SECTION 2

INTRODUCTION

ORGANIZATION FOUNDATION

The Miami Valley Regional Planning Commission is responsible for insuring comprehensive and coordinated development of the regional transportation system serving the designated MPO area including Greene, Miami and Montgomery Counties and the jurisdictions of Franklin, Carlisle, and Springboro in Warren County.

The transportation planning program is carried out under the direction of the members of MVRPC's Board of Directors that represent jurisdictions/organizations located within the MPO Boundary. The breakout is as follows: forty-eight representatives (and forty-eight votes) from jurisdictions located within Greene, Miami and Montgomery Counties, three representative (and three votes) from the cities of Carlisle, Franklin and Springboro in Warren County, three representatives from "Other Governmental/Non Governmental Members" (three votes), the three local transit authorities (three votes) and two ODOT representatives (two votes) for a total of 59 MPO members and votes.

PURPOSE

The purpose of the TIP is to ensure a closer relationship between the urban transportation planning process and the program of projects advanced for implementation with federal and state assistance and other regionally significant projects funded with other funds.

Because the TIP spans several modes of transportation, it is extremely important to properly review and coordinate the program development with other agencies, governmental units and transit operators for all federal, state and other regionally significant projects. The enclosed program for SFY2012-2015 was developed with input and assistance from various state and local officials. The resulting four-year Transportation Improvement Program is consistent with the region's needs and priorities.

REQUIREMENTS AND REGULATIONS

The MVRPC transportation programs comply with both the transportation conformity provisions resulting from the Clean Air Act and subsequent Amendments as well as the current Surface Transportation Reauthorization Bill the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) signed into a law by the President on August 10, 2005. This section provides a section by section summary of applicable elements of these regulations and laws.

Planning Boundaries

The planning regulations require the boundaries of the metropolitan planning area to include the existing urbanized area plus the contiguous area expected to become urbanized within the 20-year planning period. Additionally boundaries may be extended to encompass the entire combined statistical area or to include the entire non-attainment or maintenance area for ozone, carbon monoxide, or particulate matter. The Clark County-Springfield Transportation Coordinating Committee serves Clark County (CCS-TCC) and MVRPC serves Greene, Miami, Montgomery and northern Warren Counties. MVRPC has officially expanded its transportation

planning boundary to include the jurisdictions of Franklin, Carlisle (July 2003), and Springboro (May 17, 2006) in Warren County, however for transportation conformity purposes the portions of their areas within Warren County are considered part of the Cincinnati Region. To coordinate the activities required by the metropolitan planning process, including conformity, MVRPC maintains planning agreements with both CCS-TCC and OKI - the adjacent MPOs.

Financial Capacity

The planning regulations require a financial capacity determination, which realistically assesses available implementation funds for improvements.

Consistent with the 3-C planning process, data was provided by all of the major planning partners (local project sponsors, ODOT and the transit providers). ODOT inflation factors are applied to all highway/bikeway projects and the transit providers apply inflation factors to all transit projects shown in the TIP. Thus the amounts shown from Federal, State and Local funding sources are shown in year-of-expenditure dollars.

The STIP/TIP must be fiscally constrained, as such, MVRPC's and ODOT's highway fiscal analyses are included in Tables 4.6 and 4.7. For the Highway/Bikeway Program, the fiscal constraint will take ODOT's encumbrance based annual allocation into account. Table 4.6 - MVRPC'S Funding Plan shows a fiscal analysis for MVRPC's controlled funding sources. Table 4.7 summarizes all Federal, State and Local Match funds scheduled to be expended during SFY2012-2015. Fiscal analysis for transit is shown in the fiscally constrained transit tables (See Section 5) for each individual project sponsor. Consistent with federal regulations for TMA's, MVRPC limits projects shown in the first two years of the TIP to those with funds available or committed.

Public Participation

Public participation is a key component in SAFETEA-LU with increased emphasis on visualization techniques, electronic availability of information, and expanded participation lists. One of the main purposes of the ODOT Project Development Process (PDP) is to ensure that the social, economic, and environmental effects of projects are identified early in the planning process in order to provide some of the information required for selecting the most beneficial alternative. Central to the success of the PDP is the early participation of private citizens, public officials, and interested agencies that represent a wide range of disciplines and areas of expertise. Specific project proposals are publicized through the early coordination and Intergovernmental Review process. Affected segments of the community are identified and tentative problems and/or issues concerning the projects are defined. These problems and issues are continuously refined as project development progresses. The PDP involvement is solicited through public meetings held on proposed projects, meetings with affected property owners, and circulating and/or advertising the availability of the draft environmental document. Formal public hearings may also be held in accordance with applicable local, state, and federal laws. Transit projects follow a similar public participation process.

In addition to the public participation conducted on individual projects, the Board of Directors has adopted the ***Public Participation Policy*** (available at www.mvrpc.org). This document describes MVRPC's proactive and ongoing public participation procedures for all major transportation planning activities, including the TIP.

The TIP public input process includes two separate public input meetings throughout the TIP development process described in MVRPC's ***Public Participation Policy***. The initial public meeting for the TIP was held on January 25, 2011. A second meeting was held on April 12, 2011 during the final TIP development.

To increase the participation of citizens and organizations in the transportation planning process, MVRPC has developed and will maintain a mailing list notifying various groups and individuals of scheduled public participation meetings approximately three weeks before the meeting date. The goal of this mailing is to include groups not directly involved through the current structure of MVRPC's policy board. The list includes interested private citizens, transportation organizations/agencies, economic development interests, private transportation providers, freight representatives, environmental protection, cultural-historic resources, and other pertinent groups identified by the SAFETEA-LU legislation. In addition to groups identified by SAFETEA-LU, MVRPC will add any interested party requesting placement on the mailing list.

The MVRPC TIP is part of ODOT's State Transportation Improvement Program (STIP) and as such was also made available as part of the state public participation process. Two STIP public participation meetings were conducted for projects located in the MVRPC planning area. ODOT Districts 7 and 8 held separate public participation meetings in April. Comments received through this process were be documented in the STIP.

In accordance with Executive Order 12898 on Environmental Justice, MVRPC developed its public participation policy to incorporate the regulations required by this order. Although MVRPC has historically made efforts towards the requirements of Environmental Justice, a concerted effort has been made to further seek out disadvantaged populations or otherwise EJ targeted groups to include them in the public participation process. These efforts included:

- Expanding mailing list to include EJ targeted populations (low-income, minority, elderly and disabled) and all public libraries.
- Adopting advertising for ease of understanding including special articles and flyers.
- Adapting public meetings and locations for accessibility.

<u>Environmental Justice Analysis</u>

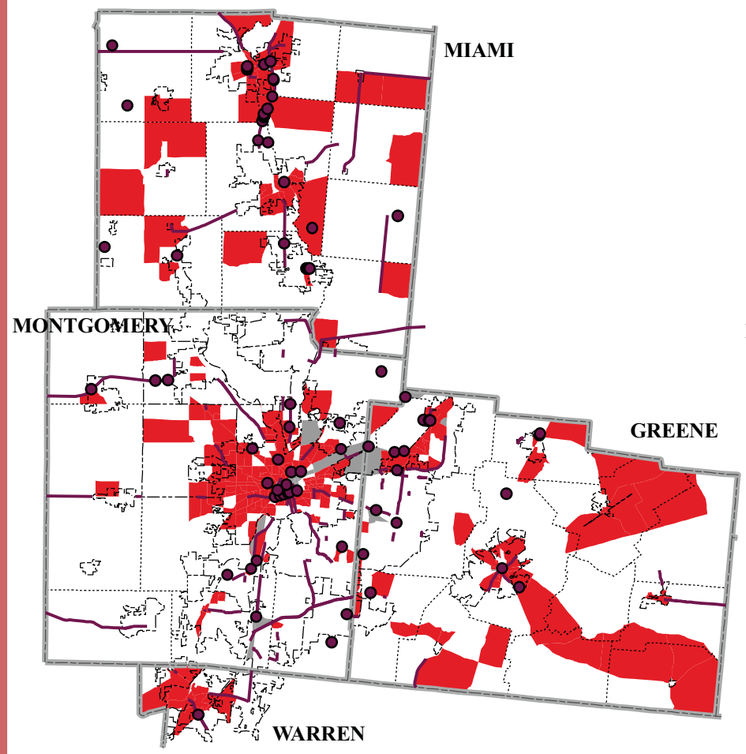
MVRPC analyzed the distribution of TIP projects with respect to targeted Environmental Justice populations using data summarized at the Traffic Analysis Zone (TAZ) level. All TIP projects, with the exception of area wide programs and projects, slated for construction during SFY 2012-2015, were overlaid on top of the region's six Environmental Justice target areas for analysis. TAZ's with an above or equal to county average population threshold for each specific Environmental Justice population were identified as a target area. The analysis was conducted to assure that the target areas are receiving a proportionate share of TIP project funds relative to the region's general population. Table 2.1 displays the allotment of total TIP project costs and project distribution throughout the region. One important consideration is that one project, the I-75-Phase II reconstruction represents 43% of the total TIP project cost.

Table 2.1: Distributions of TIP Projects with Respect to Environmental Justice Populations

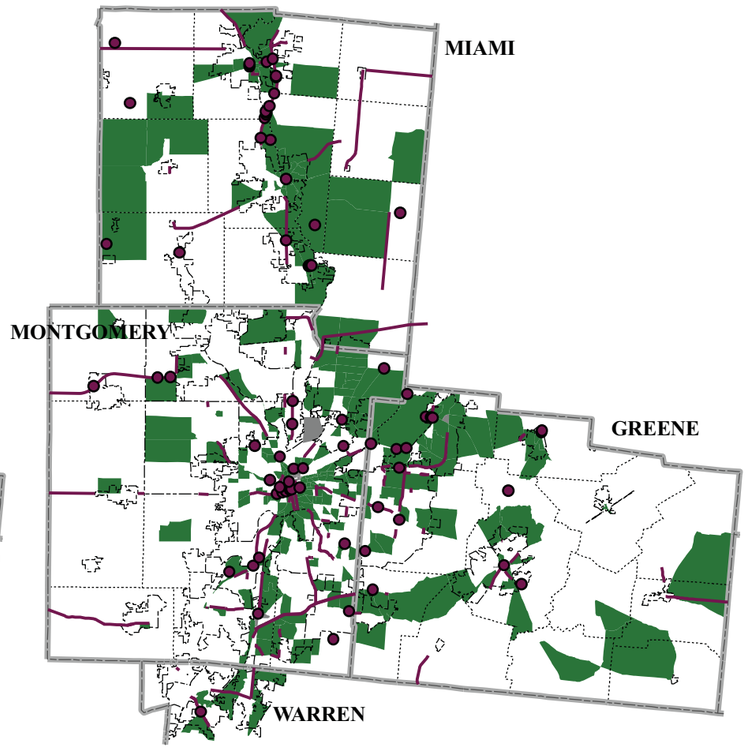
Environmental Justice Population	Total Target Areas	Number of Projects	Percent Total Projects in TIP	Project Cost ($)	Percent Total Cost in TIP
Minority:	228	61	43%	481,859,000	73%
Poverty:	294	89	62%	574,543,000	87%
Disabled:	391	129	90%	627,007,000	95%
Elderly:	391	124	87%	612,196,000	93%
Hispanic:	272	106	74%	564,680,000	86%
Zero Car:	269	97	68%	507,162,000	77%
General Population:	**845**	**149**	**100%**	**657,513,000**	**100%**

Souce: MVRPC

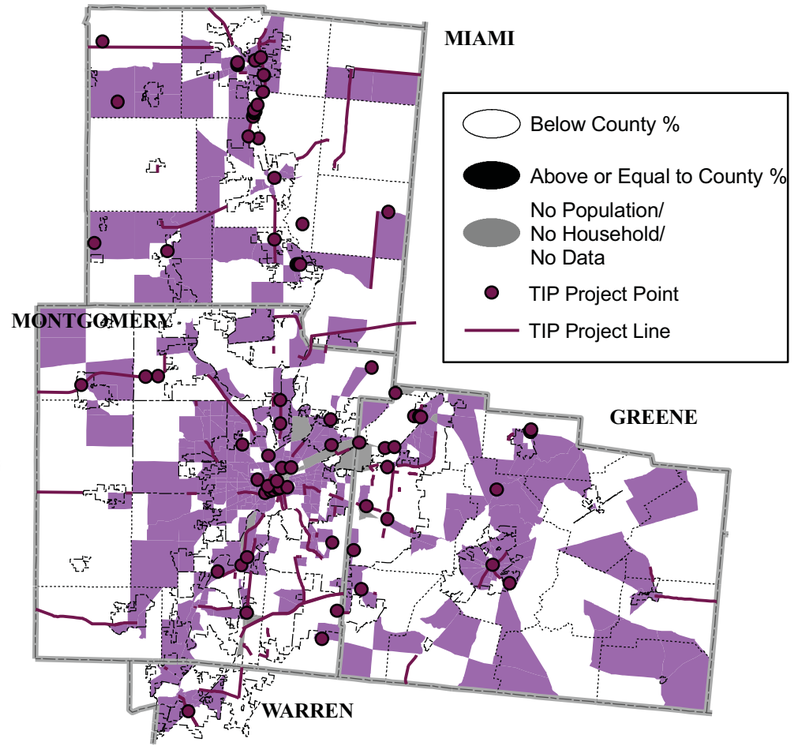
Between SFY 2012-2015, 149 TIP projects will be constructed. Minority target areas received the fewest project/ cost allocation while disabled target areas will receive the greatest. Minority target areas are mainly concentrated throughout the region's urban cores thus having the smallest regional coverage. Disabled populations as well as Elderly populations were more evenly distributed throughout the region consequently achieving a larger regional coverage and larger share of TIP projects. Maps displaying the distribution from each Environmental Justice population are included in Map 2.1.



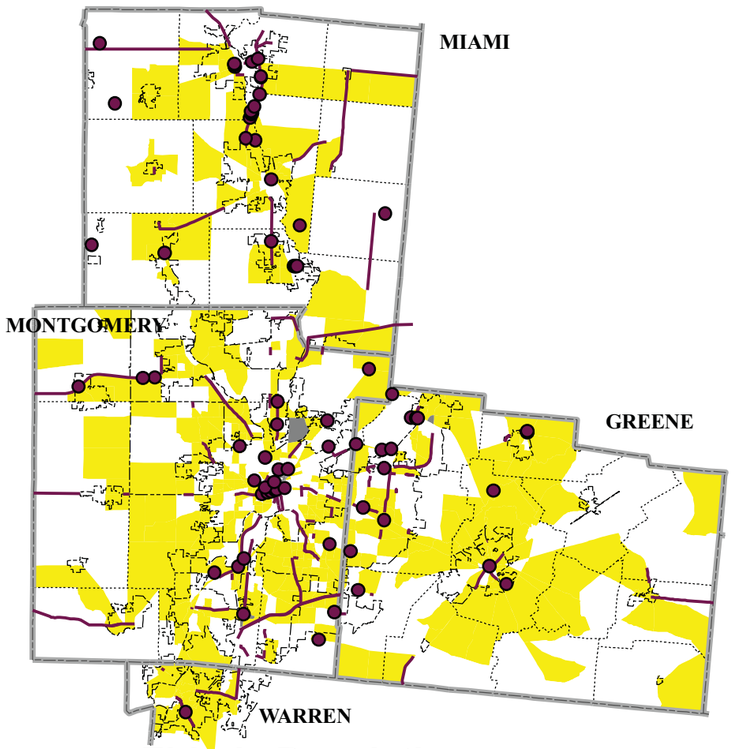
Below Poverty Population



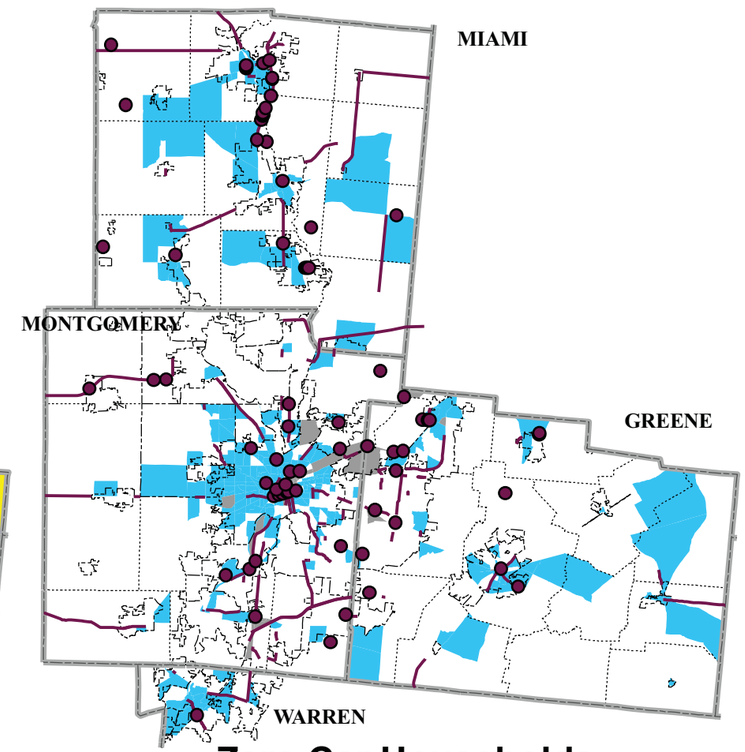
Hispanic Population



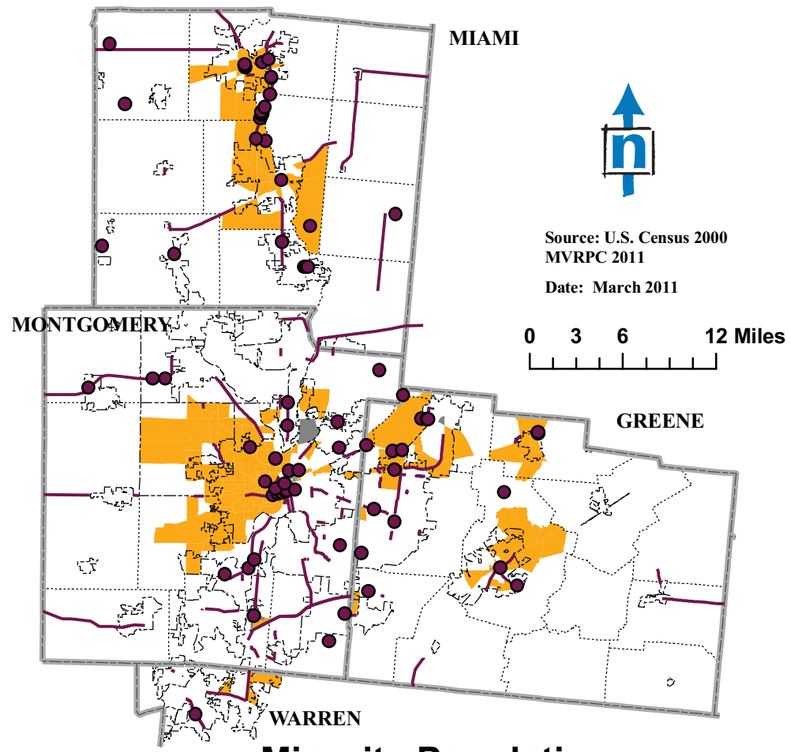
Disabled Population



Elderly Population



Zero Car Households



Minority Population

Map 2-1
Distribution of Environmental Justice Populations by TAZ

Miami Valley
Regional Planning Commission
One South Main Street Suite 260
Dayton, OH 45402
Phone - (937) 223 - 6323
Fax - (937) 223 - 9750
Web - www.mvrpc.org

Operation and Maintenance of Existing Transportation System

The TIP is required to demonstrate that existing transportation facilities are being adequately operated and maintained by showing the operation and maintenance funds. Section 3 Accomplishments includes a discussion on how the region's exiting transportation system is being adequately operated and maintained. We estimate that the region overall is spending 63.08% of the total local roadway expenditures on system preservation type projects. Of this amount, the region is spending 54.02% of its total roadway expenditures on operation and maintenance, and approximately 99.95% of its transit expenditure on operation and maintenance. This is consistent with the previous TIP analysis that estimated approximately 76.4% of total local roadway expenditures were for system preservation type projects. System preservation projects are essential to the long-term viability of the region's transportation system.

Air Quality

The Dayton/Springfield air quality Region (D/S Region) is comprised of the Counties of Clark, Greene, Miami, and Montgomery in southwest Ohio. All counties were re-designated to attainment/maintenance for the 8-hour ozone standard in August 2007, three counties (Clark, Greene, and Montgomery) are designated non-attainment for the annual PM2.5 standard.

The 8-hour ozone maintenance plan approved mobile budgets will be used to demonstrate conformity to the ozone standard. In the absence of budgets, the no-greater-than-2002 Baseline year test, will be used to demonstrate conformity to the annual PM2.5 standard.

MVRPC's 2030 Plan was adopted in May 2008 and is in the process of being amended to reflect timeframe or scope changes in projects being programmed in the new TIP (SFY2012-2015), the amended 2030 Plan and updated TIP will be adopted in May 2011 by the MVRPC Board of Directors. CCS-TCC's 2030 Plan was adopted in June 2008, the SFY 2012-2015 TIP and needed 2030 Plan amendments will also be adopted in May 2011.

The Plan amendments will also officially remove the 3C passenger rail project from the 2030 Plans. Both MVRPC and CCS-TCC amended their Transportation Plans in January 2010 in anticipation of receiving a High Speed Intercity Passenger Rail Grant from the Federal Railroad Administration (FRA). The FRA awarded a grant to Ohio but at a lower amount ($400 million) than the financial plan included with the January 2010 amendments anticipated (563.8 million). On December 9, 2010, US DOT withdrew the majority of the funds ($385 million) from the project making the 3C rail project financially unfeasible. Since the emissions analysis for the 3C amendment were done *off-model*, the regional emissions analysis for the SFY 2012-2015 TIP will be based on the original analysis for the 2008 Update of 2030 Plans.

The MVRPC Metropolitan Planning Organization is comprised of the Counties of Greene, Miami, and Montgomery as well as the Cities of Franklin, Carlisle, and Springboro in northern Warren County. Warren County is located in the Cincinnati non-attainment air quality Region. For complete documentation on OKI's Transportation Conformity Determination please refer to *Air Quality Transportation Conformity Determination for Amendment 6 to the OKI 2030 Regional Transportation Plan, Cincinnati Nonattainment Area – Technical Documentation (February 2011).*

A summary of the regional emission analyses is presented in Tables 2-2 to 2-5 as described below:

- Table 2-2 Dayton/Springfield Region 8-hour ozone Regional Emissions Analysis
- Table 2-3 Dayton/Springfield Region PM2.5 Regional Emissions Analysis
- Table 2-4 Cincinnati Region 8-hour ozone Regional Emissions Analysis
- Table 2-5 Cincinnati Region PM2.5 Regional Emissions Analysis

The results indicate that the 2030 Plans and TIPs demonstrate conformity to the PM2.5 and 8-hour ozone standard consistent with the March 24, 2010 US EPA Transportation Conformity Regulations.

Table 2-2 – Dayton/Springfield Region 8-hour ozone Regional Emissions Analysis

Year	County	HC (tons/day)	NOX (tons/day)
2015	GRE/MIA/MOT	12.097	19.894
2015	CLA	2.619	4.743
	Total 4-County	14.716	24.637
	2005 Budget	*29.19*	*63.88*
	Difference	**14.474**	**39.243**
2018	GRE/MIA/MOT	10.074	15.125
2018	CLA	2.224	3.658
	Total 4-County	12.298	18.783
	2018 Budget	*14.73*	*21.42*
	Difference	**2.432**	**2.637**
2020	GRE/MIA/MOT	9.419	13.357
2020	CLA	2.109	3.268
	Total 4-County	11.528	16.625
	2018 Budget	*14.73*	*21.42*
	Difference	**3.202**	**4.795**
2030	GRE/MIA/MOT	8.898	10.008
2030	CLA	2.105	2.553
	Total 4-County	11.003	12.561
	2018 Budget	*14.73*	*21.42*
	Difference	**3.727**	**8.859**

Table 2-3 – Dayton/Springfield Region PM2.5 Regional Emissions Analysis

Direct PM [tons]

A	B	C	D=(182)x(C)	E	F=(183*(E)	G=D+F
Year	**County**	**Emissions (Avg Daily Winter)**	**Emissions (Winter - 182 days)**	**Emissions (Avg Daily Summer)**	**Emissions (Summer – 183 days)**	**Emissions (Annual)**
2002-Base	GRE/MOT	0.858	156.156	0.935	171.105	327.3
2002-Base	CLA	0.207	37.674	0.235	43.005	80.7
					Baseline	**407.9**
2015	GRE/MOT	0.328	59.696	0.364	66.612	126.3
2015	CLA	0.084	15.288	0.097	17.751	33.0
					Total 3-county	159.3
					Baseline	*407.9*
					Difference	**248.6**
2020	GRE/MOT	0.280	50.960	0.289	52.887	103.8
2020	CLA	0.074	13.468	0.080	14.640	28.1
					Total 3-county	132.0
					Baseline	*407.9*
					Difference	**276.0**
2030	GRE/MOT	0.274	49.868	0.282	51.606	101.5
2030	CLA	0.077	14.014	0.083	15.189	29.2
					Total 3-county	130.7
					Baseline	*407.9*
					Difference	**277.3**

NOX [tons]

A	B	C	D=(182)x(C)	E	F=(183*(E)	G=D+F
Year	**County**	**Emissions (Avg Daily Winter)**	**Emissions (Winter - 182 days)**	**Emissions (Avg Daily Summer)**	**Emissions (Summer – 183 days)**	**Emissions (Annual)**
2002-Base	GRE/MOT	50.599	9209.018	52.304	9571.632	18780.7
2002-Base	CLA	13.050	2375.100	14.172	2593.476	4968.6
					Baseline	**23749.2**
2015	GRE/MOT	16.037	2918.734	16.311	2984.913	5903.6
2015	CLA	4.411	802.802	4.704	860.832	1663.6
					Total 3-county	7567.3
					Baseline	*23749.2*
					Difference	**16181.9**
2020	GRE/MOT	10.617	1932.294	10.963	2006.229	3938.5
2020	CLA	3.010	547.820	3.254	595.482	1143.3
					Total 3-county	5081.8
					Baseline	*23749.2*
					Difference	**18667.4**
2030	GRE/MOT	7.803	1420.146	8.169	1494.927	2915.1
2030	CLA	2.327	423.514	2.543	465.369	888.9
					Total 3-county	3804.0
					Baseline	*23749.2*
					Difference	**19945.3**

Table 2-4 – Cincinnati Region 8-Hour Ozone Regional Emissions Analysis (Tons per Day)

Northern Kentucky Maintenance Area

	2015	2020	2030
N. Kentucky VOC Budget	9.76	10.07	10.07
N. Kentucky VOC Emissions	8.03	7.14	7.24
N. Kentucky NOx Budget	14.40	13.27	13.27
N. Kentucky NOx Emissions	11.63	8.38	6.35

Ohio [1] and Indiana [2] Maintenance Area

	2015	2020	2030
Ohio/Indiana VOC Budget	31.73	28.82	28.82
Ohio/Indiana VOC Emissions	25.14	24.53	25.04
Ohio/Indiana NOx Budget	49.00	34.39	34.39
Ohio/Indiana NOx Emissions	42.42	30.04	23.79

[1] Includes Clinton County
[2] Dearborn County emissions are for the nonattainment portion only

Table 2-5 – Cincinnati Region PM2.5 Regional Emissions Analysis (Tons per Year)

Non-attainment Area Within a Portion of Dearborn County, IN

	2015	2020	2030
Dearborn IN (p) Direct PM2.5 2002 Annual Baseline	9.76	9.76	9.76
Dearborn IN (p) Direct PM2.5 Annual Emissions	4.33	3.79	3.68
Dearborn IN (p) Annual NOx 2002 Baseline	571.28	571.28	571.28
Dearborn IN (p) Annual NOx Emissions	209.55	147.67	104.84

Northern Kentucky Non-attainment Area

	2015	2020	2030
N. Kentucky Direct PM2.5 2002 Annual Baseline	164.68	164.68	164.68
N. Kentucky Direct PM2.5 Annual Emissions	78.31	70.52	73.44
N. Kentucky Annual NOx 2002 Baseline	9509.84	9509.84	9509.84
N. Kentucky Annual NOx Emissions	3950.79	2847.06	2157.25

Ohio Non-attainment Area

	2015	2020	2030
Ohio Direct PM2.5 2002 Annual Baseline	710.6	710.6	710.6
Ohio Direct PM2.5 Annual Emissions	285.1	252.8	251.7
Ohio Annual NOx 2002 Baseline	38057.8	38057.8	38057.8
Ohio Annual NOx Emissions	13520.3	9584.4	7469.4

Status of Major Projects in SFY2008-2011 TIP

Table 3.4 in Section 3 includes SFY2008-2011 projects that experienced significant delays. The table shows the date of construction and reason for delay. Most of the projects were delayed due to slow project development and a decrease of available funding.

Annual Listing of Projects

Table 3.6 in Section 3 includes a listing of projects for which federal funds are anticipated to be obligated during SFY2011.

Congestion Management Process (CMP)

The planning regulations require urban areas with a population over 200,000 to address congestion management through a process that provides for safe, effective, integrated management of the multimodal transportation system. A Congestion Management Process summary report is published by MVRPC approximately every 4 years, providing an overview of the multimodal system performance and regional congestion management strategies. The report is being updated in SFY 2011 and will be incorporated into the next LRPT update due in SFY 2012 in the form of new or revised congestion management projects or programs. One highlight in the SFY 2011 report is the incorporation of travel time reliability measures based on

operational data made available by the early deployment of the Freeway Management System in Dayton.

Consistency with the Long Range Transportation Plan and Conformance with State Implementation Plan

In July of 2009 the Board of Directors adopted ***Policies and Procedures for Considering Major New Capacity Projects (TRAC Projects)***. In September of 2009, the Board of Directors adopted ***Policies and Procedures for Transportation Enhancements (TE) Projects*** and ***Policies and Procedures for Congestion Mitigation & Air Quality (CMAQ) and Surface Transportation Program (STP) Projects***. All three programs are continually updated to address SAFETEA-LU issues as well as changes in Ohio Department of Transportation (ODOT) regulations. The policies are used to rank and program all federally funded highway, bikeway and transit projects in the TIP.

MVRPC Policies and Procedures for the STP/CMAQ, TE and Major New Capacity programs are available at www.mvrpc.org. These policies and procedures state that all projects must be consistent with one or more of the 7 factors required by the Federal legislation prior to being evaluated for inclusion into the TIP. Some smaller projects, such as system preservation projects, may not be specifically listed in the LRTP but they are considered consistent with the LRTP's goals and objectives. All projects listed in the TIP are consistent with the LRTP.

TIP Prioritization Process

MVRPC originally developed the Project Evaluation System (PES) for the 2004 LRTP in order to advance transportation projects that are consistent with regional transportation priorities. The PES was based on the common themes and transportation values identified by the 2003 visioning process *TransAction 2030*. Since then, PES has been used to prioritize projects seeking MVRPC controlled STP/CMAQ & TE funds, TRAC funds and Federal Earmarks.

In 2006, MVRPC undertook a major review of the project evaluation system to ensure that the process is a more collaborative, transparent, and interactive way to work with member jurisdictions. As a result, some criteria were modified, additional explanation and examples were provided, and a complete set of maps and data were made available to project sponsors to aid in the self-scoring process. The PES is now available on the MVRPC website (www.mvrpc.org) along with all relevant information and the MVRPC staff works with participants to ensure a full understanding of the process, including hosting a seminar for project sponsors.

The PES is both exhaustive and equitable, while also being easy to understand. Although some of the criteria under the different categories may appear to overlap, the attributes that they measure for each project remain distinct and unique. Based on the PES, a Project Evaluation Form was developed so that a project sponsor could complete the project evaluation and attach it to the Project Profile Form at the time of project submission. Project Evaluation Forms are unique to the mode of the project (highway, bikeway/pedestrian, transit).

The PES is made up of two different project ranking categories, first being the Basic Project Evaluation System (PES) score and the second being the Project Readiness/Other score.

The first category, the ***Basic PES*** score, measures 20 indicators from categories including Regional Context/Cooperation, Transportation Choices, Transportation System Management, Land Use, Economic Development and Environment. A maximum total of 70 points is possible

under the Basic PES scoring system.

The second category, ***Project Readiness/Other***, is made up of ranking criteria that are designed to measure project maturity and fairly and equally evaluate all traditional and non-traditional projects. A maximum total of 30 points is possible under the project readiness/other score.

The final project score is a combination of the Basic PES score (maximum total of 70 points) and the Project Readiness/Other score (maximum total of 30 points) for a maximum combined score of 100 points.

Once all Project Evaluation Forms are received, MVRPC staff confirms that potential capacity projects are consistent with the 2030 LRTP and the most recent Transportation Conformity Determination and then reviews them for consistency, accuracy, and completeness of data for each individual project. A cross-examination of all projects is also conducted to ensure that the evaluation remains equitable.

Certification of the Metropolitan Planning Process

The final planning regulations require the Secretary of Transportation to certify the metropolitan planning process for TMA's at least every 4 years. A joint FHWA/FTA certification review was conducted on July 29-30, 2009. Based upon their findings, FHWA/FTA jointly certified the MVRPC transportation planning process for the Dayton urban planning area on December 21, 2009.

In addition, the regulations also require the State and MPO's to annually certify to the FHWA and FTA that the planning process is addressing the major issues facing the area and is being conducted in accordance with all applicable federal requirements. A separate resolution self-certifying conformance with applicable federal requirements will be submitted with the final TIP.