

**Ohio Statewide Urban Congestion
Mitigation/Air Quality Program
2014 Application**

Application Forms and Instructions

This Application Form is to be filled out by the applicant. Supplemental information attached to the form should be as condensed as possible. For example, if a feasibility report has been prepared for the proposal, the applicant should excerpt and summarize rather than simply attaching the entire report.

All CMAQ applications will be provided to OSUCC members, therefore project applicants must provide eight copies for each of the project(s) being submitted for consideration.

Tips on the Application Process

Scrutinize the cost vs. benefit when applying for federal funds. The program requirements can be demanding, and what is originally thought of as a small, inexpensive project can spiral quickly into a complicated and expensive project. For example: a project once thought to have a total cost of \$85,000 with no right-of-way acquisition became a \$120,000 construction cost with an additional \$220,000 required for right-of-way acquisition.

Federally funded projects are subjected to many requirements, including the National Environmental Policy Act, the Uniform Relocation Assistance and Acquisition Policies Act, and other ODOT regulations and standards. Most locally planned and funded projects are not subject to these requirements and may often be developed more quickly and at less expense than those that are federally funded. When developing a project schedule, keep in mind that the project will be subject to all of the ODOT Project Development Processes.

Before hiring a consultant, review the experience of the firm with federally funded projects. How many have they successfully advanced through the system? When, where, and what type of project(s)?

The Project Evaluation Criteria is the method under which the OSUCC reviews and ranks the individual applications. An Overall Project Cover Sheet, Milestones Activities, and a detailed explanation of the Scoring Criteria for the Ohio CMAQ Program are shown on the following pages, including Criteria, Measures and Scoring Description, and Frequently Asked Questions and Answers. Examples of Project Type Descriptions are listed within the OSUCC Program, Policies, and Procedures.

The application should also include the following:

- ✓ Complete and detailed description of the proposed project and its relation to the intermodal transportation system and any other phases of the project. Location maps, elevations, photographs included, as necessary, to fully illustrate the project.
- ✓ Complete and detailed breakdown of the proposed construction/implementation costs inflated to year of expenditure - **certified by a professional engineer** – including funding sources.
- ✓ Complete and detailed description of the project’s characteristics and benefits and how it is included or justified in a local plan or program. Description of how the project will be coordinated with a neighboring jurisdiction if project ends at or crosses a corporation line.
- ✓ The anticipated month and year, when the project will be ready for construction. Include the present status of property ownership and plan preparation.
- ✓ A certified copy of a resolution from the applicant’s governing body authorizing the submission and local prioritization of the application(s) for CMAQ funds and committing to share in the project cost.

Overall Project Cover Worksheet - OSUCC Application

General Project Information

<u>Date:</u>	<u>PID:</u>	<u>Project Name:</u>
<u>Project Type:</u>		<u>Project Sponsor:</u>
<u>Project Useful Life (see Appendix B – Emission and Cost Effectiveness Procedures):</u> _____ years		
<u>Total Project Cost (TPC) - All Sources: \$</u>		
<u>MPO:</u>	<u>County:</u>	<u>ODOT District:</u>

Brief Scope of Work:

<u>Management Option - select one:</u>	<u>Contact Information:</u>
<u>LPA:</u>	<u>Name/Title:</u>
<u>ODOT-Let:</u>	<u>Phone:</u>
	<u>E-mail:</u>

Total Project Cost Breakdown by Phase and Funding

	Fiscal Year	OSUCC CMAQ Request	Federal Pro-Rata	Other Federal Funding	Federal Funding Source	Local Match	Non-Fed Funding Source	Phase totals
<u>Description of Work</u>					<u>Name</u>		<u>Name</u>	
Preliminary Engineering (PE)	20	\$	%	\$		\$		\$
Detailed Design (DD)	20	\$	%	\$		\$		\$
Right-of-Way (RW)	20	\$	%	\$		\$		\$
Construction (CO)	20	\$	%	\$		\$		\$
Funding Totals		\$		\$		\$		\$
Funding Percentage of TPC - all sources:		%		%		%		%

Total Emission Reductions (to be completed by MPO staff)

<u>Pollutant</u>	<u>kg/day</u>
Hydrocarbons (HC)/Volatile Organic Compound (VOC)	
Nitrogen Oxide (NO _x)	
Particulate Matter (PM _{2.5}) Micrometers in Diameter	
Total Emissions Reductions	
Conversion to kg/year	

Total Points Awarded: Based on Maximum Points Available = 100		Maximum Points Available	Scored Points
1.	Project Type	10	
2.	Cost Effectiveness	15	
3.	Other Benefits	15	
4.	Existing Modal Level of Service (LOS)	15	
5.	Positive Impact on LOS	15	
6.	Status of Project	10	
7.	Non-Federal Match of Requested CMAQ Funds	10	
8.	Regional Priority	10	
9.	Beginning in FY 2015 or Later; History of Project Delivery (Minus Points)		
		100	

MILESTONE ACTIVITY	EXPECTED DATE (month/year)
<ul style="list-style-type: none"> Project Programmed with ODOT. 	
<ul style="list-style-type: none"> Begin Planning Phase: The date that the planning scope of work is developed. 	
<ul style="list-style-type: none"> Project Initiation Package: The date that the Project Initiation Package is approved by the District. 	
<ul style="list-style-type: none"> Consultant Authorized to Begin Design. 	
<ul style="list-style-type: none"> Purpose and Need Submittal: The date that the Draft Purpose and Need is submitted. 	
<ul style="list-style-type: none"> Begin Environmental Clearance: The date when the scoping for an environmental consultant or scoping for an environmental study is initiated. 	
<ul style="list-style-type: none"> Feasibility Study Submittal: The date when the Feasibility Study is received for review by the District from a consultant or local public agency. 	
<ul style="list-style-type: none"> Preferred Alternative Approval: The date when a single Preferred Alternative is approved the preferred alternative may be established at scope development. If so, provide the scoping date. Otherwise, enter the appropriate approval date associated with the Feasibility Study or Alternative Evaluation Report. 	
<ul style="list-style-type: none"> Preliminary Right-of-Way Plan Submittal: The date when Preliminary RW plans are received for review by the District from a consultant or local public agency. 	
<ul style="list-style-type: none"> Right-of-Way Authorization: The date when authorization is given to a local public agency to begin acquisition activities. 	
<ul style="list-style-type: none"> Stage 2 Design Plan Submittal 	
<ul style="list-style-type: none"> Environmental Document Approval: The date when the responsible agency (FHWA or ODOT) approves the document or the District confirms the project is exempt from documentation. 	
<ul style="list-style-type: none"> Stage 3 Design Plan Submittal 	
<ul style="list-style-type: none"> Right-of-Way Acquisition Complete: Date on which the local public agency certifies the completion of RW acquisition activities. (Utilities/encroachments not included.) 	
<ul style="list-style-type: none"> Final Plans and Bid Package Submittal to ODOT 	
<ul style="list-style-type: none"> Award Contract: The date the local public agency approves a contract with a successful bidder. 	
<ul style="list-style-type: none"> Begin Construction 	
<ul style="list-style-type: none"> Project Completion 	
<ul style="list-style-type: none"> For programs, purchases, studies, and other projects that do not have a construction phase, please provide a schedule for project development (including environmental approval) and funding. Provide an estimate of the date(s) that federal funds would need to be available. Give a summary of the schedule to be followed before the project is ready for funding and while it is being implemented. See also instructions for Item #48 above. Describe other relevant aspects of the project schedule. For example, is the funding schedule contingent upon other actions? Will the project need funding from other sources to proceed? 	

PROJECT EVALUATION CRITERIA

Criteria	Measure	Points
1. Project Type (Maximum Points =10)	Regional rideshare/vanpool programs	10
	Congestion Reduction, Traffic Flow Improvements & ITS	10
	Transit Vehicle Replacement	8
	Freight/Intermodal including diesel engine retrofits	7
	Public Education and Outreach	6
	Transit Service Upgrades	5
	Pedestrian/Bicycle	4
	Alternative Fuels and Vehicles- Non transit	4
	Employer-based Programs	4
	Travel Demand Management	3
	Modal Subsidies and Vouchers	3
	Transit Facility Upgrades	2
Other TCM's and Misc.	2	

Project Type – CMAQ funds can be used on a variety of project types designed to address congestion mitigation and/or emissions reductions. A project will be awarded up to 10 points based on the type of project. (Refer to the Example of Project Types Descriptions.) Some projects may involve multiple project types. The score will be based on the primary project type. See below for example descriptions.

Narrative for Project Type and Supporting Documentation

Total points: (to be completed by MPO staff)

Criteria	Measure	Points
2. Cost Effectiveness (CE) (Maximum Points =15) * Sliding scale	High emissions reduced per dollar cost; Low dollar cost per kilogram reduced.	15
	Medium	*
	Low	*

Cost Effectiveness is a measure of the project’s ability to reduce emissions (HC, NO_x, and PM_{2.5}) per dollar invested (\$ per kg). The OSUCC will apply standard methodologies to estimate the emissions reduction and award up to 15 points on a sliding scale relative to the applications received. The following formula will be used to estimate the cost effectiveness:

$$CE \text{ \$/kg} = (\text{CMAQ\$ Request/Useful Life}) / \text{Total Emissions Reduction}$$

See [Appendix B](#) for useful life guidance.

Calculation for Cost Effectiveness: \$ /kg
Narrative for Cost Effectiveness and Supporting Documentation:

Total points: (to be completed by MPO staff)

Criteria	Measure	Points
3. Other Benefits (Maximum Points =15)	<i>Score up to 3 points for each additional project benefit</i>	
	Improved safety	0 - 3
	Fixed Route Transit	0 - 3
	Bicycle/Pedestrian	0 - 3
	Improved freight movement	0 - 3
	Benefits environmental justice population	0 - 3

Other Benefits - Many projects have ancillary or additional benefits beyond the primary goals of the CMAQ program. This criterion allows for a range of points based on several categories including safety, fixed route transit service, bike/pedestrian, improved freight movement and benefits to environmental justice populations. Up to 3 points may be awarded for projects that demonstrate high positive impacts from any or all of the categories up to a maximum of 15 points

Narrative for Other Benefits and Supporting Documentation:

Total points: (to be completed by MPO staff)

Criteria	Measure	Points
4. Existing Modal Level of Service (LOS) (Maximum Points =15)	F	15
	E	10
	D	4
	A-C	0

Existing (LOS) documents the existing congestion in the project area. A project may be awarded up to 15 points depending upon the current LOS. No points will be awarded to projects to improve modes currently operating at LOS C or better. The applicant must provide documentation and data showing how the LOS was determined. For transit projects, the application is to provide information to assess the “level of service” primarily with respect to the lack of capacity for which the project will provide benefits. Similarly, for bike or pedestrian projects, information is to be provided to demonstrate the poor level of service being provided for users of those modes. However, for transit, bike and pedestrian projects, lack of service or absence of a facility does not equate to poor level of service. Information must be provided that demonstrates there is demand for the service or facility that is not being met

What is the Current and Projected LOS? Please Provide Supporting Documentation:

Total points: (to be completed by MPO staff)

Criteria	Measure	Points
5. Positive Impact on LOS (Maximum Points =15)	High impact	15
	Medium impact	10
	Low impact	3
	No impact	0

The Positive Project on LOS assesses the impact the proposal will have on the existing situation, ranging from 0 to 15 points. Some examples of Positive Impacts for LOS for Roads, Transit and Bicycle and Pedestrian LOS Impacts are shown below.

ROAD LOS IMPACTS

HIGH	MEDIUM	LOW
The project will improve the LOS will from F to C	The project will improve the LOS from F to D or from E to C	The project will improve the LOS from F, E or D by one level or substantially reduce delay if resulting LOS remains F.

TRANSIT LOS IMPACTS¹

HIGH	MEDIUM	LOW
Significantly reduces transit vehicle crowding, increases service capacity significantly, increases service reliability significantly. Interconnect or fare coordination project, bus turnouts at major intersections, intermodal facility accommodating major transfers, reduces travel time.	Increases service reliability in a minor capacity, interconnect or fare coordination project, general bus turnouts, intermodal facility accommodating major transfers.	Increases passenger comfort or convenience, bike racks.

BICYCLE and PEDESTRIAN LOS IMPACTS²

HIGH	MEDIUM	LOW
Facility that will primarily serve commuters and/or school sites, sidewalks where none exist. Completes final pieces of a significant regional route.	Mixed use bicycle/pedestrian facility (recreation & commuter), usable sidewalk segments including upgrades and new installations and signage.	Public educational, promotional, and safety programs that promote and facilitate increased use of non-motorized modes of transportation.

What is the Positive Impact on LOS? Please Provide Supporting Documentation:

Total points: (to be completed by MPO staff)

¹ Council of Fresno County Governments, January 2006 CMAQ Call for Projects

² Council of Fresno County Governments, January 2006 CMAQ Call for Projects

Criteria	Measure	Points
6. Status of Project (Maximum Points =10)	Construction plans complete	10
	Non construction activity ready for authorization	8
	ROW clear and complete	8
	Environmental document complete	6
	Environmental document underway	2

The Status of Project points reflect the existing status of the project. The closer a project is to the construction/implementation phase, the more points it will receive. Those that are early in the project development process with environmental studies underway will receive 2 points. Projects with completed environmental status earn 6 points; those with right-of-way cleared and complete will be awarded 8 points. Non construction projects that do not require right-of-way and are ready for authorization such as a bus purchase also earn 8 points. Projects with construction plans complete earn 10 points.

Narrative for Status of Project and Supporting Documentation:

Total points:

Criteria	Measure	Points	Measure	Points
7. Non-Federal Match of Requested CMAQ Funds of the phase(s) cost (Maximum Points =10)	Above 40%	5	Greater than \$2.0 M	5
	>35 to 40%	4	\$1.0 M to \$2.0 M	4
	>30 to 35%	3	>\$500,000 to \$1.0 M	3
	>25 to 30%	2	\$150,000 to \$500,000	2
	>20 to 25%	1	\$50,000 to \$150,000	1
	Up to 20%	0	\$0 to \$50,000	0

The Non-Federal Match of Requested CMAQ Funds – The criteria rewards applicants that increase their local share to “overmatch” the required rate for local participation. The standard match rate for federal CMAQ funds is 20 percent (although there are exceptions); however, the applicant can gain up to a maximum of 10 points through overmatching.

Narrative for Non-Federal Match and Supporting Documentation:

Total points: (to be completed by MPO staff)

Criteria	Measure	Points
8. Regional Priority (Maximum Points =10) (determined by each MPO)	First Priority Project	10
	Second Priority Project	7
	Third Priority Project	4
	Fourth Priority Project	2
	All Other	0

Regional Priority – MPO’s will be responsible for collecting, reviewing for completeness and ranking CMAQ applications from the eligible recipients in their regions. Top ranking projects from each region will receive 10 points, second highest receives 7 points, third highest receives 4 points, fourth highest receives 2 points. All others receive 0 points. Each MPO will develop their own approach to determining their regional priority. In cases where a project is in more than one MPO an average point score will be used.

Narrative for Regional Priority and Supporting Documentation:

Total points: (to be completed by MPO staff)

Criteria	Measure	Points
9. Beginning in FY 2015 or Later: History of Project Delivery By Project Sponsor in the previous two years	One project slipped past programmed year	-5
	Two of more project slipped past programmed year	-10
	One or more projects cancelled	-10

History of Project Delivery – It is critical that projects that compete for and receive Ohio CMAQ dollars be delivered on time and within budget in order to fully realize the user benefits for Ohio citizens. Therefore, an applicant who has accepted CMAQ dollars in FY 2015 or later and allows the project to slip beyond the programmed year of obligation will be penalized 5 points on all subsequent applications for a period of two years. Applicants that allow two or more projects to slip will be penalized 10 points on subsequent applications for a period of two years. Project cancellation will also be cause for a 10 points reduction for a period of two years. Exceptions may be granted by the OSUCC for circumstances beyond the control of the applicant.

Narrative for History of Project Delivery:

Total points: (to be completed by MPO staff)

MAXIMUM POINTS 100	Applicant total points for this project.
---------------------------	---

Frequently Asked Questions and Answers

1. What is the purpose of the Ohio Statewide Urban Congestion Mitigation Air Quality Program?

In November 2012, the Director of the Ohio Department of Transportation (ODOT) announced the creation of an Ohio Statewide Urban Congestion Mitigation and Air Quality (CMAQ) Program. The intent of the program is to more quickly advance eligible projects that improve air quality, reduce congestion, and eliminate delay/improve safety, in addition to utilizing statewide CMAQ funding in the year funds are allocated.

2. What is the CMAQ Program?

The CMAQ program was established by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and continues under the current federal transportation bill Moving Ahead for Progress in the 21st Century (MAP-21); with an emphasis area on addressing PM2.5. The CMAQ Program provides a flexible funding source for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet (nonattainment areas) the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, or particulate matter, and for areas that were out of compliance but have now met (maintenance areas) the NAAQS.

Generally, projects eligible under the CMAQ program prior to enactment of MAP-21 remain eligible. All CMAQ projects must demonstrate three primary elements of eligibility: 1.) transportation identity as described within the programmatic parameters in the CMAQ Final Program Guidance Section VII – Project Eligibility Provisions – D. Eligible Projects and Programs; 2.) emissions reduction; and 3.) location in or benefitting a nonattainment or maintenance area.

3. What is the Ohio Statewide Urban Congestion Mitigation Air Quality Committee (OSUCC)?

In January 2013, the Ohio Association of Regional Councils (OARC) Executive Directors established OSUCC, charging them with the task of developing protocols for managing the Congestion Mitigation Air Quality (CMAQ) Program. The CMAQ Program provides approximately \$60 plus million annually; although this amount may vary for each application round, to Ohio's eight largest Metropolitan Planning Organizations (MPOs) with populations larger than 200,000.

4. What MPOs sit on OSUCC?

The OSUCC consists of representatives from the following agencies:

- Akron Metropolitan Area Transportation Study (AMATS)
- Eastgate Regional Council of Governments (Eastgate)
- Miami Valley Regional Planning Commission (MVRPC)
- Mid-Ohio Regional Planning Commission (MORPC)
- Northeast Ohio Areawide Coordinating Agency (NOACA)
- Ohio-Kentucky-Indiana Regional Council of Governments (OKI)
- Stark County Area Transportation Study (SCATS)
- Toledo Metropolitan Area Council of Governments (TMACOG)

5. What types of projects are eligible?

Non-capacity adding projects that can demonstrate an emissions reduction are generally eligible. For a complete listing of eligible projects, please visit the following link to review FHWA's Final CMAQ Program Guidance: <http://www.fhwa.dot.gov/environment/cmaqpgs/cmaq08gd.pdf>, specifically Section VII – Project Eligibility Provisions – D. Eligible Projects and Programs.

6. What types of project are not eligible?

Projects which add new capacity for single-occupancy vehicles are not eligible. Maintenance projects are not eligible.

7. Can any entity submit a project for CMAQ funding consideration?

Applicants are limited to qualified government entities that are members of one of the large MPOs located within the metropolitan planning area. Projects located within the boundaries of a non-member jurisdiction are not eligible for Federal CMAQ funds unless the member jurisdiction applying for funds would be the owner or maintainer of the facility being constructed.

8. Does an applicant submit projects directly to OSUCC since there are eight MPOs and when is the solicitation process?

The solicitation process for projects will consist of two parts.

- First, each of the eight large MPO will solicit projects from their area. Each MPO shall conduct this part in whatever manner that best meets their local circumstances.
- Second, each MPO will then provide the OSUCC the application form for each project from their area, including the MPO ranking, and the project scoring table.

Following this solicitation the OSUCC will review the scoring provided by the MPO's. OSUCC may adjust project scores to ensure the scoring criterion was applied uniformly across all of the projects. This will lead to a listing of projects ranked by score.

9. What is the schedule of activities for each CMAQ funding round?

- May of each year: Identify total amount by year of CMAQ funding to be available for new projects.
- May – August: Each MPO solicits projects or otherwise identifies projects to be submitted to the OSUCC.
- Early September: Projects submitted to OSUCC.
- Early September – November: OSUCC review of projects and project scoring.
- November: OSUCC identifies the recommended program of projects for funding.
- December: Executive Directors approve projects for funding. All projects will follow the individual MPO public involvement policies in accordance with the standard STIP/TIP public involvement processes.

10. Where can an applicant obtain a CMAQ application form?

Each MPO solicit projects from their respective area. Applicants should contact the respective MPO for their area.

APPENDIX A – Example of Project Type Descriptions and CMAQ Eligible Activities

Regional Rideshare/Vanpool Programs: Programs operated by MPO or other regional agency in coordination with the MPO to advance ridesharing and vanpooling. This includes ridematching and vanpool organization, vanpool capital costs, marketing, oversight and funding.

Congestion Reduction, Traffic Flow Improvements & ITS: access management, freeway management, traveler information improvements, variable message signs, roundabouts, signal upgrades /optimization/interconnectivity, new turn lanes and/or geometry intersection improvements than have demonstrated emission benefits.

Freight/Intermodal including diesel engine retrofits: includes school bus, diesel truck and locomotive engine retrofits, and intermodal transfer facilities.

Travel Demand Management: activity, programs and projects that reduce single occupant vehicle travel such as parking reduction programs, congestion pricing programs, telecommuting, etc.

Transit Vehicle Replacement: new public transit vehicles to replace existing vehicles.

Alternative Fuels and Vehicles- Non transit: Publically-owned alternative fuel vehicles and fueling facilities, certain hybrid vehicles.

Public Education and Outreach: Ozone /Clean Air Programs and other activities designed to educate about connection between transportation choices and air quality.

Employer-based programs: Employer-sponsored programs to permit flexible work schedules, expand site-specific rideshare programs and other transportation management plans.

Transit Service Upgrades: Operational transit improvements such as reduced headways, bus rapid transit, park and ride facilities, and new or extended service.

Transit Facility Upgrades: Infrastructure transit improvements such as new or rehabilitated rail cars, new or rehabilitated tracks or stations, bus shelters, and other amenities.

Modal subsidies and vouchers: subsidized parking for HOV, employer transit passes, etc.

Bicycle/Pedestrian: bicycle and pedestrian facilities that are not exclusively recreational and reduce vehicle trips. Includes on road and separate side path facilities for bikes including wide shoulders, marked bike lanes, cycle paths, share the road treatments and any other bike treatment that can improve conditions to encourage increased bike usage. Includes pedestrian facilities that enable pedestrian mobility, such as ADA compliance on any public space, sidewalks and access to bus stops.

Other TCM's and Misc: other transportation control measures and activities that are CMAQ eligible.

Sources:

1. FHWA Congestion Mitigation and Air Quality (CMAQ) Program Interim Guidance

- Transportation activities in an approved State Implementation Plan
- Transportation control measures to assist areas designated as non-attainment under the Clean Air Act Amendments (CAAA) of 1990
- Pedestrian/bicycle facilities
- Traffic management/monitoring/congestion relief strategies
- Transit (new system/service expansion or operations)
- Transit vehicle replacement
- Alternative fuel projects (including vehicle refueling infrastructure)
- Inspection and maintenance (I/M) programs
- Intermodal freight
- Telecommunications
- Travel demand management
- Project development activities for new services and programs with air quality benefits
- Public education and outreach activities
- Rideshare programs
- Establishing/contraction with transportation management associations (TMAs)
- Fare/fee subsidy programs
- HOV programs
- Diesel retrofits
- Truck-stop electrification
- Experimental pilot projects
- Other Transportation projects with air quality benefits

NOTE: Ineligible CMAQ projects include construction of projects which add new capacity for single-occupancy vehicles.

The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of clean air standards. The primary eligibility requirement is that they will demonstrably contribute to attainment or maintenance of clean air standards.

For a complete listing of eligible projects, please visit the following link to review FHWA's Final CMAQ Program Guidance: <http://www.fhwa.dot.gov/environment/cmaqpgs/cmaq08gd.pdf>.

Upon the OSUCC initial project approval, sponsors may be asked to provide more detailed project information in order for MPO staff to conduct the required emissions reduction analysis. Assuming the analysis is favorable it will be forwarded to ODOT in a request for concurrence of the use of CMAQ funds. Following ODOT's determination of concurrence, ODOT will forward the analysis and a letter of concurrence to the FHWA and request final approval of the use of CMAQ funds.

APPENDIX B –Emission Estimation and Cost Effectiveness Procedures

CMAQ Project Useful Life Guidance

The design life of a project is utilized in the cost effectiveness section of the application. This section calculates the emission benefits compared to the cost of the project over that project’s expected life span, or ‘useful life.’ A project’s expected useful life is the time (years) the project is expected to provide these benefits. The applicant should use verified information and reference it or provide an experienced estimate with explanation. The table below provides an estimated useful life for typical CMAQ eligible projects.

<u>Project Type</u>	<u>Useful Life</u>
Regional Rideshare / Vanpool Programs	# of year(s) for proposed program
Park and Ride Lots	12 years
Parking Structures	30 years
Congestion Reduction, Traffic Flow Improvements, ITS	
Signal Upgrades and Timing	10 years
HOV Lanes	25 years
Roundabouts / Intersection Improvements	25 years
Turn Lanes / Access Management Improvements	25 years
Grade Separation	50 years
Freight/Intermodal Projects	
Intermodal Facilities	20 years
Travel Demand Management	# of year(s) for proposed program
Transit Vehicle Replacements	
Heavy Duty Large Bus	12 years / 500,000 miles
Heavy Duty Small Bus	10 years / 350,000 miles
Medium Duty Bus	7 years / 200,000 miles

Light Duty Transit Vehicle	5 years / 100,000 miles
Alternative Fuels and Vehicles	
Fueling Facilities	20 years
Vehicles	5 years / 100,000 miles
Diesel Engine Retrofit	New Vehicle/Equipment Useful Life -Current Years/Mileage in Operation
Service Vehicle - Light Heavy Duty Diesel	8 years / 110,000 miles
Service Vehicle - Medium Heavy Duty Diesel	8 years / 185,000 miles
Service Vehicle - Heavy Heavy Duty Diesel	10 years / 435,000 miles
Locomotive - Line Haul	10 years / 750,000 miles
Locomotive - Switcher	10 years / 750,000 miles
Diesel Engine Anti-Idle Auxiliary Heaters	5 years
Busses / Transit Vehicles	See Transit Vehicle Replacements above for New Useful Life
Truck Electrification Facilities	10 years
Public Education and Outreach	# of year(s) for proposed program
Employer-based Programs	# of year(s) for proposed program
Transit Service Upgrades	# of year(s) for proposed program
Transit Facility Upgrades	
New or Rehabilitated Rail Cars	20 years
New or Rehabilitated Tracks or Stations	30 years
Bus Shelters/Platforms	10 years

Amenities	2 years
Operating / Modal Subsidies and Vouchers	# of year(s) for proposed program
Bicycle/Pedestrian	
On-road / Off-road facilities	15 years
Bridge	25 years
Other TCMs and Misc.	Determined by Committee Review

Sources:

1. US Department of Transportation, Federal Transit Administration, Useful Life of Transit Buses and Vans, Report No. FTA VA-26-7229-07.1, April 2007
http://www.fta.dot.gov/documents/Useful_Life_of_Buses_Final_Report_4-26-07_rv1.pdf
2. The National Academies Press, Review of 21st Century Truck Partnership (2008)
http://www.nap.edu/openbook.php?record_id=12258&page=110
3. DieselNet: Emission Standards >> United States Locomotives
<http://www.dieselnet.com/standards/us/loco.php>
4. Clean Fuels Ohio contact with Fyda Freightliner, a heavy duty truck parts company
<http://www.fydafreightliner.com/Default.aspx>
5. SAFETEA-LU 1808: Congestion Mitigation and Air Quality Improvement Program Evaluation and Assessment - Phase 1 Final Report, 2008
http://www.fhwa.dot.gov/environment/air_quality/cmaq/research/safetea-lu_phase_1/
6. Costs and Emissions Impacts of CMAQ Project Types, Prepared for: US Environmental Protection Agency Office of Policy, 1999
http://www.fhwa.dot.gov/environment/air_quality/cmaq/research/cmaq_cost.cfm
7. US Department of Transportation, Federal Highway Administration, Roundabouts: An informational Guide, Publication No. FHWA-RD-00-067
<http://www.fhwa.dot.gov/publications/research/safety/00067/index.cfm>

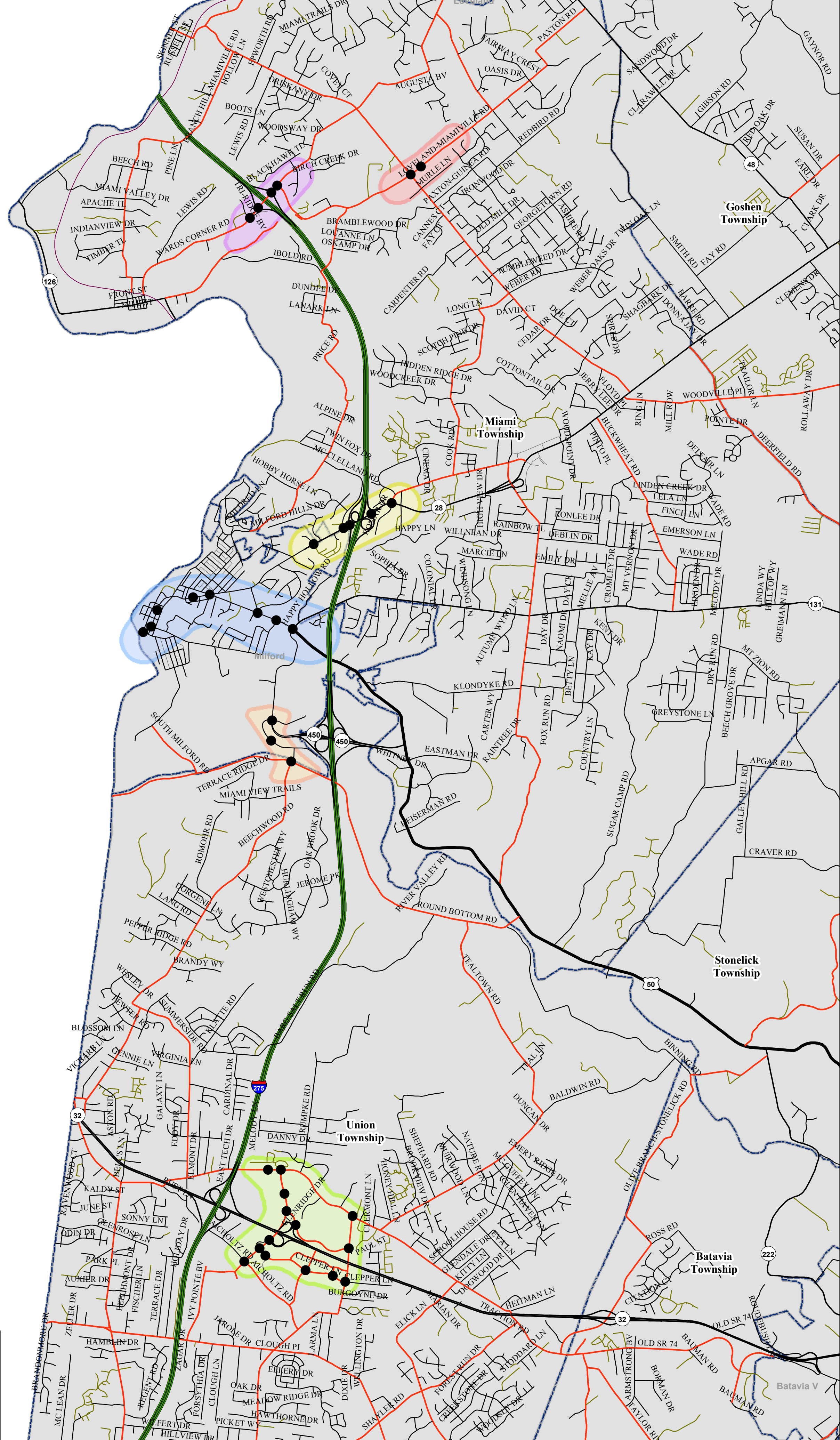
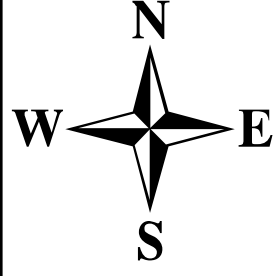


EXHIBIT "A"
Clermont County CMAQ Project Application Area

● Traffic Signals	LMV App Area
SR 28 App Area	Milford Pkwy App Area
US 50 App Area	Eastgate App Area
Wards Corner App Area	Townships

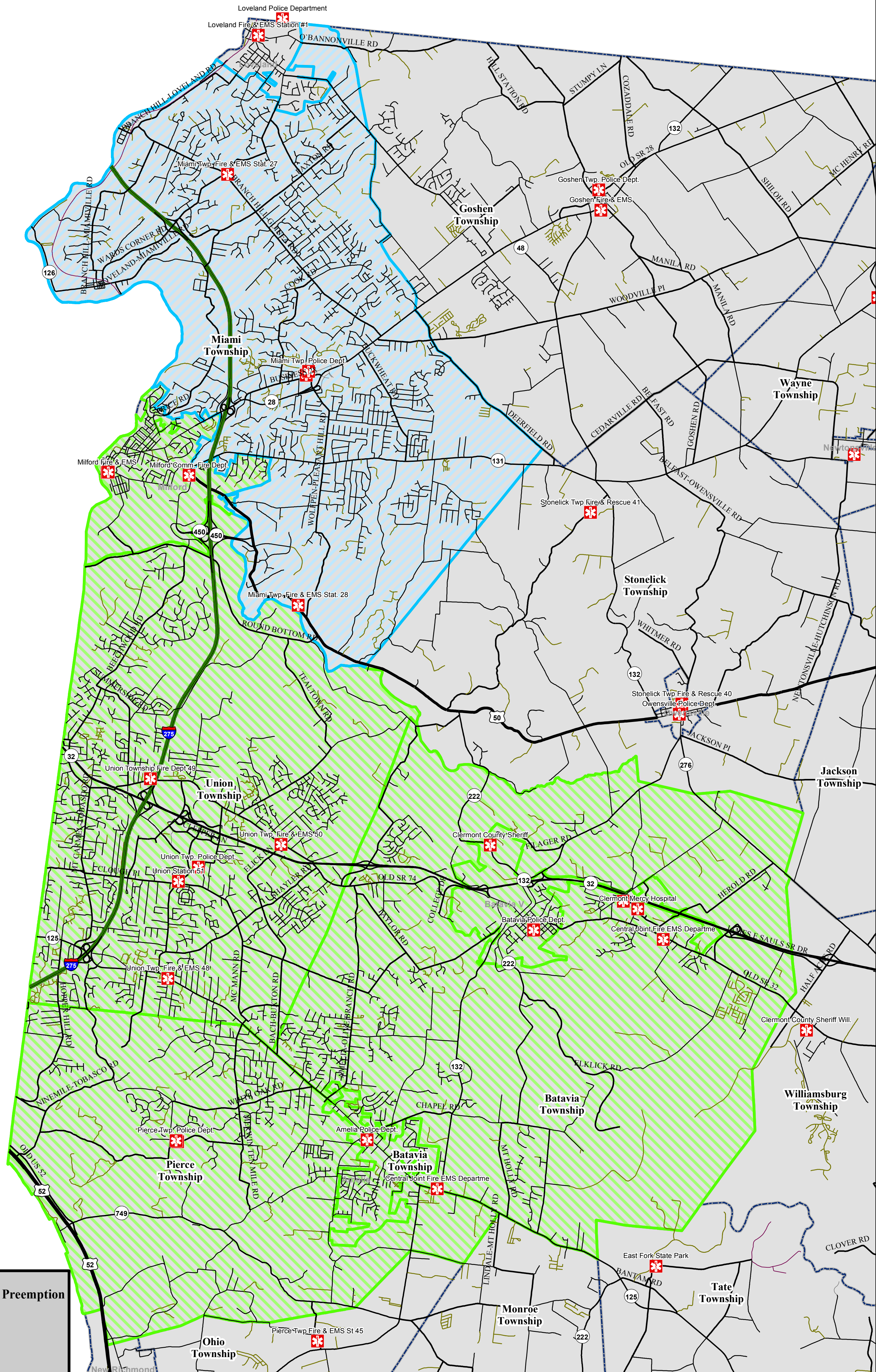
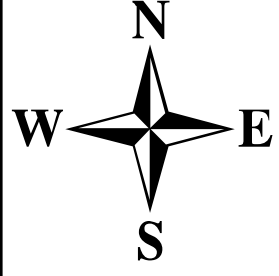


EXHIBIT "B"
Emergency Vehicle Traffic Signal Preemption

- Fire/EMS/Police Station
- Existing Preemption
- Proposed Preemption
- Townships

EXHIBIT C

CLERMONT COUNTY
TRANSPORTATION IMPROVEMENT DISTRICT

Resolution Number 2014-13

A RESOLUTION DESIGNATING AND APPROVING INCLUSION IN THE RTIP OF THE FOLLOWING CLERMONT COUNTY TRANSPORTATION IMPROVEMENT PROJECTS: BELLS LANE/SR32 IMPROVEMENT PROJECT (CCTID No. 90260) AND ITS - Phase 3 (CCTID No. 90270); AND, AUTHORIZING PROJECT APPLICATION WITH OKI FOR CMAQ PROJECT FUNDING

WHEREAS, the Clermont County Transportation Improvement District (“CCTID”) is authorized by Ohio Revised Code (“ORC”) Chapter 5540 (1) to finance, construct, maintain, repair, and operate street, highway, and other transportation projects and (2) to construct, reconstruct, improve, alter, and repair roads, highways, public places, buildings, and other infrastructure;

WHEREAS, the projects undertaken by the CCTID pursuant to ORC Chapter 5540 are essential and will contribute to the improvement of the prosperity, health, safety, and welfare of the people of Clermont County (the “County”) and of the State of Ohio (the “State”) and are essential governmental functions; and the exercise by the CCTID of the authority granted by ORC Chapter 5540 is necessary for the prosperity, health, safety, and welfare of the County and the State and their people and is consistent with and will promote industry, commerce, distribution, and research activity in the County, its environs and the State;

WHEREAS, the CCTID consistent with its purpose and mission, which includes the development of its projects under ORC Chapter 5540 as established by its Board of Trustees, is assisting and cooperating to the greatest extent possible with the local project sponsors, including, but not limited to, the County, the Office of the Clermont County Engineer (the “CCEO”), the City of Milford, Ohio (the “City), Union Township, Clermont County, Ohio (the “Township”), Miami Township, Clermont County, Ohio and the Union Township Community Improvement Corporation (the “UTCIC”) (the “Local Project Sponsors”), and coordinating as appropriate with the Ohio Department of Transportation, including its Office of Jobs & Commerce (“ODOT”), in the development of the specific transportation improvement projects and the related long-term financial strategy for the Regional Transportation Improvement Program or the “RTIP,” within the County, and these various local political subdivisions within the County, as well as Hamilton County with respect to the inter-county Eastern Corridor Multi-Modal Project, which it believes is all consistent and compatible with the transportation improvements and related economic development initiatives within the County, in general, and within local political subdivisions, including, but not limited to, the Townships and the City (the “RTIP”);

WHEREAS, the CCTID pursuant to ORC§5540.03(A)(4), in coordination with the County, the CCEO, and the Township is accordingly hereby designating, as a CCTID project, the Bells

Lane/SR32 Improvement Project (CCTID No. 90260), turn lane improvements to SR 32 and Bells Lane at the SR 32 intersection with related road improvements to Bell's Lane from SR 32 to Old SR 74 and the ITS-Phase 3 Improvement Project (PID No. 90270), will add emergency preemption, enhance the safety of non-signalized pedestrian crossings, and build upon the system of interconnected and synchronized traffic signals, in cooperation with ODOT and OKI, and as further described and set forth in plans and documents on file with the CCTID, the Township, CCEO and ODOT (the "Projects"), and that the respective Projects both be added to and made part of the RTIP and that the RTIP accordingly be updated to reflect the same.

WHEREAS, the CCTID, in said cooperative effort with the Township, CCEO and ODOT, is accordingly further preparing to administer and manage the Projects, that may include, as appropriate and feasible, but is not limited to, continued planning, development, implementation, engineering, acquisition of right of way, which includes the coordination and accommodation of utilities, and construction of the Project;

WHEREAS, OKI has announced the availability of federal Congestion Mitigation and Air Quality (CMAQ) funds for FY 18, FY19, and FY20 which requires eligible jurisdictions, such as the CCTID, requesting such project funding to make application to OKI for such funding on or before June 2, 2014, which the CCTID is proposing to submit for the Project;

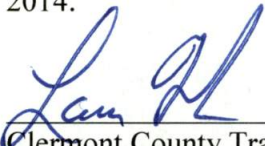
WHEREAS, the CCTID, pursuant to ORC §5540.03 is authorized to take such actions, receive such funding, and enter into all agreements necessary or incidental to performance of its functions and the execution of its powers to effect its purposes and transportation projects under ORC Chapter 5540; and

NOW, THEREFORE, BE IT RESOLVED by the CCTID Board that the Bells Lane/SR32 Improvement Project (CCTID No. 90260), turn lane improvements to SR 32 and Bells Lane at the SR 32 intersection with related road improvements to Bell's Lane from SR 32 to Old SR 74 and the ITS-Phase 3 Improvement Project (PID No. 90270), which will add emergency preemption, enhance the safety of non-signalized pedestrian crossings, and build upon the system of interconnected and synchronized traffic signals, in cooperation with ODOT and OKI, and as further described and set forth in plans and documents on file with the CCTID, the Township, CCEO and ODOT (the "Projects") are hereby designated as a transportation improvement projects of the CCTID, pursuant to ORC§5540.03(A)(4) and both the Projects are hereby added to and made part of the RTIP to be developed, implemented and constructed pursuant to and in accordance with ORC Chapter 5540 as a CCTID project and that the RTIP shall accordingly be updated to reflect the same;

BE IT FURTHER RESOLVED, that the Board accordingly hereby authorizes and directs that an application be prepared by the CCTID Chairman and/or Secretary-Treasurer, in consultation with the CCEO, ODOT, and the Township, and be submitted, to OKI for CMAQ funding for each of the Projects, and that the taking of any such action and the execution and delivery or acceptance of any such documents or instruments by the CCTID Chairman, Vice-Chairman and/or Secretary-Treasurer shall be conclusive evidence of the CCTID Board's determination that such actions are necessary in order for the CCTID to carry out the purposes of this resolution and of the authorization thereof by the CCTID Board.

It is found and determined that all formal actions of this Board concerning and relating to the adoption of this resolution were adopted in an open meeting of this Board, and that all deliberations of this Board that resulted in such formal action, were in meetings open to the public, in compliance with the law, including § 121.22 of the Ohio Revised Code.

Adopted at a regularly adjourned meeting of the Board of Trustees of the Clermont County Transportation Improvement District, Clermont County, Ohio, this 9th day of May, 2014.



Clermont County Transportation Improvement District
Chairman

Attest:



Clermont County Transportation Improvement District
Secretary-Treasurer

Motion to Pass Resolution: Mr. Wright

Seconded by: Mr. Geis

CLERMONT COUNTY ITS PHASE 3
Project Scope

Location	Description	Signal/Ped LED Upgrades	Upgrade Detection	Upgrade Controller	Add/Upgrade Communications	Coordinate/Optimize Timing	CCTV	UPS	Rewire/Rebuild Signal	Fiber Optic Interconnect	Rectangular Rapid Flash Beacons
US 50 (Main St) & Water Street	Upgrade all displays to LED, Upgrade Controller, Radio Interconnect, Cellular Communication to Centracs, UPS	X	X	X	X	X		X			
US 50 (Main St) & Garfield Ave		X	X	X	X	X		X			
US 50 (Main St) & Locust Street		X	X	X	X	X		X			
US 50 (Main St) & School Crossing		X	X	X	X	X		X			
US 50/Main/Lila/Center St	Upgrade displays at 2 intersections to LED, Upgrade 2 Controllers, Radio Interconnect, Cellular Communication to Centracs, UPS @ 2 locations	X	X	X	X	X		X			
US 50 & Mohawk Trail		X	X	X	X	X		X			
US 50 & Cemetery					X	X					
US 50 & SR 131/Milford Pkwy					X	X					
SR 28 & Castleberry Ct	Radio Interconnect, Cellular Communication to Centracs, UPS @ 2 locations				X	X		X			
SR 28 & McClelland					X	X		X			
SR 28 & EB I-275					X	X					
SR 28 @ WB I-275					X	X					
SR 28 @ Rohmar/Business 28	Radio Interconnect to Cellular Communication to Centracs at Chamber Drive & Wal-Mart				X	X					
Milford Pkwy & Chamber Drive					X	X					
Chamber Drive & Wal-Mart					X	X					
Beechwood & Round Bottom	Radio Interconnect, Cellular Communication to Centracs, CCTV				X	X					
Wards Corner & Tri Ridge Blvd					X	X	X				
Wards Corner & EB I-275					X	X					
Wards Corner & WB I-275					X	X					
Wards Corner & Loveland Miamiville	Radio Interconnect, Cellular Communication to Centracs, CCTV				X	X	X				
Loveland Miamiville & Branch Hill Guinea					X	X					
Loveland Miamiville & Kroger	Rebuild 7 intersections - new poles, wiring, cabinet, etc. (re-use Controller & Centracs/ITS components). Install fiber optic cable to interconnect system.				X	X					
Eastgate Blvd & Eastgate South									X	X	
Eastgate South & HH Greg			X						X	X	
Eastgate South & Eastgate Square									X	X	
Eastgate Blvd & Mall Crossing			X						X	X	
Eastgate Blvd & Old SR 74									X	X	
Clepper @ Gate									X	X	
Old SR 74 @ EG Mall				X					X	X	
Eastgate Blvd & Aicholtz Rd										X	
Eastgate Blvd & EB SR 32										X	
Eastgate Blvd & Eastgate North							X			X	
Gleneste Withamsville & Clepper										X	
Gleneste Withamsville & Eastgate North										X	
Gleneste Withamsville & Old SR 74										X	
Eastgate North & WB SR 32									X		
Goshen School @ Goshen Road	Rectangular Rapid Flash Beacons at School Crossings - Solar powered, push button										X
Amelia High School @ Clough Pike											X
Batavia High School @ Old SR 32											X
Monroe Elementary @ Franklin Laurel											X
Mulberry Elementary @ Buckwheat Road											X
St. Elizabeth Seton @ Buckwheat Road											X
St. Veronica School @ Mt. Carmel Tobasco											X
Gleneste HS @ Gleneste Withamsville										X	
Clough Pike @ Edinburgh	Rectangular Rapid Flash Beacons at Unsignalized Crossings - Solar powered, push button										X
Clough Pike @ Forsythia											X
Clough Pike @ Clough Lane											X
Clough Pike @ Deepwood Lane											X
Buckwheat Rd near Deblin											X
Merwin Ten Mile Rd near Locust Corner											X
Locust Corner Rd @ Pierce Twp Park											X
Amelia Olive Branch Rd near Amelia HS										X	
Tealtown Rd near Cincinnati Nature Center										X	
Branch Hill Loveland N. of BHG	Rectangular Rapid Flash Beacons at Little Miami Bike Trail Crossings - Solar powered, push button										X
Branch Hill Loveland S. of BHG											X
Loveland Miamiville											X

EXHIBIT D

Additional Elements

Emergency Vehicle Preemption @ 95 Traffic Signal Locations (65 vehicles)

Upgraded Power Service @ 40 Locations

**CLERMONT COUNTY ITS PHASE 3
ESTIMATED CONSTRUCTION COST**

Location	Description	Signal/Ped LED Upgrades ¹	Upgrade Detection ¹	Upgrade Controller ¹	Add/Upgrade Communications ¹	Coordinate/Optimize Timing ¹	CCTV ¹	UPS ¹	Rewire/Rebuild Signal	Fiber Optic Interconnect ²	Rectangular Rapid Flash Beacons	TOTAL PER LOCATION
US 50 (Main St) & Water Street	Upgrade all displays to LED, Upgrade Controller, Radio Interconnect, Cellular Communication to Centracs, UPS	\$ 9,800.00	\$ 14,000.00	\$ 6,000.00	\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 42,800.00
US 50 (Main St) & Garfield Ave		\$ 9,800.00	\$ 14,000.00	\$ 6,000.00	\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 42,800.00
US 50 (Main St) & Locust Street		\$ 9,800.00	\$ 14,000.00	\$ 6,000.00	\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 42,800.00
US 50 (Main St) & School Crossing		\$ 9,800.00	\$ 14,000.00	\$ 6,000.00	\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 42,800.00
US 50/Main/Lila/Center St	Upgrade displays at 2 intersections to LED, Upgrade 2 Controllers, Radio Interconnect, Cellular Communication to Centracs, UPS @ 2 locations	\$ 9,800.00	\$ 14,000.00	\$ 6,000.00	\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 42,800.00
US 50 & Mohawk Trail		\$ 9,800.00	\$ 14,000.00	\$ 6,000.00	\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 42,800.00
US 50 & Cemetery					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
US 50 & SR 131/Milford Pkwy				\$ 3,500.00	\$ 4,500.00						\$ 8,000.00	
SR 28 & Castleberry Ct	Radio Interconnect, Cellular Communication to Centracs, UPS @ 2 locations				\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 13,000.00
SR 28 & McClelland					\$ 3,500.00	\$ 4,500.00		\$ 5,000.00				\$ 13,000.00
SR 28 & EB I-275					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
SR 28 @ WB I-275					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
SR 28 @ Rohmar/Business 28				\$ 3,500.00	\$ 4,500.00							\$ 8,000.00
Milford Pkwy & Chamber Drive	Radio Interconnect to Cellular Communication to Centracs at Beachwood & Round Bottom				\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Chamber Drive & Wal-Mart					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Beechwood & Round Bottom					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Wards Corner & Tri Ridge Blvd	Radio Interconnect, Cellular Communication to Centracs, CCTV				\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Wards Corner & EB I-275					\$ 3,500.00	\$ 4,500.00	\$ 8,500.00					\$ 16,500.00
Wards Corner & WB I-275					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Wards Corner & Loveland Miamiville					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Loveland Miamiville & Branch Hill Guinea	Radio Interconnect, Cellular Communication to Centracs, CCTV				\$ 3,500.00	\$ 4,500.00	\$ 8,500.00					\$ 16,500.00
Loveland Miamiville & Kroger					\$ 3,500.00	\$ 4,500.00						\$ 8,000.00
Eastgate Blvd & Eastgate South	Rebuild 7 intersections - new poles, wiring, cabinet, etc. (re-use Controller & Centracs/ITS components). Install fiber optic cable to interconnect system.								\$ 110,000.00	\$ 7,800.00		\$ 117,800.00
Eastgate South & HH Greg			\$ 14,000.00						\$ 110,000.00	\$ 7,800.00		\$ 131,800.00
Eastgate South & Eastgate Square									\$ 110,000.00	\$ 7,800.00		\$ 117,800.00
Eastgate Blvd & Mall Crossing			\$ 14,000.00						\$ 110,000.00	\$ 7,800.00		\$ 131,800.00
Eastgate Blvd & Old SR 74									\$ 110,000.00	\$ 7,800.00		\$ 117,800.00
Clepper @ Gate									\$ 110,000.00	\$ 7,800.00		\$ 117,800.00
Old SR 74 @ EG Mall			\$ 14,000.00						\$ 110,000.00	\$ 7,800.00		\$ 131,800.00
Eastgate Blvd & Aicholtz Rd										\$ 7,800.00		\$ 7,800.00
Eastgate Blvd & EB SR 32										\$ 7,800.00		\$ 7,800.00
Eastgate Blvd & Eastgate North							\$ 8,500.00			\$ 7,800.00		\$ 16,300.00
Gleneste Withamsville & Clepper										\$ 7,800.00		\$ 7,800.00
Gleneste Withamsville & Eastgate North										\$ 7,800.00		\$ 7,800.00
Gleneste Withamsville & Old SR 74										\$ 7,800.00		\$ 7,800.00
Eastgate North & WB SR 32										\$ 7,800.00		\$ 7,800.00
Goshen School @ Goshen Road	Rectangular Rapid Flash Beacons at School Crossings - Solar powered, push button										\$ 12,500.00	\$ 12,500.00
Amelia High School @ Clough Pike											\$ 12,500.00	\$ 12,500.00
Batavia High School @ Old SR 32											\$ 12,500.00	\$ 12,500.00
Monroe Elementary @ Franklin Laurel											\$ 12,500.00	\$ 12,500.00
Mulberry Elementary @ Buckwheat Road											\$ 12,500.00	\$ 12,500.00
St. Elizabeth Seton @ Buckwheat Road											\$ 12,500.00	\$ 12,500.00
St. Veronica School @ Mt. Carmel Tobasco											\$ 12,500.00	\$ 12,500.00
Gleneste HS @ Gleneste Withamsville											\$ 12,500.00	\$ 12,500.00
Clough Pike @ Edinburgh	Rectangular Rapid Flash Beacons at Unsignalized Crossings - Solar powered, push button										\$ 12,500.00	\$ 12,500.00
Clough Pike @ Forsythia											\$ 12,500.00	\$ 12,500.00
Clough Pike @ Clough Lane											\$ 12,500.00	\$ 12,500.00
Clough Pike @ Deepwood Lane											\$ 12,500.00	\$ 12,500.00
Buckwheat Rd near Deblin											\$ 12,500.00	\$ 12,500.00
Merwin Ten Mile Rd near Locust Corner											\$ 12,500.00	\$ 12,500.00
Locust Corner Rd @ Pierce Twp Park											\$ 12,500.00	\$ 12,500.00
Amelia Olive Branch Rd near Amelia HS											\$ 12,500.00	\$ 12,500.00
Tealtown Rd near Cincinnati Nature Center	Rectangular Rapid Flash Beacons at Little Miami Bike Trail Crossings - Solar powered, push button										\$ 12,500.00	\$ 12,500.00
Branch Hill Loveland N. of BHG											\$ 12,500.00	\$ 12,500.00
Branch Hill Loveland S. of BHG											\$ 12,500.00	\$ 12,500.00
Loveland Miamiville											\$ 12,500.00	\$ 12,500.00
Various	Preemption @ 95 Signals (65 Vehicles) - 3 Townships + 2 Villages + 1 City										\$ 890,000.00	\$ 890,000.00
Various	Power Service @ 40 locations										\$ 70,000.00	\$ 70,000.00
Various	Miscellaneous Curb & Curb Ramp Replacement/Repair										\$ 25,000.00	\$ 25,000.00
Various	Mobilization										\$ 50,000.00	\$ 50,000.00
Various	Traffic Control										\$ 20,000.00	\$ 20,000.00

EXHIBIT E



¹ Includes all wiring & ancillary components
² Total cost per LF broken down per intersection

TOTAL \$ 2,646,500.00

EXHIBIT F

Corridor	Direction	Free Flow Delay (sec/veh)		LOS Threshold Delay (sec/veh)		Avg Speed		%Δ	%Δ
		Uncoord	Coord	Uncoord	Coord	Uncoord	Coord	Delay	Speed
US 50 (Main St) between Water Street & Locust St	NB	521.9	492.6	450.6	421.2	1.43	1.51	-7%	6%
	SB	386.4	357.1	315.1	285.8	1.88	1.99	-9%	6%
US 50 between Center St & Milford Pkwy	EB	93.5	67.4	0.0	0.0	18.49	25.83	-	40%
	WB	98.9	61.3	28.9	0.0	14.42	17.94	-	24%
SR 28 between Castleberry Ct & Business 28	EB	382.4	329.8	291.3	238.7	3.76	4.06	-18%	8%
	WB	1284.5	1226.1	1193.5	1134.8	1.19	1.22	-5%	3%
Chamber Dr between Milford Pkwy & Walmart	NB	208.9	191.3	173.6	156.0	3.87	4.17	-10%	8%
	SB	259.6	244.9	224.3	209.6	3.19	3.36	-7%	5%
Wards Corner between Tri Ridge Blvd & Loveland Miamiville	NB	323.1	286.7	275.4	239.0	0.97	1.03	-13%	6%
	SB	132.8	95.0	88.8	50.9	7.87	10.21	-43%	30%
Loveland Miamiville between Branch Hill & Kroger	EB	312.7	298.0	297.2	282.6	1.24	1.30	-5%	5%
	WB	168.7	154.0	153.2	138.5	2.26	2.46	-10%	9%

Roadway Segment	Direction	Scenario	Emissions			
			VOC	CO	Nox	%Δ
Chamber Dr (Walmart-Milford Pkwy)	NB	Uncoord	0.71	10.1	0.2	-9.4%
		Coord	0.65	9.2	0.2	
	SB	Uncoord	0.88	12.6	0.3	-6.1%
		Coord	0.83	11.8	0.2	
Loveland Miamiville (Branch Hill-Kroger)	EB	Uncoord	1.06	15.1	0.3	-5.0%
		Coord	1.01	14.4	0.3	
	WB	Uncoord	0.57	8.1	0.2	-9.8%
		Coord	0.52	7.4	0.2	
US 50 (Water St-Garfield Ave)	NB	Uncoord	0.89	12.7	0.3	-6.0%
		Coord	0.84	12.0	0.2	
	SB	Uncoord	0.43	6.0	0.1	-13.5%
		Coord	0.37	5.3	0.1	
US 50 (Cemetery-Milford Pkwy)	EB	Uncoord	0.10	1.5	0.0	-63.9%
		Coord	0.06	0.9	0.0	
	WB	Uncoord	0.09	1.3	0.0	-89.2%
		Coord	0.05	0.7	0.0	
SR 28 (I-275 WB-Rohmar)	EB	Uncoord	0.51	7.2	0.1	-11.1%
		Coord	0.46	6.5	0.1	
	WB	Uncoord	1.59	22.6	0.5	-3.3%
		Coord	1.54	21.8	0.5	
Wards Corner (I-275 WB-Loveland Miamiville)	NB	Uncoord	0.94	13.4	0.3	-5.7%
		Coord	0.89	12.7	0.3	
	SB	Uncoord	0.10	1.5	0.0	-75.1%
		Coord	0.1	0.8	0.0	

EXHIBIT G

	3 year data (2011-2013)			
	# Crashes	ADT	Length (miles)	Crash Rate
US 50 (Main St) & Water Street	NA	NA	-	NA
US 50 (Main St) & Garfield Ave	NA	NA	-	NA
US 50 (Main St) & Locust Street	NA	NA	-	NA
US 50 (Main St) & School Crossing	NA	NA	-	NA
Corridor US 50 (Main St)	42	13,443	0.29	9.84
US 50/Main/Lila/Center St	NA	NA	-	NA
US 50 & Mowhawk Trail	NA	NA	-	NA
US 50 & Cemetery	17	24,144	-	0.64
US 50 & SR 131/Milford Pkwy	NA	NA	-	NA
Corridor US 50 (Lila)	130	16,313	0.79	9.21
SR 28 & Castleberry Ct	26	25,592	-	0.93
SR 28 & McClelland	NA	NA	-	NA
SR 28 & EB I-275	NA	NA	-	NA
SR 28 @ WB I-275	NA	NA	-	NA
SR 28 @ Romar/Business 28	NA	NA	-	NA
Corridor SR 28	316	30,139	0.78	12.28
Milford Pkwy & Chamber Drive	52	36,064	-	1.32
Chamber Drive & Walmart	1	13,632	-	0.07
Corridor Milford Pkwy	56	21,552	0.27	8.79
Wards Corner & Tri Ridge Blvd	3	15,256	-	0.18
Wards Corner & EB I-275	NA	NA	-	NA
Wards Corner & WB I-275	NA	NA	-	NA
Wards Corner & Loveland Miamiville	17	24,206	-	0.64
Corridor Wards Corner	6	14,482	0.38	1
Loveland Miamiville & Branch Hill Guinea	42	25,679	-	1.49
Loveland Miamiville & Kroger	2	13,264	-	0.14
Corridor Loveland Miamiville	45	20,311	0.19	10.65
Eastgate Blvd & Eastgate South	40	24,000	-	1.52
Eastgate South & HH Greg	0	12,715	-	0
Eastgate South & Eastgate Square	4	13,710	-	0.27
Eastgate Blvd & Mall Crossing	2	18,488	-	0.1
Eastgate Blvd & Old SR 74	26	20,823	-	1.14
Clepper @ Gate	0	11,986	-	0
Old SR 74 @ EG Mall	5	17,851	-	0.26