# Alaska Statewide Gaming Market Assessment:

Feasibility and Socio-Economic Impact

Prepared for:

STATE OF ALASKA
DEPARTMENT OF REVENUE

**August 2021**

Prepared by:

The Innovation Group
7852 South Elati St. Suite 103
Littleton, Colorado 80120
www.theinnovationgroup.com

# Alaska Gaming Market Assessment and Socio-Economic Impact Analysis

**Table of Contents**


**EXECUTIVE SUMMARY ..... I**

RESEARCH OBJECTIVES AND CONSIDERATIONS ..... I
CASINO DEMAND AND MARKET ANALYSIS ..... I
*Methodology ..... i*
*Casino Results: Scenarios 1 & 2 ..... vi*
*Casino Results: Scenario 3 (with VGT Competition) ..... viii*
*Casino Results: Scenario 5 (Open Casino and VGT Markets) ..... xi*
VGT, LOTTERY, IGAMING AND SPORTS BETTING ..... XIII
*VGTs ..... xiii*
*Lottery ..... xiv*
*iGaming ..... xiv*
*Sports Betting ..... xvi*
*Seven-Year Forecasts ..... xvi*
SUMMARY ..... XIX
IMPACT ON CHARITABLE GAMING ..... XX
ECONOMIC IMPACT ANALYSIS ..... XX
SOCIAL AND COMMUNITY IMPACT ANALYSIS ..... XXVI

**INTRODUCTION ..... 1**

FORMS OF GAMING ANALYZED ..... 1
RESEARCH OBJECTIVES AND CONSIDERATIONS ..... 2
METHODOLOGICAL OVERVIEW ..... 3
*Gaming Demand and Market Analysis ..... 3*
*Socioeconomic and Tourism Impacts ..... 5*
*Stakeholder Input ..... 5*
*Site Visits ..... 5*

**STAKEHOLDER INPUT SUMMARY ..... 8**

INTERVIEW THEMES ..... 8

**ECONOMIC AND DEMOGRAPHIC ANALYSIS ..... 10**

TOTAL POPULATION ..... 10
GAMER POPULATION ..... 10
2020 POPULATION BY RACE AND ETHNICITY ..... 11
INCOME ..... 11
*National and Regional Trends ..... 11*
*Average Household Income ..... 13*
*Median Income ..... 13*

EMPLOYMENT ..... 14
*Major Employers* ..... *15*
TOURISM ..... 17
*Visitor Spending* ..... *17*
*Country of Origin* ..... *18*
*Full-Year Visitors* ..... *18*
*Fall/Winter Visitors* ..... *19*
*Summer Visitors* ..... *20*
*Ferry* ..... *21*
*Cruise* ..... *22*
*Air Service* ..... *23*
IMPLICATIONS FOR ASIAN TOURISM TO ALASKA ..... 24
*Momentum of Global Tourism* ..... *24*
*Potential of Asian Outbound Tourism* ..... *25*
*Robust Spending Power of Asian Outbound Tourists* ..... *26*
*Alaska's Attraction Factors to Asian Outbound Tourism* ..... *27*
*Fairbanks – A Northern Light* ..... *28*

**UNITED STATES GAMING MARKET OVERVIEW ..... 29**

BRICKS AND MORTAR CASINO GAMING ..... 33
*Commercial Casinos* ..... *33*
*Native American Casinos* ..... *36*
DISTRIBUTED MACHINE GAMING ..... 40
*Illinois* ..... *40*
*Louisiana* ..... *42*
*Montana* ..... *43*
*Oregon* ..... *43*
*Pennsylvania* ..... *44*
*South Dakota* ..... *44*
*West Virginia* ..... *45*
*Wyoming* ..... *46*
ONLINE GAMING ..... 47
*Delaware* ..... *47*
*Michigan* ..... *47*
*New Jersey* ..... *48*
*Pennsylvania* ..... *48*
*West Virginia* ..... *49*
SPORTS BETTING ..... 50
*Arkansas* ..... *50*
*Colorado* ..... *50*
*Delaware* ..... *51*
*Illinois* ..... *51*
*Indiana* ..... *51*
*Iowa* ..... *51*
*Michigan* ..... *51*
*Mississippi* ..... *51*
*Montana* ..... *52*

*Nevada* ..... *52*
*New Hampshire* ..... *52*
*New Jersey* ..... *52*
*New Mexico* ..... *52*
*New York* ..... *52*
*Oregon* ..... *53*
*Pennsylvania* ..... *53*
*Rhode Island* ..... *53*
*Tennessee* ..... *53*
*Virginia* ..... *53*
*Washington D.C.* ..... *54*
*West Virginia* ..... *54*
*States Close to Legal Sports Betting* ..... *54*
LOTTERIES ..... 54
COMPARATIVE PER CAPITA SPENDING ANALYSIS ..... 59
*Commercial Casinos* ..... *59*
*Distributed Gaming* ..... *61*
*Online Gaming* ..... *62*
*Sports Betting* ..... *62*
*Lotteries* ..... *63*
NEW DEVELOPMENTS AND JURISDICTIONS ..... 65
ALASKA CHARITABLE GAMING ..... 66

**GLOBAL GAMING MARKET OVERVIEW ..... 70**

CANADA ..... 70
*Bricks and Mortar Casino Gaming* ..... *71*
*Distributed Machine Gaming* ..... *72*
*Lotteries* ..... *74*
*Comparative Per Capita Spending Analysis* ..... *74*
ASIA ..... 76
*Asian Gaming Market* ..... *76*
EUROPE ..... 84
LATIN AMERICA ..... 90

**CASINO GAMING MARKET ANALYSIS ..... 91**

LOCAL MARKET METHODOLOGY ..... 91
MARKET CARVE-OUT ..... 94
MODEL CALIBRATION ..... 96
GRAVITY MODEL TEST FORECASTS ..... 96
*Test A* ..... *97*
*Test B* ..... *98*
*Test C* ..... *99*
*Test D* ..... *100*
*Test E* ..... *101*
STANDALONE MARKETS LOCAL REVENUE ..... 102
LOCAL MARKET CONCLUSION ..... 103
SEASONAL WORKERS ..... 103

TOURISM ..... 105
SUMMARY ..... 112

**FINAL SCENARIOS ..... 113**

INTRA-STATE VISITATION ..... 113
ANCHORAGE FINANCIAL ANALYSIS ..... 114
*VIP segment ..... 114*
*Five-Year Midpoint Forecast ..... 114*
*Return-on-Investment (ROI) Analysis ..... 114*
FAIRBANKS FINANCIAL ANALYSIS ..... 117
JUNEAU FINANCIAL ANALYSIS ..... 119
GAMING TAX REVENUE SUMMARY ..... 120
VGT IMPACT SCENARIO ..... 121
*Anchorage ..... 121*
*Fairbanks ..... 122*
*Juneau ..... 123*
*Gaming Tax Revenue Summary ..... 125*
OPEN MARKET ANALYSIS (SCENARIO 5) ..... 125

**VGT MARKET ANALYSIS ..... 128**
**LOTTERY MARKET ANALYSIS ..... 130**
**IGAMING ..... 135**

U.S. IGAMING LANDSCAPE ..... 135
*Delaware ..... 136*
*Nevada ..... 137*
*New Jersey ..... 137*
*Pennsylvania ..... 138*
*West Virginia ..... 138*
*Michigan ..... 139*
*States Close to Legal iGaming ..... 139*
METHODOLOGY ..... 140
*Internet and Mobile Device Accessibility ..... 140*
*COVID-19 Impact ..... 142*
*Alaska iGaming GGR Projections ..... 143*

**SPORTS BETTING ..... 146**

REVENUE COMPARABLES ..... 146
MOBILE SPORTSBOOK REVENUE FORECASTS ..... 149

**SUMMARY ..... 151**
**ECONOMIC IMPACT ANALYSIS ..... 154**

SCENARIO ASSESSED ..... 154
ECONOMIC IMPACT ANALYSIS OVERVIEW ..... 154
ECONOMIC IMPACT MODELING ..... 156
*Analysis-by-Parts for Gaming-Related Operating Impacts ..... 156*
*Multipliers ..... 157*
*A Note on Substitution ..... 159*

*Interpreting Results* ..... *159*
ONGOING OPERATIONS ..... 160
*Operating Inputs* ..... *161*
*Annual Economic Impacts from Operations* ..... *163*
*Fiscal Impacts* ..... *163*
CONSTRUCTION ..... 165
*Construction Inputs* ..... *165*
*Economic Impacts from Construction* ..... *166*
*Fiscal Impacts* ..... *167*
ECONOMIC IMPACT ANALYSIS SUMMARY: ALL SCENARIOS ..... 169

**SOCIAL AND COMMUNITY IMPACT ANALYSIS ..... 173**

SECTION ONE: POPULATION AND EMPLOYMENT RELATED IMPACTS ..... 174
*Employment Impact* ..... *174*
*Household and Population Impact* ..... *179*
*School Impact* ..... *180*
*Housing Impact* ..... *181*
*Conclusion* ..... *183*
SECTION TWO: MUNICIPAL SERVICES IMPACT ..... 184
*Police* ..... *184*
*Fire* ..... *184*
*Emergency Medical Services (EMS)* ..... *185*
COMPARATIVE ANALYSIS ..... 186
*Criminal Incident Rates* ..... *186*
*Average Incident Rates* ..... *190*
*Fire Incident Rates* ..... *192*
*Average Fire Incident Rates* ..... *195*
CONCLUSION AND IMPLICATIONS ..... 197
*Fiscal Impacts and Municipal Services* ..... *197*
*Problem Gambling* ..... *197*

**APPENDIX A: PROBLEM GAMBLING MITIGATION ..... 202**

RESPONSIBLE GAMING AND HARM MINIMIZATION ..... 204

**APPENDIX B: CASINOS AND CRIME ..... 214**
**APPENDIX C: IMPACT ON LOCAL BUSINESS ..... 221**
**DISCLAIMER ..... 225**

## List of Tables

Table 1: Market Area Demographics ..... ii
Table 2: Anchorage Midpoint 5-Year Forecast: Scenarios 1 & 2 ..... vi
Table 3: Fairbanks Midpoint 5-Year Forecast: Scenarios 1 & 2 ..... vi
Table 4: Juneau Midpoint 5-Year Forecast: Scenarios 1 & 2 ..... vi
Table 5: Anchorage Development Program and Employment Comparison: Scenarios 1 & 2 ..... vii
Table 6: Fairbanks Development Program and Employment Comparison: Scenarios 1 & 2 ..... vii
Table 7: Juneau Development Program and Employment Comparison: Scenarios 1 & 2 ..... viii
Table 8: Casino Gaming Tax Revenue (MMs) : Scenarios 1 & 2 ..... viii
Table 9: Anchorage Midpoint 5-Year Forecast: Scenario 3 ..... ix
Table 10: Fairbanks Midpoint 5-Year Forecast: Scenario 3 ..... ix
Table 11: Juneau Midpoint 5-Year Forecast: Scenario 3 ..... ix
Table 12: Anchorage Development Program and Employment Comparison: Scenario 3 ..... x
Table 13: Fairbanks Development Program and Employment Comparison: Scenario 3 ..... x
Table 14: Juneau Development Program and Employment Comparison: Scenario 3 ..... xi
Table 15: Casino Gaming Tax Revenue (MMs): VGT Impact Scenario 3 ..... xi
Table 16: Open-Market Gaming Revenue Forecast 2025 (Scenario 5; MMs) ..... xii
Table 17: Casino Scenario 5 Summary ..... xiii
Table 18: VGT Net Gaming Revenue Forecast 2025 (MMs) ..... xiv
Table 19: Per Capita Lottery Penetration Forecast for Alaska 2025 ..... xiv
Table 20: Alaska Lottery Forecast 2025 ..... xiv
Table 21: Year 5 Alaska iGaming Forecast ..... xv
Table 22: Forecast Sports Betting Revenue Per (21+) Adult (Year 5) ..... xvi
Table 23: Year 5 Alaska Sports Betting Forecast ..... xvi
Table 24: Alaska VGT 7-Year Forecast (MMs) ..... xvii
Table 25: Alaska Lottery 7-Year Forecast (MMs) ..... xvii
Table 26: Alaska iGaming 7-Year Revenue Forecast (MMs) ..... xvii
Table 27: Alaska Sports Betting 7-Year Revenue Forecast (MMs) ..... xviii
Table 28: Gaming Tax, Employment and Capital Investment Summary ..... xix
Table 29: Impact on Charitable Gaming from Casino and VGT Development ..... xx
Table 30: Economic Impacts from Gaming Implementation – Ongoing Operations – All Scenarios 2026 ..... xxiii
Table 31: Economic Impacts from Gaming Implementation – Construction – All Scenarios .. xxiv
Table 32: Fiscal Impacts from Gaming Implementation – All Scenarios (MMs) ..... xxv
Table 33: Anchorage, Fairbanks, and Juneau Casinos Impact on Households and Population xxvi
Table 34: Anchorage, Fairbanks, and Juneau Police and Fire/EMS Expense Increase 2026... xxvii
Table 35: Total Population ..... 10
Table 36: Population Over 21 Yrs. ..... 10
Table 37: 2020 Single Population by Single Race Classification or Ethnicity ..... 11
Table 38: Average Annual Household Income ..... 13
Table 39: Median Household Income ..... 13
Table 40: Average Annual Unemployment Statistics ..... 14
Table 41: 25 Largest Employers in Alaska ..... 15
Table 42: Alaska's 2019 Seasonal Workers ..... 16
Table 43: Total Visitor Spending ..... 17

Table 44: Visitor Expenditures in Alaska Per Trip & Per Night ..... 17
Table 45: Total Visitor Spending in Alaska, by Category ($Millions) ..... 17
Table 46: Alaska's Visitors by Country of Origin ..... 18
Table 47: Full Year Alaska Visitor Volumes ..... 19
Table 48: Full Year Alaska Visitor Volumes by Exit Mode ..... 19
Table 49: Full Year Alaska Visitor Percentages by Mode ..... 19
Table 50: Fall/Winter Alaska Visitor Volumes ..... 20
Table 51: Fall/Winter Alaska Visitor Volumes by Exit Mode ..... 20
Table 52: Fall/Winter Alaska Visitor Percentages by Mode ..... 20
Table 53: Summer Alaska Visitor Volumes ..... 21
Table 54: Summer Alaska Visitor Volumes by Exit Mode ..... 21
Table 55: Summer Alaska Visitor Percentages by Mode ..... 21
Table 56: Annual Ferry Traffic ..... 22
Table 57: Alaska Cruise Volumes by Port, 2019 (>10,000 passengers) ..... 22
Table 58: Ted Stevens Anchorage International Airport ..... 23
Table 59: Fairbanks International Airport (FIA) ..... 24
Table 60: US Commericial and Native American Casino Development ..... 31
Table 61: US Other Gaming Availability ..... 32
Table 62: Percent Change and 2019 Gaming Revenue for Commercial States (CYs) ..... 34
Table 63: Bricks-and-Mortar Gaming Revenue Trends Since Reopening (Y-o-Y) ..... 35
Table 64: Average Daily Win (000s) ..... 36
Table 65: Win per Admission ..... 36
Table 66: Tribal Gaming Revenue by NIGC Region (FYs) ..... 37
Table 67: Illinois VGT Historical Performance ..... 40
Table 68: Illinois VGT Penetration of Host Jurisdiction Gamer Pop ..... 41
Table 69: Illinois VGT Penetration: Casino vs. Non-Casino Markets ..... 41
Table 70: VGT Impact on Illinois Casino Slot Revenue (MMs) ..... 42
Table 71: Louisiana Video Poker Trends ..... 43
Table 72: Montana Video Gambling Machines ..... 43
Table 73: Oregon Video Lottery Trends ..... 44
Table 74: South Dakota Video Lottery Trends ..... 45
Table 75: West Virginia Limited Video Lottery ..... 46
Table 76: 2019 Wyoming HHR Adjusted Gross Revenue (MMs) ..... 46
Table 77: US Lottery Availability ..... 55
Table 78: US Lottery Historical Revenue Trends – Draw & Instant (MMs) ..... 56
Table 79: US Lottery Historical Revenue Trends – Draw & Instant (MMs) ..... 57
Table 80: US Lottery Historical Revenue Trends – Online & iLottery (MMs) ..... 58
Table 81: Statewide Penetration Metrics 2019 ..... 60
Table 82: Penetration Metrics 2019 Selected Local Markets ..... 61
Table 83: Penetration Metrics 2019 Casino and Distributed Gaming Combined ..... 61
Table 84: Penetration Metrics 2019 Distributed Electronic Gaming ..... 62
Table 85: iGaming Per Capita Spending (Win per Adult), Annualized ..... 62
Table 86: Brick-and-Mortar + Mobile Only Comparables ..... 63
Table 87: 2019 US Lottery Statewide Penetration Metrics – Draw & Instant ..... 64
Table 88: 2019 US Lottery Statewide Penetration Metrics – Online & iLottery ..... 65
Table 89: Alaska Charitable Gaming 2019 ..... 67

Table 90: Pull-Tab Proceeds 2019 ..... 67
Table 91: Bingo Proceeds 2019 ..... 68
Table 92: Raffle Proceeds 2019 ..... 68
Table 93: Native Alaskan Proceeds 2019 ..... 68
Table 94: Virginia Charitable Gaming Statistics ($000) ..... 69
Table 95: Virginia Electronic Pull Tabs at Social Halls ..... 69
Table 96:Canada Commercial and First Nations Casino Development ..... 70
Table 97:Canada Other Gaming Activity Development ..... 71
Table 98:Canada Casino Gaming Revenue ($US Millions) ..... 71
Table 99: Canada VLT Distribution and Revenue Trends ..... 73
Table 100: Canada Lottery Historical Revenue Trends ..... 74
Table 101: Canada Casino Gaming Penetration Metrics ..... 75
Table 102: Canada Distributed Gaming Penetration Metrics ..... 75
Table 103: Canada Lotteries Penetration Metrics ..... 76
Table 104: Macau Gaming Environment ..... 79
Table 105: Philippines Gaming Revenue ($US Billions) ..... 80
Table 106: South Korea Gaming Revenue ($US Billions) ..... 81
Table 107: Russia Gaming Environment ..... 82
Table 108: Tigre de Cristal Annual Gaming Revenue ($US Millions) ..... 83
Table 109: European Casino Gaming Environment ..... 88
Table 110: Market Area Demographics ..... 94
Table 111: Charitable Gaming AGI 2025 Estimate ..... 96
Table 112: Total Market Gravity Model Forecast 2025: Test A High ..... 97
Table 113: Total Market Gravity Model Forecast 2025: Test A Low ..... 97
Table 114: Gravity Model Revenue Distribution 2025: Test A High ..... 97
Table 115: Gravity Model Revenue Distribution 2025: Test A Low ..... 98
Table 116: Total Market Gravity Model Forecast 2025: Test B High ..... 98
Table 117: Total Market Gravity Model Forecast 2025: Test B Low ..... 98
Table 118: Gravity Model Revenue Distribution 2025: Test B High ..... 99
Table 119: Gravity Model Revenue Distribution 2025: Test B Low ..... 99
Table 120: Total Market Gravity Model Forecast 2025: Test C High ..... 99
Table 121: Total Market Gravity Model Forecast 2025: Test C Low ..... 100
Table 122: Gravity Model Revenue Distribution 2025: Test C High ..... 100
Table 123: Gravity Model Revenue Distribution 2025: Test C Low ..... 100
Table 124: Total Market Gravity Model Forecast 2025: Test D High ..... 101
Table 125: Total Market Gravity Model Forecast 2025: Test D Low ..... 101
Table 126: Anchorage Forecast 2025 ..... 101
Table 127: Total Market Gravity Model Forecast 2025: Test E High ..... 102
Table 128: Total Market Gravity Model Forecast 2025: Test E Low ..... 102
Table 129: Anchorage & Eklutna Forecast 2025 ..... 102
Table 130: Standalone Markets 2025 High ..... 103
Table 131: Standalone Markets 2025 Low ..... 103
Table 132: Alaska Workforce 2019 ..... 104
Table 133: 2025 Seasonal Worker Revenue Core Markets High ..... 104
Table 134: 2025 Seasonal Worker Revenue Core Markets Low ..... 105
Table 135: 2025 Seasonal Worker Revenue Other Markets ..... 105

Table 136: Total 2025 Baseline Tourism High ..... 106
Table 137: Total 2025 Baseline Tourism Low ..... 107
Table 138: Total 2025 Induced Tourism High ..... 108
Table 139: Total 2025 Induced Tourism Low ..... 109
Table 140: Total Tourism GGR 2025 ..... 110
Table 141: Cruise GGR Distribution ..... 110
Table 142: Air and Highway GGR Distribution ..... 111
Table 143: 2025 Gaming Revenue from Tourism Core Markets High ..... 111
Table 144: 2025 Gaming Revenue from Tourism Core Markets Low ..... 111
Table 145: 2025 Tourism Revenue Other Markets ..... 111
Table 146: 2025 Total Gaming Revenue Core Markets High ..... 112
Table 147: 2025 Total Gaming Revenue Core Markets Low ..... 112
Table 148: 2025 Total Revenue Other Markets ..... 112
Table 149: Intra-State Visitation Forecast ..... 113
Table 150: Anchorage VIP Segment 2025 ..... 114
Table 151: Anchorage Midpoint 5-Year Forecast ..... 114
Table 152: Anchorage ROI Results ..... 117
Table 153: Anchorage Development Program and Employment Comparison ..... 117
Table 154: Fairbanks Midpoint 5-Year Forecast ..... 118
Table 155: Fairbanks ROI Results ..... 118
Table 156: Fairbanks Development Program and Employment Comparison ..... 119
Table 157: Juneau Midpoint 5-Year Forecast ..... 119
Table 158: Juneau ROI Results ..... 120
Table 159: Juneau Development Program and Employment Comparison ..... 120
Table 160: Casino Gaming Tax Revenue (MMs) ..... 121
Table 161: Anchorage Midpoint 5-Year Forecast: VGT Impact Scenario ..... 121
Table 162: Anchorage ROI Results: VGT Impact Scenario ..... 122
Table 163: Anchorage Development Program and Employment Comparison: VGT Impact Scenario ..... 122
Table 164: Fairbanks Midpoint 5-Year Forecast: VGT Impact Scenario ..... 123
Table 165: Fairbanks ROI Results: VGT Impact Scenario ..... 123
Table 166: Fairbanks Development Program and Employment Comparison: VGT Impact Scenario ..... 123
Table 167: Juneau Midpoint 5-Year Forecast: VGT Impact Scenario ..... 124
Table 168: Juneau ROI Results: VGT Impact Scenario ..... 124
Table 169: Juneau Development Program and Employment Comparison: VGT Impact Scenario ..... 124
Table 170: Casino Gaming Tax Revenue (MMs): VGT Impact Scenario ..... 125
Table 171: Open-Market Gaming Revenue Forecast 2025 (Scenario 5; MMs) ..... 126
Table 172: Casino Scenario 5 Summary ..... 127
Table 173: VGT Penetration Metrics ..... 128
Table 174: VGT Net Gaming Revenue Forecast 2025 (MMs) ..... 128
Table 175: VGT Tax Revenue Forecast 2025 (MMs) ..... 129
Table 176: Lottery Net Revenue per Capita National Set ..... 130
Table 177: Lottery Penetration in Massachusetts & New England Compared to the Rest of US ..... 131

Table 178: Western States Penetration Compared to Rest of US ..... 131
Table 179: Lottery Net Revenue per Capita in States with VLTs/VGTs ..... 132
Table 180: Per Capita Lottery Penetration Forecast for Alaska 2025 ..... 132
Table 181: Alaska Lottery Forecast 2025 ..... 132
Table 182: Lottery Sales & Expense Detail, Comparative Set ($MMs) ..... 133
Table 183: Lottery NGR Distribution, Comparative Set vs. Rest of US ..... 133
Table 184: Alaska Lottery Government Transfers by Scenario (MMs) ..... 134
Table 185: Comparison of U.S. iGaming Implementation ..... 136
Table 186: Delaware Annual iGaming Revenue ..... 136
Table 187: New Jersey Annual iGaming Revenue ..... 137
Table 188: Pennsylvania Annual iGaming Revenue ..... 138
Table 189: West Virginia Monthly iGaming Revenue (2021) ..... 138
Table 190: Michigan Monthly iGaming Revenue (2021) ..... 139
Table 191: 2019 Computer Ownership and Internet Access – Rural vs. Urban ..... 141
Table 192: 2021 Spend per Adult for West Virginia & Michigan ..... 142
Table 193: Annual iGaming Spend per Adult for Legal U.S. iGaming Markets ..... 143
Table 194: Year 5 Alaska iGaming Forecast ..... 144
Table 195: Alaska iGaming 7-Year Revenue Forecast ..... 144
Table 196: Alaska iGaming 7-Year Gaming Tax Forecast ..... 145
Table 197: Brick-and-Mortar + Mobile Only Comparables ..... 147
Table 198: Forecast Sports Betting Revenue Per (21+) Adult (Year 5) ..... 149
Table 199: Year 5 Alaska Sports Betting Forecast ..... 149
Table 200: Alaska Sports Betting 7-Year Revenue Forecast ..... 149
Table 201: Alaska Sports Betting 7-Year Gaming Tax Forecast ..... 150
Table 202: Gaming Tax, Employment and Capital Investment Summary ..... 151
Table 203: Impact on Charitable Gaming from Casino and VGT Development ..... 153
Table 204: IMPLAN Industry Sector 503 – Alaska State Data ..... 157
Table 205: Output Multipliers for IMPLAN Industry Sector 503 – Alaska State ..... 158
Table 206: Direct Effect Inputs Alaska Statewide – Ongoing Operations ..... 162
Table 207: Alaska Gaming & Casino Resort Operating Impacts ..... 163
Table 208: Direct Local and State Tax Impact: Ongoing Operations ..... 164
Table 209: Indirect and Induced Local and State Tax Impact: Ongoing Operations ..... 164
Table 210: Estimated Construction Cost Inputs ..... 166
Table 211: Casino Construction Impacts ..... 167
Table 212: Direct Local and State Tax Impact from Construction ..... 167
Table 213: Indirect and Induced Local and State Tax Impact from Construction ..... 168
Table 214: Economic Impacts from Gaming Implementation – Ongoing Operations – All Scenarios ..... 170
Table 215: Economic Impacts from Gaming Implementation – Construction – All Scenarios . 171
Table 216: Fiscal Impacts from Gaming Implementation – All Scenarios (MMs) ..... 172
Table 217: Anchorage, AK Average Annual Employment Statistics ..... 174
Table 218: Fairbanks North Star Borough, AK Average Annual Employment Statistics ..... 175
Table 219: Juneau Borough, AK Average Annual Employment Statistics ..... 175
Table 220: Anchorage Commuting Patterns ..... 176
Table 221: Fairbanks North Star Borough Commuting Patterns ..... 176
Table 222: Juneau Borough Commuting Patterns ..... 176

Table 223: Anchorage Casino Project Source of Workforce ..... 177
Table 224: Fairbanks Casino Project Source of Workforce ..... 177
Table 225: Juneau Casino Project Source of Workforce ..... 178
Table 226: Plainridge Casino Source of Workforce ..... 178
Table 227: Rappaport Study Employment Results ..... 179
Table 228: Rappaport Study California County Results for Employment (%) ..... 179
Table 229: Anchorage, Fairbanks, and Juneau Casinos Impact on Households and Population 180
Table 230: Anchorage, Fairbanks, and Juneau Casinos Impact on School Enrollment ..... 180
Table 231: Anchorage Annual School Enrollment ..... 181
Table 232: Fairbanks Annual School Enrollment ..... 181
Table 233: Juneau Annual School Enrollment ..... 181
Table 234: Anchorage Population and Housing Trends ..... 182
Table 235: Fairbanks North Star Population and Housing Trends ..... 182
Table 236: Juneau Borough Population and Housing Trends ..... 182
Table 237: 2019 Occupied Housing Units by Tenure ..... 183
Table 238: SugarHouse Casino Service Calls and Criminal Offenses ..... 187
Table 239: Rivers Casino Pittsburgh Police Service Calls ..... 188
Table 240: Rivers Casino Pennsylvania State Police Service Calls ..... 189
Table 241: Rivers Casino Service Call Rates ..... 189
Table 242: Rivers Casino Des Plaines Police Service Calls ..... 190
Table 243: Des Plaines Service Call Rates ..... 190
Table 244: Average Criminal Incident Rate ..... 191
Table 245: Anchorage, Fairbanks, and Juneau Casinos Police Arrests Estimate ..... 191
Table 246: Anchorage Police Department Offenses Reported 2019 ..... 191
Table 247: Fairbanks Police Department Offenses Reported 2019 ..... 192
Table 248: Juneau Police Department Offenses Reported 2019 ..... 192
Table 249: Philadelphia Fire Department Calls ..... 193
Table 250: Philadelphia Fire Department Call Rate ..... 193
Table 251: Pittsburgh Fire Department Calls ..... 193
Table 252: Pittsburgh Fire Department Call Rate ..... 194
Table 253: Des Plaines Fire Department Calls ..... 194
Table 254: Des Plaines Fire Department Call Rate ..... 194
Table 255: Grand Victoria Elgin Fire Response 2014 ..... 195
Table 256: Grand Victoria Elgin Fire Call Rate ..... 195
Table 257: Average Fire Department Call Rate Estimate ..... 195
Table 258: Anchorage, Fairbanks, and Juneau Casinos Fire/EMS Service Call Estimates ..... 196
Table 259: Anchorage Fire Department Calls 2017-2020(Includes EMS) ..... 196
Table 260: Fairbanks Fire Department Calls 2017-2020 (Includes EMS) ..... 196
Table 261: Anchorage, Fairbanks, and Juneau Police and Fire/EMS Expense Increase 2026 ... 197
Table 262: Total Spend on Problem Gambling Services by State (Fiscal Year 2016) ..... 200
Table 263: Connecticut Prevalence Rates ..... 204
Table 264: Rappaport Study Results ..... 216
Table 265: Rappaport Study California County Results for Crime ..... 217
Table 266: City of San Diego, CA Transient Occupancy Tax Collections (MMs) ..... 221

## List of Figures

Figure 1: Road-Connected Market Areas ..... iii
Figure 2: National Real Growth in GDP and HH Income (Indexed to 1989) ..... 12
Figure 3: Real Median Income Comparison (1990-2019) - 2019 Dollars ..... 12
Figure 4: Chinese Outbound Tourism (in thousands) ..... 25
Figure 5: Spending of Chinese Outbound Tourists ..... 26
Figure 6: Native Entities in Alaska ..... 39
Figure 7: Delaware Annual iGaming Revenue ..... 47
Figure 8: New Jersey Annual iGaming Revenue ..... 48
Figure 9: Pennsylvania Monthly iGaming Revenue ..... 49
Figure 10: West Virginia Monthly iGaming Revenue ..... 49
Figure 11: Asia Gaming Market Size ($US Billions)* ..... 77
Figure 12: 2019 Asia Gaming Market Size ($US Billions)* ..... 78
Figure 13: Gaming Tax Rates in Major Asian Gaming Markets ..... 78
Figure 14: MBS & RWS Revenue Trends 2014-2020 ($US Billions) ..... 81
Figure 15: 2019 European Gaming Market Revenue Share* ..... 85
Figure 16: 2019 Online Share of National Gaming Markets ..... 86
Figure 17: European Lottery Annual GGR ($US Billions) ..... 89
Figure 18: Road-Connected Market Areas ..... 95
Figure 19: IMPLAN Modeling Components ..... 158
Figure 20: Economic Impact Distribution Illustration ..... 160
Figure 21: 2016 Per Capita Allocation for Problem Gambling Services by U.S. State ..... 199
Figure 22: Relationship between a State's Estimated Number of Adult Problem Gamblers and Problem Gambling Service Funding ..... 201

# EXECUTIVE SUMMARY

The Innovation Group Team has been retained by the Alaska Department of Revenue ("The Department") to provide research and guidance regarding all aspects of market potential, financial viability, impacts, implementation and legislation regarding expansion of legal gaming in Alaska. This report addresses the market potential and socio-economic impacts of a comprehensive variety of gaming options, maximizing investment driven economic and tourism impacts, job growth and fiscal benefits to the State. In addition, we were required to engage substantively with a wide array of stakeholders who may be affected positively or negatively by gaming and provide detailed guidance in the preparation and draft legislation supporting the policy objectives resulting from our work.

The Project Team is comprised of The Innovation Group, Regulatory Management Counselors and Sedor, Wendlandt, Evans & Filippi. The team was strategically assembled to offer in-depth economic, social, and legislative research deliverables with the rigor required to make responsible decisions regarding gaming. We have provided similar support to U.S. state and national governments, as covered within our proposal, and offer a balance of gaming industry and local expertise. The team also has a unique appreciation for the nuances of gaming implementation, including complex relationships between governance, capital risk, taxation, and social and economic impacts.

## *Research Objectives and Considerations*

The Innovation Group Team analysis is based on our understand of the expectations of The Department of Revenue: Research and guidance regarding all aspects of the development of legislation and implementation with respect to expansion of legal gaming in the State of Alaska. And specifically, to study the expansion of legal gaming in a way that will create a gaming experience that is unique to Alaska, will grow the Alaskan economy, will increase tourism, enhance the tourism experience, and create new jobs. In addition, the Department required that we lead substantive engagement with a wide array of stakeholders and support the drafting of legislation that succeeds in implementing the policy objectives of the jurisdiction, with adequate concern for the social impacts of expanded gaming.

## *Casino Demand and Market Analysis*

### Methodology

At the core of The Innovation Group's market analysis is a statewide gravity model, employed to estimate topline local casino visitation and revenue for multiple potential casino locations, and the impact on current charitable gaming revenue. The model also contemplates potential tourist revenue, both from existing visitors and new or induced visitors seeking a casino gaming experience. Multiple casino distribution scenarios are then developed to represent different market and casino sizing outcomes. For example, in a given market area, multiple casinos can be

introduced to maximize customer access, or a single casino can be located to consolidate revenue and investment and potentially offer a more compelling product to tourists.

Building upon the initial casino demand scenarios, The Innovation Group forecasts parallel revenue potential for alternative gaming offerings. Market penetration for widely distributed video gaming terminals (VGTs), charitable gaming, online gaming and sports betting, and lottery are based on market comparables and capture rates. The resulting demand and revenue forecasts, and appropriate supply levels to accommodate these forms of gaming are then introduced within the working casino scenarios and adjusted to account for any cross-cannibalization between gaming types.

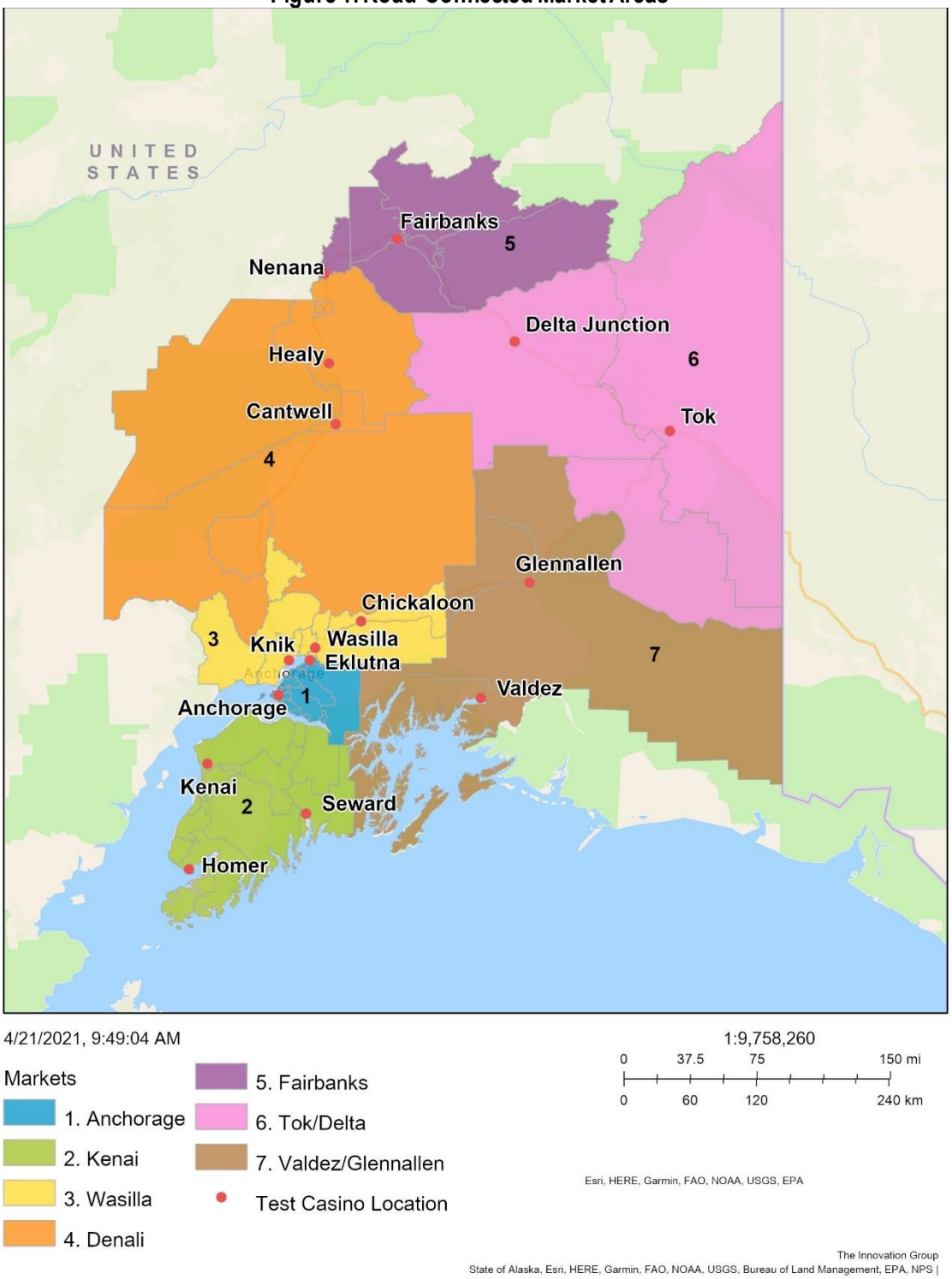
For assessing casino demand and revenue, we employed a gravity model for the road-connected region of Alaska, delineated generally along the Fairbanks—Northway—Anchorage/Kenai triangle and including spurs to Homer, Seward and Valdez. The following map and table show the market areas and their respective adult population (21 and over) and average household income (HHI).

**Table 1: Market Area Demographics**

| | Adult Pop 2020 | Adult Pop 2025 | CAGR 2020-2025 | Average HHI 2020 | Average HHI 2025 | CAGR 2020-2025 |
|---|---|---|---|---|---|---|
| 1. Anchorage | 218,137 | 218,631 | 0.0% | $109,854 | $120,138 | 1.8% |
| 2. Kenai | 45,716 | 47,203 | 0.6% | $87,947 | $95,542 | 1.7% |
| 3. Wasilla | 80,069 | 86,904 | 1.7% | $92,484 | $100,716 | 1.7% |
| 4. Denali | 2,417 | 2,520 | 0.8% | $78,427 | $83,946 | 1.4% |
| 5. Fairbanks | 74,799 | 74,613 | 0.0% | $97,344 | $106,060 | 1.7% |
| 6. Tok/Delta | 5,199 | 4,952 | -1.0% | $83,411 | $89,688 | 1.5% |
| 7. Valdez/Glennallen | 4,897 | 4,622 | -1.1% | $88,764 | $97,146 | 1.8% |
| **Average/Total** | **431,234** | **439,445** | **0.4%** | **$101,402** | **$110,472** | **1.7%** |
| State | 548,043 | 549,010 | 0.04% | $97,941 | $106,368 | 1.7% |
| *National* | *246,683,741* | *249,854,972* | *0.26%* | *$90,054* | *$99,510* | *2.0%* |

Source: ArcGIS/Esri; The Innovation Group; CAGR=Compound Annual Growth Rate

**Figure 1: Road-Connected Market Areas**




Since casino development in the road-connected would potentially overlap—for example, a casino in Wasilla would impact the revenue of a casino in Anchorage—we performed a series of five test

scenarios in the gravity modeling based on different development assumptions. These tests were designed to ground our understanding of which markets could support a casino at various capital levels and the relative effects each market's casino would have on neighboring markets. The tests were:

- Test A: First, we assessed the revenue potential for 16 locations in the gravity model area, including the major population centers as well as Native Alaskan villages and smaller towns such as Tok. We made no a priori assumptions on the potential for each market, letting the population and drivetime factors identify the local market potential.
- Test B: We then modeled a distribution in which casino development was limited to Native Alaskan villages.
- Test C: The assumption in this scenario is that casino development would be limited to the major population centers of Anchorage, Wasilla/Mat-Su Valley, Fairbanks and Kenai.
- Test D: This was designed to measure the revenue and capital development potential if casino resort investment was concentrated in Anchorage.
- Test E: This was designed to estimate the impact on Anchorage in the event a casino in Eklutna would also be developed.

For other population centers, the local market potential is based on penetration metrics of the resident gaming age population. The market potential from seasonal workers and tourists is addressed separately. Given the vastness of Alaska and the disparate destinations for tourism, estimating the gaming capture for this segment is more complicated than for a single-location market like a Singapore, New Orleans, or Las Vegas. Cruise ship passengers, which account for roughly half of the visitor volume, may only touch land at the major ports of call in the Southeast or Southcentral coast. Air travelers tend to concentrate on Fairbanks, Denali, Anchorage and the Kenai Peninsula and not visit the Southeast ports. As a general premise, the more widely casino gaming is available at tourist destinations, the larger the potential capture by the state. However, sustainable tourism capture and inducement requires a compelling gaming product, and the impact of market dilution on feasibility is a consideration.

Penetration of tourist visitation is calculated by mode of travel: air, cruise and highway. Gaming participation rates are applied to estimates of tourist visitation by country of origin. Cruise ship passengers are estimated to have fewer opportunities to visit a casino since they are housed on-board and given that there are other activities competing for the passengers' limited time on shore. These mode of travel projections are divided into two categories: capture of existing tourists (Baseline) and new visitors induced to travel to Alaska by the presence of a casino resort (Induced). For Anchorage, an additional Asian VIP segment is assessed based on the premise of a larger-scale casino resort being developed.

After analyzing the results of the analyses, we concluded with a development program consisting of casinos in Anchorage, Fairbanks and Juneau, since to maximize the capital investment potential into a single stand-out resort property that would induce new tourist visitation, it may be desirable to concentrate development in Anchorage, without casino competition in Kenai or Wasilla. Fairbanks and Juneau also show potential for casino development without impinging upon the Anchorage market.

In the Final Scenario Set we examine the gaming and tax revenue potential, hotel and amenity development, and employment estimates for Anchorage, Fairbanks and Juneau, differentiating between various tax rate assumptions and distribution assumptions for Video Gaming Terminals (VGT's). VGTs distributed within local casino markets have been shown to impact slot machine revenue at casinos. Therefore, the Final Scenarios consist of the following combinations of casino and VGT development:

- Scenario 1, "Casinos Only": No VGT development in the state, casinos in Anchorage, Fairbanks and Juneau.
- Scenario 2, "Casinos and Non-Competing VGTs": Casinos in Anchorage, Fairbanks and Juneau; VGTs elsewhere. The casino revenue forecast is the same for Scenarios 1 and 2. VGT revenue is constrained by being prohibited in the three largest cities in the state.
- Scenario 3, "Casinos and Competing VGTs": Casinos in Anchorage, Fairbanks and Juneau; VGTs permitted throughout the state. Casino revenue is lower but VGT revenue higher than Scenario 2.
- Scenario 4, "VGTs Only": VGTs permitted throughout the state but no casinos. The lack of casino competition results in higher VGT revenue.
- Scenario 5, "Open Market": Unlimited casino licenses and VGTs throughout the state. The dispersal of capital across smaller facilities diminishes the prospect of a stand-out resort being able to induce tourism and VIP play, leading to less table and amenity development, resulting in slightly fewer jobs relative to Scenario 3.

In the financial analysis, we conduct a sensitivity analysis comparing gaming tax rates of 10%, 15%, 20% and 25%. Many large-market states have higher gaming tax rates, but given the smaller market population of Alaska and the desire to create casinos capable of enhancing the tourist product of the state, 20%-25% would represent a high end rate. Mississippi, for example, has a combined state-and-local tax of 12%, but it is an open-market state where the number of licenses is not restricted, which leads to greater competition and tighter operating margins. As discussed below, a 20% rate would have an impact on the level of amenity development that would be viable at a rate of return attractive to investors and 25% would put some gaming revenue at risk.

The financial analysis included operating proforma modeling and construction costs estimates and concluded with a Return of Investment (ROI) analysis. Cash-on-cash return is commonly used as a basis for determining the return rate of a real estate investment or transaction. This calculation determines the cash income on the cash invested. The Innovation Group calculated the cash-on-cash return rate for the project by utilizing the capital outlay as the denominator, and a numerator taken from Year 5 unlevered cash flow.

Cash-on-cash expectations can vary by company, and in the gaming industry they can fluctuate with economic conditions and investment returns available elsewhere. From the mid-1990s but prior to the Great Recession, when there was dramatic growth in the gaming industry, investor expectations ranged from 20 to more than 25 percent. In the immediate aftermath of the recession, expectations tempered, and returns dropped to the 10 to 15 percent range as gaming revenue in established jurisdictions remained relatively flat into 2014. As normative growth has resumed in the industry, return expectations have started to rise again, into the 15 to 20 percent range.

For the sensitivity analysis, we maximized capital investment while maintaining a 15% return floor. It should be noted a developer would not necessarily invest the extra capital in the low tax scenario, only that the level of investment would be viable.

## Casino Results: Scenarios 1 & 2

The following tables summarize the five-year forecasts for Net Gaming Revenue (NGR, or net of free play credits) in Scenarios 1 and 2 (no local VGT competition). Newly opened casino markets typically experience substantial growth in the second and third year of operations as marketing strategies are implemented and player databases are developed. A ramp up of 6% in year two 3% in year three is projected followed by ongoing normative growth of 2.5%.

**Table 2: Anchorage Midpoint 5-Year Forecast: Scenarios 1 & 2**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $116,809,679 | $123,818,260 | $127,532,808 | $130,721,128 | $133,989,156 |
| Mass Market Table NGR | $20,613,473 | $21,850,281 | $22,505,790 | $23,068,434 | $23,645,145 |
| VIP Table NGR | $36,950,689 | $39,167,731 | $40,342,763 | $41,351,332 | $42,385,115 |
| Total NGR | $174,373,841 | $184,836,272 | $190,381,360 | $195,140,894 | $200,019,416 |
| Gaming Visits | 1,513,025 | 1,543,285 | 1,558,718 | 1,566,512 | 1,574,344 |
| # of Slot Machines | 1,300 | 1,300 | 1,300 | 1,300 | 1,300 |
| # of Table Games | 39 | 39 | 39 | 39 | 39 |

Source: The Innovation Group

**Table 3: Fairbanks Midpoint 5-Year Forecast: Scenarios 1 & 2**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $31,699,880 | $33,601,872 | $34,609,929 | $35,475,177 | $36,362,056 |
| Table NGR | $4,322,711 | $4,582,074 | $4,719,536 | $4,837,524 | $4,958,462 |
| Total NGR | $36,022,591 | $38,183,946 | $39,329,464 | $40,312,701 | $41,320,519 |
| Gaming Visits | 452,244 | 461,289 | 465,902 | 468,232 | 470,573 |
| # of Slot Machines | 400 | 400 | 400 | 400 | 400 |
| # of Table Games | 8 | 8 | 8 | 8 | 8 |

Source: The Innovation Group

**Table 4: Juneau Midpoint 5-Year Forecast: Scenarios 1 & 2**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $18,516,687 | $19,627,688 | $20,216,519 | $20,721,932 | $21,239,980 |
| Table NGR | $3,267,651 | $3,463,710 | $3,567,621 | $3,656,811 | $3,748,232 |
| Total NGR | $21,784,337 | $23,091,398 | $23,784,140 | $24,378,743 | $24,988,212 |
| Gaming Visits | 264,232 | 269,517 | 272,212 | 273,573 | 274,941 |
| # of Slot Machines | 200 | 200 | 200 | 200 | 200 |
| # of Table Games | 6 | 6 | 6 | 6 | 6 |

Source: The Innovation Group

The following tables show the capital investment and development assumptions viable at the alternative gaming tax rates, along with staffing and employment compensation estimates. The table also shows Total Revenue (NGR plus non-gaming revenue), and Gaming Taxes.

**Table 5: Anchorage Development Program and Employment Comparison: Scenarios 1 & 2**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Gaming Tax Results*** | | | | |
| Total Revenue | $225,087,780 | $219,698,183 | $214,923,141 | $203,234,498 |
| Gaming Tax | $18,483,627 | $27,725,441 | $36,967,254 | $45,012,096 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 1,542 | 1,542 | 1,542 | 1,542 |
| Hotel Rooms | 500 | 410 | 310 | 200 |
| Entertainment/Meeting Venue Seats | 1,500 | 1,500 | 1,300 | 500 |
| F&B Seats | 690 | 610 | 560 | 430 |
| Employment | 1,226 | 1,155 | 1,093 | 996 |
| Employee Compensation | $59,470,661 | $57,809,445 | $56,128,547 | $53,665,747 |
| Capital Investment* | $373,327,923 | $331,398,048 | $284,378,673 | $217,951,923 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

At a 25% tax rate, hotel development in Fairbanks would be put at risk.

**Table 6: Fairbanks Development Program and Employment Comparison: Scenarios 1 & 2**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Gaming Tax Results*** | | | | |
| Total Revenue | $47,219,808 | $45,820,307 | $44,494,867 | $40,207,353 |
| Gaming Tax | $3,818,395 | $5,727,592 | $7,636,789 | $9,110,724 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 448 | 448 | 448 | 448 |
| Hotel Rooms | 100 | 65 | 40 | 0 |
| Entertainment/Meeting Venue Seats | 200 | 200 | 100 | 100 |
| F&B Seats | 150 | 150 | 130 | 100 |
| Employment | 294 | 281 | 265 | 239 |
| Employee Compensation | $16,827,609 | $16,604,127 | $15,819,789 | $15,377,549 |
| Capital Investment* | $62,701,080 | $53,601,080 | $44,397,080 | $32,086,080 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

A small hotel would be viable in Juneau in the three lower tax rates although it is questionable whether one as small as 20-25 rooms would be realistically developed.

**Table 7: Juneau Development Program and Employment Comparison: Scenarios 1 & 2**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Gaming Tax Results*** | | | | |
| Total Revenue | $27,843,128 | $27,043,413 | $26,283,690 | $24,315,275 |
| Gaming Tax | $2,309,140 | $3,463,710 | $4,618,280 | $5,555,218 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 236 | 236 | 236 | 230 |
| Hotel Rooms | 45 | 25 | 20 | 0 |
| Entertainment/Meeting Venue Seats | 0 | 0 | 0 | 0 |
| F&B Seats | 125 | 125 | 82 | 70 |
| Employment | 197 | 190 | 171 | 152 |
| Employee Compensation | $11,099,312 | $11,099,312 | $10,629,714 | $10,027,443 |
| Capital Investment* | $37,088,068 | $31,238,068 | $26,694,080 | $19,618,213 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

The following table shows gaming taxes from the three casinos in the midpoint forecasts. At a 25% tax, amenity development sufficient to accommodate projected gaming demand is estimated to be put at risk, thereby lowering the gaming revenue projection.

**Table 8: Casino Gaming Tax Revenue (MMs): Scenarios 1 & 2**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| **Net Gaming Revenue at 10%-20% Tax** | | | | | |
| Anchorage | $174.4 | $184.8 | $190.4 | $195.1 | $200.0 |
| Fairbanks | $36.0 | $38.2 | $39.3 | $40.3 | $41.3 |
| Juneau | $21.8 | $23.1 | $23.8 | $24.4 | $25.0 |
| Total | $232.2 | $246.1 | $253.5 | $259.8 | $266.3 |
| | | | | | |
| **Net Gaming Revenue at 25% Tax** | | | | | |
| Anchorage | $169.9 | $180.0 | $185.4 | $190.1 | $194.8 |
| Fairbanks | $34.4 | $36.4 | $37.5 | $38.5 | $39.4 |
| Juneau | $21.0 | $22.2 | $22.9 | $23.5 | $24.0 |
| Total | $225.2 | $238.7 | $245.9 | $252.0 | $258.3 |
| | | | | | |
| **Gaming Tax** | | | | | |
| 10% | $23.2 | $24.6 | $25.3 | $26.0 | $26.6 |
| 15% | $34.8 | $36.9 | $38.0 | $39.0 | $39.9 |
| 20% | $46.4 | $49.2 | $50.7 | $52.0 | $53.3 |
| 25% | $56.3 | $59.7 | $61.5 | $63.0 | $64.6 |

Source: The Innovation Group

## Casino Results: Scenario 3 (with VGT Competition)

The following tables summarize the five-year forecasts for Net Gaming Revenue (NGR, or net of free play credits) in Scenario 3 (with local VGT competition). In this scenario, slot revenue at the casinos is forecast to decrease by 20%.

**Table 9: Anchorage Midpoint 5-Year Forecast: Scenario 3**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $93,447,743 | $99,054,608 | $102,026,246 | $104,576,902 | $107,191,325 |
| Mass Market Table NGR | $20,613,473 | $21,850,281 | $22,505,790 | $23,068,434 | $23,645,145 |
| VIP Table NGR | $36,950,689 | $39,167,731 | $40,342,763 | $41,351,332 | $42,385,115 |
| Total NGR | $151,011,905 | $160,072,620 | $164,874,798 | $168,996,668 | $173,221,585 |
| Gaming Visits | 1,037,715 | 1,058,469 | 1,069,054 | 1,074,399 | 1,079,771 |
| # of Slot Machines | 1,105 | 1,105 | 1,105 | 1,105 | 1,105 |
| # of Table Games | 39 | 39 | 39 | 39 | 39 |

Source: The Innovation Group

**Table 10: Fairbanks Midpoint 5-Year Forecast: Scenario 3**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $25,359,904 | $26,881,498 | $27,687,943 | $28,380,142 | $29,089,645 |
| Table NGR | $4,322,711 | $4,582,074 | $4,719,536 | $4,837,524 | $4,958,462 |
| Total NGR | $29,682,615 | $31,463,572 | $32,407,479 | $33,217,666 | $34,048,107 |
| Gaming Visits | 366,532 | 373,863 | 377,601 | 379,489 | 381,387 |
| # of Slot Machines | 320 | 320 | 320 | 320 | 320 |
| # of Table Games | 8 | 8 | 8 | 8 | 8 |

Source: The Innovation Group

**Table 11: Juneau Midpoint 5-Year Forecast: Scenario 3**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $14,813,349 | $15,702,150 | $16,173,215 | $16,577,545 | $16,991,984 |
| Table NGR | $3,267,651 | $3,463,710 | $3,567,621 | $3,656,811 | $3,748,232 |
| Total NGR | $18,081,000 | $19,165,860 | $19,740,836 | $20,234,357 | $20,740,216 |
| Gaming Visits | 204,056 | 216,300 | 222,789 | 228,359 | 234,067 |
| # of Slot Machines | 160 | 160 | 160 | 160 | 160 |
| # of Table Games | 6 | 6 | 6 | 6 | 6 |

Source: The Innovation Group

The following tables show the capital investment and development assumptions viable at the alternative gaming tax rates, along with staffing and employment compensation estimates. The table also shows Total Revenue (NGR plus non-gaming revenue), and Gaming Taxes.

**Table 12: Anchorage Development Program and Employment Comparison: Scenario 3**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Gaming Tax Results*** | | | | |
| Total Revenue | $190,587,655 | $186,589,080 | $181,788,649 | $168,895,565 |
| Gaming Tax | $16,007,262 | $24,010,893 | $32,014,524 | $38,121,499 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 1,347 | 1,347 | 1,347 | 1,317 |
| Hotel Rooms | 400 | 300 | 220 | 100 |
| Entertainment/Meeting Venue Seats | 1,000 | 1,000 | 800 | 300 |
| F&B Seats | 450 | 450 | 400 | 400 |
| Employment | 1,055 | 1,013 | 952 | 853 |
| Employee Compensation | $53,953,288 | $53,208,348 | $51,430,523 | $47,405,510 |
| Capital Investment* | $295,413,479 | $255,194,729 | $216,219,104 | $158,083,266 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

With competition from local VGTs, hotel development in Fairbanks would be at risk except with a gaming tax of 10%.

**Table 13: Fairbanks Development Program and Employment Comparison: Scenario 3**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Gaming Tax Results*** | | | | |
| Total Revenue | $37,735,275 | $36,135,845 | $35,435,722 | $33,111,186 |
| Gaming Tax | $3,146,357 | $4,719,536 | $6,292,714 | $7,430,630 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 368 | 368 | 368 | 320 |
| Hotel Rooms | 40 | 0 | 0 | 0 |
| Entertainment/Meeting Venue Seats | 200 | 200 | 0 | 0 |
| F&B Seats | 150 | 150 | 120 | 100 |
| Employment | 255 | 241 | 230 | 197 |
| Employee Compensation | $15,185,486 | $15,185,486 | $14,858,531 | $12,974,376 |
| Capital Investment* | $49,029,815 | $37,329,815 | $31,962,440 | $27,515,600 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

A small hotel would be viable in Juneau in the three lower tax rates although it is questionable whether one as small as 15-20 rooms would be realistically developed.

**Table 14: Juneau Development Program and Employment Comparison: Scenario 3**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Gaming Tax Results*** | | | | |
| Total Revenue | $23,137,931 | $22,338,216 | $21,971,927 | $20,195,537 |
| Gaming Tax | $1,916,586 | $2,874,879 | $3,833,172 | $4,573,834 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 196 | 196 | 196 | 180 |
| Hotel Rooms | 40 | 20 | 15 | 0 |
| Entertainment/Meeting Venue Seats | 0 | 0 | 0 | 0 |
| F&B Seats | 100 | 100 | 82 | 70 |
| Employment | 166 | 159 | 151 | 132 |
| Employee Compensation | $9,184,385 | $9,184,385 | $9,019,771 | $8,325,070 |
| Capital Investment* | $31,279,555 | $25,429,555 | $22,677,130 | $16,425,150 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

The following table shows gaming taxes from the three casinos in the midpoint forecasts with local VGT competition. At a 25% tax, amenity development sufficient to accommodate projected gaming demand is estimated to be put at risk, thereby lowering the gaming revenue projection.

**Table 15: Casino Gaming Tax Revenue (MMs): VGT Impact Scenario 3**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| **Net Gaming Revenue at 10%-20% Tax** | | | | | |
| Anchorage | $151.0 | $160.1 | $164.9 | $169.0 | $173.2 |
| Fairbanks | $29.7 | $31.5 | $32.4 | $33.2 | $34.0 |
| Juneau | $18.1 | $19.2 | $19.7 | $20.2 | $20.7 |
| Total | $198.8 | $210.7 | $217.0 | $222.4 | $228.0 |
| | | | | | |
| **Net Gaming Revenue at 25% Tax** | | | | | |
| Anchorage | $143.9 | $152.5 | $157.1 | $161.0 | $165.0 |
| Fairbanks | $28.0 | $29.7 | $30.6 | $31.4 | $32.2 |
| Juneau | $17.3 | $18.3 | $18.8 | $19.3 | $19.8 |
| Total | $189.2 | $200.5 | $206.5 | $211.7 | $217.0 |
| | | | | | |
| **Gaming Tax** | | | | | |
| 10% | $19.9 | $21.1 | $21.7 | $22.2 | $22.8 |
| 15% | $29.8 | $31.6 | $32.6 | $33.4 | $34.2 |
| 20% | $39.8 | $42.1 | $43.4 | $44.5 | $45.6 |
| 25% | $47.3 | $50.1 | $51.6 | $52.9 | $54.2 |

Source: The Innovation Group

## Casino Results: Scenario 5 (Open Casino and VGT Markets)

The Innovation Group was requested to assess an open-market scenario, in which neither casino licenses nor VGTs would be restricted in number or location. Currently, Nevada is the only fully open-market casino state in the United States. Mississippi and New Jersey are partially open

markets, in that there is no limit on the number of commercial casino licenses available, but casinos are restricted to certain geographic zones.

For this, Scenario 5, we utilized the gravity model to forecast net gaming revenue for the Core Markets of Anchorage, Wasilla/Mat-Su Valley, Kenai and Fairbanks (similar to gravity model Test C) and assumed casino development in other relatively larger markets. Seward and Denali were included on the strength of tourism. Markets smaller than Bethel are not likely candidates for full casino development, and therefore development in the remainder of the state was assumed using VGT metrics. The following table shows the results for the net gaming revenue forecast.

**Table 16: Open-Market Gaming Revenue Forecast 2025 (Scenario 5; MMs)**

| | High | Low |
|---|---|---|
| **Core Markets** | **$176.3** | **$142.3** |
| | | |
| ***Other Markets*** | ***$50.0*** | ***$43.6*** |
| Homer | $7.1 | $5.9 |
| Seward | $6.7 | $5.6 |
| Healy (Denali) | $4.5 | $3.7 |
| Juneau | $15.4 | $13.8 |
| Ketchikan | $9.4 | $8.1 |
| Kodiak | $3.7 | $3.4 |
| Bethel | $3.2 | $3.0 |
| | | |
| **Casino Total** | **$226.3** | **$185.9** |
| | | |
| **VGTs Additional** | **$141.3** | **$125.6** |
| | | |
| **Total** | **$367.7** | **$311.5** |

Source: The Innovation Group.

With unlimited competition, the prospect of a stand-out casino resort in Anchorage and the inducement of Asian VIP are diminished, leading to less table and amenity development, resulting in slightly fewer jobs relative to Scenario 3 despite the labor inefficiencies of a greater dispersal of casinos. Nevada was able to develop as a destination market because for decades it was the only legal gambling market in the country and it has convenient access to California, by far the highest populated state in the country. Similarly, Atlantic City developed as the only legal casino jurisdiction east of the Mississippi with convenient access to major population centers such as Philadelphia, New York, and northern New Jersey. Mississippi has two major destination zones, one on the Gulf Coast and the other, Tunica, in the northwest corner of the state near Memphis, Tennessee. Tunica has experienced declining revenue and the closure of some of its largest casinos as more casino alternatives became available in the region, so there are limits to how much economic development an open casino market can generate.

Alaska would have neither of these advantages—neither lack of competition nor access to drive-in feeder markets. It should also be noted that these three open-market states have very low gaming tax rates. Mississippi has the highest, at 12% (8% state and 4% local). Nevada levies a state tax of 6.75% on casinos with gaming revenue exceeding $134,000 monthly, less on smaller casinos. Land-based commercial casino gaming revenue in Atlantic City is taxed at an effective rate of 9.25%.

The following table shows the results of the Scenario 5 analysis for capital investment, job creation, and gaming taxes.

**Table 17: Casino Scenario 5 Summary**

| Casino Tax Rate | NGR | Non-gaming Revenue | Total Revenue | Capital | Ongoing Casino Jobs | Casino Gaming Tax | VGT Tax | Lottery Transfers | SB & iGaming Tax | Total Tax | Total Jobs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10% | $226.3 | $40.7 | $267.1 | $467.8 | 1,469 | $22.6 | $56.5 | $43.2 | $24.7 | $147.1 | 1,819 |
| 15% | $219.6 | $35.1 | $254.7 | $383.0 | 1,401 | $32.9 | $56.5 | $43.2 | $24.7 | $157.4 | 1,751 |
| 20% | $206.4 | $24.8 | $231.1 | $284.3 | 1,271 | $41.3 | $56.5 | $43.2 | $24.7 | $165.7 | 1,621 |
| 25% | $185.9 | $18.6 | $204.5 | $207.7 | 1,125 | $46.5 | $56.5 | $43.2 | $24.7 | $170.9 | 1,475 |

Source: The Innovation Group.

## *VGT, Lottery, iGaming and Sports Betting*

While it is expected that the first full year of operation of casinos would not realistically commence sooner than 2025, other forms of gaming—those not requiring significant construction—could feasibly be in operation by 2023. For these forms we offer seven-year forecasts. Based on historical data in other markets, it is evident that distributed Video Gaming Terminals (VGTs) and Lotteries have crossover with other forms of gaming, and therefore separate projections were made depending upon the competitive assumptions in Scenarios 1-5 as discussed above. However, we see iGaming and Sports Betting as discrete forms and thus we do not forecast alternative revenue forecasts depending upon the scenario assumptions.

### VGTs

Distributed Video Gaming Terminal (VGT) revenue estimates were performed for four of the five final casino scenarios, presented here in descending order according to the level of VGT revenue potential:

- Scenario 4: VGTs statewide in the absence of casino development. This would have the largest distribution and revenue potential of VGTs.
- Scenario 3: VGTs share markets with the three casinos. The VGT revenue potential in the three casino markets would be lower as a result of crossover between casino slot play and VGT play.
- Scenario 5: VGTs share markets with casinos in markets throughout the state, leading to lower VGT revenue and win per unit (WPU).
- Scenario 2: VGTs excluded from Anchorage, Fairbanks and Juneau.

The following table shows the results of the VGT forecasts for the three scenarios.

**Table 18: VGT Net Gaming Revenue Forecast 2025 (MMs)**

| | Units | NGR High | NGR Low | NGR Mid | *WPU Mid* |
|---|---|---|---|---|---|
| Scenario 4 | 4,165 | $220.7 | $196.1 | $208.4 | *$137.09* |
| Scenario 3 | 3,595 | $174.6 | $155.2 | $164.9 | *$125.66* |
| Scenario 5 | 3,595 | $141.3 | $125.6 | $133.5 | *$101.73* |
| Scenario 2 | 2,430 | $113.8 | $101.1 | $107.5 | *$121.18* |

Source: The Innovation Group

## Lottery

Based on per-capita spending rates in comparable states, we forecast different lottery penetration rates for Alaska depending upon the level of competition with casinos and VGTs.

**Table 19: Per Capita Lottery Penetration Forecast for Alaska 2025**

| | 2025 No Gaming | Scenario 1 | Scenario 2 | Scenarios 3 & 5 | Scenario 4 |
|---|---|---|---|---|---|
| Draw NGR | $50 | $48 | $47 | $45 | $46 |
| Instant NGR | $175 | $166 | $116 | $85 | $89 |

Source: The Innovation Group.

The following table shows the stabilized forecast for net lottery revenue (sales minus prizes) as well as government transfers (net revenue minus retailer commissions and administrative and operational expenses). A government transfer rate of 56% has been estimated based on a comparable set of smaller states as shown in Table 182 and Table 183. "Government transfer" is comparable to the term "gaming tax" used in the casino sections.

**Table 20: Alaska Lottery Forecast 2025**

| Lottery | 2025 No Casino or VGTs | Scenario 1 | Scenario 2 | Scenarios 3 & 5 | Scenario 4 |
|---|---|---|---|---|---|
| Draw NGR | $29.6 | $28.2 | $27.7 | $26.7 | $27.3 |
| Instant NGR | $103.7 | $98.5 | $68.9 | $50.4 | $52.9 |
| Total NGR | $133.4 | $126.7 | $96.7 | $77.1 | $80.2 |
| **Government Transfer** | **$74.7** | **$71.0** | **$54.1** | **$43.2** | **$44.9** |

Source: The Innovation Group.

## iGaming

For our downside forecast, we look to 2021 year-to-date in West Virginia, at $33 per capita spend. This is around one quarter of the Michigan 2021 year-to-date per capita spend. With both of these

data points coming from year 1 of operations in their respective states, we believe that Alaska will certainly achieve the lower number by its 5th year of operations. For our upside estimate, we look to New Jersey year 5 (2019) at $72 per capita. New Jersey - with an open market, many operators, and ample marketing and brand synergies with the multitude of land-based operators in the state - should achieve a higher per capita spend than Alaska in our view. Note that we compared to 2019 data for New Jersey, in order to avoid the effects of increased trial due to COVID-related closures.

Our internal forecast for the state is $56, yielding a year 5 revenue of $31 million, based on our best judgment related to the internal weighting of comparables and inflation estimates. The table below summarizes our forecast for the Alaska iGaming market size by Year 5.

**Table 21: Year 5 Alaska iGaming Forecast**

| | Per Capita (21+) | iGaming GGR |
|---|---|---|
| Downside | $33 | $18,420,270 |
| Upside | $72 | $40,189,680 |
| **Forecast** | **$56** | **$31,258,640** |

Source: The Innovation Group.

## Sports Betting

The Innovation Group built its revenue projections by studying US and worldwide sports betting markets. We used our research on legislative environments from across the globe where sports betting is already legal to develop a forecast model that we then tuned to the specific conditions expected in the Alaska market.

The figures below represent a range of outcomes in Alaska in a stabilized year 5. To develop this forecast, we've assumed a monopoly model partnered with a national brand and a 40% tax rate, which makes the market most similar to New Hampshire. Our downside estimate, at $42 per capita, is just below the year 1 result from New Hampshire, where DraftKings is the sole provider. The New Hampshire results should grow comfortably over the next several years, as we've seen in New Jersey and other markets, and we believe Alaska should certainly be able to achieve their year 1 results in a stabilized environment. We provide an upside scenario at $76 per capita, exceeding the year 1 performance of many of these comparable states but still below where we think they will end after ramp-up. Based on the lack of professional sports in the state and the inability to attract border play, our internal stabilized forecast of $60 is more in line with current performance in recently launched states, rather than what we believe those states will look after a full (and significant) ramp-up period.

**Table 22: Forecast Sports Betting Revenue Per (21+) Adult (Year 5)**

| | Range | TIG AK Forecast |
|---|---|---|
| With mobile option [1,2] | $42 - $76 | $60 |

[1] Based on Colorado, Illinois, Indiana, Iowa, Pennsylvania, Rhode Island, New Hampshire, and Denmark
[2] Data from benchmark states which are still growing or ramping up have been adjusted to reflect ramp up and nominal inflation

We apply the range of revenues from above to forecasted population to arrive at a Year 5 revenue forecast.

**Table 23: Year 5 Alaska Sports Betting Forecast**

| | Per Capita (21+) | Sports Betting GGR |
|---|---|---|
| Downside | $42 | $23,443,980 |
| Upside | $76 | $42,422,440 |
| **Forecast** | **$60** | **$33,491,400** |

Source: The Innovation Group.

## Seven-Year Forecasts

The following tables show the seven-year NGR and gaming tax forecasts:

**Table 24: Alaska VGT 7-Year Forecast (MMs)**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|
| **NGR** | | | | | | | |
| 1: Casinos No VGTs | | | | | | | |
| 2. Casinos & VGTs Out-Markets | $26.9 | $67.1 | $107.5 | $111.8 | $115.1 | $118.0 | $121.0 |
| 3. Casinos & VGTs All Markets | $52.1 | $125.0 | $164.9 | $171.5 | $176.6 | $181.0 | $185.6 |
| 4. VGTs Only | $52.1 | $125.0 | $208.4 | $216.7 | $223.2 | $228.8 | $234.5 |
| 5. Open Market | $35.3 | $84.8 | $141.3 | $147.0 | $151.4 | $155.2 | $159.1 |
| | | | | | | | |
| **Gaming Tax** | | | | | | | |
| 1: Casinos No VGTs | | | | | | | |
| 2. Casinos & VGTs Out-Markets | $10.7 | $26.8 | $43.0 | $44.7 | $46.0 | $47.2 | $48.4 |
| 3. Casinos & VGTs All Markets | $20.8 | $50.0 | $66.0 | $68.6 | $70.7 | $72.4 | $74.2 |
| 4. VGTs Only | $20.8 | $50.0 | $83.4 | $86.7 | $89.3 | $91.5 | $93.8 |
| 5. Open Market | $14.1 | $33.9 | $56.5 | $58.8 | $60.6 | $62.1 | $63.6 |

Source: The Innovation Group.

**Table 25: Alaska Lottery 7-Year Forecast (MMs)**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|
| **NGR** | | | | | | | |
| 2025 No Casino or VGTs | $122.7 | $129.4 | $133.4 | $134.7 | $134.7 | $134.7 | $134.7 |
| 1: Casinos No VGTs | $116.6 | $122.9 | $126.7 | $128.0 | $128.0 | $128.0 | $128.0 |
| 2. Casinos & VGTs Out-Markets | $88.9 | $93.8 | $96.7 | $97.6 | $97.6 | $97.6 | $97.6 |
| 3 & 5. Casinos & VGTs All Markets | $70.9 | $74.7 | $77.1 | $77.8 | $77.8 | $77.8 | $77.8 |
| 4. VGTs Only | | | | | | | |
| **Government Transfers** | | | | | | | |
| 2025 No Casino or VGTs | $67.2 | $71.7 | $74.7 | $75.4 | $75.4 | $75.4 | $75.4 |
| 1: Casinos No VGTs | $63.9 | $68.1 | $71.0 | $71.7 | $71.7 | $71.7 | $71.7 |
| 2. Casinos & VGTs Out-Markets | $48.7 | $52.0 | $54.1 | $54.7 | $54.7 | $54.7 | $54.7 |
| 3 & 5. Casinos & VGTs All Markets | $38.8 | $41.4 | $43.2 | $43.6 | $43.6 | $43.6 | $43.6 |
| 4. VGTs Only | | | | | | | |

Source: The Innovation Group.

**Table 26: Alaska iGaming 7-Year Revenue Forecast (MMs)**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|
| Downside | $10.1 | $15.5 | $17.6 | $18.0 | $18.4 | $18.8 | $19.3 |
| Upside | $22.0 | $33.8 | $38.4 | $39.3 | $40.2 | $41.1 | $42.1 |
| ***Forecast*** | ***$17.1*** | ***$26.3*** | ***$29.9*** | ***$30.6*** | ***$31.3*** | ***$32.0*** | ***$32.7*** |
| **Gaming Tax** | **$6.85** | **$10.51** | **$11.94** | **$12.22** | **$12.50** | **$12.79** | **$13.09** |

Source: The Innovation Group.

**Table 27: Alaska Sports Betting 7-Year Revenue Forecast (MMs)**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---|---|---|---|---|---|---|---|
| Downside | $12.8 | $19.7 | $22.4 | $22.9 | $23.4 | $24.0 | $24.5 |
| Upside | $23.2 | $35.6 | $40.5 | $41.5 | $42.4 | $43.4 | $44.4 |
| ***Forecast*** | ***$18.3*** | ***$28.1*** | ***$32.0*** | ***$32.7*** | ***$33.5*** | ***$34.3*** | ***$35.1*** |
| **Gaming Tax** | **$7.34** | **$11.26** | **$12.80** | **$13.09** | **$13.40** | **$13.71** | **$14.02** |

Source: The Innovation Group.

## *Summary*

**Table 28: Gaming Tax, Employment and Capital Investment Summary**

| | Casino Tax Rate | | | |
|---|---|---|---|---|
| | **10%** | **15%** | **20%** | **25%** |
| **1: Casinos No VGTs** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $24.6 | $36.9 | $49.2 | $59.7 |
| VGTs | $0.0 | $0.0 | $0.0 | $0.0 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $71.0 | $71.0 | $71.0 | $71.0 |
| Total | $120.3 | $132.6 | $144.9 | $155.4 |
| ***Direct Ongoing Jobs*** | 1,966 | 1,875 | 1,777 | 1,636 |
| ***Capital Investment*** | $473.1 | $416.2 | $355.5 | $269.7 |
| **2. Casinos & VGTs Out-Markets** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $24.6 | $36.9 | $49.2 | $59.7 |
| VGTs | $43.0 | $43.0 | $43.0 | $43.0 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $54.1 | $54.1 | $54.1 | $54.1 |
| Total | $146.5 | $158.8 | $171.1 | $181.5 |
| ***Direct Ongoing Jobs*** | 2,067 | 1,975 | 1,878 | 1,736 |
| ***Capital Investment*** | $473.1 | $416.2 | $355.5 | $269.7 |
| **3. Casinos & VGTs All Markets** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $21.1 | $31.6 | $42.1 | $50.1 |
| VGTs | $66.0 | $66.0 | $66.0 | $66.0 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $43.2 | $43.2 | $43.2 | $43.2 |
| Total | $154.9 | $165.5 | $176.0 | $184.0 |
| ***Direct Ongoing Jobs*** | 1,876 | 1,811 | 1,732 | 1,581 |
| ***Capital Investment*** | $375.7 | $318.0 | $270.9 | $202.0 |
| **4. VGTs Only** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | - | | | |
| VGTs | $83.4 | | | |
| Sports/iGaming | - | | | |
| Lottery Transfers | - | | | |
| Total | $83.4 | | | |
| ***Direct Ongoing Jobs*** | 271 | | | |
| ***Capital Investment*** | - | | | |

| | | | | |
|---|---|---|---|---|
| **5. Open Market** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $22.6 | $32.9 | $41.3 | $46.5 |
| VGTs | $56.5 | $56.5 | $56.5 | $56.5 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $43.2 | $43.2 | $43.2 | $43.2 |
| Total | $147.1 | $157.4 | $165.7 | $170.9 |
| | | | | |
| ***Direct Ongoing Jobs*** | 1,818 | 1,750 | 1,620 | 1,474 |
| ***Capital Investment*** | $467.8 | $383.0 | $284.3 | $207.7 |

Source: The Innovation Group.

## *Impact on Charitable Gaming*

The above forecasts do not factor in the impact on charitable gaming since it is undetermined at this time what policy provisions might be made to mitigate impacts. As discussed in the Alaska Charitable Gaming section of the report, state taxes on charitable wagering is approximately $3 million per year, and net proceeds to charities were $36 million in 2019. The following table quantifies the impacts on charitable gaming from casino and VGT development. Additional impacts on pull-tab revenue and proceeds would be expected from instant scratch lottery games.

**Table 29: Impact on Charitable Gaming from Casino and VGT Development**

| | 2019 | 2025 No Action | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 |
|---|---|---|---|---|---|---|---|
| Adjusted Gross Income (AGI)* | $92.5 | $105.5 | $88.4 | $77.3 | $58.0 | $65.9 | $55.1 |
| Net Proceeds | $36.6 | $41.7 | $36.5 | $32.1 | $23.0 | $26.1 | $21.8 |
| State Taxes & Fees | $2.7 | $3.0 | $2.5 | $2.2 | $1.7 | $1.9 | $1.6 |

Source: AK Dept of Revenue; The Innovation Group. *AGI is comparable to Net Gaming Revenue

## *Economic Impact Analysis*

The economic benefits—the revenues, jobs, and earnings—that accrue from the annual operations of an enterprise are termed ***ongoing*** impacts. The construction phase of a project is considered a ***one-time*** benefit to an area. This refers to the fact that these dollars will be introduced into the economy only during construction; construction impacts are expressed in single-year equivalence to be consistent in presentation with ongoing annual impacts.

The economic impact of an industry consists of three layers of impacts:

1. Direct effects
2. Indirect effects
3. Induced effects

The **direct effect** is the economic activity that occurs within the industry itself. The direct effect for casino operations represents the expenditures made by the facility in the form of employee

compensation and purchases of goods and services (direct expenditures), which ultimately derive from patron spending on the casino floor, and patron spending on non-gaming amenities is an additional direct effect.

**Indirect effects** are the impact of the direct expenditures on other business sectors: for example, the advertising firm who handles a casino's local media marketing. Indirect effects reflect the economic spin-off that is made possible by the direct purchases of a casino. Firms providing goods and services to a casino have incomes partially attributable to the casino.

Finally, the **induced effects** result from the spending of labor income: for example, casino employees using their income to purchase consumer goods locally. As household incomes are affected by direct employment and spending, this money is recirculated through the household spending patterns causing further local economic activity.

The **total** economic impact of an industry is the sum of the three components.

The IMPLAN analysis expresses impacts (direct, indirect, and induced) for the following four economic variables:

> **Employment** is measured in IMPLAN and by the U.S. Census as headcount, in other words the number of full and part-time workers supported by an economic activity.
>
> **Labor Income** (LI) is compensation to all workers both employees and owners in terms of wages and salaries as well as benefits and payroll taxes. Profits from self-employed businesses can also be included in this category as compensation to the owner. These are known as employment compensation (EC) and proprietor income (PI) in IMPLAN. $LI = EC + PI$
>
> **Value-Added** (VA) measures the industry or event's contribution to Gross Domestic Product (GDP). It consists of labor income (as described above), taxes on production and imports (TOPI), and other property income (OPI, such as corporate profits, rent payments, and royalties). It is the difference between a business or industry's total sales and the cost of all input materials or intermediate expenditures. $VA = LI + TOPI + OPI$
>
> **Output** is the total value of industry production; it consists of value-added plus intermediate expenditures (IE). Output is frequently the total price paid by consumers for a good or service. $Output = VA + IE$

Value-Added is the most appropriate measure of economic impact because it excludes intermediate inputs, which are the goods and services (including energy, raw materials, semi-finished goods, and services purchased from all sources) used in the production process to produce ***other*** goods or services rather than for ***final*** consumption. For example, the paper stock used in a magazine publication is an intermediate input whereas paper stock sold in an office-supply store is the final product sold to the consumer. The value of producing the magazine's paper stock is

accounted for in measures of GDP within the Paper Manufacturing sector, not in the Publishing sector.

To analyze the annual impact generated by direct operations of the facility we used Year 2 (2026), the first year of stabilized operations. The following table shows the total inputs utilized in the IMPLAN modeling for the scenario assessed.

**Table 30: Economic Impacts from Gaming Implementation – Ongoing Operations – All Scenarios 2026**

| | Employment | | | | Labor Income ($M) | | | | Value Added ($M) | | | | Output ($M) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Scenarios & Casino Tax Rates** | **Direct Effect** | **Indirect Effect** | **Induced Effect** | **Total** | **Direct Effect** | **Indirect Effect** | **Induced Effect** | **Total** | **Direct Effect** | **Indirect Effect** | **Induced Effect** | **Total** | **Direct Effect** | **Indirect Effect** | **Induced Effect** | **Total** |
| ***Scenario 1*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 1,966 | 450 | 512 | **2,927** | $102.4 | $25.2 | $29.1 | **$156.6** | $316.6 | $39.6 | $52.6 | **$408.8** | $483.6 | $75.3 | $88.7 | **$647.7** |
| 15% Tax Rate | 1,875 | 437 | 501 | **2,814** | $101.3 | $25.0 | $28.8 | **$155.1** | $315.9 | $39.3 | $52.1 | **$407.2** | $484.0 | $74.9 | $88.0 | **$646.9** |
| 20% Tax Rate | 1,777 | 426 | 488 | **2,691** | $98.6 | $24.3 | $28.2 | **$151.1** | $312.5 | $38.3 | $51.0 | **$401.8** | $477.2 | $72.9 | $86.3 | **$636.3** |
| 25% Tax Rate | 1,636 | 408 | 467 | **2,511** | $94.5 | $23.2 | $26.8 | **$144.6** | $300.6 | $36.5 | $48.5 | **$385.7** | $459.2 | $69.3 | $82.0 | **$610.5** |
| ***Scenario 2*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,067 | 571 | 565 | **3,203** | $109.7 | $32.6 | $32.4 | **$174.7** | $353.9 | $51.2 | $58.6 | **$463.8** | $569.0 | $97.5 | $99.1 | **$765.6** |
| 15% Tax Rate | 1,975 | 559 | 554 | **3,089** | $107.7 | $31.8 | $31.8 | **$171.3** | $350.2 | $50.1 | $57.5 | **$457.8** | $561.4 | $95.1 | $97.2 | **$753.8** |
| 20% Tax Rate | 1,878 | 548 | 540 | **2,967** | $104.9 | $31.2 | $31.0 | **$167.1** | $346.9 | $49.0 | $56.1 | **$451.9** | $554.6 | $92.9 | $94.8 | **$742.4** |
| 25% Tax Rate | 1,736 | 530 | 520 | **2,786** | $100.9 | $30.1 | $29.9 | **$160.8** | $335.0 | $47.2 | $54.0 | **$436.3** | $536.6 | $89.5 | $91.3 | **$717.4** |
| ***Scenario 3*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 1,876 | 603 | 549 | **3,028** | $104.0 | $34.3 | $31.5 | **$169.9** | $333.3 | $53.8 | $57.0 | **$444.2** | $558.2 | $102.1 | $96.4 | **$756.7** |
| 15% Tax Rate | 1,811 | 592 | 541 | **2,944** | $102.7 | $33.6 | $31.1 | **$167.5** | $330.5 | $52.8 | $56.2 | **$439.5** | $551.8 | $100.0 | $95.0 | **$746.8** |
| 20% Tax Rate | 1,732 | 583 | 530 | **2,845** | $100.4 | $33.1 | $30.4 | **$164.0** | $327.8 | $51.9 | $55.0 | **$434.8** | $545.9 | $98.3 | $93.0 | **$737.2** |
| 25% Tax Rate | 1,581 | 569 | 500 | **2,651** | $93.7 | $32.3 | $28.7 | **$154.7** | $316.0 | $50.6 | $51.9 | **$418.5** | $528.9 | $95.8 | $87.8 | **$712.4** |
| ***Scenario 4*** | | | | | | | | | | | | | | | | |
| 40% Tax Rate | 271 | 328 | 140 | **740** | $16.8 | $18.5 | $8.1 | **$43.4** | $92.2 | $28.9 | $14.6 | **$135.7** | $208.4 | $54.5 | $24.6 | **$287.5** |
| ***Scenario 5*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 1,818 | 537 | 506 | **2,861** | $96.9 | $30.7 | $29.1 | **$156.6** | $305.3 | $48.3 | $52.6 | **$406.2** | $509.5 | $91.6 | $88.9 | **$689.9** |
| 15% Tax Rate | 1,750 | 528 | 497 | **2,774** | $95.0 | $30.1 | $28.5 | **$153.7** | $304.2 | $47.4 | $51.6 | **$403.2** | $502.7 | $89.8 | $87.2 | **$679.7** |
| 20% Tax Rate | 1,621 | 515 | 480 | **2,616** | $91.6 | $29.3 | $27.6 | **$148.5** | $296.3 | $46.0 | $49.9 | **$392.1** | $489.5 | $87.0 | $84.2 | **$660.8** |
| 25% Tax Rate | 1,474 | 507 | 456 | **2,437** | $86.1 | $28.8 | $26.2 | **$141.0** | $279.4 | $45.1 | $47.4 | **$371.8** | $469.0 | $85.3 | $80.0 | **$634.3** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group.

**Table 31: Economic Impacts from Gaming Implementation – Construction – All Scenarios**

| Scenarios & Casino Tax Rates | Employment | | | | Labor Income ($M) | | | | Value Added ($M) | | | | Output ($M) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total |
| ***Scenario 1*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,836 | 371 | 1,112 | **4,319** | $246.6 | $24.9 | $62.3 | **$333.8** | $254.7 | $42.8 | $112.5 | **$410.0** | $425.1 | $82.7 | $189.5 | **$697.3** |
| 15% Tax Rate | 2,445 | 327 | 970 | **3,741** | $214.8 | $21.9 | $54.3 | **$291.1** | $222.0 | $37.7 | $98.1 | **$357.7** | $372.9 | $72.7 | $165.2 | **$610.9** |
| 20% Tax Rate | 2,086 | 280 | 827 | **3,194** | $183.3 | $18.8 | $46.3 | **$248.4** | $189.4 | $32.2 | $83.7 | **$305.3** | $318.5 | $62.2 | $141.0 | **$521.7** |
| 25% Tax Rate | 1,590 | 214 | 630 | **2,434** | $139.5 | $14.4 | $35.3 | **$189.2** | $144.2 | $24.6 | $63.7 | **$232.5** | $242.7 | $47.5 | $107.4 | **$397.6** |
| ***Scenario 2*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,836 | 371 | 1,112 | **4,319** | $246.6 | $24.9 | $62.3 | **$333.8** | $254.7 | $42.8 | $112.5 | **$410.0** | $425.1 | $82.7 | $189.5 | **$697.3** |
| 15% Tax Rate | 2,445 | 327 | 970 | **3,741** | $214.8 | $21.9 | $54.3 | **$291.1** | $222.0 | $37.7 | $98.1 | **$357.7** | $372.9 | $72.7 | $165.2 | **$610.9** |
| 20% Tax Rate | 2,086 | 280 | 827 | **3,194** | $183.3 | $18.8 | $46.3 | **$248.4** | $189.4 | $32.2 | $83.7 | **$305.3** | $318.5 | $62.2 | $141.0 | **$521.7** |
| 25% Tax Rate | 1,590 | 214 | 630 | **2,434** | $139.5 | $14.4 | $35.3 | **$189.2** | $144.2 | $24.6 | $63.7 | **$232.5** | $242.7 | $47.5 | $107.4 | **$397.6** |
| ***Scenario 3*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,182 | 290 | 865 | **3,338** | $191.8 | $19.5 | $48.5 | **$259.7** | $198.0 | $33.5 | $87.5 | **$319.0** | $332.4 | $64.6 | $147.4 | **$544.5** |
| 15% Tax Rate | 1,829 | 246 | 726 | **2,801** | $160.7 | $16.5 | $40.6 | **$217.8** | $166.1 | $28.3 | $73.4 | **$267.8** | $279.2 | $54.5 | $123.7 | **$457.4** |
| 20% Tax Rate | 1,562 | 210 | 619 | **2,391** | $137.1 | $14.1 | $34.7 | **$185.9** | $141.7 | $24.1 | $62.6 | **$228.5** | $238.4 | $46.6 | $105.5 | **$390.6** |
| 25% Tax Rate | 1,155 | 157 | 458 | **1,771** | $101.4 | $10.5 | $25.7 | **$137.6** | $104.9 | $18.0 | $46.3 | **$169.2** | $176.8 | $34.8 | $78.1 | **$289.7** |
| ***Scenario 4*** | | | | | | | | | | | | | | | | |
| 40% Tax Rate | N/A | N/A | N/A | **N/A** | N/A | N/A | N/A | **N/A** | N/A | N/A | N/A | **N/A** | N/A | N/A | N/A | **N/A** |
| ***Scenario 5*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,480 | 330 | 983 | **3,793** | $218.0 | $22.1 | $55.1 | **$295.2** | $225.1 | $38.1 | $99.4 | **$362.6** | $377.9 | $73.5 | $167.6 | **$618.9** |
| 15% Tax Rate | 1,993 | 267 | 791 | **3,051** | $175.2 | $17.9 | $44.3 | **$237.4** | $181.0 | $30.7 | $80.0 | **$291.7** | $304.2 | $59.3 | $134.7 | **$498.2** |
| 20% Tax Rate | 1,456 | 196 | 577 | **2,229** | $127.9 | $13.1 | $32.3 | **$173.4** | $132.2 | $22.5 | $58.4 | **$213.1** | $222.3 | $43.4 | $98.4 | **$364.1** |
| 25% Tax Rate | 1,028 | 139 | 408 | **1,575** | $90.2 | $9.3 | $22.8 | **$122.4** | $93.2 | $16.0 | $41.2 | **$150.4** | $157.1 | $30.8 | $69.5 | **$257.3** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

**Table 32: Fiscal Impacts from Gaming Implementation – All Scenarios (MMs)**

| Scenarios & Casino Tax Rates | Ongoing Operations - Impacts Occur Annually (in 2026 dollars) | | | | | | | Construction - One-Time Impacts | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gaming Tax | Other State Taxes - Direct | Other State Taxes - Indirect & Induced | **Total State** | Other Local Taxes - Direct | Other Local Taxes - Indirect & Induced | **Total Local** | State Taxes - Direct | State Taxes - Indirect & Induced | **Total State** | Local Taxes - Direct | Local Taxes - Indirect & Induced | **Total Local** |
| ***Scenario 1*** | | | | | | | | | | | | | |
| 10% Tax Rate | $132.9 | $1.7 | $1.1 | **$135.6** | $3.0 | $3.1 | **$6.1** | $1.7 | $1.9 | **$3.5** | $1.6 | $6.2 | **$7.8** |
| 15% Tax Rate | $145.2 | $1.6 | $1.0 | **$147.9** | $2.9 | $3.0 | **$6.0** | $1.4 | $1.6 | **$3.1** | $1.4 | $5.4 | **$6.8** |
| 20% Tax Rate | $157.5 | $1.6 | $1.0 | **$160.1** | $2.8 | $3.0 | **$5.8** | $1.2 | $1.4 | **$2.6** | $1.2 | $4.6 | **$5.8** |
| 25% Tax Rate | $167.9 | $1.5 | $1.0 | **$170.5** | $2.7 | $2.8 | **$5.5** | $0.9 | $1.1 | **$2.0** | $0.9 | $3.5 | **$4.4** |
| ***Scenario 2*** | | | | | | | | | | | | | |
| 10% Tax Rate | $156.3 | $2.2 | $1.3 | **$159.8** | $4.0 | $3.6 | **$7.6** | $1.7 | $1.9 | **$3.5** | $1.6 | $6.2 | **$7.8** |
| 15% Tax Rate | $168.6 | $2.2 | $1.2 | **$172.1** | $3.9 | $3.5 | **$7.4** | $1.4 | $1.6 | **$3.1** | $1.4 | $5.4 | **$6.8** |
| 20% Tax Rate | $180.9 | $2.2 | $1.2 | **$184.3** | $3.8 | $3.4 | **$7.3** | $1.2 | $1.4 | **$2.6** | $1.2 | $4.6 | **$5.8** |
| 25% Tax Rate | $191.4 | $2.1 | $1.2 | **$194.6** | $3.7 | $3.3 | **$7.0** | $0.9 | $1.1 | **$2.0** | $0.9 | $3.5 | **$4.4** |
| ***Scenario 3*** | | | | | | | | | | | | | |
| 10% Tax Rate | $163.0 | $2.4 | $1.3 | **$166.7** | $4.3 | $3.6 | **$7.9** | $1.3 | $1.4 | **$2.7** | $1.2 | $4.8 | **$6.0** |
| 15% Tax Rate | $173.5 | $2.4 | $1.2 | **$177.2** | $4.3 | $3.5 | **$7.8** | $1.1 | $1.2 | **$2.3** | $1.0 | $4.1 | **$5.1** |
| 20% Tax Rate | $184.1 | $2.4 | $1.2 | **$187.7** | $4.2 | $3.5 | **$7.7** | $0.9 | $1.0 | **$2.0** | $0.9 | $3.5 | **$4.3** |
| 25% Tax Rate | $192.1 | $2.3 | $1.2 | **$195.6** | $4.1 | $3.3 | **$7.4** | $0.7 | $0.8 | **$1.5** | $0.7 | $2.6 | **$3.2** |
| ***Scenario 4*** | | | | | | | | | | | | | |
| 40% Tax Rate | $83.4 | $1.5 | $0.5 | **$85.3** | $2.7 | $1.3 | **$4.0** | N/A | N/A | N/A | N/A | N/A | N/A |
| ***Scenario 5*** | | | | | | | | | | | | | |
| 10% Tax Rate | $148.2 | $2.2 | $1.2 | **$151.6** | $3.9 | $3.3 | **$7.2** | $1.5 | $1.6 | **$3.1** | $1.4 | $5.5 | **$6.9** |
| 15% Tax Rate | $158.5 | $2.2 | $1.1 | **$161.9** | $3.9 | $3.2 | **$7.1** | $1.2 | $1.3 | **$2.5** | $1.1 | $4.4 | **$5.5** |
| 20% Tax Rate | $166.9 | $2.2 | $1.1 | **$170.1** | $3.8 | $3.1 | **$6.9** | $0.9 | $1.0 | **$1.8** | $0.8 | $3.2 | **$4.0** |
| 25% Tax Rate | $172.1 | $2.1 | $1.1 | **$175.2** | $3.7 | $3.0 | **$6.7** | $0.6 | $0.7 | **$1.3** | $0.6 | $2.3 | **$2.9** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); US Census State & Local Finance Dataset; The Innovation Group. TOPI=Tax on Production & Imports

## *Social and Community Impact Analysis*

Increased local services and costs as a result of casino gaming operations generally fall into three categories: those arising from population and development growth, those arising from the impacts of increased visitation and traffic, and social impacts resulting from problem gambling.

The analysis draws upon social science research as well as data analysis conducted by the Innovation Group. Although casinos are perceived to be different in kind from other commercial developments of comparable size and visitor base, inordinate negative impacts from casino development have not materialized, even in small communities with limited infrastructure and resources. In fact, experience over the past two decades has demonstrated that mitigation payments designed in anticipation of drastic impacts have often exceeded the actual need of the communities.

The perception that casinos breed crime is not supported by the evidence. While the *number* of reported crimes can increase, as with any commercial development that attracts visitors, casino gaming has not been shown to lead to an increase in crime *rates*.

Host communities should expect impacts similar in kind to other commercial development of similar scope and visitor potential. The projected increase in visitor population should be expected to lead to increases in public safety services and judicial system caseload. The one significant difference in kind relates to the association between problem gambling and other social pathologies, which we discuss in detail.

In summary, evidence suggests that on-going impacts to local communities are highly manageable, typically requiring only a small fraction of gaming revenues to address fully.

We anticipate population growth ranging from 0.15% in Fairbanks to 0.37% in Juneau, with Anchorage growing by 0.21%, with similar growth in, for example, school populations.

**Table 33: Anchorage, Fairbanks, and Juneau Casinos Impact on Households and Population**

| | Anchorage | Fairbanks | Juneau |
|---|---|---|---|
| New employees moving to area | 260 | 65 | 54 |
| # of jobs per household | 1.1 | 1.1 | 1.1 |
| ***Number of new Households*** | ***237*** | ***59*** | ***49*** |
| Alaska State Avg. Household Size | 2.64 | 2.64 | 2.64 |
| **New Area Population** | **625** | **157** | **130** |
| % Increase of 2026 Total Area Pop | 0.21% | 0.15% | 0.37% |

Using observed increases in police and fire/EMS service calls in other emerging gaming markets, we forecast upticks in the police and fire/EMS budget requirements for Anchorage (0.36%), Fairbanks (1.03%), and Juneau (0.59%) as shown below:

**Table 34: Anchorage, Fairbanks, and Juneau Police and Fire/EMS Expense Increase 2026**

| | | Anchorage | Fairbanks | Juneau |
|---|---|---|---|---|
| 2026 Police Budget Estimate | | *$142,845,543* | *$7,889,210* | *$24,051,812* |
| | *Incremental %* | *0.36%* | *1.03%* | *0.54%* |
| | *Incremental $* | $517,145 | $81,518 | $130,217 |
| *2026 Fire/EMS Budget Estimate* | | *$120,323,754* | *$8,219,804* | *$21,584,045* |
| | *Incremental %* | *0.12%* | *0.20%* | *0.59%* |
| | *Incremental $* | $146,859 | $16,532 | $126,302 |
| **Total Increase in Municipal Services** | | **$664,004** | **$98,050** | **$256,520** |

Sources: City of Anchorage, City of Fairbanks, The Innovation Group

Lastly, we use data from across the United States to forecast the costs of problem gambling mitigation in Alaska. Taking a three-pronged approach utilizing data from the problem gambling literature, we looked at (1) the distribution of per capita problem gambling mitigation spend by state, (2) the distribution of all problem gambling mitigation budgets by state, and (3) a regression of problem gambling mitigation budget on the number of estimated problem gamblers in a state. Using these three lenses, we conclude that a budget for problem gambling mitigation in the range of $1.1 million to $1.3 million would adequately fund a problem gambling mitigation program comparable to those found throughout the U.S. We note that this budget anticipates not only supporting mitigation of the *incremental* problem gambling brought on by new forms of gaming in the state, but also mitigation of *existing* problem gambling in the state, for which there is not a dedicated mitigation fund or program structure today.

# INTRODUCTION

The Innovation Group Team has been retained by the Alaska Department of Revenue ("The Department") to provide research and guidance regarding all aspects of market potential, financial viability, impacts, implementation and legislation regarding expansion of legal gaming in Alaska. This report addresses the market potential and socio-economic impacts of a comprehensive variety of gaming options, maximizing investment driven economic and tourism impacts, job growth and fiscal benefits to the State. In addition, we were required to engage substantively with a wide array of stakeholders who may be affected positively or negatively by gaming and provide detailed guidance in the preparation and draft legislation supporting the policy objectives resulting from our work.

The Project Team is comprised of The Innovation Group, Regulatory Management Counselors and Sedor, Wendlandt, Evans & Filippi. The team was strategically assembled to offer in-depth economic, social, and legislative research deliverables with the rigor required to make responsible decisions regarding gaming. We have provided similar support to U.S. state and national governments, as covered within our proposal, and offer a balance of gaming industry and local expertise. The team also has a unique appreciation for the nuances of gaming implementation, including complex relationships between governance, capital risk, taxation, and social and economic impacts.

*Note: This report is one of two core documents reflecting the deliverables of The Innovation Group Team in this assignment. Its contents address the market analysis and socio-economic impacts and summarizes the stakeholder sessions. Regulatory and legislative matters are addressed in a corresponding document also available at this time. A third ancillary document details the stakeholder process and comments.*

## *Forms of Gaming Analyzed*

Despite several attempts to legalize casinos and lotteries, Alaska's gaming laws remain among the strictest in the country. Currently charitable gaming is the only legal form of gambling in Alaska. Permitted games include: "Bingo, raffles and lotteries, pull-tab games, authorized classics (for example, ice classics, cabbage classics), fish and moose derbies, Calcutta pools, and contests of skill."

The following main forms of gaming have been assessed through our research:

1. Traditional Casinos (Destination and Local)
2. Distributed Electronic Gaming Devices (VGT's)
3. Internet/Online Gaming
4. Sports Betting
5. Lottery
6. Charitable Gaming (Currently available in Alaska)

**Traditional Casinos (Destination and Local)**

- Destination Resorts – Diverse resort properties targeting tourists and offering vast non-gaming amenities like hotels, convention space, retail shops, theaters. Often a heavier table

presence than regionals. (Las Vegas, Macau, Atlantic City, Atlantis, Foxwoods)

- Regional Casinos – Emphasis on the casino product, usually slots and tables games, often coupled with modest sized hotel and basic food and beverage, entertainment, and retail (Western US tribal casinos, Mid-western US commercial markets)
- Sportsbooks becoming more widespread as states legalize sports betting.
- Poker rooms are included in many casinos.

**Distributed Electronic Gaming Machines**

- Video Gaming Terminals (VGT's) – Slot type machines available in groups of 3-15 found in bars, restaurants, social halls and retail locations. Machines are tied to a central system; termed VLTs if operated by a lottery.
- Mini-casinos – Larger groupings of machines in truck stops or standalone locations tied to a central system.

**Internet Gaming and Sports Betting**

- Casino Games – Slot-type games and house-banked table games played on a computer or mobile device.
- Online Poker – Players betting against each other; casino takes a rake.
- Sports Betting – Wagering on sports events on computer or mobile device.

**Lottery**

- Retail – Lottery tickets for sale at convenience stores, groceries or drug stores Some states allow online purchases.
- Traditional games—Scratch-off (instant prize results) and Draw games.
- iLottery – Playing interactive lottery games online.

**Charitable Gaming (Currently available in Alaska)**

- Bingo – Traditional bingo at tables with cards.
- Pull Tab – Scratch-off style games.
- Other – Such as raffles or "Las Vegas nights."

## *Research Objectives and Considerations*

The Innovation Group Team analysis is based on our understanding of the expectations of The Department of Revenue: to provide research and guidance regarding all aspects of the development of legislation and implementation with respect to expansion of legal gaming in the State of Alaska. Specifically, we were tasked to study the expansion of legal gaming in a way that will (1) create a gaming experience that is unique to Alaska, (2) grow the Alaskan economy, (3) increase tourism, (4) enhance the tourism experience, and (5) create new jobs. In addition, the Department required that we lead substantive engagement with a wide array of stakeholders and support the drafting of legislation that succeeds in implementing the policy objectives of the jurisdiction, with adequate concern for the social impacts of expanded gaming.

In meeting the above requirements, The Innovation Group Team considered gaming industry context and the state of the current economy:

- Our research is responsive to the nuances of gaming implementation, including the complex relationships between governance, capital risk, taxation, and social and economic impacts.
- We recognize the importance of considering the potential for gaming to enhance and complement tourism through gaming assets.
- Gaming amenities including lodging, entertainment, food and beverage, and retail are analyzed independently as these uses become more important than gaming itself in some locations.
- We consider both the costs and benefits of introducing and regulating the different forms of local and tourist gaming, taking public and private sector positions into account.
- We understand the importance stakeholder input and the need to carefully navigate the dynamics of different points of view on gaming and gaming expansion including current Charitable Gaming interests and Alaskan Native Communities, Corporations and Organizations.

## *Methodological Overview*

Details on the methodologies utilized in our analysis are included throughout the report. The methodological overview is comprised of gaming demand forecasts, socioeconomic and tourism impacts, and stakeholder input. Each is described briefly below.

### Gaming Demand and Market Analysis

At the core of The Innovation Group's market analysis is a statewide gravity model, employed to estimate topline local casino visitation and revenue for multiple potential casino locations, and the impact on current charitable gaming revenue. The model also contemplates potential tourist revenue, both from existing visitors and new or induced visitors seeking a casino gaming experience. Multiple casino distribution scenarios are then developed to represent different market and casino sizing outcomes. For example, in a given market area, multiple casinos can be introduced to maximize customer access, or a single casino can be located to consolidate revenue and investment and potentially offer a more compelling product to tourists.

Building upon the initial casino demand scenarios, The Innovation Group forecasts parallel revenue potential for alternative gaming offerings. Market penetration for widely distributed gaming machines (VGT's), charitable gaming, online gaming and sports betting, and lottery are based on market comparables and capture rates. The resulting demand and revenue forecasts, and appropriate supply levels to accommodate these forms of gaming are then introduced within the working casino scenarios and adjusted to account for any cross-cannibalization between gaming types.

For assessing casino demand and revenue, we employed a gravity model for the road-connected region of Alaska, delineated generally along the Fairbanks—Northway—Anchorage/Kenai triangle and including spurs to Homer, Seward and Valdez. For other population centers—

specifically Bethel, Juneau, Ketchikan and Kodiak—the local market potential is based on penetration metrics of the resident gaming age population. The market potential from seasonal workers and tourists is addressed separately.

Since casino development in the road-connected would potentially overlap—for example, a casino in Wasilla would impact the revenue of a casino in Anchorage—we performed a series of five test scenarios in the gravity modeling based on different development assumptions. These tests were designed to ground our understanding of which markets could support a casino at various capital levels and the relative effects each market's casino would have on neighboring markets. The tests were:

- Test A: First, we assessed the revenue potential for 16 locations in the gravity model area, including the major population centers as well as Native Alaskan villages and smaller towns such as Tok. We made no prior assumptions on the potential for each market, letting the population and drivetime factors identify the local market potential.
- Test B: We then modeled an assumption that casino development would be limited to Native Alaskan villages.
- Test C: The assumption in this scenario is that casino development would be limited to the major population centers of Anchorage, Wasilla/Mat-Su Valley, Fairbanks and Kenai.
- Test D: This was designed to measure the revenue and capital development potential if casino resort investment was concentrated in Anchorage.
- Test E: This was designed to estimate the impact on Anchorage in the event a casino in Eklutna would also be developed.

After analyzing the results of the gravity model test runs, we concluded with a development program consisting of casinos in Anchorage, Fairbanks and Juneau, since to maximize the capital investment potential into a single stand-out resort property that would induce new tourist visitation, it may be desirable to concentrate development in Anchorage, without casino competition in Kenai or Wasilla. Fairbanks and Juneau also show potential for casino development without impinging upon the Anchorage market.

In the Final Scenario Set we examine the gaming and tax revenue potential, hotel and amenity development, and employment estimates for Anchorage, Fairbanks and Juneau, differentiating between various tax rate assumptions and distribution assumptions for Video Gaming Terminals (VGT's). VGTs distributed within local casino markets have been shown to impact slot machine revenue at casinos. Therefore, the Final Scenarios consist of the following combinations of casino and VGT development (sports betting, iGaming and lottery are assumed for all scenarios except Scenario 4).

- Scenario 1, "Casinos Only": No VGT development in the state, casinos in Anchorage, Fairbanks and Juneau.
- Scenario 2, "Casinos and VGTs Out-Markets": Casinos in Anchorage, Fairbanks and Juneau; VGTs elsewhere. The casino revenue forecast is the same for Scenarios 1 and 2. VGT revenue is constrained by being prohibited in the three largest cities in the state.

- Scenario 3, "Casinos and VGTs All Markets": Casinos in Anchorage, Fairbanks and Juneau; VGTs permitted throughout the state. Casino revenue is lower but VGT revenue higher than Scenario 2.
- Scenario 4, "VGTs Only": VGTs permitted throughout the state but no casinos, iGaming, sports betting or lottery. The lack of casino competition results in higher VGT revenue.
- Scenario 5, "Open Market": Unlimited casino licenses and VGTs throughout the state. The dispersal of capital across smaller facilities diminishes the prospect of a stand-out resort being able to induce tourism and VIP play, leading to less table and amenity development, resulting in slightly fewer jobs relative to Scenario 3.

For each casino scenario we perform a sensitivity analysis assessing the impact on capital investment and amenity development from four alternative gaming tax rates (10%, 15%, 20% and 25%). The gaming tax rate for VGTs, iGaming and Sports Betting is assumed to be 40% in all scenarios.

## Socioeconomic and Tourism Impacts

Each market scenario is then applied to the IMPLAN economic impact analysis model. Operating proforma models are used to estimate fiscal (tax) revenue, employment, payroll, and casino expenditures for input into an economic impact analysis. A return-on-investment (ROI) analysis, including high-level estimates for development costs, was also performed to validate the potential viability of the locations for casino development and to provide construction cost for input into the economic impact analysis. Social and community impacts associated with gaming are then considered. While largely qualitative in nature these less tangible impact areas do include quantitative forecasts are included estimating the costs of mitigating problem gaming and expenses associated with hosting casinos in local communities (e.g., life safety, utilities, schools.) Impacts on the tourist market are considered both within the demand model, where new visitors are counted, and the economic impact analysis where incremental spending and taxes from tourism are addressed.

## Stakeholder Input

The Innovation Group Team worked closely with the Department of Revenue to develop an approach to solicit input from the diverse range of stakeholders that may be affected by the introduction of new forms of gaming. Virtual interviews were held with over 30 individuals or organizations within the following constituent groups: (A) Residents and Communities, (B) Private Industry, (C) Public Service Sector, and (D) Alaskan Native Communities, Corporations and Organizations. Feedback from stakeholders was documented and considered across the market scenarios, and in the socioeconomic impact analysis.

## Site Visits

The Innovation Group Team visited several potential gaming markets in Alaska, including Anchorage, Fairbanks, Juneau, Seward, Denali, and Ketchikan. The site visits allowed us to explore the inherent characteristics of the major markets and to experience the transportation

logistics of traveling to and within Alaska as well as some of the incredible tourist attractions the state has to offer.

Additionally, a visit was made to Metlakatla and the Class II tribal casino on the Annette Island Reservation. A COVID-19 outbreak on the island forced the closure of the casino and prevented observation of the operations of the casino, although a visual inspection did reveal a casino with a small bingo area, smoke shop (which was open), and 40-50 Class II gaming machines. Interviews at the smoke shop and on the island revealed that the casino relied mostly exclusively on local residents; although Metlakatla does receive some tourism (water taxis transport tourists from Ketchikan for indigenous programs), very few of those tourists reportedly visit the casino.

**Anchorage**

Anchorage has the local population and tourism/transportation infrastructure to support a quality casino resort capable of inducing tourism to Alaska. The downtown area consists of several large hotels, office buildings, and restaurants. Additionally, the city has a rather large military presence, with Elmendorf Air Force Base and Fort Richardson to the north of Route 1, on the northside of the city. For road transit, Alaska Route 1 (AK-1) is the main thoroughfare that runs from Anchorage to the south towards the Kenai Peninsula and to the east to Palmer and Glennallen. The city's main airport, Ted Stevens International Airport, is located on the west side of the city, and is the fourth busiest cargo airport in the world and has commercial routes serviced by Alaska Airlines, American, Delta, and United, among others.

Anchorage is generally the gateway to Alaska for many tourists visiting the state. Visitors can easily travel by train, vehicle, or small airplane to many nearby attractions, including Denali National Park, Kenai, and Seward. Remote regions of the state are also easily accessible via commercial or chartered flights out of Ted Stevens International Airport and Merrill Field, the municipal airport located east of downtown Anchorage. Locally, tourists in Anchorage can enjoy over 120 miles of paved trails, including the popular Tony Knowles Coastal Trail, in addition to museums, kayaking and canoeing, glacier cruises, and more.

**Fairbanks**

The central hub of Interior Alaska, Fairbanks is the northernmost large city in the United States. Like Anchorage, Fairbanks has a considerable military presence with Fort Wainwright on the eastside of the city and Eielson Air Force Base about 24 miles further to the east. Fairbanks is connected to the state highway system by Alaska Route 2 (AK-2) and Alaska Route 3 (AK-3). AK-2 runs east to Delta Junction and Tok before extending to the Canadian border and extends north to the Dalton Highway (Alaska Route 11) and Manley Hot Springs. AK-3 links Fairbanks with Denali National Park and Anchorage to the south. Fairbanks International Airport, situated to the west of the majority of the population, has commercial airline service from Alaska Airlines, American, Delta, and United, among others. Residents of remote villages regularly travel to Fairbanks, by road or by air, to stock up on supplies such as groceries and household goods.

Fairbanks has become a popular international destination for Northern Lights-seekers, and several local establishments will offer Aurora Borealis tours during the winter months. During the warmer summer months, visitors to Fairbanks can canoe on the Chena River, stroll through Pioneer Park, or visit a wide variety of restaurants and retail across the downtown area.

**Juneau**

Juneau is the third largest city in Alaska and the state capital. Juneau is not accessible by road; the main access to the city is by sea and air. By sea, the Alaska Marine Highway ferry service connects Juneau to smaller communities such as Angoon and Hoonah, in addition to larger towns such as Homer, Ketchikan, and Bellingham, WA. By air, Juneau International Airport is serviced by Alaska Airlines, Delta, and Alaska Seaplanes through the seaplane base. Downtown Juneau sits along the Gastineau Channel and at the base of Mt. Juneau.

As the largest city on the southeastern Panhandle, Juneau offers the best opportunity to tap into the cruise ship market, although local opposition to a casino development should be expected. Each summer, cruise ships bring in over 1 million tourists to the city who visit downtown retail and restaurants, ride the Mt. Roberts Tramway, and sightsee around Mendenhall Glacier.

# STAKEHOLDER INPUT SUMMARY

As part of the research effort, the Project Team conducted thirteen meetings with a variety of stakeholder groups to gain a thorough understanding of the diverse perspectives surrounding the potential expansion of gaming in the State of Alaska. The meetings were conducted virtually over Zoom throughout June 2021. Participating stakeholders included representatives from Alaska's public service sector, private and nonprofit organization officials, government regulators, Alaska Native organization leaders, and representatives from the charitable gaming industry.

Each meeting began with an introduction of the Project Team and the present stakeholders. The Project Team then presented a slideshow that detailed the scope of the project, provided a broad explanatory overview of the different forms of gaming, and established a framework of questions to guide discussion between the Project Team and stakeholder groups. Following the Project Team's presentation, each meeting was opened for discussion, during which time stakeholders engaged in a dialogue regarding the gaming expansion initiative by explaining their perceptions, raising concerns, and/or asking questions about gaming.

Furthermore, the Project Team received letter submissions from several Alaska-based stakeholder groups and gaming industry firms and associations to gain their insight on the potential expansion of gaming in the State of Alaska.

This section provides a brief summary of the categories of comments received. A separate document contains a full account of the stakeholder process, including the Project Team's slideshow presentation, stakeholder letter submissions, and an expanded account of each meeting, including meeting date, a list of attendees, and the comments shared by each attendee.

## *Interview Themes*

As noted above, the goal of the stakeholder interviews and letter submissions was to gain a comprehensive understanding of the differing viewpoints concerning the potential expansion of gaming in the State of Alaska. The Project Team heard several key themes, both in support of and against gaming expansion, during the interview process. Additionally, there were themes in questions posed by the stakeholders that they would like to see addressed if expanded gaming were to occur. Note that the themes are grouped by potential positive and negative outcomes of expanded gaming from the viewpoint of the stakeholders, followed by common questions and concerns on the topic.

- Potential Positives
    - Additional tax revenue for the state.
    - Tourism boost, either through longer length of stay or additional trips.
    - New economic opportunities.
    - Modernization of gaming monitoring procedures and systems.
- Potential Negatives
    - Greater social impact than current charitable gaming structure.
    - The healthcare system may not be well-equipped to handle the potential health impacts that gaming expansion can bring.
    - A rise in problem gaming and gambling addiction.

    - Loss of charitable gaming revenue to support nonprofit organizations.
- Questions and Concerns
    - Several groups indicated they would need more information on what the State of Alaska is going to do before having a positive or negative position on the topic.
    - More resources are needed for oversight and regulation.
    - Alaska's current healthcare system is overwhelmed and will need robust developments to support potential problem gambling issues.
    - What level of involvement will local officials have (local government and local law enforcement)?
    - What role will native communities/villages play in formulating expanded gaming policies?

The gaming market analysis assesses impacts on charitable gaming revenue and net proceeds, while the Community Impact section addresses problem gambling and other social impacts, including recommendations for funding a structured prevention and treatment program.

The introduction of casino gambling has the potential of negative social impacts. These potential impacts can be controlled and minimized through proper planning, awareness campaigns, and prevention and treatment programs applied in a coordinated manner by all relevant stakeholders. By utilizing some of the many proven prevention and treatment programs, the potential social impact of the advent of gaming in Alaska can be minimized. Allocating funds to problem gambling services can help mitigate problem gambling and promote responsible gambling.

It should be noted that problem gambling is not limited to states with casinos, since most states including Alaska have other forms of gambling, whether legal or not, and since casino options are available in other states. As part of our stakeholder research, we spoke with several treatment and healthcare professionals from Alaska. In these meetings, it was determined that there is no existing framework or dedicated funding to assist with gambling related social impacts. We also connected with the National Council on Problem Gambling and included in our stakeholder materials a copy of a letter presented to the State of Alaska which highlights suggested considerations to address problem gambling mitigation.

# ECONOMIC AND DEMOGRAPHIC ANALYSIS

This section assesses specific economic and demographic characteristics within Alaska that have implications for future demand for gaming and hospitality. The analysis will evaluate the area's potential to draw new sources of leisure demand as well as continuing its support of existing facilities in the area.

Some of the factors we analyzed, including population, income, and employment trends, have implications for the participation rates and growth forecasts utilized in the gaming market analysis. National statistics were used as benchmarks to provide context for state trends.

## *Total Population*

In 2020, Alaska's total populated reached approximately 760 thousand, growing by a compound annual growth rate (CAGR) of 0.7% from 2010 to 2020. The state's total population is expected to reach 769 thousand by 2025, growing by an anticipated CAGR of 0.2% over the next five years. Alaska's population is predicted to grow significantly slower over the next five years than as the expected national average.

**Table 35: Total Population**

| | 2010 | 2020 | 2025 | CAGR 2010-2020 | CAGR 2020-2025 |
|---|---|---|---|---|---|
| Alaska | 710,231 | 760,206 | 769,112 | 0.7% | 0.2% |
| *United States* | *308,745,538* | *333,793,107* | *346,021,282* | *0.8%* | *0.7%* |

Source: ArcGIS/ESRI, The Innovation Group

## *Gamer Population*

Gamer eligible population, consisting of adults 21 years of age and older, accounted for roughly 72.1% of Alaska's total population in 2020. By 2025, this number is expected to stay roughly the same at 71.4% of the state's total population. Alaska's adult population has been consistent with the national average.

**Table 36: Population Over 21 Yrs.**

| | 2020 | % of Total Population | 2025 | % of Total Population | CAGR 2020-2025 |
|---|---|---|---|---|---|
| Alaska | 548,043 | 72.1% | 549,010 | 71.4% | 0.0% |
| *United States* | *246,683,741* | *73.9%* | *249,854,972* | *72.2%* | *0.3%* |

Source: ArcGIS/ESRI, The Innovation Group

## *2020 Population by Race and Ethnicity*

Alaska has a significantly higher American Indian and Alaska Native Alone population at 15.1% compared to the national average of 1.0%, in addition to a lower White Alone population at 63.5% compared to the national average of 69.4% and Black or African American Alone population at 3.6% compared to the national average of 13.0%. In addition, Alaska has a slightly higher Asian Alone population at 6.5% compared to the national average of 5.9%.

**Table 37: 2020 Single Population by Single Race Classification or Ethnicity**

| | Total Pop | White Alone | Black or African American Alone | American Indian and Alaska Native Alone | Asian Alone | Native Hawaiian & Other Pacific Islander Alone | Some Other Race Alone | Two or More Races | Hispanic or Latino |
|---|---|---|---|---|---|---|---|---|---|
| Alaska | 760,206 | 63.5% | 3.6% | 15.1% | 6.5% | 1.3% | 1.9% | 8.0% | 7.2% |
| *United States* | *333,793,107* | *69.4%* | *13.0%* | *1.0%* | *5.9%* | *0.2%* | *7.1%* | *3.6%* | *18.8%* |

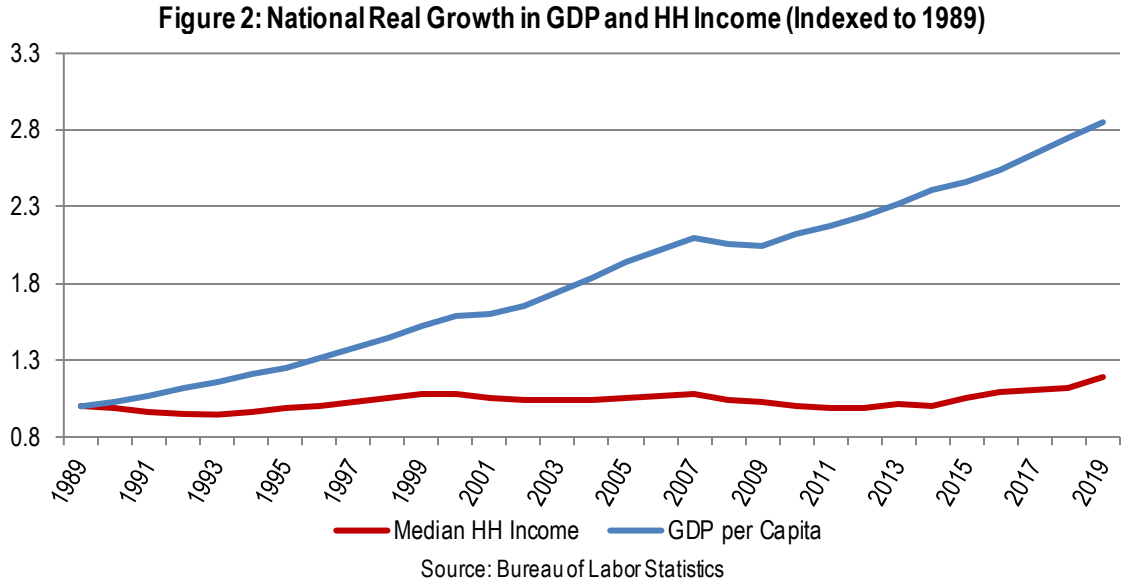
Source: ArcGIS/ESRI, The Innovation Group

## *Income*

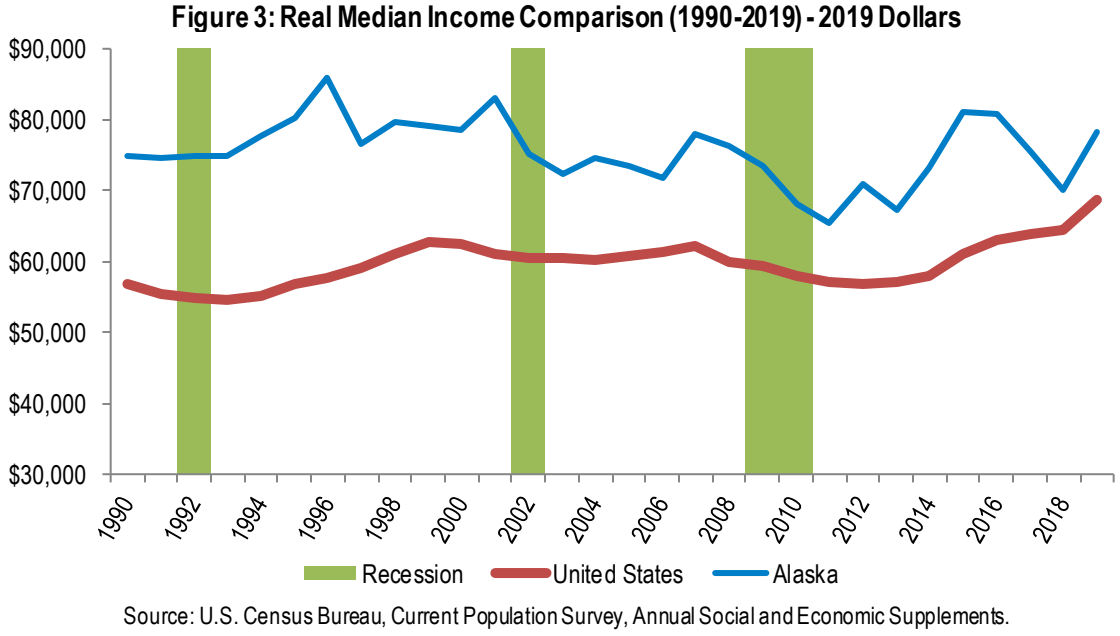
Income is an important indicator of a region's economic well-being and the discretionary spending power of its residents. The following section analyzes national and regional trends in income and discusses their potential impact on Alaska.

### National and Regional Trends

The following chart illustrates the overall widening gap between real growth in household income and gains in productivity, affecting the ability of American households to purchase the goods and services being produced. Even before the recession hit in 2008, real median income was lower than it had been in 1999 and 2000, as incomes declined in 2001 through 2004. Consumer expenditures on gaming and other leisure activities remained strong into 2007 largely on the basis of rising home values; however, gaming revenues started a steady and pronounced decline once the housing bubble burst and the financial sector collapsed. Following the Great Recession, not until 2013 did the country see a slight uptick in real income, the first since 2007, and not until 2016 did income reach pre-recession peaks. In summary, real income has risen by 19% since 1989 while GDP per capita has risen by 85%.




Median income in Alaska has on average been higher than the national median income with greater variations over the years. Following the recessionary period, Alaska's income began to recover faster in 2011 compared to the nation showing positive growth in 2013. Indicated in the chart, Texas showed an increase of median household income from 2011 to 2012 of 8.5% compared to the national decline of 0.2%. The pre-recession peak in 2007 reached nearly $78,000 while the national average was just above $62,000. In 2015, Alaska median income surpassed pre recessionary levels reaching $81,000 when the national median income was nearly $61,000. As of 2019, Alaska's median was $78,000 compared to the national average of nearly $69,000.



## Average Household Income

Income is an important indicator of a region's economic well-being and the discretionary spending power of its residents. As of 2020, Alaska's Average Annual Household Income (AAHI) was estimated at about $98,000, compared to the national average of $90,000. By 2025, the state's AAHI is anticipated to reach $106,400, growing annually by 1.7% over the next five year. In comparison, the national AAHI is expected to reach nearly $100,000 by 2025, growing annually by 2.0%.

**Table 38: Average Annual Household Income**

| | 2020 | 2025 | CAGR 2020-2025 |
|---|---|---|---|
| Alaska | $97,941 | $106,368 | 1.7% |
| *United States* | *$90,054* | *$99,510* | *2.0%* |

Source: ArcGIS/ESRI, The Innovation Group

## Median Income

The following table shows median household income for Alaska and the nation. Median income is typically lower than average income, but is often a better indicator because it is less vulnerable to statistical outliers, such as extremely high incomes in a small number of households.

The median household income in Alaska was just over $74,000 in 2020, compared to the national average of $62,000. By 2025, the states median household income is anticipated to reach nearly $77,000, growing by a CAGR of 0.7%. The national median household income is expected to grow by 1.6% and reach $67,000 in 2025.

**Table 39: Median Household Income**

| | 2020 | 2025 | CAGR 2020-2025 |
|---|---|---|---|
| Alaska | $74,387 | $76,867 | 0.7% |
| *United States* | *$62,203* | *$67,325* | *1.6%* |

Source: ArcGIS/ESRI, The Innovation Group

## *Employment*

The following table compares yearly employment trends for Alaska and the nation. Over the last five years the state's unemployment rate had been on average decreasing, reaching as low as 5.4% in 2019, however, in 2020 due to the impacts of COVID-19 the state's unemployment rate increased to 7.8%. In addition, the Alaska's civilian labor force and employment decreased 1.8% and 4.3%, respectively, while unemployment increased 42.1%. In comparison, the nation's civilian labor force and employment decreased 1.7% and 6.2%, respectively, while unemployment increased 115.7%.

**Table 40: Average Annual Unemployment Statistics**

| Year | Civilian Labor Force | Employment | Unemployment | Unemployment Rate |
|---|---|---|---|---|
| **National (000's)** | | | | |
| 2010 | 153,889 | 139,064 | 14,825 | 9.6% |
| 2011 | 153,617 | 139,869 | 13,747 | 8.9% |
| 2012 | 154,975 | 142,469 | 12,506 | 8.1% |
| 2013 | 155,389 | 143,929 | 11,460 | 7.4% |
| 2014 | 155,922 | 146,305 | 9,617 | 6.2% |
| 2015 | 157,130 | 148,834 | 8,296 | 5.3% |
| 2016 | 159,187 | 151,436 | 7,751 | 4.9% |
| 2017 | 160,320 | 153,337 | 6,982 | 4.4% |
| 2018 | 162,075 | 155,761 | 6,314 | 3.9% |
| 2019 | 163,539 | 157,538 | 6,001 | 3.7% |
| 2020 | 160,742 | 147,795 | 12,947 | 8.1% |
| *5-year CAGR* | *0.5%* | *-0.1%* | *9.3%* | |
| **Alaska** | | | | |
| 2010 | 361,707 | 332,185 | 29,522 | 8.2% |
| 2011 | 364,599 | 336,312 | 28,287 | 7.8% |
| 2012 | 364,153 | 337,834 | 26,319 | 7.2% |
| 2013 | 363,544 | 338,104 | 25,440 | 7.0% |
| 2014 | 364,281 | 339,704 | 24,577 | 6.7% |
| 2015 | 362,425 | 339,604 | 22,821 | 6.3% |
| 2016 | 362,017 | 338,193 | 23,824 | 6.6% |
| 2017 | 361,225 | 337,728 | 23,497 | 6.5% |
| 2018 | 356,199 | 335,033 | 21,166 | 5.9% |
| 2019 | 353,888 | 334,754 | 19,134 | 5.4% |
| 2020 | 347,414 | 320,219 | 27,195 | 7.8% |
| *5-year CAGR* | *-0.8%* | *-1.2%* | *3.6%* | |

Source: Bureau of Labor Statistics; The Innovation Group

## Major Employers

The Innovation Group collected major employer data from Data Axle, and the Alaska Department of Labor and Workforce Development. According to Data Axle, the top employer within the state is the Fort Wainwright Military Base, in Fort Wainwright, followed tb Uni Sea Inc, in Dutch Harbor. The third largest employer is reported to be Ted Stevens Anchorage International Airport, in Anchorage.

**Table 41: 25 Largest Employers in Alaska**

| Employer | City | Number of Employees |
|---|---|---|
| Fort Wainwright Military Base | Fort Wainwright | 6,100 |
| Uni Sea Inc | Dutch Harbor | 5,000 |
| Ted Stevens Anchorage Intl | Anchorage | 4,000 |
| Elmendorf Hospital | Elmendorf Air Force Base | 2,500 |
| Providence Alaska Medical Ctr | Anchorage | 2,488 |
| Southcentral Foundation | Anchorage | 2,200 |
| Alaska Native Med CU | Anchorage | 2,000 |
| Corrections Department | Anchorage | 1,807 |
| University of Alaska-Fairbanks | Fairbanks | 1,500 |
| Mckinley Chalet Resort | Denali National Park | 1,200 |
| University of Alaska Anchorage | Anchorage | 1,076 |
| Alyeska Resort | Girdwood | 1,000 |
| Conocophillips Alaska | Prudhoe Bay | 1,000 |
| Department of Transportation | Fairbanks | 1,000 |
| Early Childhood-Elementary | Anchorage | 1,000 |
| Sitka Wic Office | Sitka | 1,000 |
| Tanana Chiefs Conf Inc | Fairbanks | 900 |
| Alaska Regional Hospital | Anchorage | 820 |
| Hope Community Resources Inc | Anchorage | 800 |
| University of Alaska-Fairbanks | Fairbanks | 800 |
| ACS of Anchorage Inc | Anchorage | 700 |
| Conocophillips Alaska Inc | Anchorage | 700 |
| Stone Soup Cafe | Fairbanks | 700 |
| Central Peninsula Hospital | Soldotna | 682 |
| US Fish & Wildlife Dept Svc | Anchorage | 635 |

Source: Data Axle; The Innovation Group

The following table displays reported seasonal workers in Alaska according to the Alaska Department of Labor and Workforce Development, "Nonresidents Working in Alaska," published February 2021. In Alaska, workers from outside the state can sometimes outnumber residents. This is particularly true in the Southwest, where seafood processing draws a large number of seasonal workers. Overall, 66.5% of workers in Alaska were local residents and 33.5% were nonlocal residents and nonresidents.

**Table 42: Alaska's 2019 Seasonal Workers**

| Area | Local Residents | Nonlocal Residents | Non-Residents | Total Workers | Percent Local Resident | Percent Non-Local |
|---|---|---|---|---|---|---|
| Kusilvak Census Area | 3,142 | 358 | 211 | 3,711 | 84.7% | 15.3% |
| Matanuska-Susitna Borough | 25,237 | 3,176 | 3,760 | 32,173 | 78.4% | 21.6% |
| Nome Census Area | 4,330 | 608 | 683 | 5,621 | 77.0% | 23.0% |
| Anchorage, Municipality | 120,547 | 17,833 | 18,893 | 157,273 | 76.6% | 23.4% |
| Bethel Census Area | 8,013 | 1,281 | 1,198 | 10,492 | 76.4% | 23.6% |
| Kenai Peninsula Borough | 19,975 | 1,596 | 5,369 | 26,940 | 74.1% | 25.9% |
| Fairbanks North Star Borough | 33,915 | 5,229 | 7,342 | 46,486 | 73.0% | 27.0% |
| Juneau, City and Borough | 15,068 | 1,521 | 4,205 | 20,794 | 72.5% | 27.5% |
| Kodiak Island Borough | 5,088 | 413 | 1,906 | 7,407 | 68.7% | 31.3% |
| Yukon-Koyukuk Census Area | 2,214 | 705 | 395 | 3,314 | 66.8% | 33.2% |
| Prince of Wales-Hyder Census Area | 2,132 | 159 | 946 | 3,237 | 65.9% | 34.1% |
| Ketchikan Gateway Borough | 6,114 | 806 | 2,501 | 9,421 | 64.9% | 35.1% |
| Wrangell, City and Borough | 744 | 87 | 340 | 1,171 | 63.5% | 36.5% |
| Northwest Arctic Borough | 2,968 | 993 | 937 | 4,898 | 60.6% | 39.4% |
| Sitka, City and Borough | 3,612 | 367 | 2,060 | 6,039 | 59.8% | 40.2% |
| Petersburg Borough | 1,139 | 118 | 665 | 1,922 | 59.3% | 40.7% |
| Yakutat, City and Borough | 264 | 52 | 159 | 475 | 55.6% | 44.4% |
| Hoonah-Angoon Census Area | 706 | 173 | 405 | 1,284 | 55.0% | 45.0% |
| Southeast Fairbanks Census Area | 1,843 | 819 | 738 | 3,400 | 54.2% | 45.8% |
| Haines Borough | 826 | 134 | 591 | 1,551 | 53.3% | 46.7% |
| Dillingham Census Area | 1,946 | 354 | 1,715 | 4,015 | 48.5% | 51.5% |
| Valdez-Cordova Census Area | 3,860 | 1,037 | 3,504 | 8,401 | 45.9% | 54.1% |
| Aleutians West Census Area | 1,923 | 392 | 2,554 | 4,869 | 39.5% | 60.5% |
| Lake and Peninsula Borough | 639 | 268 | 886 | 1,793 | 35.6% | 64.4% |
| Skagway, Municipality | 515 | 90 | 1,239 | 1,844 | 27.9% | 72.1% |
| North Slope Borough | 3,356 | 8,391 | 5,994 | 17,741 | 18.9% | 81.1% |
| Aleutians East Borough | 683 | 298 | 3,315 | 4,296 | 15.9% | 84.1% |
| Denali Borough | 660 | 813 | 2,967 | 4,440 | 14.9% | 85.1% |
| Bristol Bay Borough | 366 | 506 | 3,866 | 4,738 | 7.7% | 92.3% |
| Other/Unknown | 10 | 3,299 | 5,551 | 8,860 | 0.1% | 99.9% |
| **Total** | **271,835** | **51,876** | **84,895** | **408,606** | **66.5%** | **33.5%** |

Source: Alaska Department of Labor and Workforce Development, Nonresidents Working in Alaska Published Feb 2021; The Innovation Group

# *Tourism*

The Innovation Group collected the most recent tourism data for Alaska from the Alaska Visitor Volume Reports prepared to the Alaska Travel Industry Association by McDowell Group.

## Visitor Spending

In 2017, the most recent year available, total out of state visitor spending in Alaska reached $2.2 billion. From 2006 to 2017, total visitor spending increased by a CAGR of 3.4%, boding well for stable and decent growth in the future.

**Table 43: Total Visitor Spending**

| Year | 2006 | 2011 | 2016 | 2017* | *CAGR* |
|---|---|---|---|---|---|
| Spending (Billion) | $1.52 | $1.51 | $1.97 | $2.20 | *3.4%* |

Source: Alaska Visitors Statistics Program (AVSP) VII; *The Economic Impacts of Alaska's Visitor Industry, 2017; The Innovation Group

Visitor expenditures in Alaska per trip reached $1,057 in 2017, growing by a CAGR of 1.2% from 2006. Visitor spending per night in 2016 was $115, growing by a CAGR of 1.1% from 2006.

**Table 44: Visitor Expenditures in Alaska Per Trip & Per Night**

| | 2006 | 2011 | 2016 | *CAGR* |
|---|---|---|---|---|
| Per Trip | $934 | $941 | $1,057 | *1.2%* |
| Per Night | $103 | $102 | $115 | *1.1%* |

Source: Alaska Visitors Statistics Program (AVSP) VII; The Innovation Group

The following table displays total visitor spending in Alaska by category. In 2017, lodging accounted for the highest category of visitor spending at $454 million, growing by a the greatest CAGR of 8.2% since 2006.

**Table 45: Total Visitor Spending in Alaska, by Category ($Millions)**

| | 2006 | 2011 | 2016 | 2017 | *CAGR* |
|---|---|---|---|---|---|
| Lodging | $191 | $191 | $234 | $454 | *8.2%* |
| Tours/Activities/Ent | $307 | $290 | $372 | $394 | *2.3%* |
| Gifts/Souveniers/Clothng | $289 | $266 | $254 | $427 | *3.6%* |
| Food/Beverage | $158 | $190 | $247 | $438 | *9.7%* |
| Cars/Fuel/Transportation | $111 | $136 | $150 | $258 | *8.0%* |
| Package not Inc. cruise | $245 | $261 | $338 | n/a | *3.3%* |
| Other | n/a | $175 | $368 | $217 | *3.7%* |

Source: Alaska Visitors Statistics Program (AVSP) VII; *The Economic Impacts of Alaska's Visitor Industry, 2017; The Innovation Group

## Country of Origin

The following table displays Alaska's visitors by country of origin for 2011 and 2016, the most recent years available. Europe over the two years has accounted for the greatest percentage of international visitors at 42% and 38% for 2011 and 2016, respectively. While visitors from Europe decreased over the years, visitors from Australia/New Zealand increased from 27% to 36%.

**Table 46: Alaska's Visitors by Country of Origin**

| | % of Int'l | | Estimated Volume | |
|---|---|---|---|---|
| | 2011 | 2016 | 2011 | 2016 |
| **Europe** | **42%** | **38%** | **64,000** | **63,000** |
| United Kingdom | 21 | 17 | 33,000 | 28,000 |
| German-Speaking Europe | 13 | 12 | 20,000 | 20,000 |
| Germany | 8 | 9 | 12,000 | 15,000 |
| Switzerland | 5 | 2 | 7,000 | 3,000 |
| Austria | 1 | 1 | 1,000 | 2,000 |
| Other Europe | 7 | 7 | 11,000 | 12,000 |
| Netherlands | 2 | 2 | 3,000 | 3,000 |
| Italy | n/a | 2 | n/a | 3,000 |
| **Australia/New Zealand** | **27%** | **36%** | **42,000** | **61,000** |
| Australia | 23 | 26 | 36,000 | 44,000 |
| New Zealand | 4 | 10 | 6,000 | 17,000 |
| **Asia** | **12%** | **14%** | **18,000** | **23,000** |
| India | 2 | 5 | 3,000 | 8,000 |
| Japan | 4 | 3 | 6,000 | 6,000 |
| China | 2 | 3 | 3,000 | 5,000 |
| Korea | 1 | 1 | 2,000 | 2,000 |
| **Latin America** | **n/a** | **8%** | **n/a** | **14,000** |
| Mexico | 6 | 3 | 8,000 | 4,000 |
| **Other International** | **14%** | **4%** | **22,000** | **6,000** |
| Israel | n/a | 2 | n/a | 3,000 |
| **Total International** | **100%** | **100%** | **154,000** | **167,000** |

Source: AVSP 7 – Section 19: Summary Profiles – International; The Innovation Group

## Full-Year Visitors

The proceeding table displays Alaska's total full fiscal year visitors form FY2010-11 to FY2018-19. Over the included years, total visitors to the state have increased by a CAGR of 4.4%, reaching over 2.5 million in FY2018-19.

**Table 47: Full Year Alaska Visitor Volumes**

| 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | CAGR |
|---|---|---|---|---|---|---|---|---|---|
| 1,800,900 | 1,853,400 | 1,956,900 | 1,932,600 | 2,066,800 | 2,173,000 | 2,242,900 | 2,347,300 | 2,536,000 | 4.4% |

Source: Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group

The following table shows all out of state travelers exiting Alaska by various transportation modes, excluding Alaska residents, during the three study periods. From FY2016 to FY2018, cruise ships as an exit mode increased the greatest with a CAGR of 10.5%, reaching 1.3 million in FY2018 and is the most popular exit mode.

**Table 48: Full Year Alaska Visitor Volumes by Exit Mode**

| Exit Mode | 2016-17* | 2017-18** | 2018-19 | *CAGR* |
|---|---|---|---|---|
| Air | 1,052,500 | 1,058,700 | 1,100,600 | *2.3%* |
| Cruise Ship | 1,089,700 | 1,089,700 | 1,331,600 | *10.5%* |
| Highway/Ferry | 100,700 | 99,900 | 103,800 | *1.5%* |
| **Total Visitors** | **2,242,900** | **2,248,300** | **2,536,000** | ***6.3%*** |

Source: *The Economic Impacts of Alaska's Visitor Industry, 2017; **Alaska Visitor Volume, Fall/Winter 2015-16 to 2017-18; Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group Weather

The proceeding table shows the percentage of all out of state travelers exiting the state by various transportation modes, divided out by winter and summer visitors. An estimated 71.2% of all travelers who exited Alaska via domestic air in the summer of 2019 were visitors. Over the winter FY2018-19, roughly 100% of international air travel as an exit mode was from out of state visitors. Note, the highway ratio refers to highway travelers who are exiting the state for the final time on their trip, eliminating the possibility of double-counting visitors who exit the state twice.

**Table 49: Full Year Alaska Visitor Percentages by Mode**

| Exit Mode | Winter 2018-19 | Summer 2019 |
|---|---|---|
| Domestic Air | 32.3% | 71.2% |
| International Air | 100.0% | 78.8% |
| Highway* | 21.2% | 34.5% |
| Ferry | 25.4% | 64.6% |
| **Total** | **31.7%** | **79.8%** |

Source: Alaska Visitor Volume, Winter 2018-19 and Summer 2019; Alaska Visitor Volume, Summer 2017; **The highway ratio refers to "last-exit" visitors: not planning to re-enter Alaska on the same trip The Innovation Group

## Fall/Winter Visitors

Alaska's fall/winter visitor volumes are displayed below. From FY2010-11 to 2018-19, fall/winter visitor volumes increased by a CAGR of 3.6%, reaching 323 thousand in FY2018-19.

**Table 50: Fall/Winter Alaska Visitor Volumes**

| FY Year | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18* | 2018-19* | *CAGR* |
|---|---|---|---|---|---|---|---|---|---|---|
| Winter | 244,100 | 266,800 | 263,100 | 273,000 | 286,800 | 315,500 | 316,600 | 321,000 | 323,000 | *3.6%* |

Source: Alaska Visitor Volume, Fall/Winter 2015-16 to 2017-18; *Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group

Between 315 thousand and 323 thousand out of state travelers visited Alaska over the last four fall/winter seasons. Overall, the majority of fall/winter visitors exit the state by air accounting for 96% of all exit modes in the FY2018-19 season.

**Table 51: Fall/Winter Alaska Visitor Volumes by Exit Mode**

| Exit Mode | 2015-16 | 2016-17 | 2017-18 | 2018-19* | *CAGR* |
|---|---|---|---|---|---|
| Air | 301,600 | 302,700 | 308,900 | 309,700 | *0.9%* |
| Highway | 12,800 | 13,000 | 12,100 | n/a | *-2.8%* |
| Ferry | 1,100 | 900 | 1,000 | n/a | *-4.7%* |
| Highway/Ferry | 13,900 | 13,900 | 13,000* | 13,300 | *-1.5%* |
| **Total Visitors** | **315,500** | **316,600** | **322,000** | **323,000** | ***0.8%*** |

Source: Alaska Visitor Volume, Fall/Winter 2015-16 to 2017-18; *Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group

The following table shows the percentage of all out of state travelers exiting Alaska by various transportation modes during the four study periods. An estimated 32.3% of out of state travelers exited Alaska via domestic air in the fall/winter FY2018-19 season. Over the same time period, 31.7% of total fall/winter exit modes were used by out of state visitors.

**Table 52: Fall/Winter Alaska Visitor Percentages by Mode**

| Exit Mode | 2015-16 | 2016-17 | 2017-18 | 2018-19* |
|---|---|---|---|---|
| Domestic Air | 32.6% | 32.4% | 32.2% | 32.3% |
| International Air | 100.0% | 100.0% | 100.0% | 100.0% |
| Highway** | 22.8% | 23.7% | 23.1% | 21.2% |
| Ferry | 25.3% | 25.4% | 25.3% | 25.4% |
| **Total** | **32.1%** | **32.0%** | **31.9%** | **31.7%** |

Source: Alaska Visitor Volume, Fall/Winter 2015-16 to 2017-18; *Alaska Visitor Volume, Winter 2018-19 and Summer 2019; **The highway ratio refers to "last-exit" visitors: not planning to re-enter Alaska on the same trip; The Innovation Group

## Summer Visitors

The following table shows all out of state visitors to Alaska over the summer months including May through September. In the most recent year available, summer out of state tourists reached 2.2 million, in 2019. From 2010 to 2019, summer visitors to the state grew by a CAGR of 4.2%.

**Table 53: Summer Alaska Visitor Volumes**

| Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | *CAGR* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Summer | 1,532,400 | 1,556,800 | 1,586,600 | 1,693,800 | 1,659,600 | 1,780,000 | 1,857,500 | 1,926,300 | 2,026,300 | 2,213,000 | *4.2%* |

Source: Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group

The following table shows all out of state travelers exiting the state by various transportation modes, excluding Alaska residents, over the summer season. From 2015 to 2019, cruise ships as an exit mode increased the greatest with a CAGR of 7.4%, reaching 1.3 million in 2019. It is also the most popular exit mode during the summer season.

**Table 54: Summer Alaska Visitor Volumes by Exit Mode**

| Exit Mode | 2015 | 2016 | 2017 | 2018 | 2019 | *CAGR* |
|---|---|---|---|---|---|---|
| Air | 703,400 | 747,100 | 750,500 | 760,100 | 790,900 | *3.0%* |
| Cruise Ship | 999,600 | 1,025,900 | 1,089,700 | 1,169,000 | 1,331,600 | *7.4%* |
| Highway/Ferry | 77,000 | 84,500 | 86,100 | 97,200 | 90,500 | *4.1%* |
| **Total** | **1,780,000** | **1,857,500** | **1,926,300** | **2,026,300** | **2,213,000** | ***5.6%*** |

Source: Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group

The proceeding table shows the percentage of all out of state travelers exiting the state by various transportation modes over the summer season. An estimated 71.2% of all travelers who exited Alaska via domestic air and 78.8% who exited by international air in the summer of 2019 were out of state visitors.

**Table 55: Summer Alaska Visitor Percentages by Mode**

| Exit Mode | Summer 2017* | Summer 2019 |
|---|---|---|
| Domestic Air | 69.6% | 71.2% |
| International Air | 80.7% | 78.8% |
| Highway* | 34.5% | 34.5% |
| Ferry | 66.5% | 64.6% |
| Cruise Ship | 100.0% | 100.0% |
| **Total** | **78.1%** | **79.8%** |

Source: Alaska Visitor Volume, Winter 2018-19 and Summer 2019; *Alaska Visitor Volume, Summer 2017; **The highway ratio refers to "last-exit" visitors: not planning to re-enter Alaska on the same trip The Innovation Group

## Ferry

The following table displays Alaska's annual ferry traffic from 2015 to 2019, according to the most recent Annual Traffic Volume Report Alaska Marine Highway Systems. Overall, total passengers and vehicles ferry traffic have been decreasing since 2015, and as of 2019 total

passenger volume was roughly 190 thousand and the number of ferry vehicle traffic was 77 thousand.

**Table 56: Annual Ferry Traffic**

| | Passengers | | | Vehicles | | |
|---|---|---|---|---|---|---|
| **Year** | **Southeast** | **Southwest** | **Total** | **Southeast** | **Southwest** | **Total** |
| 2015 | 223,000 | 65,133 | 288,133 | 74,399 | 26,148 | 100,547 |
| 2016 | 203,237 | 54,805 | 258,042 | 73,787 | 25,182 | 98,969 |
| 2017 | 200,559 | 44,189 | 244,748 | 74,818 | 25,708 | 100,526 |
| 2018 | 188,054 | 49,555 | 237,609 | 69,562 | 22,787 | 92,349 |
| 2019 | 152,310 | 37,808 | 190,118 | 58,268 | 18,935 | 77,203 |
| ***CAGR*** | ***-9.1%*** | ***-12.7%*** | ***-9.9%*** | ***-5.9%*** | ***-7.8%*** | ***-6.4%*** |

Source: 2019 Annual Traffic Volume Report Alaska Marine Highway Systems; The Innovation Group

## Cruise

The proceeding table shows Alaska cruise volumes by ports in 2019 which were visited by over 10,000 passengers, according to the most recent Alaska Visitors Volume, Winter 2018-19, and Summer 2019 report. Alaska's top three ports in 2019 where Juneau, Ketchikan, and Skagway, capturing between 78% and 98% of statewide volume. The states secondary ports include Icy Strait Point, Seward, Sitka, and Whittier receive between 15% and 20% of statewide volume. The remaining ports captured less than 5% of the total statewide volume.

**Table 57: Alaska Cruise Volumes by Port, 2019 (>10,000 passengers)**

| **Port** | **Passengers** | ***% of Total*** |
|---|---|---|
| Juneau | 1,305,700 | *98%* |
| Ketchikan | 1,186,400 | *89%* |
| Skagway | 1,035,800 | *78%* |
| Icy Strait Point | 267,200 | *20%* |
| Seward | 237,900 | *18%* |
| Sitka | 218,600 | *16%* |
| Whittier | 193,800 | *15%* |
| Haines | 63,400 | *5%* |
| Kodiak | 26,300 | *2%* |
| Wrangell | 17,300 | *1%* |
| Homer | 14,800 | *1%* |
| Anchorage | 13,700 | *1%* |
| Valdez | 12,400 | *1%* |

Source: Alaska Visitor Volume, Winter 2018-19 and Summer 2019; The Innovation Group

## Air Service

Alaska's primary airports are located in Anchorage, Fairbanks, and Juneau. Anchorage is the state's largest city and hosts the most heavily trafficked airport, Ted Stevens Anchorage International Airport. Fairbanks International Airport, located in Fairbanks, is the second most heavily trafficked airport in Alaska. The following two tables show Alaska's two most used commuter airports passenger volumes, according to Alaska International Airport Systems most recent annual report.

The Ted Stevens Anchorage International Airport opened in 1953 and by 1960 had established itself as the "Air Crossroads of the World" with seven international carriers as regular stop-over on routes between Europe, Asia, and the Eastern United States. The international airport is positioned equidistant from Tokyo and New York, and within 9.5 hours of 90% of the industrialized world. Today, the airport serves approximately 47 airline carriers, 27 of which are domestic and 18 international. Anchorage International Airport offers 16 retail outlets and 12 food and beverage. The complex is roughly 4,612 acres with hundreds of acres available for cargo and logistic development. The airport has three runways over 10,6000 feet, and the longest is 12,4000 feet. The Ted Stevens Anchorage International Airport is the second largest airport in the United States for landed weight of cargo aircraft and the fifth largest in the world in terms of cargo throughput.

In 2019, Ted Stevens Anchorage Internarial Airport served nearly 5.7 million passengers, increasing by a CAGR of 1.7% since 2010. Both enplaned and deplaned passengers have increased by a CAGR of 2.1% over the same time period.

**Table 58: Ted Stevens Anchorage International Airport**

| FY | Enplaned | Deplaned | In-Transit | Total |
|---|---|---|---|---|
| 2010 | 2,346,750 | 2,346,954 | 189,231 | 4,882,935 |
| 2011 | 2,456,175 | 2,462,554 | 164,204 | 5,082,933 |
| 2012 | 2,493,562 | 2,482,676 | 90,189 | 5,066,427 |
| 2013 | 2,469,060 | 2,445,886 | 44,398 | 4,959,344 |
| 2014 | 2,547,025 | 2,538,699 | 32,911 | 5,118,635 |
| 2015 | 2,668,378 | 2,654,554 | 41,755 | 5,364,687 |
| 2016 | 2,774,869 | 2,764,020 | 18,651 | 5,557,540 |
| 2017 | 2,725,897 | 2,725,282 | 27,457 | 5,478,636 |
| 2018 | 2,741,683 | 2,732,445 | 29,129 | 5,503,257 |
| 2019 | 2,824,465 | 2,820,399 | 49,160 | 5,694,024 |
| ***CAGR*** | ***2.1%*** | ***2.1%*** | ***-13.9%*** | ***1.7%*** |

Source: Alaska International Airport System- Annual Activity Summary Report; The Innovation Group

Fairbanks International Airport (FIA) is roughly a 9.5 hour flight from 90% of the northern industrialized hemisphere and hosts direct international and domestic passengers, and cargo traffic. The international airport has four runways, including a water/winter ski trip, gravel/ski strip, and two asphalt, the largest of which is 11,800 foot asphalt runway.

In 2019, FIA's total passengers reached nearly 1.2 million, growing by a CAGR of 2.1% since 2010. Over the same time period, enplaned and deplaned passengers increased by CAGR's of 2.7% and 2.4%, respectively.

**Table 59: Fairbanks International Airport (FIA)**

| FY | Enplaned | Deplaned | In-Transit | Total |
|---|---|---|---|---|
| 2010 | 457,744 | 477,015 | 51,100 | 985,859 |
| 2011 | 470,747 | 476,637 | 57,325 | 1,004,709 |
| 2012 | 468,325 | 472,970 | 60,260 | 1,001,555 |
| 2013 | 478,879 | 481,358 | 62,516 | 1,022,753 |
| 2014 | 496,966 | 492,110 | 72,355 | 1,061,431 |
| 2015 | 509,962 | 513,101 | 48,516 | 1,071,579 |
| 2016 | 546,550 | 547,595 | 23,707 | 1,117,852 |
| 2017 | 572,870 | 575,667 | 22,679 | 1,171,216 |
| 2018 | 576,249 | 580,278 | 24,116 | 1,180,643 |
| 2019 | 580,394 | 588,477 | 23,583 | 1,192,454 |
| ***CAGR*** | ***2.7%*** | ***2.4%*** | ***-8.2%*** | ***2.1%*** |

Source: Alaska International Airport System- Annual Activity Summary Report; The Innovation Group

# *Implications for Asian Tourism to Alaska*

## Momentum of Global Tourism

Tourism has become one of the largest contributors to the global GDP and employment. Prior to COVID-19, according to the United Nations' World Tourism Organization (UNWTO), more than 1.5 billion international tourist arrivals were recorded in 2019 globally, and all regions experienced an increase in arrivals.

With the significant COVID-19 impacts on global tourism that started in early 2020, governments have responded quickly and strongly with the level and coverage of measures steeping up over time, and most countries have adopted economy-wide stimulus packages (fiscal and monetary measures) along with job support measures.

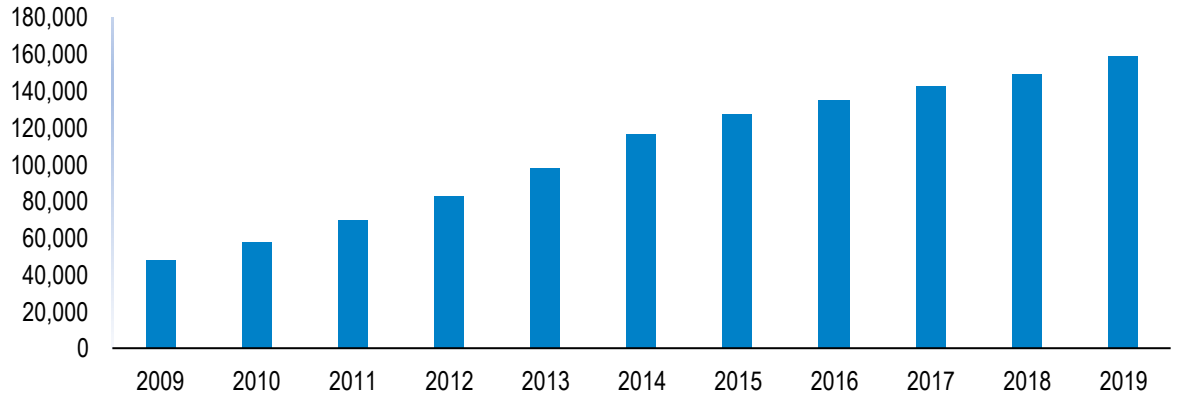
As a growing number of countries around the world gradually ease restrictions on travel, recent UNWTO research and survey results in June 2021 show that there is clearly an uptick in confidence on the recovery of international travel, with over 60% of the respondents saying they expect to see a rebound in international tourism by the end of 2022, compared to less than 50% in an earlier January 2021 survey. Although it may take two to three years (until late 2024, as estimated) for international tourism to return to the pre-COVID levels, the potential of international tourism, especially Asian tourism, to Alaska must not be overlooked.

## Potential of Asian Outbound Tourism

The group driving the global tourism growth is Asia, with the majority of its travelers originating from mainland China, Japan, and South Korea.

Take China as an example. Coinciding with the strong growth of China's economy and middle class, the number of Chinese citizens traveling internationally has increased significantly over the past decade or so. As shown in the chart below, the growth rate of international departures has been high, with the number of international tourist departures growing at a CAGR of approximately 12.8% from 2009 to 2019. In 2019, China had once again consolidated its position as the top global tourism source market with roughly 160 million trips overseas.

**Figure 4: Chinese Outbound Tourism (in thousands)**




Source: The World Bank; The Innovation Group
Note: the chart refers to the number of departures, not the number of people traveling. Therefore, a person who makes several trips from China during a given period is counted each time as a new departure.

According to a research report by CLSA, the United States was cited by survey respondents to be one of the top "dream" destinations for Asian tourists. Alaska, with relative proximity to Asia, is well positioned to cater to Asian outbound tourism, especially when combined with other unique attractions such as northern lights, national parks, wildlife, and high-quality resort amenities.

It is observed that the already rapidly growing Asian outbound tourism desires better services and personalized experiences. Today's Asian outbound tourists desire for new experiences – ranging from sightseeing and shopping to local cuisine and culture. This market is moving away from group tours and shifting towards individual travel, and these tourists will become to be increasingly savvy, independent and demand unique and high quality experience, constituting a strong demand for Alaska's exotic offerings and boding well for the success of prospective casino resorts in the state.

## Robust Spending Power of Asian Outbound Tourists

Asian tourists have historically shown robust spending power over the last decade, well represented by the Chinese tourists. According to a report by Nielsen[1], a global measurement and data analytics company, in terms of average total annual spending, outbound Chinese tourism consumption has risen steadily. In 2017, outbound Chinese tourists averaged $5,565 per person[2], with estimates for 2018 average spending expected to reach $5,715 – a growth of 3% year-over-year. In terms of on-location spending (excluding tour group costs and the major transportation costs to and from the destination), Chinese tourists spent an average of $3,064 per person on their most recent overseas travels, with the highest spending of more than $4,400 in the United States, illustrating substantial economic benefits to the travel destination.

**Figure 5: Spending of Chinese Outbound Tourists**

[1] http://www.nielsen.com/content/dam/nielsenglobal/cn/docs/Outbound%20Chinese%20Tourism%20and%20Consumption%20Trends.pdf

[2] Most recent data available.

## Alaska's Attraction Factors to Asian Outbound Tourism

America's last frontier has unique and exotic attractions with the vast, uninhabited wilderness that overwhelms most places in the world. International outbound tourists are anticipated to comprise a considerable portion of total visitation to the proposed leisure facilities. In order to effectively attract and maintain growth of Asian outbound tourism, we recommends focusing on the following aspects to synchronize marketing and promotional efforts:

- **Wilderness in the Last Frontier vs. Overcrowding in most Asian countries**. Experiencing the picturesque natural landscape, learning about the native heritage of Alaskan tribes, and having incredible outdoor adventures in the Last Frontier are what attracts tourists from across the world to Alaska, especially those from often "crowded" Asian countries. The Golden Week of collective holidays in Asian counties have often been criticized as a "Golden Mess". The railway system and highways were in gridlock, many tourist sites sold tickets beyond carrying capacity. Even outside of this period of intensive travel, natural and man-made attractions suffer from overcrowding, pushing Asian tourists to destinations beyond the border and the region.

- **Beauty of nature in Alaska vs. Environmental Issues in Asia**. The natural beauty can be enjoyed while hiking, paddling, and fishing in the great outdoors in Alaska, especially as the state and national parks are some of the largest in the United States. In contrast, environment pollutions have been worsening for many years in many Asian counties. More recently, air pollution has in many places become unbearable.

- **Favorable visa policy and tourism infrastructure in Alaska**. With the US visa waiver program covering Japan, South Korea, Singapore, and Taiwan, and the 10-year multiple-entry visa issued to eligible Chinese tourists, most Asian tourists visiting Alaska can enjoy a simplified visa process, as well we speed-up immigration controls at the international airports.

  To better facilitate the growth of Asian tourism, more investments and greater commitment may be called for from the public and private sectors to make it easier for people to travel, such as more flights between Alaska and major cities in Asia, higher customs capacity at major airports, more reliable hard and soft infrastructure, and technological support in the particular form of more accessible Internet connectivity. Air transport will remain the primary way of arrival for Asian tourists, in addition to the existing network of roads, rails, and marine transports.

- **Northern Lights in Alaska.** Alaska is one of the best places on earth to see the northern lights. Travelers from all over the world come to Alaska to see this stunning display and take advantage of other winter experiences. The northern lights occur all four seasons of the year. While auroras are still visible from cities, it is best to view from the outskirts of town, or in an area known for clear, dark skies. The Interior, especially Fairbanks and Far North regions, are considered the best in Alaska for northern lights viewing, boding well for a promising outlook of the prospective leisure resort in the region.

- **Major players enter the scene.** Many major tourism industry players have entered the market as the tourism industry continues to grow leaps and bounds. International hotel groups, cruise ship companies, additional credit card issuers (such as China's "UnionPay" cards), new smartphone apps, and other companies that are traditionally not directly involved in providing tourism services have started to create "Asia-centric" offers for tourists traveling overseas.

## Fairbanks – A Northern Light

The Fairbanks region has grown into a popular year-round destination for guests from the US and abroad. With the midnight sun and aurora, quality attractions, robust activities and the Golden Heart hospitality, the region is poised to become a bright spot of Alaska's tourist destinations in the near future.

The region's hotel/motel tax collections and airport origin and destination numbers set records in 2015 through 2018, and then again in 2019. Developing the aurora and winter tourism seasons has substantially strengthened the local travel industry, providing more year-round economic benefits and offering unparalleled opportunities for local entrepreneurs to participate in the economic success at the ownership level. Fairbanks' current cooperative destination marketing program is supported by more than 420 partners that are primarily small businesses, and a potential destination entertainment resort would further enhance the region's attraction and economy.

The Fairbanks region, specifically the Fairbanks North Star Borough and north to Coldfoot location, is ideal for northern lights viewing, as it is under the "Auroral Oval"—a ring-shaped zone over the far north where aurora activity is concentrated. Additionally, the low precipitation and distance from coastal areas contributes to consistently clear nights, making the Fairbanks region an outstanding tourist destination. The Fairbanks' location is frequently referred to as the best place to see the northern lights in the US and, in many cases, across the globe. The growth in winter and aurora tourism seasons in the Fairbanks region has resulted in a rise in many small businesses, such as dog mushing tours, aurora viewing facilities, and photography tours.

As the Fairbanks tourism industry becomes more robust, the quality of life in local communities has been improving substantially. A potential destination resort, together with future investments in marketing and developing, will make Fairbanks a bright spot in visitor destinations and pave the way to make local economy stronger and local lives better.

# UNITED STATES GAMING MARKET OVERVIEW

All US states have some form of gambling except Hawaii and Utah. State lotteries are the most prevalent, with the majority being limited to retail/paper only. Commercial casinos with slot machines operate in 24 states, and full casino development is proceeding in two more states—Nebraska and Virginia. Additionally, historical horse racing (HHR) machines operate in three states—Kentucky, Virginia and Wyoming (distributed), and several states allow some form of commercial table gaming, typically limited to card games or Class II poker games.

Prior to the late 1980s, casino gambling was limited to Nevada and Atlantic City. Several forms of casino gaming have been implemented across the US since then:

- Horse racing and pari-mutuel industries persuaded several states to allow casinos at racetracks and frontons (termed "racinos"). At first, these racinos were typically limited to slot machines, VLTs, or video poker. Over time, most racinos were permitted to operate table games.
- Several states in the South and Midwest instituted "riverboat" casinos. Confining casinos to riverboats was a way of making gaming legislation politically palatable. Most riverboat states have a fixed number of casino licenses, with Mississippi being the only unrestricted state in terms of number of licenses, although Mississippi casinos are restricted to certain counties of the Gulf Coast and Mississippi River. Over time, most riverboat states have dropped the riverboat requirement.
- Similar to the riverboat fiction, two states took advantage of Wild West nostalgia to institute casino zones in historic mining towns. Colorado allows commercial casinos in Black Hawk, Central City, and Cripple Creek, and South Dakota in Deadwood.
- At the same time that racing and riverboat interests were succeeding, the Supreme Court's *Cabazon* decision and the Indian Gaming Regulatory Act of 1988 (IGRA) ushered in a dramatic transformation of tribal gaming from bingo halls into full-scale casino gaming. Under IGRA, if a State allows gambling it is required to negotiate in good faith with federally recognized tribes seeking to enter into a gaming compact. Most affected States have done so, although Oklahoma resisted for several years, during which time the tribes operated Class II bingo machines, which proved highly successful and still operate alongside Class III slot machines. Alabama does not permit casino gambling and therefore it has not entered into a compact with the state's sole federally recognized tribe, the Poarch Band of Creek Indians, which operates three highly successful Class II casinos. There are Class III tribal casinos in 25 states, and a handful of states with non-compacted tribal gaming, including Alaska.
- Commercial card rooms operate in several states, most prominently California and Washington. Slot machine gaming is limited to tribal casinos in those states. Florida and Minnesota allow Class II poker at pari-mutuel facilities, and facilities in two south Florida counties are also allowed to operate slot machines.
- In many states where gaming interests have been unsuccessful in advancing legislation, Class II gaming has filled the void, including Alabama as noted. HHR machines have been implemented in Kentucky, Virginia and Wyoming by piggy-backing onto existing pari-mutuel regulations, although the state court system in Idaho prevented HHR

development at tracks in that state. HHR technology originated in Arkansas but the state has since legalized four full-scale casino licenses.

Three prominent themes are common to most of the commercial casino development of the past 30 years:

- Initial legislation or development was seen as being restricted in some way: "it will be just like the old Mark Twain days, playing cards on the riverboat or in the saloon;" or "gambling is already occurring at the racetrack," or "it's just like wagering on a live race."
- Many restrictions were subsequently lifted. Riverboats were often originally required to cruise, then were allowed to pretend to cruise, then allowed to have no phantom cruise schedule at all, then allowed to be placed on barge structures minimally touching water, then allowed to move onto land entirely. Casinos in Colorado and South Dakota were originally intended to provide financial life-lines to historic hotels and saloons, but ultimately full-scale casinos developed.
- With the exception of Mississippi, states restrict the number of licenses. Some states have a set statutory limit; Illinois for example originally had a limit of ten, although legislation passed in 2019 to expand the number. Iowa does not have a set statutory limit but the Iowa Racing and Gaming Commission controls whether new licenses will be issued.

Three states have all three major forms of casino gaming—riverboat, racetrack and Native American: Indiana, Iowa and Louisiana. Louisiana in addition permitted a land-based resort in New Orleans, and allows video poker machines in bars, restaurants, hotels, OTB parlors, and truck stops.

After the first wave of riverboat and racetrack development in the late 1980s and early 1990s, several major states have legalized a mixture of racetrack and land-based casino development. New York was one of the first, allowing VLTs at racetracks in late 2001 (and in 2014 approving a limited number of full casino licenses), followed by Pennsylvania in 2004 approving slot machines at racetracks and at a limited number of resort casinos (later approving table games as well), Maryland, Kansas, and Ohio.

The Virginia legislature approved five casino licenses in early 2020 subject to local voter approval. Development is underway in four locations, and the fifth (Richmond) is in the RFP process. In November 2020, Nebraska voters approved casinos at six racetracks. The legislature is currently working to pass the required regulatory framework.

The following two tables show the casino development and other approved gambling options for each state.

**Table 60: US Commericial and Native American Casino Development**

| | Commercial | Implemented | Native American |
|---|---|---|---|
| Alabama | | | Large Scale Class II |
| Alaska | | | Small Scale Class II |
| Arizona | | | Extensive |
| Arkansas | 4 licenses | 2019 | |
| California | Cardrooms | | Extensive |
| Colorado | 3 historic mining districts | 1991 | 3 in SW |
| Connecticut | | | 2 Large Scale (1993) |
| Delaware | 3 at racetracks | 1996 | |
| District of Columbia | | | |
| Florida | Cardrooms; slots in 2 counties | 2006 | Extensive 2 tribes |
| Georgia | | | |
| Hawaii | | | |
| Idaho | | | Extensive |
| Illinois | 10 licenses; more coming, 2019 legislation | 1991 | |
| Indiana | 13 licenses | 1995 | 1 |
| Iowa | 19 licenses | 1991 | 1 |
| Kansas | 4 licenses | 2010 | Extensive |
| Kentucky | 7 HHRs | 2011 | |
| Louisiana | 16 full licenses; 4 slots only | 1993 | 4 |
| Maine | 2 licenses | 2005 | Not currently eligible |
| Maryland | 6 licenses | 2010 | |
| Massachusetts | 3 full licenses (1 unused); 1 slots only | 2016 | |
| Michigan | 3 licenses in Detroit | 1999 | Extensive |
| Minnesota | 2 cardrooms at racetracks | | Extensive |
| Mississippi | Unlimited in 3 regions | 1994 | 2 |
| Missouri | 13 licenses | 1994 | |
| Montana | | | Extensive |
| Nebraska | Approved for 6 racetracks | Underway | |
| Nevada | Unlimited | 1931 | Minimal |
| New Hampshire | | | |
| New Jersey | Unlimited in Atlantic City | 1979 | |
| New Mexico | 5 slots at racetracks | 1999 | Extensive |
| New York | 9 VLT casinos; 4 full casinos | 2004; 2017 | Extensive |
| North Carolina | | | 2 existing, 1 underway |
| North Dakota | | | Extensive |
| Ohio | 7 VLT casinos; 4 full casinos | 2012 | |
| Oklahoma | | | Extensive |
| Oregon | | | Extensive |
| Pennsylvania | 14 in 4 Categories; 4 more underway | 2006 | |
| Rhode Island | 2 licenses | 1992 | |
| South Carolina | | | |
| South Dakota | 1 historic mining district | 1989 | Extensive |
| Tennessee | | | |
| Texas | | | Class II & Poker |
| Utah | | | |
| Vermont | | | |
| Virginia | 5 full licenses approved; 5 HHRs | Underway | |
| Washington | Cardrooms | | Extensive |
| West Virginia | 4 at racetracks | 1998 | |
| Wisconsin | | | Extensive |
| Wyoming | | | 4 |

Source: The Innovation Group. HHR – Historical Horse Racing

**Table 61: US Other Gaming Availability**

| | Distributed | Online Gaming | Sports Betting | Lottery |
|---|---|---|---|---|
| Alabama | | | | |
| Alaska | | | | |
| Arizona | | | Discussions | Retail |
| Arkansas | | | Casinos | Retail |
| California | | | Discussions | Retail |
| Colorado | | | Retail & Mobile | Retail |
| Connecticut | | Imminent | Imminent | Retail |
| Delaware | | Y | Retail | Retail |
| District of Columbia | | | Mobile | iLottery |
| Florida | | | | Retail |
| Georgia | Amusement | | Legislation failed 2021 | iLottery |
| Hawaii | | | | |
| Idaho | | | | Retail |
| Illinois | #1 VGT State in US | | Retail & Mobile | iLottery |
| Indiana | | | Retail & Mobile | Retail |
| Iowa | | | Retail & Mobile | Retail |
| Kansas | | | Legislation for Retail & Mobile in process | Retail |
| Kentucky | | | Legislation failed 2021 | iLottery |
| Louisiana | Video Poker | | 2022 | Retail |
| Maine | | | | Retail |
| Maryland | | | Retail & Mobile Imminent | Retail |
| Massachusetts | | | Discussions | Retail |
| Michigan | | Y | Retail & Mobile | iLottery |
| Minnesota | E. Pulltabs | | | Retail |
| Mississippi | | | Retail | Retail |
| Missouri | | | Discussions | Retail |
| Montana | VGTs & cards | | Retail & Mobile | Retail |
| Nebraska | | | Retail coming | Retail |
| Nevada | Y | | Retail & Mobile | |
| New Hampshire | | | Mobile; 2019 | iLottery |
| New Jersey | | Y | Retail & Mobile | Retail |
| New Mexico | | | N.A. Casinos | Retail |
| New York | | | Casinos | Retail |
| North Carolina | | | Casinos | Retail |
| North Dakota | | | Discussions | Retail |
| Ohio | | | Legislation for Retail & Mobile in process | Retail |
| Oklahoma | | | Discussions | Retail |
| Oregon | VLTs | | Retail & Mobile | Retail |
| Pennsylvania | Eligible Truck Stops | Y | Retail & Mobile | iLottery |
| Rhode Island | | | Retail & Mobile | Retail |
| South Carolina | | | | Retail |
| South Dakota | VLTs | | Deadwood casinos | Retail |
| Tennessee | | | Mobile; 2020 | Retail |
| Texas | | | Discussions | Retail |
| Utah | | | | |
| Vermont | | | | Retail |
| Virginia | Skill | | Mobile; Retail coming | iLottery |
| Washington | | | Casinos | Retail |
| West Virginia | VLTs | Y | Retail & Mobile | Retail |
| Wisconsin | | | | Retail |
| Wyoming | HHR; Skill | | Legislation passed 2021 | Retail |

Source: The Innovation Group. HHR – Historical Horse Racing

## *Bricks and Mortar Casino Gaming*

Unlike in many countries, casino gaming in the US is not regulated or enabled at the national level, with the exception of tribal gaming, which was enabled by the IGRA and require the approval of the Department of Interior (DOI) and which falls under the oversight of the National Indian Gaming Commission (NIGC). Although commercial and Native American casinos exist together in several states, we separate the two in the following section. Revenue data for Native American casinos are generally not available except at broad regional levels as reported by the NIGC.

### Commercial Casinos

Commercial states (plus Connecticut slot revenue) enjoyed steady gaming revenue growth in the past five years. Total gaming revenue in commercial states exceeded $43 billion in 2019. A new casino in Massachusetts, expansions and ramp up in Kentucky, and a mild winter fueled strong growth in the first two months of 2020 in every jurisdiction except Rhode Island (impact of Encore Massachusetts). Table 62 includes revenue from traditional slots and tables, historical horse racing (HHR) machines, and sports betting in Mississippi (which aggregates sports betting with slot and table revenue).

**Table 62: Percent Change and 2019 Gaming Revenue for Commercial States (CYs)**

| | 2015 | 2016 | 2017 | 2018 | 2019 | *Jan-Feb 2020* | 2019 Revenue (MMs) |
|---|---|---|---|---|---|---|---|
| Arkansas | 26.5% | 9.2% | 8.3% | 6.0% | 7.8% | *17.2%* | $400 |
| Colorado | 5.9% | 2.6% | 2.1% | 1.7% | -1.0% | *4.8%* | $834 |
| Connecticut | -2.2% | 0.9% | 2.0% | -1.9% | -6.9% | *4.7%* | $982 |
| Delaware | 0.2% | -1.5% | 2.7% | -0.4% | 3.4% | *6.9%* | $421 |
| Florida | 4.6% | 2.9% | 0.1% | 4.2% | 0.9% | *4.0%* | $574 |
| Iowa | 2.0% | 1.5% | 1.1% | 0.3% | 0.0% | *16.9%* | $1,468 |
| Illinois | 10.9% | -5.3% | -5.7% | -1.7% | -1.7% | *10.1%* | $1,413 |
| Indiana | -1.2% | -1.2% | 1.3% | -0.1% | -1.7% | *16.7%* | $2,060 |
| Kansas | 4.0% | -0.9% | 7.0% | 4.9% | 1.8% | *10.1%* | $416 |
| Kentucky | 28.7% | 74.9% | 24.3% | 42.8% | 98.5% | *43.5%* | $221 |
| Louisiana | 7.1% | -4.2% | 0.9% | 0.0% | -5.0% | *4.9%* | $2,432 |
| Maryland | 18.0% | 9.5% | 34.2% | 8.2% | 0.5% | *9.9%* | $1,757 |
| Maine | -0.2% | 4.8% | -7.2% | 16.4% | 1.0% | *12.3%* | $145 |
| Massachusetts | | 75.7% | 6.3% | 65.7% | 163.1% | *62.3%* | $719 |
| Michigan | 3.3% | 0.7% | 1.1% | 3.1% | 0.7% | *6.7%* | $1,454 |
| Missouri | 2.5% | 0.8% | 1.3% | 1.0% | -1.4% | *7.2%* | $1,729 |
| Mississippi | 1.4% | 1.2% | -2.0% | 2.2% | 3.5% | *1.8%* | $2,201 |
| New Jersey | -8.5% | -7.8% | -0.4% | 0.3% | 7.0% | *9.7%* | $2,687 |
| Nevada | 0.9% | 1.3% | 2.8% | 3.0% | 0.9% | *4.2%* | $12,031 |
| New York | 2.8% | 3.6% | 19.1% | 8.7% | 4.4% | *10.6%* | $2,731 |
| Ohio | 12.8% | 2.9% | 5.0% | 4.6% | 4.5% | *14.6%* | $1,941 |
| Pennsylvania | 3.4% | 1.2% | 0.4% | 0.7% | 0.6% | *4.2%* | $3,267 |
| Rhode Island | 0.8% | 0.5% | 0.9% | 4.9% | -0.7% | -6.1% | $651 |
| South Dakota | 0.9% | -0.8% | 0.5% | -1.0% | 2.9% | 19.0% | $103 |
| West Virginia | 18.7% | 11.9% | 6.6% | 4.2% | -3.8% | 17.8% | $934 |
| **Total** | **3.14%** | **1.26%** | **3.43%** | **3.04%** | **2.05%** | ***7.69%*** | **$43,571** |
| ***Vegas Strip*** | ***-1.0%*** | ***1.2%*** | ***2.1%*** | ***0.8%*** | ***2.1%*** | ***4.9%*** | ***$6,135*** |

Source: State gaming commissions and lotteries. Note: Mississippi reports gaming revenue inclusive of sports betting. All other state data are for table and slot revenue only to maintain same-store comparisons of on-site spending.

As concern over the virus began to take hold in March 2020, casinos began to close and the strong growth streak ended. States started reopening in May and by mid-September all had reopened with some level of capacity and operating restrictions. Early results were highly variable. A handful of states actually enjoyed revenue growth despite pandemic-related restrictions, as pent-up demand was released and competitors remained closed.

More recently, there has been a general up-and-down trend in many markets, with strong results in October giving way in November and December as the virus surged and some states curtailed operations (ex: New York's curfew, which lasted through April 4) or shut down entirely (Illinois, Michigan and Rhode Island). January ticked back up while February was flat at best.

While the East Coast markets have generally been more cautious in reopening than the South, Midwest, and Mountain West, the gap has narrowed as COVID-19 cases have dropped. Of note:

revenue in Deadwood, South Dakota has grown every month since reopening as competing tribal casinos remained closed through late February.

**Table 63: Bricks-and-Mortar Gaming Revenue Trends Since Reopening (Y-o-Y)**

| | October | November | December | January | February |
|---|---|---|---|---|---|
| Connecticut (slots only) | -21% | -39% | -31% | -19% | -31% |
| Massachusetts | -12% | -42% | -40% | -28% | -22% |
| Rhode Island | -29% | -50% | -80% | -35% | -34% |
| **New England Total** | **-20%** | **-43%** | **-46%** | **-26%** | **-28%** |
| | | | | | |
| Delaware | -13% | 6% | -33% | 21% | -14% |
| Maryland | -1% | -7% | -20% | -11% | -19% |
| New Jersey | -8% | -36% | -29% | -17% | -32% |
| New York | -13% | -29% | -33% | -23% | -33% |
| Pennsylvania | -16% | -31% | -78% | -27% | -27% |
| West Virginia | -3% | -45% | -35% | -23% | -32% |
| **Mid-Atlantic Total** | **-10%** | **-28%** | **-43%** | **-19%** | **-28%** |
| | | | | | |
| Iowa | 2% | -14% | -6% | 13% | -11% |
| Illinois | -26% | -68% | -100% | -74% | -24% |
| Indiana | -8% | -18% | -21% | -12% | -32% |
| Kansas | -11% | -23% | -20% | -3% | -23% |
| Michigan | -19% | -61% | -83% | -28% | -29% |
| Missouri | -5% | -18% | -8% | 6% | -18% |
| Ohio | 7% | -17% | -22% | -8% | -7% |
| **Midwest Total** | **-7%** | **-31%** | **-36%** | **-14%** | **-20%** |
| | | | | | |
| Louisiana | -18% | -26% | -23% | -11% | -29% |
| Mississippi (includes sports betting) | -5% | 5% | -7% | 7% | -2% |
| **South Total** | **-11%** | **-12%** | **-16%** | **-2%** | **-17%** |
| | | | | | |
| Colorado | 1% | -18% | -19% | -9% | -4% |
| South Dakota | 4% | 13% | 9% | 11% | 6% |
| **Mountain West Total** | **2%** | **-15%** | **-17%** | **-7%** | **-3%** |
| | | | | | |
| Nevada | -19% | -18% | -35% | -27% | -26% |
| ***Vegas Strip*** | ***-35%*** | ***-38%*** | ***-55%*** | ***-51%*** | ***-49%*** |

Source: State gaming commissions and lotteries. Note: Mississippi reports gaming revenue inclusive of sports betting. All other state data are for table and slot revenue only to maintain same-store comparisons of on-site spending.

March looked very strong in the states that had reported by press time, as shown in Table 64. On a daily win basis, all states reported significant increases over February, and most exceeded daily averages set in the months before March 2020.

**Table 64: Average Daily Win (000s)**

| | CT | IA | IL | IN | LA | MA | MD | MI | MS | NJ | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pre-COVID Trend | $2,369 | $4,035 | $3,670 | $5,640 | $6,629 | $2,679 | $4,830 | $3,935 | $5,943 | $7,552 | $8,815 |
| March 2021 | $2,359 | $5,375 | $3,408 | $6,414 | $7,260 | $2,708 | $5,457 | $3,576 | $8,027 | $5,964 | $8,731 |
| % Change | -0.4% | 33.2% | -7.1% | 13.7% | 9.5% | 1.1% | 13.0% | -9.1% | 35.1% | -21.0% | -1.0% |
| % Change over Feb | 19.6% | 31.5% | 22.3% | 40.8% | 34.6% | 12.4% | 21.1% | 15.8% | 30.3% | 12.6% | 20.3% |

One reason that revenue has been relatively strong despite capacity restrictions is that casinos have kept some of their best customers coming through the door. In the four states that still track admissions, win per visit has risen in the 20%-40% range.

**Table 65: Win per Admission**

| | Iowa | Illinois | Louisiana | Missouri |
|---|---|---|---|---|
| Pre-COVID Trend | $74 | $130 | $88 | $47 |
| Trend since Reopening | $96 | $157 | $127 | $62 |
| % Change | 31.1% | 21.0% | 43.5% | 32.0% |
| **% Change in Admissions** | **-26.2%** | **-38.1%** | **-45.2%** | **-30.9%** |

## Native American Casinos

Native American gaming in the United States commenced as a result of the National Indian Gaming Regulatory Act (IGRA), which was passed by the U.S. Congress in 1988. The IGRA provides for a system of joint regulation of Class II gaming on Indian lands by tribes and the Federal Government and establishes a system for compacts between tribes and states concerning the regulation of Class III gaming. By law, Class II gaming is defined as (1) bingo or lotto, whether or not electronic, computer or other technological aids are used; (2) pull-tabs, punch-boards, tip jars, instant bingo, and other similar games if played in the same location as bingo or lotto; (3) non-banking card games that a) state law explicitly authorizes, or does not explicitly prohibit, and are played legally anywhere in the state, and b) players play in conformity with state laws and regulations concerning hours, periods of operation, and limitations on wagers and pot sizes; (4) or other Class II gaming facilities in operation prior to 1988. By default, Class III gaming is defined as gaming activities that are not Class I or II, or those generally referred to as house-banked, which include Vegas-style games such as blackjack, roulette, craps and video lottery terminals, or slot machines.

IGRA established a process of compact negotiation between federally recognized tribes and state governments, which precedes casino development. States have the right to place limitations on the number and type of games as well as the location of casinos (off or on reservation land) and the selling and consumption of alcohol. Class II operations do not require a compact and usually consist of bingo halls.

Class III tribal gaming can vary by state, depending upon the results of compact negotiation between federally recognized tribes and individual governors. Some states execute compacts that

restrict the games casinos can offer, number or size, as well as revenue sharing agreements and compact expiration dates.

The National Indian Gaming Commission Gaming (NIGC) reports tribal revenue by regional office. Total tribal gaming revenue exceeded $34.6 billion in FY 2019 (the last year available), with all regions reporting growth each of the last five years except the Washington DC region, which covers Connecticut where tribal gaming has been impacted by new commercial casinos in Massachusetts. This data is based on 522 tribal operations, 33 of which account for 45% of the revenue and an additional 62 account for 30%. In summary, 18% of operations account for 75% of tribal gaming revenue.

**Table 66: Tribal Gaming Revenue by NIGC Region (FYs)**

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2019 Revenue (MMs) |
|---|---|---|---|---|---|---|
| Portland | 3.25% | 5.14% | 6.50% | 8.25% | 4.06% | $3,811 |
| Sacramento | 7.99% | 6.34% | 7.34% | 3.15% | 4.32% | $9,680 |
| Phoenix | 3.70% | 4.43% | 3.61% | 3.41% | 4.27% | $3,276 |
| St. Paul | 3.29% | 1.14% | 1.34% | 4.33% | 2.60% | $5,299 |
| Tulsa | 6.54% | 4.02% | 4.19% | 3.14% | 0.07% | $2,468 |
| OK City | 6.69% | 5.75% | 2.07% | 7.28% | 7.66% | $2,670 |
| Washington DC | 3.26% | 3.82% | 1.00% | 2.62% | -2.00% | $7,374 |
| **Total** | **5.00%** | **4.40%** | **3.87%** | **4.06%** | **2.55%** | **$34,579** |

Source: NIGC; The Innovation Group
**Portland**: Alaska, Idaho, Oregon, Washington
**Sacramento:** California, Northern Nevada
**Phoenix**: Arizona, Colorado, New Mexico, Southern Nevada
**St. Paul**: Iowa, Michigan, Minnesota, Montana, North Dakota, Nebraska, South Dakota, Wisconsin, Wyoming
**Tulsa**: Kansas, East OK
**OK City**: West OK, Texas
**DC**: Alabama, Connecticut, Florida, Louisiana, Mississippi, North Carolina, New York

***Note on Alaska Native Communities (Corporations and Organizations)***

Alaska Native Communities are organized under the Alaskan Native Claims Settlement Act (ANCSA) of 1971 which created 13 regional corporations (one of which is based in Seattle) and over 200 village corporations. Each corporation was granted land and money, although several regional corporations have now transferred their lands to tribal governments. These corporations administer federal and state health, housing, and other services to Alaska Natives in their respective regions.

According to the Federal Register, 229 Alaska Native entities are federally recognized. However, only one, the Metlakatla Indian Community, has a federal reservation that falls under the jurisdiction of the Indian Gaming Regulatory Act (IGRA). A small casino with 90 electronic bingo machines operates on this island reservation, the Annette Island Reserve in southeastern Alaska.

This leaves some 228 entities in a legal limbo regarding casino gaming. While most Alaska Native communities are remote or even on islands, which limits inherent market potential, at least one,

the Native Village of Eklutna, has attempted to open a casino within range of a major population base, in this case 20 minutes from Anchorage.

Tribes in Maine are in a similar situation, where a land settlement agreement in 1980 left three federally recognized tribes exempt from federal Indian gaming law. State legislation to restore sovereignty has been introduced but commercial gaming interests are opposed.

**Figure 6: Native Entities in Alaska**

## *Distributed Machine Gaming*

Besides Nevada, there are seven states that permit distributed electronic gaming in the form of video slot machines or video poker, keno or bingo. Additionally, there are nearly a dozen HHR facilities distributed across Wyoming.

### Illinois

Illinois is by far the largest distributed gaming market in the US, by number of machines and revenue. The machines are not operated through the lottery and thus are termed Video Gaming Terminals (VGTs). As of February 2021, there were more than 38,400 VGTs operating in Illinois. The first machines began operating in September 2012, but the industry did not reach the 10,000 mark until September 2013.

Although local jurisdictions are permitted to opt-out, or prohibit VGT development, only a small and dwindling percentage have chosen to do so. Of the more than 1,400 municipalities and unincorporated county jurisdictions in Illinois, only 113 had opted out as of 2019, down from 176 in 2015. However, at more than 21% of the state population, the City of Chicago remains an opt-out jurisdiction.

As the following table shows, VGT development in Illinois has shown consistent and dramatic growth, both in terms of supply and revenue. The number of establishments has grown by 10% a year and the number of units by 13% since 2014, the second full year of development.

**Table 67: Illinois VGT Historical Performance**

| | Establishments | VGT Count | Net Terminal Income (NTI) | WPU |
|---|---|---|---|---|
| 2013 | 1,983 | 8,248 | $300,681,373 | $99.88 |
| 2014 | 4,235 | 17,246 | $659,111,566 | $104.71 |
| 2015 | 4,934 | 20,625 | $913,604,038 | $121.36 |
| 2016 | 5,518 | 23,679 | $1,108,145,508 | $128.21 |
| 2017 | 6,097 | 26,812 | $1,302,765,498 | $133.12 |
| 2018 | 6,560 | 29,503 | $1,499,992,701 | $139.29 |
| 2019 | 7,009 | 32,162 | $1,676,670,362 | $142.83 |
| **CAGR 2014-2019** | **10.6%** | **13.3%** | **20.5%** | **6.4%** |

Source: Illinois Gaming Board; WPU=Win per Unit, or the daily NTI per VGT

On a statewide basis, as of 2019 there were 6.5 machines for every 1,000 persons of gaming age in jurisdictions that permit VGTs, up from 5.0 in 2015. Through June 2019, establishments were

permitted up to 5 devices,[3] which was nearly maximized with the statewide average of 4.7 per venue in 2019. Annual spend per capita has risen to $325 from $192 in 2015.

**Table 68: Illinois VGT Penetration of Host Jurisdiction Gamer Pop**

| | VGTs per venue | VGTs per 1,000 gamers | Spend per capita |
|---|---|---|---|
| 2015 | 4.3 | 5.0 | $192 |
| 2019 | 4.7 | 6.9 | $325 |

Source: Illinois Gaming Board; IXPRESS/Nielsen Claritas; The Innovation Group

Penetration rates vary between markets that also host casinos and where VGTs enjoy monopolies. This can be seen clearly comparing two similar metropolitan areas in the interior of the state. VGTs in Peoria, which hosts the Par-a-Dice Casino, have a lower WPU and lower win per capita than Springfield, which is approximately 70 miles from the nearest casino.

**Table 69: Illinois VGT Penetration: Casino vs. Non-Casino Markets**

| | Daily WPU | VGTs per 1,000 gamers | Spend per capita |
|---|---|---|---|
| Peoria | $115 | 6.0 | $250 |
| Springfield | $139 | 8.5 | $429 |

Source: Illinois Gaming Board; IXPRESS/Nielsen Claritas; The Innovation Group
Based on 10-mile rings for population and VGT operations

The VGT statistics to date clearly show that there is cross-over with the casino industry. This is further borne out by an assessment of slot revenue trends at Illinois casinos. The casinos that face the most VGT development in their local markets have experienced greater cannibalization than casinos in comparable markets. Comparing pre- and post-VGT periods, slot revenue at all casinos except Rivers Des Plaines has declined by between 21% and 47%. Municipalities surrounding Rivers have opted out, including the City of Chicago.

Casino slot revenue has declined every year since VGT development. In total, slot revenue in 2019 was 29% lower than in 2012. It should be noted, however, that other jurisdictions, particularly in 2013 and 2014, experienced weak slot performance because of lingering economic conditions and an aging customer base. A number of markets unaffected by cannibalization experienced declines in 2013 and 2014, followed by a rebound in 2015. Because of continuing VGT impacts, Illinois did not benefit by the general slot rebound that started in 2015, but a portion of the decline in 2013 and 2014 is properly attributed to other factors than VGTs. Examining data from control jurisdictions, we estimate that approximately 3% points of the 29% impact can be attributed to other factors, resulting in an impact of 26% attributable to VGTs.

[3] The limit was raised to 6 in June 2019.

**Table 70: VGT Impact on Illinois Casino Slot Revenue (MMs)**

| | Joliet Combined | Par-a-Dice Peoria | Grand Vic Elgin | Casino Queen E St Louis | Argosy Alton | Casino Rock Island | **Total** | *Y-o-Y % Change Total* |
|---|---|---|---|---|---|---|---|---|
| 2012 | $309 | $102 | $177 | $116 | $68 | $82 | **$854** | |
| 2013 | $284 | $92 | $162 | $110 | $61 | $75 | **$784** | *-8.1%* |
| 2014 | $274 | $80 | $141 | $96 | $54 | $71 | **$715** | *-8.8%* |
| 2015 | $267 | $76 | $136 | $89 | $51 | $70 | **$690** | *-3.6%* |
| 2016 | $256 | $68 | $129 | $92 | $46 | $70 | **$660** | *-4.2%* |
| 2017 | $259 | $64 | $133 | $86 | $44 | $65 | **$651** | *-1.4%* |
| 2018 | $249 | $63 | $126 | $80 | $43 | $63 | **$624** | *-4.2%* |
| 2019 | $245 | $60 | $122 | $84 | $36 | $61 | **$608** | *-2.5%* |
| *CAGR* | *-3.3%* | *-7.3%* | *-5.2%* | *-4.5%* | *-8.7%* | *-4.1%* | ***-4.7%*** | *Adjusted Impact* |
| 2013/2012 | -8% | -10% | -9% | -5% | -10% | -8% | **-8%** | *-7.4%* |
| 2014/2012 | -11% | -21% | -21% | -18% | -21% | -14% | **-16%** | *-14.7%* |
| 2015/2012 | -14% | -25% | -23% | -23% | -24% | -14% | **-19%** | *-17.4%* |
| 2016/2012 | -17% | -33% | -27% | -21% | -32% | -15% | **-23%** | *-20.5%* |
| 2017/2012 | -16% | -37% | -25% | -26% | -35% | -20% | **-24%** | *-21.5%* |
| 2018/2012 | -19% | -39% | -29% | -31% | -36% | -23% | **-27%** | *-24.3%* |
| **2019/2012** | **-21%** | **-41%** | **-31%** | **-28%** | **-47%** | **-25%** | **-29%** | ***-26.0%*** |

Source: Illinois Gaming Board; The Innovation Group.

## Louisiana

Unlike Illinois, where distributed gaming was implemented approximately two decades after riverboat casinos opened, in Louisiana distributed gaming in the form of video poker has been permitted for as long as casinos, which has allowed casino operators to base investment decisions on a stable playing field. Video poker devices in Louisiana may not allow more than four dollars to be placed on a game or award credits in excess of the value of one thousand dollars. There are three categories of licenses as follows:

(1) Liquor licensed establishments (consumption on the premises) are limited to three devices.
(2) Truck stop facilities are permitted to operate up to fifty devices, which allows them to function as mini-casinos. There are currently 199 facilities in this category with an average of 38 devices per.
(3) Off-track betting facilities (OTBs) and pari-mutuel wagering facilities are permitted an unlimited number of devices. There are currently 15 facilities in this category with an average of 76 devices per.

As shown in the following table, the majority of revenue and devices are at truck stops.

**Table 71: Louisiana Video Poker Trends**

| | Bars, Hotels & Restaurants | OTBs | Truck Stops | Total |
|---|---|---|---|---|
| 2013 | $151,191,278 | $41,537,335 | $406,780,729 | $599,509,342 |
| 2014 | $145,422,608 | $39,452,265 | $406,883,279 | $591,758,152 |
| 2015 | $139,838,919 | $41,923,978 | $411,706,941 | $593,469,838 |
| 2016 | $132,741,288 | $41,731,297 | $401,338,747 | $575,811,332 |
| 2017 | $128,839,265 | $43,166,165 | $403,928,479 | $575,933,909 |
| 2018 | $128,313,716 | $47,062,959 | $420,104,929 | $595,481,604 |
| 2019 | $130,335,015 | $51,102,279 | $442,394,821 | $623,832,115 |
| # of Devices 2019 | 4,185 | 1,135 | 7,616 | 12,936 |
| WPU 2019 | $85 | $123 | $159 | $132 |

Source: Louisiana Gaming Control Board

## Montana

Montana law permits bars, taverns and truck stops to have up to 20 video gaming devices that play video poker, video keno, or video bingo. Allowable operating hours are 8 AM to 2 AM. Maximum bet is $2 and maximum payout is $800.

**Table 72: Montana Video Gambling Machines**

| FY | # of Machines | Gross Revenue | WPU |
|---|---|---|---|
| 2010 | 17,892 | $349,259,553 | $53 |
| 2011 | 16,958 | $329,559,473 | $53 |
| 2012 | 16,649 | $358,218,613 | $59 |
| 2013 | 16,695 | $380,329,860 | $62 |
| 2014 | 16,684 | $379,607,573 | $62 |
| 2015 | 16,420 | $398,863,520 | $67 |
| 2016 | 17,007 | $403,212,940 | $65 |
| 2017 | 16,526 | $399,588,646 | $66 |
| 2018 | 16,864 | $402,120,393 | $65 |
| 2019 | 16,792 | $419,957,833 | $69 |
| 2020 | 16,384 | $382,211,327 | $64 |

Source: Montana Dept. of Justice

## Oregon

There are nearly 12,000 Video Lottery Terminals (VLTs) in Oregon, and net VLT receipts in FY2019 were $966 million, or 72% of total lottery sales statewide. VLT "net receipts" are comparable to "gaming revenue" as used in the gaming industry. It represents total VLT wagering minus prize payouts to customers. VLTs operate more like slot machines than traditional lottery products and the hold percentage is much lower than lottery tickets. Traditional lottery products are usually measured in total sales (that is, before prize payouts are deducted). The Oregon Lottery defines "Total Lottery Sales" as a mixture of traditional product sales plus VLT net receipts.

**Table 73: Oregon Video Lottery Trends**

| FY | Total Lottery Sales | Video Lottery (Net Receipts) | # of Retailers | # of VLTs | Average per Retailer | Per Capita Sales |
|---|---|---|---|---|---|---|
| **2010** | $1,027,681,799 | $706,981,950 | 3,916 | 12,393 | 3.2 | $270 |
| **2011** | $1,037,962,819 | $720,510,190 | 3,901 | 12,202 | 3.1 | $270 |
| **2012** | $1,050,285,706 | $727,124,878 | 3,907 | 12,175 | 3.1 | $271 |
| **2013** | $1,067,830,030 | $737,370,280 | 3,848 | 12,037 | 3.1 | $274 |
| **2014** | $1,052,808,796 | $742,730,503 | 3,843 | 11,951 | 3.1 | $268 |
| **2015** | $1,116,859,932 | $798,578,183 | 3,939 | 11,925 | 3.0 | $281 |
| **2016** | $1,229,498,699 | $876,475,310 | 3,920 | 11,909 | 3.0 | $305 |
| **2017** | $1,246,302,523 | $914,071,290 | 3,932 | 11,817 | 3.0 | $304 |
| **2018** | $1,302,334,662 | $933,980,026 | 3,923 | 11,742 | 3.0 | $314 |
| **2019** | $1,346,526,005 | $966,474,906 | 3,975 | 11,586 | 2.9 | $322 |

Source: Oregon Lottery

## Pennsylvania

Pennsylvania permits truck stops meeting the following requirements to operate up to five video gaming terminals VGTs:

(1) Equipped with diesel islands used for fueling commercial motor vehicles.
(2) Has sold on average 50,000 gallons of diesel or biodiesel fuel each month for the previous 12 months or is projected to sell an average of 50,000 gallons of diesel or biodiesel fuel each month for the next 12 months.
(3) Has at least 20 parking spaces dedicated for commercial motor vehicles.
(4) Has a convenience store.
(5) Is situated on a parcel of land of not less than three acres that the truck stop establishment owns or leases.
(6) Is not located on any property owned by the Pennsylvania Turnpike.

Maximum bet is $5 and maximum payout $1,000. The VGT application process began in May 2018, with the first location opening in August 2019. New locations continue to be frequently added. By February 2021 there were 44 establishments generating monthly revenue of $2.5 million, for win per machine of over $400.

## South Dakota

On October 16, 1989, the South Dakota Lottery pioneered the first state video lottery in the nation. Establishments must have a liquor license for on-sale consumption of alcoholic beverages; establishments are limited to ten VLTs. The maximum bet is $2 and maximum payout $1,000.

**Table 74: South Dakota Video Lottery Trends**

| FY | Venues | Terminals | Average per Venue | Net Machine Income (NMI) | WPU | State NMI Revenue Distributed | Private NMI Share |
|---|---|---|---|---|---|---|---|
| 1990 | na | 2,439 | | $48,869,360 | $55 | $10,995,606 | $37,873,754 |
| 1991 | na | 4,881 | | $107,075,332 | $60 | $25,517,271 | $81,558,061 |
| 1992 | na | 6,243 | | $127,171,059 | $56 | $37,689,529 | $88,838,503 |
| 1993 | 1,378 | 6,696 | 4.9 | $142,231,503 | $58 | $49,069,869 | $92,450,477 |
| 1994 | 1,386 | 7,447 | 5.4 | $165,500,572 | $61 | $58,752,704 | $105,920,366 |
| 1995 | 1,457 | 7,912 | 5.4 | $126,017,176 | $44 | $45,996,718 | $79,390,821 |
| 1996 | 1,444 | 8,003 | 5.5 | $176,144,722 | $60 | $87,191,638 | $88,072,361 |
| 1997 | 1,439 | 8,036 | 5.6 | $178,625,950 | $61 | $88,419,846 | $89,312,975 |
| 1998 | 1,427 | 8,045 | 5.6 | $185,274,026 | $63 | $91,708,679 | $92,637,013 |
| 1999 | 1,415 | 8,028 | 5.7 | $185,222,546 | $63 | $91,687,124 | $92,611,273 |
| 2000 | 1,393 | 7,965 | 5.7 | $193,829,338 | $67 | $95,943,126 | $96,914,669 |
| 2001 | 1,386 | 7,898 | 5.7 | $194,883,028 | $68 | $96,469,495 | $97,441,514 |
| 2002 | 1,401 | 8,108 | 5.8 | $207,730,886 | $70 | $102,826,789 | $103,865,443 |
| 2003 | 1,415 | 8,247 | 5.8 | $212,254,662 | $71 | $105,066,058 | $106,127,331 |
| 2004 | 1,419 | 8,325 | 5.9 | $216,756,456 | $71 | $107,294,446 | $108,378,228 |
| 2005 | 1,433 | 8,564 | 6.0 | $220,474,424 | $71 | $109,134,840 | $110,237,212 |
| 2006 | 1,463 | 8,716 | 6.0 | $221,535,652 | $70 | $109,660,148 | $110,767,826 |
| 2007 | 1,477 | 8,859 | 6.0 | $222,815,702 | $69 | $110,293,773 | $111,407,851 |
| 2008 | 1,478 | 8,969 | 6.1 | $224,661,210 | $69 | $111,207,299 | $112,330,605 |
| 2009 | 1,465 | 8,965 | 6.1 | $220,125,232 | $67 | $108,961,990 | $110,062,616 |
| 2010 | 1,441 | 9,156 | 6.4 | $215,456,826 | $64 | $106,651,129 | $107,728,413 |
| 2011 | 1,498 | 9,136 | 6.1 | $191,769,628 | $58 | $94,925,966 | $95,884,814 |
| 2012 | 1,459 | 9,128 | 6.3 | $176,644,130 | $53 | $87,438,844 | $88,322,065 |
| 2013 | 1,426 | 9,133 | 6.4 | $184,640,564 | $55 | $91,397,079 | $92,320,282 |
| 2014 | 1,401 | 9,045 | 6.5 | $185,246,728 | $56 | $91,697,131 | $92,623,364 |
| 2015 | 1,378 | 8,948 | 6.5 | $199,129,996 | $61 | $98,569,348 | $99,564,998 |
| 2016 | 1,331 | 9,002 | 6.8 | $207,602,544 | $63 | $102,763,259 | $103,801,272 |
| 2017 | 1,343 | 9,067 | 6.8 | $212,376,196 | $64 | $105,126,217 | $106,188,098 |
| 2018 | 1,336 | 9,109 | 6.8 | $220,625,317 | $66 | $109,416,874 | $110,522,095 |
| 2019 | 1,301 | 8,946 | 6.9 | $230,233,468 | $71 | $113,965,567 | $115,116,734 |
| 2020 | 1,301 | 9,127 | 7.0 | $234,736,011 | $70 | $116,194,325 | $117,368,005 |

Source: South Dakota Lottery

## West Virginia

West Virginia casinos opened in 1994 and "limited video lottery" operations began in December 2001. Both are regulated through the Lottery. The number of limited machines is capped at 9,000 statewide. Venues are permitted up to five machines.

**Table 75: West Virginia Limited Video Lottery**

| | Locations | VLT | Revenue | WPU |
|---|---|---|---|---|
| 2009 | 1,612 | 8,056 | $406,559,360 | $138 |
| 2010 | 1,594 | 7,991 | $397,101,749 | $136 |
| 2011 | 1,513 | 7,634 | $396,661,259 | $142 |
| 2012 | 1,502 | 7,505 | $408,723,013 | $149 |
| 2013 | 1,475 | 7,439 | $388,753,260 | $143 |
| 2014 | 1,435 | 7,285 | $373,913,644 | $141 |
| 2015 | 1,388 | 7,066 | $369,872,850 | $143 |
| 2016 | 1,348 | 6,929 | $350,530,634 | $138 |
| 2017 | 1,294 | 7,004 | $354,264,691 | $139 |
| 2018 | 1,238 | 7,542 | $382,936,353 | $139 |
| 2019 | 1,269 | 7,644 | $398,094,276 | $143 |

Source: West Virginia Lottery

## Wyoming

Legalized in 2013, HHR terminals are approved for use at OTB locations across the state. Each "spin" is based on one of the roughly 21,000 horse races stored in the machine. According to the Wyoming Gaming Commission in 2019, there are 11 OTB locations hosting 1,025 HHR terminals. There are two authorized operators for OTB HHR terminals: Wyoming Horse Racing, LLC and Wyoming Downs, LLC. Operations were briefly disrupted in 2016 when Wyoming's Attorney General ruled that the machines were illegal. Overall, the state's HHR industry has grown at an annual rate of over 29% from 2015 to 2019.

**Table 76: 2019 Wyoming HHR Adjusted Gross Revenue (MMs)**

| | 2015 | 2016 | 2017 | 2018 | 2019 | CAGR |
|---|---|---|---|---|---|---|
| Wyoming Horse Racing, LLC | $7.4 | $14.7 | $19.4 | $24.4 | $28.6 | 40.2% |
| Wyoming Downs, LLC | $14.1 | $3.5 | $11.3 | $17.3 | $31.3 | 22.1% |
| **State Total** | **$21.5** | **$18.2** | **$30.7** | **$41.8** | **$59.9** | **29.2%** |

Source: Wyoming Gaming Commission

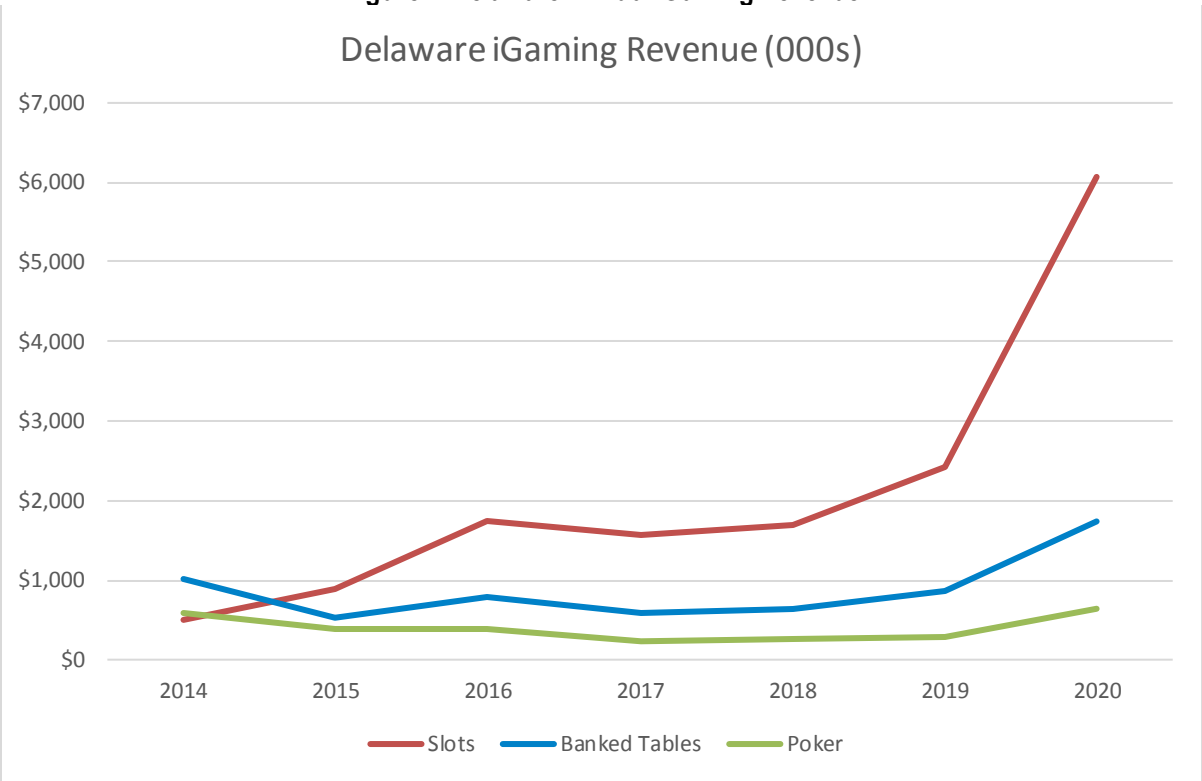
## *Online Gaming*

Five states have online casino gaming operating as of March 2021: Delaware, Michigan, New Jersey, Pennsylvania, and West Virginia.

### Delaware

Online gaming in Delaware began in November 2013. It is a small market, but 2020 saw a sharp rise as casinos closed in March 2020 because of Covid-19. Online slot revenue grew to $6 million in 2020 and banked table revenue to $1.7 million.

**Figure 7: Delaware Annual iGaming Revenue**




Source: Delaware Lottery

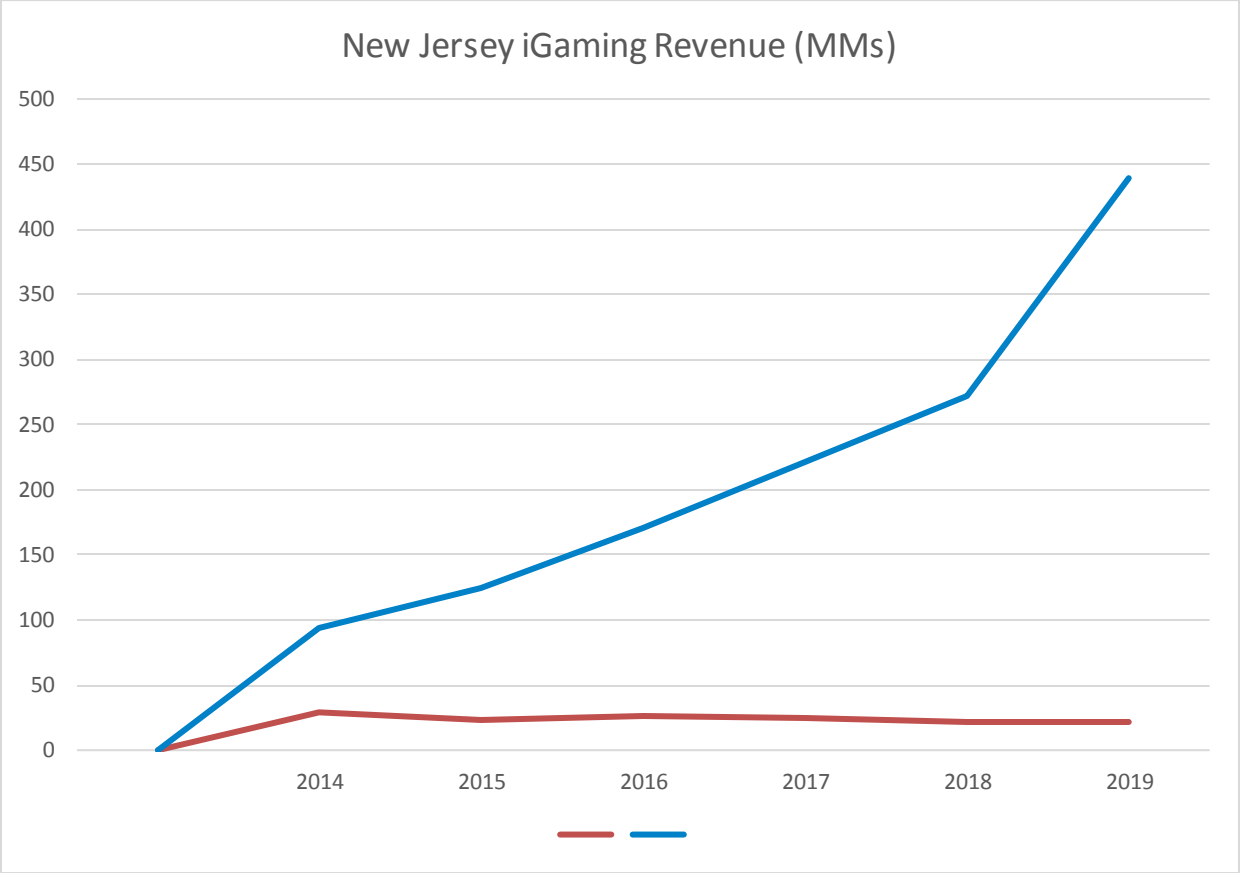
### Michigan

Online gaming in Michigan began on January 22, 2021, and only two full months of data are available. March 2021 adjusted gross revenue was $88.7 million, an 18% increase over February. There are 11 internet casinos operated by the three commercial casinos in Detroit and eight Native American tribes. BetMGM is the market leader so far, grabbing nearly one-third of revenue in March.

## New Jersey

Online gaming in New Jersey began on November 20, 2013. It is by far the leading online gaming market, with total revenue of more than $900 million in 2020. It reports online revenue for Peer-to-Peer wagering (poker) and Other Games (slots and banked tables combined). The impact of the closure of bricks-and-mortar casinos is evident in the steep rise in revenue in 2020.

**Figure 8: New Jersey Annual iGaming Revenue**

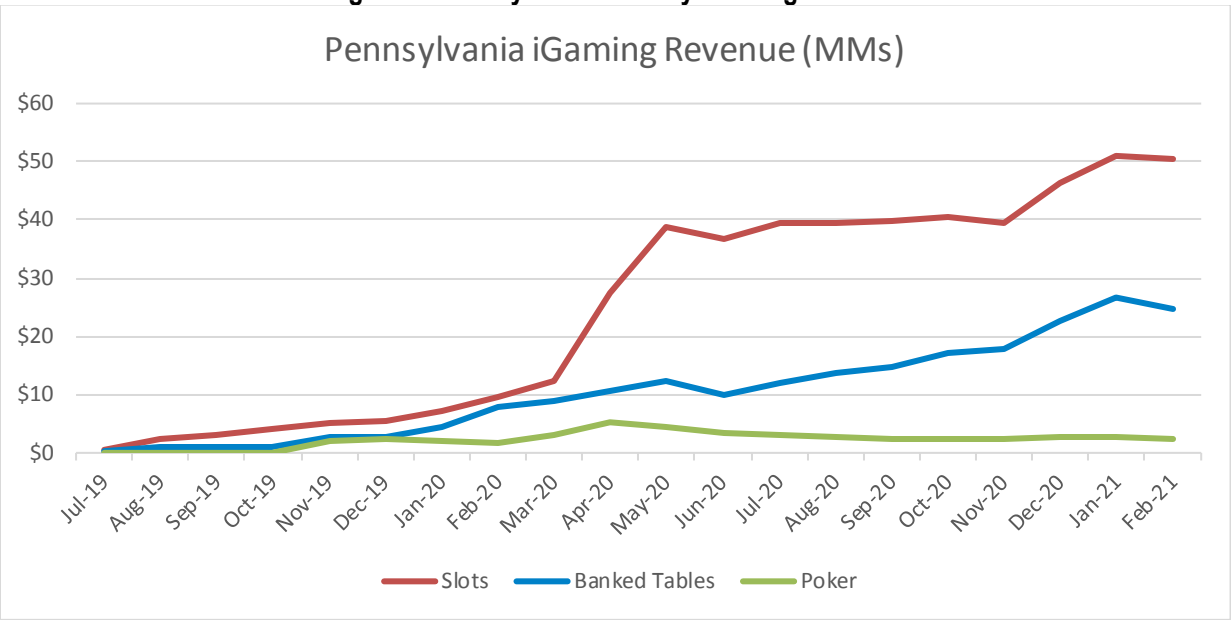



Source: New Jersey Division of Gaming Enforcement

## Pennsylvania

Online gaming in Pennsylvania began in July 2019. Monthly revenue ramped up steeply when casinos closed in March 2020 because of Covid-19. Slots are the leading game, generating approximately double the revenue as banked tables.

**Figure 9: Pennsylvania Monthly iGaming Revenue**

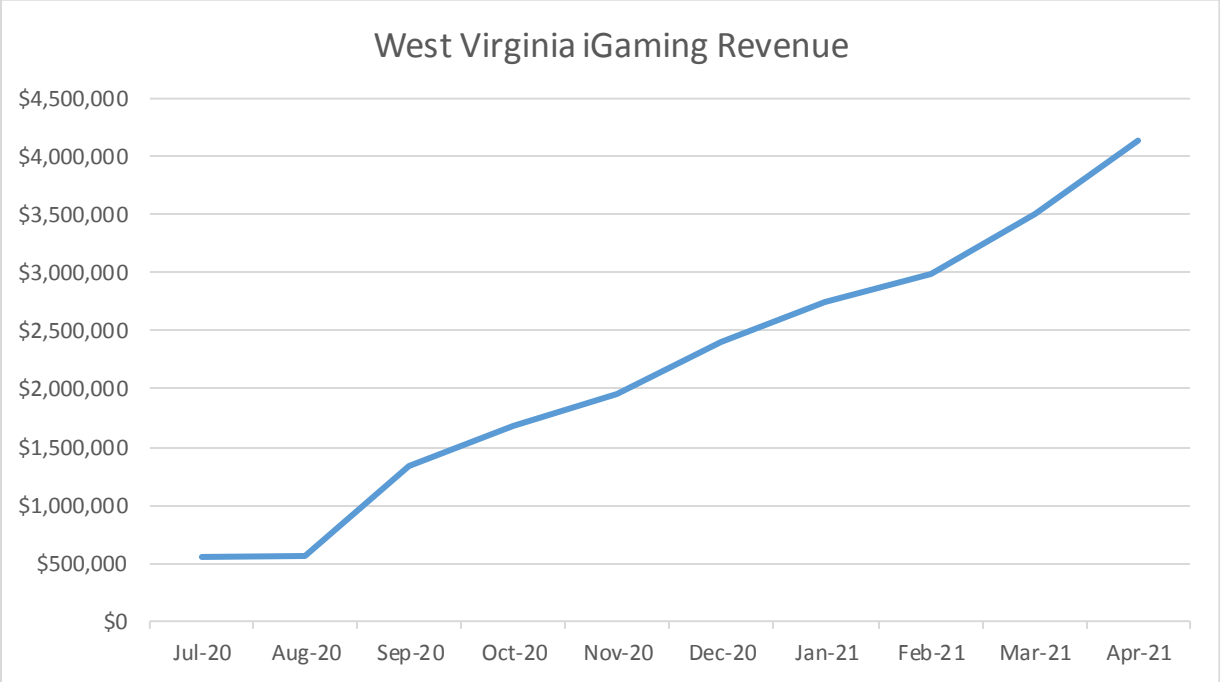



Source: Pennsylvania Gaming Control Board

## West Virginia

Online gaming in West Virginia began in July 2020. Monthly revenue has ramped up steeply to over $4 million.

**Figure 10: West Virginia Monthly iGaming Revenue**




Source: West Virginia Lottery

## *Sports Betting*

As of July 2021, 21 states have legal, regulated sports betting industries. These industries can be broadly classified according to two characteristics: (1) level of competition and (2) distribution model.

Market competition falls along a spectrum. Some states opt for an open-market model with many providers (e.g., Colorado, Indiana) while other states implement a monopoly model with either a single-provider for the entire state (e.g., New Hampshire, Rhode Island) or for a given distribution channel (e.g., Washington D.C.)

Distribution models can be categorized into three groups

1. In-person wagering only at select brick-and-mortar locations,
2. Mobile only wagering with no physical sportsbooks, and
3. A combination of in-person and mobile wagering.

The most common distribution model domestically allows both in-person and mobile sports wagering. Below we summarize the sports betting market in states with legal sports betting.

In addition to the state tax rates described below, there is a 0.25% federal excise tax on sports betting *handle* (wagers placed). This amounts to around 5% of *revenue* since sportsbooks on average win around 5% of handle. To make this clear: a sportsbook tends to realize around $5 in revenue for each $100 wagered. In various parts of the world the $100 is called *handle* or *turnover*, which is distinguished from the *revenue* or *win*, defined as the handle less the amount paid back to bettors as the result of winning (or pushing) wagers. Though the federal excise tax is applied to handle, state tax rates – for example 10% in West Virginia – are typically applied to revenue. For this reason, it helps to think of the 0.25% federal tax translated into a tax on the revenue, and with books winning (or *holding*) around 5% of handle, the 0.25% federal tax on handle translates to approximately 5% of win. So, in West Virginia, operators pay approximately 15% (10% state tax + 5% federal) of revenue in taxes.

### Arkansas

Arkansas legalized in-person sports betting at up to four locations in November 2018. However, the first sportsbook didn't launch until July 2019, and there are currently only two sportsbooks operating. These are located at the state's racinos: Southland and Oaklawn. Sports betting revenues are taxed on a sliding scale, with the first $150 million taxed at 13% and all revenues thereafter taxed at 20%.

### Colorado

In May 2020, Colorado launched a highly competitive, mobile-friendly sports betting market. Each of the state's 33 casinos are eligible for licensure, allowing them to offer in-person wagering and partner with a single mobile brand. There is no in-person registration requirement for mobile accounts. Currently, there are 31 retail sportsbooks, and 19 mobile betting apps live in the state, and revenues from sports betting are taxed at 10%.

## Delaware

Delaware in 2018 legalized sports betting at its three commercial casinos. In DE, sports betting is run by one supplier, through the DE lottery. The casino's involvement is generally only to staff the betting windows, though they may participate in risk management discussions as well. Revenue is shared as follows: 40% to the operator (casino), 12.5% to the supplier, and 47.5% to the state, resulting in an effective 47.5% state tax environment. Delaware's results have been underwhelming to date, averaging only $17 million in win annually through its first three years of operations. We attribute this primarily to the fact that the lottery has not yet built the infrastructure for mobile sports betting, despite it being legal in the state.

## Illinois

Illinois passed a gaming expansion bill in June 2019. One part of this bill was the legalization of sports betting both in-person and online. Online accounts required in-person registration for online accounts the first 18 months, although in-person registration requirements were temporarily suspended during the coronavirus pandemic. Gross gaming revenues are taxed at 15% and licensing fees can reach as high as $20 million for an online-only license. The first bets in Illinois were placed in March 2020, and mobile betting launched in June 2020.

## Indiana

Like Colorado, Indiana operates a highly competitive, mobile-friendly sports betting market. The first retail bets were placed in September 2019, and mobile betting went live the following month. Licensed casinos and off-track betting parlors in the state may operate physical and online sportsbooks. With a low tax rate at 9.5% and no in-person registration requirement for mobile accounts, nearly every major sportsbook operator has entered the market.

## Iowa

Sports betting launched in Iowa in August 2019 with both retail and online wagering. Compared to other states with online wagering, Iowa has underperformed likely due to in-person registration requirements. However, this requirement was lifted as of January 1, 2021. Other notable regulations include upfront licensure fees of only $45,000, a 6.75% tax on sports betting revenue, and a ban on proposition bets involving in-state college teams.

## Michigan

The Michigan sports betting market started off slow as in-person wagering launched in March 2020 just days before casinos were ordered to close to slow the spread of the coronavirus. Online books would not launch until January 2021. There are currently 13 online sportsbooks operating in the state, and each online book must partner with one of the state's three commercial casinos or 12 Native American tribes. Sports betting revenue is taxed at 8.4%, and the state's commercial casinos must pay an additional 1.25% city tax to host city, Detroit.

## Mississippi

Sports betting launched in Mississippi in August 2018, in time for the lucrative college and NFL football seasons. In Mississippi, online sports betting is prohibited; however, bettors may place

mobile or online wagers while on casino grounds. Taxes on sports betting revenue are approximately 12%, with 8% going to the state and up to 4% to local governments.

## Montana

Montana operates a monopoly model through its state lottery. The state's lone sports betting platform, powered by Intralot, launched in March 2020. As the current supplier of Montana's lottery system, Intralot received the sports betting contract without a public bidding process. Mobile wagering is allowed; however, bettors must be physically located inside a designated retail site to place wagers in-app.

## Nevada

Sports betting has been legal in Nevada since 1951. Currently sports betting is taxed at the Nevada gaming tax rate of 6.75%, same as slots and tables. Wagers may be placed in brick-and-mortar casinos or via mobile apps, tied to individual casino sportsbooks. In the latter case, the wagering is advance deposit wagering – i.e., the bettor deposits cash with a sportsbook and can wager that balance on the smartphone application. Even in Nevada, the sports betting industry is growing. In 2018 and 2019, Nevada sportsbooks won $301 million and $329 million, respectively, marketing the first time the industry eclipsed the $300 million mark. Around 50% of Nevada's sports betting revenue is mobile.

## New Hampshire

New Hampshire launched sports betting in January 2020 through its lone operator, DraftKings. In exchange for exclusivity, DraftKings participates in a 50/50 adjusted revenue share with the state. Bettors may wager through the DraftKings app or in person at one of DraftKings' retail partners.

## New Jersey

New Jersey planned for sports betting for several years prior to implementation, with supplier William Hill having inked a partnership deal with Monmouth Park racetrack years earlier. New Jersey's environment allows for racetracks and casinos to offer land-based sports betting and provides licenseholders with mobile "skins" – online betting licenses that they can utilize under different branding. For example, with three skins per casino in NJ, a casino could operate three different branded sports betting websites, as well as a mobile app associated to each of those sites, all under its license. Around 80% of sports betting handle in NJ is mobile, which we attribute to the considerable drivetime to a casino or racetrack for much of the population. State tax rates on sports betting revenue vary based on the betting channel. In-person wagers are taxed at 8.5% while mobile wagers are taxed 13%.

## New Mexico

In New Mexico, five tribal properties offer sports betting since it is not expressly forbidden at the state level, i.e., the state never authorized sports betting. Revenue numbers are not public, and tribal entities do not pay state taxes.

## New York

Sports betting began in New York in July 2019 with in-person wagering at the state's four commercial casinos. In April 2021, the state passed legislation authorizing mobile betting. In July

2021, the state conducted an application process for one of the minimum two platform providers and four sportsbook licenses. Selected sportsbook operators are expected to share at least 50% of total sports betting revenue with the state.

## Oregon

Sports betting launched in Oregon in late 2019 with both in-person and online wagering. Commercial sports betting in Oregon is run by a single supplier, SBTech, through Oregon Lottery, and the Lottery is the state's only online sports betting provider. Tribes in Oregon may offer in-person wagering. Revenue numbers are not public, and tribal entities do not pay state taxes.

## Pennsylvania

Pennsylvania passed an omnibus gaming expansion bill in October 2017. One part of this bill was the legalization of sports betting – including online sports betting – subject to the repeal of PASPA. It included a tax rate of 36% (34% to the state and 1% each to the municipal and county governments) and upfront licensure fees as high as $10 million. The first bets in PA were placed in November 2018, and mobile betting launched in May 2019.

## Rhode Island

Rhode Island implemented sports betting at its two casinos in November 2018, through the state lottery. Rhode Island's lottery issued an RFP to source a service provider. The RFP received only one proposal, with IGT winning the bid and later partnering with William Hill. The state takes 51% of win, with the remaining 49% divided between the casino operator and the supplier. Rhode Island accepts both in-person and mobile wagers, although mobile app users must register in-person at one of the state's casinos. Like Delaware, Rhode Island has underperformed expectations and operates in a single-supplier, high tax environment. They had the additional misfortune of having the local NFL team, the New England Patriots, win the Super Bowl in 2019, causing losses at the state's sportsbooks.

## Tennessee

In November 2020, Tennessee became the first state to implement an online-only sports betting model. Gross gaming revenue is taxed at 20%, and operators must hold at a minimum 10% of all wagers, calculated on an annual basis. Additionally, the state requires books to purchase official league data for in-game betting. Currently, there are seven licensed sportsbooks, but only six are operational.

## Virginia

In April 2020, Virginia passed gaming legislation bringing casino gaming and sports betting to the state. Ultimately, the state will have both in-person and mobile sports wagering. However, the state is temporarily a mobile only market while the state's five casinos are under development. The first mobile books launched in January 2021, and there are currently seven operators in the state. Sports betting revenues are taxed at 15%; however, operators may deduct promotional expenses related to customer acquisition. This has led to an effective tax rate of 6.5% through May 2021.

### Washington D.C.

Sports betting launched in the nation's capital in May 2020 with DC Lottery's GambetDC platform, powered by Intralot. DC Lottery maintains an effective monopoly on the mobile betting market. Commercial operators may only open retail sportsbooks at professional sporting venues and offer mobile wagering to bettors on premise. Unlike a traditional sports betting product, Intralot offers higher hold lines that are more akin to a lottery product. Higher priced mobile betting lines are disrupting the typical betting volumes we observe between mobile and in-person channels. In most jurisdictions, we see a larger percentage of GGR come from mobile wagers compared to in-person wagers. This is not true in D.C. where retail books generated 70% more GGR than GambetDC in 1Q2021.

### West Virginia

West Virginia became the fifth state to legalize sports betting, beginning with its casinos in August 2018. In December 2018, it became the third state (behind NV and NJ) to legalize online sports betting; however, just a few months after mobile wagering, launched, vendor disputes left the state with no mobile wagering operators between March 2019 and August 2019. The disputes even temporarily disrupted some retail sportsbook operations. In response, the state increased regulations around online sports betting. Currently, there are five retail sportsbooks and five online books. The state applies a 10% tax on sports betting revenue.

### States Close to Legal Sports Betting

Several states have passed sports betting legislation or are close to doing so. In May 2021, Maryland passed sports betting legislation. Two months later the state's gaming regulatory body approved sports betting regulations, paving the way for books to launch in the next few months. Louisiana passed sports betting legislation in June 2021. Both Washington and North Carolina passed legislation earlier this year authorizing in-person wagering on tribal lands, although sportsbooks in these states have yet to open. Additionally, three states (Arizona, Florida, and Connecticut) recently approved tribal-state gaming compacts, which would bring both mobile and in-person sports wagering to these states.

## *Lotteries*

Lottery represents the most prevalent form of gaming within the US—available in all but five states. Based on data reported in La Fleur's World Lottery Almanac, US Lottery generated nearly $89 billion in revenue during 2020, including land-based and online sales.

The following table details lottery availability by state. Retail lottery outlets along with draw and instant games represent the most popular forms of lottery gaming while online and iLottery are the fastest growing forms of gaming given their comparative lack of availability and relatively low level of total revenue.

Alabama is the latest state to attempt to legalize lottery gaming. In April 2021, the state senate passed a constitutional amendment along with three companion bills to allow for the legalization of lottery as well as casino gambling. However, in May 2021 the legislation stalled in the house of representatives and the session ended without passage.

**Table 77: US Lottery Availability**

| State | Retail | Online | iLottery | Draw | Instant | State | Retail | Online | iLottery | Draw | Instant |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | | | | | | Nebraska | X | | | X | X |
| Alaska | | | | | | Nevada | | | | | |
| Arizona | X | | | X | X | New Hampshire | X | X | X | X | X |
| Arkansas | X | | | X | X | New Jersey | X | | | X | X |
| California | X | | | X | X | New Mexico | X | | | X | X |
| Colorado | X | | | X | X | New York | X | X | | X | X |
| Connecticut | X | | | X | X | North Carolina | X | X | | X | X |
| Delaware | X | | | X | X | North Dakota | X | X | | X | |
| Florida | X | | | X | X | Ohio | X | | | X | X |
| Georgia | X | X | X | X | X | Oklahoma | X | | | X | X |
| Hawaii | | | | | | Oregon | X | | | X | X |
| Idaho | X | | | X | X | Pennsylvania | X | X | X | X | X |
| Illinois | X | X | | X | X | Rhode Island | X | X | | X | X |
| Indiana | X | | | X | X | South Carolina | X | | | X | X |
| Iowa | X | | | X | X | South Dakota | X | | | X | X |
| Kansas | X | | | X | X | Tennessee | X | | | X | X |
| Kentucky | X | X | X | X | X | Texas | X | | | X | X |
| Louisiana | X | | | X | X | Utah | | | | | |
| Maine | X | X | | X | X | Vermont | X | | | X | X |
| Maryland | X | | | X | X | Virginia | X | X | X | X | X |
| Massachusetts | X | | | X | X | Washington | X | | | X | X |
| Michigan | X | X | X | X | X | Washington DC | X | | | X | X |
| Minnesota | X | | | X | X | West Virginia | X | | | X | X |
| Mississippi | X | | | X | X | Wisconsin | X | | | X | X |
| Missouri | X | | | X | X | Wyoming | X | | | X | |
| Montana | X | | | X | X | | | | | | |

Source: La Fleur's World Lottery Almanac

The tables below display historical revenue trends for draw and instant lottery games. 2020 and the coronavirus pandemic brought strong growth to draw and instant lottery, with total revenue increasing roughly 7.9% from 2019 to approximately $87.3 billion. At nearly $8.2 billion, Florida generated the most revenue in 2020 within these two lottery categories.

**Table 78: US Lottery Historical Revenue Trends – Draw & Instant (MMs)**

| State | 2016* | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Draw | Instant | Total | Draw | Instant | Total | Draw | Instant | Total | Draw | Instant | Total | Draw | Instant | Total |
| Arizona | $273.4 | $596.8 | **$870.2** | $236.0 | $691.9 | **$927.9** | $285.3 | $761.0 | **$1,046.3** | $237.6 | $796.2 | **$1,033.8** | $218.6 | $1,051.9 | **$1,270.5** |
| Arkansas | $84.6 | $371.0 | **$455.6** | $73.8 | $405.7 | **$479.5** | $91.1 | $424.4 | **$515.5** | $70.5 | $425.5 | **$496.0** | $65.5 | $509.4 | **$574.9** |
| California | $1,673.3 | $4,602.3 | **$6,275.6** | $1,482.8 | $5,158.6 | **$6,641.4** | $1,841.5 | $5,433.1 | **$7,274.6** | $1,438.7 | $5,587.9 | **$7,026.6** | $1,235.8 | $5,921.0 | **$7,156.8** |
| Colorado | $199.2 | $395.2 | **$594.4** | $189.0 | $382.9 | **$571.9** | $229.3 | $432.8 | **$662.1** | $190.7 | $469.0 | **$659.7** | $182.0 | $518.9 | **$700.9** |
| Connecticut | $452.9 | $777.9 | **$1,230.8** | $436.6 | $809.8 | **$1,246.4** | $475.5 | $828.7 | **$1,304.2** | $849.1 | $457.1 | **$1,306.2** | $442.2 | $934.6 | **$1,376.8** |
| Delaware | $99.0 | $115.4 | **$214.4** | $97.6 | $129.6 | **$227.2** | $105.5 | $202.0 | **$307.5** | $93.8 | $92.3 | **$186.1** | $95.6 | $110.9 | **$206.5** |
| Florida | $2,051.1 | $4,011.3 | **$6,062.3** | $2,095.3 | $4,106.8 | **$6,202.1** | $1,886.1 | $4,484.7 | **$6,370.8** | $1,860.7 | $5,361.7 | **$7,222.4** | $1,803.6 | $6,390.1 | **$8,193.7** |
| Georgia | $1,202.9 | $3,045.1 | **$4,247.9** | $1,212.2 | $3,397.1 | **$4,609.3** | $1,298.6 | $3,401.9 | **$4,700.5** | $1,199.2 | $3,555.4 | **$4,754.6** | $1,335.1 | $4,121.9 | **$5,457.0** |
| Idaho | $62.0 | $174.1 | **$236.1** | $53.5 | $199.9 | **$253.4** | $66.0 | $212.9 | **$278.9** | $52.4 | $227.1 | **$279.5** | $48.2 | $255.2 | **$303.4** |
| Illinois | $1,040.2 | $1,815.4 | **$2,855.5** | $988.7 | $1,897.3 | **$2,886.0** | $1,147.4 | $1,909.8 | **$3,057.2** | $974.1 | $1,802.0 | **$2,776.1** | $1,041.4 | $2,047.7 | **$3,089.1** |
| Indiana | $282.7 | $929.1 | **$1,211.8** | $309.3 | $944.2 | **$1,253.5** | $344.4 | $963.2 | **$1,307.6** | $300.6 | $1,024.0 | **$1,324.6** | $274.2 | $1,261.6 | **$1,535.8** |
| Iowa | $118.2 | $248.8 | **$366.9** | $102.4 | $260.4 | **$362.8** | $113.8 | $270.3 | **$384.1** | $94.5 | $273.2 | **$367.7** | $82.7 | $322.6 | **$405.3** |
| Kansas | $94.3 | $177.7 | **$272.0** | $91.4 | $187.2 | **$278.6** | $103.4 | $195.9 | **$299.3** | $82.2 | $206.9 | **$289.1** | $68.5 | $234.0 | **$302.5** |
| Kentucky | $333.6 | $649.7 | **$983.4** | $327.2 | $702.0 | **$1,029.2** | $354.1 | $725.0 | **$1,079.1** | $328.8 | $797.4 | **$1,126.2** | $359.2 | $1,013.8 | **$1,373.0** |
| Louisiana | $284.2 | $222.9 | **$507.0** | $260.1 | $213.6 | **$473.7** | $298.2 | $219.4 | **$517.6** | $257.1 | $229.6 | **$486.7** | $255.5 | $302.1 | **$557.6** |
| Maine | $60.4 | $211.9 | **$272.4** | $60.0 | $216.1 | **$276.1** | $69.1 | $229.7 | **$298.8** | $57.0 | $244.1 | **$301.1** | $51.8 | $296.4 | **$348.2** |
| Maryland | $802.8 | $1,102.8 | **$1,905.6** | $784.4 | $1,209.2 | **$1,993.6** | $844.6 | $1,272.4 | **$2,117.0** | $827.2 | $1,348.3 | **$2,175.5** | $855.9 | $1,475.0 | **$2,330.9** |
| Massachusetts | $699.1 | $4,524.4 | **$5,223.5** | $707.5 | $4,433.3 | **$5,140.8** | $825.8 | $4,683.4 | **$5,509.2** | $711.6 | $4,773.3 | **$5,484.9** | $626.0 | $4,639.3 | **$5,265.3** |
| Michigan | $1,228.9 | $1,821.1 | **$3,050.0** | $1,208.3 | $2,200.2 | **$3,408.5** | $1,305.5 | $2,421.4 | **$3,726.9** | $1,268.9 | $2,577.8 | **$3,846.7** | $1,383.4 | $3,077.0 | **$4,460.4** |
| Minnesota | $176.4 | $416.5 | **$592.9** | $157.1 | $422.3 | **$579.4** | $182.8 | $443.9 | **$626.7** | $146.4 | $462.8 | **$609.2** | $134.5 | $599.0 | **$733.5** |
| Mississippi | | | **$0.0** | | | **$0.0** | | | **$0.0** | | $54.8 | **$54.8** | $50.0 | $458.8 | **$508.8** |
| Missouri | $344.1 | $971.5 | **$1,315.6** | $331.0 | $953.3 | **$1,284.3** | $373.3 | $955.5 | **$1,328.8** | $337.3 | $1,006.1 | **$1,343.4** | $332.7 | $1,181.3 | **$1,514.0** |
| Montana | $32.5 | $27.5 | **$60.0** | $29.4 | $25.3 | **$54.7** | $34.5 | $24.9 | **$59.4** | $28.3 | $29.3 | **$57.6** | $26.2 | $39.0 | **$65.2** |

Source: La Fleur's World Lottery Almanac; Various State Lottery Commissions/Boards

*Fiscal Year Total

Note: Instant includes Keno, Pulltabs, and "Other" Categories

## Table 79: US Lottery Historical Revenue Trends – Draw & Instant (MMs)

| State | 2016* | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Draw | Instant | Total | Draw | Instant | Total | Draw | Instant | Total | Draw | Instant | Total | Draw | Instant | Total |
| Nebraska | $80.2 | $99.3 | **$179.5** | $77.2 | $100.3 | **$177.5** | $88.1 | $103.8 | **$191.9** | $74.9 | $103.8 | **$178.7** | $72.4 | $116.9 | **$189.3** |
| New Hampshire | $80.0 | $228.6 | **$308.6** | $75.6 | $234.1 | **$309.7** | $90.7 | $266.4 | **$357.1** | $76.7 | $304.8 | **$381.5** | $67.3 | $354.3 | **$421.6** |
| New Jersey | $1,400.3 | $1,889.5 | **$3,289.8** | $1,355.3 | $1,888.3 | **$3,243.6** | $1,448.0 | $1,987.6 | **$3,435.6** | $1,274.5 | $2,040.5 | **$3,315.0** | $617.0 | $1,993.9 | **$2,610.9** |
| New Mexico | $70.4 | $84.0 | **$154.3** | $56.9 | $73.2 | **$130.1** | $66.9 | $73.7 | **$140.6** | $54.7 | $77.4 | **$132.1** | $46.0 | $86.3 | **$132.3** |
| New York | $2,974.0 | $4,729.1 | **$7,703.2** | $2,857.0 | $4,995.1 | **$7,852.1** | $3,131.7 | $5,023.1 | **$8,154.8** | $2,990.7 | $5,011.5 | **$8,002.2** | $2,663.1 | $4,620.7 | **$7,283.8** |
| North Carolina | $753.5 | $1,630.1 | **$2,383.6** | $771.7 | $1,768.6 | **$2,540.3** | $847.5 | $2,016.3 | **$2,863.8** | $871.5 | $2,024.7 | **$2,896.2** | $942.6 | $2,424.2 | **$3,366.8** |
| North Dakota | $35.7 | | **$35.7** | $29.6 | | **$29.6** | $34.8 | | **$34.8** | $27.6 | | **$27.6** | $25.0 | | **$25.0** |
| Ohio | $981.0 | $2,078.7 | **$3,059.6** | $900.4 | $2,194.8 | **$3,095.2** | $986.2 | $2,302.9 | **$3,289.1** | $921.7 | $2,394.3 | **$3,316.0** | $1,003.7 | $2,818.0 | **$3,821.7** |
| Oklahoma | $111.1 | $78.6 | **$189.6** | $88.9 | $95.8 | **$184.7** | $105.4 | $131.0 | **$236.4** | $79.3 | $140.6 | **$219.9** | $71.0 | $236.8 | **$307.8** |
| Oregon | $123.1 | $229.9 | **$353.0** | $117.0 | $232.6 | **$349.6** | $148.0 | $237.6 | **$385.6** | $108.6 | $233.7 | **$342.3** | $92.3 | $260.9 | **$353.2** |
| Pennsylvania | $1,077.6 | $3,057.6 | **$4,135.2** | $1,145.9 | $2,951.8 | **$4,097.7** | $1,248.2 | $3,135.0 | **$4,383.2** | $1,101.9 | $3,370.9 | **$4,472.8** | $1,044.7 | $3,892.8 | **$4,937.5** |
| Rhode Island | $75.6 | $185.3 | **$260.8** | $74.3 | $181.0 | **$255.3** | $79.4 | $195.3 | **$274.7** | $67.3 | $187.2 | **$254.5** | $63.6 | $189.8 | **$253.4** |
| South Carolina | $426.4 | $1,174.0 | **$1,600.4** | $475.5 | $1,236.4 | **$1,711.9** | $514.1 | $1,351.8 | **$1,865.9** | $506.3 | $1,480.0 | **$1,986.3** | $572.3 | $1,686.1 | **$2,258.4** |
| South Dakota | $26.3 | $29.0 | **$55.3** | $26.5 | $27.5 | **$54.0** | $29.8 | $32.1 | **$61.9** | $24.7 | $32.8 | **$57.5** | $21.0 | $41.8 | **$62.8** |
| Tennessee* | $322.6 | $1,304.5 | **$1,627.1** | $279.7 | $1,331.9 | **$1,611.6** | $313.2 | $1,422.7 | **$1,735.9** | $349.8 | $1,462.7 | **$1,812.5** | $271.1 | $1,569.7 | **$1,840.8** |
| Texas | $1,243.6 | $3,823.9 | **$5,067.5** | $1,173.4 | $4,070.2 | **$5,243.6** | $1,419.7 | $4,580.8 | **$6,000.5** | $1,196.5 | $4,932.5 | **$6,129.0** | $1,211.4 | $5,915.0 | **$7,126.4** |
| Vermont | $24.5 | $99.8 | **$124.3** | $22.6 | $105.0 | **$127.6** | $26.8 | $110.0 | **$136.8** | $21.3 | $115.9 | **$137.2** | $19.3 | $125.1 | **$144.4** |
| Virginia | $853.3 | $1,153.6 | **$2,006.9** | $865.7 | $1,190.4 | **$2,056.1** | $984.2 | $1,268.8 | **$2,253.0** | $900.7 | $1,259.5 | **$2,160.2** | $943.0 | $1,337.7 | **$2,280.7** |
| Washington | $235.0 | $459.8 | **$694.9** | $206.6 | $498.1 | **$704.7** | $257.7 | $518.5 | **$776.2** | $223.2 | $543.0 | **$766.2** | $196.4 | $682.6 | **$879.0** |
| Washington D.C. | $143.5 | $84.7 | **$228.2** | $117.5 | $99.5 | **$217.0** | $113.4 | $100.2 | **$213.6** | $107.3 | $101.4 | **$208.7** | $111.7 | $95.9 | **$207.6** |
| West Virginia | $81.5 | $106.7 | **$188.2** | $71.8 | $98.3 | **$170.1** | $79.7 | $112.3 | **$192.0** | $64.9 | $126.7 | **$191.6** | $58.7 | $165.5 | **$224.2** |
| Wisconsin | $238.3 | $388.9 | **$627.2** | $235.3 | $400.2 | **$635.5** | $259.3 | $442.8 | **$702.1** | $225.1 | $462.2 | **$687.3** | $216.9 | $571.7 | **$788.6** |
| Wyoming | $33.4 | | **$33.4** | $26.4 | | **$26.4** | $37.4 | | **$37.4** | $25.8 | | **$25.8** | $26.5 | | **$26.5** |
| **National Total** | **$22,986.4** | **$50,123.6** | **$73,109.9** | **$22,284.4** | **$52,719.8** | **$75,004.2** | **$24,586.0** | **$55,909.0** | **$80,495.0** | **$22,701.7** | **$58,207.9** | **$80,909.6** | **$21,325.6** | **$65,947.2** | **$87,272.8** |

Source: La Fleur's World Lottery Almanac; Various State Lottery Commissions/Boards

*Fiscal Year Total

Note: Instant includes Keno, Pulltabs, and "Other" Categories

The following table summarizes historical revenue trends for online and iLottery games. As online and iLottery gaming has grown in availability over the past several years from under five states to over ten states currently, these game categories have experienced significant relative growth. For example, in 2020 total revenue for these two game categories increased by nearly 100.0% to over $1.5 billion. We expect strong growth to continue, albeit at slower rate as the total dollar value of revenue grows larger, as more states offer online and iLottery gaming and consumer acceptance and demand grows.

**Table 80: US Lottery Historical Revenue Trends – Online & iLottery (MMs)**

| State | 2016* | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Online | iLottery | Total | Online | iLottery | Total | Online | iLottery | Total | Online | iLottery | Total | Online | iLottery | Total |
| Georgia | N/A | $5.0 | **$5.0** | $20.6 | $10.6 | **$31.2** | $35.7 | $21.6 | **$57.3** | $88.7 | $44.8 | **$133.5** | $220.1 | $139.8 | **$359.9** |
| Illinois | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | $55.8 | | **$55.8** | $129.4 | | **$129.4** |
| Kentucky | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | $30.6 | $21.1 | **$51.7** | $79.8 | $64.6 | **$144.4** |
| Maine | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** |
| Michigan | N/A | $48.0 | **$48.0** | N/A | $77.9 | **$77.9** | N/A | $93.7 | **$93.7** | $147.6 | $123.9 | **$271.5** | $297.3 | $252.5 | **$549.8** |
| New Hampshire | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | $9.8 | $7.3 | **$17.1** | $21.3 | $16.6 | **$37.9** |
| New York | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** |
| North Carolina | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | $15.7 | | **$15.7** | $40.2 | | **$40.2** |
| North Dakota | N/A | | **$0.0** | N/A | | **$0.0** | N/A | | **$0.0** | $1.6 | | **$1.6** | $1.9 | | **$1.9** |
| Pennsylvania | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | N/A | $20.8 | **$20.8** | $68.2 | $68.2 | **$136.4** | $122.9 | $111.4 | **$234.3** |
| Rhode Island | | | **$0.0** | | | **$0.0** | | | **$0.0** | | | **$0.0** | $4.4 | | **$4.4** |
| Virginia | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | N/A | N/A | **$0.0** | $55.5 | $31.4 | **$86.9** | $13.9 | | **$13.9** |
| **National Total** | **$0.0** | **$53.0** | **$53.0** | **$20.6** | **$88.5** | **$109.1** | **$35.7** | **$136.1** | **$171.8** | **$473.5** | **$296.7** | **$770.2** | **$931.2** | **$584.9** | **$1,516.1** |

Source: La Fleur's World Lottery Almanac; Various State Lottery Commissions/Boards

*Fiscal Year Total

# *Comparative Per Capita Spending Analysis*

## Commercial Casinos

Table 81 shows three key ratios used to determine market saturation: Number of Gaming Positions (slot machines and table seats) per 1,000 Adults, Gaming Win per Adult (WPA) and daily Win per Position (WPP). The first measures the supply of gaming in reference to the available local population (or the Supply Ratio), with higher values indicating greater supply and accessibility. Win per Adult measures the level of annual expenditure per adult required to achieve the revenue totals in the market. Win per Position is a standard industry metric that measures market revenue performance. WPP is the total gaming revenue generated per machine per day, with high and low values indicating, respectively, capacity constraints or saturation.

Generally, as the supply ratio increases, suggesting greater access to casinos and supply more in line with demand, the win per adult will increase. Inversely, as the supply ratio increases, the WPP tends to decline as there are more gaming positions available to satisfy market demand. Mississippi and Nevada are both highly dependent upon spending by out-of-state visitors. They are included to show how non-local visitation can skew the penetration metrics. Conversely, gamers residing in Illinois, Massachusetts and New York have historically visited casinos in neighboring states like Iowa, Indiana, Missouri, Connecticut, Rhode Island and New Jersey, and this leakage leads to low WPA in the home states and boosts WPA in the target states. Louisiana both gains from out-of-state visitation from Texas on the western side of the state as well as exports gamers from New Orleans and Baton Rouge to Mississippi casinos.

On average, excluding Mississippi and Nevada, WPA was $312 in 2019 on a statewide basis.

**Table 81: Statewide Penetration Metrics 2019**

| State | State Adult Population (21 & up) | # of Gaming Positions | Positions per 1,000 Adults | Market Revenues 2019 | Win per Adult | Win per Position |
|---|---|---|---|---|---|---|
| Colorado | 4,246,197 | 14,301 | 3.4 | $833,668,376 | $196 | $160 |
| Connecticut* | 2,677,604 | 7,913 | 3.0 | $982,276,676 | $367 | $340 |
| Delaware | 729,887 | 6,851 | 9.4 | $421,388,809 | $577 | $169 |
| Iowa | 2,290,198 | 19,273 | 8.4 | $1,467,513,718 | $641 | $209 |
| Illinois | 9,345,768 | 11,674 | 1.2 | $1,413,478,308 | $151 | $332 |
| Indiana | 4,876,222 | 21,877 | 4.5 | $2,059,637,607 | $422 | $258 |
| Louisiana | 3,372,430 | 27,792 | 8.2 | $2,432,128,060 | $721 | $240 |
| Maryland | 4,448,162 | 14,972 | 3.4 | $1,756,838,409 | $395 | $321 |
| Massachusetts | 5,226,918 | 6,832 | 1.3 | $718,534,899 | $137 | $288 |
| Missouri | 4,516,347 | 19,964 | 4.4 | $1,729,492,133 | $383 | $237 |
| Mississippi | 2,143,184 | 29,940 | 14.0 | $2,201,333,096 | $1,027 | $201 |
| New Jersey | 6,617,975 | 25,527 | 3.9 | $2,686,563,368 | $406 | $288 |
| Nevada | 2,276,722 | 173,862 | 76.4 | $12,030,986,000 | $5,284 | $190 |
| New York | 14,662,735 | 25,040 | 1.7 | $2,730,982,538 | $186 | $299 |
| Ohio | 8,643,137 | 21,044 | 2.4 | $1,941,485,831 | $225 | $253 |
| Pennsylvania | 9,652,375 | 33,284 | 3.4 | $3,266,679,859 | $338 | $269 |
| Rhode Island | 799,853 | 5,790 | 7.2 | $650,621,403 | $813 | $308 |
| West Virginia | 1,366,784 | 7,395 | 5.4 | $933,696,360 | $683 | $346 |
| **Total** | **87,892,498** | **473,330** | **5.4** | **$40,257,305,451** | **$458** | **$233** |
| **Total without MS & NV** | **83,472,592** | **269,528** | **3.2** | **$26,024,986,355** | **$312** | **$265** |

Source: State gaming commissions/gaming control boards; US Census; The Innovation Group. *Slots only, table revenue not reported.

We can also look to a more granular level at discrete local market areas, since statewide numbers may include areas that are not served by casinos. The population in this analysis consists of rings of 30 or 60 miles depending upon the spread of casinos throughout the metro area. Chicagoland has been included for illustrative purposes but it is hampered by several constraints and factors: 1) Illinois casinos were limited to approximately 1,330 gaming positions through 2019, artificially constricting supply; 2) casinos were prohibited in the City of Chicago, and; 3) distributed VGTs in Illinois absorb some of the gaming demand in the suburbs of Chicago.

Excluding Chicagoland, WPA was $500 in 2019. Detroit, with three large casinos in downtown, had the highest WPA.

**Table 82: Penetration Metrics 2019 Selected Local Markets**

| Market | Market Adult Population (21 & up) | # of Gaming Positions | Positions per 1,000 Adults | Market Revenues 2019 | Win per Adult | Win per Position |
|---|---|---|---|---|---|---|
| Detroit | 2,119,950 | 10,868 | 5.1 | $1,454,274,694 | $686 | $367 |
| Philadelphia | 2,835,113 | 11,316 | 4.0 | $1,317,706,841 | $465 | $319 |
| Kansas City | 1,712,890 | 9,058 | 5.3 | $754,222,515 | $440 | $228 |
| St. Louis | 1,930,464 | 11,210 | 5.8 | $1,020,059,789 | $528 | $249 |
| Columbus | 1,137,523 | 5,065 | 4.5 | $412,630,517 | $363 | $223 |
| Cincinnati | 1,130,627 | 5,772 | 5.1 | $473,268,116 | $419 | $225 |
| Chicagoland | 6,785,673 | 15,377 | 2.3 | $1,892,621,751 | $279 | $337 |
| **Total** | **17,652,240** | **68,667** | **3.9** | **$7,324,784,222** | **$415** | **$292** |
| **Total without Chicagoland** | **10,866,567** | **53,290** | **4.9** | **$5,432,162,471** | **$500** | **$279** |

Source: State gaming commissions/gaming control boards; Environics/iExpress; The Innovation Group.

Table 83 shows the combined penetration for the three commercial casino states that also have distributed gaming.

**Table 83: Penetration Metrics 2019 Casino and Distributed Gaming Combined**

| Market | Market Adult Population (21 & up) | # of Gaming Positions | Positions per 1,000 Adults | Market Revenues 2019 | Win per Adult | Win per Position |
|---|---|---|---|---|---|---|
| Illinois | 9,345,768 | 43,836 | 4.7 | $3,090,090,702 | $331 | $193 |
| Louisiana | 3,372,430 | 40,750 | 12.1 | $3,055,960,175 | $906 | $205 |
| West Virginia | 1,366,784 | 15,039 | 11.0 | $1,331,790,635 | $974 | $243 |
| **Total** | **14,084,982** | **99,624** | **7.1** | **$7,477,841,512** | **$531** | **$206** |

Source: State gaming commissions/gaming control boards; Environics/iExpress; The Innovation Group.

## Distributed Gaming

Montana has the highest penetration by a significant margin. It is a well-established market that has been in operation for three decades throughout population centers and it faces relatively limited competition. With the large number of machines, however, comes low WPP. South Dakota has the second highest penetration; casino competition is also relatively limited although the commercial casino district of Deadwood is fairly convenient to Rapid City. The HHR market in Wyoming is relatively new and there are several population centers that had no facilities in 2019.

**Table 84: Penetration Metrics 2019 Distributed Electronic Gaming**

| Market | Market Adult Population (21 & up) | # of Gaming Positions | Positions per 1,000 Adults | Market Revenues 2019 | Win per Adult | Win per Position |
|---|---|---|---|---|---|---|
| Illinois | 9,345,768 | 32,162 | 3.4 | $1,676,612,394 | $179 | $143 |
| Louisiana | 3,372,430 | 12,958 | 3.8 | $623,832,115 | $185 | $132 |
| Montana | 797,288 | 16,792 | 21.1 | $419,957,833 | $527 | $69 |
| Oregon | 3,199,715 | 11,586 | 3.6 | $966,474,906 | $302 | $229 |
| South Dakota | 628,773 | 8,946 | 14.2 | $230,233,468 | $366 | $71 |
| West Virginia | 1,366,784 | 7,644 | 5.6 | $398,094,276 | $291 | $143 |
| Wyoming | 420,270 | 1,025 | 2.4 | $59,076,313 | $141 | $158 |
| **Total** | **19,131,028** | **91,113** | **4.8** | **$4,374,281,305** | **$229** | **$132** |

Source: State gaming commissions/gaming control boards; Environics/iExpress; The Innovation Group.

## Online Gaming

Identifying a stabilized iGaming penetration level is made challenging because of the impact of the pandemic and the associated closure of bricks-and-mortar casinos in 2020, which resulted in a skyrocketing rise in iGaming revenue. However, even after casinos reopened, iGaming revenue has stayed high. In the following analysis we compare 2019 with the pandemic period beginning March 2020.

**Table 85: iGaming Per Capita Spending (Win per Adult), Annualized**

| | 2019 | Post-March 2020 | % Change |
|---|---|---|---|
| Delaware | $4.89 | $12.64 | 158% |
| Michigan | | $136.25 | |
| New Jersey | $73.01 | $160.36 | 120% |
| Pennsylvania | $18.52 | $71.48 | 286% |
| West Virginia | | $22.59 | |

Source: State gaming commissions and lotteries; US Census; The Innovation Group.

Per capita spending has more than doubled in the two states that have a relatively long history of online gaming, Delaware and New Jersey. In Pennsylvania, spending has nearly quadrupled, although it should be noted that the annualized 2019 penetration reflects just the first three months of operation; therefore, there is substantial normative ramp-up included in the increase.

Although it remains to be seen whether spending will stabilize at these levels once herd immunity has been achieved and all pandemic restrictions are lifted, it is clear that spending will remain well above pre-pandemic levels.

## Sports Betting

The following table contains revenue per adult data for markets with in-person and mobile sports wagering.

**Table 86: Brick-and-Mortar + Mobile Only Comparables**

| | Sports GGR [1] | Gamer Pop | Win Per Adult (21+) |
|---|---|---|---|
| Colorado | $256,898,127 | 4,341,087 | $59 |
| Illinois | $615,008,572 | 9,445,609 | $65 |
| Indiana | $349,503,419 | 5,028,813 | $70 |
| Iowa | $139,738,995 | 2,368,537 | $59 |
| Michigan | $311,838,500 | 7,594,761 | $41 |
| Nevada | $527,269,567 | 2,337,748 | $226 |
| New Jersey | $881,326,587 | 6,774,008 | $130 |
| Pennsylvania | $583,783,008 | 9,842,163 | $59 |
| Rhode Island | $45,024,758 | 816,633 | $55 |
| Washington D.C. | $29,938,865 | 555,295 | $54 |
| West Virginia | $46,491,048 | 1,449,551 | $32 |
| Oregon | $40,433,168 | 3,244,656 | $12 |
| New Hampshire | $49,371,904 | 1,076,025 | $46 |
| Tennessee | $234,154,969 | 5,263,332 | $44 |
| Virginia | $304,209,332 | 6,488,467 | $47 |

[1] Annualized 2021 for U.S. states using Nevada historical monthly revenue distribution between months

## Lotteries

At nearly three times the 2019 national average, Massachusetts has the highest penetration for draw and instant games by a significant margin. While the 2019 total Massachusetts includes keno revenue of roughly $1.1 billion, excluding this revenue still results in a total win per adult of nearly $800. Interestingly, Massachusetts was one of the few states that experienced revenue declines in 2020, as detailed previously. Availability of game categories and a state's offering within those categories appears to impact penetration. This is evidenced by comparing Georgia and Massachusetts, both of which offer a wide variety of games, with North Dakota, which only sells multi-state draw games (no instant tickets) and generated just $47 in 2019 win per adult. Similarly, Wyoming does not offer instant tickets. Note: the Mississippi lottery was only implemented in November of 2019.

**Table 87: 2019 US Lottery Statewide Penetration Metrics – Draw & Instant**

| State | Legal Lottery Age | Legal Lottery Age Population | 2019 Market Revenues | Win per Adult |
|---|---|---|---|---|
| Arizona | 21 | 5,356,557 | $1,033,800,000 | $193.00 |
| Arkansas | 18 | 2,317,649 | $496,000,000 | $214.01 |
| California | 18 | 30,617,582 | $7,026,600,000 | $229.50 |
| Colorado | 18 | 4,499,217 | $659,700,000 | $146.63 |
| Connecticut | 18 | 2,837,847 | $1,306,200,000 | $460.28 |
| Delaware | 18 | 770,192 | $186,100,000 | $241.63 |
| Florida | 18 | 17,247,808 | $7,222,400,000 | $418.74 |
| Georgia | 18 | 8,113,542 | $4,754,600,000 | $586.01 |
| Idaho | 18 | 1,338,864 | $279,500,000 | $208.76 |
| Illinois | 18 | 9,853,946 | $2,776,100,000 | $281.72 |
| Indiana | 18 | 5,164,245 | $1,324,600,000 | $256.49 |
| Iowa | 21 | 2,306,818 | $367,700,000 | $159.40 |
| Kansas | 18 | 2,213,064 | $289,100,000 | $130.63 |
| Kentucky | 18 | 3,464,802 | $1,126,200,000 | $325.04 |
| Louisiana | 21 | 3,383,106 | $486,700,000 | $143.86 |
| Maine | 18 | 1,095,370 | $301,100,000 | $274.88 |
| Maryland | 18 | 4,710,993 | $2,175,500,000 | $461.79 |
| Massachusetts | 18 | 5,539,703 | $5,484,900,000 | $990.11 |
| Michigan | 18 | 7,842,924 | $3,846,700,000 | $490.47 |
| Minnesota | 18 | 4,336,475 | $609,200,000 | $140.48 |
| Mississippi* | 21 | 2,163,688 | $54,800,000 | $25.33 |
| Missouri | 18 | 4,766,843 | $1,343,400,000 | $281.82 |
| Montana | 18 | 840,190 | $57,600,000 | $68.56 |
| Nebraska | 19 | 1,436,459 | $178,700,000 | $124.40 |
| New Hampshire | 18 | 1,104,458 | $381,500,000 | $345.42 |
| New Jersey | 18 | 6,943,612 | $3,315,000,000 | $477.42 |
| New Mexico | 18 | 1,620,991 | $132,100,000 | $81.49 |
| New York | 18 | 15,425,262 | $8,002,200,000 | $518.77 |
| North Carolina | 18 | 8,187,369 | $2,896,200,000 | $353.74 |
| North Dakota | 18 | 581,891 | $27,600,000 | $47.43 |
| Ohio | 18 | 9,111,081 | $3,316,000,000 | $363.95 |
| Oklahoma | 18 | 3,004,733 | $219,900,000 | $73.18 |
| Oregon | 18 | 3,351,175 | $342,300,000 | $102.14 |
| Pennsylvania | 18 | 10,167,376 | $4,472,800,000 | $439.92 |
| Rhode Island | 18 | 854,866 | $254,500,000 | $297.71 |
| South Carolina | 18 | 4,037,531 | $1,986,300,000 | $491.96 |
| South Dakota | 18 | 667,558 | $57,500,000 | $86.13 |
| Tennessee** | 18 | 5,319,123 | $1,812,500,000 | $340.75 |
| Texas | 18 | 21,596,071 | $6,129,000,000 | $283.80 |
| Vermont | 18 | 509,984 | $137,200,000 | $269.03 |
| Virginia | 18 | 6,674,671 | $2,160,200,000 | $323.64 |
| Washington | 18 | 5,951,832 | $766,200,000 | $128.73 |
| Washington D.C. | 18 | 577,581 | $208,700,000 | $361.33 |
| West Virginia | 18 | 1,432,580 | $191,600,000 | $133.74 |
| Wisconsin | 18 | 4,555,837 | $687,300,000 | $150.86 |
| Wyoming | 18 | 445,025 | $25,800,000 | $57.97 |
| **National Total** | | **244,338,490** | **$80,909,600,000** | **$331.14** |

Source: La Fleur's; US Census; State Lottery Commissions/Control Boards; The Innovation Group

*Partial year; MS did not implement the lottery until November 2019; **Fiscal Year Total

The following table displays online and iLottery penetration statistics. Win per adult figures reflect the nascency of these digital categories. Michigan has the highest penetration in both categories at $18.82 per adult for online and $15.80 per adult for iLottery. While we expect the penetration delta between online/iLottery and draw/instant to decrease over time, we believe there will still be a wide penetration margin for years to come.

**Table 88: 2019 US Lottery Statewide Penetration Metrics – Online & iLottery**

| State | Legal Lottery Age | Legal Lottery Age Population | 2019 Market Revenues - Online | Online Win per Adult | 2019 Market Revenues - iLottery | iLottery Win per Adult |
|---|---|---|---|---|---|---|
| Georgia | 18 | 8,113,542 | $88,700,000 | $10.93 | $44,800,000 | $5.52 |
| Illinois | 18 | 9,853,946 | $55,800,000 | $5.66 | N/A | N/A |
| Kentucky | 18 | 3,464,802 | $30,600,000 | $8.83 | $21,100,000 | $6.09 |
| Michigan | 18 | 7,842,924 | $147,600,000 | $18.82 | $123,900,000 | $15.80 |
| New Hampshire | 18 | 1,104,458 | $9,800,000 | $8.87 | $7,300,000 | $6.61 |
| North Carolina | 18 | 8,187,369 | $15,700,000 | $1.92 | N/A | N/A |
| North Dakota | 18 | 581,891 | $1,600,000 | $2.75 | N/A | N/A |
| Pennsylvania | 18 | 10,167,376 | $68,200,000 | $6.71 | $68,200,000 | $6.71 |
| Virginia | 18 | 6,674,671 | $55,500,000 | $8.32 | $31,400,000 | $4.70 |
| **Total** | | **55,990,979** | **$473,500,000** | **$8.46** | **$296,700,000** | **$7.94** |

Source: La Fleur's; US Census; State Lottery Commissions/Control Boards; The Innovation Group

# *New Developments and Jurisdictions*

## *Nebraska*

The Nebraska state constitution was amended by voters in 2020 to allow casinos at six racetracks. The legislature has approved regulatory parameters including on-site sports betting and electronic keno at casinos and bars. The minimum age for gambling is 21 for casino gaming, sports betting and horse betting, but 19 for keno, the proceeds of which fund community projects. The casino gaming tax is 20%, 70% of which is to be dedicated to property tax relief.

## *Texas*

Legislation to implement major destination resorts in the four largest cities in Texas failed to make it through the 2021 session.

## *Alabama*

Alabama currently has three Class II casinos operated by the Poarch Band of Creek Indians as well as a handful of electronic bingo venues. There is currently no lottery in Alabama. The Poarch Band and other interests have promoted legislation to legalize a state lottery and several casinos in the state. The Band would be allowed to transform its three existing electronic-only casinos to full Class III casinos and be awarded a license to open a new resort casino in the northeast corner of the state. However, the legislation failed to pass during the 2021 session.

### *Virginia*

As part of a broad gaming package, Virginia legalized sports betting in late April 2020. Online sports betting is permitted as of July 1, 2020. The legislation also approved casinos in five cities, subject to local referenda, which have been held and approved in all cities but Richmond, which is currently undergoing an RFP process to select a developer and operator. Four to twelve online sports betting vendors are allowed, with a 15 percent tax rate. Casinos will be permitted to offer sportsbooks.

## *Alaska Charitable Gaming*

Currently charitable gaming is the only legal form of gambling in Alaska. Despite several attempts to legalize casinos and lotteries, Alaska's gaming laws remain among the strictest in the country. The following is a summary of historical attempts to legalize casinos or lotteries:

- 1990: a referendum to legalize gambling and establish an Alaska Gambling Board was defeated 90,827 to 50,446.
- 1995: the legislature passed a bill making card, wheel and dice games illegal, effectively scuttling plans by the Klawock Village to open a casino, which had been approved by the National Indian Gaming Commission.
- 1995: the legislature banned cruise ships from operating casino games in Alaska waters.
- 2003: the legislature rejected proposals for a lottery and video poker.
- 2004: the legislature rejected a proposal to establish a gaming commission.
- 2003-2004: a developer's proposal to turn the former Alaska Seafood International plant in Anchorage into a casino failed. A related bill that would have allowed casinos in Alaska cities with a population above 150,000 passed the House but was denied in the Senate.
- 2005 and 2006: the State rejected two attempts to place an "Alaska Video Lottery Law" on the ballot.
- 2008: a referendum to legalize gambling and establish an Alaska Gaming Commission was defeated 116,670 to 73,463.

Authorized in "AS 05.15 The Alaska Gaming Reform Act (Act) and 15 AAC 160 Authorized Games of Skill and Chance," charitable gaming gives "permittees" the opportunity to "generate net proceeds for political, educational, civic, public, charitable, patriotic, and religious uses in the state."

Permitted games include: "Bingo, raffles and lotteries, pull-tab games, authorized classics (for example, ice classics, cabbage classics), fish and moose derbies, Calcutta pools, and contests of skill." Pull-tabs account for approximately two-thirds of proceeds to charities, followed by raffle/lottery at 22% and bingo at 10%.

There are four categories of operations:

1. Permittee (Self-directed): A municipality or qualified organization that holds a permit to conduct gaming activities.
2. Multiple-Beneficiary Permittee (MBP): Two to six municipalities or qualified organizations that jointly obtain a permit in order to aggregate prize limits.
3. Vendor: A for-profit business that sells pull-tabs on behalf of a permittee, from a location licensed by the Alcoholic Beverage Control Board.
4. Operator: A for-profit business licensed to conduct gaming activities on behalf of a permittee.

Qualified organizations include "civic or service organizations, religious, charitable, fraternal, veterans, labor, political and education organizations, police and fire departments, associations and derbies, and nonprofit trade associations."

Adjusted Gross Income (AGI) is the amount retained by the operation after prizes and federal excises taxes are deducted from Gross Sales. Net Proceeds is the amount retained by permittees after expenses and state taxes are deducted from AGI.

**Table 89: Alaska Charitable Gaming 2019**

| | # of Licenses | Gross Sales | Federal Excise Tax | Cost of Prizes | Adjusted Gross Income (AGI) | Total Expenses | Net Proceeds |
|---|---|---|---|---|---|---|---|
| Permittees | 1,101 | $149,711,684 | $165,580 | $109,967,009 | $39,579,096 | $18,893,603 | $20,685,492 |
| MBPs | 13 | $77,269,375 | $11,405 | $60,625,212 | $16,632,757 | $11,834,354 | $4,798,404 |
| Vendors | 165 | $40,732,412 | $17,115 | $32,439,528 | $8,275,769 | $4,055,567 | $4,220,202 |
| Operators | 24 | $117,512,615 | $174,116 | $89,321,211 | $28,017,287 | $21,100,511 | $6,916,776 |
| **Total** | **1,303** | **$385,226,086** | **$368,216** | **$292,352,960** | **$92,504,909** | **$55,884,035** | **$36,620,874** |

Source: Alaska Department of Revenue

The percentage of AGI allowed for expenses varies by and game type. Expenses may not exceed 70% of pull-tab AGI and 90% of bingo and raffle AGI. The expense ratio results also vary by category of operation, with Operators having the highest expense ratios. All (100%) Net Proceeds must be remitted to a permittee. Vendors only operate pull-tabs.

**Table 90: Pull-Tab Proceeds 2019**

| | Gross Sales | Federal Excise Tax | Cost of Prizes | Adjusted Gross Income (AGI) | Total Expense % | Net Proceeds |
|---|---|---|---|---|---|---|
| MBP | $52,292,715 | $11,405 | $42,488,298 | $9,793,012 | 65% | $3,449,249 |
| Operator | $92,927,334 | $173,003 | $73,263,557 | $19,490,774 | 70% | $5,876,503 |
| Self-directed | $116,863,920 | $156,084 | $92,523,851 | $24,183,986 | 56% | $10,539,978 |
| Vendor | $40,732,412 | $17,115 | $32,439,528 | $8,275,769 | 49% | $4,220,202 |
| **Total** | **$302,816,381** | **$357,607** | **$240,715,234** | **$61,743,541** | **61%** | **$24,085,932** |

Source: Alaska Department of Revenue

Bingo accounts for 17% of sales but because of higher operating expenses only 10% of proceeds.

**Table 91: Bingo Proceeds 2019**

| | Gross Sales | Federal Excise Tax | Cost of Prizes | Adjusted Gross Income (AGI) | Total Expense % | Net Proceeds |
|---|---|---|---|---|---|---|
| MBP | $24,926,512 | $0 | $18,101,054 | $6,825,459 | 80% | $1,345,927 |
| Operator | $22,352,232 | $0 | $14,721,032 | $7,631,200 | 88% | $900,586 |
| Self-directed | $17,148,443 | $2,892 | $12,171,400 | $4,974,151 | 69% | $1,527,109 |
| **Total** | **$64,427,187** | **$2,892** | **$44,993,486** | **$19,430,810** | **81%** | **$3,773,622** |

Source: Alaska Department of Revenue

Raffles are dominated by Self-directed Permittees and have little overhead, meaning that nearly 85% of AGI is retained as Net Proceeds.

**Table 92: Raffle Proceeds 2019**

| | Gross Sales | Federal Excise Tax | Cost of Prizes | Adjusted Gross Income (AGI) | Total Expense % | Net Proceeds |
|---|---|---|---|---|---|---|
| MBP | $50,148 | $0 | $35,861 | $14,287 | 77% | $3,228 |
| Operator | $1,050,244 | $1,113 | $539,087 | $510,044 | 81% | $97,669 |
| Self-directed | $13,703,658 | $6,604 | $4,369,745 | $9,327,308 | 12% | $8,214,956 |
| **Total** | **$14,804,050** | **$7,717** | **$4,944,693** | **$9,851,639** | **16%** | **$8,315,853** |

Source: Alaska Department of Revenue

Approximately 10% of proceeds accrue to Native Alaskan villages and organizations.

**Table 93: Native Alaskan Proceeds 2019**

| Gross Sales | Federal Excise Tax | Cost of Prizes | Adjusted Gross Income (AGI) | Total Expense % | Net Proceeds |
|---|---|---|---|---|---|
| $40,575,913 | $55,140 | $31,318,927 | $9,201,845 | 60% | $3,692,602 |

Source: Alaska Department of Revenue

Annual win (or AGI) per adult is nearly $170, which is significantly lower than casinos typically penetrate but very high compared to charitable gaming in other states, where other gambling options are more accessible.

Legislation to permit electronic pull-tab devices is being considered in Alaska. These devices mimic slot machine games but with fixed odds (a fixed or predetermined quantity of plays and prizes within each "game" or "deal") to remain in compliance with pull-tab regulations. To provide context on the performance of electronic pull-tab devices compared to bingo and paper pull-tabs, we present statistics below from Virginia.

**Table 94: Virginia Charitable Gaming Statistics ($000)**

| | 2014 | 2015 | 2016 | 2017 | 2018 | CAGR |
|---|---|---|---|---|---|---|
| | *Total Sales* | | | | | |
| Bingo Sales | $109,583 | $105,622 | $102,409 | $99,785 | $92,958 | -4.0% |
| Bingo Hall Pull-Tab Sales* | $148,399 | $161,509 | $164,078 | $163,654 | $156,806 | 1.4% |
| Social Hall Electronic Pull-Tab Sales | $252,696 | $385,655 | $517,783 | $594,773 | $790,277 | 33.0% |
| **Total Sales** | **$510,678** | **$652,786** | **$784,271** | **$858,212** | **$1,040,041** | **19.5%** |
| | *Total Prize Payout* | | | | | |
| Bingo Prizes | $89,142 | $86,054 | $82,957 | $81,183 | $75,359 | -4.1% |
| Bingo Hall Pull-Tab Prizes* | $107,254 | $116,521 | $118,737 | $119,497 | $116,120 | 2.0% |
| Social Hall Electronic Pull-Tab Prizes | $232,480 | $354,803 | $476,360 | $547,191 | $727,055 | 33.0% |
| **Total Prizes** | **$428,876** | **$557,378** | **$678,054** | **$747,871** | **$918,534** | **21.0%** |
| | *Total Hold (Revenue)* | | | | | |
| Bingo Hold | $20,441 | $19,568 | $19,453 | $18,602 | $17,599 | -3.7% |
| Bingo Hall Pull-Tab Hold* | $41,146 | $44,988 | $45,341 | $44,157 | $40,686 | -0.3% |
| Social Hall Electronic Pull-Tab Hold | $20,216 | $30,852 | $41,423 | $47,582 | $63,222 | 33.0% |
| **Total Hold** | **$81,802** | **$95,408** | **$106,217** | **$110,340** | **$121,507** | **10.4%** |
| | *Total Proceeds to Charity* | | | | | |
| Bingo & Bingo Hall Pull-Tab Proceeds* | $28,970 | $31,393 | $31,150 | $29,189 | $27,539 | -1.3% |
| Social Hall Electronic Pull-Tab Proceeds | $10,108 | $15,426 | $20,711 | $23,791 | $31,611 | 33.0% |
| **Total Proceeds** | **$39,077** | **$46,819** | **$51,862** | **$52,980** | **$59,150** | **10.9%** |

Source: Virginia Charitable Gaming Board; *Includes Paper and Electronic Pull Tabs

**Table 95: Virginia Electronic Pull Tabs at Social Halls**

| | |
|---|---|
| Total Electronic Pull-Tab Sales* ($000's) | $790,277 |
| Total Electronic Pull-Tab Hold* ($000's) | $63,222 |
| Total Number of Machines | 1,780 |
| Total Sales per Machine | $1,216.37 |
| **Total Hold (Revenue) per Machine** | **$97.31** |

Source: Virginia Charitable Gaming Board

## *Canada*

The gaming landscape in Canada is generally highly comparable to the US, with a mixture of commercial and First Nation developments in many provinces as well as state lotteries. Compared to the US, Canadian provinces tend to have heavier State involvement and regulation, and public reporting of gaming revenue is much more limited. The following section presents a summary of gaming availability in Canada as well as relevant trends within the market.

Casino gambling became legal in Canada in 1985 when provincial governments successfully lobbied the federal government to legalize gambling activities carried on electronically through computers, video devices, or slot machines. Since then, casino gambling, as well as other forms of gambling, have grown to multibillion dollar industries in Canada.

The following two tables show the casino development and other approved gambling options for each province.

**Table 96: Canada Commercial and First Nations Casino Development**

| Province/Territory | Number of Commercial | Number of First Nations |
|---|---|---|
| Alberta | 23 | 5 |
| British Columbia | 15 | 4 |
| Manitoba | 2 | 6 |
| New Brunswick | 2 | |
| Newfoundland and Labrador | | |
| Northwest Territories | | |
| Nova Scotia | 2 | |
| Nunavut | | |
| Ontario | 26 | 3 |
| Prince Edward Island | | |
| Quebec | 7 | 3 poker rooms |
| Saskatchewan | 2 | 7 |
| Yukon | 1 | |

Source: The Innovation Group

**Table 97:Canada Other Gaming Activity Development**

| Province/Territory | Distributed | Online Gaming | Sports Betting | Lottery |
|---|---|---|---|---|
| Alberta | VLTs, Bingo | | Parlay only | Retail |
| British Columbia | Bingo | Y | Parlay only | iLottery/Retail |
| Manitoba | VLTs, Bingo | | Parlay only | Retal |
| New Brunswick | VLTs, Bingo | Y | Parlay only | iLottery/Retail |
| Newfoundland and Labrador | VLTs, Bingo | Y | Parlay only | iLottery/Retail |
| Northwest Territories | | | Parlay only | Retail |
| Nova Scotia | VLTs, Bingo | Y | Parlay only | iLottery/Retail |
| Nunavut | | | Parlay only | Lottery |
| Ontario | Bingo | Y | Parlay only | iLottery/Retail |
| Prince Edward Island | VLTs, Bingo | Y | Parlay only | iLottery/Retail |
| Quebec | VLTs, Bingo | Y | Parlay only | iLottery/Retail |
| Saskatchewan | VLTs, Bingo | | Parlay only | Retail |
| Yukon | | | Parlay only | Retail |

Source: The Innovation Group

## Bricks and Mortar Casino Gaming

Canadian bricks and mortar gaming is managed and conducted at the provincial level. Casinos in Canada are owned and operated by private companies, native first nations, and, in some, cases Crown corporations owned by provincial governments. Bricks and mortar casinos are available in all provinces and territories with the exception of Newfoundland and Labrador, Northwest Territories, Nunavut, and Prince Edward Island.

Canadian casino gaming revenue has increased slightly over the past several years. From fiscal year ("FY") 2016 to FY 2020, reported gaming revenue increased by a CAGR of 1.3% to $6.6 billion. While Yukon casino revenue data is unavailable, give the province's one casino and low local population, we would expect revenues for this province to be below $100 million.

**Table 98:Canada Casino Gaming Revenue ($US Millions)**

| | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 |
|---|---|---|---|---|---|
| Alberta | $977.9 | $918.0 | $912.5 | $919.1 | $875.2 |
| British Columbia | $1,411.7 | $1,447.7 | $1,524.3 | $1,504.5 | $1,467.6 |
| Manitoba | $189.8 | $192.0 | $205.4 | $206.7 | $199.8 |
| New Brunswick | $21.6 | $23.9 | $26.1 | $25.4 | N/A |
| Nova Scotia | $56.4 | $55.8 | $62.5 | $63.1 | $62.0 |
| Ontario | $2,790.1 | $2,902.0 | $3,074.8 | $3,124.2 | $3,135.5 |
| Quebec | $624.2 | $642.3 | $682.5 | $681.3 | $648.6 |
| Saskatchewan | $185.2 | $180.2 | $179.4 | $185.1 | $191.5 |
| Yukon | N/A | N/A | N/A | N/A | N/A |
| **Total** | $6,257.0 | $6,361.9 | $6,667.5 | $6,709.3 | $6,580.2 |

Source: Provincial gaming commissions and lotteries; The Innovation Group

## Distributed Machine Gaming

Distributed electronic gaming is present in eight provinces in Canada, primarily in the form of video lottery terminals ("VLTs"). VLTs were introduced to the Canadian gaming market in the early 1990s.

The Atlantic Lottery Corporation and Western Canada Lottery Corporation, which are both provincially owned entities, operate the majority of the VLTs in the country. Atlantic Lottery Corporation is jointly owned by the four Atlantic provincial governments—New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador—while Western Canada Lottery Corporation provincial members include Alberta, Saskatchewan, and Manitoba. Yukon, the Northwest Territories, and Nunavut participate as associate members of the Western Canada Lottery Corporation.

The following table displays VLT machine distribution and revenue trends from FY 2017 through FY 2020. Both total machine counts and total VLT revenue have decreased slightly over the past several years, as summarized in the table below. This is likely due to a relatively widespread focus on problem gaming at the provincial level—many provinces have taken measures to reduce or cap the number of VLT machines per adult to curb problem gaming.

**Table 99: Canada VLT Distribution and Revenue Trends**

| | FY2017 | FY2018 | FY2019 | FY2020 |
|---|---|---|---|---|
| | **Alberta** | | | |
| VLT Count | 5,986 | 5,974 | 5,973 | 5,933 |
| **VLT Revenue ($USD 000s)** | **$475,557** | **$477,150** | **$477,537** | **$441,861** |
| **WPUPD** | **$218** | **$219** | **$219** | **$204** |
| | **Saskatchewan** | | | |
| VLT Count* | 3,996 | 3,974 | 4,156 | 4,200 |
| **VLT Revenue ($USD 000s)** | **$188,001** | **$181,521** | **$178,686** | **$172,719** |
| **WPUPD** | **$129** | **$125** | **$118** | **$113** |
| | **Manitoba** | | | |
| VLT Count* | 6,594 | 6,594 | 6,594 | 6,594 |
| **VLT Revenue ($USD 000s)** | **$278,640** | **$292,510** | **$288,264** | **$287,251** |
| **WPUPD** | **$116** | **$122** | **$120** | **$119** |
| | **Quebec** | | | |
| VLT Count | 11,000 | 11,000 | 9,900 | 9,900 |
| **VLT Revenue ($USD 000s)** | **$730,456** | **$730,456** | **$725,060** | **$691,316** |
| **WPUPD** | **$182** | **$182** | **$201** | **$191** |
| | **New Brunswick** | | | |
| VLT Count | 2,000 | 2,000 | 1,975 | 1,938 |
| **VLT Revenue ($USD 000s)** | **$108,551** | **$111,799** | **$110,635** | **$107,316** |
| **WPUPD** | **$149** | **$153** | **$153** | **$152** |
| | **Prince Edward Island** | | | |
| VLT Count | 280 | 280 | 280 | 306 |
| **VLT Revenue ($USD 000s)** | **$15,634** | **$16,753** | **$16,786** | **$17,025** |
| **WPUPD** | **$153** | **$164** | **$164** | **$152** |
| | **Nova Scotia** | | | |
| VLT Count | 2,072 | 2,072 | 2,043 | 2,012 |
| **VLT Revenue ($USD 000s)** | **$112,596** | **$113,717** | **$105,109** | **$99,978** |
| **WPUPD** | **$149** | **$150** | **$141** | **$136** |
| | **Newfoundland & Labrador** | | | |
| VLT Count | 1,896 | 1,926 | 1,978 | 2,045 |
| **VLT Revenue ($USD 000s)** | **$114,770** | **$113,432** | **$104,826** | **$97,720** |
| **WPUPD** | **$166** | **$161** | **$145** | **$131** |
| | **Total Canadian Market** | | | |
| VLT Count | 33,824 | 33,820 | 32,899 | 32,928 |
| **VLT Revenue ($USD 000s)** | **$2,024,203** | **$2,037,337** | **$2,006,903** | **$1,915,187** |
| **WPUPD** | **$164** | **$165** | **$167** | **$159** |

Source: Atlantic Lottery Corporation; Western Canada Lottery Corporation; Loto-Quebec; La Fleur's; The Innovation Group

*Estimated number of VLTs

## Lotteries

Lottery is the most widely available form of gaming in Canada, with lottery permitted in all provinces and territories. Lottery gaming in Canada comes in various forms including draw games, instant games, online, and iLottery, among others. Additionally, it is important to note that provincial lottery organizations offer the primary form of online casino gaming, where it is geographically legal in Canada.

The following table displays historical revenue trends for Canada's lottery offering. In the wake of bricks and mortar gaming shutdown due to the Coronavirus pandemic, Canadian lottery revenue experienced a relatively strong annual increase, growing 6.7% to over $8.1 billion.

**Table 100: Canada Lottery Historical Revenue Trends**

| Province/Territory | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Western Canada Lottery Corporation** | $1,197.52 | $1,053.57 | $1,171.99 | $1,065.72 | $1,177.66 |
| British Columbia* | $1,038.05 | $1,048.38 | $1,183.98 | $1,152.14 | $1,358.13 |
| New Brunswick* | $149.16 | $145.18 | $147.49 | $157.44 | $160.59 |
| Newfoundland and Labrador* | $226.48 | $213.64 | $215.03 | $229.42 | $216.52 |
| Northwest Territories | N/A | N/A | N/A | N/A | N/A |
| Nova Scotia* | $187.41 | $178.59 | $182.66 | $197.75 | $201.35 |
| Nunavut | N/A | N/A | N/A | N/A | N/A |
| Ontario | $3,066.34 | $3,028.10 | $3,389.04 | $3,189.78 | $3,360.61 |
| Prince Edward Island* | $30.47 | $28.85 | $29.53 | $31.67 | $32.75 |
| Quebec | $1,456.05 | $1,544.27 | $1,690.96 | $1,588.65 | $1,615.06 |
| Yukon | N/A | N/A | N/A | N/A | N/A |
| **Total** | **$7,351.5** | **$7,240.6** | **$8,010.7** | **$7,612.6** | **$8,122.7** |

Source: LaFleur's, Various Provincial Government Reports, The Innovation Group

*Indicates Fiscal Year vs. Calendar Year

**Western Canada Lottery Corporation includes the following provinces: Alberta, Manitoba, and Saskatchewan

## Comparative Per Capita Spending Analysis

The following section offers a similar per capita spending analysis to what was presented in the US gaming market overview. Recognizing that position counts for casinos in Canada are not widely reported, our analysis will focus on win per adult, only, across all three gaming categories for consistency.

### *Casinos*

The table below displays gaming age populations, gaming revenues, and win per adult by province for casino gaming in Canada. The average countrywide win per adult was nearly $224 in FY2019. Of note is the win per adult for British Columbia, which was over $362 or over 60% greater than the national average, given the proximity of the province to Alaska.

**Table 101: Canada Casino Gaming Penetration Metrics**

| Province | Legal Gaming Age | Legal Gaming Age Population | FY2019 Market Revenues | Win per Adult |
|---|---|---|---|---|
| Alberta | 18 | 3,392,072 | $919,060,830 | $270.94 |
| British Columbia | 19 | 4,153,202 | $1,504,494,000 | $362.25 |
| Manitoba | 18 | 1,057,867 | $206,738,730 | $195.43 |
| New Brunswick | 19 | 632,209 | $25,353,000 | $40.10 |
| Nova Scotia | 19 | 792,754 | $63,119,250 | $79.62 |
| Ontario | 19 | 11,586,073 | $3,124,170,000 | $269.65 |
| Quebec | 18 | 6,817,801 | $681,318,540 | $99.93 |
| Saskatchewan | 19 | 885,789 | $185,064,750 | $208.93 |
| Yukon | 19 | 32,803 | N/A | N/A |
| **Total** | | **29,963,739** | **$6,709,319,100** | **$223.91** |

Source: Provincial Gaming Commissions/Control Boards; Canadian Census; The Innovation Group

## *Distributed Gaming*

The following table summarizes the penetration metrics for distributed gaming within Canada. Average countrywide win per adult was nearly $142 in FY 2019. Similar to casino gaming win per adult, British Columbia win per adult represented the highest provincial figure at approximately $273.

**Table 102: Canada Distributed Gaming Penetration Metrics**

| Province | Legal Gaming Age | Legal Gaming Age Population | FY2019 Market Revenues | Win per Adult |
|---|---|---|---|---|
| Alberta | 18 | 3,392,072 | $477,537,120 | $140.78 |
| Manitoba | 18 | 1,057,867 | $288,264,420 | $272.50 |
| New Brunswick | 19 | 632,209 | $110,634,660 | $175.00 |
| Newfoundland and Labrador | 19 | 430,303 | $104,826,150 | $243.61 |
| Nova Scotia | 19 | 792,754 | $105,108,840 | $132.59 |
| Prince Edward Island | 19 | 125,504 | $16,785,630 | $133.75 |
| Quebec | 18 | 6,817,801 | $725,060,160 | $106.35 |
| Saskatchewan | 19 | 885,789 | $178,686,000 | $201.73 |
| **Total** | | **14,134,298** | **$2,006,902,980** | **$141.99** |

Source: Provincial Gaming Commissions/Control Boards; La Fleur's; Canadian Census; The Innovation Group

## *Lotteries*

The following table summarizes the penetration metrics for lotteries within Canada. Average countrywide win per adult was nearly $255 in FY 2019. Newfoundland and Labrador led all provinces in terms of FY 2019 win per adult at $533—more than double the nationwide average—while British Columbia lotteries generated the second highest win per adult at approximately $277.

**Table 103: Canada Lotteries Penetration Metrics**

| Province | Legal Gaming Age | Legal Gaming Age Population | FY2019 Market Revenues | Win per Adult |
|---|---|---|---|---|
| Western Canada Lottery Corporation* | 18 | 5,335,728 | $1,065,717,000 | $199.73 |
| British Columbia | 19 | 4,153,202 | $1,152,144,000 | $277.41 |
| New Brunswick | 18 | 632,209 | $157,438,890 | $249.03 |
| Newfoundland and Labrador | 19 | 430,303 | $229,421,970 | $533.16 |
| Northwest Territories | 19 | 33,704 | N/A | N/A |
| Nova Scotia | 19 | 792,754 | $197,747,730 | $249.44 |
| Nunavut | 19 | 23,659 | N/A | N/A |
| Ontario | 19 | 11,586,073 | $3,189,780,000 | $275.31 |
| Prince Edward Island | 19 | 125,504 | $31,668,570 | $252.33 |
| Quebec | 19 | 6,817,801 | $1,588,653,000 | $233.02 |
| Yukon | 18 | 32,803 | N/A | N/A |
| **Total**** | | **29,963,739** | **$7,612,571,160** | **$254.83** |

Source: La Fleur's; Various Provincial Government Reports; Canadian Census; The Innovation Group
*Western Canada Lottery Corporation includes the following provinces: Alberta, Manitoba, and Saskatchewan; **Total win per adults includes only provinces with revenue data

# *Asia*

The following section presents the current and proposed competitive environment in the Asian region relative to any potential Alaskan gaming resorts, specifically. This includes descriptions of other integrated resort developments, the most recent dynamics of these developments, and corresponding operating metrics.

Taking advantage of prohibitions and restrictions in the most populated countries in Asia, casinos throughout the Asia Pacific area have traditionally relied on foreign customers. Casinos are currently prohibited in China, Hong Kong, Taiwan, Indonesia, Thailand, and Japan (legislation passed in late 2016, implementation and development in progress). Casinos in Vietnam are currently open only to foreign passport holders. South Korea has foreign-only casinos, with the exception of Kangwon Land Casino which is open to domestic gamers. However, South Korea's only domestic casino is so remote that many Koreans often choose to travel to other countries to gamble. Malaysia's remote Genting Highland Casino is nominally off-limit to Malaysian Muslims.

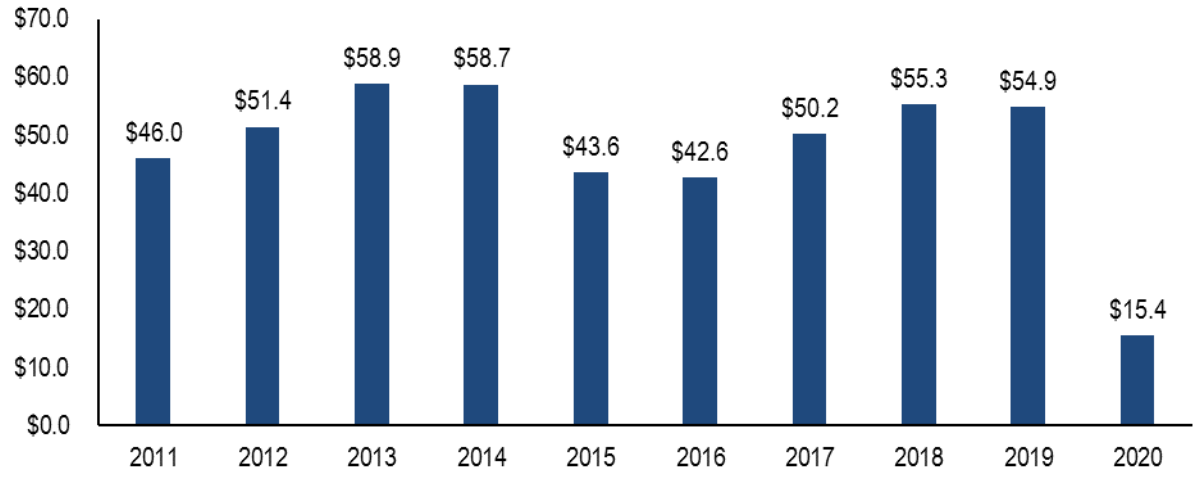
The major centers for gaming in Asia are Macau, Singapore, South Korea and the Philippines, which benefit from the restrictions listed above. Cambodia, Laos, and Vietnam have also developed casinos targeting foreign gamers as has the Russian Far East region to a smaller extent. Although Australia and Las Vegas capture premium players from Asia, Asian casino gaming market remains one of the most attractive consumption plays and continues to be a highly attractive investment area with significant untapped growth potential. Regional markets are expected to lead growth going forward.

## Asian Gaming Market

Due to the fact that many gaming enthusiasts are not able to legally gamble in their own countries, casinos throughout Asia rely a great deal on inbound tourists and junket play. Most gamers from

Asia currently travel to Macau, Singapore, Philippines, and Korea. These countries are benefitting from the restrictions instituted by other Asian countries.

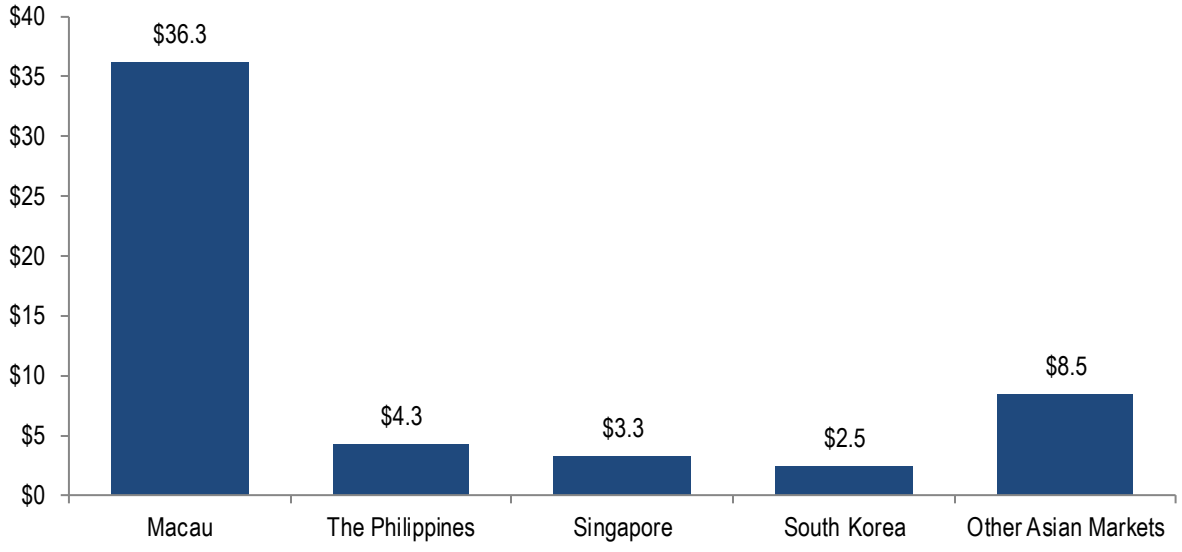
**Figure 11: Asia Gaming Market Size ($US Billions)***




Source: Various company filings, analyst reports, and The Innovation Group
*Excludes Russian Gaming Market

Macau is the most notable of all Asian gaming markets. It currently has more large-scale casinos than any other Asian jurisdiction and is continuously expanding in terms of supply. Macau generated record revenues in 2013 of $45.1 billion, more than four times the entire state of Nevada. The 2013 peak in Macau gaming revenue corresponded with the peak in overall Asian market gaming revenue. The following chart break down the overall 2019 Asian gaming market by country, where data is available. As noted in the chart above, like the rest of the global gaming market, the Asian gaming market experienced a significant annual decrease (-71.9%) in gaming revenue due to the global COVID-19 pandemic.

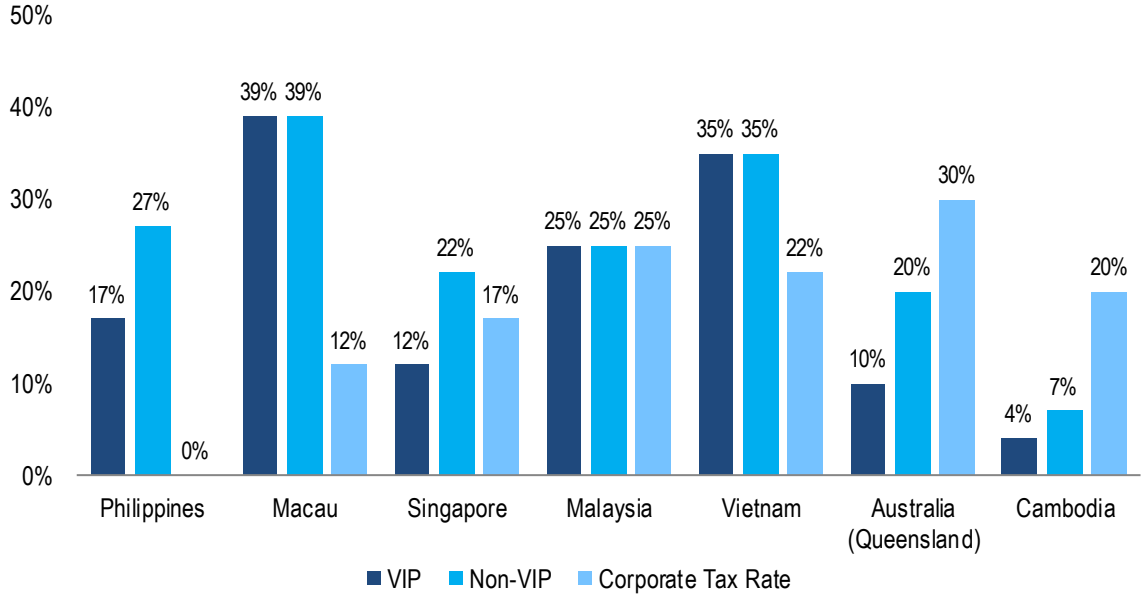
**Figure 12: 2019 Asia Gaming Market Size ($US Billions)***




Source: Various company filings, analyst reports, and The Innovation Group
*Excludes Russian Gaming Market

The following chart illustrates the effective gaming tax rates of major gaming markets in the region.

**Figure 13: Gaming Tax Rates in Major Asian Gaming Markets**




Source: Various government websites

## *Macau*

Macau is the oldest and largest casino destination in Asia. Gaming and hospitality are the center of Macau's economy, which primarily depends on foreign tourism over its local population of approximately 640,445 residents (World Bank 2019 data). Tourists from Mainland China, Hong Kong, and Taiwan make a considerable impact on the economy of Macau, as gaming is illegal in these locations, but transportation from these locations to Macau is fairly simple.

Macau is the most notable of all gaming markets. It currently has more casinos than any other Asian jurisdiction and is continuously expanding in terms of supply. Macau generated a record gaming revenue in 2013 of US$45.1 billion, more than four times the entire state of Nevada, and the official figures indicate that the jurisdiction achieved US$36.3 billion in 2019.

According to the Macau Gaming Inspection and Coordination Bureau (also known by its Portuguese acronym as "DICJ"), the Macau market consists of 41 casinos dispersed amongst Macau Peninsula, Taipa Island, and the Cotai Strip. The casinos house 17,009 slot machines and 6,739 gaming tables as of December 2019. Understandably and due to the COVID-19 pandemic, this position supply decreased in 2020, as summarized in the table below. These casino operations are operated by the following entities: S.J.M. Holdings, Galaxy Entertainment Group, Melco Resorts & Entertainment, MGM China, Sands China, and Wynn Macau.

**Table 104: Macau Gaming Environment**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | CAGR 2014-2019 | Y/Y 2019-2020 |
|---|---|---|---|---|---|---|---|---|---|
| # of Casinos | 35 | 36 | 38 | 40 | 41 | 41 | 41 | 3.2% | 0.0% |
| Room count | 27,904 | 28,409 | 36,278 | 37,100 | 38,700 | 38,282 | 35,142 | 6.5% | -8.2% |
| Table count | 5,711 | 5,824 | 6,169 | 6,419 | 6,588 | 6,739 | 6,080 | 3.4% | -9.8% |
| Slot count | 13,064 | 13,918 | 14,400 | 15,622 | 16,059 | 17,009 | 8,854 | 5.4% | -47.9% |
| Revenue (USD Bn) | $43.9 | $28.5 | $27.4 | $33.2 | $37.9 | $36.3 | $7.6 | -3.8% | -79.1% |

Source: Macau Gaming Board (DICJ), Company Financials

Effective September 2009, Macau restricted junket commissions to 1.25% of rolling chip volume (or approximately 50% of revenue). Prior to the restriction, the market average was 1.35%, although in some cases the rate went as high as 1.50%. Rolling chip volumes are used by casinos to measure the volume of VIP business transacted and represents the aggregate amount of bets players make. These rolling chips are non-negotiable and are transferred to negotiable chips when winning bets are paid out. This method was specifically designed for VIP players to allow casinos to calculate the commission payable to gaming promoters.

## *Philippines*

The Philippines is easily accessible from major countries including; China, Malaysia, Indonesia, Taiwan, Japan, South Korea, and Singapore. The Philippine Amusement and Gaming Corporation ("PAGCOR") is the government entity that is responsible for conducting and establishing gaming pools and casinos. It regulates all casinos based in the Philippines and owns and operates various casinos and slot clubs.

PAGCOR holds a monopoly over casinos in the Philippines and has also licensed private casino operators in special economic zones, including four in Clark Special Economic Zone, one in Poro Point, La Union, and one in Binangonan, Rizal. Additionally, PAGCOR has licensed two private

casinos within the Cebu market. According to PAGCOR's website, it is the most profitable company in the country and is the third largest contributor of revenue to the government after the Tax Authority and the Bureau of Customs. In addition to its managed and licensed casinos, PAGCOR operates members-only VIP slot clubs and slot arcades across the country branded as PAGCOR Clubs, as well as internet gaming sites. Among the new additions to the market are increasingly visionary properties, taking on the characteristics of Integrated Resorts, located in the Entertainment City in Manila Bay Area, including Solaire Resort & Casino, City of Dreams Manila, and Okada Manila. These properties are perhaps the highest profile destination for resorts developed in the Philippines and are expected to continue to propel the market forward, benefiting from high quality of facility and service, renowned brands, and operating expertise. The table below sets forth the gaming revenue of the Philippines gaming market for the years indicated.

**Table 105: Philippines Gaming Revenue ($US Billions)**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| Revenue (USD Billions) | $2.1 | $2.5 | $2.5 | $2.9 | $3.6 | $4.3 | $1.8 |

Source: Various company filings and analyst reports

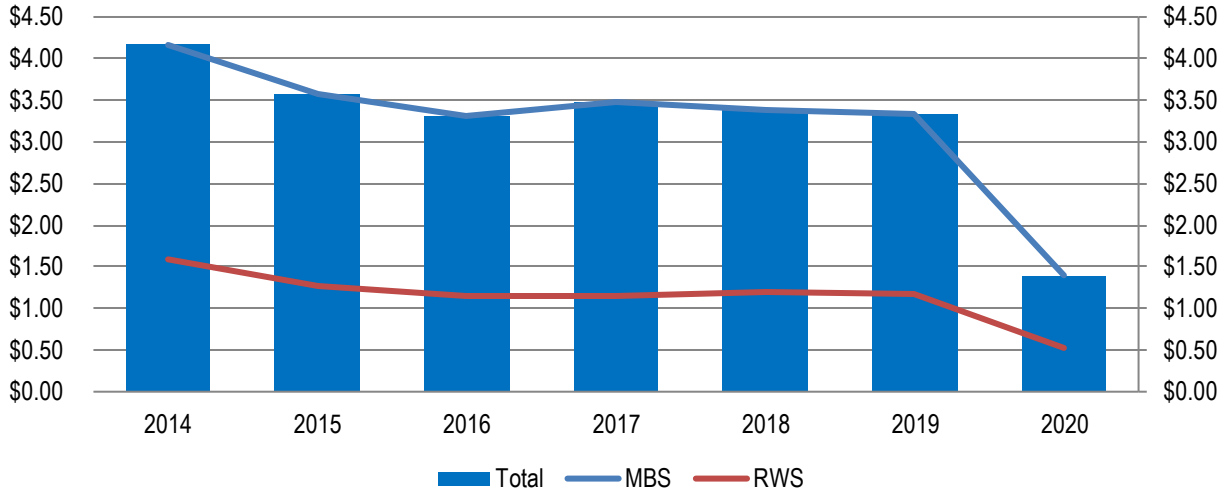
## *Singapore*

Singapore passed casino legislation in 2005 and awarded two gaming licenses to Las Vegas Sands Corporation (LVS) and Genting Resorts Worldwide. LVS operates on nearly 51 acres at Marina Bay, the city-state's new downtown. The Genting Casino is part of a 1,235-acre resort and residential development plan for the resort island of Sentosa. Development costs for each of these casinos exceeded US$4.5 billion. Casinos are restricted to 15,000 square meters per property or approximately 2,500 gaming positions. The legislation for legalized gaming in Singapore incorporates limits on the accessibility of local residents to the casino by imposing entry fees, with gamers able to opt for either an annual fee or a per visit entry fee.

In April 2019, the Singaporean Government approved the first major expansion of the two IRs in the city-state, involving S$9 billion (approximately US$6.7 billion) new investment in both gaming and non-gaming amenities, as well as increased casino entry fees and gaming taxes. The additional investment by the IRs represents almost two-thirds their initial investment. In view of the substantial investment, the government has also extended the duopoly period of the licenses to the end of 2030. This latest move by the government is seen as a long-term positive for the two operators, given the region's increasingly competitive gaming market, despite an increase in casino entry levy for locals and tax increases.

The chart below depicts gaming revenues and overall trends for both Marina Bay Sands (MBS) and Resort World Sentosa (RWS). Note that these revenues include only gaming win and exclude non-gaming revenues.

**Figure 14: MBS & RWS Revenue Trends 2014-2020 ($US Billions)**




Source: Various company filings

## *South Korea*

The Korean gaming market consists of 17 casinos, 16 of which only admit foreign players. The only casino open to Korean citizens is Kangwon Land, which is located in a remote region in the north part of the country. All casinos in Korea are regulated by the National Gambling Control Commission (NGCC) which is an agency under the Ministry of Culture, Sports and Tourism (MCST). NGCC was set up under the National Gambling Control Commission Act (Regulation No. 8279) in 2007 to control, supervise, and regulate the gambling industry independently, with prevention policies as the first priority. The main goal of NGCC is to enhance the healthiness of gambling and establish a responsible gambling culture. The Prime Minister is authorized to appoint the Chairman and Commissioners of NGCC.

Aside from the COVID-related downturn in 2020, the gaming revenue in South Korea has been relatively stable in recent years. While still competing with rival Asia hubs for high-end players, South Korean casinos are also relying on the influx of Chinese tourists. The table below sets forth the gaming revenue of the South Korean gaming market for the years indicated.

**Table 106: South Korea Gaming Revenue ($US Billions)**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| Revenue (USD Billions) | $2.7 | $2.7 | $2.8 | $2.6 | $2.7 | $2.5 | $1.0 |

Source: Various analyst reports; The Innovation Group

The Korean casino market currently has two developments slated to open between now and 2023. The casino development scheduled to open first is Jeju Dream Tower, which is scheduled to open the doors to its casino in May 2021—the development's hotel and other non-gaming operations launched in December 2020. The Lotte Tour Development Co. development's casino will feature 150 tables and 300 gaming machines.

The second major casino development scheduled to open in the coming years is Mohegan Gaming and Entertainment's Project Inspire in Incheon. Due to ongoing disruptions from the global pandemic, the tribal gaming entity recently asked the Korean government for permission to delay the opening of the resort to the first half of 2023, representing a one-year delay to the project's most recent timeline. When completed and operational, the development will include 1,300 hotel rooms, a full suite of non-gaming amenities, and a foreigner-only casino with 160 table games and 700 slot machines.

In addition to Jeju Dream Tower and Project Inspire, there has been a third major Korean gaming development in the news over the past several years. The project known as Caesars Korea Resort Complex was a joint venture between Caesars Entertainment and Guangzhou R&F Properties Co. Ltd. The joint venture was awarded a license from the Korean government to develop the third integrated resort in Incheon. Construction on the development was underway; however, in February 2020 local media reported that construction was suspended with the first phase of the development approximately 25 percent completed. Caesars announced in February 2021 that the company had disposed of its entire stake in the joint venture with R&F Properties and, since then, R&F has submitted a request to delay the opening of the resort to March 2024. With Caesars out as development partner, it remains to be seen whether R&F will in fact continue with the construction of the development or abandon it as well.

## *Russia*

While Russia still trails the majority of Asian gaming markets in terms of revenue, given the country's proximity to Alaska—especially its aspiring gaming hub, the Primorsky ("Primorsk" or "Primorye") Integrated Entertainment Zone ("IEZ")—highlighting the competitive gaming landscape in Russia is warranted. Currently, bricks and mortar gaming developments are banned in Russia with the exception of four specially arranged zones in the Altai, Krasnodar, Kaliningrad, and Primorsky regions. Primorsky has two casinos operational as October 2020 while the remaining zones each have one operational casino, as displayed in the table below.

**Table 107: Russia Gaming Environment**

| Property | City | Gaming Region | Slot Machines | Tables | Total Positions | Hotel Rooms |
|---|---|---|---|---|---|---|
| Tigre de Cristal Casino & Resort | Artyom | Primorsky | 500 | 77 | 962 | 121 |
| Shambala Casino | Artyom | Primorsky | 500 | 26 | 656 | N/A |
| Altai Palace Casino | Altai | Altai | 20 | 16 | 116 | N/A |
| Sobranie Casino | Kaliningrad | Kaliningrad | 350 | 14 | 434 | N/A |
| Sochi Casino and Resort | Sochi | Krasnodar | 569 | 80 | 1049 | 428 |

Source: Casino City, The Innovation Group

Of the four zones allowing gaming, Primorsky, located in the Far East region of the country, has become the most high-profile given its proximity to northern China and the investment commitments for gaming developments it has received. Aside from the operational Tigre de Cristal Casino and Resort and the Shambala Casino, the Primorsky IEZ has two additional casinos under construction with government targets for over 10 casino developments. NagaCorp, the owner and operator of the NagaWorld resort in Phnom Penh, Cambodia, is constructing a $350 million integrated resort in the zone. Additionally, the Russian firm Diamond Fortune is constructing its

$270 million Imperial resort. Both resorts are slated to open in 2021, according to recent news reports.

Despite the publicity the Primorsky IEZ has received, the zone has yet to generate strong gaming revenue. As of April 2021, Tigre de Cristal has been the only gaming development to report revenues. As displayed in the table below, net gaming revenue at the resort peaked in 2019 at just $62.7 million.

**Table 108: Tigre de Cristal Annual Gaming Revenue ($US Millions)**

| Year | Net Gaming Revenue |
|---|---|
| 2016* | $22.1 |
| 2017 | $22.0 |
| 2018 | $14.2 |
| 2019 | $62.7 |
| 2020 | $26.4 |

Source: Company filings
*First Full Year of Operations

While the Russian government has aspirations to create a casino cluster in Primorsky that will compete with the powerhouse clusters throughout Asia—such as Macau and Entertainment City in Manila—as noted in a white paper published by The Innovation Group, we believe that the gaming revenue generated in Primorsky will not reach the levels of other cluster markets for some time, if ever. As we note in the white paper:

> One of the most important considerations to keep in mind when comparing the potential impacts of the prospective Primorye cluster is investment scale. The group of companies developing the Primorye IEZ has allegedly committed to invest an aggregate amount of US$2.7 billion by 2025 while Macau saw a total capital investment of more than US$23 billion on major projects during the construction and openings of Venetian Macau, MGM Grand Macau, and City of Dreams. Moreover, it remains to be seen whether or not the US$2.7 billion total investment will actually occur in the Pimorye IEZ. Similarly, the Primorksy region's tourism base is still extremely small relative to Macau and the Philippines, which welcomed roughly 650,000 international visitors in 2017.[4]

## *Japan*

Japan has a long history of probability-based games that are full of passion for luck, together with the characteristics of Japanese culture: entertainment, dedication, precision, skill, and a unique critical thinking. Currently, the forms of gambling include public sports, lottery, and pachinko, which are held under special laws in order to increase the income of national and local governments, as well as to offer a form of entertainment.

[4] http://theinnovationgroup.com/wp-content/uploads/2019/01/Primorsky-Cluster-Effect-FINAL-2019-0128A.pdf

Kōei Kyōgi (Japanese: 公営競技, public sports) are public races that can be gambled on legally in Japan, including horse racing, bicycle racing, powerboat racing, and asphalt speedway motorcycle racing. The prize pool for participants on these races are about 75-85% of total sales. Betting tickets are available at numerous circuits and ticket booths within many cities.

Lotteries are held by prefectures or large cities on a regular basis throughout the calendar year, including unique number lotteries, selected number lotteries, and scratch cards. Each lottery ticket is sold at 100 to 500 yen, and the top cash prizes are usually 100 million yen or more. The lottery law stipulates that the entire prize pool for any given lottery shall be less than 50% of total sales, with the rest going to local government organizations and charities. Lottery tickets are available at lottery booths and stores in most cities, and tickets for selected number lotteries can even be bought at some ATMs.

Pachinko is a pinball-like slot machine game and is used as both a form of recreational arcade game and much more frequently as a gambling device, filling a Japanese gambling niche comparable to that of the slot machine in Western gambling. It is officially not considered gambling, as Japanese laws regard pachinko as an exception to the criminal code on gambling for historical, monetary, and cultural reasons. The widespread game has enabled a specific legal loophole allowing it to exist. Under the law, pachinko balls won from games cannot be exchanged directly for money in the parlor. Nor can they be removed from the premises or exchanged with other parlors. However, such balls can be legally traded to the parlor for so-called "special prize" tokens which can then be legally "sold" for cash to a separate vendor located off-premises. These vendors, often owned by the parlor owners, then sell the tokens back to the parlor at the same price paid (plus a small commission), thus turning a cash profit without technically violating the law.

The potential introduction of casinos to the Japanese market has been a closely followed topic in the gaming industry for years. The Diet opened the doors for Japanese gaming facilities when it legalized casinos in December 2016. On July 20, 2018, Japan's Integrated Resort Implementation Bill was enacted after a plenary session of the upper house of the country's parliament, which allows the regulatory process to move forward over the next year leading into an RFP process for the three locations that were established as part of the legislation. Due to the perceived lengthy IR implementation (RFP, public tendering processes, evaluation, etc.), design, and construction processes, we believe the most realistic opening of a casino resort in Japan is no earlier than mid or late 2025.

## *Europe*

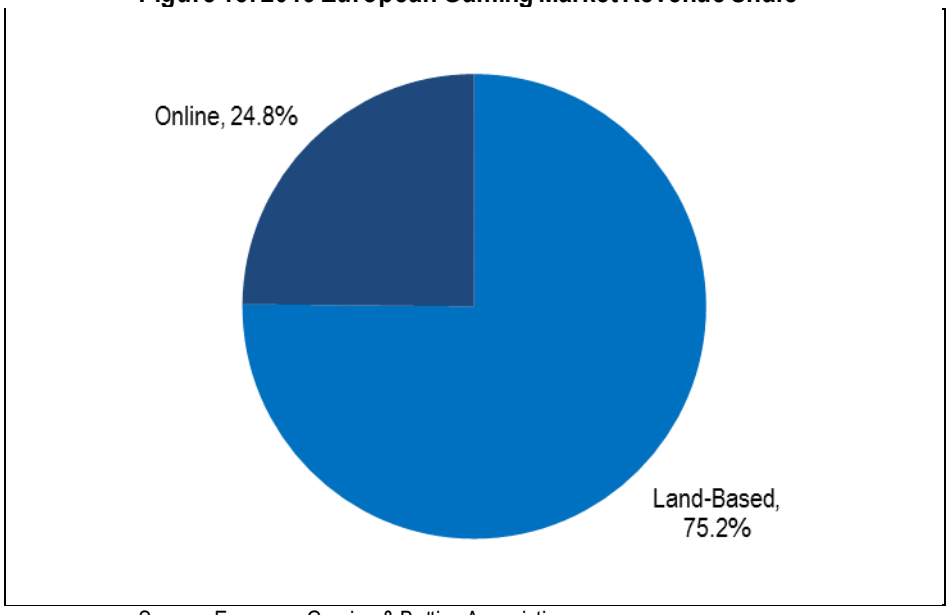
Despite having no true integrated resort developments, Europe represents one of the most mature gaming markets in the world. From bricks and mortar sports books to distributed games such as VLTs to casino developments, virtually all forms of gaming are available throughout the region. Contrary to other global gaming regions, online gaming and sports betting represent some of the most popular gaming offerings in Europe. The following section details key metrics for the region—as reported by the European Gaming & Betting Association, the European Casino

Association, and the European Lotteries Association—as well as a discussion of the key trends and forthcoming developments in the market.

### *European Total Gaming Market*

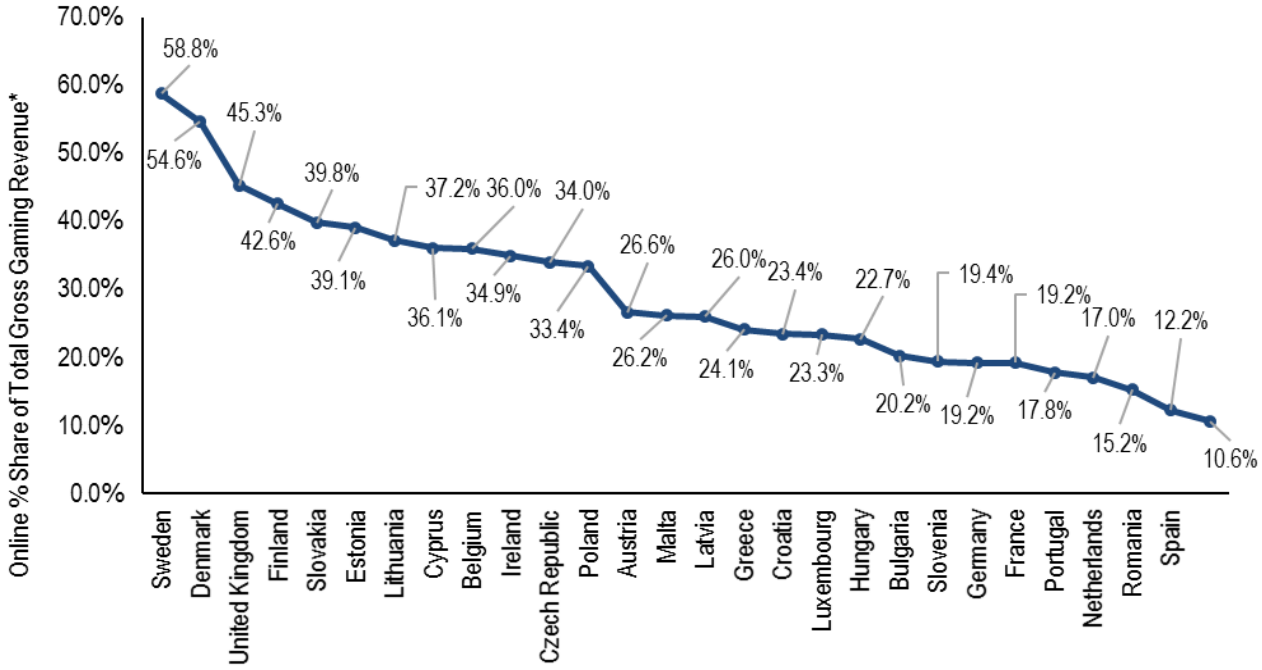
According to the European Gaming & Betting Association, the total European Gambling market was $119.3 billion in 2019. As illustrated in the charts below, the share of online gaming revenue versus land-based revenue represents one of the highest regional online penetration rates in the world. In 2019, online gaming revenue accounted for nearly 25.0% of total European gaming revenue.

**Figure 15: 2019 European Gaming Market Revenue Share***




Source: European Gaming & Betting Association
*EU-27 and UK markets only

**Figure 16: 2019 Online Share of National Gaming Markets**




Source: European Gaming & Betting Association

## *European Casino Market*

In 2017, the 1,030 European casinos received nearly 100 million visits and generated total GGR of approximately $10.7 billion. France and the United Kingdom represent the largest casino gaming markets in Europe, with France generating nearly $2.8 billion in 2017 GGR while the United Kingdom generated $1.9 billion in GGR during the same year. When comparing 2017 GGR (the most recent annual data available for the region, as reported by the European Casino Association) to 2016 GGR, we note that GGR decreased year-over-year by approximately 5.7%.

This decrease illustrates a broader trend in the European gaming market relative to other global gaming markets—land-based casino gaming does not drive industry growth. While land-based casino GGR in the US typically experiences annual increases in the low-single digits, European land-based GGR has remained stable or decreased in recent years. As mentioned previously in this section, online gaming and sports betting tend to be more popular forms of gaming for Europeans relative to gamers in other jurisdictions. In the United Kingdom, for instance, sports betting and online gaming accounted for over 55.6% of FY20 total annual gaming revenue while land-based casino gaming accounted for just 7.1%[5].

[5] As reported by the United Kingdom Gambling Commission for Fiscal Year ended March 2020

This low share of total European gaming revenue in Europe is largely driven by regional gamer preferences; however, another driving force could be a lack of true integrated resort developments in the market. There have been several false starts throughout the region when it comes to integrated resort development—with political opposition and global operator hesitation stifling development. This European gaming market phenomenon is set to change with the opening of Mohegan Gaming & Entertainment's $1 billion-plus Inspire Athens integrated resort development to be located in Athens, Greece. The company was awarded the license for the casino in 2020 but an opening date has yet to be set for the development.

**Table 109: European Casino Gaming Environment**

| Country | 2016 | | | 2017 | | | 2018 | | | 2019 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GGR ($US Millions) | # of Visits (Thousands) | # of Casinos | GGR ($US Millions) | # of Visits (Thousands) | # of Casinos | GGR ($US Millions) | # of Visits (Thousands) | # of Casinos | GGR ($US Millions) | # of Visits (Thousands) | # of Casinos |
| France | $2,734.6 | 32,088 | 201 | $2,799.9 | 33,022 | 200 | $2,327.0 | 32,676 | 201 | $1,831.0 | 24,572 | 2020 |
| United Kingdom | $1,415.7 | 20,560 | 148 | $1,938.4 | 19,718 | 150 | N/A | N/A | N/A | N/A | N/A | N/A |
| Germany | $798.6 | 5,528 | 66 | $832.5 | 5,538 | 65 | N/A | N/A | N/A | N/A | N/A | N/A |
| Switzerland | $2,449.0 | 4,789 | 21 | $799.8 | 4,770 | 21 | N/A | N/A | N/A | N/A | N/A | N/A |
| The Netherlands | $703.0 | 5,528 | 14 | $738.1 | 5,840 | 13 | N/A | N/A | N/A | N/A | N/A | N/A |
| Spain | $412.6 | 5,931 | 45 | $412.6 | 4,663 | 45 | N/A | N/A | N/A | N/A | N/A | N/A |
| Austria | $396.9 | 3,010 | 12 | $399.3 | 2,846 | 12 | $317.0 | 2,630 | 12 | $321.4 | 2,281 | 12 |
| Italy | $390.8 | 2,135 | 4 | $377.5 | 2,030 | 4 | N/A | N/A | N/A | N/A | N/A | N/A |
| Portugal | $358.2 | 6,500 | 11 | $373.9 | 6,500 | 12 | N/A | N/A | N/A | N/A | N/A | N/A |
| Greece | $325.5 | 2,878 | 9 | $314.6 | 2,846 | 9 | N/A | N/A | N/A | N/A | N/A | N/A |
| Czech Republic | $272.3 | N/A | 218 | $290.4 | N/A | 299 | N/A | N/A | N/A | N/A | N/A | N/A |
| Monaco | N/A | N/A | 4 | $269.8 | 230 | 5 | N/A | N/A | N/A | N/A | N/A | N/A |
| Slovenia | $192.4 | 1,773 | 10 | $202.1 | 1,735 | 10 | N/A | N/A | N/A | N/A | N/A | N/A |
| Poland | $153.7 | 1,050 | 46 | $209.3 | 1,150 | 49 | N/A | N/A | N/A | N/A | N/A | N/A |
| Sweden | $148.8 | 1,035 | 4 | $140.4 | 985 | 4 | N/A | N/A | N/A | N/A | N/A | N/A |
| Hungary | $112.5 | 1,200 | 9 | $129.5 | 1,370 | 10 | N/A | N/A | N/A | N/A | N/A | N/A |
| Belgium | $137.9 | 1,346 | 9 | $113.7 | 1,152 | 9 | N/A | N/A | N/A | N/A | N/A | N/A |
| Denmark | $73.8 | 415 | 6 | $72.6 | 415 | 6 | N/A | N/A | N/A | N/A | N/A | N/A |
| Estonia | $65.3 | 742 | 62 | $72.6 | 910 | 63 | N/A | N/A | N/A | N/A | N/A | N/A |
| Luxembourg | $48.4 | 430 | 1 | $49.6 | 440 | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
| Lithuania | $37.5 | N/A | 19 | $37.5 | N/A | 19 | N/A | N/A | N/A | N/A | N/A | N/A |
| Finland | $35.1 | 295 | 1 | $36.3 | 286 | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
| Slovakia | $33.9 | 380 | 12 | $37.5 | 300 | 13 | N/A | N/A | N/A | N/A | N/A | N/A |
| Latvia | $20.6 | 667 | 6 | $24.2 | 732 | 7 | N/A | N/A | N/A | N/A | N/A | N/A |
| San Marino | $20.6 | 174 | 1 | $20.6 | 174 | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
| Montenegro | $13.3 | 43 | 1 | $12.1 | 31 | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
| Serbia | $10.9 | 144 | 1 | $13.3 | 141 | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Total**** | **$11,361.9** | **98,641** | **941** | **$10,718.2** | **97,824** | **1,030** | **$2,644.0** | **35,306** | **213** | **$2,152.4** | **26,853** | **2,032** |

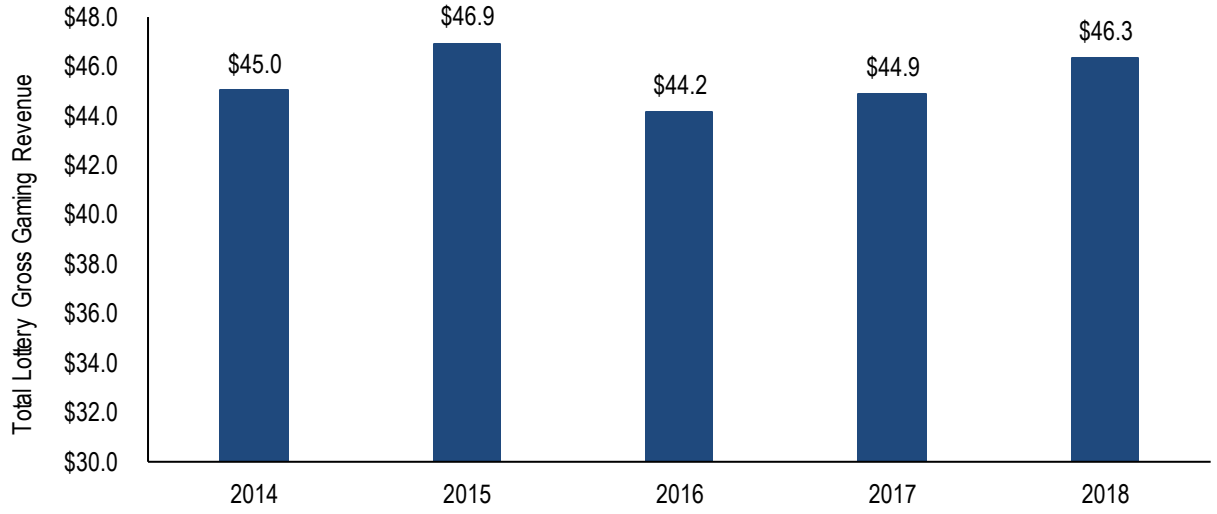
Source: European Casino Association

*Results are not for all European countries, only European Casino Association reporting countries; **Totals for 2018 and 2019 exclude many countries due to data availability

## *European Lottery Market*

The European Lotteries Association is the umbrella organization for national lotteries in more than 40 European countries. According to data reported by the association from 2014 to 2018, which represents the most recent data available, annual European lottery GGR has remained relatively stable. Lottery GGR increased slightly from $45.0 billion in 2014 to $46.3 billion in 2018, representing a CAGR of 0.7%.

**Figure 17: European Lottery Annual GGR ($US Billions)**




Source: European Lotteries Association

## *Latin America*

Similar to Europe and other developed gaming markets, Latin America offers a diverse gaming market with various forms of gaming including bricks and mortar casinos, distributed gaming, lotteries, online gaming, and sports betting. Unregulated gaming in Latin America, especially online gaming, is more prevalent, or at least more widely reported, compared to other gaming markets.

Argentina represents the largest bricks and mortar casino market within the region, generating GGR in the range of $3.0 to $5.0 billion annually. The gaming industry in the country faces many obstacles, however, including an adverse economic climate. Even before the coronavirus pandemic, the country was plagued by one of the highest rates of inflation in the world and was in a recession.

Mexico represents the next largest market in terms of bricks and mortar gaming, with over 300 casinos—many small slots-only facilities—throughout the country. Like many other Latin American countries, despite having a developed regulated gaming market a large unregulated market exists. Various reports suggest roughly 80% of all online gaming revenue in the country is generated by unregulated sites. The most notable announced gaming development in recent years is the $1 billion Mexico City tourist complex announced by Hard Rock International in partnership with Spanish gaming group Codere.

If the Hard Rock Mexico City resort is, in fact, opened, it will be one of the most significant gaming developments in the region and perhaps the first true integrated resort development in the Latin American market. It is important to note that several large-scale resort developments with gaming facilities are operational in the Caribbean. The two most well-known Caribbean gaming resorts are the Atlantis and Baha Mar developments in the Bahamas.

With over 200 million inhabitants and strong tourism arrivals, the Latin American, or even global, gaming jurisdiction with the most untapped gaming potential is Brazil. Our own internal forecasts suggest that total GGR could reach over $7 billion in certain implementation scenarios[6]. While a gaming implementation strategy focused on Integrated Resorts appears to be the most likely scenario in Brazil, legalization has stalled numerous times over the years and there is still no definitive timeline for legalization and implementation.

[6] https://files.constantcontact.com/87c14826301/f694cc92-f3b4-47e0-a98a-a3a409b3236c.pdf

## *Local Market Methodology*

A gravity model was employed to assess the local market potential for the road-connected region of Alaska, delineated generally along the Fairbanks—Northway—Anchorage/Kenai triangle and including spurs to Homer, Seward and Valdez. For other population centers—specifically Bethel, Juneau, Ketchikan and Kodiak—the local market potential is based on penetration metrics of the resident gaming age population. The market potential from seasonal workers and tourists is addressed separately.

Gravity models are commonly used in location studies for commercial developments, public facilities and residential developments. First formulated in 1929 and later refined in the 1940s, the gravity model is an analytical tool that defines the behavior of a population based on travel distance and the availability of goods or services at various locations. The general form of the equation is that attraction is directly related to a measure of availability such as square feet and inversely related to the square of the travel distance. Thus the gravity model quantifies the effect of distance on the behavior of a potential patron, and considers the impact of competing venues.

The basic formulation is that the interaction between two or more gaming venues is based on Newton's Law of Universal Gravitation: two bodies in the universe attract each other in proportion to the product of their "masses" – here, gaming positions – and inversely as the square distance between them. Thus, expected interaction between gaming venue i and market area j is shown as:

$$k \times \frac{N_i \times P_j}{d_{ij}^2}$$

where $N_i$ = the number of gaming positions in gaming venue $i$, $P_j$ = the population (21+) in market area $j$, $d_{ij}$ = the distance between market area $j$ and gaming venue $i$, and $k$ = an attraction factor relating to the quality and amenities to be found at each gaming venue in comparison to the competing set of venues. When this formulation is applied to each gaming venue gaming trips generated from any given zip code are then distributed among all the competing venues.

The gravity model included the identification of 7 discrete market areas based on drive times and other geographic features and the competitive environment. Using our GIS software and CLARITAS database[7], the adult population (21 and over), latitude and longitude, and average household income is collected for each zip code.

[7]The GIS software used was ArcGIS. This software allows for custom data generally in a tabular format with a geographic identification code (census tract, zip code, latitude and longitude, or similar identifier) to be mapped or displayed and integrated with other geographic census based information such as location of specific population or roadways. ArcGIS is the most widely used programs in the geographic information systems industry; the data

Each of these market areas is assigned a unique set of propensity and frequency factors. Gamer visits are then generated from zip codes within each of the areas based on these factors. The gamer visits thus generated are then distributed among the competitors based upon the size of each facility, its attractiveness and the relative distance from the zip code in question. The gravity model then calculates the probabilistic distribution of gamer visits from each market area to each of the gaming locations in the market.

Each travel distance/time is evaluated to determine the likely alternative gaming choices for residents of the region. The model is constructed to include only those alternative venues that are considered to be within a reasonable travel time. These include competing casinos that have the potential to attract patrons, or siphon off visits from the market. Travel distances and time have been developed through use of our GIS system.

The following section provides a description and definition of the various components of the model.

### *Gamer Visits*

This measure is used to specify the number of patron trips to a gaming market, where an individual can make any number of separate visits in the course of a year. In order to estimate the gamer visits, market penetration rates, made up of the separate measures of propensity and frequency, are applied to the adult population in each zip code. A gamer visit can include more than one visit to a casino.

### *Propensity*

Propensity measures the percentage of adults who will participate in casino gaming within the zip code. This varies based upon a number of factors, which includes the number of gaming venues, their type (i.e. landbased versus riverboat), games permitted, availability of other entertainment and leisure options, and most importantly distance from a gaming venue. Propensity in the inner market areas from 0-50 miles can vary between the high thirty per cent range in a single cruising riverboat market to the fifty percent range, or more, for multiple land based casinos with a well-developed array of amenities.

### *Frequency*

This measures the average number of visits that an adult will make annually to casinos in the subject market. Frequency is a function of annual gaming budget as indicated by income variations, the number of venues in the market, the type of gaming facility and most importantly distance from a gaming venue.

---

source behind the mapping program is Esri. Esri provides census demographic and psychographic data on a variety of geographic levels of detail ranging from census block groups and counties to postal zip codes. The data is updated annually and includes a current year estimate and a five year forecast for the future.

### *MPI (Market Potential Index)*

Propensity also varies as a function of each market's average market potential index (MPI) score. MPI scores are generated by Simmons Survey, a respected consumer research firm that conducts a nationwide survey of consumer behavior, including propensity to gamble at a casino. This score is an indication of the degree of likelihood that a person will participate in gaming based upon their lifestyle type. The MPI score inflates or discounts the participation rate of each zip code. For example, if a market area has an overall participation rate of 4.0 (propensity of 40% times frequency of 10), an MPI score of 120 for a particular zip code would effectively inflate the participation rate of that zip code to 4.8 (4.0 times 120%). The overall MPI score for the market area is a weighted average of all the zip codes within the area.

### *Win per Visit*

Win per visit varies not only by gaming jurisdiction, but also in some cases by individual facilities. Normatively, win per visit is a function of distance and income. Gamers traveling greater distances tend to spend more per visit, typically making fewer gamer visits on average.

### *Attraction Factors*

Attraction factors measure the relative attraction of one gaming venue in relation to others in the market. Attraction factors are applied to the size of the gaming venue as measured by the number of positions it has in the market. Positions are defined as the number of gaming machines plus the number of seats at gaming tables. A normative attraction factor would be one. When this is applied to the number of positions in a gaming venue there is no change in the size of the gaming venue as calculated by the model and hence its attraction to potential patrons. A value of less than one adjusts the size of the gaming venue downwards and conversely a value greater than one indicates that the gaming venue has characteristics that make it more attractive. Attraction factors can be based on a number of components including branding, the level and effectiveness of marketing efforts, and the level of quality and amenities of a facility. Attraction factors are also adjusted to model the presence of natural and man-made boundaries which impact ease of access and convenience of travel in the market area.

The sensitivity of the model to changes in these factors is not in the nature of a direct multiplication. For example, a doubling of the attraction factor will not lead to a doubling of the gamer visits attracted to the site. It will however cause a doubling of the attractive power of the gaming venue, which is then translated via non-linear equations into an increase in the number of gamer visits attracted to the gaming venue. This is based upon the location, size and number of competing gaming venues and their relationship to the market area to which the equation is applied. The variation of these factors is based upon The Innovation Group's experience in developing and applying these models, and consideration of the existing visitation and revenues. The latter represents the calibration of the model and has been accomplished by adjusting attraction factors to force the model to recreate the existing revenues and patron counts. In this case attraction factors have been adjusted for each casino for each market area. This is based upon known visitation patterns.

## *Market Carve-out*

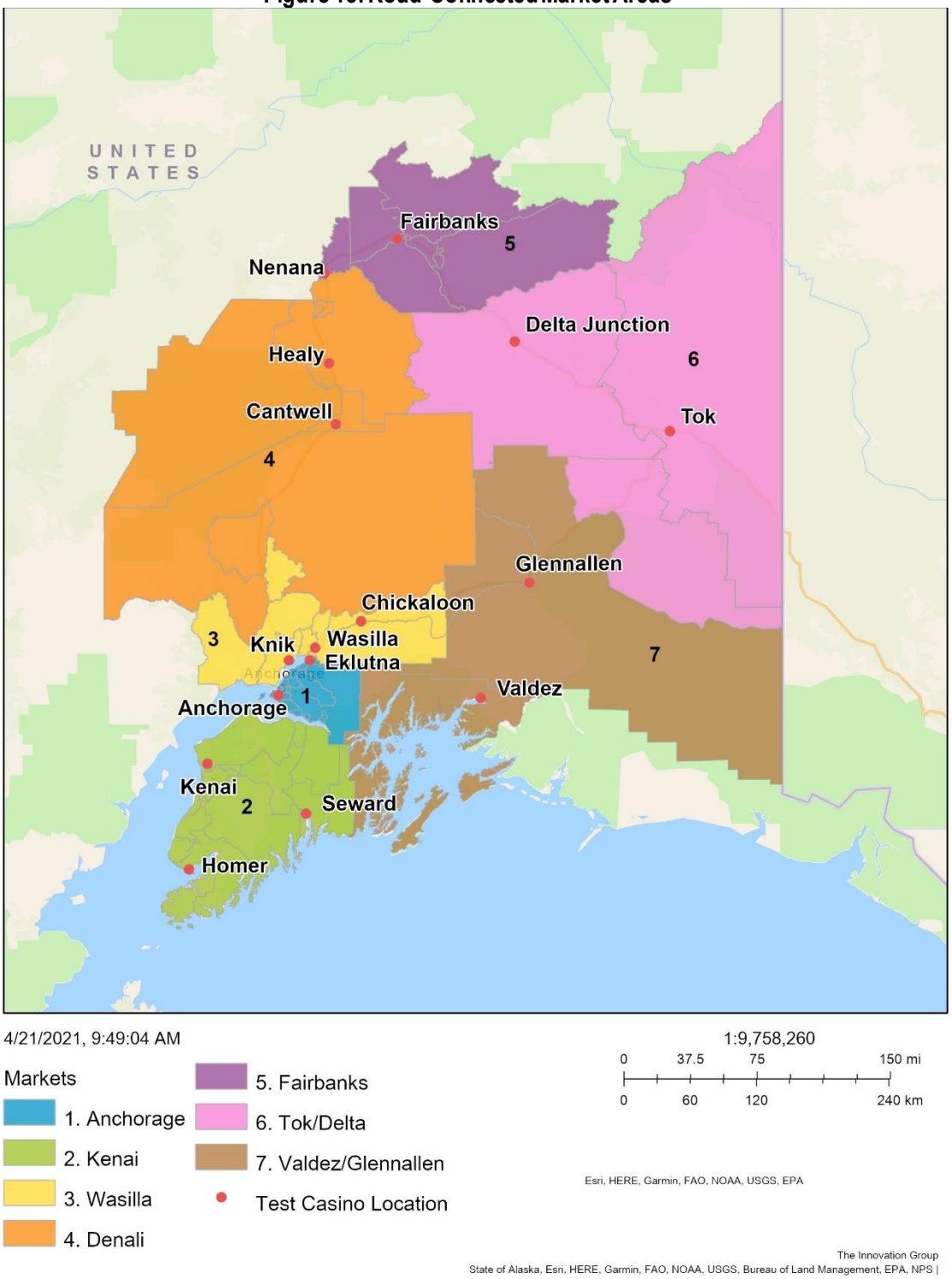
The Alaska gravity market has been carved into seven distinct market areas, from which different participation rates may be expected depending on the level and location of competition that is present in the market. The following map and table show the market areas and their respective adult population (21 and over) and average household income.

**Table 110: Market Area Demographics**

| | Adult Pop 2020 | Adult Pop 2025 | CAGR 2020-2025 | Average HHI 2020 | Average HHI 2025 | CAGR 2020-2025 |
|---|---|---|---|---|---|---|
| 1. Anchorage | 218,137 | 218,631 | 0.0% | $109,854 | $120,138 | 1.8% |
| 2. Kenai | 45,716 | 47,203 | 0.6% | $87,947 | $95,542 | 1.7% |
| 3. Wasilla | 80,069 | 86,904 | 1.7% | $92,484 | $100,716 | 1.7% |
| 4. Denali | 2,417 | 2,520 | 0.8% | $78,427 | $83,946 | 1.4% |
| 5. Fairbanks | 74,799 | 74,613 | 0.0% | $97,344 | $106,060 | 1.7% |
| 6. Tok/Delta | 5,199 | 4,952 | -1.0% | $83,411 | $89,688 | 1.5% |
| 7. Valdez/Glennallen | 4,897 | 4,622 | -1.1% | $88,764 | $97,146 | 1.8% |
| **Average/Total** | **431,234** | **439,445** | **0.4%** | **$101,402** | **$110,472** | **1.7%** |
| State | 548,043 | 549,010 | 0.04% | $97,941 | $106,368 | 1.7% |
| *National* | *246,683,741* | *249,854,972* | *0.26%* | *$90,054* | *$99,510* | *2.0%* |

Source: ArcGIS/Esri; The Innovation Group; CAGR=Compound Annual Growth Rate

**Figure 18: Road-Connected Market Areas**



## *Model Calibration*

The gravity model was initially calibrated using charitable gaming data from the Department of Revenue. As shown in Table 89, Adjusted Gross Income (AGI, which is equivalent to gaming revenue in the gaming industry) in 2019 was $92.5 million, a majority of which we estimate originated from the defined gravity model market area. Based on Net Proceeds data by physical location (that is, where the spending on charitable gaming occurred as opposed to which Permittee the Net Proceed was distributed), we estimate that 54% of Net Proceeds was derived by spending at facilities in the gravity model area. However, as shown in Table 90 and Table 91, the MBPs and Operators, which predominantly operate in the Anchorage-Wasilla/Mat-Su Valley region and Fairbanks region, have higher expense margins, which means that the AGI generated in the gravity model area is substantially higher than 54%.

In a baseline (status quo) scenario, by 2025 we estimate that charitable gaming revenue (AGI) generated by facilities in the gravity model area will reach more than $80 million.

**Table 111: Charitable Gaming AGI 2025 Estimate**

| | High | Low |
|---|---|---|
| 1. Anchorage | $45,084,365 | $44,317,405 |
| 2. Kenai | $5,666,341 | $5,567,439 |
| 3. Wasilla | $14,895,614 | $14,637,052 |
| 4. Denali | $268,265 | $263,588 |
| 5. Fairbanks | $14,353,637 | $14,104,002 |
| 6. Tok/Delta | $577,068 | $567,076 |
| 7. Valdez/Glennallen | $653,453 | $641,953 |
| **Total** | **$81,498,743** | **$80,098,515** |

Source: The Innovation Group

## *Gravity Model Test Forecasts*

We performed a series of five test scenarios based on different development assumptions:

- Test A: First, we assessed the revenue potential for 16 locations in the gravity model area, including the major population centers as well as Native Alaskan villages and smaller towns such as Tok.
- Test B: We then modeled an assumption that casino development would be limited to Native Alaskan villages.
- Test C: The assumption in this scenario is that casino development would be limited to the major population centers of Anchorage, Wasilla/Mat-Su Valley, Fairbanks and Kenai.
- Test D: Anchorage being the only casino in the gravity model.
- Test E: Anchorage and Eklutna being the only casinos in the gravity model.

We also assessed low and high estimates for each scenario based on different assumptions for market growth and impacts on charitable gaming revenue. The forecasts are for 2025, which is assumed to be the first full stabilized year of casino operation.

## Test A

The following table shows the participation rates and total market gaming visits and revenue for the High Case:

**Table 112: Total Market Gravity Model Forecast 2025: Test A High**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 43.5% | 16.9 | 103 | 1,657,987 | $83 | $138.1 |
| 2. Kenai | 47,203 | 36.0% | 13.0 | 125 | 277,829 | $83 | $23.0 |
| 3. Wasilla | 86,904 | 41.6% | 15.9 | 98 | 558,951 | $82 | $45.9 |
| 4. Denali | 2,520 | 35.7% | 12.9 | 126 | 14,518 | $83 | $1.2 |
| 5. Fairbanks | 74,613 | 43.6% | 17.0 | 98 | 542,987 | $81 | $44.2 |
| 6. Tok/Delta | 4,952 | 35.8% | 12.9 | 148 | 33,897 | $84 | $2.8 |
| 7. Valdez/Glennallen | 4,622 | 37.9% | 14.0 | 136 | 33,301 | $82 | $2.7 |
| **Total** | **439,445** | | | | **3,119,470** | **$83** | **$258.0** |

Source: The Innovation Group

The following table shows the participation rates and total market gaming visits and revenue for the Low Case:

**Table 113: Total Market Gravity Model Forecast 2025: Test A Low**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 41.4% | 16.1 | 103 | 1,503,843 | $83 | $124.3 |
| 2. Kenai | 47,203 | 34.3% | 12.4 | 125 | 251,999 | $82 | $20.7 |
| 3. Wasilla | 86,904 | 39.6% | 15.1 | 98 | 506,985 | $81 | $41.3 |
| 4. Denali | 2,520 | 34.0% | 12.2 | 126 | 13,169 | $82 | $1.1 |
| 5. Fairbanks | 74,613 | 41.6% | 16.1 | 98 | 492,505 | $81 | $39.8 |
| 6. Tok/Delta | 4,952 | 34.1% | 12.3 | 148 | 30,745 | $83 | $2.5 |
| 7. Valdez/Glennallen | 4,622 | 36.1% | 13.3 | 136 | 30,205 | $81 | $2.4 |
| **Total** | **439,445** | | | | **2,829,451** | **$82** | **$232.0** |

Source: The Innovation Group

In the High Case, we forecast that casinos would capture 78% of total local market gaming revenue, or $201 million.

**Table 114: Gravity Model Revenue Distribution 2025: Test A High**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | Homer | Seward | |
| $88,574,612 | $24,242,088 | $18,082,452 | $9,514,693 | $32,674,022 | $10,674,956 | $5,710,164 | $2,439,863 | |
| Chickaloon | Valdez | Glennallen | Tok | Delta Junction | Nenana | Healy | Cantwell | **Total Casino** |
| $2,147,104 | $1,707,217 | $571,652 | $780,266 | $1,762,830 | $1,535,099 | $658,900 | $249,142 | **$201,325,060** |

Source: The Innovation Group

In the Low Case, we forecast that casinos would capture 70% of total local market gaming revenue, or $163 million.

**Table 115: Gravity Model Revenue Distribution 2025: Test A Low**

| Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | Homer | Seward | |
|---|---|---|---|---|---|---|---|---|
| $71,711,724 | $19,967,321 | $14,573,887 | $7,737,913 | $26,199,324 | $8,712,397 | $4,729,718 | $2,022,331 | |
| Chickaloon | Valdez | Glennallen | Tok | Delta Junction | Nenana | Healy | Cantwell | **Total Casino** |
| $1,737,526 | $1,408,487 | $465,613 | $644,090 | $1,451,124 | $1,247,897 | $543,996 | $203,130 | **$163,356,479** |

Source: The Innovation Group

## Test B

The following table shows the participation rates and total market gaming visits and revenue for the High Case in Test B:

**Table 116: Total Market Gravity Model Forecast 2025: Test B High**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 31.9% | 16.5 | 103 | 1,184,981 | $86 | $101.8 |
| 2. Kenai | 47,203 | 35.2% | 12.7 | 115 | 243,585 | $83 | $20.3 |
| 3. Wasilla | 86,904 | 36.5% | 15.5 | 98 | 479,386 | $83 | $39.9 |
| 4. Denali | 2,520 | 34.8% | 12.6 | 76 | 8,363 | $83 | $0.7 |
| 5. Fairbanks | 74,613 | 17.0% | 16.5 | 99 | 206,240 | $87 | $17.9 |
| 6. Tok/Delta | 4,952 | 34.9% | 12.6 | 76 | 16,676 | $84 | $1.4 |
| 7. Valdez/Glennallen | 4,622 | 37.0% | 13.6 | 65 | 15,082 | $82 | $1.2 |
| **Total** | **439,445** | | | | **2,154,314** | **$85** | **$183.2** |

Source: The Innovation Group

The following table shows the participation rates and total market gaming visits and revenue for the Low Case:

**Table 117: Total Market Gravity Model Forecast 2025: Test B Low**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 30.7% | 16.1 | 103 | 1,112,844 | $85 | $94.3 |
| 2. Kenai | 47,203 | 34.3% | 12.4 | 115 | 231,848 | $82 | $19.0 |
| 3. Wasilla | 86,904 | 34.0% | 15.1 | 98 | 436,007 | $82 | $35.9 |
| 4. Denali | 2,520 | 34.0% | 12.2 | 76 | 7,960 | $82 | $0.7 |
| 5. Fairbanks | 74,613 | 16.4% | 16.1 | 99 | 193,849 | $86 | $16.6 |
| 6. Tok/Delta | 4,952 | 34.1% | 12.3 | 72 | 14,881 | $83 | $1.2 |
| 7. Valdez/Glennallen | 4,622 | 36.1% | 13.3 | 65 | 14,356 | $81 | $1.2 |
| **Total** | **439,445** | | | | **2,011,744** | **$84** | **$168.9** |

Source: The Innovation Group

In the High Case for Test B, we forecast that casinos would capture 59% of total local market gaming revenue, or $108 million, with Eklutna being the market leader.

**Table 118: Gravity Model Revenue Distribution 2025: Test B High**

| Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | Ninilchik | Seward | |
|---|---|---|---|---|---|---|---|---|
| $0 | $66,288,124 | $0 | $17,092,990 | $0 | $10,681,151 | $5,372,350 | $0 | |
| Chickaloon | Valdez | Glennallen | Tok Area | Delta Junction | Nenana | Healy | Cantwell | **Total Casino** |
| $2,587,152 | $0 | $643,948 | $826,066 | $0 | $4,021,581 | $0 | $319,490 | **$107,832,851** |

Source: The Innovation Group

In the Low Case for Test B, we forecast that casinos would capture 55% of total local market gaming revenue, or $94 million.

**Table 119: Gravity Model Revenue Distribution 2025: Test B Low**

| Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | Ninilchik | Seward | |
|---|---|---|---|---|---|---|---|---|
| $0 | $59,483,918 | $0 | $14,233,626 | $0 | $8,978,713 | $4,631,274 | $0 | |
| Chickaloon | Valdez | Glennallen | Tok | Delta Junction | Nenana | Healy | Cantwell | **Total Casino** |
| $2,135,231 | $0 | $564,805 | $662,733 | $0 | $2,696,468 | $0 | $293,158 | **$93,679,926** |

Source: The Innovation Group

## Test C

The following table shows the participation rates and total market gaming visits and revenue for the High Case in Test C:

**Table 120: Total Market Gravity Model Forecast 2025: Test C High**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 43.1% | 16.9 | 103 | 1,641,407 | $83 | $136.8 |
| 2. Kenai | 47,203 | 35.7% | 13.0 | 92 | 201,156 | $83 | $16.7 |
| 3. Wasilla | 86,904 | 41.1% | 15.9 | 98 | 553,361 | $82 | $45.5 |
| 4. Denali | 2,520 | 12.5% | 12.9 | 87 | 3,538 | $87 | $0.3 |
| 5. Fairbanks | 74,613 | 43.2% | 17.0 | 98 | 535,859 | $82 | $43.7 |
| 6. Tok/Delta | 4,952 | 12.5% | 12.9 | 94 | 7,560 | $87 | $0.7 |
| 7. Valdez/Glennallen | 4,622 | 13.3% | 14.0 | 102 | 8,701 | $86 | $0.7 |
| **Total** | **439,445** | | | | **2,951,583** | **$83** | **$244.4** |

Source: The Innovation Group

The following table shows the participation rates and total market gaming visits and revenue for the Low Case:

**Table 121: Total Market Gravity Model Forecast 2025: Test C Low**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 41.0% | 16.1 | 103 | 1,488,805 | $83 | $123.1 |
| 2. Kenai | 47,203 | 34.0% | 12.4 | 92 | 182,454 | $82 | $15.0 |
| 3. Wasilla | 86,904 | 39.2% | 15.1 | 98 | 501,915 | $81 | $40.9 |
| 4. Denali | 2,520 | 11.9% | 12.2 | 87 | 3,209 | $85 | $0.3 |
| 5. Fairbanks | 74,613 | 41.1% | 16.1 | 98 | 486,040 | $81 | $39.3 |
| 6. Tok/Delta | 4,952 | 11.9% | 12.3 | 94 | 6,858 | $86 | $0.6 |
| 7. Valdez/Glennallen | 4,622 | 12.6% | 13.3 | 102 | 7,892 | $85 | $0.7 |
| **Total** | **439,445** | | | | **2,677,173** | **$82** | **$219.8** |

Source: The Innovation Group

In the High Case for Test C, we forecast that casinos would capture 76% of total local market gaming revenue, or $185 million.

.

**Table 122: Gravity Model Revenue Distribution 2025: Test C High**

| Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | **Total Casino** |
|---|---|---|---|---|---|---|
| $97,644,519 | $0 | $42,411,616 | $0 | $33,708,681 | $11,603,155 | **$185,367,972** |

Source: The Innovation Group

In the Low Case for Test C, we forecast that casinos would capture 68% of total local market gaming revenue, or $149 million.

**Table 123: Gravity Model Revenue Distribution 2025: Test C Low**

| Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | **Total Casino** |
|---|---|---|---|---|---|---|
| $78,549,490 | $0 | $33,831,852 | $0 | $26,805,500 | $9,392,972 | **$148,579,815** |

Source: The Innovation Group

## Test D

The following table shows the participation rates and total market gaming visits and revenue for the High Case in Test D:

**Table 124: Total Market Gravity Model Forecast 2025: Test D High**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 42.9% | 16.6 | 103 | 1,603,172 | $84 | $134.0 |
| 2. Kenai | 47,203 | 13.7% | 12.4 | 92 | 73,243 | $86 | $6.3 |
| 3. Wasilla | 86,904 | 31.7% | 15.1 | 98 | 405,588 | $84 | $34.2 |
| 4. Denali | 2,520 | 11.7% | 12.2 | 87 | 3,163 | $87 | $0.3 |
| 5. Fairbanks | 74,613 | 14.3% | 16.1 | 98 | 168,337 | $88 | $14.7 |
| 6. Tok/Delta | 4,952 | 11.8% | 12.3 | 94 | 6,760 | $87 | $0.6 |
| 7. Valdez/Glennallen | 4,622 | 12.4% | 13.3 | 102 | 7,779 | $86 | $0.7 |
| **Total** | **439,445** | | | | **2,268,042** | **$84** | **$190.8** |

Source: The Innovation Group

The following table shows the participation rates and total market gaming visits and revenue for the Low Case:

**Table 125: Total Market Gravity Model Forecast 2025: Test D Low**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 41.2% | 16.1 | 103 | 1,496,324 | $83 | $123.7 |
| 2. Kenai | 47,203 | 13.7% | 12.4 | 92 | 73,243 | $85 | $6.2 |
| 3. Wasilla | 86,904 | 27.7% | 15.1 | 98 | 354,889 | $84 | $29.6 |
| 4. Denali | 2,520 | 11.7% | 12.2 | 87 | 3,163 | $85 | $0.3 |
| 5. Fairbanks | 74,613 | 14.3% | 16.1 | 98 | 168,337 | $86 | $14.5 |
| 6. Tok/Delta | 4,952 | 11.8% | 12.3 | 94 | 6,760 | $86 | $0.6 |
| 7. Valdez/Glennallen | 4,622 | 12.4% | 13.3 | 102 | 7,779 | $85 | $0.7 |
| **Total** | **439,445** | | | | **2,110,495** | **$83** | **$175.6** |

Source: The Innovation Group

In Test D, with Anchorage being the only casino in the model, gaming revenue for Anchorage is estimated to be $124 million in the High Case, or 65% of total gaming revenue, and $103 million in the Low Case, or 59% of total gaming revenue.

**Table 126: Anchorage Forecast 2025**

| | |
|---|---|
| High | $123,899,153 |
| Low | $103,100,139 |

Source: The Innovation Group

## Test E

The following table shows the participation rates and total market gaming visits and revenue for the High Case in Test E:

**Table 127: Total Market Gravity Model Forecast 2025: Test E High**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 42.9% | 16.6 | 103 | 1,603,172 | $84 | $134.0 |
| 2. Kenai | 47,203 | 13.7% | 12.4 | 92 | 73,243 | $86 | $6.3 |
| 3. Wasilla | 86,904 | 37.6% | 15.1 | 98 | 481,636 | $83 | $40.1 |
| 4. Denali | 2,520 | 11.7% | 12.2 | 87 | 3,163 | $87 | $0.3 |
| 5. Fairbanks | 74,613 | 14.3% | 16.1 | 98 | 168,337 | $88 | $14.7 |
| 6. Tok/Delta | 4,952 | 11.8% | 12.3 | 94 | 6,760 | $87 | $0.6 |
| 7. Valdez/Glennallen | 4,622 | 12.4% | 13.3 | 102 | 7,779 | $86 | $0.7 |
| **Total** | **439,445** | | | | **2,344,090** | **$84** | **$196.7** |

Source: The Innovation Group

The following table shows the participation rates and total market gaming visits and revenue for the Low Case:

**Table 128: Total Market Gravity Model Forecast 2025: Test E Low**

| | Gamer Pop. | Propensity | Frequency | MPI | Gaming Visits | WPV | GGR ($M) |
|---|---|---|---|---|---|---|---|
| 1. Anchorage | 218,631 | 42.9% | 16.6 | 103 | 1,603,172 | $82 | $131.6 |
| 2. Kenai | 47,203 | 13.7% | 12.4 | 92 | 73,243 | $85 | $6.2 |
| 3. Wasilla | 86,904 | 31.7% | 15.1 | 98 | 405,588 | $83 | $33.6 |
| 4. Denali | 2,520 | 11.7% | 12.2 | 87 | 3,163 | $85 | $0.3 |
| 5. Fairbanks | 74,613 | 14.3% | 16.1 | 98 | 168,337 | $86 | $14.5 |
| 6. Tok/Delta | 4,952 | 11.8% | 12.3 | 94 | 6,760 | $86 | $0.6 |
| 7. Valdez/Glennallen | 4,622 | 12.4% | 13.3 | 102 | 7,779 | $85 | $0.7 |
| **Total** | **439,445** | | | | **2,268,042** | **$83** | **$187.4** |

Source: The Innovation Group

With Eklutna added to the Anchorage-only model, gaming revenue for Anchorage is estimated to decline to between $89 million to $99 million.

**Table 129: Anchorage & Eklutna Forecast 2025**

| | Anchorage | Eklutna |
|---|---|---|
| High | $98,992,193 | $35,326,504 |
| Low | $89,448,240 | $27,259,443 |

Source: The Innovation Group

## *Standalone Markets Local Revenue*

Outside of the defined gravity model market area, we assess the local market potential for the four largest population centers in the rest of Alaska. For Kodiak, we have estimated the village population instead of the entire island given the logistics in travel from other villages.

**Table 130: Standalone Markets 2025 High**

| | Zip Code | 2025 Average Household Income | 2025 Gamer Pop | Prop | Freq | Visits | WPV | Revenue |
|---|---|---|---|---|---|---|---|---|
| Juneau | 99801 | $115,011 | 23,502 | 38% | 14 | 125,031 | $90 | $11,252,758 |
| Ketchikan | 99901 | $96,483 | 10,362 | 38% | 14 | 55,126 | $87 | $4,795,948 |
| Kodiak Village | 99615 | $97,293 | 6,207 | 40% | 18 | 44,689 | $87 | $3,887,971 |
| Bethel | 99559 | $88,651 | 7,547 | 40% | 16 | 48,301 | $75 | $3,622,560 |

Source: ArcGIS/Esri; The Innovation Group

**Table 131: Standalone Markets 2025 Low**

| | Zip Code | 2025 Average Household Income | 2025 Gamer Pop | Prop | Freq | Visits | WPV | Revenue |
|---|---|---|---|---|---|---|---|---|
| Juneau | 99801 | $115,011 | 23,502 | 38% | 14 | 125,031 | $85 | $10,627,604 |
| Ketchikan | 99901 | $96,483 | 10,362 | 38% | 14 | 55,126 | $82 | $4,520,319 |
| Kodiak Village | 99615 | $97,293 | 6,207 | 40% | 18 | 44,689 | $82 | $3,664,524 |
| Bethel | 99559 | $88,651 | 7,547 | 40% | 16 | 48,301 | $70 | $3,381,056 |

Source: ArcGIS/Esri; The Innovation Group

## *Local Market Conclusion*

In the following two sections we assess the revenue potential from seasonal workers and tourism. Given the results of the gravity modeling and the limited revenue potential from either the local market or tourism, we dispense with the following locations for further analysis: Chickaloon, Valdez, Glennallen, Tok, Delta Junction, Nenana, and Cantwell. We retain the local market result from Healy and add it to the seasonal worker and tourist forecast for Denali. We also retain Seward—despite its limited local potential—because of its tourism potential.

We identify the following locations as Core Markets in the Gravity modeling: Anchorage, Eklutna, Wasilla, Knik, Fairbanks, Kenai. Given its distance from Anchorage, Fairbanks would retain a consistent local market potential regardless of downstate development.

## *Seasonal Workers*

Alaska receives a substantial influx of workers from out-of-state (non-residents) to work in the tourism, seafood, oil and gas, mining, construction, and health care industries. Workforce data from the Alaska Department of Labor and Workforce Development were used to estimate casino spending (Table 132). Propensity and win per visit rates were applied to non-resident workers consistent with the gravity modeling above, with a reduced frequency to reflect seasonality.

**Table 132: Alaska Workforce 2019**

| | Local residents | Non-local residents | Non-res-idents | Total workers | Percent local |
|---|---|---|---|---|---|
| Kusilvak Census Area | 3,142 | 358 | 211 | 3,711 | 84.7 |
| Matanuska-Susitna Borough | 25,237 | 3,176 | 3,760 | 32,173 | 78.4 |
| Nome Census Area | 4,330 | 608 | 683 | 5,621 | 77 |
| Anchorage, Municipality | 120,547 | 17,833 | 18,893 | 157,273 | 76.6 |
| Bethel Census Area | 8,013 | 1,281 | 1,198 | 10,492 | 76.4 |
| Kenai Peninsula Borough | 19,975 | 1,596 | 5,369 | 26,940 | 74.1 |
| Fairbanks North Star Borough | 33,915 | 5,229 | 7,342 | 46,486 | 73 |
| Juneau, City and Borough | 15,068 | 1,521 | 4,205 | 20,794 | 72.5 |
| Kodiak Island Borough | 5,088 | 413 | 1,906 | 7,407 | 68.7 |
| Yukon-Koyukuk Census Area | 2,214 | 705 | 395 | 3,314 | 66.8 |
| Prince of Wales-Hyder Census Area | 2,132 | 159 | 946 | 3,237 | 65.9 |
| Ketchikan Gateway Borough | 6,114 | 806 | 2,501 | 9,421 | 64.9 |
| Wrangell, City and Borough | 744 | 87 | 340 | 1,171 | 63.5 |
| Northwest Arctic Borough | 2,968 | 993 | 937 | 4,898 | 60.6 |
| Sitka, City and Borough | 3,612 | 367 | 2,060 | 6,039 | 59.8 |
| Petersburg Borough | 1,139 | 118 | 665 | 1,922 | 59.3 |
| Yakutat, City and Borough | 264 | 52 | 159 | 475 | 55.6 |
| Hoonah-Angoon Census Area | 706 | 173 | 405 | 1,284 | 55 |
| Southeast Fairbanks Census Area | 1,843 | 819 | 738 | 3,400 | 54.2 |
| Haines Borough | 826 | 134 | 591 | 1,551 | 53.3 |
| Dillingham Census Area | 1,946 | 354 | 1,715 | 4,015 | 48.5 |
| Valdez-Cordova Census Area | 3,860 | 1,037 | 3,504 | 8,401 | 45.9 |
| Aleutians West Census Area | 1,923 | 392 | 2,554 | 4,869 | 39.5 |
| Lake and Peninsula Borough | 639 | 268 | 886 | 1,793 | 35.6 |
| Skagway, Municipality | 515 | 90 | 1,239 | 1,844 | 27.9 |
| North Slope Borough | 3,356 | 8,391 | 5,994 | 17,741 | 18.9 |
| Aleutians East Borough | 683 | 298 | 3,315 | 4,296 | 15.9 |
| Denali Borough | 660 | 813 | 2,967 | 4,440 | 14.9 |
| Bristol Bay Borough | 366 | 506 | 3,866 | 4,738 | 7.7 |
| Other/Unknown | 10 | 3,299 | 5,551 | 8,860 | 0.1 |

Source: Alaska Department of Labor and Workforce Development Research and Analysis Section, *Nonresidents Working in Alaska*

The following two tables show the casino revenue potential from seasonal workers for the Core Markets in the gravity model.

**Table 133: 2025 Seasonal Worker Revenue Core Markets High**

| | Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | **Total** |
|---|---|---|---|---|---|---|---|
| Test A | $2,360,680 | $1,078,836 | $469,812 | $134,232 | $1,398,010 | $287,510 | **$5,729,081** |
| Test B | $0 | $2,523,862 | $0 | $270,495 | | $287,677 | **$3,082,034** |
| Test C | $3,372,401 | $0 | $671,160 | $0 | $1,442,280 | $312,509 | **$5,798,350** |
| Test D | $3,607,307 | | | | | | **$3,607,307** |
| Test E | $2,504,435 | $1,313,742 | | | | | **$3,818,177** |

Source: The Innovation Group

**Table 134: 2025 Seasonal Worker Revenue Core Markets Low**

| | Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | **Total** |
|---|---|---|---|---|---|---|---|
| Test A | $2,221,817 | $1,015,375 | $442,176 | $126,336 | $1,326,743 | $270,598 | **$5,403,045** |
| Test B | $0 | $2,632,811 | $0 | $265,758 | | $278,869 | **$3,177,438** |
| Test C | $3,174,024 | $0 | $631,680 | $0 | $1,357,440 | $291,736 | **$5,454,880** |
| Test D | $3,395,112 | | | | | | **$3,395,112** |
| Test E | $2,357,116 | $1,236,463 | | | | | **$3,593,579** |

Source: The Innovation Group

The following table shows the casino revenue potential from seasonal workers for the other markets.

**Table 135: 2025 Seasonal Worker Revenue Other Markets**

| | Homer | Seward | Healy/Denali | Juneau | Ketchikan | Kodiak | Bethel |
|---|---|---|---|---|---|---|---|
| High | $287,510 | $383,347 | $605,268 | $750,593 | $510,204 | $388,824 | $244,392 |
| Low | $270,598 | $360,797 | $569,664 | $706,440 | $480,192 | $365,952 | $230,016 |

Source: The Innovation Group

## *Tourism*

Given the vastness of Alaska and the disparate destinations for tourism, estimating the gaming capture for this segment is more complicated than for a single-location market like a Singapore, New Orleans, or Las Vegas. Cruise ship passengers, which account for roughly half of the visitor volume, may only touch land at the major ports of call in the Southeast or Southcentral coast. Air travelers tend to concentrate on Fairbanks, Denali, Anchorage and the Kenai and not visit the Southeast ports. As a general premise, the more widely casino gaming is available at tourist destinations, the larger the potential capture by the state. However, sustainable tourism capture and inducement requires a compelling gaming product, and the impact of market dilution on feasibility is a consideration.

In this section, we first estimate a total statewide revenue forecast for tourism. We then estimate how that revenue could potentially be distributed across the major tourist destinations, based on travel patterns described in the Alaska Visitor Statistics Program 7.

Penetration of tourist visitation is calculated by mode of travel: air, cruise and highway. Gaming participation rates are applied to estimates of tourist visitation by country of origin, based on 2019 tourism data presented earlier in the report projected to 2025. Cruise ship passengers are estimated to have fewer opportunities to visit a casino since they are housed on-board and given that there are other activities competing for the passengers' limited time on shore. As noted in the Alaska Visitor Statistics Program 7 (AVSP 7):

> cruise passengers rarely overnight in port communities…. While Southeast was the most commonly visited region in terms of overall visitation (67 percent), only 10 percent of visitors overnighted there. (page 5-8)

These mode of travel projections are divided into two categories: capture of existing tourists (Baseline) and new visitors induced to travel to Alaska by the presence of a casino resort (Induced). The following two tables show Baseline tourism capture for the High and Low scenarios.

**Table 136: Total 2025 Baseline Tourism High**

| Country of Origin | Total Visits | Propensity | Frequency | Gaming Visits | WPV | Base Tourism GGR (000s) |
|---|---|---|---|---|---|---|
| **Air** | | | | | | |
| Domestic | 532,746 | 9.3% | 1.2 | 61,129 | $179 | $10,937 |
| Europe | 69,058 | 6.9% | 1.4 | 6,553 | $264 | $1,727 |
| Oceania | 74,584 | 8.3% | 1.5 | 9,521 | $302 | $2,876 |
| Asia | 43,635 | 13.4% | 2.0 | 11,672 | $355 | $4,148 |
| Latin America | 15,122 | 11.5% | 1.9 | 3,312 | $336 | $1,115 |
| Rest of World | 6,884 | 6.6% | 1.3 | 601 | $218 | $131 |
| International Total | 209,284 | 9.1% | 1.7 | 31,659 | $316 | $9,997 |
| Air Total | 742,030 | 9.3% | 1.4 | 92,788 | $226 | $20,934 |
| **Cruise Ship** | | | | | | |
| Domestic | 511,370 | 2.6% | 1.0 | 13,379 | $116 | $1,556 |
| Europe | 361,277 | 1.9% | 1.0 | 6,985 | $171 | $1,196 |
| Oceania | 391,198 | 2.3% | 1.1 | 10,068 | $196 | $1,977 |
| Asia | 228,866 | 3.7% | 1.4 | 12,342 | $231 | $2,851 |
| Latin America | 78,278 | 3.2% | 1.4 | 3,457 | $219 | $756 |
| Rest of World | 31,833 | 1.9% | 1.0 | 590 | $142 | $84 |
| International Total | 1,091,452 | 2.5% | 1.2 | 33,440 | $205 | $6,864 |
| Cruise Total | 1,602,822 | 2.6% | 1.1 | 46,819 | $180 | $8,420 |
| **Highway/Ferry** | | | | | | |
| Domestic | 50,972 | 5.4% | 1.1 | 2,985 | $143 | $427 |
| Europe | 706 | 4.0% | 1.2 | 34 | $211 | $7 |
| Oceania | 765 | 4.8% | 1.4 | 50 | $242 | $12 |
| Asia | 447 | 7.7% | 1.8 | 61 | $284 | $17 |
| Latin America | 153 | 6.7% | 1.7 | 17 | $269 | $5 |
| Rest of World | 70 | 3.8% | 1.2 | 3 | $175 | $1 |
| International Total | 2,141 | 5.3% | 1.5 | 165 | $253 | $42 |
| Highway/Ferry Total | 53,114 | 5.4% | 1.1 | 3,151 | $149 | $469 |
| Total Domestic | 1,095,088 | 6.0% | 1.2 | 77,493 | $167 | $12,920 |
| Total International | 1,302,877 | 3.6% | 1.4 | 65,265 | $259 | $16,903 |
| **Total** | **2,397,966** | **4.7%** | **1.3** | **142,758** | **$209** | **$29,823** |

Source: AVSP 7; The Innovation Group

**Table 137: Total 2025 Baseline Tourism Low**

| Country of Origin | Total Visits | Propensity | Frequency | Gaming Visits | WPV | Base Tourism GGR (000s) |
|---|---|---|---|---|---|---|
| **Air** | | | | | | |
| Domestic | 532,746 | 8.9% | 1.2 | 58,073 | $170 | $9,871 |
| Europe | 69,058 | 6.6% | 1.4 | 6,225 | $250 | $1,558 |
| Oceania | 74,584 | 7.8% | 1.5 | 9,045 | $287 | $2,595 |
| Asia | 43,635 | 12.7% | 2.0 | 11,088 | $338 | $3,744 |
| Latin America | 15,122 | 10.9% | 1.9 | 3,147 | $320 | $1,006 |
| Rest of World | 6,884 | 6.3% | 1.3 | 571 | $208 | $118 |
| International Total | 209,284 | 8.6% | 1.7 | 30,076 | $300 | $9,022 |
| Air Total | 742,030 | 8.8% | 1.4 | 88,149 | $214 | $18,893 |
| **Cruise Ship** | | | | | | |
| Domestic | 511,370 | 2.5% | 1.0 | 12,710 | $110 | $1,404 |
| Europe | 361,277 | 1.8% | 1.0 | 6,635 | $163 | $1,080 |
| Oceania | 391,198 | 2.2% | 1.1 | 9,564 | $187 | $1,784 |
| Asia | 228,866 | 3.6% | 1.4 | 11,725 | $219 | $2,573 |
| Latin America | 78,278 | 3.1% | 1.4 | 3,284 | $208 | $682 |
| Rest of World | 31,833 | 1.8% | 1.0 | 560 | $135 | $76 |
| International Total | 1,091,452 | 2.4% | 1.2 | 31,768 | $195 | $6,195 |
| Cruise Total | 1,602,822 | 2.4% | 1.1 | 44,478 | $171 | $7,599 |
| **Highway/Ferry** | | | | | | |
| Domestic | 50,972 | 5.1% | 1.1 | 2,836 | $136 | $386 |
| Europe | 706 | 3.8% | 1.2 | 32 | $200 | $7 |
| Oceania | 765 | 4.5% | 1.4 | 47 | $230 | $11 |
| Asia | 447 | 7.4% | 1.8 | 58 | $270 | $16 |
| Latin America | 153 | 6.3% | 1.7 | 16 | $256 | $4 |
| Rest of World | 70 | 3.6% | 1.2 | 3 | $175 | $1 |
| International Total | 2,141 | 5.0% | 1.5 | 157 | $240 | $38 |
| Highway/Ferry Total | 53,114 | 5.1% | 1.1 | 2,993 | $141 | $423 |
| Total Domestic | 1,095,088 | 5.7% | 1.2 | 73,619 | $158 | $11,661 |
| Total International | 1,302,877 | 3.4% | 1.4 | 62,002 | $246 | $15,255 |
| **Total** | **2,397,966** | **4.5%** | **1.3** | **135,620** | **$198** | **$26,915** |

Source: AVSP 7; The Innovation Group

The following two tables show Induced tourism capture for the High and Low scenarios.

**Table 138: Total 2025 Induced Tourism High**

| Country of Origin | Base Tourism | Induced Growth | Induced Visitors | Frequency | Induced Gaming Visits | WPV | Induced Tourism GGR (000s) |
|---|---|---|---|---|---|---|---|
| **Air** | | | | | | | |
| Domestic | 532,746 | 0.6% | 3,058 | 2.1 | 6,421 | $555 | $3,562 |
| Europe | 69,058 | 0.3% | 194 | 2.3 | 447 | $817 | $365 |
| Oceania | 74,584 | 0.7% | 486 | 2.3 | 1,121 | $873 | $978 |
| Asia | 43,635 | 4.2% | 1,819 | 2.8 | 5,098 | $1,032 | $5,261 |
| Latin America | 15,122 | 1.1% | 170 | 2.4 | 408 | $964 | $394 |
| Rest of World | 6,884 | 0.5% | 34 | 2.1 | 72 | $648 | 47 |
| International Total | 209,284 | 1.3% | 2,704 | 2.6 | 7,146 | $986 | $7,045 |
| Air Total | 742,030 | 0.8% | 5,762 | 2.4 | 13,567 | $782 | $10,606 |
| **Cruise Ship** | | | | | | | |
| Domestic | 511,370 | 0.2% | 1,263 | 1.1 | 1,326 | $444 | $588 |
| Europe | 361,277 | 0.4% | 1,292 | 1.2 | 1,486 | $654 | $971 |
| Oceania | 391,198 | 0.3% | 1,098 | 1.2 | 1,265 | $698 | $883 |
| Asia | 228,866 | 1.0% | 2,233 | 1.4 | 3,130 | $826 | $2,584 |
| Latin America | 78,278 | 0.6% | 508 | 1.2 | 609 | $771 | $470 |
| Rest of World | 31,833 | 0.0% | 5 | 1.1 | 5 | $518 | 3 |
| International Total | 1,091,452 | 0.5% | 5,135 | 1.3 | 6,495 | $756 | $4,910 |
| Cruise Total | 1,602,822 | 0.4% | 6,398 | 1.2 | 7,821 | $703 | $5,499 |
| **Highway/Ferry** | | | | | | | |
| Domestic | 50,972 | 0.1% | 67 | 2.1 | 141 | $416 | $58 |
| Europe | 706 | 0.0% | 0 | 2.3 | 1 | $613 | $0 |
| Oceania | 765 | 0.1% | 1 | 2.3 | 3 | $655 | $2 |
| Asia | 447 | 1.0% | 5 | 2.8 | 13 | $774 | $10 |
| Latin America | 153 | 0.1% | 0 | 2.4 | 1 | $723 | $0 |
| Rest of World | 70 | 0.0% | 0 | 2.1 | 0 | $486 | 0 |
| International Total | 2,141 | 0.3% | 6 | 2.7 | 16 | $747 | $12 |
| Highway/Ferry Total | 53,114 | 0.1% | 73 | 2.1 | 157 | $451 | $71 |
| Total Domestic | 1,095,088 | 0.4% | 4,388 | 1.8 | 7,888 | $534 | $4,208 |
| Total International | 1,302,877 | 0.6% | 7,846 | 1.7 | 13,657 | $876 | 11,967 |
| **Total** | **2,397,966** | **0.5%** | **12,233** | **1.8** | **21,545** | **$751** | **$16,176** |

Source: AVSP 7; The Innovation Group

**Table 139: Total 2025 Induced Tourism Low**

| Country of Origin | Base Tourism | Induced Growth | Induced Visitors | Frequency | Induced Gaming Visits | WPV | Induced Tourism GGR (000s) |
|---|---|---|---|---|---|---|---|
| **Air** | | | | | | | |
| Domestic | 532,746 | 0.6% | 3,058 | 2.1 | 6,421 | $361 | $2,315 |
| Europe | 69,058 | 0.3% | 194 | 2.3 | 447 | $531 | $237 |
| Oceania | 74,584 | 0.7% | 486 | 2.3 | 1,121 | $567 | $636 |
| Asia | 43,635 | 4.2% | 1,819 | 2.8 | 5,098 | $671 | $3,420 |
| Latin America | 15,122 | 1.1% | 170 | 2.4 | 408 | $627 | $256 |
| Rest of World | 6,884 | 0.5% | 34 | 2.1 | 72 | $421 | 30 |
| International Total | 209,284 | 1.3% | 2,704 | 2.6 | 7,146 | $641 | $4,579 |
| Air Total | 742,030 | 0.8% | 5,762 | 2.4 | 13,567 | $508 | $6,894 |
| **Cruise Ship** | | | | | | | |
| Domestic | 511,370 | 0.2% | 1,263 | 1.1 | 1,326 | $288 | $383 |
| Europe | 361,277 | 0.4% | 1,292 | 1.2 | 1,486 | $425 | $631 |
| Oceania | 391,198 | 0.3% | 1,098 | 1.2 | 1,265 | $454 | $574 |
| Asia | 228,866 | 1.0% | 2,233 | 1.4 | 3,130 | $537 | $1,679 |
| Latin America | 78,278 | 0.6% | 508 | 1.2 | 609 | $501 | $305 |
| Rest of World | 31,833 | 0.0% | 5 | 1.1 | 5 | $337 | 2 |
| International Total | 1,091,452 | 0.5% | 5,135 | 1.3 | 6,495 | $491 | $3,192 |
| Cruise Total | 1,602,822 | 0.4% | 6,398 | 1.2 | 7,821 | $457 | $3,574 |
| **Highway/Ferry** | | | | | | | |
| Domestic | 50,972 | 0.1% | 67 | 2.1 | 141 | $270 | $38 |
| Europe | 706 | 0.0% | 0 | 2.3 | 1 | $398 | $0 |
| Oceania | 765 | 0.1% | 1 | 2.3 | 3 | $426 | $1 |
| Asia | 447 | 1.0% | 5 | 2.8 | 13 | $503 | $6 |
| Latin America | 153 | 0.1% | 0 | 2.4 | 1 | $470 | $0 |
| Rest of World | 70 | 0.0% | 0 | 2.1 | 0 | $316 | 0 |
| International Total | 2,141 | 0.3% | 6 | 2.7 | 16 | $486 | $8 |
| Highway/Ferry Total | 53,114 | 0.1% | 73 | 2.1 | 157 | $293 | $46 |
| Total Domestic | 1,095,088 | 0.4% | 4,388 | 1.8 | 7,888 | $347 | $2,736 |
| Total International | 1,302,877 | 0.6% | 7,846 | 1.7 | 13,657 | $570 | 7,779 |
| **Total** | **2,397,966** | **0.5%** | **12,233** | **1.8** | **21,545** | **$488** | **$10,514** |

Source: AVSP 7; The Innovation Group

Table 140 summarizes casino gaming revenue from tourism for 2025.

**Table 140: Total Tourism GGR 2025**

| | Base | Induced | Total |
|---|---|---|---|
| ***High*** | | | |
| Air | $20,934,077 | $10,606,206 | $31,540,283 |
| Cruise | $8,419,867 | $5,498,924 | $13,918,790 |
| HWY | $469,053 | $70,779 | $539,832 |
| Total | $29,822,996 | $16,175,909 | $45,998,906 |
| ***Low*** | | | |
| Air | $18,893,005 | $6,894,034 | $25,787,039 |
| Cruise | $7,598,930 | $3,574,301 | $11,173,230 |
| HWY | $423,346 | $46,006 | $469,352 |
| Total | $26,915,280 | $10,514,341 | $37,429,621 |

These total visits and casino gaming revenue are then distributed among the Core Markets and the Other Markets considered in the Local and Seasonal Workers projections previously. Cruise passenger revenue is divided on a fair share basis among four ports based on 2019 passenger counts, as shown in Table 141.

**Table 141: Cruise GGR Distribution**

| | 2019 Passenger Count | Share | GGR High | GGR Low |
|---|---|---|---|---|
| Juneau | 1,305,700 | 47% | $6,593,537 | $5,292,924 |
| Ketchikan | 1,186,400 | 43% | $5,991,094 | $4,809,317 |
| Seward | 237,900 | 9% | $1,201,350 | $964,377 |
| Kodiak | 26,300 | 1% | $132,810 | $106,612 |
| **Total** | **2,756,300** | **100%** | **$13,918,790** | **$11,173,230** |

Air and highway travelers were distributed based on fair share of overnight stays according to the Alaska Visitor Statistics Program 7 (AVSP 7). Air travelers tend to stay overnight mostly in the Anchorage-Wasilla area, Fairbanks and Denali, and the Kenai Peninsula. In Test scenarios 4 and 5, while total statewide capture of tourism is diminished because of fewer assumed casino locations, Anchorage is estimated to capture a larger share. Fairbanks, because of its isolation, would be expected to have a relatively consistent level of tourism capture regardless of scenario.

**Table 142: Air and Highway GGR Distribution**

| | Air Share | HWY Share | Air High | HWY High | Total High | Air Low | HWY Low | Total Low |
|---|---|---|---|---|---|---|---|---|
| Anchorage | 41% | 23% | $12,841,905 | $123,927 | $12,965,832 | $10,499,421 | $107,747 | $10,607,168 |
| Seward | 13% | 12% | $4,021,915 | $64,780 | $4,086,695 | $3,288,280 | $56,322 | $3,344,602 |
| Kenai/Soldotna | 8% | 9% | $2,399,037 | $47,881 | $2,446,918 | $1,961,430 | $41,630 | $2,003,060 |
| Homer | 8% | 10% | $2,540,157 | $53,514 | $2,593,671 | $2,076,808 | $46,527 | $2,123,336 |
| Palmer/Wasilla | 5% | 10% | $1,693,438 | $52,575 | $1,746,013 | $1,384,539 | $45,711 | $1,430,250 |
| Fairbanks | 13% | 20% | $4,021,915 | $108,905 | $4,130,821 | $3,288,280 | $94,687 | $3,382,967 |
| Denali NP | 13% | 16% | $4,021,915 | $88,251 | $4,110,166 | $3,288,280 | $76,729 | $3,365,009 |
| **Total** | **100%** | **100%** | **$31,540,283** | **$539,832** | **$32,080,115** | **$25,787,039** | **$469,352** | **$26,256,391** |

Source: The Innovation Group

The following two tables show the casino revenue potential from tourism for the Core Markets in the gravity model.

**Table 143: 2025 Gaming Revenue from Tourism Core Markets High**

| | Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | Total |
|---|---|---|---|---|---|---|---|
| Test A | $11,669,249 | $1,296,583 | $1,571,412 | $174,601 | $4,048,204 | $2,446,918 | **$21,206,967** |
| Test B | | $5,186,333 | | $698,405 | | $2,446,918 | **$8,331,656** |
| Test C | $12,965,832 | | $1,746,013 | | $4,130,821 | $2,446,918 | **$21,289,583** |
| Test D | $18,779,142 | | | | | | **$18,779,142** |
| Test E | $17,840,185 | $1,784,018 | | | | | **$19,624,203** |

Source: The Innovation Group

**Table 144: 2025 Gaming Revenue from Tourism Core Markets Low**

| | Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | Total |
|---|---|---|---|---|---|---|---|
| Test A | $9,546,451 | $1,060,717 | $1,287,225 | $143,025 | $3,315,308 | $2,003,060 | **$17,355,785** |
| Test B | | $4,242,867 | | $572,100 | | $2,003,060 | **$6,818,027** |
| Test C | $10,607,168 | | $1,430,250 | | $3,382,967 | $2,003,060 | **$17,423,444** |
| Test D | $15,341,607 | | | | | | **$15,341,607** |
| Test E | $14,574,526 | $1,457,453 | | | | | **$16,031,979** |

Source: The Innovation Group

The following table shows the casino revenue potential from tourism for the other markets.

**Table 145: 2025 Tourism Revenue Other Markets**

| | Homer | Seward | Healy/Denali | Juneau | Ketchikan | Kodiak |
|---|---|---|---|---|---|---|
| High | $2,593,671 | $5,288,045 | $4,542,377 | $6,593,537 | $5,991,094 | $132,810 |
| Low | $2,123,336 | $4,308,979 | $3,094,329 | $5,292,924 | $4,809,317 | $106,612 |

Source: The Innovation Group

## *Summary*

The following two tables show the total casino revenue potential for the Core Markets in the gravity model.

**Table 146: 2025 Total Gaming Revenue Core Markets High**

| | Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | **Total** |
|---|---|---|---|---|---|---|---|
| Test A | $102,604,541 | $26,617,507 | $20,123,676 | $9,823,526 | $38,120,236 | $13,409,383 | **$210,698,870** |
| Test B | | $73,998,319 | | $18,061,890 | | $13,415,746 | **$105,475,955** |
| Test C | $113,982,751 | | $44,828,789 | | $39,281,782 | $14,362,583 | **$212,455,905** |
| Test D | $146,285,602 | | | | | | **$146,285,602** |
| Test E | $119,336,813 | $38,424,265 | | | | | **$157,761,078** |

Source: The Innovation Group

**Table 147: 2025 Total Gaming Revenue Core Markets Low**

| | Anchorage | Eklutna | Wasilla | Knik | Fairbanks | Kenai | **Total** |
|---|---|---|---|---|---|---|---|
| Test A | $83,479,992 | $22,043,413 | $16,303,288 | $8,007,274 | $30,841,375 | $10,986,054 | **$171,661,396** |
| Test B | | $66,359,596 | | $15,071,485 | | $11,260,642 | **$92,691,722** |
| Test C | $92,330,682 | | $35,893,782 | | $31,545,907 | $11,687,767 | **$171,458,138** |
| Test D | $121,836,858 | | | | | | **$121,836,858** |
| Test E | $106,379,882 | $29,953,359 | | | | | **$136,333,241** |

Source: The Innovation Group

The following table shows the total casino revenue potential for the other markets.

**Table 148: 2025 Total Revenue Other Markets**

| | Homer | Seward | Healy/Denali | Juneau | Ketchikan | Kodiak | Bethel |
|---|---|---|---|---|---|---|---|
| High | $8,591,344 | $8,111,254 | $5,374,334 | $18,596,887 | $11,297,246 | $4,409,605 | $3,866,952 |
| Low | $7,123,651 | $6,692,107 | $4,478,669 | $16,626,968 | $9,809,828 | $4,137,089 | $3,611,072 |

Source: The Innovation Group

# FINAL SCENARIOS

To maximize the capital investment potential into a single stand-out resort property, it may be desirable to concentrate development in Anchorage, without casino competition in Kenai or Wasilla (Test D). The revenue concentration of an Anchorage-only model, which would support a more substantial capital investment to drive tourism and job creation, is evident in Test D. Fairbanks and Juneau also show potential for casino development without impinging upon the Anchorage market, and therefore in this Final Scenario set we examine the gaming revenue potential for Anchorage, Fairbanks and Juneau along with downstream impacts including gaming tax revenue, hotel and amenity development, and employment. This Final Scenario set is based on the midpoint of the high-low revenue forecasts presented previously. In the first scenario, it is assumed that VGTs would not be permitted in these three cities to maximize capital investment at the casinos. Following that analysis, we also present an alternative where VGTs are developed in the three casino markets.

In the financial analysis we conduct a sensitivity analysis comparing gaming tax rates of 10%, 15%, 20% and 25%. Many large-market states have higher gaming tax rates, but given the smaller market population of Alaska and the desire to create casinos capable of enhancing the tourist product of the state, 20%-25% would represent a high end rate. Mississippi, for example, has a combined state-and-local tax of 12%, but it is an open-market state where the number of licenses is not restricted, which leads to greater competition and tighter operating margins. The gaming tax rate for VGTs, iGaming and Sports Betting is assumed to be 40% in all scenarios.

As discussed below, a 20% rate would have an impact on the level of amenity development that would be viable at a rate of return attractive to investors and 25% would put some gaming revenue at risk.

## *Intra-State Visitation*

In addition to revenue sources already discussed, we have assessed the revenue potential from intra-state visitation given that these three cities serve as regional hubs. The forecast is based on intra-state air passenger counts and Alaska Marine Highway disembarking counts at Juneau.

**Table 149: Intra-State Visitation Forecast**

| | Total Passengers | Adult Passengers % | Capture % | Visits | WPV | NGR |
|---|---|---|---|---|---|---|
| Anchorage | 561,819 | 88% | 8% | 39,552 | $85 | $3,361,922 |
| Fairbanks | 46,867 | 88% | 18% | 7,424 | $82 | $608,746 |
| Juneau | 162,940 | 88% | 8% | 11,471 | $85 | $975,033 |
| Juneau Ferry | 40,000 | 80% | 16% | 5,120 | $70 | $358,400 |

Source: US DOT; Alaska Marine Highway System; The Innovation Group

# *Anchorage Financial Analysis*

## VIP segment

For Anchorage, we also assess the revenue potential from an additional, VIP segment. With direct air service to several Asian markets, a casino in Anchorage has the potential to induce high-value gamers to Alaska. Based on our proprietary global VIP allocation model, we estimate that Anchorage could attract more than 3,000 VIP gamers annually, generating between $33 million and $41 million in revenue.

**Table 150: Anchorage VIP Segment 2025**

| | Gaming Visits | WPV | Revenue |
|---|---|---|---|
| High | 3,503 | $11,654 | $40,829,491 |
| Low | 3,153 | $10,489 | $33,071,888 |

Source: The Innovation Group

## Five-Year Midpoint Forecast

The following table summarizes the five-year forecast for Net Gaming Revenue (NGR, or net of free play credits) for Anchorage. Newly opened casino markets typically experience substantial growth in the second and third year of operations as marketing strategies are implemented and player databases are developed. A ramp up of 6% in year two 3% in year three is projected followed by ongoing normative growth of 2.5%. Slot revenue is estimated at 85% of total mass market gaming revenue.

**Table 151: Anchorage Midpoint 5-Year Forecast**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $116,809,679 | $123,818,260 | $127,532,808 | $130,721,128 | $133,989,156 |
| Mass Market Table NGR | $20,613,473 | $21,850,281 | $22,505,790 | $23,068,434 | $23,645,145 |
| VIP Table NGR | $36,950,689 | $39,167,731 | $40,342,763 | $41,351,332 | $42,385,115 |
| Total NGR | $174,373,841 | $184,836,272 | $190,381,360 | $195,140,894 | $200,019,416 |
| Gaming Visits | 1,513,025 | 1,543,285 | 1,558,718 | 1,566,512 | 1,574,344 |
| # of Slot Machines | 1,300 | 1,300 | 1,300 | 1,300 | 1,300 |
| # of Table Games | 39 | 39 | 39 | 39 | 39 |

Source: The Innovation Group

## Return-on-Investment (ROI) Analysis

The first step in the ROI analysis was to complete operating pro formas for each alternative tax scenario. The operating pro formas were developed utilizing the Innovation Group's proprietary operating model and is based upon operating characteristics of comparable properties in the region. It also takes into consideration existing and assumed future market dynamics and the major assumptions addressed in previous sections of this report. It is a dynamic model built on a foundation of staffing and expense estimates relative to facility size and business volume, whereby changes to the facility or business volume flow through the model to estimate how variable

expenses will be affected. The outputs of the operating model include Employment and Employee Compensation (wages, salaries, tips, taxes and benefits), gaming taxes, other casino expenses, and Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA)

The Return on Investment analysis utilized a discounted cash flow analysis (DCF), which uses unlevered cash flow (a company's cash flow before interest payments). A DCF analysis adjusts for the time value of money in estimating the value of an investment. NPV (net present value) is a comparison of a dollar today to a projected value for the same dollar at some point in the future or the past.

To adjust for the time value of money, a DCF analysis utilizes a Weighted Average Cost of Capital (WACC) or discount rate. Companies and projects are financed by a combination of debt and equity. There is a cost of using this capital, so investors and companies try to earn returns in excess of this cost. This cost—the WACC—corresponds to the weighted average cost, expressed as a percentage, of the various means of financing (loans, equity, etc.) available to fund an investment project. A higher WACC or discount rate results in a lower NPV.

The first step in identifying cash flow is to arrive at a figure for EBIT (Earnings before Interest and Taxes). We began with the incremental EBITDA for the five forecasted years and applied a growth rate of 1.5% through Year 10. EBIT was calculated subtracting the following from EBITDA:

- Depreciation as calculated from building cost, FF&E, and maintenance cap ex;
- Amortization.

Next, EBIT is adjusted to derive Unlevered Cash Flow, which is calculated as follows:

EBIT:
Less: Unlevered Taxes (at 21%)
Plus: Depreciation
Less: Maintenance Capex
Unlevered Cash Flow

Construction costs, including fixtures, furnishings, and equipment (FF&E) were estimated on a square-foot and per-unit basis. Building costs were depreciated over 20 years; FF&E costs were depreciated over seven years. Other development costs were included in the ROI analysis, including architectural and engineering, permits and site work, land costs, regulatory application fee, working capital, and pre-opening costs.

The analysis also includes an allowance for maintenance capital expenditures. This reflects the need, which grows greater as a property ages and experiences wear and tear, to replace FF&E and in general maintain the facility. Maintenance capex is typically calculated as a percentage of total revenues; in the present analysis a capex allowance of 0.5% is applied to incremental revenue in year two, gradually rising to 3.5% by year six.

Unlevered cash flow through Year Ten was then applied to the DCF analysis. In addition, standard methodology is to assess a terminal value to reflect the value the property would continue to have beyond the forecast period. We utilized the Gordon Model: Value equals to Cash Flow divided by Discount Rate (k) minus a long-term or perpetual Growth Rate (g), "V=CF/(k-g)". Terminal CF is calculated as Year Ten cash flow times 1+g. The value for "g" (the perpetual growth rate) has been set at 1.5%.

Enterprise value (EV) includes the value of debt, which would need to be paid by a willing buyer. Therefore, the development costs need to be subtracted from EV to determine residual equity value (or net present value), which represents the fair market value in a DCF valuation. In other words, the NPV line represents the present value of cash flows, minus the cost of development or capital outlay. A positive NPV value indicates a project is generally worth pursuing.

The cash-on-cash return is commonly used as a basis for determining the return rate of a real estate investment or transaction. This calculation determines the cash income on the cash invested. The Innovation Group calculated the cash-on-cash return rate for the project by utilizing the capital outlay as the denominator, and a numerator taken from Year 5 unlevered cash flow.

Cash-on-cash expectations can vary by company, and in the gaming industry they can fluctuate with economic conditions and investment returns available elsewhere. From the mid-1990s but prior to the Great Recession, when there was dramatic growth in the gaming industry, investor expectations ranged from 20 to more than 25 percent. In the immediate aftermath of the recession, expectations tempered, and returns dropped to the 10 to 15 percent range as gaming revenue in established jurisdictions remained relatively flat into 2014. As normative growth has resumed in the industry, return expectations have started to rise again, into the 15 to 20 percent range.

High-level estimates for development costs used in the ROI analysis included hard construction, fixtures, furnishings, and equipment (FF&E, including gaming equipment), architectural and engineering, permits and site work, land costs, regulatory application fee, working capital, and pre-opening costs. For the purposes of estimating the economic impact of development, land costs and regulatory application fees have been subtracted in the capital investment numbers shown below, since those costs would not add to economic development in the State. Building program assumptions included front- and back-of-house space for casino, hotel, food and beverage, gift shop, entertainment, and meeting space operations, as well as surface and structured parking. Food and beverage programs included a variety of venues to be competitive in the regional market and a sufficient number of seats to accommodate the projected visitation.

For this sensitivity analysis, we maximized capital investment while maintaining a 15% return floor. It should be noted a developer would not necessarily invest the extra capital in the low tax scenario, only that the level of investment would be viable. The following table compares the ROI results under the four tax scenarios.

**Table 152: Anchorage ROI Results**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| Discount Rate | 12.50% | 12.50% | 12.50% | 12.50% |
| Perpetual Growth Rate | 1.50% | 1.50% | 1.50% | 1.50% |
| Enterprise Value (Present Value of Cash Flows) | $533.0 | $472.9 | $412.8 | $334.3 |
| Less: Project Debt & Equity | ($419.3) | ($377.3) | ($330.2) | ($263.6) |
| Net Present Value (NPV) of Project* | $113.6 | $95.6 | $82.6 | $70.7 |
| Cash-on-Cash Return in Year 5 | 15.3% | 15.1% | 15.1% | 15.3% |
| Payback Period | 6.7 | 6.8 | 6.8 | 6.7 |

Source: The Innovation Group; *Also known as Residual Equity Value

The following table compares the staffing and employment compensation estimates and amenity development assumptions. The table also shows Total Revenue (NGR plus non-gaming revenue), Gaming Tax, EBITDA and Cash Flow for 2026 (Year Two).

**Table 153: Anchorage Development Program and Employment Comparison**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Cash Flow Results*** | | | | |
| Total Revenue | $225,087,780 | $219,698,183 | $214,923,141 | $203,234,498 |
| Gaming Tax | $18,483,627 | $27,725,441 | $36,967,254 | $45,012,096 |
| EBITDA | $74,262,543 | $66,385,544 | $58,570,916 | $48,291,324 |
| Cash Flow | $63,079,183 | $56,371,384 | $49,651,231 | $40,724,823 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 1,542 | 1,542 | 1,542 | 1,542 |
| Hotel Rooms | 500 | 410 | 310 | 200 |
| Entertainment/Meeting Venue Seats | 1,500 | 1,500 | 1,300 | 500 |
| F&B Seats | 690 | 610 | 560 | 430 |
| Employment | 1,226 | 1,155 | 1,093 | 996 |
| Employee Compensation | $59,470,661 | $57,809,445 | $56,128,547 | $53,665,747 |
| Capital Investment* | $373,327,923 | $331,398,048 | $284,378,673 | $217,951,923 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

## *Fairbanks Financial Analysis*

The following table summarizes the five-year forecast for Net Gaming Revenue (NGR, or net of free play credits) for Fairbanks. Newly opened casino markets typically experience substantial growth in the second and third year of operations as marketing strategies are implemented and player databases are developed. A ramp up of 6% in year two 3% in year three is projected followed by ongoing normative growth of 2.5%. Slot revenue is estimated at 88% of total gaming revenue.

**Table 154: Fairbanks Midpoint 5-Year Forecast**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $31,699,880 | $33,601,872 | $34,609,929 | $35,475,177 | $36,362,056 |
| Table NGR | $4,322,711 | $4,582,074 | $4,719,536 | $4,837,524 | $4,958,462 |
| Total NGR | $36,022,591 | $38,183,946 | $39,329,464 | $40,312,701 | $41,320,519 |
| Gaming Visits | 452,244 | 461,289 | 465,902 | 468,232 | 470,573 |
| # of Slot Machines | 400 | 400 | 400 | 400 | 400 |
| # of Table Games | 8 | 8 | 8 | 8 | 8 |

Source: The Innovation Group

For this sensitivity analysis, we maximized capital investment while maintaining a 15% return floor. It should be noted a developer would not necessarily invest the extra capital in the low tax scenario, only that the level of investment would be viable. The following table compares the ROI results under the four tax scenarios.

**Table 155: Fairbanks ROI Results**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| Discount Rate | 12.50% | 12.50% | 12.50% | 12.50% |
| Perpetual Growth Rate | 1.50% | 1.50% | 1.50% | 1.50% |
| Enterprise Value (Present Value of Cash Flows) | $106.9 | $94.2 | $82.0 | $63.7 |
| Less: Project Debt & Equity | ($86.0) | ($75.7) | ($65.3) | ($51.4) |
| Net Present Value (NPV) of Project* | $21.0 | $18.4 | $16.6 | $12.2 |
| Cash-on-Cash Return in Year 5 | 15.0% | 15.1% | 15.3% | 15.1% |
| Payback Period | 6.8 | 6.8 | 6.7 | 6.8 |

Source: The Innovation Group; *Also known as Residual Equity Value

The following table compares the staffing and employment compensation estimates and amenity development assumptions. The table also shows Total Revenue (NGR plus non-gaming revenue), Gaming Tax, EBITDA and Cash Flow for 2026 (Year Two). At a 25% tax rate, hotel development would be put at risk.

**Table 156: Fairbanks Development Program and Employment Comparison**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Cash Flow Results*** | | | | |
| Total Revenue | $47,219,808 | $45,820,307 | $44,494,867 | $40,207,353 |
| Gaming Tax | $3,818,395 | $5,727,592 | $7,636,789 | $9,110,724 |
| EBITDA | $14,895,816 | $13,219,690 | $11,636,406 | $9,169,410 |
| Cash Flow | $12,697,639 | $11,263,506 | $9,886,409 | $7,788,098 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 448 | 448 | 448 | 448 |
| Hotel Rooms | 100 | 65 | 40 | 0 |
| Entertainment/Meeting Venue Seats | 200 | 200 | 100 | 100 |
| F&B Seats | 150 | 150 | 130 | 100 |
| Employment | 294 | 281 | 265 | 239 |
| Employee Compensation | $16,827,609 | $16,604,127 | $15,819,789 | $15,377,549 |
| Capital Investment* | $62,701,080 | $53,601,080 | $44,397,080 | $32,086,080 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

## *Juneau Financial Analysis*

The following table summarizes the five-year forecast for Net Gaming Revenue (NGR, or net of free play credits) for Juneau. In the event that Juneau is the only major cruise port that develops a casino, its capture of the cruise segment would increase, which is reflected in the forecast below. Newly opened casino markets typically experience substantial growth in the second and third year of operations as marketing strategies are implemented and player databases are developed. A ramp up of 6% in year two 3% in year three is projected followed by ongoing normative growth of 2.5%. Slot revenue is estimated at 85% of total gaming revenue.

**Table 157: Juneau Midpoint 5-Year Forecast**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $18,516,687 | $19,627,688 | $20,216,519 | $20,721,932 | $21,239,980 |
| Table NGR | $3,267,651 | $3,463,710 | $3,567,621 | $3,656,811 | $3,748,232 |
| Total NGR | $21,784,337 | $23,091,398 | $23,784,140 | $24,378,743 | $24,988,212 |
| Gaming Visits | 264,232 | 269,517 | 272,212 | 273,573 | 274,941 |
| # of Slot Machines | 200 | 200 | 200 | 200 | 200 |
| # of Table Games | 6 | 6 | 6 | 6 | 6 |

Source: The Innovation Group

For this sensitivity analysis, we maximized capital investment while maintaining a 15% return floor. It should be noted a developer would not necessarily invest the extra capital in the low tax scenario, only that the level of investment would be viable. The following table compares the ROI results under the four tax scenarios. A small hotel would be viable in Juneau in the three lower tax rates although it is questionable whether one as small as 20-25 rooms would be developed.

**Table 158: Juneau ROI Results**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| Discount Rate | 12.50% | 12.50% | 12.50% | 12.50% |
| Perpetual Growth Rate | 1.50% | 1.50% | 1.50% | 1.50% |
| Enterprise Value (Present Value of Cash Flows) | $56.7 | $48.9 | $43.3 | $34.8 |
| Less: Project Debt & Equity | ($45.6) | ($39.7) | ($35.2) | ($28.0) |
| Net Present Value (NPV) of Project* | $11.1 | $9.2 | $8.2 | $6.7 |
| Cash-on-Cash Return in Year 5 | 15.1% | 15.0% | 15.0% | 15.2% |
| Payback Period | 6.8 | 6.8 | 6.8 | 6.8 |

Source: The Innovation Group; *Also known as Residual Equity Value

The following table compares the staffing and employment compensation estimates and amenity development assumptions. The table also shows Total Revenue (NGR plus non-gaming revenue), Gaming Tax, EBITDA and Cash Flow for 2026 (Year Two).

**Table 159: Juneau Development Program and Employment Comparison**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Cash Flow Results*** | | | | |
| Total Revenue | $27,843,128 | $27,043,413 | $26,283,690 | $24,315,275 |
| Gaming Tax | $2,309,140 | $3,463,710 | $4,618,280 | $5,555,218 |
| EBITDA | $7,970,805 | $6,949,419 | $6,227,164 | $5,080,373 |
| Cash Flow | $6,769,615 | $5,899,867 | $5,263,517 | $4,281,433 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 236 | 236 | 236 | 230 |
| Hotel Rooms | 45 | 25 | 20 | 0 |
| Entertainment/Meeting Venue Seats | 0 | 0 | 0 | 0 |
| F&B Seats | 125 | 125 | 82 | 70 |
| Employment | 197 | 190 | 171 | 152 |
| Employee Compensation | $11,099,312 | $11,099,312 | $10,629,714 | $10,027,443 |
| Capital Investment* | $37,088,068 | $31,238,068 | $26,694,080 | $19,618,213 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

## *Gaming Tax Revenue Summary*

The following table shows gaming taxes from the three casinos in the midpoint forecasts. At a 25% tax, amenity development sufficient to accommodate projected gaming demand is estimated to be put at risk, thereby lowering the gaming revenue projection.

**Table 160: Casino Gaming Tax Revenue (MMs)**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| **Net Gaming Revenue at 10%-20% Tax** | | | | | |
| Anchorage | $174.4 | $184.8 | $190.4 | $195.1 | $200.0 |
| Fairbanks | $36.0 | $38.2 | $39.3 | $40.3 | $41.3 |
| Juneau | $21.8 | $23.1 | $23.8 | $24.4 | $25.0 |
| Total | $232.2 | $246.1 | $253.5 | $259.8 | $266.3 |
| | | | | | |
| **Net Gaming Revenue at 25% Tax** | | | | | |
| Anchorage | $169.9 | $180.0 | $185.4 | $190.1 | $194.8 |
| Fairbanks | $34.4 | $36.4 | $37.5 | $38.5 | $39.4 |
| Juneau | $21.0 | $22.2 | $22.9 | $23.5 | $24.0 |
| Total | $225.2 | $238.7 | $245.9 | $252.0 | $258.3 |
| | | | | | |
| **Gaming Tax** | | | | | |
| 10% | $23.2 | $24.6 | $25.3 | $26.0 | $26.6 |
| 15% | $34.8 | $36.9 | $38.0 | $39.0 | $39.9 |
| 20% | $46.4 | $49.2 | $50.7 | $52.0 | $53.3 |
| 25% | $56.3 | $59.7 | $61.5 | $63.0 | $64.6 |

Source: The Innovation Group

## *VGT Impact Scenario*

We also assessed the development potential and ROI in the event that VGTs are deployed in the three casino markets. In this scenario, slot revenue at the casinos is forecast to decrease by 20%.

### Anchorage

The following tables summarize the results of the VGT-impact analysis for Anchorage.

**Table 161: Anchorage Midpoint 5-Year Forecast: VGT Impact Scenario**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $93,447,743 | $99,054,608 | $102,026,246 | $104,576,902 | $107,191,325 |
| Mass Market Table NGR | $20,613,473 | $21,850,281 | $22,505,790 | $23,068,434 | $23,645,145 |
| VIP Table NGR | $36,950,689 | $39,167,731 | $40,342,763 | $41,351,332 | $42,385,115 |
| Total NGR | $151,011,905 | $160,072,620 | $164,874,798 | $168,996,668 | $173,221,585 |
| Gaming Visits | 1,037,715 | 1,058,469 | 1,069,054 | 1,074,399 | 1,079,771 |
| # of Slot Machines | 1,105 | 1,105 | 1,105 | 1,105 | 1,105 |
| # of Table Games | 39 | 39 | 39 | 39 | 39 |

Source: The Innovation Group

**Table 162: Anchorage ROI Results: VGT Impact Scenario**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| Discount Rate | 12.50% | 12.50% | 12.50% | 12.50% |
| Perpetual Growth Rate | 1.50% | 1.50% | 1.50% | 1.50% |
| Enterprise Value (Present Value of Cash Flows) | $426.4 | $370.3 | $319.8 | $246.5 |
| Less: Project Debt & Equity | ($336.5) | ($296.3) | ($257.2) | ($198.9) |
| Net Present Value (NPV) of Project* | $89.8 | $74.0 | $62.6 | $47.5 |
| Cash-on-Cash Return in Year 5 | 15.2% | 15.1% | 15.0% | 15.1% |
| Payback Period | 6.7 | 6.8 | 6.8 | 6.8 |

Source: The Innovation Group; *Also known as Residual Equity Value

The following table compares the staffing and employment compensation estimates and amenity development assumptions. The table also shows Total Revenue (NGR plus non-gaming revenue), Gaming Tax, EBITDA and Cash Flow for 2026 (Year Two).

**Table 163: Anchorage Development Program and Employment Comparison: VGT Impact Scenario**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Cash Flow Results*** | | | | |
| Total Revenue | $190,587,655 | $186,589,080 | $181,788,649 | $168,895,565 |
| Gaming Tax | $16,007,262 | $24,010,893 | $32,014,524 | $38,121,499 |
| EBITDA | $59,711,229 | $52,373,517 | $45,798,472 | $36,069,369 |
| Cash Flow | $50,602,186 | $44,365,937 | $38,716,984 | $30,398,132 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 1,347 | 1,347 | 1,347 | 1,317 |
| Hotel Rooms | 400 | 300 | 220 | 100 |
| Entertainment/Meeting Venue Seats | 1,000 | 1,000 | 800 | 300 |
| F&B Seats | 450 | 450 | 400 | 400 |
| Employment | 1,055 | 1,013 | 952 | 853 |
| Employee Compensation | $53,953,288 | $53,208,348 | $51,430,523 | $47,405,510 |
| Capital Investment* | $295,413,479 | $255,194,729 | $216,219,104 | $158,083,266 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

## Fairbanks

The following tables summarize the results of the VGT-impact analysis for Fairbanks.

**Table 164: Fairbanks Midpoint 5-Year Forecast: VGT Impact Scenario**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $25,359,904 | $26,881,498 | $27,687,943 | $28,380,142 | $29,089,645 |
| Table NGR | $4,322,711 | $4,582,074 | $4,719,536 | $4,837,524 | $4,958,462 |
| Total NGR | $29,682,615 | $31,463,572 | $32,407,479 | $33,217,666 | $34,048,107 |
| Gaming Visits | 366,532 | 373,863 | 377,601 | 379,489 | 381,387 |
| # of Slot Machines | 320 | 320 | 320 | 320 | 320 |
| # of Table Games | 8 | 8 | 8 | 8 | 8 |

Source: The Innovation Group

**Table 165: Fairbanks ROI Results: VGT Impact Scenario**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| Discount Rate | 12.50% | 12.50% | 12.50% | 12.50% |
| Perpetual Growth Rate | 1.50% | 1.50% | 1.50% | 1.50% |
| Enterprise Value (Present Value of Cash Flows) | $77.1 | $66.9 | $56.8 | $47.9 |
| Less: Project Debt & Equity | ($61.4) | ($49.7) | ($44.3) | ($39.1) |
| Net Present Value (NPV) of Project* | $15.7 | $17.3 | $12.5 | $8.9 |
| Cash-on-Cash Return in Year 5 | 15.3% | 16.4% | 15.7% | 15.0% |
| Payback Period | 6.8 | 6.4 | 6.6 | 6.8 |

Source: The Innovation Group; *Also known as Residual Equity Value

**Table 166: Fairbanks Development Program and Employment Comparison: VGT Impact Scenario**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Cash Flow Results*** | | | | |
| Total Revenue | $37,735,275 | $36,135,845 | $35,435,722 | $33,111,186 |
| Gaming Tax | $3,146,357 | $4,719,536 | $6,292,714 | $7,430,630 |
| EBITDA | $10,823,468 | $9,516,658 | $8,182,423 | $6,987,259 |
| Cash Flow | $9,214,706 | $8,056,619 | $6,919,617 | $5,907,539 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 368 | 368 | 368 | 320 |
| Hotel Rooms | 40 | 0 | 0 | 0 |
| Entertainment/Meeting Venue Seats | 200 | 200 | 0 | 0 |
| F&B Seats | 150 | 150 | 120 | 100 |
| Employment | 255 | 241 | 230 | 197 |
| Employee Compensation | $15,185,486 | $15,185,486 | $14,858,531 | $12,974,376 |
| Capital Investment* | $49,029,815 | $37,329,815 | $31,962,440 | $27,515,600 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

## Juneau

The following tables summarize the results of the VGT-impact analysis for Juneau.

**Table 167: Juneau Midpoint 5-Year Forecast: VGT Impact Scenario**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Slot NGR | $14,813,349 | $15,702,150 | $16,173,215 | $16,577,545 | $16,991,984 |
| Table NGR | $3,267,651 | $3,463,710 | $3,567,621 | $3,656,811 | $3,748,232 |
| Total NGR | $18,081,000 | $19,165,860 | $19,740,836 | $20,234,357 | $20,740,216 |
| Gaming Visits | 204,056 | 216,300 | 222,789 | 228,359 | 234,067 |
| # of Slot Machines | 160 | 160 | 160 | 160 | 160 |
| # of Table Games | 6 | 6 | 6 | 6 | 6 |

Source: The Innovation Group

**Table 168: Juneau ROI Results: VGT Impact Scenario**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| Discount Rate | 12.50% | 12.50% | 12.50% | 12.50% |
| Perpetual Growth Rate | 1.50% | 1.50% | 1.50% | 1.50% |
| Enterprise Value (Present Value of Cash Flows) | $48.1 | $41.7 | $35.8 | $29.2 |
| Less: Project Debt & Equity | ($38.5) | ($32.6) | ($29.5) | ($23.0) |
| Net Present Value (NPV) of Project* | $9.6 | $9.1 | $6.3 | $6.2 |
| Cash-on-Cash Return in Year 5 | 15.1% | 15.5% | 14.8% | 15.6% |
| Payback Period | 6.8 | 6.7 | 6.9 | 6.7 |

Source: The Innovation Group; *Also known as Residual Equity Value

**Table 169: Juneau Development Program and Employment Comparison: VGT Impact Scenario**

| | 10% Gaming Tax | 15% Gaming Tax | 20% Gaming Tax | 25% Gaming Tax |
|---|---|---|---|---|
| ***2026 Revenue and Cash Flow Results*** | | | | |
| Total Revenue | $23,137,931 | $22,338,216 | $21,971,927 | $20,195,537 |
| Gaming Tax | $1,916,586 | $2,874,879 | $3,833,172 | $4,573,834 |
| EBITDA | $6,747,875 | $5,922,766 | $5,141,383 | $4,263,711 |
| Cash Flow | $5,723,195 | $5,008,506 | $4,354,213 | $3,586,498 |
| ***Program and Employment Stats*** | | | | |
| Gaming Positions | 196 | 196 | 196 | 180 |
| Hotel Rooms | 40 | 20 | 15 | 0 |
| Entertainment/Meeting Venue Seats | 0 | 0 | 0 | 0 |
| F&B Seats | 100 | 100 | 82 | 70 |
| Employment | 166 | 159 | 151 | 132 |
| Employee Compensation | $9,184,385 | $9,184,385 | $9,019,771 | $8,325,070 |
| Capital Investment* | $31,279,555 | $25,429,555 | $22,677,130 | $16,425,150 |

Source: The Innovation Group; *excluding Land Cost, Application Fee, Slot Machine Costs, and Pre-opening costs

## Gaming Tax Revenue Summary

The following table shows gaming taxes from the three casinos in the midpoint forecasts with local VGT competition. At a 25% tax, amenity development sufficient to accommodate projected gaming demand is estimated to be put at risk, thereby lowering the gaming revenue projection.

**Table 170: Casino Gaming Tax Revenue (MMs): VGT Impact Scenario**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| **Net Gaming Revenue at 10%-20% Tax** | | | | | |
| Anchorage | $151.0 | $160.1 | $164.9 | $169.0 | $173.2 |
| Fairbanks | $29.7 | $31.5 | $32.4 | $33.2 | $34.0 |
| Juneau | $18.1 | $19.2 | $19.7 | $20.2 | $20.7 |
| Total | $198.8 | $210.7 | $217.0 | $222.4 | $228.0 |
| | | | | | |
| **Net Gaming Revenue at 25% Tax** | | | | | |
| Anchorage | $143.9 | $152.5 | $157.1 | $161.0 | $165.0 |
| Fairbanks | $28.0 | $29.7 | $30.6 | $31.4 | $32.2 |
| Juneau | $17.3 | $18.3 | $18.8 | $19.3 | $19.8 |
| Total | $189.2 | $200.5 | $206.5 | $211.7 | $217.0 |
| | | | | | |
| **Gaming Tax** | | | | | |
| 10% | $19.9 | $21.1 | $21.7 | $22.2 | $22.8 |
| 15% | $29.8 | $31.6 | $32.6 | $33.4 | $34.2 |
| 20% | $39.8 | $42.1 | $43.4 | $44.5 | $45.6 |
| 25% | $47.3 | $50.1 | $51.6 | $52.9 | $54.2 |

Source: The Innovation Group

# *Open Market Analysis (Scenario 5)*

The Innovation Group was requested to assess an open-market scenario, in which neither casino licenses nor VGTs would be restricted in number or location. Currently, Nevada is the only fully open-market casino state in the United States. Mississippi and New Jersey are partially open markets, in that there is no limit on the number of commercial casino licenses available, but casinos are restricted to certain geographic zones.

For this, Scenario 5, we utilized the gravity model to forecast net gaming revenue for the Core Markets of Anchorage, Wasilla/Mat-Su Valley, Kenai and Fairbanks (similar to gravity model Test C) and assumed casino development in other relatively larger markets. Seward and Denali were included on the strength of tourism. Markets smaller than Bethel are not likely candidates for full casino development, and therefore development in the remainder of the state was assumed using VGT metrics. Table 171 shows the results for the net gaming revenue forecast.

**Table 171: Open-Market Gaming Revenue Forecast 2025 (Scenario 5; MMs)**

| | High | Low |
|---|---|---|
| **Core Markets** | **$176.3** | **$142.3** |
| | | |
| ***Other Markets*** | ***$50.0*** | ***$43.6*** |
| Homer | $7.1 | $5.9 |
| Seward | $6.7 | $5.6 |
| Healy (Denali) | $4.5 | $3.7 |
| Juneau | $15.4 | $13.8 |
| Ketchikan | $9.4 | $8.1 |
| Kodiak | $3.7 | $3.4 |
| Bethel | $3.2 | $3.0 |
| | | |
| **Casino Total** | **$226.3** | **$185.9** |
| | | |
| **VGTs Additional** | **$141.3** | **$125.6** |
| | | |
| **Total** | **$367.7** | **$311.5** |

Source: The Innovation Group.

With unlimited competition, the prospect of a stand-out casino resort in Anchorage and the inducement of Asian VIP are diminished, leading to less table and amenity development, resulting in slightly fewer jobs relative to Scenario 3 despite the labor inefficiencies of a greater dispersal of casinos. Nevada was able to develop as a destination market because for decades it was the only legal gambling market in the country and it has convenient access to California, by far the highest populated state in the country. Similarly, Atlantic City developed as the only legal casino jurisdiction east of the Mississippi with convenient access to major population centers such as Philadelphia, New York, and northern New Jersey. Mississippi has two major destination zones, one on the Gulf Coast and the other, Tunica, in the northwest corner of the state near Memphis, Tennessee. Tunica has experienced declining revenue and the closure of some of its largest casinos as more casino alternatives became available in the region, so there are limits to how much economic development an open casino market can generate.

Alaska would have neither of these advantages—neither lack of competition nor access to drive-in feeder markets. It should also be noted that these three open-market states have very low gaming tax rates. Mississippi has the highest, at 12% (8% state and 4% local). Nevada levies a state tax of 6.75% on casinos with gaming revenue exceeding $134,000 monthly, less on smaller casinos. Land-based commercial casino gaming revenue in Atlantic City is taxed at an effective rate of 9.25%.

Table 172 shows the results of the Scenario 5 analysis for capital investment, job creation, and gaming taxes.

**Table 172: Casino Scenario 5 Summary**

| Casino Tax Rate | NGR | Non-gaming Revenue | Total Revenue | Capital | Ongoing Casino Jobs | Casino Gaming Tax | VGT Tax | Lottery Transfers | SB & iGaming Tax | Total Tax | Total Jobs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10% | $226.3 | $40.7 | $267.1 | $467.8 | 1,469 | $22.6 | $56.5 | $43.2 | $24.7 | $147.1 | 1,819 |
| 15% | $219.6 | $35.1 | $254.7 | $383.0 | 1,401 | $32.9 | $56.5 | $43.2 | $24.7 | $157.4 | 1,751 |
| 20% | $206.4 | $24.8 | $231.1 | $284.3 | 1,271 | $41.3 | $56.5 | $43.2 | $24.7 | $165.7 | 1,621 |
| 25% | $185.9 | $18.6 | $204.5 | $207.7 | 1,125 | $46.5 | $56.5 | $43.2 | $24.7 | $170.9 | 1,475 |

Source: The Innovation Group.

# VGT MARKET ANALYSIS

Distributed Video Gaming Terminal (VGT) revenue estimates were performed for four of the five final casino scenarios, presented here in descending order according to the level of VGT revenue potential:

- Scenario 4: VGTs statewide in the absence of casino development. This would have the largest distribution and revenue potential of VGTs.
- Scenario 3: VGTs share markets with the three casinos. The VGT revenue potential in the three casino markets would be lower as a result of crossover between casino slot play and VGT play.
- Scenario 5: VGTs share markets with casinos in markets throughout the state, leading to lower VGT revenue and win per unit (WPU).
- Scenario 2: VGTs excluded from Anchorage, Fairbanks and Juneau.

The following table shows the results of the VGT forecasts for the three scenarios.

The forecasts were based on the following penetration metrics, which vary depending upon the assumed presence of casino competition. These metrics served as the Low revenue case, with the High case revenue increased by 12.5%. With more options for entertainment spending in urban markets, the Win per Adult is projected to be lower than in rural areas. However, with lower population density in rural markets, the number of units would be expected to have more downtime leading to lower win per unit (WPU).

**Table 173: VGT Penetration Metrics**

| | Win per Adult | Win per Unit |
|---|---|---|
| No Casino Market Urban | $320 | $150 |
| No Casino Market Rural | $500 | $100 |
| Competing with Casinos (B) | $175 | $125 |

Source: The Innovation Group

The following table shows the results of the VGT forecasts for the four scenarios.

**Table 174: VGT Net Gaming Revenue Forecast 2025 (MMs)**

| | Units | NGR High | NGR Low | NGR Mid | *WPU Mid* |
|---|---|---|---|---|---|
| Scenario 4 | 4,165 | $220.7 | $196.1 | $208.4 | *$137.09* |
| Scenario 3 | 3,595 | $174.6 | $155.2 | $164.9 | *$125.66* |
| Scenario 5 | 3,595 | $141.3 | $125.6 | $133.5 | *$101.73* |
| Scenario 2 | 2,430 | $113.8 | $101.1 | $107.5 | *$121.18* |

Source: The Innovation Group

Gaming taxes are forecast at 40% of NGR and shown in the following table.

**Table 175: VGT Tax Revenue Forecast 2025 (MMs)**

| | Tax High | Tax Low | Tax Mid |
|---|---|---|---|
| Scenario 4 | $88.3 | $78.5 | $83.4 |
| Scenario 3 | $69.8 | $62.1 | $66.0 |
| Scenario 5 | $56.5 | $50.3 | $53.4 |
| Scenario 2 | $45.5 | $40.5 | $43.0 |

Source: The Innovation Group

# LOTTERY MARKET ANALYSIS

For the Lottery revenue forecast, we examined Win per Adult metrics for Draw Games and Instant Scratch tickets, and we eliminated outliers such as Massachusetts, which benefits from cross-border spending, and Mississippi, since the data reflected only a few months of operation. Penetration metrics are highly variable in the selected set, ranging from $30+ per capita for Draw games in a handful of states to more than $100 in several states, with the average reaching $85. Spend for Instant games is also highly variable, as is the ratio between Instant and Draw.

**Table 176: Lottery Net Revenue per Capita National Set**

| State | WPA Draw | WPA Instant | Instant/Draw Ratio |
|---|---|---|---|
| Arizona | $44.36 | $148.64 | 3.4 |
| Arkansas | $30.42 | $183.59 | 6.0 |
| Colorado | $42.39 | $104.24 | 2.5 |
| Delaware | $121.79 | $119.84 | 1.0 |
| Florida | $107.88 | $310.86 | 2.9 |
| Idaho | $39.14 | $169.62 | 4.3 |
| **Illinois** | **$98.85** | **$182.87** | **1.8** |
| Indiana | $58.21 | $198.29 | 3.4 |
| Iowa | $40.97 | $118.43 | 2.9 |
| Kansas | $37.14 | $93.49 | 2.5 |
| Kentucky | $94.90 | $230.14 | 2.4 |
| **Louisiana** | **$76.00** | **$67.87** | **0.9** |
| Maine | $52.04 | $222.85 | 4.3 |
| Maryland | $175.59 | $286.20 | 1.6 |
| Michigan | $161.79 | $328.68 | 2.0 |
| Minnesota | $33.76 | $106.72 | 3.2 |
| Missouri | $70.76 | $211.06 | 3.0 |
| **Montana** | **$33.68** | **$34.87** | **1.0** |
| Nebraska | $52.14 | $72.26 | 1.4 |
| New Hampshire | $69.45 | $275.97 | 4.0 |
| New Jersey | $183.55 | $293.87 | 1.6 |
| New Mexico | $33.74 | $47.75 | 1.4 |
| North Carolina | $106.44 | $247.30 | 2.3 |
| Ohio | $101.16 | $262.79 | 2.6 |
| **Oregon** | **$32.41** | **$69.74** | **2.2** |
| Rhode Island | $78.73 | $218.98 | 2.8 |
| South Carolina | $125.40 | $366.56 | 2.9 |
| **South Dakota** | **$37.00** | **$49.13** | **1.3** |
| Tennessee | $65.76 | $274.99 | 4.2 |
| Texas | $55.40 | $228.40 | 4.1 |
| Vermont | $41.77 | $227.26 | 5.4 |
| Virginia | $134.94 | $188.70 | 1.4 |
| Washington | $37.50 | $91.23 | 2.4 |
| **West Virginia** | **$45.30** | **$88.44** | **2.0** |
| Wisconsin | $49.41 | $101.45 | 2.1 |
| **National Total** | **$85.29** | **$211.82** | **2.5** |

Source: La Fleur's; US Census; State Lottery Commissions/Control Boards; The Innovation Group. Per capita of age-eligible population.

As noted, Massachusetts and New England as a region have extremely high per capita penetration. Massachusetts reportedly benefits by consumers from adjacent states preferring the games the Commonwealth offers, which is suggested by the lower penetration in New England as a whole compared to Massachusetts. Removing New England from the comparable set, the resulting averages are very close to the results in Table 176.

**Table 177: Lottery Penetration in Massachusetts & New England Compared to the Rest of US**

| | WPA Draw | WPA Instant |
|---|---|---|
| Massachusetts | $128 | $862 |
| New England | $159 | $538 |
| **Rest of Country** | **$90** | **$224** |

Source: La Fleur's; US Census; State Lottery Commissions/Control Boards; The Innovation Group. Per capita of age-eligible population.

The data also shows that Western states tend to have lower penetration rates than jurisdictions east of the Mississippi River.

**Table 178: Western States Penetration Compared to Rest of US**

| State | WPA Draw | WPA Instant |
|---|---|---|
| Arizona | $44.36 | $148.64 |
| California | $46.99 | $182.51 |
| Colorado | $42.39 | $104.24 |
| Idaho | $39.14 | $169.62 |
| Kansas | $37.14 | $93.49 |
| Nebraska | $52.14 | $72.26 |
| New Mexico | $33.74 | $47.75 |
| Oregon | $32.41 | $69.74 |
| South Dakota | $37.00 | $49.13 |
| Washington | $37.50 | $91.23 |
| **Average** | **$40.28** | **$102.86** |
| | | |
| North Dakota | $47.43 | no instant |
| Wyoming | $57.97 | no instant |
| | | |
| **Rest of Nation** | **$94.17** | **$225.90** |

Source: La Fleur's; US Census; State Lottery Commissions/Control Boards; The Innovation Group. Per capita of age-eligible population.

Of additional note in the data, is that states with established distributed gaming tend to have low penetration rates, particularly for Instant games.

**Table 179: Lottery Net Revenue per Capita in States with VLTs/VGTs**

| | WPA Draw | WPA Instant | WPA VGT/VLT |
|---|---|---|---|
| Illinois | $99 | $183 | $179 |
| Montana | $34 | $35 | $527 |
| Oregon | $32 | $70 | $302 |
| South Dakota | $37 | $49 | $366 |
| WV | $45 | $88 | $291 |
| **Average** | **$49** | **$85** | **$333** |

Source: La Fleur's; US Census; State Lottery Commissions/Control Boards; The Innovation Group. Per capita of age-eligible population.

Based on the national data, we forecast different lottery penetration rates for Alaska depending upon the level of competition with casinos and VGTs.

**Table 180: Per Capita Lottery Penetration Forecast for Alaska 2025**

| | 2025 No Gaming | Scenario 1 | Scenario 2 | Scenarios 3 & 5 | Scenario 4 |
|---|---|---|---|---|---|
| Draw NGR | $50 | $48 | $47 | $45 | $46 |
| Instant NGR | $175 | $166 | $116 | $85 | $89 |

Source: The Innovation Group.

Table 181 shows the stabilized forecast for net lottery revenue (sales minus prizes) as well as government transfers (net revenue minus retailer commissions and administrative and operational expenses). A government transfer rate of 56% has been estimated based on a comparable set of smaller states as shown in Table 182 and Table 183. "Government transfer" is comparable to the term "gaming tax" used in the casino sections.

**Table 181: Alaska Lottery Forecast 2025**

| Lottery | 2025 No Casino or VGTs | Scenario 1 | Scenario 2 | Scenarios 3 & 5 | Scenario 4 |
|---|---|---|---|---|---|
| Draw NGR | $29.6 | $28.2 | $27.7 | $26.7 | $27.3 |
| Instant NGR | $103.7 | $98.5 | $68.9 | $50.4 | $52.9 |
| Total NGR | $133.4 | $126.7 | $96.7 | $77.1 | $80.2 |
| **Government Transfer** | **$74.7** | **$71.0** | **$54.1** | **$43.2** | **$44.9** |

Source: The Innovation Group.

**Table 182: Lottery Sales & Expense Detail, Comparative Set ($MMs)**

| | Arkansas | Idaho | Iowa | Maine | Nebraska | New Hampshire | New Mexico | North Dakota | Vermont | Wyoming |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total Sales** | $532.00 | $278.27 | $371.96 | $319.65 | $183.08 | $392.23 | $127.06 | $24.51 | $137.39 | $24.09 |
| | | | | | | | | | | |
| Prizes | $369.61 | $185.85 | $236.32 | $212.06 | $108.27 | $246.88 | $68.29 | $12.67 | $91.65 | $13.78 |
| Retailer commissions | $30.11 | $16.23 | $24.31 | $20.82 | $12.02 | $23.08 | $8.28 | $1.19 | $8.66 | $1.53 |
| Admin & operational expenses | $44.45 | $20.87 | $30.74 | $21.54 | $20.39 | $23.26 | $12.17 | $5.07 | $9.71 | $5.16 |
| **Total Operating Expenses** | $444.17 | $222.95 | $291.37 | $254.42 | $140.68 | $293.22 | $88.74 | $18.93 | $110.02 | $20.47 |
| | | | | | | | | | | |
| Total non-operating revenue | $2.12 | $0.45 | $0.39 | | $0.39 | $0.32 | $0.08 | $0.01 | $0.15 | $0.01 |
| | | | | | | | | | | |
| **Net Income before transfers** | $89.95 | $55.77 | $80.98 | $65.23 | $42.79 | $99.33 | $38.40 | $5.59 | $27.52 | $3.63 |
| **Gov't transfers after admin** | $89.27 | $55.93 | $81.53 | $65.24 | $42.41 | $99.79 | $38.16 | $5.22 | $27.52 | $3.33 |

Source: La Fleur's; The Innovation Group.

**Table 183: Lottery NGR Distribution, Comparative Set vs. Rest of US**

| | Arkansas | Idaho | Iowa | Maine | Nebraska | New Hampshire | New Mexico | North Dakota | Vermont | Wyoming | *Comp Set Average % of NGR* | *Rest of US Average** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **$MMs:** | | | | | | | | | | | | |
| NGR | $162.39 | $92.42 | $135.64 | $107.59 | $74.81 | $145.35 | $58.77 | $11.84 | $45.74 | $10.31 | | |
| Retailer commissions | $30.11 | $16.23 | $24.31 | $20.82 | $12.02 | $23.08 | $8.28 | $1.19 | $8.66 | $1.53 | | |
| Admin & operational expenses | $44.45 | $20.87 | $30.74 | $21.54 | $20.39 | $23.26 | $12.17 | $5.07 | $9.71 | $5.16 | | |
| Gov't transfers after admin | $89.27 | $55.93 | $81.53 | $65.24 | $42.41 | $99.79 | $38.16 | $5.22 | $27.52 | $3.33 | | |
| ***% Distribution:*** | | | | | | | | | | | | |
| Retailer commissions | 18.5% | 17.6% | 17.9% | 19.4% | 16.1% | 15.9% | 14.1% | 10.1% | 18.9% | 14.8% | ***16.3%*** | ***17.7%*** |
| Admin & operational expenses | 27.4% | 22.6% | 22.7% | 20.0% | 27.3% | 16.0% | 20.7% | 42.8% | 21.2% | 50.0% | ***27.1%*** | ***14.4%*** |
| Gov't transfers after admin | 55.0% | 60.5% | 60.1% | 60.6% | 56.7% | 68.7% | 64.9% | 44.1% | 60.2% | 32.3% | ***56.3%*** | ***68.6%*** |

Source: La Fleur's; The Innovation Group. Excludes states with VLT data blended in.

Table 184 shows the multi-year forecast for government transfers from lottery, assuming Year Three is 2025 and the lottery is able to begin operations by 2023. A ramp-up of 6% is forecast in Year Two and 4% in Year Three. Going forward, we have applied a conservative growth rate of 1% since lottery revenue trends tend to be highly volatile.

**Table 184: Alaska Lottery Government Transfers by Scenario (MMs)**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---|---|---|---|---|---|---|---|
| No Casino or VGTs | $67.2 | $71.7 | $74.7 | $75.4 | $75.4 | $75.4 | $75.4 |
| Scenario 1 | $63.9 | $68.1 | $71.0 | $71.7 | $71.7 | $71.7 | $71.7 |
| Scenario 2 | $48.7 | $52.0 | $54.1 | $54.7 | $54.7 | $54.7 | $54.7 |
| Scenarios 3 & 5 | $38.8 | $41.4 | $43.2 | $43.6 | $43.6 | $43.6 | $43.6 |
| Scenario 4 | | | | | | | |

Source: The Innovation Group.

# iGaming

In this section, we discuss the current iGaming landscape in the United States and present a forecast of iGaming revenue in Alaska.

We believe U.S. comparisons will provide the most realistic projections compared to international comparisons. While Europe has mature iGaming markets, Europe lacks large brick-and-mortar casinos. Because of this, we generally don't look to the European markets as comparable to the U.S. markets. Instead, we look domestically, with the primary example of a thriving iGaming market being New Jersey. Following our overview of iGaming in the U.S., we outline our forecast methodology and provide revenue estimates for Alaska iGaming.

Just as cities and states offer reduced tax rates in economic development zones, we believe that states should aim to incent businesses that create local economic impact. Typically, iGaming suppliers are located out of state or even abroad, so iGaming revenue provides minimal local economic impact. It is also generally higher margin, as it is not labor intensive. As such we recommend an environment where iGaming is taxed at a higher rate than brick-and-mortar gaming. A lower tax rate on iGaming than on brick-and-mortar gaming creates a situation where casinos would rather have their guests playing online than in the casino, a scenario which produces both lower income and lower economic benefit to the state.

## *U.S. iGaming Landscape*

Below we describe the iGaming market in the six states that have launched legal forms of online gambling: Delaware, Nevada, New Jersey, Michigan, Pennsylvania, and West Virginia. Delaware, Nevada, and New Jersey were early adopters of iGaming, launching their first online gambling sites in 2013. In July 2019, Pennsylvania became the next state to launch legal online gambling sites followed by West Virginia in July 2020. Michigan is the latest state to launch iGaming operations with sites hitting the market in January 2021. Several additional states have interactive (online) lottery products, but these are not discussed here. Mobile and online sports betting are discussed in the sports betting section of this document.

States implementing iGaming are required to make many regulatory decisions, such as who is eligible for licensure, which games to allow and whether license holders may operate multiple brands via sublicenses, or "skins". In all states except Nevada and Pennsylvania, iGaming licensure is open only to brick-and-mortar casino operators. The chart below summarizes how U.S. states have approached which games and number of skins to allow.

**Table 185: Comparison of U.S. iGaming Implementation**

| State | Games Allowed | Skins per License holder |
|---|---|---|
| Delaware | Slots, tables, and poker | 1 |
| Nevada | Poker only | 1 |
| New Jersey | Slots, tables, and poker | 5 |
| Pennsylvania | Slots, tables, and poker | Unlimited |
| West Virginia | Slots, tables, and poker | 3 |
| Michigan | Slots, tables, and poker | 2 |

Source: The Innovation Group.

## Delaware

Online gambling in Delaware was legalized in 2012, and the first online gambling sites launched in 2013. Since inception, Delaware has allowed online poker, slots, and table games through a single platform manager. Each of the state's three brick-and-mortar casinos has an online gambling license and a path to the online gambling system. In 2015, the state signed a liquidity agreement with Nevada, allowing poker players from both states to play against each other. In 2018, New Jersey joined this agreement.

**Table 186: Delaware Annual iGaming Revenue**

| Year | GGR |
|---|---|
| 2013 [1] | $251,397 |
| 2014 | $2,098,532 |
| 2015 | $1,798,931 |
| 2016 | $2,906,886 |
| 2017 | $2,391,942 |
| 2018 | $2,591,130 |
| 2019 | $3,569,678 |
| 2020 | $8,448,034 |
| 2021 [2] | $10,207,899 |

Source: Delaware Lottery
[1] iGaming began November
[2] Annualized based on 1H2021

Between its first full year of operations and 2019, gross iGaming revenue grew on average 11% annually, while brick-and-mortar casino revenue has remained flat. In 2019, iGaming revenue represented roughly one percent of brick-and-mortar casino revenue. iGaming revenue doubled in 2020 due to the global pandemic; despite this growth, iGaming revenue represents less than three percent of brick-and-mortar casino revenue.

The tax environment for online gaming in Delaware is as follows: the first $3.75 million generated industry-wide go to the state, and marginal revenue is taxed at 43.5% for slots and 29.4% for tables. An additional 10% of slot revenue and 4.5% of table revenue goes to the horse racing industry. Prior to 2020, online gambling GGR was effectively taxed at 100% since statewide revenue totals had yet to exceed the $3.75 million threshold.

## Nevada

Online poker was legalized in February 2013, and the player pool was restricted to adults located within Nevada. In 2015, the state signed a liquidity agreement with Delaware, allowing poker players from both states to play against each other. Despite many companies applying for poker licenses, only three providers have ever offered licensed real money online poker in Nevada. Due to the limited number of players, the market struggled to gain traction. Ultimate Poker, which opened to players in early 2013, shut down in November 2014. The other two – WSOP.com and Real Gaming Online Poker – opened in late 2013 and early 2014 respectively, and while both still exist, the Nevada Gambling Control Board stopped publishing revenue reports due to low revenues from online gambling. Online poker revenue is subject to the same 6.75% state tax imposed on land-based gaming revenue.

## New Jersey

Online gambling in New Jersey was legalized in February 2013 with passage of Bill A2578, and the first online gambling sites began operating in November of that same year. Each license holder is allowed five skins, or sites. Currently, there are 7 land-based casinos offer an online gaming option and 33 total authorized sites.

**Table 187: New Jersey Annual iGaming Revenue**

| Year | GGR |
|---|---:|
| 2013 [1] | $8,371,486 |
| 2014 | $123,096,896 |
| 2015 | $149,029,795 |
| 2016 | $196,858,746 |
| 2017 | $246,018,441 |
| 2018 | $299,076,588 |
| 2019 | $483,148,127 |
| 2020 | $971,640,789 |
| 2021 [2] | $1,335,392,632 |

Source: New Jersey Division of Gaming Enforcement
[1] iGaming began November 2013
[2] Annualized based on 1H2021

New Jersey offers a full online casino experience, allowing operators to offer slots, poker, and table games, such as blackjack or craps. Players may create and fund an account from anywhere in the world; however, they must physically be inside New Jersey in order to play. Between 2014 and 2019, gross iGaming revenue grew on average 32% annually, while brick-and-mortar casino revenue remained flat. In 2019, iGaming revenue represented 15.2% of the state's gaming revenue (brick-and-mortar casinos plus iGaming). This increased to nearly 50% in 2020 due to the global pandemic.

Online gambling GGR is subject to a 15% state tax and an additional 5% of GGR goes to the Casino Reinvestment Development Authority (CRDA). By comparison, brick-and-mortar gaming revenue is subject to an 8% state tax and an additional 2.5% community investment alternative tax. The iGaming tax rate being higher than the brick-and-mortar tax rate reflects both the higher

margins present in online gaming and the fact that the economic impact from online gaming – with suppliers abroad and across the US – is primarily out of state, as we discussed above.

## Pennsylvania

In October 2017, Pennsylvania legalized online versions of poker, casino games, daily fantasy sports, and sports betting. The state's first two online casinos launched on July 15th, 2019, and ten total online casinos currently operate. While the sites are accessible to those outside of the state, players must be within Pennsylvania state lines in order to make deposits and real money wagers.

**Table 188: Pennsylvania Annual iGaming Revenue**

| Year | GGR |
|---|---|
| 2019 [1] | $33,599,749 |
| 2020 | $565,157,898 |
| 2021 [2] | $1,708,841,894 |

Source: Pennsylvania Gaming Control Board
[1] iGaming began July 2019
[2] Annualized based on 1H2021

In 2020, iGaming revenue represented nearly one-quarter of the state's gaming revenue (brick-and-mortar casinos plus iGaming). Online gaming tax rates vary based on the revenue source: online table games and poker are taxed at 16% while online slot revenue will be taxed at 54%. These are the same rates that apply to brick-and-mortar slot and table revenue.

## West Virginia

West Virginia legalized online casinos in March 2019 with passage of the West Virginia Lottery Interactive Wagering Act. The law allows each of the state's five land-based casinos to apply for a permit to offer online poker and casino games. The state's first online casino launched in July 2020, and currently there are two operators in the market. Online gambling revenue is taxed at 15%. By comparison, revenue from video lottery terminals in the state are taxed at 49% and table revenue is taxed at 35%.

**Table 189: West Virginia Monthly iGaming Revenue (2021)**

| Month | GGR |
|---|---|
| January | $3,386,287 |
| February | $3,448,361 |
| March | $3,947,068 |
| April | $3,792,428 |
| May | $5,346,648 |
| June | $4,739,948 |
| **1H2021** | **$24,660,741** |
| **2021 [1]** | **$51,042,832** |

Source: West Virginia Lottery
[1] Annualized based on 1H2021

## Michigan

In 2019, Michigan passed the Lawful Internet Gaming Act legalizing online casinos. The law allows each of the state's land-based commercial and tribal casinos to apply for a permit to offer online poker and casino games. Online casinos launched in the state in January 2021 and currently there are 14 licensed iGaming operators. Online gambling revenue is taxed on a sliding scale ranging from 20 to 28% based on adjusted gross receipts. For context, commercial land-based casino revenue is taxed at 19% (8.1% to the state + 10.9% to the city).

**Table 190: Michigan Monthly iGaming Revenue (2021)**

| Month | GGR |
|---|---|
| January | $27,538,672 |
| February | $75,188,016 |
| March | $88,711,907 |
| April | $88,869,106 |
| May | $89,064,106 |
| June | $66,193,027 |
| **1H2021** | **$435,564,835** |
| **2021 [1]** | **$901,532,634** |

Source: Michigan Gaming Control Board
[1] Annualized based on 1H2021

## States Close to Legal iGaming

The latest state to legalize iGaming is Connecticut. In March 2021, Connecticut reached an agreement with the state's two federally recognized tribes, the Mohegans and the Mashantucket Pequots on a revised gaming compact permitting iGaming. iGaming in the state is expected to launch in Fall 2021, subject to federal approval of the revised gaming compact. Many states and tribes have begun renegotiating gaming compacts to include sports betting, which spark a broader trend of tribal entities entering the iGaming space. Additionally, several states introduced iGaming bills in their state legislatures this year, including Illinois (HB3142) and Indiana (SB417).

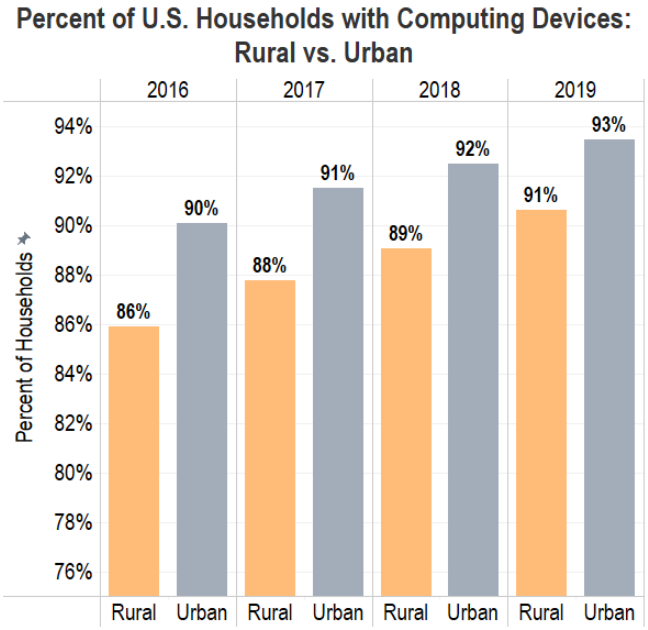
# *Methodology*

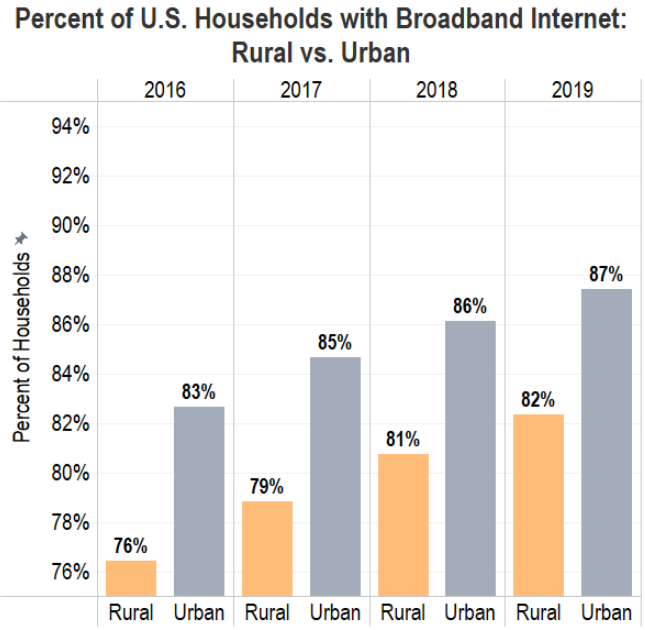
The Innovation Group used a multi-step process to estimate Alaska iGaming revenues. The process is highlighted in the section that follows. As the above competitive landscape section illustrated, there is only one mature online gambling market in the United States: New Jersey. We consider New Jersey's history and how other recent markets have launched in developing forecasts for Alaska's market.

## Internet and Mobile Device Accessibility

As part of our iGaming modeling, The Innovation Group assessed Internet access statistics within the state of Alaska that have implications for future demand for internet gaming. National statistics are used as benchmarks to provide context for local trends.

In general, Internet accessibility varies based on urban-rural classification: urban households tend to have higher rates of computing device ownership and broadband internet access than rural households. The following figure illustrate this trend using national statistics from the Census Bureau's American Community Survey (ACS). While the urban-rural gap has shrunk over time, rural households still own computing devices and subscribe to broadband internet at lower rates than their urban counterparts.

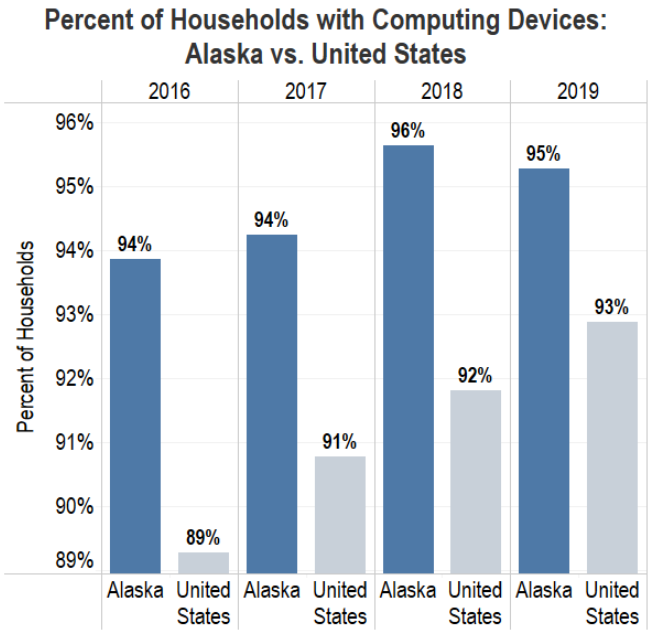


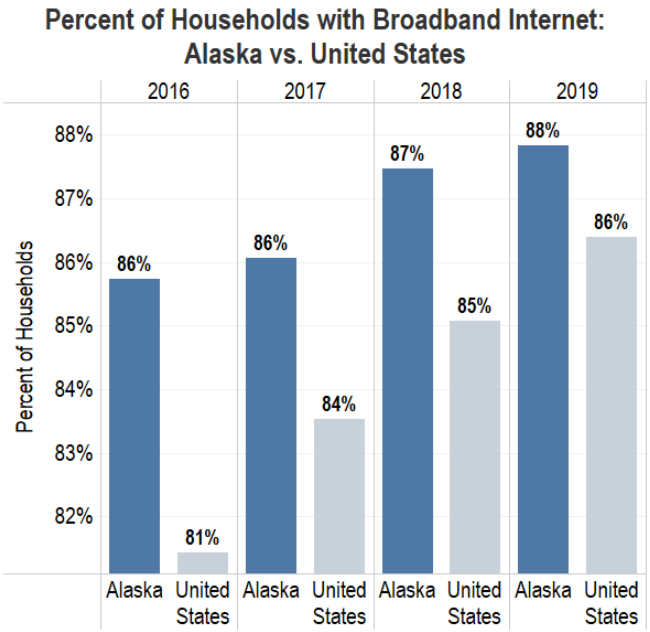




Source: American Community Survey

In 2019, one-third (33%) of Alaskan households were classified as rural compared to one-fifth (20%) nationally. As the figures below illustrate, Alaskan households are more likely to own at least one computing device and subscribe to broadband internet than the national average despite the higher incidence of rural households and the urban-rural internet accessibility divide. As Table

191 shows, this trend is driven by above average rates in urban areas while rural rates are near the national average.




Source: American Community Survey

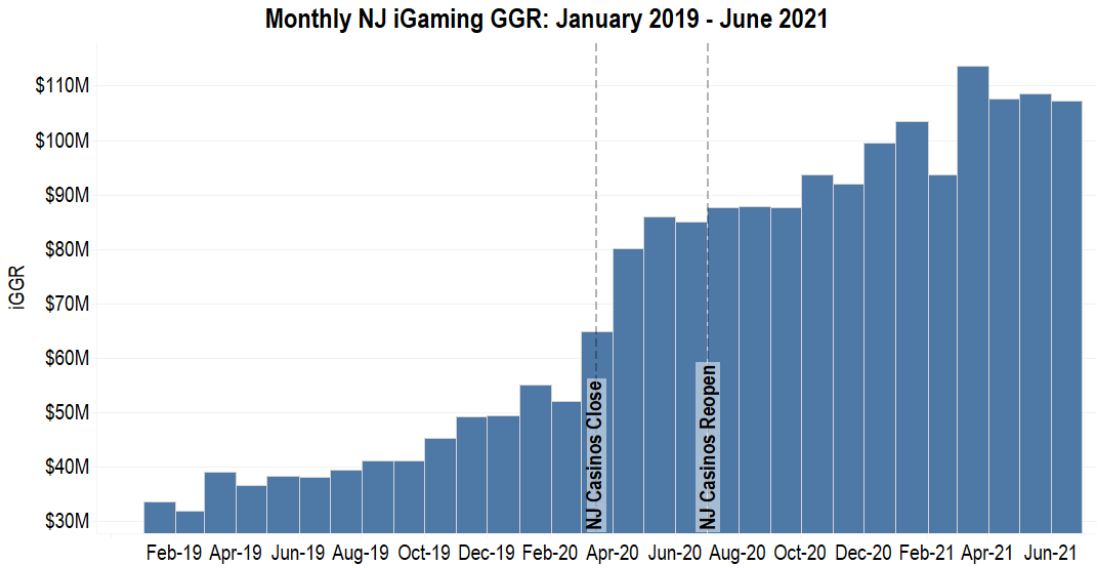
**Table 191: 2019 Computer Ownership and Internet Access – Rural vs. Urban**

| | Percent of Households with Computing Devices | | Percent of Households with Broadband Internet | |
|---|---|---|---|---|
| **Geography** | **Rural** | **Urban** | **Rural** | **Urban** |
| Alaska | 93% | 97% | 81% | 91% |
| United States | 91% | 83% | 82% | 87% |
| **Variance** | **+2%** | **+14%** | **-1%** | **+4%** |

Source: American Community Survey

## COVID-19 Impact

The COVID-19 pandemic had a profound impact on iGaming. As the figure below illustrates, growth in monthly New Jersey iGaming GGR accelerated while brick-and-mortar casinos temporarily closed to stop the spread of the coronavirus, and eleven months after casinos reopened iGaming revenues remain at an unprecedented level. It remains to be seen whether this growth represents a permanent shift in iGaming volumes or a temporary pandemic-related effect that will eventually return to pre-pandemic levels, though we see little evidence to support a reversion to pre-pandemic levels so far.




It is also unclear if the pandemic iGaming growth effect holds for newly launched iGaming markets and to what extent pandemic-related iGaming growth should influence our estimation of the Alaska iGaming market size. To answer this, we look at two states that launched iGaming sites during the pandemic: West Virginia and Michigan. West Virginia iGaming launched in July 2020 and Michigan launched in January 2021. We used 2021 iGaming revenues to date along with gaming-eligible population to estimate annualized spend per adult for each state. The results are summarized in the chart below. West Virginian adults spent an estimated $33 on average on iGaming while estimated spend per adult in Michigan is nearly four times higher.

**Table 192: 2021 Spend per Adult for West Virginia & Michigan**

| | West Virginia | Michigan |
|---|---|---|
| Days Operating [1,2] | 186 | 160 |
| iGGR (as reported) | $24.7 | $435.6 |
| iGGR (annualized) | $48.4 | $993.6 |
| Population Age 21+ | 1,449,551 | 7,594,761 |
| Annualized Spend per Adult | $33.4 | $130.8 |

Sources: Michigan Gaming Control Board, West Virginia Lottery, ESRI
[1] West Virginia reports weekly data. Time period under study: 12/27/2020 – 6/30/2021
[2] Michigan iGaming launched 1/22/2021. Time period under study: 1/22/2021 – 6/30/2021

To put these estimated per capita spending numbers in context, we show spend per adult by market and year for all legalized U.S. iGaming markets. As the chart below shows, Michigan's year-to-date performance is in line with a mature New Jersey market, while West Virginia's spend per adult is closer to New Jersey's per capita spend in its early ramp up years. Our analysis of comparable markets shows a wide range of potential outcomes for the Alaska iGaming market; therefore, we use a range of per capita spend assumptions when forecasting the Alaska iGaming market size.

**Table 193: Annual iGaming Spend per Adult for Legal U.S. iGaming Markets**

| State | Calendar Year [1] | Year of iGaming Operations | Spend per Adult |
|---|---|---|---|
| New Jersey | 2020 | 7 | $196.3 |
| New Jersey | 2021 | 8 | $195.2 |
| Pennsylvania | 2020 | 1 | $173.6 |
| Pennsylvania | 2021 | 2 | $173.1 |
| **Michigan** | **2021** | **1** | **$130.8** |
| New Jersey | 2019 | 6 | $71.5 |
| New Jersey | 2018 | 5 | $44.5 |
| New Jersey | 2017 | 4 | $36.8 |
| **West Virginia** | **2021** | **1** | **$33.4** |
| New Jersey | 2016 | 3 | $29.7 |
| New Jersey | 2015 | 2 | $22.6 |
| New Jersey | 2014 | 1 | $18.8 |
| Delaware | 2020 | 7 | $13.6 |
| Delaware | 2021 | 8 | $13.4 |
| Delaware | 2019 | 6 | $4.8 |
| Delaware | 2016 | 3 | $4.1 |
| Delaware | 2018 | 5 | $3.5 |
| Delaware | 2017 | 4 | $3.3 |
| Delaware | 2014 | 1 | $3.0 |
| Delaware | 2015 | 2 | $2.6 |

Sources: Gaming Regulatory Bodies, ESRI
[1] 2021 numbers annualized based on 1H2021

## Alaska iGaming GGR Projections

To forecast iGaming revenue in Alaska, we apply a spend per adult on iGaming revenue to forecasted Alaska adult population. We provide a downside forecast, an upside forecast, and our own internal forecast as guidance. Note that in this process, we assume a 40% tax rate and a monopoly operation from a partner with a national brand. While we believe this will limit the market size due to reduced competition, we think that given the size of the state and the associated smaller market for multiple operators to compete over, this approach will maximize the tax revenues to the state.

For our downside forecast, we look to 2021 year-to-date in West Virginia, at $33 per capita spend. This is around one quarter of the Michigan 2021 year-to-date per capita spend. With both of these data points coming from year 1 of operations in their respective states, we believe that Alaska will certainly achieve the lower number by its 5th year of operations. We note that we believe Alaska will easily surpass the early-stage New Jersey per-capita numbers, since New Jersey's launch was laden with technological and operational issues. A letter released by the New Jersey Division of Gaming Enforcement discussing the one-year anniversary of iGaming operations stated, "[The

iGaming providers] thought they would be able to flip a switch and start up their current system here. They quickly found out that was not going to happen."[8]. Issues such as geolocation and payment processing hindered early market growth. With these issues resolved and providers now experienced operating in a regulated U.S. environment, we believe Alaska will be able to hit the ground running. Delaware, for its part, has had a troubled iGaming launch from the start. It is run through the lottery with no national brands involved in the marketing, and it was never able to get the level of trial that we believe would come from a branded provider. It is also worth noting that West Virginia's mobile sports betting rollout had massive technological problems in 2019, resulting in the inability to bet on several mobile apps during March Madness. This may have reduced West Virginians' propensity to trial iGaming platforms.

For our upside estimate, we look to New Jersey year 5 (2019) at $72 per capita. New Jersey - with an open market, many operators, and ample marketing and brand synergies with the multitude of land-based operators in the state - should achieve a higher per capita spend than Alaska in our view. Note that we compared to 2019 data for New Jersey, in order to avoid the effects of increased trial due to COVID-related closures.

Our internal forecast for the state is $56, yielding a year 5 revenue of $31 million, based on our best judgment related to the internal weighting of comparables and inflation estimates. The table below summarizes our forecast for the Alaska iGaming market size by Year 5.

**Table 194: Year 5 Alaska iGaming Forecast**

| | Per Capita (21+) | iGaming GGR |
|---|---|---|
| Downside | $33 | $18,420,270 |
| Upside | $72 | $40,189,680 |
| **Forecast** | **$56** | **$31,258,640** |

Source: The Innovation Group.

The following table contains our forecast for Alaska iGaming revenue over the first seven full years of operations. The market is expected to grow from $17M in Year 1 to stabilized market size of $30M in Year 3. After Year 3, an annual spend per capita growth rate of 2% per year is forecast.

**Table 195: Alaska iGaming 7-Year Revenue Forecast**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---|---|---|---|---|---|---|---|
| Downside | $10,086,369 | $15,479,404 | $17,597,047 | $18,003,954 | $18,420,270 | $18,846,213 | $19,282,004 |
| Upside | $22,006,624 | $33,773,244 | $38,393,558 | $39,281,355 | $40,189,680 | $41,119,009 | $42,069,828 |
| **Forecast** | **$17,116,263** | **$26,268,079** | **$29,861,656** | **$30,552,165** | **$31,258,640** | **$31,981,452** | **$32,720,977** |

Source: The Innovation Group.

[8] https://www.nj.gov/oag/ge/2015news/Internetgamingletter.pdf

For the purpose of fiscal forecasting, Year 1 is assumed to be calendar year 2023 and the gaming tax is estimated at 40%.

**Table 196: Alaska iGaming 7-Year Gaming Tax Forecast**

| 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| $6,846,505 | $10,507,232 | $11,944,662 | $12,220,866 | $12,503,456 | $12,792,581 | $13,088,391 |

Source: The Innovation Group.

With the addition of iGaming revenue into the Alaska gaming environment, it is worth noting that we did not forecast a reduction in the brick-and-mortar casino revenues. This is generally based on the experience of New Jersey's brick-and-mortar casinos and the opinions of several New Jersey casino operators, which failed to register meaningful declines in visitation or customer spending post-iGaming implementation. Some casinos noted a boost in brick-and-mortar performance from players that had trialed their iGaming product, claiming to have benefitted from the brand exposure. We note, though, that New Jersey's regional market has also changed a lot in recent years, with new gaming developments and forms of gaming in Pennsylvania and New York and casino closures, openings, and reopenings in Atlantic City providing limited ability to definitively assert the impact of iGaming on brick-and-mortar casinos.

# SPORTS BETTING

In this section, we present a forecast of sports wagering revenue in Alaska. Our research focused on US and worldwide market comparisons to gauge performance across the world.

In May 2018, the Supreme Court of the United States ruled in favor of New Jersey in *Murphy v. NCAA*, overturning PASPA, the Professional and Amateur Sports Protection Act. PASPA was the legislation that effectively rendered sports betting illegal in most of the United States. This SCOTUS ruling puts the legislation and regulation of sports wagering in the hands of the states. In addition to Nevada, many states, such as New Jersey, Delaware, Pennsylvania, Mississippi, New York, West Virginia, and Michigan have already passed legislation legalizing sports wagering, and several other states have bills being considered in their legislatures.

The Innovation Group built its revenue projections by studying US and worldwide sports betting markets. We used our research on legislative environments from across the globe where sports betting is already legal to develop a forecast model that we then tuned to the specific conditions expected in the Alaska market.

## *Revenue Comparables*

To identify comparables with both brick-and-mortar and mobile, we look both internationally and domestically. The following table contains revenue per adult data for markets with in-person and mobile sports wagering.

**Table 197: Brick-and-Mortar + Mobile Only Comparables**

| | Sports GGR [7] | Gamer Pop | Win Per Adult (21+) |
|---|---|---|---|
| Denmark [1,2,3] | $377,023,368 | 4,455,621 | $85 |
| United Kingdom [4,5,6] | $6,740,894,297 | 50,381,611 | $134 |
| Colorado | $256,898,127 | 4,341,087 | $59 |
| Illinois | $615,008,572 | 9,445,609 | $65 |
| Indiana | $349,503,419 | 5,028,813 | $70 |
| Iowa | $139,738,995 | 2,368,537 | $59 |
| Michigan | $311,838,500 | 7,594,761 | $41 |
| Nevada | $527,269,567 | 2,337,748 | $226 |
| New Jersey | $881,326,587 | 6,774,008 | $130 |
| Pennsylvania | $583,783,008 | 9,842,163 | $59 |
| Rhode Island | $45,024,758 | 816,633 | $55 |
| Washington D.C. | $29,938,865 | 555,295 | $54 |
| West Virginia | $46,491,048 | 1,449,551 | $32 |
| Oregon | $40,433,168 | 3,244,656 | $12 |
| New Hampshire | $49,371,904 | 1,076,025 | $46 |
| Tennessee | $234,154,969 | 5,263,332 | $44 |
| Virginia | $304,209,332 | 6,488,467 | $47 |

[1] Revenue: https://www.spillemyndigheden.dk/uploads/2021-06/The%20Gambling%20Market%20in%20Numbers%202020.pdf

[2] Used conversion rate of .1500USD=1DKK, 2019 weighted avg (https://www.x-rates.com)

[3] Adult population per http://www.statbank.dk/FOLK1A, used 2019Q4 data

[4] Revenue GBP1.8B online + GBP3.2B live (https://www.gamblingcommission.gov.uk/statistics-and-research/industry-statistics/series/industry-statistics-2021)

[5] Conversion rate of 1.28USD=1GBP, 2019 weighted avg (https://www.x-rates.com)

[6] Used 2019 populations by age (https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland)

[7] Annualized 2021 for U.S. states using Nevada historical monthly revenue distribution, FY 2019 for international comps

We make several notes from this data. First, Great Britain is an incredibly mature market with a wide array of online options. Sports betting shops abound – there are approximately 9,000 retail sports betting shops in the UK. Additionally, eight of the 20 teams (40%) in England's Premiership are kit-sponsored (i.e., name on their jersey) by betting companies. While an ongoing review of the UK's Gambling Act may ultimately ban gambling sponsorship in soccer, the current practice points to a marketing and advertising environment that is mature and friendly to betting companies. These differences make us believe that the UK estimate is higher than what we'd experience in a US jurisdiction with online betting, despite the breadth of sports leagues (both college and professional) available to bet in the US.

By contrast, we believe Denmark to be a reasonable comp for a mature, fully stabilized U.S. online sports betting environment with open licensure. Onshore betting in Denmark was a state-run

monopoly until 2012, when licenses were issued and many of the offshore operators became licensed. While betting shops in Denmark provide a distribution advantage over casino only, we note that (1) the betting shop market is still maturing and being introduced to new competition there, (2) the US arguably has a stronger sports culture with several professional and collegiate sports leagues, and (3) mobile and online betting in the U.S. should absorb much of the impact of not having a convenience store-type distribution.

Lastly, we consider domestic comps. Fifteen states offer either mobile only or mobile and in-person wagering options. However, we do not feel all fifteen are reasonable comparisons for the Alaska market. On the high end are Nevada and New Jersey, which have win per adult exceeding $100. General gambling-oriented visitation to Nevada makes it an inappropriate comparison, and likewise New Jersey sports revenue is high owing to border play near New York City, where sports betting is not yet legally available. At the low revenue end of the spectrum, states/jurisdictions we do not believe are reasonable comps – whether for a structural reason or because we have too little data to make a comparison – are:

- **Michigan**: Michigan is one of five states to launch sports betting in 2020. Brick-and-mortar sports wagering launched in March 2020, shortly before sports leagues and casinos shutdown due to the coronavirus pandemic. Mobile wagering did not begin until January 22, 2021, well after leagues returned to play.
- **Washington, D.C.**: Commercial operators may only open retail sportsbooks, while D.C. Lottery has a monopoly on the mobile market with its GambetDC product, powered by Intralot. In most jurisdictions, we see a larger percentage of GGR come from mobile wagers compared to in-person wagers. This is not true in D.C. High prices on GambetDC seem to be driving bettors to retail books, which generated 70% more GGR than GambetDC in 1Q2021.
- **West Virginia**: In December 2018, mobile wagering began in West Virginia. Just a few months later vendor disputes left the state with no mobile wagering operators between March 2019 and August 2019; even some *brick-and-mortar* sportsbook operations were temporarily disrupted. While there are now five online sportsbooks operating in the state and increased regulations around online sports betting, we believe weakened consumer confidence caused by the early outages could be a factor in the industry's performance to date.
- **Oregon**: Oregon Lottery is the state's only online sports wagering provider. Tribes in Oregon may also offer sports wagering. Since tribal data is not reported, our win per visit estimate does not reflect all sports wagering activity in the state.

Additionally, we exclude Tennessee and Virginia from our comparison set. These states launched sports betting in 4Q20 and 1Q21 under a mobile only distribution model. While market performance to date can inform expected early market performance in Alaska, the Tennessee and Virginia sports betting markets are still ramping up, and we expect win per adult to grow as these markets mature.

The figures below represent a range of outcomes in Alaska in a stabilized year 5. To develop this forecast, we've assumed a monopoly model partnered with a national brand and a 40% tax rate, which makes the market most similar to New Hampshire. Our downside estimate, at $42 per capita,

is just below the year 1 result from New Hampshire, where DraftKings is the sole provider. The New Hampshire results should grow comfortably over the next several years, as we've seen in New Jersey and other markets, and we believe Alaska should certainly be able to achieve their year 1 results in a stabilized environment. We provide an upside scenario at $76 per capita, exceeding the year 1 performance of many of these comparable states but still below where we think they will end after ramp-up. Based on the lack of professional sports in the state and the inability to attract border play, our internal stabilized forecast of $60 is more in line with current performance in recently launched states, rather than what we believe those states will look after a full (and significant) ramp-up period.

**Table 198: Forecast Sports Betting Revenue Per (21+) Adult (Year 5)**

| | Range | TIG AK Forecast |
|---|---|---|
| With mobile option [1,2] | $42 - $76 | $60 |

[1] Based on Colorado, Illinois, Indiana, Iowa, Pennsylvania, Rhode Island, New Hampshire, and Denmark
[2] Data from benchmark states which are still growing or ramping up have been adjusted to reflect ramp up and nominal inflation

## *Mobile Sportsbook Revenue Forecasts*

We apply the range of revenues from above to forecasted population to arrive at a Year 5 revenue forecast.

**Table 199: Year 5 Alaska Sports Betting Forecast**

| | Per Capita (21+) | Sports Betting GGR |
|---|---|---|
| Downside | $42 | $23,443,980 |
| Upside | $76 | $42,422,440 |
| **Forecast** | **$60** | **$33,491,400** |

Source: The Innovation Group.

The table below shows forecasted statewide Alaska market revenue for the first seven years of sports betting assuming mobile wagering. Under this scenario, we estimate the market grows to a fully stabilized size of $32M in year 3. After Year 3, an annual spend per capita growth rate of 2% per year is forecast.

**Table 200: Alaska Sports Betting 7-Year Revenue Forecast**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---|---|---|---|---|---|---|---|
| Downside | $12,837,197 | $19,701,059 | $22,396,242 | $22,914,123 | $23,443,980 | $23,986,089 | $24,540,733 |
| Upside | $23,229,214 | $35,649,535 | $40,526,534 | $41,463,652 | $42,422,440 | $43,403,399 | $44,407,041 |
| **Forecast** | **$18,338,853** | **$28,144,370** | **$31,994,632** | **$32,734,462** | **$33,491,400** | **$34,265,841** | **$35,058,190** |

Source: The Innovation Group.

New Jersey and Pennsylvania offer some perspective into the mobile/brick-and-mortar revenue split. Both states saw mobile revenues make up more than 86% of total revenue in April 2021, with PA revenues maintaining 86% mobile in May and NJ mobile share rising to more than 90%.

While both of these states have a multi-operator market, which should strengthen overall performance, New Jersey has a challenged retail market, as its retail sportsbooks are generally inconvenient (drivetime) to the state's population centers. Ultimately, under the proposed model, we believe Alaska will stabilize at around 85%-90% mobile.

For the purpose of fiscal forecasting, Year 1 is assumed to be calendar year 2023 and the gaming tax is estimated at 40%.

**Table 201: Alaska Sports Betting 7-Year Gaming Tax Forecast**

| 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| $7,335,541 | $11,257,748 | $12,797,853 | $13,093,785 | $13,396,560 | $13,706,336 | $14,023,276 |

Source: The Innovation Group.

# SUMMARY

Table 202 compares the gaming taxes, job creation and capital investment forecast for Scenarios 1-5, which are described in the following bullets.

- Scenario 1, "Casinos Only": No VGT development in the state, casinos in Anchorage, Fairbanks and Juneau.
- Scenario 2, "Casinos and VGTs Out-Markets": Casinos in Anchorage, Fairbanks and Juneau; VGTs elsewhere. The casino revenue forecast is the same for Scenarios 1 and 2. VGT revenue is constrained by being prohibited in the three largest cities in the state.
- Scenario 3, "Casinos and VGTs All Markets": Casinos in Anchorage, Fairbanks and Juneau; VGTs permitted throughout the state. Casino revenue is lower but VGT revenue higher than Scenario 2.
- Scenario 4, "VGTs Only": VGTs permitted throughout the state but no casinos, iGaming, sports betting or lottery. The lack of casino competition results in higher VGT revenue.
- Scenario 5, "Open Market": Unlimited casino licenses and VGTs throughout the state. The dispersal of capital across smaller facilities diminishes the prospect of a stand-out resort being able to induce tourism and VIP play, leading to less table and amenity development, resulting in slightly fewer jobs relative to Scenario 3.

Sports betting, iGaming and lottery are assumed for all scenarios except Scenario 4. For each of the casino scenarios we perform a sensitivity analysis assessing the impact on capital investment and amenity development from four alternative gaming tax rates (10%, 15%, 20% and 25%). The gaming tax rate for VGTs, iGaming and sports betting is assumed to be 40% in all scenarios. As discussed in previous sections, iGaming and sports betting are not expected to be sensitive to other forms of gaming, while the lottery is expected to be affected by casino and VGT development.

**Table 202: Gaming Tax, Employment and Capital Investment Summary**

| | Casino Tax Rate | | | |
|---|---|---|---|---|
| | **10%** | **15%** | **20%** | **25%** |
| **1: Casinos No VGTs** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $24.6 | $36.9 | $49.2 | $59.7 |
| VGTs | $0.0 | $0.0 | $0.0 | $0.0 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $71.0 | $71.0 | $71.0 | $71.0 |
| Total | $120.3 | $132.6 | $144.9 | $155.4 |
| ***Direct Ongoing Jobs*** | 1,966 | 1,875 | 1,777 | 1,636 |
| ***Capital Investment*** | $473.1 | $416.2 | $355.5 | $269.7 |
| **2. Casinos & VGTs Out-Markets** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $24.6 | $36.9 | $49.2 | $59.7 |
| VGTs | $43.0 | $43.0 | $43.0 | $43.0 |

| | | | | |
|---|---|---|---|---|
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $54.1 | $54.1 | $54.1 | $54.1 |
| Total | $146.5 | $158.8 | $171.1 | $181.5 |
| | | | | |
| ***Direct Ongoing Jobs*** | 2,067 | 1,975 | 1,878 | 1,736 |
| ***Capital Investment*** | $473.1 | $416.2 | $355.5 | $269.7 |
| | | | | |
| **3. Casinos & VGTs All Markets** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $21.1 | $31.6 | $42.1 | $50.1 |
| VGTs | $66.0 | $66.0 | $66.0 | $66.0 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $43.2 | $43.2 | $43.2 | $43.2 |
| Total | $154.9 | $165.5 | $176.0 | $184.0 |
| | | | | |
| ***Direct Ongoing Jobs*** | 1,876 | 1,811 | 1,732 | 1,581 |
| ***Capital Investment*** | $375.7 | $318.0 | $270.9 | $202.0 |
| | | | | |
| **4. VGTs Only** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | - | | | |
| VGTs | $83.4 | | | |
| Sports/iGaming | - | | | |
| Lottery Transfers | - | | | |
| Total | $83.4 | | | |
| | | | | |
| ***Direct Ongoing Jobs*** | 271 | | | |
| ***Capital Investment*** | - | | | |
| | | | | |
| **5. Open Market** | | | | |
| ***Gaming Tax*** | | | | |
| Casinos | $22.6 | $32.9 | $41.3 | $46.5 |
| VGTs | $56.5 | $56.5 | $56.5 | $56.5 |
| Sports/iGaming | $24.7 | $24.7 | $24.7 | $24.7 |
| Lottery Transfers | $43.2 | $43.2 | $43.2 | $43.2 |
| Total | $147.1 | $157.4 | $165.7 | $170.9 |
| | | | | |
| ***Direct Ongoing Jobs*** | 1,818 | 1,750 | 1,620 | 1,474 |
| ***Capital Investment*** | $467.8 | $383.0 | $284.3 | $207.7 |

Source: The Innovation Group.

The above forecasts do not factor in the impact on charitable gaming since it is undetermined at this time what policy provisions might be made to mitigate impacts. As discussed in the Alaska Charitable Gaming section of the report, state taxes on charitable wagering is approximately $3 million per year, and net proceeds to charities were $36 million in 2019. Table 203 quantifies the impacts on charitable gaming from casino and VGT development. Additional impacts on pull-tab revenue and proceeds would be expected from instant scratch lottery games.

**Table 203: Impact on Charitable Gaming from Casino and VGT Development**

| | 2019 | 2025 No Action | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 |
|---|---|---|---|---|---|---|---|
| Adjusted Gross Income (AGI)* | $92.5 | $105.5 | $88.4 | $77.3 | $58.0 | $65.9 | $55.1 |
| Net Proceeds | $36.6 | $41.7 | $36.5 | $32.1 | $23.0 | $26.1 | $21.8 |
| State Taxes & Fees | $2.7 | $3.0 | $2.5 | $2.2 | $1.7 | $1.9 | $1.6 |

Source: AK Dept of Revenue; The Innovation Group. *AGI is comparable to Net Gaming Revenue

# ECONOMIC IMPACT ANALYSIS

## *Scenario Assessed*

In order to simplify the presentation of the economic impacts for ease of interpretation and understanding of results, The Innovation Group assessed one casino gaming implementation scenario for the state of Alaska (Scenario 2 with a 10% tax). This scenario includes the following key components: three casino resorts in the state with Anchorage, Fairbanks, and Juneau being the respective host cities; VGTs available outside of host city limits; sports betting and iGaming; and a gaming tax rate of 10% on gaming revenue. The gaming tax rate for VGTs, iGaming and Sports Betting is assumed to be 40% in all scenarios.

## *Economic Impact Analysis Overview*

The economic benefits—the revenues, jobs, and earnings—that accrue from the annual operations of an enterprise are termed ***ongoing*** impacts. The construction phase of a project is considered a ***one-time*** benefit to an area. This refers to the fact that these dollars will be introduced into the economy only during construction; construction impacts are expressed in single-year equivalence to be consistent in presentation with ongoing annual impacts.

The economic impact of an industry consists of three layers of impacts:

4. Direct effects
5. Indirect effects
6. Induced effects

The **direct effect** is the economic activity that occurs within the industry itself. The direct effect for casino operations represents the expenditures made by the facility in the form of employee compensation and purchases of goods and services (direct expenditures), which ultimately derive from patron spending on the casino floor, and patron spending on non-gaming amenities is an additional direct effect.

**Indirect effects** are the impact of the direct expenditures on other business sectors: for example, the advertising firm who handles a casino's local media marketing. Indirect effects reflect the economic spin-off that is made possible by the direct purchases of a casino. Firms providing goods and services to a casino have incomes partially attributable to the casino.

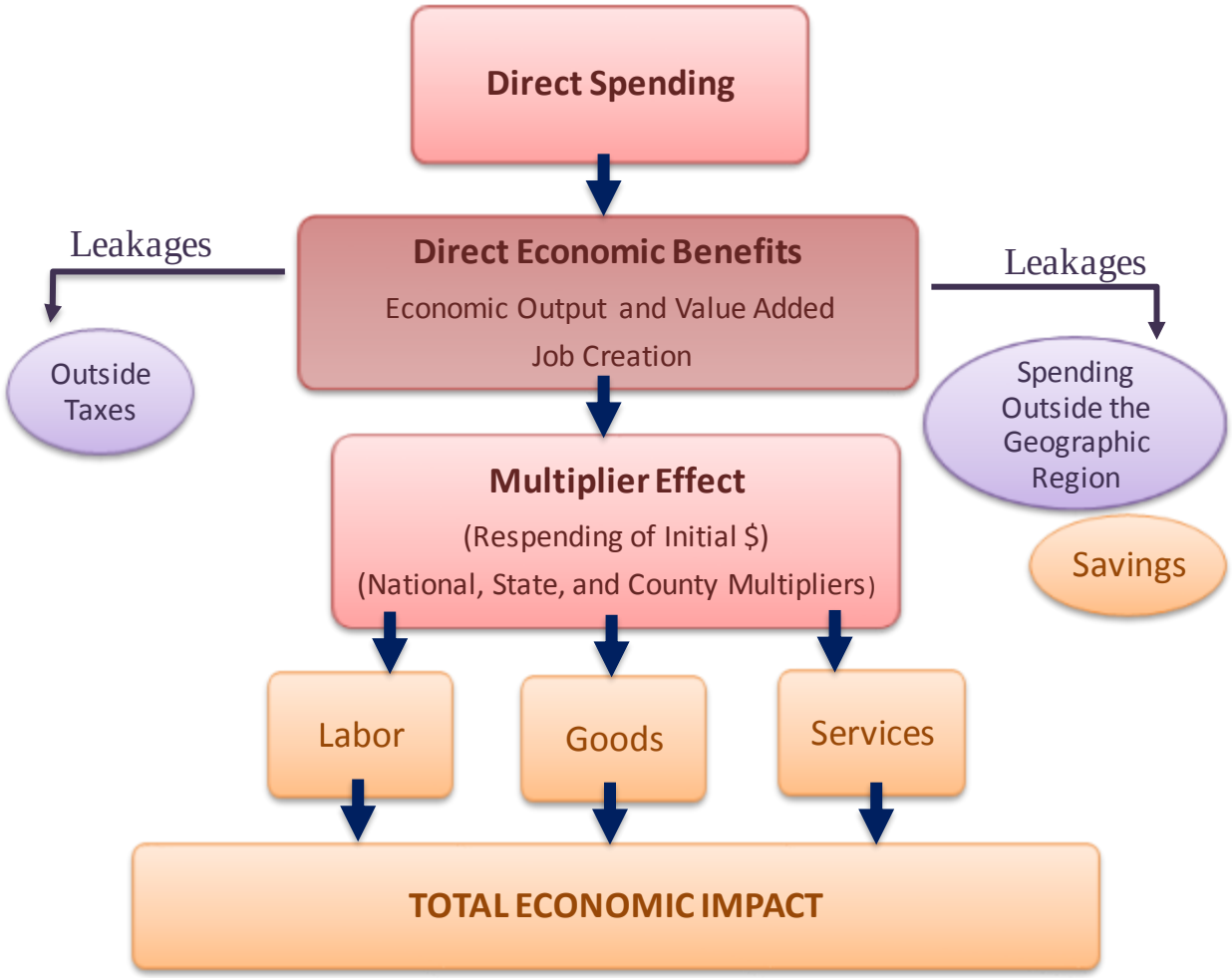
Finally, the **induced effects** result from the spending of labor income: for example, casino employees using their income to purchase consumer goods locally. As household incomes are affected by direct employment and spending, this money is recirculated through the household spending patterns causing further local economic activity.

The **total** economic impact of an industry is the sum of the three components.

Determining the direct economic impact is a critical first step in conducting a valid economic impact analysis. Once the direct expenditures are identified, the indirect and induced effects are

calculated using multipliers derived from an input-output model[9] of the economy. The IMPLAN input-output model identifies the relationships between various industries. The model is then used to estimate the effects of expenditures by one industry on other industries so that the total impact can be determined. Industry multipliers are developed based on U.S. Census data. IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis.

The following flow-chart shows how the economic impact model operates.




[9] IMPLAN 3.1 software and data were utilized for this study.

## *Economic Impact Modeling*

The IMPLAN tools utilized to model direct effects vary according to the type of data collected for each input segment. There are six types of economic activity changes that IMPLAN is designed to model for: industry, commodity, labor income, household income, industry spending pattern, and institutional (government) spending patterns. The most commonly used activity is an industry change, as the business generating a change in revenue, labor, or employment is often known and attributable to a specific industry sector.

The IMPLAN sectoring scheme is based on the 6-digit North American Industry Classification System (NAICS), developed under the auspices of the Office of Management and Budget (OMB), which classifies business establishments based on the activities they are primarily engaged in or the commodities they create. IMPLAN's current sectoring scheme aggregates the 2017 version of the NAICS classification scheme down to just 536 industry sectors. When an industry and the commodity produced by the industry have the same name, the commodity is considered the primary product of that industry and will share the same sector code. Other commodities produced by that industry are considered secondary products of that industry. Therefore, it is possible for more than one industry to produce a specific good or service.

When using the Industry Change function, the direct effect values are entered into IMPLAN using the appropriate sector and IMPLAN calculates the multiplier effects resulting from that direct spending. A commodity change will distribute the total demand or sales for the good or service as an industry change across all producing industries or institutions, based on their regional market share distribution of that commodity. For construction impacts, the Industry Change function was most appropriate for modeling the costs associated with land improvements and building related costs. Costs associated with purchases of Furniture, Fixtures and Equipment (FF&E) were modeled using the Commodity Change function. The Industry Change function was also utilized for casino-related amenity operations including Hotel, Food & Beverage, Entertainment and Other revenues.

For gaming-related operating impacts, it was determined to use the Analysis-by-Parts technique to avoid potentially over-estimating the multiplier effects of casino operations.

### Analysis-by-Parts for Gaming-Related Operating Impacts

The Analysis-by-Parts (ABP) differs from the traditional Industry Change Activity, as it separates out the multiplier effects into individual impact components, Intermediate Expenditure (indirect impacts from Type I multipliers) and Labor Income (induced impacts from Type II multipliers).[10] This allows for more flexibility and customization capabilities in the analysis to model actual business operations.

---

[10] Economic impact multipliers consist of Type I, which measures only business-to-business purchases (indirect). Type II multipliers in the Bureau of Economic Analysis method measure the effects of local Household spending (induced). SAM (social accounting matrix) multipliers in the IMPLAN systems measure the combined indirect and induced effects.

For the Labor Income (LI) component we used a Labor Income Change activity to analyze the impact of the payroll of casino operations necessary to meet the demand or production level. The direct input for Labor Income in the casino analysis consisted of Employee Compensation from our operating pro forma models.

For Intermediate Expenditures (IE), we import an Industry Spending Pattern to specify the goods and services of industry purchases needed for the sector 503 - Gambling industries (except casino hotels) in order to satisfy projected casino revenues. The purchase of these goods and services from local sources actually represents the first round of indirect purchases by the casino industry. The coefficients listed in an Industry Spending Pattern represent the amount spent on each commodity to produce one dollar of the industry's output, while the sum of all commodity coefficients equals total intermediate expenditures used by that industry sector.

Since the ABP technique shifts the direct inputs to indirect and induced impact results, the direct effects of these components are imputed using our proforma operating statements.

## Multipliers

As shown in the following table, the standard data from IMPLAN for Sector 503-Gambling Industries (Except Casino Hotels) at the state level showed Other Property Income (OPI) at approximately 35% of total Output per Worker. Based on our experience analyzing the economic impacts of gaming within states that have existing casino resort operations and our knowledge of casino industry profitability, The Innovation Group believes this is an appropriate OPI to total Output per Worker ratio. We believe the Alaska state data within IMPLAN will provides realistic estimate of casino profitability and the corresponding economic impacts that will flow through the state's economy due to the introduction of gaming.

**Table 204: IMPLAN Industry Sector 503 – Alaska State Data**

| Industry Ratio | Value | % |
|---|---|---|
| Employment Compensation (EC) | $24,968 | 20% |
| Proprietor Income (PI) | $2,969 | 2% |
| Other Property Income (OPI) | $43,239 | **35%** |
| Tax on Production & Imports (TOPI) | $2,896 | 2% |
| ***Value Added*** | ***$74,072*** | ***60%*** |
| Intermediate Expenditures (IE) | $50,059 | 40% |
| **Output per worker** | **$124,131** | |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

Compared to other industries with lower profitability levels, the gaming industry's multipliers are lower since more of the output is shifted away from Intermediate Expenditures into Other Property Income (OPI). Multipliers are not applied to OPI in an economic impact analysis since it does not stimulate any additional impacts that can be attributed to the study area. For example, corporate profits from a casino operation may accrue to a company based in another state, effectively a leakage from the model. In other words, by generating higher OPI, more of the Output is effectively leaked out of state, and the multiplier effect is reduced. Figure 19 illustrates.

**Figure 19: IMPLAN Modeling Components**

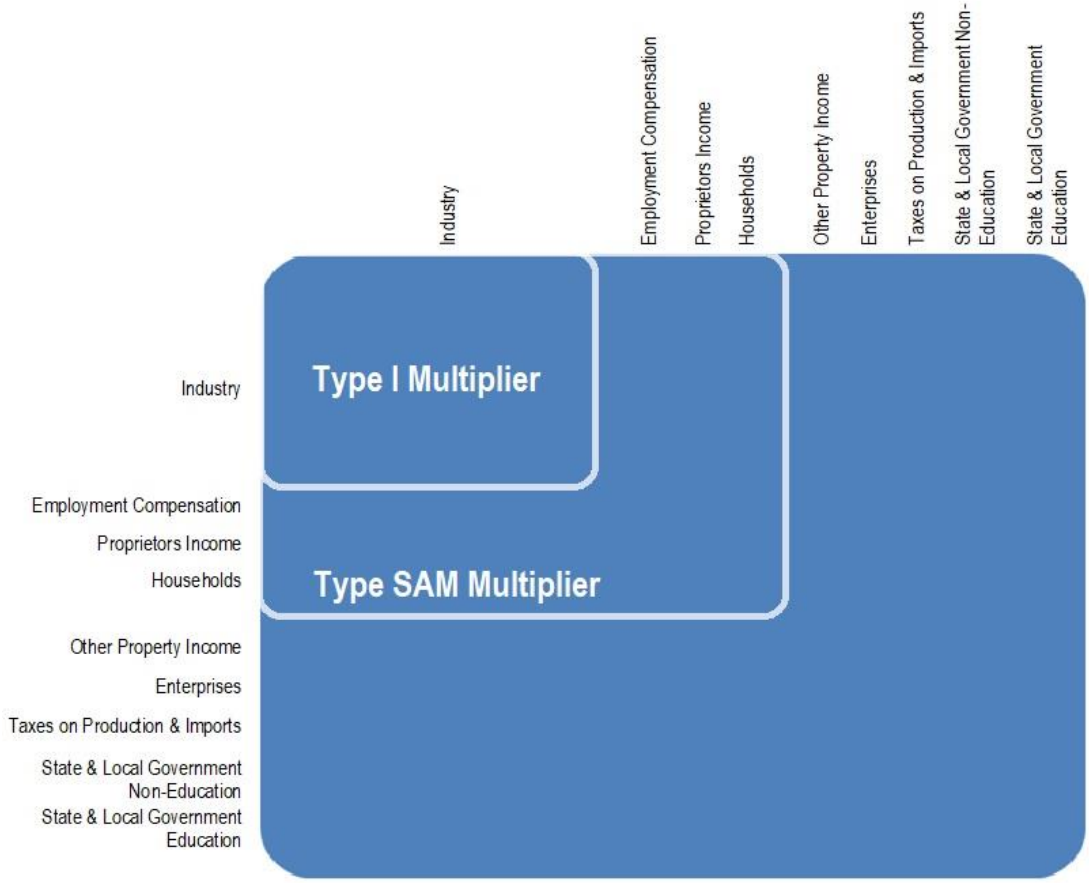



Table 205 shows the output multipliers for the Alaska state model for industry sector 503, Gambling Industries (Except Casino Hotels). To illustrate, an increase in direct effect of $1,000,000 would produce a total effect of $1,480,000 in the model.

**Table 205: Output Multipliers for IMPLAN Industry Sector 503 – Alaska State**

| Multiplier | Standard Model |
|---|---|
| Type I | 0.27 |
| Type II | 0.22 |
| **Total (SAM)** | **0.48** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

The Analysis-by-Parts method results in a much more conservative and we believe realistic estimate of the indirect and induced (or multiplier) effects of the operation of the casino component. The inputs into the IMPLAN casino model consist solely of the proforma estimates of employee compensation and purchases by the casino of goods and services. Operating profit and gaming taxes are excluded from the multiplier effect, although they are included in the displays of direct effects.

## A Note on Substitution

Casino development frequently elicits concern that a substitution of consumer spending (the substitution effect) will negatively impact local businesses, especially smaller "mom and pop" retail, restaurant, and other entertainment industries. Intuitively it seems to be logical that spending at a casino would be diverted from other consumer activities such as going to a movie or taking a trip to the beach. However, numerous empirical studies have failed to find any conclusive evidence of significant economic substitution after the introduction of new casinos, nor is there any conclusive evidence as to the amount of spending that is substituted or the industry that it would have otherwise been spent in.

It is likely that countervailing positive effects dilute or outweigh any substitution that occurs. First, there is the increased household income in the area from casino employment. Secondly, there is a substantial body of research and case studies demonstrating the positive impacts that casinos have on surrounding local businesses. A review of studies of casino impacts on local business shows that casinos can stimulate local economies, resulting in communitywide growth, including in the local food and beverage business and retail businesses. Casino visitors stop at local retail outlets and restaurants in addition to some overnight casino guests patronizing local non-casino hotels.

Since these off-property impacts were not included in this economic impact analysis, it was determined after careful consideration that any substitution effects that may occur in the state as a result of legalized gaming operations would not be modeled in the economic impact analysis.

## Interpreting Results

The IMPLAN analysis expresses impacts (direct, indirect, and induced) for the following four economic variables:

**Employment** is measured in IMPLAN and by the U.S. Census as headcount, in other words the number of full and part-time workers supported by an economic activity.

**Labor Income** (LI) is compensation to all workers both employees and owners in terms of wages and salaries as well as benefits and payroll taxes. Profits from self-employed businesses can also be included in this category as compensation to the owner. These are known as employment compensation (EC) and proprietor income (PI) in IMPLAN. $LI = EC + PI$

**Value-Added** (VA) measures the industry or event's contribution to Gross Domestic Product (GDP). It consists of labor income (as described above), taxes on production and imports (TOPI), and other property income (OPI, such as corporate profits, rent payments, and royalties). It is the difference between a business or industry's total sales and the cost of all input materials or intermediate expenditures. $VA = LI + TOPI + OPI$

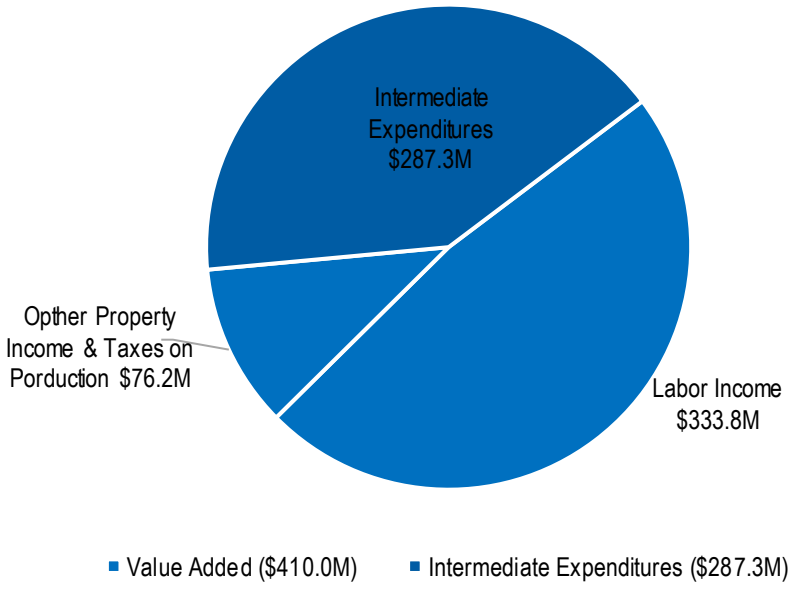
**Output** is the total value of industry production; it consists of value-added plus intermediate expenditures (IE). Output is frequently the total price paid by consumers for a good or service. *Output = VA + IE*

Value-Added is the most appropriate measure of economic impact because it excludes intermediate inputs, which are the goods and services (including energy, raw materials, semi-finished goods, and services purchased from all sources) used in the production process to produce ***other*** goods or services rather than for ***final*** consumption. For example, the paper stock used in a magazine publication is an intermediate input whereas paper stock sold in an office-supply store is the final product sold to the consumer. The value of producing the magazine's paper stock is accounted for in measures of GDP within the Paper Manufacturing sector, not in the Publishing sector.

The following graph shows how economic impact components are distributed, using the economic impacts of construction in the gaming implementation scenario assessed as an illustration. The lighter blue wedges combined are equivalent to Value Added and the total pie is equivalent to Output.

**Figure 20: Economic Impact Distribution Illustration**

**Total Economic Output - Construction**




## *Ongoing Operations*

Legalized gambling operations in Alaska will result in ongoing economic benefits that will accrue annually to the state. Direct inputs for casino and amenity development were derived from The Innovation Group's gaming market assessment and proforma analysis of each casino property as

well as our analysis of the VGT, lottery, and sports betting and iGaming markets. The casino operations were modeled using an Analysis-by-Parts technique from operating expenditures including labor income and cost of goods (COGS). Projected F&B, Hotel, Entertainment, and Other revenues at the casino were modeled using an industry change. Additionally, we modeled the VGT, lottery, and sports betting and iGaming operations as an industry change.

## Operating Inputs

Direct effect inputs for casino operations account for the workers employed at the facility and the compensation they earn as well as the purchases of goods and services. Staffing and employment compensation estimates were based on The Innovation Group's operating pro forma model and input into the IMPLAN software. Our staffing model has been calibrated to actual operating data from existing casinos and is on a Full-Time Equivalent ("FTE") basis. These FTEs were converted into total number of employees (Full and Part-time) using IMPLAN's conversion matrix, which for the casino sector is 0.82136 FTEs for each employee on a headcount basis.

Gaming taxes of 10% at the casino resorts and VGT locations have been assumed. To analyze the annual impact generated by direct operations of the facility we used Year 2 (2026), the first year of stabilized operations. The following table shows the total inputs utilized in the IMPLAN modeling for the scenario assessed.

Please note, employment and labor income for VGT, lottery, sports betting and iGaming operations was modified (i.e., decreased) within IMPLAN to remove standard front-of-house casino employment and account for only administrative, accounting, legal, finance, management, and machine tech and service jobs, among other back-office roles where applicable and relevant.

## Table 206: Direct Effect Inputs Alaska Statewide – Ongoing Operations

| | | | |
|---|---|---|---|
| **Anchorage** | | | |
| ***Industry Spending Pattern & Labor Change*** | **Expenditures** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $34,169,934 | | |
| 5001 Employment Compensation | | 664 | $44,177,973 |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 507 Hotels and motels, including casino hotels | $19,992,875 | 213 | $4,484,586 |
| 509 Full-service restaurants | $17,392,597 | 343 | $10,346,336 |
| 504 Other amusement and recreation industries | $2,866,036 | 6 | $461,766 |
| **Fairbanks** | | | |
| ***Industry Spending Pattern & Labor Change*** | **Expenditures** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $4,943,596 | | |
| 5001 Employment Compensation | | 186 | $13,572,812 |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 507 Hotels and motels, including casino hotels | $3,998,575 | 37 | $807,383 |
| 509 Full-service restaurants | $4,464,528 | 68 | $2,233,683 |
| 504 Other amusement and recreation industries | $572,759 | 4 | $213,731 |
| **Juneau** | | | |
| ***Industry Spending Pattern & Labor Change*** | **Expenditures** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $2,748,080 | | |
| 5001 Employment Compensation | | 125 | $9,349,723 |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 507 Hotels and motels, including casino hotels | $1,799,359 | 16 | $456,197 |
| 509 Full-service restaurants | $2,836,914 | 56 | $1,749,590 |
| 504 Other amusement and recreation industries | $115,457 | 0 | $0 |
| **VGTs** | | | |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $107,470,196 | 140 | $8,659,347 |
| **Lottery** | | | |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $96,660,026 | 126 | $7,355,639 |
| **Sports Betting & iGaming** | | | |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $64,750,040 | 84 | $5,796,884 |
| **Total State** | | | |
| ***Industry Spending Pattern & Labor Change*** | **Expenditures** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $41,861,610 | | |
| 5001 Employment Compensation | | 974 | $67,100,507 |
| ***Industry Change*** | **Revenue** | **Employment** | **Labor Income** |
| 503 Gambling industries (except casino hotels) | $268,880,262 | 350 | $21,811,871 |
| 507 Hotels and motels, including casino hotels | $25,790,809 | 266 | $5,748,166 |
| 509 Full-service restaurants | $24,694,040 | 467 | $14,329,609 |
| 504 Other amusement and recreation industries | $3,554,252 | 10 | $675,497 |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group.

## Annual Economic Impacts from Operations

Table 207 shows the statewide annual ongoing impacts of casino resort, VGT, lottery, sports betting, and iGaming operations, reflecting stabilized operations. In the scenario assessed, the ongoing impacts of these operations are estimated to generate annual direct effects of 2,067 jobs, $109.7 million in labor income, and $353.9 million of value added for the state of Alaska. Based on indirect and induced effects, the total annual impact for the state of Alaska from gaming operations is roughly 3,203 jobs, $174.7 million in labor income, and $463.8 million in value added.

**Table 207: Alaska Gaming & Casino Resort Operating Impacts**

| Impact Type | Employment | Labor Income ($M) | Value Added ($M) | Output ($M) |
|---|---|---|---|---|
| Direct Effect | 2,067 | $109.7 | $353.9 | $569.0 |
| Indirect Effect | 571 | $32.6 | $51.2 | $97.5 |
| Induced Effect | 565 | $32.4 | $58.6 | $99.1 |
| **Total** | 3,203 | $174.7 | $463.8 | $765.6 |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

## Fiscal Impacts

Fiscal impacts resulting from IMPLAN include business taxes (including sales taxes), payroll taxes, property taxes, and other relevant taxes within the state. Under the scenario assessed, the direct ongoing fiscal impacts would contribute $6.2 million annually to the local and state governments in Alaska, according to IMPLAN results. On top of this, IMPLAN estimates an additional $4.9 million in local and state tax revenue from Indirect and Induced effects.

It is important to note that the fiscal impacts estimated by IMPLAN and illustrated in the tables below exclude gaming tax revenue generated for Alaska. Under the scenario assessed, this gaming tax revenue—from casino, VGT, lottery, sports betting, and iGaming operations—is estimated to be approximately $156.3 million annually.

Please note, at the request of the Client, state property taxes and state and local severance taxes have been omitted as these taxes are levied against only the oil and gas industry within the state of Alaska.

**Table 208: Direct Local and State Tax Impact: Ongoing Operations**

| | Total | State | Local |
|---|---|---|---|
| Dividends | $1,013,495 | | |
| Social Ins Tax- Employee Contribution | $3,215 | | |
| Social Ins Tax- Employer Contribution | $4,919 | | |
| TOPI: Sales Tax | $1,166,875 | $0 | $1,166,875 |
| TOPI: Property Tax | $2,758,071 | $0 | $2,758,071 |
| TOPI: Motor Vehicle Lic | $40,355 | $25,069 | $15,286 |
| TOPI: Severance Tax | $0 | $0 | $0 |
| TOPI: Other Taxes | $181,643 | $173,899 | $7,744 |
| TOPI: S/L NonTaxes | $13,679 | N/A | N/A |
| Corporate Profits Tax | $1,786,723 | $1,786,723 | $0 |
| Personal Tax: Income Tax | $0 | $0 | $0 |
| Personal Tax: NonTaxes (Fines- Fees) | $146,694 | $113,293 | $33,401 |
| Personal Tax: Motor Vehicle License | $30,650 | $19,040 | $11,610 |
| Personal Tax: Property Taxes | $3,007 | $221 | $2,786 |
| Personal Tax: Other Tax (Fish/Hunt) | $123,710 | $118,436 | $5,274 |
| **Total State and Local Tax** | **$7,273,036** | **$2,236,682** | **$4,001,046** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); US Census State & Local Finance Dataset; The Innovation Group.
TOPI=Tax on Production & Imports

**Table 209: Indirect and Induced Local and State Tax Impact: Ongoing Operations**

| | Local | State | Total |
|---|---|---|---|
| TOPI: Sales Tax | $1,040,998 | $0 | $1,040,998 |
| TOPI: Property Tax | $2,460,542 | $0 | $2,460,542 |
| TOPI: Motor Vehicle Lic | $13,637 | $22,365 | $36,002 |
| TOPI: Severance Tax | $0 | $0 | $0 |
| TOPI: Other Taxes | $6,908 | $155,141 | $162,049 |
| TOPI: S/L NonTaxes | N/A | N/A | $12,203 |
| Corporate Profits Tax | $0 | $688,704 | $688,704 |
| Personal Tax: Income Tax | $0 | $0 | $0 |
| Personal Tax: NonTaxes (Fines- Fees) | $51,829 | $175,802 | $227,631 |
| Personal Tax: Motor Vehicle License | $18,016 | $29,545 | $47,561 |
| Personal Tax: Property Taxes | $4,323 | $344 | $4,667 |
| Personal Tax: Other Tax (Fish/Hunt) | $8,184 | $183,781 | $191,965 |
| **Total** | **$3,604,438** | **$1,255,681** | **$4,872,322** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); US Census State & Local Finance Dataset; The Innovation Group.
TOPI=Tax on Production & Imports

## *Construction*

Construction of the proposed gambling facilities would bring one-time (non-recurring) benefits to Alaska. Construction impacts are expressed on a single-year basis. Therefore, the employment figures, for example, represent person-year equivalents; for a construction period of two years, the actual number of workers onsite would be half the person-year equivalent.

The impact of construction only relates to expenditures made directly by the development company to design, build and outfit the physical structure. For construction impacts, the Industry Change function using sector 55-Construction of New Commercial Structures, Including Farm Structures was most appropriate for modeling the costs associated with land improvements and building related costs. For design, site studies, and permitting the Industry Change function was applied to sector 457-Architectural, Engineering, and Related Services. Costs associated with purchases of Furniture, Fixtures and Equipment (FF&E) were modeled using the Commodity Change function sectors 3393-Wholesale Trade Services-Professional and Commercial Equipment and Supplies and 3391-All Other Miscellaneous Manufactured Products.

### Construction Inputs

Based on high-level construction capital costs estimated by the Innovation Group, the following table outlines the final inputs used to calculate the economic impact by sector. The cost of slot machines was separated out from the other FF&E as it is a very specialized product and is not expected to be available within the region. IMPLAN estimates what percentage of the purchases, including slot machines, will originate from within the study area based on its Social Accounting Matrix (SAM).

**Table 210: Estimated Construction Cost Inputs**

| | |
|---|---|
| **Anchorage** | |
| ***Industry Change*** | |
| 55 Construction of New Commercial Structures, including farm structures | $268,675,147 |
| 457 Architectural, engineering, and related services | $44,803,103 |
| ***Commodity Change*** | |
| 3393 Wholesale Services - Professional and commercial equipment and supplies | $59,849,673 |
| 3391 All other miscellaneous manufactured products | $29,900,000 |
| **Fairbanks** | |
| ***Industry Change*** | |
| 55 Construction of New Commercial Structures, including farm structures | $51,074,218 |
| 457 Architectural, engineering, and related services | $8,987,635 |
| ***Commodity Change*** | |
| 3393 Wholesale Services - Professional and commercial equipment and supplies | $11,626,862 |
| 3391 All other miscellaneous manufactured products | $9,200,000 |
| **Juneau** | |
| ***Industry Change*** | |
| 55 Construction of New Commercial Structures, including farm structures | $25,780,001 |
| 457 Architectural, engineering, and related services | $4,632,008 |
| ***Commodity Change*** | |
| 3393 Wholesale Services - Professional and commercial equipment and supplies | $6,676,059 |
| 3391 All other miscellaneous manufactured products | $4,600,000 |
| **Statewide** | |
| ***Industry Change*** | |
| 55 Construction of New Commercial Structures, including farm structures | $345,529,366 |
| 457 Architectural, engineering, and related services | $58,422,745 |
| ***Commodity Change*** | |
| 3393 Wholesale Services - Professional and commercial equipment and supplies | $78,152,594 |
| 3391 All other miscellaneous manufactured products | $43,700,000 |

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

## Economic Impacts from Construction

The results in the following section represent total impacts (direct, indirect and induced) of construction costs. In the scenario assessed, the one-time impacts from the construction of casino resorts are estimated to generate direct effects of 2,836 jobs, $246.6 million in labor income, and $254.7 million of value added for the state of Alaska. Based on indirect and induced effects, the total one-time impact for the state of Alaska from the construction of casino resorts is estimated at over 4,300 jobs, $333.8 million in labor income, and $410.0 million in value added.

**Table 211: Casino Construction Impacts**

| Impact Type | Employment | Labor Income ($M) | Value Added ($M) | Output ($M) |
|---|---|---|---|---|
| Direct Effect | 2,836 | $246.6 | $254.7 | $425.1 |
| Indirect Effect | 371 | $24.9 | $42.8 | $82.7 |
| Induced Effect | 1,112 | $62.3 | $112.5 | $189.5 |
| **Total** | 4,319 | $333.8 | $410.0 | $697.3 |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

## Fiscal Impacts

Fiscal impacts resulting from IMPLAN include business taxes (including sales taxes), payroll taxes, property taxes, and other relevant taxes within the state. Under the scenario assessed, the one-time fiscal impacts from construction would contribute $11.3 million to local and state governments in Alaska from direct, indirect, and induced effects, according to IMPLAN results.

Please note, at the request of the Client, state property taxes and state and local severance taxes have been omitted as these taxes are levied against only the oil and gas industry within the state of Alaska.

**Table 212: Direct Local and State Tax Impact from Construction**

| | Total | State | Local |
|---|---|---|---|
| Dividends | $58,884 | | |
| Social Ins Tax- Employee Contribution | $12,992 | | |
| Social Ins Tax- Employer Contribution | $19,875 | | |
| TOPI: Sales Tax | $370,620 | $0 | $370,620 |
| TOPI: Property Tax | $876,013 | $0 | $876,013 |
| TOPI: Motor Vehicle Lic | $12,817 | $7,962 | $4,855 |
| TOPI: Severance Tax | $0 | $0 | $0 |
| TOPI: Other Taxes | $57,693 | $55,233 | $2,460 |
| TOPI: S/L NonTaxes | $4,345 | N/A | N/A |
| Corporate Profits Tax | $103,809 | $103,809 | $0 |
| Personal Tax: Income Tax | $0 | $0 | $0 |
| Personal Tax: NonTaxes (Fines- Fees) | $873,358 | $674,503 | $198,855 |
| Personal Tax: Motor Vehicle License | $182,478 | $113,357 | $69,121 |
| Personal Tax: Property Taxes | $17,905 | $1,318 | $16,587 |
| Personal Tax: Other Tax (Fish/Hunt) | $736,517 | $705,118 | $31,399 |
| **Total State and Local Tax** | **$3,327,306** | **$1,661,300** | **$1,569,910** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); US Census State & Local Finance Dataset; The Innovation Group.
TOPI=Tax on Production & Imports

**Table 213: Indirect and Induced Local and State Tax Impact from Construction**

| | Local | State | Total |
|---|---|---|---|
| TOPI: Sales Tax | $1,799,037 | $0 | $1,799,037 |
| TOPI: Property Tax | $4,252,273 | $0 | $4,252,273 |
| TOPI: Motor Vehicle Lic | $23,568 | $38,650 | $62,218 |
| TOPI: Severance Tax | $0 | $0 | $0 |
| TOPI: Other Taxes | $11,939 | $268,111 | $280,050 |
| TOPI: S/L NonTaxes | N/A | N/A | $21,089 |
| Corporate Profits Tax | $0 | $1,021,978 | $1,021,978 |
| Personal Tax: Income Tax | $0 | $0 | $0 |
| Personal Tax: NonTaxes (Fines- Fees) | $69,450 | $235,571 | $305,021 |
| Personal Tax: Motor Vehicle License | $24,140 | $39,590 | $63,730 |
| Personal Tax: Property Taxes | $5,793 | $460 | $6,253 |
| Personal Tax: Other Tax (Fish/Hunt) | $10,966 | $246,263 | $257,229 |
| **Total** | **$6,197,167** | **$1,850,623** | **$8,068,878** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); US Census State & Local Finance Dataset; The Innovation Group.
TOPI=Tax on Production & Imports

## *Economic Impact Analysis Summary: All Scenarios*

Utilizing the same methodological process described previously, the following tables summarize the economic and fiscal impacts for the gaming implementation and taxation scenarios assessed by The Innovation Group.

The following Scenarios were assessed consisting of the following combinations of casino and VGT development.

- Scenario 1, "Casinos Only": No VGT development in the state, casinos in Anchorage, Fairbanks and Juneau.
- Scenario 2, "Casinos and Non-Competing VGTs": Casinos in Anchorage, Fairbanks and Juneau; VGTs elsewhere. The casino revenue forecast is the same for Scenarios 1 and 2. VGT revenue is constrained by being prohibited in the three largest cities in the state.
- Scenario 3, "Casinos and Competing VGTs": Casinos in Anchorage, Fairbanks and Juneau; VGTs permitted throughout the state. Casino revenue is lower but VGT revenue higher than Scenario 2.
- Scenario 4, "VGTs Only": VGTs permitted throughout the state but no casinos. The lack of casino competition results in higher VGT revenue.
- Scenario 5, "Open Market": Unlimited casino licenses and VGTs throughout the state. The dispersal of capital across smaller facilities diminishes the prospect of a stand-out resort being able to induce tourism and VIP play, leading to less table and amenity development, resulting in slightly fewer jobs relative to Scenario 3.

For each of the casino scenarios we perform a sensitivity analysis assessing the impact on capital investment and amenity development from four alternative gaming tax rates (10%, 15%, 20% and 25%). The gaming tax rate for VGTs is assumed to be 40% in all scenarios.

**Table 214: Economic Impacts from Gaming Implementation – Ongoing Operations – All Scenarios**

| Scenarios & Casino Tax Rates | Employment | | | | Labor Income ($M) | | | | Value Added ($M) | | | | Output ($M) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total |
| ***Scenario 1*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 1,966 | 450 | 512 | **2,927** | $102.4 | $25.2 | $29.1 | **$156.6** | $316.6 | $39.6 | $52.6 | **$408.8** | $483.6 | $75.3 | $88.7 | **$647.7** |
| 15% Tax Rate | 1,875 | 437 | 501 | **2,814** | $101.3 | $25.0 | $28.8 | **$155.1** | $315.9 | $39.3 | $52.1 | **$407.2** | $484.0 | $74.9 | $88.0 | **$646.9** |
| 20% Tax Rate | 1,777 | 426 | 488 | **2,691** | $98.6 | $24.3 | $28.2 | **$151.1** | $312.5 | $38.3 | $51.0 | **$401.8** | $477.2 | $72.9 | $86.3 | **$636.3** |
| 25% Tax Rate | 1,636 | 408 | 467 | **2,511** | $94.5 | $23.2 | $26.8 | **$144.6** | $300.6 | $36.5 | $48.5 | **$385.7** | $459.2 | $69.3 | $82.0 | **$610.5** |
| ***Scenario 2*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,067 | 571 | 565 | **3,203** | $109.7 | $32.6 | $32.4 | **$174.7** | $353.9 | $51.2 | $58.6 | **$463.8** | $569.0 | $97.5 | $99.1 | **$765.6** |
| 15% Tax Rate | 1,975 | 559 | 554 | **3,089** | $107.7 | $31.8 | $31.8 | **$171.3** | $350.2 | $50.1 | $57.5 | **$457.8** | $561.4 | $95.1 | $97.2 | **$753.8** |
| 20% Tax Rate | 1,878 | 548 | 540 | **2,967** | $104.9 | $31.2 | $31.0 | **$167.1** | $346.9 | $49.0 | $56.1 | **$451.9** | $554.6 | $92.9 | $94.8 | **$742.4** |
| 25% Tax Rate | 1,736 | 530 | 520 | **2,786** | $100.9 | $30.1 | $29.9 | **$160.8** | $335.0 | $47.2 | $54.0 | **$436.3** | $536.6 | $89.5 | $91.3 | **$717.4** |
| ***Scenario 3*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 1,876 | 603 | 549 | **3,028** | $104.0 | $34.3 | $31.5 | **$169.9** | $333.3 | $53.8 | $57.0 | **$444.2** | $558.2 | $102.1 | $96.4 | **$756.7** |
| 15% Tax Rate | 1,811 | 592 | 541 | **2,944** | $102.7 | $33.6 | $31.1 | **$167.5** | $330.5 | $52.8 | $56.2 | **$439.5** | $551.8 | $100.0 | $95.0 | **$746.8** |
| 20% Tax Rate | 1,732 | 583 | 530 | **2,845** | $100.4 | $33.1 | $30.4 | **$164.0** | $327.8 | $51.9 | $55.0 | **$434.8** | $545.9 | $98.3 | $93.0 | **$737.2** |
| 25% Tax Rate | 1,581 | 569 | 500 | **2,651** | $93.7 | $32.3 | $28.7 | **$154.7** | $316.0 | $50.6 | $51.9 | **$418.5** | $528.9 | $95.8 | $87.8 | **$712.4** |
| ***Scenario 4*** | | | | | | | | | | | | | | | | |
| 40% Tax Rate | 271 | 328 | 140 | **740** | $16.8 | $18.5 | $8.1 | **$43.4** | $92.2 | $28.9 | $14.6 | **$135.7** | $208.4 | $54.5 | $24.6 | **$287.5** |
| ***Scenario 5*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 1,818 | 537 | 506 | **2,861** | $96.9 | $30.7 | $29.1 | **$156.6** | $305.3 | $48.3 | $52.6 | **$406.2** | $509.5 | $91.6 | $88.9 | **$689.9** |
| 15% Tax Rate | 1,750 | 528 | 497 | **2,774** | $95.0 | $30.1 | $28.5 | **$153.7** | $304.2 | $47.4 | $51.6 | **$403.2** | $502.7 | $89.8 | $87.2 | **$679.7** |
| 20% Tax Rate | 1,621 | 515 | 480 | **2,616** | $91.6 | $29.3 | $27.6 | **$148.5** | $296.3 | $46.0 | $49.9 | **$392.1** | $489.5 | $87.0 | $84.2 | **$660.8** |
| 25% Tax Rate | 1,474 | 507 | 456 | **2,437** | $86.1 | $28.8 | $26.2 | **$141.0** | $279.4 | $45.1 | $47.4 | **$371.8** | $469.0 | $85.3 | $80.0 | **$634.3** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group.

**Table 215: Economic Impacts from Gaming Implementation – Construction – All Scenarios**

| Scenarios & Casino Tax Rates | Employment | | | | Labor Income ($M) | | | | Value Added ($M) | | | | Output ($M) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total | Direct Effect | Indirect Effect | Induced Effect | Total |
| ***Scenario 1*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,836 | 371 | 1,112 | **4,319** | $246.6 | $24.9 | $62.3 | **$333.8** | $254.7 | $42.8 | $112.5 | **$410.0** | $425.1 | $82.7 | $189.5 | **$697.3** |
| 15% Tax Rate | 2,445 | 327 | 970 | **3,741** | $214.8 | $21.9 | $54.3 | **$291.1** | $222.0 | $37.7 | $98.1 | **$357.7** | $372.9 | $72.7 | $165.2 | **$610.9** |
| 20% Tax Rate | 2,086 | 280 | 827 | **3,194** | $183.3 | $18.8 | $46.3 | **$248.4** | $189.4 | $32.2 | $83.7 | **$305.3** | $318.5 | $62.2 | $141.0 | **$521.7** |
| 25% Tax Rate | 1,590 | 214 | 630 | **2,434** | $139.5 | $14.4 | $35.3 | **$189.2** | $144.2 | $24.6 | $63.7 | **$232.5** | $242.7 | $47.5 | $107.4 | **$397.6** |
| ***Scenario 2*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,836 | 371 | 1,112 | **4,319** | $246.6 | $24.9 | $62.3 | **$333.8** | $254.7 | $42.8 | $112.5 | **$410.0** | $425.1 | $82.7 | $189.5 | **$697.3** |
| 15% Tax Rate | 2,445 | 327 | 970 | **3,741** | $214.8 | $21.9 | $54.3 | **$291.1** | $222.0 | $37.7 | $98.1 | **$357.7** | $372.9 | $72.7 | $165.2 | **$610.9** |
| 20% Tax Rate | 2,086 | 280 | 827 | **3,194** | $183.3 | $18.8 | $46.3 | **$248.4** | $189.4 | $32.2 | $83.7 | **$305.3** | $318.5 | $62.2 | $141.0 | **$521.7** |
| 25% Tax Rate | 1,590 | 214 | 630 | **2,434** | $139.5 | $14.4 | $35.3 | **$189.2** | $144.2 | $24.6 | $63.7 | **$232.5** | $242.7 | $47.5 | $107.4 | **$397.6** |
| ***Scenario 3*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,182 | 290 | 865 | **3,338** | $191.8 | $19.5 | $48.5 | **$259.7** | $198.0 | $33.5 | $87.5 | **$319.0** | $332.4 | $64.6 | $147.4 | **$544.5** |
| 15% Tax Rate | 1,829 | 246 | 726 | **2,801** | $160.7 | $16.5 | $40.6 | **$217.8** | $166.1 | $28.3 | $73.4 | **$267.8** | $279.2 | $54.5 | $123.7 | **$457.4** |
| 20% Tax Rate | 1,562 | 210 | 619 | **2,391** | $137.1 | $14.1 | $34.7 | **$185.9** | $141.7 | $24.1 | $62.6 | **$228.5** | $238.4 | $46.6 | $105.5 | **$390.6** |
| 25% Tax Rate | 1,155 | 157 | 458 | **1,771** | $101.4 | $10.5 | $25.7 | **$137.6** | $104.9 | $18.0 | $46.3 | **$169.2** | $176.8 | $34.8 | $78.1 | **$289.7** |
| ***Scenario 4*** | | | | | | | | | | | | | | | | |
| 40% Tax Rate | N/A | N/A | N/A | **N/A** | N/A | N/A | N/A | **N/A** | N/A | N/A | N/A | **N/A** | N/A | N/A | N/A | **N/A** |
| ***Scenario 5*** | | | | | | | | | | | | | | | | |
| 10% Tax Rate | 2,480 | 330 | 983 | **3,793** | $218.0 | $22.1 | $55.1 | **$295.2** | $225.1 | $38.1 | $99.4 | **$362.6** | $377.9 | $73.5 | $167.6 | **$618.9** |
| 15% Tax Rate | 1,993 | 267 | 791 | **3,051** | $175.2 | $17.9 | $44.3 | **$237.4** | $181.0 | $30.7 | $80.0 | **$291.7** | $304.2 | $59.3 | $134.7 | **$498.2** |
| 20% Tax Rate | 1,456 | 196 | 577 | **2,229** | $127.9 | $13.1 | $32.3 | **$173.4** | $132.2 | $22.5 | $58.4 | **$213.1** | $222.3 | $43.4 | $98.4 | **$364.1** |
| 25% Tax Rate | 1,028 | 139 | 408 | **1,575** | $90.2 | $9.3 | $22.8 | **$122.4** | $93.2 | $16.0 | $41.2 | **$150.4** | $157.1 | $30.8 | $69.5 | **$257.3** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

**Table 216: Fiscal Impacts from Gaming Implementation – All Scenarios (MMs)**

| Scenarios & Casino Tax Rates | Ongoing Operations - Impacts Occur Annually | | | | | | | Construction - One-Time Impacts | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gaming Tax | Other State Taxes - Direct | Other State Taxes - Indirect & Induced | **Total State** | Other Local Taxes - Direct | Other Local Taxes - Indirect & Induced | **Total Local** | State Taxes - Direct | State Taxes - Indirect & Induced | **Total State** | Local Taxes - Direct | Local Taxes - Indirect & Induced | **Total Local** |
| ***Scenario 1*** | | | | | | | | | | | | | |
| 10% Tax Rate | $132.9 | $1.7 | $1.1 | **$135.6** | $3.0 | $3.1 | **$6.1** | $1.7 | $1.9 | **$3.5** | $1.6 | $6.2 | **$7.8** |
| 15% Tax Rate | $145.2 | $1.6 | $1.0 | **$147.9** | $2.9 | $3.0 | **$6.0** | $1.4 | $1.6 | **$3.1** | $1.4 | $5.4 | **$6.8** |
| 20% Tax Rate | $157.5 | $1.6 | $1.0 | **$160.1** | $2.8 | $3.0 | **$5.8** | $1.2 | $1.4 | **$2.6** | $1.2 | $4.6 | **$5.8** |
| 25% Tax Rate | $167.9 | $1.5 | $1.0 | **$170.5** | $2.7 | $2.8 | **$5.5** | $0.9 | $1.1 | **$2.0** | $0.9 | $3.5 | **$4.4** |
| ***Scenario 2*** | | | | | | | | | | | | | |
| 10% Tax Rate | $156.3 | $2.2 | $1.3 | **$159.8** | $4.0 | $3.6 | **$7.6** | $1.7 | $1.9 | **$3.5** | $1.6 | $6.2 | **$7.8** |
| 15% Tax Rate | $168.6 | $2.2 | $1.2 | **$172.1** | $3.9 | $3.5 | **$7.4** | $1.4 | $1.6 | **$3.1** | $1.4 | $5.4 | **$6.8** |
| 20% Tax Rate | $180.9 | $2.2 | $1.2 | **$184.3** | $3.8 | $3.4 | **$7.3** | $1.2 | $1.4 | **$2.6** | $1.2 | $4.6 | **$5.8** |
| 25% Tax Rate | $191.4 | $2.1 | $1.2 | **$194.6** | $3.7 | $3.3 | **$7.0** | $0.9 | $1.1 | **$2.0** | $0.9 | $3.5 | **$4.4** |
| ***Scenario 3*** | | | | | | | | | | | | | |
| 10% Tax Rate | $163.0 | $2.4 | $1.3 | **$166.7** | $4.3 | $3.6 | **$7.9** | $1.3 | $1.4 | **$2.7** | $1.2 | $4.8 | **$6.0** |
| 15% Tax Rate | $173.5 | $2.4 | $1.2 | **$177.2** | $4.3 | $3.5 | **$7.8** | $1.1 | $1.2 | **$2.3** | $1.0 | $4.1 | **$5.1** |
| 20% Tax Rate | $184.1 | $2.4 | $1.2 | **$187.7** | $4.2 | $3.5 | **$7.7** | $0.9 | $1.0 | **$2.0** | $0.9 | $3.5 | **$4.3** |
| 25% Tax Rate | $192.1 | $2.3 | $1.2 | **$195.6** | $4.1 | $3.3 | **$7.4** | $0.7 | $0.8 | **$1.5** | $0.7 | $2.6 | **$3.2** |
| ***Scenario 4*** | | | | | | | | | | | | | |
| 40% Tax Rate | $83.4 | $1.5 | $0.5 | **$85.3** | $2.7 | $1.3 | **$4.0** | N/A | N/A | N/A | N/A | N/A | N/A |
| ***Scenario 5*** | | | | | | | | | | | | | |
| 10% Tax Rate | $148.2 | $2.2 | $1.2 | **$151.6** | $3.9 | $3.3 | **$7.2** | $1.5 | $1.6 | **$3.1** | $1.4 | $5.5 | **$6.9** |
| 15% Tax Rate | $158.5 | $2.2 | $1.1 | **$161.9** | $3.9 | $3.2 | **$7.1** | $1.2 | $1.3 | **$2.5** | $1.1 | $4.4 | **$5.5** |
| 20% Tax Rate | $166.9 | $2.2 | $1.1 | **$170.1** | $3.8 | $3.1 | **$6.9** | $0.9 | $1.0 | **$1.8** | $0.8 | $3.2 | **$4.0** |
| 25% Tax Rate | $172.1 | $2.1 | $1.1 | **$175.2** | $3.7 | $3.0 | **$6.7** | $0.6 | $0.7 | **$1.3** | $0.6 | $2.3 | **$2.9** |

Source: IMPLAN Group, LLC, IMPLAN System (data and software); US Census State & Local Finance Dataset; The Innovation Group. TOPI=Tax on Production & Imports

# SOCIAL AND COMMUNITY IMPACT ANALYSIS

This section assesses the social and community impacts of the proposed casino developments in Anchorage, Fairbanks, and Juneau. To simplify the presentation of the social and community impacts, The Innovation Group assessed one casino gaming implementation scenario for the state of Alaska, Scenario 2. This scenario includes the following key components: three casino resorts in the state with Anchorage, Fairbanks, and Juneau being the respective host cities; VGTs available outside of host city limits; sports betting and iGaming; and a gaming tax rate of 10% on Gross Gaming Revenues.

Increased local services and costs as a result of casino gaming operations generally fall into three categories: those arising from population and development growth, those arising from the impacts of increased visitation and traffic, and social impacts resulting from problem gambling.

The analysis draws upon social science research as well as data analysis conducted by the Innovation Group. Although casinos are perceived to be different in kind from other commercial developments of comparable size and visitor base, inordinate negative impacts from casino development have not materialized, even in small communities with limited infrastructure and resources. In fact, experience over the past two decades has demonstrated that mitigation payments designed in anticipation of drastic impacts have often exceeded the actual need of the communities.

The perception that casinos breed crime is not supported by the evidence. While the *number* of reported crimes can increase, as with any commercial development that attracts visitors, casino gaming has not been shown to lead to an increase in crime *rates*.

Host communities should expect impacts similar in kind to other commercial development of similar scope and visitor potential. The projected increase in visitor population should be expected to lead to increases in public safety services and judicial system caseload. The one significant difference in kind relates to the association between problem gambling and other social pathologies as discussed in Appendix A.

In summary, evidence suggests that on-going impacts to local communities are highly manageable, typically requiring only a small fraction of gaming revenues to address fully.

## *Section One: Population and Employment Related Impacts*

A casino in Anchorage is expected to draw 1.5 million annual gaming visits[11] in 2025 and directly employ 1,226 people. A casino in Fairbanks is expected to draw nearly 0.4 million annual gaming visits and directly employ 294 people, while a Juneau casino is expected to draw 0.2 million annual gaming visits and directly employ 197 people.

For the purposes of this section, Anchorage, Fairbanks North Star, and Juneau Boroughs will be used as primary study areas of impacts as it pertains to employment and increased population.

### Employment Impact

As noted, the proposed Anchorage development is projected to require 1,226 jobs[12] in 2025, the first full year of operations, the Fairbanks development 294[13], and the Juneau development 197. These jobs are expected to be filled by a combination of local unemployed workers, local out-bound commuters, residents of neighboring cities, and new residents.

Unemployment in Anchorage, Fairbanks, and Juneau stand at approximately 11,000, 3,000, and 1,000 workers, respectively. While the 2020 recession adversely impacted unemployment in all three Boroughs, pre-2020 trends show consistent declines in unemployment levels. Therefore, for the future baseline conditions, we have forecasted 7,671 unemployed Anchorage residents in 2026, 1,763 unemployed Fairbanks residents, and 689 unemployed Juneau residents.

**Table 217: Anchorage, AK Average Annual Employment Statistics**

| Year | Civilian labor force | Employment | Unemployment | Unemployment Rate |
|---|---|---|---|---|
| 2010 | 157,743 | 146,993 | 10,750 | 6.8% |
| 2011 | 158,382 | 148,731 | 9,651 | 6.1% |
| 2012 | 157,748 | 149,177 | 8,571 | 5.4% |
| 2013 | 157,637 | 149,423 | 8,214 | 5.2% |
| 2014 | 157,650 | 149,591 | 8,059 | 5.1% |
| 2015 | 156,476 | 148,856 | 7,620 | 4.9% |
| 2016 | 155,471 | 147,254 | 8,217 | 5.3% |
| 2017 | 154,046 | 145,674 | 8,372 | 5.4% |
| 2018 | 151,067 | 143,566 | 7,501 | 5.0% |
| 2019 | 149,118 | 142,485 | 6,633 | 4.4% |
| 2020 | 148,392 | 137,421 | 10,971 | 7.4% |

Source: Bureau of Labor Statistics, LAUS series, Not-seasonally adjusted; The Innovation Group

[11] Visits, not individual patrons. Casino customers typically make more than one visit per year.
[12] Headcount, including full and part-time workers.
[13] Only direct jobs are included in these employment impacts. Jobs supported by indirect and induced effects are diffuse and not expected to have the same migratory impact as direct jobs.

**Table 218: Fairbanks North Star Borough, AK Average Annual Employment Statistics**

| Year | Civilian labor force | Employment | Unemployment | Unemployment Rate |
|---|---|---|---|---|
| 2010 | 48,234 | 44,917 | 3,317 | 6.9% |
| 2011 | 48,167 | 44,992 | 3,175 | 6.6% |
| 2012 | 48,009 | 45,047 | 2,962 | 6.2% |
| 2013 | 47,057 | 44,292 | 2,765 | 5.9% |
| 2014 | 46,662 | 44,016 | 2,646 | 5.7% |
| 2015 | 46,308 | 43,862 | 2,446 | 5.3% |
| 2016 | 46,443 | 43,824 | 2,619 | 5.6% |
| 2017 | 46,505 | 43,856 | 2,649 | 5.7% |
| 2018 | 45,962 | 43,569 | 2,393 | 5.2% |
| 2019 | 45,510 | 43,373 | 2,137 | 4.7% |
| 2020 | 44,679 | 41,838 | 2,841 | 6.4% |

Source: Bureau of Labor Statistics, LAUS series, Not-seasonally adjusted; The Innovation Group

**Table 219: Juneau Borough, AK Average Annual Employment Statistics**

| Year | Civilian Labor Force | Employment | Unemployment | Unemployment Rate |
|---|---|---|---|---|
| 2010 | 17,880 | 16,787 | 1,093 | 6.1% |
| 2011 | 17,833 | 16,821 | 1,012 | 5.7% |
| 2012 | 17,831 | 16,909 | 922 | 5.2% |
| 2013 | 17,504 | 16,619 | 885 | 5.1% |
| 2014 | 17,412 | 16,548 | 864 | 5.0% |
| 2015 | 17,060 | 16,283 | 777 | 4.6% |
| 2016 | 17,343 | 16,599 | 744 | 4.3% |
| 2017 | 17,326 | 16,578 | 748 | 4.3% |
| 2018 | 17,248 | 16,559 | 689 | 4.0% |
| 2019 | 17,302 | 16,625 | 677 | 3.9% |
| 2020 | 16,374 | 15,293 | 1,081 | 6.6% |

Source: Bureau of Labor Statistics, LAUS series, Not-seasonally adjusted; The Innovation Group

According to the most recent LEHD Origin-Destination Employment Statistics (LODES)[14] data from the US Census (2016), 91.3% of the 142,272 workers living in Anchorage work there, meaning 8.7% commute out to other locations or work remotely for businesses located elsewhere. The percentage of jobs in Anchorage held by residents outside of Anchorage is 19.6%.

[14] More information about the data source can be found here: https://lehd.ces.census.gov/doc/help/onthemap/OnTheMapDataOverview.pdf

**Table 220: Anchorage Commuting Patterns**

| | |
|---|---|
| A. Workers residing in Anchorage | 142,272 |
| B. Number of Jobs in Anchorage | 161,636 |
| C. Live & work in Anchorage | 129,954 |
| % who live & work in Anchorage | 91.3% |
| % of A who commute OUT | 8.7% |
| % of B who commute IN | 19.6% |

Source: US Census. (2016) LEHD Origin-Destination Employment Statistics (2002-2018)

In Fairbanks, 72.5% of the 39,953 workers living in Fairbanks North Star Borough work there, meaning 27.5% commute out to other boroughs or work remotely for businesses located elsewhere. The percentage of jobs in Fairbanks North Star held by residents of other boroughs is 14.5%.

**Table 221: Fairbanks North Star Borough Commuting Patterns**

| | |
|---|---|
| A. Workers residing in Fairbanks | 39,953 |
| B. Number of Jobs in Fairbanks | 33,886 |
| C. Live & work in Fairbanks | 28,981 |
| % who live & work in Fairbanks | 72.5% |
| % of A who commute OUT | 27.5% |
| % of B who commute IN | 14.5% |

Source: US Census. (2016) LEHD Origin-Destination Employment Statistics (2002-2018)

In Juneau, 85.9% of the 17,855 workers living in Juneau work there, meaning 14.1% commute out to other boroughs or work remotely for businesses located elsewhere. The percentage of jobs in Juneau held by residents outside of Juneau is 17.0%.

**Table 222: Juneau Borough Commuting Patterns**

| | |
|---|---|
| A. Workers residing in Juneau | 17,855 |
| B. Number of Jobs in Juneau | 18,480 |
| C. Live & work in Juneau | 15,346 |
| % who live & work in Juneau | 85.9% |
| % of A who commute OUT | 14.1% |
| % of B who commute IN | 17.0% |

Source: US Census. (2016) LEHD Origin-Destination Employment Statistics (2002-2018)

As the following tables illustrate, the existing workforce in the three locations is estimated to fill nearly 70%-80% of the new jobs created by a casino development, and the remaining 20%-30% of workers are estimated to represent new residents moving into the area.

**Table 223: Anchorage Casino Project Source of Workforce**

| Source of Employment | Proposed Project | Metric Applied | Source |
|---|---|---|---|
| A. Number of New Employees | 1,226 | Total Jobs | IMPLAN, Innovation Group revenue projections |
| *B. Number of Commuters from outside Anchorage* | *63* | 20% based on Anchorage Workforce Commuting Patterns | US Census |
| *C. I.W.V. Unemployed back to work* | *767* | 10% of a future estimate of 7,671 Unemployed Workers* | US Census |
| *D. Commuters Staying within Anchorage* | *135* | 1.1% of 12,318 Anchorage workers who currently commute outside the area | US Census |
| *E. Total from Existing Area Workforce* | *966* | B+C+D | |
| *F. Estimated Total New Workers Needed* | *260* | A-E | |
| *% of New Employees* | *21.2%* | F/A | |

**Table 224: Fairbanks Casino Project Source of Workforce**

| Source of Employment | Proposed Project | Metric Applied | Source |
|---|---|---|---|
| A. Number of New Employees | 294 | Total Jobs | IMPLAN, Innovation Group revenue projections |
| *B. Number of Commuters from outside Fairbanks* | *11* | 14%, based on Fairbanks Workforce Commuting Patterns | US Census |
| *C. I.W.V. Unemployed back to work* | *97* | 5% of a future estimate of 1,763 Unemployed Workers* | US Census |
| *D. Commuters Staying within Fairbanks* | *121* | 1.1% of 10,972 Fairbanks workers who currently commute outside the area | US Census |
| *E. Total from Existing Area Workforce* | *229* | B+C+D | |
| *F. Estimated Total New Workers Needed* | *65* | A-E | |
| *% of New Employees* | *22.2%* | F/A | |

**Table 225: Juneau Casino Project Source of Workforce**

| Source of Employment | Proposed Project | Metric Applied | Source |
|---|---|---|---|
| A. Number of New Employees | 197 | Total Jobs | IMPLAN, Innovation Group revenue projections |
| *B. Number of Commuters from outside Juneau* | 11 | 17%, based on Juneau Workforce Commuting Patterns | US Census |
| *C. I.W.V. Unemployed back to work* | 69 | 10% of a future estimate of 689 Unemployed Workers* | US Census |
| *D. Commuters Staying within Juneau* | 63 | 2.5% of 2,509 Juneau workers who currently commute outside the area | US Census |
| *E. Total from Existing Area Workforce* | **143** | B+C+D | |
| *F. Estimated Total New Workers Needed* | *54* | A-E | |
| *% of New Employees* | *27.5%* | F/A | |

These estimates were based on previous Innovation Group research and results from a recent analysis of Plainridge casino in Plainville, Massachusetts. The survey of Plainridge employees demonstrates that casino employment is comprised mainly of workers already residing within commuting distance: a mixture of previously employed local residents looking for a better opportunity or the ability to work closer to home, along with previously unemployed local residents. The percentage of workers who moved to take the position with Plainridge was a small percentage of the staff. Furthermore, most casino workers had not had prior casino work experience.

**Table 226: Plainridge Casino Source of Workforce**

| | # of Responses | Percentage |
|---|---|---|
| *Prior Employment status:* | | |
| Unemployed | 162 | 15.5% |
| Employed Part-time | 363 | 34.7% |
| *Underemployed* | *189* | *18.1%* |
| Employed Full-time | 522 | 49.9% |
| Total | 1,047 | 100.0% |
| | | |
| *Reason for taking the position* | | |
| Job closer to home | 305 | 29.1% |
| *Other results* | | |
| No prior casino experience | 902 | 86.2% |
| Moved to take the position | 75 | 7.2% |

New Employee Survey at Plainridge Park Casino: Analysis of First Two Years of Data Collection
University of Massachusetts Donahue Institute, Economic and Public Policy Research Group, May 10, 2017

Other studies show similar impacts on employment. The Rappaport Institute for Greater Boston and the John F. Kennedy School of Economics at Harvard University (Baxandall and Sacerdote

2005) in a national, county-level study of Native American casinos found a slight decrease in unemployment rates after casinos opened. The analysis included all California casinos in existence in the 1990s. From their total sample of 156 casino counties, the Rappaport study isolated out 57 counties with large casinos and relatively low population and nine counties with both large casinos and large populations to see if there were statistical differences in terms of community impacts. The authors compared the county unemployment rate averaged for the year before and after a casino opens in a county, and then subtracted that number from the average state change in unemployment to isolate the county-specific effect. The following table shows their results:

**Table 227: Rappaport Study Employment Results**

| | All Casino-Counties[1] | Counties with Large-Capacity Casinos[2] | Populous Casino Counties[3] |
|---|---|---|---|
| Population Growth (%) | +5* | 8.6 | +8.1* |
| Total Employment (%) | +6.7* | +14.9* | 5.7 |
| Unemployment (%) | -0.3 | -1.2* | 0.5 |

*Statistically significant results at 99% confidence interval.
1. Reports how adjusted outcomes in 156 counties that introduced Indian-run casinos during the 1990s differed from the other 2,959 that did not.
2. The effect for 21 counties in the top 10th percentile in terms of number of slot machines (over 1,760).
3. The effect for the 57 casino counties in the top population quartile (over 55,000 residents).

The Rappaport study also highlighted results for three counties in southern California: Riverside, San Bernardino, and San Diego. In all three counties, the unemployment decreased relative to the state average. For example, before casino development, Riverside County had a slightly lower unemployment rate than the state average (by 0.3%). After casino development, the county's unemployment rate was 1.7% lower than the state average, a relative decrease of 1.4 percentage points. San Bernardino had a relative decrease of 0.5 points and San Diego 0.4.

**Table 228: Rappaport Study California County Results for Employment (%)**

| | Relative Unemployment % (County - State Average) Before | Relative Unemployment % (County - State Average) After | Change in Relative % Unemployment (Before - After) |
|---|---|---|---|
| Riverside, CA | -0.3 | -1.7 | -1.4 |
| San Bernardino, CA | -2.2 | -2.7 | -0.5 |
| San Diego, CA | -4.1 | -4.5 | -0.4 |

## Household and Population Impact

Assuming approximately 1.1 casino workers per household, the total number of new households to Anchorage, Fairbanks, and Juneau is estimated at 237, 157 and 130, respectively. On average, households in Alaska comprise 2.64 persons, bringing the total population increase to Anchorage to 625 people, or 0.21% of the projected 2026 Anchorage population. The total population increase to Fairbanks is estimated at 157 people, or 0.15% of the projected 2026 Fairbanks North Star

Borough population. The total population increase to Juneau is estimated at 130 people, or 0.37% of the projected 2026 Juneau population.

**Table 229: Anchorage, Fairbanks, and Juneau Casinos Impact on Households and Population**

| | Anchorage | Fairbanks | Juneau |
|---|---|---|---|
| New employees moving to area | 260 | 65 | 54 |
| # of jobs per household | 1.1 | 1.1 | 1.1 |
| ***Number of new Households*** | ***237*** | ***59*** | ***49*** |
| Alaska State Avg. Household Size | 2.64 | 2.64 | 2.64 |
| **New Area Population** | **625** | **157** | **130** |
| % Increase of 2026 Total Area Pop | 0.21% | 0.15% | 0.37% |

## School Impact

Based on the number of new households and Alaska household metrics, the increase to school enrollment is estimated to be approximately 129 children in Anchorage, 32 children in Fairbanks, and 27 children in Juneau. These represent an increase of 0.16% - 0.57% over 2020 enrollment.

**Table 230: Anchorage, Fairbanks, and Juneau Casinos Impact on School Enrollment**

| | Metric | Anchorage | Fairbanks | Juneau |
|---|---|---|---|---|
| Number of New Households | | 237 | 59 | 49 |
| Number of Households That Will Have Children* | 36.4% | 86 | 22 | 18 |
| *Number of Children per Household*** | *1.87* | | | |
| Total Number of Children | | 161 | 40 | 34 |
| **Projected School Age Children** | **80%** | **129** | **32** | **27** |
| | | | | |
| 2020 School Enrollment | | 46,701 | 20,017 | 4,725 |
| 2026 Projected School Enrollment | | 46,830 | 20,049 | 4,752 |
| % Change | | 0.28% | 0.16% | 0.57% |

Source: ESRI, US Census Bureau: Table ST-F1-2000.;
*Alaska 2010 percent of households with presence of children under age of 18
**Alaska's average number of children per family with children

School enrollment trends for the districts serving Anchorage, Fairbanks, and Juneau can be found in the tables below.

**Table 231: Anchorage Annual School Enrollment**

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | *CAGR* |
|---|---|---|---|---|---|---|
| All Students (Public and AE) | 48,827 | 48,789 | 48,098 | 46,689 | 46,701 | *-1.1%* |
| Pre-Kindergarten | 767 | 825 | 878 | 749 | 987 | *6.5%* |
| Kindergarten | 3,929 | 3,827 | 3,786 | 3,641 | 3,595 | *-2.2%* |
| Grades 1-8 | 29,673 | 29,732 | 29,415 | 28,407 | 28,643 | *-0.9%* |
| Grades 9-12 | 14,458 | 14,405 | 14,019 | 13,446 | 13,476 | *-1.7%* |

**Table 232: Fairbanks Annual School Enrollment**

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | *CAGR* |
|---|---|---|---|---|---|---|
| All Students (Public and AE) | 19,166 | 19,239 | 19,531 | 19,627 | 20,017 | *1.1%* |
| Pre-Kindergarten | 364 | 393 | 423 | 491 | 467 | *6.4%* |
| Kindergarten | 1,450 | 1,504 | 1,501 | 1,502 | 1,566 | *1.9%* |
| Grades 1-8 | 11,932 | 11,957 | 12,057 | 11,823 | 12,197 | *0.6%* |
| Grades 9-12 | 5,420 | 5,385 | 5,550 | 5,647 | 5,787 | *1.7%* |

**Table 233: Juneau Annual School Enrollment**

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | *CAGR* |
|---|---|---|---|---|---|---|
| All Students (Public and AE) | 4,851 | 4,852 | 4,765 | 4,745 | 4,725 | -0.7% |
| Pre-Kindergarten | 197 | 158 | 154 | 208 | 187 | -1.3% |
| Kindergarten | 332 | 356 | 310 | 338 | 366 | 2.5% |
| Grades 1-8 | 2,851 | 2,851 | 2,872 | 2,710 | 2,790 | -0.5% |
| Grades 9-12 | 1,471 | 1,487 | 1,429 | 1,427 | 1,382 | -1.5% |

## Housing Impact

The additional households that are projected to locate in and around the Anchorage, Fairbanks, and Juneau areas will have small, but positive impact on the housing market. New households will support the current and future development of housing in the community.

Currently, the number of housing units is 8% greater than the number of households in Anchorage, 18% greater than the number of households in Fairbanks North Star Borough, and 7% greater than the number of households in Juneau. This denotes an adequate number of units available for residents. Five-year projections estimate that the growth of housing units will outpace growth of families and households in all three markets. According to ESRI data, the number of housing units is projected to grow by 2.7k units by 2026 in Anchorage, 1.7k units in Fairbanks, and 0.4k in Juneau. This will be sufficient to absorb the households estimated to relocate.

**Table 234: Anchorage Population and Housing Trends**

| | 2010 Census | 2021 ESRI | 2026 Projection |
|---|---|---|---|
| Population | 292,444 | 296,382 | 293,092 |
| *Percent Change* | | 0.12% | -0.22% |
| Households | 107,565 | 108,927 | 107,561 |
| *Percent Change* | | 0.11% | -0.25% |
| Families | 70,544 | 69,932 | 68,573 |
| *Percent Change* | | -0.08% | -0.39% |
| Housing Units | 113,262 | 117,459 | 120,152 |
| *Percent Change* | | 0.33% | 0.45% |

**Table 235: Fairbanks North Star Population and Housing Trends**

| | 2010 Census | 2021 ESRI | 2026 Projection |
|---|---|---|---|
| Population | 97,945 | 101,935 | 103,814 |
| *Percent Change* | | 0.36% | 0.37% |
| Households | 36,584 | 38,256 | 39,070 |
| *Percent Change* | | 0.41% | 0.42% |
| Families | 23,726 | 24,320 | 24,659 |
| *Percent Change* | | 0.23% | 0.28% |
| Housing Units | 41,932 | 45,131 | 46,864 |
| *Percent Change* | | 0.67% | 0.76% |

**Table 236: Juneau Borough Population and Housing Trends**

| | 2010 Census | 2021 ESRI | 2026 Projection |
|---|---|---|---|
| Population | 31,337 | 34,723 | 35,346 |
| *Percent Change* | | 0.94% | 0.36% |
| Households | 12,212 | 13,574 | 13,837 |
| *Percent Change* | | 0.97% | 0.38% |
| Families | 7,742 | 8,411 | 8,511 |
| *Percent Change* | | 0.76% | 0.24% |
| Housing Units | 13,080 | 14,484 | 14,931 |
| *Percent Change* | | 0.93% | 0.61% |

According to Census Reporter, Anchorage Municipality had a vacancy rate for housing units of 11.8% in 2019, which translated to roughly 13,860 units.[15] If the same percentage is applied to the

[15] https://censusreporter.org/profiles/05000US02020-anchorage-municipality-ak/

number of housing units projected for 2026, then there will be nearly 14,200 available housing units to accommodate the incoming households. Consequently, there is a substantial and sufficient housing supply to accommodate the 237 households estimated to relocate to Anchorage.

Fairbanks North Star Borough had a vacancy rate for housing units of 19.8% in 2019, which translated to roughly 8,300 units.[16] If the same percentage is applied to the number of housing units projected for 2026, then there will be nearly 9,300 available housing units to accommodate the incoming households. Consequently, there is a substantial and sufficient housing supply to accommodate the 59 households estimated to relocate to Fairbanks.

Juneau City and Borough had a vacancy rate for housing units of 7.5% in 2019, which translated to roughly 1,000 units.[17] If the same percentage is applied to the number of housing units projected for 2026, then there will be nearly 1,100 available housing units to accommodate the incoming households. Consequently, there is a substantial and sufficient housing supply to accommodate the 49 households estimated to relocate to Juneau.

Both Anchorage Municipality and Fairbanks North Star Borough have higher than average rates of renter-occupied housing than Alaska and the national average. In contrast, Juneau has slightly lower renter rates than the state and national average. The new jobs created at the proposed casino developments will provide stable employment for existing residents that can support homeownership, increasing homeownership figures throughout the local area. The addition of new families has the potential to support current and planned housing development throughout the city without overwhelming existing infrastructure.

**Table 237: 2019 Occupied Housing Units by Tenure**

| | Anchorage | Fairbanks | Juneau | Alaska | United States |
|---|---|---|---|---|---|
| Owner-Occupied | 61.3% | 58.9% | 64.8% | 64.3% | 64.0% |
| Renter-Occupied | 38.7% | 41.1% | 35.2% | 35.7% | 36.0% |

Source: US Census Bureau

## Conclusion

Overall, the proposed casino developments in Anchorage, Fairbanks, and Juneau are projected to increase local population by approximately 0.15-0.40 percent and increase school enrollment by approximately 0.15-0.60 percent.

[16] https://censusreporter.org/profiles/05000US02090-fairbanks-north-star-borough-ak/

[17] https://censusreporter.org/profiles/05000US02110-juneau-city-and-borough-ak/

## *Section Two: Municipal Services Impact*

Host communities should expect impacts similar in kind to other commercial development of similar scope and visitor potential. The projected increase in visitor population should be expected to lead to increases in public safety services and judicial system caseload.

Evidence suggests that on-going impacts to local communities are highly manageable, typically requiring only a small fraction of gaming revenues to address fully. Of most direct consequence to casino development are police, fire, and EMS. These will largely fall into the purview of the local police and fire departments serving Anchorage, Fairbanks, and Juneau.

### Police

The Anchorage Police Department (APD) serves the entire Anchorage Municipality with its patrol area encompassing the core "Anchorage bowl", the Seward Highway corridor from Potter Creek south to McHugh Creek, the Glenn Highway corridor north of the Anchorage bowl to the municipality's border with the Matanuska-Susitna Borough, and includes the communities of Eagle River, Chugiak, and Eklutna. APD is the largest municipal police force in Alaska serving the state's largest city. The department employs just over 600 people made up of both sworn and non-sworn positions. According to the 2021 Approved General Government Operating Budget Report, the approved 2021 budget was increased 1.5% to $123.4 million from the revised 2020 budget of $121.6 million. Roughly 78.1% of the approved 2021 budget is going to the police department's salaries and benefits. From 2019 to 2020, the department's budget decreased 2.3% from $124.4 million in 2019 to $121.6 million in 2020. In 2019, the police department's salaries and benefits accounted for 77.0% of the total budget.

Unlike other larger cities in Alaska, Fairbanks still has separate borough and city governments with the Fairbanks Police Department the law enforcement agency responsible for the city. Within the Fairbanks North Star Borough Municipality, there are a total of five police departments. The City of Fairbanks Police Department has one police station and 63 police vehicles. According to the most recent Comprehensive Annual Financial Report, the final 2020 budget for the total police department was $6.9 million, decreasing by 1.1% from $7.0 in 2019. In 2020, the department's salaries, wages, and benefits accounted for 77.5% of the total year budget, compared to 87.1% in 2019.

The Juneau Police Department is the second largest municipal police department in Alaska and is staffed by nearly 100 employees. According to the City and Borough of Juneau's most recent budget report, the department's projected FY2021 budget increased 9.2% over the previous year to $17.4 million.

### Fire

The Anchorage Fire Department (AFD) provides fire protection and emergency medical services in Anchorage, assisted by two volunteer fire departments operating in the outlying areas of the Anchorage Municipality. The Anchorage fire service area covers the immediate 166 square miles of the Anchorage bowl and out to Eagle River; EMS coverage extends throughout the 1,961 square

miles of the entire Municipality. Aid agreements exist between the Anchorage Fire Department, Ted Stevens International Airport Police and Fire Department, Joint Base Elmendorf-Richardson, Girdwood Fire Department and Chugiak Volunteer Fire and Rescue Department. In addition, the State of Alaska Division of Forestry and the U.S. Bureau of Land Management help protect residents and property lying within the 1,961-square mile Municipality during the wildland fire season. The Anchorage Fire Department lends support to communities threatened by wildland fires throughout South-central Alaska. According to the 2020 Approved General Government Operating Budget, there are 13 fire stations with 14 fire engines, 13 medic units, 5 fire trucks, and 5 tenders. The entire fire department employs nearly 400 full-time positions. AFD's approved budget for 2021 is $105.3 million, increasing 1.6% from the previous year. Salaries and benefits for the 2021 budget account for 74.7%. From 2019 to 2020, the AFD budget decreased 0.4% from $104.3 million to $103.6 million.

Similar to the Fairbanks Police Department, the Fairbanks Fire Department is responsible for the entire city. Overall, there are nine fire service areas within the Fairbanks North Star Borough. The City of Fairbanks Fire Department has two fire stations located within its service area and one right across the border in the University FSA fire service area. Fairbanks Fire Department has a total of 25 emergency response vehicles. As of 2020, the department employed roughly 40 people including two temporary positions. From 2019 to 2020, the department's budget increased slightly by 1.1% to nearly $7.0 million. Of the total fire budget, 89.6% was dedicated to salary, wages, and employee benefits in 2020 and 86.1% in 2019.

Capital City Fire/Rescue (CCFR) provides fire suppression and emergency services to Juneau and has five stations. From FY2019 to FY2020, the department's budget increased 19.7% to $10.9 million from $9.1 million. Roughly 70.2% of the FY2020 budget was used for fire personnel services. The projected FY2021 actual budget is expected to increase 10.7% reaching $12.0 million, with roughly 67.5% going towards fire personnel services.

## Emergency Medical Services (EMS)

The Anchorage Fire Department also provides EMS to Anchorage with a mutual aid agreement between the Anchorage Fire Department, Ted Stevens International Airport Police and Fire Department, Joint Base Elmendorf-Richardson, Girdwood Fire Department, and Chugiak Volunteer Fire and Rescue Department. In 2020, EMS calls accounted for 66.5% of the AFD's total service calls, averaging 66 EMS calls per day throughout the year.

The Fairbanks Fire Department also provides EMS to the city of Fairbanks and has the only Paramedic level EMS service in the Fairbanks North Star Borough. While providing fire and EMS response for the city, the department also provides and receives mutual aid with many of the surrounding departments. In 2020, EMS calls into the department accounted for roughly 64.7% of all service calls, averaging 12 EMS calls per day.

Juneau's Capital City Fire/Rescue (CCFR) also provides emergency medical services. The department includes teams specializing in high angle rope, water rescue, and a hazmat. The department also works with local helicopter operators to provide air rescue service for incidents that occur in areas that are not accessible by other means.

## *Comparative Analysis*

Research in other jurisdictions show that impacts to local communities are manageable, typically requiring only a small fraction of gaming revenues to address fully. Based on casino evaluations performed by Purdue University and other research institutions on behalf of the Indiana Gaming Commission, statewide average actual costs borne by host communities are approximately 0.3% of gaming revenues. A study of the fiscal impact of Belterra on Switzerland County, Indiana in 2005 concluded, "…the added property, wagering and admissions taxes, and the incentive payments, exceeded the costs imposed by the riverboat. This allowed the county to increase appropriations—to cover added riverboat costs and to provide more public services—while charging Switzerland taxpayers less".[18]

The introduction of a casino can lead to an increase in traffic patrol requirements and in the number of calls for police service. Arrests or citations related to increased visitation to the local area will create increased caseloads for the local judiciary. Even calls not resulting in arrest or citation can result in a need for increased police staffing.

A large, well-equipped fire department usually does not have to increase fire personnel in order to respond to incidents at a new casino. However, rural communities which do not have the types of equipment needed to respond to incidents at buildings beyond a certain height (e.g. ladder truck) often invest in new equipment. In general, rural municipalities have more limited service-infrastructure to handle large-scale developments and increased visitation than large cities, where impacts are marginal relative to resources.

## Criminal Incident Rates

The following section provides data for the number of calls police respond to and the numbers of arrests made at a sampling of casinos throughout the country. The analysis includes three individual properties, SugarHouse in Philadelphia, Pennsylvania, Rivers Casino in Pittsburgh, Pennsylvania and Rivers Casino in Des Plaines, Illinois.

### *SugarHouse Casino – Philadelphia, Pennsylvania*

SugarHouse Casino is located along the Delaware River, outside of downtown Philadelphia in an urban neighborhood. The following statistics provide an overview of the number of calls and arrests the police department has made near the casino. It should be noted that the following data overstates the number of calls to the casino as the Philadelphia Police Department collects data based on address, which in this case also includes adjacent commercial properties. The

[18] *Five-Year License Renewal: Belterra Resort Indiana, LLC*, performed by Indiana University-Purdue University Indianapolis on behalf of the Indiana Gaming Commission, October 2005, page 36.

Pennsylvania State Police respond to incidents within the casino. The number of calls to the area near the casino declined from 2012 to 2014 by over 50% and offenses declined by 75%. This is due to a steep decline in the "all other offenses" category, indicating change in police procedure or local ordinances.

**Table 238: SugarHouse Casino Service Calls and Criminal Offenses**

| Crime Category | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| Total Service Calls | 1,023 | 708 | 499 | 743 |
| *Part One Offenses* | *30* | *22* | *19* | *24* |
| Rape | 0 | 1 | 0 | 0 |
| Robbery | 1 | 3 | 2 | 2 |
| Aggravated Assault | 5 | 1 | 0 | 2 |
| Theft | 21 | 16 | 16 | 18 |
| Stolen Vehicle | 3 | 1 | 1 | 2 |
| *Part Two Offenses* | *122* | *137* | *21* | *93* |
| Simple Assault | 12 | 19 | 5 | 12 |
| Fraud | 3 | 1 | 2 | 2 |
| Prostitution | 14 | 8 | 5 | 9 |
| Narcotic | 3 | 2 | 0 | 2 |
| Offenses Against Family | 1 | 0 | 0 | 0 |
| Driving Under the Influence | 3 | 0 | 1 | 1 |
| Liquor Law Violations | 0 | 0 | 0 | 0 |
| Public Drunkenness | 1 | 2 | 0 | 1 |
| Disorderly Conduct | 11 | 13 | 5 | 10 |
| All Other Offenses | 74 | 92 | 3 | 56 |
| **Total Offenses** | **152** | **159** | **40** | **117** |

Source: Philadelphia Police Department, The Innovation Group

## *Rivers Casino – Pittsburgh, Pennsylvania*

Rivers Casino is located near Heinz Field, along the Ohio River in Pittsburgh, Pennsylvania. Police protection is provided by two entities, the Pennsylvania State Police and the Pittsburgh Police. The Pennsylvania State Police address incidents within the casino, while the local Pittsburgh Police respond to incidents outside of the casino. The following provides an overview of the calls made to the state and local police.

**Table 239: Rivers Casino Pittsburgh Police Service Calls**

| Call Type | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| 911 | 18 | 17 | 18 | 18 |
| Accident | 19 | 16 | 17 | 17 |
| Animal | 0 | 0 | 0 | 0 |
| Auto Theft | 6 | 3 | 4 | 4 |
| Assault | 3 | 13 | 10 | 9 |
| Child | 3 | 2 | 2 | 2 |
| Criminal Mischief | 7 | 8 | 4 | 6 |
| Disorderly Person | 23 | 19 | 20 | 21 |
| Dispute | 6 | 2 | 6 | 5 |
| Disturbance | 2 | 0 | 1 | 1 |
| DV | 7 | 3 | 6 | 5 |
| Drugs | 1 | 0 | 0 | 0 |
| Fight | 0 | 5 | 6 | 4 |
| Fire | 0 | 1 | 1 | 1 |
| Fraud | 0 | 0 | 1 | 0 |
| Gun/Weapon | 6 | 2 | 1 | 3 |
| Harassment | 2 | 3 | 2 | 2 |
| Hit & Run | 28 | 27 | 26 | 27 |
| Ind Exposure/Sex Asslt | 2 | 0 | 0 | 1 |
| Intox (Person/Driver) | 43 | 38 | 44 | 42 |
| Medical | 13 | 14 | 19 | 15 |
| Overdose | 2 | 1 | 3 | 2 |
| Parking | 3 | 3 | 2 | 3 |
| Police | 36 | 33 | 71 | 47 |
| Psych | 5 | 5 | 5 | 5 |
| Resist Arr | 0 | 0 | 0 | 0 |
| Robbery | 0 | 1 | 3 | 1 |
| Retail Theft | 0 | 0 | 0 | 0 |
| Shots Fired | 1 | 0 | 0 | 0 |
| Soliciting | 18 | 12 | 6 | 12 |
| Suspicious Act/Pe/Veh | 7 | 4 | 7 | 6 |
| Theft | 4 | 13 | 14 | 10 |
| Theft fr Auto | 14 | 5 | 12 | 10 |
| Traffic | 14 | 16 | 20 | 17 |
| Trespass | 1 | 0 | 2 | 1 |
| Unknown | 5 | 1 | 5 | 4 |
| Warrant | 8 | 1 | 1 | 3 |
| Misc | 21 | 22 | 19 | 21 |
| **Total** | **328** | **290** | **358** | **325** |

Source: Pittsburgh Police Department, The Innovation Group

**Table 240: Rivers Casino Pennsylvania State Police Service Calls**

| Call Type | 2013 | 2014 | Average |
|---|---|---|---|
| Criminal Homicide | 0 | 0 | 0 |
| Sex Offenses | 0 | 2 | 1 |
| Robbery | 0 | 0 | 0 |
| Assaults | 32 | 26 | 29 |
| Property Offenses | 535 | 368 | 452 |
| Arson | 0 | 0 | 0 |
| Drug Violations | 18 | 27 | 23 |
| Alcohol Crimes | 14 | 25 | 20 |
| **Total** | **599** | **448** | **524** |

Source: Pennsylvania State Police, The Innovation Group

The Rivers Casino in Pittsburgh receives an average of 849 calls to the casino and areas directly adjacent to the casino. The incident rate was calculated based on the estimated attendance at the facility and the total number of service calls.

**Table 241: Rivers Casino Service Call Rates**

| | |
|---|---|
| Revenue 2014 | $346,297,439 |
| Avg. Spend | $75 |
| Est. Attendance | 4,617,299 |
| | |
| Average Pittsburgh Police Calls | 325 |
| Incident Rate Pittsburgh Police Calls | 0.007% |
| Average Pennsylvania Police Calls | 524 |
| Incident Rate Pennsylvania State Police Calls | 0.011% |
| Incident Rate All Police Calls | 0.018% |

Source: Pittsburgh Police Department, Pennsylvania State Police, Pennsylvania Gaming Control Board, The Innovation Group

## *Rivers Casino – Des Plaines, Illinois*

The Rivers Casino in Des Plaines is located on the west side of Chicago within close proximity to O'Hare Airport. The following provides an overview of the number and type of calls that the Des Plaines Police Department at the casino.

**Table 242: Rivers Casino Des Plaines Police Service Calls**

| | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| Assault & Battery | 61 | 73 | 68 | 67 |
| Administrative & Investigative | 275 | 204 | 336 | 272 |
| Animal/Pet Related | 10 | 5 | 5 | 7 |
| Community Relations Related | 128 | 29 | 24 | 60 |
| Controlled Substance | 5 | 30 | 79 | 38 |
| Disorderly Conduct | 12 | 9 | 16 | 12 |
| Fire/LEO Assist | 180 | 48 | 62 | 97 |
| Fraudulent Activity | 43 | 70 | 88 | 67 |
| Gambling Related | 3 | 0 | 0 | 1 |
| Medical Related | 7 | 6 | 6 | 6 |
| Minors with Alcohol | 2 | 0 | 1 | 1 |
| Motor Vehicle Offense (DUI, DL) | 44 | 44 | 42 | 43 |
| Property Damage | 12 | 13 | 14 | 13 |
| Theft Related | 35 | 44 | 70 | 50 |
| Traffic Accident | 60 | 59 | 46 | 55 |
| Traffic Enforcement | 26 | 40 | 49 | 38 |
| Trespassing | 431 | 354 | 341 | 375 |
| Welfare/Missing Persons Related | 1 | 4 | 6 | 4 |
| **Total** | **1,335** | **1,032** | **1,253** | **1,207** |

Source: Des Plaines Police Department, The Innovation Group

Attendance figures from the Illinois Gaming Board were utilized in order to calculate the incident rates for calls made to local police.

**Table 243: Des Plaines Service Call Rates**

| | |
|---|---|
| Casino Attendance 2014 | 3,519,071 |
| Average Casino Service Calls | 1,207 |
| Incident Rate for Service Calls | 0.034% |

Source: Des Planes Police Department, Illinois Gaming Board, The Innovation Group

## Average Incident Rates

Incident rates from the data above was utilized in order to establish an incident rate that will be applied to the Anchorage and Fairbanks facilities in order to project the number of calls and charges that can be expected with the addition of a casino to the community. Data from Philadelphia was excluded from the average because it doesn't include incidents on the casino floor.

**Table 244: Average Criminal Incident Rate**

| | Estimated Arrests |
|---|---|
| Rivers Casino - Pittsburgh, PA | 0.007% |
| Rivers Casino - Des Plaines, IL | 0.002% |
| **Average** | ***0.005%*** |

Criminal offense data for the Anchorage and Fairbanks police departments from the FBI's Uniform Crime Reporting (UCR) Program. In 2019, there were 19,995 criminal offenses reported to Anchorage Police, 2,094 reported to Fairbanks Police, and 2,335 offenses reported to Juneau Police. In an effort to remain conservative, a growth rate was not applied to the incident volumes. It is estimated that the proposed Anchorage, Fairbanks, and Juneau casinos will have approximately 72, 22, and 13 annual incidents, respectively, in 2026. These represent an increase of 0.36% - 1.03% over 2019 volumes.

**Table 245: Anchorage, Fairbanks, and Juneau Casinos Police Arrests Estimate**

| | Anchorage | Fairbanks | Juneau |
|---|---|---|---|
| 2026 Projected Casino Attendance | 1,543,285 | 461,289 | 269,517 |
| *Average arrest rate* | *0.005%* | *0.005%* | *0.005%* |
| **Projected Arrests** | **72** | **22** | **13** |
| *2019 Offenses Reported* | 19,995 | 2,094 | 2,335 |
| 2026 Projected Offenses Reported | 20,067 | 2,116 | 2,348 |
| *% Change* | 0.36% | 1.03% | 0.54% |

The following charts show a breakdown of reported criminal offenses by type for each of the three cities of interest.

**Table 246: Anchorage Police Department Offenses Reported 2019**

| Type | Incidents | % of Total |
|---|---|---|
| **Total** | **19,995** | **100%** |
| Criminal Homicide | 37 | 0.2% |
| Rape | 546 | 2.7% |
| Robbery | 622 | 3.1% |
| Assault | 6,445 | 32.2% |
| Burglary | 1,694 | 8.5% |
| Larceny | 9,069 | 45.4% |
| Motor Vehicle Theft | 1,582 | 7.9% |
| **Total Population** | **299,452** | |
| *Incidents per 100 residents* | *6.7* | |

Sources: FBI Uniform Crime Reporting (UCR) Program; ESRI

**Table 247: Fairbanks Police Department Offenses Reported 2019**

| Type | Incidents | % of Total |
|---|---|---|
| **Total** | **2,094** | **100%** |
| Criminal Homicide | 4 | 0.2% |
| Rape | 41 | 2.0% |
| Robbery | 55 | 2.6% |
| Assault | 594 | 28.4% |
| Burglary | 173 | 8.3% |
| Larceny | 1,033 | 49.3% |
| Motor Vehicle Theft | 194 | 9.3% |
| | | |
| **Total Population** | **103,644** | |
| *Incidents per 100 residents* | *2.0* | |

Sources: FBI Uniform Crime Reporting (UCR) Program; ESRI

**Table 248: Juneau Police Department Offenses Reported 2019**

| Type | Incidents | % of Total |
|---|---|---|
| **Total** | **2,335** | **100%** |
| Criminal Homicide | 4 | 0.2% |
| Rape | 29 | 1.2% |
| Robbery | 49 | 2.1% |
| Assault | 916 | 39.2% |
| Burglary | 192 | 8.2% |
| Larceny | 1,037 | 44.4% |
| Motor Vehicle Theft | 108 | 4.6% |
| | | |
| **Total Population** | **33,335** | |
| *Incidents per 100 residents* | *7.0* | |

Sources: FBI Uniform Crime Reporting (UCR) Program; ESRI

For additional information on criminal incidents and qualitative data from other jurisdictions, see Appendix B.

## Fire Incident Rates

The following section provides data for the number of calls local fire departments respond to for the three casino properties: SugarHouse in Philadelphia, Pennsylvania, Rivers Casino in Pittsburgh, Pennsylvania and Rivers Casino in Des Plaines, Illinois. Additionally, data from the Grand Victoria Casino in Elgin, Illinois was used. The majority of calls made to the area around the casino are calls for EMS service or traffic accidents. There are a very small number of calls that are labeled as fire and usually involve a false alarm.

### *SugarHouse Casino – Philadelphia, Pennsylvania*

The Philadelphia Fire Department responded to an average of 28 calls from 2012 to 2014. Of those calls, the majority were in connection with EMS or traffic accidents.

**Table 249: Philadelphia Fire Department Calls**

| | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| EMS and Traffic Accident | 27 | 18 | 19 | 21 |
| Fire | 9 | 8 | 3 | 7 |
| **Total** | **36** | **26** | **22** | **28** |

Source: Philadelphia Fire Department, The Innovation Group

The following utilizes the estimated attendance figures from the previous section in order to calculate the fire call rate for SugarHouse Casino in Philadelphia.

**Table 250: Philadelphia Fire Department Call Rate**

| | |
|---|---|
| Estimated Casino Attendance | 3,534,995 |
| Average Fire Incidents | 28 |
| Fire Dept. Call Rate | 0.001% |

Source: Philadelphia Fire Department, The Innovation Group

### *Rivers Casino – Pittsburgh, Pennsylvania*

The Pittsburgh Fire Department responded to an average of 17 calls from 2012 to 2014. Of those calls, the majority were in connection with EMS or traffic accidents.

**Table 251: Pittsburgh Fire Department Calls**

| | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| EMS and Traffic Accident | 10 | 9 | 15 | 11 |
| Fire | 9 | 5 | 3 | 6 |
| **Total** | **19** | **14** | **18** | **17** |

Source: Pittsburgh Fire Department, The Innovation Group

The following utilizes the estimated attendance figures from the previous section to calculate the fire call rate for Rivers Casino Pittsburgh.

**Table 252: Pittsburgh Fire Department Call Rate**

| | |
|---|---|
| Estimated Casino Attendance | 4,617,299 |
| Average Fire Incidents | 17 |
| Fire Dept. Call Rate | 0.0004% |

Source: Pittsburgh Fire Department, The Innovation Group

### *Rivers Casino – Des Plaines, Illinois*

The Philadelphia Fire Department responded to an average of 168 calls from 2012 to 2014. Of those calls, the majority were in connection with EMS or traffic accidents.

**Table 253: Des Plaines Fire Department Calls**

| | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| EMS | 185 | 138 | 167 | 163 |
| Fire | 3 | 4 | 6 | 4 |
| **Total** | **188** | **142** | **173** | **168** |

Source: Des Plaines Fire Department, The Innovation Group

The following utilizes the estimated attendance figures from the previous section in order to calculate the fire call rate for Rivers Casino in Des Plaines.

**Table 254: Des Plaines Fire Department Call Rate**

| | |
|---|---|
| Attendance | 3,519,071 |
| Average Calls | 168 |
| Fire Dept. Call Rate | 0.005% |

Source: Des Plaines Fire Department, The Innovation Group

### *Grand Victoria - Elgin*

The City of Elgin, Illinois is located near a major metropolitan area. The Grand Victoria Casino is also located within an hour of downtown Chicago and draws from that market. The following table provides an overview of incidents reported by the Elgin Fire Department for the Grand Victoria Casino.

**Table 255: Grand Victoria Elgin Fire Response 2014**

| Call Type | 2012 | 2013 | 2014 | Average |
|---|---|---|---|---|
| EMS | 65 | 72 | 67 | 68 |
| Fire | 0 | 0 | 0 | 0 |
| Good Int. | 2 | 2 | 3 | 2 |
| Public Assistance | 0 | 2 | 1 | 1 |
| False | 4 | 2 | 5 | 4 |
| **Total** | **71** | **78** | **76** | **75** |

Source: Elgin Fire Department, The Innovation Group

Attendance was taken from the Illinois Gaming Board. Based on these figures, the rate of incidents compared to number of guests was extremely small.

**Table 256: Grand Victoria Elgin Fire Call Rate**

| Des Plaines Fire Incidents | |
|---|---|
| Attendance | 1,372,095 |
| Average Calls | 75 |
| Fire Dept. Call Rate | 0.005% |

Source: Elgin Fire Department, Illinois Gaming Board, The Innovation Group

## Average Fire Incident Rates

Incident rates from the data above was utilized in order to establish an incident rate that is applicable to the proposed Anchorage and Fairbanks facilities to project the number of calls the local fire departments can expect. It should be noted that some communities have seen a smaller impact on services. For example, the Kenner Fire Department in Louisiana has reported a small number of service calls at the Treasure Chest Casino, averaging approximately seven medical calls and only one fire call in the last five years.

**Table 257: Average Fire Department Call Rate Estimate**

| | Estimated Fire Incident Rate |
|---|---|
| SugarHouse Casino - Philadelphia, PA | 0.001% |
| Rivers Casino - Pittsburgh, PA | 0.0004% |
| Rivers Casino - Des Plaines, IL | 0.005% |
| Grand Victoria Casino - Elgin, IL | 0.006% |
| **Average** | **0.003%** |

Source: The Innovation Group

As shown in the following table, it is estimated that the proposed casinos will result in an increase of 44 service calls in Anchorage, 13 service calls in Fairbanks, and 8 service calls in Juneau. This is an increase of approximately 0.1-0.6% over the current call volume.

**Table 258: Anchorage, Fairbanks, and Juneau Casinos Fire/EMS Service Call Estimates**

| | Anchorage | Fairbanks | Juneau |
|---|---|---|---|
| 2026 Projected Casino Attendance | 1,543,285 | 461,289 | 269,517 |
| *Average service call rate* | *0.003%* | *0.003%* | *0.003%* |
| **Projected Fire Service/EMS Calls** | **44** | **13** | **8** |
| | | | |
| *2020 Fire/EMS Service Calls [1]* | 36,238 | 6,573 | 1,320 |
| 2026 Projected Fire/EMS Service Calls | 36,282 | 6,586 | 1,328 |
| *% Change* | 0.12% | 0.20% | 0.59% |

[1] 2020 Fire Alarms used for Juneau (as reported in FY 2020 City of Juneau Annual Report)

The following provides a breakdown of calls to Anchorage and Fairbanks Fire Departments. Call breakdown data for Juneau was not available.

**Table 259: Anchorage Fire Department Calls 2017-2020(Includes EMS)**

| Type | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|
| **Total** | **36,270** | **35,889** | **36,694** | **36,238** |
| | | | | |
| **Medical** | **24,952** | **24,347** | **24,527** | **24,103** |
| | | | | |
| **Non-Medical** | **11,318** | **11,542** | **12,167** | **12,135** |
| Fire | 785 | 915 | 1,010 | 900 |
| Service Calls | 7,799 | 7,808 | 8,266 | 8,518 |
| Hazard | 518 | 589 | 508 | 455 |
| False Alarm | 2,216 | 2,230 | 2,383 | 2,262 |
| | | | | |
| **Total Population** | **301,190** | **299,826** | **299,452** | **298,060** |
| *Incidents per 100 residents* | *12.0* | *12.0* | *12.3* | *12.2* |

**Table 260: Fairbanks Fire Department Calls 2017-2020 (Includes EMS)**

| Type | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|
| **Total** | **8,625** | **5,793** | **6,293** | **6,573** |
| | | | | |
| **Medical** | **3,396** | **3,455** | **3,548** | **4,253** |
| | | | | |
| **Non-Medical** | **5,229** | **2,338** | **2,745** | **2,320** |
| | | | | |
| **Total Population** | **101,955** | **102,473** | **103,644** | **103,392** |
| *Incidents per 100 residents* | *8.5* | *5.7* | *6.1* | *6.4* |

# *Conclusion and Implications*

## Fiscal Impacts and Municipal Services

Impacts arising from population and development growth would be effectively diluted by the size of Anchorage, Fairbanks, and Juneau's existing labor force, housing stock, and school capacity. Impacts arising from increased visitation—such as police, fire and EMS calls—are less than significant but detailed below. Moreover, the gains in tax revenues that will accrue to the local governments as a result of increased economic activity generated by the casino and its employees will mitigate increases in municipal services expenses. In sum, the casino will have a significant positive impact on Anchorage, Fairbanks, and Juneau's governmental services.

### *Estimated Municipal Expenses*

The following table shows the estimated expenses attributable to the subject development from police and fire/EMS services, based on the Comparative Analysis section above, with percent change estimates from that analysis applied to future budget estimates.

**Table 261: Anchorage, Fairbanks, and Juneau Police and Fire/EMS Expense Increase 2026**

| | | Anchorage | Fairbanks | Juneau |
|---|---|---|---|---|
| 2026 Police Budget Estimate | | *$142,845,543* | *$7,889,210* | *$24,051,812* |
| | *Incremental %* | *0.36%* | *1.03%* | *0.54%* |
| | *Incremental $* | $517,145 | $81,518 | $130,217 |
| *2026 Fire/EMS Budget Estimate* | | *$120,323,754* | *$8,219,804* | *$21,584,045* |
| | *Incremental %* | *0.12%* | *0.20%* | *0.59%* |
| | *Incremental $* | $146,859 | $16,532 | $126,302 |
| **Total Increase in Municipal Services** | | **$664,004** | **$98,050** | **$256,520** |

Sources: City of Anchorage, City of Fairbanks, The Innovation Group

## Problem Gambling

Since Alaska does not currently offer any state-funded problem gambling services, we do expect a fiscal impact from the creation of prevention and treatment programs. The size and scope of these services will depend on the prevalence of problem gambling in the state. Since gambling is already in Alaska via Charitable Gaming, it is reasonable to assume a problem gambling population currently exists. We look to other markets and research studies to estimate the current number of problem gamblers in Alaska; however, we recommend a prevalence study to better assess the current levels of problem gambling as well as the geographic distribution of problem gamblers for more efficient funds allocation.

One of the most frequently cited studies on prevalence rates is *Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis by the Harvard*

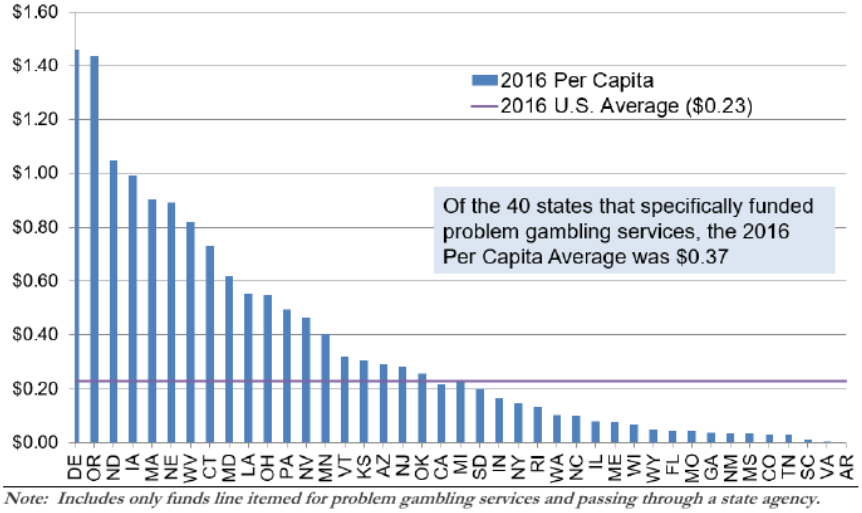
*Medical School Division on Addictions*. The Harvard Medical School study analyzed 152 distinct previous prevalence studies and determined that 2.9% of the adult population could be considered problem or pathological gamblers. The *2016 Survey of Problem Gambling Services in the United States*[19] conducted by the Association of Problem Gambling Service Administrators and the National Council on Problem Gambling estimated 2.2% of Alaska adults have a gambling problem. Combining these two studies, we estimate there are currently around 12,000 problem gamblers in Alaska. Studies on problem gambling comorbidities show high rates of alcohol use disorder among problem gamblers[20]. Given Alaska's prevalence of binge drinking[21] is near the upper end of the national distribution, we would forecast the likely population of Alaska problem gamblers, after casinos are introduced, to be higher than the national average. Therefore, when assessing mitigation costs, we analyze a range from 2.2% (current estimates) to 5%, which we believe will be comfortably higher than the actual prevalence of problem gambling.

To estimate mitigation costs for Alaska, we return to the *2016 Survey of Problem Gambling Services in the United States*, which includes data on state-funded problem gambling programs. We used three approaches from this report to triangulate the costs of a mitigation program for the state. First, we consider the distribution of per capita problem gambling services spend across the states. Second, we look at the distribution of total problem gambling services spend by state. Third, the study regresses problem gambling services spend by state on estimated number of problem gamblers by state. We use Alaska's estimated number of problem gamblers to predict spend. These three approaches, described in more detail below, yield a range of $1.1 million to $1.3 million in problem gambling services spend.

[19] https://158bvz3v7mohkq9oid5904e0-wpengine.netdna-ssl.com/wp-content/uploads/2018/03/2016-Survey-of-PGS-in-US_FULL-REPORT-FINAL-12-19-2017-1.pdf
[20] https://pubmed.ncbi.nlm.nih.gov/15889941/
[21] Alaska has the 10th highest binge drinking prevalence in the country according to data obtained from the CDC https://www.cdc.gov/alcohol/data-stats.htm

The bar chart below shows per capita funding for problem gambling services. Among the states with state-funded problem gambling programs average per capita funding is $0.37. Delaware spends the most per capita at $1.46. Assuming Alaska matched Delaware's per capita spend, Alaska would spend approximately $1.11M annually on problem gambling prevention and mitigation.

**Figure 21: 2016 Per Capita Allocation for Problem Gambling Services by U.S. State**




*Note: Includes only funds line itemed for problem gambling services and passing through a state agency. Missing states do not fund problem gambling services through legislative actions or utilize state agency budgets line itemed for problem gambling services. U.S. average is based on national population divided by total state agency spending from budgets line itemed for problem gambling services.*

Source: 2016 Survey of Problem Gambling Services in the United States

Next, we analyzed total spend on problem gambling services by state. That chart below lists total spend by state (note: six states do not have any funding for problem gambling services). If Alaska matched the median level of funding, it would spend $1.10M on problem gambling services.

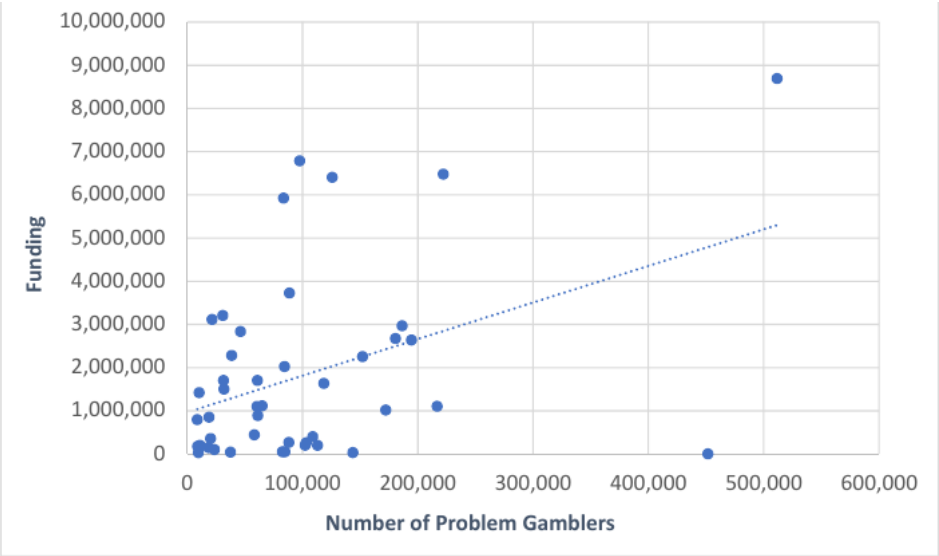
**Table 262: Total Spend on Problem Gambling Services by State (Fiscal Year 2016)**

| State | Total Spend on Problem Gambling Services |
|---|---|
| Alabama | $50,000 |
| Arizona | $2,022,200 |
| California | $8,690,040 |
| Colorado | $201,837 |
| Connecticut | $3,204,500 |
| Delaware | $1,389,842 |
| Florida | $2,680,000 |
| Georgia | $400,000 |
| Illinois | $1,101,420 |
| Indiana | $1,100,000 |
| Iowa | $3,111,614 |
| Kansas | $889,198 |
| Kentucky | $69,650 |
| Louisiana | $2,834,673 |
| Maine | $100,000 |
| Maryland | $3,725,180 |
| Massachusetts | $6,782,969 |
| Michigan | $2,279,184 |
| Minnesota | $2,252,832 |
| Mississippi | $266,228 |
| Missouri | $258,960 |
| Montana | $375,000 |
| Nebraska | $1,700,000 |
| Nevada | $1,700,646 |
| New Hampshire | $25,000 |
| New Jersey | $2,636,400 |
| New Mexico | $859,431 |
| New York | $2,967,500 |
| North Carolina | $1,015,600 |
| North Dakota | $794,500 |
| Ohio | $6,402,000 |
| Oklahoma | $1,113,200 |
| Oregon | $5,921,830 |
| Pennsylvania | $6,475,000 |
| Rhode Island | $148,345 |
| South Carolina | $50,000 |
| South Dakota | $174,194 |
| Tennessee | $200,000 |
| Texas | $40 |
| Vermont | $200,000 |
| Virginia | $30,750 |
| Washington | $1,631,936 |
| West Virginia | $1,500,000 |
| Wisconsin | $450,000 |
| **Median** | **$1,100,710** |

Source: 2016 Survey of Problem Gambling Services in the United States

Finally, we use a regression of problem gambling services funding on a state's estimated number of problem gamblers to predict Alaska's problem gambling services spend. The best fit line shown below has an intercept around one million, suggesting baseline spend regardless of problem gamer population size is $1M. The slope of the line is approximately 9, indicating that for every one problem gambler, a state's problem gambling budget increases by $9 above the baseline $1 million. At what we believe is a substantial overestimate of 5% of Alaskan adult population in the problem gambling population (solely for the purposes of developing a conservative budget estimate), the regression would indicate a state spend of just under $1.3 million on problem gambling mitigation.

**Figure 22: Relationship between a State's Estimated Number of Adult Problem Gamblers and Problem Gambling Service Funding**




Source: 2016 Survey of Problem Gambling Services in the United States

More information on problem gambling research is contained in Appendix A.

# APPENDIX A: PROBLEM GAMBLING MITIGATION

## *Definition and Prevalence*

A majority of Americans, about 86%, report having gambled at least once in their lifetime[22]. Most people gamble for recreational purposes without the behavior becoming a problem. Studies, however, estimate that 0.4%-1.6% of the United States population can be classified as pathological gamblers.[23,24] Pathological gambling has been commonly associated with relationship problems, employment issues, and significant financial difficulties.

The American Psychiatric Association (2004) defines a pathological gambler as a person who features a continuous loss of control over gambling. Furthermore this gambler illustrates a progression, in gambling frequency and amounts wagered, in the preoccupation with gambling and in obtaining monies with which to gamble. However, problem gambling is a more loosely defined term and is commonly associated with gaming-related difficulties that are considered less serious than those of a pathological gambler. For the sake of this report we will utilize the definition by noted researchers Cox, Rosenthal and Volberg which defines problem gambling as a pattern of gambling behavior that compromise, disrupt or damage personal, family or vocational pursuits.[25]

The National Research Council[26] utilizes a three-level metric. Level 1 gambling is considered social and or recreational gambling with no appreciable harmful effects. Level 2 gambling is synonymous with problem gambling. Level 3 gambling is synonymous with pathological gambling. Problem gambling is an urge to gamble despite harmful negative consequences or a desire to stop. It is often defined by whether harm is experienced by the gambler or others, such as the gamblers family, significant other, spouse, friends, or coworkers. A problem gambler may or may not be a pathological gambler. Pathological or compulsive gambling is defined as a mental disorder characterized by a continuous or periodic loss of control over gambling, a preoccupation with gambling and with obtaining money with which to gamble, irrational thinking, and a continuation of the behavior despite adverse consequences.

Prevalence rates to determine adult problem gambling rates are measured by administering a survey (often a variation of the South Oaks Gambling Screen or a modified DSM-IV questionnaire) to a statistically valid sample of the adult population of the jurisdiction being

---

[22] James KC, Bible WA, Dobson JC, Lanni JT, Leone RC, Loescher RW, et al. *National gambling impact study commission final report*. National Gambling Impact Study Commission. 1999.
[23] Shaffer HJ, Hall MN, Vander Bilt J. "Estimating the prevalence of disordered gambling behavior in America and Canada: a research synthesis." *Am J Public Health*. 1999
[24] Petry NM, Stinson FS, Grant BF. "Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: results from the national epidemiologic survey on alcohol and related conditions." *J Clin Psychiatry*. 2005
[25] Cox, S., H. R. Lesieur, R. J. Rosenthal & R. A. Volberg. 1997. *Problem and Pathological Gambling in America: The National Picture*. Columbia, MD: National Council on Problem Gambling.
[26] National Research Council, pp. 20-21.

measured. Adolescent rates are measured in a similar manner. Such a method and analysis of data that accompanies the process is referred to as a general population prevalence study.

Jurisdictions, both domestically and internationally, have conducted studies to estimate the percentage of the population that could be classified as having some level of problem gambling behavior. These studies, commonly referred to as prevalence studies, are designed to reflect the scope and severity of problem gambling behavior.[27]

One of the most frequently cited studies on prevalence rates is *Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis by the Harvard Medical School Division on Addictions*. The meta-analysis method of estimating prevalence rates has been used in related addiction fields of drug prevention and patterns of alcohol use and alcohol treatment. It is considered a more cost-effective method than a national study since it makes use of existing research already conducted in a field.

The Harvard Medical School study, believed to be the first to use meta-analysis measurements for problem gambling prevalence rates, analyzed 152 distinct previous prevalence studies available for review by June 15, 1997. The study determined that 2.0 percent of the adult population could be considered as Level 2 of disordered gambling (often referred to as problem gambling) and 0.9 percent of Level 3 or disordered gambling (also referred to as pathological gambling) during the past year. The vast majority of adults in the general population, then, do not experience gambling-related problems of any clinical significance.

The meta-analysis raw data was given to the Committee on the Social and Economic Impact of Pathological Gambling of the National Research Council (NRC) in its analysis for the National Gaming Impact Study Commission. After an extensive review, the NRC agreed with the above rates of problem gambling and used the numbers in its own analysis of problem gambling in its final report.

It should be noted that problem gambling is not limited to states with casinos, since most states including Alaska have other forms of gambling, whether legal or not, and since casino options are available in other states. As part of our stakeholder research, we spoke with several treatment and healthcare professionals from Alaska. In these meetings, it was determined that there is no existing framework or dedicated funding to assist with gambling related social impacts. We also connected with the National Council on Problem Gambling and included in our stakeholder materials a copy of a letter presented to the State of Alaska which highlights suggested considerations to address problem gambling mitigation.

The introduction of casino gambling has the potential of negative social impacts. These potential impacts can be controlled and minimized through proper planning, awareness campaigns, and prevention and treatment programs applied in a coordinated manner by all relevant stakeholders.

---

[27] *Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis*, Harvard Medical School Division on Addictions, 1997.

By utilizing some of the many proven prevention and treatment programs, the potential social impact of the advent of gaming in Alaska can be minimized. Allocating funds to problem gambling services can help mitigate problem gambling and promote responsible gambling.

As an example, by devoting more resources to prevention and treatment, Connecticut was able to cut prevalence rates despite further gaming development. In 1996, Connecticut had only a single clinic, but by the time of an updated study in 2008, the state had 17 clinics.[28] Prevalence rates declined substantially during that period, despite the opening of Mohegan Sun late in 1996 and further expansion at Foxwoods, including the opening of Grand Pequot Tower hotel in 1997.

**Table 263: Connecticut Prevalence Rates**

| | 2008 Survey | 1997 Study |
|---|---|---|
| Problem Gamblers | 0.90% | 2.20% |
| Probable Pathological Gamblers | 0.70% | 0.60% |
| Total Disordered Gamblers | 1.60% | 2.80% |

Source: Spectrum Gaming Group.

## *Responsible Gaming and Harm Minimization*

Responsible gambling/gaming programs take several forms in an effort to combat and prevent gambling-related harms. Instances of problem gambling manifest in two categories of harm: (1) personal harm, including effects on health, well-being, and relationships, and/or (2) economic harm. Research on responsible gaming falls short of the levels of scientific analysis necessary to develop responsible gaming "best practices." While various publications have attempted to synthesize existing research on common responsible gaming and harm minimization practices, the field of research often lacks peer-reviewed scientific analyses.

In their current form, the most common responsible gaming practices reflected in the field of research are self-exclusion programs, gambling help lines, tracking behavioral characteristics, setting gambling limits, providing responsible gaming-oriented game features, and employee training. Each of these strategies will be discussed below.

As a condition of licensing, commercial casino states may mandate that casinos prepare and submit for approval a wide-ranging plan for addressing responsible gaming issues. Required elements of the plan often include employee training and public awareness efforts along with other policies that various states have addressed specifically through standalone statutes, or regulations, that address only a single subject. The required elements of these plans vary by state.

[28] Spectrum Gaming Group, *Gambling in Connecticut: Analyzing the Economic and Social Impacts*, prepared for the State of Connecticut, Division of Special Revenue, June 2009.

In Maryland, for example, a responsible gambling program must consist of mechanisms that both mitigate the effects of problem gambling in the State and maximize the access of individuals with a gambling problem to problem gambling resources.[29]

Massachusetts makes the issuance of gaming licenses contingent upon the submission of a plan to "address lottery mitigation, compulsive gambling problems, workforce development and community development [,] and host and surrounding community impact and mitigation issues."[30] The State intends for these requirements to advance its objective of providing a gaming environment that is safe and productive for all stakeholders. In furtherance of this objective, Massachusetts prompts gaming licensees to develop plans that train employees to identify patrons exhibiting problems with gambling, and prevention programs for vulnerable populations.[31]

Other states, such as Ohio, connect their responsible gaming plans to other mitigation mechanisms, such as voluntary exclusion programs, to better protect vulnerable groups.[32] Overall, the development of responsible gaming plans serves to establish concrete frameworks to better promote safe gaming.

## Self-Exclusion Programs

Voluntary self-exclusion programs, typically operated by casinos and online gambling sites or gaming regulators, give individuals the ability to exclude themselves from gambling activities. Many states require that patrons have the ability to authorize a casino to refuse their right to gamble and to expel them if they are found gambling or, in some cases, otherwise found on the premises. Program management models vary; in some cases, they are run by the state or a state-appointed group, in others they are managed directly by licensees. State statutes vary in the length of the self-exclusion periods available – typically ranging from a six month ban to lifetime restriction – and in the procedures for reversing self-exclusion. In some states, third parties also have the ability to voluntarily exclude patrons exhibiting problem gambling behavior. Many state laws specify that, in addition to banning play, the casino must also eliminate direct promotional outreach to these individuals as well as exclude them from complimentary offerings ("comps") or access to credit. Such programs illustrate efforts to mitigate the potential social harms of expanded gaming in a state, including mental health issues, relationship concerns, and financial and work problems resulting from problem gambling.[33] As one of the most investigated responsible gaming strategies, self-exclusion programs benefit from a robust body of research conducted around the world.

---

[29] Maryland responsible gaming plan statute. COMAR 36.01.03.07(B).
[30] Massachusetts responsible gaming statute. M.G.L. Ch. 23K, § 15(6).
[31] M.G.L., Ch. 23K, § 18(6)
[32] *See e.g.*, Ohio Regulation 3772-12-06.
[33] Nerilee Hing, Barry Tolchard, Elaine Nuske & Louise Holdsworth, *A Process Evaluation of a Self-Exclusion Program: A Qualitative Investigation from the Perspective of Excluders and Non-Excluders*, 12 INTERNATIONAL JOURNAL OF MENTAL HEALTH AND ADDICTION 509, 510 (2014), 10.1007/s11469-014-9482-5.

Generally, the research on the effectiveness of self-exclusion programs concludes that this method is a safe and, for some gamblers, effective form of intervention against problem gambling. As one study suggests, self-exclusion may have similar outcomes to counseling and may reduce harm in the short-term. Additional research has indicated that self-excluded persons also engage in treatment, self-help groups, or other forms of support experience more positive outcome than those who do not. This research suggests that self-exclusion programs that serve as a gateway to treatment are most successful for individuals harmed by problem gambling. Research has also indicated that problem gamblers appear to be more receptive to self-exclusion mitigation strategies when compared to self-led efforts to seek professional help.[34] Ultimately, self-exclusion has transitioned from a "punitive" enforcement model to one that aims to provide individual assistance in order to connect vulnerable persons with counseling and other support services.

The framework for self-exclusion programs varies from state to state, but many states mandate that patrons have the ability to refuse their right to gamble and to expel them from the premises.[35] In Kansas, for example, the voluntary exclusion statutes require that each self-exclusion applicant "refrain from visiting gaming facilities, pari-mutuel licensee locations, and fair association race meets."[36] Kansas' statutes also enable the gaming commission to "prohibit the applicant from entering the premises of all gaming facilities."

Similarly, Massachusetts enables a person to be placed on a self-exclusion list by "acknowledging that the person is a problem gambler and by agreeing that, during any period of voluntary exclusion, the person shall not collect any winnings or recover any losses."[37] Massachusetts also prohibits gaming establishments from marketing "to persons on any excluded persons list," and requires gaming establishments to deny access to complimentary credits. Ultimately, Massachusetts identifies voluntary self-exclusion as "one means to help address problem gambling behavior or deter an individual with family, religious, or other personal concerns from entering . . . a gaming establishment."[38]

Various challenges interfere with the effectiveness of self-exclusion. First, the number of gambling facilities within a jurisdiction may make the enforcement of self-exclusion impractical; if alternative facilities can be easily accessed, the effectiveness of self-exclusion may be compromised. Notably, statutorily required training may not sufficiently prepare officials responsible for self-exclusion enforcement.[39] The diversity of socioeconomic and psychological conditions among voluntary self-excluders may require responsive enforcement mechanisms. Furthermore, the need to apply for placement on a self-exclusion list within a gaming facility may

---

[34] Hing, *supra* note 5, at 510.
[35] Regulatory Management Counselors, *Comparative Governance and Regulatory Structure of Gaming Regulations Related to Expanded Legalized Gaming Activities in the Commonwealth of Virginia* (Aug. 5, 2019), at 160 (hereinafter *Comparative Governance Report*).
[36] *Id.* at 161.
[37] *Id.* at 169.
[38] *Id.* at 171.
[39] Hing, *supra* note 5, at 511.

compromise the integrity of the process, thereby deterring potential self-excluders from participating.

Individual compliance poses another well-documented challenge to the effectiveness of self-exclusion programs. For example, one study determined that more than half of the participants for whom self-exclusion was still in effect had returned to a casino or breached their contracts by the six month follow-up interview. Additionally, a study of self-excluded individuals in Missouri found similar breaches, indicating that the benefits of the program were attributable more to the act of enrollment than to enforcement. This research has led to the frequent conclusion that responsibility for self-exclusion lies with both the gaming industry and the self-excluding individual.

In conclusion, voluntary self-exclusion programs may reduce the urge to gamble and increase the perception of control over personal behavior.[40] While self-exclusion alone cannot substitute for dedicated treatment, it provides an external control mechanism that may limit problem gambling and encourage voluntary excluders to seek professional help.

## Tracking Behavioral Characteristics

In an effort to predict the likelihood that a patron will experience harm from gambling and to introduce preventative interventions before the onset of such problems, gaming jurisdictions have implemented systems to track player behavioral characteristics. These behavioral tracking systems are based on algorithms of play. Implementation strategies vary with the form of gaming: whereas in online gaming environments tracking procedures benefit from access to all player transaction information, in brick-and-mortar environments, the strategy is often designed around player tracking systems (e.g., Players Clubs) that depend upon an individual patron's participation.

Research on the effectiveness of tracking frameworks has produced informative findings. Based on analysis of player habits, studies have suggested that efforts to promote responsible gaming should be tailored to each type of gambling offered at a gaming location, rather than adhering to a general mitigation program. By studying behaviors and thoughts patrons use to control the amount they gamble, such as attempts to set a budget or to seek help, research has identified characteristics that could be used to develop prevention and early intervention programs for problem gamblers. Research dedicated to tracking the behavioral characteristics of online gamblers has determined that patrons who engaged in more than two types of gambling within their first month of play, with high variability of wagers, were more likely to benefit from responsible gaming programs.

The study of behavioral characteristics remains a highly-variable task. Given the limitations inherent in the use of personalized player data, there remains a lack of definitive evidence of any behavioral algorithm that can accurately predict patterns of gambling disorder.

---

[40] Robert Ladouceur, Caroline Sylvain & Patrick Gosselin, *Self-Exclusion Program: A Longitudinal Evaluation Study*, 23 J. GAMBLING STUDIES 85, 85 (2007), 10.1007/s10899-006-9032-6.

## Setting Gambling Limits

The ability to set gambling limits, a process also known as pre-commitment, allows gamblers to predetermine the amount of time or money they are permitted to devote to gambling activities before play begins. Depending on the gaming venue or website, spending limits can include deposit, play, loss, win, bet, and time limits.

Research on the effectiveness of pre-determined gambling limits has demonstrated mixed outcomes and has illustrated positive and negative results of this mitigation technique. Studies have indicated that requiring individuals to set such limits may reduce overall money spent on gambling, but evidence is still lacking to suggest that this spending reduction occurred in individuals who were experiencing gambling-related harms, or that gambling-related harm was reduced. Furthermore, research has indicated that voluntary money limit setting was more effective than time limits in reducing problem gambling behavior. While self-limiting has been found to reduce the variety of games played and the number of bets placed, gambling limits have not been found to reduce the amount wagered per bet. Additionally, research has indicated that pre-commitment may have little effect on decreasing gambling expenditures, especially among those who are intent on continued gambling and who are likely to find methods of circumventing gambling limits.

Finally, the emergence of GameSense, a program that employs in-house responsible gaming information centers or advisors, and other limit-setting programs like PlayMyWay, signal that the future direction of gambling mitigation plans is likely to employ gambling limits. Further research will be required to produce evidence that supports the effectiveness of pre-commitment initiatives.

## Responsible Gaming-Oriented Game Features

This harm minimization technique involves the modification to the structure or operation of games to assist patrons in making informed choices about their gambling activity, and to encourage responsible gaming behavior. While research on this mitigation strategy is often focused on the use of warning messages, select studies have explored the use of additional modifications, such as slowing down the rate of play, posting clocks around gambling facilities, and offering "play money" modes.

A threshold study evaluating the effectiveness of five game features (messages, bank meters, clocks, demo mode, and charity donations) found that most participants were aware of at least one feature, but that only a small portion actually utilized the features. Further research concluded that, when compared to warning messages that appear on the periphery of a screen, messages that appear in the middle of a screen are more frequently recalled and considered more useful. Patrons in one study also identified a cash display as helpful to controlling gambling activities.

The research on responsible gaming-oriented game features has provided varying insights on the effectiveness of such features. While evidence confirming the efficacy of responsible game features is mixed, little research has shown that game features reduce gambling-related harm in a real-world setting.

## Employee Training

Training of gaming facility employees in responsible gaming is a nearly universal practice. Some states require that this training include instruction on the complex question of how to identify problem gamblers on the gaming floor. Other states provide for in-depth education on the nature and symptoms of problem gambling.[41] With this training, employees of gambling facilities can better serve patrons who may be identified as problem gamblers by providing information about problem gambling programs. Delaware, for example, requires that the rules for state lottery games provide "procedures for the display and presentation of messages concerning responsible gaming and the regulations, procedures and training for identification of and assistance to compulsive gamblers."[42]

While few studies exist that explore the effectiveness of employee training programs, research has determined that there is considerable disparity in employee ability to accurately identify problem gambling behavior among patrons. Studies indicate that employee training can improve employee knowledge of responsible gambling, however, there is limited evidence that this enhanced understanding enables employees to more accurately identify patrons with a gambling disorder.

Additional obstacles to the effectiveness of employee training are found in the difficulty, awkwardness, and uncertainty present in the act of confronting a patron. Studies have indicated that gaming facility employees often experience difficulty when approaching patrons due to uncertain estimations of a patron's potential problems or in an attempt to avoid causing a patron embarrassment.

Ultimately, the spectrum of harm from problem gambling manifests differently from state to state. As a result, the role of employee training may vary with the extent of a state's understanding of the gambling problems its residents face.

## Public Health

By understanding gambling and its potential impacts on public health, policymakers and health practitioners alike can work to minimize gambling's negative impacts, while promoting its potential benefits. Today, public health perspectives are not limited to the biological and behavioral dimensions of gambling. Rather, a contemporary public health perspective can also target the social and economic determinants of gambling, such as income, employment, and poverty. Four principles have emerged as the basis for a public health framework on gambling: (1) scientific research is the foundation of public health knowledge, (2) public health knowledge is derived from population-based observations, (3) health initiatives are proactive (i.e., health promotion and prevention are primary, while treatment is secondary), and (4) public health is balanced and considers both the costs and benefits of gambling. This framework can stimulate a better understanding of gambling, further elucidate the determinants of problem gambling, and indicate a range of intervention strategies.

---

[41] Mississippi employee training: MGC Regs. Title 13, Part 3, Rule 10.6
[42] Delaware employee training: 19 Del. C. § 4805(a)(29).

Throughout the past decade, publicly-funded problem gambling services have received increased support in the United States. The total number of states that reported publicly-funded problem gambling services increased from 37 in 2010 to 40 in 2016, and the total amount of public funding allocated to problem gambling services increased from $60.6 million in 2013 to $73.0 million in 2016. Among the states that provided funding, the most commonly supported services were problem gambling awareness programs, counselor training, helplines, and problem gambling treatment. Despite the continued growth of problem gambling efforts throughout the United States, in 2016, about one quarter of one percent of people who needed problem gambling treatment received publicly-funded care from a gambling treatment specialist.

## Public Education and Informed Choice

Across gaming jurisdictions worldwide, governments and gaming providers have recognized the importance of providing patrons sufficient information to make informed decisions about their gambling. While individuals retain the ultimate responsibility over their gambling choices and level of participation, optimal decision-making depends significantly on the availability of reliable and comprehensive information. This concept of the "informed decision" is pervasive in systems of law and economics and remains an essential component of effective problem gambling mitigation efforts.

Several environmental factors may influence gambling behavior simultaneously, making it difficult to determine the local impact of any one factor. Advertising to promote problem gambling awareness, for example, has attempted to influence gambling behavior and reduce gambling-related harm. Various studies have concluded that the impact of advertising is not likely to be overt, and it may be difficult to measure the impact of advertising efforts to promote problem gambling awareness.

States may require that casinos post signs and/or offer brochures identifying the risks of gambling, signs of gambling disorder, the odds of casino games and/or toll-free phone numbers and other resources for assistance. Common practices among the states include requirements that gambling facilities ensure their advertisements display problem gambling help-line phone numbers. Additionally, some states, like Maryland, require that radio, television, and video advertisements contain a gambling assistance message.[43]

Some states provide regulations that specifically address risk-related advertisements for internet and mobile gaming. Delaware, for example, mandates that internet lottery websites include advertisements for and links to information for treatment, education, and assistance of compulsive gamblers and their families.[44] Similarly, West Virginia requires online sportsbooks and mobile gambling applications to display links to responsible gaming resources.[45]

---

[43] Maryland advertising requirements. COMAR 36.03.06.03(B)(5).
[44] Delaware advertising requirements. 29 Del. C. § 4826.
[45] West Virginia advertising requirements. WV CSR § 179-9-13.4.

Gaming jurisdictions have acknowledged that different messaging approaches may work better for different groups. One Canadian study prospectively detailed the most effective messaging approach for different styles of gaming. For casual gamblers (new and occasional gamblers), programs that enhance gambling literacy, including key safeguards and main risk factors, are essential. Frequent gamblers (i.e., those that gamble at least once per month, but not weekly) need a deeper understanding of how gambling works, including information on house edge, randomness, and independence of events. Finally, the study concluded that intensive gamblers (i.e., those who gamble weekly or more often) need to be informed of their play activity, offered self-assessment tools that draw attention to the consequences of their gaming habits, and made aware of the options available for help in addressing gambling-related problems.

## Additional Mitigation Strategies

In addition to the main mitigation techniques discussed above, various jurisdictions also employ additional strategies to promote healthy gambling practices. These strategies include restrictions on alcohol, treatment and research funding, and casino credit restrictions along with bet limits.

### *Restrictions on Alcohol*

Several states require casinos to limit alcoholic beverage service on the gaming floor, or to limit access to gambling services for patrons who are visibly intoxicated. The extent of restrictions on the sale of alcoholic beverages varies across different states. Some states, like Michigan and Kansas do not impose any restriction on alcohol service in gaming facilities. Other states, however, like Massachusetts and Maryland limit the time and place of alcohol sales.

Many states that restrict alcohol service mandate that gambling facilities refuse to sell or serve alcohol to patrons that appear intoxicated, or are younger than 21-years old.[46] Maryland, for example, requires that video lottery licensees prevent intoxicated individuals from playing video lottery or table games and prohibit intoxicated individuals from entering areas where such games are located. Maryland further restricts alcohol service by prohibiting licensed operators from providing complimentary alcoholic beverages.[47]

As a further restriction on alcohol service in gambling facilities, Massachusetts requires gambling facilities to obtain a gaming beverage license in order to serve alcohol on the premises of such a facility.[48] The sale of alcohol must adhere to the conditions of the issued gaming beverage license, which may be imposed on such license "in the interest of the integrity of gaming and/or public health, welfare, or safety."[49] Massachusetts further requires that gaming licensees promulgate a system of internal controls to monitor the sale of alcohol. At minimum, such a system must include procedures to (1) ensure proper training of employees involved in the service of alcoholic beverages, (2) prevent serving alcoholic beverages to underage or visibly intoxicated individuals, (3) ensure that visibly intoxicated or impaired patrons are not permitted to play slot machines or

[46] *See e.g.*, 4 Del. C § 706; Md. Code Ann., State Govt. Law, § 9-1A-24(c)(1); 205 CMR 136.02.
[47] COMAR 36.03.10.09(A)(2)
[48] M.G.L. Ch. 23K, § 26.
[49] 205 CMR 136.02.

table games, and (4) ensure that alcohol is properly secured and stored.[50] In addition, Massachusetts prohibits the sale of alcohol between 2:00AM and 4:00AM to patrons who are not in the gaming area and not actively engaged in gambling.[51]

Restrictions on the sale of alcohol play a significant role in the gambling regulations of several states. While the extent of such restrictions may vary, the motivation to promote public health and welfare remains widely relevant.

### *Treatment and Research Funding*

States may implement financial commitments to support treatment for problem gamblers, education services concerning problem gambling, and research to advance responsible gaming and prevent problem gambling. Most states that implement such commitments earmark certain state revenues from gaming for these programs.

Pursuant to advancing public health efforts, Massachusetts assesses an annual fee in proportion to the number of gaming positions at each gaming establishment. This fee is meant to cover the costs of public health services and programs dedicated to addressing problems associated with compulsive gambling.[52] Monies within the Fund may be expended to assist social service programs that address gambling prevention, substance abuse services, and educational campaigns to mitigate the potential addictive nature of gambling.[53] Massachusetts also imposes upon each gaming licensee a requirement to provide on-site space for independent substance abuse, compulsive gambling, and mental health counseling services.[54]

Efforts in other states pursue a more targeted approach, focusing treatment funding specifically on problem gambling, rather than on addictive behavior in general. Kansas, for example, established the Problem Gambling and Addictions Grant Fund to provide assistance for the treatment of "persons diagnosed as suffering from pathological gambling."[55]

The scope of research efforts varies from state to state. Massachusetts has established an annual research agenda to study the social and economic effects of gaming in the State and to obtain scientific information relative to neuroscience, psychology, sociology, epidemiology, and etiology of gambling.[56] Similarly, Michigan reserves a significant portion of the monies within its Compulsive Gambling Prevention Fund for, among other things, "research, and evaluation of pathological gamblers and their families."[57]

---

[50] Massachusetts alcohol service restriction: 205 CMR 138.12.
[51] Massachusetts alcohol service restriction: 205 CMR 136.07(7)(i).
[52] Massachusetts research statutes. M.G.L., Ch. 23K, § 56(e).
[53] M.G.L., Ch. 23K, § 58.
[54] M.G.L., Ch. 23K, § 21.
[55] Kansas problem gambling treatment statutes. K.S.A. §79-4805(c)(1).
[56] Massachusetts research statutes. M.G.L., 23K, § 71.
[57] Michigan problem gambling research statutes. MCL 432.253.

The majority of states have implemented treatment and research funding provisions to make gaming as healthy for participating individuals, and the environment around them, as possible.

### *Casino Credit Restrictions and Bet Limits*

Some state laws aim to protect patrons from betting more than they can afford to lose by banning casinos from offering credit advances and limiting bet amounts. Methods to limit credit advances include both patron-driven efforts, such as voluntarily placing one's name on a credit exclusion list, and facility efforts, including policies and procedures that limit those patrons to whom a gambling facility may issue credit.

Generally, the procedures established by states aim to ensure that a gaming facility does not extend credit to patrons beyond an amount that those patrons lack a reasonable ability to repay. Regulations may range from broad mandates to gaming operators to exercise caution and good judgment in extending credit[58], to more specific rules that identify groups to whom credit should be limited. As an example of targeted restrictions, Massachusetts requires that a gaming licensee's policies prevent the extension of credit to patrons who self-identify as problem gamblers, place themselves on a voluntary credit suspension list, or are on public assistance.[59]

While the use of credit restrictions as a mitigation tool may vary across states, the desired effect of such restrictions and limitations remains similar. The promotion of safe gambling habits through credit restrictions and bet limits emerges as a primary goal of many states.

[58] Delaware credit restrictions. 10 Del. Admin. Code 204-6.1.10.
[59] Massachusetts credit restrictions. 205 CMR 138.43(1)(d).

# APPENDIX B: CASINOS AND CRIME

The social and community impacts of gaming development have been extensively studied. In many areas research findings have been inconclusive and thus considerable resources continue to be devoted to researching possible negative impacts given the unique nature of gaming compared to other commercial enterprises.

A number of broad studies of the social and economic impact of casinos have been conducted in the United States. In the late 1990s, prompted by the expansion of casinos throughout the United States, mainly in the form of riverboat casinos, Native American casinos, and racetrack slot parlors, Congress set up the National Gambling Impact Study Commission (NGISC). Its findings were released in 1999.

The Commission retained the National Research Council (NRC) to review the existing research on the socio-economic impacts of casino development. The NRC concluded that the existing research on the subject was inadequate:

> The NRC project involved a review of all existing and relevant studies by representatives of a variety of scientific fields. In the end, NRC recommended that further study be initiated. Study of the benefits and costs of gambling "is still in its infancy." Lamenting past studies that utilized "methods so inadequate as to invalidate their conclusions," the absence of "systematic data," the substitution of "assumptions for the missing data," the lack of testing of assumptions, "haphazard" applications of estimations in one study by another, the lack of clear identification of the costs and benefits to be studied, and many other problems, NRC concluded the situation demands a "need for more objective and extensive analysis of the economic impact that gambling has on the economy."[60]

The Commission then retained the National Opinion Research Center (NORC) to undertake said "objective and extensive analysis" concerning impacts. The NORC came to the following conclusion:

> First, the casino effect is not statistically significant for any of the bankruptcy or crime outcome measures…….. This is not to say that there is no casino-related crime or the like; rather, these effects are either small enough as not to be noticeable in the general wash of the statistics, or whatever problems that are created along these lines when a casino is built may be countered by other effects.[61]

Despite the NGISC's authoritative findings, some researchers continue to claim that casinos cause crime.[62] However, there are three major flaws in much of this research:

---

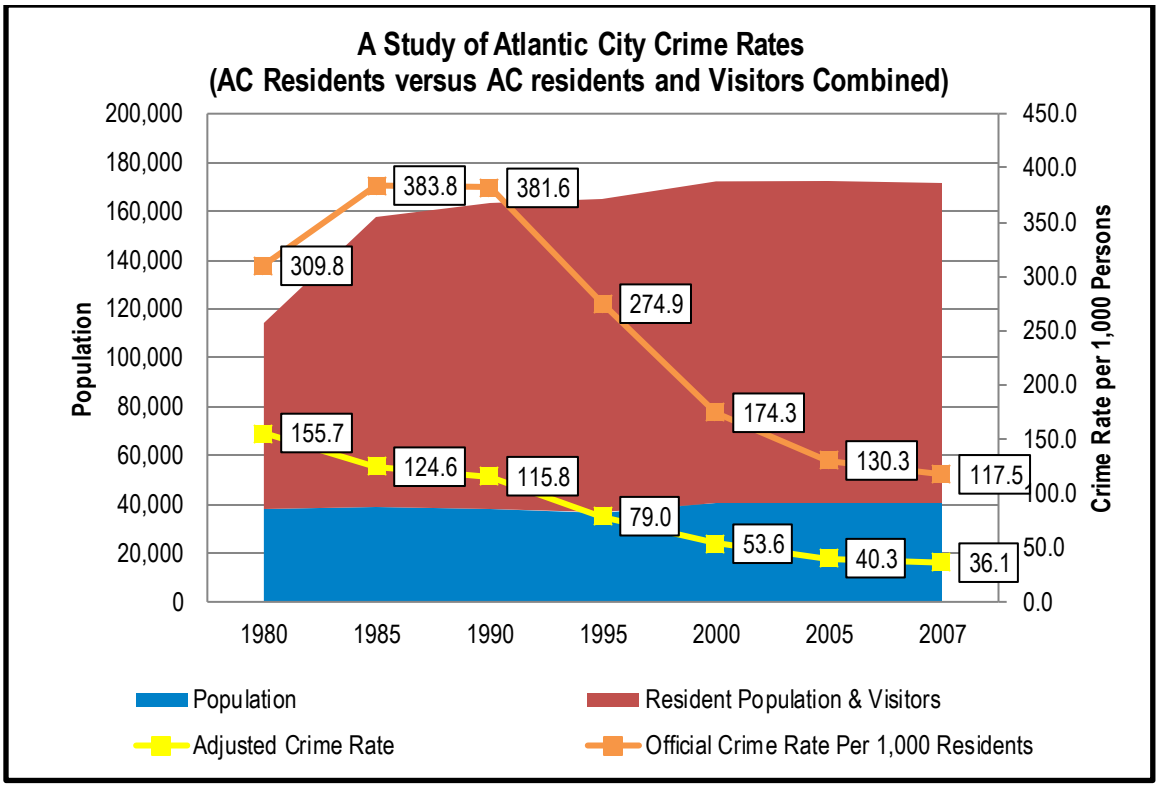
[60] National Gambling Impact Study, Chapter 7. 1999. Gambling's Impact on People and Places.
[61] The National Gambling Impact Study Commission, "National Gambling Impact Study" (1999).
[62] See Grinols and NBER discussion below.

1. Much of the research that attributes an increase in crime to casinos has ignored the temporary population increases brought about by casino visitation. When crime rates are calculated not accounting for the influx of visitors, there appears to be an increase in crime. While this may be true in absolute terms, it radically overestimates the increase in likelihood of residents being victims of crime.
2. Further to #1, some research applies crimes such as on-site thefts of casino visitors to the local population, leading to an invalid increase in the local crime rate.
3. The crimes rates are not studied over a sufficient period of time and therefore temporary increases or long term trends attributable to more primary causal factors are not always recognized or are misinterpreted.

One of the earliest examples of flawed research is related to Atlantic City. The ***number*** of crimes tripled after casinos opened in 1978, and some researchers applied the increase to the local resident population, which in the resulting invalid calculation resulted in a tripling of the crime ***rate***. However, most of the increase related to thefts within the casinos, which did not impact the local population. A valid calculation of the crime rate has to include the visitation base.

In fact, there has been a ***decreased*** chance of being a victim of crime since casinos were developed in Atlantic City. Factors likely include an increase in casino employment and law enforcement resources, safer infrastructure with well-lit garages, and an increase in general tourism activity. According to more recent data supplemented to the study completed by Margolis et al, [63] this decline in crime rates per 1,000 residents continued through 2007 to a rate of 36.1 per thousand residents. The chart below illustrates the crime rate trends from 1980 to 2007.

[63] Margolis, J. & Altheimer & Gray. (December 1997). "Casinos and crime: An analysis of the evidence." American Gaming Association. http://www.americangaming.org/assets/files/studies/Crime.pdf . The Innovation Group.




The Rappaport Institute for Greater Boston and the John F. Kennedy School of Economics at Harvard University (Baxandall and Sacerdote 2005) in a national, county-level study of Native American casinos found a slight decrease in crime rates after casinos opened. The analysis included all California casinos in existence in the 1990s. From their total sample of 156 casino counties, the Rappaport study isolated out 57 counties with large casinos and relatively low population and nine counties with both large casinos and large populations to see if there were statistical differences in terms of community impacts. The following table shows their results:

**Table 264: Rappaport Study Results**

| | All Casino-Counties[1] | Counties with Large-Capacity Casinos[2] | Populous Casino Counties[3] |
|---|---|---|---|
| Population Growth (%) | +5* | 8.6 | +8.1* |
| Total Employment (%) | +6.7* | +14.9* | 5.7 |
| Unemployment (%) | -0.3 | -1.2* | 0.5 |
| House Prices | $5,869 | $8,924 | $7,083 |
| Crime (Per 1,000 People) | -3 | -6 | -1 |

*Statistically significant results at 99% confidence interval.
1. Reports how adjusted outcomes in 156 counties that introduced Indian-run casinos during the 1990s differed from the other 2,959 that did not.
2. The effect for 21 counties in the top 10th percentile in terms of number of slot machines (over 1,760).
3. The effect for the 57 casino counties in the top population quartile (over 55,000 residents).

The Rappaport study concluded:

> Our analysis shows that while total crime can be expected to increase when casinos open, the increase is due to increased population, not to a casino-created crime wave. Looking at FBI indexed crimes per resident in all [156] counties; we find that introducing a casino is associated with a decrease of 3 reported crimes per 1,000 people. The introduction of a casino, however, had no statistically significant effect on per-capita crime rates in either large-population casino counties or in large-casino counties. The per-capita crime rate in the 9 large-population counties that also hosted large-capacity casinos dropped 9 crimes per 1,000 residents, however.[64]

It is worth noting that the study included two of the largest casinos in the world, Foxwoods and Mohegan Sun. In Ledyard, Connecticut (which hosts the Foxwoods casino), crimes outside the casino increased from 214 in 1991 to 364 in 1998, but in subsequent years, State Police data show that off-casino crimes in Ledyard fell below pre-casino levels. In Montville, Connecticut (host to Mohegan Sun), as with Ledyard, the number of crimes reported "remained relatively constant," which the authors conclude is "surprising since the sheer increase in activity around these towns might have led to greater crime."[65]

The study also highlighted results for three counties in southern California: Riverside, San Bernardino, and San Diego. In all three counties, crime decreased relative to the state average. For example, before casino development, Riverside County suffered 22 more crimes per 1,000 residents than the state average. After casino development, the county had just 6 more crimes per 1,000 residents than the state average, a relative decrease of 16 crimes per thousand residents. San Bernardino had a relative decrease of 10 crimes per thousand, and San Diego 9.

**Table 265: Rappaport Study California County Results for Crime**

| | Relative Crime (Before) | Relative Crime (After) | Change in Relative Crime (After - Before) |
|---|---|---|---|
| Riverside, CA | 0.022 | 0.006 | -0.016 |
| San Bernardino, CA | 0.016 | 0.006 | -0.01 |
| San Diego, CA | 0.008 | -0.001 | -0.009 |

In other western jurisdictions, the Montana legislature in 1997 commissioned a study on the video gaming industry. The resulting analysis found no impact on crime rates in Montana:

> While gambling may have caused an increase of certain types of crime, Montana's overall crime rate increase is not any higher than the increases in matched cities with little or no

[64] IBID. As summarized in their 2008 report, "Betting on the Future: The Economic Impact of Legalized Gambling."

65 Baxandall, P. & B. Sacerdote (January 2005). *The Casino Gamble in Massachusetts: Full Report and Appendices*. Rappaport Institute for Greater Boston, John F. Kennedy School of Economics, Harvard University. Page 14.

> legal gambling. In fact, in almost three-quarters of the specific comparisons carried out, crime rates rose more (or decreased less) in the matched cities than in the Montana cities.
>
> Each of the seven largest Montana cities was matched with an out-of-state city in the region with similar population size, similar population growth rate, similar racial composition, but with little or no legal gambling. The percentage change in crime rates for three indices of crime (total serious crime, property crime, and violent crime) was computed for three time periods… between 1984 and 1994. [The data] illustrate the lack of a systematic pattern in crime rate changes between Montana cities and those in states with little or no gambling. For example, the violent crime rate grew faster in Cheyenne, Wyo., than in Great Falls between 1984 and 1994, yet the index of property crime decreased in Cheyenne while it increased in Great Falls during the same period.[66]

In summary, there is no evidence from gross level data that the advent of casinos has a measurable impact on local crime rates in general, whether in Eastern, Midwestern, or Western jurisdictions. It is highly likely any crimes associated with casinos are either offset by economic benefits or that the level of crime is so small as to be overwhelmed by other factors such as economic trends.

## *Primary Research from Select Casino Jurisdictions*

The figures from the casinos used in the Comparative Analysis Criminal Incidents section, provide a general picture of criminal activity at a casino. Other communities have found lower and higher levels of incidents. For example, figures from the Kenner Police Department note an average of 9 criminal incidents at the Treasure Chest Casino from 2012 to 2014. Attendance at the Treasure Chest Casino in Kenner is over one million annually.

A recent article in The Enterprise provided additional qualitative data from the casinos in this analysis. An officer from the Pittsburgh Police department compared the number of calls to games at the local baseball and football stadiums, "Nothing different than when there's a ball game," Luczak said. "I wouldn't say there's much change."[67]

Des Plaines Police Deputy Chief Nick Treantafeles had similar sentiments, "It's just like any place that serves alcohol," he said. "You get drunk and disorderly, but their security handles 98 percent of the issues there. We might get called for a fight that gets out of hand. ... It hasn't put a damper on the services we offer the rest of the community."[68]

While specific increase in police staffing varies from community to community, many communities found no need to increase police staffing, as shown below in the examples from Indiana. The Center for Urban Policy and the Environment at Indiana University-Purdue University has prepared 5-year evaluations of riverboat licensees for the Indiana Gaming

---

[66] Montana Gambling Commission Study, 1998, Chapter 8.
[67] http://www.enterprisenews.com/article/20150517/NEWS/150516955/12741/NEWS/?Start=1
[68] http://www.enterprisenews.com/article/20150517/NEWS/150516955/12741/NEWS/?Start=1

Commission which contain sections on community impacts. The following bullet points include summaries and excerpts from these reports with respect to police and fire protection.

Casino Aztar:

- The Evansville Police Department reports no increases in crime since the riverboat opening. They do report a drop in crime in 1999 when compared to the previous year.
- "No new police officers or firefighters were added. Traffic control has not been a problem..."

Majestic Star:

- The community purchased 12 police cars with Year 1 incentive payments.
- Gary's Chief of Police reports no additional criminal activity surrounding the riverboat.

Horseshoe Hammond (formerly Empress Casino Hammond):

- The Hammond Police Department reports crime has fallen in most categories when compared to before the boat opened.

Hollywood (formerly Argosy):

- According to the Lawrenceburg Police Department, casino-related arrests for public intoxication, DWI, and minor theft, as well as traffic accidents in the area have increased slightly each year from 1997 to 2000.
- Lawrenceburg has added two police officers since the boat opened to deal with the increased caseload.

Ameristar (formerly Harrah's East Chicago):

- According to East Chicago's police department, no additional criminal activity can be attributed to the riverboat's presence.
- "Crime in East Chicago has decreased substantially over this time period due to increased cooperation with federal agencies, community policing and increased staffing."

Blue Chip Casino:

- According to Michigan City's chief of police, no additional criminal activity can be attributed to Blue Chip's presence.

On the issue of crime, Jeremy Margolis, who had served as Assistant U.S. Attorney in Chicago, Illinois Inspector General, and Director of the Illinois State Police, found in a 1997 study[69] that the chance of being victim of a crime decreases after casino development. Factors include an

[69] Margolis, J. (December 1997). "Casinos and crime: An analysis of the evidence." American Gaming Association.

increase in employment brought by casinos, increased law enforcement resources, safer infrastructure with well-lit garages, and an increase in general tourism activity.

In testimony before the Pennsylvania Gaming Control Board (PGCB) in 2006, Margolis was asked to give an update of his seminal study. Margolis concluded, based on examining updated crime data from the F.B.I. as well as interviews with the Executive Director of the Illinois Crime Commission, the Illinois State Police, and the Illinois Gaming Board, that the situation is "really unchanged except for the maturation of the industry, the maturation of the regulatory process has probably settled things down more than it had settled when I completed my study in 1997. It's just not an issue."[70]

[70] PGCG hearing transcript, September 7, 2006, pages 22-23.

# APPENDIX C: IMPACT ON LOCAL BUSINESS

## Research Results

There is a substantial body of research and case studies demonstrating the impacts that casinos have on surrounding local businesses. There are several important reasons that local businesses benefit from the development of a casino:

- Casino visitors stopping at local retail outlets and restaurants.
- Long-distance patrons staying at area hotels; even in markets with casino hotels, non-casino hotels enjoy boosts in occupancy.
- Casino expenditures on local goods and services put more money into the local economy.

A review of studies of casino impacts on local business shows that casinos can stimulate local economies, resulting in communitywide growth, including in the local food and beverage business and retail businesses. There is little evidence of significant economic substitution after the introduction of new casinos, particularly for casinos in urban areas.

Casino development increases room demand at non-casino hotels even when casino hotels are built. For example, in Shreveport-Bossier City, Louisiana, hotel occupancy rates averaged about 60% before casinos but rose to 74% by 2005.[71] Such a boost to non-casino hotel demand results from the overall increased visitation to the area and the overflow from peak periods when casino hotels are fully booked. On the Mississippi Gulf Coast occupancy rates in non-casino hotels remained steady at 55% despite a 143% increase in total rooms, including a 60% increase in non-casino hotel rooms.[72]

Within the City of San Diego, the Transient Occupancy Tax (TOT) has grown substantially since recovering from the 2009-10 recession effects, despite the opening of several large hotels at casinos on the outskirts of the market (and not within the City), including an 1,100-room hotel at Harrah's Rincon. Furthermore, HVS reports that hotel occupancy in the San Diego market posted its third straight record occupancy in 2016 at 77%. RevPAR (revenue per available room, a measure of hotel performance) has also seen steady increases since the recession.[73]

**Table 266: City of San Diego, CA Transient Occupancy Tax Collections (MMs)**

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|
| $160.24 | $136.32 | $128.11 | $139.77 | $150.82 | $157.03 | $170.17 | $186.24 | $202.80 | $221.10 |

Source: San Diego Tourism Authority

[71] Shreveport-Bossier Convention and Tourism Bureau 2011 Lodging Report.
[72] Source: Mississippi Gaming Commission.
[73] http://hvi.hvs.com/market/united-states/San_Diego

The research division of the Federal Reserve Bank of St. Louis concluded in a 2003 report that the results are "mixed" regarding the impacts of casinos on other local businesses. The report references one study that "found that the growth in retail sales tax collections from various industries slowed after the introduction of casino gambling." However, another referenced study from Indiana showed that casino development retained spending by patrons "who would have, without the casino, spent their money outside of the local area."[74]

Furthermore, there is substantial economic research from throughout the country contradicting the substitution effect. Hashimoto and Fenich's 1997 research shows that "in jurisdictions from the seashore to the riverfront to rural areas, north and south, east and west, local restaurants tended to thrive after a casino opened nearby." Furthermore, Hashimoto and Fenich conclude: "When casinos are developed, all aspects of the local food and beverage business increase: the number of establishments increases, the number of people employed increases and payroll increases at an even greater rate than the first two."[75]

Research conducted in 1996 by Nancy Reeves and Associates for the Mille Lacs Band of Ojibwe, entitled "The Economic Impact of Grand Casino Mille Lacs and Grand Casino Hinckley on Their Surrounding Areas" concluded that:

> At least 15 businesses have either opened, expanded, or re-opened since the opening of Grand Casino Mille Lacs. Included are 4 hotels/motels and resorts, 8 restaurants and fast food establishments, 2 gas stations and a go-kart track. Together, these businesses have added an estimated 142 jobs in the area.
>
> With the opening of Grand Casino Hinckley in 1992, the hospitality business in Hinckley was transformed from a rest stop for travelers to a tourist destination. In addition to the casino complex, with its 1,275 jobs, Hinckley has added 11 new businesses and expanded 4 more since 1992, adding 87 new jobs. As is the case in the Mille Lacs area, Hinckley is now a year round destination because of the casino. Also similar to the Mille Lacs situation, the main street businesses in Hinckley have seen increases in customer spending attributed primarily to casino employees living in the area.

The Center for Policy Analysis University of Massachusetts Dartmouth came to similar conclusions analyzing a number of gaming jurisdictions throughout the country. The number of restaurants and retail sales excluding those from casinos increased in Bossier City, Louisiana; Biloxi/Gulfport, Mississippi; Connecticut; Gilpin County, Colorado, and; Tunica County, Mississippi.

---

[74] Thomas A. Garrett, Senior Economist, Federal Reserve Bank of St. Louis, *Casino Gambling in America and Its Economic Impacts,* August 2003.

[75] George Fenich and Kathryn Hashimoto, "The Effects of Casinos on Local Restaurant Business," paper presented at the International Conference on Gambling and Risk-Taking, Montreal, 1997.

> There was a net increase of eight restaurants in Bossier City, Louisiana following the introduction of riverboat casinos. The city's taxable restaurant sales, excluding restaurants in the hotels and casinos, increased by 5 percent in 1994 and by 7 percent in 1995 *after* the introduction of riverboat casinos. In Biloxi/Gulfport, Mississippi, the rate of non-casino retail sales growth increased from an average of 3 percent annually (1990-1992) in the years prior to riverboat gambling to 12 percent annually in the years after riverboat gaming began in the locality.
>
> …the number of restaurants in the area surrounding Foxwoods and Mohegan Sun increased from 472 to 506 following the casino's opening, while restaurant employment increased from 5,911 to 6,628 during the same period…. In Gilpin County Colorado, the number of restaurants increased from 31 to 40 after the introduction of casino gaming. In Tunica County, Mississippi, the number of restaurants increased by 13 percent and restaurant employment grew by 9 percent after the introduction of casino gaming in the county.[76]

Similar conclusions have been reached in other studies:

- Even after accounting for substitution effect, economists at the University of Missouri and Washington University concluded that casino gambling in Missouri had a net positive annual impact on Missouri output of $759 million, corresponding to a continuing higher level of employment of 17,932 jobs generating $508 million more in personal income.[77]
- A multijurisdictional analysis of retail spending found that in Biloxi/Gulfport, Miss., annual retail sales growth rates increased an average of 3 percent per year from 1990 to 1992, the year when casinos were introduced. Between 1993 and 1995, retail sales jumped 13 percent. In Will County, Ill., retail sales growth trailed statewide trends until 1992, when riverboat casinos were introduced in the local economy. But each year between 1992 and 1995, retail sales growth in Will County exceeded the state rate. In Shreveport/Bossier City, La., retail sales increased by more than 10 percent during 1994, the year that riverboat casinos opened, as the region enjoyed the highest retail sales increase in more than a decade.[78]

In summary, there is a wealth of evidence contradicting the proposition that gaming substitutes for other expenditures. The positive spillover effect on local hotels for one is unequivocally demonstrated in numerous jurisdictions, even in markets where casinos operate hotels for their gaming customers.

---

[76] Ibid.

[77] Charles Leven et al., "Casino Gambling and State Economic Development," paper presented at the Regional Science Association, 37th European Congress, Rome, Aug. 26-29, 1997.

[78] Arthur Andersen, *Economic Impacts of Casino Gaming in the United States, Volume 2: Micro Study* (Washington, D.C.: American Gaming Association, May 1997).

# DISCLAIMER

Certain information included in this report contains forward-looking estimates, projections and/or statements. The Innovation Group has based these projections, estimates and/or statements on our current expectations about future events. These forward-looking items include statements that reflect our existing beliefs and knowledge regarding the operating environment, existing trends, existing plans, objectives, goals, expectations, anticipations, results of operations, future performance and business plans.

Further, statements that include the words "may," "could," "should," "would," "believe," "expect," "anticipate," "estimate," "intend," "plan," "project," or other words or expressions of similar meaning have been utilized. These statements reflect our judgment on the date they are made and we undertake no duty to update such statements in the future.

Although we believe that the expectations in these reports are reasonable, any or all of the estimates or projections in this report may prove to be incorrect. To the extent possible, we have attempted to verify and confirm estimates and assumptions used in this analysis. However, some assumptions inevitably will not materialize as a result of inaccurate assumptions or as a consequence of known or unknown risks and uncertainties and unanticipated events and circumstances, which may occur. Consequently, actual results achieved during the period covered by our analysis will vary from our estimates and the variations may be material. As such, The Innovation Group accepts no liability in relation to the estimates provided herein.