DEPARTMENT OF TRANSPORTATION 2008 ANNUAL REPORT



Onondaga County Department of Transportation

Commissioner Brian J. Donnelly

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COMMISSIONER'S MESSAGE

I am pleased to present the 2008 Annual Report for the Onondaga County Department of Transportation.

The mission of the Department of Transportation is to provide for the maintenance and care of approximately 800 miles of county owned roads and 210 bridge structures. Our primary objective is to ensure that this network of highways and bridges is safe, convenient and efficient for the traveling public.

2008 Accomplishments

Below is a list of significant accomplishments for 2008:

- Completed the following bridge projects:
 - o Schuyler Road bridge rehabilitation over Nine Mile Creek in the Town of Marcellus
 - Jamesville Road bridge replacement project over Butternut Creek in the Town of DeWitt
 - o Plainville Road bridge replacement project over the Seneca River in the Towns of Lysander and Van Buren
- Completed the following highway projects:
 - o Grand Avenue Phase II Reconstruction project in the Towns of Geddes and Onondaga
 - o East Molloy (Hosman) Road Rehabilitation project in the Town of DeWitt and Salina
- Rehabilitated approximately eighty (80) centerline miles of highway using hot mix asphalt, cold mix asphalt and surface treatment applications. As part of the program, we tested "Low Emissions Asphalt", a new technology which is more environmentally friendly.
- Cleared 800+ miles of County and State highways of 126.2 inches (over 10 feet) of snow.
- Successfully negotiated a new 3-year snow removal contract with the County's towns and village to the mutual benefit
 of all participants. Of particular note is the participation of both the towns of Elbridge and Salina after leaving the
 contract in 2005.

2008 Inter-Municipal Cooperation

In 2008, The Department of Transportation continued to look for opportunities to work cooperatively and collaboratively with the surrounding governmental agencies. The following is a list of initiatives in 2008:

- The DOT entered into an agreement with the City of Syracuse to purchase hot mix bituminous asphalt from the city's recently updated asphalt plant. This agreement benefits both parties in that the asphalt plant runs more efficiently with higher output and the agreed upon price received from the City was lower than that supplied by our private vendor. As part of the agreement, we are testing the use of recycled asphalt as part of the bituminous mix in an effort to reduce departmental costs and develop a more environmentally friendly approach to paving.
- The DOT continued agreements with eleven outside public agencies and five County Departments for vehicle refueling at our facilities. Doing so reduced overall municipal and public agency costs and eliminated the need for construction of new fueling facilities.
- The Department continued to provide technical services to the various towns and villages in the County relative to the
 maintenance of their roads and bridges. The Department also makes all of its commodity bids available to the
 municipalities for their use and has modified those bids to accommodate the towns' and villages' needs.

Yet again in 2008 the hard working men and women of the Department of Transportation demonstrated their dedication and commitment to the people of Onondaga County, striving always to provide a safe and efficient highway system. I extend my continued appreciation for their support of the Department's mission.

Brian J. Donnelly Commissioner

ADMINISTRATION

The Administration section of the Department of Transportation provides many critical services to the Department.

- Payroll and Personnel (also performs these functions for the Division of Emergency Management)
- Service requests
- Accounts payable and receivable
- Cost accounting
- Recruitment and interviewing of candidates for jobs
- Preparation and management of the annual budget
- Produces reports requested by management
- Application of progressive discipline
- Purchasing
- Safety training
- Personal injury and motor vehicle accident review

The payroll staff, working with the Comptroller's Office and the Department of Personnel brought a new payroll system on line in 2008. This system allows for greater accuracy and is able to create more detailed reports than was previous available.

The managerial staff continues to refine the way the Department operates. The intent is to continue to perform at the highest level while reducing costs. To this end, the Department expanded its one person plowing program. Additional employees have been trained and new routes are now able to be plowed by a single operator. This program has been successful to date. There have been no accidents involving a truck operated by a single individual. This program has allowed the Department to increase its level of service without increasing spending.

SAFETY PROGRAM

The Department of Transportation is involved in a number of safety related programs. These programs are updated with new information whenever possible. The Department's Safety Training Instructor, in concert with the Assistant Commissioner, administers many of these programs.

Departmental personnel are required to attend a number of safety training courses each year. The Safety Training Instructor teaches some of the courses. DOT employees who have been trained as instructors teach CPR, First Aid, Work Zone Safety, Defensive Driving and Fork Lift Operator. Still, others are taught by industry trainers. For example, this year Mohawk Valley Community Collage trained and certified five "One Person Plowing" trainers. These trainers have trained and certified 30 D.O.T. operators for the '08-'09 snow season.

The Department administers a drug and alcohol testing program. This program complies with Federal Department of Transportation regulations. The policy applies to all employees who possess a commercial driver's license (CDL) and who operate motor vehicles requiring a CDL for the Department. In 2008, approximately 150 employees were in the Department's drug and alcohol testing program.

Prior to each construction season, the Department hires temporary employees to assist our full time employees. These temporary employees are trained in safety prior to reporting to work. Subjects such as proper flagging procedures, proper use of personal protective equipment, hazard communication, harassment, and proper interaction with the public are presented.

In the spring and again in the fall, we hold labor crew leader (LCL) meetings. These meetings concentrate on refocusing the minds of our leaders in the field to the upcoming season. The spring meeting aims to get our LCL's thinking about road work projects and related issues. Discussions are held about properly setting up a work zone, what should be covered in the daily "tailgate" meeting, first aid and any number of other subjects. The fall meeting gets our leadership back into the snowplowing mode. Our employees attend a snowplow seminar every year prior to the winter season to refresh them on safety practices. Safely changing steel and checking tires and wheels several times per day are some of the subjects covered.

The Department has a safety committee that now meets on an as needed basis. The Assistant Commissioner chairs the committee with assistance from the Safety Training Instructor. Other members come from the work force. This committee developed a program that allows any employee to bring any safety issues to the committee. They then review the issue and make a recommendation to the Commissioner. This committee has studied such issues as personnel protective equipment. Their recommendation to the Commissioner resulted in a new policy requiring the use of equipment and defining when it must be used.

With the assistance of the County's Loss Control Administrator, we review all of the DOT's personal injury reports to isolate problems and mitigate solutions. This has proved to be invaluable to the Department and have assisted in reducing the Department's lost time injuries.

The Department has continued to train employees on the National Incident Management System. This training prepares the Department to properly deal with catastrophic events whether natural or man-made.

HIGHWAY CONSTRUCTION AND RECONSTRUCTION PROGRAM

In 2008, the Department of Transportation successfully conducted construction and reconstruction on the following County highways:

Official Name	Common Name	County Road Number	Contractor	Town	Number of Lanes	Length of Project (mi.)
Syracuse-Cedarvale Road (Grand Ave.)	Fay Road	39	CCI	Onondaga	2	1.5
Hosman Road	East Molloy Road	71	Barrett Paving Materials, Inc.	Salina/DeWitt	2/3	2.11

The responsibility of the Department of Transportation in the above projects entailed conducting or overseeing all preliminary surveys, environmental studies, preparation of complete and detailed construction plans, right-of-way, maps, cost estimates, negotiations and acquisition of right-of-way, coordination of utility relocations, construction stakeout and inspection of force account work, and supervision of consultant inspection on contract work. Projects constructed by the Department of Transportation forces included all excavation, drainage, sub-base installation, paving and restoration work.

Each of the above projects presented its own special and unique planning, design and construction problems that were dealt with in a practical and economical manner by the Department's staff. The following is a brief overview of these projects:

Syracuse – Cedarvale Road (Grand Avenue), C.R. No. 39, Rehabilitation

The Grand Avenue project is a continuation of the Fay and Onondaga project completed Fall 2004. This second phase of the project improved the County Route 39 corridor from Bellevue Avenue on Fay Road to the City line at Avery Avenue on Grand Avenue. This project encompassed approximately 1.5 miles of highway and two county bridges. The intersection of Fay Road, Grand Avenue and Sheraton Road was realigned to form a four-way intersection with new traffic signal and turn lanes. Two new sections of retaining wall were constructed along Harbor Brook.

The highway had consisted of distressed pavement structure, inadequate shoulders, inadequate guide rails, inadequate drainage facilities and intersection characteristics that were unable to handle the current and forecast traffic demands.

Improvements included: new pavement, widened shoulders, enclosed drainage facilities, new guide rail, two new bridges, two retaining walls and intersection realignment and signalization. A special consideration on this project is the existence of a DEC designated trout stream, Harbor Brook, adjacent to Grand Avenue. In 2007, a portion of Harbor Brook was realigned; Bridge C-35 was installed to mitigate destructive erosion forces along the roadside banks and a section of retaining wall was constructed downstream of this bridge to ensure stability of the highway. One half mile of sanitary force main was replaced for the Department of Water and Environmental Protection under this contract as well in 2007.

The field survey was completed in 2004 and final design was completed in the spring of 2007. The contract was let in June of 2007 and awarded to CCI Companies from Canastota, New York. CCI began construction activities in July of 2007. Utility work had begun earlier in anticipation of the road construction. The contract was completed in November 2008 for a total of \$4.2 million.

Hosman Road (East Molloy Road), C.R. No. 71 Rehabilitation

This 2.11 mile 2R project, which begins 1395 feet west of Town Line Road and extends 150 feet east of Kinne Street, was initiated in 2005 to address a deteriorating pavement. The preliminary scope of the project includes a two-course asphalt overlay through the entire project area, traffic signal and signage upgrades and minor drainage improvements. Other improvements include a new eastbound left turn lane, a new westbound right turn lane and a new traffic signal at the Airbase entrance. Also included are new northbound and westbound left turn lanes at Kinne Street.

The project's design was completed in late 2007 due to the need to meet revised standards imposed by the State's adoption of the National Manual of Uniform Traffic Control Devices. A construction contract was let in early 2008 and completed before the end of construction season. The contractor, Barrett Paving Materials, Inc., won the project with a low bid of \$2,046,770.76. This project is a "LOCALLY ADMINISTERED FEDERALLY FUNDED PROJECT" with a financial cost breakdown of 80% Federal, 15% State, 5% County.

BRIDGES

During 2008, the Department of Transportation designed and reconstructed the following bridges:

Schuyler Road over Nine Mile Creek, County Bridge C-211, BIN 3208170- is located on Schuyler Road, a town road, in the Town of Marcellus. This bridge was built in 1922. The existing multi girder structure had a poor condition rating based on biannual New York State DOT inspections. The existing deck and steel beams were deteriorated beyond the point of rehabilitation and were replaced. The project replaced the bridge's superstructure and included extensive concrete repairs on the abutments and wingwalls. Scour protection was provided by heavy stone fill. An upgraded guiderail system was installed. All work was completed in 2008 by County Forces.

Vincent Corners Road over the West Branch of Tioughnioga River, County Bridge C-153- is located on Vincent Corners Road, C.R. No. 178 in the Town of Fabius. This bridge was built in 1935 by County Forces. The original 15'x 5' Structure has a poor condition rating based on biannual County inspections. The existing structure is deteriorated beyond the point of rehabilitation and will be replaced. The design for a new 15'x 5' precast concrete box culvert was completed in 2008. The precast box culvert was bid and manufactured. All work will be completed in 2009 by County Forces.

Pompey Center Road over Limestone Creek, County Bridge C-65- is located on Pompey Center Road, C.R. No. 11 in the Town of Pompey. This bridge was built in 1923 and widened in 1961. The structure's poor condition rating dictates replacement with a precast concrete box culvert. The design was completed by consultant with construction by contract forces in 2009.

Apulia Road over a Tributary to Butternut Creek, County Bridge C-36 - is located on Apulia Road, C.R. No. 1, at the intersection of Weller Road, in the Town of LaFayette. This bridge was built in 1913 and widened in 1954 to accommodate the widened highway. Design plans call for replacement of the 8' x 6' structure. The design was completed by consultant with construction by contract forces in 2009.

Apulia Road over a Butternut Creek Tributary, County Bridge C-38 - is located on Apulia Road, C.R. No. 1, at the intersection of Colton Road, in the Town of LaFayette. This bridge was built in 1913 and widened in 1954 to accommodate the widened highway. Design plans call for replacement of the 8' x 5' structure. The design was completed by consultant with construction by contract forces in 2009.

<u>County Bridge Repair and Stream Cleaning</u> – was accomplished on various structures as required for maintenance purposes and to support the hot mix and cold mix paving programs:

Peck Road over Chittenango Creek – joint repair Tully Farms Road over Tributary to Onondaga Creek – stream cleaning John Glenn Boulevard over Onondaga Lake Outlet – pedestal Repair Lee-Mulroy Road – stream cleaning - road slope stabilization

LOCALLY ADMINISTERED FEDERALLY FUNDED BRIDGE PROJECTS

A policy change by the N.Y.S. Department of Transportation mandates that any projects funded by federal funds and matched by state funds be administered by the sponsoring locality. This change requires the Department of Transportation to utilize its staff to see these projects through from scoping to post construction audit. Noteworthy among those projects are:

Plainville Road over the Seneca River, County Bridge C-28-BIN 3313200 — is located in the town of Elbridge on Plainville Road, C.R. No. 32, over the Seneca River. The bridge was built in 1928 and was rehabilitated in 1980 and is a two span concrete arch structure. The New York State Department of Transportation had given the bridge a "General Recommendation" of 4.3 and a sufficiency rating of 43.4. Final plans called for replacement with a multi-girder bridge on the existing alignment with an on-site detour utilizing a temporary structure. A consultant was selected and design progressed in 2005. Design progressed through 2006 and 2007 with a January 2008 construction advertisement for construction by contract forces. The project was completed in November of 2008. This project was a "LOCALLY ADMINISTERED FEDERAL AID PROJECT" with a financial cost breakdown of 80% Federal, 15% State, 5% County.

<u>Orville Jamesville Road over Butternut Creek, County Bridge C-26, BIN 3312910</u> – is located in the Town of Dewitt on Jamesville Road, C.R. No. 7, over Butternut Creek. This bridge was built in 1964. Design plans called for a replacement bridge at the same location. The design was completed by consultant in 2006 with construction by contract forces with a construction letting in the spring of 2007.

The Legislature previously authorized \$1,750,000 (\$87,500 County share) for this project. As design progressed it became apparent that improvements not envisioned in the original scope were necessary to address the traffic-related issues at the entrance to the Jamesville Quarry. A dedicated left turn lane was warranted and constructed into the quarry requiring additional roadwork. A temporary bridge was provided as an onsite detour and utilized during construction due to the existing traffic volumes.

The construction contract was let in the spring of 2007 in the amount of \$3,203,200.00 to the low bidder Slate Hill Constructors. Construction was completed in August 2008. This project was a "LOCALLY ADMINISTERED FEDERAL AID PROJECT" with a financial cost breakdown of 80% Federal, 15% State, 5% County.

<u>Camillus</u> – Warners Road over the Finger Lakes Railroad County Bridge C-173, BIN 3093940 – is located in the Town of Camillus on Warners Road (Route 173), C.R. No. 63 over the Finger Lakes Railroad. This bridge was built in 1975 as part of the construction of New York State's Route 695. Design plans call for the replacement of the existing concrete deck and approach slabs, with concrete repairs to the piers and abutments. The steel girders will be painted with upgrades made to the guide rail. Construction shall be staged utilizing an on site detour. The design was completed in 2008 by consultant with a February 2009 advertisement for construction bids anticipated. Construction to be completed in 2009.

This project is a "LOCALLY ADMINISTERED FEDERAL AID PROJECT" with a financial cost breakdown of 80% Federal, 15% State, 5% County.

HIGHWAY DESIGN PROJECTS

Official Name	Common Name	County Road Number	Town	Proposed Number of Traffic Lanes	Length of Project (mi.)	
Bellevue Avenue Extension	Bellevue Avenue	101	Onondaga	2	0.63	
Syracuse-DeWitt Road	North Street	6	DeWitt	2	0.87	
DeWitt-Cicero Road, Part II	Thompson Road	14	Cicero	3	1.68	
Locally Administered Federally Funded Highway Projects						
Taft Settlement Rd. Part II	Taft Road	19	Clay/Cicero	4/5	2.00	
Velasko Road	(same)	130	Onondaga	2	1.00	
Factory Avenue at LeMoyne Avenue	(same)	93/219	Salina	3/4	0.57	

Bellevue Avenue, C. R. No. 101

The Bellevue Avenue project, in the Town of Onondaga, will address the deteriorated pavement of Bellevue Avenue and will extend 0.5 miles from Onondaga Boulevard easterly to approximately 600' east of Winkworth Parkway. The pavement has deteriorated beyond the point where repaving is cost effective. The entire pavement structure will be rebuilt to provide a roadway which will reduce maintenance costs for many years into the future. Other betterments will include widened shoulders and improved drainage.

Survey work was completed in 2004 and has been updated through 2007. Construction is anticipated to begin early summer 2009. This department has delayed construction to facilitate the relocation and addition of underground utilities in the area. Overhead utilities should begin relocation early spring 2009 and should not hamper roadway construction efforts. The intersection at Bellevue Ave. and Onondaga Boulevard across from West Hill High School will not be constructed at this time.

Syracuse – DeWitt Road, C.R. No. 6 (North Street in Jamesville)

This project, in the Town of DeWitt, begins at NYS Route 173 in Jamesville and proceeds 1.4 kilometers northerly to the intersection of Rock Cut Road. Traffic counts performed in 2006 indicated 10,094 vehicles using North Street on an average day.

The highway currently consists of pavement structure, shoulder width and drainage facilities that are unable to handle both current and future vehicular demands. Slope failures along North Street adjacent to Butternut Creek and in the area of the intersection of Lime Kiln Road need to be corrected through the use of slope stabilization and/or retaining walls.

Improvements are proposed using 100% Onondaga County funds and include the reconstruction of the mainline to meet the needs of a design year defined as the Estimated Time of Completion plus 20 years (ETC+20) and will include all necessary pavement, shoulders, related drainage and slope stabilization/retaining walls. Intersection improvements at NYS Route 173 and Rock Cut Road are NOT anticipated. Major improvements/renovations are NOT anticipated to the railroad bridge over North Street located immediately south of Rock Cut Road. Design was begun in 2006 and progressed through 2008 with a 2009 Construction letting expected. Design is being coordinated closely with the Town of DeWitt to accommodate new sanitary sewer and potable water systems needed by the Town.

DeWitt - Cicero Road, Part II, C.R. No. 14 (Thompson Road)

This project in the Town of Cicero begins at the intersection of Northern Blvd. Island Rd. and Thompson Rd. and continues north through the South Bay Road intersection to NYS Rt. 31 being approximately 1.68 miles in length.

The highway currently consists of distressed pavement structure, shoulder width, drainage facilities and intersection characteristics which are unable to safely handle the current and forecast traffic demands.

Improvements are proposed which will include all necessary pavement, shoulders, and drainage facilities. Intersection improvements at South Bay Road will be made based on traffic forecasts. The Legislature previously authorized \$2,675,000 for design and partial construction phases for this project.

LOCALLY ADMINISTERED FEDERALLY FUNDED HIGHWAY PROJECTS

A policy change by the N.Y.S. Department of Transportation mandates that any projects funded by federal funds and matched by state funds be administered by the sponsoring locality. This change will require the Department of Transportation to utilize our staff to see these projects through from scoping to post construction audit. Projects under design in 2008 include:

Taft Settlement Road Part II (East Taft Road), C.R. No. 19, South Bay Road to Northern Boulevard

This project was initiated in 2004 to address a deteriorating pavement and an accident rate that exceeds the statewide average for this type of facility. The preliminary scope of the project includes a two-course asphalt overlay through the entire project area and the addition of a two-way left turn lane from South Bay Road to the I-81 overpass. Further studies indicated the fifth lane should be extended farther to the east to a relocated and signalized Kreischer Road. In connection with that relocation, access to Taft Road directly from Church Street will be eliminated with the construction of a cul-de-sac.

The current schedule provides for design to be completed for an anticipated contract letting in the spring of 2009 and construction completed by the end of 2010. The preliminary construction estimate for this project is \$10,000,000. This project is a "LOCALLY ADMINISTERED FEDERALLY FUNDED PROJECT" with a financial cost breakdown of 80% Federal, 15% State, 5% County.

Velasko Road, C.R. No. 130, NYS Rt 173 to the City of Syracuse Line

This project was initiated to address a deteriorating pavement and an accident rate that exceeds the statewide average for this type of facility. The preliminary scope of the project includes a two-course asphalt overlay through the entire project area and the enclosure of existing deep open ditches. Additional dedicated turning lanes and a new three-color signal will be installed at the McDonald Road intersection.

The current schedule provides for design to be completed in 2009 with a construction letting anticipated for late in the year. The preliminary construction estimate for this project is approximately \$2,500,000. This project is a "LOCALLY ADMINISTERED FEDERALLY FUNDED PROJECT" with a financial cost breakdown of 80% Federal, 15% State, 5% County.

Factory Avenue, C.R. No. 93 at LeMoyne Avenue, C.R. No. 219 Intersection Safety Project

This project, in the Town of Salina, will improve capacity, mobility and safety at the intersection. Improvements are proposed which will include all necessary pavement, shoulders, and drainage facilities. The intersection is currently experiencing an accident rate exceeding the statewide average and studies will be conducted to determine if the need for turning lanes is warranted. Intersection improvements will be made based on traffic forecasts. Survey and preliminary design began in 2008.

This project will be a "LOCALLY ADMINISTERED FEDERAL AID PROJECT" with a financial cost breakdown for Construction of 80% Federal, 15% State, 5% County.

SURVEY ACTIVITIES

The Department of Transportation utilizes a number of its engineering staff as survey technicians, who are supervised by a licensed Land Surveyor. The survey group conducts field surveys and produces base maps for a wide variety of projects undertaken by the Department each year. Typical projects include right of way surveys and mapping, highway surveys and mapping for road reconstruction, bridge survey and mapping for bridge reconstruction, drainage improvement surveys for County roads and boundary surveys for County property.

In addition the survey staff engages in projects for other County Departments as well as towns and villages throughout Onondaga County.

A list of projects that the surveyors worked on in the year 2008 follows:

DEPARTMENT OF TRANSPORTATION SURVEY PROJECTS

Apulia Road Bridge C-36

Complete base mapping for bridge reconstruction Project

Apulia Road Bridge C-37

Complete base mapping for bridge reconstruction Project.

Lamson Road and Plainville Road

Design survey and base mapping for drainage survey.

Morgan Road and Fairway Drive East

Design survey and base mapping for traffic improvement project.

Hosman Road

Locate water, electric and gas utilities for road reconstruction project

Bellevue Ave.

Collect additional topographic data and update base mapping for road reconstruction project.

Plainville Road Bridge C-28 over the Seneca River

Utility location survey for road re-construction project.

Old Liverpool Road

Construction stake-out for drainage project.

Winchell Road and Walters Road

Supplement base mapping for road reconstruction project.

Salt Volumes

Measure & determine volumes of County stockpiles of salt.

Halfway Road culvert at Carpenters Brook

Design survey and mapping for culvert replacement.

Schuyler Road Bridge C-211

Construction stakeout for bridge reconstruction project.

INTER-DEPARTMENTAL SURVEY PROJECTS

Old Van Duyn and Hillbrook Boundary Survey

Revise map, set property corner stakes and conference with Law Department concerning Boundary Survey, Map and Description of Old Van Duyn Property (60 Acres) for conveyance to Onondaga County Community College. Original survey map and description prepared for the Law Department in 2007 by OCDOT.

Proposed Destiny Research and Development Park

Revise map and conference with Law Department concerning title Study, Map and Description of Proposed Destiny Research and Development Park for local law. Original survey map and description prepared for the Law Department in 2007 by OCDOT.

Old Route 5 and Munro Road Accident Survey

Prepare survey map showing municipal lines in reference to Old Route 5 and Monroe Road for Law Department request in regards to lawsuit involving a motor vehicle accident.

911 Cell Tower Site Surveys at Lamson Road and Whiting Road

Prepare Survey Site Map and set property corner stakes for Onondaga County 911 showing proposed cell tower sites at Lamson Road in the Town of Lysander and Whiting Road in the Town of Elbridge.

RIGHT OF WAY

The Department of Transportation is responsible for negotiating right of entry and release of damage agreements, temporary occupancy agreements, permanent and temporary easements, and all rights of way required by the Department for highway purposes. Due to attrition, the department no longer employs a right of way agent, instead utilizing outside consultants, on a project basis, to acquire the necessary rights of way.

Activities undertaken by Department employees include:

- ✓ Identifying all properties to be sold at Tax Auction that are located on county roads and requesting that the Division of Finance Real Property reserve additional right of way for future highway improvements from all parcels sold.
- ✓ Presenting all right-of-way resolutions to both the Facilities and Ways and Means Committees for approval prior to presentation to the full session of the Onondaga County Legislature.

2008 CRACK SEALING

Crack sealing is a process by the Department of Transportation to retard the deterioration of the pavement. Each crack is cleared of debris with compressed air. An asphalt solution is then poured into the crack. This helps to prevent moisture, which would expand and contract thus harming the pavement, from working its way into the pavement. The Department, as part of our pavement preservation initiative, increased the amount of crack sealing done in 2008 by approximately two times the normal.

Following is a list of the roads that were crack sealed during the past year:

Section I	Miles	Gallons
Jamesville Maintenance Facility		633
Section I Total		633
Section II		
East Taft Rd. & Northern Blvd C.R. 19 & 82 (intersection)	1.78	1161
Northern Blvd. C.R.82 (Thompson Rd. to E. Taft Rd./Northern Blvd)	3.40	2898
Kirkville Rd. & Fly Rd. C.R. 53 & 77 (intersection)	1.23	996
Buckley Rd. & Bear Rd. C.R. 161 & 191 (intersection)	<u>1.06</u>	<u>1184</u>
Section II Total	7.47	6239
Section III		
Hamilton Rd. C.R. 271 (Jordan Village Line to NYS Rt. 5)	1.95	864
Lamson Rd. C.R. 30 (Plainville Rd. to Prine Rd.)	1.50	623.50
Jones Rd. C.R. 118 & 28 (NYS Rt. 690 Ramp to NYS Rt. 48)	.58	271.30
Lamson Rd. C.R. 29 (Phoenix to Sixty Rd.)	1.45	807.10
Longbranch Rd C.R 35, NYS Rt. 370 to Park (Bridge)	.75	115
Old Route 5 C.R. 98 (NYS Rt. 173 to Westland Rd.)	.98	588
Plainville Rd. C.R. 32 (NYS Rt. 270 to Sprague Rd.)	1.57	666.10
River Rd. C.R. 38 (Patchett Rd. to NYS Belgium Bridge Project)	1.19	389.40
Section III Total	9.95	4324.40
Section IV		
Munro Rd. C.R. 206 (Howlett Hill Rd. to Old Rt. 5)	1.72	717
Bishop Hll Rd. C.R. 211 (NYS Rt. 20 to Lee Mulroy Rd.)	1.87	1130
Broad Rd. C.R. 62 (NYS Rt. 173 to South Ave)	.41	100
Hamilton Rd. C.R. 271 (Jordan Rd. to NYS Rt. 5)	1.56	401
Kasson Rd. C.R. 155 (Howlett Hill Rd. to New Construction @ Old Rt.5)	2.09	700
Makyes Rd. C.R. 129 (Young Rd. to Tanner Rd.)	1.40	1241
Onondaga Blvd. C.R. 240 (NYS Rt. 173 to Whedon Rd.)	1.20	446
Otisco Valley Rd. C.R. 124 & 24 (Oak Hill Rd. South 1.8 miles)	1.80	1189
Sheehan Rd. C.R. 68 (Candlewick Lane to Howlett Hill Rd.)	.71	250
Bishop Hill Rd. C.R. 211 (South Street to Lee Mulroy Rd.)	2.00	620
Coon Hill Rd. C.R. 27 (Rose Hill Rd. to NYS Rt. 174)	.87	240
Makyes Rd. C.R. 129 (Tanner Rd. to NYS Rt. 80)	1.40	528
Vinegar Hill Rd. C.R. 142 (Mistletoe Rd. to Jordan Rd.)	<u>1.56</u>	<u>1005</u>
Section IV Total	18.59	8567
SUMMARY		
SECTION I	Shop	633.00
SECTION II	7.47	6239.00
SECTION III	9.95	4324.40
SECTION IV	18.59	<u>8567.00</u>
TOTAL	36.01	19763.40
I VIIII	20.01	17/02/70

2008 ASPHALT CONCRETE (PAVING) PROGRAM

In order to extend the life of a roadway, the Department of Transportation has determined that it is cost effective to periodically replace the wearing surface of its highways. This process waterproofs the road sub-base and provides additional skid resistance. Many of the roads that undergo this process are first trued and leveled to restore a proper crown. The shoulders on all roads that receive resurfacing are stabilized with asphalt concrete. Beginning in 2007 and continued in 2008 the Department increased the use of "Pavement Preservation Techniques". These are lower cost initiatives whose goals are to prolong the life cycle of the highways. The idea of this program is to keep the highways which are presently in "good" condition in the same condition. In other words, keep the good roads good. Also in 2008 the Department tested "Low Energy Asphalt" products on two projects. This product, also known as "warm asphalt", is produced at much lower temperatures than conventional asphalt products. This process significantly lowers the volatiles released into the environment during production providing environmental benefits.

In 2008 the significant increases in the price of crude oil resulted in asphalt price escalations never seen before. In order to offset the price of asphalt the Department was forced to defer more than 7 miles of paving to future years. The impacts of deferrals over several years could result in an additional need for reconstruction projects at a much higher cost per mile.

In 2008 the Department entered into an agreement with the City of Syracuse to purchase Hot Mix Bituminous Asphalt from the city's recently updated asphalt plant. This agreement benefits both parties in that the asphalt plant runs more efficiently with higher output saving the City money and the agreed upon price was lower than our private vendor's saving money for this department. This department as part of the agreement is testing using recycled asphalt product as part if the Bituminous Asphalt as an economic and environmental initiative.

Following is a list of roads that received this treatment in the past year:

Onondaga County Department of Transportation 2008 Asphalt Concrete Paving List

			2000 Asphan Concrete I aving Lis	si.			
		C.R.		Pavement	Shoulder	Centerline	Two Lane
	Road	No.	Location	Width	Width**	Miles	Equivalent
				(Feet)	(Feet)		Miles
	Section 1						
1a	DeRuyter Lake Road	12	NYS Route 80 to Dam Road	22	4	1.76	1.76
1b	DeRuyter Lake Road***	12	Dam Road to County Maintenance (Pav't Preservation)	22	4	0.49	0.37
1c	Oran Delphi Road	5	NYS Route 80 to Delphi Falls Road	22	4	2.20	2.20
20%	Pompey Center Road	10	Indian Hill Road to No. 2 Road	22	4	1.10	1.10
1e	Warren Street in Tully	111	Route 80 North to Village Line (Mill and Inlay)	26	2	0.49	0.98
	-		Section Total				6.41
	Section 2						
***	Ladd Road***	166	Mud Mill Rd. to Muskrat Bay (Pav't Preservation)	22	4	0.80	0.40
\$\$\$	Malden Road	87	NYS Route 11 to Florida Drive (Mill and Inlay)	24	6	0.66	
\$\$\$	Morgan Road	46	Railroad Tracks to Route 481	22	6	0.66	
2d	Mud Mill Road	16	NYS Route 11 to Weaver Road	22	4	2.56	2.56
###							1.52
20%	North Kirkville Road	53	Canal Bridge to the County Line (Mill and Fill)	22	4	1.02	1.02
***	Northern Boulevard	82	Taft Road to Thompson Road NB/SB (Pav't Preservation)	24	8/4	3.67	2.32
***	South Bay Road	208	NYS Route 31 to Lakeshore Road (Pav't Preservation)	22	4	1.92	0.96
***	Taft Road	18	Fly Road to 1.55 Miles Easterly (Pav't Preservation)	24	8	1.55	0.78
2i	Vine Street	51	Sixth Street to Commerce Boulevard (New Shoulders)	22	4	0.23	0.33
$\wedge \wedge \wedge$	Wetzel Road	252	Henry Clay Boulevard to Buckley Road	22	6	1.31	1.75
\$\$\$	West Taft Road. & Buckley Road Intersection	48/151	Intersection (Mill and Inlay)	Varies	Varies	0.76	
!!!!	West Taft Road	48	Buckley Road to Bear Road	Varies	Varies	0.97	1.93
			Section Total				10.61

	Section 3						
***	Brickyard Road	118	N. Brickyard Road to Van Buren Road (Pav't Preservation)	24	8	1.38	1.10
3b	Plainville Road	33	Lamson Road to County Line	22	4	1.48	1.48
%%%	River Road	37	NYS Route 31 to Potter Road – LEA Southbound	22	4	2.06	2.06
***	State Fair Boulevard	80	NYS Route 690 to Nine Mile Creek (Pav't Preservation)	22	6	2.27	1.14
3e	Warners Road	63	Railroad Bridge to Mabel Avenue	48	10	0.41	0.93
			Section Total				6.71
	Section 4						
##	Bishop Hill Road***	211	Slate Hill Road to NYS Route 20 (Pav't Preservation)	22	4	1.45	0.74
4b	Flat Rock Road	236	Limeledge Extension to NYS Route 321	24	6	0.67	1.00
\$\$\$	Howlett Hill Road	40	Kasson Road to Cedarvale Road	22	8	1.03	
4d	Limeledge Extension	236	Limeledge Road to NYS Route 321	22	4	0.66	0.79
4e	Oak Hill Road	23	Patterson Road to Canty Hill Road	22	4	1.86	1.86
%%%	Otisco Valley Road	24	Sawmill Road to 1.3 mile North-LEA Northbound	22	4	1.30	1.30

NYS Route 20 to Tower Road (Pav't Preservation)

NYS Route 20 to 1.5 mile North (Mill and Inlay)

County Total 31.74

4

4

2.43

1.54

2.32

8.00

22

22

Section Total

Note: Numbers refer to locations on the map. Included in 2008 Workplan

Rose Hill Road

Slate Hill Road

\$\$\$

4h

211

150

^{***} Pavement Preservation Program

^{\$\$\$ -} Paving Deferred to later years due to fuel and asphalt cost increases not included in milage totals

^{#### -} Mileage decreased due to Asphalt Escalation

^{%%%-} Low Energy Asphalt utilized on a test basis for reduced emissions

^{!!!!!! -} Funded in 2007 Paved in 2008 - Not included in Mileage Totals

XX% - the percentage of Recycled Asphalt Product included in Hot Mix Bituminous purchased from the City of Syracuse

^{^^^ -} Funded in 2008 to be Paved in 2009

2008 BITUMINOUS SURFACE TREATMENT

The annual bituminous surface treatment program is designed to preserve and extend the life of pavement on the County's low volume highway system. The intent is to treat eligible highways on a five-year rotation basis. Following is a list of roads that received this treatment in the past year (Cold Mix Roads deferred due to asphalt escalation are in "strikethrough"):

Onondaga County Department of Transportation 2008 Bituminous Surface Treatment List

		C.R.		Centerline
	Road	No.	Location	Miles
	Section 1			
1a	Broadfield Road	250	Sweet Road to Watervale Road	1.40
1b	Eager Road	232	Coye Road to Apulia Road	3.87
1c	Henneberry Road	182	Burke Road to Pratts Falls Road	1.31
1d	Onondaga Highland Road	188	NYS Route 80 south to stop sign	0.88
1e	Palmer Road	169	2002 Paving limit to Peck Hill Road	1.06
1f	Barker Hill Road	198	Gallinger Road to LaFayette Road	1.54
			Section 1 Total	10.06
	Section 2			
2a	Bonstead Road	199/160	2002 Paving limit East To Morgan Road	1.25
2b	Whiting Road	147	Lakeshore Road to South Bay Road	0.71
	_		Section 2 Total	1.96
	Section 3			
3a	Daboll Road	226	West Dead Creek Road to River Road	2.23
3b	East Sorrell Hill Road	153	NYS Route 173 to Ellsworth Road	3.20
3c	Grimes Road	59	NYS Route 31 to Stevens Road	1.36
3d	Thompson Road	163	O'Brien Devoe Road to Warners Road	1.96
3e	Perry Road	241	Loveless Road to Kingdom Road	1.11
			Section 3 Total	9.86
	Section 4			
4a	Griffin Road	172	Cole Road to NYS Route 80	0.89
4b	Kingston Road	217	NYS Route 5 to Stump Road	3.39
			Cedarvale Road to 1700' East of Gardner	
4c	Pleasant Valley Road	119	Road	2.14
4d	Pork Street	259	Route 41 to Rickard Road	1.62
4e	Tanner Road	184	NYS Route 80 to Makyes Road	1.19
4f	Willowdale Road	26	Stanton Road to Coldbrook Road	2.70
4g	Norton Road	242	Young Road to Bussey Road	1.16
-			Relocated Road - Dunbar Woods to Dunbar	
4h	Howlett Hill Road	40	Woods	0.74
			Section 4 Total	13.83

COLD MIX ROADS 1.02 Berwyn Road 114 Collins Road to Kelly Road Berwyn Road 114 Kelly Road to NYS Route 20 1.06 1b Broadfield Road 250 0.58 1c Gates Road to Sweet Road 3a Church Road 192 NYS Route 690 and Westerly 2.65 1000' South of Craig Road to 1.2 miles North 4a Coldbrook Road 25 1.22 County Line to 1.22 miles North (from 2006 Coldbrook Road 25 1.22 ruined by plows) Lamson Road to County Line East Mud Lake Road 180 0.98 3b Eastwood Road 215 NYS Route 31 to Bull Street 1.20 Falls Road 248 Frank Gay Road West to the Top of the Hill 0.89 4b Guy Young Road 152 Cicero Townline to Caughdenoy Road 1.23 2b Daboll Road to Old NYS Route 31 3c Kingdom Road 120 0.80 2e **Maider Road** 160 Bonstead Road to Bennett Road 0.342c**Maider Road** 160 Bennett Road to NYS Route 481 0.41 1d Number 5 Road West 171 Ridge Road to Cemetery Road 0.68 Rickard Road 259 Lee Mulroy Road to New Seneca Turnpike 4c 0.50 Ridge Road 128 NYS Route 80 to Bumpus Road 1.35 1e Sevier Road 270 County Maintenance to Sweet Road 0.36 **Cold Mix Total** 14.48 **County Total** 50.19

2008 COLD MIX BITUMINOUS PAVING

Included in the County's' highway system are 375 miles of low volume highways. In 1980, in order to restore badly deteriorated highways, the Department instituted the Cold Mix Bituminous Paving Program. In order to be eligible for this program, a highway must have deteriorated to the point where less expensive rehabilitation strategies are ineffective.

In 2008 the significant increases in the price of crude oil resulted in asphalt price escalations never seen before. In order to offset the price of asphalt the Department was forced to defer more than 2 miles of paving to future years. The impacts of deferrals over several years could result in an additional need for reconstruction projects at a much higher cost per mile.

Following are a list of roads that were paved with Cold Mix Bituminous Pavement in the past year.

Onondaga County Department of Transportation 2008 Cold Mix Paving List

		C.R.		Centerline	Equivalent
	Road	No.	Location	Miles	Miles
	Section 1				
^^^	Berwyn Road	114	Collins Road to Kelly Road	1.02	1.02
^^^	Berwyn Road	114	Kelly Road to NYS Route 20	1.06	1.06
\$\$\$	Broadfield Road	250	Gates Road to Sweet Road	0.58	
\$\$\$	Number 5 Road West	171	Ridge Road to Cemetery Road	0.68	
1e	Ridge Road	128	NYS Route 80 to Bumpus Road	1.35	1.35
1f	Sevier Road	270	County Maintenance Line to Sweet Road	0.36	0.36
			Section 1 Total	5.05	3.79
	Section 2				
2a	Eastwood Road	215	NYS Route 31 to Bull Street	1.20	1.20
2b	Guy Young Road	152	Cicero Townline to Caughdenoy Road	1.23	1.23
\$\$\$	Maider Road	160	Bonstead Road to Bennett Road	0.34	
\$\$\$	Maider Road	160	Bennett Road to NYS Route 481	0.41	
			Section 2 Total	3.18	2.43
	Section 3				
3a	Church Road	192	NYS Route 690 and Westerly	2.65	2.65
3b	East Mud Lake Road	180	Lamson Road to the County Line	0.98	0.98
3c	Kingdom Road	120	Daboll Road to Old NYS Route 31	0.80	0.80
			Section 3 Total	4.43	4.43
	Section 4				
4a	Coldbrook Road	25	1000' South of Craig Road to 1.2 miles North	1.22	1.22
4b	Falls Road	248	Frank Gay Road West to the Top of the Hill	0.89	0.89
4c	Rickard Road	259	Lee Mulroy Road to New Seneca Turnpike	0.50	0.50
			Section 4 Total	2.61	2.61
			Total County Miles	15.27	13.26

\$\$\$ - Paving Deferred to later years due to fuel and asphalt cost increases **not included in mileage totals**^^^ - Funded in 2008 to be Paved in 2009

TRAFFIC PROGRAM

The traffic program consists of three units: the signal unit, the sign unit and the striping unit. In addition to their traffic program related duties, employees also perform snow removal work.

Following is a description of each unit and their accomplishments over the past year:

Traffic Signal Crew

The County of Onondaga owns and maintains traffic signals at 98 locations throughout the county, consisting of the following:

Full Actuated – 43 Semi Actuated – 37 Flashers – 18

The Traffic Signal Crew consists of three men who maintain, revise, answer service request calls and erect new signals. The operation of these signals is very complex and highly trained individuals are needed to maintain them.

Maintenance

All signals are visited a minimum of four times per year for maintenance checks in order to insure the proper operation of the equipment.

A number of signal units were completely repainted both for maintenance and to improve their appearance.

There were a total of 144 service calls of which; 20 were false calls, 13 were the result of storm damage and power outages. Of the 144 service calls, 35 occurred after normal working hours.

Majors Repairs

Caughdenoy Road intersection with Lawton Road – complete replacement of the traffic signal controller cabinet, complete replacement of the overhead wiring, signs and traffic signal heads, mounting hardware, and installation of new inductance loop detectors.

Teal Avenue intersection with Galster Road – complete replacement of the traffic signal controller cabinet, installed a new electrical service riser assembly, complete replacement of the overhead wiring, signs, traffic signal heads, mounting hardware, and installation of new inductance loop detectors

Kinne Road intersection with Franklin Park Drive – complete replacement of the traffic signal controller cabinet, installed a new electrical service riser assembly, complete replacement of the overhead wiring, signs and traffic signal heads, mounting hardware, and installation of new inductance loop detectors.

Nottingham Road intersection with Jamesville Road - complete replacement of the traffic signal controller cabinet.

Minor Repairs

This department answered 103 service calls requiring minor repairs.

Miscellaneous Information

- 1. Laid out for sign crew to help with detours, bridge closures, lane closures and culvert repairs
- 2. Assisting striping crew in striping and layout of roadways

The traffic signal crew assisted all four sections of the DOT where the use of the bucket truck was needed for tree work and building repairs and various other maintenance works.

Traffic Sign Crew

The County has two, two-man sign crews that are responsible for 800 miles of road. Their responsibilities include maintaining and erecting traffic signs, pavement markings and other various projects related to traffic control devices. Their projects included:

- 1. 853 new signs were manufactured and installed.
- 2. 634 new sign posts were installed.
- 3. Put up road construction signs, road closure signs, detour signs and road flooded signs.
- 4. Maintain all construction barricades to avoid the need to purchase new barricades.
- 5. Erect and maintain all signs and barricades for all detours for road and bridge construction or emergency closings. This included those areas flooded in the spring.
- 6. Provided sign manufacturing or other support to various county departments.
- 7. The two traffic sign crews traveled 43,316 miles within Onondaga County performing their work.

PAVEMENT STRIPING PROGRAM

The County has one full size striping truck that paints County road centerlines and edge lines. Five individuals man this unit.

The County has one walk behind pavement striper. This machine is used to paint symbols, crosswalks, stop bars, railroad markings, and island cross-hatching.

The crews start striping the roads in early spring and continue through late fall. Additionally, the crews paint and stencil the County fleet when necessary.

The crews accomplished the following in 2008:

- 1. 780 miles of roads were striped.
- 2. Striped 5 school crosswalks
- 3. Striped 2 railroad crossings
- 4. Painted 87 pavement symbols

The following supplies were used by the striping crew to accomplish the painting of the County roads:

- 1. 89,000 lbs. of glass beads.
- 2. 10,383 gallons of white paint.
- 3. 11,075 gallons of yellow paint.

DRAINAGE PROJECTS

A significant amount of development occurs in Onondaga County each year. The Department of Transportation is continually asked to investigate drainage problems, provide design and field layout and to construct and install drainage improvements.

A list of some of the major projects completed on the past year follows:

Old Liverpool Road Drainage System

A new roadside drainage system comprised of new drainage structures and 500 feet of underground piping was installed along Old Liverpool Road in the Town of Salina. The system began approximately 800 feet west of the State highway interchanges and continued easterly and connected to the NYS drainage system. The system was installed to correct an improper outfall discharging along the Parkway. The project was completed using a combination of County and Contract forces.

Lamson Road Drainage System

This project was initiated to improve and/or correct the drainage problem experienced at the intersection of Lamson Road and Plainville Road and westerly on Lamson Road in the Town of Lysander. A parallel system, approximately 1500 feet in length, will be installed on the north side of Lamson Road from the intersection westerly to the stream along with new structures at the intersection and improved culverts on Plainville Road to the south. Design was begun in 2008 with contract drawings to be completed early 2009 for a late spring-early summer construction in 2009.

Miscellaneous Drainage Installation

Cross culverts or closed drainage systems installed or replaced in 2008 by county forces due to deteriorated condition, maintenance operations or request by the public included facilities on Berwyn Road, Amber Road, Kingdom Road, Palmer Road, Old Coye Road and Black Creek Road. Large Culverts installed under our in-house excavation bid included Van Buren Road (72" x 48"), Kingdom Road (49"x33") and Canton Street (30") which included the replacement of sidewalks and pedestrian handrail. Our Contractor, in conjunction with County Forces, replaced an existing enclosed drainage system on Kasson Road, in the Town of Camillus, to alleviate a flooding issue. Approximately 225 lf of 24" pipe and one cleanout was installed.

TRAFFIC ENGINEERING

On September 10, 2007 this department officially adopted the Manual on Uniform Traffic Control Devices for Streets and Highways published by the Federal Highway Administration, as mandated by New York State Department of Transportation. As part of this new requirement, the Department has implemented a program to upgrade our Traffic signs to the standards set forth in the Federal Manual. In an effort to keep fully aware of all new standards in the field of traffic controls, our traffic technicians attended the Cornell Local Roads Program "Traffic Signs and Pavement Markings" seminar which is conducted each year in an effort to acquaint the various government agencies with the new equipment and trends in the complex field of traffic control.

Each year our engineers conduct studies, at the request of the traveling public and local municipalities, at various intersections on principal County highways. These requests include adding stop control, three color signals and the alteration of signal phasing and timing.

As part of a three color traffic signal request a determination is made whether the intersection qualifies for the installation of a signal by meeting certain warrants as set forth in the <u>Manual on Uniform Traffic Control Devices for Streets and Highways</u> published by the Federal Highway Administration.

Intersections of high volume, arterial type County highways that are already controlled by traffic signals produce complex problems. Problems pertaining to the degree of difficulty of turning movements and inadequate time allotted for specified movements during peak traffic conditions are examples.

The following list is of intersections studied by our staff during the past year:

Howlett Hill Road @ Harris Road Howlett Hill Road @ Kasson Road Henry Clay Boulevard and Metropolitan Drive Buckley Road @ Hopkins Road Buckley Road @ Patricia Drive Buckley Road @ Melvin Drive John Glenn Boulevard @ Kings Park Drive Old Liverpool Road @ Beechwood Avenue South Bay Road @ Darby Road / Cobblestone Drive South Bay Road @ Whiting Road Old Route 57 @ Blackberry Road / Rivercrest Drive Makyes Road @ Cleveland Road Kinne Street @ James Sreet North Manlius Street @ Kirkville Road Bartel Road @ Muskrat Bay Road Broadfield Road @ Whetstone Road Jones Road @ O'Brien Road

Also, departmental forces performed layout and striping of all County roads each year and this program requires not only the striping of centerlines, but also the edge of pavement, providing, of course, that the width of pavement is adequate to permit same.

This Department operates the Highway Traffic Sign Shop, provides sign erection crews, and investigates all service requests where the legality and advisability of certain regulatory and warning sign installations are involved. There are 8,700± regulatory or warning signs installed on County roads. These signs are periodically inspected and maintained.

In 2008 Onondaga County added four signals into its inventory:

Onondaga County installed overhead flashing beacons at the intersection of Old Seneca Turnpike and County Line Road / Franklin Road. This signal beacon was installed as a result of a traffic study which showed an above average number of accidents involving vehicles turning from Old Seneca Turnpike onto County Line Road / Franklin Road.

Onondaga County accepted ownership of a new traffic control signal at the intersection of Hosman Road (E. Molloy Road) and Hancock Field, Air National Guard Base. This signal was installed by Barrett Paving Materials, Inc. under the Hosman Road Reconstruction Project and paid for by the Air National Guard.

Onondaga County accepted ownership of the traffic signal at the intersection of Downer Street and Crego Road. This signal was installed as a traffic mitigation measure by Walgreen's Pharmacy located on the northwest corner of the intersection.

Onondaga County installed a temporary traffic control signal at the intersection of Morgan Road and Fairway Drive East. This signal was installed as a result of a traffic study which showed traffic volumes reaching thresholds set forth in the <u>Manual on Uniform Traffic Control Devices</u>. This temporary traffic control signal will be made permanent as part of the Morgan Road Traffic Systems Management project scheduled for 2009.

UTILITY ENGINEERING

The Utility Engineer for the Department of Transportation is responsible for initiating first contact with each utility owner for any road reconstruction project. The Engineer identifies each utility that is involved on a project and requests their utility asbuilt drawings be sent to the County for further study. This first contact also informs the utility owner that a road project is under consideration or design.

The Utility Engineer is responsible for reviewing consultant or in-house proposed design features along with utility as-built drawings to identify possible conflicts. Onondaga County, State or Federal guidelines are used to identify any conflicts. Once conflicts are identified, the Utility Engineer works with the Project Engineer, Permit Engineer and utility owner to resolve conflicts and develop a proposed and acceptable utility plan for that project. When this has been accomplished a County permit is issued to the utility owner to work within the County right-of-way.

During construction of a project, the Utility Engineer monitors the progress of each utility and interacts with the Engineer-Incharge of the project. Any unforeseen utility conflict or suggested changes to the permit by the utility owner are reviewed by the Engineer-In-Charge and the Utility Engineer. A solution is discussed by all concerned parties and is brought to the attention of the Permit Engineer and Project Engineer for their approval.

For projects involving State and Federal monies, the Utility Engineer will prepare or have a consultant prepare any utility reports and agreements that are necessary for these types of projects. These reports are monitored by the Utility Engineer and sent to the New York State Department of Transportation Planning and Program Management Group for their review and or approval.

When utilities are located on private property, the Utility Engineer will request verification of private ownership and a cost estimate for the cost involved in relocating each utility. Once this is done, an agreement to provide compensation for the removal, relocation, replacement or reconstruction of utility facilities and appurtenances located on privately owned property in connection with a project pursuant to Section 10, subdivision 24-b of the highway law is sent to the utility to be completed. This document is then signed by the County Executive.

The Utility Engineer works with 4 different county project engineers and a permit engineer to answer any utility issues for each project. In 2008 the Utility Engineer has worked on 11 different consultant designed projects and 3 in-house projects along with several miscellaneous projects. Also in 2008 the Utility Engineer has had contact with over 20 different utility owners involving various projects.

The utilities listed below, along with several towns, villages, their consultants or other private utilities are a sample of who the County does business with.

Adesta, LLC

All Tel Communications, Inc.

AT&T

Buckeye Pipeline Company

City of Syracuse Water Development

Dig Safely New York Elantic Telecommunications

Exxon/Mobil Pipeline Company

Fibertech Networks

Fingerlakes Railroad Frontier Citizens

MCI Fiber Security Metropolitan Water Board

New York State D.O.T.

New York State Electric & Gas Corp.

National Grid Electric National Grid Gas

Onondaga County Water Authority

Onondaga Co. Water Environ. Protection

Ouest Communications

Soft Dig (Underground Services Inc.)

Sprint

Sunco Pipeline

Syracuse Utilities, Inc. Time Warner Cable Town of Cicero Sewer

Town of Clay Water Town of Dewitt Water

Verizon

The Utility Engineer also helps to resolve any outstanding work left undone by a utility owner.

COUNTY SNOW REMOVAL PROGRAM

The primary function of the Department of Transportation during, the winter season is to keep roads as safe as possible for the driving public. In an area where winter weather can be expected from November to April and the average snowfall is in excess of nine feet, this can be a daunting task.

The department is continually attempting to determine the perfect amount of material to be used for the various conditions we face. Our goal is to apply the proper amount of material that will clear the road in the least amount of time and do it cost effectively.

Our vehicles are equipped with an automated spreader, a device known as a Dicky-John. This device spreads the material at a calibrated rate. Our Foremen determine what amount of material is to be used. Using a distribution rate chart created by the Salt Institute, Inc. and the Cornell University Local Roads Program. The operator can, from within the cab; instantly change the calibration to the setting given by the foremen.

In prior years, the Onondaga County Department of Transportation used a salt/sand mix on the roads it plowed. Through study and experimentation, the Department determined it could reduce the number of plow trips needed by switching to 100% salt usage. Not only did this increase the effectiveness of OCDOT's snow and ice removal operations, but it also reduced its material, overtime, and equipment use costs. Eliminating the use of sand has also reduced the need for street sweeping and culvert cleaning in the spring. In recent years, the Department has moved to the use of treated salt, which is a mix of regular salt and magnesium chloride. Treated salt works at lower temperatures while requiring less material be spread per mile than salt itself.

In order to more effectively serve the driving public, in the 2008-2009 winter season we contracted with 19 towns, 2 villages and Cayuga County to plow certain County roads. Together, they perform snow removal and ice control on 303.52 miles of road. We also contract with the State of New York to serve 219.52 miles of State roads within Onondaga County.

COUNTY ROADS, SECTION I JAMESVILLE SNOWPLOWING

Shop	C.R.	Road	Total	
No.	<u>No.</u>	<u>Name</u>	<u>Width</u>	<u>Miles</u>
602	257	Assembly Park	20	0.36
625	198	Barker Hill	22	2.12
610	114	Berwyn	20	5.11
637	170	Cemetery (Pompey)	20	0.27
660	74	Dam	18	0.19
813	250	Edwards-Falls Road	18	0.30
663	145	Gates-Watervale	20	4.37
660	12	Gooseville-DeRuyter	22	3.07
665	174	Graham	20	1.70
675	182	Hall-Henneberry	20	6.49
679	1	Jamesville-Onativia	20	7.83
684	103	Jamesville Toll	20	1.81
699	112	LaFayette-Onondaga	18	6.92
703	5	Manlius-Delphi	20	9.60
706	9	Manlius-Watervale	20	5.12
710	10	Manlius-Pompey-Fabius, Pt.I	22	4.96
710A	11	Manlius-Pompey-Fabius, Pt.II	22	6.17
857	94	North Burdick St.	24	2.21
805	171	No. 5 West, Barber Hill	20	5.32
735	3	Onativia-Apulia	20	4.36
732	2	Onondaga-DeWitt, (South St.)	20	0.61
731	52	Onondaga-DeWitt, (Wms. Hill)	18	0.98
739	188	Onondaga-Highland	20	1.11
736	7	Orville-Jamesville	22	0.90
750	169	Palmer-Peck Hill	20	3.90
754	128	Ridge	20	5.73
		22		

635 771 784 761 792	173 109 237 6 111	Sentinel Heights Sweet Road Swift-Radway Road Syracuse-DeWitt Tully-LaFayette	20 16-22 20 20 22 Total	1.81 7.04 3.03 1.79 <u>5.01</u> 110.19
State Roads;		State Route 92 257 80 11A 20 281 11 91 173	Turk	Miles 8.6 1.9 18.6 7.17 22.2 1.4 16.8 15.2 10.2
LaFayette Road	Road – Jamesville To - City/County Line to e - NYS #173 to Thu	NYS #173	Total County Miles State Miles City Streets Extra Lanes Extra State Lanes Section I Total	102.7 Miles 0.68 0.96 1.76 3.40 110.19 102.07 3.40 1.28 4.37 221.31

COUNTY ROADS SECTION II

NORTH AREA SNOWPLOWING

Shop	C.R.	Road	Total	
No.	<u>No.</u>	<u>Name</u>	Width	<u>Miles</u>
621	181	Bartons Corners-	22	1.66
		East Syracuse		
620	191	Bear Road	24	3.63
609	38	Belguim Cold Springs	22	3.45
617	161	Buckley Rd. Ext.		2.22
629	49	Caughdenoy Rd., Pt. I	22	5.21
629A	50	Caughdenoy Rd., Pt. II	22	5.55
639	205	Chestnut Rd. & Street	22	1.74
		(Allen & Chestnut)		
642	13	DeWitt-Cicero, Pt. I	22	2.86
642A	14	DeWitt-Cicero, Pt. II	22	1.70
643	53	DeWitt-Manlius	24	9.86
	69	East Molly Rd.		1.42
	93	Factory Avenue		1.68
619	77	Fly Road	24	3.38
65	136	Fremont-Stevenson	22	4.14
751	78	Hancock Airport	48	0.60
672	148	Hopkins	22	1.19
	148	Hopkins Rd. (Seventh North to Buckley - 0.4		1.19
		extra lanes)		
841	71	Hosman	24	2.33

671	115	Hubbs CorsSchepps	22	3.31
849	86	Kinne St.		0.91
	51	Lawrence Cors	24	2.93
		Liverpool		
864	219	LeMoyne Avenue	48	0.85
851	88	Liverpool Bypass	22	0.53
696a	35	Longbranch Rt. 57-River		1.52
	87	Malden Rd.		1.40
721	197	Maple Rd.		3.21
711	55	Minoa-Manlius Center	22	2.11
704	54	Minoa-Schepps Corners	22	2.10
707	47	Morgan Road	50 & 22	2.59
713	16	Mud Mill-Hush Acres		0.20
818	81	John Glenn Blvd.		2.56
821	251	North Street-Collamer	22	1.19
845	82	Northern Blvd.	48	4.48
758	187	Oak Orchard	22	2.40
854	91	Old Route 57	24	7.99
666	76	Reichert Road	48	1.45
763	48	Salina-Clay (Buckley Road)	24	4.19
758	45	Salina-Clay (7th North St.)	24	4.35
758A	46	Salina-Clay (Morgan Rd.)		5.55
840	70	Salina-DeWitt (Townline)		0.60
	70	Salina-DeWitt (.32 miles & .16 adjusted)		0.48
773	265	Seventh North St. Ext. (N. of Rt. 31)		1.56
773	121	Seventh North St. (Henry Clay)		3.11
722	137	Syracuse-Liverpool		2.17
779	208	Syracuse- South Bay		7.92
786	18	Taft Settlement Part I		3.14
786A	19	Taft Settlement Part II		4.41
	228	Teall Ave.		0.67
814	252	Wetzel Rd.		3.58
			Total	137.27
			County Miles	137.27
			Extra Lanes	14.15
			Four Lanes	37.54
		Rt. 5	7 (5-6-7-8 lanes)	9.69
			Section II Total	198.65

COUNTY ROADS, SECTION III CAMILLUS

SNOWPLOWING

Shop	C.R.	Road	Total	
<u>No.</u>	<u>No.</u>	<u>Name</u>	<u>Width</u>	Miles
600	57	Amboy-Warners	22	3.04
613	106	Baldwinsville-	22	1.90
		Bell Isle-Lakeland		
809	29	Baldwinsville-Phoenix	22	5.22
		Little Utica		
844	80	Baldwinsville-	22	2.64
		State Fair-Syracuse		
606	31	Baldwinsville-Warners	20	3.79
607	100	Belle Isle-Amboy	22	1.04
608	101	Bellevue Avenue Ext.	20	1.14
623	223	Bennett Road	22	0.11
614	118	Brickyard	22	4.01
617	161	Buckley Rd. Ext	24	2.22

		(RR – Taft)		
630	36	Camillus-Warners	22	3.02
630	36	Camillus-Warners	24	1.14
		(New North Street)		
630	36	North Street Connector	24	0.02
855	92	Downer Street Road	22	0.47
	122	Elbridge – Skaneateles (between Hart lot &		1.69
		Vinegar Hill)		
647	58	Elderberry St. & Ext.	22	0.46
653	63	Fairmount-Amboy	22	3.39
837	271	Hamilton		1.96
674	194	Hardscrabble	22	0.13
	209	Hinsdale Rd		1.26
681	32	Jacks Reef-Plainville	22	4.62
818	81	John Glenn Blvd.	48	1.81
683	204	Jordan-B'Ville, Pt. I	18	0.21
847	84	Jordan-B'Ville	20	3.73
		(Old Route 31)		
682	59	Jordan-Cross Lake	22	1.40
		(Grimes)		
680	63	Jordan-Seneca River	22	1.79
000	155	Kasson		0.81
694	30	Little Utica-Plainville	22	6.57
696A	35	Long Branch	22	0.84
695	33	Lysander-North Co. Line	22	1.49
698	34	Lysander-West Co. Line	16	1.00
705	67	Memphis-Hamlet	22	0.21
712	66	Memphis-Sweets Crossing	22	4.59
719	183	Memphis-Whiting	22	5.39
722	203	Memphis-Whiting Ext.		0.30
720	190	Milton AveAmboy	20	3.63
720	190	Milton AveAmboy-	20	0.86
	170	Bennett		0.00
723	206	Munro Road	20	1.76
740	216	O'Brien-DeVoe	20	4.06
861	98	Old Route 5	40	3.88
603	240	Onondaga Blvd.	48	2.75
744	135	Peru-Fikes	20	4.28
742	60	Peru-Jordan	22	3.72
743	37	Phoenix-Belguim	22	3.86
746	164	Pottery Road	22	2.11
756	165	Richard-Cooper	20	2.57
862	99	Route 31B	22	0.37
776	140	Sixty	22	3.70
759	28	Syracuse-Baldwinsville	22	0.81
760	39	Syracuse-Cedarvale	22	4.01
799	64	Warners-Memphis	22	3.67
801	138	Warners-Memphis (Canal)	20	2.46
848	85	Willis Avenue	20	0.20
804	162	Winchell Avenue	22	0.20
004	102	Winchen Avenue	Sub-Total	122.93
		Unimproved John		<u>-2.74</u>
		Ommproved John	Total	$\frac{-2.74}{120.19}$
~ - -		-		
State Roads;		State Route		Miles
		Rt. 31-Downer StCo. line		12.60
		Rt. 31C		0.50
		Rt. 321		8.38
		SH9544-Jordan-Elbridge		2.34
		State Fair Blvd.		2.00

Rt. 173 Rt. 174 Forward Rd. Old Rt. 5 City Line – Geddes Brook	Total	1.80 2.20 1.10 <u>1.85</u> 32.77
<u>City Streets</u> : Grand Avenue - County/City Line - Velasko Road Onondaga Blvd County/City Line - Velasko Road Bellevue Avenue - Bellevue to Velasko Road	Total	Miles 0.04 0.06 0.50 0.60
City Four	Roads Streets Lanes Lanes	120.19 32.77 0.60 9.73 2.11 165.40

COUNTY ROADS, SECTION IV MARCELLUS SNOWPLOWING

Shop	C.R.	Road	Total	
<u>No.</u>	<u>No.</u>	<u>Name</u>	Width	<u>Miles</u>
601	23	Amber-Otisco	18	4.68
604	24	Amber-Preble	18	8.77
626	211	Bishop Hill	20	3.98
631	44	Cedarvale-Amber	22	7.31
633	27	Coon Hill Road	18	4.24
835	266	County Home Road	20	0.18
645	110	Days Corners-Kelleys Corners	22	2.42
649	131	Eibert	20	1.25
648	122	Elbridge-Skaneateles	22	.69
664	172	Griffin Corners	22	2.98
664A	201	Griffin Corners Ext.	20	1.25
863	107	Halfway Road	22	1.76
837	271	Hamilton		1.54
673	151	Hitchings Road	18	2.01
669	40	Howlett Hill Road	22	6.80
691	179	Kasson Road & Extension	22	3.03
701	225	Lyons Road (Martisco- Lyons)	20	2.96
693	217	Kingston	20	3.37
734	73	Lee-Mulroy Road	12	3.50
702	236	Limeledge Road	20	3.93
725	235	Main Town Line Road	20	3.10
708	41	Marcellus-Skaneateles	20	5.97
716	133	Marcellus-W. Co. Line	22	6.37
717	154	Marcellus-West County Line Extension	20	1.00
715	124	Marietta-Amber	20	2.88
846	83	Marietta-Marcellus (South Street)	20	0.89
726	222	McDonald Road	22	1.48
738	168	Northeast Town Line	20	2.10
733	62	Onondaga Hill	20	0.31
737	129	Onondaga Hill- South Onondaga	20	5.72
741	247	Otisco-Joshua	20	3.74
830	113	Otisco Valley	18	2.58
842	72	Richard Road	18	0.26
753	21	Rose Hill	20	2.50

		Rush Road (Hitchings)		1.75	
764	68	Sheehan Road	22	0.28 3.89	
756	22	Skaneateles-Elbridge 22			
774	150	Slate Hill	20	6.90	
766	42	South Onondaga-Cedarvale Part I	18	3.56	
766A	43	South Onondaga-Cedarvale Part II	18	1.80	
777	176	Stump Road-E. Town Line	20	3.11	
768	202	Stump Road Ext.	20	1.42	
760	39	Syracuse-Cedarvale	22	1.90	
794	130	Velasko Road	22	1.46	
796	142	Vinegar Hill	20	2.99	
800	26	Willowdale	18	<u>7.11</u>	
			Total	141.03	
State Roads;		State Route		Miles	
Division 1		Rt. 175		11.59	
		Rt. 41		15.97	
		Rt. 20W		9.03	
		Rt. 20E		7.99	
		Rt. 80		11.54	
		Rt. 175		12.97	
		Rt. 173		4.93	
			Total	74.02	
City Streets:				Miles	
	- County/City Li	ne - Glenwood Avenue.		0.04	
11102 011414 11044	e country, city 21	Siem Court in Court	Total	$\frac{0.04}{0.04}$	
			County Miles	141.03	
			State Roads	74.02	
			City Streets	0.04	
			Extra State Lanes	2.33	
			Section IV Total	$\frac{2.33}{217.42}$	
			Section 1 v 10tui	217.72	

GENERAL AND HEAVY MAINTENANCE

Following are some of the highlights of the 2008 maintenance program:

Tree Stumps

Number of tree stumps removed

34 miles Miles of Ditch Cleaned/Re-Dug Guide Rail Feet Repaired/Installed 6,493 feet Feet of Underdrain Flushed 1,444 feet **Catch Basins** Installed New 4 basins Rebuilt 78 basins Cleaned 106 basins Miles of Debris Pickup 37 miles Miles of Mowing By Tractor and Long Arm Mower 2,942 miles Miles of Road and Intersections Swept 59 miles Miles of Shoulder Repair 102 miles Shoulder Regraded Pounds of Patch Used Hot 1,480,600 lbs. Cold 184,340 lbs. Road Signs Signs Maintained 723 signs New Signs Installed 24 signs **Mailboxes** Boxes Repaired 394 boxes **Brush Cutting** Miles of road where brush was cut 53 miles

107 stumps

EQUIPMENT AND FACILITIES

For the purposes of the Department of Transportation, Onondaga County is divided into four quadrants. Within these quadrants, the Department maintains 802 miles of County highways. The Department owns a fleet on trucks and construction equipment that is used for highway maintenance and snow removal.

Each quadrant or section is served by a highway maintenance facility. Each facility is capable of making repairs to equipment and each has a stockroom of parts.

The Jamesville Maintenance Facility is the primary facility in the system. It is equipped to make repairs of a more complex nature to the fleet. In addition, the stockroom in Jamesville is the primary warehouse of parts for the Department. The Administration building houses supervisors, offices, dispatching center, conference room, etc. The maintenance building provides space for the repair of our equipment. The bays are large enough so that snowplows can be brought in without having to remove the wing blades. This is a great time saver. Each bay gives our mechanics with tool storage areas and overhead hoses supplying water, compressed air, grease, etc. This building also contains our stockroom, tire shop, metal shop, wood shop, and welding shop.

The several storage buildings provide enough space for us to store all of our equipment indoors, out of the weather. These buildings are heated and are kept warm enough to facilitate the starting of our Diesel engines in cold weather. This allows us to respond more quickly when roads need attention.

The Jamesville facility also houses several specialty shops. Following is a description of some of our shops:

Mechanics Shop

In these shops our staff of mechanics make repairs to the Department's motor fleet. These skilled professionals rebuild engines, repair brakes and cooling systems and in short do all that is needed to keep our fleet running.

Welding Shop

This shop allows us to make in-house repairs to broken parts. Our employees also possess the skills to manufacture parts that can no longer be purchased. These functions allow us to keep down time low and save the Department money. The machinery used in this facility includes: large and small lathes; vertical and horizontal milling machines; a radial arm drill; and, a grinding machine.

Tire Shop

This facility is responsible for the repair and replacement of tires and wheels on all Department of Transportation vehicles. Vehicles range in size from pick up trucks to snowplows and heavy construction equipment. Repairs are undertaken at the shop when possible. However, through the use of our tire truck, repairs are frequently made in the field.

Vehicle Maintenance

The DOT has 4 maintenance facilities for vehicle storage and supervisor offices, a staff of mechanics and a small stockroom in 3 facilities (North Area, Camillus & Marcellus). There is a larger staff of mechanics and a large stockroom at the Jamesville maintenance facility.

The DOT maintains a fleet of rolling stock of 260+ vehicles and 60 pieces of small equipment.

The mechanical staff from our 4 maintenance operations accomplished 2862 work orders in 2008. Examples of what were done range from minor engine repair to total rebuilding of engines & transmissions.

The department operates a large wrecker that responded to 106 calls for towing operations for DOT equipment, other county departments, town vehicles and our bridge unit.

The list below shows the diversity of the equipment that the department needs to maintain in order to support our mission.

Athey Loaders Skid Steers

Arrow Boards Small Equipment Inventory

Backhoes Snow Blowers

Catchbasin Cleaners Stake Rake truck (for welding)

Dozers Street Flushers
6 & 10 wheel Dump trucks Stripers
Forklifts Stump Grinders
Gang trucks Suburbans

Gradalls Sweepers/ Tow Brooms

MowersTankersPayloadersTire TruckPick-upsTower TrucksPlows (1 ton)TrailersRollersTruck Tractors

Scout Vehicles Vans

Wood Chippers

Wrecker

During the winter, the DOT needs to be prepared with 55+ snowplows to cover all the routes needed for state and county snow routes.

During the summer, there are different demands on the vehicle maintenance staff. The staff supports paving operations, shoulder repairs, striping operations, bridge projects, catch basin cleaning & repairs, and any other projects for road maintenance.

Stockroom

In order to oversee the large number of parts required to maintain the department's equipment, the Jamesville maintenance facility houses the main stockroom that also supplies the other 3 facilities. The stockroom carries 10,000+ parts in the inventory for various pieces of equipment that are used frequently. Many parts needed are unique or not cost effective to stock and need to be processed immediately by our stockroom staff in order for the equipment to be able to get back out on the road as soon as possible.

The stockroom also processes all the orders for the other 3 stockrooms so that a constant accurate inventory is kept. Requests for all building maintenance supplies are also ordered through the stockroom.

The stock personnel continue to work to find ways to lower stock levels and to find more efficient ways to keep track of the inventory.

Facilities

The Department has 4 maintenance facilities that have a total of 14 buildings and 5 salt sheds. The facility at North Area is a very large building that has 6 tenants. These tenants are from other county departments that have storage or offices. Through use and age there are numerous repairs that need to be done throughout the year.

At our Marcellus Maintenance Facility, the training room project was completed. This room will provide the Department an appropriate sight for the continuing training of approximately 60 employees at a time. At our fueling facility in Marcellus, we sell fuel to Town of Marcellus Highway, Town of Marcellus Parks, Town of Marcellus Fire, Marcellus Ambulance, Village of Marcellus Police, Sewer & Highway Departments, and the Marcellus School Bus District.

The department has a maintenance person who oversees the maintenance of the facilities. Work that needs to be accomplished is done either by house staff or by contractors, and all work is overseen by this maintenance individual. Listed below is a list by facility of work that was done by either contractor or by our staff.

JAMESVILLE (6 buildings, salt shed and upper quarry building)

Repairs as follows: Fabricated as follows:

Electrical **Boxes** Overhead doors Sideboards Picture frames Plumbing Lights Grade stakes Heating Road flags Sewer System Chainsaw chains **HVAC** Trailer beds Gutters Forms & jigs Locks Mailbox posts

Furnace Creepers
Repaired fuel island breakers & lights Extension cords

Replaced pressure valve in welding shop water heater
Cleaned drains in building 2 floor

New:
Locks

NAMF (1 building, 6 tenants & salt shed)

Repairs as follows:

Plumbing New:

Heating system Changed locks
Overhead doors Replaced main sump pump

Overhead doors
Locks
Electrical
Sewer System

CAMILLUS (4 buildings, salt shed, Amboy)

Air Condition system

Repairs as follows: New:

Heating Hot water heater – Main building Plumbing Fire alarm system building 4
Overhead doors New ceiling for lunch area
Man. Doors
Electrical

Electrical Lights Locks Generator Gutters

MARCELLUS (1 building, 2 salt sheds)

Repairs as follows: New:

Electrical Finished training room
Plumbing Installed shut-offs in main water line

Gutters Lights

Overhead doors

Locks Manual Doors Heating

Maintained Inventory:

Lumber Hardware Plexiglass

Plumbing supplies Electrical supplies Sandbags for County

Sandbags for U.S. Army Corps. Of Engineering

Grass seed

SERVICE REQUESTS

The goals of the Service Request System:

- 1. To better serve our customers.
- 2. To better track the quantity and type of service request that our Department receives.
- 3. To make sure that all of the service requests our Department receives get a response.
- 4. To track our Department's performance with our customers.

Since the conception of the service request system in 1996, our Department has maintained a 98% approval from our customers.

Requests for service by type and area

TYPE	JAMESVILLE	NORTH AREA	CAMILLUS	MARCELLUS
Accident Cleanup	3	6	2	0
Brush	6	3	13	10
Dead Animals	71	63	60	89
Drainage	92	161	103	146
Driveway Repairs	30	32	26	42
Guide Rail	12	23	11	20
Mailboxes	96	64	88	146
Requests Directed to Other Agencies	53	71	32	29
Miscellaneous	36	67	49	39
Mowing Requests	25	32	29	7
Potholes	14	37	27	14
Road Striping	1	4	5	1
Shoulder Repairs	21	13	16	24
Snow Plowing Requests	14	2	18	11
Stump Grinding	7	2	2	0
Road Sweeping	8	4	4	6
Traffic Signal	11	126	10	8
Traffic Signs	71	86	45	66
Trash	9	21	5	3
Tree Requests	<u>88</u>	<u>46</u>	<u>65</u>	<u>63</u>
	668	863	610	724

MISCELLANEOUS DEPARTMENTAL SERVICES

Permits

During 2008, the Onondaga County Department of Transportation issued 37 residential driveway permits, 8 commercial driveway permits, 11 special hauling permits, and reviewed and processed another 32 applications for permit for subdivision entrances onto County roads, drainage installation, water lines, rental agreements, and miscellaneous public utilities. As a mutual service with Syracuse-Onondaga County Planning Agency, this Department reviewed 515 cases for zone changes, 105 cases for subdivision approvals, and participated in two scoping sessions.

Beginning January 1, 1998 the Onondaga County Department of Transportation revised its residential driveway entrance program. A list of contractors permitted to install driveways was established. The permitee may choose a contractor of their choice or from the list provided to them by this Department. The permit fee for residential driveways is \$15.00 with the installing contractor supplying a \$500.00 deposit along with liability insurance to this Department. The permitted contractor is also responsible for ditching one hundred feet of roadside ditch, if necessary. This Department conducts a final inspection of the installation.

This Office issued 143 utility permits in 2008 to allow utility companies to install, repair or modify their facilities located within the County highway right-of-way. Beginning in 2003, an annual maintenance permit program was initiated for all utilities within the County highway R.O.W. In 2008, 11 annual permits were issued.

In 2001 Onondaga County entered into an annual rental agreement with Sun Oil Pipeline for a pipeline along the Syracuse Auburn Electric Railroad right of way.

		<u>2008</u>	<u>2007</u>	<u>2006</u>
Revenues collected for:	Driveway permits	\$ 6,247.00	\$ 8,896.00	\$ 12,470.00
	Utility permits	\$ 10,245.12	\$ 10,625.61	\$ 10,625.61
	Rental payments	\$ 8,728.22	\$ 7,768.22	\$ 7,768.22
	Other permits	\$ 880.00	\$ 600.00	\$ 280.00
		\$ 26,100.34	\$ 27,528.38	\$ 31,143.83

Highway Damage Control

In 1993, a program was developed to monitor accident reports involving County highways. The main purpose of this program is to determine if any highway apparatus, such as guide rail, signs, etc., were damaged at the time of the vehicular accident.

For example, if we determine, through an accident report, that damage to the highway was incurred, we would make the repairs and, through the Law Department, be reimbursed.

In 2008, twenty-eight (28) claims were filed with the Law Department resulting in collections of \$15,744.46

Seeding and Topsoil Program

The purpose of this program is to topsoil and seed areas disturbed during highway construction and routine maintenance. In 2008 this Department had 18.1+/- acres hydroseeded by contract with Onondaga County Soil and Water Conservation District. Also 3640 square yards of topsoil were spread and turf established, an additional 2555 square feet of turf established, work was completed under a low bid contract.

Tree Planting Program

In 2008 the Onondaga County Department of Transportation continued its tree and shrub replacement policy, which replaces trees and shrubs removed during construction projects. A total of eighteen (18) trees and shrubs were planted in various parts of the County. Among the varieties planted were red oaks, little leaf linden, burning bush, spirea, along with flowering pears. This was completed under low bid contract.

Driveway Paving Program

The Department of Transportation determined that the repaving of driveways that had been disturbed on drainage, maintenance paving, and heavy construction projects would best be completed by an outside contractor. Bids were taken and a low bidder was chosen. A total of four hundred and forty-eight (448) driveways were paved from the edge of shoulder to its construction limits in 2008.

Guide Rail Projects

It is the policy and has been the policy of the Department of Transportation to consider as a priority the maintenance and upgrading of the guide rail system on County highways. Guide rail locations and installations are adequately justified, properly designed, constructed, and maintained by County forces.

In 2008, five (5) project areas were scheduled to receive guide rail. These locations were on reconstruction projects and upgrading existing systems. New guide rail locations were installed by contract.

Guide rail was installed on sections of the following County highways:

SECTION I	SECTION II	SECTION III	SECTION IV
Oran Delphi Road	N.A.	Devoe Road	Falls Road
DeRuyter Road		Thompson Road	

In 2008 County forces answered 60 filed service requests for repairs to damaged guide rail. In addition, County forces supported drainage projects by removing and resetting guide rail in a timely manner, thus reducing the amount of time construction zones needed to remain open.

Accident Litigation/Legal Claims

The County of Onondaga receives numerous highway related accident claims every year. This Department searches its records to provide the appropriate information for each claim. This file is retained with a copy provided to the Department of Law for its use in litigation.

In 2008, a total of thirty-four (34) legal claims or litigation cases were reviewed by this Department.

State Environmental Quality Review Act

This Department has incorporated the State Environmental Quality Review Act procedures and substantive information produced in the environmental review into the planning and design stages of County highway and bridge projects. It was the intent of this statute that agencies realize their obligations to protect and enhance the environment for the uses and enjoyment of this and all future generations.

Environmental Impact Statement Review

Both commercial and residential developments need access to County highways. This Department conducts extensive analyses of Environmental Impact Statements as part of the review process, when called upon to do so as an involved agency. The Department's primary concerns are site-generated traffic, safe ingress and egress, and post-development surface drainage.

Stormwater Phase II Regulations

The Environmental Protection agency (EPA) amended the stormwater regulations that operators of municipal separate storm sewer systems (MS4s) within "Urbanized Areas" develop programs for the control of stormwater under their jurisdiction. This Phase II took effect in March 2003.

Onondaga County applied for and received a general SPDES Permit No. GP-02-02 (Revised to GP-0-08-002 effective from May 01, 2008 to April 30, 2010), administered by the New York State Department of Environmental Conservation (NYSDEC), for its MS4 operations and will comply with the basic requirements of six minimum measures; public education and outreach, public involvement, illicit discharge detection and elimination, pollution prevention and good housekeeping, construction site runoff control and post construction stormwater management. This department entered into an agreement with the Central New York Regional Planning and Development Board (CNYRPDB) to administer portions of these measures.

DOT construction projects that disturbed one or more acres of land were required to obtain a SPDES General permit for Stormwater Discharges from Construction Activity GP-02-01 (Revised to GP-0-08-001 effective from May 01, 2008 to April 30, 2010).

This department's fifth Annual Report, as required by permit, was submitted to the NYSDEC for the period of March 10, 2007 – March 09, 2008. A public hearing on the Stormwater Management Plan Annual Report was held on May 21, 2008 in the County Executive's Conference Room.

Yearly pre-season construction meetings are held to highlight stormwater concerns and construction site best management practices.

Vegetation Control

In 2008 Onondaga County Department of Transportation renewed a contract for the application of herbicides to control roadside vegetation. This was done in selective areas to control overgrowth around guide rail, in median areas and on shoulders that were to be overlaid with blacktop. The contractor had to be registered with the New York State D.E.C., have proper equipment, be in material compliance and possess at least two years experience with references.

Shoulder Control, Cold Mix Blacktop, Section I-IV
Guide Rail Vegetation Control, Section I - IV
S22,720 LF
Raised Median Vegetation Control, Section II
29,040 LF

Road Side Brush Control

This was a very successful project in the past and the program will be evaluated for next year's program.

Preacquisition Hazardous Site Assessment

As part of the review process for highway and bridge construction, this Department utilizes a Preacquisition Hazardous Site Assessment process. The purpose of this policy is to protect the County from liability associated with acquiring property with pre-existing environmental contamination. This Department worked with the County Office of the Environment to formulate a countywide policy to aid departments in determining the existence of contamination prior to acquisition. This County-Wide Policy was adopted December, 1995 and was revised in May, 2002.

Tax Delinquent Property

It is also our responsibility to investigate for highway usage, all tax delinquent and surplus County land.

Network Level Pavement Management System

The Department of Transportation began the development of its Pavement Management System in 1984. By 1987, the implementation of the program for high volume highways was completed, with 428.75 miles in the system. An annual update program was instituted to maintain the accuracy of the database.

In 1991, the update program continued, but with the budgetary problems plaguing county government, the Department was forced to look for more efficient ways to manage the limited funds available. It was felt that by incorporating the secondary County highways into the pavement management system, a savings could be realized in both the surface treatment and cold mix paving programs. The initial work was completed and continued in 1994. In 2008 our update program on the primary system continued.

Traffic Volume Studies

The Department of Transportation operates ten (10) Jamar automatic traffic data recorders. These recorders are placed at various locations on County highways during non-winter months to provide traffic volume data for departmental use. Intersection traffic volume studies are also undertaken when needed.

Machine counts were conducted in 2008 at fifty-nine (59) locations.

Computer Systems

Our current computer system includes six PC workstations dedicated to the mapping, design and finished document drafting of public works projects utilizing CAD software. An additional PC is dedicated to GIS applications with access to the Onondaga County GIS database. Other PCs run applications in highway design, traffic engineering, hydraulics, quantity calculation, cost estimating and bid tabulation, and various administrative functions.

Bids for Goods and Services

The Department of Transportation currently maintains 39 annual contracts for goods or services. The majority of these contracts (13) are for the paving or maintenance of our highway system and include both materials and contract services. Other contracts (3 each) include snowplow parts or snow and ice removal materials, vegetation removal or planting, guiderail, traffic signal parts or services, equipment rental, Bridge materials or services and miscellaneous materials. Other bids include Material Testing Services, Striping and Animal Carcass Removal. Our staff supplies the Purchasing Department with specifications and assistance in writing these bids. In 2008 we re-bid 18 of the 39 annual contracts.

The Department also is required to advertise for bid all of our contract road reconstruction projects, bridge reconstruction projects, bridge decks, facilities enhancements and new vehicle purchases on a per project basis. In 2008 we opened bids for 2 bridge reconstruction projects and 2 bridge decks or precast bridges.

Pesticide Application For Wasps And Hornet Control

In 2008 our Department continued training employees in pesticide application to control wasps and hornets. This training establishes these employees as apprentice level pesticide applicators. Wasps and hornets nests in and around traffic control devices are the Departments main concern.

In 2008 our Department made five applications of wasps and hornet spray. This is an increase of three applications from the previous year.

Beaver Dam Removal

In 2008 our Department applied for and was granted four permits from the New York State Department of Environmental Conservation to remove beaver dams located within our maintenance right-of-way. This is an increase of three permits from the previous year. Our Department will only remove a beaver dam when it becomes absolutely necessary to do so.

INTER-DEPARTMENTAL SERVICES

The Department of Transportation is asked to assist other County Departments with a wide assortment of construction, administrative and engineering problems.

Professional Engineers

A Professional Engineer, from our Department, is available at all times to interpret maps and give testimony to all condemnation hearings associated with the acquisition of land for the improvements of County highways. Also, professional engineers are available to represent the County of Onondaga at all public hearings and lawsuits involving personal injury and/or property damage claims against the County.

Professional Land Surveyor

A professional Land Surveyor, from our Department, is available to determine property lines, to interpret survey information, and to prepare maps for acquisition and conveyances of County property. This professional land surveyor is also available to aid the County Attorney's Office in court actions involving the County in land claims.

Department of Law

Various surplus properties adjacent to County roads were conveyed to towns or private owners in cooperation with the Department of Law. This allowed the properties to be placed back on the tax rolls and relieved the County of the liabilities of ownership of these properties.

Wrecker Service

The Department's wrecker is made available to various County departments to tow large equipment

Syracuse Metropolitan Transportation Council

Representatives of the Department of Transportation serve on the Syracuse Metropolitan Transportation Council. In 2008, the Commissioner of Transportation serves on the Planning Committee and the Executive Committee. These committees are responsible for review of all Transportation projects involving federal funds. It is the responsibility of the Syracuse Metropolitan Transportation Council to formulate a five-year Transportation Improvement Plan, a Unified Planning Work Plan and a Transportation Systems Management Program. These programs involve all modes of transportation utilized by the community.

A Civil Engineer from our Department serves as Chairman of the Capital Projects Committee. This Committee is responsible for the technical review and prioritizing of prospective projects to be included in the five-year Transportation Improvement Plan.

In 2008 Department personnel have participated in projects undertaken by the Syracuse Metropolitan Transportation Council such as The Congestion Management System Study, The Emergency Travel Routes Study, the Onondaga County Long Range Transportation Plan Update, the Northern MPA study, the Downer Street Corridor Study, the Village of Liverpool Transportation Modeling task, the I-81 Travel Demand Modeling task and the State Transportation Improvement Program.

Department of Parks and Recreation

The Department provides technical services to the Parks Department relative to the Maintenance of their many internal roads and parking facilities. The Department also provides specialized maintenance equipment to the Parks in order to eliminate duplication of the purchasing of costly equipment.

Onondaga Lake Canalways Trail, PIN 375355

This project, funded with federal and county dollars, is a multi phase project to complete the pedestrian trail around Onondaga Lake.

This Office has been providing and will continue to provide into 2009 technical assistance to the Department of Parks and Recreation relative to moving this project through the FHWA/NYSDOT process.

Department of Emergency Management

This Department provides Accounting, Purchasing and Payroll services to the Department of Emergency Management. This cooperative has been in existence since 2002. The Department provides for the purchase of all goods and services and keeps all payroll records for Emergency Management.

Department of Corrections

In 2008 the Department of Transportation aided the Department of Corrections in the establishment of a new Visitor's Parking area at the Jamesville Penitentiary. The Department of Corrections used our in-house excavation contractor to perform the excavation, compaction and paving operations. The Department lent technical assistance, and, per the contract, removed the spoils and provided the delivery of the subbase material and asphalt products. After completion, our Department installed the guiderail and signs for the Corrections Department.

Erie Canal Museum

The Erie Canal Museum, an authorized agency of Onondaga County, applied for and received a Transportation Enhancement Program (TEP) grant from FHWA to buy and convert the Water Street Gym into an annex of the Weighlock Museum in 2007. The Museum also received Multi-Modal monies to refurbish and update the exhibits in the Weighlock Building, which is owned by Onondaga County. The Onondaga County DOT administers all FHWA monies that come through the New York State DOT. Our department will administer and oversee these projects to their completion.

Towns and Villages

The Department provides technical services to the various towns and villages in the county relative to the maintenance of their roads and bridges. The Department also makes all of our commodity bids available to the municipalities and will modify our bids to accommodate the town's and village's needs.

FOUR AND FIVE LANE HIGHWAYS

FOUR LANE Airport Boulevard	<u>C.R. NO</u> 78	<u>MILES</u> 0.60
Electronic Parkway	241	1.22
John Glenn Boulevard	81	4.19
Vine Street	51	1.70
Northern Boulevard	82	4.48
Chrysler Drive	76	1.09
Fay Road (Taft Road, Buckley to South Bay)	48	0.90
Seventh North Street	45	4.00
Salina-DeWitt-Town Line Road	70	0.63
Kinne Street	86	0.45
Old Liverpool Road	137	2.17
South Bay Trolley Road	208	0.91
Taft Road	19	3.60
Teall Avenue	228	0.67
Morgan Road (Commerce Blvd. to Buckley Rd.)	47	1.93
Onondaga Boulevard	240	1.76
Old Route 5	93	3.88
Route 57	91	<u>2.42</u>
	TOTAL	36.60
FIVE LANE		
Route 57	91	2.29

MILEAGE OF COUNTY ROADS WITHIN TOWNS

	County Roads	Const	
<u>Towns</u>	Within <u>Villages</u>	County <u>Roads</u>	<u>Total</u>
Camillus	0.52	47.70	48.22
Cicero	1.68	41.22	42.90
Clay		71.20	71.20
DeWitt	1.50	28.15	29.65
Elbridge	.87	32.26	33.13
Fabius	0.57	30.05	30.62
Geddes		8.81	8.81
LaFayette		40.81	40.81
Lysander		61.95	61.95
Manlius	3.96	35.63	39.59
Marcellus	0.74	47.43	48.17
Onondaga		71.61	71.61
Otisco		26.56	26.56
Pompey		75.35	75.35
Salina	1.78	22.48	24.26
Skaneateles	0.41	38.61	39.02
Spafford		27.23	27.23
Tully	0.83	16.22	17.05
VanBuren		56.32	56.32
TOTAL	12.86	779.59	792.45