

Planning for complete road networks

Meghan Vitale

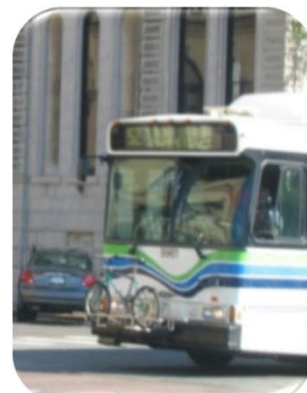
Syracuse Metropolitan Transportation Council



Metropolitan Planning Organization (MPO):

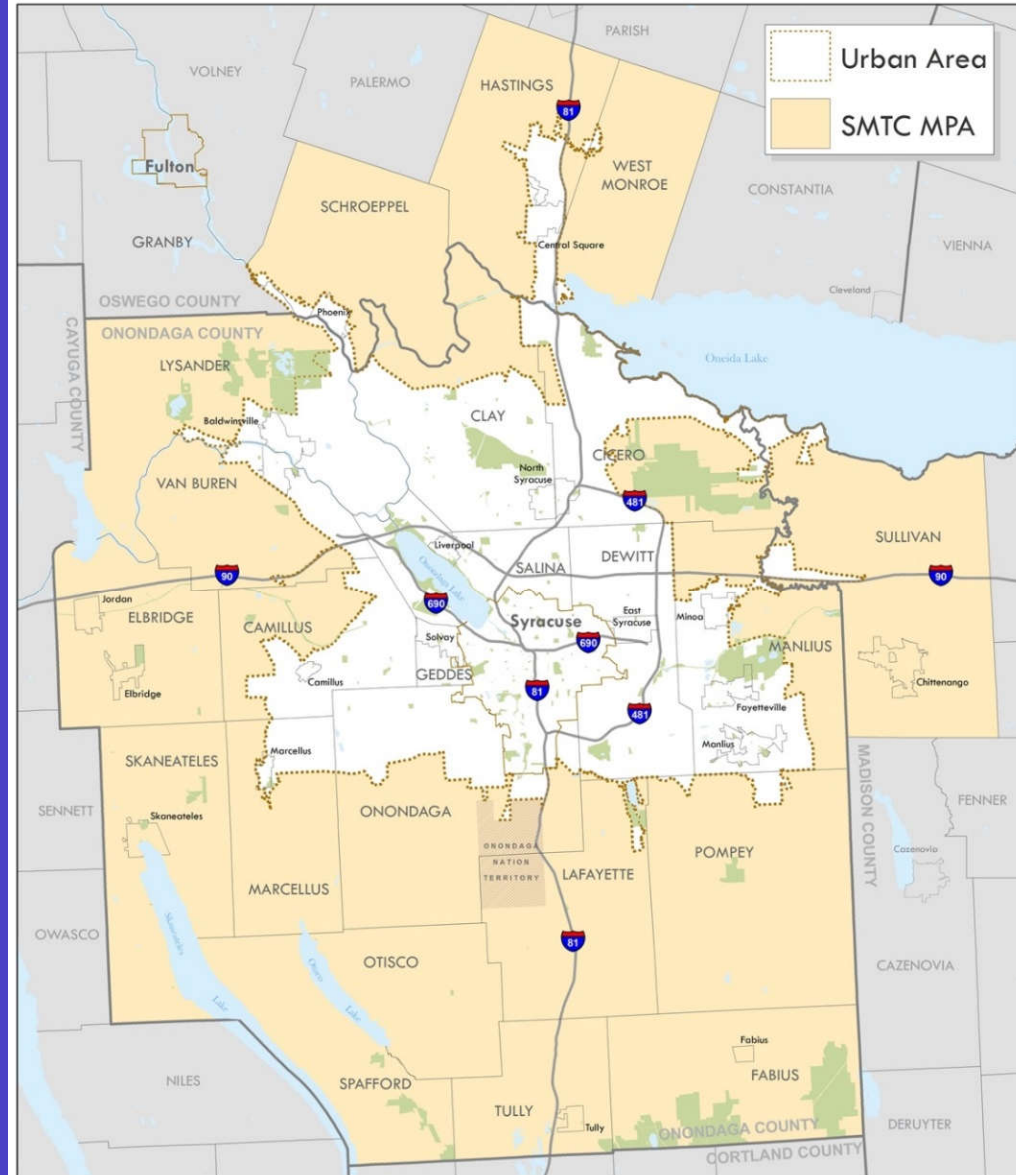
a transportation policy-making and planning body made up of representatives of local, state, and federal government and transportation authorities.

The MPO is charged with the **comprehensive, cooperative, and continuous** transportation planning process for a metropolitan area.



SMTC's Metropolitan Planning Area (MPA)

- All of Onondaga County
- Town of Sullivan in Madison County
- Towns of West Monroe, Hastings, Schroepfel, and small portion of Town of Granby in Oswego County



Member Agencies

The Policy Committee is the MPO.

Central New York Regional Transportation Authority (Centro)

Central New York Regional Planning & Development Board

City of Syracuse:

Mayor Common Council Department of Public Works
Planning Commission Planning

CenterState Corporation for Economic Opportunity

New York State:

Department of Environmental Conservation Department of Transportation
Empire State Development Corporation Thruway Authority

Onondaga County:

County Executive Department of Transportation
County Legislature Syracuse Onondaga County Planning Agency
Planning Board



Staff

Director Planners Analysts

SMTC planning and programming



Regional
transportation
vision



Specific transportation
studies and plans



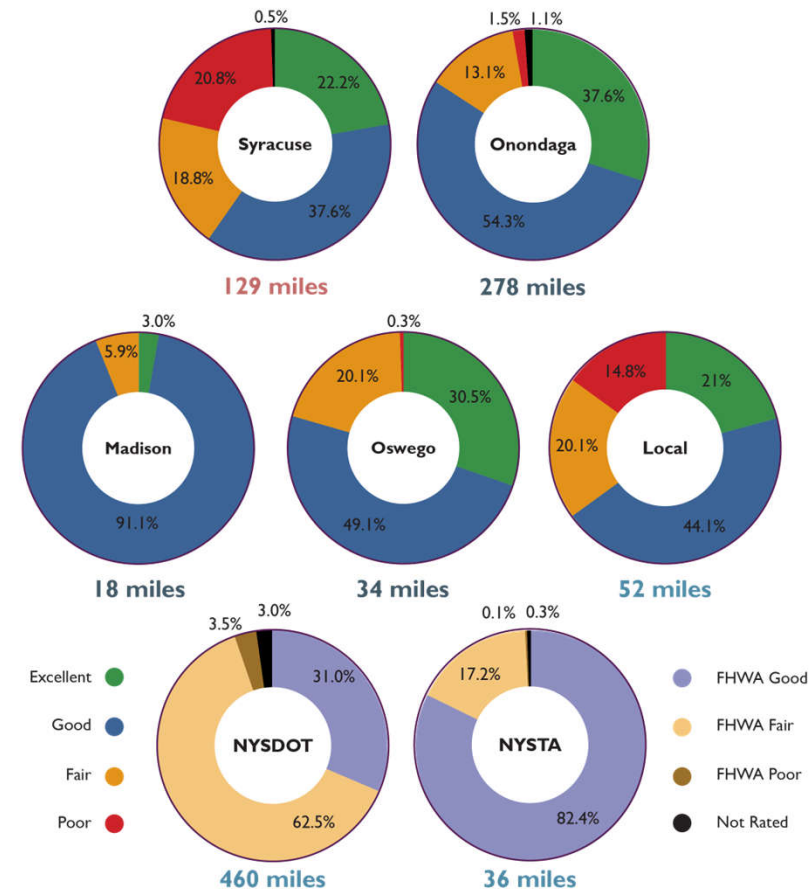
Federal
funding
program

Pavement and bridge conditions

Aging infrastructure requires ongoing, cyclical maintenance

- Pavement conditions generally 'fair' to 'good', but higher percentage of 'poor' pavement on local (town, village, city) roads.
- Most bridges in 'fair' condition.

Pavement conditions
*SMTC Bridge and Pavement Condition
Management System Report, 2021-2022*



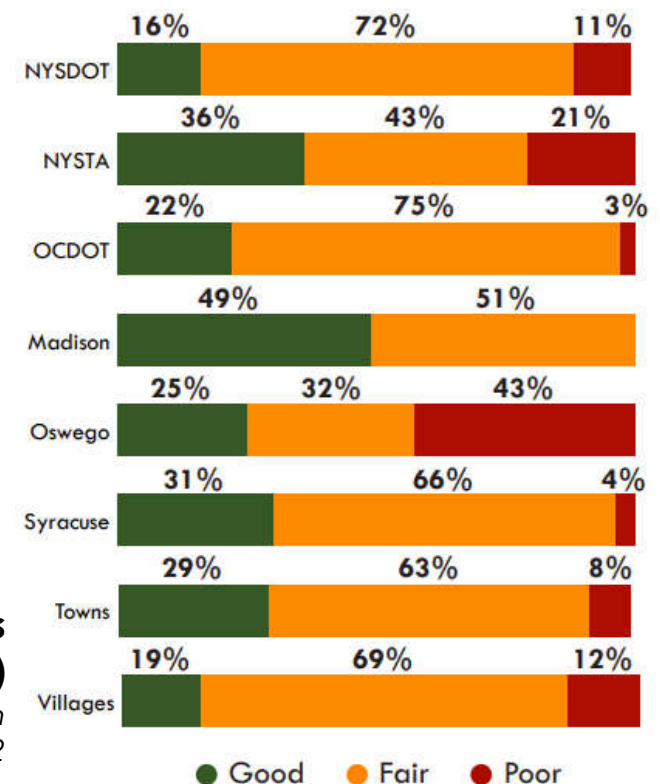
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Bridge conditions (NBI rating weighted by deck area)

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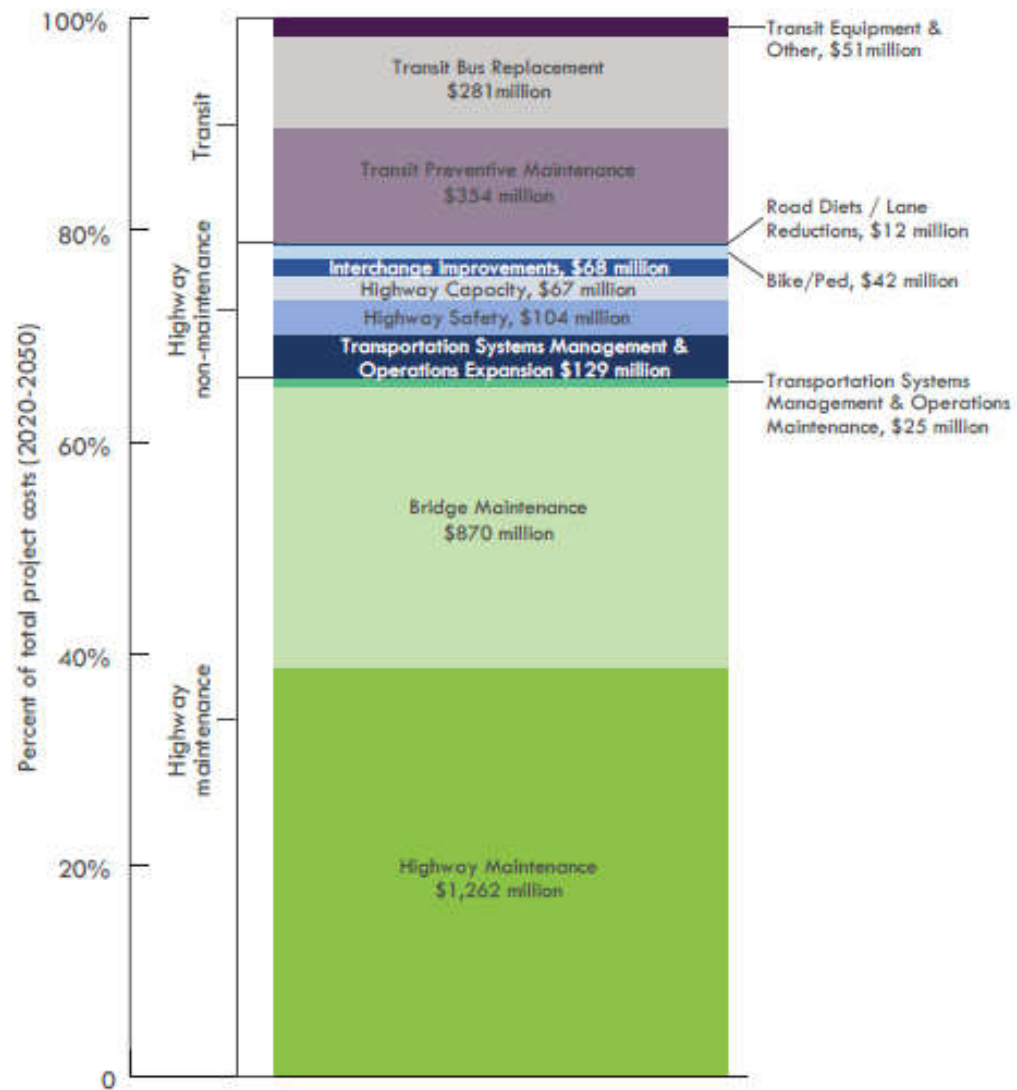


Transportation system performance

- Currently, highway system works very well for drivers; some isolated areas of congestion.
- Support for expanding transit, bicycle, and pedestrian options.
 - Enhance job accessibility, especially 'reverse commute'
 - Maintain high transit service frequency in urban core
 - Attract and retain population interested in multi-modal options
- Maintaining good conditions and performance will support economic development.

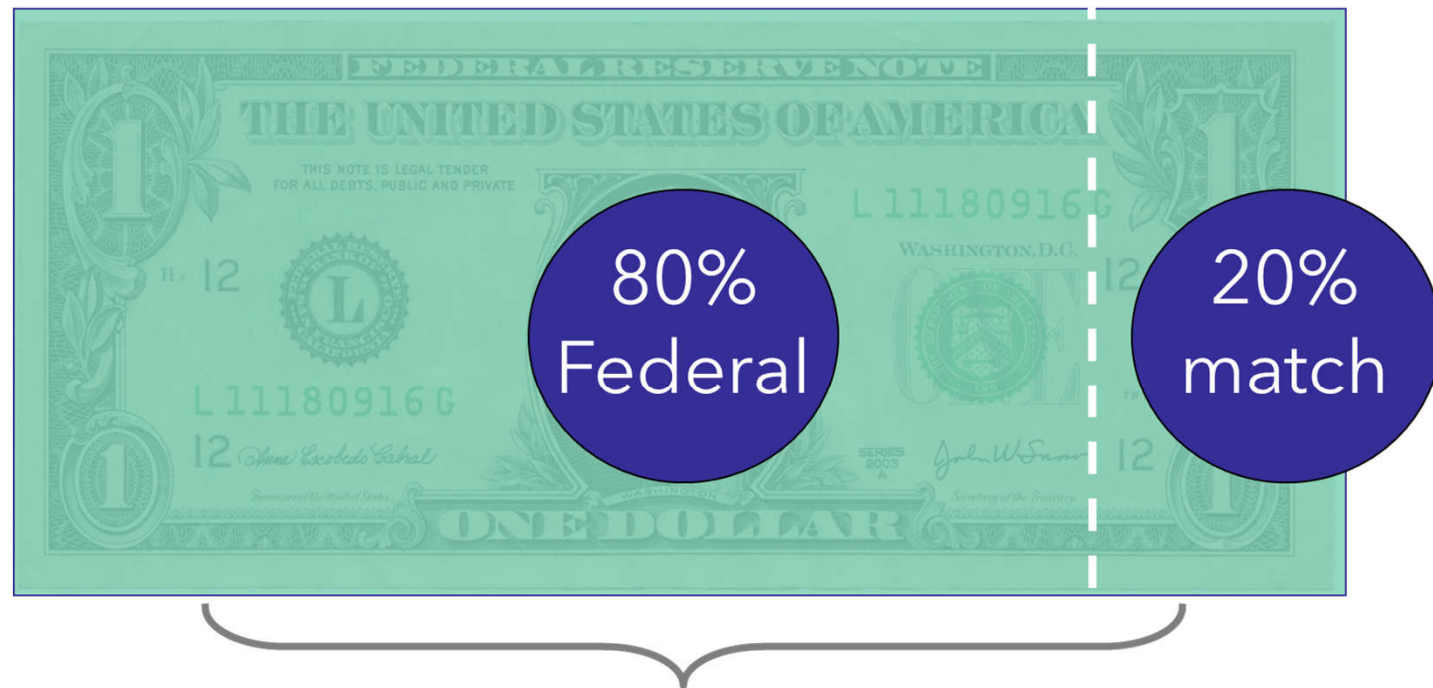


Maintenance projects make up the bulk of transportation spending in our region.



The Transportation Improvement Program (TIP)

- Lists all capital projects programmed with Federal Highway (FHWA) or Federal Transit (FTA) funds
- Reimbursement, not a grant



Sponsor required to first instance 100% of funding (individual phase or bill)

The Transportation Improvement Program (TIP)

Project selection

Eligibility screening

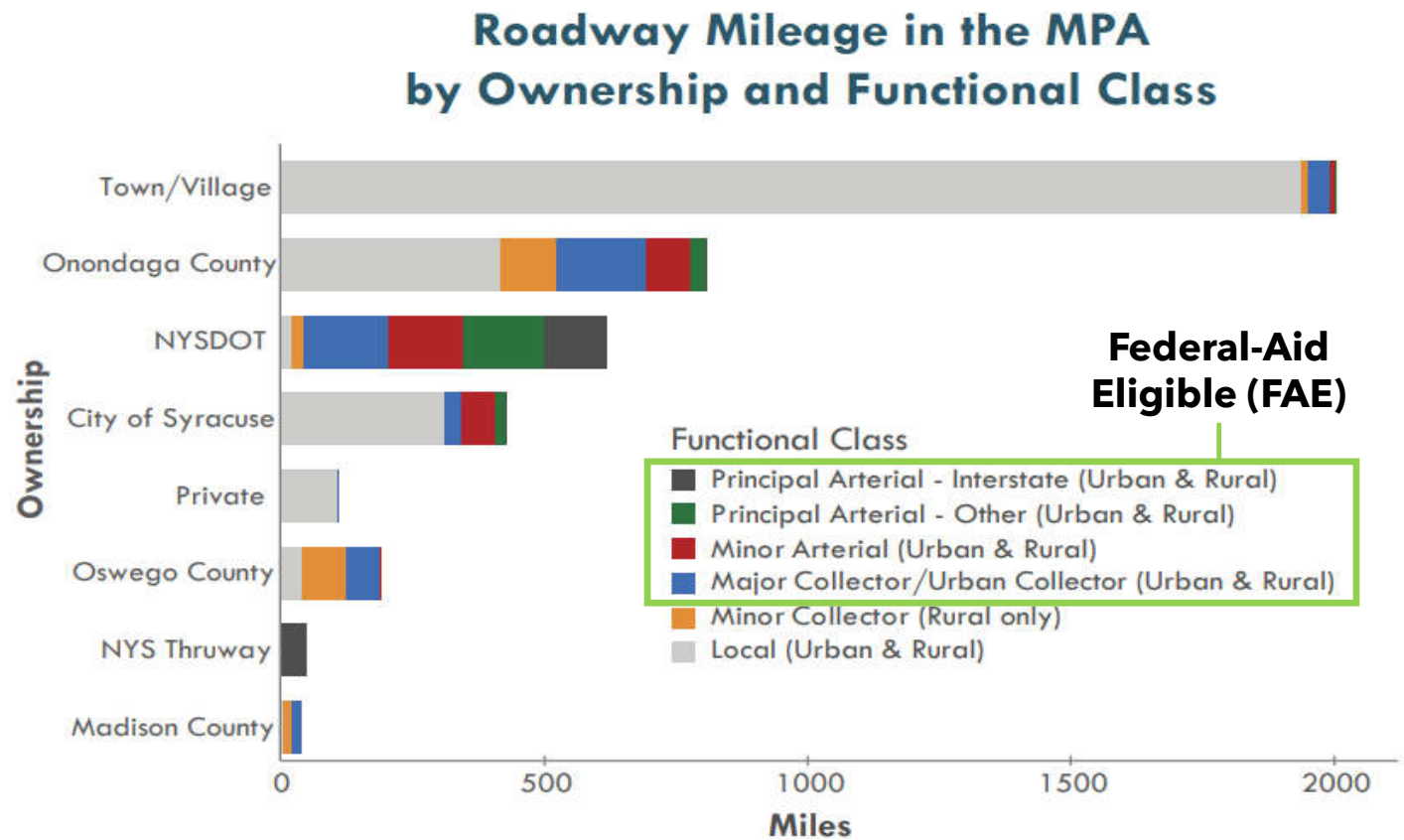
- **Paving** work must be on a Federal-Aid Eligible facility (based on functional classification)
- **Bridge** work can be on any public roadway, regardless of functional classification
- **Culverts** must be on a Federal-Aid Eligible facility

Detailed project evaluation: Consistency with LRTP goals, objectives, and performance measures

- Freight movement
- Safety, security, resiliency
- Multi-modal accessibility and mobility
- Environment, energy conservation
- Reliability
- Preserve existing infrastructure
- Equity

Functional Class	Federal Aid Eligible?
Principal Arterial	✓
Minor Arterial	✓
Major Collector	✓
Urban Minor Collector	✓
Minor Collector	
Local	

Most road mileage is owned by towns and villages, and is NOT Federal-Aid Eligible.



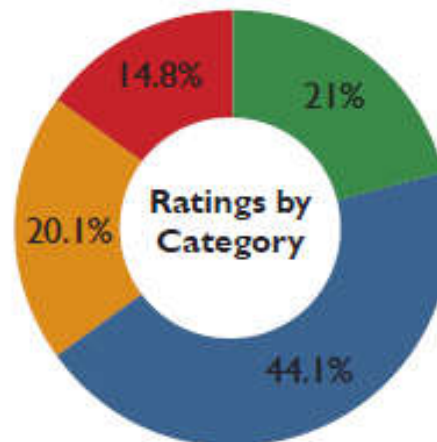
Only 52 miles of town/village FAE roads, but most of that in good-excellent condition.

Towns and Villages

Total FAE Miles 52

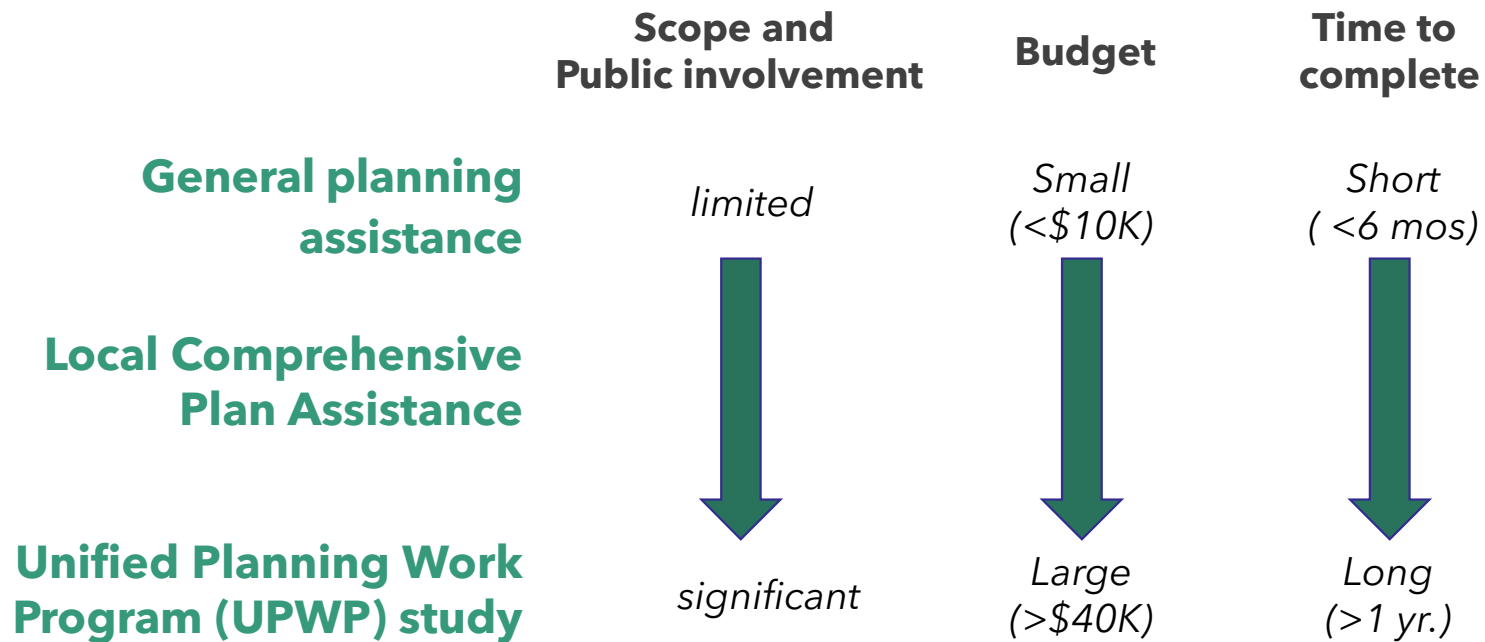
Weighted Average Rating 7.2

No NHS Miles

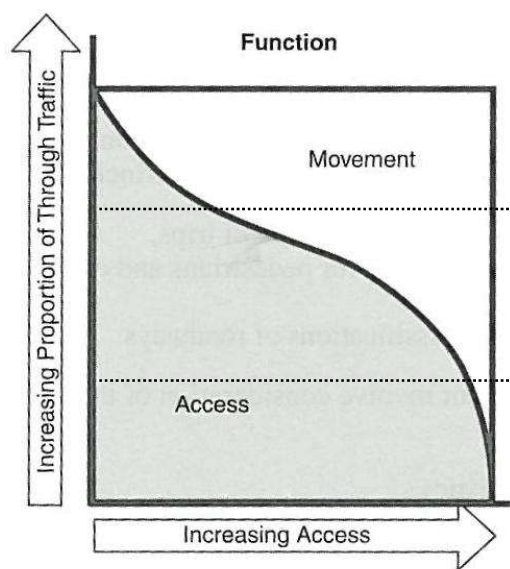


Rating	Condition Description
9 - 10 Excellent	No or slight pavement distress.
7 - 8 Good	Minor to moderate distress occurring infrequently to occasionally.
6 Fair	Moderate to severe distress occurring occasionally to frequently.
1 - 5 Poor	Severe or very severe distress occurring frequently. Travel may be impaired.

Planning assistance SMTC can provide



Elements of complete road networks



Arterials: movement of through traffic

Collectors: connection between local roads and arterials; some through movement, some access

Local roads: access to residential properties

Logical hierarchy

Access management on arterials and collectors

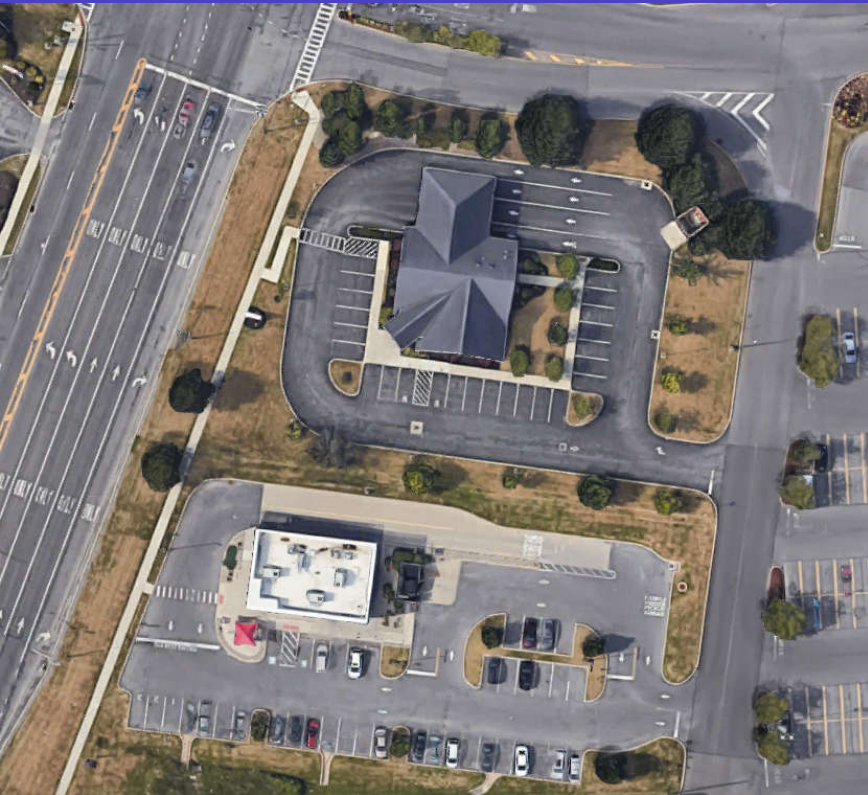
High connectivity

Bicycle and pedestrian facilities

Transit-supportive features

Amenities and design

Elements of complete road networks



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arterials and collectors**

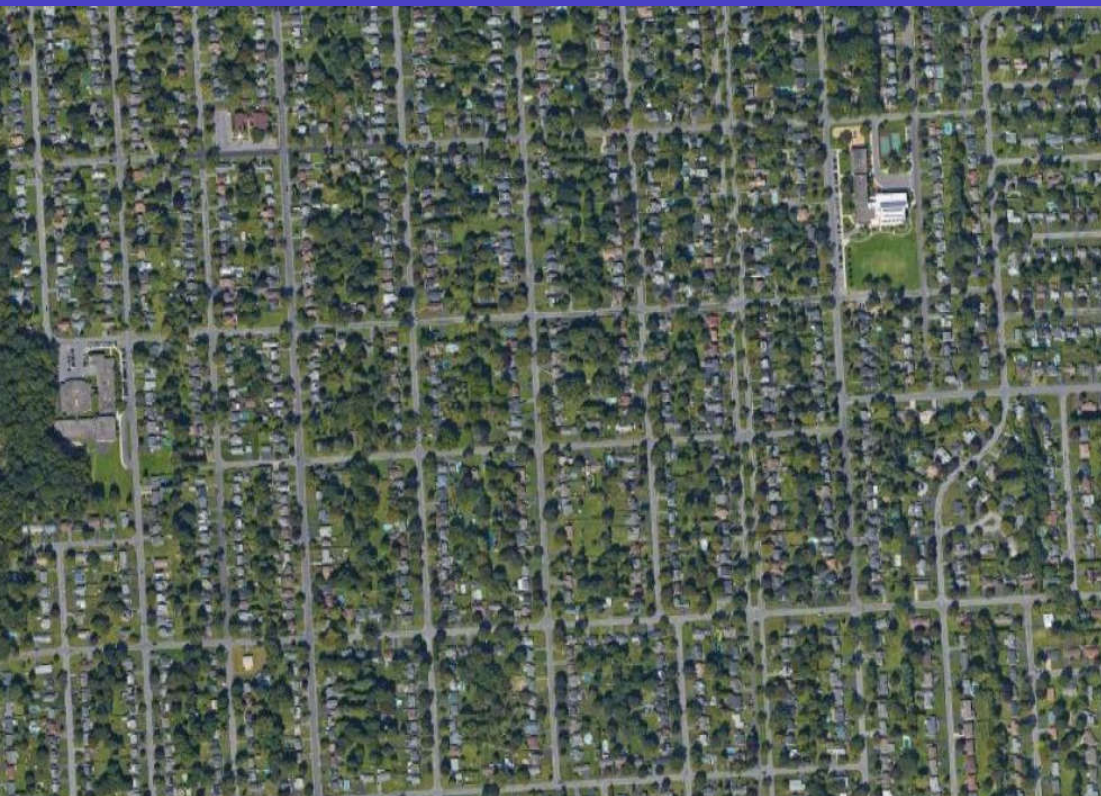
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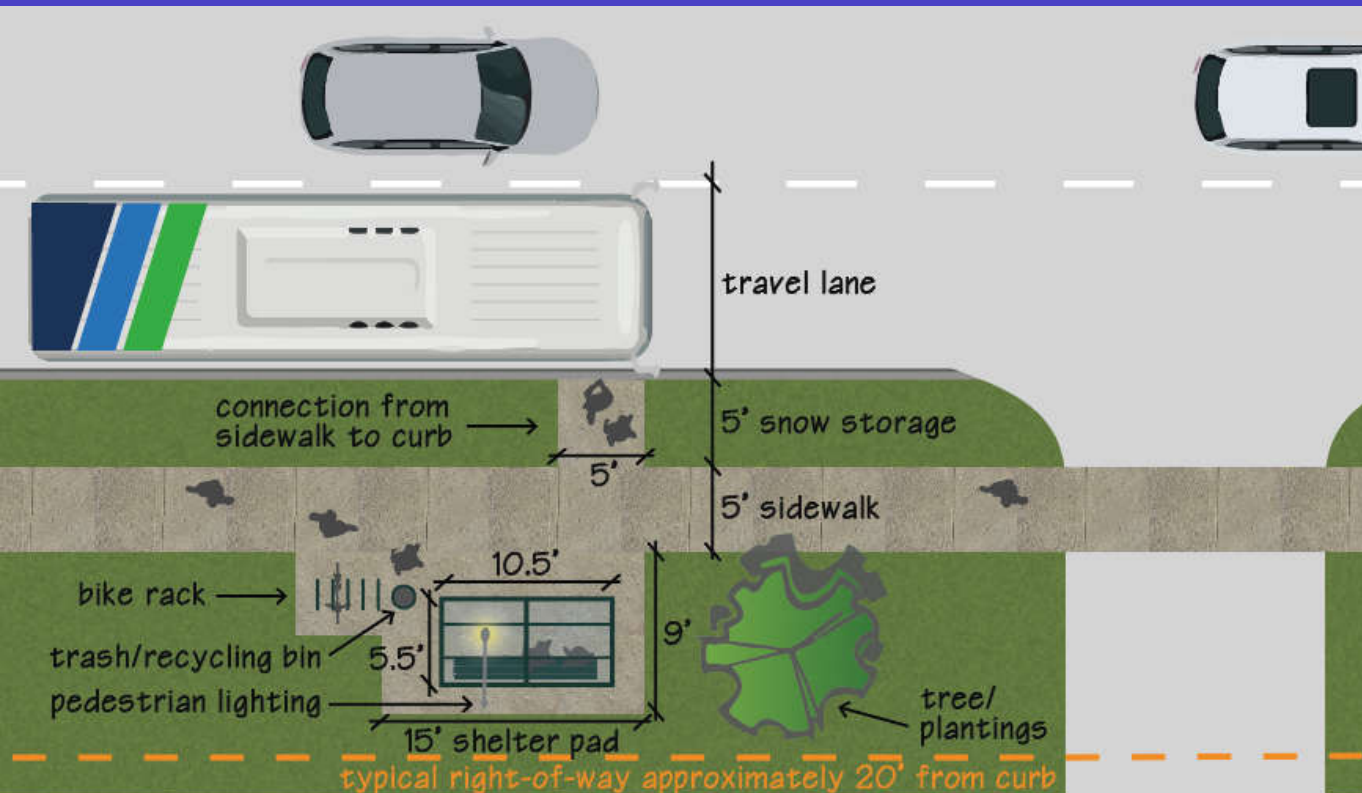
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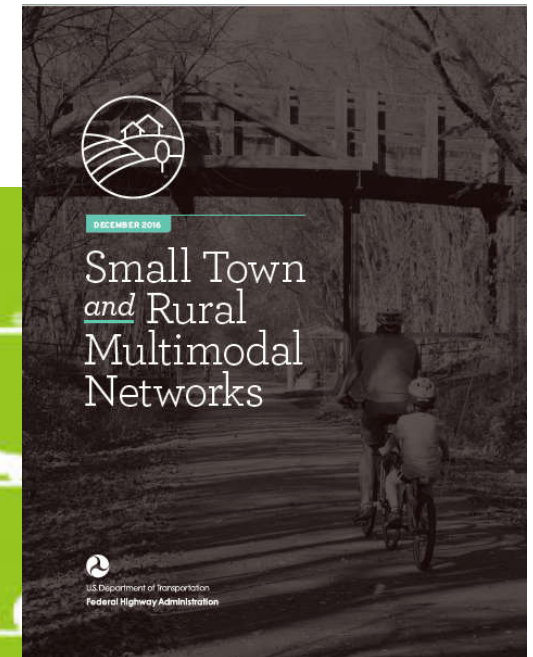
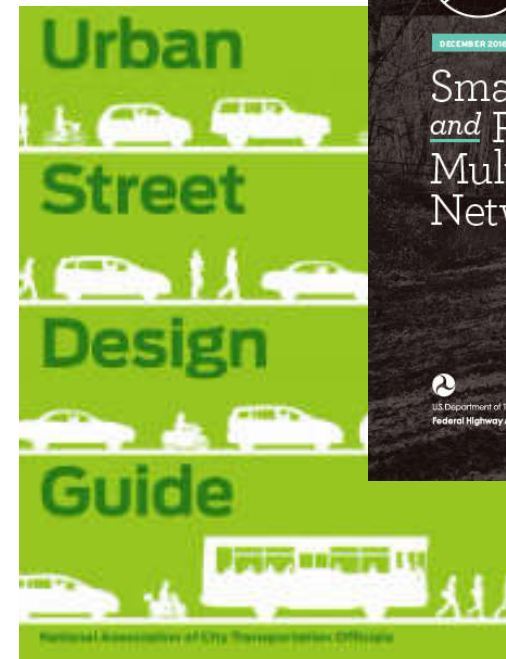
Bicycle and pedestrian
facilities

Transit-supportive features

Amenities and design

Design resources

- FHWA Small Town and Rural Multimodal Networks
- NACTO Urban Street Design Guide
- Context Sensitive Solutions:
 - NYSDOT: <https://www.dot.ny.gov/divisions/engineering/design/dqab/css>
 - FHWA: <https://www.fhwa.dot.gov/planning/css/>



Resources available from SMTC

- Traffic counts – intersections and road segments
- Publications – available for download or request a hard-copy
 - Transportation Atlas
 - Bike Suitability Map
 - Canal Services Map
 - Introduction to SMTC brochure
 - Newsletters
 - Various UPWP study reports
- Online interactive maps
 - Pedestrian Demand Model
 - Bike Map
 - Planning Area

