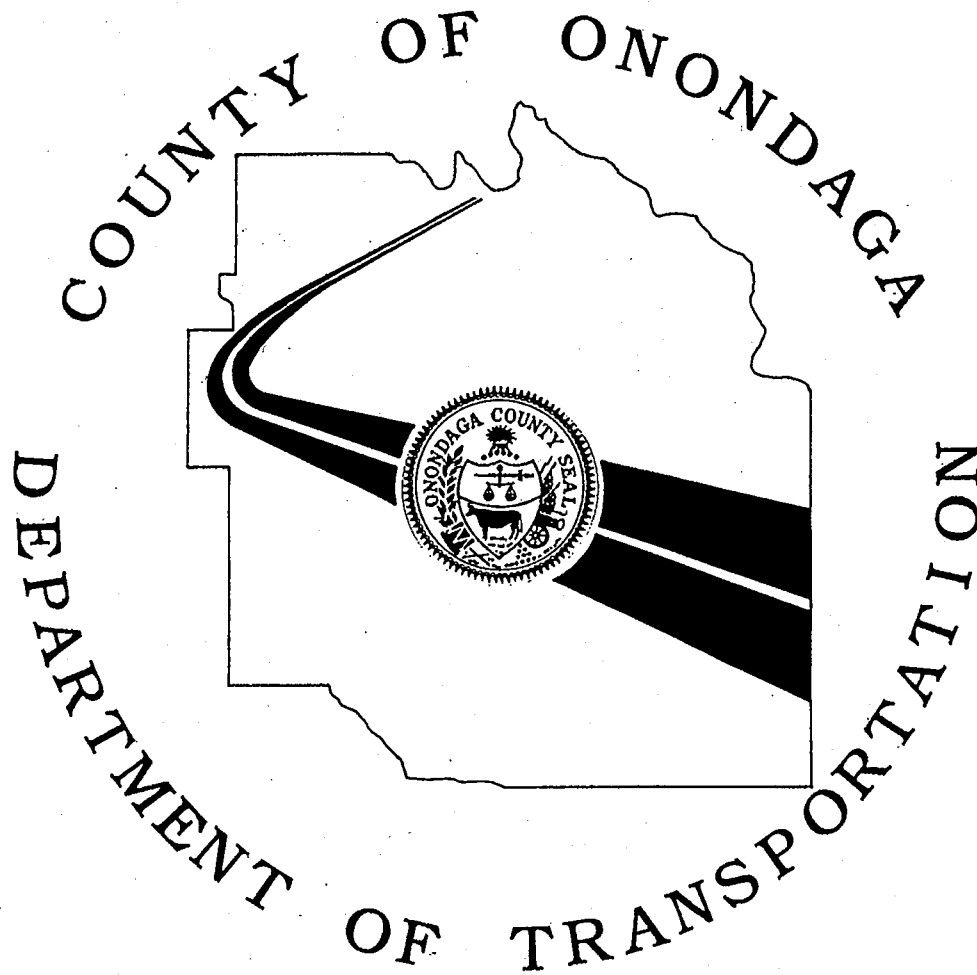


2012 HIGHWAY PLAN



JOANNE M. MAHONEY
COUNTY EXECUTIVE

BRIAN J. DONNELLY
COMMISSIONER

**Department of Transportation
2012 Highway Work Plan**

Projects	2012 Operating Budget	2012 CHIPS*		Bond Issue	Federal/ State / Others Aid	Totals
1) Highway Projects				\$325,000		\$325,000
North Street Reconstruction						
2) Green Infrastructure						\$300,000
Green Design				\$100,000		
Electronics Parkway Design				\$200,000		
3) Federal Aid Projects**				\$250,000	\$3,850,000	\$4,100,000
Fly Road Paving						
Bridge Maintenance Phase I Design						
Velasko Road						
Old Route 5 Construction						
Electronics/Old Lpool Safety Const						
Factory Avenue/LeMoyne Avenue						
4) Traffic System Management						\$528,000
Bear Road at Allen Road				\$428,000		
Traffic Design				\$100,000		
5) Cold Mix Bituminous Reconstruction	\$130,000			\$4,050,000		\$4,180,000
13.93						
At \$300,000 per mile						
6) Maintenance Reconstruction						
7) Bridges	\$150,000			\$1,500,000		\$1,650,000
8) Hot Mix Bituminous Paving		\$4,769,433		\$5,230,000		\$9,999,433
33.33						
At \$300,000 per mile						
9) Guiderail	\$450,000					\$450,000
10) Bituminous Surface Treatment	\$1,040,000					\$1,040,000
40.00						
At 26,000 per mile						
11) Testing	\$150,000					\$150,000
12) Drainage	\$250,000					\$250,000
13) Facilities Repair	\$130,000					\$130,000
2012 TOTALS	\$2,300,000	\$4,769,433		\$12,183,000	\$3,850,000	\$23,102,433

NOTE: Numbers refer to locations on attached maps and descriptions.

* CHIPS (Consolidated Highway Improvement Program) was implemented in New York State in June 1982 and was designed to replace revenues previously derived from New York State Motor Fuel and New York State Vehicle License Registration fees.

** See Text for cost breakdown.

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4/3/2012



1 - HIGHWAY PROJECTS

Projects under this category would encompass major highway improvements including, traffic capacity to ease congestion, accident reduction to improve safety, reconstruction to alleviate maintenance costs and right of way acquisitions for the needed improvements.

1a Syracuse – Dewitt Road, C.R. No. 6 (North Street in Jamesville)

This project, in the Town of DeWitt, begins at the Intersection of NYS Route 173 and proceeds Northwesterly to the Intersection of Rock Cut Road, a distance of 0.88 miles. Traffic counts performed in 2006 indicated up to 10,100 vehicles using North Street, on an average day.

The highway currently consists of pavement structure, shoulder width and drainage facilities which 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 which will include all necessary pavement, shoulders, and drainage facilities. The southbound North Street approach to the NYS Route 173 intersection will be improved by the formal addition of a right turn lane (southbound North Street to westbound NYS Route 173). Modifications to the existing traffic signal equipment and operation will be included. Additionally, sidewalks, crosswalks and handicap accessible sidewalk ramps will be constructed to meet current ADAAG codes and regulations.

Bids for Construction were opened in March of 2012. The cost of construction, including inspection, is estimated to be \$3,160,000. The Legislature had previously authorized funding which falls short of the low bid price. Additionally the cost of fuel and asphalt has risen drastically since the funding was secured. The additional project cost is expected to be adequate to complete the project.

PROJECT COST:

\$ 325,000

2 - GREEN INFRASTRUCTURE

Projects under this category would utilize means and methods of green infrastructure to encourage the retention and infiltration of stormwater runoff.

2a Green Design

This project, through the use of a term contract, would review this Department's standards of design and construction to ascertain where Green Infrastructure can best be utilized on highway projects.

Plans, Specifications and Typical Sections will be reviewed and best practice standards will be incorporated into our bid documents.

PROJECT COST:

\$ 100,000

- 2b Electronics Parkway Design - This project, in the Town of Salina, will repair Electronics Parkway, C.R. No. 45, from Seventh North Street to Limestone Drive, a distance of 0.48 miles and will replace flush concrete islands with structures to capture pavement runoff and modify drainage along the highway to improve water quality which presently flows to a tributary of Bloody Brook which flows directly to Onondaga Lake.

Design will be completed in 2012 and construction will be completed in 2013 with a combination of County and Contract forces.

PROJECT COST:

\$ 200,000

3 - **LOCALLY ADMINISTERED FEDERAL AID PROJECTS**

The Onondaga County Department of Transportation is required to administer and oversee all Federal Highway Transportation funding used for highway purposes. Following is a list of projects in which the local matching share is being funded through this workplan.

- 3a Fly Road Paving Project – This project, in the Town of DeWitt, will repave Fly Road, C.R. No. 77, from Kirkville Road to New Venture Gear Drive, a distance of 1.12 miles and will improve ride quality and safety in the project area and maintain the County's investment in the highways.

Improvements are proposed which will include all necessary pavement, shoulder and drainage facilities.

The Legislature previously authorized \$200,000 (\$40,000 County Share) for the design phase of the project as part of a multi-year funding plan. The estimate to construct the project currently stands at \$1,200,000.

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

PROJECT COST:	COUNTY SHARE	\$ 60,000
	STATE SHARE	\$ 180,000
	FEDERAL SHARE	\$ 960,000
	TOTAL	\$1,200,000

- 3b Old Liverpool Road at Electronics Parkway Safety Improvement - This project, in the Town of Salina, will remove the "slip" ramp from Old Liverpool Road, C.R. 137, to Electronics Parkway, C.R. 148, and replace it with a dedicated right turn lane at the traffic signal in order to eliminate an accident pattern at the site and to increase the safety of the intersection.

Improvements are proposed which will include all necessary pavement, shoulder, drainage facilities, signing, striping and signal upgrades.

The Legislature previously authorized \$120,000 (\$24,000 County Share) for the design phase of the project as part of a multi-year funding plan. The estimate to construct the project currently stands at \$500,000.

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

PROJECT COST:	COUNTY SHARE	\$ 25,000
	STATE SHARE	\$ 75,000
	FEDERAL SHARE	<u>\$ 400,000</u>
	TOTAL	\$ 500,000

- 3c Old Route 5, C.R. 98, Paving Project - This project, in the Town of Camillus, will repave Old Route 5, C.R. No. 98, from the New York State Route 173 to the Village of Camillus, a distance of 3.40 miles and will improve ride quality and safety in the project area and maintain the County's investment in the highways.

Improvements are proposed which will include all necessary pavement, shoulder, drainage facilities and signal upgrades and coordination.

The Legislature previously authorized \$800,000 (\$160,000 County Share) for the design phase of the project and \$5,900,000 (\$295,000 County Share) for a partial construction phase as part of a multi-year funding plan. The estimate to construct the project currently stands at \$6,900,000.

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

PROJECT COST:	COUNTY SHARE	\$ 50,000
	STATE SHARE	\$ 150,000
	FEDERAL SHARE	<u>\$ 800,000</u>
	TOTAL	\$1,000,000

Miscellaneous Locally Administered Federal Aid Projects

The following projects will be under various stages of scoping, preliminary design, construction and right of way acquisition in 2011, 2012 and 2013:

	FEDERAL SHARE	STATE SHARE	COUNTY SHARE
• Bridge Maintenance Phase I Design	\$240,000		\$60,000
• Velasko Road Construction	\$640,000	\$120,000	\$40,000
• Factory Avenue at LeMoyne Avenue Const	\$240,000	\$ 45,000	\$15,000

4- **TRAFFIC SYSTEMS MANAGEMENT**

The Traffic System Management Program provides funds to upgrade safety and traffic mobility at various Onondaga County highway intersections.

- 4a Bear Road, C.R. 191 at Allen Road, C.R. 205 - This project, located in the Town of Clay, will construct a westbound left turn lane, northbound right turn lane and a three color traffic signal at the intersection to rectify an accident pattern which was identified by a safety analysis performed by the Syracuse Metropolitan Transportation Council (SMTTC) at the County's request.

Improvements are proposed which will include all necessary pavement, shoulder, drainage facilities, signing, striping and the elimination of roadside obstacles.

PROJECT COST: \$428,000

- 4b 2012 Traffic Systems Design - will be done on various intersections for improvement in 2012 and 2013 utilizing Consultant services. Additional services by the Consultant will include trip generation, level of service and traffic signal analysis on County Facilities.

PROJECT COST: \$100,000

5 - **COLD MIX BITUMINOUS RECONSTRUCTION** - See Attached Paving List on page 11

The Cold Mix Bituminous Reconstruction Program was instituted in 1980 to restore badly deteriorated highways on our approximately 375 mile long low volume highway system. Highways eligible for this program have deteriorated to the point where less expensive, Pavement Preservation type, rehabilitation strategies would not be effective.

The work consists of: the replacement of drainage pipes and structures as required, ditches are regraded and cleaned, the existing pavement is milled or reclaimed, graded and compacted. Finally, a four-inch course of cold mix bituminous pavement and a bituminous surface treatment is applied to provide a roadway with a twenty year expected life span. See attached list on page 11.

Work will be accomplished by a combination of county and contract forces in 2012

PROJECT COST: \$ 4,180,000

6- **MAINTENANCE RECONSTRUCTION**

This program provides funds for the reconstruction of low volume highway. The reconstruction process would involve providing a durable subbase, new wearing surface, drainage improvements to prevent damage from freeze-thaw cycles and roadside hazard improvements. Existing grade and alignment are followed to reduce costs; however, current design standards dictate spot improvements to increase safety. Projects are selected from highways that are too badly deteriorated to benefit from our Hot Mix Paving or Cold Mix Paving programs.

There is no Maintenance Reconstruction Project scheduled for 2012.

7 - **BRIDGES**

The following bridges will be replaced or repaired in 2012. The County of Onondaga Department of Transportation has started preliminary designs, and construction will be done in 2012 by County forces except where noted.

- 7a Tanner Road, C.R. No. 184, County Bridge C-250 - is located in the Town of Onondaga on Tanner Road over a tributary to the West Branch of Onondaga Creek. The Bridge was built in 1944. The existing structure has a low condition rating based on county inspections and has deteriorated beyond the point of rehabilitation. The structure will be replaced with a 10' x 5' precast concrete box culvert with beveled end sections. The new structure will accommodate wider pavement and shoulder sections matching the approach roadway. An upgraded guiderail system will be installed. Medium stone shall be placed to stabilize the embankments. All work will be completed in 2012 by County forces.

PROJECT COST: \$ 175,000

- 7b Lamson Road over a the West Branch of the Six Mile Creek, County Bridge C-43 - is located on Lamson Road, C.R. No. 29, in the Town of Lysander. The bridge was built in 1929. The existing concrete structure has a low condition rating and requires replacement. The structure will be replaced with a 14' x 6' Aluminum box culvert with prefabricated wing walls. The new structure will accommodate wider pavement and shoulder sections matching the approach roadway. An upgraded guiderail system will be installed. Medium stone shall be placed to stabilize the embankments. All work will be completed in 2012 by County forces.

PROJECT COST: \$ 175,000

- 7c Hitchings Road over the West Branch of Onondaga Creek, County Bridge C-101 - is located on Hitchings Road, C.R. No. 151, between NYS Route 80 and US Route 20, in the Town of Onondaga. This structure is a laid up stone arch which has been extended on both ends. The original arch was built in 1850 and lengthened in 1933. This structure has a poor condition rating based on the NYSDOT Biennial inspections. Due to the structure type and deterioration this structure will be replaced with a precast concrete arch accommodating a widened road section, improved centerline profile and an upgraded guiderail system. Design was funded (\$200,000) and progressed in 2011 with construction by contract forces during the 2012 construction season.

PROJECT COST: \$ 925,000

- 7d County Bridge Design - will be done on various structures for construction in 2012 and 2013 utilizing Consultant services. Additional services by the Consultant will include load rating, hydraulic analysis, substructure design and footer analysis on County Bridges.

PROJECT COST: \$ 225,000

- 7e County Bridge Repair, Stream Cleaning and Maintenance Cleaning and Sealing – will be done on various structures as required for maintenance purposes and for repairs to features of County bridges that do not meet the requirements for bonding.

PROJECT COST:

\$ 150,000

8 - **HOT MIX BITUMINOUS PAVING** - See Attached Paving List on page 13

The Paving Program is reserved for high traffic volume County highways. The Department of Transportation has determined that it is cost effective to periodically repave the wearing surface on its highways. This procedure extends the life of the roadway, thereby protecting the County's investment. The repaving procedure provides additional skid resistance and waterproofs the base. Prior to the resurfacing, many of these highways are first trued and leveled to restore a proper crown. The shoulders on all highways under this program are stabilized with asphalt concrete.

Beginning in 2007 and continued in 2008, 2009, 2010, 2011 and now 2012 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. These projects are marked with asterisks on the project lists. One process included within this funding is Crack Sealing.

The program is funded with a combination of local tax dollars, authorized borrowing and State funding through the CHIPS program. See attached list on page 13.

PROJECT COST:

\$ 9,999,433

9 - **GUIDE RAIL**

This project is designed to upgrade existing substandard guide rail and install guide rail in various locations on county highway to improve safety and reduce liability. Work will be performed as a cooperative project by the Department of Transportation and contract forces.

PROJECT COST:

\$ 450,000

10 - **BITUMINOUS SURFACE TREATMENT** - See Attached List on page 15

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. At the very minimum the Cold Mix Bituminous Paving projects included in this plan must be surface treated. See attached list on page 15.

PROJECT COST:

\$ 1,040,000

11 - **TESTING**

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. In 1995 the 375-mile secondary system was incorporated into the study.

In 2012 work will continue to update the secondary highway program together with the annual update of the primary highway pavement management program. Other testing activities to be performed in 2012 include tests on aggregates, liquid bituminous, concrete and other materials used in highway and bridge construction.

PROJECT COST: \$ 150,000

12 - **DRAINAGE**

Storm sewer systems, catch basins, and culverts will be installed and/or replaced at various sites on County highways in 2012 in an effort to maintain the pavement structure by insuring proper surface and subsurface drainage.

Using a portion of last year's and this year's drainage fund source the Department will construct a drainage project on Newport Road, C.R. No. 36, in Warners as part of this program. The project will provide enclosed drainage to alleviate a current flooding situation. Design of the project will be funded and completed through 2012 with construction to be accomplished with a combination of County work forces and the utilization of contractors obtained through in-house contracts in early 2013.

PROGRAM COST: \$ 250,000

13 - **FACILITIES REPAIR**

The Onondaga County Department of Transportation owns and maintains four highway maintenance facilities in various locations throughout the County. This funding will be used to perform capital repairs to these facilities.

PROJECT COST: \$ 130,000

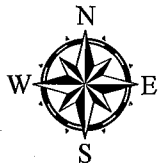
**Onondaga County Department of Transportation
2012 Cold Mix Reconstruction List**

Road	C.R. No.	Location	Centerline Miles	Equivalent Miles
Section 1				
1a Collins Road***	249	Berwyn Road to Berry Road (Single Lift)	1.15	0.58
1b Gates Road	145	Frank Long Road to Henneberry Road	1.01	1.01
1c Sky High Road***	79	Dailey Road to 1.28 Miles North (Single Lift)	1.28	0.77
1d Swift Road	237	Chase Road to Berwyn Road (Single Lift)	1.86	1.23
1e Webb Road	255	US Route 11 to Shute Road	1.10	1.10
Section Total			6.40	4.69
Section 2				
2a				
Section Total			0.00	0.00
Section 3				
3a O'Brien Road***	216	Jones Road to NYS Route 48 (Single Lift)	1.67	1.00
3b Old Route 31	84	Laird Road to Shantz Road	1.50	1.50
3c Tater Road	156	Fire Lane 14 to Route 370 (In-Place Recycle w/ Cold Top)	0.97	1.35
Section Total			4.14	3.85
Section 4				
4a Buckwheat Road	247	Oak Hill Road to Wright Road	1.18	1.18
4b Otisco Road	246	Tully Farms Road to 1.5 Miles West	1.50	1.50
4c Slate Hill Road	150	Otisco Valley Road to Schuyler Road	1.49	1.49
4d Stump Road	176	Kingston Road to NYS Route 321	1.22	1.22
Section Total			5.39	5.39
Total County Miles			15.93	13.93

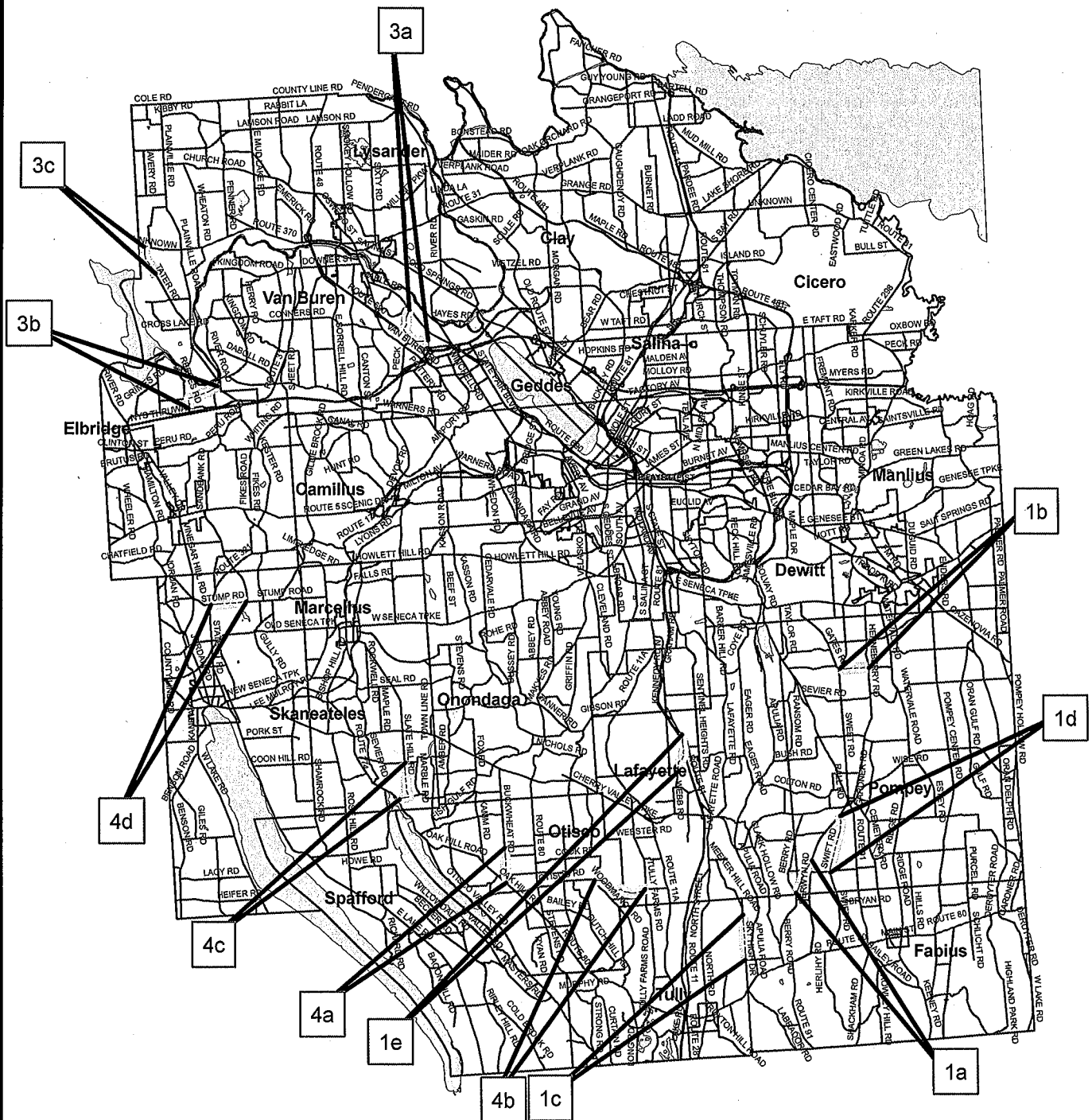
Note: Numbers refer to locations on the attached map.

*** Pavement Preservation Program

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2012 COLD MIX PAVING



Onondaga County Department of Transportation

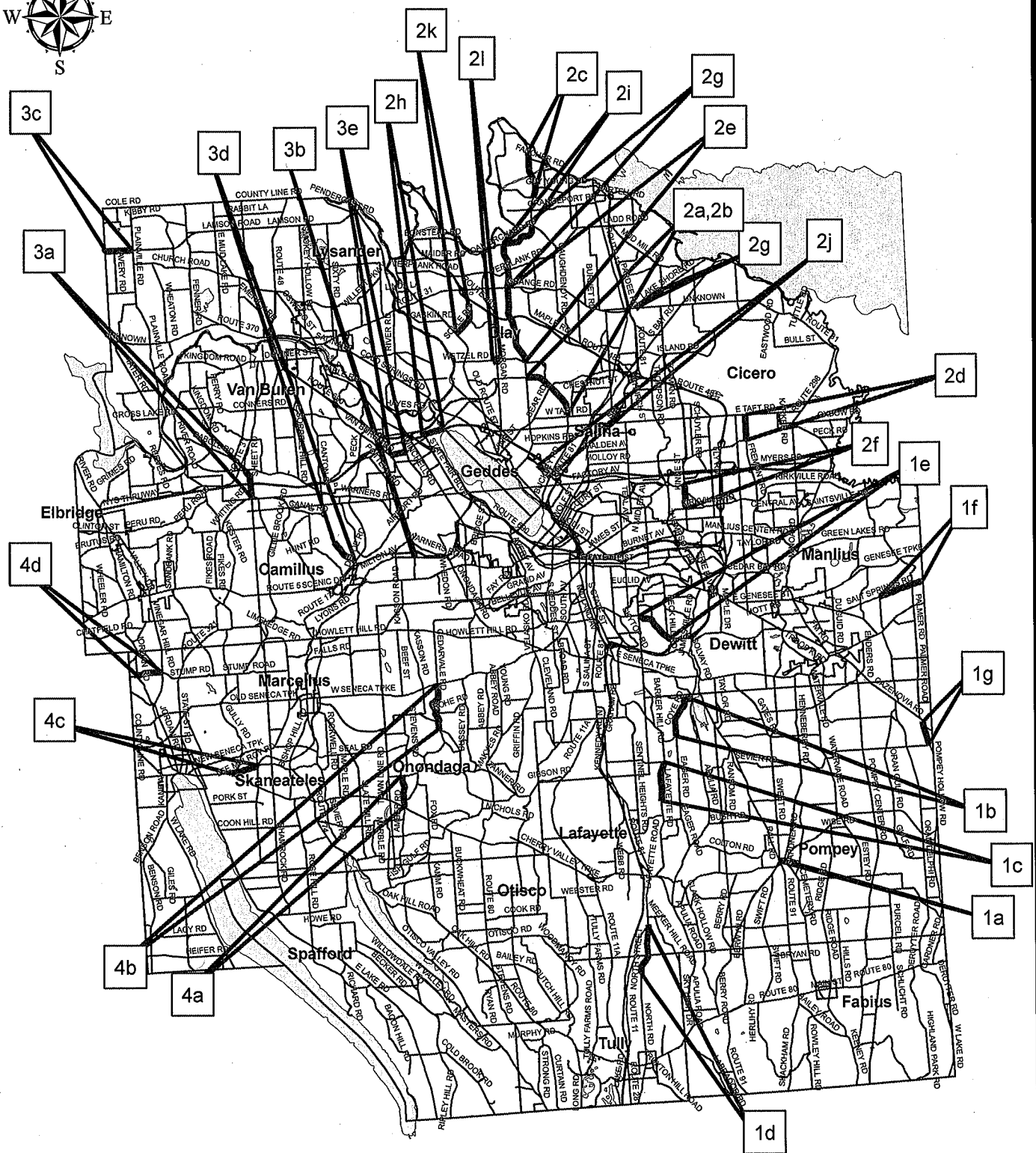
2012 Hot Mix Paving List

Road	C.R. No.	Location	Pavement Width (Feet)	Shoulder Width** (Feet)	Centerline Miles	Two Lane Equivalent Miles
Section 1						
1a Cherry Street	109	Sweet Road to Henneberry Road	22	4	0.39	0.39
1b Coye Road***	144	Eager Road to Apulia Road (Fiber/1 1/2")	22	4	1.62	1.07
1c LaFayette Road***	112	Bull Hill Road to 1.35 Miles South (Single Lift)	22	4	1.35	0.81
1d North Road (Tully)	111	US Route 11 to 1.7 Miles South (2011 Limit)	22	4	1.70	1.70
1e Nottingham Road***	6	Old Stonehouse Road to Colvin Street (Fiber and Single Lift)	22	4	1.35	0.95
1f Salt Springs Road	132	McClinton Road to the County Line	22	4	1.62	1.62
1g Pompey Hollow Road	146	NYS Route 92 to No. 2 Road East	22	4	0.85	1.33
Section Total					8.88	7.87
Section 2						
2a Buckley Road	161	Taft Road Limits to Bear Road Limits (Mill and Inlay)	24	8	1.06	1.41
2b Buckley Road	161	Bear Road to Henry Clay Boulevard (Mill and Inlay)	24	8	1.29	1.72
2c Caughdenoy Road	50	South Black Creek Road to 1.6 Miles North	22	5	1.60	2.03
2d Fremont Road	136	NYS Route 298 to Taft Road (Single Lift)	22	4	0.60	0.60
2e Henry Clay Boulevard***	121	Wetzel Road to NYS Route 31	24	8	2.73	1.97
2f Kinne Street / James Street	53	NYS Route 290 to Kirkville Road (Mill and Single Lift)	22	4	0.78	0.55
2g Lakeshore Road***	123	NYS Route 31 to Weaver Road (Mill and Single Lift Inlay)	22	4	1.17	0.70
2h Longbranch Road	35	John Glenn Boulevard to the Outlet Bridge	22	4	0.88	1.17
2i Oak Orchard Road	187	Henry Clay Boulevard to Caughdenoy Road	22	5	1.40	1.40
2j Seventh North Street***	45	Buckley Road to Elwood Davis Road (Mill and Single Lift)	44	6	0.63	0.88
2k Soule Road	96	Old Route 57 to Burningtree Road	22	8	1.18	1.67
2l Wetzel Road @ Morgan Road	252	Intersection (Mill and Inlay)	Varies	Varies	0.75	1.54
Section Total					14.07	15.64
Section 3						
3a Bennetts Corners Road	67/64	Warners Road to Whiting Road	22	4	1.00	1.00
3b Hindsdale Road	209	NYS Route 5 EB Off Ramp to the RR Tracks (Mill and Inlay)	60	2	0.28	0.76
3c Lamson Road	30	County Line to Plainville Road	22	4	0.98	0.98
3d Newport Road	36	Devoe Road to 1.0 Mile North	22	6	1.00	1.13
3e Walters Road	221	Winchell Road to VanBuren Road	Varies	Varies	0.54	0.83
Section Total					3.80	4.70
Section 4						
4a Amber Road	44	US Route 20 to Collins Road	22	4	1.12	1.12
4b Cedarvale Road	43	Amber Road to NYS Route 175	22	4	1.80	1.80
4c Lee Mulroy Road	73	Rickard Road to US Route 20	24	8	0.96	1.29
4d Stump Road	176	Jordan Road to Vinegar Hill Road	22	4	0.91	0.91
Section Total					4.79	5.12
County Total					31.54	33.33

Note: Numbers refer to locations on the attached map.

*** Pavement Preservation Program

**Shoulder widths to be verified in the field before paving begins



Onondaga County Department of Transportation

2012 Bituminous Surface Treatment List

Road	C.R. No.	Location	Centerline Miles
Section 1			
1a Berwyn Road	114	Stebbins Road to 500' north of Collins Road	1.20
1b Cemetery Road	170	NYS Route 91 to 1394' North of Number 5 Road	0.69
1c Indian Hill Road	5	Oran Gulf Road to Oran Delphi Road	0.41
1d Number 5 Road West	171	Pompey Center Road to Ridge Road	1.37
1e Palmer Road	169	NYS Route 92 to 1.0 Mile north	1.00
1f Truxton Hill Road	175	RR Tracks to the County Line	1.85
Section Total			6.52
Section 2			
2a Bonstead Road	199	NYS Route 481 Bridge, East 1.22 Miles	1.22
2b Ferguson Road	214	NYS Route 31 to Island Road	1.58
2c Fly Road	251	NYS Route 298 to Taft Road	1.22
2d Old Wetzel Road	252	Wetzel Road to Wetzel Road	0.50
Section Total			4.52
Section 3			
3a East Sorrell Hill Road	153	Hoag Road to Ellis Road	1.70
3b Kellogg Road	213	Smokey Hollow Road to Sixty Road	1.00
3c Kingdom Road	120	Lynch Road to Loveless Road	0.87
3d Kingdom Road	120	Perry Road to Daboll Road	0.64
3e Perry Road	241	Kingdom Road South to the Hencle Berry Farm	1.75
Section Total			5.96
Section 4			
4a Abbey Road	212	Norton Road to NYS Route 175	2.00
4b Bussey Road	139	Norton Road to Tanner Road	1.80
4c Cook Road	256	Case Road to 0.9 Miles west	0.90
4d Frank Gay Road	243	NYS Route 175 to Howlett Hill Road	2.03
4e Rickard Road	259	US Route 20 to Lee Mulroy Road	0.73
4f Tanner Road	184	Cedarvale Road to Makyes Road	0.94
Section Total			8.40
COLD MIX ROADS (Locations shown on the Cold Mix Map)			
1a Collins Road***	249	Berwyn Road to Berry Road (Single Lift)	0.58
1b Gates Road	145	Frank Long Road to Henneberry Road	1.01
1c Sky High Road***	79	Dailey Road to 1.28 Miles North (Single Lift)	0.77
1d Swift Road	237	Chase Road to Berwyn Road	1.23
1e Webb Road	255	US Route 11 to Shute Road	1.10
3a O'Brien Road***	216	Jones Road to NYS Route 48 (Single Lift)	1.00
3b Old Route 31	84	Laird Road to Shantz Road	1.50
3c Tater Road	156	Fire Lane 14 to NYS Route 370 (In-Place Recycle w/ Cold Top)	1.41
4a Buckwheat Road	247	Oak Hill Road to Wright Road	1.18
4b Otisco Road	246	Tully Farms Road to Woodmancy Road	2.11
4c Slate Hill Road	150	Otisco Valley Road to Schyler Road	1.49
4d Stump Road	176	Kingston Road to NYS Route 321	1.22
Cold Mix Total			14.60
County Total			40.00

Note: Numbers refer to locations on the attached maps.

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