
**HOUSING ANALYSIS FOR THE
PROPOSED GAMING FACILITY AT ADELAAR
TOWN OF THOMPSON, NEW YORK**

ATTACHMENT IX.A.4.-1

FINAL DRAFT

Prepared for:
Empire Resorts, Inc.

Prepared by:
The logo for AKRF features the letters 'AKRF' in a bold, blue, sans-serif font. To the left of the letters is a stylized graphic consisting of two overlapping circles, one blue and one yellow, with a white crescent shape between them.

June 27, 2014

A. INTRODUCTION

AKRF, Inc. was retained to assess the likely impact on the housing stock in the Town of Thompson (the Host municipality) and nearby municipalities resulting from the new jobs provided by the proposed Gaming Facility. Specifically, this analysis considers whether the existing housing stock in the Town of Thompson and nearby municipalities can sufficiently accommodate the anticipated influx in population caused by expected employment growth associated with the Gaming Facility at Adelaar. As detailed below, this assessment determines that there would not be any adverse impacts on the local housing stock associated with this anticipated population growth under the high-, average-, and low-revenue cases for the “No Regional Competition” scenario, or under the high-, average-, and low-revenue cases for the “With Regional Competition” scenario.

Following this introduction, the Attachment is organized into the following sections:

- **B. Methodology and Data Sources** - This section describes the methodology, data sources, and assumptions behind the regional employment model used to identify potential labor shortages and potential in-migration to the Town of Thompson and nearby municipalities.
- **C. Existing Housing Market Conditions** - This section provides an overview of the existing local housing market for the Town of Thompson and nearby municipalities, and identifies any new residential units under construction in planned development projects that may result in an expansion of the housing stock in the near future.
- **D. Analysis Findings** - This section compares the demand for housing generated by the expected employment growth in the Town of Thompson and nearby municipalities with the existing supply of available housing units.

B. METHODOLOGY AND DATA SOURCES

REGIONAL EMPLOYMENT PROJECTION METHODOLOGY

This analysis relies on the regional employment gravity model described in detail as part of Exhibit VIII.B.7.a. Results from the model were used as a starting point for this analysis to assess the impact on local and regional housing markets. As shown in Exhibit VII.B.7.a, the projected distribution of labor demand generated by the proposed Gaming Facility across local and regional labor markets did not produce any gaps as long as occupational categories were

aggregated. However, if the demand is assessed for each of the occupational categories, a mismatch of skills appears for the service jobs category, particularly for the Town of Thompson and the nearby municipalities that are within a 20-minute drive-time distance of the Project Site. For all other categories used in the model (i.e., managerial, professional, and blue collar/maintenance) a surplus continues to exist.

Table 1 matches demand and supply statistics for the 10-, 20-, and 30-minute drive-time rings and identifies a gap for services occupations for the 10- and 20-minutes rings only. Labor gaps exists only for service-related occupations in the immediate vicinity of the Gaming Facility, while labor markets further from the Project Site will be able to satisfy the demand for jobs in all occupational categories.

Table 1 also shows that there is additional capacity in other occupational categories such that—through education and job training—some people within the blue collar/maintenance and professional categories may be attracted to service jobs. For the purpose of the analysis it was assumed that after acquiring new skills through training, a larger fraction (50%) of the blue collar/maintenance workers would be willing to “trade-up” and work in service jobs at the proposed Gaming Facility. Since professional jobs tend to offer higher salaries, it was assumed that only 10% out of the professional labor pool would be willing to work in service related jobs at the proposed Gaming facility. Subtracting potential occupational category changers from the gross service gap, results in a lower net gap for all commute time rings.

ASSESSMENT OF HOUSING DEMAND

After the labor gap was determined for the 10- and 20-minute drive-time rings, the net gap numbers were assigned to the various municipalities using the population-based approach described in the Attachment to Exhibit VIII.7.a (**Table 2**). For example, for the high-revenue scenario a total labor shortage of 113 positions was identified. This shortage is assumed to be satisfied by people moving to the various local labor markets. For the high-revenue case, it is estimated that the Town of Thompson would receive 64 of 113 positions, while Bethel would receive only 4 people filling positions at the proposed Gaming Facility. The remaining gap was assigned to the other nearby municipalities based on their existing population size.

This influx of new workers was assumed to generate a corresponding increase in housing demand in Town of Thompson and those nearby municipalities where labor shortages may exist. To assess the impact on the housing stock in Town of Thompson and nearby municipalities, the expected increase in housing demand (i.e., new worker households) was compared to the available housing supply in each of these areas. For the purpose of the analysis it was assumed that every worker household would require one unit, without differentiating between the various types of housing (e.g., single-family units, apartment unit, etc.)

Table 1

Labor Surpluses / Gaps by Employment Classification and Drive Time

Employment Classification	High Gaming Facility Revenue			Average Gaming Facility Revenue			Low Gaming Facility Revenue		
	Labor Demand	Available Labor	Surplus / (Gap)	Labor Demand	Available Labor	Surplus / (Gap)	Labor Demand	Available Labor	Surplus / (Gap)
Less than 10 Minute Drive									
Management	14	36	+22	14	36	+22	14	36	+22
Professional	83	293	+210	75	293	+218	70	293	+223
Service	262	135	(127)	226	135	(91)	218	135	(83)
Blue-Collar / Maintenance	40	122	+82	40	122	+82	40	122	+82
10 to 20 Minute Drive									
Management	25	116	+91	25	116	+91	25	116	+91
Professional	145	457	+312	132	457	+325	122	457	+335
Service	458	267	(191)	396	267	(129)	382	267	(115)
Blue-Collar / Maintenance	70	294	+224	70	294	+224	70	294	+224
20 to 30 Minute Drive									
Management	16	253	+237	16	253	+237	16	253	+237
Professional	90	989	+899	82	989	+907	76	989	+913
Service	284	550	+266	245	550	+305	237	550	+313
Blue-Collar / Maintenance	43	557	+514	43	557	+514	43	557	+514
Sources: Gaming Hospitality Experts, LLC; EPR Properties; AKRF, Inc.									

Table 2
Projected Shortage in Job Positions by Municipality

Municipality	High-Revenue Case	Average-Revenue Case	Low-Revenue Case
Thompson	64	24	17
Bethel	4	0	0
Fallsburg	26	4	3
Forestburgh	1	0	0
Liberty	8	0	0
Mamakating	10	0	0
TOTAL	113	28	20
Note: Host Municipality (Town of Thompson) is indicated in bold. Sources: AKRF, Inc.			

ASSESSMENT OF HOUSING SUPPLY

To determine available housing supply, the analysis used data from the 2008-12 American Community Survey to estimate vacant units available for sale or for rent in each of towns with a labor gap. The analysis also considers the potential for growth in the existing housing stock due to construction of new residential units related to new development projects in Town of Thompson and nearby towns in the future, and potential future changes in housing availability based on 30-year population projections from the Cornell Program on Applied Demographics.

Real estate listings for properties for sale and for rent as of June 2014 were collected from Zillow for areas within a 30-minute driving radius of the project site to supplement and validate Census data on housing availability and valuation by location, and to understand the volume of available housing that is currently on the market.

The information on existing housing supply was compared with the projected housing demand to reach a final conclusion as to whether the employment growth from the proposed Gaming Facility would result in any housing shortages in the Town of Thompson and surrounding municipalities.

C. EXISTING HOUSING MARKET CONDITIONS

EXISTING HOUSING STOCK

This section provides an overview of existing housing market conditions in the Town of Thompson and nearby municipalities in Sullivan County. It describes current demographic and housing stock characteristics in Town of Thompson and nearby municipalities, summarizes planned housing development projects in the area, and provides an overview of residential units currently for sale or rent in the area. The section also identifies key differences in the local housing stock with statewide averages and opportunities for new workers moving into the area to take advantage of existing housing.

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Table 3 below summarizes population and household characteristics for the Town of Thompson, surrounding municipalities, Sullivan County, Region One, and New York State, based on data from the 2008-12 American Community Survey. The data indicate that the Town of Thompson and Sullivan County municipalities have smaller household sizes on average when compared to the surrounding region and New York State. Also, households in Town of Thompson and nearby municipalities have lower incomes and are more likely to be in poverty than elsewhere in Region One and New York State.

Table 4 summarizes the existing housing stock characteristics in the Town of Thompson, surrounding municipalities, Sullivan County, Region One, and New York State, based on data from the 2008-12 American Community Survey. Town of Thompson and surrounding municipalities, like Sullivan County, have relatively high vacancy rates, as 37% of the housing units in Town of Thompson and 40% of units in Sullivan County were vacant as of 2008-12. In comparison, only 18% of the housing units in Region One and 11% of units in New York State were vacant as of 2008-12.

This key difference can be explained by the high volume of seasonal housing in Town of Thompson and Sullivan County's housing stock, as shown in **Table 5**. 70% of vacant housing units in Town of Thompson were for seasonal, recreational, or occasional use; 75% of vacant units in Sullivan County were also classified as seasonal. In comparison, only 33% of vacant units statewide were seasonal units.

**Table 3
Population and Household Characteristics, 2008-12**

Area	Population	Households	Average Household Size	Median Household Income (\$)	Percent of Population Below Poverty Level
Town of Thompson	15,263	5,883	2.47	37,885	24.3%
Sullivan County	77,340	29,664	2.46	49,363	17.2%
Region One	1,089,952	396,659	2.62	66,021	11.7%
New York State	19,398,125	7,230,896	2.60	59,259	14.9%
Surrounding Municipalities					
Bethel	4,254	1,757	2.28	52,809	15.8%
Callicoon	3,058	1,431	2.09	53,994	12.6%
Cochecton	1,264	528	2.38	55,647	15.7%
Delaware	2,673	1,070	2.17	58,400	15.2%
Fallsburg	12,910	3,865	2.78	44,792	22.8%
Forestburgh	860	398	2.16	69,956	6.3%
Fremont	1,422	625	2.26	63,060	7.0%
Highland	2,384	954	2.37	53,156	17.2%
Liberty	9,834	3,737	2.48	43,357	19.3%
Lumberland	2,639	996	2.63	47,218	17.1%
Mamakating	11,989	4,690	2.55	55,351	8.7%
Neversink	3,557	1,492	2.38	50,809	9.6%
Rockland	3,773	1,599	2.33	52,049	17.4%
Tusten	1,460	639	2.18	51,495	11.4%
<p>Note: "Region One" consists of the following counties of New York State: Columbia, Delaware, Dutchess, Greene, Orange, Sullivan, and Ulster. Source: 2008-12 American Community Survey</p>					

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Table 4
Housing Stock Characteristics, 2008-12

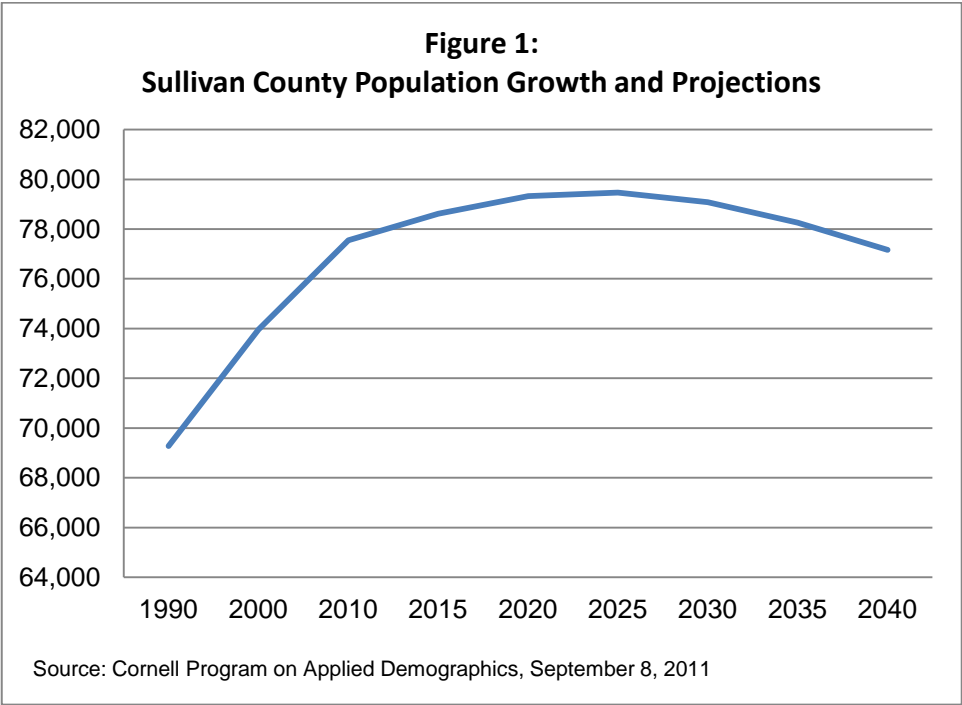
Area	Housing Units	Percent Occupied	Percent Vacant	Owner-Occupied	Renter-Occupied	Median Value of Owner-Occupied Units (\$)
Town of Thompson	9,391	62.6%	37.4%	34.7%	27.9%	174,441
Sullivan County	49,179	60.3%	39.7%	40.1%	20.2%	184,406
Region One	481,173	82.4%	17.6%	57.7%	24.7%	256,961
New York State	8,102,223	89.2%	10.8%	48.6%	40.6%	303,371
Surrounding Municipalities						
Bethel	4,316	40.7%	59.3%	30.6%	10.1%	200,124
Callicoon	2,114	67.7%	32.3%	49.8%	17.9%	216,664
Cochecton	1,111	47.5%	52.5%	41.8%	5.8%	195,604
Delaware	1,702	62.9%	37.1%	46.3%	16.6%	199,713
Fallsburg	7,720	50.1%	49.9%	26.1%	24.0%	160,572
Forestburgh	654	60.9%	39.1%	52.3%	8.6%	249,949
Fremont	1,299	48.1%	51.9%	38.3%	9.8%	187,591
Highland	1,719	55.5%	44.5%	40.8%	14.7%	183,584
Liberty	5,266	71.0%	29.0%	39.1%	31.9%	162,832
Lumberland	1,710	58.2%	41.8%	47.3%	10.9%	194,576
Mamakating	6,323	74.2%	25.8%	57.3%	16.9%	201,562
Neversink	2,067	72.2%	27.8%	60.0%	12.2%	189,440
Rockland	2,651	60.3%	39.7%	40.9%	19.4%	162,113
Tusten	1,136	56.3%	43.8%	40.6%	15.7%	185,022
NOTE: "Region One" consists of the following counties of New York State: Columbia, Delaware, Dutchess, Greene, Orange, Sullivan, and Ulster. Source: 2008-12 American Community Survey						

**Table 5
Vacant Housing Characteristics, 2008-12**

Area	For Rent	Rented, Not Occupied	For Sale Only	Sold, Not Occupied	Seasonal, Recreational, or Occasional Use	For Migrant Workers	Other Vacant	TOTAL
Town of Thompson	8%	2%	5%	0%	70%	0%	16%	100%
Sullivan County	4%	1%	4%	0%	75%	0%	16%	100%
New York State	18%	5%	8%	4%	33%	0%	31%	100%

Source: 2008-12 American Community Survey

While the high volume of seasonal housing can create housing opportunities for potential new migrants generated by the proposed project’s employment growth, the county is also expected to experience a decline in overall population over the next 30 years, due to an expected slowdown in natural population growth. Figure 1 below presents the population growth in Sullivan County between 1990 and 2010, and the projection from 2010 to 2040. It is expected that the population growth would decline from 2010 to 2025, and that the county would start experiencing a decrease in population after 2025.



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Table 6 summarizes the population projections from 2015 to 2040 by the natural increase in population due to the birth and death rates, and net migration. While there is an expected increase in net migration to Sullivan County, higher death rates relative to birth rates will result in an expected decrease in population by 2040, according to population projections in 2011 from the Cornell Program on Applied Demographics. This expected decrease in population over the next 30 years can also provide additional housing opportunities for individuals employed in the new positions generated by the proposed project, as they will be able to take advantage of the vacated housing stock.

Table 6
Sullivan County Population Projection, 2015-2040

Year	Population	5-Year Percent Change	Natural Increase (Births – Deaths)	Net Migration
2015	78,623	1.4%	61	1,015
2020	79,322	0.9%	-329	1,028
2025	79,470	0.2%	-888	1,036
2030	79,082	-0.5%	-1,421	1,033
2035	78,258	-1.0%	-1,856	1,032
2040	77,165	-1.4%	-2,108	1,015

Source: Cornell Program on Applied Demographics, September 8, 2011

EXISTING HOUSING STOCK ON THE MARKET

In order to validate Census data on housing stock characteristics, such as available housing units and housing values, in June 2014 AKRF conducted an independent online survey of existing residential units that are currently for sale or rent within a 30-minute radius of the Project Site. The survey found 199 total listings of properties for sale and 19 listings of properties for rent within the 30-minute radius. Of the listings of properties for sale, the average selling price was \$153,194, or \$83 per square foot. These confirm the findings from the 2008-12 American Community Survey that there exists a surplus of housing in communities adjacent to the Project Site, and that housing prices in the area tend to lag regional and statewide averages. **Table 7** summarizes the distribution of properties identified as for sale and for rent in June 2014:

Table 7

Properties Listed on Zillow Within 30 Minutes of Project Site, June 2014

Town*	Total Properties For Sale	Percent of Total for Sale	Total Properties For Rent	Percent of Total for Rent
Middletown, NY	84	42%	5	26%
Liberty, NY	57	29%	1	5%
Monticello, NY	55	28%	5	26%
All Others	3	1%	7	43%
TOTAL	199	100%	19	100%

*Note: Town boundaries were based on definitions from Zillow.com
 Source: Zillow.com, June 2014

NEW RESIDENTIAL DEVELOPMENT

In addition to the existing housing stock, there are several planned development projects that, if executed, would add as many as 3,300 residential units to the housing stock in Town of Thompson and neighboring municipalities within the foreseeable future. The majority of the residential construction is expected to occur in the towns of Thompson and Fallsburgh. One of the largest residential development projects planned in the area is the Gan-Eden development in the Town of Thompson, which is expected to provide 885 residential units upon its estimated completion year of 2019.

Table 8

Number of Residential Units of Planned Development Projects by Municipality

Municipality	Number of Residential Units
Town of Thompson	1,811
Town of Fallsburgh	1,526
Village of Monticello	94
Town of Forestburgh	*Lost Lake Resort, unknown number of units

Note: Expected completion years of residential construction range up to year 2021.
 Source: AKRF, Inc.

D. ANALYSIS FINDINGS

“NO REGIONAL COMPETITION” SCENARIO

This section presents the comparison between the modeled housing demand in The Town of Thompson and surrounding municipalities and the estimated available housing supply, and determines whether there are any expected housing shortages in any potentially affected

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municipality due to the proposed Gaming Facility. This analysis shows that the existing housing supply in the Town of Thompson and nearby municipalities can be expected to satisfy the demand for housing generated by employment growth from the proposed Gaming Facility and the corresponding in-migration of new households. Based on estimates of labor shortages presented in Table 2, the regional employment model concluded that there will be an expected in-migration of households within six municipalities: the towns of Thompson, Bethel, Fallsburgh, Forestburgh, Liberty, and Mamakating. According to data on vacant housing units in these municipalities from the 2008-12 American Community Survey, there exists a surplus of available housing for rent and for sale in each of these six municipalities, and for all Gaming Facility revenue cases.

Table 9
Housing Demand and Estimated Available Housing
“No Regional Competition” Scenario

Municipality	Housing Demand (number of households)			Estimated Available Housing Units		
	High-Revenue Case	Average-Revenue Case	Low-Revenue Case	For Rent	For Sale Only	Total Units
Thompson	64	24	17	276	162	438
Bethel	4	0	0	14	72	86
Fallsburg	26	4	3	148	116	264
Forestburgh	1	0	0	3	0	3
Liberty	8	0	0	193	218	411
Mamakating	10	0	0	71	54	125
TOTAL	113	28	20	705	622	1,327

Note: Host Municipality (Town of Thompson) indicated in bold.
Sources: Gaming Hospitality Experts, LLC; EPR Properties; AKRF, Inc.; 2008-12 American Community Survey

After accounting for new residential development expected to be completed in the future, this analysis shows that the proposed Gaming Facility is unlikely to increase pressure on the existing housing supply that would result in increases in rents, housing prices and/or development costs in the Town of Thompson and nearby municipalities.

Overall, is expected that limited housing demand generated by the proposed Gaming Facility will be met by the Town of Thompson and the nearby communities. Conservative assumptions in terms of retraining the existing labor force, the capacity of the local housing market to absorb new households, and housing added in the future by planned projects make it unlikely that much new housing will be constructed as a result of the proposed Gaming Facility.

“WITH REGIONAL COMPETITION” SCENARIO

Similar to the above findings for the “No Regional Competition” Scenario, it is expected that with the “With Regional Competition” scenario there would be enough existing housing supply within the local and regional markets to meet the incremental housing demand created by two licensed casinos within Region One.

- Detailed gravity modeling was not performed for the “With Regional Competition” scenario because the specific employment demands of a second Region One casino are unknown at this time. However, for the following reasons it is reasonable to conclude that the housing market could absorb demand generated by the in-migrating workforce of two casinos within Region One:
- With additional competition in Region One, individually the casinos would have a smaller demand for labor, and collectively could fall within the maximum demand of 2,036 FTE employees modeled for the high-revenue “No Regional Competition” scenario, above. The reduced labor demand would reduce the potential for in-migrating workforce and new housing demands.
- For the low-revenue and average-revenue cases, in which a second licensed casino is located within Orange County, geographically the labor pools from which the two casinos draw would differ substantially. An Orange County casino would draw labor principally from within the New York metropolitan area, reducing overall in-migration of workforce and lessening the demand overlap in local housing markets.
- For the high-revenue case, in which a second licensed casino is located in the Town of Liberty within Sullivan County, the labor pool from which the two casinos draw would substantially overlap. However, the local labor pool would have capacity to absorb additional employment demand beyond that assumed within the gravity modeling described above. The unemployment rate within Sullivan County historically has dropped well below the 4.5% residual unemployment rate assumed in this analysis; from the late 1990’s through 2005 there were several period during which Sullivan County’s unemployment rate was below 4.5%, dropping as low as 3.5% in 2000. Furthermore, timing of entry-to-market for the two Sullivan County casinos would differ by several years; as detailed in EXHIBIT VIII.C.4.b, the Gaming Facility is located on a Project Site that is ready for construction immediately (subject only to issuance of certain routine final approvals and permits), assuring the fastest speed-to-market of any proposed Gaming Facility in the State. The delay in introduction for a second casino would allow the local housing market to adjust to any additional in-migrating workforce seeking housing, and potentially initiate additional demand-driven planned residential projects identified above.

About AKRF, Inc.

AKRF, founded in 1981, is a multidisciplinary consulting firm specializing in environmental, planning, economic, and engineering services. We bring together the talents of over 200 professionals in five locations to complete a wide variety of projects for public agencies, private clients, and municipalities, and deliver solutions with substantial, measurable value.

Our people are key to our long record of success. Our professional staff—many of whom are recognized industry leaders with many years of experience—include economists, urban planners, historians, air quality and noise analysts, civil engineers, transportation planners, and hazardous materials specialists. Our range of expertise enables us to offer our clients, from a small private developer to a large public agency, a single source to meet all their regulatory, engineering, and planning needs.

Because AKRF's growth has been from within and not through acquisition, our departments and our staff members have worked side-by-side for decades. This means that there are no barriers to communication as projects evolve and new challenges are addressed. When you work with AKRF, you have immediate and constant access to the full range of our staff expertise and we can seamlessly respond to your project's needs.

AKRF's Economic and Real Estate Advisory Services practice helps public and private clients make informed, cost-effective decisions through a broad range of services including market and demand analyses, financial feasibility analyses, economic and fiscal impact analyses and comprehensive development strategies. Our team includes economists, MBAs, input-output modelers, accredited real estate professionals, and former real estate developers. For over 30 years we have worked on award-winning, small town revitalization projects as well as some of the region's signature multi-million-dollar development projects. Our experts are well versed in analyzing markets, conducting financial pro forma assessments, assessing economic impacts, and creating economic development strategies that help not only to get things built but also unfold each project's catalytic potential.

AKRF's Economic and Real Estate Advisory Services practices areas are as follows:

Demographics & Market Conditions

We provide demographic and market studies for residential, commercial, industrial, and mixed-use projects. Private-sector clients call on AKRF to determine or test demand for their real estate developments, and to help them navigate the public approval process by forecasting potential socioeconomic impacts. Public-sector clients frequently use our services to plan for population and job growth and to verify the market for proposed real estate projects. Specific areas of expertise include:

- Market and feasibility studies and consumer spending analysis
- Capture rate/gap analysis
- Housing demand analysis
- Demographic trends and forecasts
- CEQR/SEQR/NEPA socioeconomic impact and environmental justice analyses

Tourism & Hospitality

Tourism and the hospitality industry are key contributors to the economy of an area, urban or rural. AKRF understands how attracting, entertaining, and lodging visitors provides opportunities to capture consumer expenditures. Clients who have used these services include real estate developers, state and municipal finance authorities, economic development agencies, operating corporations such as casinos and convention centers, local development corporations, and museums and cultural facilities. Specific areas of expertise include:

- Market assessments / Facility programming
- Feasibility studies and performance evaluation
- Visitation projections / Marketing strategy
- Sales and revenue projections
- Strategic development planning

Economic & Fiscal Impacts

AKRF is well-known for top-notch economic and fiscal impact modeling capabilities. Using RIMS II and IMPLAN input-out models, we help economic development agencies, public development corporations, and private-sector developers understand and communicate the value of proposed development projects in terms of direct and indirect jobs, wages and salaries, property and sales taxes, personal income and corporate taxes, and utility and special district taxes. In addition to economic and fiscal impact modeling, specific expertise includes:

- Cost-benefit analysis
- Cost of services analysis
- Employment and labor market analysis
- Tax Increment Financing (TIF) planning and analysis
- EB-5 application support

Real Estate & Economic Development

We help public development agencies and private real estate investors determine how best to generate sustainable economic development in a region, town, neighborhood, or single development parcel. Our staff works to maximize development opportunities by weighing economic, financial, environmental, and physical factors, setting priorities, and evaluating the public and private return on investment. Our services include:

- Corridor studies / Revitalization strategy / Blight studies
- Transit Oriented Development (TOD) studies
- Research & Development (R&D) studies
- Strengths Weaknesses Opportunities and Threats analysis

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- Highest-and-best use analysis / Financial feasibility studies
- Urban renewal plans
- Cash-flow analysis / Site selection studies
- Public private partnership (P3) strategy.