

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



END OF YEAR REPORT
January 1 through December 31, 2013

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 32 specialized motor equipment.

A supervisor, three full-time employees, and one part-time summer laborer 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 2013

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 85 traffic signal failure calls.
- Scheduled work--The Department performed 14 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 intersections with the intent of adding all key intersections in the city to the system. There are 37 intersections now on the system.

- Request for location of underground utilities--The Department received 407 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 577 new signs and posts.
- Repair work orders issued and completed-- 864.
- Scheduled replacement--The Department replaced 830 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. 1,600 gallons of paint and 10,000 pounds of reflective spheres were applied to city streets and parking lots this year.
- Crosswalk and stop bar—10,000 square feet of preformed pavement markings were applied to city streets.
- New streets added to the striping program—none in 2013

Special Projects

- **Energy Reduction Project--** The Department completed the WALK/DON'T WALK phase of the Light Emitting Diode (LED) upgrade project where 78 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 the city's Global Warming footprint impact inline with the City Council's Cool Cities agreement.

- **Fire Department Remote Signal and Door Control System--** The Department designed and installed new secure remote radio control systems at both stations, that allows emergency apparatus drives to open and closed the firehouse doors and trigger traffic signal operation.

This work included the installation of 6 radio receivers in the stations, and 10 portable transmitters in emergency apparatus.

- **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 Pedersen Engineering for the design and construction bid document preparation. The next phase of awarding a contract to Stilsing Electric, Inc. for the construction portion of the project was also completed.

Project completion is anticipated in 2014.

- **Broadway Corridor Study—**The Department undertook a study of nine traffic signalized intersection 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 Pedersen Engineering 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 intersection were they might be beneficial.

The results of this study are anticipated to be present to the City Council for their consideration in the first quarter of 2014.

Vehicle Maintenance

- Scheduled service--The Department performed 210 scheduled preventive maintenance checks and services.
- Vehicle repairs--The Department performed 618 vehicle repairs.
- New vehicles placed in service—The Department equipped and placed in service 6 new vehicles, and retired 6 old.

Other Activities in 2013

Traffic Problem Reviews

The Department evaluated 40 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 18 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-- \$165,000.
 - Washington Street at Franklin Street-- \$135,000.