

Memorandum

TO: Tompkins County Joint Safety Action Plan Project Team

FROM: Danena Gaines and Cory Hopwood, Cambridge Systematics

DATE: March 1, 2024

RE: Tompkins County Joint Safety Action Plan Task 2: Document Review

Introduction

This memo presents the deliverable for Task 2 of the Tompkins County Joint Safety Action Plan project. It reviews and summarizes transportation and safety-related documents in New York State, the Tompkins County planning area, and local jurisdictions. The goal of this effort is to understand the types of safety policies, programs, and projects already in place that could inform and enhance the development of the Joint Safety Action Plan. Tables 1 and 2 succinctly summarize each document and its applicability to the Joint Safety Action Plan. The consultant team did their own extensive research to collect many of these documents. The project team also provided additional relevant documents to be included. Following the document review section are the key emphasis areas and key takeaway sections.

Key Documents Reviewed

This section discusses the key findings from the documents that were reviewed for this task. While Table 1 discusses the safety planning documents related to the project study area within Tompkins County and local jurisdictions, Table 2 discusses the New York State safety-related documents, National Association of City Transportation Officials (NACTO) guides, international best practices, and other useful documents.

Table 1 discusses the safety priority topics of each document which includes the goals and objectives related to safety of motorized and non-motorized transportation. Additionally, the table lists the locations that have been identified as a safety priority, talks about challenges for implementing the safety projects, and mentions the proposed projects identified in the document.

Table 2, on the other hand, provides a brief overview of the document, key safety components mentioned in the document, and relevance of the document to Tompkins County SS4A Joint Safety Action Plan.

Table 1: Study Area Specific Documents

Name of Document (Year Published)	Safety Priority Topics	Safety Priority Locations	Challenges in Implementation	Proposed Projects
County and Metropolitan Planning Organization (MPO) Documents				
Tompkins County Comprehensive Plan (2015) Tompkins County Comprehensive Plan – Five-Year Review (2019)	<ul style="list-style-type: none"> • Reduce the use of single-occupancy vehicles and encouraging walking, biking, carpooling/ridesharing, and public transit • Provide safe and effective movement of freight • Provide transportation options for physically challenged population • Promote complete and green streets principles • Maintain sidewalk inventory with municipalities 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Limited funding opportunities 	<ul style="list-style-type: none"> • [5-year plan review] Developing the 2020 State Route 13 Corridor Study and provide recommendations • [5-year plan review] Implementing the Tompkins Priority Trails Strategy

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Tompkins Priority Trails Strategy (2023)	<ul style="list-style-type: none"> • Construct and maintain multi-use trails across municipal boundaries 	<ul style="list-style-type: none"> • Recommendation for following priority trails: <ul style="list-style-type: none"> • Dryden Rail Trail • South Hill Recreation Way Extension • Black Diamond Trail: Extension to Trumansburg and Connection between Buttermilk and Robert H Treman State Parks • Urban Connectors • Finger Lakes Trail 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Priority trails proposed at different stages of planning, design and/or implementation
Final State Route 13 Corridor Study (2020) State Route 13 Corridor Study – Appendix (2020)	<ul style="list-style-type: none"> • Improve corridor operations and traffic flow for safety • Install bike and pedestrian infrastructure • Improve lighting condition at intersections 	<ul style="list-style-type: none"> • 8.5 mile stretch of State Route 13 between Warren Road in the Village of Lansing and Spring House Road at the edge of the Village of Dryden, with focus on six key intersections along the Corridor: <ul style="list-style-type: none"> • Warren Road • Sapsucker Woods Road / Brown Road • Hanshaw Road • Lower Creek Road • State Route 366 (Dryden Road) • State Route 366 (Main Street) 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Shared-Use Path from Warren Road to State Route 366 (Dryden Road) • Bicyclist Signage & Transit Connections from State Route 366 (Dryden Road) to Spring House Road • Design proposals for the six key intersections such as installation of bicycle warning signage, pedestrian crosswalks, etc.
Route 96 Corridor Management Study (2009)	<ul style="list-style-type: none"> • Reduce speed limit within the nodes • Provide pedestrian and bicycle infrastructure 	<ul style="list-style-type: none"> • State Route 96 	<ul style="list-style-type: none"> • Narrow the width of streets and flatten steep grades (challenge for pedestrian and 	<ul style="list-style-type: none"> • Improve and incorporate bicycle and pedestrian accommodations into all new developments along Route 96

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	<ul style="list-style-type: none"> • Provide improvements at intersections • Provide connections to existing and proposed recreation trails • Adopt access management guidelines 		bicycle enhancements)	<ul style="list-style-type: none"> • Incorporate multi-use trails to internally connect to sidewalks and bike lanes • Optimization of traffic signal phasing/timing • Recommendation for a new bridge connection between Route 89 and Fulton St. at Court St. to reduce congestion at Route 89/Route 96
East Shore Drive Pedestrian And Bike Study (ongoing)	<ul style="list-style-type: none"> • Install bike and pedestrian infrastructure • Provide connections to existing and proposed recreation trails 	<ul style="list-style-type: none"> • East Shore Drive (NYS-34) between Boynton Middle School (N. Cayuga Street) and the Ithaca Youth Bureau (James L. Gibbs Dr.) 	<ul style="list-style-type: none"> • Multiple parties with jurisdiction: City of Ithaca, Town of Ithaca, and NYSDOT • High speeds and traffic volumes as James L. Gibbs drive complicated design for safe bike/pedestrian crossing • Limited Funding 	<ul style="list-style-type: none"> • Improve the safety for pedestrians and bicyclists on East Shore Drive • Develop designs to link existing multi-use trail infrastructure on approximately 700' of East Shore Drive (NYS-34) between Boynton Middle School (N. Cayuga Street) and the Ithaca Youth Bureau (James L. Gibbs Dr.)
Black Diamond Trail Final Master Plan/ Environmental Impact Statement (2009)	<ul style="list-style-type: none"> • Build a multi-use trail connecting four state parks in the Town of Ulysses, Town of Ithaca and City of Ithaca 	<ul style="list-style-type: none"> • Trail street crossings 	<ul style="list-style-type: none"> • Limited funding • Need to define route at southern end • Design of trail in floodplain area 	<ul style="list-style-type: none"> • None

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ITCTC 2040 Long Range Transportation Plan (LRTP) (2019)	<ul style="list-style-type: none"> • Reduce motorized and non-motorized fatal and serious injury crashes • Promote safe streets and safe freight movement • Provide cost-effective solutions for active transportation modes • Promote educational outreach activities • Promote Safe Routes to School and Complete Streets principles 	<ul style="list-style-type: none"> • Tompkins County 	<ul style="list-style-type: none"> • Limited funding • Challenge to shift from single occupancy vehicles to active and shared modes 	<ul style="list-style-type: none"> • Traffic Signal Upgrade Program for Downtown City of Ithaca • State Route 13 Signal Management Program • All other projects to be implemented county-wide
ITCTC 2040 LRTP Projects for Implementation (2019)	<ul style="list-style-type: none"> • Promote safety education, including for bicycling and pedestrians • Provide pedestrian and bicycle facility improvements • Improve safety through transit infrastructure and passenger facilities • Build Complete Streets network • Traffic signal system improvements 	<ul style="list-style-type: none"> • Across Tompkins County – the only specific locations are State Route 13 Corridor and Downtown City of Ithaca 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Safety Education, 1-5 year implementation • Bicycle Promotions (including safety), 1-5 year implementation • Pedestrian Promotions (including safety), 1-5 year implementation • Bicycling Facilities Planning and Improvements, 5-10 year implementation • Pedestrian Facilities Planning and Improvements, 5-10 year implementation • Transit Infrastructure and Capital Needs (including safety), 5-10 year implementation • Passenger Facilities Improvements (including safety), 5-10 year implementation • Complete Streets Network, 10-20 year implementation

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				<ul style="list-style-type: none"> • State Route 13 Corridor Study, 1-5 year implementation • Traffic Signal Upgrade Program for Downtown City of Ithaca, 5-10 year implementation • State Route 13 Signal Management Program, 1-5 year implementation
ITCTC Draft Complete Streets Network Map (2020)	<ul style="list-style-type: none"> • Complete Streets definition: <ul style="list-style-type: none"> ○ Sidewalk on at least one side of the street ○ Marked Bicycle Lane, Wide Road Shoulder, or Bicycle Boulevard • Within 1/4 mile of hourly (minimum) bus service 	<ul style="list-style-type: none"> • Map of Tompkins County 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • None
Map of Multi-Use Trails in City of Ithaca (2023)	<ul style="list-style-type: none"> • Multi-use trail status 	<ul style="list-style-type: none"> • Map of the City of Ithaca 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Black Diamond Trail (Urban Section) is in progress • Portions of the Gateway Trail are proposed
Map of Multi-Use Trails in Tompkins County (2023)	<ul style="list-style-type: none"> • Multi-use trail status 	<ul style="list-style-type: none"> • Map of Tompkins County 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Dryden Rail Trail bridge over Route 13 is in progress • Proposed portions of trails: <ul style="list-style-type: none"> ○ Black Diamond Trail ○ East South Trail ○ Coddington Trail ○ Dryden Trail

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Ithaca & Tompkins County Bicycle Map (2022)	<ul style="list-style-type: none"> Suitability ratings of roads in Tompkins County Bicycling rules of the road Traffic volume rankings Bicycle facility types 	<ul style="list-style-type: none"> Bicycling map of Tompkins County, City of Ithaca, and of several other specific bike rides 	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> None
ITCTC 2023-2027 Transportation Improvement Program (TIP) (Approved 2022, Updated 2023)	<ul style="list-style-type: none"> Set statewide safety targets by the NYSDOT HSIP and SHSP Safety is a primary consideration in the selection of projects to be included in the TIP, as it is a goal in the ITCTC's LRTP Transit safety targets set by Tompkins Consolidated Area Transit (TCAT) in 2020 and is focused on replacing older transit equipment and vehicles 	<ul style="list-style-type: none"> Throughout Tompkins County 	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Rt 96 Repaving and Safety Improvements, Village of Trumansburg South Village Line to North Village Line MbC Route 13/34/96, Elmira Road to North Ithaca City Line State St. Mill and Repave from East Green St./Seneca Way to Mitchell St. (replace sidewalk) Hector Street Culvert Rehabilitation (adding a sidewalk) Ithaca Active Transportation Network Walking Safe Cayuga Heights Dryden Rail Trail Phase 2 Black Diamond Trail Connector Cayuga Heights: Sidewalk Connections Several transit vehicle and equipment improvements

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ITCTC 2024-2025 Simplified Statement of Work (Unified Planning Work Program) (2024)	<ul style="list-style-type: none"> • “Safe and Accessible Transportation” is a 2.5% set aside policy • Complete Streets is a FHWA Planning Emphasis Area • Advance racial equity in transportation planning • Improve active transportation 	<ul style="list-style-type: none"> • City of Ithaca 	<ul style="list-style-type: none"> • Reduced ridership, supply chain delays and costs, and staffing challenges have affected public transportation providers- TCAT and Gadabout transportation service 	<ul style="list-style-type: none"> • CLEAR Safety Management Data System Transfer • Expansion of bike parking survey in the City of Ithaca • Implementation and updating of the priority trails strategy
Tompkins County Economic Recovery Strategy Document (2021)	<ul style="list-style-type: none"> • Expand transit service in rural areas • Integrating micro-mobility modes with rideshare services 	<ul style="list-style-type: none"> • Tompkins County 	<ul style="list-style-type: none"> • Uncertainty in transit funding 	<ul style="list-style-type: none"> • Route 13 west end 3-way 5th street intersection improvements • Enhancement of Micro-mobility (bike share)
Local Plans (Comprehensive Plans, Transportation Plans, etc.)				
City of Ithaca Comprehensive Plan (2015)	<ul style="list-style-type: none"> • Enhance and expand bicycle and pedestrian infrastructure • Provide educational programs to address distracted driving and other safety issues • Introduce traffic calming measures and ITS technologies • Adopt Complete Streets principles • Increase multi-modal connectivity • Promote Transportation Demand Management (TDM) strategies 	<ul style="list-style-type: none"> • West State/MLK Street Corridor • West End • Collegetown • Southwest Ithaca • Undeveloped West Hill Land • Emerson • Waterfront • NY State Route 13, State Route 79, and Route 96/96B 	<ul style="list-style-type: none"> • Environmental challenges such as topography and poor soil condition • Sensitivity of new development to adjacent neighborhoods • A number of state highways and railroad separating the neighborhoods 	<ul style="list-style-type: none"> • Provision of sidewalks in central core of Collegetown and Ithaca Commons • Providing alternative transportation options for Route 79 • Converting Route-13 into a Complete Street • Development of new intersection at Carpenter Business Park

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City of Ithaca Draft Transportation Safety Action Plan (2022)	<ul style="list-style-type: none"> • Reduce crashes, especially serious injury crashes and fatalities • Build Complete Streets • Provide safe streets with adequate pedestrian and bicycle infrastructure • Provide organized parking areas, marked crosswalks, designated transit stops, and speed limiting features 	<ul style="list-style-type: none"> • Entire City of Ithaca is declared as safety priority 	<ul style="list-style-type: none"> • Environmental challenges such as topography and Ithaca’s snowy winters 	<ul style="list-style-type: none"> • Multi-site Traffic Calming Project for school safety • Cayuga Street/Ithaca High School Transportation Safety Project • University Avenue Reconstruction • Proposal for Six Corners Roundabout • Cherry St. Industrial Park Area Transportation Improvements • Elm and Chestnut Safety Improvements • Stewart Avenue Reconstruction • Spencer Road Sidewalk Project • Citywide Intersection Improvements – Video Detection and Transit Signal Priority • “Tuning Fork” Intersection Reconstruction • Ithaca Commons Pedestrian and Truck Safety Project • Multi-modal Safety Improvements (Various Locations Citywide) • Infrastructure Support for TCAT TDP Plan (Multi-site) • Route 34 and E. Shore Drive Area Safety Improvements • Ithaca Road Safety Improvements

Name of Document (Year Published)	Safety Priority Topics	Safety Priority Locations	Challenges in Implementation	Proposed Projects
				<ul style="list-style-type: none"> • High Friction Roadway Resurfacing (Various Locations Citywide) • Proposed “Better Bike Network”
Town of Ithaca Comprehensive Plan (2014)	<ul style="list-style-type: none"> • Improve safety of active transportation users by providing additional pedestrian and bicycle infrastructure • Promote Complete Streets • Reduce the use of single-occupancy vehicle and encourage walking and biking • Maintain crash database • Petition the County and State for speed limit reductions • Adopt access management requirements to control access points to the Town's streets 	<ul style="list-style-type: none"> • Warren and Hanshaw Road (safety issue for bicycles) • South Hill, West Hill, and East Hill neighborhood 	<ul style="list-style-type: none"> • Insufficient regulation limiting the creation of streets for all users • Individual driveways create conflict points for pedestrians and cyclists • Inadequate design standards 	<ul style="list-style-type: none"> • None
Town of Ithaca's Transportation Plan (2007)	<ul style="list-style-type: none"> • Provide solutions for motorized and non-motorized safety • Reduce speed limits on certain roads • Implement a transportation safety program that includes three Es: Education, Enforcement, and Engineering 	<ul style="list-style-type: none"> • Map 11: Prioritized Pedestrian Needs • Map 12: Prioritized Bicycle Corridor Needs • West Hill priority segments • Forest Home neighborhood • Ithaca College and South Hill neighborhood • Northeast neighborhood (Safe Routes to School Warren Road Walkway completed in 2010) 	<ul style="list-style-type: none"> • Existing cul-de-sacs restricting the movement of bicycle users and pedestrians 	Essential non-motorized projects: <ul style="list-style-type: none"> • NYS Route 96 (Trumansburg Rd.) from Dates Dr. to City Line • NYS Route 79 (Mecklenburg Rd.) City Line to Westhaven Rd; ~500 ft. from City to Linderman Cr. walking path completed in 2020) • NYS Route 96B (Danby Rd) second phase from IC to King Rd. • Pine Tree Road (Slaterville Rd to Honness Ln) Recommended non-motorized projects:

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				<ul style="list-style-type: none"> • Forest Home Dr (sidewalks between bridges) • Warren Road (from Hanshaw Rd south) • Elm St. Ext (City line to Valley View Rd. to West Haven Preserve) • Danby Road (Alumni Circle/IC entrance to King Road) • Juniper Dr to back entrance of IC • Slaterville Road (City line to Pine Tree Rd) • Snyder Hill Road (Pine Tree Rd to Dove Dr.) • Forest Home Dr (~1000 ft section along residents towards Flat Rock) • Murial St. (Hanshaw to Rose Hill Rd)
Town of Ithaca Complete Streets Policy (2015)	<ul style="list-style-type: none"> • Pursue a safe, reliable, efficient, integrated and connected multimodal transportation system • Promote accessibility, mobility and health for all road users including pedestrians, bicyclists, transit users, people of all ages and abilities, motorists, emergency responders, freight providers and adjacent landowners 	<ul style="list-style-type: none"> • Town 2007 Transportation Plan Map 11: Prioritized Pedestrian Needs • Town 2007 Transportation Plan Map 12: Prioritized Bicycle Corridor Needs 	<ul style="list-style-type: none"> • Selecting and retrofitting priority Complete Streets segments for Town CIP (Capital Improvement Plan) thoroughfares 	<ul style="list-style-type: none"> • None
Town of Caroline Comprehensive Plan (2020)	<ul style="list-style-type: none"> • Provide sufficient pedestrian infrastructure • Provide safe access to main roads 	<ul style="list-style-type: none"> • Pedestrian pathways and bike routes between Slaterville Springs, Brooktondale, and Ithaca, 	Not Applicable	<ul style="list-style-type: none"> • None

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	<ul style="list-style-type: none"> • Improve accessibility to public transportation 	including Coddington, Six Mile Creek, and Besemer trails		
Town Of Danby Comprehensive Plan (2011)	<ul style="list-style-type: none"> • Reduce speed limits in the neighborhoods • Provide pedestrian and bicycle pathways • Maintain crash database • Implement traffic calming measures • Improve road safety for farm vehicles • Enhance opportunities of public input 	<ul style="list-style-type: none"> • Routes 96B and 34/96, Coddington Road, South Danby Road, East Miller Road, and Comfort Road 	<ul style="list-style-type: none"> • Topography challenge • Jurisdictional challenge (many roads owned by multiple jurisdictions) • Conflicting public opinion 	<ul style="list-style-type: none"> • Develop Multimodal Transportation Plan for Danby
Town of Dryden 2045 Comprehensive Plan (2022)	<ul style="list-style-type: none"> • Reduce speed limit • Traffic management in residential areas • Expand rail trail connections and on-road bicycling facilities • Improve signage, wayfinding, and trail maintenance • Reduce access conflicts between through traffic and business patrons 	<ul style="list-style-type: none"> • Hamlet of Varna 	<ul style="list-style-type: none"> • Preserving agricultural practices while expanding trails 	<ul style="list-style-type: none"> • Corridor improvements on the western section of NYS Route 13 between Warren Road and NYS Route 366 (Main Street), and the eastern section of NYS Route 13 between NYS Route 366 (Main Street) and Spring House Road
Town of Dryden Comprehensive Plan (2005)	<ul style="list-style-type: none"> • Enforcement of speed limits • Provide truck safety regulations • Provide network of bicycle/pedestrian system 	<ul style="list-style-type: none"> • Traffic speed issue on NYS Route 366 between Freeville and NYS Route 13; and Fall Creek Road through the hamlet of McLean, a portion of which is in the Town of Dryden 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Recommendation for utilizing old abandoned former railroad as a bicycle pedestrian path • Proposal of bicycle/pedestrian system between Dryden Lake and the East Ithaca Recreation Way

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Village of Dryden Comprehensive Plan (2006)	<ul style="list-style-type: none"> Establish safe driveway access parking locations Implement integrated multimodal transportation network Provide sidewalks on new streets 	<ul style="list-style-type: none"> Route 13 (Safety of pedestrians) Safety concern around the “four corners” intersection and the post office 	<ul style="list-style-type: none"> Flooding constraints Freeze and thaw patterns 	<ul style="list-style-type: none"> None
Town of Dryden Residential Development Design Guidelines (2008)	<ul style="list-style-type: none"> Enhance public safety along roadways Reduce conflict between roadway traffic and vehicles entering and exiting driveways 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> None
Town of Dryden Commercial Development Design Guidelines (2008)	<ul style="list-style-type: none"> Improve road safety for vehicles Improve walking accessibility between adjacent commercial developments through sidewalks, multi-use paths, etc. Provide internal pedestrian connectivity (on site, from parking lots, to adjacent lots, etc.) through pedestrian walkways and access to development Provide sufficient crosswalks, curb bulb-outs, appropriate signage, lighting, pedestrian crossing signals, and traffic lights 	<ul style="list-style-type: none"> Improve safety for vehicles traveling along Route 13/366 	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> None
Varna Community Development Plan (2005)	<ul style="list-style-type: none"> Implement TDM strategies Enhance pedestrian and bicycle resources. Invest in the development and maintenance of new and existing trails 	<ul style="list-style-type: none"> Intersection of NYS Route 366 with Freese Road / Mt. Pleasant Road (safety issue for pedestrians and drivers) 	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Implementation of a Complete Street system in the study area along Route 366 which will include sidewalks, bike lanes, and raised medians

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Town of Newfield Comprehensive Plan (2013)	<ul style="list-style-type: none"> • Implement more bike routes and trails • Implement integrated multimodal transportation network • Provide safe pedestrian walkways between key points • Improve lighting in the hamlet • Control the changes in speed limits, traffic control devices and changes to dangerous intersections 	<ul style="list-style-type: none"> • Intersections of Route 13 at Millard Hill and Route 13 at Trumbull's Corners Rd. 	<ul style="list-style-type: none"> • Topography challenge 	<ul style="list-style-type: none"> • None
Newfield Hamlet Core Revitalization Plan (2021)	<ul style="list-style-type: none"> • Improve pedestrian infrastructure such as crosswalks, sidewalks, lighting. • Improve safety around parking lot for pedestrians • Lowering speed limit 	<ul style="list-style-type: none"> • Main Street/Bridge Street/Shaffer Road Intersection area at the core of the hamlet 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • New network of pedestrian connection to provide linkage to important destinations • Provision of green infrastructure • Realignment of Shaffer Road to Bridge Street
Village of Lansing Comprehensive Plan (2015)	<ul style="list-style-type: none"> • Include Complete Streets principles • Improve commercial district zoning to include provisions for pedestrians and bicyclists • Prepare a sidewalk plan • Provide access to public transportation 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • None
Town of Lansing Comprehensive Plan (2018)	<ul style="list-style-type: none"> • Provide multi-use trails for bikers and pedestrians • Enhance and expand bicycle and pedestrian infrastructure such as providing sidewalks, improving street lighting, providing bike lanes, monitoring of speed, etc. 	<ul style="list-style-type: none"> • Triphammer Road, Route 34, Town Hall area, Waterwagon Road, Hillcrest Road, Warren Road 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • None

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	<ul style="list-style-type: none"> • Provide road safety education for drivers and pedestrians • Implement Complete Streets design standards 			
The Village of Lansing Greenway Plan (2022)	<ul style="list-style-type: none"> • Provide safe and ADA compliant pathways for walking and biking • Provide sidewalks when a special permit or subdivision is considered by the Planning Board (per Local Law 3 adopted in 2021) 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • None
Village of Cayuga Heights Comprehensive Plan (2014)	<ul style="list-style-type: none"> • Implement a strategic plan for sidewalks to ensure the safety of Village pedestrians, especially older adults and children • Provide bike lanes on village streets • Implement traffic calming measures to lower vehicle speeds and increase pedestrian safety 	<ul style="list-style-type: none"> • Accessibility around Ithaca High School, Boynton Middle School, and Cayuga Heights Elementary School (Pedestrian safety issue) 	<ul style="list-style-type: none"> • High traffic volume hinders road maintenance 	<ul style="list-style-type: none"> • None
Transportation Impact Study for the proposed Lansing Town Center Development (Draft) Traffic Impact Study for the proposed Dandy Mini Mart NY-34B/NY-34 (2021)	<ul style="list-style-type: none"> • Eliminate traffic crashes • Enhance and expand bicycle and pedestrian infrastructure • Reduce posted speed limits 	<ul style="list-style-type: none"> • Intersection of NY-34/NY-34B overlap 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Proposed sidewalks along all internal roadways and along the NY-34 frontage

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Better Bike Network Routes & Projects (website)	<ul style="list-style-type: none"> • Provide connected, convenient, comfortable, and safe bike networks in Tompkins County 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Proposal of six Better Bike routes in Ithaca- Fall Creeker, Waterfront Connector, Northside-Southside, Hill-to-Hill, Six Mile Creek Trail, and Southwest Shopper
NYS Route 96 / Trumansburg Road Pedestrian Corridor Study Project (2020)	<ul style="list-style-type: none"> • Provide sidewalks along the corridor • Pedestrian and Bicyclist safety, particularly after fatal crashes • Reduce crashes involving animals 	<ul style="list-style-type: none"> • NYS Route 96 (Pedestrian safety) 	<ul style="list-style-type: none"> • Drainage • Inability to successfully petition for lower speed limits (as of 2022) 	<ul style="list-style-type: none"> • Two alternatives proposed for corridor: First Alternative includes provision of sidewalk on the east side of Trumansburg Road. Second Alternative includes provision of sidewalks on both sides of the roadway The first alternative is at the highest priority
NYS Route 96B (Danby Road) Pedestrian Study (2017)	<ul style="list-style-type: none"> • Lower speed limit • Enhance pedestrian infrastructure • Improve traffic signals at the intersections 	<ul style="list-style-type: none"> • Phase 2 implementation: sidewalks on east side of NYS Route 96B from King Road north to current terminus at IC entrance (Phase 1 completed in 2020 of construction of sidewalks from IC entrance on east side of NYS Route 96B north to the City of Ithaca/Town of Ithaca Municipal Line.) 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Provide sidewalks along NYS Route 96B • Update traffic signals at the intersection of NYS Route 96B and Ithaca College main entrance and at the intersection of NYS Route 96B and the South Hill Business Campus driveway • Install a new mid-block crossing on NYS Route 96B • Install pedestrian signals at the NYS Route 96B/King Road intersection • Reduce speed limit of NYS Route 96B

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Reimagining the Dryden North Street Neighborhood (2022)	<ul style="list-style-type: none"> • Lower speed limit on the streets • Enhance sidewalks and crosswalks 	<ul style="list-style-type: none"> • North Dryden's Route 13 Corridor (safety issue for pedestrians and drivers) 	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Sidewalk extension on both sides of the road, from Freeville Road to Bahar Drive • Crosswalks at Route 13's intersection Ellis Drive, Brightday Road, Quounist Road, North Road and Bahar Drive • Signalization at the Brightday Road and North Street intersections

Table 2: Safety-Related Documents

Name of Document (Year Published)	Description	Key Safety Components	Relevance to Tompkins County SS4A Joint Safety Action Plan
New York State Safety Documents			
New York State Strategic Highway Safety Plan (SHSP) (2023)	<ul style="list-style-type: none"> • Five-year plan framing statewide priority safety areas (emphasis areas) and proven strategies and actions to be taken to reduce fatality and serious injury crashes on New York’s public roads • Programs and projects identified that address a SHSP emphasis area are eligible for Highway Safety Improvement Program (HSIP) funding 	<ul style="list-style-type: none"> • Eliminating fatalities and serious injuries using Safe System Approach • Implementing safety opportunities to promote safer vehicles, post-crash care and response, and data improvements • Enforcing safety laws and continuing educational programs to prevent crashes • Implementation of Traffic Incident Management Strategies 	<ul style="list-style-type: none"> • Statewide objectives and approach for setting those can be considered • Understand statewide emerging needs that apply to Tompkins County • Relevant emphasis areas and supporting strategies and actions can be adopted or customized • Understand state safety partners and engage in planning process (or implementation process) as needed
New York State SHSP Appendix 2: Vulnerable Road User (VRU) Safety Assessment (2023)	<ul style="list-style-type: none"> • An in-depth quantitative risk assessment examining crash locations across New York State and assessment of risk by census tract based on this crash data • Provides insights on safety issues gathered from multiple stakeholders representing VRUs across New York State 	<ul style="list-style-type: none"> • Reduce non-motorized fatalities and serious injury crashes • Conducting VRU Risk Assessment • Improving coordination, communication, and engagement strategies between the State, municipalities, and Tribal Nations • Enforcing safety laws for VRUs 	<ul style="list-style-type: none"> • NYS DOT identified City of Ithaca as one of the locations for target outreach and safety initiatives • Provides the methodology for VRU risk assessment • Includes a list of strategies and proposed actions to progress VRU safety in upcoming years using a Safe Systems Approach • Identifies Special Equity Areas to enhance the analysis of the VRU Safety Assessment
New York State FFY 2023 Highway Safety Strategic Plan (2023)	<ul style="list-style-type: none"> • Plan talks about equity in traffic safety, statewide performance measures, highway safety planning process and performance plan • Performance plan includes 12 core performance measures established 	<ul style="list-style-type: none"> • Prevention of motor vehicle crashes and reducing the severity of injuries • Reducing speeding issues and alcohol impaired driving 	<ul style="list-style-type: none"> • Statewide performance measures can be considered • Understand state safety partners and engage in planning process as needed • Provides strategies to address behavioral aspects of safety

	by NHTSA and some additional measures selected by New York. The targets for these performance measures are set in this plan	<ul style="list-style-type: none"> • Promoting safety of motorcyclists and non-motorized users including pedestrians and bicyclists • Implementing community traffic safety programs 	
Final Statewide Greenway Trails Plan & Final Generic Environmental Impact Statement (2021)	<ul style="list-style-type: none"> • The Plan identifies non-motorized multi-use trail user types, addresses trail trends and issues, and discusses the benefits of trails. 	<ul style="list-style-type: none"> • Providing safe routes to walk or bike to school • Including safe infrastructure for walking and biking to major destinations • Implementing Complete Streets principles 	<ul style="list-style-type: none"> • Provides existing and proposed non-motorized, shared-use trails across the state • Provides goals and recommendations for implementing Greenway Trails
NACTO Design Guides			
Urban Street Design Guide (2013)	<ul style="list-style-type: none"> • Outlines the principles and practices for implementing complete streets to make urban streets safer, more livable, and more economically vibrant 	<ul style="list-style-type: none"> • One of the guide's six basic Street Design Principles is "Design for Safety." Each section of street design elements, interim design strategies, intersection design elements, and design controls, have tools to make safer streets 	<ul style="list-style-type: none"> • This guide provides practical designs for different street types to make them safer. For example, the report details pedestrian safety islands, leading pedestrian interval, and speed reduction mechanisms
Global Street Design Guide (2016)	<ul style="list-style-type: none"> • Addresses a variety of street typologies and design elements found around the world to make streets safe, accessible, and economically sustainable places. Many case studies and examples from around the world are included as well 	<ul style="list-style-type: none"> • One of the guide's ten Key Design Principles is "Streets for Safety: Design streets to be safe and comfortable for all users. Prioritize the safety of pedestrians, cyclists, and the most vulnerable users among them: children, seniors, and people with disabilities. Safe streets have lower speeds to reduce conflicts, provide natural surveillance, and ensure spaces are safely lit and free of hazards." The 	<ul style="list-style-type: none"> • Provides more details on different facility types and strategies for how to improve street safety for pedestrians, cyclists, and motorists • Provides good case study examples for different street types

		guide provides specifics for pedestrian crossings, visibility and sight distance for motorists, and different cycle facilities	
Urban Bikeway Design Guide (2014)	<ul style="list-style-type: none"> Provides cities with state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists. The guide gives three levels of guidance: required, recommended, and optional elements 	<ul style="list-style-type: none"> The basis for the guide is building bike infrastructure that will make biking safer and more comfortable for riders. Details bike lanes, cycle tracks, intersection treatments, bicycle signals, bikeway signing & marking, bicycle boulevards, and designing for all ages & abilities 	<ul style="list-style-type: none"> Provides details on facility types to improve safety and comfort of bicyclists
Transit Street Design Guide (2016)	<ul style="list-style-type: none"> The guide provides design guidance for the development of transit facilities on city streets, and for the design and engineering of city streets to prioritize transit, improve transit service quality, and support other goals related to transit 	<ul style="list-style-type: none"> One of the guide's six Key Principles is "Safe Movement at a Large Scale: Transit streets designed with people in mind are safe places to walk and bike, and transit improvements go hand in hand with better pedestrian access, safer crossings, and more enjoyable public space." Also, transit is much safer than private automobiles. Transit mode share and transit-supportive infrastructure are directly correlated to lower traffic fatality rates 	<ul style="list-style-type: none"> Potential interest in "transit streets," which are safer for all kinds of movement Includes recommendations and examples of creating transit streets
Designing Streets for Kids (2020)	<ul style="list-style-type: none"> Builds upon the approach of putting people first, with a particular focus on the specific needs of children and their caregivers as pedestrians, cyclists, and transit users in urban streets around the world. This is a supplement to NACTO-GDCI's Global Street Design Guide 	<ul style="list-style-type: none"> The first attribute that the guide says streets for kids should be is "safe and healthy." Safe and healthy streets include continuous and accessible pedestrian infrastructure, safe cycling and transit facilities, safe vehicular speeds, clean air, access to nature through 	<ul style="list-style-type: none"> This guide serves as a reminder to include children when considering safety improvements in Tompkins County and specific case studies and examples of how this has been successfully implemented. Several examples are safety improvements around schools for children as pedestrians and cyclists

		landscape and trees, opportunities for physical activity, and adequate lighting	
Bike Share Station Siting Guide (2016)	<ul style="list-style-type: none"> The NACTO Bike Share Station Siting Guide provides high-level guidance on physical bike share station siting types and principles 	<ul style="list-style-type: none"> One of the five Bike Share Siting Goals is "Designed for Safety: Stations should be considered as part of a city's traffic calming toolkit and located in areas with relatively high volumes of pedestrian traffic and good lighting." 	<ul style="list-style-type: none"> Tompkins County includes a bike share system, so this guide can help to address how existing and future bike share can contribute to safer streets
Don't Give Up at the Intersection (2019)	<ul style="list-style-type: none"> Don't Give Up at the Intersection expands the NACTO Urban Bikeway Design Guide, adding detailed guidance on intersection design treatments that reduce vehicle-bike and vehicle-pedestrian conflicts This guidance covers protected bike intersections, dedicated bike intersections, and minor street crossings, as well as signalization strategies to reduce conflicts and increase comfort and safety. Used in concert with NACTO's Urban Bikeway Design Guide and Designing for All Ages and Abilities, this guidance provides the tools cities need to build comprehensive, connected, safe bike networks 	<ul style="list-style-type: none"> Overall, this guide's purpose is to reduce turn conflicts for cyclists and motor vehicles. The three main ways to do this are to reduce turning speed, make bikes visible, and give bikes the right of way. The guide focuses on three intersection design strategies and the specific tools that are most applicable to each (protected intersections, dedicated intersections, and minor street crossings) 	<ul style="list-style-type: none"> Provides ways to improve intersections where bicyclists are, or could be, present
International Best Practices			
Dutch Design Manual for Bicycle Traffic (2006, updated 2017)	<ul style="list-style-type: none"> This manual helps designers and policymakers to give the bicycle a full-fledged place in the traffic and transport system and offers a wide array of arguments, empirical data, ideas and tips for effective cycling 	<ul style="list-style-type: none"> The manual considers five basic design principles for network design: cohesion, directness, safety, comfort, and attractiveness 	<ul style="list-style-type: none"> Provides a more holistic definition of safety for cycling, including both social and road safety Outlines what are considered gold standards for cycling facilities and design

	<p>infrastructure and appropriate cycle facilities. Considered the gold standard for bicycle planning and design</p>	<ul style="list-style-type: none"> • Safety: Good cycling infrastructure design must guarantee both social and road safety. It is necessary to reduce stress and the exposure to pollutants and noise to assure personal health on the road, and especially to attract new people that are interested in cycling, but still concerned and fearful of the conditions. To achieve this, bike lanes work better when they are not parallel to main busy roads, but in neighborhood low speed streets. In addition, bike lanes that are physically separated from the roads will make cycling safer. To minimize the risk of collision, it is also crucial to build tunnels and bridges for intersections with busy traffic and high speed roads 	<p>that may be considered by Tompkins County</p>
<p>Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (2010)</p>	<ul style="list-style-type: none"> • This report provides guidance on the application of context sensitive solutions to make urban thoroughfares walkable and change streets from primarily focused on mobility and restore economic and social functions 	<ul style="list-style-type: none"> • Safety for pedestrians, bicyclists and transit users is key to creating more walkable, livable streets 	<ul style="list-style-type: none"> • Guidance on the planning of walkable streets, particularly facility designs for pedestrians, bicyclists, and transit users
<p>Implementing Context Sensitive Design Handbook (2017)</p>	<ul style="list-style-type: none"> • The handbook is a follow up to "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach" and includes an expanded focus on topic areas including speed management and context-sensitive design in lower-density urban and built-up suburban environments 	<ul style="list-style-type: none"> • One of the focus areas of the document is speed management with case studies to demonstrate the medium- and long-term impacts of successful context-sensitive design projects 	<ul style="list-style-type: none"> • Provides insights into successful context-sensitive design projects

Other Documents			
Safe Streets and Roads for All (SS4A) Grant Program	<ul style="list-style-type: none"> • Safety funding program established under the Bipartisan Infrastructure Law (BIL) providing funds up to \$5 billion for regional, local, and Tribal initiatives through grants to prevent traffic fatalities and serious injuries • SS4A program supports the USDOT's National Roadway Safety Strategy and the goal of zero roadway deaths using a Safe System Approach 	<ul style="list-style-type: none"> • Development of a comprehensive safety action plan identifying significant roadway safety concerns • Implementation of projects and strategies to address roadway safety issues 	<ul style="list-style-type: none"> • Action Plans are prepared under the SS4A grant program to implement projects and strategies • Communities can use Planning and Demonstration Grants to develop an Action Plan • SS4A grant program provides a checklist of requirements needed for implementation grants' eligibility
National Cooperative Highway Research Program (NCHRP) 500 Guides (2003-2009)	<ul style="list-style-type: none"> • To reduce fatalities and serious injury crashes, the National Cooperative Highway Research Program (NCHRP) developed 22 guides which will guide state and local agencies to identify the problem areas and provide the strategies/countermeasures to address those problem areas 	<ul style="list-style-type: none"> • Reducing crashes including speed-related crashes, motorcycles, young drivers, pedestrians, bicycles, drowsy and distracted drivers, heavy trucks, etc. 	<ul style="list-style-type: none"> • Guides can help identify appropriate strategies for the Tompkins County region • Guides also provide some best practices for improving safety on the streets
National Highway Traffic Safety Administration's (NHTSA) Countermeasures That Work (2023)	<ul style="list-style-type: none"> • Guidance for State Highway Safety Offices (SHSOs) for the selection of appropriate evidence-based countermeasures for traffic safety issues • Guide provides major strategies and countermeasures that are relevant to SHSOs and provides the effectiveness, costs, and implementation time 	<ul style="list-style-type: none"> • Several safety related problem areas are discussed including impaired driving, speed management, distracted driving, motorcycle safety, young drivers, older drivers, pedestrian safety, bicycle safety, and drowsy driving 	<ul style="list-style-type: none"> • Assist Tompkins County in selecting countermeasures strategies that have proven to be effective
Federal Highway Administration (FHWA) Proven Safety Countermeasures	<ul style="list-style-type: none"> • A collection of 28 countermeasures and strategies that are proven to effective in reducing traffic fatalities and serious injury crashes • Strategies are designed for all road users on all kinds of roads including rural/urban roadways, high-volume 	<ul style="list-style-type: none"> • Several safety related focus areas are discussed including speed management, intersections, roadway departures, pedestrians/bicyclists, etc. 	<ul style="list-style-type: none"> • Assist Tompkins County in selecting countermeasures that have proven to be effective

	freeways, state roads, country roads, signalized intersections and so on		
Oxnard Local Road Safety Plan (2022)	<ul style="list-style-type: none"> • City of Oxnard (California) Local Road Safety Plan (LRSP) identifies proven countermeasures to improve transportation safety and reduce the number of traffic fatalities and serious injuries on city's streets • The plan utilizes safe system approach as the foundation of the safety plan 	<ul style="list-style-type: none"> • Focus on traffic safety initiatives and infrastructure for areas with high crash rates, especially areas with high fatalities and serious injury crashes • Promote safety culture for all road users • Provide equitable access to safety resources 	<ul style="list-style-type: none"> • Provides a comprehensive list of proven countermeasures that can be used for Safety Action Plan for Tompkins County
Institute of Transportation Engineers (ITE) Technical Brief on Institutionalizing the Safe System Approach in Local Road Safety Plans (2023)	<ul style="list-style-type: none"> • Document provides a robust and holistic safety framework to include Safe System Approach in LRSP in order to achieve to zero fatalities on the streets of the USA • Follows the FHWA's four-step process for LRSP and provides a series of tenets that helps the users in incorporating Safe System Approach in the LRSP 	<ul style="list-style-type: none"> • Vision to achieve zero fatalities and serious injuries • Address the disproportionate equity impacts of safety outcomes • Address speeding related issues and provide speed management opportunities 	<ul style="list-style-type: none"> • Provides a process for development of safety action plan • Presents as series of tenets to include Safe System Approach in a safety plan
Small Town and Rural Multimodal Networks (2016)	<ul style="list-style-type: none"> • Resource for small towns and rural communities to provide safe, accessible, and active transportation for people of all ages and abilities • Focus on providing pedestrian and bicycle infrastructure tailored to small towns and rural areas • Provides examples of best practices specific to rural communities 	<ul style="list-style-type: none"> • Providing a safe, equitable, and convenient network of pedestrian and bicycle facilities for people of all ages and abilities 	<ul style="list-style-type: none"> • Provide examples of peer communities and project implementation that will be appropriate for rural communities in Tompkins County

Key Themes

Several key themes or areas related to safety stood out in the document review. These themes are important to keep in mind while developing the Joint Safety Action Plan as they reflect priority safety topics for municipalities in Tompkins County, as well as best practices in transportation safety. The key themes include:

- Vulnerable Road User Safety (considerations for both older road users and children)
- Pedestrian and bicycling facilities, including trail networks
- Transportation demand management and encouraging mode shift to active transportation
- Complete and Green Streets
- Speed management
- Safe access to driveways (minimizing conflict between vehicle entering/exiting driveways and roadway traffic)
- Reducing crashes (fatalities, serious injuries, and collisions with animals)
- Crash data management
- Safe movement of freight
- Lighting improvements
- Safety education and outreach
- Equity
- Safe System Approach

Key Takeaways

The local municipal, county, and MPO plans and documents provide a basis for understanding the local context for transportation safety and provide background for the one-on-one meetings with municipalities and public outreach later in the project. Determining key projects is a part of the Joint Safety Action Plan process, and these documents provided information on ongoing, planned, and proposed safety projects in the study area. These projects include, but are not limited to:

- Driver, pedestrian, and bicyclist safety improvements on NYS Route 13 throughout Tompkins County
- Tompkins Priority Trail Strategy
- Pedestrian safety and accessibility around Ithaca High School, Boynton Middle School, and Cayuga Heights Elementary School
- Complete Streets system along NYS Route 366
- Multimodal Transportation Plan for Danby
- Dryden Rail Trail Phase 2
- Black Diamond Trail Connector
- Cayuga Heights: Sidewalk Connections

The reviewed municipal and county plans and documents also pointed out specific locations and corridors that are safety priorities. While the full list is in Table 1 above, these locations include but are not limited to:

- NYS Route 96/96B
- East Shore Drive (NYS Route 34A/930F)
- NYS Route 79
- NYS Route 34/34B
- Downtown City of Ithaca
- Warren and Hanshaw Road (Northeast neighborhood)
- South Hill, West Hill, and East Hill neighborhoods
- Forest Home neighborhood
- Ithaca College
- Hamlet of Varna
- Fall Creek Road through the Hamlet of McLean
- Intersection of NYS Route 366 with NYS 13 and Hall Road

Another useful takeaway from these local plans and documents were the challenges faced in implementing safety improvements in the area. While many of these challenges are typical across the nation, including limited funding, conflicting public opinion, and ownership by multiple jurisdictions, others are more unique to Tompkins County. These include the topography and climate (including snow and freezing temperatures), preserving agriculture practices while expanding trails, and collisions with animals. Another challenge is that many towns have one main, high-traffic road cutting across it, such as NYS Route 13, which makes road maintenance and construction difficult, as well as poses safety issues like residential driveways creating conflict points for pedestrians and bicyclists.

New York State's SHSP and VRU Assessment provide a jumping off point for this work. The City of Ithaca was named as a priority location for safety improvements in the state. NCHRP, NACTO, and other national and international best practice guides and documents were part of this review as they provide potential solutions for the challenges identified in this document review, as well as other problem areas that will be discovered in future meetings to determine recommended projects.