidden trigger amount shall be set randomly upon each jackpot reset and shall remain unknown at all times; and
- b) It shall not be possible to gain access to or knowledge of the hidden trigger amount at any time.

4.13.9 Jackpot Triggers for Multiple Players

The Gaming Platform shall be designed to accurately identify and record the order of triggers when multiple players trigger at nearly the same time, such that the full amount of the displayed payoff can be awarded to winning player who triggered first. When this is not possible or if it's possible that multiple players trigger at the exact same time (e.g., in a multi-player game), one of the following shall occur:

- a) The full amount of the displayed payoff shall be awarded to each winning player; or
- b) Accurate information on how the payoff is distributed shall be disclosed to the player.

4.14 Game Recall

4.14.1 Player Facing Recall

A ‘game recall’ facility shall be provided to the player, either as a re-enactment or by description. The ‘game recall’ facility shall clearly indicate that it is a replay of the previous game.

4.14.2 Last Play Information Required

Game recall shall consist of graphical, textual, or video content, or some combination of these options, or other means (e.g., “flight recorder” mechanism), so long as the full and accurate reconstruction of game outcome and/or player actions is possible. It is allowable to display values in currency in place of credits. Game recall shall display the following information as applicable:

- a) The date and time the game was played;
- b) The denomination played for the game, if a multi-denomination game type;
- c) The display associated with the final outcome of the game, either graphically or via a clear text description;
- d) The funds available for wagering at the start of play and/or at the end of play;
- e) Total amount wagered, including any incentive credits;
- f) Total amount won, including:
 - i. Any incentive credits and/or prizes;
 - ii. Any progressive jackpots and/or incrementing jackpots;
- g) Any non-wager purchase that occurred between the start of play and the end of play;
- h) Rake, commission, or fees collected;
- i) The results of any player choices involved in the game outcome;
- j) The results of any intermediate game phases, such as double-up/gamble or bonus/feature games;
- k) If a progressive jackpot and/or incrementing jackpot was won, an indication that the jackpot was awarded; and
- l) Any player advice that is offered to the player for games with skill.

4.14.3 Bonus/Feature Game Recall

Game recall shall reflect at least the last fifty events of completed bonus/feature games. If a bonus/feature game consists of 'x number of events,' each with separate outcomes, each of the 'x events', up to fifty, shall be displayed with its corresponding outcome, regardless of whether the result was a win or loss.

4.15 Disable Requirements

4.15.1 Game Disable

When a game or gaming activity is disabled by the Gaming Platform while a game is in progress, all players playing that game shall be permitted to conclude their current game in play (i.e., bonus rounds, double-up/gamble and other game features related to the wager shall be fully concluded right away or the next time that game becomes available to the player). Once the game has fully concluded it shall no longer be accessible to a player.

4.15.2 Jackpot Disable

For cases where a progressive jackpot or incrementing jackpot is disabled (e.g., operator intervention, error condition, time limit has expired, etc.), the following requirements shall apply:

- a) An indication shall be displayed when the jackpot is not available;
- b) It shall not be possible for the jackpot to be incremented or won while in this state; and
- c) Upon resumption of the jackpot from the disabled state, it shall be possible to return the jackpot with the identical parameters as before the disable, including the payoff. The hidden trigger amount, if used to determine jackpot win for a mystery-triggered jackpot, may only be reselected if the reselected amount is in the range of the current payoff to the ceiling.

NOTE: For house-banked games, it is recommended that if the minimum percentage requirement as specified within the "Software Requirements for Percentage Payout" section is no longer met when the jackpot is not available, the participating games shall also be disabled.

4.16 Interrupted Games

4.16.1 Interrupted Games

A game is considered interrupted when the game outcome remains unresolved or the outcome cannot be properly conveyed to the player. Interrupted games may result from the following occurring during game play:

- a) Loss of communications between the Gaming Platform and the Remote Player Device;
- b) A Gaming Platform restart;
- c) A Remote Player Device restart or malfunction;
- d) Abnormal termination of the Player Software; or
- e) A game-disable command by the Gaming Platform.

4.16.2 Wagers in Interrupted Games

Wagers associated with an interrupted game that can be continued shall be held by the Gaming Platform until the game completes. Player accounts shall reflect any funds held in interrupted games.

4.16.3 Completion of Interrupted Games

The Gaming Platform shall provide a mechanism for a player to complete an interrupted game. An interrupted game shall be resolved before a player is permitted to participate in another instance of the same game.

- a) Where no player input is required to complete the game, it is acceptable for the game to return to a game completion state, provided the game history and the credit meter or player account balance reflects a completed game.
- b) For single-player games, where player input is required to complete the game, the game shall return the player to the game state immediately prior to the interruption and allow the player to complete the game, unless any superseding game rules and/or terms and conditions for game recovery is disclosed to the player.
- c) For multi-player games, where player input is required to complete the game and the player

cannot complete an action required of them to allow a game to continue within the allotted time:

- i. The Gaming Platform shall complete the game on behalf of the player in accordance with the game rules and/or terms and conditions;
- ii. The game history and credit meters or player account balances shall be updated accordingly;
- iii. The results of the game shall be available to the player and shall indicate which decisions, if any, were made by the Gaming Platform on behalf of the player; and
- iv. The Gaming Platform shall be designed such that one player not completing an action in the required time shall not impact any other players in the same gaming session with regards to completing the game and being credited for wins or debited for losses.

4.17 Virtual Event Wagering

4.17.1 General Statement

Virtual event wagering allows for the placement of wagers on simulations of sporting events, contests, and races whose results are based solely on the output of an approved Random Number Generator (RNG) as allowed by the regulatory body. Gaming Platforms which support virtual event wagering shall meet the requirements specified for “Virtual Event Wagering” within the *GLI-33 Standards for Event Wagering Systems*. In addition, the RNG utilized for virtual event wagering shall comply with applicable “Random Number Generator (RNG) Requirements” of this document.

4.18 Live Game Requirements

4.18.1 General Statement

Where authorized by a regulatory body, the following requirements apply where wagers are placed through a Gaming Platform on live games conducted by a gaming attendant (e.g., dealer, croupier, etc.) and/or other gaming equipment (e.g., automated roulette wheel, ball blower, gaming device, etc.) in a live game environment. This includes, but is not limited to live drawings, live card games, live table games, live keno games, live bingo games, and live play of gaming devices or other games as allowed by the regulatory body.

- a) The entire process is viewed by all players through real-time remote audio and video feed using streaming, narrowcast, broadcast or other technology and a graphical interface.
- b) The Gaming Platform receives instructions from each player through the player interface or another communication channel to facilitate player decisions where required.
- c) In addition to the requirements contained within this section, the operator or third-party service provider maintaining these components, services and/or applications shall meet the operational procedures and controls indicated in the “Live Game Services” section of this document.

NOTE: Where authorized by a regulatory body, a live game service provider may utilize a surrogate to place wagers on behalf of a player instead of directly through a system. Such implementations, when used in conjunction with a Gaming Platform, will be reviewed on a case by case basis.

4.18.2 Live Game Information

A live game shall conform to the applicable display requirements found in related sections of this standard for “Game Information and Rules of Play”, “Information to be Displayed”, and “Game Fairness”. In addition, the following display requirements apply:

- a) The Gaming Platform shall provide information to the player which:
 - i. Describes procedures in place to deal with live game interruptions caused by the discontinuity of data flow, video and voice from the network server during a game (e.g., internet connection outage, simulcast control server malfunction, etc.);
 - ii. Indicates the possibility of human error by the gaming attendant and system error by the specialized device and how errors are resolved; and
 - iii. Identifies any correlation between the player’s wager selection through the Gaming Platform and what will be displayed in the video feed, such as physical player chips and their values.
- b) The Gaming Platform may not provide any real time information, for the current live game being played, that can be used to aid in:
 - i. Projecting or predicting the outcome of a game;
 - ii. For card games, tracking the cards played and cards remaining to be played;
 - iii. Analyzing the probability of the occurrence of an event relating to a game; or
 - iv. Analyzing the strategy for playing or wagering to be used in a game, unless allowed by the rules of the game.
- c) Players shall be informed for any live game relying on ‘live’ monitoring of an event (e.g., bingo) that ‘live’ transmissions may be subject to delay or interruption. Where a delay is apparent or created by the Gaming Platform, the scale of the delay shall be displayed to the player.

4.18.3 Player Fairness in Live Games

The following rules apply when players participate in games through the Gaming Platform with in-person players, who are playing at the actual game in a gaming venue (e.g., casino, bingo hall, card room, etc.):

- a) The rules, artwork and functionality of the live game, as made available to the player through the Gaming Platform, shall include no more or no less information than that which is made available to an in-person player, where applicable; and
- b) Players who are playing through a Gaming Platform shall be no more or no less eligible to win the game than in-person players.

NOTE: Nothing herein may preclude the possibility of implementing specific incentive awards only for in-person players or players who are playing through a Gaming Platform.

4.18.4 Game Outcome Data

Game outcome data refers to any result generated or detected by specialized devices during the live game up to and including the result of the player’s wager including any intermediate phases that

impact the result, as determined by the Gaming Platform. Game outcome data shall be transmitted to the player immediately following its generation or detection (subject to the natural limitations of system processing and Internet communication delays). If allowed by the regulatory body, game outcome data may be automatically registered by specialized devices, provided that the software used for automated recognition shall:

- a) Ensure a very high degree of accuracy in identifying and reporting the game outcome data to the Gaming Platform. The rules of the game shall be programmed into the Gaming Platform;
- b) Not provide any information that may be used to compromise the device and its components (e.g., cards contained in the current shuffle or dealing shoe);
- c) Not interfere with or modify the device's behavior beyond what functionality is associated with that software; and
- d) Include a manual operation mode to allow for corrections of an erroneous result (where the device misreads a card, the position of the ball, etc.) if such corrections are not done directly on the Gaming Platform. The player shall be made aware that the manual operation mode is in use.

4.18.5 Physical Randomness Devices

Live games may utilize physical randomness devices, as described within the "Mechanical RNG (Physical Randomness Device)" section of this document, to generate game outcomes.

- a) Physical randomness device outcomes shall be digitized into game outcome data and securely transmitted to the Gaming Platform via specialized devices for processing without alterations unless approved by the regulatory body.
- b) Game outcome data shall be recorded by the Gaming Platform and made available to the player for review immediately following its generation (subject to the natural limitations of system processing and network communication delays).
- c) Except for a human error or an error correctable with a manual override, at any time during the game the game outcome data shall match the outcome generated by the physical randomness device. Where a discrepancy between the physical randomness device and the game outcome data exists, the physical randomness device's outcome shall be considered correct.

Appendix A: Operational Audit for Gaming Procedures and Practices

A.1 Introduction

A.1.1 General Statement

This appendix sets forth procedures and practices for gaming operations which will be reviewed in an operational audit as a part of the Interactive Gaming System evaluation, including, but not limited to establishing gaming rules, managing games, monitoring games and Random Number Generator (RNG) output, handling various gaming and financial transactions, creating and managing progressive jackpots and incrementing jackpots, player account management, fundamental practices relevant to the limitation of risks, and any other objectives established by the regulatory body.

NOTE: It is also recognized that additional procedures and practices which are not specifically included within this standard will be relevant and required for an operational audit as determined by the operator and/or regulatory body within their rules, regulations, and Minimum Internal Control Standards (MICS).

A.2 Internal Control Procedures

A.2.1 Internal Control Procedures

The operator shall establish, maintain, implement and comply with internal control procedures for gaming operations, including performing gaming and financial transactions.

A.2.2 Information Management

The operator's internal controls shall include the processes for maintaining the recorded information specified under the section entitled "Information to be Maintained" for a period of five years or as otherwise specified by the regulatory body.

A.2.3 Risk Management

The operator's internal controls shall contain details on its risk management framework, including but not limited to:

- a) Automated and manual risk management procedures;
- b) Employee management, including access controls and segregation of duties;
- c) Information regarding identifying and reporting fraud and suspicious conduct;
- d) Controls ensuring regulatory compliance;
- e) Description of Anti-Money Laundering (AML) compliance standards, including procedures for detecting structuring to avoid reporting requirements;
- f) Description of all software applications that comprise the Interactive Gaming System;
- g) Description of all types of games available to be offered by the operator;
- h) Description of the method to prevent collusion for peer-to-peer games;

- i) Description of all integrated third-party service providers; and
- j) Any other information required by the regulatory body.

A.2.4 Restricted Players

The operator's internal controls shall describe the method to prevent game play from people identified as employees, subcontractors, directors, owners, and officers of an operator, as well as those within the same household as required by the regulatory body.

A.2.5 Test Accounts

The operator may establish test accounts to be used to test or have tested the various components and operation of an Interactive Gaming System in accordance with internal controls adopted by the operator, which, at a minimum, shall address the following procedures:

- a) The procedures for authorizing testing activity and assigning each test account for use;
- b) The procedures for the issuance of funds used for testing, including the identification of who is authorized to issue the funds and the maximum amount of funds that may be issued;
- c) The maintenance of a record for all test accounts, to include when they are active and to whom they are issued; and
- d) The procedures for the auditing of testing activity to ensure the accountability of funds used for testing and proper adjustments to reports and records.

A.3 Player Account Controls

A.3.1 Registration and Verification

Where player account registration is done manually by the operator, procedures shall be in place to satisfy the requirements for "Registration and Verification" as indicated within this document.

A.3.2 Fraudulent Accounts

The operator shall have a documented public policy for the treatment of player accounts discovered to being used in a fraudulent manner, including but not limited to:

- a) The maintenance of information about any account's activity, such that if fraudulent activity is detected, the operator has the necessary information to take appropriate action;
- b) The suspension of any account discovered to be engaged in fraudulent activity, such as a player providing access to underage persons; and
- c) The handling of deposits, wagers, and wins associated with a fraudulent account.

A.3.3 Terms and Conditions

A set of terms and conditions shall be available to the player. During the registration process and when any terms and conditions are materially updated (i.e., beyond any grammatical or other minor changes), the player shall agree to the terms and conditions. The terms and conditions shall:

- a) State that only individuals legally permitted by their respective jurisdiction can participate in gaming;
- b) Advise the player to keep their authentication credentials (e.g., password and username) secure;
- c) Disclose all processes for dealing with lost authentication credentials, forced password changes, password strength and other related items as required by the regulatory body;
- d) Specify the conditions under which an account is declared inactive and explain what actions will be undertaken on the account once this declaration is made;
- e) Clearly define what happens to the player's wagers placed but remaining undecided in interrupted games prior to any self-imposed or operator-imposed exclusion, including the return of all wagers, or settling all wagers, as appropriate;
- f) Contain information about timeframes and limits regarding deposits to and/or withdrawals from the player account, including a clear and concise explanation of all fees (if applicable);
- g) State that the operator has the right to:
 - i. Refuse to establish a player account for what it deems good and sufficient reason;
 - ii. Refuse deposits to and/or withdrawals from player accounts for what it deems good and sufficient reason; and
 - iii. Unless there is a pending investigation or player dispute, suspend or close any player account at any time pursuant to the terms and conditions between the operator and the player.

A.3.4 Privacy Policy

A privacy policy shall be available to the player. During the registration process and when the privacy policy is materially updated (i.e., beyond any grammatical or other minor changes), the player shall agree to the privacy policy. The privacy policy shall state:

- a) The personally identifiable information (PII) required to be collected;
- b) The purpose and legal basis for PII collection and of every processing activity for which consent is being sought including, where required by the regulatory body, the "legitimate interest" pursued by the operator (or third-party service provider(s)) if this is the legal basis chosen (i.e., identification of the specific interest in question);
- c) The period in which the PII is stored, or, if no period can be possibly set, the criteria used to set this. It is not sufficient for the operator to state that the PII will be kept for as long as necessary for the legitimate purposes of the processing;
- d) The conditions under which PII may be disclosed;
- e) An affirmation that measures are in place to prevent the unauthorized or unnecessary disclosure of the PII;
- f) The identity and contact details on the operator who is seeking the consent, including any third-party service provider(s) which may access and or use this PII;
- g) Where required by the regulatory body, that the player has a right to:
 - i. Access, export, or transfer their PII;
 - ii. Rectify, erase, or restrict access to their PII;
 - iii. Object to the PII processing;
 - iv. To withdraw consent, if the processing is based on consent;

- h) The rights and possibility of a player to file a complaint to the regulatory body;
- i) For PII collected directly from the player, whether there is a legal or contractual obligation to provide the PII and the consequences of not providing that PII;
- j) Where applicable and required by the regulatory body, information on the operator's use of automated decision-making, including profiling, and at least in those cases, without hindering compliance with other legal obligations:
 - i. Sufficient insight into the logic of the automated decision-making;
 - ii. The significance and the envisaged consequences of such processing for the player; and
 - iii. Safeguards in place around solely automated decision-making require, including information for a player on how to contest the decision and to require direct human review or intervention.

A.3.5 Personally Identifiable Information (PII) Security

Any information obtained in respect to the player account, including personally identifiable information (PII) and authentication credentials, shall be done in compliance with the privacy policy and local privacy regulations and standards observed by the regulatory body. Both PII and the player funds shall be considered as critical assets for the purposes of risk assessment.

- a) Any PII which is not subject to disclosure pursuant to the privacy policy shall be kept confidential, except where the release of that information is required by law. This includes, but is not limited to:
 - i. The amount of money credited to, debited from, or present in any particular player account;
 - ii. The amount of money wagered by a particular player on any game;
 - iii. The account number and authentication credentials that identify the player; and
 - iv. The name, address, and other information in the possession of the operator that would identify the player to anyone other than the regulatory body or the operator.
- b) There shall be procedures in place for the security and sharing of PII, funds in a player account and other sensitive information as required by the regulatory body, including, but not limited to:
 - i. The designation and identification of one or more employees having primary responsibility for the design, implementation and ongoing evaluation of such procedures and practices;
 - ii. The procedures to be used to determine the nature and scope of all information collected, the locations in which such information is stored, and the storage devices on which such information may be recorded for purposes of storage or transfer;
 - iii. The measures to be utilized to protect information from unauthorized access; and
 - iv. The procedures to be used in the event the operator determines that a breach of data security has occurred, including required notification to the regulatory body.
- c) Where required by the regulatory body, players shall be provided with a method to request:
 - i. Confirmation that their PII is being processed;
 - ii. Access to a copy of their PII as well as any other information about the PII processing;
 - iii. Updates to their PII; and
 - iv. Their PII erased and/or to impose restrictions on processing of PII.
- d) There shall be procedures in place to record and process such requests from players, including maintaining records of such requests and providing reasons to the player when such requests are denied or rejected. The player shall be given a reason when the operator does not intend to

comply with the request and also provided with the necessary information on the possibility to file a complaint with the regulatory body.

- e) Where required by the regulatory body and upon player's request, the operator shall forward to the players the PII which they have received from the same player, in a structured, commonly used and machine-readable format and transmit those data to another operator, where it is technically feasible to do so. This only applies to:
 - i. PII which the player has provided to the operator or PII which is processed by automated means (i.e., this would exclude any paper records); and
 - ii. Cases where the basis for processing is PII consent, or that the data is being processed to fulfil a contract or steps preparatory to a contract.
- f) Where required by the regulatory body, the player has the right to object to PII processing:
 - i. Based on legitimate interests or the performance of a task in the public interest or in the exercise of official authority;
 - ii. Used in direct marketing, including profiling to the extent that it is related to such marketing activities; and
 - iii. For scientific or historical research purposes or for the purpose of statistics.
- g) There shall be procedures in place for the operator to comply with requests from players to have PII erased and/or to prevent or restrict processing of PII, including, in the following circumstances:
 - i. Where the PII is no longer necessary in relation to the purpose for which it was originally collected/processed;
 - ii. When the player withdraws consent;
 - iii. When the player objects to the PII processing and there is no overriding legitimate interest for continuing the processing;
 - iv. The PII was unlawfully processed; or
 - v. The PII has to be erased in order to comply with a legal obligation.
- h) Where prohibited by the regulatory body, the operator may not utilize solely automated decision-making which:
 - i. Produces legal effects the player such as those which result in the player being subjected to surveillance by a competent authority; or
 - ii. Significantly affects the player in a similar manner (e.g., it has the potential to influence the circumstances, behavior or choices of the player).

A.3.6 Player Funds Maintenance

Procedures shall be in place to ensure all financial transactions are conducted in accordance with local commerce regulations and requirements mandated by the regulatory body.

- a) Where financial transactions cannot be performed automatically by the Interactive Gaming System, procedures shall be in place to satisfy the requirements for "Financial Transactions" as indicated within this document.
- b) Where financial transactions are allowed through Electronic Funds Transfers (EFT), the operator shall have security measures and controls to prevent EFT fraud. A failed EFT attempt may not be considered fraudulent if the player has successfully performed an EFT on a previous occasion with no outstanding chargebacks. Otherwise, the operator shall do all of the following:
 - i. Temporarily block the player account for investigation of fraud after five consecutive failed

- EFT attempts within a ten-minute time period or a period to be determined by the regulatory body. If there is no evidence of fraud, the block may be removed; and
- ii. Suspend the player account after five additional consecutive failed EFT attempts within a ten-minute period or a period to be determined by the regulatory body.
 - c) Positive player identification or authentication shall be completed before the withdrawal of any funds can be made by the player.
 - d) The operator shall not allow a player account to be overdrawn unless caused by payment processing issues outside the control of the operator.
 - e) A player's request for withdrawal of funds (i.e., deposited and cleared funds and wagers won) shall be completed by the operator within a reasonable amount of time, unless there is a pending unresolved player complaint/dispute or investigation. Such investigation shall be documented by the operator and available for review by the regulatory body.
 - f) The operator shall have security or authorization procedures in place to ensure that only authorized adjustments can be made to player accounts, and these changes are auditable.

A.3.7 Limitations

Players shall be provided with a method to impose limitations for gaming parameters including, but not limited to deposits and wagers as required by the regulatory body. In addition, there shall be a method for the operator to impose any limitations for gaming parameters as required by the regulatory body.

- a) Once established by a player and implemented by the operator, it shall only be possible to reduce the severity of self-imposed limitations upon twenty-four hours' notice, or as required by the regulatory body.
- b) Players shall be notified in advance of any operator-imposed limits and their effective dates. Once updated, operator-imposed limits shall be consistent with what is disclosed to the player.
- c) Upon receiving any self-imposed or operator-imposed limitation order, the operator shall ensure that all specified limits are correctly implemented immediately or at the point in time (e.g., next login, next day) clearly indicated to the player.

A.3.8 Exclusions

Players shall be provided with a method to exclude themselves from gaming for a specified period or indefinitely, as required by the regulatory body. In addition, there shall be a method for the operator to exclude a player from gaming as required by the regulatory body.

- a) Players shall be given a notification containing exclusion status and general instructions for resolution where possible.
- b) Immediately upon receiving the exclusion order, no new wagers or deposits are accepted from that player, until the exclusion has been removed.
- c) While excluded, the player shall not be prevented from withdrawing any or all of their account balance, provided that the operator acknowledges that the funds have cleared, and that the reason(s) for exclusion would not prohibit a withdrawal.
- d) All advertising or marketing material shall not specifically target players that have been excluded from play.

- e) The operator shall establish procedures to evaluate requests made by third-parties to exclude a player from gaming, including when the requestor provides documentary evidence of sole or joint financial responsibility for the source of funds deposited with an operator by the player or a court order requiring the player to pay unmet financial obligations (e.g., child support).

A.3.9 Inactive Accounts

A player account is considered to be inactive under the conditions as specified in the terms and conditions. Procedures shall be in place to:

- a) Allow access by player to their inactive account only after performing additional identity verification;
- b) Protect inactive player accounts that contain funds from unauthorized access, changes or removal; and
- c) Deal with unclaimed funds from inactive player accounts, including returning any remaining funds to the player where possible.

A.3.10 Account Closure

Players shall be provided with a method to close their player account at any time unless the operator has temporarily excluded a player from gaming. Any balance remaining in a player account shall be refunded to the player, provided that the operator acknowledges that the funds have cleared.

A.4 General Operating Procedures

A.4.1 Operator Reserves

The operator shall have processes in place for maintaining and protecting adequate cash reserves, as determined by the regulatory body, including segregated accounts of funds held for player accounts and any operational funds used to cover all other operator liability if defined by the regulatory body.

A.4.2 Protection of Player Funds

The operator shall have processes in place to ensure funds in an operator account are either to be held in trust for the player in a segregated account or in a special purpose segregated account that is maintained and controlled by a properly constituted corporate entity that is not the operator and whose governing board includes one or more corporate directors who are independent of the operator and of any corporation related to or controlled by the operator. In addition, the operator shall have procedures that are reasonably designed to:

- a) Ensure that funds generated from gaming are safeguarded and accounted for;
- b) Make clear that the funds in the segregated account do not belong to the operator and are not available to creditors other than the player whose funds are being held; and
- c) Prevent commingling of funds in the segregated account with other funds including, without

limitation, funds of the operator.

A.4.3 Taxation

The operator shall have a process in place to identify all wins that are subject to taxation (single wins or aggregate wins over a defined period as required) and provide the necessary information in accordance with each regulatory body's taxation requirements.

NOTE: Amounts won that exceed any jurisdictional specified limit shall require the appropriate documentation to be completed before the winning player is paid.

A.4.4 Complaint/Dispute Process

The operator shall provide a method for a player to make a complaint/dispute, and to enable the player to notify the regulatory body if such complaint/dispute has not been or cannot be addressed by the operator, or under other circumstances as specified by the law of the regulatory body.

- a) Players shall be able to log complaints/disputes on a 24/7 basis.
- b) Records of all correspondence relating to a complaint/dispute shall be maintained for a period of five years or as otherwise specified by the regulatory body.
- c) A documented process shall exist between the operator and the regulatory body on the complaint/dispute reporting and resolution process.

A.4.5 Player Protection Information

Player protection information shall be available to the player. The player protection information shall contain at a minimum:

- a) Information about potential risks associated with excessive gaming, and where to get help for a gambling problem;
- b) A statement that no underage persons are permitted to participate in gaming;
- c) A list of the available player protection measures that can be invoked by the player, such as self-imposed exclusion, and information on how to invoke those measures;
- d) Mechanisms in place which can be used to detect unauthorized use of their account, such as reviewing financial statements against known deposits;
- e) Contact information or other means for reporting a complaint/dispute; and
- f) Contact information for the regulatory body and/or a link to their website.

NOTE: All links to problem gambling services provided by third parties are to be regularly tested by the operator. Interactive gaming may not occur where the links used to supply information on player protection are not displayed or are not operational. Where the link is no longer available or not available for a significant period of time, the operator shall provide an alternative support service.

A.4.6 Responsible Gaming

The operator shall have policies and procedures in place which facilitate interaction with players

whenever their gaming behavior indicates a risk of the development of a gambling problem. Employees interacting directly with players shall be trained to ensure they understand problem gambling issues and know how to respond to them.

A.4.7 Chat Features

A defined procedure shall exist for cases where the operator provides for the use of chat features which allow the player to communicate directly with the operator and/or other players, including maintaining chat logs for a period of ninety days or as required by the regulatory body. In addition, email correspondence between the player and the operator shall also be maintained for the same amount of time.

A.5 Gaming Rules and Content

A.5.1 Gaming Rules

Gaming rules refers to any written, graphical, and auditory information provided to the public regarding gaming operations. The operator shall adopt and adhere to comprehensive gaming rules which shall be approved by the regulatory body.

- a) Gaming rules shall be complete, unambiguous, and not misleading or unfair to the player.
- b) Gaming rules that are presented aurally (via sound or voice) shall also be displayed in written form.
- c) Gaming rules shall be rendered in a color that contrasts with the background color to ensure that all information is clearly visible/readable.
- d) The operator shall keep a log of any changes to the gaming rules relating to playing games.
- e) Where gaming rules are altered for games being offered, all rule changes shall be time and date stamped showing the rule applicable in each period. If multiple rules apply to a game, the operator shall apply the rules that were in place when the wager was accepted.

A.5.2 Gaming Rules Content

The following information shall be made available to the player. The functionality to display the information required by this section shall be displayed by the player interface or from a page accessible to the player:

- a) The methods of funding a player account (e.g., cash, personal check, cashier's check, wire transfer, money order, debit instrument, credit card, electronic funds transfer, etc.), including a clear and concise explanation of all fees (if applicable);
- b) As allowed by the regulatory body, any prizes that are offered in the form of merchandise, annuities, lump sum payments, or payment plans instead of cash payouts for each game that is offering such a prize;
- c) The procedures by which any unrecoverable malfunctions of hardware/software are addressed including if this process results in the voiding of any pays or plays;
- d) The procedures to deal with interruptions caused by player disconnection from the Gaming Platform where the result of a game is affected by the time to respond to a game event;

- e) What happens to the player's wagers placed but remaining undecided in interrupted games including how they are handled when they remain undecided beyond the specified time period;
- f) A description on restricted players, including any applicable limitations on participation for them;
- g) For each progressive jackpot or incrementing jackpot:
 - i. The imperfections of the communications medium for the game, and how it may affect players in relation to the jackpot;
 - ii. Any maximum payoff limit or "ceiling" and/or time limit which is supported by the jackpot;
 - iii. How the jackpot is funded and determined; and
 - iv. Any planned or unplanned decommissions of the jackpot, including how any outstanding contribution amounts are dealt with in order to ensure player fairness.

A.5.3 Incentive Award Offers

An operator may offer incentive awards, which are credits and/or prizes not included in the payable of a game and are based upon predetermined events or criteria established by the parameters of the Interactive Gaming System.

- a) Players shall be able to access clear and unambiguous terms in the gaming rules pertaining to any available incentive award offers, which shall include the following at a minimum:
 - i. The date and time presented;
 - ii. The date and time the offer is active and expires;
 - iii. Player eligibility, including any limitations on participation;
 - iv. Any restriction or terms on withdrawals of funds;
 - v. Wagering requirements and limitations by type of game, game theme and/or payable;
 - vi. How the player is notified when they have received an incentive award;
 - vii. The order in which funds are used for wagers; and
 - viii. Rules regarding cancellation.
- b) An operator shall provide a clear and conspicuous method for a player to cancel their participation in an incentive award offer that utilizes restricted incentive credits.
 - i. Upon request for cancellation, the operator shall inform the player of the amount of unrestricted player funds that will be returned upon cancellation and the value of restricted incentive credits that will be removed from the player account.
 - ii. If the player elects to proceed with cancellation, unrestricted player funds remaining in a player account shall be returned in accordance with the terms of the offer.
- c) Once a player has met the terms of an incentive award offer, the operator shall not limit winnings earned while participating in the offer (i.e., the restricted incentive credits of the offer will become unrestricted incentive credits).

A.5.4 Contests/Tournaments

A contest/tournament, which permits a player to either purchase or be awarded the opportunity to engage in competitive gaming against other players, may be permitted provided the following rules are met:

- a) Rules shall be made available to a player for review in the gaming rules prior to

contest/tournament registration. The rules shall include at a minimum:

- i. All conditions registered players shall meet to qualify for entry and advancement through, the contest/tournament;
 - ii. Specific information pertaining to any single contest/tournament, including the available prizes or awards and distribution of funds based on specific outcomes; and
 - iii. The name of the organization (or persons) that conducted the contest/tournament on behalf of, or in conjunction with, the operator, if applicable.
- b) Procedures shall be in place to record the results of each contest/tournament and make publicly available for the registered players to review for a reasonable period of time. Subsequent to being posted publicly, the results of each contest/tournament shall be made available upon request. The results include the following:
- i. Name of the contest/tournament;
 - ii. Date(s)/times(s) of the contest/tournament;
 - iii. Total number of entries;
 - iv. Amount of entry fees;
 - v. Total prize pool; and
 - vi. Amount paid for each winning category.

NOTE: For free contests/tournaments (i.e., registered player does not pay an entry fee), the information required by the above shall be recorded except for the number of entries, amount of entry fees and total prize pool.

A.6 Gaming Procedures and Controls

A.6.1 Evaluating Theoretical and Actual Return to Player Percentages

The operator shall maintain accurate and current documentation (e.g., PAR sheets) indicating the theoretical return to player (RTP) percentages for each house-banked game based on adequate levels of credits wagered, as well as the number of credits that may be played, the payout schedule and other information descriptive of the particular type of game. In addition:

- a) Records shall be maintained for each game indicating the initial theoretical RTP percentage, dates and type of changes made affecting the game's theoretical RTP percentage, and the recalculation of theoretical RTP percentage because of the changes.
- b) Each change to a game's theoretical RTP percentage, including adding and/or changing progressive jackpot or incrementing jackpot increments, shall result in that game being treated as new for all reports and records.
- c) If incentive awards are included in the reports and records for the game, it shall be in a manner that prevents distorting the actual RTP percentages of the affected paytables.
- d) The operator shall have procedures in place to periodically compare the theoretical and actual RTP percentage to identify, investigate, and resolve large variances between these two values.

A.6.2 Monitoring Game and RNG Output

The operator shall have procedures in place for monitoring the game and RNG output on a defined periodic or volume basis as required by the regulatory body. The purpose of monitoring is early

detection of abnormal behavior enabling timely appropriate remedial action. Any abnormalities (e.g., the actual RTP percentage for the period falling outside the expected range) shall result in an error being logged and escalated for investigation. Best practice monitoring will include independent mapping between RNG output and game symbols should verify game symbol usage. RNG output game symbols logs may be maintained and verified as a monitoring exercise.

A.6.3 Disabling Gaming

There shall be established procedures for disabling a game or gaming activity. When a game or gaming activity is disabled, an entry shall be made in an audit log that includes the date and time of disable and its reason.

A.6.4 Interrupted Game Handling

There shall be established procedures for the handling of interrupted games. If a game cannot be continued due to an Interactive Gaming System action, the operator shall:

- a) Return all wagers to the player(s) of that game;
- b) Update the credit meter(s) or player account balance(s) and game history accordingly;
- c) Inform the regulatory body of the circumstances of the incident; and
- d) Disable the game if the game is likely to be affected by the same failure.

A.6.5 Progressive Jackpot and Incrementing Jackpot Procedures

The operator shall establish, maintain, implement and comply with internal control procedures for jackpot operations, including the following:

- a) Where jackpot contributions are part of the RTP calculations, ensuring the contributions are not assimilated into revenue.
- b) Jackpot adjustments and transfers, as supported.
- c) For large jackpot awards exceeding a particular value as defined by the regulatory body:
 - i. Jackpot verification and payment procedures, including independent reconciliation and operator signoff;
 - ii. Payment when multiple jackpot triggers occur and there is no definitive way of knowing which trigger occurred first (unless it's handled automatically by the Interactive Gaming System); and
 - iii. Disbursement options for jackpot awards, including information for periodic payments.
- d) For jackpots with parameters which are configurable after initial setup, performing independent reconciliation of jackpot contributions and awards to ensure that all jackpot increments deducted:
 - i. Have been paid to players as jackpot payoffs;
 - ii. Are displayed as part of jackpot payoffs; or
 - iii. Are held in separate accounts, which can be demonstrated to be paid to players as part of future jackpot payoffs.
- e) Jackpot decommissioning procedures, including procedures for distribution of contributions to another jackpot.

A.7 Procedures and Controls for Peer-to-Peer (P2P) Gaming Sessions

A.7.1 Shills and Proposition Players

The operator shall have processes to ensure the player is not disadvantaged by players that are playing with house money (shills) or proposition players participating in a P2P gaming session. The following risks are expected to be mitigated:

- a) The shills and proposition players shall be clearly indicated to all other players for that P2P gaming session;
- b) The operator's controls shall mitigate the conflict between the role of the shill or proposition player and the role of the gaming attendant who has access to the operational environment (both physically and virtually) to be able to manipulate the games or have information not available to all the other players and be able to take advantage of it;
- c) The operator shall not profit from the play (beyond the rake);
- d) If the shill or proposition player's wager is funded by the operator, neither the operator nor the shill or proposition player may profit from the play, the funds may not be withdrawn, and so shall ultimately be lost/played; and
- e) Procedures shall be in place to address the risk that the shill or proposition player is motivated to protect personal wagers beyond the assignment of stimulating play. If the shill or proposition player risks private wagers, then the shill or proposition player shall not have any knowledge of software or other PII (the shill or proposition player is a bona fide independent contractor with no prior relationship with the operator).

A.7.2 P2P Gaming Session Tracking

The operator shall have a process to keep track of all P2P gaming sessions for each player, including tracking:

- a) The "Game Play Information" recorded for each game, including their opposing players; and
- b) The player's choice of P2P gaming session, as well as instances where the player repeatedly enters and exits P2P gaming sessions without playing until they arrive at their preferred P2P gaming session.

A.7.3 Reporting Suspicious Players

The operator shall provide a method for a player to report suspected cheating, collusion, or usage of bots or other unauthorized player software by others to create an unfair advantage during the P2P gaming session.

A.8 Monitoring Procedures

A.8.1 Monitoring for Collusion and Fraud

The operator shall take measures designed to reduce the risk of collusion or fraud, including having

procedures for:

- a) Identifying and/or refusing to accept suspicious wagers which may indicate cheating, manipulation, interference with the regular conduct of a game, or violations of the integrity of any game on which wagers were made.
- b) Reasonably detecting irregular patterns or series of wagers to prevent player collusion in P2P gaming sessions, including the following:
 - i. Chip Dumping – Two or more players help each other to stay in the game, leading to losses and therefore to an exchange of chips even with certainly winning combinations;
 - ii. Soft-Play – One or more players renounce to play against another player in situations where such behavior is unreasonable in accordance with normal practices of play (e.g., a player leaves the game even if the win is secure);
 - iii. Best Hand Play – Between two or more players only the one who has the best score always plays, while the other player(s) leave the game; and
 - iv. Chat Collusion – The collusion is achieved through the exchange of relevant information related to the current game or series of games.
- c) Reasonably detecting and preventing situations where players in games may be using bots or other unauthorized player software to create an unfair advantage during game play, such as:
 - i. Projecting or predicting the outcome of a game;
 - ii. For card games, tracking the cards played and cards remaining to be played;
 - iii. Analyzing the probability of the occurrence of an event relating to a game; or
 - iv. Analyzing the strategy for playing or wagering to be used in a game, unless allowed by the rules of the game.

A.8.2 Anti-Money Laundering (AML) Monitoring

The operator is required to develop and implement AML procedures and policies that adequately address the risks posed by interactive gaming for the potential of money laundering and terrorist financing. At a minimum, the AML procedures and policies shall provide for:

- a) A system of internal controls to assure ongoing compliance with the local AML regulations and standards observed by the regulatory body;
- b) Up to date training of employees in the identification of unusual or suspicious transactions;
- c) Assigning an individual or individuals to be responsible for all areas of AML by the operator including reporting unusual or suspicious transactions;
- d) Monitoring player accounts for opening and closing in short time frames and for deposits and withdrawals without associated game play;
- e) Ensuring that aggregate transactions over a defined period may require further due diligence checks and may be reportable to the relevant organization(s) if they exceed the threshold prescribed by the regulatory body;
- f) Use of any automated data processing systems to aid in assuring compliance; and
- g) Periodic independent tests for compliance with a scope and frequency as required by the regulatory body. Logs of all tests shall be maintained.

Appendix B: Operational Audit for Technical Security Controls

B.1 Introduction

B.1.1 General Statement

This appendix sets forth technical security controls which will be reviewed in an operational audit as a part of the Interactive Gaming System evaluation, including, but not limited to, a review of the operational processes that are critical to compliance, penetration testing focused on the external and internal infrastructure as well as the applications transferring, storing and/or processing personally identifiable information (PII) and/or other sensitive information, and any other objectives established by the regulatory body. The security controls outlined in this appendix apply to the following critical components of the system:

- a) Components which record, store, process, share, transmit or retrieve PII and other sensitive information (e.g., validation numbers, authentication credentials, etc.);
- b) Components which generate, transmit, or process random numbers used to determine the outcome of games;
- c) Components which store results or the current state of a player's wager;
- d) Points of entry to and exit from the above components (other systems which communicate directly with core critical systems); and
- e) Communication networks which transmit PII and other sensitive information.

NOTE: It is also recognized that additional technical security controls which are not specifically included within this standard will be relevant and required for an operational audit as determined by the operator and/or regulatory body within their rules, regulations, and Minimum Internal Control Standards (MICS).

B.2 System Operation & Security

B.2.1 System Procedures

The operator shall be responsible for documenting and following the relevant Interactive Gaming System procedures and security standards, as required by the regulatory body, including procedures to:

- a) Monitor the critical components and the transmission of data of the entire system, including communication, data packets, networks, as well as the components and data transmissions of any third-party services involved, with the objective of ensuring integrity, reliability and accessibility;
- b) Maintain all aspects of security of the system to ensure secure and reliable communications, including protection from hacking or tampering;
- c) Define, monitor, and document, as well as report, investigate, respond to, and resolve security incidents, including detected breaches and suspected or actual hacking or tampering with the system;
- d) Monitor and adjust resource consumption and maintain a log of the system performance,

- including a function to compile performance reports;
- e) Investigate, document, and resolve malfunctions, which address the following:
 - i. Determination of the cause of the malfunction;
 - ii. Review of relevant records, reports, logs, and surveillance records;
 - iii. Repair or replacement of the critical component;
 - iv. Verification of the integrity of the critical component before restoring it to operation;
 - v. Filing an incident report with the regulatory body and documenting the date, time and reason for the malfunction along with the date and time the system is restored; and
 - vi. Voiding plays and pays if a full recovery is not possible.

B.2.2 Physical Location of Servers

The Interactive Gaming System server(s) shall be housed in one or more secure location(s) which may be located locally, within a single venue, or may be remotely located outside of the venue as allowed by the regulatory body. In addition, secure location(s) shall:

- a) Have sufficient protection against alteration, tampering or unauthorized access;
- b) Be equipped with a surveillance system that shall meet the procedures put in place by the regulatory body;
- c) Be protected by security perimeters and appropriate entry controls to ensure that access is restricted to only authorized personnel;
 - i. Physical access shall have a multi-factor authentication process unless the location is staffed at all times;
 - ii. Any attempts at physical access are recorded in a secure log; and
- d) Be equipped with controls to provide physical protection against damage from fire, flood, and other forms of natural or manmade disaster (e.g., hurricane, earthquake, etc.).

B.2.3 Logical Access Control

The Interactive Gaming System shall be logically secured against unauthorized access by authentication credentials allowed by the regulatory body, such as passwords, multi-factor authentication, digital certificates, PINs, biometrics, and other access methods (e.g., magnetic swipe, proximity cards, embedded chip cards).

- a) Each user account shall have their own individual authentication credential whose provision shall be controlled through a formal process, which shall include periodic review of access rights and privileges. The use of generic accounts shall be limited, and where used the reasons for their use shall be formally documented.
- b) Authentication credential records for secret information shall be maintained either manually or by systems that automatically record authentication changes and force authentication credential changes.
- c) Any authentication credentials stored on the system shall be either encrypted or hashed to the cryptographic algorithms that meet current industry accepted standards, such as ISO/IEC 19790, FIPS 140-2, or equivalent.
- d) A fallback method for resetting authentication credentials (e.g., forgotten passwords) shall be at least as strong as the primary method. A multi-factor authentication process shall be employed

for these purposes.

- e) Lost or compromised authentication credentials and authentication credentials of terminated users shall be deactivated, secured or destroyed as soon as reasonably possible.
- f) The system shall have multiple security access levels to control and restrict different classes of access to the server, including viewing, changing or deleting critical files and directories. Procedures shall be in place to assign, review, modify, and remove access rights and privileges to each user, including:
 - i. Allowing the administration of user accounts to provide an adequate separation of duties.
 - ii. Limiting the users who have the requisite permissions to adjust critical system parameters.
 - iii. The enforcement of adequate authentication credential parameters such as minimum length, and expiration intervals.
- g) Procedures shall be in place to identify and flag suspect accounts to prevent their unauthorized use, which includes:
 - i. Having system administrator notification and user lockout or audit trail entry, after a maximum number of three incorrect attempts at authentication;
 - ii. Flagging of suspect accounts where authentication credentials may have been stolen; and
 - iii. Invalidating accounts and transferring critical stored account information into a new account.
- h) Any logical access attempts to the system applications or operating systems shall be recorded in a secure log.
- i) The use of utility programs which can override application or operating system controls shall be restricted and tightly controlled.
- j) Restrictions on connection times such as but not necessarily limited to session timeouts shall be used to provide additional security for high-risk applications, such as remote access.

NOTE: Where passwords are used as an authentication credential, it is recommended that they are at least eight characters in length.

B.2.4 User Authorization

The Interactive Gaming System shall implement the following user authorization requirements:

- a) A secure and controlled mechanism shall be employed that can verify that the critical component is being accessed by authorized personnel on demand and on a regular basis as required by the regulatory body.
- b) When used, automated equipment identification methods to authenticate connections from specific locations and equipment shall be documented and shall be included in the review of access rights and privileges.
- c) Any authorization information communicated by the system for identification purposes shall be obtained at the time of the request from the system and not be stored on the system component.
- d) Where user sessions are tracked for authorization, the user session authorization information shall always be created randomly, in memory, and shall be removed after the user's session has ended.

B.2.5 Server Programming

The Interactive Gaming System shall be sufficiently secure to prevent any user-initiated programming capabilities on the server that may result in modifications to the database. However, it is acceptable for network or system administrators to perform authorized network infrastructure maintenance or application troubleshooting with sufficient access rights. The server shall also be protected from the unauthorized execution of mobile code.

B.2.6 Verification Procedures

There shall be procedures in place for verifying that the critical control program components of the Interactive Gaming System in the production environment are identical to those approved by the regulatory body.

- a) Signatures of the critical control program components shall be gathered from the production environment through a process to be approved by the regulatory body, and shall be performed:
 - i. Upon installation/updates of components;
 - ii. Upon power up or recovery from a shutdown state;
 - iii. At least once every 24 hours; and
 - iv. On demand.
- b) The process shall include one or more analytical steps to compare the current signatures of the critical control program components in the production environment with the signatures of the current approved versions of the critical control program components.
- c) The output of the process shall include the current and expected signature results and be stored in an unalterable format, which detail the verification results for each critical control program authentication and:
 - i. Be recorded in a system log or report which shall be retained for a period of ninety days or as otherwise specified by the regulatory body;
 - ii. Be accessible by the regulatory body in a format which will permit analysis of the verification records by the regulatory body; and
 - iii. Comprise part of the system records which shall be recovered in the event of a disaster or equipment or software failure.
- d) Any failure of verification of any component of the system shall require a notification of the authentication failure being communicated to the operator and regulatory body as required.
- e) There shall be a process in place for responding to authentication failures, including determining the cause of the failure and performing the associated corrections or reinstallations needed in a timely manner.

B.2.7 Electronic Document Retention System

Reports listed under the "Reporting Requirements" within this standard and required by the regulatory body may be stored in an electronic document retention system provided that the system:

- a) Is properly configured to maintain the original version along with all subsequent versions reflecting all changes to the report for reports that are stored in an alterable format;

- b) Maintains a unique signature for each version of the report, including the original;
- c) Retains and reports a complete log of changes to all reports including who (user identification) performed the changes and when (date and time);
- d) Provides a method of complete indexing for easily locating and identifying the report including at least the following (which may be input by the user):
 - i. Date and time report was generated;
 - ii. Application or system generating the report;
 - iii. Title and description of the report;
 - iv. User identification of who is generating the report;
 - v. Any other information that may be useful in identifying the report and its purpose;
- e) Is configured to limit access to modify or add reports to the system through logical security of specific user accounts;
- f) Is configured to provide a complete audit trail of all administrative user account activity;
- g) Is properly secured through use of logical security measures (user accounts with appropriate access, proper levels of event logging, and document the version control, etc.);
- h) Is physically secured with all other critical components of the Interactive Gaming System; and
- i) Is equipped to prevent disruption of report availability and loss of data through hardware and software redundancy best practices, and backup processes.

B.2.8 Asset Management

All physical or logical assets housing, processing or communicating sensitive information, including those comprising the operating environment of the Interactive Gaming System and/or its components, shall be accounted for.

- a) Procedures shall exist for adding new assets and removing assets from service.
- b) Assets shall be disposed of securely and safely using documented procedures.
- c) A policy shall be included on the acceptable use of assets associated with the system and its operating environment.
- d) The designated “owner” of each asset is responsible for:
 - i. Ensuring that information and assets are appropriately classified in terms of their confidentiality, integrity, accountability, and availability; and
 - ii. Defining and periodically reviewing access restrictions and classifications.
- e) A procedure shall exist to ensure that recorded accountability for assets is compared with actual assets at least annually or at intervals required by the regulatory body and appropriate action is taken with respect to discrepancies.
- f) Copy protection to prevent unauthorized duplication or modification of licensed software may be implemented provided that:
 - i. The method of copy protection is fully documented and provided to the independent test laboratory, to verify that the protection works as described; or
 - ii. The program or component involved in enforcing the copy protection can be individually verified by the methodology approved by the regulatory body.
- g) Prior to disposal or re-use, assets containing storage media shall be checked to ensure that any licensed software, as well as PII and other sensitive information has been removed or securely overwritten (i.e., not just deleted).

B.2.9 Critical Asset Register (CAR)

A Critical Asset Register (CAR) shall be maintained for any assets that affect the functionality of the Interactive Gaming System or has an influence on how PII and other sensitive information is stored/handled by the system. The structure of the CAR shall include hardware and software components and the inter-relationships and dependencies of the components. The following minimum items shall be documented for each asset:

- a) The name/definition of each asset;
- b) A unique ID that is assigned to each individual asset;
- c) A version number of the asset listed;
- d) Identifying asset characteristics (e.g., system component, database, virtual machine, hardware);
- e) The “owner” responsible for the asset;
- f) The geographical location of hardware assets;
- g) Relevance codes on the asset’s role in achieving or ensuring the following classification criteria:
 - i. Confidentiality of PII and other sensitive information (e.g., identification and transaction information);
 - ii. Integrity of the system, specifically any asset that affects the functionality of the system and/or has an influence on how PII and other sensitive information is stored and/or handled;
 - iii. Availability of PII and other sensitive information; and
 - iv. Accountability of user activity, and how much influence the asset has on the user activity.

NOTE: For each of the above classification criteria a relevance code of 1, meaning no relevance (the asset can have no negative impact on the criteria), 2, meaning some relevance (the asset can have an impact on the criteria); or 3, meaning substantial relevance (the criteria are related to or dependent on the asset) shall be assigned.

B.3 Data Integrity

B.3.1 Data Security

The operator shall provide a layered approach to security within the production environment to ensure secure storage and processing of data. The Interactive Gaming System shall provide a logical means for securing PII and other sensitive information, including accounting, reporting, significant event, or other player and gaming data, against alteration, tampering, or unauthorized access.

- a) Appropriate data handling methods shall be implemented, including validation of input and rejection of corrupt data.
- b) The number of workstations where critical applications or associated databases may be accessed shall be limited.
- c) Encryption or password protection or equivalent security shall be used for files and directories containing data. If encryption is not used, the operator shall restrict users from viewing the contents of such files and directories, which at a minimum shall provide for the segregation of system duties and responsibilities as well as the monitoring and recording of access by any person to such files and directories.

- d) The normal operation of any equipment that holds data shall not have any options or mechanisms that may compromise the data.
- e) No equipment may have a mechanism whereby an error will cause the data to automatically clear.
- f) Any equipment that holds data in its memory shall not allow removal of the information unless it has first transferred that information to the database or other secured component(s) of the system.
- g) PII and other sensitive information shall be stored in areas of the server that are encrypted and secured from unauthorized access, both external and internal.
- h) Production databases containing data shall reside on networks separated from the servers hosting any player interfaces.
- i) Data shall be maintained at all times regardless of whether the server is being supplied with power.
- j) Data shall be stored in such a way as to prevent the loss of the data when replacing parts or modules during normal maintenance.

B.3.2 Data Alteration

The alteration of any accounting, reporting or significant event data shall not be permitted without supervised access controls. In the event any data is changed, the following information shall be documented or logged:

- a) Unique ID number for the alteration;
- b) Data element altered;
- c) Data element value prior to alteration;
- d) Data element value after alteration;
- e) Time and date of alteration; and
- f) Personnel that performed alteration (user identification).

B.3.3 Backup Frequency

Backup scheme implementation shall occur at least once every day or as otherwise specified by the regulatory body, although all methods will be reviewed on a case-by-case basis.

B.3.4 Storage Medium Backup

Audit logs, system databases, and any other PII or pertinent gaming data shall be stored using reasonable protection methods. The Interactive Gaming System shall be designed to protect the integrity of this data in the event of a failure. Redundant copies of this data shall be kept on the system with open support for backups and restoration, so that no single failure of any portion of the system would cause the loss or corruption of data.

- a) The backup shall be contained on a non-volatile physical medium, or an equivalent architectural implementation, so that should the primary storage medium fail, the functions of the system and the process of auditing those functions can continue with no critical data loss. If hard disk drives are used as backup media, data integrity shall be assured in the event of a disk failure.

- b) Upon completion of the backup process, the backup media is immediately transferred to a location physically separate from the location housing the servers and data being backed up (for temporary and permanent storage).
 - i. The storage location is secured to prevent unauthorized access and provides adequate protection to prevent the permanent loss of any data.
 - ii. Backup data files and data recovery components shall be managed with at least the same level of security and access controls as the system.
- c) Where the regulatory body allows for the use of cloud platforms, if the backup is stored in a cloud platform, another copy may be stored in a different cloud platform or region.

B.3.5 System Failure

The Interactive Gaming System shall have sufficient redundancy and modularity so that if any single component or part of a component fails, the functions of the system and the process of auditing those functions can continue with no critical data loss. When two or more components are linked a procedure shall be in place for the Interactive Gaming System and components to be tested after installation but prior to use in a production environment to verify that:

- a) The process of all gaming operations between the components shall not be adversely affected by restart or recovery of either component (e.g., transactions are not to be lost or duplicated because of recovery of one component or the other); and
- b) Upon restart or recovery, the components shall immediately synchronize the status of all transactions, data, and configurations with one another.

B.3.6 Accounting of Master Resets

The operator shall be able to identify and properly handle the situation where a master reset has occurred on any component which affects gaming operations.

B.3.7 Recovery Requirements

In the event of a catastrophic failure when the Interactive Gaming System cannot be restarted in any other way, it shall be possible to restore the system from the last backup point and fully recover. The contents of that backup shall contain the following critical information including, but not limited to:

- a) The recorded information specified under the section entitled "Information to be Maintained";
- b) Specific site or venue information such as configuration, security accounts, etc.;
- c) Current system encryption keys; and
- d) Any other system parameters, modifications, reconfiguration (including participating sites or venues), additions, merges, deletions, adjustments and parameter changes.

B.3.8 Uninterruptible Power Supply (UPS) Support

All system components shall be provided with adequate primary power. Where the server is a stand-alone application, it shall have an Uninterruptible Power Supply (UPS) connected and shall have sufficient capacity to permit a graceful shut-down and that retains all PII and other sensitive information during a power loss. It is acceptable that the system may be a component of a network that is supported by a network-wide UPS provided that the server is included as a device protected by the UPS. There shall be a surge protection system in use if not incorporated into the UPS itself.

B.3.9 Business Continuity and Disaster Recovery Plan

A business continuity and disaster recovery plan shall be in place to recover gaming operations if the Interactive Gaming System's production environment is rendered inoperable. Such plan shall consider disasters including, but not limited to, those caused by weather, water, flood, fire, environmental spills and accidents, malicious destruction, acts of terrorism or war, and contingencies such as strikes, epidemics, pandemics, etc. The business continuity and disaster recovery plan shall:

- a) Address the method of storing PII and other sensitive information, including gaming data, to minimize loss. If asynchronous replication is used, the method for recovering information shall be described or the potential loss of information shall be documented;
- b) Delineate the circumstances under which it will be invoked;
- c) Address the establishment of a recovery site physically separated from the production site. Utilization of cloud platforms for this purpose will be evaluated on a case-by-case basis;
- d) Contain recovery guides detailing the technical steps required to re-establish gaming functionality at the recovery site; and
- e) Address the processes required to resume administrative operations of gaming activities after the activation of the recovered system for a range of scenarios appropriate for the operational context of the system.

NOTE: The distance between the two locations should be determined based on potential environmental threats and hazards, power failures, and other disruptions but should also consider the potential difficulty of data replication as well as being able to access the recovery site within a reasonable time (Recovery Time Objective).

B.4 Communications

B.4.1 General Statement

This section will discuss the various wired and wireless communication methods, including communications performed across the internet or a public or third-party network, as allowed by the regulatory body.

B.4.2 Connectivity

Only authorized devices shall be permitted to establish communications between any critical components of the system. The Interactive Gaming System shall provide a method to:

- a) Enroll and un-enroll critical components;
- b) Enable and disable specific critical components;
- c) Ensure that only enrolled and enabled critical components can participate in gaming operations; and
- d) Ensure that the default condition for critical components shall be un-enrolled and disabled.

B.4.3 Communication Protocol

Each component of the Interactive Gaming System shall function as indicated by a documented secure communication protocol.

- a) All protocols shall use communication techniques that have proper error detection and recovery mechanisms, which are designed to prevent intrusion, interference, eavesdropping and tampering. Any alternative implementations will be reviewed on a case-by-case basis and approved by the regulatory body.
- b) All data communications critical to gaming or player account management shall employ encryption and authentication.
- c) Communications on the secure network shall only be possible between approved critical components that have been enrolled and authenticated as valid on the network. No unauthorized communications to components and/or access points shall be allowed.
- d) Communications shall be hardened in order to be immune to all possible malformed message attacks.
- e) After a system interruption or shutdown, communication with all components necessary for system operation shall not be established and authenticated until the program resumption routine, including any self-tests, are completed successfully.

B.4.4 Communications Over Internet/Public Networks

Communications between any system components, including Remote Player Devices, which takes place over internet/public networks, shall be secure by encrypting the data packets or by utilizing a secure communications protocol to ensure the integrity and confidentiality of the transmission. PII, sensitive information, wagers, results, financial information, and player transaction information shall always be encrypted over the internet/public network and protected from incomplete transmissions, misrouting, unauthorized message modification, disclosure, duplication or replay.

B.4.5 Wireless Local Area Network (WLAN) Communications

Wireless Local Area Network (WLAN) communications, as allowed by the regulatory body, shall adhere to the applicable jurisdictional requirements specified for wireless devices and network security. In the absence of specific jurisdictional standards, the "Wireless Device Requirements" and "Wireless Network Security Requirements" of the *GLI-26 Standards for Wireless Systems* shall be used as applicable.

NOTE: It is imperative for operators to review and update internal control policies and procedures to ensure the network is secure and threats and vulnerabilities are addressed accordingly. Periodic inspection and verification of the integrity of the WLAN is recommended.

B.4.6 Network Security Management

Networks shall be logically separated such that there should be no network traffic on a network link which cannot be serviced by hosts on that link. The following requirements apply:

- a) All network management functions shall authenticate all users on the network and encrypt all network management communications.
- b) The failure of any single item shall not result in a denial of service.
- c) An Intrusion Detection System/Intrusion Prevention System (IDS/IPS) shall be installed which includes one or more components that can listen to both internal and external communications as well as detect or prevent:
 - i. Distributed Denial of Service (DDOS) attacks;
 - ii. Shellcode from traversing the network;
 - iii. Address Resolution Protocol (ARP) spoofing; and
 - iv. Other "Man-In-The-Middle" attack indicators and sever communications immediately if detected.
- d) In addition to the requirements in (c), an IDS/IPS installed on a WLAN shall be able to:
 - i. Scan the network for any unauthorized or rogue access points or devices connected to any access point on the network at least quarterly or if defined by the regulatory body;
 - ii. Automatically disable any unauthorized or rogue devices connected to the system; and
 - iii. Maintain a history log of all wireless access for at least the previous ninety days or as otherwise specified by the regulatory body. This log shall contain complete and comprehensive information about all wireless devices involved and shall be able to be reconciled with all other networking devices within the site or venue.
- e) Network Communication Equipment (NCE) shall meet the following requirements:
 - i. NCE shall be constructed in such a way as to be resistant to physical damage to the hardware or corruption of the contained firmware/software by normal usage;
 - ii. NCE shall be physically secured from unauthorized access;
 - iii. System communications via NCE shall be logically secured from unauthorized access; and
 - iv. NCE with limited onboard storage shall, if the audit log becomes full, disable all communication or offload logs to a dedicated log server.
- f) All entry and exit points to the network shall be identified, managed, controlled, and monitored on a 24/7 basis. In addition:
 - i. All network hubs, services and connection ports shall be secured to prevent unauthorized access to the network; and
 - ii. Unused services and non-essential ports shall be either physically blocked or software disabled whenever possible.
- g) In cloud and virtualized environments, redundant server instances shall not run under the same hypervisor. In addition:
 - i. Each server instance may perform only one function; and
 - ii. Alternative equivalently secure mechanisms will be considered as technology advances.
- h) Stateless protocols, such as UDP (User Datagram Protocol), shall not be used for sensitive information without stateful transport. Note that although HTTP (Hypertext Transport Protocol) is technically stateless, if it runs on TCP (Transmission Control Protocol) which is stateful, this is allowed.

- i) All changes to network infrastructure (e.g., network communication equipment configuration) shall be logged.
- j) Virus scanners and/or detection programs shall be installed on the system. These programs shall be updated regularly to scan for new strains of viruses.
- k) The operator shall monitor the system and network in order to prevent, detect, mitigate, and respond to cyberattacks.

B.4.7 Active and Passive Attacks

Appropriate measures shall be in place to detect, prevent, mitigate, and respond to common active and passive technical attacks. The operator shall have an established procedure to gather cyber threat intelligence and act on it appropriately.

B.4.8 Mobile Computing and Communications

A formal policy shall be in place, and appropriate security measures shall be adopted to protect against the risks of using mobile computing and communication facilities. Telecommuting shall not be permitted except under circumstances where the security of the endpoint can be guaranteed.

B.5 Third-Party Service Providers

B.5.1 Third-Party Communications

Where communications with third-party service providers are implemented, such as for player loyalty programs, payment services (financial institutions, payment processors, etc.), location services, information security services, cloud services, live game services, and identity verification services, the following requirements apply:

- a) The Interactive Gaming System shall be capable of securely communicating with third-party service providers using encryption and strong authentication.
- b) All login events involving third-party service providers shall be recorded to an audit file.
- c) Communication with third-party service providers shall not interfere or degrade normal Interactive Gaming System functions.
 - i. Third-party service provider data shall not affect player communications.
 - ii. Third-party service providers shall be on a segmented network separate from network segments hosting player connections.
 - iii. Gaming shall be disabled on all network connections except for those within the production environment.
 - iv. The system shall not route data packets from third-party service providers directly to the production environment and vice-versa.
 - v. The system shall not act as IP routers between the production environment and third-party service providers.

B.5.2 Third-Party Services

The security roles and responsibilities of third-party service providers shall be defined and

documented as required by the regulatory body. The operator shall have policies and procedures for managing them and monitoring their adherence to relevant security requirements.

- a) Agreements with third-party service providers involving accessing, processing, communicating or managing the system and/or its components, or adding products or services to the system and/or its components shall cover all relevant security requirements.
- b) The services, reports and records provided by the third-party service providers shall be monitored and reviewed annually or as required by the regulatory body.
- c) Changes to the provision of third-party service providers, including maintaining and improving existing security policies, procedures and controls, shall be managed, taking account of the criticality of systems and processes involved and re-assessment of risks.
- d) The access rights of third-party service providers to the system and/or its components shall be removed upon termination of their contract or agreement or adjusted upon change.

B.5.3 Third-Party Data Processing

Unauthorized third-party service providers shall be prevented from viewing or altering PII and other sensitive information. Where PII and other sensitive information is shared with third-party service providers, formal data processing agreements shall be in place that states the rights and obligations of each party concerning the protection of the PII and other sensitive information. Each data processing agreement shall set out:

- a) The subject matter and duration of the processing;
- b) The nature and purpose of the processing;
- c) The type of data to be processed;
- d) How the data is stored;
- e) The detail of the security surrounding the data;
- f) The means used to transfer the data from one organization to another;
- g) The means used to retrieve data about certain individuals;
- h) The method for ensuring a retention schedule is adhered to;
- i) The means used to delete or dispose of the data; and
- j) The categories of data.

B.6 Technical Controls

B.6.1 Domain Name Service (DNS) Requirements

The following requirements apply to the servers used to resolve public or external Domain Name Service (DNS) queries used in association with the Interactive Gaming System.

- a) The operator shall utilize a secure primary DNS server and a secure secondary DNS server which are logically and physically separate from one another.
- b) The primary DNS server shall be physically located in a secure data center or a virtualized host in an appropriately secured hypervisor or equivalent.
- c) Logical and physical access to the DNS server(s) shall be restricted to authorized personnel.
- d) Zone transfers to arbitrary hosts shall be disallowed.

- e) A method to prevent cache poisoning, such as DNS Security Extensions (DNSSEC), is required.
- f) Multi-factor authentication shall be in place.
- g) Registry lock shall be in place, so any request to change DNS server(s) will need to be verified manually.

B.6.2 Cryptographic Controls

A policy on the use of cryptographic controls for protection of information shall be developed and implemented.

- a) PII and other sensitive information shall be encrypted if it traverses a network with a lower level of trust. Encryption shall also be applied for such PII and other sensitive information stored on portable computer systems (e.g., laptops, USB devices, etc.).
- b) Data that is not required to be hidden but shall be authenticated shall use some form of message authentication technique.
- c) Authentication shall use a security certificate from an approved organization, containing information about whom it belongs to, who it was issued by, valid dates, a unique serial number or other unique identification that can be used to verify the contents of the certificate.
- d) The grade of encryption used shall be appropriate to the sensitivity of the data.
- e) The use of encryption algorithms shall be reviewed periodically to verify that the current encryption algorithms are secure.
- f) The encryption method shall include the use of different encryption keys so that encryption algorithms can be changed or replaced to correct weaknesses as soon as practical. Other methodologies shall be reviewed on a case-by-case basis.
- g) Encryption keys shall be stored on a secure and redundant storage medium after being encrypted themselves through a different encryption method and/or by using a different encryption key.

B.6.3 Encryption Key Management

The management of encryption keys shall follow defined processes established by the operator and/or regulatory body, which shall cover the following:

- a) Obtaining or generating encryption keys and securely storing them in a way which limits access;
- b) Managing the expiry of encryption keys, where applicable;
- c) Revoking encryption keys;
- d) Securely changing the current encryption keyset; and
- e) Recovering data encrypted with a revoked or expired encryption key for a defined period after the encryption key becomes invalid.

B.6.4 Critical Component Hardening

Configuration procedures for critical components shall address all known security vulnerabilities and be consistent with industry-accepted best practices for system hardening. The appropriateness and effectiveness of steps taken to harden critical components shall be regularly assessed and, if

appropriate, changes shall be made to improve the hardening. These configuration procedures shall include the following:

- a) All default or standard configuration parameters shall be removed from all components where a security risk is presented;
- b) Only one primary function shall be implemented per server to prevent functions that require different security levels from co-existing on the same server;
- c) Additional security features shall be implemented for any required services, protocols or daemons that are considered to be insecure;
- d) System security parameters shall be configured to prevent misuse; and
- e) All unnecessary functionality shall be removed, such as scripts, drivers, features, subsystems, file systems, and unnecessary web servers.

B.6.5 Generation and Storage of Logs

There shall be procedures in place to centrally monitor and manage user activities, exceptions, and information security events. Logs recording these items shall be:

- a) Generated on each critical component of the system in order to monitor and rectify anomalies, flaws and alerts;
- b) Stored for an appropriate period to assist in future investigations and access control monitoring;
- c) Protected against tampering and unauthorized access; and
- d) Reviewed periodically using a documented process. A record of each review shall be maintained.

B.7 Remote Access and Firewalls

B.7.1 Remote Access Security

Remote access is defined as any access from outside the system or system network including any access from other networks within the same site or venue. Remote access shall only be allowed if authorized by the regulatory body and shall:

- a) Be performed via a secured method, such as a multi-factor authentication process;
- b) Have the option to be disabled;
- c) Accept only the remote connections permissible by the firewall application and system settings;
- d) Be limited to only the application functions necessary for users to perform their job duties:
 - i. No unauthorized remote user administration functionality (adding users, changing permissions, etc.) is permitted; and
 - ii. Unauthorized access to the operating system or to any database other than information retrieval using existing functions is prohibited.

NOTE: Remote access security will be reviewed on a case-by-case basis, in conjunction with the implementation of the current technology and approval from the regulatory body.

B.7.2 Remote Access Procedures by Suppliers

A procedure for strictly controlled remote access shall be established. It is acknowledged that the supplier may, as needed, access the system and its associated components remotely for product and user support or updates/upgrades, as permitted by the regulatory body and the operator. This remote access shall use user accounts reserved for this purpose which are:

- a) Continuously monitored by the operator;
- b) Disabled when not in use; and
- c) Restricted through logical security controls to access only the necessary application(s) and/or database(s) for the product and user support or providing updates/upgrades.

B.7.3 Remote Access Activity Log

The remote access application shall maintain an activity log which updates automatically depicting all remote access information, to include:

- a) Identification of user(s) who performed and/or authorized the remote access;
- b) Remote IP Addresses, Port Numbers, Protocols, and where possible, MAC Addresses;
- c) Time and date the connection was made and duration of connection; and
- d) Activity while logged in, including the specific areas accessed and changes made.

NOTE: This activity log shall be regularly reviewed as required by the operator and/or the regulatory body.

B.7.4 Firewalls

All communications, including remote access, shall pass through at least one approved application-level firewall. This includes connections to and from any non-system hosts used by the operator.

- a) The firewall shall be located at the boundary of any two dissimilar security domains.
- b) A device in the same broadcast domain as the system host shall not have a facility that allows an alternate network path to be established that bypasses the firewall.
- c) Any alternate network path existing for redundancy purposes shall also pass through at least one application-level firewall.
- d) Only firewall-related applications may reside on the firewall.
- e) Only a limited number of user accounts may be present on the firewall (e.g., network or system administrators only).
- f) The firewall shall reject all connections except those that have been specifically approved.
- g) The firewall shall reject all connections from destinations which cannot reside on the network from which the message originated (e.g., RFC1918 addresses on the public side of an internet firewall).
- h) The firewall shall only allow remote access using encryption that meets current industry accepted standards, such as ISO/IEC 19790, FIPS 140-2, or equivalent.

B.7.5 Firewall Audit Logs

Firewalls used to protect the production environment shall be able to log audit information in a manner to preserve and secure the information from loss or alteration. This information includes the following:

- a) All changes to configuration of the firewall;
- b) All successful and unsuccessful connection attempts through the firewall; and
- c) The source and destination IP Addresses, Port Numbers, Protocols, and where possible, MAC Addresses.

NOTE: A configurable parameter 'unsuccessful connection attempts' may be utilized to deny further connection requests should the predefined threshold be exceeded. The system administrator shall also be notified.

B.8 Change Management

B.8.1 General Statement

A change management policy (CMP) is selected by the regulatory body for handling updates to the Interactive Gaming System and its components based on the propensity for frequent system upgrades and chosen risk tolerance. For systems that require frequent updates, a risk-based change management program may be utilized to afford greater efficiency in deploying updates. Risk-based CMPs typically include a categorization of proposed changes based on regulatory impact and define associated certification procedures for each category. The independent test laboratory will evaluate the system and future modifications in accordance with the CMP selected by the regulatory body.

B.8.2 Program Change Control Procedures

Program change control procedures shall be adequate to ensure that only authorized versions of programs are implemented on the production environment. These change controls shall include:

- a) An appropriate software version control or mechanism for all software components, source code, and binary controls;
- b) Records kept of all new installations and/or modifications to the system, including:
 - i. The date of the installation or modification;
 - ii. Details of the reason or nature of the installation or change such as new software, server repair, significant configuration modifications;
 - iii. The component(s) to be changed including the unique identification number from the CAR, version information, and if the component being changed is hardware, the physical location of this component;
 - iv. The identity of the user(s) performing the installation or modification;
 - v. The identity of the user(s) responsible for authorizing the installation or modification;
- c) A strategy to cover the potential for an unsuccessful install or a field issue with one or more changes implemented under the CMP:
 - i. Where an outside party such as an App store is a stakeholder in the release process, this strategy shall cover managing releases through the outside party. This strategy may take into account the severity of the issue;

- ii. Otherwise, this strategy shall cover reverting back to the last implementation (rollback plan), including complete backups of previous versions of software and a test of the rollback plan prior to implementation to the production environment;
- d) A policy addressing emergency change procedures;
- e) Procedures for testing and migration of changes, including the identification of authorized personnel for signoff prior to release;
- f) Segregation of duties within the release process; and
- g) Procedures to ensure that technical and user documentation is updated as a result of a change.

B.8.3 System Development Life Cycle

The acquisition and development of new software shall follow defined processes established by the operator and/or regulatory body.

- a) The production environment shall be logically and physically separated from the development and test environments. When cloud platforms are used, no direct connection may exist between the production environment and any other environment.
- b) The delegation of responsibilities between the operator and/or supplier shall be established where applicable.
- c) There shall be a documented method to develop software securely:
 - i. Following industry standards and/or best practices for coding; and
 - ii. Incorporating information security throughout the life cycle.
- d) The documented test methodology shall include provisions to:
 - i. Verify that test software is not deployed to the production environment; and
 - ii. Prevent the use in testing of actual PII and other sensitive information, or other raw production data.
- e) All documentation relating to software and application development shall be available and retained for the duration of its life cycle.

B.8.4 Patches

The operator shall have patching policies agreed upon with the regulatory body, whether developed and supported by the operator or by a third-party service provider. All patches should be tested whenever possible on a development and test environment configured identically to the target production environment. Under circumstances where patch testing cannot be thoroughly conducted in time to meet the timelines for the severity level of the alert and if authorized by the regulatory body, then patch testing should be risk managed, either by isolating or removing the untested component from the network or applying the patch and testing after the fact.

B.9 Technical Security Testing

B.9.1 Periodic Security Testing

On an annual basis, or as required by the regulatory body, technical security tests on the production environment shall be performed to guarantee that no vulnerabilities putting at risk the security and operation of the Interactive Gaming System exist.

- a) These tests shall consist of a method of evaluation of security by means of an attack simulation by a third-party following a known methodology, and the analysis of vulnerabilities will consist in the identification and passive quantification of the potential risks of the system.
- b) Unauthorized access attempts shall be carried out up to the highest level of access possible and shall be completed with and without available authentication credentials (white box/black box type testing). These allow assessments to be made regarding operating systems and hardware configurations, including but not limited to:
 - i. UDP/TCP port scanning;
 - ii. Stack fingerprinting and TCP sequence prediction to identify operating systems and services;
 - iii. Public Service Banner grabbing;
 - iv. Web scanning using HTTP and HTTPS vulnerability scanners; and
 - v. Scanning routers using BGP (Border Gateway Protocol), BGMP (Border Gateway Multicast Protocol) and SNMP (Simple Network Management Protocol).
- c) Once completed, a report on the assessments shall be provided to the operator and/or regulatory body, which shall include:
 - i. Scope of review;
 - ii. Name and company affiliation of the individual(s) who conducted the assessment;
 - iii. Date of the assessment;
 - iv. Findings;
 - v. Recommended corrective action, if applicable; and
 - vi. The operator's response to the findings and recommended corrective action.

B.9.2 Vulnerability Assessment

The purpose of the vulnerability assessment is to identify vulnerabilities, which could be later exploited during penetration testing by making basic queries relating to services running on the systems concerned. The vulnerability assessment shall include at least the following activities:

- a) External Vulnerability Assessment – The targets are the network devices and servers which are accessible by a third-party (both a person and a company), by means of a public IP (publicly exposed), related to the system from which is possible to access PII and other sensitive information.
- b) Internal Vulnerability Assessment – The targets are the internal facing servers (within the DMZ, or within the LAN if there is no DMZ) related to the system from which is possible to access PII and other sensitive information. Testing of each security domain on the internal network shall be undertaken separately.

B.9.3 Penetration Testing

The purpose of the penetration testing is to exploit any weaknesses uncovered during the vulnerability assessment on any publicly exposed applications or systems hosting applications processing, transmitting and/or storing PII and other sensitive information. The penetration testing shall include at least the following activities:

- a) Network Layer Penetration Test – The test mimics the actions of an actual attacker exploiting weaknesses in the network security examining systems for any weakness that could be used by an external attacker to disrupt the confidentiality, availability and/or integrity of the network.
- b) Application Layer Penetration Test – The test uses tools to identify weaknesses in the applications with both authenticated and unauthenticated scans, analysis of the results to remove false positives, and manual testing to confirm the results from the tools and to identify the impact of the weaknesses.

B.9.4 Firewall Rules Review

If required by the regulatory body, the firewall rules shall be periodically reviewed to verify the operating condition of the firewall and the effectiveness of its security configuration and rule sets and shall be performed on all the perimeter firewalls and the internal firewalls.

Appendix C: Operational Audit for Service Providers

C.1 Introduction

C.1.1 General Statement

This appendix sets forth procedures and practices for the assessment of providers of particular services, which will be reviewed in an operational audit as a part of the Interactive Gaming System evaluation, including, but not limited to evaluation of information security services, cloud services, payment services (financial institutions, payment processors, etc.), location services, live game services, and any other services which may be offered directly by the operator or involve the use of third-party service providers.

NOTE: It is also recognized that additional procedures and practices which are not specifically included within this standard will be relevant and required for an operational audit as determined by the operator and/or regulatory body within their rules, regulations, and Minimum Internal Control Standards (MICS).

C.2 Information Security Services

C.2.1 Information Security Management System (ISMS) Audit

The operator or a third-party information security service provider used to provide management, support, security, or disaster recovery services for the system shall undergo a specific audit as required by the regulatory body. Their Information Security Management System (ISMS) will be reviewed against common information security principles in relation to confidentiality, integrity and availability, as covered within the appendix for “Operational Audit for Technical Security Controls”, and this section. If allowed by the regulatory body for completing this audit, it is acceptable to leverage the results of prior audits conducted by appropriately accredited vendors and qualified individuals, within the current audit period (e.g., within the past year), against standards such as ISO/IEC 27001, the NIST Cybersecurity Framework (CSF), or equivalent. Such leveraging will be noted in the audit report.

C.2.2 Information Security Policy

An information security policy shall be in effect to describe the ISMS’s approach to managing information security and its implementation. The information security policy shall:

- a) Have a provision requiring review at planned intervals and when changes occur to the Interactive Gaming System or the operator’s processes which alter the risk profile of the system;
- b) Be approved by management and communicated to all operator employees and relevant third-party service provider employees; and
- c) Delineate the security roles and responsibilities of operator employees and relevant third-party service provider employees for the operation, service and maintenance of the Interactive Gaming System and/or its components;

C.2.3 Access Control Policy

An access control policy shall be established and documented within the ISMS which shall be periodically reviewed based on business and security requirements for physical and logical access to the Interactive Gaming System and/or its components.

- a) A formal user registration and de-registration procedure shall be in place for granting and revoking access to the Interactive Gaming System and/or its components.
- b) The allocation of access privileges shall be restricted and controlled based on business requirements and the principle of least privilege.
- c) Employees shall only be provided with access to the services or facilities that they have been specifically authorized to use.
- d) Employees shall receive appropriate security awareness training and regular updates in organizational policies and procedures as needed for their job function.
- e) Management shall review user access rights at regular intervals using a formal process.
- f) The access rights of employees to the Interactive Gaming System and/or its components shall be removed upon termination of their employment, contract or agreement, or adjusted upon change.

C.2.4 Allocation of Security Responsibilities

Security responsibilities shall be effectively documented and implemented within the ISMS.

- a) A security forum comprised of management shall be formally established to monitor and review the ISMS to ensure its continuing suitability, adequacy and effectiveness, maintain formal minutes of meetings, and convene periodically as required by the regulatory body.
- b) A security department shall exist that will be responsible to develop and implement security strategies and action plans. The security department shall:
 - i. Be involved in and review all processes regarding security aspects of the operator, including, but not be limited to, the protection of information, communications, physical infrastructure, and game processes;
 - ii. Report to no lower than executive level management and not reside within or report to the IT department; and
 - iii. Have the competences and be sufficiently empowered and have access to all necessary resources to enable the adequate assessment, management, and reduction of risk.
- c) The head of the security department shall be a member of the security forum and be responsible for recommending security policies and changes.

C.2.5 Incident Management

A process for reporting information security incidents and the management response shall be documented and implemented within the ISMS in accordance with the information security policy. The incident management process shall:

- a) Include a definition of what constitutes an information security incident;

- b) Document how information security incidents are reported through appropriate management channels;
- c) Address management responsibilities and procedures to ensure a rapid, effective and orderly response to information security incidents, including:
 - i. Procedures to handle different types of information security incident;
 - ii. Procedures for the analysis and identification of the cause of the incident;
 - iii. Communication with those affected by the incident;
 - iv. Reporting of the incident to the appropriate authority;
 - v. Forensic evidence collection; and
 - vi. Controlled recovery from information security incidents.

C.3 Cloud Services

C.3.1 Cloud Service Provider Audit

An operator making use of a cloud service provider, as allowed by the regulatory body, to store, transmit or process PII and other sensitive information shall undergo a specific audit as required by the regulatory body. The cloud service provider's operations will be reviewed against common information security principles in relation to the provision and use of cloud services, as covered within the appendix for "Operational Audit for Technical Security Controls", and this section. If allowed by the regulatory body for completing this audit, it is acceptable to leverage the results of prior audits conducted by appropriately accredited vendors and qualified individuals, within the current audit period (e.g., within the past year), against standards such as ISO/IEC 27017 and ISO/IEC 27018 or equivalent. Such leveraging will be noted in the audit report.

C.3.2 Cloud Service Provider Relationship

Cloud security is a shared responsibility between the cloud service provider and the operator.

- a) If PII and other sensitive information is stored, processed or transmitted in a cloud environment, the applicable requirements will apply to that environment, and will typically involve validation of both the cloud service provider's infrastructure and the operator's usage of that environment.
- b) The allocation of responsibility between the cloud service provider and the operator for managing security controls does not exempt an operator from the responsibility of ensuring that PII and other sensitive information is properly secured according to the applicable requirements.
- c) Clear policies and procedures shall be agreed between the cloud service provider and the operator for all security requirements, and responsibilities for operation, management and reporting shall be clearly defined and understood for each applicable requirement.

C.4 Payment Services

C.4.1 Payment Service Provider Audit

The operator or a third-party payment service provider used to conduct transactions with financial institutions shall undergo a specific audit as required by the regulatory body. The payment service provider's operations will be reviewed against common information security principles in relation to the provision and use of payment services, as covered within the appendix for "Operational Audit for Technical Security Controls", and this section. If allowed by the regulatory body for completing this audit, it is acceptable to leverage the results of prior audits conducted by appropriately accredited vendors and qualified individuals, within the current audit period (e.g., within the past year), against standards such as the Payment Card Industry Data Security Standards (PCI-DSS) or equivalent. Such leveraging will be noted in the audit report.

C.4.2 Securing Payments

The payment service provider shall protect payment types used in the system from fraudulent use.

- a) Collection of PII and other sensitive information directly related to financial transactions shall be limited to only the information strictly needed for the transaction.
- b) There shall be processes in place for verifying the payment service provider's protection of the PII or other sensitive information directly related to each financial transaction.
- c) Any communication channels between the operator and the payment service provider conveying payment details shall be encrypted and protected against interception.
- d) All financial transactions shall be reconciled between the operator and the payment service provider daily or as otherwise specified by the regulatory body. There shall be established procedures for:
 - i. In calculating amounts paid to or received from a player, considering all payments used by the player or operator; and
 - ii. Assuring the match of ownership between the payment type holder and the player account holder.

C.5 Location Services

C.5.1 Location Service Provider Audit

The operator or a third-party location service provider used to provide information for the identification of and the geographic location of players as authorized by the regulatory body shall undergo a specific audit as required by the regulatory body to assess and measure its continued ability to detect and mitigate existing and emerging location fraud risks, including the controls within this section.

C.5.2 Location Service Reporting and Analytics

Given that location fraud shall be assessed on a single location check, as well as cumulative player locations over time, the location service provider shall:

- a) Have procedures to maintain a real-time data feed of all location checks and an up-to-date list of potential location fraud risks (e.g., fake location apps, virtual machines, remote desktop programs, etc.);

- b) Offer an alert system to identify unauthorized or improper access; and
- c) Facilitate routine, recurrent delivery of supplemental fraud reports pertaining to suspicious or unusual activities, account sharing, malicious players and devices, as well as other high-risk transactional data.

C.5.3 Location Service Maintenance

To maintain the overall integrity of the location service, the location service provider shall ensure the location detection service or application used for location detection:

- a) Utilizes closed-source databases (IP, proxy, VPN, etc.) that are frequently updated and periodically tested for accuracy and reliability; and
- b) Undergoes frequent updates to maintain cutting-edge data collection, device compatibility, and fraud prevention capabilities against location fraud risks.

C.6 Live Game Services

C.6.1 Live Game Service Provider Audit

The live game service provider shall be required to meet the applicable aspects of the appropriate policy and/or procedure documents as determined by the operator in consultation with the regulatory body, including the controls within this section. To maintain the integrity of the game outcome determination process, live game services may be subject to an additional verification audit, as required by the regulatory body.

C.6.2 Live Game Environment Security

The live game environment shall be defined and have appropriate physical security controls. Secure areas, consumables, and live game equipment shall be protected by appropriate entry controls and security procedures to ensure that only authorized members of staff are allowed access according to the following guidelines:

- a) In case the live games occur in a gaming venue (e.g., casino, bingo hall, card room, etc.), where the gaming area is opened for game play by in-person players, according to the laws and standards of the regulatory body, the live game environment shall be controlled with the same rules and controls as the gaming venue, including, but not necessarily restricted to:
 - i. The security systems of the perimeters of those areas where the live games occur; and
 - ii. The controls on the accesses to those areas, to ensure that only authorized members of staff could reach them, and controls on the whole area near to the live game equipment to ensure the players correctness.
- b) In the case the live games occur in a gaming venue, during the public opening hours, in a gaming area not opened for game play by in-person players:
 - i. The areas where the live games occur and the whole of the area near the live game equipment and the related accesses, shall be at least protected by delimitation and alert barriers and supervised by the security staff; and
 - ii. The live game equipment shall be subject to access controls as though these were in a

- gaming venue.
- c) In the case the live games occur in a private gaming studio or in a gaming venue during public closure hours or in a gaming area not opened to game play for the in-person players and not supervised by the security staff:
 - i. The areas where the live games occur and the whole of the area near the live game equipment and the related accesses, shall be protected by physical barriers and the related accesses protected through access security systems; and
 - ii. Access points such as delivery and loading areas and other points where unauthorized persons may enter the areas where the live games occur shall be controlled and, if possible, isolated from operations areas to avoid unauthorized access.

C.6.3 Surveillance and Recording

The live game service provider will be required to install, maintain, and operate a surveillance system that has the capability to monitor and record continuous unobstructed views of all live game play.

- a) A continuous recording shall be made of all the games played so that:
 - i. The information necessary to adequately reconstruct each game, consistent with the applicable recall requirements stated within the section entitled “Last Play Information Required” which are not displayed by the Gaming Platform itself, is identifiable and distinguishable;
 - ii. The date and time of each game can be determined to an accuracy of one second relative to the clock used by the system; and
 - iii. The sequence of games relative to each other can be determined.
- b) Procedures shall be in place to ensure that the recording:
 - i. Covers the defined live game environment with sufficient detail to confirm whether the game rules and procedures were followed and to identify discrepancies;
 - ii. Is captured in such a way that precludes interference or deletion;
 - iii. Can be reviewed by the operator and/or regulatory body in the event of a player complaint/dispute; and
 - iv. Is kept for at least ninety days or as required by the regulatory body.

C.6.4 Simulcast Control Servers

The live game service provider shall utilize simulcast control servers for recording all gaming activity and results. The live game service provider may use their own surveillance camera and split live feed to simulcast control server, or there may be a separate network of video involved. The simulcast control servers shall:

- a) Provide the player with real-time audio/visual access to the live game being played, including:
 - i. Any information found in the sections entitled “Game Information and Rules of Play” and “Information to be Displayed” which are not displayed by the Gaming Platform itself;
 - ii. The actions of the gaming attendant and, where applicable, other players;
 - iii. Date and time at the gaming venue; and
 - iv. Game identification/table number and location.

- b) Provide each player with an equivalent quality video/audio feed.
 - i. This equivalence shall be measured and verified whenever communications are initiated, including reconnection due to signal interruptions or re-initiation when the signal was severed.
 - ii. A minimum signal connection requirement shall be established, enforced and disclosed to the player.
- c) Prevent anyone from accessing the live game outcome prior to finalizing a wager.
- d) Record game results before posting to the Gaming Platform.
- e) Be equipped with a mechanism for an authorized employee to void game results, if necessary.

C.6.5 Live Game Equipment

The live game service provider shall provide a secure location for the placement, operation, and usage of live game equipment, including simulcast control servers, gaming servers and communications equipment. Security policies and procedures shall be in place and reviewed periodically to ensure that risks are identified, mitigated and underwritten by contingency plans. In addition, live game equipment shall meet minimum standards as determined by the regulatory body as well as the following requirements:

- a) Live game equipment shall be installed according to a defined plan and records of all installed live game equipment shall be maintained.
- b) Live game equipment shall be sited or protected to reduce the risks from:
 - i. Environmental threats and hazards;
 - ii. Opportunities for unauthorized access;
 - iii. Power failures; and
 - iv. Other disruptions caused by failures in supporting utilities.
- c) Access to the live game equipment by the gaming attendant shall be controlled by a secure logon procedure or other secure process approved by the regulatory body to ensure that only authorized gaming attendants are allowed access. It shall not be possible to modify the configuration settings of the live game equipment without an authorized secure process.
- d) A user session, where supported by live game equipment, is initiated by the gaming attendant logging in to their user account using their secure username and password or an alternative means for the gaming attendant to provide identification information as allowed by the regulatory body.
 - i. All available options presented to the gaming attendant shall be tied to their user account.
 - ii. If the live game equipment does not receive input from the gaming attendant within five minutes, or a period specified by the regulatory body, the user session shall time out or lock up, requiring the gaming attendant to re-establish their login in order to continue.
- e) To ensure its continued availability and integrity, live game equipment shall be correctly maintained, inspected and serviced at regular intervals by designated staff to ensure that it is free from defects or mechanisms that could interfere with its operation.
- f) Prior to disposal or re-use, live game equipment containing storage media shall be checked to ensure that any licensed software and other sensitive information has been removed or securely overwritten (i.e., not just deleted).

C.6.6 Live Game Consumables

Consumables used by live game services shall meet minimum standards as determined by the regulatory body as well as the following requirements:

- a) Procedures shall be implemented for tracking the inventory of consumables from receipt, through storage, installation, use, retirement, and destruction. All consumables shall have an associated audit trail which shows which designated staff had access to the consumables at any given time for any given operation;
- b) Periodic random inspections shall be performed on the consumables in use, from disbursement to retirement; and
- c) Used consumables shall be destroyed in a manner which prevents their accidental re-use in live games, and which puts them permanently beyond use.

C.6.7 Physical Player Chips

The following controls apply to physical player chips used in live games. For instance, in a live poker game involving both in-person players and players who are playing through a Gaming Platform, physical player chips may be placed on the table to indicate the player's wager to the other players.

- a) All chips shall have identical physical characteristics except for specific differences in denomination.
- b) The chips of all possible denominations shall be shown (as per the game denomination) so that unavailability of chips of smaller denominations will not force players to bet more.
- c) Each chip shall be designed so that the specific denomination of each chip can be determined when placed in a stack of chips of various denominations.
- d) The chips used shall be unique for each denomination they are representing, and the denomination shall be clearly visible on any chip.

C.6.8 Live Game Procedures

The following procedures shall be in place for live game service providers. These procedures shall be reviewed periodically to ensure that risks are identified, mitigated and underwritten by contingency plans.

- a) Procedures shall be in place to enable a suitable response to any security issue within the live game services.
- b) Procedures shall be in place to prevent any person from tampering with or interfering with the operation of any live game or live game equipment.
- c) Separate procedures shall exist for each game and new games shall have their procedures in place before being offered to players.
- d) The following procedures shall be in place for the staff of the live game service provider, including game attendants, as required by the regulatory body:
 - i. Procedures shall be in place to perform periodic background checks on staff;
 - ii. Staff shall undergo adequate training to provide live game in a fair way according to

- documented procedures and game rules. Evidence of training and periodic refresher training shall be maintained;
- iii. Staff shall be trained in, and regularly reminded of, any physical behavior which is prohibited or mandated (including hand signals, talking, the handling of the cards, etc.);
 - iv. Policies and procedures concerning rotations, shift patterns and allocation shall be documented, including how game attendants are allocated to tables/games (i.e., without prior knowledge of which tables/games they will be serving and with their time-on-game set at a level to deter harmful relationships being developed), and changes in game attendants during exceptional circumstances;
 - v. A method to reasonably detect players who reject tables/games and re-apply for another within the same game type on a consistent basis until they arrive at their preferred table/game;
 - vi. The retention of documentation shall be robust, allowing staff records to be audited and investigations to be performed where staff members are either involved directly or where their presence in a particular place and/or time, is crucial to understanding a chain of events;
 - vii. Procedures for the hiring and termination of staff shall be documented;
 - viii. A supervisory employee shall always be present when live games are taking place;
 - ix. Staffing logs shall be maintained for each table/game; and
- e) Procedures shall be in place to inform in-person players that they are being filmed as part of a live feed.
 - f) Procedures regarding anomalous events which may occur during live games shall be documented and understood by staff, including, but not limited to:
 - i. Specialized device or physical randomness device malfunctions, including incorrect outcome detection;
 - ii. Dropped cards;
 - iii. Misdeals;
 - iv. Re-spins;
 - v. Aborted games; and
 - vi. Table/game closure.
 - g) Consistent card shuffling procedures, including a verification of the card count, frequency of shuffling, and cases for reshuffling, shall be in place. The shuffling of cards shall be logged.
 - h) A defined procedure shall exist for the accounting of the physical player chips.
 - i) Procedures shall be in place to demonstrate that a single member of staff would not be able to undertake all duties concerning game management and that there is segregation of responsibilities prior to play, during play and after play.
 - j) Procedures shall be in place to deal with player disconnection or any video, voice, or data stream disruptions during a live game.
 - k) Procedures shall be in place to ensure that for wagers placed on live games:
 - i. When wagers are placed by verbal instruction, the content of the wager is communicated back and acknowledged by the player before the wager is confirmed;
 - ii. When a game attendant is receiving wagers indicated by the player, a clear indication or notification if the wager has been accepted or rejected (in full or in part) is provided to the player; and
 - iii. The winning player is notified of their win, including the amount won, after the completion of the game and that their account balance is updated either immediately or once they exit

the game.

- l) Variations in the operation of card shufflers and shoes, roulette wheels, ball blowers, dice shakers or other live game equipment shall be incorporated into the game procedures to maintain randomness. This equipment shall have a level of randomness consistent with that seen in gaming venues to ensure their fairness and integrity.
- m) Procedures shall be in place to ensure card shoes and similar specialized devices and physical randomness devices are tamper-proof once they have been loaded to preclude interference prior to and during play.
- n) To ensure and maintain their integrity, any specialized devices and physical randomness devices shall be periodically inspected and tested for reliability. In addition:
 - i. All consumables or live game equipment that will be subjected to this hardware shall be checked against it for defects prior to processing, to prevent play being disrupted; and
 - ii. Logs of all tests shall be maintained.
- o) There shall be procedures in place to inform the player when the manual operation mode of the specialized device is activated, and tracking shall be enabled to allow for further review.
- p) Policies and procedures shall be in place to identify and replace specialized devices and physical randomness devices which show an unacceptable level of errors.
- q) Procedures shall be in place to maintain game logs and collate game events into statistics which can be analyzed for trends relating to game performance, staff and/or locations in the live game environment, including those for supervisors, shifts, procedure violations, as well as other incidents, irregularities, and errors.

Glossary of Key Terms

Access Control – The process of granting or denying specific requests for obtaining and using sensitive information and related services specific to a system; and to enter specific physical facilities which houses critical network or system infrastructure.

Advertised Award – An award that can be awarded by a game and which is explicitly advertised to the player in the game artwork.

Algorithm – A finite set of unambiguous instructions performed in a prescribed sequence to achieve a goal, especially a mathematical rule or procedure used to compute a desired result. Algorithms are the basis for most computer programming.

Alternative Game Mode – Any mode of gaming other than the normal mode of game play. This includes modes such as autoplay, tournament, and free play.

ARP, Address Resolution Protocol – The protocol used to translate IP addresses into MAC addresses to support communication on a wireless or wired local area network.

Artwork – The graphics, thematic art, help screens, and other textual information that is shown to a player by the player interface.

Audit Trail – A record showing who has accessed a system and what operations the user has performed during a given period.

Authentication – Verifying the identity of a user, process, software package, or device, often as a prerequisite to allowing access to resources in a system.

Automated Decision-Making – The ability to make decisions by technological means based on PII or data provided directly by players; data observed about players; derived or inferred data (e.g., risk rating). For any type of processing to be classed as automated rather than solely automated, there shall be meaningful human involvement in the process (for example through review or filtering) and that human involvement shall take place prior to the final decision.

Autoplay Mode – A player-selectable mode of a game that allows a player to place wagers automatically without any manual interaction, once a denomination, wager, and other play attributes have been selected for game play.

Backup – A copy of files and programs made to facilitate recovery if necessary.

Best-Hand Play – A collusion method where between two or more players only the one who has the best score always plays, while the other or others leave the game.

Biometrics – A biological identification input, such as fingerprints or retina patterns.

Bonusing Award – An incentive award based on a game event or some external trigger which do not include triggers based upon specific player account activity. Examples include multiplied awards, whereby the game multiplies all wins within a specified range by a specified value or an nth coin award is won when a percentage of play on participating games reaches a randomly selected value.

Cache Poisoning – An attack where the attacker inserts corrupt data into the cache database of the Domain Name Service (DNS).

Chip Dumping – A collusion method where two or more players help each other to stay in the game, leading to losses and therefore to an exchange of chips even with certainly winning combinations.

Communications Technology – Any method used, and the components employed, to facilitate the transmission and receipt of information, including transmission and reception by systems using wire, wireless, cable, radio, microwave, light, fiber optics, satellite or computer data networks, including the Internet and intranets.

Community Bonus – A type of bonus/feature play where players collaborate and/or compete for a shared award.

Contributions – The financial method by which progressive jackpot or incrementing jackpot pools are funded.

Contingency Plan – Management policy and procedures designed to maintain or restore gaming operations, possibly at an alternate location, in the event of emergencies, system failures, or disaster.

Credit Meter – A meter which maintains the player funds available to the player for the commitment of a wager which is transferred to and from the player account balance.

Critical Component – Any sub-system for which failure or compromise can lead to loss of player entitlements, government revenue or unauthorized access to data used for generating reports for the regulatory body. Examples of critical components include: Components which record, store, process, share, transmit or retrieve PII and other sensitive information (e.g., validation numbers, authentication credentials, etc.); Components which generate, transmit, or process random numbers used to determine the outcome of games; Components which store results or the current state of a player's wager; Points of entry to and exit from the above components (other systems which communicate directly with core critical systems); and Communication networks which transmit PII and other sensitive information.

Critical Control Program – A software program that controls behaviors relative to any applicable technical standard and/or regulatory requirement.

Cryptographic RNG – A Random Number Generator (RNG) which is resistant to attack or compromise by an intelligent attacker with modern computational resources who has knowledge of

the source code of the RNG and/or its algorithm. Cryptographic RNGs cannot be feasibly 'broken' to predict future values.

Data Integrity – The property that data is both accurate and consistent and has not been altered in an unauthorized manner in storage, during processing, and while in transit.

DDOS, *Distributed Denial of Service* – A type of attack where multiple compromised systems, usually infected with a destructive software program, are used to target a single system. Victims of a DDOS attack consist of both the end targeted system and all systems maliciously used and controlled by the hacker in the distributed attack.

Debit Instrument – A card, code, or other device with which a person may initiate an electronic funds transfer. The term includes, without limitation, a prepaid access instrument.

Direct Cryptanalytic Attack – An RNG attack whereby the attacker, given a sequence of past values produced by an RNG, is able to predict or estimate future RNG values.

Diversion Pool – The monies collected pursuant to a contribution schedule that are intended to be used for the funding of future progressive jackpots and incrementing jackpots or for other purposes.

DNS, *Domain Name Service* – The globally distributed internet database which (amongst other things) maps machine names to IP numbers and vice-versa.

Domain – A group of computers and devices on a network that are administered as a unit with common rules and procedures.

Double-Up (aka "Gamble") – An extended game play feature available to a player to double or risk current winnings.

DRP, *Disaster Recovery Plan* – A plan for processing critical applications and preventing loss of data in the event of a major hardware or software failure or destruction of facilities.

Effective Bandwidth – The amount of data that actually can be transferred across a network per unit of time. The effective bandwidth through the Internet is usually considerably lower than the bandwidth of any of the constituent links.

EFT, *Electronic Funds Transfer* (aka "ECT", "Electronic Credits Transfer") – An electronic transfer of funds from an independent financial institution to a player account using a payment service provider. This includes Automated Clearing House (ACH) transfers.

Encryption – The conversion of data into a form, called a ciphertext, which cannot be easily understood by unauthorized people.

Encryption Key – A cryptographic key that has been encrypted in order to disguise the value of the underlying plaintext.

Firewall – A component of a computer system or network that is designed to block unauthorized access or traffic while still permitting outward communication.

Flight Recorder – Game recall functionality that records various player physical actions and correlates them in time to other game inputs such as touch screen activations, button presses, etc. in order to more fully reconstruct the outcome of game play. When used in conjunction with a game containing a physical skill element, such functionality may be especially useful for recording/documenting aspects of game history specific to a player’s physicality, dexterity, motions, or gestures.

Free Play Mode – A game mode that allows a player to participate in a game without placing any wager, principally for the purpose of learning or understanding game play mechanics.

Game Cycle – A game cycle is defined as “wager to wager”. The cycle is the period from an initial wager to the point of the final transfer to the player’s credit meter or player account balance, or when all funds wagered are lost.

Game Theme (aka “Personality Program”) – The concept, subject matter, and methodology of design in which a game is built around, including artwork, game graphics, one or more paytables, sound effects, and music.

Game with Skill – A wagered game in which the skill of the player, rather than pure chance, is a factor in affecting the outcome of the game as determined over a period of continuous play. A game with skill contains one or more elements of skill in its design which can be leveraged by a player to impact the return percentage.

Gaming Platform – The Interactive Gaming System hardware and software which drives the which may drive the features common to game offerings, game configurations, RNGs, reporting, etc.

Gaming Rules (aka “House Rules”) – Any written, graphical, and auditory information compiled by the operator for the purpose of summarizing portions of the internal controls and certain other information necessary to inform the public of the functionality of the interactive gaming operations.

Gaming Session – The period of time commencing, at minimum, when a player initiates a game or series of games on a Gaming Platform for a particular game theme by committing a wager and ending at the time of a final game outcome for that game or series of games and coincident with the opportunity for the player to exit the game.

Geolocation – Identifying the real-world geographic location of an internet connected Remote Player Device.

Group Membership – A method of organizing user accounts into a single unit (by job position) whereby access to system functions may be modified at the unit level and the changes take effect for all user accounts assigned to the unit.

Hardware-Based RNG – An RNG that derives its randomness from small-scale physical events such as electric circuit feedback, thermal noise, radioactive decay, photon spin, etc.

Hash Algorithm – A function that converts a data string into an alpha-numeric string output of fixed length.

HTTP, *Hypertext Transport Protocol* – The underlying protocol used to define how messages are formatted and transmitted, and what actions servers and browsers shall take in response to various commands.

Identifier – Any specific and verifiable fact concerning a player or group of players which is based upon objective criteria relating to the player or group of players and which may be utilized to affect some prescribed change to a game configuration.

Identity Verification Service Provider – An entity who verifies, or provides information for the verification of, the identification of individuals.

IDS/IPS, *Intrusion Detection System/Intrusion Prevention System* – A system that inspects all inbound and outbound network activity and identifies suspicious patterns that may indicate a network or system attack from someone attempting to break into or compromise a system. Used in computer security, intrusion detection refers to the process of monitoring computer and network activities and analyzing those events to look for signs of intrusion in your system.

Incentive Credits and/or Prizes (aka “Incentive Awards”) – Credits and/or prizes that are not described in the payable of a game, that is based upon predetermined events or criteria established by the parameters of the Interactive Gaming System. An incentive award may be a promotional award or a bonusing award.

Increment Rate – The configurable or hardcoded value used to increment the progressive jackpot or incrementing jackpot.

Incrementing Jackpot – A monetary award or “payoff” which increases on the occurrence of one or more specific conditions (defined events) established by the rules of the game. In addition to the defined event(s), it is acceptable for incrementing jackpots to also increase according to the credits wagered in the game. An example of this would be an incrementing jackpot which increases every time you get a specific win in a bonus.

Information Security – Protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide integrity, confidentiality, and availability

Information Security Service Provider – An entity who provides management, support, security, or disaster recovery services for regulated hardware or software.

Interactive Gaming – Gaming, conducted through the use of communications technology, which uses an element of chance, skill, or strategy, or some combination of these elements in the

determination of awards, contain some form of activation to initiate the selection process, and makes use of a suitable methodology for delivery of the determined outcome to the Remote Player Device.

Interactive Gaming System – The hardware, software, firmware, communications technology, other equipment, as well as operator procedures implemented in order to allow player participation in gaming, and, if supported, the corresponding equipment related to the display of the game outcomes, and other similar information necessary to facilitate player participation. The system provides the player with the means to play games. The system provides the operator with the means to review player accounts, disable games, generate various gaming/financial transaction and account reports, input outcomes for live games, and set any configurable parameters.

Internet – An interconnected system of networks that connects computers around the world via TCP/IP.

IP Address, *Internet Protocol Address* – A unique number for a computer that is used to determine where messages transmitted on the Internet should be delivered. The IP address is analogous to a house number for ordinary postal mail.

ISMS, *Information Security Management System* – A defined, documented management system that consists of a set of policies, processes, and systems to manage risks to organizational data, with the objective of ensuring acceptable levels of information security risk.

Jackpot Display – A display which is used to indicate the progressive jackpot or incrementing jackpot information.

Jackpot Diversion Scheme – A portion of the jackpot contributions are diverted to another pool or “diversion pool” to be used as needed by the design of the progressive jackpot or incrementing jackpot (e.g., the diversion pool may be added to the reset value of the next jackpot or be used to pay simultaneous wins of a jackpot)

Jailbreaking – Modifying a smartphone or other electronic device to remove restrictions imposed by the manufacturer or operator to allow the installation of unauthorized software.

Key – A value used to control cryptographic operations, such as decryption, encryption, signature generation or signature verification.

Key Management – Activities involving the handling of cryptographic keys and other related security parameters (e.g., passwords) during the entire life cycle of the keys, including their generation, storage, establishment, entry and output, and zeroization.

Known Input Attack – An RNG attack whereby the attacker is able to compromise an RNG by determining or estimating the state of the RNG after initial seeding.

Link Utilization – The percentage time that a communications link is engaged in transmitting data.

Live Event Wagering – The wagering on live sports, competitions, matches, and other live event types approved by the regulatory body where the player places wagers on markets within a live event.

Live Game – A game conducted by a gaming attendant (e.g., dealer, croupier, etc.) and/or other gaming equipment (e.g., automated roulette wheel, ball blower, gaming device, etc.) in a live game environment in which players have the ability to review game play and communicate game decisions through the Gaming Platform. Live games include, but are not limited to, live drawings, live card games, live table games, live keno games, live bingo games, and live play of gaming devices or other games as allowed by the regulatory body.

Live Game Environment – A physical location that utilizes live video streaming technology to provide live games to a Remote Player Device that permits the player to participate in live streamed games, interact with game attendants, and interact with fellow players.

Location Service Provider – An entity who identifies, or provides information for the identification of, the geographic location of individuals.

MAC, Message Authentication Code – A cryptographic checksum on data that uses a symmetric key to detect both accidental and intentional modifications of the data.

Malware – A program that is inserted into a system, usually covertly, with the intent of compromising the confidentiality, integrity, or availability of the victim's data, applications, or operating system or of otherwise annoying or disrupting the victim.

"Man-In-The-Middle" Attack – An attack where the attacker secretly relays and possibly alters the communication between two parties who believe they are directly communicating with each other.

Mapping Algorithm – An algorithm or method by which a value is associated to a symbol or object that is usable and applicable to the current game (e.g.: the value 51 might be mapped to an ace of spades).

Mechanical RNG (aka "Physical Randomness Device") – An RNG that generates outcomes mechanically, employing the laws of physics. Live game implementations include, but are not limited to, mechanical wheels, tumblers, blowers, shufflers, etc.

Message Authentication – A security measure designed to establish the authenticity of a message by means of an authenticator within the transmission derived from certain predetermined elements of the message itself.

Mobile Code – Executable code that moves from computer to computer, including both legitimate code and malicious code such as computer viruses.

Multi-Factor Authentication – A type of authentication which uses two or more of the following to verify a user's identity: Information known only to the user (e.g., a password, pattern or answers to challenge questions); An item possessed by a user (e.g., an electronic token, physical token or an

identification card); A user's biometric data (e.g., fingerprints, facial or voice recognition).

Multi-Wager Game – A game where multiple, independent wagers can simultaneously be applied towards advertised awards.

Mystery Award – An award paid by a game that is not associated with a specific payable combination.

NCE, *Network Communication Equipment* – One or more devices that controls data communication in a system including, but not limited to, cables, switches, hubs, routers, wireless access points, and telephones

Near Miss – Showing a top award winning combination above or below an active payline.

Non-Wager Purchase – A purchase made by the player that debits the credit meter or player account balance and which is used for entertainment purposes only. A non-wager purchase does not influence the outcome of the game. An example might be the purchase of an artistic attribute of a game.

Operator – A person or entity that operates an Interactive Gaming System, using both the technological capabilities of the Interactive Gaming System as well as their own internal procedures.

Overflow – Pool containing the contributions which exceed the progressive jackpot or incrementing jackpot ceiling.

P2P Gaming Sessions, *Peer-to-Peer Gaming Sessions* – Environments which offer players the opportunity to play with and against each other. In these environments, the operator usually does not engage in the gaming session as a party (e.g., house-banked gaming), but usually provides the environment for use by its players, and takes a rake, commission, or fee for the service.

PAR Sheet – A specification sheet for a game that provides the theoretical return to player, hit frequency, symbol combination, number of reels, number of credits that can be accepted, and reel strip listing as applicable.

Password – A string of characters (letters, numbers, and other symbols) used to authenticate an identity or to verify access authorization.

Payment Service Provider – An entity who directly facilitates the depositing of funds into or withdrawing of funds from player accounts.

Paytable (aka "Variation") – The mathematical behavior of a game based upon the data from the manufacturer's PAR sheet, inclusive of the return percentage, and reflective of all possible payouts/awards.

Perfecta (aka "Exacta") – A wager in which the player picks the first and second place finishers in a

competition in the correct order.

Persistence Game – A game that is associated with a unique attribute (e.g., player ID, game theme/paytable ID, etc.) and incorporates a feature that enables progress towards the award of game play enhancements and/or bonuses through the achievement of some designated game outcome.

Physics Engine – Specialized software that approximates the laws of physics, including behaviors such as motion, gravity, speed, acceleration, mass, etc. for a game’s elements or objects. The physics engine is utilized to place game elements/objects into the context of the physical world when rendering computer graphics or video simulations.

PII, Personally identifiable information – Sensitive information that could potentially be used to identify a particular player. Examples include a legal name, date of birth, place of birth, social security number (or equivalent government identification number), driver’s license number, passport number, residential address, phone number, email address, debit instrument number, credit card number, bank account number, or other personal information if defined by the regulatory body.

PIN, Personal Identification Number – A numerical code associated with an individual and which allows secure access to a domain, account, network, system, etc.

Play from Save – A feature utilized in some persistence game designs where complexity increases, or additional elements are added to the game, as play continues. A player is able to save their progress and resume from the saved point of game play.

Player Account (aka “Wagering Account”) – An account maintained for a player where information relative to gaming and financial transactions are recorded on behalf of the player including, but not limited to, deposits, withdrawals, wagers, winnings, and balance adjustments. The term does not include an account used solely by an operator to track incentive points or credits or similar benefits issued by an operator to a player which may be redeemed for merchandise and/or services.

Player Interaction Device – An internal or external device that connects to a machine and that registers various types of player inputs allowing the player to interact with the machine. Several examples include touch screens, joysticks, handheld controllers, camera systems, etc. The player interaction device may be hard-wired or wireless. A “smart” player interaction device supports two-way communications with the Gaming Platform. For the purpose of this technical standard, a traditional keyboard is excluded from this definition unless it is used to affect the outcome for a game.

Player Interface – An interface application or program through which the user views and/or interacts with the Player Software to communicate their actions to the Interactive Gaming System.

Player Loyalty Program – A program that provides incentive awards for players based on the volume of play or revenue received from a player.

Player Software – The software used to take part in gaming and financial transactions with the Interactive Gaming System which, based on design, is downloaded to or installed on the Remote Player Device, run from the Interactive Gaming System which is accessed by the Remote Player Device, or a combination of the two. Examples of Player Software include proprietary download software packages, html, flash, etc.

Pool – An accumulated reservoir of progressive jackpot or incrementing jackpot monetary contributions.

Port – A physical entry or exit point of a module that provides access to the module for physical signals, represented by logical information flows (physically separated ports do not share the same physical pin or wire).

Prepaid Access Instrument – A card, code, electronic serial number, mobile identification number, personal identification number or similar device used in conjunction with an Interactive Gaming System that allows player access to funds that have been paid in advance and can be retrieved or transferred at some point in the future through such a device.

Profiling – Any form of automated processing of PII consisting of the use of PII gathered from various sources to evaluate certain personal aspects relating to a natural person, in particular to analyze or predict aspects concerning that natural person's economic situation, personal preferences, interests, reliability, behavior, location, etc.

Proxy – An application that “breaks” the connection between client and server. The proxy accepts certain types of traffic entering or leaving a network and processes it and forwards it. This effectively closes the straight path between the internal and external networks. Making it more difficult for an attacker to obtain internal addresses and other details of the internal network.

Progressive Jackpot – A monetary award or “payoff” that increases according to the credits wagered in the game.

Promotional Award – An incentive award based on predefined player activity criteria that are tied to a specific player account, which generally recur. Examples include earning restricted credits which match their first deposit, awarding points for a certain amount of credits played on a game; awarding credits for wagering more than a certain amount of credits within a specific time period.

Proposition Player – A player that has been hired to participate in a game and wagers personal funds.

Protocol – A set of rules and conventions that specifies information exchange between devices, through a network or other media.

Quinella – A wager in which the first two places in a competition shall be predicted, but not necessarily in the finishing order.

Rake, Commission, or Fee – An amount retained and not distributed by the operator from the

total amount wagered on a game.

Remote Access – Any access from outside the system or system network including any access from other networks within the same site or venue.

Remote Player Device – A player-owned device that at a minimum will be used for the execution of game play. Examples of a Remote Player Device include a personal computer, mobile phone, tablet, etc.

Reset Value – The amount of a progressive jackpot or incrementing jackpot payoff initially offered before it increases.

Restricted Incentive Credits (aka “Non-Cashable Incentive Credits”) – Incentive awards that either have no cash redemption value or cannot be cashed out until a wagering requirement or other restrictions associated with the credits is met.

Restricted Player Funds – Player funds that are not redeemable for cash, including restricted incentive credits.

Risk – The likelihood of a threat being successful in its attack against a network or system.

RNG, Random Number Generator – A computational or physical device, algorithm, or system designed to produce numbers in a manner indistinguishable from random selection.

RNG Period – The length of the ordered sequence of raw numbers output by the RNG. When the RNG is cyclic, it has a finite period. Otherwise, the RNG is said to have an infinite period.

RNG State – The state defined by one or more variables in computer memory and represents a specific point within the cycle of the RNG. RNG state may be modified by replacing one or more of these variables with new values, or otherwise mixing the values with new data.

Rooting – Attaining root access to the operating system code to modify the software code on the mobile phone or other Remote Player Device or install software that the manufacturer would not allow to be installed.

RTP, Return to Player – A ratio of the ‘total amount won’ to the ‘total amount wagered’ by a player. Such a return may be “theoretical” (based on mathematical calculations or simulations) or “actual” (based on the metering supported by an enabled game).

Scaling Algorithm – An algorithm or method by which the numbers selected by an RNG are scaled or mapped from a greater range to a lesser range for use in the game.

Secure Communication Protocol – A communication protocol that provides the appropriate confidentiality, authentication and content integrity protection.

Security Certificate – Information, often stored as a text file that is used by the Transport Socket

Layer (TSL) Protocol to establish a secure connection. In order for an TSL connection to be created, both sides shall have a valid Security Certificate.

Security Policy – A document that delineates the security management structure and clearly assigns security responsibilities and lays the foundation necessary to reliably measure progress and compliance

Seeding / Seed – The initialization of the state variables of an RNG. The source value or values used for initialization is the seed.

Sensitive Information – Information such as PII, gaming data, validation numbers, authentication credentials, PINs, passwords, secure seeds and keys, and other data that shall be handled in a secure manner.

Server – A running instance of software that is capable of accepting requests from clients, and the computer that executes such software. Servers operate within a Client-Server Architecture, in which “servers” are computer programs running to serve the requests of other programs (“clients”). In this case the “server” would be the Interactive Gaming System and the “clients” would be the Remote Player Devices.

Shellcode – A small piece of code used as a payload in the exploitation of security. Shellcode exploits vulnerability and allows an attacker the ability to reduce a system’s information assurance.

Shill – A player that has been hired to participate in a game and wagers funds on behalf of the operator.

Shuffling Algorithm – An algorithm or method by which RNG output is used to produce without replacement data, or, equivalently, to randomize the order of multiple objects. All possible orderings are intended to be equally likely.

Soft-Play – A collusion method where one or more players renounce to play against another player in situations where such behavior is unreasonable in accordance with normal practices of play (for example, a player leaves the game even if the win is secure).

Software RNG – An RNG that derives its randomness from a computer-based or software-driven algorithm.

Source Code – A text listing of commands to be compiled or assembled into an executable computer program.

Startup Value – The initial progressive jackpot or incrementing jackpot value (does not include values from overflow or diversion pools).

State Compromise Extension Attack – An RNG attack in which an attacker compromises a single state of the RNG and penetrates past or future outputs of the RNG using this information. Usually this attack is executed using the seed state or a vulnerable state in which insufficient entropy is

available.

Stateless Protocol – A communications scheme that treats each request as an independent transaction that is unrelated to any previous request so that the communication consists of independent pairs of requests and responses.

Surrender – An option available in some card games where the player can forfeit half of their wager rather than play out their active hand of cards. There are two types of surrender: early and late. These terms refer to whether or not a dealer checks to see if she/he has a blackjack (when an Ace or 10 is showing) before the player makes the surrender decision.

System Administrator – The individual(s) responsible for maintaining the stable operation of the Interactive Gaming System (including software and hardware infrastructure and application software).

TCP/IP, Transmission Control Protocol/Internet Protocol – The suite of communications protocols used to connect hosts on the Internet.

Third-Party Service Provider – An entity who acts on behalf of an operator to provide services used for the overall conduct of interactive gaming.

Threat – Any circumstance or event with the potential to adversely impact network operations (including mission, functions, image, or reputation), assets, or individuals through a system via unauthorized access, destruction, disclosure, modification of information, and/or denial of service. Also, the potential for a threat-source to successfully exploit a system vulnerability.

Time Stamp – A record of the current value of the Interactive Gaming System date and time which is added to a message at the time the message is created.

Touch Screen – A video display device that also acts as a player input device by using electrical touch point locations on the display screen.

Tournament (aka “Contest/Tournament”) – An organized, measured event that permits a player to engage in competitive play against other players. An out-of-revenue tournament involves only non-wagered play using tournament credits or points that have no cash value. In contrast, an in-revenue tournament allows for wagered play in conjunction with the operation of the tournament.

Trifecta – A wager in which a player wins by selecting the first three finishers of a competition in the correct order of finish.

Unauthorized Access – A person gains logical or physical access without permission to a network, system, application, data, or other resource.

Unrestricted Incentive Credits (aka “Cashable Incentive Credits”) – Incentive awards that are redeemable for cash.

Unrestricted Player Funds – Player funds that are redeemable for cash, including unrestricted incentive credits.

Version Control – The method by which an evolving approved Interactive Gaming System is verified to be operating in an approved state.

Virtual Event Wagering – A form of wagering that allows for the placement of wagers on sports, contests, and matches whose results are determined solely by an approved Random Number Generator (RNG).

Virtual Opponent – A computer-based player that participates in a game with skill and effectively mimics the actions of a live player.

Virus – A self-replicating program, typically with malicious intent, that runs and spreads by modifying other programs or files.

Virus Scanner – Software used to prevent, detect and remove computer viruses, including malware, worms and Trojan horses.

VPN, *Virtual Private Network* – A logical network that is established over an existing physical network and which typically does not include every node present on the physical network.

Vulnerability – Software, hardware, or other weaknesses in a network or system that can provide a “door” to introducing a threat.

Wager – Any commitment of credits or money by the player which has an impact on game outcome.

Wi-Fi – The standard wireless local area network (WLAN) technology for connecting computers and electronic devices to each other and/or to the internet.

GLI STANDARD SERIES

GLI-20:

STANDARDS FOR KIOSKS

VERSION: 2.0

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About This Standard

This technical standard has been produced by **Gaming Laboratories International, LLC (GLI)** for the purpose of providing independent technical analysis and/or certifications to gaming and wagering industry stakeholders indicating the state of compliance for kiosks with the requirements set forth herein.

This document is intended to be used by regulatory bodies, operators, and industry suppliers as a compliance guideline for technologies pertaining to kiosks. This standard is not intended to represent a set of prescriptive requirements that every kiosk shall comply with; however, it does establish a standard regarding the technologies used to facilitate these operations.

Suppliers are expected to submit equipment with a request that it be certified in accordance with this technical standard. Upon completion of testing, GLI provides a certificate of compliance evidencing the certification of the kiosk to this standard.

GLI-20 should be viewed as a living document that provides a level of guidance that will be tailored periodically to align with this developing industry over time as kiosk implementations and operations evolve.

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Chapter 1: Introduction to Kiosks

1.1 Introduction

1.1.1 General Statement

Gaming Laboratories International, LLC (GLI) has been testing gaming equipment since 1989. Over the years, GLI has developed numerous technical standards utilized by jurisdictions all over the world. This document, *GLI-20*, sets forth the technical standards for kiosks.

1.1.2 Document History

This document is a compilation based upon many standards documents from around the world. Some were written by GLI; others were written by industry regulators with input from independent test laboratories and kiosk manufacturers. GLI has taken each of the standards documents and merged the unique rules, eliminated some rules and updated others, to reflect both the change in technology and the purpose of maintaining an objective standard that achieves common regulatory objectives without unnecessarily impeding technological innovation. GLI lists below, and gives credit to, organizations whose documents were reviewed prior to writing this standard. It is the policy of GLI to update this document as often as warranted to reflect changes in technology and/or testing methods. This document will be distributed without charge and may be obtained by downloading it from the GLI website at www.gaminglabs.com or by contacting GLI at:

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1.2 Acknowledgment of Other Standards Reviewed

1.2.1 General Statement

This technical standard has been developed by reviewing and using portions of the documents from the following organizations. GLI acknowledges and thanks the regulators and other industry participants who have assembled these documents:

- a) Nevada Gaming Commission and Gaming Control Board.
- b) US Tribal Compacts from Tribal Governments and State Governments including Arizona, Connecticut, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, North Carolina, North Dakota, Oregon, and Wisconsin.
- c) Colorado Division on Gaming.
- d) Illinois Gaming Board.
- e) Indiana Gaming Commission.
- f) Iowa Racing and Gaming Commission.

- g) Missouri Gaming Commission.
- h) Pennsylvania Gaming Control Board.
- i) South Dakota Commission on Gaming.

1.3 Purpose of Technical Standards

1.3.1 General Statement

The purpose of this technical standard is as follows:

- a) To eliminate subjective criteria in analyzing and certifying the regulated operations of a kiosk.
- b) To test the criteria that impact the credibility and integrity of a kiosk from both the revenue collection and security perspective.
- c) To create a standard that will ensure that kiosks are fair, secure, and able to be audited and operated correctly.
- d) To distinguish between local public policy and Independent Test Laboratory criteria. It is up to each local jurisdiction to set its own public policy with respect to kiosks.
- e) To recognize that non-gaming testing (such as electrical testing) should not be incorporated into this standard but left to appropriate test laboratories that specialize in that type of testing. Except where specifically identified in this standard, testing is not directed at health or safety matters. These matters are the responsibility of the manufacturer, purchaser, and operator of the kiosk.
- f) To construct a standard that can be easily revised to allow for new technology.
- g) To construct a standard that does not specify any particular design, method, or algorithm. The intent is to allow a wide range of methods to be used to conform to the standards, while at the same time encourage new methods to be developed.

1.3.2 No Limitation of Technology

One should be cautioned that this document shall not be read in such a way that limits the use of future technology. This document should not be interpreted to mean that if the technology is not mentioned, then it is not allowed. To the contrary, GLI will review this standard and make changes to incorporate minimum standards for any new and related technology.

1.3.3 Adoption and Observance

This technical standard can be adopted in whole or in part by any regulatory body that wishes to implement a comprehensive set of requirements for kiosks.

1.4 Other Documents That May Apply

1.4.1 Other GLI Standards

This technical standard covers the requirements for the regulated operations of kiosks. Depending on the technology utilized by a kiosk, additional GLI technical standards may also apply.

NOTE: The entire family of GLI Standards is available free of charge at www.gaminglabs.com.

1.5 Definition of a Kiosk

1.5.1 General Statement

Kiosks are player interface units that, as approved by the regulatory body, may be used to perform various regulated operations when interfaced (either directly or through a back-office platform installed externally to the kiosk terminal) with a compatible host system including, but not limited to:

- a) Wagering Instrument Issuance and/or Redemption – Kiosks that issue and/or redeem wagering instruments (vouchers and/or coupons) will be interfaced with a host system (Validation System) which supports wagering instruments.
- b) Player Account Management – Kiosks that allow players to manage their player account (e.g. registration, deposits, withdrawals, etc.) and/or redeem their promotional points for cashable credits will be interfaced with a host system (Cashless Wagering System, Promotional System, etc.) which supports player accounts. This standard will not address the use of kiosks for redemption of promotional points for merchandise and/or services.
- c) Event Wagering – Kiosks that allow players to place wagers on events and/or redeem winning wagers will be interfaced with a host system (Event Wagering System).
- d) Games of Chance Consumable Purchase and/or Redemption – Kiosks that allow players to purchase consumables for games of chance (raffle tickets, lottery tickets, pull-tabs, bingo cards, keno tickets, etc.) and/or redeem winners will be interfaced with the applicable host system(s).
- e) Bill Breaking – Bill Breaking is the act of making change. A player may insert a bill for any combination of change. It may include an insertion of a large denomination bill for the issuance of smaller denomination bills. It may also include the insertion of small denomination bills for the issuance of coins.
- f) Information Reporting – The kiosk can be used to display marketing information for players. This feature is not covered by this standard as it does not affect the integrity of kiosk security and/or accounting.

NOTE: Additional requirements beyond this document might apply for kiosks based on their functionality. Please refer to the applicable jurisdictional requirements or GLI Standards for the compatible systems which the kiosk is intended to work with.

Chapter 2: Kiosk Terminal Requirements

2.1 Introduction

2.1.1 General Statement

This chapter sets forth the technical requirements for the key attributes of a kiosk terminal. All proprietary devices developed for kiosks shall meet the applicable requirements within this chapter. Unless otherwise directed by the regulatory body, this chapter does not apply to kiosks that solely utilize unaltered commercial off-the-shelf (COTS) components, such as PCs or tablets. For kiosks that utilize modified off-the-shelf (MOTS) components, sections of this chapter will apply only to the modifications made to the components unless otherwise directed by the regulatory body.

2.2 Player Safety

2.2.1 Physical Hazards and Environmental and Electrical Safety Testing

Electrical and mechanical parts and design principles of the kiosk terminal shall not subject a player to any physical hazards. The independent test laboratory does not make any findings with regard to Electro-Magnetic Compatibility (EMC) or Radio Frequency Interference (RFI), as that is the responsibility of the manufacturer of the kiosk, or those that purchase the kiosk. Such EMC and RFI testing may be required under separate statute, regulation, law, or act and should be researched accordingly by those parties who manufacture or purchase said kiosk. The independent test laboratory does not test for, is not liable for, nor makes any findings related to these matters. However, during the course of testing, the independent test laboratory may inspect for marks or symbols indicating that a kiosk has undergone product safety or other compliance testing by some other party but that is outside the scope of the requirements defined by this technical standard.

2.3 Environmental Effects on Integrity

2.3.1 General Statement

This section on integrity is only applicable for a kiosk terminal which has locally stored critical NV memory and/or installed software which has the potential to influence the regulated operations of the kiosk.

2.3.2 Kiosk Integrity

The independent test laboratory shall perform certain tests to determine whether or not an electrostatic discharge (ESD) or a power surge impacts the integrity of a kiosk. ESD testing and power surge testing are intended to simulate techniques observed in the field that may be used in an attempt to disrupt the integrity of a kiosk.

2.3.3 ESD Effects

Protection against ESD requires that the kiosk terminal's conductive cabinet be earthed in such a way that static discharge energy shall not permanently damage or permanently impact the normal operation of the electronics or other components within the kiosk terminal. A kiosk may exhibit temporary disruption when subjected to a significant external ESD with a severity level of 15kV air discharge. The kiosk shall exhibit a capacity to recover and complete any interrupted operation without loss or corruption of any locally stored control information or critical data following any temporary disruption.

2.3.4 Power Surges

The kiosk terminal shall not be adversely affected, other than resets, by surges or dips of $\pm 10\%$ of the power supply voltage. It is acceptable for the kiosk to reset provided no damage to the equipment or loss or corruption of locally stored data is experienced which cannot be automatically recovered from the back-office platform. Alternatively, the kiosk terminal may be equipped with an Uninterruptible Power Supply (UPS) or battery backup that, when detecting power loss, allows the completion of the current transaction before ceasing operations.

2.4 Basic Hardware Requirements

2.4.1 Identification Information

The kiosk terminal shall be identifiable by model number, manufacturer identification, and any other information required by the regulatory body.

2.4.2 On/Off Switch

An on/off switch that controls the electrical current supplied to the kiosk terminal shall be located in a secured area of the kiosk terminal. The on/off positions of the switch shall be clearly labeled.

2.4.3 Touch Screen Displays

Touch screen displays, if in use by regulated operations of the kiosk, shall be accurate, and if required by their design, shall support a calibration method to maintain that accuracy; alternatively, the display hardware may support automatic self-calibration.

2.5 Custom and Modified Hardware

2.5.1 General Statement

This section only applies to custom and modified hardware components which have the potential to influence the regulated operations of the kiosk.

2.5.2 Printed Circuit Board (PCB) Identification Requirements

Each PCB shall be clearly identifiable by an alphanumeric identification and, when applicable, a revision number. If track cuts, patch wires, or other circuit alterations are introduced to the PCB, then a new revision number shall be assigned.

2.5.3 Switches and Jumpers

If the kiosk contains switches and/or jumpers, they shall be fully documented for evaluation by the independent test laboratory.

2.5.4 Kiosk Wiring

The kiosk terminal shall be designed so that power and data cables into and out of the kiosk terminal can be routed so that they are not accessible to the public.

NOTE: The independent test laboratory will make no determination as to whether the kiosk installation conforms to local electrical codes, or to any other electrical testing standards and practices.

2.5.5 Wired Communication Ports

Wired communication ports shall be clearly labeled and shall be securely housed within the kiosk terminal to prevent unauthorized access to the ports or their associated cable connectors.

2.5.6 Charging Mechanisms

The kiosk may support the use of an externally accessible charging mechanism, such as a Universal Serial Bus (USB) charging port, or some other analogous technology (e.g., cables, inductive chargers, etc.). The mechanism may be used to provide external power or charging access for an electronic device such as a smartphone, tablet, etc. If so equipped, the charging mechanism shall:

- a) Be appropriately fused and/or electrically-protected;
- b) Not impact the integrity of the regulated operations of the kiosk; and
- c) Not allow any data transmission between the kiosk and the charging mechanism.

2.6 Doors and Security

2.6.1 General Statement

This section on doors and security is only applicable for a kiosk terminal which:

- a) Performs transactions using peripheral devices installed within the terminal; and/or
- b) Has locally stored critical NV memory and/or installed software which has the potential to influence the regulated operations of the kiosk.

2.6.2 Physical Security

The kiosk terminal shall be robust enough to resist forced entry into any secured doors, areas, or compartments. In the event that extreme force is applied to the cabinet materials causing a potential breach in kiosk terminal security, evidence of tampering shall be conspicuous. "Secured areas" or "secured compartments" shall include, as applicable, the external doors such as the main door, currency compartment doors such as a drop box door or stacker door, and/or other sensitive access areas of the kiosk terminal.

2.6.3 External Doors

The following requirements apply to kiosk terminals which contain external doors into any secured areas or compartments:

- a) External doors shall be manufactured of materials that are suitable for allowing only legitimate access to the inside of the kiosk terminal.
- b) External doors and their associated hinges shall be capable of withstanding determined and unauthorized efforts to gain access to the interior of the kiosk terminal and shall leave conspicuous evidence of tampering if such an attempt is made;
- c) The seal between the kiosk terminal and the external door shall be designed to resist the entry of objects. It shall not be possible to insert an object into the kiosk terminal that disables a door open sensor when the kiosk terminal's door is fully closed, without leaving conspicuous evidence of tampering; and
- d) All external doors shall be secure and support the installation of locks.

2.6.4 Door Monitoring

Any doors that provide access to secure areas of the kiosk terminal shall be monitored by door access detection software.

- a) The detection software shall register a door as being open when the door is moved from its fully closed and locked position, provided power is supplied to the kiosk.
- b) When any door that provides access to a secured area or secured compartment registers as open, the kiosk shall cease operation and display an appropriate error message. This error condition shall be communicated to the back-office platform when such functionality is supported.

2.7 Peripherals

2.7.1 Peripheral Requirements

A peripheral is defined as an internal or external device connected to the kiosk terminal that supports credit acceptance, credit issuance, player identification, or other specialized function(s) which are used in the regulated operations of the kiosk. The following requirements apply for kiosk peripherals as supported:

- a) Bill validators and stackers shall meet the applicable jurisdictional requirements for bill validators. In the absence of specific jurisdictional standards, the requirements established

within the “Bill Validators and Stackers” section of the *GLI-11 Standards for Gaming Devices* shall be used as applicable.

- b) Coin acceptors, diverters, and drop boxes shall meet the applicable jurisdictional requirements for coin acceptors. In the absence of specific jurisdictional standards, the requirements established within the “Coin Acceptors, Diverters, and Drop Boxes” section of the *GLI-11 Standards for Gaming Devices* shall be used as applicable.
- c) Integrated player identification components shall meet the applicable jurisdictional requirements for these components. In the absence of specific jurisdictional standards, the requirements established within the “Integrated Player Identification Components” section of the *GLI-11 Standards for Gaming Devices* shall be used as applicable. This does not apply to the use of kiosks for player tracking only or for the redemption of promotional player points for merchandise and/or services.
- d) Hoppers and/or printers shall meet the applicable jurisdictional requirements for these devices. In the absence of specific jurisdictional standards, the requirements established within the “Machine Payment and Payment Devices” and “Machine Vouchers” sections of the *GLI-11 Standards for Gaming Devices* shall be used as applicable.

NOTE: The requirement for error conditions within the above referenced sections to “sound an alarm and/or illuminate the tower light” is not applicable for kiosks. However, these error conditions shall be communicated to the back-office platform when such functionality is supported. Additionally, the “Bill Validator Recall” and “Voucher-Out Log” are not required if the “Transaction Log” specified in the next chapter contains these transactions.

Chapter 3: Kiosk Software Requirements

3.1 Introduction

3.1.1 General Statement

This chapter sets forth the requirements for the kiosk software. Kiosk software refers to the software used to take part in regulated operations which, based on design, is downloaded to or installed on the kiosk terminal, run from the back-office platform, or a combination of the two.

3.2 Software Requirements

3.2.1 Software Identification

Kiosk software shall contain sufficient information to identify the software revision level.

3.2.2 Software Validation

The kiosk and/or back-office platform shall have the ability to authenticate that all regulated critical components contained in any kiosk software are valid each time the software is loaded for use and, where supported by the system, on demand. Critical components may include but are not limited to elements that control kiosk communications, peripheral device firmware, or other components that affect regulated operations of the kiosk.

- a) The authentication shall employ a hash algorithm which produces a message digest of at least 128 bits. Other test methodologies shall be reviewed on a case-by-case basis.
- b) In the event of a failed authentication (i.e., program mismatch or authentication failure), the kiosk shall cease operation and display an appropriate error message. This error condition shall be communicated to the back-office platform when such functionality is supported.

NOTE: Program verification mechanisms will be evaluated on a case-by-case basis and approved by the regulatory body and the independent test laboratory based on industry-standard security practices.

3.2.3 Independent Software Verification

It shall be possible to perform an independent integrity check of the kiosk software from an outside source. This verification is required for all control programs that affect the integrity of the kiosk. The verification shall be accomplished by being authenticated by a third-party application run from the kiosk and/or back-office platform, by allowing a third-party device to authenticate the media, or by allowing for removal of the media such that it can be verified externally. The independent test laboratory, prior to software approval, shall evaluate the integrity check method.

3.3 Critical Non-Volatile (NV) Memory

3.3.1 Contents of Critical NV Memory

Critical Non-Volatile (NV) memory shall be used to store all data elements that are considered vital to the continued operation of the kiosk software. Critical NV memory may be maintained by the kiosk and/or the back-office platform. These data elements include, but are not limited to:

- a) All electronic meters and logs defined in the “Electronic Meters and Logs” section of this standard;
- b) Current player balance (as applicable); and
- c) Kiosk configuration data (e.g., communications, etc.) and state of operations (e.g., error conditions, etc.).

3.3.2 Critical NV Memory Backup

Kiosks whose operation relies on locally stored critical NV memory shall have a backup or archive capability, which allows the recovery of critical NV memory should a failure occur.

3.3.3 Critical NV Memory Errors

Critical NV memory storage shall be maintained by a methodology that enables errors to be identified. This methodology may involve signatures, checksums, redundant copies, database error checks, and/or other method(s) approved by the regulatory body.

3.3.4 Critical NV Memory Checks

Comprehensive checks of critical NV memory data elements shall be made upon power up and program resumption. NV memory that is not critical to kiosk integrity is not required to be checked.

3.3.5 Unrecoverable Corruption of Critical NV Memory

An unrecoverable corruption of critical NV memory, shall result in an error. Upon detection, the kiosk software shall cease operation and display an appropriate error message. Additionally, the critical NV memory error shall cause any communication external to the kiosk to cease.

NOTE: This section is not intended to preclude the use of alternate storage media types, such as hard disk drives, for the retention of critical data. Such alternate storage media is still expected to maintain critical data integrity in a manner consistent with the requirements in this section, as applicable to the specific storage technology implemented.

3.4 Kiosk Operations

3.4.1 Player Interface Requirements

The player interface is defined as an application or program through which the player views and/or interacts with the kiosk software. The player interface shall meet the following:

- a) The functions of all buttons, touch or click points shall be clearly indicated within the area of the button, or touch/click point and/or within the help menu. There shall be no functionality available through any buttons or touch/click points on the player interface that are hidden or undocumented.
- b) Any resizing or overlay of the player interface shall be mapped accurately to reflect the revised display and touch/click points.
- c) Player interface instructions, as well as information on the functions and services provided by the kiosk, shall be clearly communicated to the player and shall not be misleading or inaccurate.
- d) The display of this information shall be adapted to the player interface. For example, where a kiosk uses technologies with a smaller display screen, it is permissible to present an abridged version of this information accessible directly from within the transaction screen and make available the full/complete version of this information via another method, such as a secondary screen, help menu, or other interface that is easily identified on the visual transaction screen.

3.4.2 Simultaneous Inputs

The kiosk software shall not be adversely affected by the simultaneous or sequential activation of the various inputs and outputs which might, whether intentionally or not, cause malfunctions or invalid results.

3.4.3 Current Player Balance

Where applicable, the current player balance shall be displayed to the player any time a transaction may be conducted unless a tilt condition or malfunction exists, or unless the player opts to view an informational screen such as a menu or help screen item. The amount displayed shall be updated upon every transaction performed.

3.5 Kiosk Configurations and Functionality

3.5.1 Configuration Settings

Changes to any configuration settings for the regulated operations of the kiosk may only be performed by a secure means.

3.5.2 Transaction Limits

The kiosk software shall have the ability to configure transaction limits, where required by the regulatory body. If a player attempts a transaction which exceeds these limits, then this transaction may only be processed provided that the player is clearly notified that they have transacted less than requested.

3.5.3 Bill Breaking/Dispensing Functionality

If allowed by the regulatory body, the kiosk software may have the functionality of acting as a bill breaker/dispenser. The bill dispenser software for bill-breaking shall have preset amounts, player

selection or the option to set dispensing amounts. The kiosk shall identify options on bill dispensing selectable options on denominations when bill dispensing.

3.5.4 Automated Teller Machine (ATM) Functionality

If allowed by the regulatory body, the kiosk software may have the ability to issue funds from an automated teller machine (ATM) network however, the ATM network shall not interact with the host system and the kiosk shall be capable of separately identifying and summarizing ATM transactions from other transactions.

NOTE: The independent test laboratory does not make any findings with regard to evaluating or certifying ATM functionality as such requirements fall under Federal (Banking) Regulations. It is the responsibility of the manufacturer of the kiosk and provider of ATM services to ensure these regulations are met prior to installation.

3.5.5 Test/Diagnostic Mode

Test/diagnostic mode (sometimes called demonstration or audit mode) allows an attendant to view execute auditing and/or diagnostic functions supported by the kiosk software. If test/diagnostic mode is supported, the following rules shall apply:

- a) Entry to test/diagnostic mode shall only be possible using a secure means.
- b) If the kiosk is in a test/diagnostic mode,
 - i. The kiosk shall clearly indicate that it is in this mode; and
 - ii. Any test or diagnostic that incorporates funds entering or leaving the kiosk shall be completed prior to the resumption of normal kiosk operation.
- c) Any funds on kiosk that were accrued during the test/diagnostic mode shall be automatically cleared when the mode is exited.

3.6 Communication Protocol

3.6.1 Integrity of Protocol Communications

The kiosk software shall accurately function as indicated by the communications protocol that is implemented, and as required by the regulatory body. In addition, the following rules shall be met:

- a) The kiosk software shall be designed or programmed such that it may only communicate with authorized system components through secure communications.
- b) After a program interruption, any communications to an external device shall not begin until the program resumption routine, including any self-test, is completed successfully.
- c) If communication between the kiosk and the host system is lost, the kiosk software shall cease operations related to that communication and display an appropriate error message. It is permissible for the kiosk software to detect this error when the kiosk tries to communicate with the system. Non-system transactions, such as bill breaking if supported, may continue while system communication is down.

3.6.2 Protection of Sensitive Information

The kiosk software shall not allow any information contained in communication to or from the kiosk that is intended by the communication protocol to be protected, or which is of a sensitive nature, to be viewable through any display mechanism supported by the kiosk. This includes, but is not limited to, validation numbers, secure PINs, player data, or secure seeds and keys.

3.6.3 Kiosk Communication

Any kiosk which is capable of bidirectional communication with internal or external associated equipment, or other equipment, shall utilize a robust communication protocol which ensures that erroneous data or signals do not adversely affect the integrity or operation of the kiosk.

3.6.4 Kiosk Clock

If the kiosk maintains an internal clock, it shall be able to accurately reflect the current time and date and synchronize its clock to that of the host system.

3.7 Electronic Meters and Logs

3.7.1 Information Access

The electronic meters and logs shall only be accessible by an authorized person and shall have the ability to be displayed on demand using a secure means.

3.7.2 Electronic Accounting Meters

Electronic accounting meters shall be at least ten (10) digits in length. Eight (8) digits shall be used for the dollar amount and two (2) digits used for the cents amount. The meter shall automatically roll over to zero once its maximum logical value has been reached. Meters shall be labeled so they can be clearly understood in accordance with their function. The required electronic accounting meters are as follows:

- a) Handpay. The kiosk software shall have a meter that accumulates the total value of payments made by an attendant when the kiosk is incapable of making the proper payment;
- b) Physical Coin In. The kiosk software shall have a meter that accumulates the total value of coins or tokens inserted into the kiosk;
- c) Physical Coin Out. The kiosk software shall have a meter that accumulates the total value of coins or tokens physically paid by the kiosk;
- d) Bill In. The kiosk software shall have a meter that accumulates the total value of currency accepted;
- e) Bill Out. The kiosk software shall have a meter that accumulates the total value of currency physically paid by the kiosk;
- f) Voucher In. The kiosk software shall have a meter that accumulates the total value of all wagering vouchers accepted by the kiosk;

- g) Voucher Out. The kiosk software shall have a meter that accumulates the total value of all wagering vouchers issued by the kiosk;
- h) Electronic Funds Transfer In (EFT In). The kiosk software shall have a meter that accumulates the total value of cashable credits electronically transferred to the kiosk from a financial institution through a host system;
- i) Player Account Transfer In (WAT In). The kiosk software shall have a meter that accumulates the total value of cashable credits electronically transferred to the kiosk from a player account through a host system;
- j) Player Account Transfer Out (WAT Out). The kiosk software shall have a meter that accumulates the total value of cashable credits electronically transferred from the kiosk to a player account through a host system;
- k) Cashable Electronic Promotion In (CEP In). The kiosk software shall have a meter that accumulates the total value of cashable credits electronically transferred to the kiosk from a player account through a host system;
- l) Cashable Electronic Promotion Out (CEP Out). The kiosk software shall have a meter that accumulates the total value of cashable credits electronically transferred from the kiosk to a player account through a host system;
- m) Non-Cashable Electronic Promotion In (NCEP In). The kiosk software shall have a meter that accumulates the total value of non-cashable credits electronically transferred to the kiosk from a player account through a host system;
- n) Non-Cashable Electronic Promotion Out (NCEP Out). The kiosk software shall have a meter that accumulates the total value of non-cashable credits electronically transferred from the kiosk to a player account through a host system;
- o) Coupon Promotion In. The kiosk software shall have a meter that accumulates the total value of all promotional coupons accepted by the kiosk;
- p) Coupon Promotion Out. The kiosk software shall have a meter that accumulates the total value of all promotional coupons issued by the kiosk; and
- q) Other Meters. Kiosk software that allows for transactions related to regulated operations of the kiosk that would not otherwise be metered under any of the above electronic accounting meters, shall maintain sufficient meters to properly reconcile all such transactions.

NOTE: Any accounting meter that is not supported by the functionality of the kiosk, is not required to be implemented by the supplier.

3.7.3 Electronic Occurrence Meters

Occurrence meters shall be at least eight (8) digits in length however, are not required to automatically roll over. Meters shall be labeled so they can be clearly understood in accordance with their function. The required electronic occurrence meters are as follows:

- a) External Doors. The kiosk software shall have meters that accumulate the number of times any external door (e.g., main or belly door, drop box door, currency area with an external door, etc.) has been opened since the last NV memory clear, provided power is supplied to the kiosk.
- b) Stacker Door. The kiosk software shall have a meter that accumulates the number of times the stacker door has been opened since the last NV memory clear provided power is supplied to the kiosk;

- c) Bill Denomination In. The kiosk software shall have a specific occurrence meter for each denomination of currency accepted by the kiosk;
- d) Bill Denomination Out. The kiosk software shall have a specific occurrence meter for each denomination of currency dispensed by the kiosk;
- e) Wagering Instruments Accepted. The kiosk software shall have a specific occurrence meter that records the number of all other notes not including bills, such as vouchers and coupons, accepted by the kiosk; and
- f) Wagering Instruments Issued. The kiosk software shall have a specific occurrence meter that records the number of all other notes not including bills, such as vouchers and coupons, issued by the kiosk.

NOTE: Any occurrence meter that is not supported by the functionality of the kiosk, is not required to be implemented by the supplier.

3.7.4 Transaction Log

There shall be the capacity to display a complete transaction log for the previous thirty-five (35) transactions that incremented any of the meters related to bills, wagering instruments, EFT, and player account transactions. The following information shall be displayed:

- a) The transaction value in local monetary units in numerical form;
- b) The time of day of the transaction, in twenty-four (24) hour format showing hours and minutes;
- c) The date of the transaction, in any recognized format, indicating the day, month, and year;
- d) For wagering instrument transactions, the validation number with the following conditions:
 - i. Where the log can be displayed from kiosk terminal, only the last four (4) digits may be displayed for voucher-out transactions where the vouchers are yet to be redeemed;
 - ii. Where the log can be displayed from back-office platform, at least the last four (4) digits shall be displayed for voucher-in transactions;
- e) For player account transactions:
 - i. The type of transaction (upload/download) including restrictions (cashable, non-cashable, etc.); and
 - ii. The account number or a unique transaction number, either of which can be used to authenticate the source of the funds (i.e. where funds came from/went to).

NOTE: It is acceptable for items accepted by the bill validator to be omitted from this log if there is a timestamped bill validator recall log maintained which indicates the item type and denomination/value for last five (5) items accepted by the bill validator. It is also acceptable for issued vouchers to be omitted from this log if there is a timestamped voucher-out log maintained which indicates the above information for the last twenty-five (25) issued vouchers.

3.7.5 Significant Event Log

The last one hundred (100) significant events for kiosks shall be stored with an appropriate timestamp in one or more secure logs that are not accessible to the player and which minimally include the following events, as applicable:

- a) Software verification errors or critical NV memory errors, if technically possible to log these

- events based on the nature and/or severity of the error;
- b) Changes made to kiosk configurations;
- c) Kiosk communication failure, if supported;
- d) Power resets;
- e) Handpay conditions;
- f) Access to secured areas or secured compartments; and
- g) Peripheral errors, if supported.

Glossary of Key Terms

Back-Office Platform – A component external to the kiosk terminal which may govern some or all the regulated operations of the kiosk, such as metering and communications between the host system and the kiosk terminal. The back-office platform may be integrated into the host system. For the purposes of this technical standard, the back-office platform is considered a part of the kiosk.

Barcode – An optical machine-readable representation of data. A good example is a barcode found on printed vouchers.

Barcode Reader – A device that is capable of reading or interpreting a barcode. This may extend to some smartphones or other electronic devices that can execute an application to read a barcode.

Bill In/Out – The total value of all currency accepted or paid out by a bill validator.

Bill Validator – A kiosk peripheral that accepts paper currency, wagering instruments, and other approved items in exchange for credits.

Card Reader – A kiosk peripheral that reads data embedded on a magnetic strip, or stored in an integrated circuit chip, for player identification.

Cashable Credits (aka “Unrestricted Credits”) – Credits that are redeemable for cash.

CEP, Cashable Electronic Promotion – Cashable credits electronically transferred to/from a kiosk from/to a promotional account.

Coin Acceptor – A kiosk peripheral that accepts coins or tokens in exchange for credits. The coin-in assembly receives, verifies, counts and appropriately routes coins deposited into the machine.

Control Program – A software program that controls kiosk behaviors relative to any applicable technical standard and/or regulatory requirement.

Coupon – A wagering instrument that is used primarily for promotional purposes and which can be redeemed for cashable or non-cashable credits.

Coupon Promotion In/Out – The total value of all promotional coupons accepted or paid out by the kiosk.

Critical Non-Volatile (NV) Memory – Memory used to store all data that is considered vital to the continued operation of the kiosk.

Diverter – The portion of the coin-in assembly that channels coins to either the hopper or the drop box.

Drop Box – A secure container housed within a kiosk cabinet that collects coins when the hopper is full or when the diverter directs coins to it.

EFT, *Electronic Funds Transfer*; ECT, *Electronic Credits Transfer* – EFT (or ECT) is a system by which currency can be electronically transferred to or from a kiosk in the form of credits. EFT requires some form of communication between the kiosk and a host system.

Electronic Accounting Meter (aka “Software Meter” / “Soft Meter”) – An accounting meter that is implemented in the main program software of a kiosk.

EMC, *Electromagnetic Compatibility* – The principal in which any electronic or electrical appliance should be able to operate without causing, or being affected by, electromagnetic interference.

EMI, *Electromagnetic Interference* – Any electromagnetic disturbance that interrupts, obstructs, or otherwise degrades or limits the effective performance of electronics and electrical equipment.

ESD, *Electro-Static Discharge* – The release of static electricity when two objects come into contact. It is the sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or a dielectric breakdown.

Hopper – An electromechanical assembly inside the kiosk that receives, holds and dispenses coins and/or currency.

Integrated Player Identification Component – An integrated player identification component is an electronic device controlled by kiosk software which provides a means for players to enter their secure identification information. Examples include a card reader, a barcode reader, or a biometric scanner.

Jumper – A removable connector (plug, wire, etc.) that electrically joins together or short-circuits two separate physical connections.

Kiosk – Kiosks are player interface units that may be used to perform regulated operations when interfaced with a compatible host system. This includes the kiosk terminal and the back-office platform.

Kiosk Software – The software used to take part in regulated operations which, based on design, is downloaded to or installed on the kiosk terminal, run from the back-office platform, or a combination of the two.

Kiosk Terminal – An electronic device that converts communications from the kiosk software into a human interpretable form and converts human decisions into communication format understood by the kiosk software.

MI, *Magnetic Interference* – Any magnetic disturbance that interrupts, obstructs, or otherwise degrades or limits the effective performance of electronics and electrical equipment.

NCEP, *Non-Cashable Electronic Promotion* – Non-cashable credits electronically transferred to/from the kiosk from a promotional account.

Non-Cashable Credits (aka “Restricted Credits”) – Credits that have no cash redemption value.

PCB, Printed Circuit Board – A hardware component of a computer or other electronic device, consisting of a flat piece of a non-conductive, rigid material to which Integrated Circuits (ICs) and other electronic components such as capacitors, resistors, etc. are mounted. Electrical connections are made between the ICs and components using a copper sheet that is laminated into the overall board assembly.

Peripheral – An internal or external device connected to a machine that supports credit acceptance, credit issuance, player interaction, or other specialized function(s).

Physical Coin In/Out – The total value of coins or tokens inserted into or paid out by the kiosk.

PIN, Personal Identification Number – A numerical code associated with an individual and which allows secure access to a domain, account, network, system, etc.

Player Account (aka “Wagering Account” / “Cashless Account”) – An account maintained for a player where information relative to financial and wagering/gaming transactions are recorded on behalf of the player including, but not limited to, deposits, withdrawals, wagers, winnings, and balance adjustments. The term does not include an account used solely by an operator to track promotional points or credits or similar benefits issued by an operator to a player which may be redeemed for merchandise and/or services.

Player Account Transfer (aka “Wagering Account Transfer” / “Cashless Account Transfer”) – Cashable credits electronically transferred to/from the kiosk from a player account.

Player Data – Sensitive information regarding a player and which may include items such as full name, date of birth, place of birth, social security number, address, phone number, medical or employment history, or other personal information as defined by the regulatory body.

Printer – A kiosk peripheral that prints wagering instruments and other items as necessary.

Protocol – A set of rules and conventions that specifies information exchange between devices, through a network or other media.

RFI, Radio Frequency Interference – Electromagnetic radiation which is emitted by electrical circuits carrying rapidly changing signals, as a by-product of their normal operation, and which causes unwanted signals (interference or noise) to be induced in other circuits.

Secure Areas or Secure Compartments – Sensitive areas of a kiosk such as the external doors such as the main door, currency compartment doors such as a drop box door or stacker door, and/or other sensitive access areas of the kiosk terminal.

Sensitive Information – Includes information such as PINs, player data, passwords, secure seeds and keys, and other data that shall be handled in a secure manner.

Stacker – An electromechanical bill validator component that loads paper currency, wagering instruments, and other approved items into a locked container for secure storage within the kiosk.

Tilt – An error in kiosk operation that halts or suspends operations and/or that generates some intelligent fault message.

Touch Screen – A video display device that also acts as a player input device by using electrical touch point locations on the display screen.

Voucher – A wagering instrument which can be redeemed for cash or used to subsequently redeem for credits.

Voucher In/Out (aka “Ticket In/Out”) – The total value of all wagering vouchers accepted or paid out by the kiosk.

Wagering Instrument – A printed or virtual representative of value, other than a chip or token and includes coupons and vouchers. A virtual wagering instrument is an electronic token exchanged between a player's mobile device and the kiosk which is used for credit insertion and redemption.

GLI STANDARD SERIES

GLI-33:

STANDARDS FOR EVENT WAGERING SYSTEMS

VERSION: 1.1

REVISION DATE: MAY 14, 2019

About This Standard

This technical standard has been produced by **Gaming Laboratories International, LLC (GLI)** for the purpose of providing independent technical analysis and/or certifications to wagering industry stakeholders indicating the state of compliance for wagering operations and systems with the requirements set forth herein.

This document is intended to be used by regulatory bodies, operators, and industry suppliers as a compliance guideline for technologies and procedures pertaining to event wagering. This standard is not intended to represent a set of prescriptive requirements that every Event Wagering System and operator shall comply with; however, it does establish a standard regarding the technologies and procedures used to facilitate these operations.

Operators and suppliers are expected to provide internal control documentation, credentials and associated access to a production equivalent test environment with a request that it be evaluated in accordance with this technical standard. Upon completion of testing, GLI will provide a certificate of compliance evidencing the certification to this Standard.

GLI-33 should be viewed as a living document that provides a level of guidance that will be tailored periodically to align with this developing industry over time as wagering implementations and operations evolve.

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Chapter 1: Introduction to Event Wagering Systems

1.1 Introduction

1.1.1 General Statement

Gaming Laboratories International, LLC (GLI) has been testing gaming equipment since 1989. Over the years, GLI has developed numerous technical standards utilized by jurisdictions all over the world. This document, *GLI-33*, sets forth the technical standards for Event Wagering Systems.

1.1.2 Document History

This document is a compilation based upon many standards documents from around the world. Some were written by GLI; others were written by industry regulators with input from independent test laboratories and Event Wagering System operators, developers, and suppliers. GLI has taken each of the standards documents and merged the unique rules, eliminated some rules and updated others, to reflect both the change in technology and the purpose of maintaining an objective standard that achieves common regulatory objectives without unnecessarily impeding technological innovation. GLI lists below, and gives credit to, agencies whose documents were reviewed prior to writing this Standard. It is the policy of GLI to update this document as often as warranted to reflect changes in technology and/or testing methods. This document will be distributed without charge and may be obtained by downloading it from the GLI website at www.gaminglabs.com or by contacting GLI at:

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1.2 Acknowledgment of Other Standards Reviewed

1.2.1 General Statement

This technical standard has been developed by reviewing and using portions of documents from the following organizations. GLI acknowledges and thanks the regulators and other industry participants who have assembled these documents:

- a) Nevada Gaming Commission and Gaming Control Board.
- b) British Columbia Gaming Policy and Enforcement Branch (GPEB).
- c) Association of Racing Commissioners International (ARCI).
- d) Tasmanian Liquor and Gaming Commission.
- e) Northern Territory Racing Commission.
- f) Victorian Commission for Gambling and Liquor Regulation.
- g) Danish Gambling Authority.
- h) Spanish Directorate General for the Regulation of Gambling (DGOJ).

- i) South African Bureau of Standards (SABS).

1.3 Purpose of Technical Standards

1.3.1 General Statement

The purpose of this technical standard is as follows:

- a) To eliminate subjective criteria in analyzing and certifying Event Wagering Systems.
- b) To test the criteria that impact the credibility and integrity of Event Wagering Systems from both the revenue collection and player's perspective.
- c) To create a standard that will ensure wagers on events are fair, secure, and able to be audited and operated correctly.
- d) To distinguish between local public policy and Independent Test Laboratory criteria. It is up to each local jurisdiction to set its own public policy with respect to wagering.
- e) To recognize that the evaluation of internal control systems (such as Anti-Money Laundering, Financial and Business processes) employed by the operators of the Event Wagering System should not be incorporated into the laboratory testing of the standard but instead be included within the operational audit performed for local jurisdictions.
- f) To construct a standard that can be easily revised to allow for new technology.
- g) To construct a standard that does not specify any particular design, method, or algorithm. The intent is to allow a wide range of methods to be used to conform to the standards, while at the same time encourage new methods to be developed.

1.3.2 No Limitation of Technology

One should be cautioned that this document shall not be read in such a way that limits the use of future technology. This document should not be interpreted to mean that if the technology is not mentioned, then it is not allowed. To the contrary, GLI will review this standard and make changes to incorporate minimum standards for any new and related technology.

1.3.3 Adoption and Observance

This technical standard can be adopted in whole or in part by any regulatory body that wishes to implement a comprehensive set of requirements for Event Wagering Systems.

1.4 Other Documents That May Apply

1.4.1 Other GLI Standards

This technical standard covers the requirements for Event Wagering Systems. Depending on the technology utilized by a system, additional GLI technical standards may also apply.

NOTE: The entire family of GLI Standards is available free of charge at www.gaminglabs.com.

1.4.2 Operator's Minimum Internal Control Standards (MICS)

The implementation of an Event Wagering System is a complex task, and as such will require the development of internal processes and procedures to ensure that the system is configured and operated with the necessary level of security and control. To that end, it is expected that the operator will establish a set of Minimum Internal Control Specifications (MICS) to define the internal processes for the creation, management, and handling of wagering transactions as well as the requirements for internal control of any system or component software and hardware, and their associated accounts.

1.5 Interpretation of this Document

1.5.1 General Statement

This technical standard applies to systems that support wagering on sports, competitions, matches, and other event types approved by the regulatory body. The requirements in this technical standard apply to wagering on events in a way that is general in nature and does not limit or authorize specific events, markets or types of wagers. The intent is to provide a framework to cover those currently known and permitted by law. This document is not intended to define which parties are responsible for meeting the requirements of this technical standard. It is the responsibility of the stakeholders of each operator to determine how to best meet the requirements laid out in this document.

1.5.2 Software Suppliers and Operators

The components of an Event Wagering System, although they may be constructed in a modular fashion, are designed to work seamlessly together. In addition, Event Wagering Systems may be developed to have configurable features; the final configuration of which depends on the options chosen by the operator. From a testing perspective, it might not be possible to test all of the configurable features of an Event Wagering System submitted by a software supplier in the absence of the final configuration chosen by the operator; however, the configuration that will be utilized in the production environment shall be communicated to the independent test laboratory to facilitate creating a functionally equivalent test environment. Because of the integrated nature of an Event Wagering System, there are several requirements in this document which may apply to both operators and suppliers. In these cases, where testing is requested for a "white-label" version of the system, a specific configuration will be tested and reported.

1.6 Testing and Auditing

1.6.1 Laboratory Testing

The independent test laboratory will test and certify the components of the Event Wagering System in accordance with the chapters of this technical standard within a controlled test environment, as applicable. Any of these requirements which necessitate additional operational procedures to meet the intent of the requirement shall be documented within the evaluation report and used to supplement the scope of the operational audit.

1.6.2 Operational Audit

The integrity and accuracy of the operation of an Event Wagering System is highly dependent upon operational procedures, configurations, and the production environment's network infrastructure. As such, an operational audit is an essential addition to the testing and certification of an Event Wagering System. The operational audit, outlined within the following appendices of this technical standard, shall be performed at a frequency specified by the regulatory body:

- a) Appendix A: Operational Audit of Event Wagering Procedures and Practices. This includes, but is not limited to, review of the MICS, procedures and practices for wagering operations, including, but not limited to establishing wagering rules, suspending events, handling various wagering and financial transactions, creating markets, settling wagers, closing markets, cancellations of events, voiding or cancelling wagers, player account management, fundamental practices relevant to the limitation of risks, and any other objectives established by the regulatory body.
- b) Appendix B: Operational Audit of Technical Security Controls. This includes, but is not limited to, an information security system (ISS) assessment, review of the operational processes that are critical to compliance, penetration testing focused on the external and internal infrastructure as well as the applications transferring, storing and/or processing of player data and/or sensitive information, and any other objectives established by the regulatory body.

Chapter 2: System Requirements

2.1 Introduction

2.1.1 General Statement

If the Event Wagering System is comprised of multiple computer systems at various sites, the system as a whole and all communication between its components shall conform to the applicable technical requirements within this document.

2.2 System Clock Requirements

2.2.1 System Clock

The Event Wagering System shall maintain an internal clock that reflects the current date and time that shall be used to provide for the following:

- a) Time stamping of all transactions and events;
- b) Time stamping of significant events; and
- c) Reference clock for reporting.

2.2.2 Time Synchronization

The Event Wagering System shall be equipped with a mechanism to ensure the time and dates between all components that comprise the system are synchronized.

2.3 Control Program Requirements

2.3.1 General Statement

In addition to the requirements contained within this section, the auditing procedures indicated in the "Verification Procedures" section of this document shall also be met.

2.3.2 Control Program Self-Verification

The Event Wagering System shall be capable of verifying that all critical control program components contained on the system are authentic copies of the approved components of the system, upon installation, at least once every 24 hours, and on demand using a method approved by the regulatory body. The critical control program authentication mechanism shall:

- a) Employ a hash algorithm which produces a message digest of at least 128 bits;
- b) Include all critical control program components which may affect wagering operations, including but not limited to: executables, libraries, wagering or system configurations, operating system files, components that control required system reporting, and database elements that affect system operations; and

- c) Provide an indication of the authentication failure if any critical control program component is determined to be invalid.

2.3.3 Control Program Independent Verification

Each critical control program component of the Event Wagering System shall have a method to be verified via an independent third-party verification procedure. The third-party verification process shall operate independently of any process or security software within the system. The independent test laboratory, prior to system approval, shall approve the integrity check method.

2.3.4 Shutdown and Recovery

The Event Wagering System shall be able to perform a graceful shut down, and only allow automatic restart on power up after the following procedures have been performed at a minimum:

- a) Program resumption routine(s), including self-tests, complete successfully;
- b) All critical control program components of the system have been authenticated using a method approved by the regulatory body; and
- c) Communication with all components necessary for system operation have been established and similarly authenticated.

2.4 Wagering Management

2.4.1 Wagering Management

The Event Wagering System shall be able to suspend the following on demand:

- a) All wagering activity;
- b) Individual events;
- c) Individual markets;
- d) Individual Wagering Devices (if applicable); and
- e) Individual player logins (if applicable).

2.5 Player Account Management

2.5.1 General Statement

The requirements of this section apply to player accounts where supported by the Event Wagering System. In addition to the requirements contained within this section, the "Player Account Controls" section of this document shall also be met.

NOTE: Player account registration and verification are required by the Event Wagering System for a player to participate in remote wagering.

2.5.2 Registration and Verification

There shall be a method to collect player information prior to the registration of a player account. Where player account registration and verification are supported by the Event Wagering System either directly by the system or in conjunction with a third-party service provider's software, the following requirements shall be met:

- a) Only players of the legal wagering age for the jurisdiction may register for a player account. Any person that submits a birth date that indicates they are underage shall be denied the ability to register for a player account.
- b) Identity verification shall be undertaken before a player is allowed to place a wager. Third-party service providers may be used for identity verification as allowed by the regulatory body.
 - i. Identity verification shall authenticate the legal name, physical address and age of the individual at a minimum as required by the regulatory body.
 - ii. Identity verification shall also confirm that the player is not on any exclusion lists held by the operator or the regulatory body or prohibited from establishing or maintaining an account for any other reason.
 - iii. Details of identity verification shall be kept in a secure manner.
- c) The player account can only become active once age and identity verification are successfully completed, the player is determined to not be on any exclusion lists or prohibited from establishing or maintaining an account for any other reason, the player has acknowledged the necessary privacy policies and terms and conditions, and the player account registration is complete.
- d) A player shall only be permitted to have one active player account at a time unless specifically authorized by the regulatory body.
- e) The system shall allow the ability to update passwords, registration information and the account used for financial transactions for each player. A multi-factor authentication process shall be employed for these purposes.

2.5.3 Player Access

A player accesses their player account using a username (or similar) and a password or a secure alternative means for the player to perform authentication to log in to the Event Wagering System. Authentication methods are subject to the discretion of the regulatory body as necessary. The requirement does not prohibit the option for more than one method of authentication being available for a player to access their account.

- a) If the system does not recognize the username and/or password when entered, an explanatory message shall be displayed to the player which prompts the player to re-enter the information.
- b) Where a player has forgotten their username and/or password, a multi-factor authentication process shall be employed for the retrieval of the username/resetting of the password.
- c) Current account balance information and transaction options shall be available to the player once authenticated.
- d) The system shall support a mechanism that allows for an account to be locked in the event that suspicious activity is detected (e.g., too many failed attempts for login). A multi-factor authentication process shall be employed for the account to be unlocked.

2.5.4 Player Inactivity

For player accounts accessed remotely for wagering or account management, after 30 minutes of inactivity on that device, or a period determined by the regulatory body, the player shall be required to re-authenticate to access their player account.

- a) No further wagering or financial transactions on that device are permitted until the player has been re-authenticated.
- b) A simpler means may be offered for a player to re-authenticate on that device, such as operating system-level authentication (e.g., biometrics) or a Personal Identification Number (PIN). Each means for re-authentication will be evaluated on a case-by-case basis by the independent test laboratory.
 - i. This functionality may be disabled based on preference of the player and/or regulatory body.
 - ii. Once every 30 days, or a period specified by the regulatory body, the player will be required to provide full authentication on that device.

2.5.5 Limitations and Exclusions

The Event Wagering System shall be able to correctly implement any limitations and/or exclusions put in place by the player and/or operator as required by the regulatory body:

- a) Where the system provides the ability to directly manage limitations and/or exclusions, the applicable requirements within the “Limitations” and “Exclusions” sections of this document shall be evaluated;
- b) The self-imposed limitations set by a player shall not override more restrictive operator-imposed limitations. The more restrictive limitations shall take priority; and
- c) Limitations shall not be compromised by internal status events, such as self-imposed exclusion orders and revocations.

2.5.6 Player Funds Maintenance

Where financial transactions can be performed automatically by the Event Wagering System the following requirements shall be met:

- a) The system shall provide confirmation/denial of every financial transaction initiated.
- b) A deposit into a player account may be made via a credit card transaction or other methods which can produce a sufficient audit trail.
- c) Funds shall not be available for wagering until they are received from the issuer or the issuer provides an authorization number indicating that the funds are authorized. The authorization number is to be maintained in an audit log.
- d) Payments from an account are to be paid (including funds transfer) directly to an account with a financial institution in the name of the player or made payable to the player and forwarded to the player’s address using a secure delivery service or through another method that is not prohibited by the regulatory body. The name and address are to be the same as held in player registration details.
- e) If a player initiates a player account transaction and that transaction would exceed limits put in

place by the operator and/or regulatory body, this transaction may only be processed provided that the player is clearly notified that they have withdrawn or deposited less than requested.

- f) It shall not be possible to transfer funds between two player accounts.

2.5.7 Transaction Log or Account Statement

The Event Wagering System shall be able to provide a transaction log or account statement history to a player upon request. The information provided shall include sufficient information to allow the player to reconcile the statement or log against their own financial records. Information to be provided shall include at a minimum, details on the following types of transactions:

- a) Financial Transactions (time stamped with a unique transaction ID):
 - i. Deposits to the player account;
 - ii. Withdrawals from the player account;
 - iii. Promotional or bonus credits added to/removed from the player account (outside of credits won in wagering);
 - iv. Manual adjustments or modifications to the player account (e.g., due to refunds);
- b) Wagering Transactions:
 - i. Unique identification number of the wager;
 - ii. The date and time the wager was placed;
 - iii. The date and time the event started and ended or is expected to occur for future events (if known);
 - iv. The date and time the results were confirmed (blank until confirmed);
 - v. Any player choices involved in the wager, including market and line postings, wager selection, and any special condition(s) applying to the wager;
 - vi. The results of the wager (blank until confirmed);
 - vii. Total amount wagered, including any promotional/bonus credits (if applicable);
 - viii. Total amount won, including any promotional/bonus credits (if applicable);
 - ix. Commission or fees collected (if applicable); and
 - x. The date and time the winning wager was paid to the player.

2.5.8 Player Loyalty Programs

Player loyalty programs are any programs that provide incentives for players, typically based on the volume of play or revenue received from a player. If player loyalty programs are supported by the Event Wagering System, the following principles shall apply:

- a) All awards shall be equally available to all players who achieve the defined level of qualification for player loyalty points;
- b) Redemption of player loyalty points earned shall be a secure transaction that automatically debits the points balance for the value of the prize redeemed; and
- c) All player loyalty points transactions shall be recorded by the system.

2.6 Wagering Instrument Functionality

2.6.1 General Statement

Event Wagering Systems which support the issuance and/or redemption of wagering instruments (vouchers and coupons) shall meet the applicable requirements established within the "Machine Vouchers" section of the *GLI-11 Standards for Gaming Devices* and the "Validation System Requirements" of the *GLI-13 Standards for On-Line Monitoring and Control Systems (MCS) and Validation Systems* and other applicable jurisdictional requirements observed by the regulatory body.

2.7 Location Requirements for Remote Wagering

2.7.1 General Statement

Where required by the regulatory body, the requirements within this section shall apply when the Event Wagering System supports remote wagering.

NOTE: The operator or third-party service provider maintaining these components, services and/or applications shall meet the auditing procedures indicated in the "Location Service Provider" section of this document.

2.7.2 Location Fraud Prevention

The Event Wagering System shall incorporate a mechanism to detect the use of remote desktop software, rootkits, virtualization, and/or any other programs identified as having the ability to circumvent location detection. This shall follow best practice security measures to:

- a) Detect and block location data fraud (e.g., fake location apps, virtual machines, remote desktop programs, etc.) prior to completing each wager;
- b) Examine the IP address upon each Remote Wagering Device connection to a network to ensure a known Virtual Private Network (VPN) or proxy service is not in use;
- c) Detect and block devices which indicate system-level tampering (e.g., rooting, jailbreaking, etc.);
- d) Stop "Man-In-The-Middle" attacks or similar hacking techniques and prevent code manipulation;
- e) Utilize detection and blocking mechanisms verifiable to an application level; and
- f) Monitor and prevent wagers placed by a single player account from geographically inconsistent locations (e.g., wager placement locations were identified that would be impossible to travel between in the time reported).

2.7.3 Location Detection for Remote Wagering on a WLAN

Where remote wagering occurs over a Wireless Local Area Network (WLAN), the Event Wagering System shall incorporate one of the following methods that can track the locations of all players connected to the WLAN:

- a) A location detection service or application in which each player shall pass a location check prior to completing each wager. This service or application shall meet the requirements specified in the next section for "Location Detection for Remote Wagering Over the Internet"; or

- b) A location detection component that detects in real-time when any players are no longer in the permitted area and prevent further wagers from being placed. This can be accomplished with the use of specific IT hardware such as directional antennas, Bluetooth sensors or other methods to be evaluated on a case-by-case basis by the independent test laboratory.

2.7.4 Location Detection for Remote Wagering Over the Internet

Where remote wagering occurs over the internet, the Event Wagering System shall incorporate a location detection service or application to reasonably detect and dynamically monitor the location of a player attempting to place a wager; and to monitor and enable the blocking of unauthorized attempts to place a wager.

- a) Each player shall pass a location check prior to completing the first wager after logging in on a specific Remote Wagering Device. Subsequent location checks on that device shall occur prior to completing wagers after a period of 30 minutes since the previous location check, or as otherwise specified by the regulatory body:
 - i. If the location check indicates the player is outside the permitted boundary or cannot successfully locate the player, the wager shall be rejected, and the player shall be notified of this.
 - ii. An entry shall be recorded in a time stamped log any time a location violation is detected, including the unique player ID and the detected location.
- b) A geolocation method shall be used to provide a player's physical location and an associated confidence radius. The confidence radius shall be entirely located within the permitted boundary.
- c) Accurate location data sources (Wi-Fi, GSM, GPS, etc.) shall be utilized by the geolocation method to confirm the player's location. If a Remote Wagering Device's only available location data source is an IP Address, the location data of a mobile device registered to the player account may be used as a supporting location data source under the following conditions:
 - i. The Remote Wagering Device (where the wager is being placed) and the mobile device shall be determined to be near one another.
 - ii. If allowed by the regulatory body, carrier-based location data of a mobile device may be used if no other location data sources other than IP Addresses are available.
- d) The geolocation method shall possess the ability to control whether the accuracy radius of the location data source is permitted to overlap or exceed defined buffer zones or the permitted boundary; and
- e) To mitigate and account for discrepancies between mapping sources and variances in geospatial data, boundary polygons based on audited maps approved by the regulatory body as well as overlay location data onto these boundary polygons shall be utilized.

2.8 Information to be Maintained

2.8.1 Data Retention and Time Stamping

The Event Wagering System shall be capable of maintaining and backing up all recorded data as discussed within this section:

- a) The system clock shall be used for all time stamping.

- b) The system shall provide a mechanism to export the data for the purposes of data analysis and auditing/verification (e.g., CSV, XLS).

2.8.2 Wager Record Information

For each individual wager placed by the player, the information to be maintained and backed up by the Event Wagering System shall include:

- a) The date and time the wager was placed;
- b) Any player choices involved in the wager:
 - i. Market and line postings (e.g., money line bet, point spreads, over/under amounts, win/place/show);
 - ii. Wager selection (e.g., athlete or team name and number);
 - iii. Any special condition(s) applying to the wager;
- c) The results of the wager (blank until confirmed);
- d) Total amount wagered, including any promotional/bonus credits (if applicable);
- e) Total amount won, including any promotional/bonus credits (if applicable);
- f) Commission or fees collected (if applicable);
- g) The date and time the winning wager was paid to the player;
- h) Unique identification number of the wager;
- i) User identification or unique Wagering Device ID which issued the wager record (if applicable);
- j) Relevant location information;
- k) Event and market identifiers;
- l) Current wager status (active, cancelled, unredeemed, pending, void, invalid, redemption in progress, redeemed, etc.);
- m) Unique player ID, for wagers conducted using a player account;
- n) Redemption period (if applicable); and
- o) Open text field for attendant input of player description or picture file (if applicable);

2.8.3 Market Information

For each individual market available for wagering, the information to be maintained and backed up by the Event Wagering System shall include:

- a) The date and time the wagering period started and ended;
- b) The date and time the event started and ended or is expected to occur for future events (if known);
- c) The date and time the results were confirmed (blank until confirmed);
- d) Total amount of wagers collected, including any promotional/bonus credits (if applicable);
- e) The line postings that were available throughout the duration of a market (time stamped) and the confirmed result (win/loss/push);
- f) Total amount of winnings paid to players, including any promotional/bonus credits (if applicable);
- g) Total amount of wagers voided or cancelled, including any promotional/bonus credits (if applicable);
- h) Commission or fees collected (if applicable);

- i) Event status (in progress, complete, confirmed, etc.); and
- j) Event and market identifiers.

2.8.4 Contest/Tournament Information

For Event Wagering Systems which support contests/tournaments, the information to be maintained and backed up by the Event Wagering System shall include for each contest/tournament:

- a) Name of the contest/tournament;
- b) The date and time the contest/tournament occurred or will occur (if known);
- c) Unique player ID and name of each registered player, amount of entry fee paid, and the date paid;
- d) Unique player ID and name of each winning player, amount paid, and the date paid;
- e) Total amount of entry fees collected, including any promotional/bonus credits (if applicable);
- f) Total amount of winnings paid to players, including any promotional/bonus credits (if applicable);
- g) Commission or fees collected (if applicable); and
- h) Contest/tournament status (in progress, complete, etc.).

2.8.5 Player Account Information

For Event Wagering Systems which support player account management, the information to be maintained and backed up by the Event Wagering System shall include for each player account:

- a) Unique player ID and player name;
- b) Player data (including verification method);
- c) The date of player agreement to the operator's terms and conditions and privacy policy;
- d) Account details and current balance;
- e) Open text field for attendant input of player description or picture file (if applicable);
- f) Previous accounts, if any, and reason for de-activation;
- g) The date and method from which the account was registered (e.g., remote vs. on-site);
- h) The date and time of last log in;
- i) Exclusions/limitations information as required by the regulatory body:
 - i. The date and time of the request (if applicable);
 - ii. Description and reason of exclusion/limitation;
 - iii. Type of exclusion/restriction (e.g., operator-imposed exclusion, self-imposed limitation);
 - iv. The date exclusion/limitation commenced;
 - v. The date exclusion/limitation ended (if applicable);
- j) Financial Transaction information:
 - i. Type of transaction (e.g., deposit, withdrawal, adjustment);
 - ii. The date and time of the transaction;
 - iii. Unique transaction ID;
 - iv. Amount of transaction;
 - v. Total account balance before/after transaction;
 - vi. Total amount of fees paid for transaction (if applicable);
 - vii. User identification or unique Wagering Device ID which handled the transaction (if applicable);

- viii. Transaction status (pending, complete, etc.);
- ix. Method of deposit/withdrawal (e.g., cash, debit or credit card, personal check, cashier's check, wire transfer, money order);
- x. Deposit authorization number; and
- xi. Relevant location information.

2.8.6 Promotion/Bonus Information

For Event Wagering Systems which support promotions and/or bonuses that are redeemable for cash, wagering credits, or merchandise, the information to be maintained and backed up by the Event Wagering System shall include for each promotion/bonus:

- a) The date and time the promotion/bonus period started and ended or will end (if known);
- b) Current balance for promotion/bonus;
- c) Total amount of promotions/bonuses issued;
- d) Total amount of promotions/bonuses redeemed;
- e) Total amount of promotions/bonuses expired;
- f) Total amount of promotion/bonus adjustments; and
- g) Unique ID for the promotion/bonus.

2.8.7 Wagering Device Information

For each individual Self-Service Wagering Device or POS Wagering Device, the information to be maintained and backed up by the Event Wagering System shall include, as applicable:

- a) Unique Wagering Device ID;
- b) Wager record purchases;
- c) Winning wager record redemptions, if supported;
- d) Wager record voids and cancellations; and
- e) User identification and session information, for POS Wagering Devices;

2.8.8 Significant Event Information

Significant event information to be maintained and backed up by the Event Wagering System shall include:

- a) Failed login attempts;
- b) Program error or authentication mismatch;
- c) Significant periods of unavailability of any critical component of the system;
- d) Large wins (single and aggregate over defined time period) in excess of a value specified by the regulatory body, including wager record information;
- e) Large wagers (single and aggregate over defined time period) in excess of a value specified by the regulatory body, including wager record information;
- f) System voids, overrides, and corrections;
- g) Changes to live data files occurring outside of normal program and operating system execution;

- h) Changes that are made to the download data library, including the addition, changing or deletion of software, where supported;
- i) Changes to operating system, database, network, and application policies and parameters;
- j) Changes to date/time on master time server;
- k) Changes to previously established criteria for an event or market (not including line posting changes for active markets);
- l) Changes to the results of an event or market;
- m) Changes to promotion and/or bonus parameters;
- n) Player Account Management:
 - i. Adjustments to a player account balance;
 - ii. Changes made to player data and sensitive information recorded in a player account;
 - iii. Deactivation of a player account;
 - iv. Large financial transactions (single and aggregate over defined time period) in excess of a value specified by the regulatory body, including transaction information;
- o) Irrecoverable loss of sensitive information;
- p) Any other activity requiring user intervention and occurring outside of the normal scope of system operation; and
- q) Other significant or unusual events as deemed applicable by the regulatory body.

2.8.9 User Access Information

For each user account, the information to be maintained and backed up by the Event Wagering System shall include:

- a) Employee name and title or position;
- b) User identification;
- c) Full list and description of functions that each group or user account may execute;
- d) The date and time the account was created;
- e) The date and time of last log in;
- f) The date and time of last password change;
- g) The date and time the account was disabled/deactivated; and
- h) Group membership of user account (if applicable).

2.9 Reporting Requirements

2.9.1 General Reporting Requirements

The Event Wagering System shall be capable of generating the information needed to compile reports as required by the regulatory body. In addition to meeting the requirements in the section above for “Data Retention and Time Stamping”, the following requirements shall apply for required reports:

- a) The system shall be able to provide the reporting information on demand and for intervals required by the regulatory body including, but not limited to, daily, month-to-date (MTD), year-to-date (YTD), and life-to-date (LTD).
- b) Each required report shall contain:
 - i. The operator, the selected interval and the date/time the report was generated; and

- ii. An indication of “No Activity” or similar message if no information appears for the period specified.

NOTE: In addition to the reports outlined in this section, the regulatory body may also require other reports utilizing the information stored under the “Information to be Maintained” section of this document.

2.9.2 Operator Revenue Reports

The Event Wagering System shall be able to provide the following information needed to compile one or more reports on operator revenue for each event as a whole and for each individual market within that event which may be used for operator taxation information:

- a) The date and time each event started and ended;
- b) Total amount of wagers collected;
- c) Total amount of winnings paid to players;
- d) Total amount of wagers voided or cancelled;
- e) Commission and fees collected (if applicable);
- f) Event and market identifiers; and
- g) Event status (in progress, complete, confirmed, etc.).

2.9.3 Operator Liability Reports

The Event Wagering System shall be able to provide the following information needed to compile one or more reports on operator liability:

- a) Total amount held by the operator for the player accounts (if applicable);
- b) Total amount of wagers placed on future events; and
- c) Total amount of winnings owed but unpaid by the operator on winning wagers.

2.9.4 Future Events Reports

The Event Wagering System shall be able to provide the following information needed to compile one or more reports on future events for the gaming day:

- a) Wagers placed prior to the gaming day for future events (total and by wager);
- b) Wagers placed on the gaming day for future events (total and by wager);
- c) Wagers placed prior to the gaming day for events occurring on that same day (total and by wager);
- d) Wagers placed on the gaming day for events occurring on that same day (total and by wager);
- e) Wagers voided or cancelled on the gaming day (total and by wager); and
- f) Event and market identifiers.

2.9.5 Significant Events and Alterations Reports

The Event Wagering System shall be able to provide the following information needed to compile one or more reports for each significant event or alteration as applicable:

- a) The date and time of the significant event or alteration;
- b) Event/component identification (if applicable);
- c) Identification of user(s) who performed and/or authorized the significant event or alteration;
- d) Reason/description of the significant event or alteration, including data or parameter altered;
- e) Data or parameter value before alteration; and
- f) Data or parameter value after alteration.

Chapter 3: Wagering Device Requirements

3.1 Introduction

3.1.1 General Statement

A wager may be placed using one of the following types of Wagering Devices as allowed by the regulatory body. Any other types of Wagering Devices will be reviewed on a case-by-case basis, as allowed by the regulatory body.

- a) Point-of-Sale (POS) Wagering Device: An attendant station that at a minimum will be used by an attendant for the execution or formalization of wagers placed on behalf of a player.
- b) Self-Service Wagering Device: A kiosk that at a minimum will be used for the execution or formalization of wagers placed by a player directly and, if supported, may be used for redemption of winning wager records.
- c) Remote Wagering Device: A player-owned device operated either on an in-venue wireless network or over the internet that at a minimum will be used for the execution or formalization of wagers placed by a player directly. Examples of a Remote Wagering Device include a personal computer, mobile phone, tablet, etc.

3.2 Wagering Software

3.2.1 General Statement

Wagering Software is used to take part in wagering and financial transactions with the Event Wagering System which, based on design, is downloaded to or installed on the Wagering Device, run from the Event Wagering System which is accessed by the Wagering Device, or a combination of the two.

3.2.2 Software Identification

Wagering Software shall contain sufficient information to identify the software and its version.

3.2.3 Software Validation

For Wagering Software installed locally on the Wagering Device, it shall be possible to authenticate that all critical components contained in the software are valid each time the software is loaded for use, and where supported by the system, on demand as required by the regulatory body. Critical components may include, but are not limited to, wagering rules, elements that control the communications between the Wagering Device and the Event Wagering System, or other components that are needed to ensure proper operation of the software. In the event of a failed authentication (i.e., program mismatch or authentication failure), the software shall prevent wagering operations and display an appropriate error message.

NOTE: Program verification mechanisms will be evaluated on a case-by-case basis and approved by the regulatory body and the independent test laboratory based on industry-standard security practices.

3.2.4 User Interface Requirements

The user interface is defined as an interface application or program through which the user views and/or interacts with the Wagering Software. The user interface shall meet the following requirements:

- a) The functions of all buttons, touch or click points shall be clearly indicated within the area of the button, or touch/click point or within the help menu. There shall be no functionality available through any buttons or touch/click points on the user interface that are undocumented.
- b) Any resizing or overlay of the user interface shall be mapped accurately to reflect the revised display and touch/click points.
- c) User interface instructions, as well as information on the functions and services provided by the software, shall be clearly communicated to the user and shall not be misleading or inaccurate.
- d) The display of the instructions and information shall be adapted to the user interface. For example, where a Wagering Device uses technologies with a smaller display screen, it is permissible to present an abridged version of the wagering rules accessible directly from within the wagering screen and make available the full/complete version of the wagering rules via another method, such as a secondary screen, help menu, or other interface that is easily identified on the visual wagering screen.

3.2.5 Simultaneous Inputs

Wagering Software shall not be adversely affected by the simultaneous or sequential activation of the various inputs and outputs which might, whether intentionally or not, cause malfunctions or invalid results.

3.2.6 Wager Record Printers

If the Wagering Device uses a printer to issue printed wager records to the player, the printed wager record shall include information as indicated in “Wager Record” section of this document. It may be permissible for some of this information to be contained on the ticket stock itself.

3.2.7 Communications

Wagering Software shall be designed or programmed such that it may only communicate with authorized components through secure communications. If communication between the Event Wagering System and the Wagering Device is lost, the software shall prevent further wagering operations and display an appropriate error message. It is permissible for the software to detect this error when the device tries to communicate with the system.

3.3 Self-Service Wagering Devices

3.3.1 General Statement

A player places a wager at a Self-Service Wagering Device by using funds from their player account or by using peripheral devices as authorized by the regulatory body. In addition to the requirements for “Wagering Software”, the applicable requirements established within the *GLI-20 Standards for Kiosks* and other applicable jurisdictional requirements observed by the regulatory body shall be met for all proprietary components of the Self-Service Wagering Device.

3.4 POS Wagering Devices

3.4.1 General Statement

A player places a wager at POS Wagering Device by using funds from their player account or by providing payment for the wager(s) directly to the attendant. In addition to the requirements for “Wagering Software”, the requirements established in this section shall be met for POS Wagering Devices.

3.4.2 Touch Screen Displays

Touch screen displays, if in use by the Wagering Software, shall be accurate, and if required by their design, shall support a calibration method to maintain that accuracy; alternatively, the display hardware may support automatic self-calibration.

3.4.3 Printing Wager Records

If the POS Wagering Device connects to a printer to produce printed wager records and/or wagering instruments (vouchers and coupons), the printer and/or Wagering Software shall be able to detect and indicate the following error conditions, where supported. It is permissible for the error condition to be detected when it tries to print:

- a) Low battery (where power is external to the POS Wagering Device);
- b) Out of paper/paper low; and
- c) Printer disconnected.

3.4.4 Wireless POS Wagering Devices

For wireless POS Wagering Devices, the applicable requirements for “Client-Server Interactions” of the next section shall also be met. Additionally, communication shall only occur between the wireless POS Wagering Device and the Event Wagering System via authorized access points within the venue.

3.5 Remote Wagering Devices

3.5.1 General Statement

A player may only place a wager on a Remote Wagering Device by using funds from their player account (i.e. anonymous wagering transactions are prohibited). Depending on the implementation(s)

authorized by the regulatory body, Remote Wagering Devices may be used on an in-venue Wireless Local Area Network (WLAN) or over the internet. In addition to the requirements for “Wagering Software”, the requirements established in this section shall be met for Remote Wagering Devices.

3.5.2 Client-Server Interactions

The player may obtain/download an application or software package containing the Wagering Software or access the software via a browser to take part in wagering and financial transactions with the Event Wagering System.

- a) Players shall not be able to use the software to transfer data to one another, other than chat functions (e.g., text, voice, video, etc.) and approved files (e.g., user profile pictures, photos, etc.);
- b) The software shall not automatically alter any device-specified firewall rules to open ports that are blocked by either a hardware or software firewall;
- c) The software shall not access any ports (either automatically or by prompting the user to manually access) which are not necessary for the communication between the Remote Wagering Device and the server;
- d) If the software includes additional non-wagering related functionality, this additional functionality shall not alter the software’s integrity in any way;
- e) The software shall not possess the ability to override the volume settings of the Remote Wagering Device; and
- f) The software shall not be used to store sensitive information. It is recommended that auto complete, password caching, or other methods that will fill in the password field are disabled by default for the software.

3.5.3 Compatibility Verification

During any installation or initialization and prior to commencing wagering operations, the Wagering Software used in conjunction with the Event Wagering System shall detect any incompatibilities or resource limitations with the Remote Wagering Device that would prevent proper operation of the software (e.g., software version, minimum specifications not met, browser type, browser version, plug-in version, etc.). If any incompatibilities or resource limitations are detected the software shall prevent wagering operations and display an appropriate error message.

3.5.4 Software Content

Wagering Software shall not contain any malicious code or functionality deemed to be malicious in nature by the regulatory body. This includes, but is not limited to, unauthorized file extraction/transfers, unauthorized device modifications, unauthorized access to any locally stored personal information (e.g., contacts, calendar, etc.) and malware.

3.5.5 Cookies

Where cookies are used, players shall be informed of the cookie use upon Wagering Software installation or during player registration. When cookies are required for wagering, wagering cannot occur if they are not accepted by the Remote Wagering Device. All cookies used shall contain no

malicious code.

3.5.6 Information Access

The Wagering Software shall be able to display, either directly from the user interface or from a page accessible to the player, the items specified in the following sections of this document. For Remote Wagering Devices which only allow wagers within a venue, it is acceptable to disclose to the player the means of obtaining the information required by this section:

- a) "Wagering Rules and Content";
- b) "Player Protection Information";
- c) "Terms and Conditions";
- d) "Privacy Policy";
- e) "Wagering Displays and Information"; and
- f) "Results Display".

NOTE: It is accepted that the system will unavoidably be subject to a certain degree of synchronization delay for updates to this information as displayed on the software, and it is possible that information may only be updated at the player's next interaction with the software which causes the on-screen information to be refreshed.

Chapter 4: Event Wagering Requirements

4.1 Introduction

4.1.1 General Statement

This chapter sets forth technical requirements for wagering operations, including, but not limited to rules for wager placement and results for markets within an event.

4.2 Wagering Displays and Information

4.2.1 Posting of Wagering Rules

Comprehensive wagering rules shall be posted by an operator for the markets and event types currently offered. Where the Wagering Software includes these wagering rules directly, the software will be evaluated against the requirements within the “Wagering Rules” section of this document.

4.2.2 Dynamic Wagering Information

The following information shall be made available without the need for placing a wager. Within a venue this information may be displayed on a Wagering Device and/or an external display.

- a) Information regarding the events and markets available for wagering;
- b) Current odds/payouts and prices for available markets;
- c) For types of markets where individual wagers are gathered into pools:
 - i. Up-to-date odds/payouts information for simple market pools. For complex market pools, it is accepted that there may be reasonable limitations to the up-to-date accuracy of the pool estimates displayed to the player;
 - ii. Up-to-date values of total investments for all market pools; and
 - iii. The dividends of any decided market.

NOTE: This information shall be displayed as accurately as possible within the constraints of communication delays and latencies.

4.2.3 Player Resources/Features

Where allowed by the regulatory body, player resources/features may be provided such as one that offers advice, hints, or suggestions to a player, or a data stream that may be used to externally facilitate wager selection, if they conform to the following requirements:

- a) The player shall be made aware of each resource/feature that is available, the advantage it offers (if any), and the options that exist for selection.
- b) The method for obtaining each resource/feature shall be disclosed to the player. Any player resources/features that are offered to the player for purchase shall clearly disclose the cost.

- c) The availability and functionality of player resources/features shall remain consistent for all players.
- d) For peer-to-peer wagering, the player shall be provided with sufficient information to make an informed decision, prior to participation, as to whether to participate with player(s) who may possess such resources/features.

4.3 Wager Placement

4.3.1 General Statement

Wagers are placed in conjunction with a player account or by funds provided to a Wagering Device or an attendant. Depending on the type of Wagering Device, wagers may be placed directly by the player or on behalf of a player by an attendant.

NOTE: Wagers placed using a Remote Wagering Device may only be placed in conjunction with a player account.

4.3.2 Placement of a Wager

The following rules only apply to the placement of a paid wager directly by a player on the Wagering Device:

- a) The method of placing a wager shall be straightforward, with all selections (including their order, if relevant) identified. When the wager involves multiple events (e.g., parlays), such groupings shall be identified.
- b) Players shall have the ability to select the market they want to place a wager on.
- c) Wagers shall not be automatically placed on behalf of the player without the player's consent/authorization.
- d) Players shall have an opportunity to review and confirm their selections before the wager is submitted. This does not preclude the use of "single-click" wagering where permitted by the regulatory body and opted in by the player.
- e) Situations shall be identified where the player has placed a wager for which the associated odds/payouts or prices have changed, and unless the player has opted in to auto-accept changes as permitted by the regulatory body, provide a notification to confirm the wager given the new values.
- f) Clear indication shall be provided that a wager has been accepted or rejected (in full or in part). Each wager shall be acknowledged and clearly indicated separately so that there is no doubt as to which wagers have been accepted.
- g) For wagers conducted using a player account:
 - i. The account balance shall be readily accessible.
 - ii. A wager shall not be accepted that could cause the player to have a negative balance.
 - iii. The account balance is to be debited when the wager is accepted by the system.

4.3.3 Automatic Acceptance of Changes in Wagers

Where allowed by the regulatory body, an Event Wagering System may support a feature that allows a player while placing a wager to auto-accept changes in odds/payouts or price of the wager provided that it conforms to the following requirements:

- a) Any auto-accept options available (e.g., auto-accepting all wagers with higher price, auto-accepting all wagers with lower price, etc.) shall be explained to the player;
- b) The player shall manually opt in to use this functionality (i.e., it shall not be set by default); and
- c) The player shall be able to opt out at any time.

4.3.4 Wager Record

Upon completion of a wagering transaction, the player shall have access to a wager record which contains the following information:

- a) The date and time the wager was placed;
- b) The date and time the event is expected to occur (if known);
- c) Any player choices involved in the wager:
 - i. Market and line postings (e.g., money line bet, point spreads, over/under amounts, win/place/show, etc.);
 - ii. Wager selection (e.g., athlete or team name and number);
 - iii. Any special condition(s) applying to the wager;
- d) Total amount wagered, including any promotional/bonus credits (if applicable);
- e) Unique identification number and/or barcode of the wager;
- f) User identification or unique Wagering Device ID which issued the wager record (if applicable);
- g) Venue Name/Site Identifier (for printed wager record, it is permissible for this information to be contained on the ticket stock itself); and
- h) Redemption period (for printed wager records it is permissible for this information to be contained on the ticket stock itself).

NOTE: Some of the above-listed information may also be part of the unique identification number and/or barcode. Multiple barcodes are allowed and may represent more than just the unique identification number.

4.3.5 Wagering Period Close

It shall not be possible to place wagers once the wagering period has closed.

4.3.6 Free Play Mode

Where allowed by the regulatory body, the Event Wagering System may support free play mode, which allows a player to participate in wagering without paying. Free play mode shall not mislead the player about the odds/payouts available in the paid version.

4.4 Results and Payment

4.4.1 Results Display

Results entry shall include the entry of all information which may affect the outcome of all types of wagers offered for that event.

- a) It shall be possible for a player to obtain the results of their wagers on any decided market once the results have been confirmed.
- b) Any change of results (e.g., due to statistics/line corrections) shall be made available.

4.4.2 Payment of Winnings

Once the results of the event are entered and confirmed, the player may receive payment for their winning wagers. This does not preclude the ability for the player to perform a redemption for an adjusted payout before event conclusion where offered and allowed by the regulatory body.

4.4.3 Winning Wager Record Redemption

The following requirements apply to the redemption of a winning wager at a Wagering Device, as allowed by the regulatory body. This section does not apply to winning wagers tied to a player account which automatically updates the account balance.

- a) The Event Wagering System shall process winning wager record redemption according to the secure communication protocol implemented.
- b) No winnings are issued to the player prior to confirmation of winning wager record validity.
- c) The Event Wagering System shall have the ability to identify and provide a notification in the case of invalid or unredeemable wager records for the following conditions:
 - i. Wager record cannot be found on file;
 - ii. Wager record is not a winner;
 - iii. Winning wager record has already been paid; or
 - iv. Amount of winning wager record differs from amount on file (requirement can be met by display of winning wager amount for confirmation during the redemption process).
- d) The Event Wagering System shall update the wager record status on the database during each phase of the redemption process accordingly. In other words, whenever the wager record status changes, the system shall update the database.

4.5 Virtual Event Wagering

4.5.1 General Statement

Virtual event wagering allows for the placement of wagers on simulations of sporting events, contests, and races whose results are based solely on the output of an approved Random Number Generator (RNG) as allowed by the regulatory body. The following requirements are only applicable to cases that virtual event wagering is conducted in total by the Event Wagering System where a wager is placed at a Wagering Device or through interaction with an attendant and then the virtual event is displayed via a public or common display (e.g. external display, website, etc.). For virtual events conducted by a gaming device (e.g., player makes a wager and the event plays out before them on their machine or a shared display on a multi-player machine), please refer to the *GLI-11 Standards for Gaming Devices* or other jurisdictional requirements observed by the regulatory body.

4.5.2 Randomization and Virtual Events

A cryptographic RNG shall be utilized to determine virtual event outcomes and shall comply with the applicable jurisdictional requirements set out for RNGs. In the absence of specific jurisdictional standards, the "Random Number Generator (RNG) Requirements" chapter of the *GLI-11 Standards for Gaming Devices* shall be used as applicable. Additionally, the evaluation of virtual event outcomes using an RNG shall comply with the following rules:

- a) Where more than one RNG is used to determine different virtual event outcomes, each RNG shall be separately evaluated; and
- b) Where each instance of an RNG is identical, but involves a different implementation within the virtual event, each implementation shall be separately evaluated.

4.5.3 Virtual Event Selection Process

Determination of events of chance that result in a monetary award shall not be influenced, affected, or controlled by anything other than the values selected by an approved RNG, in accordance with the following requirements:

- a) It shall not be possible to ascertain the outcome of the virtual event prior to its commencement;
- b) When making calls to the RNG, the virtual event shall not limit the outcomes available for selection, except as provided for by design;
- c) The virtual event shall not modify or discard outcomes selected by the RNG due to adaptive behavior. Additionally, outcomes shall be used as described by the rules of the virtual event;
- d) After the commencement of a virtual event, no further actions or decisions may be made that change the behavior of any of the elements of chance within the virtual event, other than player decisions;
- e) Except as provided for by the rules of the virtual event, events of chance shall be independent and shall not correlate with any other events within the same virtual event, or events within previous virtual events;
- f) Any associated equipment used in conjunction with an Event Wagering System shall not influence or modify the behaviors of the system's RNG and/or random selection process, except as authorized, or intended by design;
- g) Virtual event outcomes shall not be affected by the effective bandwidth, link utilization, bit error rate or other characteristics of the communications channel between the Event Wagering System and the Wagering Device; and
- h) Wagering Software shall not contain any logic utilized to generate the result of any virtual event. All critical functions including the generation of any virtual event shall be generated by the Event Wagering System and be independent of the Wagering Device.

4.5.4 Virtual Event Display

Displays for a virtual event shall conform to applicable display requirements of this standard. In addition, the following display requirements apply:

- a) Statistical data that is made available to the player pertaining to the virtual event shall not misrepresent the capabilities of any virtual participant. This does not prevent the use of an element of chance or randomness from impacting performance of the virtual participant during the virtual event.
- b) For scheduled virtual events, a countdown of the time remaining to place a wager in that event shall be displayed to the player. It shall not be possible to place wagers on the event once this time has passed; however, this requirement does not prohibit the implementation of in-play wagers.
- c) Each virtual participant shall be unique in appearance, where applicable to the wager. For instance, if the wager is on one team to beat another, the virtual participants themselves do not need to be unique in appearance, however the teams that they are on shall be visually distinct from each other.
- d) The result of a virtual event shall be clear, unambiguous, and displayed for a sufficient length of time to allow a player a reasonable opportunity to verify the virtual event's outcome.

4.5.5 Simulation of Physical Objects

Where a virtual event incorporates a graphical representation or simulation of a physical object that is used to determine virtual event outcome, the behaviors portrayed by the simulation shall be consistent with the real-world object, unless otherwise denoted by the virtual event rules. This requirement does not apply to graphical representations or simulations that are utilized for entertainment purposes only. The following shall apply to the simulation:

- a) The probability of any event occurring in the simulation that affects the outcome of the virtual event shall be analogous to the properties of the physical object;
- b) Where the virtual event simulates multiple physical objects that would normally be expected to be independent of one another based on the rules of the virtual event, each simulation shall be independent of any other simulation; and
- c) Where the virtual event simulates physical objects that have no memory of previous events, the behavior of the simulated objects shall be independent of their previous behavior, so as to be non-adaptive and non-predictable, unless otherwise disclosed to the player.

4.5.6 Physics Engine

Virtual events may utilize a "physics engine" which is specialized software that approximates or simulates a physical environment, including behaviors such as motion, gravity, speed, acceleration, inertia, trajectory, etc. A physics engine shall be designed to maintain consistent play behaviors and virtual event environment unless an indication is otherwise provided to the player by the virtual event rules. A physics engine may utilize the random properties of an RNG to impact virtual event outcome.

NOTE: Implementations of a physics engine in a virtual event will be evaluated on a case-by-case basis by the independent test laboratory.

4.6 External Wagering Systems

4.6.1 General Statement

This section contains requirements for the circumstances where the Event Wagering System communicates with an external wagering system in any of the following configurations:

- a) The Event Wagering System is acting as the “host wagering system” receiving, for its own markets, wagers from one or more external “guest wagering systems”; or
- b) The Event Wagering System is acting as a “guest wagering system” passing wagers to an external “host wagering system,” for that system’s markets.

NOTE: The requirements of this section apply to the interoperability of the Event Wagering System with the external wagering system and are not a complete evaluation of the external wagering system itself. The external wagering system may independently be subject to evaluation by the independent test laboratory per regulatory body discretion.

4.6.2 Information

The following requirements apply to information being conveyed between the host wagering system and the guest wagering system:

- a) If the host wagering system provides pari-mutuel wagering for the guest wagering system, the Event Wagering System shall be able to:
 - i. When acting as the guest wagering system, receive the current dividends for active pools sent from the host wagering system.
 - ii. When acting as the host wagering system, pass the current dividends for active pools to all receiving guest wagering systems.
- b) If the host wagering system provides fixed odds wagering for the guest wagering system where the odds/payouts and prices can be dynamically changed, the Event Wagering System shall be able to:
 - i. When acting as the guest wagering system, receive the current odds/payouts and prices sent from the host wagering system whenever any odds/payouts and prices are changed.
 - ii. When acting as the host wagering system, pass the current odds/payouts and prices to all receiving guest wagering systems whenever any odds/payouts and prices are changed.
- c) Change of event status information shall be passed from the host wagering system to the guest wagering system whenever any change occurs, including:
 - i. Withdrawn/reinstated selections;
 - ii. Altered event starting time;
 - iii. Individual markets opened/closed;
 - iv. Results entered/modified;
 - v. Results confirmed; and
 - vi. Event cancelled.

4.6.3 Wagers

The following requirements apply to wagers being placed between the host wagering system and the guest wagering system:

- a) Wagers placed on the guest wagering system shall receive clear acknowledgment of acceptance, partial acceptance (including details), or rejection sent by the host wagering system.
- b) If the cost of the wager is determined by the host wagering system, there shall be a positive confirmation sequence in place to enable the player to accept the wager cost and the guest wagering system to determine that there are enough funds in the account balance to meet the wager cost prior to making an offer to the host wagering system.
- c) Where wagers may be placed in bulk, the following requirements apply:
 - i. If the stream of wagers is interrupted for any reason, there shall be a means available to determine where in the stream that the interruption occurred.
 - ii. No wager in the stream may be greater than the account balance. If such a wager is attempted, the entire stream is to be halted.
- d) The account balance shall be debited an amount equaling the offer and cost to the host wagering system. The funds shall remain as a pending transaction with details of the offer to the host wagering system logged. On receipt of acknowledgment from the host wagering system, the appropriate adjustments shall be made to the "pending" account and the account balance on the guest wagering system.
- e) Cancellation requests from the guest wagering system shall receive clear acknowledgment of acceptance or rejection by the host wagering system. The player is not to be credited by the guest wagering system until final confirmation is received from the host wagering system including the amount of the voided or cancelled wager.

4.6.4 Results

When results are entered and confirmed on the host wagering system, each winning wager shall be transferred to the guest wagering system with the amount of the win. Confirmation of receipt of the winning wagers shall be acknowledged by the guest wagering system.

Appendix A: Operational Audit for Wagering Procedures and Practices

A.1 Introduction

A.1.1 General Statement

This appendix sets forth procedures and practices for wagering operations which will be reviewed in an operational audit as a part of the Event Wagering System evaluation, including, but not limited to establishing wagering rules, suspending events, handling various wagering and financial transactions, creating markets, settling wagers, closing markets, cancellations of events, voiding or cancelling wagers, player account management, fundamental practices relevant to the limitation of risks, and any other objectives established by the regulatory body.

NOTE: It is also recognized that additional procedures and practices which are not specifically included within this standard will be relevant and required for an operational audit as determined by the operator and/or regulatory body within their rules, regulations, and Minimum Internal Control Standards (MICS).

A.2 Internal Control Procedures

A.2.1 Internal Control Procedures

The operator shall establish, maintain, implement and comply with internal control procedures for wagering operations, including performing wagering and financial transactions.

A.2.2 Information Management

The operator's internal controls shall include the processes for maintaining the recorded information specified under the section entitled "Information to be Maintained" for a period of five years or as otherwise specified by the regulatory body.

A.2.3 Risk Management

The operator's internal controls shall contain details on its risk management framework, including but not limited to:

- a) Automated and manual risk management procedures;
- b) Employee management, including access controls and segregation of duties;
- c) Information regarding identifying and reporting fraud and suspicious conduct;
- d) Controls ensuring regulatory compliance;
- e) Description of Anti-Money Laundering (AML) compliance standards including procedures for detecting structuring to avoid reporting requirements;
- f) Description of all software applications that comprise the Event Wagering System;
- g) Description of all types of wagers available to be offered by the operator;

- h) Description of the method to prevent past-post wagers from being placed;
- i) Description of all integrated third-party service providers; and
- j) Any other information required by the regulatory body.

A.2.4 Restricted Players

The operator's internal controls shall describe the method to prevent players from wagering on events in which they might have insider information, including, but not limited to the following examples, as required by the regulatory body:

- a) Players identified as employees, subcontractors, directors, owners, and officers of an operator, as well as those within the same household, shall not place wagers on any event, except in private pools where their association with the operator is clearly disclosed.
- b) Players identified as professional or collegiate athletes, team employees and owners, coaches, managers, handlers, athletic trainers, league officials and employees, referees, umpires, sports agents, and employees of a player or referee union, as well as those within the same household, shall not place wagers on any event in the sport in which they participate, or in which the athlete they represent participates.

A.3 Player Account Controls

A.3.1 Registration and Verification

Where player account registration is done manually by the operator, procedures shall be in place to satisfy the requirements for "Registration and Verification" as indicated within this document.

A.3.2 Fraudulent Accounts

The operator shall have a documented public policy for the treatment of player accounts discovered to being used in a fraudulent manner, including but not limited to:

- a) The maintenance of information about any account's activity, such that if fraudulent activity is detected, the operator has the necessary information to take appropriate action;
- b) The suspension of any account discovered to be engaged in fraudulent activity, such as a player providing access to underage persons; and
- c) The handling of deposits, wagers, and wins associated with a fraudulent account.

A.3.3 Terms and Conditions

A set of terms and conditions shall be available to the player. During the registration process and when any terms and conditions are materially updated (i.e. beyond any grammatical or other minor changes), the player shall agree to the terms and conditions. The terms and conditions shall:

- a) State that only individuals legally permitted by their respective jurisdiction can participate in wagering;
- b) Advise the player to keep their authentication credentials (e.g., password and username) secure;

- c) Disclose all processes for dealing with lost authentication credentials, forced password changes, password strength and other related items;
- d) Specify the conditions under which an account is declared inactive and explain what actions will be undertaken on the account once this declaration is made; and
- e) Clearly define what happens to the player's pending wagers placed prior to any self-imposed or operator-imposed exclusion, including the return of all wagers, or settling all wagers, as appropriate.

A.3.4 Privacy Policy

A privacy policy shall be available to the player. During the registration process and when the privacy policy is materially updated (i.e. beyond any grammatical or other minor changes), the player shall agree to the privacy policy. The privacy policy shall state

- a) The player data required to be collected;
- b) The purpose for information collection;
- c) The period in which the information is stored;
- d) The conditions under which information may be disclosed; and
- e) An affirmation that measures are in place to prevent the unauthorized or unnecessary disclosure of the information.

A.3.5 Player Data Security

Any information obtained in respect to the player account, including player data, shall be done in compliance with the privacy policy and local privacy regulations and standards observed by the regulatory body. In addition:

- a) Any player data which is not subject to disclosure pursuant to the privacy policy shall be kept confidential, except where the release of that information is required by law.
- b) There shall be procedures in place for the security and sharing of player data, funds in a player account and other sensitive information as required by the regulatory body, including, but not limited to:
 - i. The designation and identification of one or more employees having primary responsibility for the design, implementation and ongoing evaluation of such procedures and practices;
 - ii. The procedures to be used to determine the nature and scope of all information collected, the locations in which such information is stored, and the storage devices on which such information may be recorded for purposes of storage or transfer;
 - iii. The measures to be utilized to protect information from unauthorized access; and
 - iv. The procedures to be used in the event the operator determines that a breach of data security has occurred, including required notification to the regulatory body.

A.3.6 Financial Transactions

Procedures shall be in place to ensure all financial transactions are conducted in accordance with local commerce regulations and requirements mandated by the regulatory body:

- a) Where financial transactions cannot be performed automatically by the Event Wagering System, procedures shall be in place to satisfy the requirements for “Player Funds Maintenance” as indicated within this document.
- b) Positive player identification or authentication shall be completed before the withdrawal of any funds can be made by the player.
- c) A player’s request for withdrawal of funds (i.e., deposited and cleared funds and wagers won) shall be completed by the operator within a reasonable amount of time, unless there is a pending unresolved player complaint/dispute or investigation. Such investigation shall be documented by the operator and available for review by the regulatory body.
- d) The operator shall have security or authorization procedures in place to ensure that only authorized adjustments can be made to player accounts, and these changes are auditable.

A.3.7 Limitations

Players shall be provided with a method to impose limitations for wagering parameters including, but not limited to deposits and wagers as required by the regulatory body. In addition, there shall be a method for the operator to impose any limitations for wagering parameters as required by the regulatory body.

- a) Once established by a player and implemented by the operator, it shall only be possible to reduce the severity of self-imposed limitations upon 24 hours’ notice, or as required by the regulatory body;
- b) Players shall be notified in advance of any operator-imposed limits and their effective dates. Once updated, operator-imposed limits shall be consistent with what is disclosed to the player; and
- c) Upon receiving any self-imposed or operator-imposed limitation order, the operator shall ensure that all specified limits are correctly implemented immediately or at the point in time (e.g., next login, next day) clearly indicated to the player.

A.3.8 Exclusions

Players shall be provided with a method to exclude themselves from wagering for a specified period or indefinitely, as required by the regulatory body. In addition, there shall be a method for the operator to exclude a player from wagering as required by the regulatory body.

- a) Players shall be given a notification containing exclusion status and general instructions for resolution where possible;
- b) Immediately upon receiving the exclusion order, no new wagers or deposits are accepted from that player, until the exclusion has been removed;
- c) While excluded, the player shall not be prevented from withdrawing any or all of their account balance, provided that the operator acknowledges that the funds have cleared, and that the reason(s) for exclusion would not prohibit a withdraw; and
- d) All advertising or marketing material shall not specifically target players that have been excluded from play.

A.3.9 Inactive Accounts

A player account is considered to be inactive under the conditions as specified in the terms and conditions. Procedures shall be in place to:

- a) Protect inactive player accounts that contain funds from unauthorized access, changes or removal; and
- b) Deal with unclaimed funds from inactive player accounts, including returning any remaining funds to the player where possible.

A.4 General Operating Procedures

A.4.1 Operator Reserves

The operator shall have processes in place for maintaining and protecting adequate cash reserves, as determined by the regulatory body, including segregated accounts of funds held for player accounts and operational funds such as those used to cover unclaimed winning wagers, potential winning wagers for the gaming day, etc.

A.4.2 Protection of Player Funds

The operator shall have processes in place to ensure funds in an operator account are either to be held in trust for the player in a special purpose segregated account that is maintained and controlled by a properly constituted corporate entity that is not the operator and whose governing board includes one or more corporate directors who are independent of the operator and of any corporation related to or controlled by the operator. In addition, the operator shall have procedures that are reasonably designed to:

- a) Ensure that funds generated from wagering are safeguarded and accounted for;
- b) Make clear that the funds in the segregated account do not belong to the operator and are not available to creditors other than the player whose funds are being held; and
- c) Prevent commingling of funds in the segregated account with other funds including, without limitation, funds of the operator.

A.4.3 Taxation

The operator shall have a process in place to identify all wins that are subject to taxation (single wins or aggregate wins over a defined period as required) and provide the necessary information in accordance with each regulatory body's taxation requirements.

NOTE: Amounts won that exceed any jurisdictional specified limit shall require the appropriate documentation to be completed before the winning player is paid.

A.4.4 Complaint/Dispute Process

The operator shall provide a method for a player to make a complaint/dispute, and to enable the player to notify the regulatory body if such complaint/dispute has not been or cannot be addressed by the operator, or under other circumstances as specified by the law of the regulatory body.

- a) Players shall be able to log complaints/disputes on a 24/7 basis.
- b) Records of all correspondence relating to a complaint/dispute shall be maintained for a period of five years or as otherwise specified by the regulatory body.
- c) A documented process shall exist between the operator and the regulatory body on the complaint/dispute reporting and resolution process.

A.4.5 Player Protection Information

Player protection information shall be available to the player. The player protection information shall contain at a minimum:

- a) Information about potential risks associated with excessive wagering, and where to get help for a gambling problem;
- b) A statement that no underage persons are permitted to participate in wagering;
- c) A list of the available player protection measures that can be invoked by the player, such as self-imposed exclusion, and information on how to invoke those measures;
- d) For player accounts, mechanisms in place which can be used to detect unauthorized use of their account, such as reviewing credit card statements against known deposits;
- e) Contact information or other means for reporting a complaint/dispute; and
- f) Contact information for the regulatory body and/or a link to their website.

A.5 Wagering Rules and Content

A.5.1 Wagering Rules

Wagering rules refers to any written, graphical, and auditory information provided to the public regarding event wagering operations. The operator shall adopt, and adhere to comprehensive wagering rules which shall be approved by the regulatory body:

- a) Wagering rules shall be complete, unambiguous, and not misleading or unfair to the player.
- b) Wagering rules that are presented aurally (via sound or voice) shall also be displayed in written form.
- c) Wagering rules shall be rendered in a color that contrasts with the background color to ensure that all information is clearly visible/readable.
- d) The operator shall keep a log of any changes to the wagering rules relating to placing wagers.
- e) Where wagering rules are altered for events or markets being offered, all rule changes shall be time and date stamped showing the rule applicable in each period. If multiple rules apply to an event or market, the operator shall apply the rules that were in place when the wager was accepted.

A.5.2 Wagering Rules Content

The following information shall be made available to the player. For wagers placed within a venue, it is acceptable for this information to be displayed by the Wagering Device directly or by external signage, forms, or brochures available:

- a) The methods of funding a wager or player account, including a clear and concise explanation of all fees (if applicable);
- b) As allowed by the regulatory body, any prizes that are offered in the form of merchandise, annuities, lump sum payments, or payment plans instead of cash payouts for each market that is offering such a prize;
- c) The procedures by which any unrecoverable malfunctions of hardware/software are addressed including if this process results in the voiding or cancelling of any wagers; and
- d) The procedures to deal with interruptions caused by the discontinuity of data flow from the network server during an event.
- e) Rules of participation, including all wagering eligibility and scoring criteria, available events and markets, types of wagers accepted, line postings, all advertised awards, and the effect of schedule changes;
- f) Payout information, including possible winning positions, rankings, and achievements, along with their corresponding payouts, for any available wager option;
- g) Any restrictive features of wagering, such as wager amounts or maximum win values;
- h) A description on restricted players, including any applicable limitations on wagering for them (e.g. athletes shall not wager on their sport);
- i) The procedures for handling incorrectly posted events, markets, odds/payouts, prices, wagers, or results;
- j) A wager cancellation policy which shall cater for wagers with multiple events (e.g., parlays) and indicate any prohibitions of voiding or cancelling wagers (e.g., after a fixed time period);
- k) Whether the odds/payouts are locked-in at the time of the wager, or if the odds/payouts may change dynamically prior to the commencement of the event and the method of noticing changes to the odds/payouts;
- l) For types of wagers where the odds/payouts are fixed at the time the wager is placed, any situations where the odds/payouts may be adjusted such as atypical winning outcomes (e.g., dead heats), cancelled legs of wagers with multiple events (e.g., parlays), and prorating;
- m) For types of wagers where individual wagers are gathered into pools, the rules for dividend calculation including the prevailing formula for pool allocations and the stipulations of the event being wagered upon as approved by the regulatory body;
- n) For in-play wagering, due to varying communication speeds or broadcast transmission latencies:
 - i. Updates of the displayed information may put a player at a disadvantage to others who may have more up-to-date information; and
 - ii. There may be delays incorporated in the registered time of an in-play wager to prevent past-post wagers and cancellations.
- o) A statement that the operator reserves the right to:
 - i. Refuse any wager or part of a wager or reject or limit selections prior to the acceptance of a wager for reasons indicated to the player in these rules;
 - ii. Accept a wager at other than posted terms; and
 - iii. Close wagering periods at their discretion;
- p) If prizes are to be paid for combinations involving participants other than solely the first-place finisher (e.g., in an Olympic competition), the order of the participants that can be involved with these prizes (e.g., result 8-4-7);
- q) The rules for any exotic wagering options (e.g., perfecta, trifecta, quinella, etc.) and the expected payouts;

- r) What is to occur when an event or market is cancelled or withdrawn, including the handling of selections wagers with multiple events (e.g., parlays) where one or more of these legs are cancelled or withdrawn;
- s) How a winning wager is determined and the handling of an award in any case where a tie is possible;
- t) The payment of winning wagers, including the redemption period and the method for calculation. Where the calculation of payouts may involve rounding, information on how these circumstances are handled shall clearly explain:
 - i. Rounding up, down (truncation), true rounding; and
 - ii. Rounding to what level (e.g., 5 cents).

A.5.3 Promotions and/or Bonuses

Players shall be able to access information in the wagering rules pertaining to any available promotions and/or bonuses, including how the player is notified when they have received a promotional award or bonus win and the terms of their withdrawal. This information shall be clear and unambiguous, especially where promotions or bonuses are limited to certain events, markets, or when other specific conditions apply.

A.5.4 Contests/Tournaments

A contest/tournament, which permits a player to either purchase or be awarded the opportunity to engage in competitive wagering against other players, may be permitted provided the following rules are met:

- a) Rules shall be made available to a player for review prior to contest/tournament registration. The rules shall include at a minimum:
 - i. All conditions registered players shall meet to qualify for entry and advancement through, the contest/tournament;
 - ii. Specific information pertaining to any single contest/tournament, including the available prizes or awards and distribution of funds based on specific outcomes; and
 - iii. The name of the organization (or persons) that conducted the contest/tournament on behalf of, or in conjunction with, the operator (if applicable).
- b) Procedures shall be in place to record the results of each contest/tournament and make publicly available for the registered players to review for a reasonable period of time. Subsequent to being posted publicly, the results of each contest/tournament shall be made available upon request. The results include the following:
 - i. Name of the contest/tournament;
 - ii. Date(s)/times(s) of the contest/tournament;
 - iii. Total number of entries;
 - iv. Amount of entry fees;
 - v. Total prize pool; and
 - vi. Amount paid for each winning category.

NOTE: For free contests/tournaments (i.e., registered player does not pay an entry fee), the information required by the above shall be recorded except for the number of entries, amount of entry fees and total prize pool.

A.6 Wagering Procedures and Controls

A.6.1 Odds/Payouts and Prices

There shall be established procedures for setting and updating the odds/payouts and prices including publicly providing the current odds/payouts and prices, changing odds/payouts and prices as necessary to handle exceptions, and properly logging and periodically logging the odds/payouts and prices.

A.6.2 Statistics/Line Data

The operator shall ensure that any statistics/line data that is made available to the player pertaining to an event uses a source allowed by the regulatory body and is kept reasonably accurate and updated. As required by the regulatory body, controls shall be implemented for the operator to:

- a) Review the accuracy and timeliness of any statistics/line services; and
- b) When an incident or error occurs that results in a loss of communication with statistics/line services, record the incident or error in a log along with the date and time of occurrence, its duration, nature, and a description of its impact on the system's performance. This information shall be maintained for a period of 90 days, or as otherwise specified by the regulatory body.

A.6.3 Suspending Markets or Events

There shall be established procedures for suspending markets or events (i.e. stop accepting wagers for that market or markets associated with that event). When wagering is suspended for an active event, an entry shall be made in an audit log that includes the date and time of suspension and its reason.

A.6.4 Wager Cancellations

Wagering transactions cannot be modified except to be voided or cancelled as provided for in the operator's published cancellation policy. A cancellation grace period may be offered to allow players to request a cancellation of wagers placed. The following requirements apply to wager cancellations:

- a) Player initiated cancellations may be authorized in accordance with the cancellation policy.
- b) Operator initiated cancellations shall provide a reason for cancellation to a player (e.g., past-post wager).
- c) An operator shall not void or cancel any wager without the prior approval of the regulatory body.

A.6.5 Wagering Periods

Documentation shall be in place to provide how the wagering period is controlled. This would include any cases where the wagering period is first opened, when it is closed, or any other time in between where a wager is unable to be placed (e.g., odds/payouts and prices are being updated).

A.6.6 Results

Before publicly announcing results and declaring winners, there shall be a policy for the confirmation of results based on qualified and approved sources, unless automated by an external feed. If an external feed is in use, there shall be procedures in place for cases where access to the external feed is unavailable. There shall also be a procedure in place to handle changes in results (e.g., due to statistics/line corrections).

A.6.7 Winning Wager Payment

In the event of a failure of the Event Wagering System's ability to pay winning wagers, the operator shall have controls detailing the method of paying these wagers.

A.6.8 Virtual Events

An operator who offers virtual event wagering shall maintain all information necessary to adequately reconstruct the virtual events, including the virtual event outcome and/or virtual participant actions, conducted within the past 90 days or as required by the regulatory body. This information may be recorded by the Event Wagering System or associated equipment, using some combination of text, logs, video, graphics, screen captures, or other means (e.g., "flight recorder" mechanism). Alternatively, procedures may be included to have the public display of the virtual event be recorded by the surveillance system.

A.7 Wagering Venue Specifications

A.7.1 Venue Verification Audit

The wagering venue will be required to meet the applicable aspects of the appropriate policy and/or procedure documents as determined by the operator in consultation with the regulatory body. To maintain the integrity of wagering operations, venues may be subject to an additional verification audit as required by the regulatory body. The following specifications apply to venues:

A.7.2 Wagering Equipment

The venue shall provide a secure location for the placement, operation, and usage of wagering equipment, including Wagering Devices, displays, and communications equipment. Security policies and procedures shall be in place and reviewed periodically to ensure that risks are identified, mitigated and underwritten by contingency plans. In addition:

- a) Wagering equipment shall be installed according to a defined plan and records of all installed wagering equipment shall be maintained.
- b) Wagering equipment shall be sited or protected to reduce the risks from:

- i. Environmental threats and hazards;
 - ii. Opportunities for unauthorized access;
 - iii. Power failures; and
 - iv. Other disruptions caused by failures in supporting utilities.
- c) Access to the wagering equipment by an employee shall be controlled by a secure logon procedure or other secure process approved by the regulatory body to ensure that only authorized employees are allowed access. It shall not be possible to modify the configuration settings of the wagering equipment without an authorized secure process.
 - d) A user session, where supported by wagering equipment, is initiated by the employee logging in to their user account using their secure username and password or an alternative means for the employee to provide identification information as allowed by the regulatory body.
 - i. All available options presented to the employee shall be tied to their user account.
 - ii. If the wagering equipment does not receive input from the employee within 5 minutes, or a period specified by the regulatory body, the user session shall time out or lock up, requiring the employee to re-establish their login in order to continue.
 - e) To ensure its continued availability and integrity, wagering equipment shall be correctly maintained, inspected and serviced at regular intervals to ensure that it is free from defects or mechanisms that could interfere with its operation.
 - f) Prior to disposal or re-use, wagering equipment containing storage media shall be checked to ensure that any licensed software, player account information, and other sensitive information has been removed or securely overwritten (i.e., not just deleted).

A.7.3 Wagering Operations

The following procedures shall be in place for wagering operations within the venue:

- a) Procedures to enable a suitable response to any security issue within the venue.
- b) Procedures to prevent any person from tampering with or interfering with the operation of any wagering or wagering equipment;
- c) Procedures to describe the operations and the servicing of POS Wagering Devices and Self-Service Wagering Devices, including the handling of error conditions and performing reconciliations;
- d) Procedures to ensure accessibility requirements observed by the regulatory body are met for the installation of Self-Service Wagering Devices.
- e) Procedures for wager transactions using a POS Wagering Device, including:
 - i. Accepting wagers from players only during the wager period;
 - ii. Notifying players if their wager attempt is rejected;
 - iii. Requiring the recording of player data or player account registration if their wager exceeds a value specified by the regulatory body;
 - iv. Providing notification of any odds/payouts or price changes which occur while attempting to process a wager;
 - v. Providing a player access to a wager record once the wager is authorized;
- f) Procedures for handling cancelled events and withdrawn selections for wagers with multiple events (e.g., parlays), including providing refunds to players who were not refunded automatically by the system (e.g., wagers placed anonymously); and
- g) Procedures for redemption of winning wagers, including:

- i. Scanning the barcode of a wager record (via a barcode reader or equivalent); or
- ii. Manually inputting the wager identification number and performing a verification with the system.

A.7.4 Surveillance and Recording

The venue will be required to install, maintain, and operate a surveillance system that has the capability to monitor and record continuous unobstructed views of all wagering and financial transactions as well as any dynamic displays of wagering information. Procedures shall be in place to ensure that the recording:

- a) Covers the defined wagering areas with sufficient detail to identify any discrepancies;
- b) Is captured in such a way that precludes interference or deletion;
- c) Can be reviewed by the operator and/or regulatory body in the event of a player complaint/dispute; and
- d) Is kept for at least 90 days or as required by the regulatory body.

A.8 Monitoring Procedures

A.8.1 Monitoring for Collusion and Fraud

The operator shall take measures designed to reduce the risk of collusion or fraud, including having procedures for:

- a) Identifying and/or refusing to accept suspicious wagers which may indicate cheating, manipulation, interference with the regular conduct of an event, or violations of the integrity of any event on which wagers were made;
- b) Reasonably detecting irregular patterns or series of wagers to prevent player collusion or the unauthorized use of artificial player software; and
- c) Monitoring and detecting events and/or irregularities in volume or swings in odds/payouts and prices which could signal suspicious activities as well as all changes to odds/payouts and prices and/or suspensions throughout an event.

A.8.2 Anti-Money Laundering (AML) Monitoring

The operator shall have AML procedures and policies put in place, as required by the regulatory body, to ensure that:

- a) Employees are trained in AML, and this training is kept up to date;
- b) Player accounts are monitored for opening and closing in short time frames and for deposits and withdrawals without associated wagering transactions; and
- c) Aggregate transactions over a defined period may require further due diligence checks and may be reportable to the relevant organization if they exceed the threshold prescribed by the regulatory body.

A.8.3 Location Service Provider Monitoring

The operator, who offers remote wagering, or a third-party location service provider authorized by the regulatory body shall, where required by the regulatory body:

- a) Have procedures to maintain a real-time data feed of all location checks and an up-to-date list of potential location fraud risks (e.g., fake location apps, virtual machines, remote desktop programs, etc.);
- b) Offer an alert system to identify unauthorized or improper access;
- c) Allow periodic audits to assess and measure its continued ability to detect and mitigate existing and emerging location fraud risks;
- d) Ensure the location detection service or application used for location detection:
 - i. Utilizes closed-source databases (IP, proxy, VPN, etc.) that are frequently updated and periodically tested for accuracy and reliability; and
 - ii. Undergoes frequent updates to maintain cutting-edge data collection, device compatibility, and fraud prevention capabilities against location fraud risks.

Appendix B: Operational Audit for Technical Security Controls

B.1 Introduction

B.1.1 General Statement

This appendix sets forth technical security controls which will be reviewed in an operational audit as a part of the Event Wagering System evaluation, including, but not limited to, an information security system (ISS) assessment, review of the operational processes that are critical to compliance, penetration testing focused on the external and internal infrastructure as well as the applications transferring, storing and/or processing player data and/or sensitive information, and any other objectives established by the regulatory body. The security controls outlined in this appendix apply to the following critical components of the system:

- a) Components which record, store, process, share, transmit or retrieve sensitive information (e.g., validation numbers, PINs, player data);
- b) Components which generate, transmit, or process random numbers used to determine the outcome of virtual events (if applicable);
- c) Components which store results or the current state of a player's wager;
- d) Points of entry to and exit from the above components (other systems which are able to communicate directly with core critical systems); and
- e) Communication networks which transmit sensitive information.

NOTE: It is also recognized that additional technical security controls which are not specifically included within this standard will be relevant and required for an operational audit as determined by the operator and/or regulatory body within their rules, regulations, and Minimum Internal Control Standards (MICS).

B.2 System Operation & Security

B.2.1 System Procedures

The operator shall be responsible for documenting and following the relevant Event Wagering System procedures. These procedures shall at least include the following as required by the regulatory body:

- a) Procedures for monitoring the critical components and the transmission of data of the entire system, including communication, data packets, networks, as well as the components and data transmissions of any third-party services involved, with the objective of ensuring integrity, reliability and accessibility;
- b) Procedures and security standards for the maintenance of all aspects of security of the system to ensure secure and reliable communications, including protection from hacking or tampering;
- c) Procedures for defining, monitoring, documenting, and reporting, investigating, responding to, and resolving security incidents, including detected breaches and suspected or actual hacking or tampering with the system;

- d) Procedure for monitoring and adjusting resource consumption and maintaining a log of the system performance, including a function to compile performance reports;
- e) Procedures to investigate, document and resolve malfunctions, which address the following:
 - i. Determination of the cause of the malfunction;
 - ii. Review of relevant records, reports, logs, and surveillance records;
 - iii. Repair or replacement of the critical component;
 - iv. Verification of the integrity of the critical component before restoring it to operation;
 - v. Filing an incident report with the regulatory body and documenting the date, time and reason for the malfunction along with the date and time the system is restored; and
 - vi. Voiding or cancelling wagers and pays if a full recovery is not possible.

B.2.2 Physical Location of Servers

The Event Wagering System server(s) shall be housed in one or more secure location(s) which may be located locally, within a single venue, or may be remotely located outside of the venue as allowed by the regulatory body. In addition, secure location(s) shall:

- a) Have sufficient protection against alteration, tampering or unauthorized access;
- b) Be equipped with a surveillance system that shall meet the procedures put in place by the regulatory body;
- c) Be protected by security perimeters and appropriate entry controls to ensure that access is restricted to only authorized personnel and that any attempts at physical access are recorded in a secure log; and
- d) Be equipped with controls to provide physical protection against damage from fire, flood, hurricane, earthquake and other forms of natural or manmade disaster.

B.2.3 Logical Access Control

The Event Wagering System shall be logically secured against unauthorized access by authentication credentials allowed by the regulatory body, such as passwords, multi-factor authentication, digital certificates, PINs, biometrics, and other access methods (e.g., magnetic swipe, proximity cards, embedded chip cards).

- a) Each user shall have their own individual authentication credential whose provision shall be controlled through a formal process.
- b) Authentication credential records shall be maintained either manually or by systems that automatically record authentication changes and force authentication credential changes.
- c) The storage of authentication credentials shall be secure. If any authentication credentials are hard coded on a component of the system, they shall be encrypted.
- d) A fallback method for failed authentication (e.g., forgotten passwords) shall be at least as strong as the primary method.
- e) Lost or compromised authentication credentials and authentication credentials of terminated users shall be deactivated, secured or destroyed as soon as reasonably possible.
- f) The system shall have multiple security access levels to control and restrict different classes of access to the server, including viewing, changing or deleting critical files and directories.

Procedures shall be in place to assign, review, modify, and remove access rights and privileges to each user, including:

- i. Allowing the administration of user accounts to provide an adequate separation of duties;
 - ii. Limiting the users who have the requisite permissions to adjust critical system parameters;
 - iii. The enforcement of adequate authentication credential parameters such as minimum length, and expiration intervals; and
- g) Procedures shall be in place to identify and flag suspect accounts where authentication credentials may have been stolen.
 - h) Any logical access attempts to the system applications or operating systems shall be recorded in a secure log.
 - i) The use of utility programs which can override application or operating system controls shall be restricted and tightly controlled.

NOTE: Where passwords are used as an authentication credential, it is recommended that they are changed at least once every 90 days, are at least 8 characters in length and contain a combination of at least two of the following criteria: upper case letters, lower case letters, numeric and/or special characters.

B.2.4 User Authorization

The Event Wagering System shall implement the following user authorization requirements:

- a) A secure and controlled mechanism shall be employed that can verify that the system component is being operated by an authorized user on demand and on a regular basis as required by the regulatory body.
- b) The use of automated equipment identification to authenticate connections from specific locations and equipment shall be documented and shall be included in the review of access rights and privileges.
- c) Any authorization information communicated by the system for identification purposes shall be obtained at the time of the request from the system and not be stored on the system component.
- d) The system shall allow for system administrator notification and user lockout or audit trail entry, after a set number of unsuccessful authorization attempts.

B.2.5 Server Programming

The Event Wagering System shall be sufficiently secure to prevent any user-initiated programming capabilities on the server that may result in modifications to the database. However, it is acceptable for network or system administrators to perform authorized network infrastructure maintenance or application troubleshooting with sufficient access rights. The server shall also be protected from the unauthorized execution of mobile code.

B.2.6 Verification Procedures

There shall be procedures in place for verifying on demand that the critical control program components of the Event Wagering System in the production environment are identical to those approved by the regulatory body.

- a) Signatures of the critical control program components shall be gathered from the production environment through a process to be approved by the regulatory body.
- b) The process shall include one or more analytical steps to compare the current signatures of the critical control program components in the production environment with the signatures of the current approved versions of the critical control program components.
- c) The output of the process shall be stored in an unalterable format, which detail the verification results for each critical control program authentication and:
 - i. Be recorded in a system log or report which shall be retained for a period of 90 days or as otherwise specified by the regulatory body;
 - ii. Be accessible by the regulatory body in a format which will permit analysis of the verification records by the regulatory body; and
 - iii. Comprise part of the system records which shall be recovered in the event of a disaster or equipment or software failure.
- d) Any failure of verification of any component of the system shall require a notification of the authentication failure being communicated to the operator and regulatory body as required.
- e) There shall be a process in place for responding to authentication failures, including determining the cause of the failure and performing the associated corrections or reinstallations needed in a timely manner.

B.2.7 Electronic Document Retention System

Reports required by this standard and the regulatory body may be stored in an electronic document retention system provided that the system:

- a) Is properly configured to maintain the original version along with all subsequent versions reflecting all changes to the report;
- b) Maintains a unique signature for each version of the report, including the original;
- c) Retains and reports a complete log of changes to all reports including who (user identification) performed the changes and when (date and time);
- d) Provides a method of complete indexing for easily locating and identifying the report including at least the following (which may be input by the user):
 - i. Date and time report was generated;
 - ii. Application or system generating the report;
 - iii. Title and description of the report;
 - iv. User identification of who is generating the report; and
 - v. Any other information that may be useful in identifying the report and its purpose;
- e) Is configured to limit access to modify or add reports to the system through logical security of specific user accounts;
- f) Is configured to provide a complete audit trail of all administrative user account activity;
- g) Is properly secured through use of logical security measures (user accounts with appropriate access, proper levels of event logging, and document the version control, etc.);
- h) Is physically secured with all other critical components of the Event Wagering System; and
- i) Is equipped to prevent disruption of report availability and loss of data through hardware and software redundancy best practices, and backup processes.

B.2.8 Asset Management

All assets housing, processing or communicating sensitive information, including those comprising the operating environment of the Event Wagering System and/or its components, shall be accounted for and have a nominated owner.

- a) An inventory shall be drawn up and maintained of all assets holding controlled items.
- b) A procedure shall exist for adding new assets and removing assets from service.
- c) A policy shall be included on the acceptable use of assets associated with the system and its operating environment.
- d) Each asset shall have a designated “owner” responsible for:
 - i. Ensuring that information and assets are appropriately classified in terms of their criticality, sensitivity, and value; and
 - ii. Defining and periodically reviewing access restrictions and classifications.
- e) A procedure shall exist to ensure that recorded accountability for assets is compared with actual assets at intervals required by the regulatory body and appropriate action is taken with respect to discrepancies.
- f) Copy protection to prevent unauthorized duplication or modification of software may be implemented provided that:
 - i. The method of copy protection is fully documented and provided to the independent test laboratory, to verify that the protection works as described; or
 - ii. The program or component involved in enforcing the copy protection can be individually verified by the methodology approved by the regulatory body.

B.3 Backup and Recovery

B.3.1 Data Security

The Event Wagering System shall provide a logical means for securing the player data and wagering data, including accounting, reporting, significant event, or other sensitive information, against alteration, tampering, or unauthorized access.

- a) Appropriate data handling methods shall be implemented, including validation of input and rejection of corrupt data.
- b) The number of workstations where critical applications or associated databases may be accessed shall be limited.
- c) Encryption or password protection or equivalent security shall be used for files and directories containing data. If encryption is not used, the operator shall restrict users from viewing the contents of such files and directories, which at a minimum shall provide for the segregation of system duties and responsibilities as well as the monitoring and recording of access by any person to such files and directories.
- d) The normal operation of any equipment that holds data shall not have any options or mechanisms that may compromise the data.
- e) No equipment may have a mechanism whereby an error will cause the data to automatically clear.

- f) Any equipment that holds data in its memory shall not allow removal of the information unless it has first transferred that information to the database or other secured component(s) of the system.
- g) Data shall be stored in areas of the server that are encrypted and secured from unauthorized access, both external and internal.
- h) Production databases containing data shall reside on networks separated from the servers hosting any user interfaces.
- i) Data shall be maintained at all times regardless of whether the server is being supplied with power.
- j) Data shall be stored in such a way as to prevent the loss of the data when replacing parts or modules during normal maintenance.

B.3.2 Data Alteration

The alteration of any accounting, reporting or significant event data shall not be permitted without supervised access controls. In the event any data is changed, the following information shall be documented or logged:

- a) Unique ID number for the alteration;
- b) Data element altered;
- c) Data element value prior to alteration;
- d) Data element value after alteration;
- e) Time and date of alteration; and
- f) Personnel that performed alteration (user identification).

B.3.3 Backup Frequency

Backup scheme implementation shall occur at least once every day or as otherwise specified by the regulatory body, although all methods will be reviewed on a case-by-case basis.

B.3.4 Storage Medium Backup

Audit logs, system databases, and any other pertinent player data and wagering data shall be stored using reasonable protection methods. The Event Wagering System shall be designed to protect the integrity of this data in the event of a failure. Redundant copies of this data shall be kept on the system with open support for backups and restoration, so that no single failure of any portion of the system would cause the loss or corruption of data.

- a) The backup shall be contained on a non-volatile physical medium, or an equivalent architectural implementation, so that should the primary storage medium fail, the functions of the system and the process of auditing those functions can continue with no critical data loss.
- b) Where the regulatory body allows for the use of cloud platforms, if the backup is stored in a cloud platform, another copy may be stored in a different cloud platform.
- c) If hard disk drives are used as backup media, data integrity shall be assured in the event of a disk failure. Acceptable methods include, but are not limited to, multiple hard drives in an acceptable RAID configuration, or mirroring data over two or more hard drives.

- d) Upon completion of the backup process, the backup media is immediately transferred to a location physically separate from the location housing the servers and data being backed up (for temporary and permanent storage).
 - i. The storage location is secured to prevent unauthorized access and provides adequate protection to prevent the permanent loss of any data.
 - ii. Backup data files and data recovery components shall be managed with at least the same level of security and access controls as the system.

NOTE: The distance between the two locations should be determined based on potential environmental threats and hazards, power failures, and other disruptions but should also consider the potential difficulty of data replication as well as being able to access the recovery site within a reasonable time (Recovery Time Objective).

B.3.5 System Failure

The Event Wagering System shall have sufficient redundancy and modularity so that if any single component or part of a component fails, the functions of the system and the process of auditing those functions can continue with no critical data loss. When two or more components are linked:

- a) The process of all wagering operations between the components shall not be adversely affected by restart or recovery of either component (e.g., transactions are not to be lost or duplicated because of recovery of one component or the other); and
- b) Upon restart or recovery, the components shall immediately synchronize the status of all transactions, data, and configurations with one another.

B.3.6 Accounting of Master Resets

The operator shall be able to identify and properly handle the situation where a master reset has occurred on any component which affects wagering operations.

B.3.7 Recovery Requirements

In the event of a catastrophic failure when the Event Wagering System cannot be restarted in any other way, it shall be possible to restore the system from the last backup point and fully recover. The contents of that backup shall contain the following critical information including, but not limited to:

- a) The recorded information specified under the section entitled "Information to be Maintained";
- b) Specific site or venue information such as configuration, security accounts, etc.;
- c) Current system encryption keys; and
- d) Any other system parameters, modifications, reconfiguration (including participating sites or venues), additions, merges, deletions, adjustments and parameter changes.

B.3.8 Uninterruptible Power Supply (UPS) Support

All system components shall be provided with adequate primary power. Where the server is a stand-alone application, it shall have an Uninterruptible Power Supply (UPS) connected and shall have sufficient capacity to permit a graceful shut-down and that retains all player data and wagering data during a power loss. It is acceptable that the system may be a component of a network that is supported by a network-wide UPS provided that the server is included as a device protected by the UPS. There shall be a surge protection system in use if not incorporated into the UPS itself.

B.3.9 Business Continuity and Disaster Recovery Plan

A business continuity and disaster recovery plan shall be in place to recover wagering operations if the Event Wagering System's production environment is rendered inoperable. The business continuity and disaster recovery plan shall:

- a) Address the method of storing player data and wagering data to minimize loss. If asynchronous replication is used, the method for recovering data shall be described or the potential loss of data shall be documented;
- b) Delineate the circumstances under which it will be invoked;
- c) Address the establishment of a recovery site physically separated from the production site;
- d) Contain recovery guides detailing the technical steps required to re-establish wagering functionality at the recovery site; and
- e) Address the processes required to resume administrative operations of wagering activities after the activation of the recovered system for a range of scenarios appropriate for the operational context of the system.

B.4 Communications

B.4.1 General Statement

This section will discuss the various wired and wireless communication methods, including communications performed across the internet or a public or third-party network, as allowed by the regulatory body.

B.4.2 Connectivity

Only authorized devices shall be permitted to establish communications between any system components. The Event Wagering System shall provide a method to:

- a) Enroll and un-enroll system components;
- b) Enable and disable specific system components;
- c) Ensure that only enrolled and enabled system components, including Wagering Devices, participate in wagering operations; and
- d) Ensure that the default condition for components shall be un-enrolled and disabled.

B.4.3 Communication Protocol

Each component of the Event Wagering System shall function as indicated by a documented secure communication protocol.

- a) All protocols shall use communication techniques that have proper error detection and recovery mechanisms, which are designed to prevent intrusion, interference, eavesdropping and tampering. Any alternative implementations will be reviewed on a case-by-case basis and approved by the regulatory body.
- b) All data communications critical to wagering or player account management shall employ encryption and authentication.
- c) Communication on the secure network shall only be possible between approved system components that have been enrolled and authenticated as valid on the network. No unauthorized communications to components and/or access points shall be allowed.

B.4.4 Communications Over Internet/Public Networks

Communications between any system components, including Wagering Devices, which takes place over internet/public networks, shall be secure by a means approved by the regulatory body. Player data, sensitive information, wagers, results, financial information, and player transaction information shall always be encrypted over the internet/public network and protected from incomplete transmissions, misrouting, unauthorized message modification, disclosure, duplication or replay.

B.4.5 Wireless Local Area Network (WLAN) Communications

Wireless Local Area Network (WLAN) communications, as allowed by the regulatory body, shall adhere to the applicable jurisdictional requirements specified for wireless devices and network security. In the absence of specific jurisdictional standards, the “Wireless Device Requirements” and “Wireless Network Security Requirements” of the *GLI-26 Standards for Wireless Systems* shall be used as applicable.

NOTE: It is imperative for operators to review and update internal control policies and procedures to ensure the network is secure and threats and vulnerabilities are addressed accordingly. Periodic inspection and verification of the integrity of the WLAN is recommended.

B.4.6 Network Security Management

Networks shall be logically separated such that there should be no network traffic on a network link which cannot be serviced by hosts on that link. The following requirements apply:

- a) All network management functions shall authenticate all users on the network and encrypt all network management communications.
- b) The failure of any single item shall not result in a denial of service.
- c) An Intrusion Detection System/Intrusion Prevention System (IDS/IPS) shall be installed on the network which can listen to both internal and external communications as well as detect or prevent:
 - i. Distributed Denial of Service (DDOS) attacks;
 - ii. Shellcode from traversing the network;

- iii. Address Resolution Protocol (ARP) spoofing; and
 - iv. Other "Man-In-The-Middle" attack indicators and sever communications immediately if detected.
- d) In addition to the requirements in (c), an IDS/IPS installed on a WLAN shall be able to:
- i. Scan the network for any unauthorized or rogue access points or devices connected to any access point on the network at least quarterly or as defined by the regulatory body;
 - ii. Automatically disable any unauthorized or rogue devices connected to the system; and
 - iii. Maintain a history log of all wireless access for at least the previous 90 days or as otherwise specified by the regulatory body. This log shall contain complete and comprehensive information about all wireless devices involved and shall be able to be reconciled with all other networking devices within the site or venue.
- e) Network Communication Equipment (NCE) shall meet the following requirements:
- i. NCE shall be constructed in such a way as to be resistant to physical damage to the hardware or corruption of the contained firmware/software by normal usage.
 - ii. NCE shall be physically secured from unauthorized access.
 - iii. System communications via NCE shall be logically secured from unauthorized access.
 - iv. NCE with limited onboard storage shall, if the audit log becomes full, disable all communication or offload logs to a dedicated log server.
- f) All network hubs, services and connection ports shall be secured to prevent unauthorized access to the network. Unused services and non-essential ports shall be either physically blocked or software disabled whenever possible.
- g) In virtualized environments, redundant server instances shall not run under the same hypervisor.
- h) Stateless protocols, such as UDP (User Datagram Protocol), shall not be used for sensitive information without stateful transport. Note that although HTTP (Hypertext Transport Protocol) is technically stateless, if it runs on TCP (Transmission Control Protocol) which is stateful, this is allowed.
- i) All changes to network infrastructure (e.g., network communication equipment configuration) shall be logged.
- j) Virus scanners and/or detection programs shall be installed on all systems. These programs shall be updated regularly to scan for new strains of viruses.

B.5 Third-Party Service Providers

B.5.1 Third-Party Communications

Where communications with third-party service providers are implemented, such as player loyalty programs, financial services (banks, payment processors, etc.), location service providers, cloud service providers, statistics/line services, and identity verification services, the following requirements apply:

- a) The Event Wagering System shall be capable of securely communicating with third-party service providers using encryption and strong authentication.
- b) All login events involving third-party service providers shall be recorded to an audit file.
- c) Communication with third-party service providers shall not interfere or degrade normal Event Wagering System functions.

- i. Third-party service provider data shall not affect player communications.
 - ii. Connections to third-party service providers shall not use the same network infrastructure as player connections.
 - iii. Wagering shall be disabled on all network connections except for the player network;
 - iv. The system shall not route data packets from third-party service providers directly to the player network and vice-versa
 - v. The system shall not act as IP routers between player networks and third-party service providers.
- d) All financial transactions shall be reconciled with financial institutions and payment processors daily or as otherwise specified by the regulatory body.

B.5.2 Third-Party Services

The security roles and responsibilities of third-party service providers shall be defined and documented as required by the regulatory body. The operator shall have policies and procedures for managing them and monitoring their adherence to relevant security requirements:

- a) Agreements with third-party service providers involving accessing, processing, communicating or managing the system and/or its components, or adding products or services to the system and/or its components shall cover all relevant security requirements.
- b) The services, reports and records provided by the third-party service providers shall be monitored and reviewed annually or as required by the regulatory body.
- c) Changes to the provision of third-party service providers, including maintaining and improving existing security policies, procedures and controls, shall be managed, taking account of the criticality of systems and processes involved and re-assessment of risks.
- d) The access rights of third-party service providers to the system and/or its components shall be removed upon termination of their contract or agreement or adjusted upon change.

B.6 Technical Controls

B.6.1 Domain Name Service (DNS) Requirements

The following requirements apply to the servers used to resolve Domain Name Service (DNS) queries used in association with the Event Wagering System.

- a) The operator shall utilize a secure primary DNS server and a secure secondary DNS server which are logically and physically separate from one another.
- b) The primary DNS server shall be physically located in a secure data center or a virtualized host in an appropriately secured hypervisor or equivalent.
- c) Logical and physical access to the DNS server(s) shall be restricted to authorized personnel.
- d) Zone transfers to arbitrary hosts shall be disallowed.
- e) A method to prevent cache poisoning, such as DNS Security Extensions (DNSSEC), is required.
- f) Multi-factor authentication shall be in place.
- g) Registry lock shall be in place, so any request to change DNS server(s) will need to be verified manually.

B.6.2 Cryptographic Controls

A policy on the use of cryptographic controls for protection of information shall be developed and implemented.

- a) Any player data and/or sensitive information shall be encrypted if it traverses a network with a lower level of trust.
- b) Data that is not required to be hidden but shall be authenticated shall use some form of message authentication technique.
- c) Authentication shall use a security certificate from an approved organization.
- d) The grade of encryption used shall be appropriate to the sensitivity of the data.
- e) The use of encryption algorithms shall be reviewed periodically to verify that the current encryption algorithms are secure.
- f) Changes to encryption algorithms to correct weaknesses shall be implemented as soon as practical. If no such changes are available, the algorithm shall be replaced.
- g) Encryption keys shall be stored on a secure and redundant storage medium after being encrypted themselves through a different encryption method and/or by using a different encryption key.

B.6.3 Encryption Key Management

The management of encryption keys shall follow defined processes established by the operator and/or regulatory body. These defined processes shall cover the following:

- a) Obtaining or generating encryption keys and storing them;
- b) Managing the expiry of encryption keys, where applicable;
- c) Revoking encryption keys;
- d) Securely changing the current encryption keyset; and
- e) Recovering data encrypted with a revoked or expired encryption key for a defined period after the encryption key becomes invalid.

B.7 Remote Access and Firewalls

B.7.1 Remote Access Security

Remote access is defined as any access from outside the system or system network including any access from other networks within the same site or venue. Remote access shall only be allowed if authorized by the regulatory body and shall:

- a) Be performed via a secured method;
- b) Have the option to be disabled;
- c) Accept only the remote connections permissible by the firewall application and system settings;
- d) Be limited to only the application functions necessary for users to perform their job duties:
 - i. No unauthorized remote user administration functionality (adding users, changing permissions, etc.) is permitted; and
 - ii. Unauthorized access to the operating system or to any database other than information retrieval using existing functions is prohibited.

NOTE: Remote access security will be reviewed on a case-by-case basis, in conjunction with the implementation of the current technology and approval from the regulatory body.

B.7.2 Remote Access Procedures and Guest Accounts

A procedure for strictly controlled remote access shall be established. It is acknowledged that the supplier may, as needed, access the system and its associated components remotely for product and user support or updates/upgrades, as permitted by the regulatory body and the operator. This remote access shall use specific guest accounts which are:

- a) Continuously monitored by the operator;
- b) Disabled when not in use; and
- c) Restricted through logical security controls to access only the necessary application(s) and/or database(s) for the product and user support or providing updates/upgrades.

B.7.3 Remote Access Activity Log

The remote access application shall maintain an activity log which updates automatically depicting all remote access information, to include:

- a) Identification of user(s) who performed and/or authorized the remote access;
- b) Remote IP Addresses, Port Numbers, Protocols, and where possible, MAC Addresses;
- c) Time and date the connection was made and duration of connection; and
- d) Activity while logged in, including the specific areas accessed and changes made.

B.7.4 Firewalls

All communications, including remote access, shall pass through at least one approved application-level firewall. This includes connections to and from any non-system hosts used by the operator.

- a) The firewall shall be located at the boundary of any two dissimilar security domains.
- b) A device in the same broadcast domain as the system host shall not have a facility that allows an alternate network path to be established that bypasses the firewall.
- c) Any alternate network path existing for redundancy purposes shall also pass through at least one application-level firewall.
- d) Only firewall-related applications may reside on the firewall.
- e) Only a limited number of user accounts may be present on the firewall (e.g., network or system administrators only).
- f) The firewall shall reject all connections except those that have been specifically approved.
- g) The firewall shall reject all connections from destinations which cannot reside on the network from which the message originated (e.g., RFC1918 addresses on the public side of an internet firewall).
- h) The firewall shall only allow remote access over the most up to date encrypted protocols.

B.7.5 Firewall Audit Logs

The firewall application shall maintain an audit log and shall disable all communications and generate an error if the audit log becomes full. The audit log shall contain:

- a) All changes to configuration of the firewall;
- b) All successful and unsuccessful connection attempts through the firewall; and
- c) The source and destination IP Addresses, Port Numbers, Protocols, and where possible, MAC Addresses.

NOTE: A configurable parameter 'unsuccessful connection attempts' may be utilized to deny further connection requests should the predefined threshold be exceeded. The system administrator shall also be notified.

B.7.6 Firewall Rules Review

If required by the regulatory body, the firewall rules shall be periodically reviewed to verify the operating condition of the firewall and the effectiveness of its security configuration and rule sets and shall be performed on all the perimeter firewalls and the internal firewalls.

B.8 Change Management

B.8.1 General Statement

A change management policy is selected by the regulatory body for handling updates to the Event Wagering System and its components based on the propensity for frequent system upgrades and chosen risk tolerance. For systems that require frequent updates, a risk-based change management program may be utilized to afford greater efficiency in deploying updates. Risk-based change management programs typically include a categorization of proposed changes based on regulatory impact and define associated certification procedures for each category. The independent test laboratory will evaluate the system and future modifications in accordance with the change management policy selected by the regulatory body.

B.8.2 Program Change Control Procedures

Program change control procedures shall be adequate to ensure that only authorized versions of programs are implemented on the production environment. These change controls shall include:

- a) An appropriate software version control or mechanism for all software components and source code;
- b) Records kept of all new installations and/or modifications to the system, including:
 - i. The date of the installation or modification;
 - ii. Details of the reason or nature of the installation or change such as new software, server repair, significant configuration modifications;
 - iii. A description of procedures required to bring the new or modified component into service (conversion or input of data, installation procedures, etc.);
 - iv. The identity of the user(s) performing the installation or modification;

- c) A strategy for reverting back to the last implementation (rollback plan) if the install is unsuccessful, including complete backups of previous versions of software and a test of the rollback plan prior to implementation to the production environment;
- d) A policy addressing emergency change procedures;
- e) Procedures for testing and migration of changes;
- f) Segregation of duties between the developers, quality assurance team, the migration team and users; and
- g) Procedures to ensure that technical and user documentation is updated as a result of a change.

B.8.3 Software Development Life Cycle

The acquisition and development of new software shall follow defined processes established by the operator and/or regulatory body.

- a) The production environment shall be logically and physically separated from the development and test environments. When cloud platforms are used, no direct connection may exist between the production environment and any other environment.
- b) Development staff shall be precluded from having access to promote code changes into the production environment.
- c) There shall be a documented method to verify that test software is not deployed to the production environment.
- d) To prevent leakage of sensitive information, there shall be a documented method to ensure that raw production data is not used in testing.
- e) All documentation relating to software and application development shall be available and retained for the duration of its lifecycle.

B.8.4 Patches

All patches should be tested whenever possible on a development and test environment configured identically to the target production environment. Under circumstances where patch testing cannot be thoroughly conducted in time to meet the timelines for the severity level of the alert and if authorized by the regulatory body, then patch testing should be risk managed, either by isolating or removing the untested component from the network or applying the patch and testing after the fact.

B.9 Periodic Security Testing

B.9.1 Technical Security Testing

Periodic technical security tests on the production environment shall be performed as required by the regulatory body to guarantee that no vulnerabilities putting at risk the security and operation of the Event Wagering System exist. These tests shall consist of a method of evaluation of security by means of an attack simulation by a third-party following a known methodology, and the analysis of vulnerabilities will consist in the identification and passive quantification of the potential risks of the system. Unauthorized access attempts shall be carried out up to the highest level of access possible and shall be completed with and without available authentication credentials (white box/black box

type testing). These allow assessments to be made regarding operating systems and hardware configurations, including but not limited to:

- a) UDP/TCP port scanning;
- b) Stack fingerprinting and TCP sequence prediction to identify operating systems and services;
- c) Public Service Banner grabbing;
- d) Web scanning using HTTP and HTTPS vulnerability scanners; and
- e) Scanning routers using BGP (Border Gateway Protocol), BGMP (Border Gateway Multicast Protocol) and SNMP (Simple Network Management Protocol).

B.9.2 Vulnerability Assessment

The purpose of the vulnerability assessment is to identify vulnerabilities, which could be later exploited during penetration testing by making basic queries relating to services running on the systems concerned. The assessment shall include at least the following activities:

- a) External Vulnerability Assessment – The targets are the network devices and servers which are accessible by a third-party (both a person or a company), by means of a public IP (publicly exposed), related to the system from which is possible to access sensitive information.
- b) Internal Vulnerability Assessment – The targets are the internal facing servers (within the DMZ, or within the LAN if there is no DMZ) related to the system from which is possible to access sensitive information. Testing of each security domain on the internal network shall be undertaken separately.

B.9.3 Penetration Testing

The purpose of the penetration testing is to exploit any weaknesses uncovered during the vulnerability assessment on any publicly exposed applications or systems hosting applications processing, transmitting and/or storing sensitive information. The penetration testing shall include at least the following activities:

- a) Network Layer Penetration Test – The test mimics the actions of an actual attacker exploiting weaknesses in the network security examining systems for any weakness that could be used by an external attacker to disrupt the confidentiality, availability and/or integrity of the network.
- b) Application Layer Penetration Test – The test uses tools to identify weaknesses in the applications with both authenticated and unauthenticated scans, analysis of the results to remove false positives, and manual testing to confirm the results from the tools and to identify the impact of the weaknesses.

B.9.4 Information Security Management System (ISMS) Audit

The audit of the Information Security Management System (ISMS) is to be conducted, including all the locations where sensitive information are accessed, processed, transmitted and/or stored. The ISMS will be reviewed against common information security principles in relation to confidentiality, integrity and availability, such as the following sources or equivalent:

- a) ISO/IEC 27001 Information Security Management Systems (ISMS);
- b) Payment Card Industry Data Security Standards (PCI-DSS); and
- c) World Lottery Association Security Control Standards (WLA-SCS).

B.9.5 Cloud Service Audit

An operator making use of a cloud service provider (CSP), as allowed by the regulatory body, to store, transmit or process sensitive information shall undergo a specific audit as required by the regulatory body. The CSP will be reviewed against common information security principles in relation to the provision and use of cloud services, such as ISO/IEC 27017 and ISO/IEC 27018, or equivalent.

- a) If sensitive information is stored, processed or transmitted in a cloud environment, the applicable requirements will apply to that environment, and will typically involve validation of both the CSP's infrastructure and the operator's usage of that environment.
- b) The allocation of responsibility between the CSP and the operator for managing security controls does not exempt an operator from the responsibility of ensuring that sensitive information is properly secured according to the applicable requirements.
- c) Clear policies and procedures shall be agreed between the CSP and the operator for all security requirements, and responsibilities for operation, management and reporting shall be clearly defined and understood for each applicable requirement.

Glossary of Key Terms

Access Control – The process of granting or denying specific requests for obtaining and using sensitive information and related services specific to a system; and to enter specific physical facilities which houses critical network or system infrastructure.

Algorithm – A finite set of unambiguous instructions performed in a prescribed sequence to achieve a goal, especially a mathematical rule or procedure used to compute a desired result. Algorithms are the basis for most computer programming.

ARP, Address Resolution Protocol – The protocol used to translate IP addresses into MAC addresses to support communication on a wireless or wired local area network.

Audit Trail – A record showing who has accessed a system and what operations the user has performed during a given period.

Authentication – Verifying the identity of a user, process, software package, or device, often as a prerequisite to allowing access to resources in a system.

Backup – A copy of files and programs made to facilitate recovery if necessary.

Barcode – An optical machine-readable representation of data. An example is a barcode found on printed wager records.

Barcode Reader – A device that is capable of reading or interpreting a barcode. This may extend to some smartphones or other electronic devices that can execute an application to read a barcode.

Biometrics – A biological identification input, such as fingerprints or retina patterns.

Bluetooth – A low power, short-range wireless communications protocol utilized for the interconnection of cellular phones, computers, and other electronic devices, including Wagering Devices. Bluetooth connections typically operate over distances of 10 meters or less and rely upon short-wavelength radio waves to transmit data over the air.

Cache Poisoning – An attack where the attacker inserts corrupt data into the cache database of the Domain Name Service (DNS).

Commission – An amount retained and not distributed by the operator from the total amount wagered on an event.

Contingency Plan – Management policy and procedures designed to maintain or restore wagering operations, possibly at an alternate location, in the event of emergencies, system failures, or disaster.

Coupon – A wagering instrument that is used primarily for promotional purposes and which can be redeemed for restricted or unrestricted credits.

Critical Component – Any sub-system for which failure or compromise can lead to loss of player entitlements, government revenue or unauthorized access to data used for generating reports for the regulatory body.

Critical Control Program – A software program that controls behaviors relative to any applicable technical standard and/or regulatory requirement.

Cryptographic RNG – A Random Number Generator (RNG) which is resistant to attack or compromise by an intelligent attacker with modern computational resources who has knowledge of the source code of the RNG and/or its algorithm. Cryptographic RNGs cannot be feasibly ‘broken’ to predict future values.

Data Integrity – The property that data is both accurate and consistent and has not been altered in an unauthorized manner in storage, during processing, and while in transit.

DDOS, Distributed Denial of Service – A type of attack where multiple compromised systems, usually infected with a destructive software program, are used to target a single system. Victims of a DDOS attack consist of both the end targeted system and all systems maliciously used and controlled by the hacker in the distributed attack.

Dividend – The amount corresponding to the winner of a pari-mutuel wager.

DNS, Domain Name Service – The globally distributed internet database which (amongst other things) maps machine names to IP numbers and vice-versa.

Domain – A group of computers and devices on a network that are administered as a unit with common rules and procedures.

DRP, Disaster Recovery Plan – A plan for processing critical applications and preventing loss of data in the event of a major hardware or software failure or destruction of facilities.

Encryption – The conversion of data into a form, called a ciphertext, which cannot be easily understood by unauthorized people.

Encryption Key – A cryptographic key that has been encrypted in order to disguise the value of the underlying plaintext.

Event – Occurrence related to sports, competitions, matches, and other types of activities approved by the regulatory body on which wagers may be placed.

Event Wagering – The wagering on sports, competitions, matches, and other event types approved by the regulatory body where the player places wagers on markets within an event.

Event Wagering System – The hardware, software, firmware, communications technology, other equipment, as well as operator procedures implemented in order to allow player participation in wagering, and, if supported, the corresponding equipment related to the display of the wager

outcomes, and other similar information necessary to facilitate player participation. The system provides the player with the means to place and manage wagers. The system provides the operator with the means to review player accounts, if supported, suspend events, generate various wagering/financial transaction and account reports, input outcomes for events, and set any configurable parameters.

External Wagering System – System hardware and software separate from that which comprises the Event Wagering System, which may drive the features common to wager offerings, wager configurations, reporting, etc. The player initially communicates directly with the Event Wagering System which can be integrated with one or more External Wagering Systems.

Firewall – A component of a computer system or network that is designed to block unauthorized access or traffic while still permitting outward communication.

Fixed Odds Wagers – Wager types where the payout is to be fixed at the time the wager is placed. If the predictions are correct, the odds are first multiplied by each other and then by the amount of the wager.

Free Play Mode – A mode that allows a player to participate in wagering without placing any financial wager, principally for the purpose of learning or understanding wagering mechanics.

Geolocation – Identifying the real-world geographic location of an internet connected Remote Wagering Device.

Group Membership – A method of organizing user accounts into a single unit (by job position) whereby access to system functions may be modified at the unit level and the changes take effect for all user accounts assigned to the unit.

Hash Algorithm – A function that converts a data string into an alpha-numeric string output of fixed length.

HTTP, Hypertext Transfer Protocol – The underlying protocol used to define how messages are formatted and transmitted, and what actions servers and browsers shall take in response to various commands.

In-Play Wager – A wager that is placed while an event is in-progress or actually taking place.

Information Security – Protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide integrity, confidentiality, and availability

Internet – An interconnected system of networks that connects computers around the world via TCP/IP.

IDS/IPS, Intrusion Detection System/Intrusion Prevention System – A system that inspects all inbound and outbound network activity and identifies suspicious patterns that may indicate a

network or system attack from someone attempting to break into or compromise a system. Used in computer security, intrusion detection refers to the process of monitoring computer and network activities and analyzing those events to look for signs of intrusion in your system.

IP Address, *Internet Protocol Address* – A unique number for a computer that is used to determine where messages transmitted on the Internet should be delivered. The IP address is analogous to a house number for ordinary postal mail.

Jailbreaking – Modifying a smartphone or other electronic device to remove restrictions imposed by the manufacturer or operator to allow the installation of unauthorized software.

Key – A value used to control cryptographic operations, such as decryption, encryption, signature generation or signature verification.

Key Management – Activities involving the handling of cryptographic keys and other related security parameters (e.g., passwords) during the entire life cycle of the keys, including their generation, storage, establishment, entry and output, and zeroization.

Line Posting – A value that establishes a wager's potential payout (e.g., money line + 175) or the conditions for a wager to be considered a win or loss (e.g., point spread + 2.5).

MAC, *Message Authentication Code* – A cryptographic checksum on data that uses a symmetric key to detect both accidental and intentional modifications of the data.

Malware – A program that is inserted into a system, usually covertly, with the intent of compromising the confidentiality, integrity, or availability of the victim's data, applications, or operating system or of otherwise annoying or disrupting the victim.

"Man-In-The-Middle" Attack – An attack where the attacker secretly relays and possibly alters the communication between two parties who believe they are directly communicating with each other.

Market – A wager type (e.g., money line, spread, over/under) on which opportunities are built for wagering on one or more events.

Message Authentication – A security measure designed to establish the authenticity of a message by means of an authenticator within the transmission derived from certain predetermined elements of the message itself.

Mobile Code – Executable code that moves from computer to computer, including both legitimate code and malicious code such as computer viruses.

Multi-Factor Authentication – A type of authentication which uses two or more of the following to verify a user's identity: Information known only to the user (e.g., a password, pattern or answers to challenge questions); An item possessed by a user (e.g., an electronic token, physical token or an identification card); A user's biometric data (e.g., fingerprints, facial or voice recognition).

NCE, *Network Communication Equipment* – One or more devices that controls data communication in a system including, but not limited to, cables, switches, hubs, routers, wireless access points, and telephones

Operator – A person or entity that operates an Event Wagering System, using both the technological capabilities of the Event Wagering System as well as their own internal procedures.

Pari-Mutuel Wagers – Wager types where individual wagers are gathered into a pool. The winnings are calculated by sharing the pool among all winning bets.

Parlay – A single wager that links together two or more individual wagers and is dependent on all of those wagers winning together.

Participant – The athlete, team, or other entity that competes in an event.

Password – A string of characters (letters, numbers, and other symbols) used to authenticate an identity or to verify access authorization.

Past-Post Wager – A wager that was made after the result of an event is accepted or after the selected participant has gained a material advantage (e.g., a score).

Perfecta (aka “Exacta”) – A wager in which the player picks the first and second place finishers in a competition in the correct order.

Physics Engine – Specialized software that approximates the laws of physics, including behaviors such as motion, gravity, speed, acceleration, mass, etc. for a virtual event’s elements or objects. The physics engine is utilized to place virtual event elements/objects into the context of the physical world when rendering computer graphics or video simulations.

PIN, *Personal Identification Number* – A numerical code associated with an individual and which allows secure access to a domain, account, network, system, etc.

Player Account (aka “Wagering Account”) – An account maintained for a player where information relative to wagering and financial transactions are recorded on behalf of the player including, but not limited to, deposits, withdrawals, wagers, winnings, and balance adjustments. The term does not include an account used solely by an operator to track promotional points or credits or similar benefits issued by an operator to a player which may be redeemed for merchandise and/or services.

Player Data – Sensitive information regarding a player and which may include items such as full name, date of birth, place of birth, social security number, address, phone number, medical or employment history, or other personal information as defined by the regulatory body.

Player Loyalty Program – A program that provides incentives for players based on the volume of play or revenue received from a player.

POS Wagering Device, *Point-of-Sale Wagering Device* – An attendant station that at a minimum will be used by an attendant for the execution or formalization of wagers placed on behalf of a player.

Port – A physical entry or exit point of a module that provides access to the module for physical signals, represented by logical information flows (physically separated ports do not share the same physical pin or wire).

Printer – A Wagering Device peripheral that prints wager records and/or wagering instruments.

Proxy – A proxy is an application that “breaks” the connection between client and server. The proxy accepts certain types of traffic entering or leaving a network and processes it and forwards it. This effectively closes the straight path between the internal and external networks. Making it more difficult for an attacker to obtain internal addresses and other details of the internal network.

Protocol – A set of rules and conventions that specifies information exchange between devices, through a network or other media.

Quinella – A wager in which the first two places in a competition shall be predicted, but not necessarily in the finishing order.

Remote Access – Any access from outside the system or system network including any access from other networks within the same site or venue.

Remote Wagering – Wagering conducted using Remote Wagering Devices on an in-venue wireless network or over the internet, depending on the implementation(s) authorized by the regulatory body.

Remote Wagering Device – A player-owned device operated either on an in-venue wireless network or over the internet that at a minimum will be used for the execution or formalization of wagers placed by a player directly. Examples of a Remote Wagering Device include a personal computer, mobile phone, tablet, etc.

Risk – The likelihood of a threat being successful in its attack against a network or system.

RNG, *Random Number Generator* – A computational or physical device, algorithm, or system designed to produce numbers in a manner indistinguishable from random selection.

Rooting – Attaining root access to the operating system code to modify the software code on the mobile phone or other Remote Wagering Device or install software that the manufacturer would not allow to be installed.

Secure Communication Protocol – A communication protocol that provides the appropriate confidentiality, authentication and content integrity protection.

Security Certificate – Information, often stored as a text file that is used by the TSL (Transport Socket Layers) Protocol to establish a secure connection. A Security Certificate contains information

about whom it belongs to, who it was issued by, valid dates, a unique serial number or other unique identification that can be used to verify the contents of the certificate. In order for an SSL connection to be created, both sides shall have a valid Security Certificate, which is also called a Digital ID.

Security Policy – A document that delineates the security management structure and clearly assigns security responsibilities and lays the foundation necessary to reliably measure progress and compliance

Self-Service Wagering Device – A kiosk that at a minimum will be used for the execution or formalization of wagers placed by a player directly and, if supported, may be used for redemption of winning wager records.

Sensitive Information – Information such as player data, wagering data, validation numbers, PINs, passwords, secure seeds and keys, and other data that shall be handled in a secure manner.

Server – A running instance of software that is capable of accepting requests from clients, and the computer that executes such software. Servers operate within a Client-Server Architecture, in which “servers” are computer programs running to serve the requests of other programs (“clients”). In this case the “server” would be the Event Wagering System and the “clients” would be the Wagering Devices.

Shellcode – A small piece of code used as a payload in the exploitation of security. Shellcode exploits vulnerability and allows an attacker the ability to reduce a system’s information assurance.

Stateless Protocol – A communications scheme that treats each request as an independent transaction that is unrelated to any previous request so that the communication consists of independent pairs of requests and responses.

System Administrator – The individual(s) responsible for maintaining the stable operation of the Event Wagering System (including software and hardware infrastructure and application software).

TCP/IP, Transmission Control Protocol/Internet Protocol – The suite of communications protocols used to connect hosts on the Internet.

Threat – Any circumstance or event with the potential to adversely impact network operations (including mission, functions, image, or reputation), assets, or individuals through a system via unauthorized access, destruction, disclosure, modification of information, and/or denial of service. Also, the potential for a threat-source to successfully exploit a system vulnerability.

Time Stamp – A record of the current value of the Event Wagering System date and time which is added to a message at the time the message is created.

Touch Screen – A video display device that also acts as a user input device by using electrical touch point locations on the display screen.

Trifecta – A wager in which a player wins by selecting the first three finishers of a competition in the correct order of finish.

Unauthorized Access – A person gains logical or physical access without permission to a network, system, application, data, or other resource.

User Interface – An interface application or program through which the user views and/or interacts with the Wagering Software to communicate their actions to the Event Wagering System.

Version Control – The method by which an evolving approved Event Wagering System is verified to be operating in an approved state.

Virtual Event Wagering – A form of wagering that allows for the placement of wagers on sports, contests, and matches whose results are determined solely by an approved Random Number Generator (RNG).

Virtual Participant – The athlete or other entity that competes in a virtual event.

Virus – A self-replicating program, typically with malicious intent, that runs and spreads by modifying other programs or files.

Virus Scanner – Software used to prevent, detect and remove computer viruses, including malware, worms and Trojan horses.

Voucher – A wagering instrument which can be redeemed for cash or used to subsequently redeem for credits.

VPN, *Virtual Private Network* – A logical network that is established over an existing physical network and which typically does not include every node present on the physical network.

Vulnerability – Software, hardware, or other weaknesses in a network or system that can provide a “door” to introducing a threat.

Wager – Any commitment of credits or money by the player on the results of events.

Wager Record – A printed ticket or electronic message confirming the acceptance of one or more wagers.

Wagering Device – An electronic device that converts communications from the Event Wagering System into a human interpretable form and converts human decisions into communication format understood by the Event Wagering System.

Wagering Instrument – A printed or virtual representative of value, other than a chip or token and includes coupons and vouchers. A virtual wagering instrument is an electronic token exchanged between a player’s mobile device and the wagering device which is used for credit insertion and redemption.

Wagering Rules – Any written, graphical, and auditory information provided to the public regarding event wagering operations.

Wagering Software – The software used to take part in wagering and financial transactions with the Event Wagering System which, based on design, is downloaded to or installed on the Wagering Device, run from the Event Wagering System which is accessed by the Wagering Device, or a combination of the two. Examples of Wagering Software include proprietary download software packages, html, flash, etc.

Wi-Fi – The standard wireless local area network (WLAN) technology for connecting computers and electronic devices to each other and/or to the internet.