



ECONOMIC IMPACT ANALYSIS:

Tioga Downs Casino Expanded Facility, Nichols, NY

Prepared for American Racing and Entertainment LLC
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Introduction and Executive Summary

American Racing & Entertainment (“Client”) engaged Spectrum Gaming Group (“Spectrum,” “we” or “our”) to prepare an economic impact study that details the total economic contributions of an expanded Tioga Downs Casino on its local region and the Rest of New York State. This full panoply of economic contribution combines that of the existing facility and the proposed additions and expansions. There are three variations of the study corresponding to low, average, and high estimates of revenues for the expanded property.

The methodology for the study relies on the PI+ model from Regional Economic Models Inc. (“REMI”) and data from the Client. REMI’s models are the leading economic and policy analysis models in the United States and abroad and are used by a diverse group of local, regional, state, and federal clients, including several State of New York agencies.

Our analysis takes into account the existing economic landscape surrounding Tioga Downs in Nichols, NY, including the slack in the area’s existing labor force due to lingering high unemployment. It also considers that Tioga Downs is already operating and functioning as a significant employer and economic contributor to the region. The Client provided Spectrum with all information required for the analysis including employment, revenues, construction spending, and gaming tax estimates. Broadly speaking, REMI made assumptions on labor productivity, consumer spending reallocation, and the distribution of construction costs in order to prepare the client’s data for the model. REMI used effective tax rates to calculate the tax revenue estimates.

The Client’s planned expansion for Tioga Downs includes the following, which were factored into our modeling:

- A 137-room hotel
- A significantly enlarged gaming floor
- An amenity building with a spa, pool, fitness center and other attractions
- A 274-space parking garage

The results in the Tioga Region¹ are driven by the operations of Tioga Downs while the results for the Rest of New York are largely driven by the shifting of spending toward Tioga Downs from local market consumption.

Our analysis in the average (expected) case shows the following in the Tioga Region from 2015 through 2025, the total period of measurement in this analysis:

- The peak year of employment contributions for the operations only is 2016, with 1,241 total jobs, which includes 1,071 jobs at Tioga Downs, 131 indirect jobs, and 39 induced

¹ As noted in the Methodology chapter, the Tioga Region in our model consists of Broome, Chemung, Chenango, Tioga and Tompkins counties.

jobs. These jobs represent approximately 0.43 percent of the regional total, which is a substantial effect for one employer over a five-county region.

- The expanded operations of Tioga Downs will provide a cumulative gain of \$1.1 billion to the gross regional product (“GRP”), which measures the net new economic value created in a region and is equivalent to a smaller-scale gross domestic product.
- Expanded Tioga Downs contributes to a cumulative increase of \$405 million of Personal Income, with an annual average increase of \$37 million.
- The payments to horsemen support the breeding and training of racehorses in New York State. The purses paid are the beginning of a supply chain that begins with owners but includes trainers, breeders, feed providers, veterinarians, and the like. The payments made by Tioga Downs in 2015 support 124 jobs, \$6.5 million in GRP, \$4.5 million in Personal Income, and \$270,000 in tax dollars statewide. Of the total jobs, 88 are directly involved in owning and training racehorses, 14 are indirect, and 22 are induced.
- The sectors that experience the greatest benefit from the casinos are construction, professional and technical services, and administrative and waste management services. The jobs in these sectors are created as the result of economic growth and business-to-business sales.
- Within the analysis period, the one-year construction period creates 1,214 jobs, \$91 million of GRP, and \$53 million of Personal Income.

Other results in the Tioga Region are summarized in the following table, which shows the contributions of Tioga Downs in the final analysis year (2025). This table captures the long-term and steady-state contributions of expanded Tioga Downs on its local region, the Rest of New York, and the state as a whole.

Figure 1: Summary economic results, final analysis year snapshot, average case (\$ in nominal millions)

Contributions in 2025	Tioga Region	Rest of New York State	Total New York
Employment	1,131	57	1,188
Gross Regional Product	\$111.33	\$4.82	\$116.15
Personal Income	\$45.40	\$10.42	\$55.82
Residential Capital Stock	\$47.86	\$7.30	\$55.16
School-Aged Population	228	27	255

Source: Spectrum Gaming Group, Regional Economic Models Inc.

The economic growth, as encapsulated in the above table, drives more tax dollars to the State. These new taxes are largely composed of the gaming taxes paid by Tioga Downs. Because we assumed that the total amount of money available to New Yorkers to spend is unchanged, any spending at Tioga Downs not recaptured from out-of-state must be reallocated away from other

household consumption toward gaming. This reallocation explains why there is a small reduction in statewide sales tax revenues.

Figure 2: Summary tax results, final analysis year snapshot, average case (\$ in nominal millions)

Contributions in 2025	New York State
Sales Tax	-\$0.57
Individual Income	\$2.08
Corporate Income	\$0.30
Other Taxes	\$0.33
Gaming Tax	\$34.52
Total	\$36.66

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Modeling Methodology and Assumptions

The client provided REMI all the information required for the analysis, including employment, revenues, construction spending, and gaming tax estimates. Converting these data into suitable model inputs required some assumptions and manipulation, as described in the following paragraphs.

The Client's planned expansion for Tioga Downs includes the following, which were factored into our modeling:

- 274-space parking garage and new lobby connection
- Amenity building with:
 - Fitness center (652 square feet)
 - Indoor pool with waterslide
 - Spa (2,500 square feet)
 - Event center (6,562 square feet)
 - 150-seat restaurant and bar
 - Outdoor terraces (750 total seats)
 - Food concessions
- Hotel (137 rooms)
 - Outdoor pool and pool bar
- Casino expansion (19,500 square feet) with:
 - Casino bar lounge (60 Seats)
 - 38 table games
 - 1,000 slot machines (upgrade from 802 VGMs)
 - New poker room with 12 tables
- Site-related work:
 - New right turn exit lane
 - New traffic lights at intersection
 - New hotel parking lot
- Tioga Downs country club with:
 - 5,000-square-foot clubhouse
 - 18-hole golf course
- 200-seat restaurant
- Office expansion (4,392 square feet)
- Mini-golf and fun center with:
 - 2,241 square feet Pavilion
 - 18-hole mini-golf course
 - Batting cages
 - Rock-climbing wall
 - Picnic area

Figure 3: Summary of client data used for economic impact modeling inputs

Category	Units	2015	2016	2017	2018	2019	2020
Employment	Jobs	536	1,071	1,071	1,071	1,071	1,071
Total Revenues (Average)	Nominal Millions	\$82.0	\$113.1	\$114.3	\$116.1	\$117.9	\$119.8
Total Revenues (High)	Nominal Millions	\$82.0	\$121.9	\$123.3	\$125.2	\$127.2	\$129.1
Total Revenues (Low)	Nominal Millions	\$82.0	\$104.2	\$105.4	\$107.0	\$108.7	\$110.4
Gaming Taxes (Average)	Nominal Millions	\$33.4	\$30.4	\$30.7	\$31.2	\$31.6	\$32.1
Gaming Taxes (High)	Nominal Millions	\$33.4	\$33.4	\$33.7	\$34.2	\$34.7	\$35.2
Gaming Taxes (Low)	Nominal Millions	\$33.4	\$27.5	\$27.8	\$28.2	\$28.6	\$29.0
Payments to Horsemen	Nominal Millions	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3
Construction	Nominal Millions	\$109.6					

Category	Units	2021	2022	2023	2024	2025
Employment	Jobs	1,071	1,071	1,071	1,071	1,071
Total Revenues (Average)	Nominal Millions	\$121.6	\$123.5	\$125.4	\$127.2	\$129.2
Total Revenues (High)	Nominal Millions	\$131.1	\$133.1	\$135.2	\$137.1	\$139.3
Total Revenues (Low)	Nominal Millions	\$112.1	\$113.9	\$115.6	\$117.3	\$119.2
Gaming Taxes (Average)	Nominal Millions	\$32.6	\$33.1	\$33.5	\$34.0	\$34.5
Gaming Taxes (High)	Nominal Millions	\$35.7	\$36.2	\$36.7	\$37.3	\$37.8
Gaming Taxes (Low)	Nominal Millions	\$29.5	\$29.9	\$30.3	\$30.8	\$31.2
Payments to Horsemen	Nominal Millions	\$5.3	\$5.3	\$5.3	\$5.3	\$5.3

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Casinos without hotels are classified as part of the Arts, Entertainment, and Recreation industry by the federal government (North American Industry Classification System, or “NAICS”) whereas casinos with hotels are classified as part of the Accommodations industry. Because PI+ is built upon NAICS definitions, the existing activity at the Client’s site is modeled in the Arts and Entertainment sector while the expansion is modeled in the Accommodations sector. Employees are assumed to be paid the regional average wage for appropriate industry.

REMI’s modeling must account for the difference in the revenue per employee (i.e., labor productivity) of a gambling establishment relative to other establishments classified under the same NAICS industry. For example, while both are under the Accommodations sector, a casino hotel will have significantly more revenue per employee than a normal four-star hotel. Our analysis adds in this incremental revenue but makes an additional assumption regarding productivity growth in the gambling industries.

Our analysis assumes that the revenues at the expanded Tioga Downs grow at 1.5 percent per year (from client’s data). Because the analysis does not look back in time, this growth rate does not represent the one-time jump from pre-expansion to post-expansion revenue levels. In addition, we assume that the employment at Tioga Downs will remain constant at the expected 2016 levels. This assumption lies between two other options: the first being that productivity grows at the same rate as the aggregate sector (i.e., Arts and Entertainment or Accommodations) and the other that

productivity does not grow at all. We easily can dismiss the latter option as unrealistic. The former, while possible, is not likely due to the nature of the employment at casino hotels in relation to regular hotels, especially with the growth in popularity of table games and non-gambling amenities. These operational differences cause casino hotels to be more labor intensive than a regular hotel with fewer opportunities to improve productivity by automation or other capital investments. The presence of dealers, bartenders, wait staff, retail clerks, etc., will probably limit the productivity gains that the sector will see. In fact, if the gambling sector's productivity rises at the same rate as the larger arts and entertainment or accommodations sector, we would see employment fall over time because expected annual revenue growth is less than the growth in productivity for each sector.

To summarize, our assumption of constant employment can be deemed reasonable, as it falls between one assumption that would see employment increase unrealistically and another that would see employment fall unreasonably.

Any increase in total revenues for Tioga Downs was assumed to come at the expense of existing spending, with the exception of revenues gained from new out-of-state visitors and that recaptured from out-of-state gaming establishments. In other words, we assumed that the total amount of money available to New Yorkers to spend is not changing, thus any new spending on gambling would have to be diverted from other consumption or recaptured. This reallocation was modeled by reducing consumption across all categories relative to each item's size in the household consumption basket. It should be noted that competition for and reallocation of consumer spending is not unique to this casino or casinos in general but is a reality with any business expansion that relies on local residents.

Based on the data supplied by the Client, roughly 72 percent of the existing revenues at Tioga Downs come from New York residents, with 52 percent of the total coming from the Tioga Region and 20 percent coming from the Rest of New York. However, based on data from a separate study commissioned by the Client, 42 percent of the new revenues at an expanded Tioga Downs would be recaptured from outside New York (mainly from Pennsylvania). Thus, the revenues at the existing Tioga Downs were reallocated according the percentages above and the revenues of the expansion were reallocated using the same percentages scaled down by 42 percent.

The payments to horsemen are assumed to be income to the owners of racehorses. These revenues are allocated across the state to the Arts, Entertainment, and Recreation industry based on the each region's share of existing farm output. Arts, Entertainment, and Recreation is the NAICS sector that includes racehorses and their owner and trainers. We chose to use the existing farm output as the allocation weight because we believe it more accurately reflects the distribution of the activity around the state.

The total construction budget provided by the Client included many different categories of spending which, to the extent possible, we separated into more detailed categories. Construction is modeled separately from furniture, fixtures, and equipment ("FF&E"). Spending on construction is modeled as sales of the construction industry. FF&E is modeled as spending on durable

equipment. Permit expenses are modeled as revenue to the local government and are assumed to be spent according to established patterns. Architect and engineering (“A/E”) fees were modeled as demand for professional and technical services. The Client’s construction budget included multiple phases, the timing of which are unimportant to our analysis because all construction occurs in one year and is thus one phase for modeling purposes. However, the Client’s A/E and permit fees were listed separately for one phase but were combined in another. Where separate, A/E fees were 97.6 percent of the combined amount. This same ratio was used to separate A/E from permits in the combined phase. Contingency expenses are excluded because by definition they may never be needed and if used their destination cannot be predicted.

All construction is assumed to occur in 2015, with partial expanded activities also occurring in that year. The first full year of expanded operations is 2016.

REMI used effective tax rates to calculate tax revenue. Effective tax rates are calculated by dividing historical revenue² by the size of the revenue driver from the REMI baseline forecast. For example, the actual individual income tax revenue in 2012 for New York State is \$38.8 billion and the Personal Income for 2012 from the PI+ model is roughly \$1 trillion, so the estimated effective income tax rate is 3.72 percent. Using a similar methodology, we calculated effective tax rates for other categories, as shown in the following table:

² Census of Governments, 2012 Annual Survey of State Government Tax Collections Detailed Table:
<http://www.census.gov/govs/statetax/>.

Figure 4: Taxes with bases and effective rates

Tax	Base	Effective Rate
Sales and Gross Receipts Taxes - General Sales and Gross Receipts Taxes	Total consumption	1.5%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Alcoholic Beverages Sales Tax	Alcoholic beverages purchased for off-premises consumption	2.7%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Amusements Sales Tax	Membership clubs, sports centers, parks, theaters, museums	0.0%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Insurance Premiums Sales Tax	Sum of purchases of life, health, and household insurance	5.8%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Motor Fuels Sales Tax	Purchases of motor vehicle fuels, lubricants, and fluids	6.7%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Pari-mutuels Sales Tax	Household expenditures on gambling	0.4%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Public Utilities Sales Tax	Sum of purchases of water, sewer, electricity, and gas	4.6%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Tobacco Products Sales Tax	Purchases of tobacco products	20.8%
Sales and Gross Receipts Taxes - Selective Sales and Gross Receipts Taxes - Other Selective Sales and Gross Receipts Taxes	Total consumption	0.6%
License Taxes	Population	98.46
Income Taxes - Individual Income Taxes	Personal Income	3.7%
Income Taxes - Corporation Net Income Taxes	Total revenues	0.2%
Other Taxes	Population	174.23

Source: Regional Economic Models Inc.

Definitions

The following table defines the concepts reported in the Economic Impacts chapter.

Figure 5: Definitions of result concepts

Concept	Definition
Employment	Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.
Gross Regional Product	The market value of goods and services produced by labor and property in a region, regardless of nationality. It is the sum of consumption, investment, government spending, and net exports.
Residential Capital Stock	The amount of residential capital (housing structures) in the region accumulated over time net of depreciation.
School-Age Population	Total number of individuals ages 5 through 18.
Sales Tax	Total of general and selective sales taxes.
Individual Income	Total of taxes on individual income.
Corporate Income	Total of taxes on corporate income.
Other Taxes	Total of all other taxes, e.g. license fees, estate taxes, etc.
Gaming Tax	Direct tax revenue from Tioga Downs.
Payments to Horsemen	Payments by the casino to racehorse owners.

Source: Regional Economic Models Inc.

Economic Impacts of Tioga Downs

This study measures the total economic contribution of Tioga Downs on its local region and the Rest of New York State. This contribution combines that of the existing facility and the proposed additions and expansions, as described in the previous chapter. There are three variations of the study corresponding to low, average (expected), and high estimates of revenues for the expanded property. The low and high scenarios represent a roughly 7 percent to 8 percent difference in estimated revenues from the average case. All other simulation inputs remain the same between the scenarios. These three scenarios are defined by the Client’s estimates of the range of potential revenue at an expanded Tioga Downs and satisfy the requirement of the New York State Gaming Commission’s RFA to present these three revenue cases if the results of an analysis are sensitive to revenues and/or employment.

Given the relatively small difference in size of the three scenarios, most of the discussion of the average case will apply to the others. Thus, we will provide an in-depth discussion of the average case followed by a brief presentation of the results for the low and high cases.

Average Case

The total construction budget is roughly \$109 million and is spent over the course of one year. In the Tioga Region in 2015, the construction activity creates 1,214 jobs, \$91 million of gross regional product, and \$53 million of Personal Income. The total jobs include 777 direct jobs, 108 indirect jobs, and 329 induced jobs. The new construction will lead to an incremental increase in property taxes. Tioga Downs has negotiated payments in lieu of taxes (“PILOT”) that that will be paid based on the value of the additions.

Figure 6: Payment in lieu of taxes from additions to Tioga Downs (\$ in nominal dollars)

Year	2014	2015	2016	2017	2018
PILOT	\$48,163	\$75,708	\$103,252	\$130,796	\$158,341

Source: Duane Morris LLP

The peak year of employment is 2016, the first full year of expanded operations. With a contribution of 1,241 jobs, the 2016 employment is approximately 0.43 percent of the regional total, which is a substantial effect for one employer over a five-county region. The jobs in 2016 include 1,071 direct jobs, 131 indirect jobs, and 39 induced jobs.

After the first expanded year, the employment contributions slowly decrease to 1,131 by 2025. These years represent the ongoing operations of the fully expanded Tioga Downs. The employment contributions decrease over this time due to labor market adjustments that improve productivity, such that greater value can be created with slightly fewer jobs. In any region, when there is an increase in demand for workers, wages increase. In response to these increases, employers find ways to improve the productivity of their employees to offset their labor cost

increases. It is the total effect of myriad business-level decisions that leads to the productivity increases seen in the ten-year employment estimates.

Gross regional product (“GRP”) measures the net new economic value created in a region and is equivalent to a smaller-scale gross domestic product. Unlike employment, GRP grows from 2015 through 2025, resulting in cumulative gains in the Tioga Region of \$1.1 billion of new economic value. Growing GRP coupled with declining employment means that employees in the region are producing greater value-added than before.

The casino is projected to generate roughly \$37 million in Personal Income for residents of the Tioga region each year; \$19 million of this income is direct wages and salary disbursements from the casino. Much of the remaining Personal Income is represented by wage and salary disbursements for the indirect and induced jobs created by the casino’s operations.

As part of its racing activities, Tioga Downs contributes to the purses that support the breeding and training of racehorses in New York State. The purses paid are the beginning of a supply chain that begins with owners but includes trainers, breeders, feed providers, veterinarians, and the like. The payments made by Tioga Downs in 2015 support 124 jobs, \$6.5 million in GRP, \$4.5 million in Personal Income, and \$270,000 in tax dollars statewide. Of the total jobs, 88 are directly involved in owning and training racehorses, 14 are indirect, and 22 are induced.

As an economy grows, the general result is that more people move in and earn larger incomes. Both of these factors increase the stock of housing in a region. Furthermore, due to the realities of permitting and building housing, the actual stock of housing lags behind the demand. This pattern explains why the residential capital stock ramps up quickly before rising more slowly in the second half of the analysis period. The residential capital stock results represent the value of new housing created and does not include any changes in the value of the land under these structures.

As mentioned above, an improving economy attracts economic migrants. Those cohorts who are most likely to move are also those most likely to have young children. It is these children who compose the increase in the school-age population in the region. While not drastically, this new population tends to skew toward the younger half of the age range. It should be noted that the new population is spread over a five-county area and not contained entirely in Tioga County. Furthermore, the total new labor force is considerably less than the jobs linked to the contributions of Tioga Downs, meaning that the site will help reduce the high unemployment rate in the region. As of March 2014, the unemployment rate in Tioga County was 7.9 percent, with 1,890 unemployed people.³ Unemployment reductions can be further improved by local hiring policies that focus on existing residents, especially since with the expansion Tioga Downs is expected to directly employ roughly 700 more people.

³ Bureau of Labor Statistics, *Local Area Unemployment Statistics*. <http://www.bls.gov/lau/data.htm> (accessed June 3, 2014).

Figure 7: Total contribution of expanded Tioga Downs, Tioga Region, average case (\$ in nominal millions)

Tioga Region	2015	2016	2017	2018	2019	2020
Employment	638	1,241	1,237	1,227	1,212	1,196
Gross Regional Product	\$73.07	\$99.62	\$101.84	\$103.81	\$105.36	\$106.61
Personal Income	\$13.78	\$28.47	\$32.58	\$35.77	\$38.05	\$39.83
Residential Capital Stock	\$1.47	\$5.01	\$9.72	\$15.01	\$20.43	\$25.76
School-Aged Population	20	58	88	114	137	158

Tioga Region	2021	2022	2023	2024	2025
Employment	1,180	1,164	1,151	1,140	1,131
Gross Regional Product	\$107.57	\$108.48	\$109.38	\$110.23	\$111.33
Personal Income	\$41.23	\$42.30	\$43.36	\$44.37	\$45.40
Residential Capital Stock	\$30.85	\$35.58	\$39.97	\$44.06	\$47.86
School-Aged Population	177	192	206	218	228

Source: Spectrum Gaming Group, Regional Economic Models Inc.

The above results discuss the contribution of expanded Tioga Downs on its local region. However, it has a small effect on the Rest of New York State. At a fundamental level, these results are characterized by the effects of the consumption reallocation. As mentioned in the Methodology, all spending at Tioga Downs by New York residents not recaptured from out of state is assumed to come at the expense of other New York-based consumption. Therefore, insofar as there are Tioga Downs' customers living in areas of New York outside of the Tioga Region, their spending in the Tioga Region comes at the expense of spending in their home counties in the Rest of New York. This assumption is not unique to this casino or casinos in general but is the reality with any business expansion that relies on local residents.

Based on the data supplied by the client, roughly 72 percent of the existing revenues at Tioga Downs come from New York residents and 42 percent of expanded revenues would come from other New York-based activities. This reallocation reduces but does not eliminate the positive contributions to the economy of the Rest of New York. Because the majority of the supply chain and customer base of Tioga Downs are located within the Tioga Region, the expansion of Tioga Downs has only a small, albeit positive, effect on the Rest of New York State.

Figure 8: Total contribution of expanded Tioga Downs, Rest of New York Region, average case (\$ in nominal millions)

Rest of New York	2015	2016	2017	2018	2019	2020
Employment	46	47	49	54	54	56
Gross Regional Product	\$0.36	\$1.85	\$2.51	\$3.35	\$3.65	\$3.72
Personal Income	\$1.75	\$3.61	\$5.18	\$6.87	\$7.09	\$7.27
Residential Capital Stock	\$0.00	\$0.37	\$0.98	\$1.04	\$1.75	\$2.67
School-Aged Population	2	5	7	10	13	15

Rest of New York	2021	2022	2023	2024	2025
Employment	55	60	59	57	57
Gross Regional Product	\$4.14	\$4.58	\$4.55	\$4.53	\$4.82
Personal Income	\$8.17	\$8.94	\$9.79	\$9.19	\$10.42
Residential Capital Stock	\$3.34	\$4.40	\$5.22	\$6.15	\$7.30
School-Aged Population	18	21	23	25	27

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 9: Total contribution of expanded Tioga Downs, New York State, average case (\$ in nominal millions)

New York State	2015	2016	2017	2018	2019	2020
Employment	684	1,287	1,285	1,281	1,267	1,253
Gross Regional Product	\$73.43	\$101.47	\$104.35	\$107.16	\$109.02	\$110.33
Personal Income	\$15.53	\$32.08	\$37.76	\$42.64	\$45.14	\$47.10
Residential Capital Stock	\$1.47	\$5.38	\$10.70	\$16.05	\$22.18	\$28.43
School-Aged Population	22	62	95	124	150	173

New York State	2021	2022	2023	2024	2025
Employment	1,235	1,224	1,210	1,197	1,188
Gross Regional Product	\$111.71	\$113.06	\$113.93	\$114.77	\$116.15
Personal Income	\$49.40	\$51.24	\$53.15	\$53.56	\$55.82
Residential Capital Stock	\$34.19	\$39.98	\$45.19	\$50.21	\$55.16
School-Aged Population	194	213	229	243	255

Source: Spectrum Gaming Group, Regional Economic Models Inc.

All of the preceding economic contributions drive changes in tax revenues. For example, each job comes with a paycheck which adds to the income tax base. The same companies that hire these workers do so because they have greater revenues, which add to the corporate income base. Not surprisingly, the biggest contribution to State revenues comes from gaming taxes paid by Tioga Downs. These taxes begin at \$33.4 million with the partial expansion in 2015 and continue to climb with gaming revenues to \$34.5 million in 2025. In total, the economic contributions of Tioga Downs add \$357 million through gaming taxes and \$373 million from all sources to State tax revenues.

The State tax revenues are positive, even with the reduction in sales taxes. These reductions are caused by the consumption reallocation described earlier. However, this shift will not negatively affect the State’s fiscal balance because consumption is being reallocated from a low tax activity (sales) to a considerably higher tax activity (gross gaming revenue).

Figure 10: Total contributions to taxes, New York State, average case (\$ in nominal millions)

New York State	2015	2016	2017	2018	2019	2020
Sales Tax	-\$0.92	-\$0.94	-\$0.87	-\$0.81	-\$0.77	-\$0.73
Individual Income	\$0.58	\$1.20	\$1.40	\$1.59	\$1.68	\$1.75
Corporate Income	\$0.19	\$0.27	\$0.28	\$0.28	\$0.29	\$0.29
Other Taxes	\$0.03	\$0.09	\$0.14	\$0.18	\$0.21	\$0.24
Gaming Tax	\$33.40	\$30.44	\$30.75	\$31.19	\$31.65	\$32.11
Total	\$33.28	\$31.06	\$31.70	\$32.44	\$33.06	\$33.66

New York State	2021	2022	2023	2024	2025
Sales Tax	-\$0.70	-\$0.65	-\$0.62	-\$0.61	-\$0.57
Individual Income	\$1.85	\$1.91	\$1.97	\$2.00	\$2.08
Corporate Income	\$0.29	\$0.29	\$0.29	\$0.29	\$0.30
Other Taxes	\$0.26	\$0.28	\$0.30	\$0.31	\$0.33
Gaming Tax	\$32.58	\$33.05	\$33.53	\$34.02	\$34.52
Total	\$34.28	\$34.88	\$35.47	\$36.01	\$36.66

Source: Spectrum Gaming Group, Regional Economic Models Inc.

High Case

Figure 11: Total contribution of expanded Tioga Downs, Tioga Region, high case (\$ in nominal millions)

Tioga Region	2015	2016	2017	2018	2019	2020
Employment	638	1,252	1,247	1,237	1,222	1,206
Gross Regional Product	\$73.07	\$106.28	\$108.63	\$110.74	\$112.43	\$113.79
Personal Income	\$13.78	\$29.13	\$33.26	\$36.47	\$38.78	\$40.57
Residential Capital Stock	\$1.47	\$5.08	\$9.91	\$15.31	\$20.86	\$26.31
School-Aged Population	20	58	88	115	138	159

Tioga Region	2021	2022	2023	2024	2025
Employment	1,189	1,173	1,159	1,148	1,139
Gross Regional Product	\$114.83	\$115.83	\$116.81	\$117.75	\$118.92
Personal Income	\$41.96	\$43.01	\$44.09	\$45.11	\$46.13
Residential Capital Stock	\$31.50	\$36.32	\$40.79	\$44.96	\$48.83
School-Aged Population	177	193	207	219	229

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 12: Total contribution of expanded Tioga Downs, Rest of New York Region, high case (\$ in nominal millions)

Rest of New York	2015	2016	2017	2018	2019	2020
Employment	46	44	47	52	50	53
Gross Regional Product	\$0.36	\$1.85	\$2.14	\$3.10	\$3.53	\$3.72
Personal Income	\$1.75	\$3.74	\$5.06	\$6.99	\$6.72	\$7.27
Residential Capital Stock	\$0.00	\$0.37	\$0.98	\$1.04	\$1.75	\$2.67
School-Aged Population	2	4	7	10	12	15

Rest of New York	2021	2022	2023	2024	2025
Employment	52	55	55	52	52
Gross Regional Product	\$3.77	\$4.21	\$4.19	\$4.04	\$4.82
Personal Income	\$8.04	\$8.82	\$9.42	\$9.19	\$10.42
Residential Capital Stock	\$3.34	\$4.40	\$5.22	\$6.15	\$7.42
School-Aged Population	17	20	22	24	27

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 13: Total contribution of expanded Tioga Downs, New York State, high case (\$ in nominal millions)

New York State	2015	2016	2017	2018	2019	2020
Employment	684	1,295	1,294	1,289	1,273	1,259
Gross Regional Product	\$73.43	\$108.12	\$110.78	\$113.85	\$115.96	\$117.51
Personal Income	\$15.53	\$32.86	\$38.32	\$43.46	\$45.50	\$47.83
Residential Capital Stock	\$1.47	\$5.45	\$10.88	\$16.35	\$22.61	\$28.98
School-Aged Population	22	62	96	125	150	173

New York State	2021	2022	2023	2024	2025
Employment	1,241	1,228	1,215	1,200	1,190
Gross Regional Product	\$118.61	\$120.04	\$121.00	\$121.79	\$123.74
Personal Income	\$50.00	\$51.83	\$53.51	\$54.29	\$56.55
Residential Capital Stock	\$34.84	\$40.72	\$46.02	\$51.11	\$56.25
School-Aged Population	195	213	230	243	255

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 14: Total contributions to taxes, New York State, high case (\$ in nominal millions)

New York State	2015	2016	2017	2018	2019	2020
Sales Tax	-\$0.92	-\$1.01	-\$0.94	-\$0.87	-\$0.84	-\$0.80
Individual Income	\$0.58	\$1.22	\$1.43	\$1.61	\$1.69	\$1.78
Corporate Income	\$0.19	\$0.30	\$0.30	\$0.31	\$0.31	\$0.31
Other Taxes	\$0.03	\$0.09	\$0.14	\$0.18	\$0.21	\$0.24
Gaming Tax	\$33.40	\$33.35	\$33.69	\$34.18	\$34.68	\$35.18
Total	\$33.28	\$33.95	\$34.62	\$35.41	\$36.04	\$36.71

New York State	2021	2022	2023	2024	2025
Sales Tax	-\$0.77	-\$0.73	-\$0.71	-\$0.69	-\$0.65
Individual Income	\$1.87	\$1.93	\$1.99	\$2.02	\$2.11
Corporate Income	\$0.31	\$0.31	\$0.31	\$0.32	\$0.32
Other Taxes	\$0.26	\$0.28	\$0.30	\$0.32	\$0.33
Gaming Tax	\$35.69	\$36.21	\$36.74	\$37.28	\$37.82
Total	\$37.37	\$38.01	\$38.64	\$39.24	\$39.93

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Low Case

Figure 15: Total contribution of expanded Tioga Downs, Tioga Region, low case (\$ in nominal millions)

Tioga Region	2015	2016	2017	2018	2019	2020
Employment	638	1,230	1,226	1,216	1,202	1,187
Gross Regional Product	\$73.07	\$92.96	\$95.05	\$96.88	\$98.30	\$99.42
Personal Income	\$13.78	\$27.80	\$31.89	\$35.04	\$37.31	\$39.09
Residential Capital Stock	\$1.47	\$4.93	\$9.54	\$14.70	\$20.00	\$25.21
School-Aged Population	20	57	87	113	136	157

Tioga Region	2021	2022	2023	2024	2025
Employment	1,171	1,155	1,143	1,132	1,123
Gross Regional Product	\$100.29	\$101.12	\$101.94	\$102.72	\$103.75
Personal Income	\$40.48	\$41.57	\$42.64	\$43.65	\$44.70
Residential Capital Stock	\$30.19	\$34.83	\$39.15	\$43.17	\$46.92
School-Aged Population	176	191	205	217	227

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 16: Total contribution of expanded Tioga Downs, Rest of New York Region, low case (\$ in nominal millions)

Rest of New York	2015	2016	2017	2018	2019	2020
Employment	46	48	52	59	57	59
Gross Regional Product	\$0.36	\$1.85	\$2.88	\$3.59	\$4.02	\$3.96
Personal Income	\$1.75	\$3.74	\$5.30	\$7.11	\$7.21	\$7.75
Residential Capital Stock	\$0.00	\$0.37	\$0.98	\$1.04	\$1.75	\$2.67
School-Aged Population	2	5	7	11	13	16

Rest of New York	2021	2022	2023	2024	2025
Employment	59	65	62	61	58
Gross Regional Product	\$4.50	\$4.70	\$4.67	\$5.51	\$4.82
Personal Income	\$8.41	\$9.06	\$9.67	\$9.55	\$10.05
Residential Capital Stock	\$3.34	\$4.40	\$5.47	\$6.64	\$7.79
School-Aged Population	18	21	24	26	27

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 17: Total contribution of expanded Tioga Downs, New York State, low case (\$ in nominal millions)

New York State	2015	2016	2017	2018	2019	2020
Employment	684	1,278	1,278	1,275	1,259	1,246
Gross Regional Product	\$73.43	\$94.81	\$97.93	\$100.47	\$102.32	\$103.39
Personal Income	\$15.53	\$31.54	\$37.20	\$42.16	\$44.53	\$46.84
Residential Capital Stock	\$1.47	\$5.30	\$10.52	\$15.74	\$21.74	\$27.88
School-Aged Population	22	62	95	124	149	172

New York State	2021	2022	2023	2024	2025
Employment	1,230	1,220	1,205	1,193	1,182
Gross Regional Product	\$104.80	\$105.82	\$106.61	\$108.23	\$108.57
Personal Income	\$48.89	\$50.63	\$52.30	\$53.20	\$54.75
Residential Capital Stock	\$33.53	\$39.23	\$44.61	\$49.81	\$54.70
School-Aged Population	194	213	229	242	254

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Figure 18: Total contributions to taxes, New York State, low case (\$ in nominal millions)

New York State	2015	2016	2017	2018	2019	2020
Sales Tax	-\$0.92	-\$0.88	-\$0.81	-\$0.74	-\$0.70	-\$0.66
Individual Income	\$0.58	\$1.17	\$1.38	\$1.57	\$1.65	\$1.75
Corporate Income	\$0.19	\$0.25	\$0.26	\$0.26	\$0.26	\$0.26
Other Taxes	\$0.03	\$0.09	\$0.14	\$0.18	\$0.21	\$0.24
Gaming Tax	\$33.40	\$27.53	\$27.81	\$28.21	\$28.62	\$29.04
Total	\$33.28	\$28.17	\$28.78	\$29.49	\$30.05	\$30.63

New York State	2021	2022	2023	2024	2025
Sales Tax	-\$0.63	-\$0.58	-\$0.56	-\$0.54	-\$0.50
Individual Income	\$1.83	\$1.89	\$1.95	\$1.98	\$2.04
Corporate Income	\$0.27	\$0.27	\$0.27	\$0.27	\$0.27
Other Taxes	\$0.26	\$0.28	\$0.30	\$0.31	\$0.33
Gaming Tax	\$29.46	\$29.89	\$30.32	\$30.76	\$31.21
Total	\$31.19	\$31.75	\$32.28	\$32.79	\$33.35

Source: Spectrum Gaming Group, Regional Economic Models Inc.

Comparisons to Similar Built Projects

RFA requirement of No. 16(B)(3)(a) and (b) that the applicants' economic-impact reports "compare those results to actual observed conditions in similar built projects." Spectrum determined that Iowa provides a relevant and timely example, as the State on May 23, 2014, released *Socioeconomic Impact of Gambling on Iowans*,⁴ a comprehensive study conducted by Strategic Economics Group and Spectrum Gaming Group. The Iowa research team also employed the REMI model to determine statewide fiscal and economic impacts.

The 18 Iowa casinos are of a similar scale to the proposed Tioga Downs casino: In Fiscal Year 2013 they had an average of 1,004 slot machines, 26 table games and 38,122 square feet of gaming space.⁵ The Iowa casino sizes were in the ranges of 525 to 2,055 slots; 8 to 73 table games; and 16,357 square feet to 85,686 square feet.

The proposed Tioga Downs casino is of similar size to the Iowa average and is in the middle of the ranges cited above: 1,000 slot machines, 50 table games, and 32,324 square feet.

Additionally, 13 of the 18 Iowa casinos have an integrated or attached hotel, within a range of 60 to 514 guest rooms; the median number is 170 guest rooms. By comparison, the proposed Tioga Downs casino would have 137 guest rooms in its integrated hotel.

⁴ Strategic Economics Group and Spectrum Gaming Group, *Socioeconomic Impact of Gambling on Iowans*, May 23, 2014; <http://www.state.ia.us/irgc/StudySocioeconomicImpact2014.pdf>.

⁵ Iowa Racing and Gaming Commission data; <http://www.state.ia.us/irgc/FYTD2013.pdf>.

Both the Iowa casinos and the proposed Tioga Down casinos have a variety non-gaming amenities such as restaurants, bars, meeting space, pools and/or spas, etc. Further, three of the Iowa casinos – like Tioga Downs – having racing operations (one thoroughbred, two greyhound).

Like Tioga Downs, most of the Iowa casinos are in or near smaller cities and towns.

The Iowa research team found that the Iowa casinos produced the following average annual economic impacts; we then compare these with our average-case projections for the similarly proposed Tioga Downs casino:

- Direct and secondary private-sector jobs of 13,978, or an average of 777 per casino. The Tioga Downs casino will generate 1,287 direct and secondary private-sector jobs statewide in its peak year of 2016.
- Personal Income of \$591.7 million, equating to \$32.9 million per casino. The Tioga Downs casino will generate \$32.1 million of Personal Income statewide, rising to \$55.8 million by 2025.
- Gross state product of \$1.3 billion, equating to \$73.1 million per casino. The Tioga Downs casino will contribute gross regional product of \$101.5 million in 2016, rising to \$116.2 million by 2025.

Impacts on Incremental Job Creation, Unemployment Rates, Cultural Institutions, Small Businesses

This section is founded on the principle that policies established by the casino operator can have a profound impact on capturing the benefits of gaming expansions and minimizing the challenges and costs. Moreover, our work in this area also leads us to the clear admonition that neither benefits nor costs stop at municipal boundaries. They affect the entire region, thus magnifying the need for clear policies.

Among the policies that Tioga Downs will pursue include:

- Local hiring preferences.
- Positioning the expanded facility as a key component of the region, one of many attractions that would help expand the visitor base, and help other Tioga County businesses to grow and prosper.
- Working with local small businesses to serve as both suppliers of goods and services, and as marketing partners.

An expanded, Tioga Downs will directly employ more than 1,000 people – 300-plus at the existing facility and 700-plus from the expansion. These jobs are part of a statewide contribution of 1,287 direct and secondary private-sector jobs. The jobs created outside of the casino operation itself will range across industries like administrative and waste management services; professional,

scientific, and technical services; construction; and real estate, rental, and leasing. These jobs – which reflect how the casino itself, as well as the incremental spending from its employees interacts with the local economy – also cover a variety of occupations including food preparation and serving; sales, office, and administrative support; building maintenance; and management, business, and financial occupations.

The number of jobs at Tioga Downs is significant compared to the number of unemployed in Tioga County. As of March 2014, there were an estimated 1,890 unemployed people in the county. The 700-plus jobs from the expansion would be a significant boon to reducing the unemployment rate in the county. Should Tioga Downs not expand and ultimately close, the number of unemployed in the county would increase by roughly 380, or 20 percent. The extent to which the continued operations and expansion of Tioga Downs will serve to reduce the unemployment rate in the county depend significantly on local hiring policies. All else being equal, if only half of the projected expansion in employment (approximately 350 jobs) at Tioga Downs were to be filled by currently unemployed local residents, the unemployment rate would decrease from 7.9 percent to 6.4 percent. That is a clearly a material impact, and one that we consider to be achievable.

The expansion of a casino does introduce competition for entertainment to the region. However, casinos excel at offering only certain forms of entertainment, such as gaming and live shows. Tioga is positioned to work with cultural institutions throughout the wider region. This would advance some critical shared goals:

- Attracting adults from a wider geographic region
- Expanding the demographic appeal of gaming
- Extending the length of stay for visitors
- Reducing seasonal visitation peaks and valleys

We do not anticipate that Tioga Downs will compete with other attractions, including cultural institutions, but will benefit from growth and further investment by such institutions. With a proactive marketing and cross-promotional campaign, casinos can work to drive visitor traffic to other businesses and raise awareness of other local establishments, whether they offer similar or unrelated amenities. While this concept may initially seem counter-intuitive, Spectrum's experience has shown that strengthening the attractiveness of the region to visitors will ultimately help the casino draw in more customers, especially those from outside of the region.

Small businesses have a role to play in many aspects of a casino expansion. Like many large establishments, casinos have a long and varied supply chain. Many small businesses can position themselves to benefit by supplying services like landscaping, building cleaning and maintenance, security, raw and prepared food, laundry, uniforms and other supplies. Tioga Downs and such small businesses will benefit from a concerted effort to buy locally, and helping incubate some small businesses to become cost-effective suppliers. Again, such a program provides

multiple benefits. For Tioga Downs, it expands the list of potential suppliers, while the local community gets more revenue and creates more local employment.

Many of the regional amenities outside of a casino are small businesses that would benefit from the visitors the casino draws to the area. Lastly, the employees of the casino will take their incomes back to their towns where their spending will benefit their local small businesses. This also provides benefits, primarily by creating opportunities for small businesses that will more likely respond by investing in their own facilities, thus creating an upward spiral of jobs and benefits that would be retained within the local region.

Methodology

This study relies on the PI+ model from and data from the client. REMI’s models are the leading economic and policy analysis models in the US and abroad and are used by a diverse group of local, regional, state, and federal clients. In New York, REMI clients include New York State Energy Research and Development Authority, Empire State Development, New York City Independent Budget Office, and New York City Economic Development Corporation. The PI+ model for this study is a two-region model of New York State with 23 industry sectors.

Figure 19: Definition of PI+ Model regions

Region	Counties
Tioga Region	Broome
	Chemung
	Chenango
	Tioga
	Tompkins
Rest of New York	All Other

Source: Regional Economic Models Inc.

Detailed PI+ Description

PI+ is a fully dynamic, multiregional, computerized model of the state economy. The current version of the New York PI+ is calibrated to the last history year of 2012. The REMI model relies on four different quantitative methodologies in its framework, which allows them to highlight each other’s strengths while compensating weaknesses. These methodologies include:

- **Input/output tabulation (“IO”)** – IO modeling is sometimes called “social accounting” because it shows the interrelationships between different industries and households in the economy. This includes the flow of goods and services between firms in supply chains, final sales to households, and wages paid to and spent by individuals. These interconnections create multipliers. The data for the table comes from the Bureau of Labor Statistics (“BLS”)⁶ and the theoretical underpinnings for IO modeling come from the Nobel laureate Wassily Leontief.
- **Econometrics** – The REMI model includes statistical parameters for behavior of firms and households based on historical data. In modeling terms, this is the source of our elasticities and parameters. This includes how actors respond to changes in prices or wages and the “rate of adjustment” from a shock until the economy returns to a new balance.

⁶ For the most recent BLS make and use table, which we then transform into an IO table from there, see http://www.bls.gov/emp/ep_data_input_output_matrix.htm.

- **Computable General Equilibrium** – This is a broad class of models. Computable general equilibrium modeling adds market concepts and the principles of equilibrium economics to the REMI algorithm. This includes markets for housing, labor, consumer goods, and importantly, a concept of market shares and competitiveness for businesses. For example, consumers in the state of Massachusetts may demand automobiles, but in all likelihood those cars come from plants in Michigan or the Southeast, or even overseas. This flow of goods and services can change over time, and with it the attractiveness of the state for labor and capital, given changes in economic conditions.
- **Economic Geography** – Geography gives the REMI model a sense of agglomeration, labor pooling, and economies of scale. Labor-intensive industries, such as healthcare or professional services, tend to cluster in urban centers where specialized pools of educated workers are easy to obtain. Manufacturers tend to do the same thing given their tendency to locate near their input suppliers, customers, and transportation hubs. This allows them to lower their costs and increase their productivity.

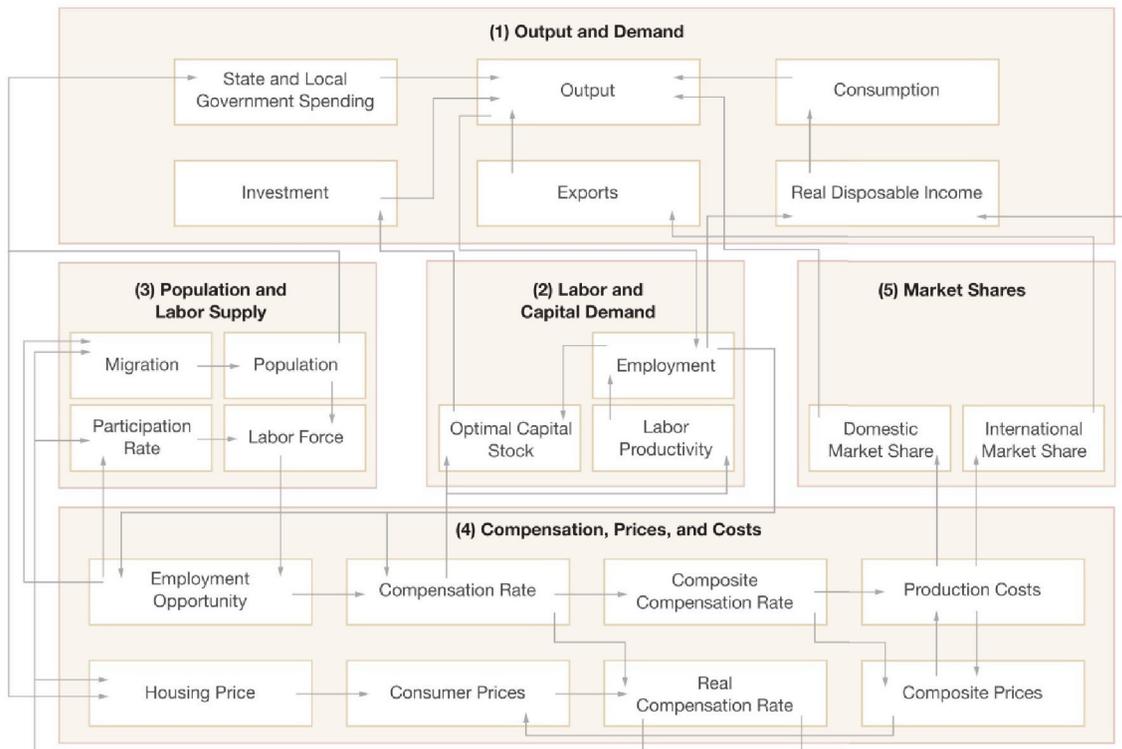
REMI began as a research inquiry, and the literature behind PI+ is public and oftentimes appears in peer-reviewed journals. These include the *Journal of Regional Science*, *American Economic Review*, and *the Review of Economics and Statistics*.⁷ REMI only uses data from public sources. Our references include the Bureau of Economic Analysis (“BEA”), Bureau of Labor Statistics (“BLS”), the Census Bureau, and the Energy Information Administration (“EIA”) at the Department of Commerce and Department of Energy.⁸ The REMI model exists in a block structure of simultaneous equations. Each of the five blocks in the figure below adds its own perspective on the economy. Block 1 is final demand and final production; it is the “macroeconomy” in terms of its total aggregates. That includes consumer spending, investment, net exports, government spending, and a subtraction for intermediate inputs in a local area. Block 2 is the business perspective on the economy; sales orders come in from Block 1, and industries have to make production decisions (in terms of hiring workers and investing in capital) to eventually generate their needed output. Block 3 is the demographic portion of the model, which includes births and deaths, how intra-national migration changes a state-level economy over time, and how the regional population chooses to participate in the labor force. Block 4 introduces equilibrium concepts to the REMI model: households appraise the labor market, housing, and the cost of living when making location decisions. For businesses, they make an analogous consideration about their costs for labor, capital, intermediates, and fuel. Block 5 quantifies regional competitiveness, which means how much an area will export and displace imports when competing on a domestic and international marketplace against other states and nations.

⁷ For journal citations from the above publications, see p. 46 of our equations document online, [www.remi.com/download/documentation/pi+/pi+ version 1.4/PI+ v1.4 Model Equations\(2\).pdf](http://www.remi.com/download/documentation/pi+/pi+ version 1.4/PI+ v1.4 Model Equations(2).pdf).

⁸ For a full listing of data sources and types, see our document online of data sources and procedures, www.remi.com/download/documentation/pi+/pi+ version 1.4/Data Sources and Estimation Procedures.pdf.

Figure 20: REMI Model linkages⁹

REMI Model Linkages (Excluding Economic Geography Linkages)



Source: Regional Economic Models Inc.

PI+ has two purposes: forecasting and policy analysis by examining alternative policy scenarios. The model has an underlying forecast based on the government data. To use the model to simulate demographic and economic changes, we introduce “exogenous” changes to the REMI variables. They are called “policy variables” in the PI+ system and they represent the direct effect of projects on the economy. From there, the model automatically passes these changes through the rest of the economic structure until the model system reaches a new equilibrium at some point in the future after adjusting over time.

⁹ This is the overall structure of REMI’s representation of the state economy. Each rectangle is a “stock,” a finite concept such as population or the number of jobs. Each arrow shows an equation that links them together. For example, the population times the participation rate equals the labor force; government spending, plus capital investment, plus net exports, plus consumption, and minus intermediates, then equals GDP.

About This Report

This report was prepared by Spectrum Gaming Group in cooperation with Regional Economic Models Inc. of Amherst, MA. Spectrum and REMI have cooperated on several major projects throughout the country that measure the impacts of gaming industries on states and selected regions within the states. Their most recent such collaborative reports include those prepared for the Iowa Racing and Gaming Commission in June 2014 and the Florida Legislature in October 2013.

Spectrum is an independent research and professional services firm founded in 1993 that serves private- and public-sector clients worldwide. Our principals have backgrounds in operations, economic analysis, law enforcement, regulation and journalism. Spectrum holds no beneficial interest in any casino operating companies or gaming equipment manufacturers or suppliers. We employ only senior-level executives and associates who have earned reputations for honesty, integrity and the highest standards of professional conduct. Our work is never influenced by the interests of past or potentially future clients.

Each Spectrum project is customized to our client's specific requirements and developed from the ground up. Our findings, conclusions and recommendations are based solely on our research, analysis and experience. Our mandate is not to tell clients what they want to hear; we tell them what they need to know. We will not accept, and have never accepted, engagements that seek a preferred result.

Our public-sector clients have included 15 US state and territory governments, six national governments, 14 Native American governments, and numerous gaming companies (national and international) of all sizes.

Our principals have testified before the following government bodies:

- Georgia Joint Committee on Economic Development and Tourism
- Illinois Gaming Board
- Indiana Gaming Study Commission
- International Tribunal, The Hague
- Iowa Gaming and Racing Commission
- Massachusetts Joint Committee on Bonding, Capital Expenditures, and State Assets
- New Hampshire Gaming Study Commission
- New Jersey Assembly Tourism and Gaming Committee
- National Gambling Impact Study Commission
- New Jersey Senate Legislative Oversight Committee
- New Jersey Senate Wagering, Tourism & Historic Preservation Committee
- Ohio House Economic Development Committee
- Ohio Senate Oversight Committee
- Pennsylvania Gaming Control Board
- Puerto Rico Horse Racing Board

- US House Congressional Gaming Caucus
- US Senate Indian Affairs Committee
- US Senate Select Committee on Indian Gaming
- US Senate Subcommittee on Organized Crime

Spectrum and its sister company, Spectrum OSO Asia, maintain a network of leading experts in all disciplines relating to the gaming industry, and we do this through our offices in Atlantic City, Bangkok, Guangzhou, Hong Kong, Macau, Miami and Tokyo.

Disclaimer

Spectrum Gaming Group (“Spectrum,” “we” or “our”) has made every reasonable effort to ensure that the data and information contained in this study reflect the most accurate and timely information possible. The data are believed to be generally reliable. This study is based on estimates, assumptions, and other information developed by Spectrum from its independent research effort, general knowledge of the gaming industry, and consultations with the Client and its representatives. Spectrum shall not be responsible for any inaccuracies in reporting by the Client or its agents and representatives, or any other data source used in preparing or presenting this study. The data presented in this study were collected through the cover date of this report. Spectrum has not undertaken any effort to update this information since this time.

Some significant factors that are unquantifiable and unpredictable – including, but not limited to, economic, governmental, managerial and regulatory changes; and acts of nature – are qualitative by nature, and cannot be readily used in any quantitative projections.

No warranty or representation is made by Spectrum that any of the projected values or results contained in this study will actually be achieved. We shall not be responsible for any deviations in the project’s actual performance from any predictions, estimates, or conclusions contained in this study.

Possession of this study does not carry with it the right of publication thereof, or the right to use the name of Spectrum Gaming Group in any manner without first obtaining the prior written consent of Spectrum. No abstracting, excerpting, or summarizing of this study may be made without first obtaining the prior written consent of Spectrum.

This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from Spectrum.

This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.