

Social & Economic Impacts of Casino Introduction to Massachusetts

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Presentation to MA Gaming Commission

October 24, 2024

OVERVIEW

Overview

- Social & Economic Impacts of Expanded Gambling in Massachusetts ([SEIGMA](#)) is largest study of gambling ever undertaken.
 - 11 years: 2013 - 2024
 - 22 team members over the 12 years; 13-member team currently
 - \$17.5+ million USD
- Funded by the Massachusetts Gaming Commission to identify the socioeconomic impacts of casino introduction to the state.
- 3 casinos introduced into Massachusetts for the first time between 2015 and 2019

Plainridge Park Casino (PPC)

Venue	Host Community	Surrounding Communities	Opening Date	Current Gambling Availability	Notes
Slot Parlor	Plainville	Attleborough Foxborough Mansfield North Attleborough Wrentham	June 24, 2015	<ul style="list-style-type: none"> • 925 slot machines and electronic table games • live harness racing track + simulcast betting • several instant ticket and lottery ticket terminals 	<ul style="list-style-type: none"> • Harness racing since 1999 • Casino expansion cost \$250M • 196,000 sq ft for casino operations • several restaurants & bars • Owned by Penn National



MGM Springfield (MGM)

Venue	Host Community	Surrounding Communities	Opening Date	Gambling Availability	Notes
Region B Casino	Springfield	Agawam Chicopee E. Longmeadow Holyoke Longmeadow Ludlow Wilbraham West Springfield	August 24, 2018	<ul style="list-style-type: none"> 1,500+ slot machines 63 table games 	<ul style="list-style-type: none"> Estimated to cost \$960M 109,000 sq ft gaming space Hotel with 250 rooms, convention space, etc. Owned by MGM Resorts International

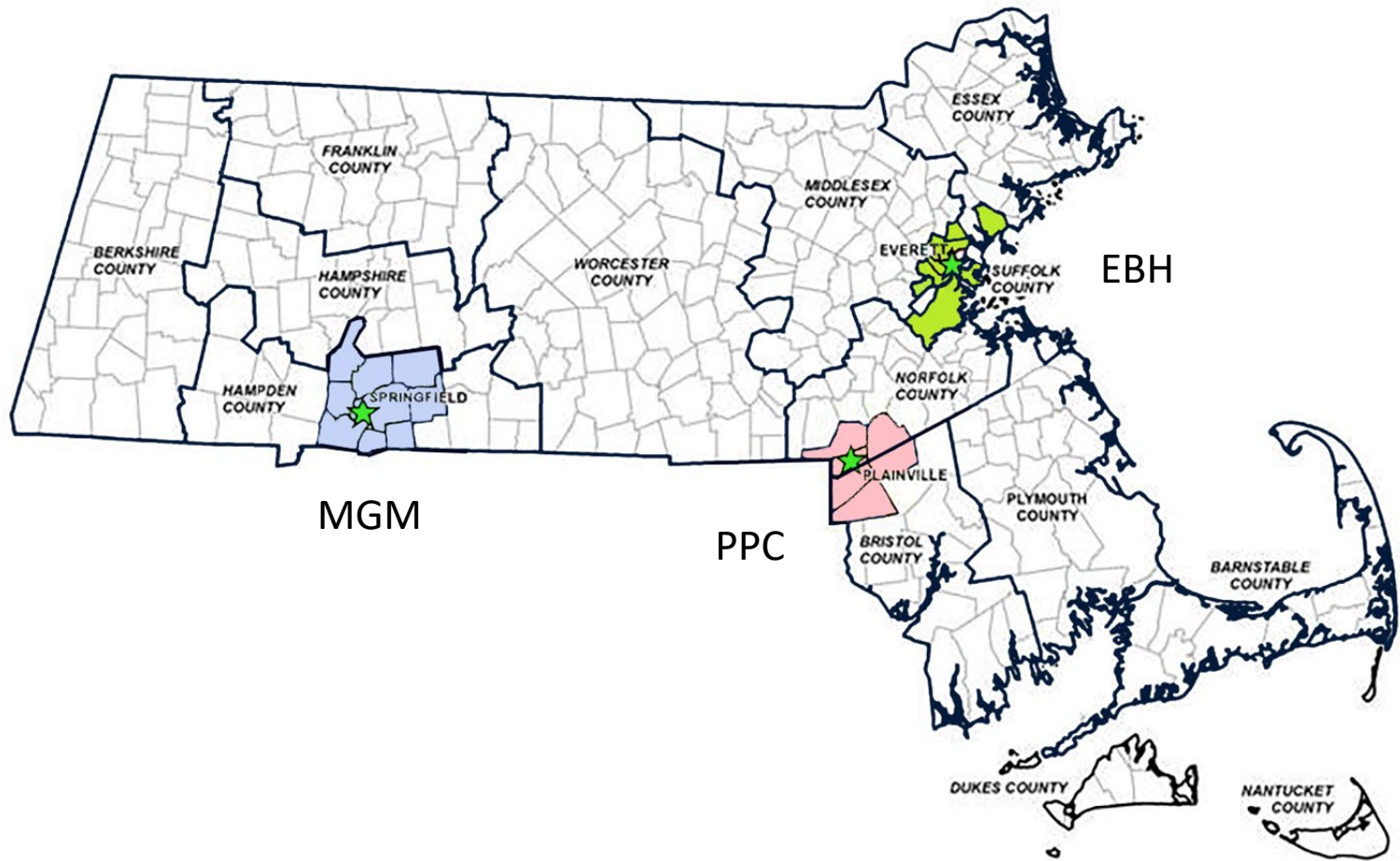


Encore Boston Harbor (EBH)

Venue	Host Community	Surrounding Communities	Opening Date	Gambling Availability	Notes
Region A Casino	Everett	Boston Cambridge Lynn Malden Medford Melrose Somerville	June 23, 2019	<ul style="list-style-type: none"> • 2,700+ slot machines • 185+ table games • poker room 	<ul style="list-style-type: none"> • Estimated to cost \$2.6B • 210,000 sq ft gaming space • Hotel with 671 rooms, convention space, retail & restaurant space, etc. • Owned by Wynn Resorts



Casino Location and their Host & Surrounding Communities (H&SC)



Overview

- Extensive social and economic baseline data collected 2013 - 2014 prior to introduction.
- Extensive primary and secondary data subsequently collected to identify impacts with 55 interim reports and academic publications produced to date.
- Current presentation is our summative report on the impacts drawing on these prior reports, supplemented with secondary data, info from other agency reports, and newly collected primary data.
- Findings organized into: Social and Health Impacts, Economic and Fiscal Impacts, and Overall Impacts and Conclusions.

Data Sources

- **General Population Surveys**
 - 2013/2014, $n = 9,578$, 36.6% RR
 - 2021/2021, $n = 6,293$, 27.5% RR
- **Targeted Population Surveys of H&SC's**
 - PPC H&SC: 2014, $n = 1,093$; 2016/17, $n = 1,012$
 - MGM H&SC: 2015; $n = 1,131$; 2019/20, $n = 1,131$
 - EBH H&SC: 2013/14; $n = 1,155$; 2021/22, $n = 1,777$

Data Sources

- **Statewide Online Panel Surveys**
 - 2013/2014; $n = 5,046$
 - 2022; $n = 3,041$
 - 2023; $n = 3,380$
- **Longitudinal Statewide Cohort of Adult Gamblers**
 - Massachusetts Gambling Impact Cohort (MAGIC)
 - 2013 – 2019, 5 Waves
 - 2,989 at Wave 5; 79.7% retention

Data Sources

- **Key Informant Interviews**
 - 3 in Plainville (PPC)
 - 9 in Springfield (MGM)
 - 7 in Everett (EBH)
- **Focus Groups**
 - 4 in Springfield (MGM)
 - 1 in Everett (EBH)

Data Sources

- **Secondary Data from State and Federal Govt.**
 - Changes over time in social (e.g., suicide, divorce, bankruptcy) and economic indices (e.g., employment, # businesses) as they relate to casino introduction
- **Crime Impact Reports**
 - 13 commissioned studies of crime impacts in each of the H&SC's by a crime analyst (Christopher Bruce)
 - 2016 to 2023

Data Sources

- **Casino Construction Impact Analyses**
 - Spending, employment, and wages provided by each casino
 - Economic modeling (REMI) then used to estimate total economic impacts for each casino/region
- **Patron and License Plate Surveys**
 - PPC: Feb & Jul/Aug 2016; $n = 479$; 4,800 vehicles
 - MGM: Feb & Jul/Aug 2019; $n = 878$; 10,194 vehicles
 - EBH: Apr 2022; $n = 440$; 4,628 vehicles

Data Sources

- **Casino Operation Impact Analyses**
 - Revenue, employment, wages, vendor spending, and state taxes provided by each casino
 - Economic modeling (REMI) then used to estimate total economic impacts for each casino/region
- **Surveys of all New Employees at Each Casino**
 - PPC: 2017; $n = 190$
 - MGM: Mar 2018 – Dec 2019; $n = 2,044$
 - EBH: Jan 2019 – Dec 2021; $n = 2,445$

Data Sources

- **Real Estate Analyses for Each Host Community**
 - Sales, prices, rents for residential real estate
 - Sales, prices, lease rates, vacancy rates, inventory for commercial real estate
- **Matched Community Comparison**
 - Comparing differences in economic and demographic indices in 2024 in host community vs. demographically and economically matched communities (without casinos)

Data Sources

- **Smartphone Detection Analysis**
 - Identification of all smartphones detected at the 3 MA casinos and the 8 closest casinos in Connecticut, Rhode Island, and New York for 2 continuous weeks in Jan 2023 and again in Oct 2023
 - 1,213,741 smartphones detected, with associated information on county and state origin of the smartphone

SOCIAL & HEALTH IMPACTS

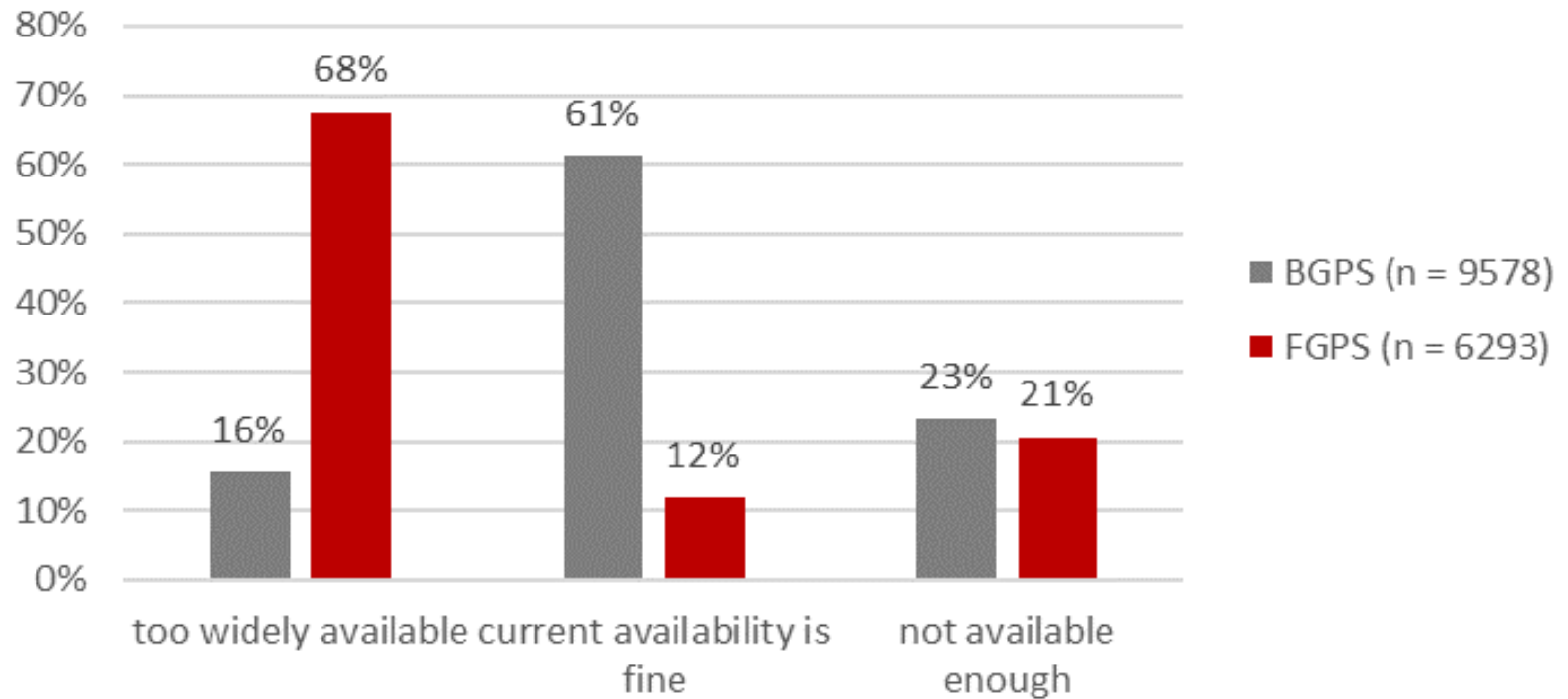
ATTITUDES	benefit vs harm, legal availability, anticipated vs actual impacts, most positive and negative impacts
GAMBLING BEHAVIOR	Participation and expenditure for each type of gambling
PROBLEM GAMBLING (PG) & RELATED INDICES	Population Prevalence of Problem Gambling
	Demographics of Problem Gambling
	Treatment Seeking for Problem Gambling
	Bankruptcy
	Family Impacts (divorce, separation, restraining orders, child welfare involvement, child maltreatment)
	Suicide
CRIME	Crime Rates; Illegal Gambling
OTHER SOCIAL INDICES	Changes in population, demographic make-up of student body, traffic volume, traffic accidents

Attitudes

- AT A **STATEWIDE** AND **H&SC** LEVEL THERE ARE SIGNIFICANT CHANGES IN ATTITUDES TOWARD GAMBLING:
 - Increase in % people who think gambling ‘is too widely available’
 - Increase in % of people who think ‘casinos are neither harmful or beneficial’
 - Increase in % of people in the H&SC’s who think their particular casino was ‘neither harmful or beneficial’

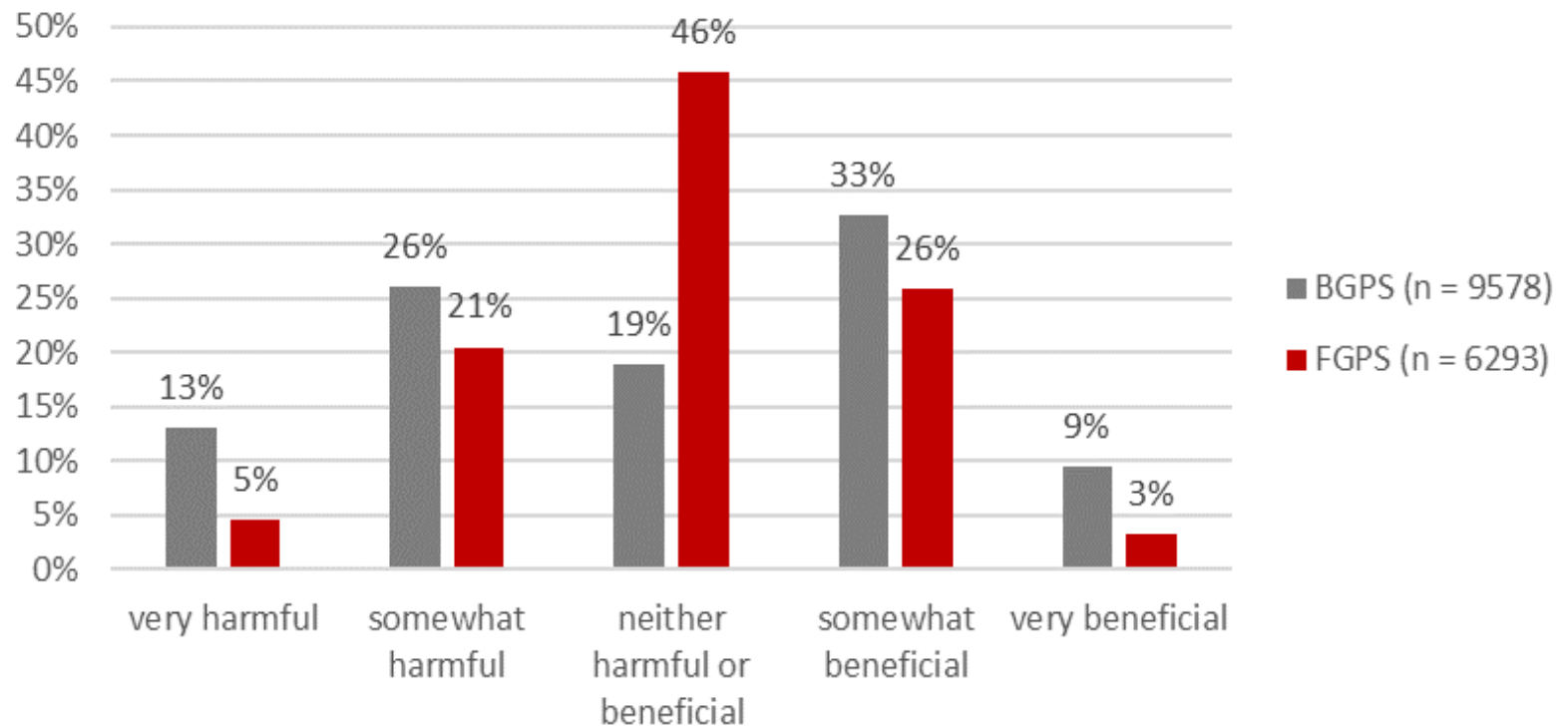
Attitudes

➤ Current availability of gambling: 2013/14 to 2021/22



Attitudes

- Anticipated (2013/14) versus actual (2021/22) impacts of casino introduction



Gambling Participation

- AT A **STATEWIDE** & **H&SC** LEVEL THERE ARE SIGNIFICANT CHANGES IN PAST YEAR GAMBLING PARTICIPATION
 - Increase in MA casino patronage; decrease in out-of-state casino patronage; *decrease in overall casino patronage*
 - Slight decline in lottery participation
 - Declines in raffles, horse racing participation
 - Increase in online gambling participation

Gambling Participation

	2013/2014 BGPS		2021/2022 FGPS	
	%	95% CI	%	95% CI
Any Past Year Gambling	73.1	(71.8, 74.4)	60.2*	(58.3, 62.2)
Any Lottery Product	61.7	(60.2, 63.1)	47.6*	(45.6, 49.6)
Traditional Lottery	58.1	(56.6, 59.5)	43.3*	(41.3, 45.3)
Daily Lottery Games	14.1	(13.1, 15.2)	14.5	(13.1, 16.0)
Instant Games	37.2	(35.8, 38.7)	26.6*	(24.8, 28.4)
Raffles	31.5	(30.2, 32.8)	18.6*	(17.2, 20.2)
Casinos either in or out of state	21.5	(20.3, 22.7)	15.7*	(14.3, 17.3)
Only Casinos out of state	21.5	(20.3, 22.7)	4.3*	(3.6, 5.3)
Only Casinos in MA	0	0	5.1*	(4.3, 6.1)
Casinos in and out of state	0	0	5.6*	(4.7, 6.7)
Sports Betting	12.6	(11.6, 13.7)	9.9*	(8.6, 11.2)
Private Wagering	11.1	(10.1, 12.2)	6.7*	(5.7, 7.8)
Horse Racing	3.4	(2.9, 4.0)	2.6	(2.0, 3.3)
Bingo	3.4	(2.9, 4.0)	2.1*	(1.5, 2.8)
Online Gambling	1.6	(1.2, 2.1)	2.7	(2.0, 3.5)
Average # of Types Engaged In	1.9	(1.9, 2.0)	1.4*	(1.3, 1.5)

Problem Gambling & Related Indices

- AT A **STATEWIDE** & **H&SC** LEVEL NO SIGNIFICANT CHANGES IN PROBLEM GAMBLING (PG) OR MOST RELATED INDICES
 - PGs slightly younger than before
 - Decrease in treatment seeking (although increase in helpline calls in 2022)
 - Decrease in personal bankruptcy filings

Problem Gambling & Related Indices

- Some increase in PG in MAGIC cohort in 2018 & 2019
 - 2018 increase occurred prior to MGM opening
 - 2018 & 2019 increases due to increased relapse in remitted PGs

	WAVE 1 2013/14	WAVE 2 2015	WAVE 3 2016	WAVE 4 2018	WAVE 5 2019	
	%	%	%	%	%	<i>p</i>
Non-Gambler	14.5	15.2	12.7	12.5	13.7	.0003
Recreational	70.5	68.2	72.5	73.1	70.2	<.0001
At-Risk Gambler	12.6	13.5	11.7	10.6	12.4	.0120
Problem Gambler	2.5	3.1	3.1	3.8	3.7	.0105

Problem Gambling & Related Indices

➤ Population Prevalence (assessed using the PPGM)

	2013/2014 BGPS		2021/2022 FGPS	
	%	95% CI	%	95% CI
Non-Gambler	26.6	(25.3, 28.0)	38.7*	(36.7, 40.7)
Recreational Gambler	62.9	(61.4, 64.4)	51.3*	(49.3, 53.4)
At-Risk Gambler	8.4	(7.5, 9.4)	8.5	(7.4, 9.8)
Problem Gambler	2.0	(1.6, 2.6)	1.4	(1.0, 2.1)

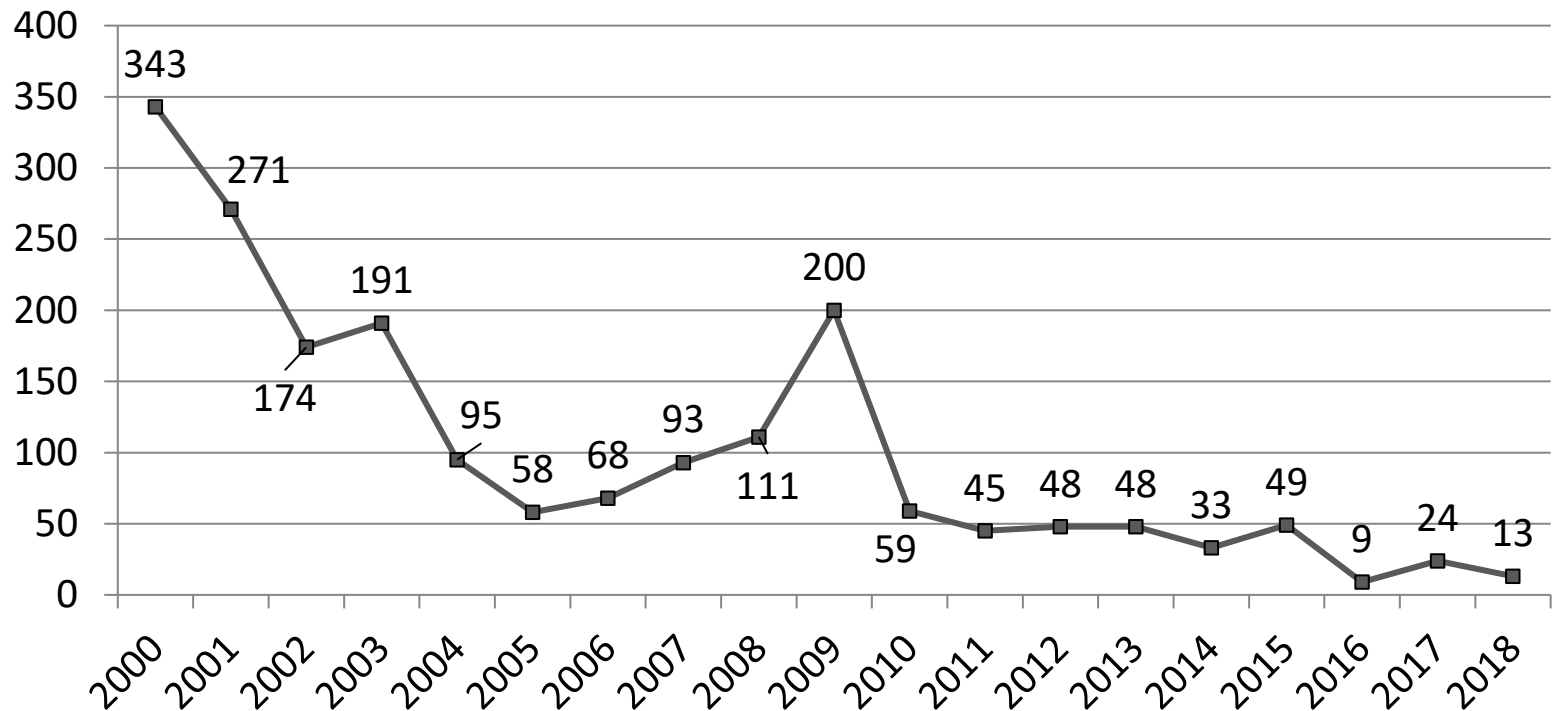
Problem Gambling & Related Indices

➤ Demographic Profile of Problem Gamblers

	2013/14 (<i>n</i> = 128)	2021/22 (<i>n</i> = 84)	<i>p</i>	MA Census
% Male	72.3%	69.1%	.59	48.2%
Average Age	49.3	43.8	.005	40.4
% Non-White	36.6%	41.4%	.54	29.6%
Educational Attainment Level (1-11)	5.2	5.1	.35	5.6
Household Income Level (1-8)	3.6	3.1	.13	5.7

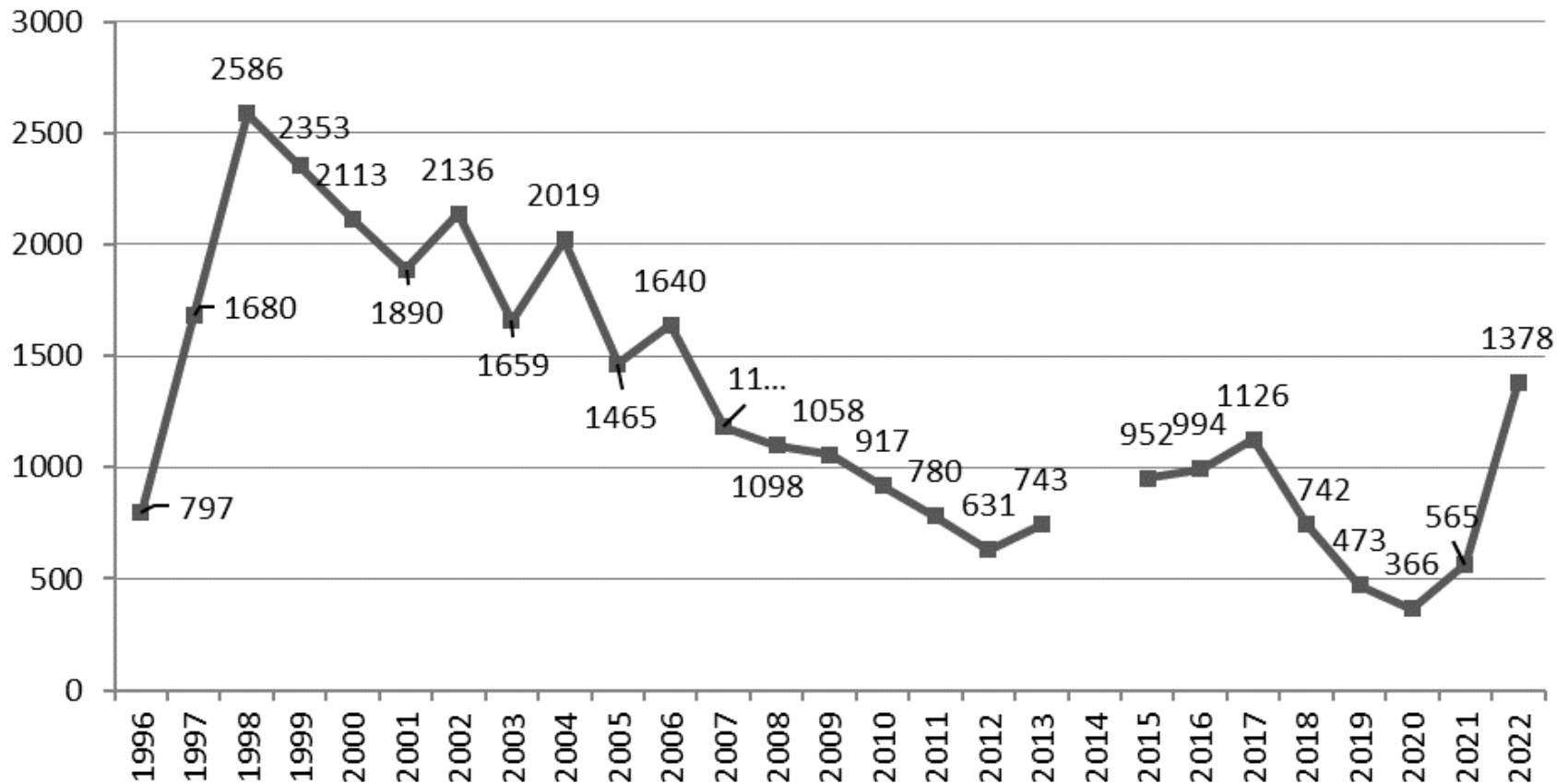
Problem Gambling & Related Indices

➤ Problem gambling treatment admissions to Department of Public Health



Problem Gambling & Related Indices

➤ Helpline calls (sports betting legalized in 2022)



Crime

- AT A **STATEWIDE** & **H&SC** LEVEL OVERALL CRIME HAS DECREASED, ALBEIT WITH A SLIGHT INCREASE BEGINNING IN 2020. ALSO:
 - Increase in illegal gambling beginning in 2019
 - Small increase in certain types of crime and calls for service at the casino and H&SC level
 - money laundering, theft of tokens, intoxicated patrons, fraud, purse snatching, burglary, theft from vehicles, shoplifting, prostitution

Crime

➤ Crime rates in Host & Surrounding Communities

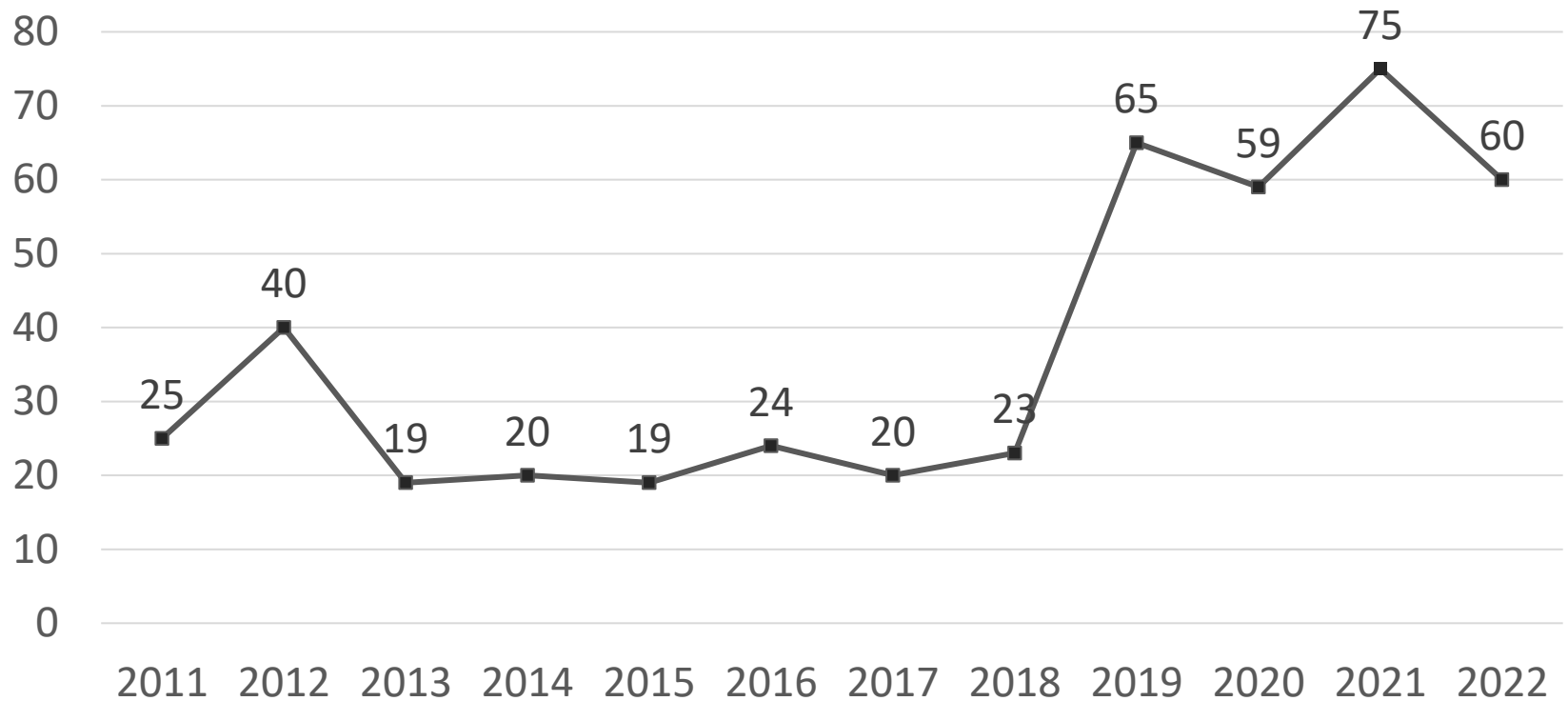
PPC H&SC	Pre-PPC Annual Average	2016 – 2019 Annual Average	% Change
Property Crime Offenses	3,903.4	3,214.5	17.6% decrease
Violent Crime Offenses	870.4	943.3	8.4% increase

MGM H&SC	2014-2018 Annual Average	Sep 1 2018 – Aug 31 2019	% Change
Property Crime Offenses	22,356	16,391	26.7% decrease
Violent Crime Offenses	11,647	10,565	9.3% decrease

EBH H&SC	Pre-EBH Annual Average	Jul-Dec 2019	% Change
Property Crime Offenses	3,038	2,610	14.1% decrease
Violent Crime Offenses	163	133	18.4% decrease

Crime

➤ Illegal gambling offenses in MA

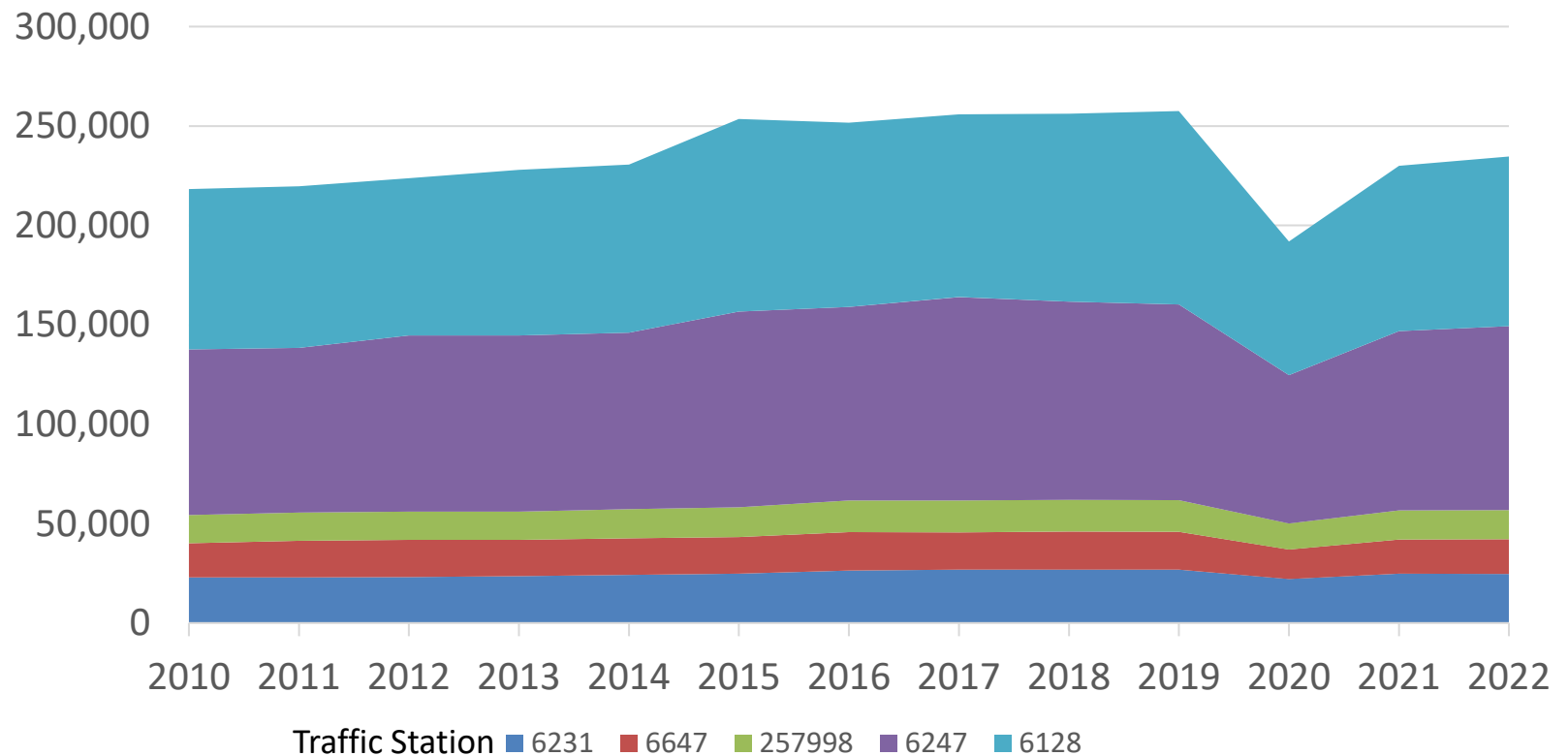


Other Social Indices

- AT A **HOST COMMUNITY** LEVEL, NO IMPACTS ON POPULATION OR EDUCATIONAL SYSTEMS
- AT A **HOST COMMUNITY LEVEL**, INCREASES IN TRAFFIC (ALL 3), ACCIDENTS (EVERETT & PLAINVILLE ONLY), AND IMPAIRED DRIVING

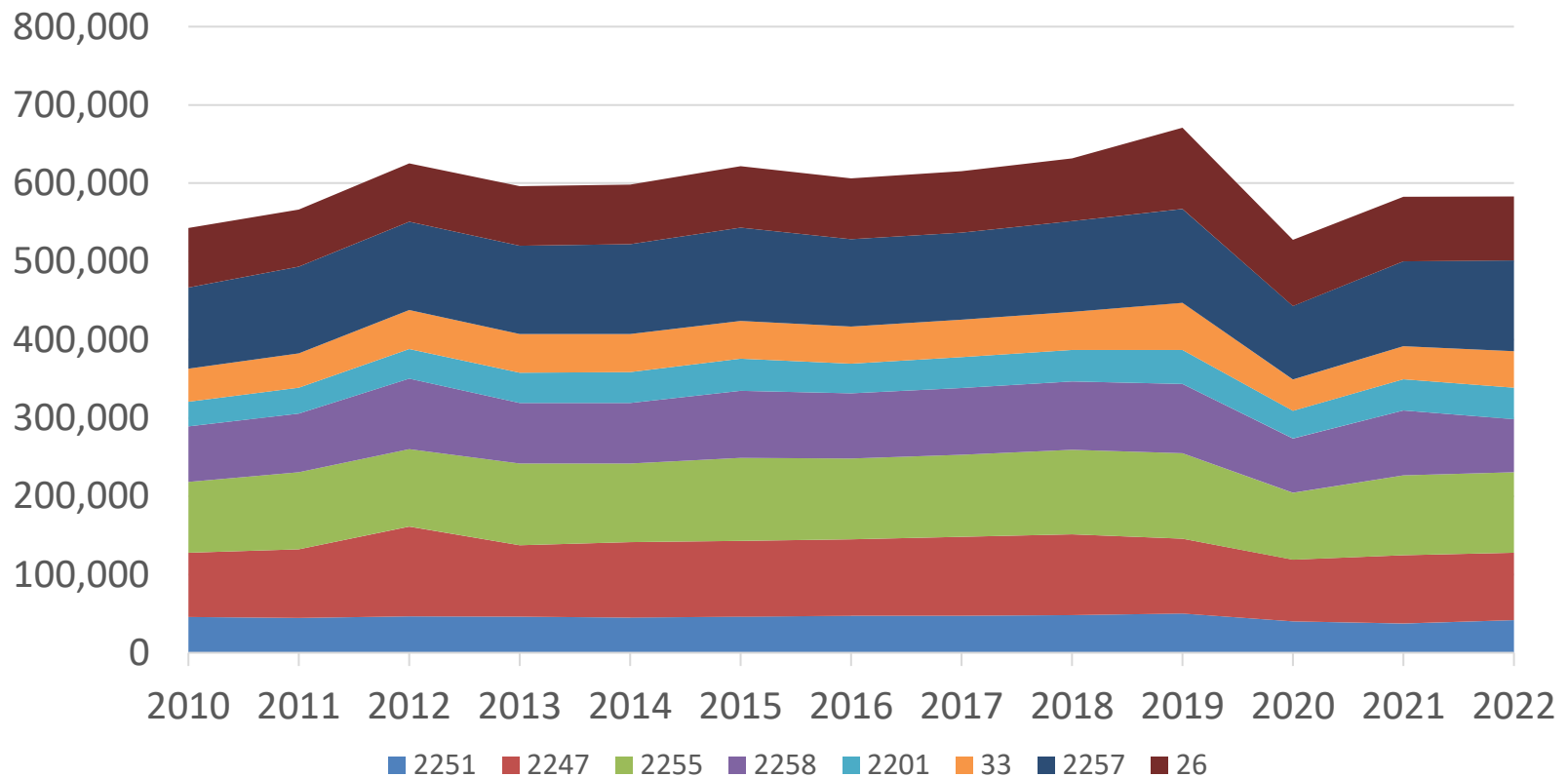
Other Social Indices

- Traffic volume in Plainville increased 9.9% from 2014 to 2016. [PPC construction began Apr 2014 and casino opened Jun 2015].



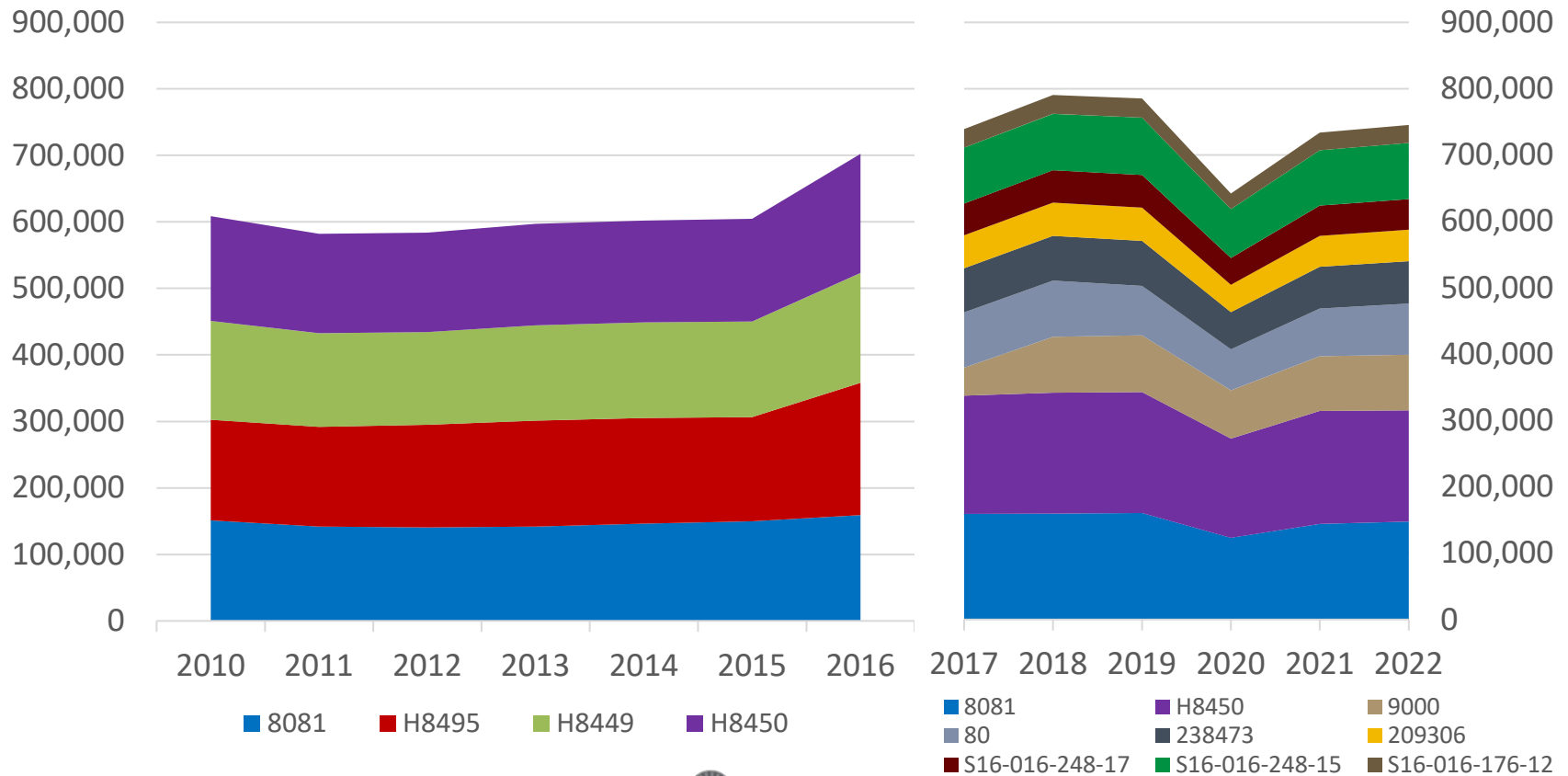
Other Social Indices

- Traffic volume in Springfield increased 12% from 2014 to 2019. [MGM broke ground Mar 2015 and opened in Aug 2018].



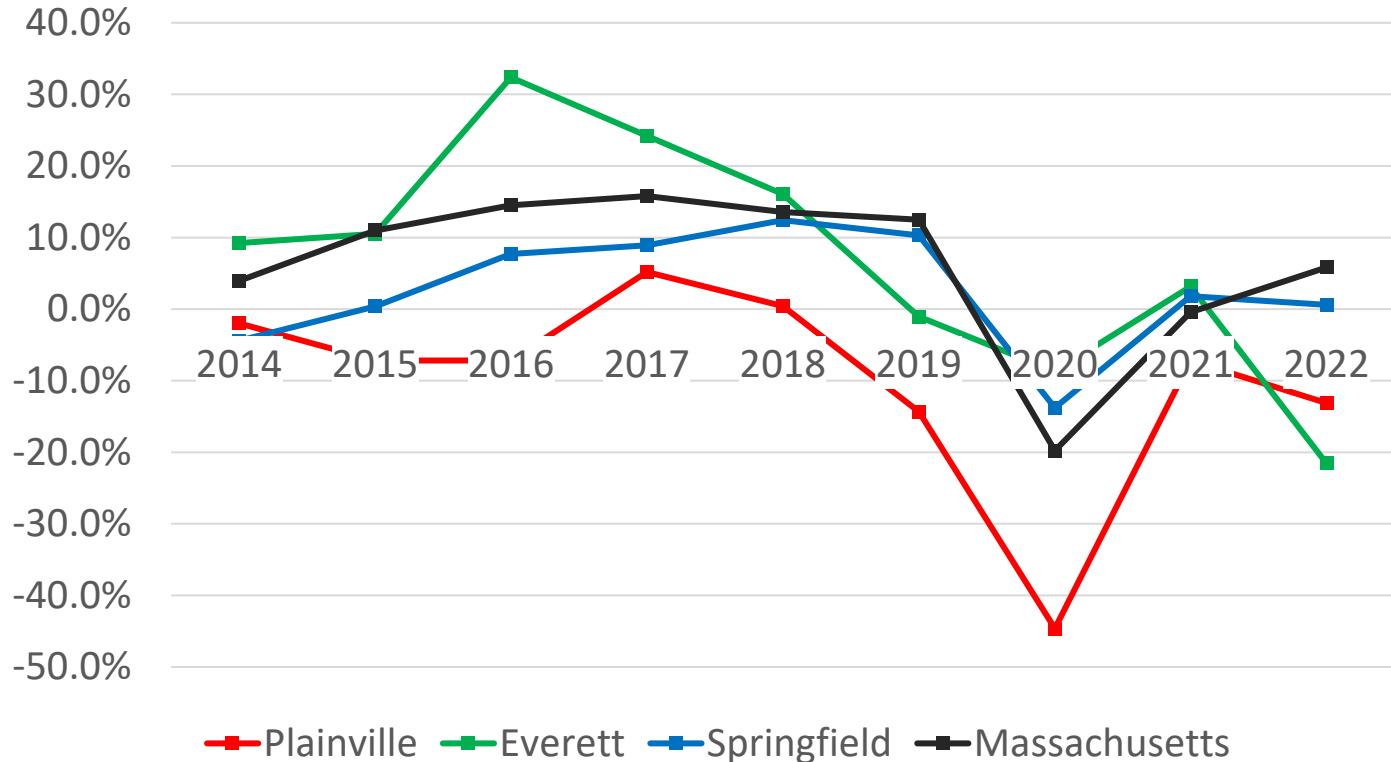
Other Social Indices

- Traffic volume in Everett increased 22.9% from 2014 to 2022. [Encore Boston broke ground Aug 2016 and opened June 2019].



Other Social Indices

➤ % change in vehicle crashes from 2013



ECONOMIC & FISCAL IMPACTS

DIRECT ECONOMIC IMPACTS	Construction Expenditure
	Operating Revenue (geographic origin of revenue)
	Operating Expenditure (GGR tax; operating expenses; employment and wages)
	Net Casino Profit
INDIRECT ECONOMIC IMPACTS	Total Impacts of Casino Construction Expenditure
	Total Impacts of Casino Operation
	Secondary Data
REAL ESTATE	Residential sales, prices, rents
	Commercial inventory, vacancy rates, lease rates, price per square foot

Direct Economic Impacts

- THE BUILDING AND OPERATION OF THE CASINOS HAS HAD SIGNIFICANT DIRECT ECONOMIC BENEFITS AT BOTH A STATEWIDE AND REGIONAL LEVEL

Casino Construction Expenditure

- All 3 casino companies based outside MA (NV & PA) and they spent considerable money in MA building these facilities:
 - \$115.4M for PPC with 85.3% spent in MA (~\$250M when including everything).
 - \$573.3M for MGM, with 65.2% spent in MA (~\$960M total).
 - MGM H&SCs received 30.8% of total spending and host county of Hampden received 33.9%.
 - \$1.6B for EBH, with 68.8% spent in MA (~\$2.6B total)
 - EBH H&SCs received 27.8% of total spending and host county of Middlesex received 14.8%.

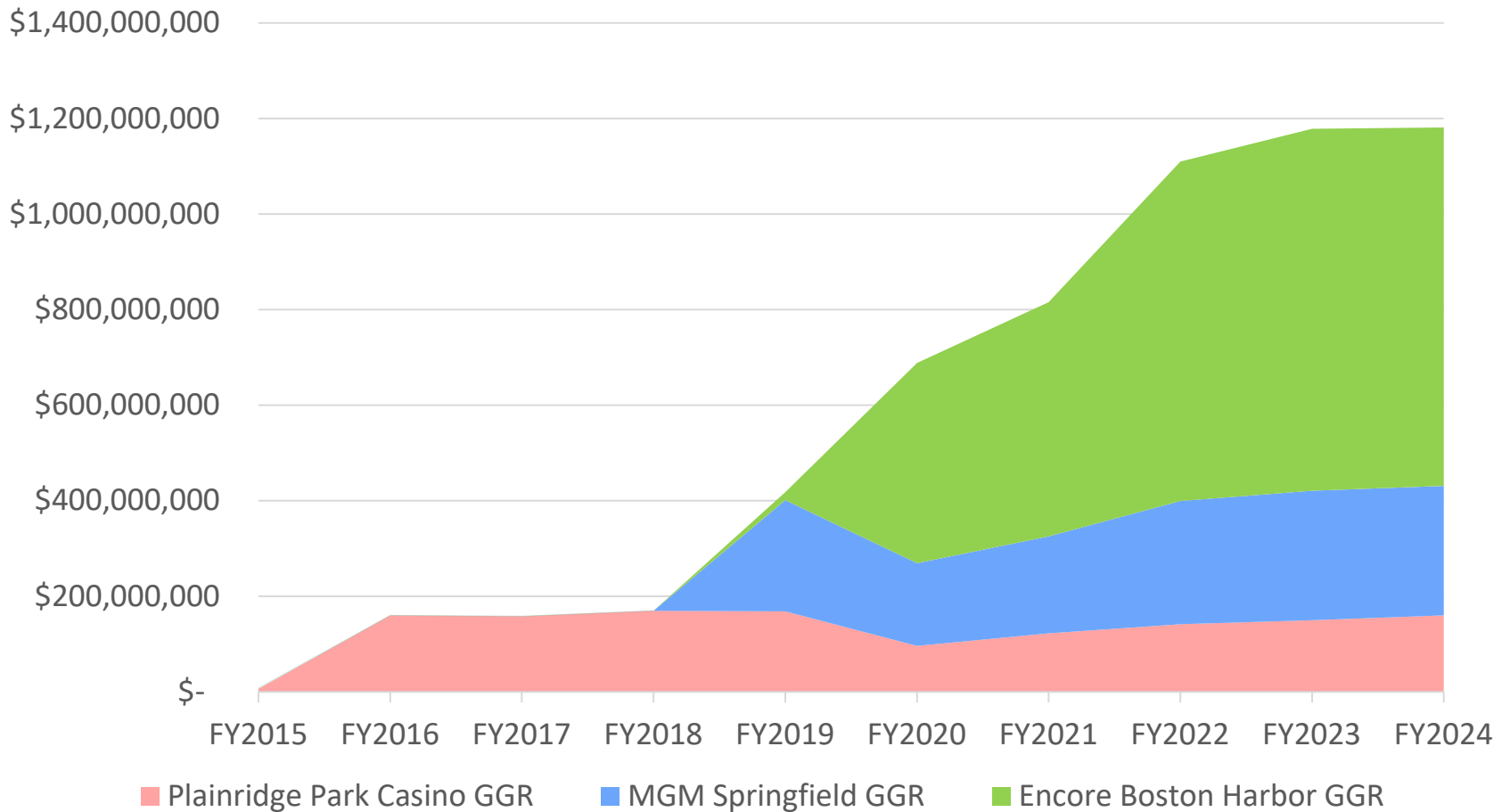
Casino Construction Expenditure

- Large local workforce also employed:
 - 554 fulltime employees building PPC during 14 month construction period.
 - 81.2% from MA
 - 1,251 fulltime employees building MGM for a year during 3yr 4m construction period.
 - 69.7% from MA
 - 2,478 fulltime employees from MA building EBH for a year during 3yr 6m construction period.

Casino Operation Revenue

- \$5.9 billion in Gross Gaming Revenue (GGR) to date
- \$1.1 to \$1.2 billion of GGR annually + ~ \$315M non-gaming
 - \$738M EBH; \$266M MGM; \$149M PPC
 - MA residents account for 77.8% of revenue
 - 91.8% PPC; 80.6% EBH; 62.0% MGM
 - CT residents account for 6.8%, NH 2.5%, RI 2.4%, 10.5% elsewhere
- Significant recapture of MA patronage previously leaving state
 - MA still accounts for ~51.5% of RI revenue, ~14.0% CT, ~2.2% NY
 - Net loss of ~\$360M/yr, still much lower than \$665M in 2015

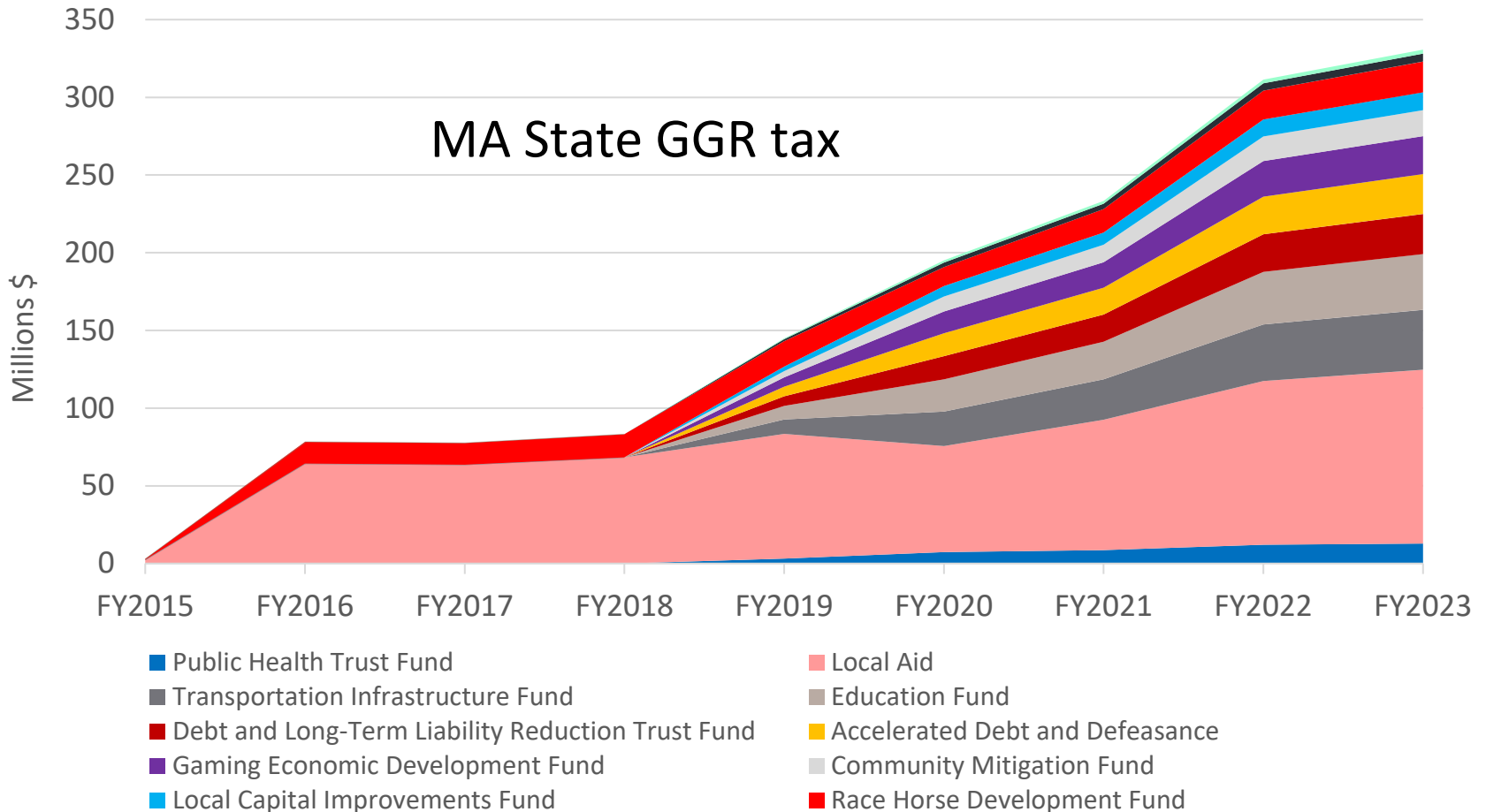
Casino Operation Revenue



Casino Operation Expenses

- Main operating expenses are:
 - State GGR tax (25% EBH & MGM; 49% PPC)
 - \$330M in FY2023; 100% to MA
 - Operational costs (vendors, business tax, leasing)
 - ~\$450M per year; roughly 50% to MA
 - Wages
 - \$271M per year; almost all to MA

Casino Operation Expenses



Net Casino Profit & Its Distribution

- Casino GGR and non-gaming revenue estimated to be ~\$1.5 billion a year.
- Casino expenses estimated to be ~\$1.1 billion a year.
- Net profit difficult to calculate. This money leaves MA, as all three casino companies based in other states (Nevada and Pennsylvania) with no other business holdings in MA.

Total Economic Impacts

- THE BUILDING AND OPERATION OF THE CASINOS HAS HAD SUBSTANTIAL ADDITIONAL INDIRECT ECONOMIC BENEFITS AT BOTH A STATEWIDE AND REGIONAL LEVEL

Economic Modeling (REMI): Construction

➤ Total Construction Economic Impacts

~19,000 job years

~\$14 billion in increased economic activity (output)

~\$2.2 billion in net new economic activity (value added)

~\$1.5 billion in personal income

Economic Modeling (REMI): Operation

➤ Total Annual Operation Economic Impacts

~18,500 fulltime jobs supported; 75% in private sector

~\$3.2 billion in increased economic activity (output)

~\$2.3 billion in net new economic activity (value added)

- 0.3% of MA GDP

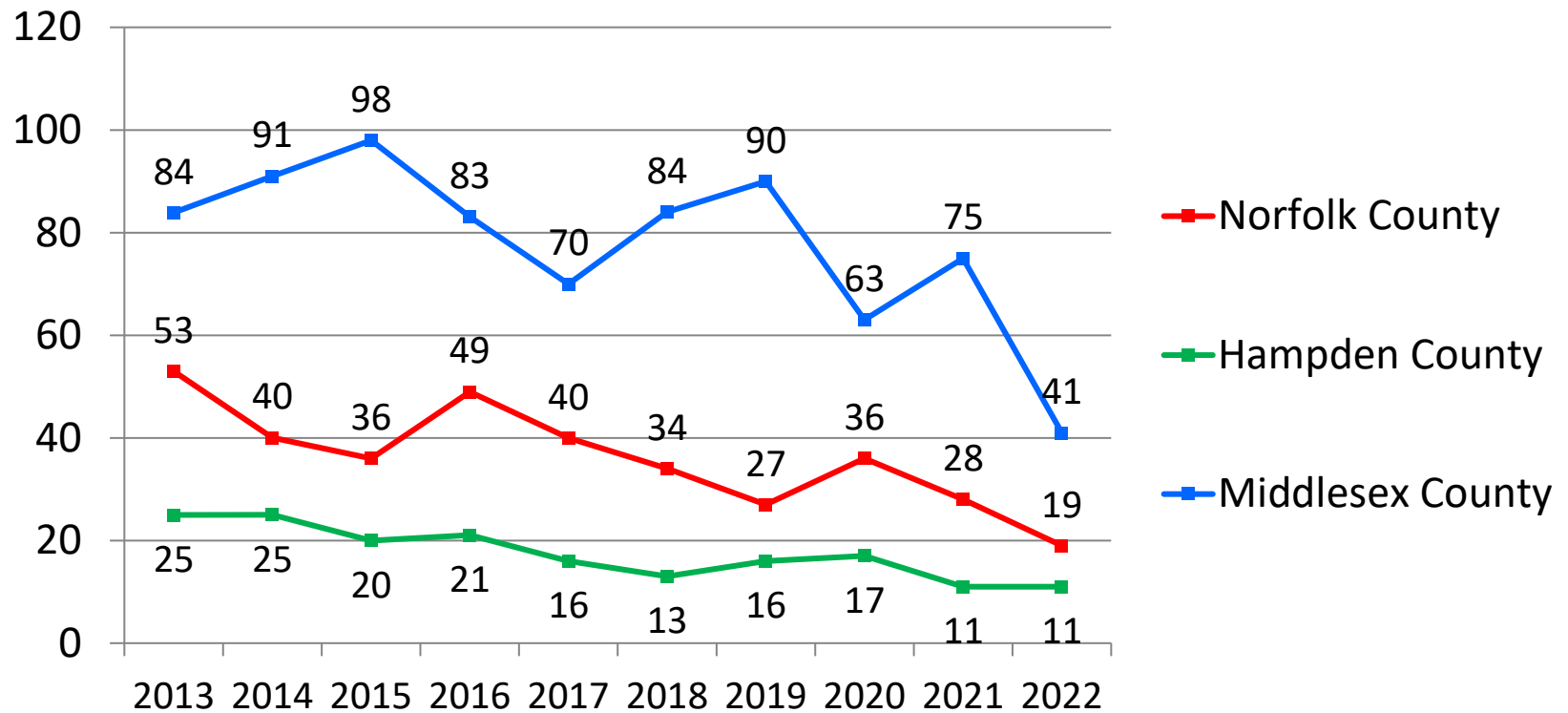
~\$1.6 billion in personal income

Secondary Economic Indices

- Consistent with increased economic activity:
 - Total # businesses increased by 15.1% - 35.8% in all host communities and counties from 2013/2014 to 2022
 - Although Everett only place where it increased more than the state
 - 55.3% decrease in business bankruptcies in all host counties from 2013/2014 to 2022
 - Total # businesses in different sectors also increased for most sectors
 - However, many of these increases parallel increases in population
 - Decreases in food services & drinking places in Plainville, Springfield, and Hampden county potentially due to cannibalization

Secondary Economic Indices

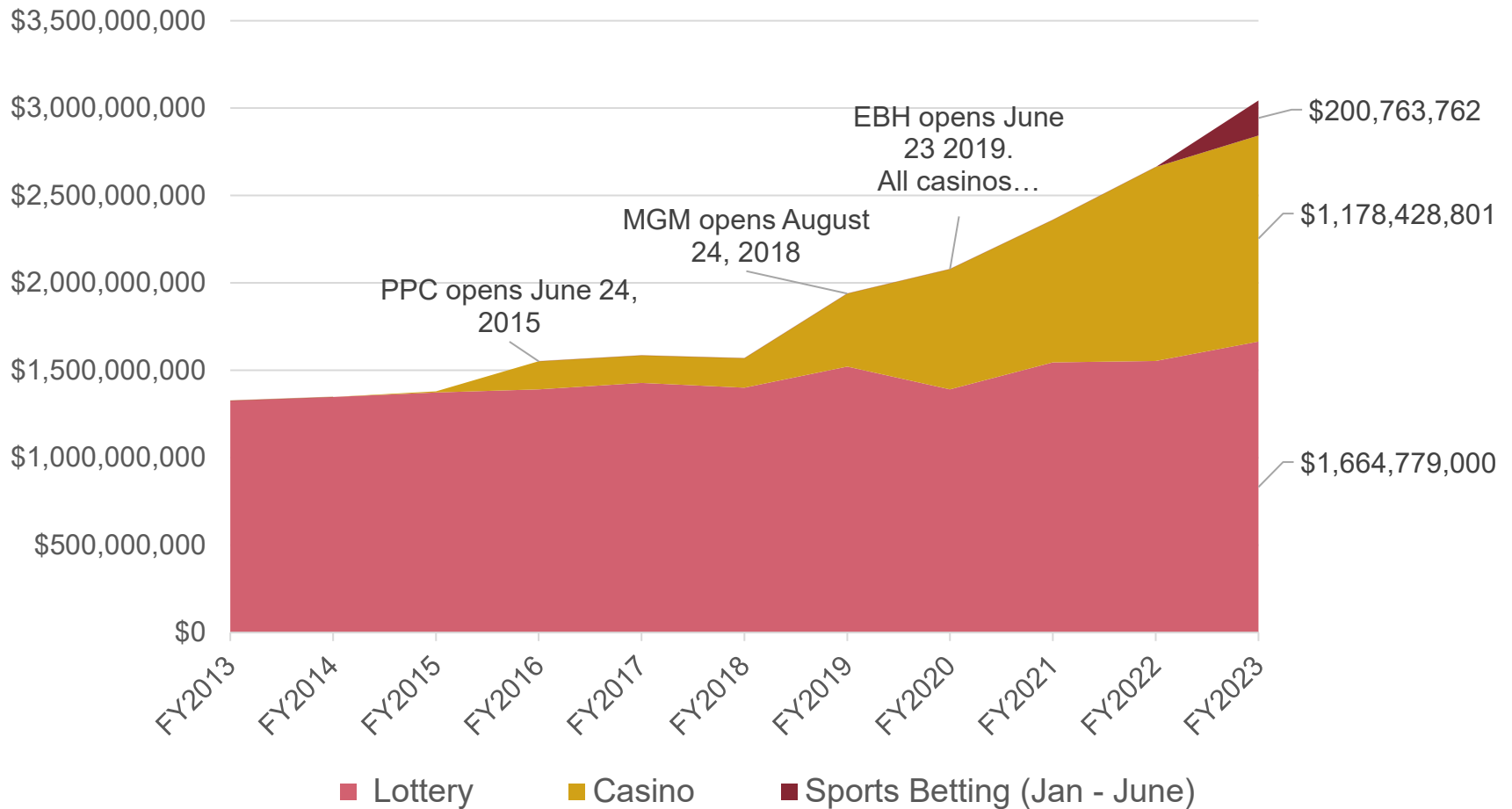
➤ Business bankruptcies



Impacts on Other Types of Gambling

- No significant impact on MA lottery revenue
- # of live horse races continues to decline, although amount wagered is unchanged
- Charitable gambling continues to decline, and GGR decline from \$66.5M in 2013 to \$38M in 2022 potentially accelerated by casinos

MA Gambling Revenue



Secondary Economic Indices

- Consistent with increased economic activity:
 - Employment numbers have increased in all host communities since 2013, with employment in Plainville and Everett increasing at rate above MA average
 - Unemployment rates have dropped significantly in all host communities and counties, paralleling state decreases

Secondary Economic Indices

➤ Unemployment Rate

	Plainville	Norfolk County	Springfield	Hampden County	Everett	Middlesex County	MA
2013	6.1%	5.7%	11.1%	8.6%	6.3%	8.6%	6.6%
2014	5.2%	5.0%	9.9%	7.6%	5.4%	7.6%	5.7%
2015	4.1%	4.2%	8.5%	6.4%	4.3%	6.4%	4.8%
2016	3.5%	3.5%	7.1%	5.4%	3.6%	5.4%	4.0%
2017	3.4%	3.4%	6.9%	5.2%	3.3%	5.2%	3.8%
2018	3.1%	3.1%	6.4%	4.8%	2.9%	4.8%	3.5%
2019	2.8%	2.6%	5.8%	4.3%	2.6%	4.3%	3.0%
2020	9.1%	8.8%	14.5%	10.9%	11.5%	10.9%	9.4%
2021	4.7%	5.0%	10.0%	7.2%	5.8%	7.2%	5.5%
2022	3.3%	3.3%	6.6%	4.9%	3.4%	4.9%	3.8%
% point change 2013/14 to 2022	-2.4%	-2.1%	-3.9%	-3.2%	-2.5%	-3.2%	-2.4%

Real Estate Impacts

- THE BUILDING AND OPERATION OF THE CASINOS HAS HAD LIMITED IMPACTS ON RESIDENTIAL AND COMMERCIAL REAL ESTATE AT A HOST & SURROUNDING COMMUNITY LEVEL

Residential Real Estate

- No impact on Plainville & Surrounding Communities
- No broad impacts in Springfield & Surrounding Communities
- Unknown impacts in Everett & Surrounding Communities, although key informants report a 'hot' property market

Commercial Real Estate

- No broad impact on Plainville & Surrounding Communities, although some increase in commercial building inventory
- No broad impacts in Springfield & Surrounding Communities
- Increase in commercial building inventory and lease rates in Everett

OVERALL IMPACTS AND CONCLUSIONS

POSITIVE IMPACTS

- **Significant increase in overall economic activity and employment, particularly in areas close to the casinos.**
 - Due to:
 - billions spent by out-of-state companies building the casinos
 - billions in revenue, primarily from recaptured out-of-state casino spending
 - large downstream ripple effects in MA economy from this monetary investment and recapture
 - Benefits outweigh losses, but losses still occur in significant continued out-of-state casino patronage + net casino profits leaving state.

POSITIVE IMPACTS

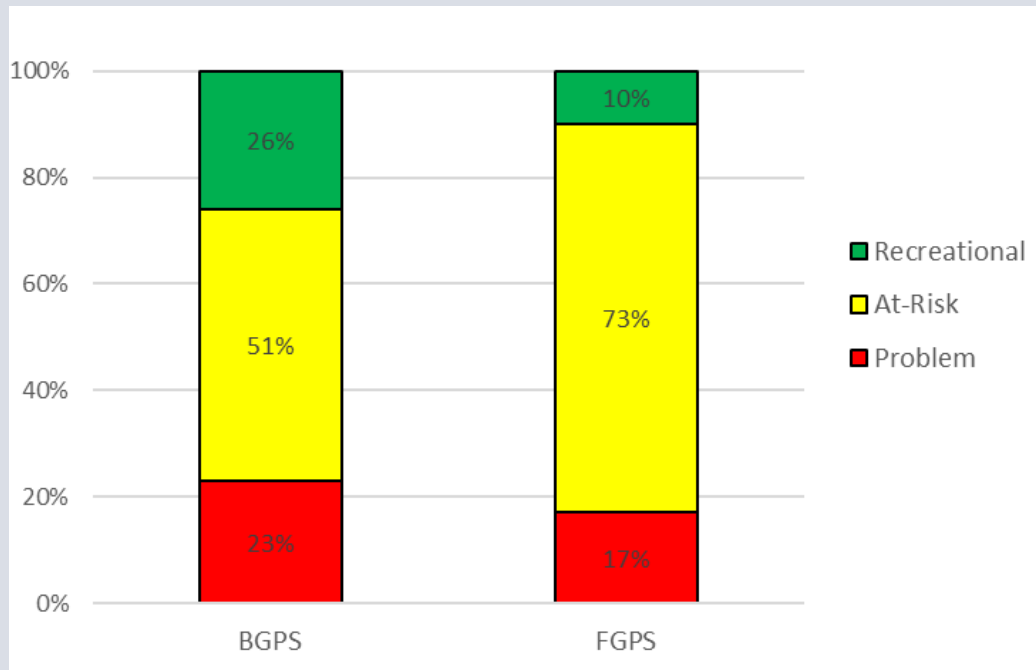
- **Casino GGR tax** provides hundreds of millions of dollars to state government, which then used to benefit towns and cities as well as MA citizenry more generally.
- **Additional leisure option** has been made available to MA residents.

NEGATIVE IMPACTS

- **Some negative impact on employment and revenue in other sectors** (restaurants, bars, other types of gambling (e.g., charitable)).
- Small **increase in certain types of crime** in the casino and surrounding area
- Some increase in **traffic volume, traffic accidents, and impaired driving** near the casinos
- Most MA residents (68%) now believe that **gambling ‘is too widely available’** (vs 16% pre-casino)

NEGATIVE IMPACTS

- However, main negative impact is that the significant increased economic activity in MA derives largely from the expenditures of at-risk and problem gamblers



Proportion of past year casino expenditure by type of gambler, 2013/2014 (BGPS) and 2021/2022 (FGPS)

RECOMMENDATIONS

RECOMMENDATIONS

1. Pros and cons to adding a 4th casino in Region C

- Would produce additional out-of-state casino recapture as most of RI's casino revenue comes from Bristol and Plymouth counties
- However, overall MA casino patronage is declining and MA residents already feel that gambling is too widely available

RECOMMENDATIONS

2. Reduction needed in casino industry's financial reliance on at-risk and problem gamblers (90% of revenue):

- Automated alerts to people when gambling behavior escalates
- Reward responsible gambling rather than total expenditure
- Restrict ATM access and/or withdrawal amounts
- Mandatory pre-commitment or incentivizing voluntary pre-commitment
- Better promotion of 3rd party initiation of self-exclusion (Section 45 (i) 2)

RECOMMENDATIONS

3. Periodic reassessment of these findings as MA casino impacts will change somewhat with:

- Changing consumer interest in casino gambling
- Increased competition
 - Nash Casino in Nashua, NH in Winter 2025
 - 3 large scale casinos in New York City at some point in future
 - Legalized sports betting
 - Expanded online casino gambling

RECOMMENDATIONS

4. These findings do not apply to legalized sports betting or online gambling

- Economic benefits appear smaller and risk of social harm much higher
- Comparable socioeconomic impact study warranted

The End!