

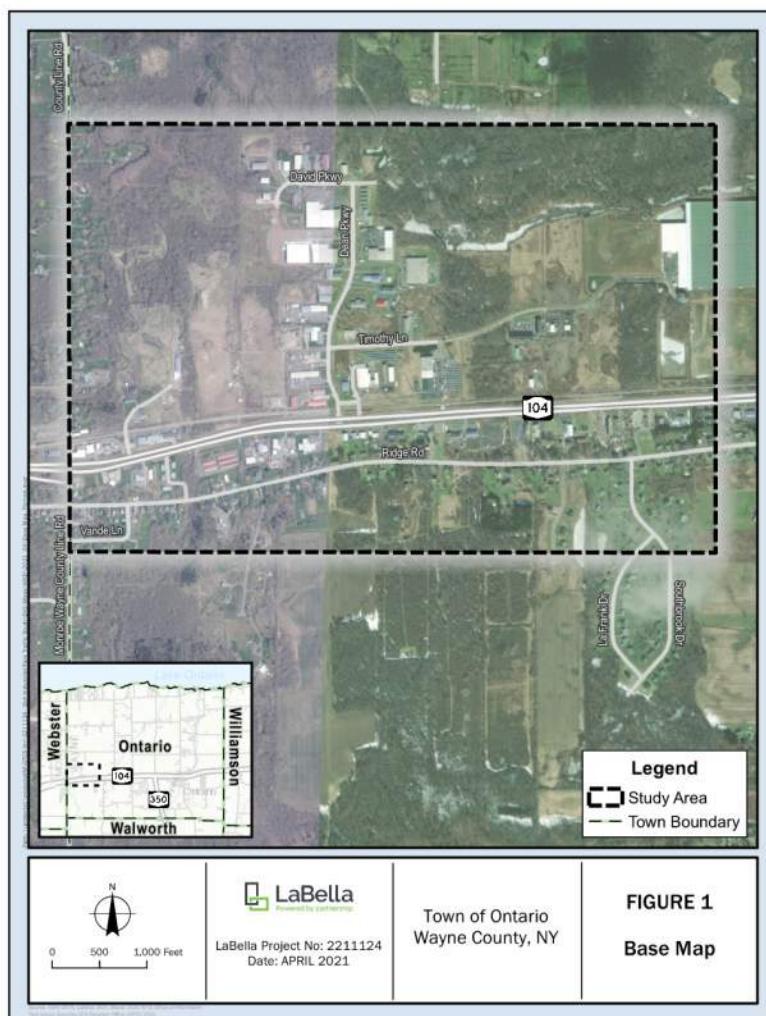
## EXECUTIVE SUMMARY

### A. Introduction

The Beh Industrial Park is located along NYS Route 104 in the Town of Ontario, Wayne County, New York. The site encompasses properties along Dean Parkway, David Parkway and Timothy Lane and contains commercial and industrial developments of various types and sizes. The industrial park has experienced continual growth over the years, and many of the existing businesses have plans for additional growth and expansion. However, the site is constrained by a single access point at Dean Parkway and NYS Route 104, experiences traffic congestion at this intersection, lacks accommodations for pedestrians, cyclists, and transit users, and has additional infrastructure-related needs.

The purpose of this Traffic Optimization Study is to identify physical and regulatory opportunities within the project area to improve mobility, access and safety for vehicles and multi-modal users, and to provide recommendations that could be implemented by the Town of Ontario to address the site's infrastructure needs. The Study will develop solutions that improve traffic flow and safety for all users and support the site's continued economic growth.

Figure 1 (below) is a base map that depicts the study area of the project, which includes the Beh Industrial Park and adjacent intersections along NYS Route 104. In addition to the immediate Beh Industrial Park site, the NYS Route 104 intersections with Basket Road, County Line Road, Dean Parkway, Lincoln Road, and Lakeside Road were included in the analysis.



## B. Existing Studies and Data

An understanding of existing and planned conditions within the study area was achieved by reviewing existing plans and data, analyzing existing traffic operation, observing existing circulation, traffic operation and infrastructure conditions firsthand, and seeking input from local officials regarding future projects and growth that are expected to affect the Beh Industrial Park.

Specific tasks included assessment and familiarization of the study area, reviewing existing studies, data, regulatory framework, and development projections, field observations to assess existing infrastructure and traffic operation, and a traffic assessment (Level of Service, delay and queuing) of intersections within the study area.

The following existing plans and studies were reviewed:

- *Town of Ontario Comprehensive Plan* prepared by Stuart I Brown Associates, 2006
- *Onward Ontario* prepared by MRB Group, Adopted December 20, 2021
- *Regional Engagement: Revitalization Opportunity Report – Wayne County (2016)*
- *Wayne County Economic Development Strategic Plan* prepared by Stuart I Brown Associates, November 2006
- *Route 104 Corridor Trail Feasibility Assessment and Design Recommendations* prepared by EDR Companies, August 2011
- *OMID Strategic Plan Technical Memo #2* materials, prepared by Fisher Associates, March 2021

Existing traffic data was reviewed, including traffic volumes (Average Daily Traffic Volumes), functional classification, ownership / jurisdiction, percent trucks, and speed. New intersection turning movement counts were performed at six (6) intersections within the study area, including:

- NYS Route 104 and Basket Road
- NYS Route 104 and County Line Road
- NYS Route 104 and Dean Parkway
- NYS Route 104 and Lincoln Road
- NYS Route 104 and Lakeside Road
- Dean Parkway and Timothy Lane

The counts were collected by Tri-State Traffic Data on March 30, 2021 during the morning and afternoon commuter peak periods. Peak hours for analysis were determined for each period. The peak hour data was reviewed against historic traffic volumes along Route 104 and was determined to be approximately 10% to 40% lower (varies by segment, direction and time of day), which is likely attributed to the COVID-19 pandemic. Therefore, the 2021 peak hour traffic counts were increased accordingly to align with the historic data.

Overall intersection traffic operation was determined to be Level of Service "C" or better at each intersection during both morning and afternoon peak hours, which is considered acceptable traffic operation. Many left turn, U-turn and side street movements were found to operate with longer delays and Level of Service "D" and "E". This is a result of the Route 104 intersections being programmed / timed to prioritize efficiency of the Route 104 thru movements. Also, most left turns and U-turns operate as protected-only movements (traffic must wait for a green arrow) for safety reasons due to the high speed and divided highway character of the Route 104 corridor, which increases delay.

Crash data for the Beh Industrial Park study project area was obtained from the Accident Location Information System (ALIS) via the NYSDOT. The data spans a six-year period from January 1, 2014 to December 31, 2019, and 354 crashes were documented. The predominant crash type was Rear End (36%) followed by Animal (21%). Forty-four percent (44%) of crashes resulted in property damage, while 37% were classified as Non-Reportable and 19% resulted in injury. There was one fatality, which occurred at the NYS Route 104 and Basket Road intersection as a result of a head-on collision.

One crash involving a pedestrian occurred on NYS Route 104 near Lincoln Road, which resulted in injury. The crash was attributed to the pedestrian crossing at a location with no signal or crosswalk.

### **C. Community Engagement**

This plan was prepared with significant involvement from a committee of stakeholders, targeted groups of affected property owners, and Town of Ontario residents.

A Steering Committee of Local, County and State agency representatives was assembled and met regularly throughout the process. In addition to the consultant team, Steering Committee members included the following:

- **Town of Ontario:** Frank Robusto, Town Supervisor; Adam Cummings, Town Engineer; William Riddell, Director of Economic Development
- **Wayne County:** Brian Pincelli, Director of Economic Development
- **New York State Department of Transportation:** Zachary Starke, Region 4 Permits; Andrew Quinn, Region 4 Traffic & Safety
- **Genesee Transportation Council:** Jody Binnix, Program Manager

Several public outreach efforts were undertaken to inform the public about the project and solicit feedback from residents, property owners and users of the Beh Industrial Park, including:

- Meeting with business owners within the Beh Industrial Park, targeted towards larger tenants and those with known plans for expansion (June 25, 2021).
- Public Informational Meeting with project introduction and one-on-one discussion (September 23, 2021)
- Community Survey available online and in-person following the first Public Meeting
- Public Informational Meeting presenting the draft report and recommendations (January 20, 2022)
- Project Website hosted on the Public Input platform, accessed at <https://www.publicinput.com/BehTrafficStudy>, containing project information and documents.

### **D. Needs and Opportunities**

An understanding of the specific physical, operational, design, and regulatory needs and opportunities within the Beh Industrial Park was obtained by reviewing existing data, site conditions and traffic operation. This understanding was enhanced by firsthand observations of existing circulation, traffic operation, and infrastructure, seeking input from local officials and business owners regarding future projects and growth within the Beh Industrial Park, and assessing opportunities to improve safety, mobility, and connectivity for all road users.

#### **Local Market Trends for Future Growth and Development**

A market trend analysis identified unmet demand for retail within the Town of Ontario, including Home Furnishing Stores, Specialty Food Stores, Clothing Stores, Office Supplies, and others. Based on current zoning, these types of land uses are most likely to be located along the Route 104 corridor. Therefore, it can be expected that traffic volumes along Route 104 and adjacent roadways would increase over time as growth in retail development is experienced within the Town.

#### **Planned Growth and Expansion at the Beh Industrial Park**

Coordination was undertaken with the Town of Ontario and businesses within the Beh Industrial Park to determine plans for future expansion.

Expansion plans and employment projections were provided by the following companies:

- Intergrow (663 Timothy Lane): Phase 2 (under construction) and Phase 3 (estimated construction in 2024), estimated 220 new employees
- Optimax (6367 Dean Pkwy): 75,000 sf future expansion, 300 new employees
- OptiPro (6368 Dean Pkwy): future expansion, 125 new employees
- Peak Fabrication (6314 Dean Pkwy): future expansion, 75 new employees
- Ranger Design Building (6377 Dean Pkwy): Potential future redevelopment, approx. 100,000 sf

Trip generation estimates indicate that the proposed expansion projects would result in a total of 372 new vehicular trips (282 entering and 90 exiting) during the morning peak hour and 367 new vehicular trips (123 entering and 244 exiting) during the afternoon peak hour.

To account for unforeseen future growth within the Beh Industrial Park and overall study area, a growth rate of 1% per year was applied to all traffic volumes at intersections within the study area. A five-year study period was assumed, with a future analysis year of 2026. This results in a 5% increase in background traffic volumes at Year 2026.

### **Future Traffic Operation**

A traffic analysis was performed to determine traffic operation during the morning and afternoon peak hours at the analysis year 2026. This represents a five-year buildup period where the expansion projects are expected to occur. The analysis was performed using Synchro traffic software, Version 11.

Two scenarios were analyzed at Year 2026: a Background scenario and a Full Development scenario. The Background scenario includes a general growth in traffic volumes of 1% per year, but does not include any of the identified Beh Industrial Park expansion projects. All existing lane geometry and traffic signal timing is maintained.

The Full Development scenario includes the background growth plus the new vehicular trips associated with the expansion projects. All existing lane geometry and traffic signal timing is maintained.

The Background scenario traffic analysis indicates similar traffic operation to Existing conditions, with modest increases in delay for individual turning movements and overall intersections. All overall intersection LOS is projected to be "D" or better. All individual movements are projected to operate at LOS "E" or better, except the westbound U-turn movement at the Route 104 & Dean Parkway intersection, which is projected to operate at LOS "F" during the morning peak hour. This U-turn movement is low-volume and should not be a significant traffic concern, but may warrant periodic monitoring or modifications to traffic signal timing.

The Full Development scenario traffic analysis indicates similar traffic operation to Background conditions at the Route 104 intersections with Basket Road, County Line Road, Lincoln Road, and Lakeside Road, with modest increases in delay for individual turning movements and overall intersections. These intersections are all projected to operate with overall intersection LOS "D" or better and individual movement LOS "E" or better during both peak hours.

Potential lane and traffic signal improvements at the Route 104 and Dean Parkway intersection were modeled using Synchro to determine if the Level of Service could be improved to acceptable levels. The improvements include:

- Lengthen the Route 104 eastbound left turn lane to 550 ft
- Construct new Dean Parkway southbound right turn lane – 200 ft length
- Modify traffic signal timing during peak hours

The analysis indicates that overall intersection operation improves to LOS "D" or better, but LOS "F" is still expected for certain movements during both peak hours. This analysis indicates that more extensive improvements, such as widening Route 104 to provide an additional eastbound left turn lane

or constructing a second point of access to the industrial park, would be required to achieve acceptable traffic operation with the identified developments within the Beh Industrial Park.

### **Summary of Needs and Opportunities**

Existing site infrastructure and facilities for vehicles, pedestrians, and bicycles were analyzed and assessed in the field to determine if improvements are needed to address mobility and safety concerns, circulation, and connectivity. A summary of needs and opportunities for each group of users is as follows:

#### **Traffic Operation Needs and Opportunities:**

- Lengthen the Route 104 eastbound left turn lane at Dean Parkway to accommodate peak hour traffic volumes and improve safety.
- Install a southbound right turn lane on Dean Parkway at Route 104.
- Improve or install new vehicle detection (loops or overhead sensors) on Dean Parkway at Route 104. Additional detection is needed north of the railroad tracks to accommodate trucks that stop and wait ahead of the tracks.
- Provide new site access point to Route 104 or a surrounding roadway such as County Line Road or Lakeside Road.

**Note:** NYSDOT is planning to construct improvements at the Route 104 and Dean Parkway intersection, including lengthening the Route 104 eastbound left turn lane, replacing the traffic signal, and installing new vehicle detection systems, as part of an upcoming preventive maintenance and intersection improvement project.

#### **Pedestrian and Bicycle Needs and Opportunities:**

- Construct a sidewalk or trail system within the Beh Industrial Park to provide a complete pedestrian network within the site. Pedestrian facilities should meet current ADA and PROWAG design standards.
- Provide a pedestrian connection from the Beh Industrial Park to Route 104.
- Add crosswalks and pedestrian signal equipment to the signalized intersections within the study area to improve pedestrian safety.
- Delineate pedestrian routes across driveways and parking areas.
- Encourage individual businesses to install bicycle amenities such as bike racks and promote bicycle usage, which could reduce vehicular trips to and from the site.

**Note:** NYSDOT is planning to install pedestrian signals, crosswalks, and sidewalk pads at the Route 104 intersections with Basket Road, County Line Road, Dean Parkway, Lincoln Road and Lakeside Road as part of an upcoming preventive maintenance and intersection improvement project.

#### **Transit Needs and Opportunities:**

- Improve pedestrian routes between existing transit stops and the Beh Industrial Park (install crosswalks and pedestrian signal equipment at intersections, and sidewalks within the Beh site).
- Encourage RTS to provide more direct service to the Beh Industrial Park.
- Encourage individual businesses to promote transit usage, which could reduce vehicular trips to and from the site.

#### **Pavement Needs and Opportunities:**

- Rehabilitate the pavement on Dean Parkway and Timothy Lane where needed.
- Install pavement markings including double yellow center stripes and white edge stripes.
- Evaluate areas along the edge of the road where rutting and off-tracking are present to determine if widening, shoulder improvements or driveway modifications are needed.

**Note:** The Town of Ontario plans to mill and overlay the asphalt pavement on Dean Parkway once heavy construction is completed on development sites such as Intergrow.

**Drainage Needs and Opportunities:**

- Improve drainage infrastructure including driveway culverts, inlets and headwalls where needed.
- Ensure open & closed drainage systems are regularly cleaned and maintained to promote positive drainage.

**Note:** The Town of Ontario is currently evaluating drainage improvements in the vicinity of the Beh Industrial Park that would benefit overall drainage conditions within the project area.

**Traffic Signal Needs and Opportunities:**

- Add high-visibility back plates to traffic signals to improve visibility and safety.
- Install pedestrian signal equipment and crosswalks at signalized intersections to improve pedestrian safety.

**Note:** NYSDOT is planning to replace the traffic signals at the Route 104 intersections with Basket Road, County Line Road, Dean Parkway, Lincoln Road and Lakeside Road as part of an upcoming preventive maintenance and intersection improvement project. The new signals would include mast arms and high-visibility back plates.

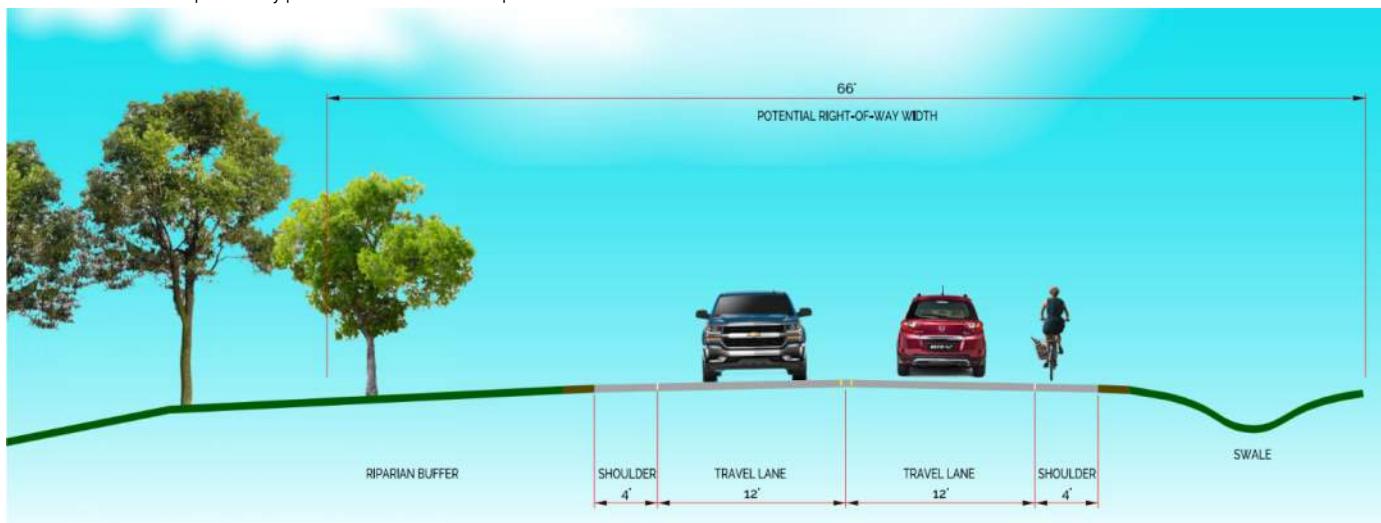
## E: Corridor Recommendations

Recommendations have been developed to improve mobility and safety for all users of the Beh Industrial Park, considering the identified needs and opportunities. The recommendations include a new point of access to the Beh Industrial Park, improvements to the existing access at Dean Parkway and Route 104, multi-modal improvements within the study area, and infrastructure upgrades within the Beh Industrial Park. Conceptual cost estimates, potential funding sources, and implementation strategies have also been developed for each recommendation.

### New Access to County Line Road

It is recommended that a new 3,000 linear feet access road be constructed between Timothy Lane and County Line Road. The new access would alleviate traffic congestion at the Route 104 and Dean Parkway intersection, improve emergency response time to the site, and improve access to property and potential developable land in the western portion of the Beh Industrial Park.

The conceptual plan of the new access road to County Line Road is depicted on the following page. The conceptual typical section is depicted below.



The new access road is expected to cost approximately \$3.2 million to construct. The cost includes all pavement items, a culvert crossing Fournile Creek, extension of water and sewer lines along the roadway, incidentals such as work zone traffic control, erosion and sediment control, survey and engineering design, and a 20% contingency.



Potential funding sources include the Transportation Improvement Program (TIP), Empire State Development (ESD) Capital Grant, Community Development Block Grant (CDBG), and Rebuilding America Infrastructure with Sustainability and Equity (RAISE) Grant. The Infrastructure Investment and Jobs Act recently passed by Congress may have additional funding opportunities.

#### NYS Route 104 and Dean Parkway Intersection Improvements



The intersection improvements are expected to cost approximately \$345,000 to construct. NYSDOT is planning to lengthen the eastbound left turn lane and replace the traffic signal including pedestrian upgrades as part of an upcoming capital project. Constructing the southbound right turn lane on Dean Parkway would be the responsibility of the Town of Ontario, at a cost of approximately \$64,000. The right turn lane will require additional traffic studies and review and approval by NYSDOT.

#### Sidewalk / Trail System within Beh Industrial Park

It is recommended that a new sidewalk or trail system be constructed within the Beh Industrial Park. A new sidewalk / trail system would provide pedestrian connections between businesses within the Beh Industrial Park as well as between the site and Route 104. It would also provide health and recreational benefits and accommodate a connection to a future Route 104 trail system.

The recommended pedestrian network would include a 10 ft wide trail along Dean Parkway (Route 104 to Timothy Lane) and Timothy Lane (Dean Parkway to Intergrow), and a 5 ft wide sidewalk along Dean parkway (Timothy Lane to David Parkway). Construction cost is estimated at \$710,000, and potential funding opportunities include the Transportation Alternative Program (TAP), Climate Smart Communities (CSC), Environmental Protection Fund, TIP, ESD Capital Grant, and CDBG program.

### **Traffic Signal and Pedestrian Improvements at NYS Route 104 Intersections with Basket Road, County Line Road, Lincoln Road and Lakeside Road**

It is recommended that traffic signal upgrades be implemented at the NY Route 104 intersections with Basket Road, County Line Road, Lincoln Road and Lakeside Road. The upgrades would improve traffic flow along Route 104 and adjacent side streets, provide high-visibility treatments to improve safety for all users, and provide infrastructure for safe pedestrian crossings of Route 104. The upgrades include new signals with reflective back plates, pedestrian signal equipment, crosswalks, and sidewalk pads.

NYSDOT plans to implement traffic signal upgrades at the Route 104 intersections with Basket Road, County Line Road, Lincoln Road and Lakeside Road as part of an upcoming capital project.

### **Infrastructure Improvements within Beh Industrial Park**

It is recommended that pavement areas along Dean Parkway and Timothy Lane in need of rehabilitation receive a mill and overlay treatment to extend the life and maintain safe and efficient travel along the roadway. Drainage conditions within the Beh Industrial Park should be regularly monitored. Infrastructure within the right-of-way including driveway culverts, closed drainage systems, and roadside swales should be regularly inspected, cleaned, and replaced as needed.

The recommended mill and overlay treatment is expected to cost approximately \$315,000. The cost for drainage improvements would vary based on the type of work and location.

## **F. Implementation and Follow-on Activities**

### **Pursue Funding Opportunities**

This Plan provides a tool for the Town of Ontario, Wayne County and other partners to actively engage State and Federal officials and justify that the project is a priority for the Town and users of the Beh Industrial Park. The Town and partnering agencies should agree on priority project(s) to pursue (such as the new access road) and select funding opportunities that best align with the project(s), and also begin to plan for any local matching funds that may be required for grant programs.

### **Initiate Design of New Access Road**

If the Town of Ontario intends to pursue construction of a new access road connecting Timothy Lane to County Line Road, the Town should initiate the process by engaging a design professional and beginning tasks such as survey, environmental studies, and conceptual design of the new roadway. Establishing the exact alignment of the new road will require close coordination with property owners within the affected area and establishment of a right-of-way for the road by way of property acquisition. Tasks required for subsequent design phases (Preliminary / Final Design) may vary based on funding sources used and potential involvement of State or Federal partnering agencies.

### **Integrate Plan Recommendations in the Development Review Process**

The Beh Industrial Park is expected to experience continual growth and development in the coming years. As individual applications for development occur, the Town of Ontario should ensure that the recommendations within this Plan are considered during the site plan review and approval process.

### **Maintain Close Coordination with NYSDOT and Other Partnering Agencies**

As development occurs within the Beh Industrial Park, NYSDOT should continually monitor traffic operation at the Route 104 and Dean Parkway intersection and other intersections within the study area to ensure that safe and efficient traffic operation is maintained for all users of the Beh Industrial Park. Periodic signal timing and coordination adjustments may be needed as new and expanded developments within the park are completed.

Implementation of the Plan's recommendations may require coordinating with and obtaining permits from local, county and state agencies. The new access road connection at County Line Road will require a permit from the Monroe County Department of Transportation. Work within the Route 104 right-of-way will require a work permit from the New York State Department of Transportation.