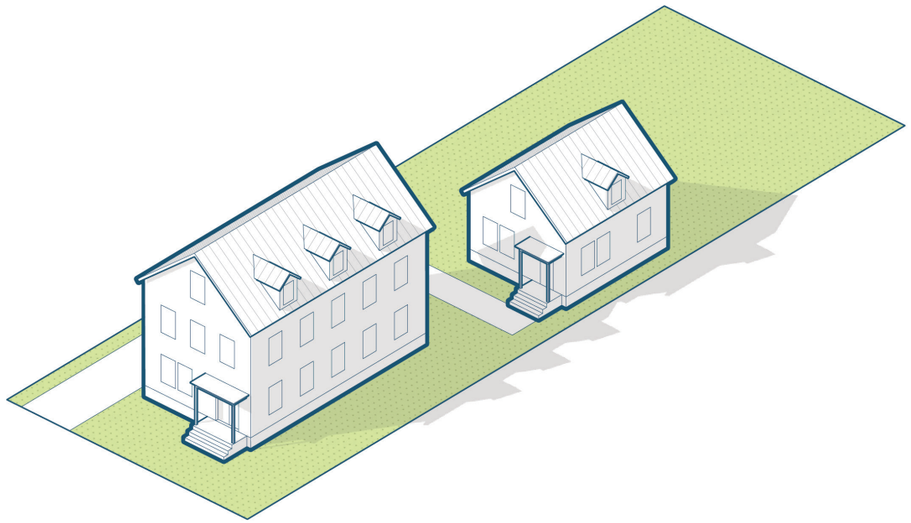
Appendix E:

HOUSING TYPOLOGY MATRIX

SINGLE-FAMILY W/ ADU

A traditional single-family home with an accessory dwelling unit (ADU) on the same lot. These ADUs are small self-contained homes that can be attached, detached, carve-outs or garage conversions.



- ADUs are a versatile solution for infill, providing an affordable housing option that gradually builds density while maintaining neighborhood character. This housing type is sustainable, cost-effective, and promotes walkability through reduced parking requirements.

Source: Regional Planning Association

Source: New York State Official Website

Source: AP Photo / Gene J. Puskar

- **TRANSIT COMPATIBILITY:**
  Enhanced Bus
- **DENSITY:**
  6-12 dwelling units/acre
- **HEIGHT:**
  1-2.5 stories

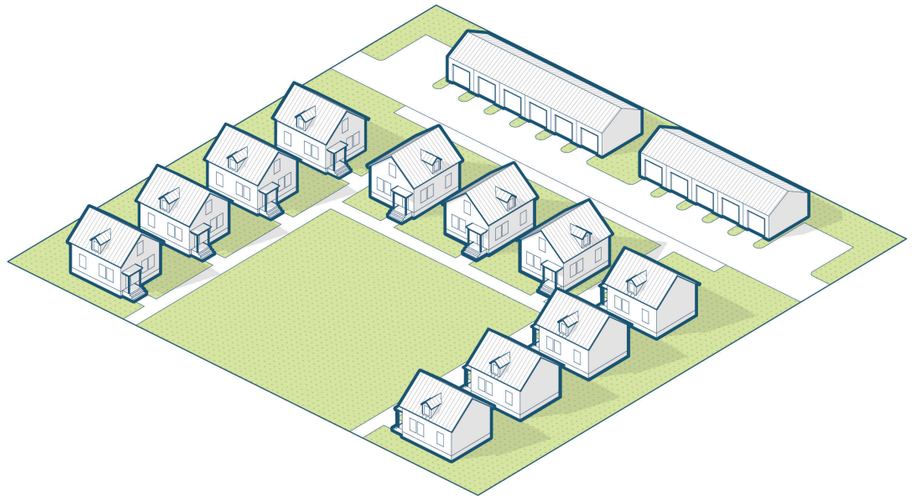
APPLICABILITY:
Ideal for infill within established single-family neighborhoods.

PARKING:
1 space per ADU (or less). Driveway is typically shared.

TRANSIT:
Provide a moderate increase in density that supports Enhanced Bus systems. Reduced parking requirements help promote walkability and transit use.

SINGLE-FAMILY CLUSTER HOUSING/COTTAGE COURT

A group of small, detached homes arranged around a shared courtyard or open space that is visible from the street.



- Cluster housing offers community-oriented living and more public open space, creating a sustainable and low-impact option that encourages pedestrian activity. This housing type is a cost-effective and compact alternative to traditional single-family housing that provides more density while maintaining neighborhood character.


Source: Michael Watkins Architect


Source: Wenzlau Architects


Source: Washington Coast Vacation Rentals

- **TRANSIT COMPATIBILITY:**
  Enhanced Bus
- **DENSITY:**
  10-12 dwelling units/acre
- **HEIGHT:**
  1-1.5 stories

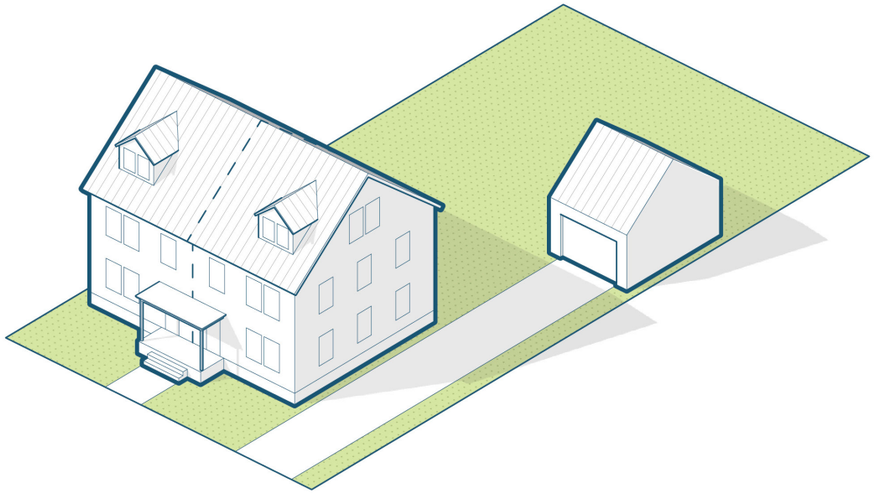
APPLICABILITY:
Ideal for infill within established single-family neighborhoods.

PARKING:
1 parking space per unit. Typically include a shared parking area and consolidated driveway.

TRANSIT:
Provide a moderate increase in density that supports Enhanced Bus systems. A pedestrian-oriented design that generates walkable environment with shared green spaces.

DUPLEX SIDE-BY-SIDE/STACKED

One structure that contains two separate residential units arranged side-by-side or stacked vertically, each with an entrance from the street.



- Duplexes are an equitable and affordable housing option that provide increased density while retaining the appearance and scale of single-family neighborhoods. The moderate density and reduced parking requirements of housing type help to support higher transit use, making duplexes a viable option for BRT.

Source: Google Street View (2024)

Source: Prairie Pines Townhomes

Source: New Western

- **TRANSIT COMPATIBILITY:**
  Enhanced Bus, Bus Rapid Transit (BRT)
- **DENSITY:**
  10-15 dwelling units/acre
- **HEIGHT:**
  1-2.5 stories

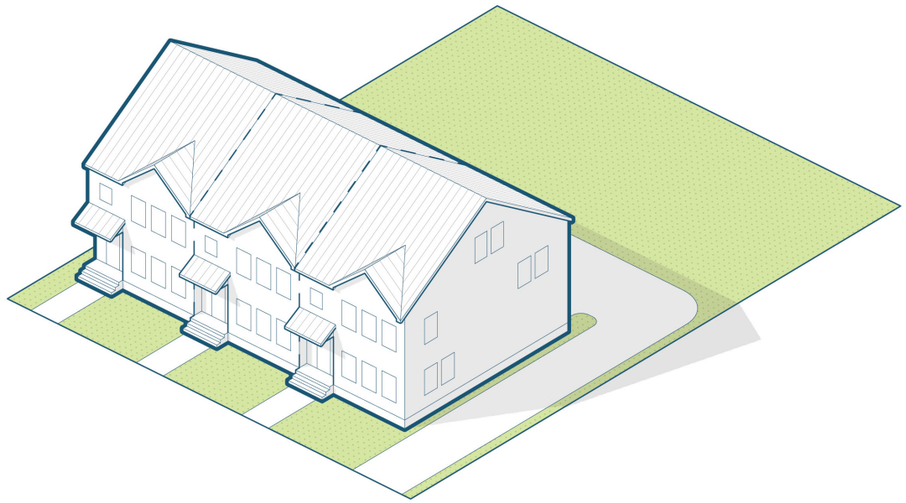
APPLICABILITY:
Great for neighborhood infill and transitional areas between single-family and moderate-density housing.

PARKING:
1 parking space per unit. Might include a shared driveway and garage.

TRANSIT:
Introduces moderate densities needed to support more frequent transit service. Reduced parking requirements help promote walkability and encourage ridership.

TRIPLEX SIDE-BY-SIDE

One structure that contains three separate residential units arranged side-by-side, each having their own entrance from the street.



- Side-by-side triplexes increase housing density, but their layout resembles traditional townhomes, making them ideal for urban neighborhoods seeking modest density increases. This typology maximizes the use of land in transit-adjacent areas by housing multiple units on a relatively compact footprint.

Source: Google Street View (2024)

Source: PCRI

Source: Jill Rosell

- **TRANSIT COMPATIBILITY:**
  Enhanced Bus, Bus Rapid Transit (BRT)
- **DENSITY:**
  12-20 dwelling units/acre
- **HEIGHT:**
  2-2.5 stories

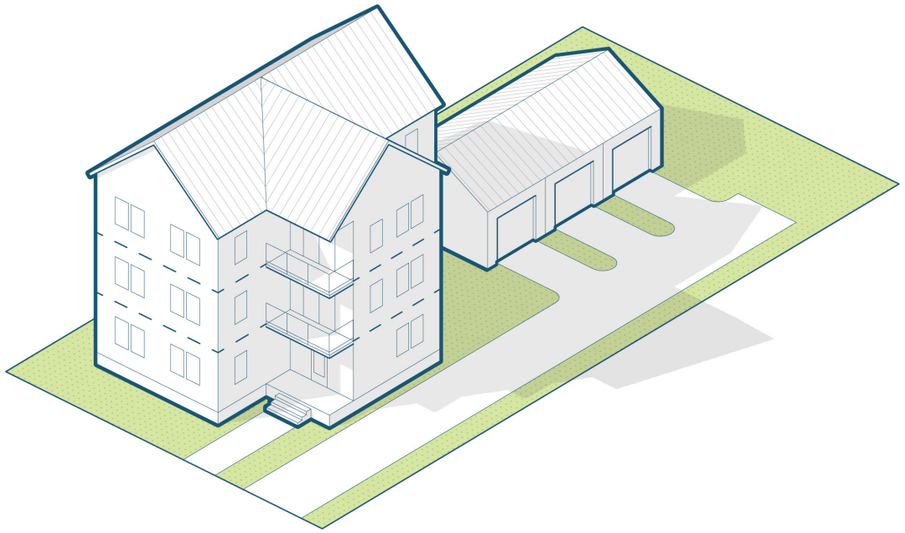
APPLICABILITY:
Ideal for corner lots, new development, and infill projects.

PARKING:
1 space per unit, with a shared driveway and parking areas.

TRANSIT:
Introduces moderate densities needed to support more frequent transit service. Reduced parking requirements and an active street edge promote walkability and encourage ridership.

TRIPLEX STACKED

Three residential units stacked vertically within a single structure that share an entrance from the street.



- Stacked triplexes are typically more affordable than single-family homes, providing a range of options for different household sizes and incomes. This typology is a versatile and sustainable housing solution that offers higher density within a compact footprint while retaining neighborhood compatibility.

Source: The Albertan News

Source: Missing Middle Housing

Source: Missing Middle Housing

- **TRANSIT COMPATIBILITY:**
  Enhanced Bus, Bus Rapid Transit (BRT)
- **DENSITY:**
  12-20 dwelling units/acre
- **HEIGHT:**
  3-3.5 stories

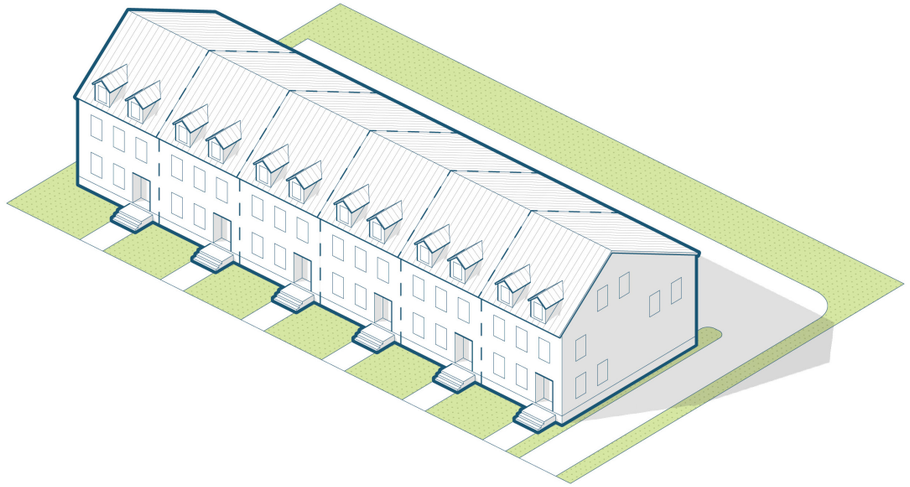
APPLICABILITY:
Suitable for compact urban areas or as infill in established suburban neighborhoods.

PARKING:
1 space per unit, with a shared driveway and parking area.

TRANSIT:
Provide moderate density housing that encourages public transit use and walkability through their compact form and reduced parking requirements.

TOWNHOMES/ROWHOUSES

Attached residential units with one or two shared walls between residences, each having their own entrance from the street. These housing types are typically narrow multi-floor homes with a small front lawn and backyard.



- Townhomes and rowhouses provide a flexible and higher-density housing option at a neighborhood scale. This housing type is a popular choice for creating active and walkable, transit-oriented development with densities needed to support higher transit use.

Source: NAHB

Source: Baharlou

Source: The Raleigh Architecture Company

- **TRANSIT COMPATIBILITY:**
  Enhanced Bus, Bus Rapid Transit (BRT)
- **DENSITY:**
  12-20 dwelling units/acre
- **HEIGHT:**
  2-3 stories

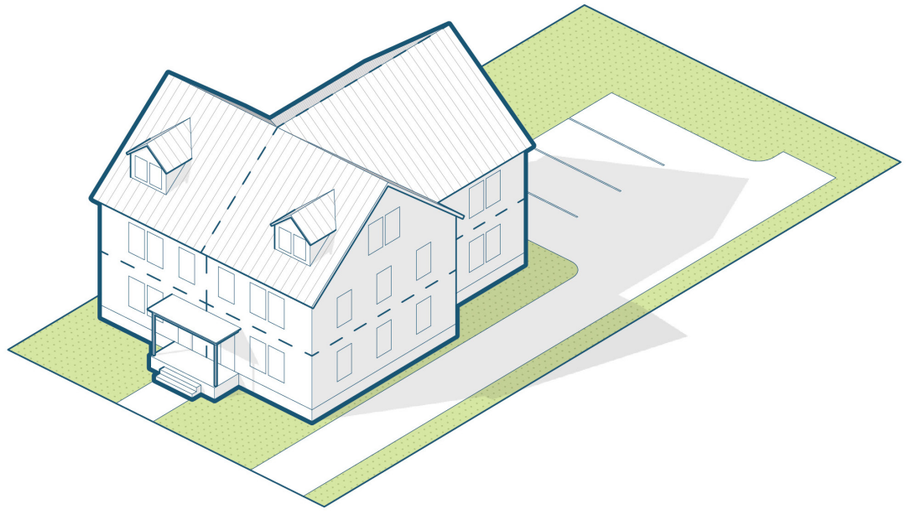
APPLICABILITY:
Ideal for new development and infill projects.

PARKING:
1 parking space per unit, with a shared driveway and parking area.

TRANSIT:
Introduces moderate densities needed to support more frequent transit service. Reduced parking requirements and an active street edge promote walkability and encourage ridership.

FOURPLEX/QUADPLEX

A multi-family building with four residential units (either side-by-side or stacked) that share an entrance from the street.



- Fourplexes and quadplexes strike a balance between density, affordability, and neighborhood compatibility, making it a valuable housing solution in urban areas. This housing type is a popular choice for creating active and walkable, transit-oriented development with densities needed to support higher transit use.

Source: Google Street View (2024)

Source: Chad McDermott

Source: Vincent Brière

- **TRANSIT COMPATIBILITY:**
  Bus Rapid Transit (BRT)
- **DENSITY:**
  15-25 dwelling units/acre
- **HEIGHT:**
  2-2.5 stories

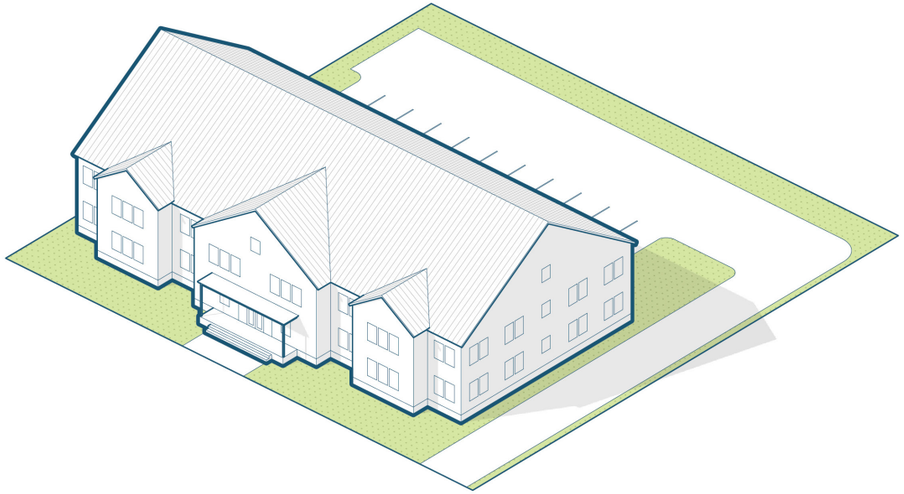
APPLICABILITY:
Great for corner lots or as infill in moderate-density neighborhoods.

PARKING:
1 space per unit, with a shared driveway and parking area.

TRANSIT:
Provide moderate density housing that encourages public transit use and walkability through their compact form and reduced parking requirements.

LOW-RISE RESIDENTIAL

A multifamily building typically housing between four to twenty residential units that share an entrance from the street.



- Low-rise residential housing is designed for efficient urban living while offering shared amenities and close-knit community spaces. This typology supports sustainable, affordable, and livable urban environments near transit with a scale that compliments walkable neighborhoods.

Source: Google Streetview (2024)

Source: Google Streetview (2024)

Source: Long & Froster

- **TRANSIT COMPATIBILITY:**
  Bus Rapid Transit (BRT), Light Rail Transit (LRT)
- **DENSITY:**
  18-30 dwelling units/acre
- **HEIGHT:**
  2-4 stories

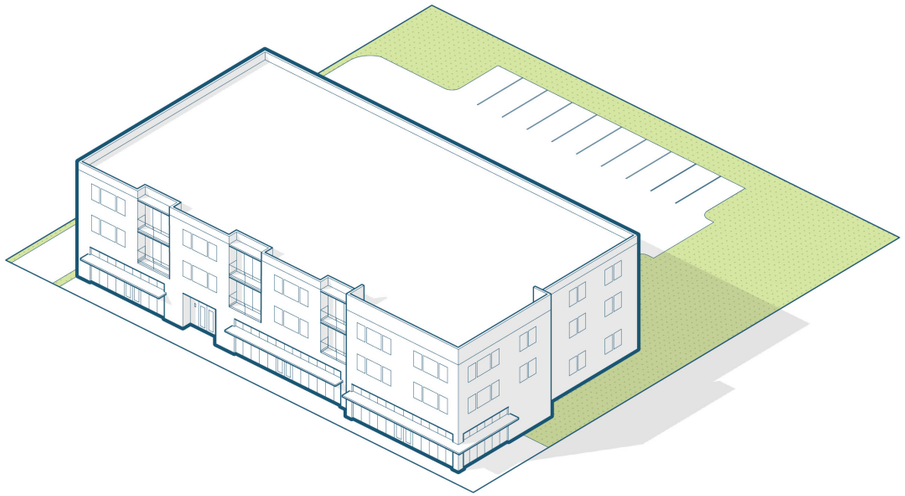
APPLICABILITY:
Great for infill or new development in moderate-density neighborhoods.

PARKING:
1 space per unit, typically in surface lots.

TRANSIT:
Introduces moderate to higher densities needed to support more frequent transit service while retaining a compact form for transitional areas.

LOW-RISE MIXED-USE

A mixed-use building that combines residential units with ground-floor commercial or retail uses, such as shops or offices.



- The mix of residential and commercial spaces in this typology fosters active neighborhoods with local businesses and community spaces. Low-rise mixed-use buildings reduce dependence on cars and promote a walkable environment where essential services and amenities are easily accessible, allowing residents to live, shop, and work within a short distance.

Source: Google Streetview (2024)

Source: Google Streetview (2024)

Source: Bay Meadows

- **TRANSIT COMPATIBILITY:**
  Bus Rapid Transit (BRT), Light Rail Transit (LRT)
- **DENSITY:**
  15-30 dwelling units/acre
- **HEIGHT:**
  2-4 stories

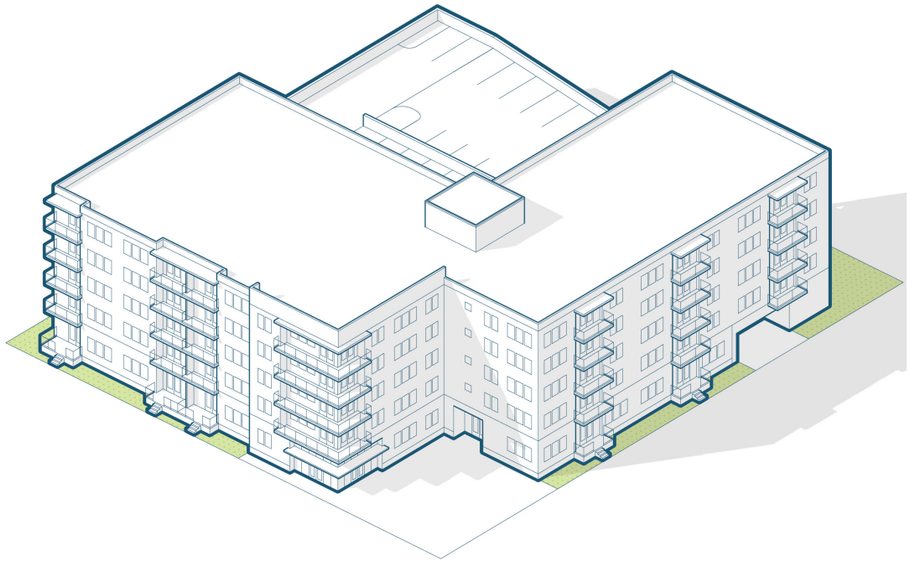
APPLICABILITY:
Suitable for urban neighborhoods, areas with transit-oriented development, suburban transition areas, and mixed-use districts.

PARKING:
1 space per residential unit with additional parking for commercial uses.

TRANSIT:
BRT and LRT corridors benefit from mixed-use developments that provide density and require frequency of service.

MID-RISE RESIDENTIAL

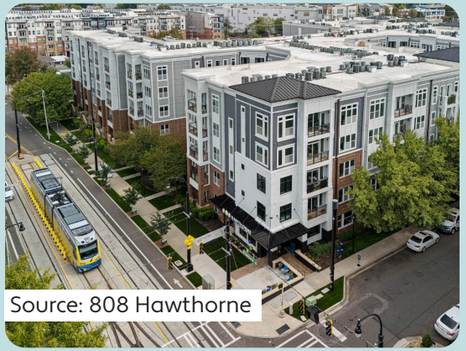
A multifamily building designed to accommodate a higher density of residential units within a compact footprint. The ground floor units typically have their own entrance to the street.



- This typology contributes to walkable neighborhoods by integrating higher-density residential spaces with nearby amenities, making daily tasks and services more accessible. They promote active frontages through a pedestrian-oriented ground floor and are an efficient use of land.

Source: Google Streetview (2024)

Source: Google Streetview (2024)



Source: 808 Hawthorne

- **TRANSIT COMPATIBILITY:**
  Light Rail Transit (LRT)
- **DENSITY:**
  20-40 dwelling units/acre
- **HEIGHT:**
  5-12 stories

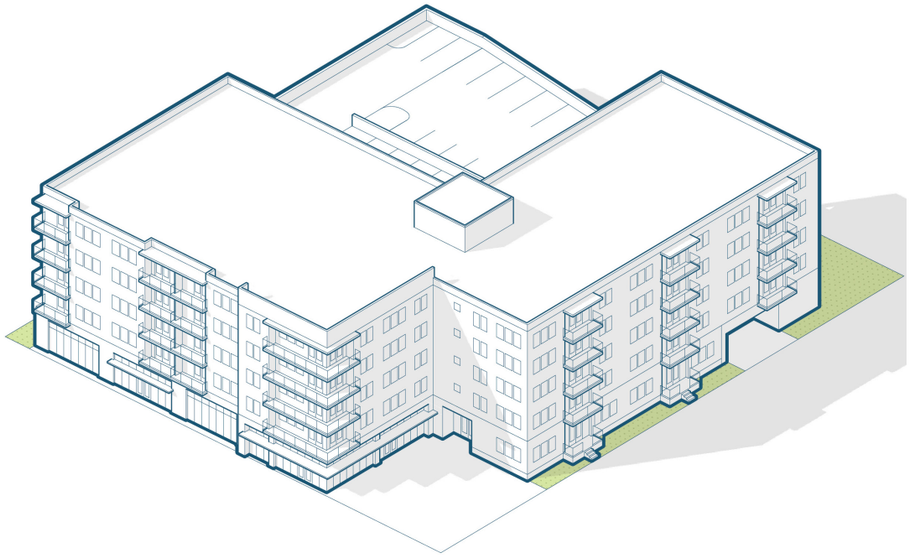
APPLICABILITY:
Suitable for urban centers, areas with transit-oriented development, suburban transition areas, and along major streets.

PARKING:
1 space per unit, with shared and/or structured parking.

TRANSIT:
Higher densities and limited parking reduce the reliance on personal vehicles and encourage the use of public transit options.

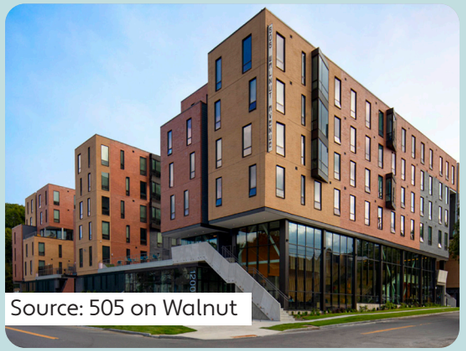
MID-RISE MIXED-USE

A mixed-use building designed to accommodate a higher density of residential units within a compact footprint. It combines housing with ground-floor commercial or retail uses, such as shops or offices.

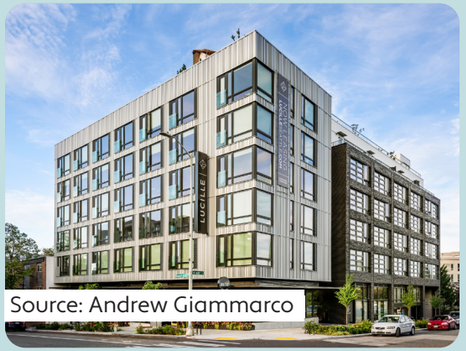


- This housing typology promotes sustainable commuting options, convenience, and active community life while maximizing land use. Mid-rise mixed-use buildings are integral for creating the densities and activity needed to support higher public transit ridership.

Source: Tri City Rentals



Source: 505 on Walnut



Source: Andrew Giammarco

- **TRANSIT COMPATIBILITY:**
  Light Rail Transit (LRT)
- **DENSITY:**
  20-40 dwelling units/acre
- **HEIGHT:**
  5-12 stories

APPLICABILITY:
Suitable for urban centers, areas with transit-oriented development, suburban transition areas, mixed-use districts, and along major streets.

PARKING:
1 space per residential unit, with shared and/or structured parking; commercial parking requirements may be reduced due to high transit accessibility.

TRANSIT:
Promotes the integration of work, retail, and leisure activities within a compact, walkable area.

Appendix F:

EVALUATION AND IMPLEMENTATION TECHNICAL MEMORANDUM

Stantec

Memo

To:	Mario Colone SMTC	From:	Adam Catherine Erin Cameron Gilchrist Stantec Consulting Services, Inc.
Project/File:	Route 31 Transit Corridor Assessment	Date:	July 3, 2025

Reference: Transit Alternative Evaluation

Task 5 of the Route 31 Transit Corridor Assessment includes an evaluation of the three transit alternatives, Enhanced Bus, BRT, and LRT. This assessment is directly related to the goals and objectives established in Task 1 of the study and evaluates the transit service and associated density requirements along the corridor. This memo summarizes the evaluation methodology, and recommendation to advance BRT as the preferred transit alternative. In addition, it presents considerations for the implementation of the preferred alternative.

Goals and Objectives

The Project goals were established at the start of this project, with the intent to hold the Project Team and Study Advisory Committee accountable and help guide the decision-making process when weighing the transit alternative to advance. These goals are:

- Establish a Multimodal Corridor Framework
- Prepare Route 31 for Transit-Oriented Communities
- Foster Regional Growth to Support Communities
- Identify Strategies for Long-Term Corridor Success
- Support Implementation

Evaluation

Each goal was accompanied by objectives that can be quantitatively or qualitatively measured as outlined in the Goals and Objectives Memorandum (dated March 22, 2024). Some evaluation metrics were eliminated or modified from the original goals and objectives to align with the project status and available information (e.g. the Micron build-out information was unavailable, so it is not possible to evaluate the change in automobile trips due to the introduction of transit). The evaluation also differentiated between community support for a transit type (meaning the service characteristics) versus the development density required to support a transit type, as Focus Group and SAC conversations to date have shown these are often not in agreement. The revised criteria are shown in **Table 1**.

Reference: Transit Alternative Evaluation

All measurements were categorized as High, Medium, and Low, where High is positive and Low is negative (e.g. even when cost is greater for Light Rail Transit than Enhanced Bus, it is scored Low to show the larger investment needed). The detailed evaluation tables can be found in Attachment A.

For comparing the transit alternatives against one another, a sum of scores was calculated with High receiving 3 points, medium receiving 2 points, and low receiving 1 point. This calculation resulted in BRT scoring 53 points, Enhanced Bus scoring 49 points, and LRT scoring 45 points. The project team wants to note that when removing consideration of cost and funding opportunities, LRT scores above Enhanced Bus.

The Project team recommends advancing the BRT transit alternative. It is possible that BRT could evolve into LRT, using the dedicated right-of-way to lay rails through a portion of the corridor (note, the Village of Baldwinsville cannot replace the proposed BRT service with LRT given the limited right-of-way and infrastructure needs for LRT in this portion of the corridor). This potential is explained further below in the implementation strategy.

Table 1: Evaluation Criteria Related to the Study Goals and Objectives

Study Goal	Criterion	Evaluation Measure	High	Medium	Low
Establish a multimodal corridor framework.	Miles of exclusive transit right-of-way	Percentage of total mileage on exclusive transit right-of-way, including bus lanes, queue jumpers, pullouts, and track (for LRT/Streetcar)	>75%	50 – 74%	<50%
	Miles of proposed sidewalk	Potential increase in the mileage of sidewalks	>200% increase with required transit-supportive development	At least 100% increase with required transit-supportive development	Not anticipated to increase substantially
	Pedestrian crossing density	Potential for high marked crossing density of NYS 31 per mile	>100% increase with required transit-supportive development	50% - 100% increase with required transit-supportive development	Not anticipated to increase substantially
	Miles of low-stress bicycle facilities	Potential in the mileage of low-stress pedestrian and bicycle facilities	>100% increase with required transit-supportive development	50% - 100% increase with required transit-supportive development	Not anticipated to increase substantially
	Impacts to cross-corridor access	Potential retention of cross-corridor vehicular movements	Cross-corridor vehicular movements will be unaffected	Some driveways may need to become right-in, right-out only	Some side streets and driveways may need to become right-in, right-out only
Prepare NYS 31 for transit-oriented communities.	Transit-supportive land uses within one-half mile of the corridor (2050)	Community and stakeholder support for population and employment densities within one-half mile of the corridor that would be capable of supporting the alternative	Interactions with stakeholders and focus groups indicate strong support for transit alternative supportive densities	Interactions with stakeholders and focus groups indicate moderate support for transit alternative supportive densities	Interactions with stakeholders and focus groups indicate low support for transit alternative supportive densities
	Economic development potential	Acreage of potential reinvestment	>7,000 acres	3,500 – 7,000 acres	<3,500 acres
	Potential for “missing middle” housing	Number of potential duplex, triplex, and townhome units within walking distance* of a stop/station	Transit-supportive density for the alternative would allow missing middle housing as primary station area development	Transit-supportive density for the alternative would allow missing middle housing as portion of the station area development	Transit-supportive density for the alternative would require multi-family buildings as the primary type of station area development

Reference: Transit Alternative Evaluation

Study Goal	Criterion	Evaluation Measure	High	Medium	Low
Foster regional growth to support communities.	Municipal support	A qualitative measure of municipal support for the transit alternative	Interactions with municipal officials indicate strong support for the transit alternative	Interactions with municipal officials indicate moderate support for the transit alternative	Interactions with municipal officials indicate low support for the transit alternative
	Likelihood of adoption of recommendations into municipal comprehensive plans, zoning ordinances, etc.	A qualitative measure of the likelihood that the recommendations associated with a particular alternative would be adopted into municipal plans or ordinances	Interactions with municipal officials indicate strong desire to adopt new/modified plans and ordinances to support transit alternative	Interactions with municipal officials indicate moderate desire to adopt new/modified plans and ordinances to support transit alternative	Interactions with municipal officials indicate low desire to adopt new/modified plans and ordinances to support transit alternative
	Employment served	Potential employment density at station areas	> 50 jobs per acre	20 – 50 jobs per acre	<20 jobs per acre
	Population served	Potential population density at station areas	> 30 dwelling units per acre	15 – 30 dwelling units per acre	<15 dwelling units per acre
Identify strategies for long-term corridor success.	Ridership (2050)	Total daily boardings and annual ridership in 2050 (full build-out of Micron)	>5,000 riders per day	2,500 – 5,000 riders per day	<2,500 riders per day
	Corridor travel time	Total estimated time that it would take to travel from one end of the corridor to the other using transit	< 30 min	30 – 45 min	> 45 min
	Travel time ratio	The ratio of transit travel time to vehicle travel time for an average end-to-end trip	1 – 1.5 vehicle travel time	1.5 – 2 times vehicle travel time	>2 times vehicle travel time
	Disadvantaged Populations Served	Number of transportation disadvantaged census block groups within walking distance of stops/stations* (relative to the total on the corridor)	4 or more	1 – 3	0

Reference: Transit Alternative Evaluation

Study Goal	Criterion	Evaluation Measure	High	Medium	Low
Support implementation.	Level of community support	A qualitative measure of community support for the density to support transit alternative	Interactions with stakeholders and focus groups indicate strong support for this transit alternative	Interactions with stakeholders and focus groups indicate moderate support for this transit alternative	Interactions with stakeholders and focus groups indicate low support for this transit alternative
	Number of potential short-terms actions	Potential for short-term implementation	This transit alternative could be implemented as within the next 3 – 5 years	This transit alternative could be implemented within 5 – 10 years	This transit alternative would likely take more than 10 years to implement
	Capital cost	Planning-level capital cost estimate (in 2024 dollars) per lane/track-mile that includes infrastructure, rider amenities, and vehicle acquisition costs	<$250 million	$250 million to $1 billion	>$1 billion
	Annual operating and maintenance costs	Planning-level annual operation and maintenance costs in 2024 dollars	<$10 million per year	$10 - $30 million	>$30 million
	Cost effectiveness	Cost per rider in 2024 dollars	<$5 per rider	$5 - $10 per rider	>$10 per rider
	Potential funding	The proportion of the capital cost that could be paid by using known sources of funding	Strong likelihood of funding based on existing funding sources and criteria	Moderate likelihood of funding based on existing funding sources and criteria	Low likelihood of funding based on existing funding sources and criteria
	Operating hours	Proposed hours of operation upon full build-out	24-hour service	12 - 23 hours	<12 hours
	Operating frequency	Proposed peak service frequency upon full-build out	5 – 10-minute headways	10 – 15-minute headways	15 – 30-minute headways

*Walking distance is measured as a 10-minute walkshed around a stop/station.

Implementation

Although BRT is recommended to be advanced as the preferred alternative, existing densities (housing and jobs) along the Route 31 corridor would not support the immediate implementation of BRT. Furthermore, in order to reach BRT-supportive densities there are a number of factors outside the transit service itself that need to be considered in order to provide the necessary infrastructure, policies, and services that could support the required densities. These factors include:

- **Policies and plans:** Alignment of comprehensive plans, zoning codes, design guidelines and approval strategies across the four municipalities is critical to supporting transit-oriented development at densities that evolve over time as demands change. This includes:
    - Creating connected, walkable environments and supporting density and housing diversity approaches that align with ridership targets.
    - Identifying training and support service needs to ensure municipal and approving authorities and their support staff are ready for change in development patterns along the corridor. This work can be conducted concurrently with the policy alignment work but should be sustained to ensure new staff hired during the preceding years have consistent information and approaches to approvals and review processes.
- **Utility infrastructure:** Increased development densities will require supportive utility infrastructure such as power, water, sewer, gas, and storm water. New roadway and transit infrastructure will also require the relocation of some utilities. Therefore, municipalities, Onondaga County, and utility providers should work together to conduct an infrastructure readiness review that considers relocation needs and future demand to identify opportunities to plan ahead of the projected growth. Furthermore, stormwater improvements that anticipate a more urban future along the corridor should also be identified.
- **Transportation infrastructure:** With the region about to invest substantially in roadway infrastructure to support the proposed Micron development, there is a need to ensure that the decisions made now regarding the roadways are not precluding the implementation of higher intensity transit services in the future. Furthermore, it is anticipated that BRT-supportive densities would not be available initially. Therefore, it is likely that an enhanced bus service would be more appropriate in the short-term, with future BRT service which could also be upgraded to LRT if higher density development occurs on the corridor in the future. Investments in roadway infrastructure now must consider future transit through allocation of space, preferably a median that would support the future BRT, or ensuring that right-of-way is reserved for future widening to support the BRT.
- **Capital improvement planning:** To support the results of infrastructure readiness review, a long-term capital improvement plan should be developed that considers 20-, 40- and 60-year upgrade needs to ensure viable space for investments (development and infrastructure) over time to

facilitate growth as needed. This includes services like schools, emergency services, and parks/recreation.

Timeline	Factor	Task
Short-Term (1-5 Years)	Policies and Plans	• Update and align comprehensive plans and zoning codes to permit cluster development that will support higher density development in station areas • Revise design guidelines and approval processes to promote TOD, connectivity, and walkability • Develop policies that promote a larger diversity in housing types
	Utility Infrastructure	• Conduct an infrastructure readiness assessment • Include a review of proposed TOD investment over a 20, 40 and 60-year period to anticipate growth and change during this time • Analyze utility relocation needs and plan for future growth • Identify stormwater improvements that anticipate a more urban future
	Transportation Infrastructure	• Coordinate with NYSDOT to ensure that future transit is considered in NYS 31 corridor design • Plan, design and seek funding for enhanced bus service • Develop pedestrian and bicycle master plan for the area around the corridor that supports TOD and connections to transit • Evaluate crash clusters within the study area, particularly for pedestrians and bicyclists, and develop a mitigation plan
		• Develop a long-term capital improvement plan that considers 20, 40 and 60 year upgrade needs to ensure viable space for investments over time and to facilitate growth as needed and in demand
Mid-Term (5-10 Years)	Policies and Plans	• Ready municipal and approving authorities for change • Provide training and support services to approving authorities and their support staff to support TOD approaches
	Utility Infrastructure	• Continue to monitor utility needs as development occurs along the corridor and if growth indicators permit, consider additional utility needs for BRT-supportive densities
	Transportation Infrastructure	• Implement enhanced bus service • Monitor anticipated growth on the corridor and begin plan development for BRT. Plan, design, and seek funding for BRT services if planned growth would support required densities
	Capital Improvement Planning	• Assess the need for additional services such as schools, emergency services, parks, etc,
Long-Term (> 10 Years)	Policies and Plans	• Evaluate growth and update comprehensive plans, zoning codes, and design guidelines to fill development gaps
	Utility Infrastructure	• Continue to monitor utility needs as development occurs along the corridor
	Transportation Infrastructure	• Plan, design, seek funding for, and implement BRT services if planned growth would support required densities • Monitor anticipated growth on the corridor to determine if densities would support LRT
	Capital Improvement Planning	• Begin planning, design, and construction of additional support services, such as schools, emergency services, and parks, etc.

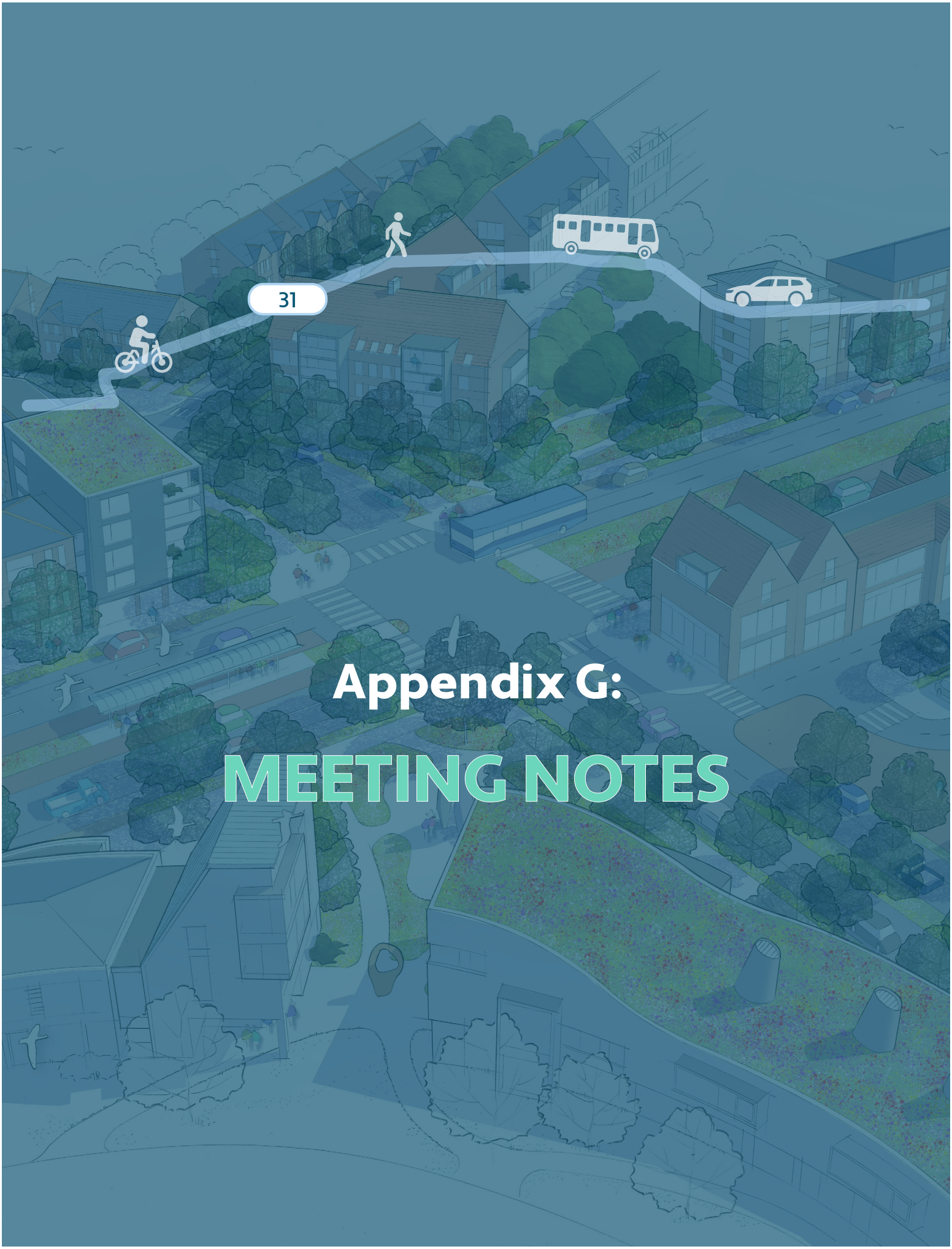
FUNDING SOURCES FOR NYS 31 TRANSIT CORRIDOR STUDY

Program	Agency	Purpose / Goals	Applicant Eligibility	Eligible Use of Funds	Loan or Grant Maximums & Terms	Additional Requirements / Notes	Funding Cycle	Contact
Better Utilizing Investments to Leverage Development (BUILD)	U.S. Department of Transportation	To fund eligible surface transportation projects that will have a significant local or regional impact that advance the Departmental priorities of safety, equity, climate and sustainability, and workforce development, job quality, and wealth creation.	State, local and tribal governments, including U.S. territories, transit agencies, port authorities, metropolitan planning organizations (MPOs), and other political subdivisions of State or local governments.	1.Capital Projects: surface transportation capital projects that including: a.highway, bridge, or other road projects eligible under title 23, United States Code; b.public transportation projects eligible under chapter 53 of title 49, United States Code; c.11 passenger and freight rail transportation projects; d.port infrastructure investments (including inland port infrastructure and land ports of entry); e.intermodal projects; f.projects investing in surface transportation facilities that are located on Tribal land and for which title or maintenance responsibility is vested in the Federal Government. 5 g.Research, demonstration, or pilot projects are eligible only if they will result in long-term, permanent surface transportation infrastructure that has independent utility 2.Planning Projects a.Planning, preparation, or design— for example environmental analysis, feasibility studies, and other pre-construction activities—of eligible surface transportation capital projects. b.In addition, eligible activities related to multidisciplinary projects or regional planning may include: i.Development of master plans, comprehensive plans, or corridor plans; ii.Planning activities related to the development of a multimodal freight corridor, including those that seek to reduce conflicts with residential areas and with passenger and non-motorized traffic; iii.Development of port and regional port planning grants, including State-wide or multi-port planning within a single jurisdiction or region; iv.Risk assessments and planning to identify vulnerabilities and address the transportation system's ability to withstand probable occurrence or recurrence of an emergency or major disaster.	Grants not less than $5 million and not greater than $25 million, except that for projects located in rural areas (as defined in Section C.4.(a)) the minimum award size is $1 million. Must provide 20% non-federal match. There is no minimum award size, regardless of location, for planning grants. $1 billion was available in FY 2025. Future funding is dependent on appropriations.	The primary selection criteria are Safety, Environmental Sustainability, Quality of Life, Mobility & Community Connectivity, Economic Competitiveness & Opportunity, and State of Good Repair. Partnership & Collaboration and Innovation are also merit criteria.	Annually, typically in January.	BUILDgrants@dot.gov
Bridge Investment Program	Federal Highway Administration	Focuses on existing bridges to reduce the overall number of bridges in poor condition, or in fair condition at risk of falling into poor condition	• A State or a group of States. • A metropolitan planning organization that serves an urbanized area (as designated by the Bureau of the Census) with a population of over 200,000. • A unit of local government or a group of local governments. • A political subdivision of a State or local government. • A special purpose district or public authority with a transportation function. • An FLMA. • A Tribal government or a consortium of Tribal governments. • A multistate or multijurisdictional group of entities described above	A project (or bundle of projects) to replace, rehabilitate, preserve, or protect a bridge on the National Bridge Inventory (NBI); or a project to replace or rehabilitate culverts on the NBI for the purpose of improving flood control and improved habitat connectivity for aquatic species. Eligible costs include: • a wide range of development phase activities (specified in statute); • construction, reconstruction, rehabilitation, acquisition of real property, environmental mitigation, construction contingencies, acquisition of equipment, and operational improvements directly related to improving system performance; and • expenses related to the protection of a bridge, including seismic or scour protection.	Grant, up to 75% (generally) of the project costs. $1 billion was available in 2023, allocated in the following manner: • State/Territory Allocation: $112 million (up to $2 million per Applicant). • Tribal Set-Aside: $50 million. • National Competition for Mitigation Projects: $701 million (estimated).	The "Other Bridge Projects" has since been closed and archived in grants.gov. It's future is uncertain.	The most recent funding cycle had the following deadlines: Large Bridge Projects: August 1, 2025. Planning Projects: October 1, 2025. Other Bridge Projects: November 1, 2025. However, "Other Bridge Projects" has been closed and archived in grants.gov and its future is uncertain.	https://www.fhwa.dot.gov/bridge/bip/
Bus and Bus Facilities Program	Federal Transit Administration	Federal funding available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants.	Low-No Program: Eligible recipients and subrecipients are designated recipients, states (including territories and Washington, D.C.), local government entities, and federally recognized Indian tribes. Bus Program: Eligible recipients are designated recipients, states (including territories and Washington, D.C.), local government entities, and federally recognized Indian tribes. Except for Indian tribes, eligible recipients must allocate funds to or operate fixed-route bus service. Eligible subrecipients are all otherwise eligible recipients and private nonprofit organizations engaged in public transportation.	Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Additionally, 0.5% of a request may be for workforce development training, and an additional 0.5% may be for training at the National Transit Institute. Applicants proposing any project related to zero-emission vehicles must also spend 5% of their award on workforce development and training as outlined in their Zero-Emission Transition Plan, unless the applicant certifies that their financial need is less.	Requires a 20% non-federal match, although may be smaller if project aligns with the ADA and the Clean Air Act.	Funding is available through both formula allocations to states and transit agencies (5339 (a)) and competitive grants (5339 (b)).	Most recent cycle closed on July 14, 2025. Anticipate similar timing in 2026.	Kirsten Wiard-Bauer FTALowNoBusNOFO@dot.gov 202-366–2053
Capital Investment Grants (CIG)	Federal Transit Administration	The Federal Transit Administration's primary financial resource for supporting transit capital projects that are locally planned, implemented, and operated	State and local governments and public transportation agencies.	Depending on the project type (New Starts, Small Starts, or Core Capacity), eligible activities include: • Design and construction of new or extended fixed guideway systems (e.g., rail, BRT) • Corridor-based BRT projects that emulate rail features • Capacity improvements of existing transit corridors (must increase capacity by at least 10%) Projects must go through a multi-step development process and receive at least a "Medium" rating from FTA based on project justification and local financial commitment.	Maximum federal share is 80% and limited to 60% for New Starts.	Future of this program is uncertain.	Project sponsors can enter the process at any time, but they must complete specific phases before receiving a construction grant: • New Starts & Core Capacity: Must complete both Project Development and Engineering phases. • Small Starts: Must complete the Project Development phase only.	FTA.CIG@dot.gov 202-366-4043
Congestion Mitigation Air Quality (CMAQ) Improvement Program	Federal Highway Administration (administeredy by the New York State DOT)	Provides funds for transportation projects that reduce congestion and improve air quality.	State, local governments and public transportation agencies. CMAQ funds are made available to the 11 NYSDOT Regions and New York City via formula funding.	CMAQ projects can generally be classified in one of the following categories: • Transit Improvements • Shared-Ride Services • Traffic Flow Improvements (non-SOV construction) • Demand Management Strategies • Pedestrian and Bicycle Programs • Inspection and Maintenance Programs	20% local match is required. The FAST Act directs FHWA to apportion funding as a lump sum for each State then divide that total among apportioned programs. Once each State's combined total apportionment is calculated, funding is set-aside for the State's CMAQ Program.	Each CMAQ project must meet three basic criteria: it must be a transportation project, it must generate an emissions reduction from motor vehicles, and it must be located in or benefit a nonattainment or maintenance area.	This ~~grant~~ program has been available for many years, although the future status of the program is unknown.	https://www.dot.ny.gov/divisions/policy-and-strategy/public-transportation/funding-sources/cmaq
Congressionally Directed Spending (Senate) Community Project Funding (House)	U.S. Congress	Provides federal lawmakers the ability to demonstrate priorities for their constituents.	State, local governments and eligible non-profit entities.	Broad latitude in projects; however, some federal lawmakers narrow what kinds of projects they will endorse.	Senate: 1% cap on discretionary spending for congressionally directed spending items. House: Each Representative may request funding for up to 15 projects in their community – although only a handful may actually be funded.	Typically in March / April. These earmarks were not available FY25.	Work through US Senators Chuck Schumer and Kirsten Gillibrand and / or Congressman John Mannion.	Work through Congressional delegation.

FUNDING SOURCES FOR NYS 31 TRANSIT CORRIDOR STUDY

Program	Agency	Purpose / Goals	Applicant Eligibility	Eligible Use of Funds	Loan or Grant Maximums & Terms	Additional Requirements / Notes	Funding Cycle	Contact
Consolidated Funding Application	New York State - multiple agencies / programs	To advance efforts to improve New York's business climate and expand economic growth; support the Regional Economic Development Council (REDC) Initiative; and allow applicants to access multiple state funding sources through one application, making the process quicker, easier, and more productive.	Varies by program but typically include for-profit businesses, not-for-profit corporations, business improvement districts, local development corporations, public benefit corporations (including industrial development agencies), economic development organizations, research and academic institutions, incubators, technology parks, municipalities, counties, regional planning councils, tourist attractions and community facilities.	Varies by program but include: • Strategic Planning and Feasibility Studies • Community Development Block Grant Program- Public Infrastructure • Parks, Preservation and Heritage (EPF) • Waterfront Revitalization Program (LWRP) • Brownfield Opportunity Area Program (BOA) • Smart Growth Community Planning Program • Canalway Grants Program N • Commercial and Industrial (C&I) Carbon Challenge (CICC) • Building Cleaner Communities Competition (BCCC) N • Water Quality Improvement Project (WQIP) Program • Climate Smart Communities Grant Program	Varies by program.	As statewide programs and local needs have evolved, so has the CFA which is now host to a multitude of programs and initiatives. These programs change throughout the year so be sure to check back periodically to see what programs are available.	Varies by program.	Daniel Kolinski 315-425-9110 nys-centralny@esd.ny.gov
Enhancing Mobility Innovation Program	Federal Transit Administration	FTA's Enhancing Mobility Innovation program advances a vision of mobility for all – safe, reliable, equitable, and accessible services that support complete trips for all travelers. The program promotes technology projects that center the passenger experience and encourage people to get on board, such as integrated fare payment systems and user-friendly software for demand-response public transportation.	Providers of public transportation, including public transportation agencies, state or local government DOTs, and federally recognized Indian tribes Private for-profit and not-for-profit organizations, including shared-use mobility providers, private operators of transportation services, technology system suppliers and integrators, bus or vehicle manufacturers or	Projects that develop novel operational concepts and/or demonstrate innovations that improve mobility and enhance the rider experience, focused on innovative service delivery models, creative financing, novel partnerships, and integrated payment solutions, or other innovative solutions. Projects that develop software to facilitate demand-response public transportation that dispatches transit vehicles through riders' mobile devices or other means.	FY21 projects ranged in size from $250,000 to $800,000. On January 17, 2025, FTA selected two projects to receive a share of $1.25 million available under the Enhancing Mobility Innovation program.		Annual	Office of Research, Demonstration and Innovation Federal Transit Administration 202-366-4052
Highway Safety Improvement Program (HSIP)	Federal Highway Administration (administeredy by the New York State DOT)	A core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land.	Eligible applicants include States, local governments, and tribal nations. HSIP funds are made available to the 11 NYSDOT Regions and New York City via a formula that includes exposure, population and crashes.	Safety projects on all public roads in New York State including local roads are eligible to receive HSIP funds.	Formula program: Each State's NHPP apportionment is calculated based on a percentage specified in law. [23 U.S.C. 104(b)(1)].	Project must align with New York State's Strategic Highway Safety Plan.	Formula program: Funding applications sought through MPO (TIP) or statewide solicitations.	Mario Colone mcolone@smtcmpo.org 315-422-5716
Innovative Coordinated Access and Mobility Grants	Federal Transit Administration	Access and Mobility Partnership Grants seek to improve access to public transportation by building partnerships among health, transportation and other service providers. This program provides competitive funding to support innovative projects for the transportation disadvantaged that will improve the coordination of transportation services and non-emergency medical transportation services.	Eligible applicants are organizations that are eligible to be recipients and subrecipients of the Enhanced Mobility for Seniors and Individuals with Disabilities Program, (defined under 49 U.S.C. 5310): designated recipients, states and local governmental authorities, private nonprofit organizations, and operators of public transportation. Proposals may contain projects to be implemented by the recipient or its subrecipients.	The ICAM Pilot Program awards funds competitively to finance innovative capital projects for the transportation disadvantaged that improve the coordination of non-emergency medical transportation services.	There is no minimum or maximum grant award amount; however, FTA intends to fund as many meritorious projects as possible. Due to funding limitations, projects selected for funding may receive less than the amount requested. In those cases, applicants must be able to demonstrate that the proposed projects are still viable and can be completed with the amount awarded. In FY24, FTA announced that 17 projects in 15 states will receive $7.8 million in Fiscal Year 2023, 2024 and prior year competitive grant funding for	Grantees will have up to 24 months from the time of the award to complete the project. Within the first year, projects must be able to demonstrate impacts related to the expected outcome as described in the application. Funds under the ICAM Pilot Program may be used for capital expenditures only. The maximum federal share of project costs under the ICAM Pilot Program is 80 percent. The applicant provides a local share of at least 20 percent of the net project cost and must document the source of the local match in the grant application.	Annual	Office of Program Management Federal Transit Administration 202-366-2053
Low or No Emission Grant Program - 5339(c)	Federal Transit Administration	Grant funding to support the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities.	Direct or designated recipients of FTA grants; States; local governmental authorities; and Indian Tribes.	• Purchasing or leasing low- or no-emission buses • Acquiring low- or no-emission buses with a leased power source • Constructing or leasing facilities and related equipment (including intelligent technology and software) for low- or no-emission buses • Constructing new public transportation facilities to accommodate low- or no-emission buses • Rehabilitating or improving existing public transportation facilities to accommodate low- or no-emission buses • Additionally 0.5% of a request may be for workforce development training and an additional 0.5% may be for training at the National Transit Institute (NTI). Applicants proposing any project related to zero-emission vehicles must also spend 5% of their award on workforce development and training as outlined in their Zero-Emission Transition Plan, unless the applicant certifies that their financial need is less.	$1.1 billion in competitive grants is available in FY2025. Federal share is 80%, although may be greater if project aligns with the ADA and the Clean Air Act.	All applicants proposing a zero-emission project, including tribes requesting less than $1 million, are required by law to submit a Zero-Emission Fleet Transition Plan.	Most recent funding cycle closed on July 14, 2025. Anticipate similar timing in 2026.	Kirsten Wiard-Bauer FTALowNoBusNOFO@dot.gov 202-366–2053.
National Highway Performance Program (NHPP)	Federal Highway Administration (administered by New York State DOT)	Provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established	Eligible applicants include States, local governments, and tribal nations. NHPP funds are made available to the 11 NYSDOT Regions and New York City via formula funding.	Projects that enhance the condition and performance of the NHS, such as: • Raising or relocating roadways • Stabilizing slopes and areas prone to landslides • Improving drainage • Using nature-based solutions to manage stormwater and reduce flooding • Bridge rehabilitation	Formula program: Each State's NHPP apportionment is calculated based on a percentage specified in law. [23 U.S.C. 104(b)(1)].	Project must align with New York State's Strategic Highway Safety Plan.	Formula program: Funding applications sought through MPO (TIP) or statewide solicitations.	Mario Colone mcolone@smtcmpo.org 315-422-5716
Pilot Program for Transit-Oriented Development Planning	U.S. Department of Transportation	Funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment.	State and local governments; Federally Recognized Tribes and Affiliated Groups; planning and project organizations; U.S. Territories	Comprehensive planning funded through the program must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations.	FY2024 grant awards ranged from $300,000 to $2 million. The maximum Federal cost-share is 80 percent.	Comprehensive planning funded through the pilot program must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations. The statute also requires that the planning work be associated with a new fixed guideway or core capacity transit project as defined in federal transit statute.	Unknown. The FY 2024 funding deadline was July 22, 2024.	April McLean-McCoy April.McLeanMcCoy@dot.gov, 202-366-7429
Public Works Program	U.S. Economic Development Administration	Provides grants to economically distressed areas for public works projects that: promote economic development; create long-term jobs; and/or benefit low-income persons or the long-term unemployed.	States, cities, counties; Indian tribes; the Federated States of Micronesia; the Republic of the Marshall Islands; commonwealths and territories of the United States; and private or public nonprofits representing a redevelopment area or a designated economic development center.	Construction and/or infrastructure projects that meet the needs of communities to enable them to become more economically competitive. Examples include projects supporting water and sewer system improvements, industrial parks, high-tech shipping and logistics facilities, workforce training facilities, business incubators and accelerators, brownfield redevelopment, technology-based facilities, wet labs, multi-tenant manufacturing facilities, science and research parks, and telecommunications infrastructure and development facilities.	50% of total project costs, up to $3,000,000	Must align with regional Comprehensive Economic Development Strategy (CEDS) document and directly tie to job retention or creation and private investment. Seems likely considering the Micron semiconductor chip manufacturing facility.	Year-round	Lucas Martin lmartin2@eda.gov 267-314-3476
Surface Transportation Block Grant Program (STBG)	Federal Highway Administration (administered by New York State DOT)	To preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.	Eligible applicants include States, local governments, and tribal nations. NHPP funds are made available to the 11 NYSDOT Regions and New York City via formula funding.	Projects must be functionally classified as collector or above, unless the project is a bridge, railroad, safety, or nonmotorized-transportation project. Eligible uses of STBG funding include: • Transit projects: Fixed guideway projects such as electric streetcar, trolley bus, monorail, and ferry vessels. • Bicycle and pedestrian infrastructure: Facilities for safe and accessible transportation. • Safety improvements: Enhancements to highway safety. • Traffic monitoring and management: Facilities and programs for traffic control and management. • Planning projects: System planning, corridor planning, and project planning. • Nonmotorized transportation: Activities like recreational trails and natural habitat mitigation.	Formula program: Each State's NHPP apportionment is calculated based on a percentage specified in law. [23 U.S.C. 104(b)(1)].	Project must align with New York State's Strategic Highway Safety Plan.	Formula program: Funding applications sought through MPO (TIP) or statewide solicitations.	Mario Colone mcolone@smtcmpo.org 315-422-5716

FUNDING SOURCES FOR NYS 31 TRANSIT CORRIDOR STUDY								
Program	**Agency**	**Purpose / Goals**	**Applicant Eligibility**	**Eligible Use of Funds**	**Loan or Grant Maximums & Terms**	**Additional Requirements / Notes**	**Funding Cycle**	**Contact**
Transportation Infrastructure Finance & Innovation Act (TIFIA)	Federal Highway Administration	Provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance.	State departments of transportation; local government; transit agencies; special authorities; special districts; railroad companies; and private firms or consortia that may include companies specializing in engineering, construction, materials, and/or the operation of transportation facilities.	Many surface transportation projects: Bridges; Intelligent Transportation Systems; Intermodal Connectors; Transit Vehicles and Facilities; Intercity Buses and Facilities; Freight Transfer Facilities; Pedestrian Bicycle Infrastructure Networks; Transit-Oriented Development; Rural Infrastructure Projects; Passenger Rail Vehicles and Facilities; Surface Transportation Elements of Port Projects Project must be included in the applicable State Transportation Improvement Program.	Low-interest loans with flexible terms. Minimum Anticipated Project Costs: $10 million for Transit-Oriented Development, Local, and Rural Projects $15 million for Intelligent Transportation System Projects $50 million for all other eligible Surface Transportation Projects TIFIA Credit Assistance Limit – Credit assistance limited to 33% of reasonably anticipated eligible project costs (unless sponsor provides a compelling justification for up to 49%).	Investment Grade Rating – Senior debt and TIFIA loan must receive investment grade ratings from at least two nationally recognized credit rating agencies (only one rating required if less than $75 million) Dedicated Repayment Source – The project must have a dedicated revenue source pledged to secure both the TIFIA and senior debt financing	Ongoing application cycle, starting with a Letter of Interest.	BuildAmerica@dot.gov 202-366-2300
Urbanized Area Formula Grants - 5307	Federal Transit Administration	Federal resources available to governors and other recipients for transit capital and operating assistance and transportation-related planning in urbanized areas.	Funding for urbanized areas with a population of 200,000 or more is made available to designated recipients that are public bodies with the legal authority to receive and dispense federal funds. For urbanized areas with a population of 200,000 or more, governors, responsible local officials and providers of publicly owned public transportation service select a designated recipient to receive and apportion funds to eligible projects and recipients within the urbanized area.	Planning, engineering, design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement, overhaul and rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, station infrastructure, track, signals, communications, and computer hardware and software. In addition, associated transit improvements, workforce development activities, and certain expenses associated with mobility management programs are eligible under the program. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.	Funding is apportioned based on legislative formulas. For urbanized areas with a population of 200,000 or more, the formula is based on a combination of bus vehicle revenue miles, bus passenger miles, fixed guideway vehicle revenue miles, fixed guideway directional route miles, fixed guideway passenger miles, and operating expenses, as well as population, low-income population, and population density. The federal share is not to exceed 80 percent of the net project cost for capital expenditures. The federal share may be 85 percent for the	CNYRTA is the only recipient of the Section 5307 funds in the SMTC planning area.	Office of Program Management, FTA, 202-366-2053	Office of Program Management, FTA, 202-366-2053



Appendix G:

MEETING NOTES

Stantec

Meeting Notes

Study Advisory Committee Meeting – Kick-Off

NYS Route 31 Transit Corridor Assessment

Date/Time:	January 18, 2024 / 11:00 AM
Place:	MS Teams
Next Meeting:	March 2024 – To Be Scheduled
Attendees:	SMTC: Mario Colone (Project Manager); James D'Agostino Stantec: Erin Cameron; Adam Catherine (Project Manager); Ralph DeNisco; Steve Kearney; Graeme Masterton; Astrid Mayak; Craig Sklenar EDR: Samuel Gordon; Benjamin Woelk Town of Lysander: Supervisor Kevin Rode Village of Baldwinsville: Mayor Bruce Stebbins Town of Clay: Supervisor Damian Ulatowski Town of Cicero: Supervisor Michael Aregano NYSDOT: Julie Baldwin; Ike Achufusi CNY Regional Planning & Development Board: David Bottar Onondaga County Planning: Megan Costa; Daniel Kwasnowski
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

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Notes

Project Approach

The study will focus on transit and land use along Route 31, although recommendations may address side streets and multimodal improvements to support transit and development along corridor.

It was suggested that Stantec consider mapping visualizations at a wider geography, capturing Central Square, and Bridgeport, to understand regional trips on Route 31.

Transit options considered will include on-demand bus, enhanced bus service, BRT, and light rail/streetcar.

Separate from this process, SMTC is working with Micron and their transportation consultant to evaluate transportation alternatives given impact on the corridor.

The study will consider that, in order to get people to switch to transit, a land use shift is needed. A modification in density and mixed land use will naturally encourage transit and multimodal uses.

Project Goals to be developed as part of Task 1 – Open Discussion

D. Kwasnowski: Get communities and agencies to accept that Route 31 will be a multimodal corridor (less focus on preserving current travel patterns with slip ramps, etc.). It should create a future vision for what density is appropriate, what communities want to see, and what transit will serve this area.

M. Aregano: It is crucial to include members from the Town. In the past, those preparing plans haven't included the implementors in the planning process. We need walkability and need to prepare for not just the Micron development, but more of a long-term, 50-year plan.

Notes
D. Ulatowski: How will Verplank Road be included? Walkable communities won't happen around the Route 31 corridor, but on the side streets, where you have community centers and an opportunity to create walkable places. **M. Costa**: The study should identify shared aspirations about what we want this area to be in 30-years so we can match the expectations between government, development community, etc. It should support shared and cohesive ideas. Biggest needs/concerns are if we don't do transit, what is the alternative? How do we handle those volumes of cars? Congestion leads to bigger roads and that causes conflict with other community goals. **D. Bottar:** Don't limit ideas because of perceived cost constraints. There might be future funding opportunities that we won't know about. We should look both at big bold projects and the more practical options. Verplank and Mud Mill should be included in the study, as the multiuse transportation network on Route 31 will need to connect; this is the time to stretch the parameters of this study. **M. Aregano:** In Cicero, we are working with public works and developers to encourage them to widen sidewalks and improve intersections. At Route 31 and South Bay Road, NYSDOT is doing an intersection with 4-way left-turn lanes and we are asking the developers to add sidewalks. **B. Stebbins:** Baldwinsville is the western edge, and we live with congestion due to the bottleneck of the corridor in the village and the limited crossings of the river. How will we handle the bottleneck at Baldwinsville if the improvements will cause any level of congestion? Would like to see this study discuss connecting Van Buren Road to Route 631 via a new bridge that was previously thought about. Ideas of walkability, bikeability, and crosswalks are important because they experience people get hit by riding bikes on shoulders and crossing Route 31. **K. Rode**: What are the DOT's plans for Cicero? You can't fix the congestion in Cicero. It was a 45-minute trip to go to the mall in the holiday season. Micron could bring congestion at those levels most of the time. The study might want to look at the northern end of the project area for light rail. To get someone to buy into using a bus, will take a lot of convincing as the drive mentality is huge. Sidewalks are not common everywhere and they are trying to get developers to add them, but this doesn't happen always. Would like a long-term path. On the flip side, people don't bike or walk in the cold which is most of the winter.
Next Steps Communities to share data with SMTC to pass on to Stantec team. Stantec to provide SMTC and communities with data request. SAC Meeting #1 and Focus Groups to be scheduled for March 2024. J. D'Agostino to set-up meeting with Town of Clay and potentially Project Team to discuss how Verplank Road can support this planning process.

Stantec

Meeting Notes

Study Advisory Committee Meeting Number 1

Route 31 Transit Corridor Assessment

Date/Time:	March 15, 2024 / 10:00 AM
Place:	Town of Clay, Town Hall
Next Meeting:	TBD
Attendees:	SMTC: Mario Colone (Project Manager); James D'Agostino Stantec: Erin Cameron; Adam Catherine (Project Manager); Ralph DeNisco; Craig Sklenar EDR: Samuel Gordon; Benjamin Woelk Town of Lysander: Supervisor Kevin Rode Village of Baldwinsville: Mayor Bruce Stebbins Town of Clay: Supervisor Damian Ulatowski Town of Cicero: Supervisor Michael Aregano NYSDOT: Julie Baldwin; Ike Achufusi CNY Regional Planning & Development Board: David Bottar Onondaga County Planning: Megan Costa; Daniel Kwasnowski CENTRO: Bren Daiss
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

Item:	Action:
Schedule Study Advisory Committee #2 in June/July to discuss transportation service options (Task 4).	SAC Members to send contacts for the study Focus Groups (to be scheduled)
Scope, Vision, Purpose, and Goals Ensure the matrix explains if X then Y, given the corridor will experience change and recommendations should consider the change needed for outcomes. Plan Onondaga struggled with employment forecasts – this study should try and relate road capacity, occupancy, and employment. With an exception of a few locations, the corridor has poor non-auto connections; this analysis needs to show that the corridor is starting from a multimodal deficit. Planning for the future of an area should be comprehensive with acknowledgement of long term needs; process needs to consider how much land might be needed long-term, so there isn't a separate process later on to revisit this conversation should more land be needed for transit expansion – this will be incorporated into the implementation matrix.	Project Team will consider short term actions that can prepare the corridor for multimodal change (~5 year near term potential recommendations: identifying property for development, preparing for funding and grant applications, enhance pedestrian and bicycle connections, comprehensive plan updates)

Item:	Action:
State can set ROW to preserve space through development approvals – recommendations for this kind of policy shift can be part of this process. Cicero and Clay are working on comprehensive plans that can inform this study, and vis versa.	
Activity Town of Clay believes there needs to be a backup corridor, should Route 31 become too congested for effective transit (Verplank Road – corridor may need to be completely rebuilt to support the kinds of development being considered here, but will play a role in some way). This plan needs to get ahead of growth, and the style of growth and development needs to support walkable trips to cut down on car-only trips (this may not be supported by all residents along the corridor). County traffic model indicates the Transportation System can support Micron development; it is the ancillary development that can impact the transportation system poorly, so this process will help to identify the type of development and housing to reduce the single-vehicle trips (mixed-use to support walkable centers – *internal capture*). Evaluation should consider VMT over LOS (similar to California). Introducing an urban environment and plan in a rural area will face challenges in approaches with the town taxpayers – there are no apartments here and mixed-use is a drastic change.	Study area does not have hard boundaries, as corridor plans will need to rely on the full network for success Project to identify Micron campus entry points Plan will factor in traffic model increases (will use a tool like VMT, if not VMT exactly) Plan will focus on nodal development, rather than redeveloping the entire corridor – housing typologies can be more akin to what exists today, so townhouses and duplexes (including some owner-occupied options) rather than high rise apartments; the plan needs to plan for who is not here, in addition to those who are here today Plan to include the unit count and housing typology suggestions required to support different transit options
Access 46% of all daily trips that end in the Destination Area, also start there; the other 54% some from neighboring communities. 31% of daily trips that end in the Destination Area come from somewhere in Clay; 6.3% of daily trips that end in the Destination Area come from somewhere in Cicero.	SAC to consider where there are traffic pinch points, when this occurs, how long they occur Full sidewalk network around development should be implemented

Item:	Action:
Shorter trips (1-5 miles) are the kinds of trips that can be easily switched to non-auto modes; ~50% of trips along the corridor are less than 5 miles. Study area has sidewalks to no where. People walk where they need to, even without a sidewalk. Comfortable sidewalks matter.	Project Team to update maps to show crosswalk at Route 621
Opportunities and Next Steps Span of service matters. Transit needs to meet the needs of all users, including those with off-peak commuting times (third shift). People are more likely to take transit when there is permanent infrastructure, as it suggests the bus will come more often. BRT service requires that more than 50% of the ROW be in a dedicated lane; while there are places along the corridor that cannot support this with the limited ROW and existing land uses, there is potential for a dedicated lane at other places along the corridor, meaning this is not off the table. Park and Rides work when there is an incentive to get drivers out of their cars (either traffic and delay, or cost of parking where they are going) which may not be the case for the Route 31 corridor.	Plan to consider: enhanced bus, on-demand bus, BRT, light-rail, and streetcar

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Stantec Consulting Services, Inc.

Stantec

Meeting Notes

Study Advisory Committee Meeting 2

Route 31 Transit Corridor Assessment Study

Date/Time:	June 18, 2024 / 2:00 PM EDT
Place:	Cicero Fire Station
Next Meeting:	TBD
Attendees:	Mario Colone (SMTC) Erin Cameron (Stantec) Bren Daiss (Centro) Damian Ulatowski (Town of Clay Supervisor) Ike Achufusi (NYSDOT) Julie Baldwin (NYSDOT) Kevin Rode (Town of Lysander Supervisor) Bruce Stebbins (Village of Baldwinsville Mayor) Michael Aregano (Town of Cicero Supervisor) James D'Agostino (SMTC) Craig Sklenar (Stantec) Ralph DeNisco (Stantec) Sam Gordon (EDR)
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

Item: **Action:**

1. Mario's Opening Remarks:

Mario opened the meeting by acknowledging the progress made with the focus groups and highlighted the upcoming sessions.

2. Project Overview by Erin Cameron (Stantec):

Erin provided a brief overview of the project goals, objectives, and schedule.

3. Planned Development and Changes (EDR):

The discussion on planned development and changes centered on configuring housing units along the corridor to bolster transit development and emphasized the necessity for gradual transformations over the next 50-100 years. Opportunities were identified for mixed-use developments and improved connectivity to create more vibrant urban environments.

The complexity of existing zoning, comprising over 50 zones, was highlighted for its significant impact on transit-supportive initiatives. Proposed strategies included integrating townhomes, multi-family units, and mixed-use buildings to enhance residential density while accommodating diverse land uses. Challenges posed by current zoning regulations were acknowledged, affecting both development patterns

Item:	Action:
and the seamless integration of transit systems. Emphasis was placed on implementing contextual changes throughout the corridor to foster cohesive development, alongside investments in public realm enhancements like walkability, bikeability, and landscape improvements that are integral to supporting transit infrastructure.	
4. Transit Options shared by Stantec: Discussed five transit options (On-Demand Bus, Enhanced Fixed Route Bus, Bus Rapid Transit (BRT), Streetcar, Light Rail Transit (LRT). Highlighted differences in infrastructure requirements, capacity, and operational costs for each option. The project will identify potential station locations along the Route 31 corridor and provide visualizations of what the development patterns could look like to support the various transit options.	Gather feedback from Onondaga County for preferred transit options to explore land use in visual format
Recommendations may include a combination of service options to plan for land use appropriate for Towns, while meeting transit needs of corridor and working within the right-of-way available	Develop a regional connection map that examines north to south connection in Onondaga County and examines how existing transportation routes connect in the Route 31 Transit Corridor.
Next Steps: The project team will narrow down from five to three transit alternatives to further explore. **The SAC members discussed Enhanced Fixed Route Bus, BRT, and LRT as their preferred options for further exploration. SMTC will review the preferred options with Onondaga County to receive their input. Project team to visually represent land use and density required to support different transit options (identified above)**	Further analyze the potential for the preferred transit options and develop visualizations of potential development patterns with transit supportive densities.
The consultant team will consider the potential for future population growth as a result of the Micron project and its implications for future housing demand. The team will also identify potential regulatory and zoning tools that would complement the transit service alternatives. Successful transit service will require the integration of land use planning, zoning and regulatory updates, and transit investments.	Evaluate zoning adjustments to support transit-oriented development.

5. Discussion and Action Items:

- Participants expressed interest in studying Enhanced Fixed Route Bus, Bus Rapid Transit, and Light Rail Transit options further.
- Agreed to await input from Onondaga County before finalizing transit options.
- Identified the need for a regional connection map to understand interconnected transit components.
- Discussed ongoing studies related to rail options in Onondaga County.
- Emphasized the integration of public realm enhancements and station amenities to support transit quality.
- Outlined the necessity for zoning adjustments to accommodate anticipated population growth effectively.

Conclusion:

The meeting concluded with a clear direction to proceed with further evaluation of three transit options and development strategies along

Item:	Action:
Route 31 including **Enhanced Fixed Route Bus, Bus Rapid Transit, and Light Rail Transit**. Participants agreed on the importance of collaborative planning and await additional insights from Onondaga County to advance the project.	

Meeting Notes

Final Focus Group

Project/File:	Route 31 Transit Corridor Assessment
Date/Time:	June 18 / 19, 2024
Attendees:	Town of Clay (9/18/2024) Town of Cicero (9/19/2024) Stantec EDR
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

Notes

The project team met with the Town of Clay ahead of the second SAC meeting in June 2024, and the Town of Cicero after the meeting. These meetings were intended to review the corridor activity, infrastructure, and opportunity for growth within the municipality.

Town of Clay

The Town of Clay is undergoing a comprehensive zoning update.

Discussion around an alternate transit route was a primary focus, understanding the Micron site will need secondary access, otherwise Route 31 will have too much traffic.

The Town of Clay indicated housing growth is important given the Town's housing supply is 10 years behind. Their policies are designed to support single-family houses that support renters getting out of the rental market, with the ability to purchase a home in Clay. For this reason, the Town is not supportive of apartments and other renter-occupied housing types as a primary focus of growth.

The project team discussed housing types (other than single-family) that can support growth, such as duplexes, townhomes, and condos. Growth in the Town of Clay is already planned for the Great Northern Mall site, and parcels west of Clay Village.

Town of Cicero

The Town of Cicero shared the status of the town's comprehensive plan, and that the people of Cicero are ready for growth and change. The new growth and development throughout the town should be cohesive and attractive – passed design guidelines to regulate this.

The Comprehensive plan is considering creating a village center east of I-81 at Lakeshore Road. The Project Team indicated this site can be included in the illustrations to show what a transit-oriented village center may look like. In a future study, the Town wants the I-81/Rt. 31 interchange reviewed and improved

The Town was also interested in extending the transit corridor east towards Bridgeport. Sullivan is growing to accommodate a casino development and interested in pursuing a NY Forward grant.

For the transit alternative, light-rail continues to be the most interesting mode as there is concern about residents and employees taking a bus (but a train would encourage them to get out of cars).

Notes
Continued concern about the state disregarding recommendations for a transit-forward, pedestrian friendly right-of-way given past experience with left-turn lanes being added for businesses.

Meeting Notes

Study Advisory Committee Meeting #3

Project/File:	Route 31 Transit Corridor Assessment
Date/Time:	November 15, 2024 / 10:30 AM
Location:	MS Teams
Next Meeting:	Spring 2025
Attendees:	SMTC: Mario Colone, Jim D'Agostino Onondaga County: Megan Costa, Centro: Steven Koegel Baldwinsville: Mayor Bruce Stebbins Town of Clay: Supervisor Ulatowski Town of Cicero: Kate Fiorello Stantec Consulting: Erin Cameron, Adam Catherine, Craig Sklenar
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

Notes	Action:
After the SAC 2 meeting in June 2024, the Project Team advanced Light Rail Transit, Bus Rapid Transit, and Enhanced Bus Transit service to the illustrative phase of the project. • Light Rail Transit requires a bridge crossing the existing railroad at Clay Village and a new bridge in Baldwinsville; the political feasibility of this should be considered when weighing this transit alternative • Bus Rapid Transit requires a bridge crossing the existing railroad at Clay Village for through vehicles and may require operating in the existing general purpose lanes (no priority) through Baldwinsville, given limited space • Enhanced bus service will use bus only lanes and bus priority where able to provide high quality service The presentation showed 4 locations along the corridor and the redevelopment potential of the sites. • Downer Street • Oswego Road • Clay Village • Cicero Town Center 3 of these sites were selected to illustrate an example redevelopment, as needed under of one of the three transit types. • Downer Street – Enhanced Bus • Oswego Road – Light Rail Transit • Cicero Town Center – Cicero Town Center Each transit service has it's own level of density and housing/commercial development needed. The exact design and location is only an example. Existing	Project to pause until April ; consultant Team will be unavailable, but SMTC is available for comments and suggestions from committee members; a need for additional meetings during project hiatus should be requested through Mario Colone Task 6 will advance one of the three transit options and illustrate a station area at each of the 4 locations with this transit type, and the associated land use needed. The selected transit service and land use should strive to meet the project goals and objectives, and will be evaluated

Notes	Action:
plans (Great Northern Mall, multifamily housing developments) were not selected, as the examples are meant to illustrate density at any of the station areas along Route 31, rather than the detailed urban form of planned projects. Route 31 was selected for this study area, and sites on other roadways (e.g. Verplank Road) are not shown in this process; if transit is envisioned for another corridor, the same station area density shown in these graphics would be needed to support transit	by the measures described in the attached table

Study Goal	Criterion	Evaluation Measures
Establish a multimodal corridor framework.	Miles of exclusive transit right-of-way.	Total mileage of exclusive transit right-of-way, including bus lanes, queue jumpers, pullouts, and track (for LRT/Streetcar)
	Miles of proposed sidewalks.	Increase in the mileage of sidewalks.
	Pedestrian crossing density.	The number of proposed marked crossings of NYS 31 per mile.
	Miles of low-stress bicycle facilities.	Increase in the mileage of low-stress pedestrian and bicycle facilities.
Prepare NYS31 for transit-oriented communities.	Transit-supportive land uses within one-half mile of the corridor (2050)	Future population and employment density within one-half mile of the corridor that would be capable of supporting the alternative.
	Economic development potential	Number of potential redevelopment sites that are within walking distance* of proposed stops/stations.
	Potential for “missing middle” housing	Number of potential duplex/triplex, townhome, and condo units within walking distance* of a stop/station.
	Zoning potential/capacity	Potential maximum density within walking distance* of stops/stations. This will be measured as a comparison of existing zoning versus potential TOC-supportive zoning.
Foster regional growth to support communities.	Municipal support	A qualitative measure of municipal support for the transit alternative (high, medium, low).
	Likelihood of adoption of recommendations into municipal comprehensive plans, zoning ordinances, etc.	A qualitative measure of the likelihood that the recommendations associated with a particular alternative would be adopted into municipal plans or ordinances (high, medium, low).
	Employment served	The number of existing jobs that would be within walking distance* of a station area.

Study Goal	Criterion	Evaluation Measures
	Population served	Existing population that lies within walking distance* of a station area.
Identify strategies for long-term corridor success.	Ridership (2050)	Total daily boardings and annual ridership in 2050 (full build-out of Micron).
	Projected vehicle miles traveled (2050)	Measures change in automobile miles traveled that would result from a shift from driving to transit. This would be measured from by comparing No Build and Build conditions in 2050 (full build-out of Micron).
	Corridor travel time.	Total estimated time that it would take to travel from one end of the corridor to the other using transit.
	Travel time ratio.	The ratio of transit travel time to vehicle travel time for an average end-to-end trip.
	Zero-car households served	Number of zero car households within walking distance of a stop/station.
	Affordable housing served	Number of existing and potential affordable housing units within walking distance of stops/stations.
	Households below poverty level served	Number of households below poverty level that are within walking distance* of stops/stations.
	Renters served	Number of rental households that are within walking distance* of stops/stations.
	Minority population served	Minority population that is within walking distance of stops/stations.
	Elderly and young populations served	Elderly (>65 years of age) and young (<18 years of age) population that is within walking distance* of stops/stations.
Support implementation.	Level of community support	A qualitative measure of community support for the transit alternative (high, medium, low).
	Number of potential short-terms actions	Number of recommended short-term actions.
	Capital cost	Planning-level capital cost estimate (in 2024 dollars) per lane/track-mile that includes infrastructure, rider amenities, and vehicle acquisition costs.

Study Goal	Criterion	Evaluation Measures
	Annual operating and maintenance costs	Planning-level annual operation and maintenance costs in 2024 dollars.
	Cost effectiveness	Cost per rider in 2024 dollars.
	Potential funding	The proportion of the capital cost that could be paid by using known sources of funding
	Operating hours	Proposed hours of operation upon full build-out.
	Operating frequency	Proposed service frequency upon full-build out.

Meeting Notes

Final Focus Group

Project/File:	Route 31 Transit Corridor Assessment
Date/Time:	September 15, 2025 / 10:00 AM
Location:	SMTC
Attendees:	Town of Cicero: Michael Aregano, Kate Fiorello Town of Clay: Joseph Nicoletti, Deb Magaro-Dolan Town of Lysander: Kevin Rode Town of Van Buren: Wendy Van Der Water Village of Baldwinsville: Bruce Stebbins NYSDOT: Ike Achufusi, Julie Baldwin Centro: Bren Daiss SMTC: Jim D'Agostino Stantec: Adam Catherine, Erin Cameron
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

Notes

The final focus group was intended to preview the illustrations for the final report, review the evaluation, and frame the implementation steps (will be reviewed in more detail at final SAC) with the study advisory committee. The discussion focused primarily on the implementation and next steps.

The report shares example station areas, but the same level of development would be needed at each station to support transit. The transit does not work with only a few nodes of density.

There was discussion about the need for reserving right-of-way to ensure NYSDOT planning and construction does not preclude the ability to advance the further study of transit along Route 31.

Jim (SMTC) and Julie (NYSDOT) indicated the municipalities can comment on the existing EIS document and indicate they want the right-of-way reserved. It was recommended that the municipalities combine to write a letter to NYSDOT requesting incorporation of transit.

There was discussion of an on-going study advisory committee to continue conversations about transit and how to advance transit. This group should focus on the transit service and the land use that is required to support transit.

The process needed a final recommendation to include in the final report. Stantec polled the room, asking each municipality for their preferred corridor approach. The results showed support for **enhanced bus along the entire corridor**. BRT would be the ultimate solution but can be explored at a later time.

Van Buren – Enhanced bus, or no-build
Lysander – Enhanced bus or BRT
Baldwinsville – Enhanced bus in town, BRT for corridor
Clay – likes light-rail for transit, but realistically can't support the land use required for BRT or LRT; enhanced bus
Cicero – BRT with LRT connections to Cicero

Meeting Notes

Study Advisory Committee Meeting #4

Project/File:	Route 31 Transit Corridor Assessment
Date/Time:	November 19, 2025 / 9:00 AM
Location:	MS Teams
Attendees:	SMTC: Mario Colone, Jim D'Agostino Onondaga County: Megan Costa, Troy Waffner Centro: Bren Daiss NYS DOT: Ike Achufusi Van Buren: Wendy Van Der Water Baldwinsville: Bruce Stebbins Town of Cicero: Kate Fiorello Stantec Consulting: Erin Cameron, Adam Catherine
Distribution:	Mario Colone; James D'Agostino; Stantec Project Team SMTC to distribute notes to communities as needed

Notes	Action:
The final SAC meeting focused on reviewing a transit and land use study for the Route 31 corridor, which evaluated various transit options and their associated development requirements. The team presented renderings and plans for potential light rai, bus rapid transit, and enhanced bus densities, discussing implementation guidance and timeframes for enhanced bus service as the immediate goal. The group concluded by discussing transportation improvements, bike and pedestrian infrastructure, and next steps for coordinating between municipalities and planning future initiatives. The report shares example station areas, but the same level of development would be needed at each station to support transit. The transit does not work with only a few nodes of density. It was recommended that the report should specify that corridor-wide bicycle and pedestrian facilities should parallel the transit, not just at station areas. Megan (County Planning) suggested SMTC hold briefing sessions for the municipal planning boards to explain the recommendations and next steps required to advance the plan (will review if there is room on the Planning Federation agenda). There was a discussion about the need for reserving right-of-way AND modifying zoning codes to encourage transit-oriented development. Municipalities to agree on a unified voice to respond to Micron EIS and make a single request to NYSDOT for right-of-way acquisition where needed, to ensure new designs do not preclude the ability to integrate transit in the future.	Comments for report are due December 2, 2025 to Mario Colone