SMTC

SMTC will incorporate public comments collected during the 3-27-25 hearing into this draft once the meeting transcript notes are available from the Village. Any additional comments received will also be incorporated. Thank you for taking the time to review this document and for providing feedback.

DRAFT Memorandum #1

TO: Gary Butterfield, Mayor of North Syracuse

FROM: Michael Alexander

DATE: 3/27/25

RE: Existing Conditions – Grove, Maxwell, Van Mara Study

This technical memo (TM#1) documents existing conditions along Van Mara Drive and Grove Street.

The Village of North Syracuse seeks to reduce vehicular cut-through traffic along Van Mara Drive and Grove Street and promote safe pedestrian and bicycling along these roadways. The Syracuse Metropolitan Transportation Council (SMTC) agreed to help identify opportunities to discourage vehicular cut-through traffic and promote the safe use of these roads by walkers and bicyclists.

Three significant challenges face these roadways:

1. vehicular cut-through traffic (caused in-part by GPS units; and local knowledge it's a "short cut")
2. lack of bicycle and pedestrian amenities across South Bay Road
3. dated and/or non-existent pedestrian and bicycle amenities at various locations.

SMTC will provide guidance on pedestrian and bicyclist crossing strategies for South Bay Road and traffic management strategies for Grove and Van Mara. Strategies could include making the roads one-way, installing speed bumps, speed cushions, speed tables, narrowing, changing turning patterns (e.g., right-out only), etc. SMTC will also identify bicycle and pedestrian facility options for these roadways. Recommendations will help inform the design, implementation, and expenditure of existing grant funds the Village has already secured from the Transportation Alternatives Program to improve these local roads.

TM #1 documents existing conditions that will help to validate / invalidate concerns and issues to address. Existing conditions include road and intersection geometry; land use; traffic flow; bicycle, pedestrian, and transit facilities; facility user needs; general ownership and right-of-way information; a crash data summary; and existing signs and other restrictions.

Study Area

As shown in Figure 1, the study area includes Van Mara Drive and Grove Street between Church Street and South Bay Road. During the scoping discussion, the Village Mayor, a local resident, and the Village Police Chief asked SMTC to also identify options to make it safer and easier for bicyclists and pedestrians to cross South Bay Road to Maxwell Avenue. Therefore, the study area also includes Maxwell Avenue and South Bay Road at the Grove Street/Van Mara Drive/Maxwell Avenue intersection.

Figure 1 – Study Area

Existing Land Uses

Grove Street, Van Mara Drive and Maxwell Avenue are local neighborhood roads lined primarily with detached single-family houses. Grove Street connects to Slindes Wood Circle, which is a small pre/post-retirement community of attached two-family patio homes known as: Slinde Woods at the Northlands. Grove Street also provides access to Kennedy Park, which includes a community pool that attracts users from throughout the Village. A walking path connects Slindes Wood Circle to Kennedy Park.

During the scoping meeting, the mayor noted that Kennedy Park Pool is often visited by families and children who access the park by walking and biking across South Bay Road.

Route 81 (I-81) exists east of Grove Street/Slindes Wood Circle. Vehicles, bicyclists, and pedestrians traveling along Grove Street and Van Mara Drive can access the Meals on Wheels building and the neighborhood east of I-81 by traveling along Church Steet under the I-81 overpass.

In addition to detached single family homes, Maxwell Avenue provides access to the "Edwards / Wevers VFW Post 7290" as well as access to two parking lots for Twin Trees II, a popular restaurant that fronts Route 11 at the intersection's southeast corner. The Twin Trees II parking lots exist on the north and on the south side of the road. The lot on the south side of the road abuts Maxwell at grade with approximately 260-feet of frontage. Access to the lots is managed by a four-foot striped buffer only.

South Bay Road provides access to residential neighborhoods and some commercial uses. A Citgo Gas station and the Home Outlet Store are located one block southwest of Van Mara Drive. Alchemy & Mysteria Beauty Spa is located approximately one block northeast of Grove Street. South Bay Road and Route 11 provide access to commercial areas that serve the greater region.

Existing Plans, Studies, & Codes Summary

SMTC reviewed and summarized substantive recommendations from existing plans and studies.

2021 TAP Award

As previously mentioned, the Village of North Syracuse is the recipient of a TAP award and is currently working with its consultant, CHA Companies, Inc. to survey, design, and implement bicycle and pedestrian facilities for study area roadways. SMTC's technical assessment will help inform that process.

In the 2021 application, the Village of North Syracuse described their project proposal, which includes eight streets and new sidewalks in this study's intersections of interest. They indicated that the project would "construct or rehabilitate approximately 9,000 feet of sidewalks and crosswalks within key pedestrian areas." The application indicated that "all proposed work will be done is assumed to be within the 50-foot street right-of-way that is owned and maintained by the Village".

Plan Onondaga 2022

This regional plan aims to increase the quality of life and progress economic vitality for residents of Onondaga County by supporting five themes: Strong Centers, Housing & Neighborhoods, Community Mobility, Greenways & Blueways, and Agriculture. Nothing specific is recommended for the study area.

SMTC Onondaga County Safety Assessment 2020

The systemic safety assessment identifies the portion of South Bay Road through the study area as "high risk" for lane departures and age-related crashes.

SMTC Village of North Syracuse Municipal Parking Assessment 2018

SMTC assessed traffic patterns that could result from consolidating public and private parking lots into a municipal lot with modified access points on Route 11 and on Church Street. SMTC identified a preferred option to promote safe access management, minimize impacts to traffic patterns, and maximize the number of potential parking spaces. To date, a municipal lot has not been formed.

SMTC Church Street Access Study 2016

Church Street existed as a dead-end (east end) with no turnaround/cul-de-sac, this limited truck movements along the road and reduced economic development potential. The study determined traffic operability on surrounding intersections caused by new traffic patterns from various access alternative connections for Church Street at Route 11 and at South Bay Road. Village representatives used the study to implement the village's preferred alternative, which maintains full access from Route 11 and a right-out only at South Bay Road. This design prevents cut-through traffic patterns, while allowing trucks to more easily exit at South Bay Road. This is an important prerequisite for the current study.

CNY Regional Planning & Development Board Complete Streets Plan 2016

The Complete Streets Committee members identified problems such as poorly maintained shoulders and sidewalks, pedestrian safety issues, congestion, lack of street connectivity, and complex traffic patterns. The study's recommendations for South Bay Road, Church Street, and Chestnut Street aligned with SMTC's recommendations for bike lanes in the SMTC Bicycle Commuter Corridor Study.

SMTC Bicycle Commuter Corridor Study 2013

On behalf of NYSDOT, SMTC identified a bicycle commuter corridor network that links suburban/rural areas within a 45-minute bike ride to downtown Syracuse and University Hill. SMTC identified South Bay Road as a candidate for bike lanes. To date, Onondaga County has not provided bike lanes on South Bay Road. SMTC also identified bike lanes/sharrows for Chestnut Street and Church Street. The Village installed these bicycle facilities.

Village's Comprehensive Plan 2004

The Village's Comprehensive Plan indicates concerns of arterial congestion leading trip diversions to collector and local roadways that were not designed to accommodate such high volumes of traffic. The Village identifies their desire to address safety and quality-of-life issues for residents because of increased cut-throughs on local streets. The Village seeks to balance vehicular traffic flow and safe pedestrian mobility.

Travel Demographic Overview

SMTC reviewed the 2022 American Community Survey (five-year estimates) to determine travel characteristics and related demographics within the Village. Takeaways include the following:

- Mean travel times to work range from 20 to 24 minutes.
- In the Village, about 2.3% of households do not have access to a vehicle.
- Approximately 1% of residents walk, bike, or commute to work.
- About 5% of residents in North Syracuse work from home.
- In North Syracuse, approximately 95% of residents work in Onondaga County.

Transit Ridership and Facilities

Centro operates Routes 88/188 that connects riders from the Centro Hub in downtown Syracuse to the Village of North Syracuse primarily along the I-81 and Route 11 roadways. Signed stops along North Main Street (Route 11) exist along Centerville Place, Gertrude Street, and Maxwell Avenue. Centro does not operate along any of the other roads, including South Bay Road and Church Street.

This route runs Monday through Friday with 3 buses running in both directions in the morning. In the afternoon, there are only 2 buses going outbound from the Centro Hub to North Syracuse, and 4 buses going outbound from North Syracuse to the Centro Hub.

Centro collects boarding (getting on the bus) and alighting (getting off the bus) data by bus stop, with approximate weekday averages for the number of people boarding and alighting at each stop in 2023.

The stops closest to Maxwell Avenue (both northbound and southbound lanes) have an average daily activity of 0.16 boardings and 1.07 alightings. Stops near Maxwell Avenue do not meet Centro's activity threshold of at least 50 riders boardings daily to qualify for a bus shelter.

Vehicle and Traffic Restrictions and Design Standards

The Village of North Syracuse Code sets the following restrictions and standards applicable to study area roadways:

- Neighborhood streets have 50' right-of-way with sidewalks
- Collector Roads have a 75' right-of-way with sidewalks
- 5' Sidewalks (property owner maintains)
- No trucks > 5 tons on Grove Street
- No overnight parking along Grove Street during winter months
- The village-wide speed limit is 30 MPH
- Maxwell Street has a 25 MPH speed limit
- Village Code Section 230-10
    - No left turn from South Bay Road from the north onto Van Mara Drive except for emergency vehicles and school buses dropping off students on Van Mara Drive.
    - No right turn from Church Street from the east onto Van Mara Drive except for emergency vehicles and school buses picking up or dropping off students on Van Mara Drive.

Inventory of Existing Road Conditions

The SMTC conducted a desktop inventory to document road ownership, functional classification, pavement condition rating, available traffic volume data, and presence of bicycle and pedestrian facilities.

Road Ownership

As shown in Figure 2, all roads in the Village of North Syracuse are village-owned except for:

- Route 11, Bear Road, and I-81, which are owned by the New York State Department of Transportation (NYSDOT)
- South Bay Road, which is owned by the Onondaga County Department of Transportation (OCDOT).

Figure 2 also shows road ownership beyond the village.

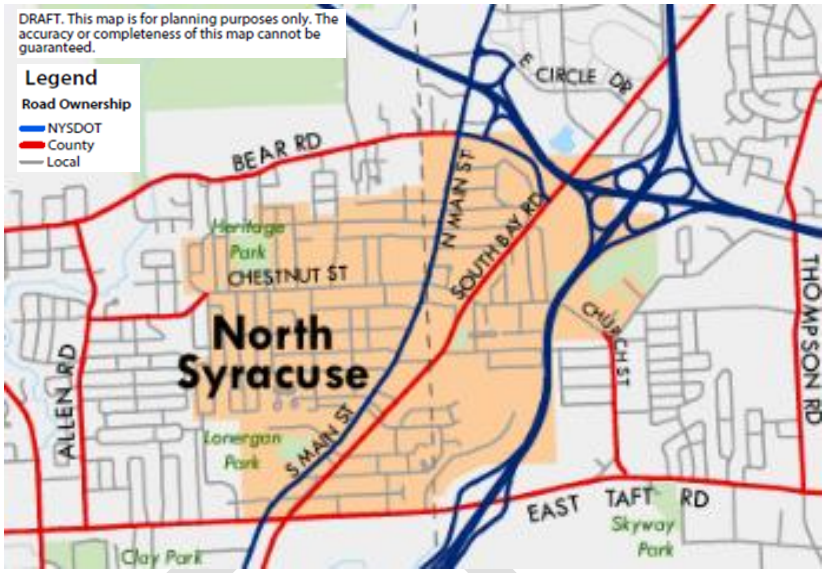

Figure 2 – Road Ownership

Functional Classification

Figure 3 shows functional classification, which categorizes roads according to their character and their role in the transportation network. Categories range from interstates designed for high-speed trips between cities - to local roads that provide access to individual properties. Roads are also classified as urban or rural based on an Urban Area Boundary. The Urban Area Boundary is based on population density per the U.S. Census.

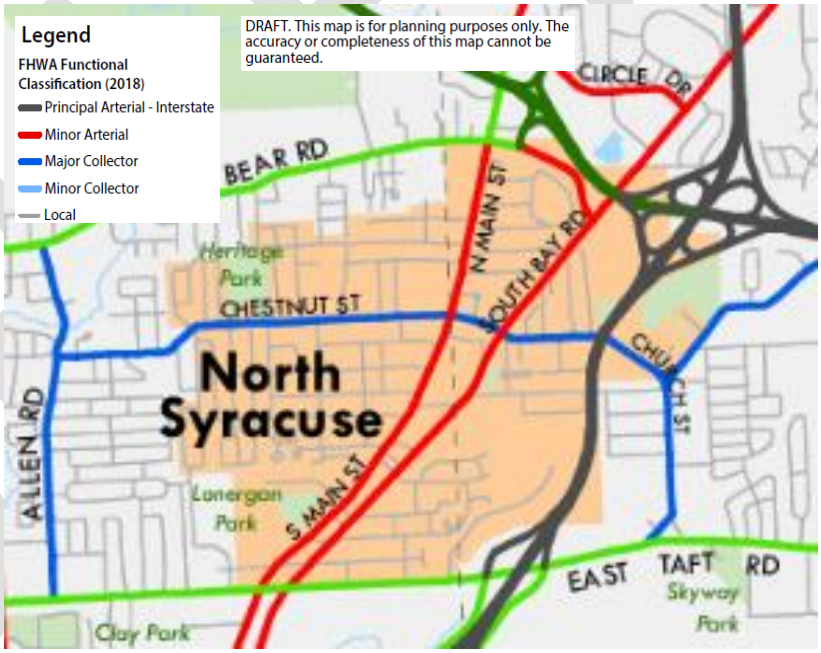

Figure 3 – Functional Classification

Functional classification determines if a road may receive federal transportation funding. Principal arterials, minor arterials, and major collectors are federal-aid eligible. Minor collectors and local roads (urban and rural) are not federal-aid eligible.

As shown in Figure 3, all roads within the Village of North Syracuse are classified as local roads except for Route 11, South Bay Road, and Bear Road which are classified as Minor Arterials; I-81 which is classified as a Principal Arterial; and Church Street/Chestnut Street which are classified as Major Collectors. Figure 3 also shows functional classification just beyond the village. South Bay Road and the local roads within the village are not identified as primary freight or primary commuter corridors and,

therefore, were not examined in the SMTC's *Congestion Management Process – Status Update*. Moreover, these roads are not part of the National Highway System.

Traffic Volumes & Peak Hour Volume

The average annual daily traffic, or AADT, is the total daily traffic averaged over a full year and is expressed in vehicles per day (VPD). AADT is typically estimated for a road segment based on a sample count taken over a few days. Peak hour volume is the amount of traffic that passes through a lane, approach, or lane group during the busiest hour of the day. Current AADT estimates and peak hour volume are shown on Table 1.

As shown in Table 1, Grove Street has more than twice the number of VPD than Van Mara Drive (975 VPD vs. 401 VPD, respectively). South Bay Road has just under 10,000 VPD, Route 11 has nearly 12,000 VPD, and Church Street has about 5,200 VPD. The busiest time of day for Van Mara Drive and Grove Street is in the evening peak hour from 5:00 p.m. to 6:00 p.m., but the busiest time for South Bay Road, Route 11, and Church Street is between 4:00 p.m. and 5:00 p.m. Route 11 and South Bay Road have more than 1,000 vehicles per hour during their business time, whereas Church Street has just over 600 vehicles per hour.

Table 1 – Traffic Volumes (AADT) & Peak Hour Volumes

Road Name To/From (Station Number, Date of Count)	**AADT**	**PM Peak Hour Time**		**Overall Peak Hour Time**	**Total PH Volume**
		NB	**SB**		
Van Mara Drive					
South Bay Road to Church Street (335241, 7/25/2015)	401	5-6	5-6	5-6	43
Grove Street					
South Bay Road to Church Street (335234, 7/25/2015)	975	5-6	4-5	5-6	102
South Bay Road					
Church Street to Bear Road (20804, 5/16/2022)	9,633	4-5	5-6	4-5	1,042
Church Street					
South Bay Road to Hamilton Road (331218, 9/12/2022)	5,193	4-5	5-6	4-5	611
Route 11					
Taft Road to Bear Road (330226, 10/11/21)	11,725	5-6	4-5	4-5	1,078

Bridge and Pavement Ratings

The SMTC publishes a Bridge and Pavement Condition Management System (BPCMS) every year as a part of the Unified Planning Work Program (UPWP). The most recent BPCMS is from 2023 and includes condition information.

Pavement Ratings: Pavement ratings are conducted for all federal-aid eligible roads. The ratings are based on cracking, faulting (concrete) or rutting (asphalt), and International Roughness Index (IRI) or the Present Serviceability Rating (PSR). Pavements are rated Good, Fair, or Poor based on the values of

these individual metrics. Pavement in Good condition suggests that no major investment is needed. Pavement in Poor condition suggests major reconstruction investment is needed in the near term.

Route 11 is rated 'Fair,' South Bay Road is rated 'Good,' and Church Street is 'Excellent.'

Bridge Rating: The NYSDOT defines a bridge as a structure that is erected over a depression or an obstruction (such as water) and that has a track or passageway for carrying public traffic. Classification is based on the National Bridge Inventory (NBI) condition ratings for the deck, superstructure, substructure, and culvert with each rated on a scale of 0-9. If greater than or equal to 7, the bridge is classified as "Good." If less than or equal to 4, it is classified as "Poor." Bridges rated below 7 but above 4 are classified as "Fair." A sizeable portion of capital funds are spent on bridges with NHS bridges receiving priority.

The I-81 bridge (over Church Street) is owned by NYSDOT and is rated 'Fair.'

Roadway Measurements

SMTC used GIS parcel files and ortho imagery to take approximate measurements. Table 2 shows measurement estimates for right-of-way, lane width, shoulder width, and sidewalk width for roads of interest. In general, all observed roadways have excess right-of-way.

Table 2 – Approximate Roadway Measurements

	Approximate Width (in feet)						
Street Name	**Right-of-way (ROW)**	**Lanes**		**Shoulder**		**Sidewalk**	
		NB/EB	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Grove Street	49	10	10	-	-	-	4
Van Mara Drive	49	10	10	-	-	4	-
Maxwell Avenue	49	10	10	-	-	4*	-
South Bay Road	102	11	11	8	8	4*	-
Church Street	50	11	11	3	3	4	5
Route 11	72	11	11	8	8	5	4

* Only a short segment of sidewalk exists on South Bay Road (about 85 linear feet) and on Maxwell Avenue (about 50 linear feet near South Bay Road).

Existing Sidewalk and Crosswalk Locations

Grove Street has a 4-foot-wide sidewalk along its southbound lane that is flush with the road (between South Bay Road and the stop sign controlled entrance to Kennedy Park. The sidewalk widens to 5-feet-wide south of the park's entrance. The sidewalk is curbed, but dips flush to the road at each driveway. Two crosswalks exist across Grove Street: one at the stop sign across the northbound approach of the Kennedy Park entrance; and the other at Church Street. Van Mara Street has a 4-foot-wide sidewalk adjacent to the northbound lane along its entire length. The sidewalk is flush with the road and driveways. One crosswalk exists across Van Mara Drive at Church Street.

Maxwell Avenue has a 4-foot-wide sidewalk that extends approximately 50 feet in length along the eastbound travel lane. No other sidewalks exist. A crosswalk exists across Maxwell Avenue at Route 11, but not at South Bay Road. South Bay Road has a 4-foot-wide sidewalk along its northbound travel lane

between Van Mara Drive and Grove Street. It is approximately 85 feet long and connects the sidewalk at Van Mara Drive to the Sidewalk along Grove Street. No other sidewalks or crosswalks exist along South Bay Road.

Church Street has a 5-foot-wide sidewalk along its westbound lane and a 4-foot-wide sidewalk along its eastbound lane. Crosswalks across Church Street do not exist at Van Mara Drive and at Grove Street. Sharrows (i.e., Shared Lane Markings) exist within both travel lanes along Church Street. Route 11 has a 5-foot-wide sidewalk along its northbound lane and 4-foot-wide sidewalk along its southbound lane. A crosswalk across Route 11 does not exist at Maxwell Avenue.

Bike Lanes and Shared Lane Markings

Bicycle facilities do not exist in most of the study area; however, shared lane markings (i.e., 'sharrows') do exist along Church Street.

Furthermore, NYS Bike Route 11 exists along Route 11 throughout New York State as a signed route only; however, Bike Route 11 bypasses the segment of Route 11 in the Village of North Syracuse. Instead, NYS Bike Route 11 uses the following roads to bypass the Village of North Syracuse and the hamlet of Mattydale (to the south): Molloy Road (in Mattydale), Northern Boulevard, Thompson Road, and Route 31 (Bike Route 5 extends along Route 31).

No other signed state-designated bicycle routes exist within the study area.

Crash Summary

The SMTC gathered and analyzed data from NYSDOT's Crash Location and Engineering Analysis Repository (CLEAR) database to identify trends in crashes at unsignalized intersections and along corridors of interest in the study area. Crash data were collected for the most recent five-year period (January 1, 2019, to December 31, 2023).

North Syracuse Police Department
In June 2024, the North Syracuse Village Police Clerk summarized the following events that occurred on Van Mara Drive and Grove Street within the past year:

- VanMara @ Church St – 1 motor vehicle collision, and 1 traffic complaint
- Grove @ South Bay – 13 stops resulting in a traffic ticket, 2 traffic complaints
- VanMara @ South Bay – 1 traffic complaint
- We don't get phone complaints anymore for speeding or turning left on Van Mara / Grove. The main complaints are about not stopping at the stop sign on Grove Street at Kennedy Park.

Bike and Pedestrian Crashes

During the five-year review period, there were not any pedestrian or bike crashes.

Fatal and Serious Injury Crashes

Four crashes resulted in a serious injury; no fatal crashes occurred during the five-year review period.

Intersection crashes

Intersection crashes were defined using two methods. If stop bars were present at the intersection, crashes that occurred within the stop bars were defined as 'intersection crashes.' If stop bars were not present at the intersection, intersection crashes were defined as any crashes that occurred within 33 feet (10 meters) of the center of the intersection. Table 3 lists all intersection crashes and collision type.

Table 3 – Intersection Crashes

Intersection of Interest	Total Crashes (Motor Vehicle Only)	Collision Type (Number of Events)
Maxwell Avenue / Route 11	5	2 Rear End, 2 Right Angle, 1 Other
Maxwell / Grove / South Bay Road	3	2 Right Angle, 1 Left Turn
Gertrude / South Bay Rd	1	1 Right Angle
Van Mara Drive / Church Street	0	N/A
Grove Street / Church Street	1	1 Right Angle
South Bay Road / Bear Road	8	3 Rear End, 2 Right Angle, 2 Left Turn, 1 Other

As shown, most intersections experienced one or fewer crashes per year. Bear Road had 8 crashes during the five year period. Study area intersections did not experience bike or pedestrian crashes. (Intersection crash rates were not calculated due to lack of entering volume data.)

CLEAR identifies the collision type for crashes between two vehicles. For example, collision types include head-on, rear-end, right-angle, overtaking, left-turn, right-turn, etc. Right-angle collisions were the most common collision type, followed by left-turn collisions. The intersection at South Bay Road / Bear Road and Maxwell Ave / Route 11 experienced right end collisions.

Non-intersection crashes (i.e., road segment crashes)

Road segments are split between intersections. Road segment crashes do not include intersection crashes previously analyzed. Road segments crashes and collision type are shown in Table 4. 60 percent of the crashes on South Bay Road involved Rear End collisions. Sideswipe collisions, and Right Angle collisions were prevalent on the other study area road segments as shown in Table 4.

Intersection and non-intersection crashes are illustrated in Figure 4. As shown, South Bay Road (from Maxwell Avenue to Bear Road) and Maxwell Avenue (from North Main Street to South Bay Road) experience the most non-intersection crashes.

Table 4 - Road Segment Crashes and Collision Type

Road Segment	Total Crashes (Motor Vehicle Only)	Collision Type (Number of Events)
South Bay Road		
Maxwell Ave to Bear Rd	8	5 Rear End, 1 Other, 1 Overtaking, 1 Right Turn
Gertrude St to Van Mara Dr	1	1 Sideswipe
Van Mara Dr to Maxwell Ave	1	1 Rear End
Maxwell Avenue		
North Main St to South Bay Rd	6	3 Other, 2 Sideswipe, 1 Unknown
Grove Street		
South Bay Rd to Church St	2	1 Rear End, 1 Other
Van Mara Drive		
South Bay Rd to Church St	2	2 Other
Church Street		
Grove St to Van Mara Dr	1	1 Other
Gertrude Street		
North Main St to South Bay Rd	3	2 Right Angle, 1 Other

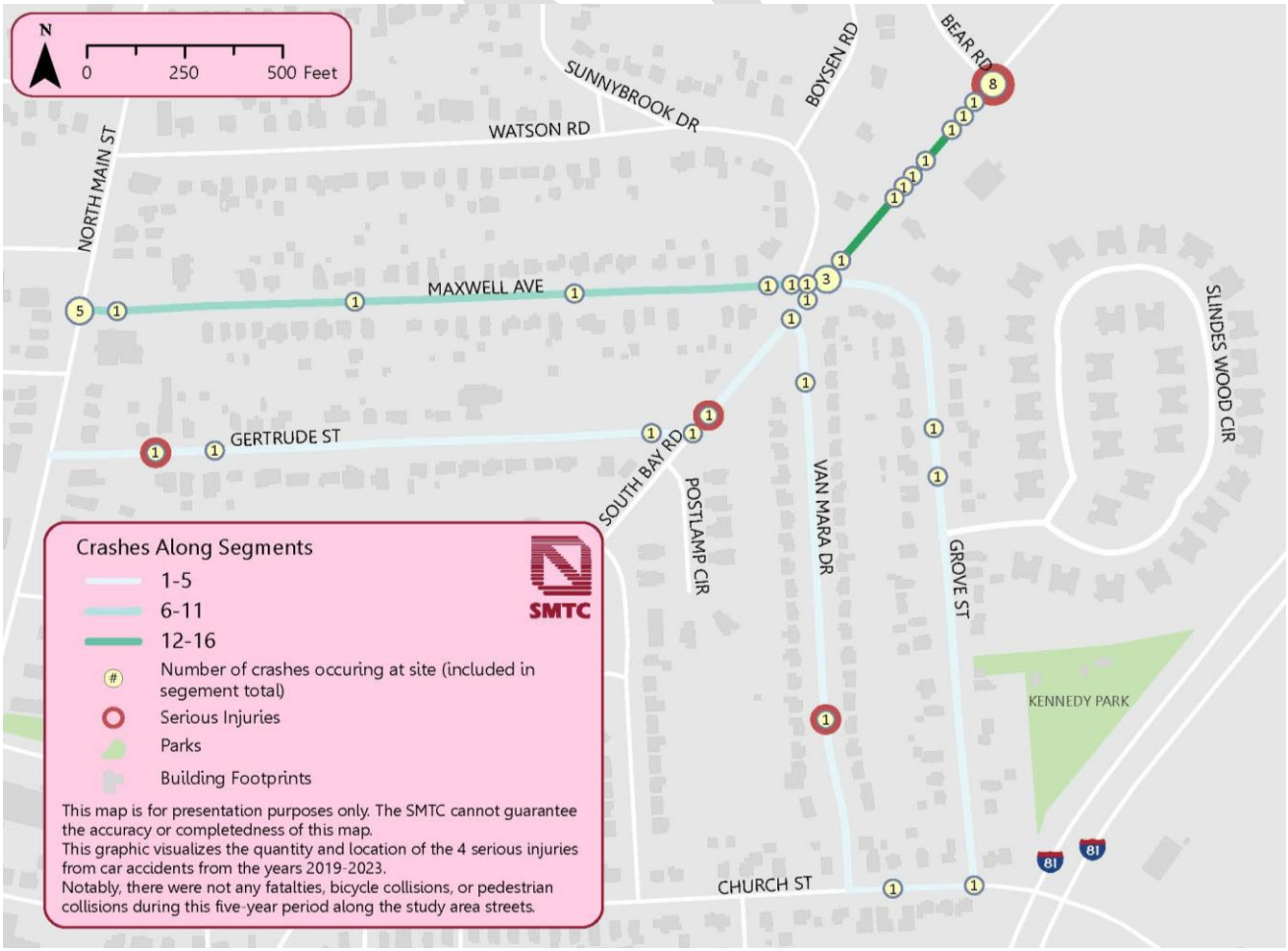

Figure 4 – Intersection and Segment Crashes

Travel Speed and Heavy Vehicle Percentage (South Bay Road Only)

Travel Speed

The posted speed and average speed on South Bay Road (from Church Street to Bear Road) is 35 MPH. The 85th percentile speed going northbound is 42 MPH and going southbound is 40 MPH.

Heavy Vehicle Percentage

The percentage of heavy vehicles is low (below the 5% threshold) and is 3% going northbound, 3% going southbound.

Coordination with Onondaga County Department of Transportation

As noted, South Bay Road ownership is governed by Onondaga County in agreements with the village. On Thursday, June 13, 2024, SMTC spoke with Onondaga County. A summary of takeaways is provided below:

1. OCDOT only maintains the riding surface of South Bay Road within the Village of North Syracuse.

2. OCDOT has no issues with the addition of sidewalks and a crossing on South Bay, in conjunction with some kind of Hawk or Rapid Flashing Beacon system, as long as it is understood that all ownership and maintenance of these facilities will be the responsibility of the Village.

3. Sidewalks need to be far enough away from the roadway to maintain a snow storage area.

Conclusion

The Village of North Syracuse seeks to reduce cut-through traffic along Grove Street, Maxwell Avenue, and Van Mara Drive, and promote safe pedestrian travel and bicycling along these roadways. SMTC documented existing site conditions in TM#1 to help inform the selection of infrastructure improvement options to consider. SMTC will share preliminary concepts and recommendation maps with the SAC for feedback. SAC feedback will inform the development of draft concept plans and recommendation maps to share with the public and community stakeholders for additional feedback and documentation in TM#2. Once TM#2 is complete, the Village's consultant, CHA Companies, Inc will reference TM#1, TM#2, the concept plans, and the recommendation maps to inform design considerations. Through awarded TAP grant funds, CHA will help the Village design and implement improvements to improve safety and mobility along these roadways.