



Elmira-Chemung Transportation Council

City of Elmira Sidewalk Inventory

2023



Introduction

In the Summer of 2023, the Elmira-Chemung Transportation Council (ECTC) began to examine the sidewalk system in the City of Elmira. ECTC hired a summer intern to complete the data collection and preliminary data analysis. This survey was based on previous and ongoing work conducted by the Adirondack Glens Falls Transportation Council (AGFTC) and the Syracuse Metropolitan Transportation Council (SMTC). The findings of this survey were analyzed and summarized into this report. Findings are represented by maps and charts, divided up by individual census tracts within the City.

This report provides a preliminary record/database of the sidewalk, curb ramp and crosswalk conditions, starting with the City of Elmira. Through this inventory, it was found that there are approximately 162 miles of sidewalk in the City of Elmira. This record can be updated to reflect updates, upgrades, and as a basis for future planning initiatives.

Data Preparation & Methodology

The sidewalk survey was performed using an internally developed system of data sources and software. This system uses ESRI's ArcPRO geographic information system (GIS) mapping software, ESRI's Field Maps App, an iPad with cellular connection, an intern, a digitized layer (hand drawn) of the City's sidewalks, curb ramps and crosswalk and a GoPro camera.

The iPad with cellular connection was used for real-time GPS tracking and for monitoring the current live location in the GIS Field Maps App. When surveying the sidewalks, the current location is an important aid in knowing the exact location to score the appropriate section of sidewalk. Sidewalks scored are displayed, or symbolized with a line style and/or color different from the other sidewalks, which provides a visual aid to know which areas are to be scored.

Initializing the surveying process can be time consuming depending on the area one is trying to cover and is mostly completed in office. A file geodatabase was created with three feature classes: sidewalks, curb ramps and crosswalks, and adds a rating domain. Data was digitized (sidewalks, crosswalks and curb ramps) using aerial photos and Google Maps. Curb ramps were 'snapped' to sidewalks, as was crosswalks to curb ramps. AGFTC digitized continuous sidewalk lines instead of breaking at driveway entrances or parcel boundaries, unlike SMTC who digitized sidewalks based on parcel. ECTC followed AGFTCs methodology in this case. The project was published to an ArcOnline account to edit and share the Map.

Some MPOs use a GPS receiver, while ECTC enabled cellular connection on their iPad. The cellular connection allowed real time editing of assets in the field, rather than collecting field data and synching the updates after returning to the office. ECTC decided to photograph assets with a rating of Partially Accessible and Below with a GoPro camera. This GoPro pictures captured include GPS coordinates that provide a spatial reference to verify the scores assigned in the field to an exact location. These locations can be used to create a PhotoLog, similar to that of the Road Scoring endeavor ECTC takes on every year. This PhotoLog can be used by the City of Elmira and DPW for many reasons, such as comparison of before and after and for other referential purposes.

NYS DOT Rating Scale:

This is a rating scale for accessibility of Pedestrian facility segments or points along state highways. Below are examples of the Rating Scale 1-5, with 5 being the best.



Rating 2 – NOT ACCESSIBLE – Accessibility for Persons with Disabilities is impossible or very difficult

Sidewalks, Multi-use trails -

- There are significant obstacles such as:
 - > 50' of unpaved walkway
 - Significant heaving or vertical displacement
 - Significant flooding
 - Vegetation growing over walkway
 - Steps within walkway

Less than 3' of width around obstacles (5' generally overall)



Intersections - curb ramps and crosswalks

- No curb ramps
- Street crown very steep
- Crosswalk pavement severely cracked or distressed

Crosswalks



Curb Ramps



Rating 1
– NOT

APPLICABLE – A facility or feature is not required to be accessible. If a feature is part of an accessible route, it is required to be accessible.

Rating 3 – PARTIALLY ACCESSIBLE – Not to current standards. Accessibility is possible, but there are problems

Sidewalks, Multi-use trails -

- Small heaving or vertical displacement
- No handrails on walkway ramps, etc.
- Major maintenance issues (gravel accumulation)



Intersections - curb ramps and crosswalks

- Problems with geometry
- Generally less than 5' width
- No detectable warnings
- Curb ramps not compliant as per Standard Sheets
- Major maintenance issues (gravel accumulation)

Crosswalks



Curb Ramps





Rating 4 – ACCESSIBLE – May need additional improvements

Sidewalks, Multi-use trails -

- Generally minor maintenance problems
- Minor insufficient width



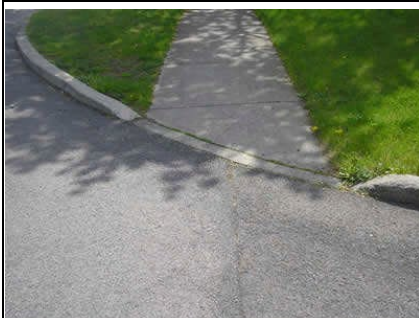
Intersections - curb ramps and crosswalks

- Generally minor maintenance problems
- Minor insufficient width

Crosswalks



Curb Ramps





Rating 5 – FULLY ACCESSIBLE – Fully Accessible to current standards

Sidewalks, Multi-use trails -



Intersections - curb ramps and crosswalks

Crosswalks



Curb Ramps



Source: NYSDOT ADA Transition Plan Appendix



SMTC Condition Rating Description (Based on NYSDOT Rating)

Rating	Title	Description	
1	Not Applicable	A facility or feature is not required to be accessible. If a feature is part of an accessible route, it is required to be accessible.	Generally not going to be used.
2	Not Accessible	Accessibility for Persons with Disabilities is impossible or very difficult. Think "Poor."	>50' unpaved walkway
			Significant heaving or vertical displacement
			Significant flooding
			Vegetation growing over walkway
			Steps within walkway
3	Partially Accessible	Not to current standards. Accessibility is possible, but there are problems. Think "Fair."	Less than 3' of width around obstacles (5' generally overall)
			Small heaving or vertical displacement
			No handrails on walkway ramps (not generally applicable)
4	Accessible	May need additional improvements. Think "Good."	Major maintenance issues (gravel accumulation)
			Generally minor maintenance problems
5	Fully Accessible to current standards	No improvements needed. Think "Excellent."	Minor insufficient width
			No or very minor maintenance problems
			Appropriate width (5' residential, 8' commercial)



NOT ACCESSIBLE





PARTIALLY ACCESSIBLE



ACCESSIBLE





FULLY ACCESSIBLE



Source: NYSDOT Pavement Condition Rating Manual



Overall Results

There are 161.9 miles of sidewalk total in the City of Elmira. These are the total distances of sidewalk broken up by Census Tract, including percentage below the poverty line, percentage of each rating of sidewalk when compared to the total, total population, percentage vehicle owners, senior citizen percentage, and number of bus stops, benches, bus shelters, food banks, grocery stores, and healthcare facilities. Census Tracts within the City that do not have sidewalks, curb ramps, or crosswalks located in them are not included.

Tract 1:

- 16.4 miles of sidewalk, 10.1% of total, 30.5% of the population is below the poverty line, total population of 2,635 people. 86.2% of households are vehicle owners, 12.72% of the population are seniors.
- Sidewalks: 24.35% are Fully Accessible, 48.19% are More Accessible, 18.65% are Less Accessible, and 8.29% are Not Accessible.
- Curb Ramps: 38.96% are Fully Accessible, 36.62% are More Accessible, 18.77% are Less Accessible, and 5.63% are Not Accessible.
- Crosswalks: 74% are Fully Accessible, 24% are More Accessible, 2% are Less Accessible.
- Facilities: 4 Bus Stops, Family Services, Salvation Army Halfway House, American Red Cross, Wegmans Pharmacy and Grocery Store, Cids, Comprehensive.
- Notes: Grand Central/Division Bus Stop next to poor condition roads.

Tract 2:

- 17.1 miles of sidewalk, 10.6% of total, 18.02% of the population is below the poverty line, total population of 2,642, 89.1% of households are vehicle owners, 15.47% of the population are seniors.
- Sidewalks: 67.04% are Fully Accessible, 28.40% are More Accessible, 3.41% are Less Accessible, and 1.13% are Not Accessible.
- Curb Ramps: 64.14% are Fully Accessible, 27.27% are More Accessible, 4.04% are Less Accessible, and 4.54% are Not Accessible.
- Crosswalks: 95% are Fully Accessible, 5% are More Accessible.
- Facilities: Finger Lakes Endodontics, Caregivers, 1 Bus Bench, 2 Shelter, 2 Bus Stops.

Tract 3: Elmira Correctional Facility

-Not Assessed

Tract 4:

- 12.5 miles of sidewalk, 7.7% of total, 26.87% of the population is below the poverty line, total population of 2,113, 93.4% of households are vehicle owners, 25.08% are seniors.
- Sidewalks: 70.5% are Fully Accessible, 27.3% are More Accessible, and 2.2% are Less Accessible.
- Curb Ramps: 72.6% are Fully Accessible, 27.4% are More Accessible.
- Crosswalks: 73.1% are Fully Accessible, 26.9% are More Accessible.
- Facilities: One Bus Stop, Arnot Health Main Campus and Specialists, Able 2.

Tract 5:



- 17.3 miles of sidewalk, 10.7% of total, 21.54% of the population is below the poverty line, total population of 2,912, 89.86% of households are vehicle owners, 17% are seniors.
- Sidewalks: 77.89% are Fully Accessible, 20.52% are More Accessible, 0.5% are Less Accessible and 1% are Not Accessible.
- Curb Ramps: 70.89% are Fully Accessible, 25.92% are More Accessible, 2.64% are Less Accessible, and 0.53% are Not Accessible.
- Crosswalks: All Crosswalks are Fully Accessible.
- Facilities: 3 Bus Stops, 1 Shelter on Church/Hoffman, Finger Lakes Orthopedic Surgery, Mark G Schuller DDS PC, Gerould's Professional Pharmacy.

Tract 6:

- 14.99 miles of sidewalk, 9.25% of total, 47.1% of the population is below the poverty line, total population of 2864, 85.35% of households are vehicle owners, 9.69% are seniors.
- Sidewalks: 42.32% are Fully Accessible, 34.39% are More Accessible, 15.34% are Less Accessible, and 7.93% are Not Accessible.
- Curb Ramps: 66.15% are Fully Accessible, 27.69% are More Accessible, 3.58% are Less Accessible, 2.56% are Not Accessible.
- Crosswalks: 83.6% are Fully Accessible, 16.39% are More Accessible.
- Facilities: Bridges for Brain Injury, Social Connection, West Church Street Dental, Arthur J Miller Jr DDS PC, Oral & Implant Surgery, Independent Living Aim, Ray of Hope Church, Western Food Mart, Clarke Health Center, 1 Bus Stop.

Tract 7:

- 22.67 miles of sidewalk, 14.00% of total, 52.37% are below the poverty line, total population of 2407, 76.29% of households are vehicle owners, 27.53% are seniors.
- Sidewalks: 41.23% are Fully Accessible, 36% are More Accessible, 14.15% are Less Accessible, 8.61% are not Accessible.
- Curb Ramps: 51.89% are Fully Accessible, 33.24% are More Accessible, 10% are Less Accessible, and 4.86% are Not Accessible.
- Crosswalks: 72.5% are Fully Accessible, 22.5% are More Accessible, and 5% are Less Accessible.
- Facilities: Arnot Medical SVC, Family Services of Chemung County, Twin Tiers Eyecare, St. Joe's Hospital, NYS Department of Mental Health, 7 Bus Stops, 1 Shelter, 2 Benches.

Tract 9:

- 19.14 miles of sidewalk, 11.82% of total, 12.31% are below the poverty line, total population of 3355, 90.17% of households are vehicle owners, 13.6% are seniors.
- Sidewalks: 13.15% are Fully Accessible, 53.9% are More Accessible, 20.61% are Less Accessible, and 12.28% are Not Accessible.
- Curb Ramps: 44.72% are Fully Accessible, 39.24% are More Accessible, 8.43% are Less Accessible, 7.59% are Not Accessible.
- Crosswalks: 78.43% are Fully Accessible, 19.6% are More Accessible, 1.96% are Less Accessible.
- Facilities: Catholic Charities Chemung County, 2 Bus stops, 1 Shelter.

Tract 10:

- 14.68 miles of sidewalk, 9.06% of total, 26.33% are below the poverty line, total population of 2770, 77.73% of households are vehicle owners, 14.92% are seniors.



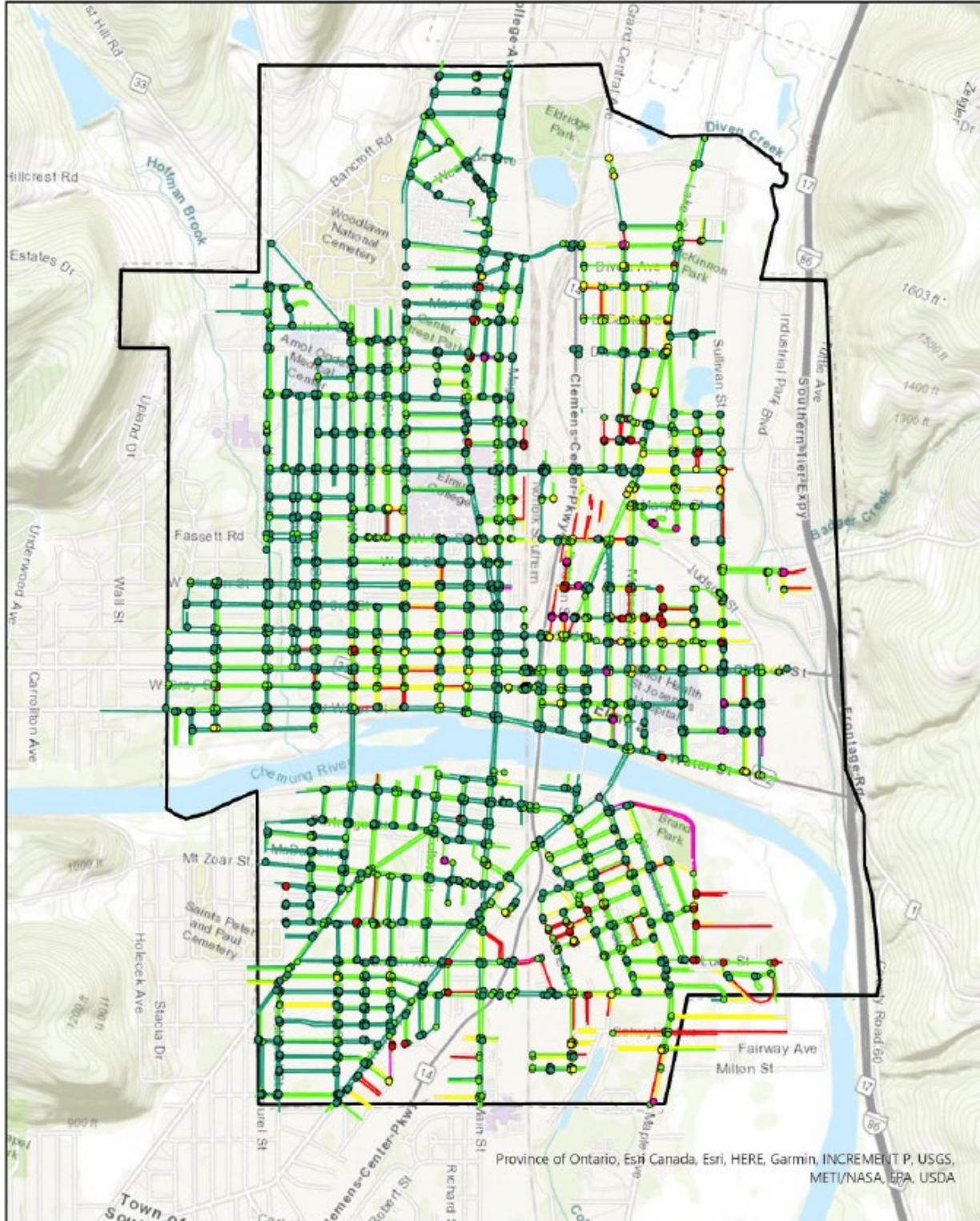
- Sidewalks: 50.2% are Fully Accessible, 43.58% are More Accessible, 2.05% are Less Accessible, 4.10% are Not Accessible.
- Curb Ramps: 192, 58.85% are Fully Accessible, 36.97% are More Accessible, 2.08% are Less Accessible, and 2.08% are Not Accessible.
- Crosswalks: 81.6% are Fully Accessible, 17.24% are More Accessible, and 1.15% are Not Accessible.
- Facilities: 4 Bus Stops, 3 Benches, Gerould's Pharmacy, Chemung County Crisis Management.
- Notes: Franklin Street sidewalk in severe disrepair, should be priority due to proximity to County Services.

Tract 11:

- 11.09 miles of sidewalk, 6.84% of total, 10.38% are below the poverty line, total population of 3354, 91.94% of households are vehicle owners, 16.77% are seniors.
- Sidewalks: 204, 56.86% are Fully Accessible, 39.7% are More Accessible, 2.45% are Less Accessible, and 0.98% are Not Accessible.
- Curb Ramps: 206, 67.47% are Fully Accessible, 28.15% are More Accessible, 1.94% are Less Accessible, 2.42% are Not Accessible.
- Crosswalks: 72.2% are Fully Accessible, 27.8% are More Accessible.
- Facilities: 3 Bus Stops.

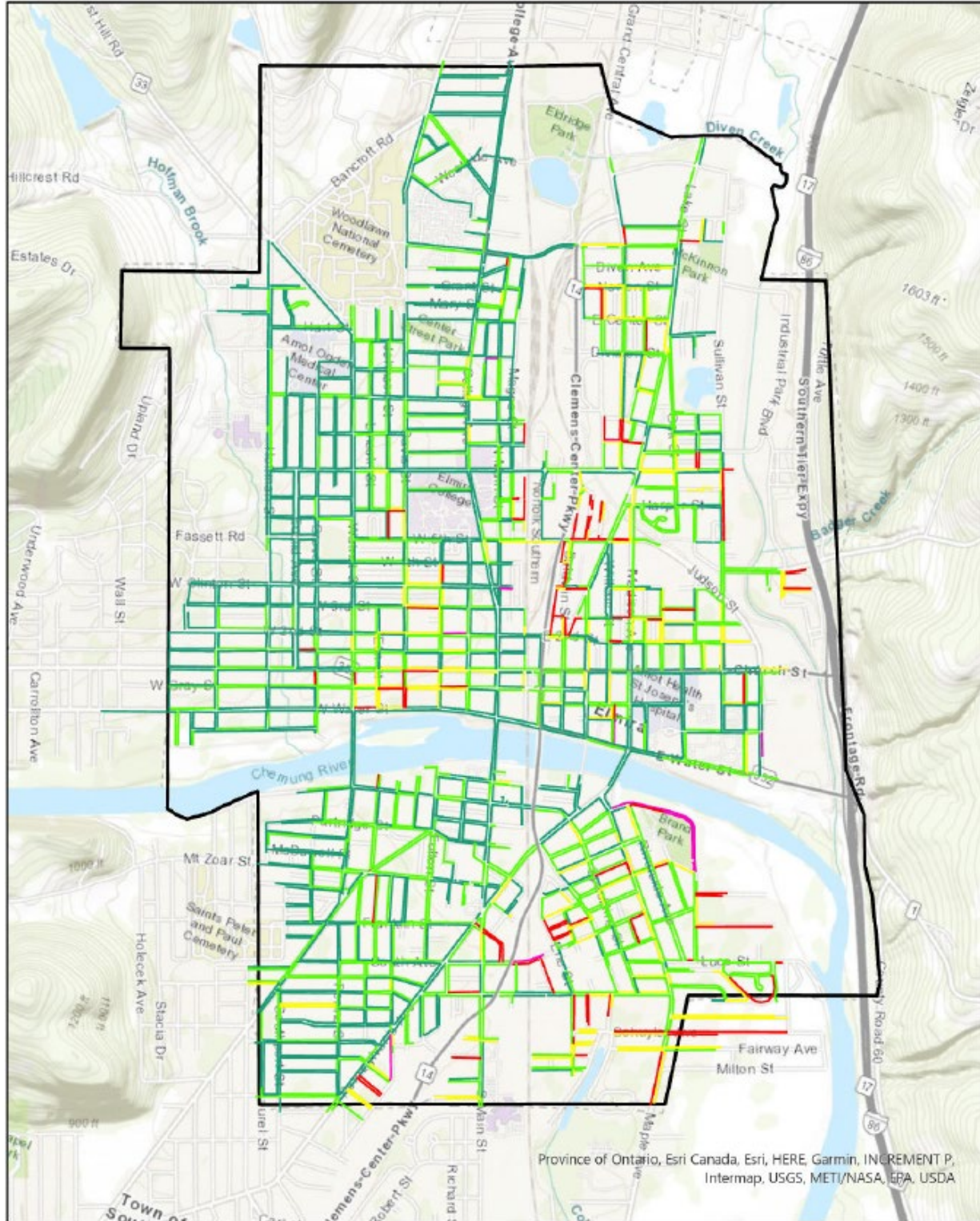


ADA Conditions City of Elmira





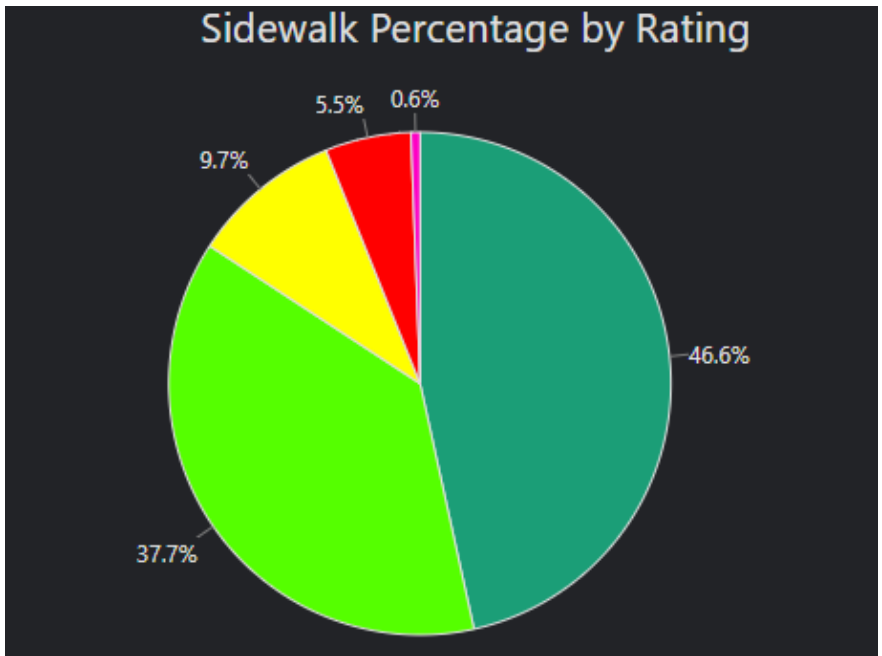
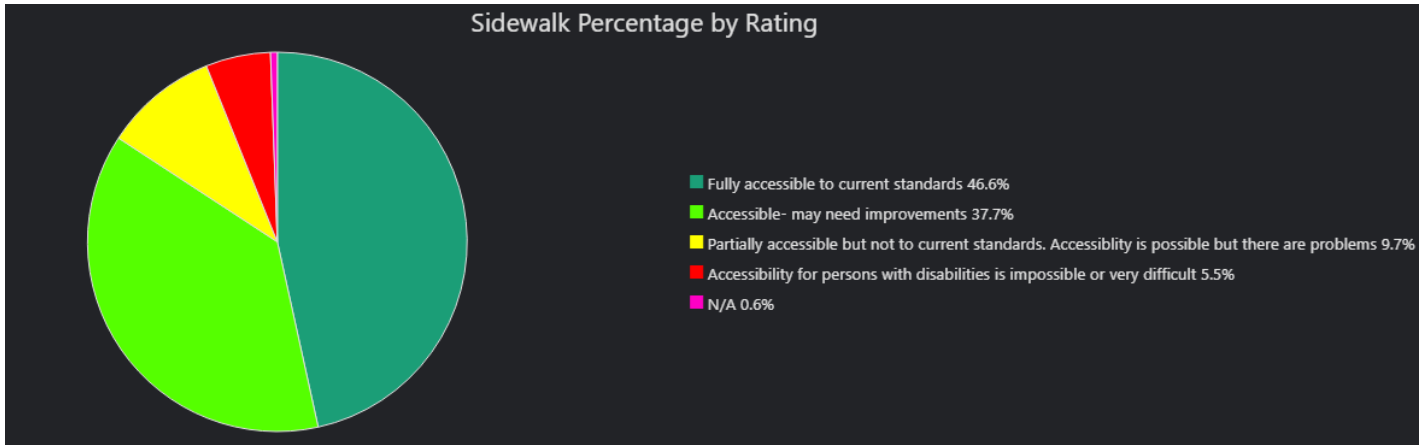
Sidewalk Conditions City of Elmira





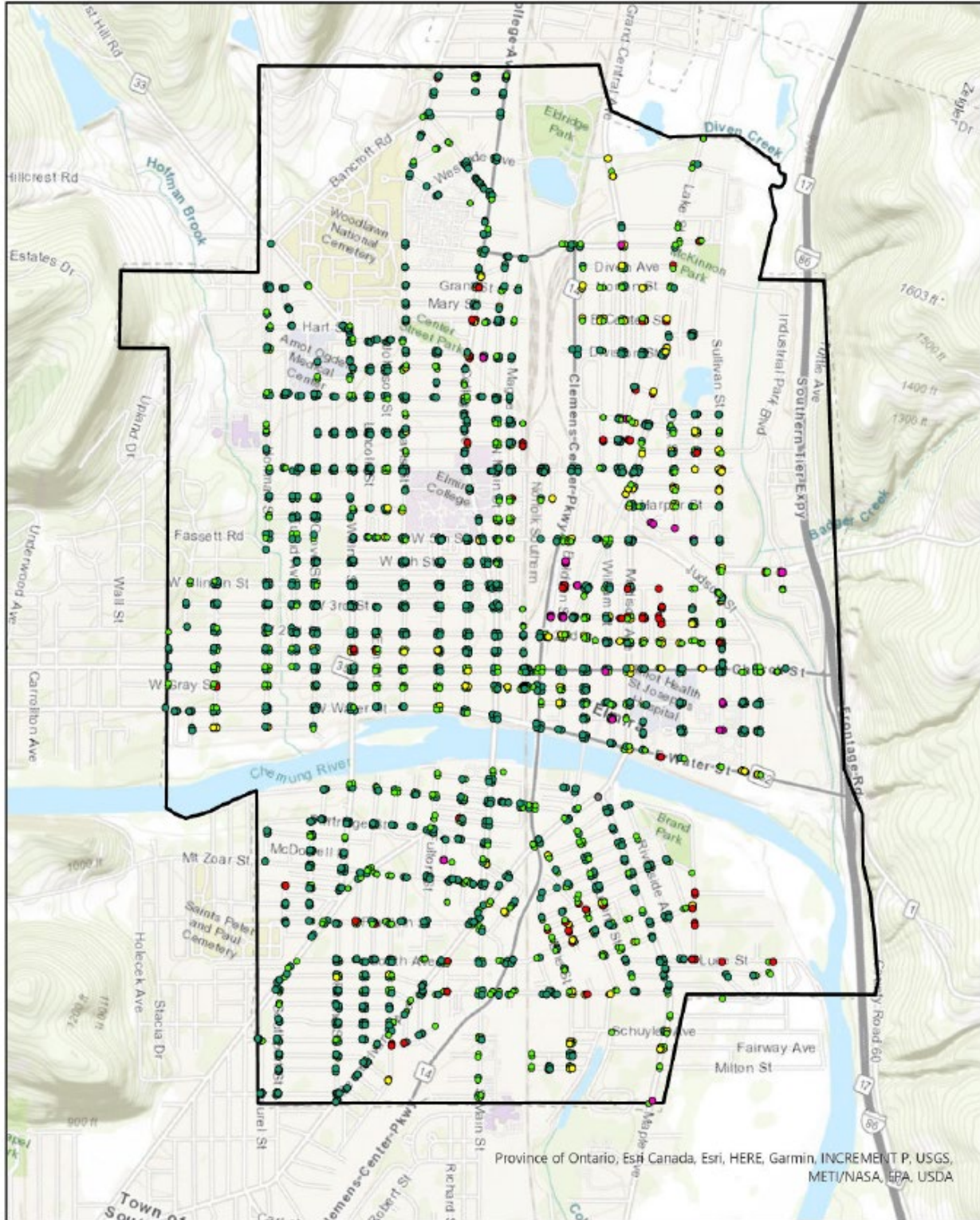
Sidewalks

- Fully accessible to current standards
- Accessible- may need improvements
- Partially accessible but not to current standards. Accessibility is possible but there are problems
- Accessibility for persons with disabilities is impossible or very difficult
- N/A





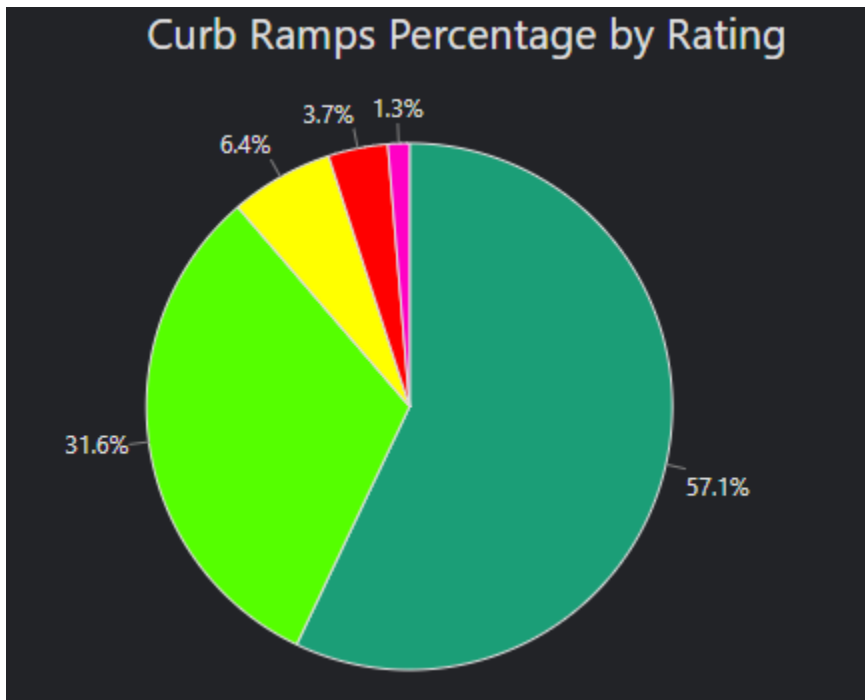
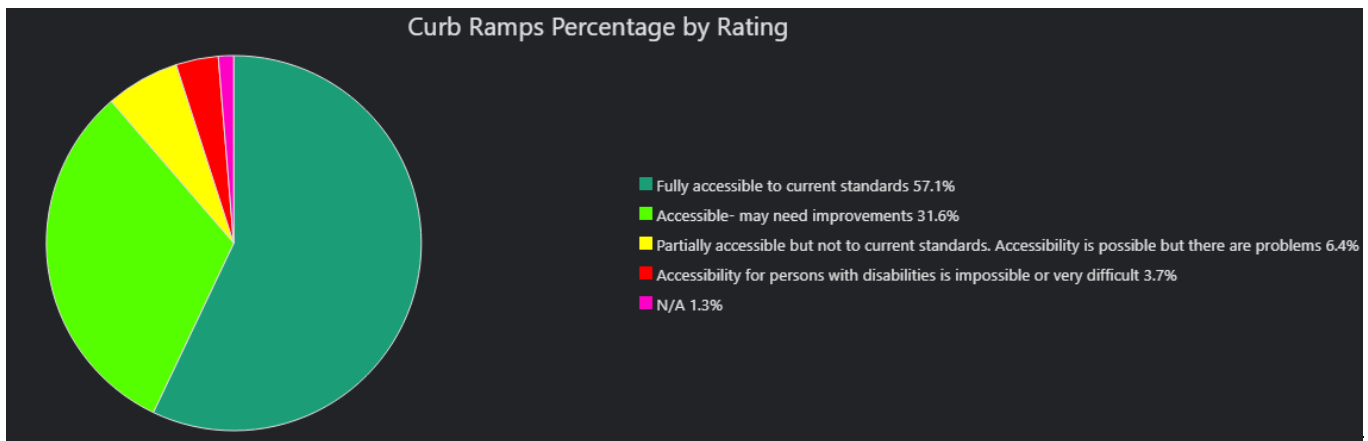
Curb Ramp Conditions City of Elmira





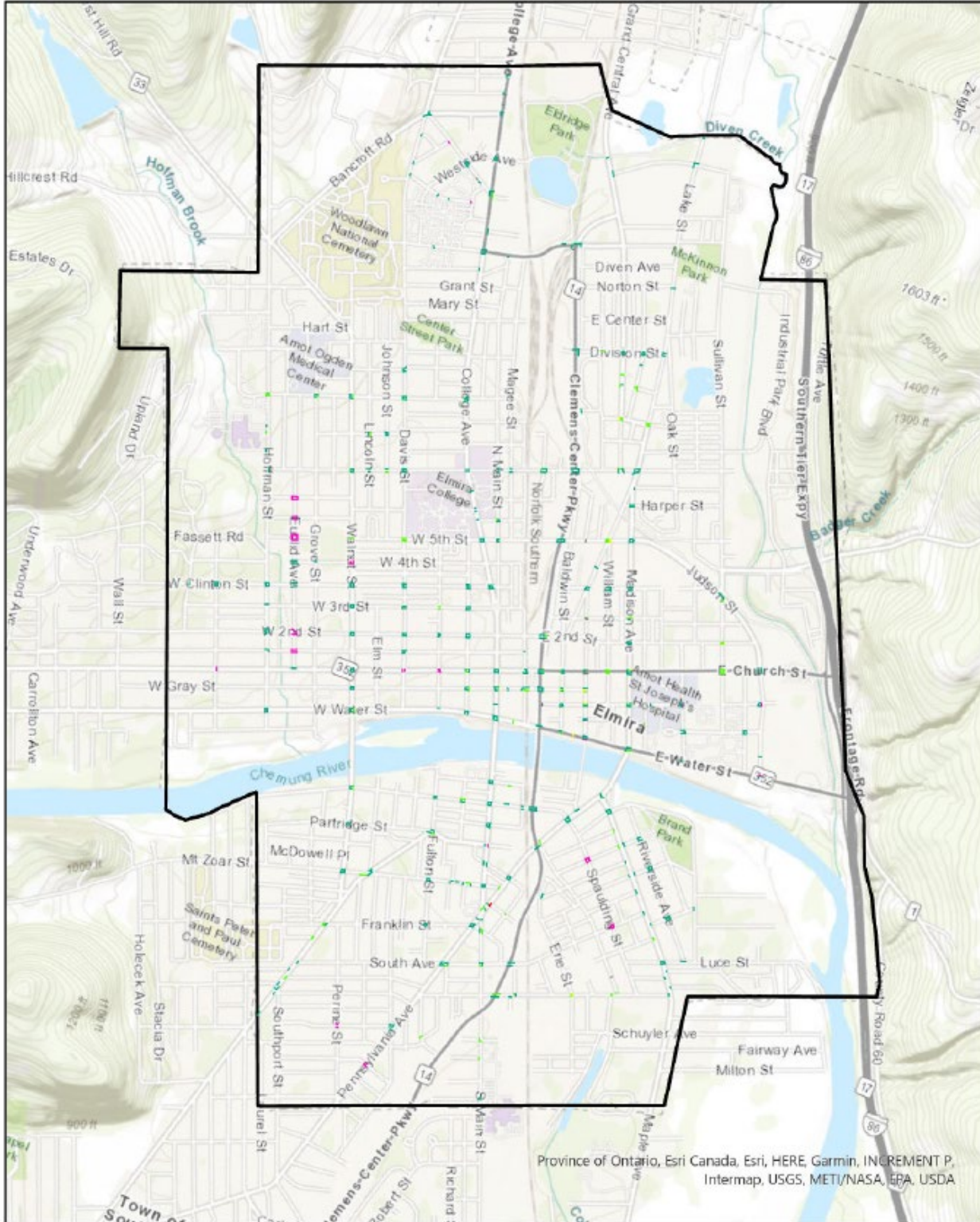
Curb Ramps

- Fully accessible to current standards
- Accessible- may need improvements
- Partially accessible but not to current standards. Accessibility is possible but there are problems
- Accessibility for persons with disabilities is impossible or very difficult
- N/A





Crosswalk Conditions City of Elmira





Crosswalk

- Fully accessible to current standards
- Accessible- may need improvements
- Partially accessible but not to current standards. Accessibility is possible but there are problems
- Accessibility for persons with disabilities is impossible or very difficult
- N/A





ADA Conditions in the City of Elmira by Census Tract

