



# TECHNICAL MEMORANDUM

To: Barbara Cadwell, NYSDOT, WJCTC  
From: Nelson\Nygaard Consulting  
Date: June 1, 2018  
Subject: Potential Transit Development Corridors

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## OVERVIEW

The document identifies corridors in Watertown and Jefferson County, plus immediately adjacent areas, for potential new transit services. Data is presented supporting preliminary calculations on the most optimal locations for regional transit expansion. Corridor profiles provide a more detailed level of design for the potential service. The possible service type, span, and service frequency for weekdays as well as weekend days are included.

Following this document, and incorporating the same analysis, the study team will more elaborately describe evaluation criteria and prepare a preliminary visual representation of recommended transit services for each corridor as part of a technical memo on the screening and ranking process. At this stage the methodology behind the ranking system will be described. Included in this system are:

- Operational feasibility assessments, which may lead to the removal of unsustainable routes from the list of corridors
- Social justice considerations, as described by the Transit Propensity Index (TPI) in each corridor profile, which weights the concentration of low-income households, persons with disabilities, older adults, and zero-vehicle households; segments of the population most likely to depend on transit for their transportation needs
- The effect on existing transit operators, including potential integration details
- Public survey results, which may result in additions or reprioritization of resources as portrayed in this document.

Once screening and ranking is complete, corridor and service options will be assembled into multiple potential service network packages. Each service network package will be presented with:

- Predicted operational performance statistics
- Vehicle and staffing requirements
- Scheduling assumptions
- A financial analysis containing capital and operating requirements
- Organizational and operational recommendations
- Funding packages available to the recommendation organization

The findings will be provided to the advisory committee in a technical memo on corridor selection and organizational structure. A Project Advisory Committee meeting and further stakeholder meetings will inform revisions to that document.

## SUMMARY

The potential corridors work together to create a more comprehensive regional transit network.

- Ten route corridors perform 38 weekday round trips
- Weekday service span is longer than the current CitiBus service span on select corridors
  - Opportunities exist in later phases of the study to better integrate with CitiBus and potentially extend service span of the overall network
- 14 Saturday and 14 Sunday round trips would be provided
- Based on anticipated ridership, the appropriate service vehicle would be a 21-34 passenger cutaway van (example pictured)



## EXISTING TRANSIT NETWORK IMPACT

The corridors described in this memo are not intended as a replacement for the CitiBus service. After corridors are screened further, the integration of existing transit routes will be included in regional transit system service network packages. The integration of existing routes and resources into the regional system may result in a transit network with a longer weekday service span. Subsequent study documents will also include discussion of potential transfer station expansion and/or relocation alternatives.

## CORRIDORS FOR SCREENING/RANKING

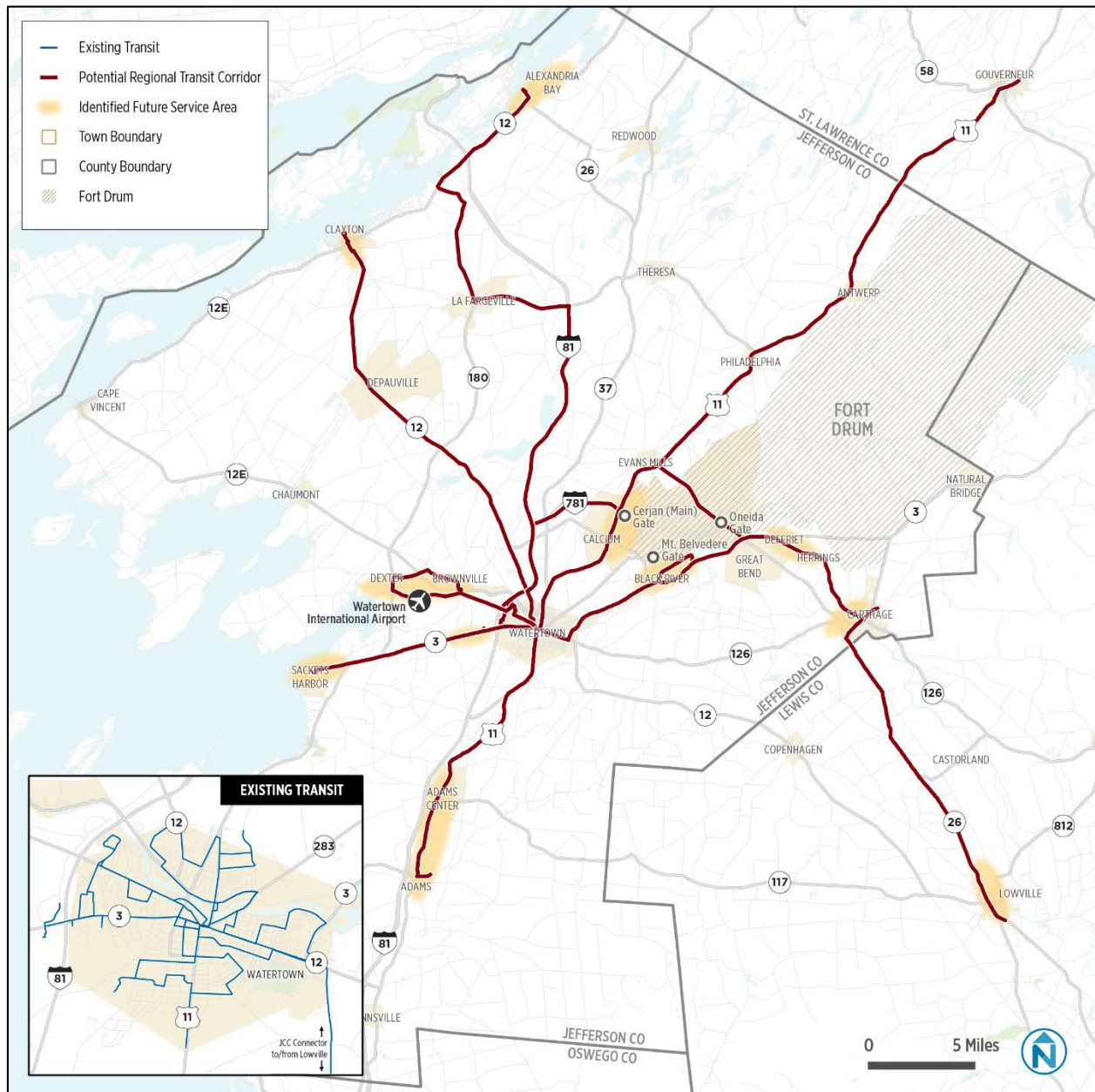
In the table below, corridors are sorted with the most optimal locations for service expansion listed first.

Corridor	Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Weekday Round Trips	Weekday Start	Weekday Stop	Saturday Round Trips	Sunday Round Trips
Fort Drum/Calcium	27.4	49	10	7:25AM	7:30PM	4	4
Sackets Harbor	21.5	49	5	8:45AM	7:30PM	2	2
Dexter/JCC/Airport	16.8	39	5	7:35AM	6:35PM	2	2
Adams	28.6	53	5	7:20AM	6:35PM	2	2
Carthage	40.8	78	5*	7:00AM	6:50PM	2	2
Fort Drum/JCC/Commercial Express	26.0	51	3	11:00AM	7:30PM	2	2
Gouverneur	72.3	101	2	7:00AM	4:45PM	0	0
Lowville	70.9	109	2	7:00AM	6:50PM	0	0
Clayton	44.7	63	2	9:05AM	6:05PM	0	0
Alexandria Bay	67.4	83	2	7:25AM	6:25PM	0	0

\* Includes 2 Lowville round trips. 3 weekday trips terminate in Carthage

POTENTIAL TRANSIT DEVELOPMENT CORRIDORS  
City of Watertown

## CORRIDOR MAP



## EVALUATED CORRIDOR PROFILES

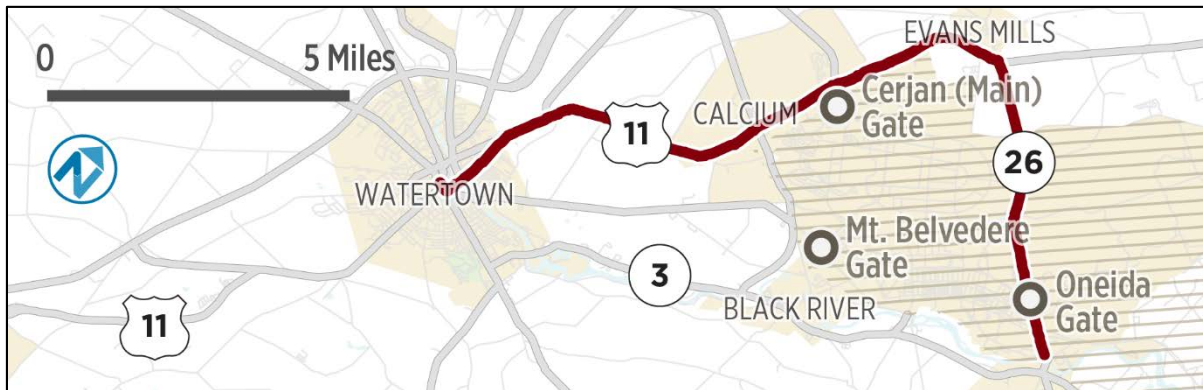
### Watertown – Fort Drum/Calcium

Via US Route 11, NY Route 26

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
30.8	49	1,372	1,032	13.5
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
10	7:25AM 7:30PM	4	4	1,786

#### Route Description

The Fort Drum corridor operates mostly along US Route 11 with the ability to serve multiple Fort Drum gates. The corridor serves multiple commercial areas in addition to multiple military employment centers, including Wheeler-Sack Army Airfield. Uncertainty is acknowledged regarding the exact off-post transfer location to a potential base-operated shuttle.





POTENTIAL TRANSIT DEVELOPMENT CORRIDORS  
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## Watertown – Sackets Harbor

via NY Route 3

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
21.5	48	763	938	12.2
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
5	8:45AM 7:30PM	2	2	623

### Route Description

The Sackets Harbor corridor increases frequency of access along Arsenal Street to the commercial area at the western edge of the Watertown city limits. The corridor also extends coverage to the Jefferson-Lewis BOCES and the Sackets Harbor village center.



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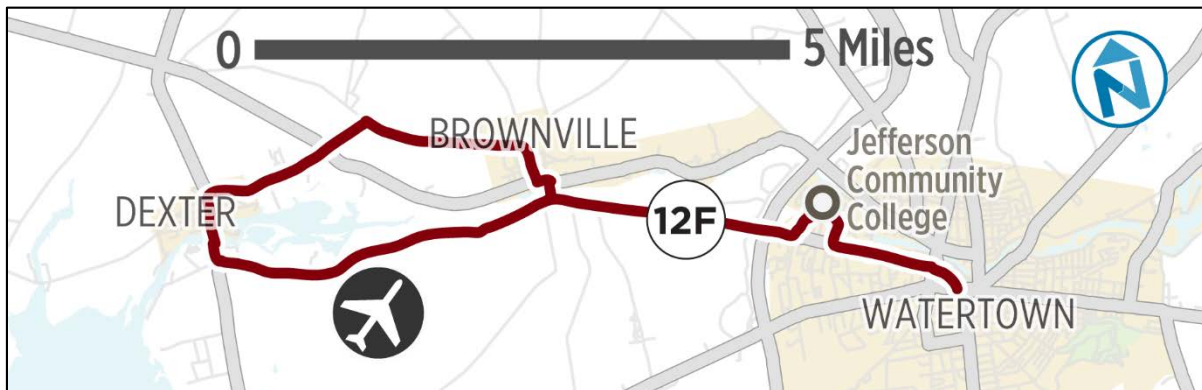
# Watertown – JCC/Airport/Dexter/Brownville

via NY Route 12F & Jefferson County Route 53

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
16.8	39	746	788	13.3
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
5	7:35AM 6:35PM	2	2	487

## Route Description

The Sackets Harbor corridor increases frequency of access along Coffeen Street to Jefferson Community College. The corridor also extends coverage to a major hardware store, Watertown International Airport, and the village centers of Dexter and Brownville.



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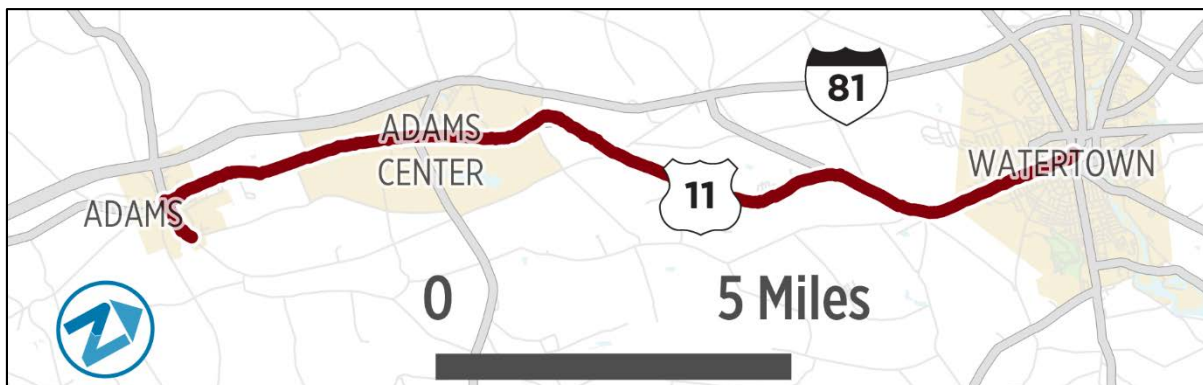
## Watertown – Adams/Adams Center

via US Route 11

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
28.6	52	753	849	12.1
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
5	7:20AM 6:35PM	2	2	830

### Corridor Description

The Adams/Adams Center corridor provides bus service along Route 11 (Washington Street in the City of Watertown), terminating at the Country View Apartments senior meal site in Adams. The corridor serves Downtown Watertown, Samaritan Medical Center, additional medical offices, Watertown City Schools, multiple supermarkets, and the business districts of Adams and Adams Center.





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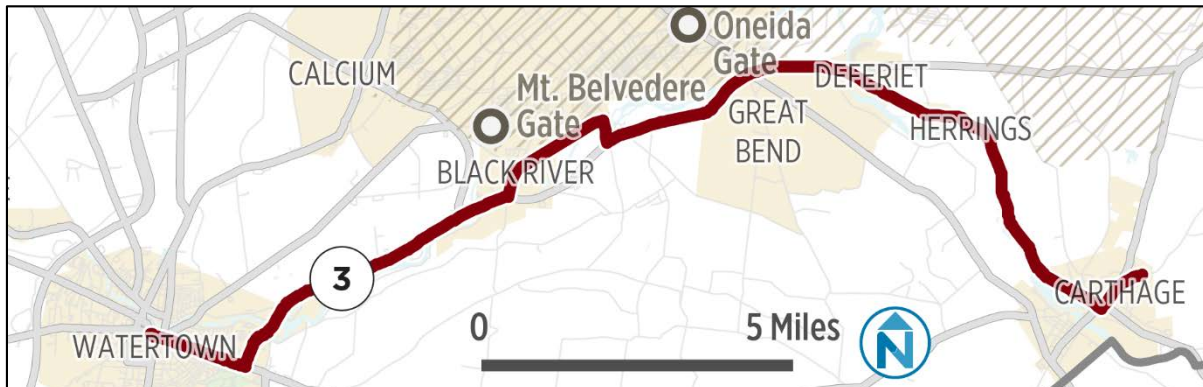
## Watertown – Carthage

### Via NY Route 3

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
40.8	77	883	448	13.9
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
5 <sup>†</sup>	7:00AM 6:50PM	2	2	953

#### Route Description

The Carthage corridor travels along NY Route 3 to connect multiple small communities along the Black River to the City of Watertown and Village of Carthage, providing access options for medical facilities and other daily needs. The corridor travels near to two Fort Drum access points, potentially increasing service to the military population, before terminating at Carthage Area Hospital.



<sup>†</sup> Includes 2 Lowville round trips. 3 weekday trips terminate in Carthage



## Fort Drum/JCC/Commercial Express

Via Interstate 81 & Interstate 781

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
26.0	48	979	237	13.5
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
3	11:00AM 7:30PM	2	2	494

### Route Description

The Fort Drum/Jefferson Community College/Commercial Express corridor links the Fort with JCC and commercial areas at the western edge of the City of Watertown without travelling to Downtown Watertown. The route would utilize Interstates 781 and 81 to arrive at the college. The route links together populations with high transit propensity indices (soldiers, students) to commercial necessities such as supermarkets, clothing, and home supply stores. Again, the exact off-post transfer location to a potential base-operated shuttle is subject to change.



# POTENTIAL TRANSIT DEVELOPMENT CORRIDORS

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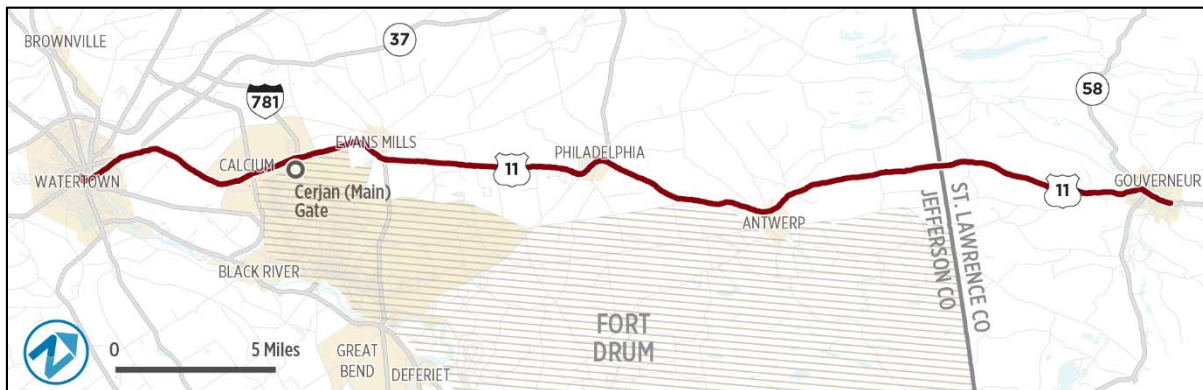
### Watertown – Gouverneur

Via US Route 11

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
72.3	104	669	482	10.2
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
2	7:00AM 4:45PM	0	0	723

#### Route Description

The Gouverneur corridor is designed to connect to St. Lawrence County Transit on East Main Street in the Village of Gouverneur. The route passes in close proximity and augments service to the Fort Drum Main Gate and the commercial area immediately to the west and could be used to augment service to the Fort.



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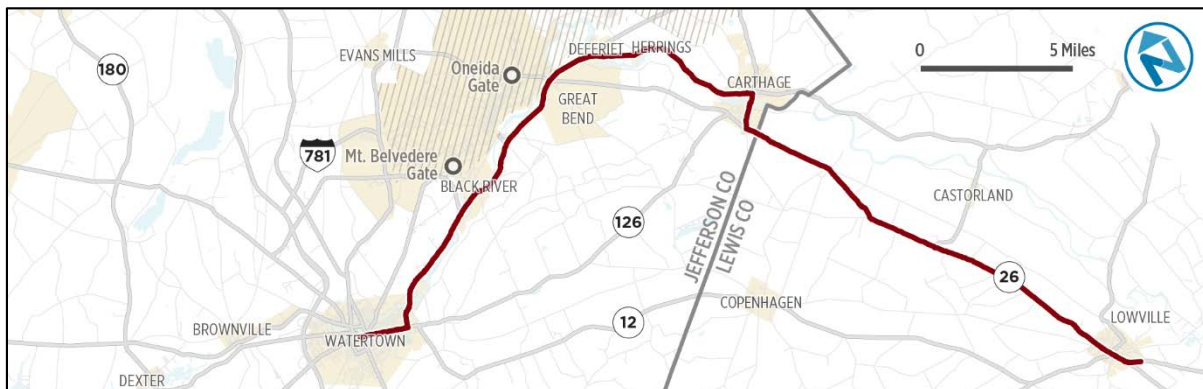
### Watertown - Lowville/Carthage

Via NY Rt. 3 & NY Rt. 26

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
70.9	109	555	334	12.2
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
2	7:00AM 6:50PM	0	0	709

#### Route Description

The Lowville corridor extends the Carthage corridor to the Village of Lowville on select weekday trips, linking regional employment, medical, and social services centers to intermediate destinations. The Lowville trips do not travel into Great Bend.





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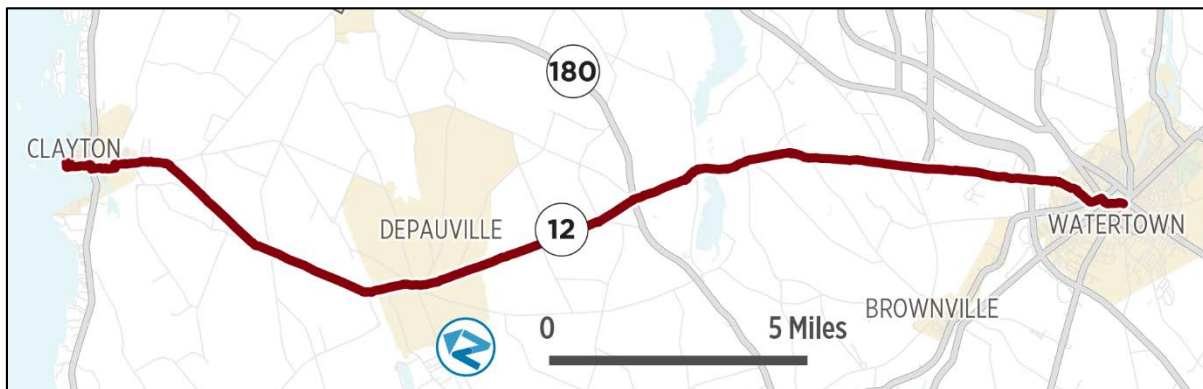
### Watertown – Clayton

Via NY Rt. 12

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
44.7	63	437	370	8.8
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
2	9:05AM 6:05PM	0	0	447

#### Route Description

The Clayton corridor connects Route 12 to Clayton destinations such as the Paynter Senior Citizens Center, Samaritan Family Health Center, and a full service supermarket, terminating on Riverside Drive in the Village of Clayton's business district. The route would only operate on weekdays, making two round trips, and would attempt to coincide with employment schedules.



POTENTIAL TRANSIT DEVELOPMENT CORRIDORS  
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## Watertown – Alexandria Bay/La Fargeville

Via Interstate 81, NY Route 180, & NY Route 12

Round Trip Route Length (Miles)	Round Trip Running Time (Minutes)	Population (Persons per Route Mile)	Employment (Jobs per Route Mile)	Corridor TPI
67.4	83	273	229	8.5
Weekday Round Trips	Weekday Span	Saturday Round Trips	Sunday Round Trips	Weekly Revenue Miles
2	7:25AM 6:25PM	0	0	674

### Route Description

The Alexandria Bay corridor would function as an express service, utilizing Interstate 81 between exits 47 and 49 before resuming transit service along NY Routes 411, 180, and 12. The route would provide access to a major employment center in La Fargeville as well as a hospital in Alexandria Bay. The route would only operate on weekdays, making two round trips, and would attempt to coincide with employment schedules.

