

**CITY OF SARATOGA SPRINGS, NY
DEPARTMENT OF PUBLIC SAFETY
TRAFFIC MAINTENANCE**



END OF YEAR REPORT
January 1 through December 31, 2014

Christian Mathiesen, Commissioner
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TRAFFIC MAINTENANCE

The Traffic Maintenance Department has two primary functions:

- Traffic maintenance
- Department vehicle maintenance.

The City Charter tasks the Commissioner of Public Safety with regulation and control of vehicle and pedestrian traffic on city maintained streets and properties.

The Traffic Maintenance Department accomplishes this task through the application and installation of approved traffic control devices such as signs, traffic signals, and pavement markings.

The Department monitors city street operation, accident history, and responds to public complaints. When problem areas are found, the Department conducts established and approved traffic studies, makes recommendations to the Commissioner and other traffic safety officials, and with approval, installs traffic control devices in accordance with Federal, and New York State Rules and Regulations.

Traffic Maintenance department maintains the city's 45 traffic signals, 4 warning signals, traffic regulatory signs, warning signs, guide signs, and pavement markings on 148 estimated miles of city streets. They also conduct traffic impact technical reviews of community development projects, and provide advisory opinions to the Commissioner.

The Department staff represents the Commissioner of Public Safety on various traffic related public committees. They also provide planning and traffic control equipment for special community events such as parades, street walks, and block parties.

The Department provides repairs, maintenance, and N.Y.S. Vehicle Inspections on all Public Safety vehicles under 18,000 pounds. This includes Police, Fire, Traffic Maintenance, and administrative vehicles and motorized equipment. The Department currently maintains 53 vehicles, 3 trailers, and 33 special pieces of motorized equipment.

A supervisor, three full-time employees, and two part-time summer laborers staff the Traffic Maintenance Department. The full-time staff is a multi-talented group of individuals in various fields of work. Their willingness to work as a collective team enables the Department to meet the demands of its mission.

The Public Safety Garage is located on Excelsior Avenue in the City. In addition to the work performed in the community and vehicle maintenance, the staff operates, cleans, and maintains the garage facility.

Maintenance Activity in 2014

Traffic Signals

- Annual traffic signal fixture clean and lamp program--The traffic signal light fixture lenses are cleaned, and incandescent lamps are replaced each year.
- Annual traffic signal inspection program--The Department conducts a detailed physical and operational inspection of all traffic signal equipment on an annual basis. These inspections provide a baseline for preventative maintenance needs to maintain safer and efficient signal operation.
- Repair call--The Department responded to 103 traffic signal work orders.
- Scheduled work--The Department performed 8 preventative maintenance projects.
- Signal up-grades--The Department added 1 intersection to the cities Central Urban Traffic Control System. This was accomplished through installing radio

telemetry, software upgrades, and programming. The control system was installed as part of the ITS Traffic Signal Improvement project on 13 intersection with the intent of adding all key intersections in the city to the system. There are 38 intersections now on the system.

- Request for location of underground utilities--The Department received 310 requests for the location of its underground traffic signal utilities.

Traffic Signs

- Racing season and seasonal sign installations--The Department installs and removes 155 parking signs on streets for the annual horseracing season and 100 seasonal parking signs for winter months.
- New sign and post installations--The Department installed 155 new signs and posts.
- Repair work orders issued and completed-- 298.
- Scheduled replacement--The Department replaced 227 signs and posts that failed to meet current Manual of Uniform Traffic Control Device minimum standards.

Pavement Markings

- Painted street lines, symbols, and safety zones--The Department repaints all of the city street centerlines, skip lines, edge lines, symbols, and safety zones each year. 1,700 gallons of paint and 10,000 pounds of reflective spheres were applied to city streets and parking lots this year.
- Crosswalk and stop bar—11,000 square feet of preformed pavement markings were applied to city streets.
- New streets added to the striping program—Double yellow center line striping was placed on Petrified Gardens Road between the Towns of Milton and Greenfield lines. New enhanced pedestrian crosswalks were installed crossing Van Dam Street at Woodlawn Avenue, and crossing Division Street at Woodlawn Avenue.

The Department for the first time since construction re-striped the new 474 space Woodlawn Avenue parking garage. This work was performed without the need of closing or disrupting the facility over the course of two nights.

Special Projects

- **Energy Reduction Project**-- The Department completed the WALK/DON'T WALK phase of the Light Emitting Diode (LED) upgrade project where 39 Incandescent lamps were replaced with high efficiency LED's. The old Incandescent signals each used 119 Watts of electric power compared to LED consumption of 11 Watts.

This work is an effort to reduce energy cost and keep the city's Global Warming footprint impact inline with the City Council's Cool Cities agreement.

- **Traffic Signal Replacement**-- The Department began the first phases of replacing the traffic signal located at the Lake Avenue Fire Station. The existing signal is estimated to be 40 years old and has exceeded its useful life.

The project began with the City hiring Greenman and Pedersen Engineering for the design and construction bid document preparation. Stilsing Electric, Inc. was awarded a contract for the next phase of the construction portion of the project and has been completed.

This project was completed and placed in service August of 2014

- **Broadway Corridor Study**-- The Department undertook a study of nine traffic signalized intersections along Broadway between Ellsworth Jones Place and Congress Street. The goal of the study is to determine if there could be improvements in traffic flow and safety for pedestrians and motorist by making changes to existing conditions.

The project began with hiring Greenman and Pedersen Engineer to perform the study. Detailed existing condition and future projected data was provided to the consultant for setting up a computer model of the Broadway corridor for testing various modifications such as the addition of left turn arrows at select intersections where they might be beneficial.

The results of this study were presented to the City Council with proposed modification to signal operation and time setting. The changes were implemented in 2014. Most noted change was the addition of a protected left turn arrow northbound on Broadway at Church Street intersection.

- **Washington St at Franklin St Signal Replacement**--The Department completed design and contracting phases for the planned replacement of the existing traffic signal at this location. Creighton Manning Engineering was retained for signal design and bid document preparation. Stilsing Electric Inc. was awarded the contract to perform the replacement that is anticipated to be completed in 2015.

Vehicle Maintenance

- Scheduled service--The Department performed 185 scheduled preventive maintenance checks and services.
- Vehicle repairs--The Department performed 747 vehicle repairs.
- New vehicles placed in service—The Department equipped and placed in service 7 new vehicles.

Other Activities in 2014

Traffic Problem Reviews

The Department evaluated 31 traffic condition problems, and provided written findings or recommendations for improvement to the Commissioner.

Planning Board Reviews

The Department reviewed and commented on Planning Board Community Development issues.

Community Events

The Department provided planning and/or traffic control equipment for 20 events, including the closing of Broadway for the Victorian Street Walk.

Future Needs For Next Two Years

- Traffic signals requiring replacement--The Department has identified the follow traffic signals that will require full replacement, having exceeded their design life and currently experiencing failures consistent with their age.
 - Broadway at Circular Street/Ballston Avenue-- \$175,000.
 - Union Avenue at Circular Street-- \$165,000.