

1.0 EXECUTIVE SUMMARY

This Draft Generic Environmental Impact Statement (DGEIS) has been prepared to evaluate the possible environmental impacts associated with annexation of certain lands from the Town of Monroe to the Village of Kiryas Joel, in Orange County, New York. This Executive Summary is not intended to present all assumptions, underlying background information and data contained in the DGEIS analyses. The reader is advised to explore that information in the sections that follow and not rely solely on the material presented in the Executive Summary alone.

1.1 Project Description

The SEQRA "action" triggering this DGEIS review is a petition by owners of a number of privately owned parcels requesting annexation of 507 acres from the Town of Monroe to the Village of Kiryas Joel (hereinafter, the "Annexation Petition"). The territories proposed for annexation are located adjacent to the existing Village boundary. Generally, 164 acres are situated at the eastern and northern sides of the Village and 343 acres are on the western side of the Village. A separate petition has been filed for annexation of the aforementioned 164 acres, which remains active and is identified and assessed as an alternative in this DGEIS. .and is identified and assessed as an alternative in this DGEIS and is identified and assessed as an alternative in this DGEIS. The "study area" as described herein refers to the existing Village of Kiryas Joel and the lands proposed for annexation ("annexation territory").

The annexation requires the approvals of both the Monroe Town Board and Village Board of Trustees after a properly noticed joint public hearing on the matter, as provided for in Article 17 of the NY General Municipal Law (the "Annexation Law"). In the event of approval by both municipalities, a special election of qualified voters within the annexation territory will be called to determine whether the annexation should be approved. Upon approval of the electors, the annexation will occur by local law.

Existing Zoning

The annexation territory is presently zoned by the Town of Monroe for predominantly residential uses within the Urban Residential Multi-Family (UR-M) and Rural Residential 1-acre and 3-acre (RR-1.0AC and RR-3AC) districts. Maximum permitted residential density ranges from 0.7 to 8.7 dwelling units per acre for typical residential units with two bedrooms or more. No commercial uses are permitted in any of these districts.

The Village of Kiryas Joel is divided into two zoning districts: R Residential, and C Commercial. The Village code also provides a Planned Unit Development (PUD) district which has been applied as an overlay zone for specific development applications. The R, C, and PUD districts all permit one-family and two-family dwellings as principal uses and multi-family dwellings under certain conditions. The R and C districts also permit various other uses such as neighborhood commercial, public and semi-public facilities; the C district permits local retail, hotels and motels in certain conditions. The PUD district permits "all" uses. Connections to central water and sewer are typically required for uses other than one- and two-family dwellings. Minimum lot sizes are specified for each district. There is no maximum density (units per acre) provision in the code.

Comparative Development Analysis

The DGEIS establishes that continued growth of the area population is inevitable, with or without the annexation approval. A projected 3,825 new families/households will be added to the community by the year 2025. This growth represents approximately 19,663 persons added to an existing estimated 2014 population of 22,634 persons. Two scenarios were examined for the environmental analysis.

1. Without Annexation

Residential development of the annexation territory will take place to accommodate the growing population of the Hasidic community in and around Kiryas Joel. Of the total projected new population of 19,663 persons (by 2025), without annexation, approximately 7,356 persons would need 1,431 new dwelling units in the annexation territory based on the maximum development densities permitted by Monroe Town zoning. Development in the annexation parcels, however, would not accommodate all of the projected growth. New development would continue in and around Kiryas Joel to accommodate the remainder of the growing population. Approximately 2,394 dwelling units would be needed to accommodate the remainder of the projected population (12,307) and the DGEIS analysis adds these within the Village. The development projections for the annexation territory assume connections to central sewer and water for multifamily buildings and occupation consistent with the average size of families existing in the Village.

2. With Annexation

With annexation, the expanded Village could be developed to accommodate approximately 3,825 dwelling units (3,825 families, or approximately 19,633 persons) at an average density of approximately 6.6 units per acre (over the expanded Village).

1.2 Reviews, Permits and Approvals

Prior to any decision-making the lead agency for this action must complete the requisite SEQRA review. Since there is no development project associated with the Annexation Petitions, the only actions required under Article 17 of the New York State General Municipal Law are the resolutions by the Village of Kiryas Joel Board of Trustees and the Town Board of the Town of Monroe to approve or deny the annexation.

The use and development of lands annexed to the Village will become subject to the Village zoning code. Likewise any development proposals for such lands will be subject to the appropriate SEQRA review as well as all other relevant local, State, and federal laws and regulations. While this DGEIS will address potential impacts from future development of the annexation parcels generally, it will not replace the obligation for future consideration of SEQRA on particular projects that may be proposed.

The only Involved Agencies with jurisdiction to approve the annexation action are the Village of Kiryas Joel Board of Trustees and the Town Board of the Town of Monroe.

1.3 Land Use and Zoning

The two development scenarios used in this DGEIS to project potential impacts from the annexation -- the Without Annexation and With Annexation scenarios -- reveal that potential impacts of annexation relate not to population growth, but to the difference in population distribution, one to the other, based on the underlying premise of inevitable continued population growth.

Compatibility with Surrounding Land Use Patterns

The two study scenarios would conform to the underlying precepts of the Priority Growth Area encompassing the study area that is identified in Orange County's Comprehensive Plan. The comparative theoretical maximum residential development density on the annexation land will change from approximately 5.0 to 6.7 du/ac without annexation to approximately 12 to 20 du/ac with annexation, compared to 0.1 to 3.5 du/ac in the adjoining municipalities. These relationships are not unlike what already exists, or is possible under existing zoning, around the boundaries of the Village as it exists right now. Ultimately the overall density of development on the land encompassing the Village and the annexation territory ($\pm 1,207$ acres), with or without annexation, will be the same.

Land use compatibility has occurred in the Village and the Town of Monroe, generally, through adherence to commonly accepted planning principals, zoning codes, building codes and environmental rules and regulations. Such rules and policies are expected to continue, with or without the annexation action. It is anticipated that the Village of Kiryas Joel will establish a master plan committee to study the opportunities and constraints of the 507 acres as it relates to Village goals for its existing and future residents, and make specific recommendations for future land use decisions.

1.4 Demographics and Fiscal

The table below shows the population growth in the study area projected in this DGEIS for each year between 2015 and 2025, when the population is estimated to reach 42,297. This represents an average growth rate of approximately 5.6 percent annually over the next ten years. This projection is comparable to the 2009 demographic forecast made for the Aqueduct Connection EIS.

Table 1-1 Population in Kiryas Joel 2014 to 2025				
Year	Village of Kiryas Joel Population	% Change	Number of Total Housing Units	Number of New Housing Units
2014	22,634	3.4%	4,086	370
2015	23,466	3.7%	4,419	332
2016	24,301	3.6%	4,706	287
2017	25,497	4.9%	5,021	307
2018	26,984	5.8%	5,316	304
2019	28,864	7.0%	5,635	319
2020	30,890	7.0%	5,978	343
2021	32,945	6.7%	6,326	348
2022	35,177	6.8%	6,705	378
2023	37,432	6.4%	7,087	382
2024	39,870	6.5%	7,500	413
2025	42,297	6.1%	7,911	411
Average		5.6%		
Growth 2014 to 2025	19,663	64.4%	3,825	3,825

Source: US Census; NYS BEDS 2014; US Census 2012 American Community Survey.
Table prepared by Tim Miller Associates, 2015.

The total population growth in the study area (Village of Kiryas Joel and the annexation territory) is projected to be 19,663 persons. Based upon the age distribution of the existing population as reported by the US Census, approximately 41.5 percent or 8,160 persons of the projected population would be school age children.

Table 1-2 Change in Population Distribution Without and With Annexation of 507 acres By Year 2025						
	Without Annexation			With Annexation		
	Number of Units	Population	Density du/acre*	Number of Units	Population	Density du/acre*
Village of Kiryas Joel	2,394	12,307	9.26	0	0	5.84
Annexation Properties in Town of Monroe	1,431	7,356	2.82	3,825	19,663	7.54
Total Net Change (2025)	3,825	19,663		3,825	19,663	6.55 **

* Density represents existing dwellings plus new dwellings.
** Average density of expanded Village after annexation.
Source: Table E-1, Change in Population Distribution, Tim Miller Associates, Inc., 2015.

Summary of Fiscal Impacts to Annexation Lands Only

The DGEIS explains that population growth of the Hasidic community is projected to occur with or without annexation. The analysis of population and demographic impacts projects circumstances that are likely to occur to accommodate this growth, which will be distributed in the annexation lands, in the existing Village of Kiryas Joel, and in the surrounding region.

However, under SEQRA, the proposed action is specific to the annexation lands. The following summary provides the statistics related to only the annexation lands.

Population

Without annexation, 7,356 persons, including 3,052 students, are projected to live on the annexation lands, and the remaining new population in the Village of Kiryas Joel. With annexation, for the purposes of this analysis, 19,663 persons, including 8,160 students, are projected to live on the annexation lands.

Tax Revenue Town of Monroe

Without Annexation, gross tax revenues to the Town of Monroe from the annexation lands is projected to total \$1,395,056. Municipal costs for combined Townwide and Town outside the Village are estimated at \$126 per person, thus municipal costs for the 7,356 population projected to live on the annexation lands would be \$926,856, and a net tax benefit of \$468,200 is projected.

With Annexation, gross tax revenues to the Town of Monroe from the annexation lands is projected to total \$1,559,107. Town of Monroe Townwide municipal costs are estimated at \$57 per person. Municipal costs for the 19,663 population projected to live on the annexation lands would be \$1,120,791, and a net tax benefit of \$438,316 is projected. It is noted that the Kiryas Joel residents do not use all the Town services that the \$57 per person represents and thus, the net benefit is understated.

Tax Revenue Village of Kiryas Joel

Without Annexation, there will be no increase in tax revenue or municipal costs to the Village of Kiryas Joel from the annexation properties.

With Annexation, based upon the increase in assessed valuation, gross tax revenues to the Village of Kiryas Joel from the annexation lands is projected to total \$3,756,168. Municipal operating costs to the Village are projected to be \$70 per person equating to \$1,376,410, thus a net tax benefit of \$2,379,758 is projected. These funds will be used to fund capital project costs (such as sewers, sidewalks, fire trucks, fire substation, and parks) that are not funded by grants or other sources to accommodate the growth in the newly expanded Village.

Monroe-Woodbury and Kiryas Joel School Districts

The current boundary between the Monroe-Woodbury School District (MWSD) and the Kiryas Joel School District (KJSD) is coterminous with the municipal boundary between the Village of Kiryas Joel and the Town of Monroe. All of the annexation territory is located within the MWSD. Alteration of the district boundary line between the MWSD and the KJSD will not occur automatically upon annexation, but instead would require separate administrative actions

requiring agreement from both school district's Boards of Education. The DGEIS evaluates the fiscal implications of the annexation scenarios with and without a change to the school district boundary.

Without Annexation, and with no change to the school district boundary, the MWSD will see growth of the Hasidic population in the annexation territory of approximately 1,431 families. Based on the increase in assessed valuation on the annexation lands only, revenues to the MWSD are projected to be \$9,228,992, compared to projected costs of \$7,507,400, indicating a net benefit of \$1,721,592. Without Annexation there could be no school district boundary change, as when the boundary of the KJSD was established it was stipulated to be coterminous with the Village boundary.

With Annexation, and with a coterminous school district boundary, revenues to the KJSD are projected to be \$17,084,582, with projected costs of \$15,208,000, indicating a net benefit of \$1,876,582.

With Annexation, but with no change to the school district boundary, the MWSD will see considerable growth of the Hasidic population on the annexation land of approximately 3,825 families. Revenues to the MWSD are projected to be \$30,441,769, with projected costs of \$20,056,000, indicating a net benefit of \$10,385,769, based primarily on the fact that the growing student population would not be attending the MWSD schools.

Under this circumstance a portion of the MWSD would include lands within the new Village boundaries, and the annexation properties would be occupied by Hasidic families whose children would primarily attend private schools. The population growth would result in 3,825 families in the annexation lands who would have voting rights on school district matters. The Monroe-Woodbury School Board will have to carefully consider the relative merits of having a large portion of the District residents within the annexation territory whose children do not attend the public schools, compared to the potential for additional revenue.

Under the With Annexation scenario, certain fiscal impacts to the MWSD could be mitigated by the mutual consent of the KJSD and the MWSD to adjust the district boundaries to be coterminous with the municipal boundaries of the expanded Village of Kiryas Joel, as noted in the Kiryas Joel Board of Education Resolution dated May 13, 2014.

Table 1-3 provides a summary of the demographic and fiscal analysis specific to the annexation lands.

Table 1-3 Fiscal & Demographic Analysis - Annexation Lands Only Post Development		
Area of Concern	<i>Without Annexation</i>	<i>With Annexation</i>
Development	Full Buildout to 2025	Full Buildout to 2025
<i>Residential Units</i>		
Residential Units in Annexation Territory	1,431	3,825
<i>Community Resources</i>		
Total Population Increase 19,663 persons	7,356	19,663
Total School-age Children ¹ 8,160 students	3,052	8,160
<i>Town of Monroe</i>		
Tax Revenue - Post Development	\$1,395,056	\$1,559,107
Municipal Costs Without Annexation 7,356 population x \$57pp Townwide Cost = \$419,292 7,356 population x \$69pp TOV Cost = <u>\$507,564</u> TOTAL \$926,856	\$926,856	\$1,120,791
With Annexation 19,663 population x \$57pp Townwide Cost = \$1,120,791		
Net Revenue (Cost) to the Town of Monroe after covering expenses.	\$468,200	\$438,316
<i>Village of Kiryas Joel</i>		
Tax Revenue	\$0	\$3,756,168
Municipal Costs Without Annexation \$0.00	\$0	\$1,376,410
With Annexation 19,663 population x \$70pp Village Cost = \$1,376,410		
Net Revenue (Cost) to the Village of Kiryas Joel after covering expenses.	\$0	\$2,379,758
<i>School Districts</i>		
Net Benefit to the M-W School District after covering expenses	\$1,721,592*	\$350,243**
Net Benefit to the KJ School District after covering expenses	\$0*	\$1,876,582**
Notes: All numbers are approximate. ¹ Most school aged children would attend the local parochial schools. * With no change to the School District Boundary. ** With School District Boundary line change to be coterminous with revised annexation boundary. Source: Tim Miller Associates, Inc., 2015.		

1.5 Community Services and Facilities

The annexation is proposed to consolidate the properties of a number of community members who seek to share the unique community character, services and cultural mores that exist in the Village of Kiryas Joel, including central water and sewer services, public and private schools, public safety and fire protection services, full-time paid EMS, places of worship and mikvahs, daily sanitation pick-up, day care and head start services, pedestrian friendly communities with access to sidewalks, use of Village parks and public transportation, streetlights, municipal water supply for fire protection (hydrants), and affordable housing and health care services with specialty care to accommodate larger families and new mothers, among others.

With or without annexation the increasing population within the Village will create a demand for community services in terms of public safety staffing, increased fire protection and increased need for emergency medical facilities. Tax revenues from the increasing assessed valuation in the Village and the Town will help to support the anticipated increases in fire protection equipment and facilities, anticipated increases in public safety officers and expansion of emergency medical facilities.

Community services are expected to respond to the growing population under either scenario, as has historically occurred, in accordance with contemporary standards by adding staff, facilities and/or equipment and associated infrastructure. The increase in tax revenue as a result of additional development will serve to offset the cost of an increased need for services.

Benefits of Village Services

The Village has its own water and sewer facilities which are a significant distinguishing benefit for residents living in the Village. The Village has completed construction on nearly half of a 13-mile pipeline to connect to the NYC Catskill Aqueduct to provide a safer and more reliable source water supply to accommodate the potable water needs of current and future Village residents.

The Village is part of the Orange County Sewer District #1 and has built its own wastewater treatment plant that serves the Village needs. The Village has established an extensive wastewater collection network to facilitate treatment at either the Kiryas Joel plant or the Harriman wastewater treatment plant thus assuring adequate capacity for its future residents.

Consistent with NYSDEC regulations as an MS4 community, the Village has an extensive stormwater management system including ponds, catch basins, underground pipes, a catch basin cleaning protocol and a MS4 enforcement program.

The Village has constructed six foot wide illuminated sidewalks on both sides of eleven miles of Village streets. Sidewalks are regularly maintained, snow-plowed and kept free of obstructions year round by the Village public works department. The Village transportation department operates eight buses and ten bus stop shelters throughout the Village. Transit service within the Village is provided six days a week. Park and Ride facilities benefit commuters with a combined capacity to park approximately 200 vehicles. Municipal sanitation services are provided by the Village with five pick-ups per week to all homes.

The Village operates a large playground off of Larkin Drive for its residents, known as the Kinder Park, and a senior dining program for its residents.

Public Safety Services

Based on the applicable planning standards (based on population), without annexation, the new population projected to reside in the annexation territory would increase police staffing needs by about 11 police personnel, which would be New York State Police Troop F that currently serves the Town. The additional police services in the Town would need to be funded out of the State's tax revenues. The new population in the Village would require the service of 18 additional Village public safety officers. Since the Village has its own public safety force, the additional tax revenue generated by the increased development in the Village would help to support the increased need for service.

With annexation, public safety staffing needs in the Village would increase by about 30 officers. The additional tax revenue generated by the parcels annexed would help to offset the increased demand for service in the Village. New York State Police would continue to provide supplementary police services to the expanded Village upon annexation; this increase in services would be funded out of the State's tax revenues.

Fire Protection

Annexation does not automatically alter the defined service area for fire protection or ambulance service. The Kiryas Joel Fire Department (KJFD) does not currently serve any of the annexation territory and this area would continue to be served by the Monroe Fire Department (MFD) for primary fire protection until such time as the fire district boundaries are changed.

Without annexation, the Monroe Fire Department (MFD) would need an additional 12 fire fighters to meet planning standards. The increased population in the Village would require 20 additional fire fighters in the KJFD. Development associated with the projected growth will generate annual property tax revenues to the respective fire districts to offset the additional demand.

The MFD has indicated its concern about the availability of sufficient water volume and pressure to provide fire protection services to the anticipated higher density housing in the annexation area. It also is concerned about the necessary manpower required to respond to additional calls for service. As growth in the study area occurs, the local jurisdictions will need to evaluate the adequacy of water, equipment and manpower resources for fire fighting on a case by case basis, including whether the additional tax revenue generated by the development would support the increased demand. Should the boundary of the fire districts be changed to match the new Village boundary, jurisdiction of the KJFD would then include the annexation areas and the resultant tax revenue would accrue to the Village to support the KJFD.

The Village has a state-of-the-art fire and EMS facility and as growth continues, anticipates construction of additional facilities in the future. All new multifamily buildings will be built according to the NYS Building Code with full sprinkler systems. Should the fire district line be relocated, it is anticipated that an additional emergency services sub-station to dispatch Fire, EMS, and Public Safety trucks and equipment would be built in the Village, and the KJFD would purchase a second ladder truck. Incorporation of the annexation area into the Kiryas Joel Fire District will reduce the reliance of the Yiddish speaking residents on non-Yiddish speaking emergency service workers.

Ambulance & Health Services

Without annexation, the development projected in the Town of Monroe would potentially increase demand for EMS by approximately 269 calls annually. In the Village, demand would potentially increase by approximately 449 calls annually. With annexation, potential increase in demand for the Village EMS would be up to 718 calls annually, on average.

The projected population increase associated with study area growth, with or without annexation, has the potential to increase the need for beds in hospitals serving the area by approximately 79 beds. The recently constructed Orange Regional Medical Center has capacity to accommodate this growth. It is noted that the cultural ties that exist between the populations of Kiryas Joel and Williamsburg, Brooklyn are significant and the Hasidic population often utilizes the hospitals in New York City.

Given the anticipated population growth in and around the Village of Kiryas Joel over time, the changes in demand for the various emergency services are anticipated to evolve with or without the annexation taking place. With or without annexation, the tax revenues which are generated to the respective municipalities will help to offset the increased need for services that are funded by property taxes.

Road Maintenance

The Village of Kiryas Joel contracts with the Town of Monroe for public road maintenance. Upon annexation, the public town roads in the annexation parcels would become Village roads and would be subject to a renegotiation of the agreement for highway maintenance between the Town and the Village at a rate commensurate with the number of miles of road to be transferred.

Library Facilities

Residents of the annexation territory, who are predominantly Yiddish speaking and do not utilize the services of the Ramapo-Catskill Library System but have access to private libraries in the Village, would continue to be served by the private libraries and would be entitled to any public library services provided by the Village in the future.

Orange County Social Services

There will be no difference in the cost or availability of County Services as a result of annexation. The cost of services administered by the County will not be impacted by annexation since whether a home is located in the Town or the Village, it remains within Orange County. There will be no change to the social services provided by the County due to annexation.

The assessed valuation of the annexation territory is different depending on whether the property is developed in the Town or the Village due to the differences in the types of units that are likely to be built and the permitted density. This variation in assessed valuation results in a projected \$4,155,887 in County property tax revenue without annexation compared to a projected \$4,604,690 with annexation. Of the County Department of Social Services' budget which totals \$783,796,511, only \$114,374,464 is raised from property taxes.

The population of Kiryas Joel represents approximately 5.4 percent of the overall Orange County population per the 2010 US Census. Due to modest family incomes and large family

sizes, the Village of Kiryas Joel has a high percentage of households that are eligible for Medicaid and other forms of social service assistance programs. An unofficial report from the Department of Social Services indicates that in 2010 of the 109,390 incidences of social services provided throughout the County, 21,068 incidences were in the Village of Kiryas Joel. These numbers, however, do not reflect the types of services received by individual recipients or the relative cost of those services. The County's report states that due to the lack of detailed information available and other reasons, its estimation of social service program costs for individual municipalities does not produce accurate results.

Various programs are funded in varying amounts by the County and also by reimbursement to the County from New York State and Federal funds.

The residents of Kiryas Joel do not typically utilize many available County services such as the Orange County Community College, Orange County Court system, jail facilities, Orange County Sheriff, the County's Valley View Nursing Home, drug prevention and rehabilitation programs, or Orange County Senior Housing. As a result, it would appear that any higher proportionate reliance on Medicaid and Supplemental Nutrition Assistance Program (SNAP) is offset by the lower proportionate use of these other programs so as not to reflect a disproportional reliance on County social services or depletion of Orange County tax resources.

Schools

The majority of students who reside in the Village of Kiryas Joel attend private parochial schools. The school aged population in the study area can be expected to increase by approximately 8,160 students over the next ten years and the majority of those students are expected to attend the private schools, with or without annexation. The private schools that serve the Kiryas Joel community have already initiated plans to accommodate the anticipated growth.

Due to the anticipated cultural background of the new population, it is not expected that annexation will result in a significant number of new students attending the schools of the MWSD.

The Village of Kiryas Joel and the KJSD have the same boundaries, as established in 1989. Any change to the school district boundary would require action on the part of the boards of education of both the MWSD and the KJSD. As noted in the May 6, 2014, letter from the KJSD Superintendent (included in Appendix C, Correspondence), "if and when the municipal annexation is approved, the Kiryas Joel Board of Education is prepared to work with the M-W Board to alter our school district boundaries accordingly, consistent with Section 1507 of NY State Education Law." By Resolution dated May 13, 2014, the Board of Education of the KJSD formalized its consent to the alteration of district boundaries to be coterminous with the municipal boundaries of the Village of Kiryas Joel if and when such Village boundaries are amended to include the parcels listed on the annexation petition, consistent with Section 1507 of New York State Education Law.

A change in the school district boundary would determine to which district the school tax revenue generated by the annexation properties would be paid and which district would be obligated to pay the cost of services for the special education population and the non-public school student costs associated with the annexation properties.

Community Services Mitigation Measures

Community services are expected to respond to the growing population under either scenario, as has historically occurred, by adding staff, facilities and/or equipment and associated infrastructure. The increase in tax revenue as a result of additional development will help to offset the cost of the increased need for services.

With or without annexation, the increasing population within the Village will create a demand for additional community services. Tax revenues from the increasing assessed valuation in the Village will help to support the anticipated increases in emergency response manpower, equipment and facilities.

The growing population should provide an ample resource of additional volunteers for fire prevention and ambulance services.

At the time site-specific development applications are submitted, mitigation measures may be identified that are appropriate for the individual projects. With regard to fire protection, the Fire Department will have opportunity to review site plan and subdivision applications for fire code compliance and adequate accessibility for fire emergency vehicles.

1.6 Traffic

Four roads -- CR 44, Bakertown Road, Forest Avenue, and Acres Road -- will be the primary roads used by traffic related to the area growth. These roads provide access toward the Quickway, the Thruway, Park and Ride lots, and the nearest train station.

Trip generation at the end of the ten year growth period is summarized in the table below. Overall, the proposed annexation compared to no annexation is anticipated to result in a reduction of 18 to 25 percent in the peak hour trips into and out of Kiryas Joel as shown in the table.

Table 1-4 Trip Generation Comparison - 3850 units By Year 2025						
Condition	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total
With Annexation ¹	168	702	870	559	295	854
Without Annexation ²	203	853	1056	745	392	1137
Difference	-35	-151	-186 (-18%)	-186	-97	-283 (-25%)
¹ See Table 3.4-13.						
² See Table 3.4-12.						

The distribution of site-generated trips has been projected. As the annexation lands border the west, north, and east edge of the Village of Kiryas Joel, the distribution of traffic in either scenario will be similar.

Traffic impacts are not expected as a direct result of the annexation action but rather will evolve over time as growth takes place. No mitigation measures have been identified for the annexation action. The traffic analysis shows that with annexation, reduced traffic growth outside the Village of Kiryas Joel is anticipated as Village transportation services such as sidewalks are extended into the annexation area, as compared to without annexation.

Site specific traffic-related changes are expected to be considered by applicable agencies as individual projects undergo site plan and subdivision review.

1.7 Community Water and Sewer Services

Water Service

Population growth and estimated future water demand indicates a 2025 study area population of 42,297 and an estimated daily water demand of 2.79 million gallons per day (mgd). Future water demand for the Village is estimated using an established water use rate of 66.0 gallons per day, per-capita water usage.

The 507-acre annexation area is not within the Village's current water service area. However, at present the Village is providing public water supply service to portions of that area by agreement. Without annexation in the future, the Village may continue to provide such services out of district, or alternatively, future users may obtain their water supply from individual wells. With annexation, it is assumed that all development in the annexed area would obtain water from the Village water supply system

The Village plans to connect to the Catskill Aqueduct water system in 2017, which has the capacity to provide water to the Village beyond the study period for this DGEIS, as its population grows. The NYCDEP requires that the Village maintain 100 percent back-up for the volume of its water taking from the Aqueduct with existing and new groundwater wells which would be developed by the time of connection to the Aqueduct. While the Village will be required to maintain its existing groundwater well supply sources to serve this backup capacity, it is expected that the Aqueduct connection will relieve and reduce demand on the local groundwater resource.

All of the Village's water supply sources are subject to regulatory control of the New York State Department of Environmental Conservation (NYSDEC) and Department of Health (NYSDOH). The NYSDEC water supply permits regulating the Village's existing water supply contain standard provisions requiring water conservation measures and mandatory enforceable conditions to mitigate impacts to other existing nearby supply wells. In addition, each permit was subject to review pursuant to SEQRA. Any new source of groundwater for the Village from wells will likewise be subject to review and approval by NYSDEC and NYSDOH. In addition to SEQRA review, permit review includes technical assessment of the sustainable pumping rate of wells and their potential impact to neighboring wells and nearby surface water features. Water supply permits are subject to conditions to ensure public and environmental health and safety.

Wastewater Service

The population growth in the Village proper and the annexation lands will be the same overall under the two scenarios, but the density of that development will differ by location. The demand

for wastewater treatment under either scenario will be generally the same and, therefore, the potential impacts are expected to be generally the same under both the annexation and without annexation scenarios.

The quality of the wastewater treatment plant effluent is not affected by the level of population growth or its location. Rather, it is more dependent upon the proper operation and maintenance of the facility as it was designed. Therefore, there are no significant impacts to the receiving water body (Ramapo River) as a result of the proposed annexation action.

Estimates of Future Wastewater Flows

Wastewater demand is estimated using the per-capita daily water usage estimate of 66.0 gallons per day per person. Population growth in the study area is projected to add 19,663 persons in 3,825 units by the year 2025 (with or without annexation). Using the per-capita daily water usage, future development in the Village will generate 1,297,758 gallons per day (gpd) (1.30 million gallons per day, mgd) of additional wastewater treatment demand for the OCSD#1 over the next decade.

Approximately 77 percent of the 507 acres of land in Monroe proposed for annexation is located in the OCSD#1 at the present time. The remaining land is still served by OCSD#1 under the Moodna municipalities' agreement. Currently, wastewater from the Village is treated at either the Kiryas Joel WWTP and at the Harriman WWTP on River Road in the Village of Harriman, both operated by OCSD#1.

All land owners in the District, whether connected to the sewer, or not, pay a sewer tax based on the assessed value of the land.

The Orange County Department of Environmental Facilities Report (January, 2010) concludes that there will be sufficient capacity beyond 2015 based on its obligation to increase capacity pursuant to the 2010 Expansion Agreement between Orange County and the Sewer District. The County has retained an engineering firm to develop plans for plant expansion over the next year, consistent with their obligations.

Studies completed by Orange County Department of Environmental Facilities and Services and NYSERDA (October, 2006) demonstrate that the Harriman WWTP can be expanded by one-third, to 9.0 mgd, within the existing facility boundaries using available technology. Such an expansion would service the additional demand from the overall growth in OCSD#1, including the Village of Kiryas Joel, well beyond the year 2025. All improvements and resulting discharges will need to be approved, regulated and enforced by NYSDEC, ensuring the maintenance of water quality and minimization or mitigation of any potential impacts.

Wastewater generation is closely tied to water usage in a community system. The Village and the OCSD #1 are required to monitor and report both daily and monthly wastewater treatment volumes at their respective wastewater treatment plants. These requirements are conditions of the NYSDEC SPDES permit for the treatment plant.

The Village is committed to the proper operation and maintenance of the Village of Kiryas Joel WWTP. The Village has recently implemented facility upgrades of the WWTP that have improved operation of the plant and effluent water quality.

Annexation would provide the assurance of connecting new development in the annexation lands to the OCSD#1 public sewer system. Without annexation certain properties in the annexation lands may be required to install individual septic systems for future development if public sewers are not practically available. Annexation would also allow properties with existing individual septic systems to connect to the public sewer system providing for more reliable, regulated wastewater treatment for those properties and resultant benefits to the environment.

1.8 Natural Resources

The DGEIS study area is characterized by undulating topographic features which are typical for Orange County. The topography of the annexation land is reflective of the topography of the Village. There are no Unique Geological Features mapped in the study area by the NYSDEC's Environmental Resource Mapper.

The soils in the study area are very common in Orange County and have no unusual characteristics that significantly affect their use in modern construction. Some of these soils are capable of being prime agricultural land, although the existing land use pattern of the study area reveals only one parcel on Bakertown Road that remains undeveloped and used for agriculture.

The DGEIS identifies the northwestern half of the study area as an area within which there could be potential habitat for a NYS Protected animal, the Allegheny Woodrat (*Neotoma magister*), which was last documented in 1949 about a mile from the study area. The DGEIS also identifies a significant natural community called the Pitch pine-oak-heath rocky summit which is located approximately 0.2 miles from the closest annexation parcel. Additionally, there may be woodland trees in the study area that may provide habitat to the Indiana bat or Northern Long-eared bat during certain times of the year, necessitating seasonal limitations on the clearing of trees. Incidences of Timber Rattlesnake potential habitat have also been reported in the region.

One area within the Village is mapped as State-regulated wetlands, located in the south to southeastern portion of the Village, and a number of small federally-mapped wetlands are scattered about the Village and annexation lands. There is no State or locally regulated wetland area mapped in the lands proposed for annexation. The Town regulates wetlands on a site by site basis. Both State and Town also regulate a 100-foot wetland buffer area outside of the regulated wetlands.

Water Resources and Stormwater

The project area is generally split between two drainage basins. The drainage divide runs north-south slightly west of the existing Village boundary, effectively resulting in drainage from the western-most annexation properties flowing to the Moodna Creek basin. The remaining part of the study area is situated within the Ramapo River drainage basin. These land, including the entire Village, drain to the southeast through NYSDEC wetland MO-11 in the southeastern portion of the Village, and then south eventually to the Ramapo River. A network of surface channels and watercourses that are tributary to the Ramapo River flows through Kiryas Joel. Coronet Lake is the largest waterbody and the only named waterbody in the study area. Groundwater resources mapping shows sizable areas of sand and gravel aquifers in and around Kiryas Joel but none in the annexation territory.

The majority of the study area is either developed with residences and other buildings or is vegetated, vacant land.

Annexation Impacts on Natural Resources

The proposed annexation action does not involve any physical disturbance of the ground and thus, will not directly impact natural resources (including geology, soils, topography, wildlife and habitats, wetlands and water resources). Under either development scenario (without and with annexation), disturbance of the land would result from construction activities to much the same degree regardless of development density. In the future, whether the proposed annexation land becomes part of the Village of Kiryas Joel or does not, it will likely be developed to accommodate the population growth. Development could disturb virtually all of the land in some fashion, either resulting in temporary or permanent removal of vegetation, and will increase the impervious surface coverage thereby increasing the rate and volume of stormwater runoff in the future in the absence of appropriate stormwater controls.

These development activities would follow a formal site plan or subdivision review process under which the immediate impacts of site specific activities would need to be reviewed and approved by the appropriate regulatory agencies prior to any construction activity including the design and implementation of appropriate stormwater management infrastructure to properly control stormwater runoff and provide water quality treatment. It is expected that conventional methods of construction would be employed to minimize potential impacts to these natural resources. Tree removal limited to certain months of the year would protect potential impacts to bats.

For every site specific plan, a stormwater management plan will be required to incorporate structures and methods designed to satisfy the requirements of the NYSDEC Stormwater Management Design Manual with regard to sizing and performance criteria for site-specific stormwater management practices that properly treat stormwater runoff.

Cumulatively, loss of existing natural resources over portions of the annexation lands as they are developed for human use will result in incremental reductions in habitat potential for the indigenous species.

Any site specific action will need to comply with the applicable State and local requirements created for the protection of natural resources. Individual site plan or subdivision plan reviews will need to address the various mitigation measures that would be appropriate at each site to protect its natural resources. Such measures would be taken without or with annexation.

1.9 Cultural Resources

The proposed annexation action would not involve any physical disturbance of the ground and thus, would not directly impact visual or historic/cultural resources. However, under either development scenario, disturbance of the land would result from development activities to much the same degree regardless of the action. Without or with annexation, future development could disturb virtually all of the developable land in some fashion, either resulting in temporary or permanent removal of vegetation and addition of new buildings and other facilities.

There are no designated significant visual resources in the study area that would be affected by the anticipated area growth and development. There are no identified historical/cultural resources in the annexation territory that would be affected by the anticipated area growth and development. There are higher topographic locations that, once cleared of trees, would no

longer provide a wooded backdrop to views from particular locations of nearby roads or nearby private property locations.

There are no existing views or access from Gonzaga Park or the Kinder Park that would be directly affected by the proposed annexation.

The Highlands Trail/Long Path traverses the ridge of Schunnemunk Mountain north of the annexation territory. Some development in the annexation territory would be somewhat visible through the trees from a portion of the trail only during the winter months. The extent of this change would not significantly change the character of the trail experience.

As Seven Springs Road is a public road, the annexation will not remove or hinder public access to the Highlands Trail/Long Path which traverses a portion of that roadway. The anticipated future development on Seven Springs Road and the concomitant modest increase in traffic on the local roads will change the character of this portion of the trail over time from a rural to a suburban landscape.

Site specific plan reviews will need to address possible measures such as avoidance of sensitive resources, access, replanting visual buffers, establishing green spaces bordering development, and constructing attractive building designs that are appropriate at each site to create a livable community. Such measures should be taken without or with annexation.

1.10 Potential Use and Conservation of Energy

The DGEIS establishes the scenario of the future where population growth will occur regardless of any annexation action, thereby resulting in new development in the study area. The resulting effects on the use and conservation of energy resources will follow that growth, either without or with the proposed annexation. Both short-term and long-term energy consumption effects are associated with any development. The majority of the energy would come from fossil fuel consumption.

Greenhouse gas (GHG) emissions as affects climate change

Development on the annexation territory has the potential to generate greenhouse gas (GHG) emissions, with or without the proposed annexation, which potentially have an adverse effect on global climate change.

Direct GHG emissions include discharges generated from stationary sources such as combustion equipment that uses fuel oil and propane for heating and for cooking, and fixed generators utilizing diesel fuel. Non-stationary sources of direct GHG emissions include vehicles used by residents of the community. The proposed annexation does not affect the future population of the study area as the growth will occur with or without the annexation. With growth comes additional use of stationary and non-stationary GHG sources.

Indirect GHG emissions from stationary sources are those that are generated off-site and delivered to the locale through the public utility transmission systems. The annexation action itself does not alter these however there will be changes from the development that is anticipated to occur.

Future development projects should consider building design and operational measures, efficiency or mitigation of on-site GHG sources, site selection and design measures and well as transportation measures as part of site design process.

If the proposed annexation of 507 acres occurs, a higher density of development will occur within the study area than if the land is not annexed and remains in the Town of Monroe. Higher density development typically results in a more economical footprint on the land, which encourages energy savings in comparison to large lot, single family homes that are more typical of the surrounding region.

1.11 Alternatives

The DGEIS evaluates the following alternatives:

1. No Action (No Annexation)
2. Annexation of smaller land area (164 Acres) identified in the pending August 2014 Annexation Petition in the Town of Monroe.

These alternatives are described and evaluated qualitatively in the DGEIS. The potential effects of the 164-acre Annexation Petition of August 2014 are discussed in this section.

A summary matrix of the estimated, quantifiable impacts associated with each alternative compared with the proposed action is provided in the table below.

Table 1-5 Alternative Comparisons By Year 2025 ⁶			
Area of Concern for the Study Area	No Action Alternative ³	Proposed 507-Acre Annexation ³	164-Acre Annexation Alternative ⁴
Development Potential	Buildout to 2025	Buildout to 2025	Buildout to 2025
Residential Units			
New Residential Units in Annexation Territory	1,431	3,825	1,952
New Residential Units in existing Kiryas Joel	2,394	0	1,873
Total Unit Increase by Year 2025	3,825	3,825	3,825
Community Resources			
Population Increase	19,663	19,663	19,663
School-age Children Increase ¹	8,160	8,160	8,160
Net Traffic generation (AM peak hour trips with modal split)	1056	870 (18% less than No Action)	873 (17% less than No Action)
Net Traffic generation (PM peak hour trips with modal split)	1137	854 (25% less than No Action)	858 (25% less than No Action)
Projected new Water Demand (Average daily flow, mgd)	1.30	1.30	1.30
Projected new Sewage Flow (Average daily flow, mgd)	1.30	1.30	1.30
Net Revenue (Cost) to the Town of Monroe after covering expenses.	\$775,296	\$438,316	\$472,356
Net Revenue (Cost) to the Village of KJ after covering expenses.	\$1,389,826	\$2,379,758	\$2,276,315
Net Revenue Increase (Cost) to the M-W School District after covering expenses ²	\$484,792	\$50,243 ⁵	\$22,593 ⁵
Net Revenue Increase (Cost) to the KJ School District after covering expenses ²	\$649,300	\$1,720,782	\$1,250,282
Notes: All numbers are approximate. ¹ Most school aged children would attend the local parochial schools. ² With KJ School District boundary coterminous with the KJ municipal boundary. ³ Study Area = Village of KJ plus 507-Acre Territory. ⁴ Study Area = Village of KJ plus 164-Acre Territory. ⁵ Net cost represents the removal of properties from the assessment roll and the resulting reduction in tax revenues. ⁶ Fiscal estimates based on 2015 information. Source: Tim Miller Associates, Inc., 2015.			