II. PLAN REQUIREMENTS AND GUIDING PRINCIPLES

The Toledo Metropolitan Area Council of Governments (TMACOG), a voluntary association of local governments in northwest Ohio and southeast Michigan, develops the regional transportation plan based on our region's vision and goals. The intent is to enable our region to effectively respond to transportation-related needs and opportunities. A full public involvement process is employed in developing a solid plan.

This long range plan is required by and is in compliance with federal law. TMACOG is further bound by federal regulations, state law, and agreements with the states of Ohio and Michigan and units of local government to maintain the regional transportation plan for our metropolitan area. The TMACOG Board of Trustees is designated as the Metropolitan Planning Organization (MPO) for the metropolitan transportation study area by the Governor of Ohio through the Ohio Department of Transportation. TMACOG is authorized to carry out the required continuing, comprehensive, coordinated transportation planning process for our area in cooperation with local elected officials and transit authorities. As a primary output of this process, the TMACOG Transportation Council recommends and the Board of Trustees adopts the "On the Move: 2007-2035 Transportation Plan" (2035 Plan).

This chapter of the plan outlines key plan requirements and how the 2035 Plan addresses them. In fulfilling these requirements, this plan serves as the guideline for the region to make decisions on major transportation investments over the next 20 years.

1. Vision and Goals

The "On the Move: 2007-2035 Transportation Plan" is designed to fulfill a regional vision and meet seven related goals. These were developed with input from the annual regional meetings of transportation stakeholders. TMACOG and stakeholders recognize the need for a regional system of highways, railroads, waterways, airports, bicycle/pedestrian facilities, and public transit that will work together in a coordinated way, be adequately maintained, and be improved to increase safety and accommodate growth.

The vision statement and goals are:

"We envision a vibrant region with a dynamic economy and high quality of life where transportation is a core strength.

"Our region and its transportation system will:

- Be designed and operated to promote safe and efficient travel across all modes,
- Protect the region's investment by maintaining and preserving the existing system,
- Protect and sustain community and natural environments,
- Be a top quality multimodal passenger transportation hub,
- Be a world-class multimodal freight transportation hub,
- Be a center of transportation research and innovation, and
- Be successful in obtaining adequate funding for transportation facilities."

-Approved by TMACOG Transportation Council, 2005

The goals served as the central organizing tool for the plan process. Needs were related to one or more goals, and proposed solutions were evaluated against measures of effectiveness for each goal. A discussion of how plan projects, initiatives, and policies address each goal is included in this document.

2. Federal Rules: Overview

The plan requirements largely come from a major federal law, the "Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users" or SAFETEA-LU. (For more information, see **Appendix A.**) The 2035 Plan is in compliance with SAFETEA-LU's requirements for long range metropolitan transportation plans.

This law and its predecessors (ISTEA and TEA-21) require the plan to identify short term and long term policies, projects and strategies for maintaining and improving the transportation system in our region. The plan must identify reasonably expected financial resources to accomplish these tasks.

In the regional plan, all types of transportation are to be identified and integrated into an intermodal system that facilitates the efficient movement of both people and goods. This plan must look ahead at least 20 years, reflecting current and projected land use, population, employment and economic activity, travel patterns, and congestion. It must address the resulting demands on the transportation system — outlining improvements that add capacity, plus use of better operational and management strategies.

Local elected officials, transit agencies, environmental agencies, and citizens must have opportunities to be involved in developing the plan. The plan must meet federal air quality requirements by showing that the proposed projects will not cause the region to exceed the allowed levels of air pollution. Strategies for addressing potential impacts on the natural and community environment—including low-income and minority neighborhoods—must be included. In the post 9-11 era, a new focus on safety and security of the transportation system is required.

Details on how the 2035 Plan addresses these federal rules are included below and throughout the plan document. For example, see the sections on the "safety and efficiency" goal and the "system preservation" goal for strategies to improve capacity and management. Another section addresses TMACOG's approach to bikeway and transportation enhancement planning.

3. Environmental Consultation and Mitigation

The federal transportation law (SAFETEA-LU) requires TMACOG to consult with environmental agencies as part of developing the long range plan. These are to include, as appropriate, state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation.

From a base list provided by the Ohio Department of Transportation (ODOT), TMACOG developed a list of agencies and sent them the draft plan for comment. As part of the required consultation, TMACOG mapped environmental data against proposed plan projects to identify

potential impacts. A table was prepared listing projects with potential impacts on key environmental resources. TMACOG shared this information (maps and table) with the environmental agencies to facilitate their review of the draft plan.

Resulting comments from the agencies were considered in completing the final draft of the plan. For example, descriptions of Projects 4 (US 20A improvements and relocation) and 59 (Toledo Express north-south runway extension) were modified to reflect their potential impact on a significant natural habitat, the Oak Openings eco-region.

Federal law also requires that the plan include discussion of types of potential environmental mitigation activities. In response, ODOT provided and TMACOG modified a description of environmental issues and potential mitigation for projects that might have impacts on area resources. The resources discussed are streams and wetlands; threatened and endangered species; lands requiring special protection under Section 4(f) of the Department of Transportation Act (public park and recreation lands, wildlife and waterfowl refuges, and historic sites); cultural resources; and "environmental justice" areas (low income and minority neighborhoods).

More detailed information on the environmental consultation process and environmental mitigation can be found in **Chapter V** and **Appendix E.** Included are the list of agencies contacted and agency comments, the discussion of environmental mitigation strategies that should be considered in this region, plus a description of environmental justice issues and analysis.

4. Finance Plan - Fiscal Constraint and Reserve Projects

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires the regional transportation plan to include a financial forecast that demonstrates that adequate funding for plan implementation is reasonably available. The purpose of this document is to present the forecast of the amount of funds that will be available to support transportation in the Toledo Metropolitan Area Council of Governments (TMACOG) area from now until the year 2035. The projections herein are used to estimate the resources available for maintenance of existing facilities and for construction of new improvements as outlined in the plan.

The methodology used to develop this forecast is discussed in detail. The fiscal constraint for this plan was based on the financial forecast prepared for the 2025 Plan Update 2004 and assumptions were made on each category of funding. All types of funding shown in the 2025 Plan were reviewed for the 2035 Plan. Wherever there was new or better information available, the projection was updated. If there was not such information available, the previous projection was retained. **Table 1** details the 2035 Plan financial forecast.

4.1 Revenue Forecast

Federal Funds Managed by TMACOG

The amounts shown for Surface Transportation Program (STP), Congestion Mitigation Air Quality (CMAQ), and Transportation Enhancements (ENH) are projections based the expected amount of funding in the Transportation Improvement Program (TIP) for FY2007 and FY2008 as of the fall of 2006. For FY2009 through FY2035, the projected figure is based on the amount allocated to the region for FY2008 and increased by an annual growth rate estimated at one percent to arrive at the yearly figures. The actual amount spent on projects listed in the TIP was not used for this projection.

Transportation Review Advisory Council (TRAC)

Forecasted funding through ODOT's Transportation Review Advisory Council is based on the programmed dollar amount for Lucas and Wood counties in SFY2007-2012. The TRAC budgeted $44.6 million in Lucas and Wood counties for design, right-of-way, and construction in 2007 and $121.9 in 2008. The amounts for 2009 through 2012 are the remainder of the funds currently budgeted for awarded projects ($262.5 million). The amounts calculated for 2013 through 2035 are based on a total of $9,214 million of estimated annual TRAC funding and the assumption that Lucas and Wood counties will receive 10 percent (approximately $40 million per year) of that funding. This assumption is a conservative estimate of the success the region will have in the TRAC process. Through 2007, the region has received over 15 percent of the budgeted TRAC funds.

The total is the sum of 2007-08 ($166.5M), 2009 through 2012 ($262.5M) and 2013 through 2035 ($40M x 23 years=$920M). The total of $1,349M was rounded slightly to $1,350M.

Funds Managed by ODOT and MDOT

TMACOG received 2007-2010 figures from the Ohio Department of Transportation District 2 office. The amount used for 2007 was taken directly from ODOT's figures. The 2008 number is the average of the 2008-2010 figures and multiplied by 27 (years) to project to 2035.

The Michigan Department of Transportation figures are identical to the estimates used in the 2025 Plan Update 2004 as current figures could not be determined.

County Engineers Funds

Funding from the County Engineers Association of Ohio (CEAO) administered County Surface Transportation Program (CSTP) and the Local Bridge Repair Program (LBRP) is the average anticipated funding based on the current 2007-2012 CSTP and LBRP Transportation Improvement Program. The figures were verified by the Lucas County Engineer.

Transit Funds

Transit funding figures were derived from tables provided by ODOT. The figures were verified by the Toledo Area Regional Transit Authority (TARTA) for accuracy.

Other State Funds

Local Transportation Improvement Program (LTIP)

LTIP funds are derived from a one-cent per gallon gasoline tax that is not presently subject to expiration. It is projected that the current level of funding will continue through the duration of this plan.

Issue 2 Funds

Funds are made available to the local jurisdictions by the State of Ohio pursuant to a voter approved bond issue for capital improvements. This projection anticipates that the program will be extended (or replaced) for the duration of the plan period at a level equal to 50 percent of the original program which began in 2000.

ODOT Operations in Lucas and Wood Counties

These amounts reflect the total cost of ODOT's in-house operations and maintenance activities in Lucas and Wood counties. Amounts were obtained from ODOT District 2 for the operation of the maintenance garages located in each county and for the District's central office and garage.

The costs of the central office and garage were proportioned to the two counties based on population. Lucas and Wood counties' combined population is 576,119 vs. the total population of the eight-county district of 848,061. Amounts shown are an average of the four years FY2000 through FY2004 and increased to account for inflation, projecting it to a 2007 value based on a 12 percent Consumer Price Index inflation rate.

MDOT Programmed Projects

The amounts projected for southern Monroe County, Michigan are based on past programmed project awards. It is assumed that the annual average spent in the past few years will remain constant over the life of the plan.

Local Funds

A critical component of the long range plan is the ongoing operations and maintenance of existing facilities. Operations, maintenance, and capital is the estimated amount of local resources that are dedicated to adequately operating and maintaining existing transportation facilities. In the TMACOG TIP, this was accomplished by surveying the local jurisdictions for the amount of funds spent on their facilities. This amount was then reduced to a per capita rate and then multiplied by the total population of Lucas and Wood counties. A thorough survey of local jurisdictions took place in 2002 for the preparation of the FY2002 – 2005 TIP. The 2002

figure was increased to account for inflation, projecting it to a 2007 value based on a 12 percent Consumer Price Index inflation rate.

Table 1: 2035 Plan Financial Resources

	2007	2008	(Year 2008x27)	Years 2007 – 2035 Totals (Rounded in Thousands)
TMACOG Managed Federal Funds:				
STP*	$6,811	$7,177	$223,414	$230,591
CMAQ*	$3,917	$4,128	$128,501	$132,629
ENH*	$681	$718	$22,320	$23,038
TRAC (includes DEMO)**	$44,600	$121,900	***	$1,350,000
ODOT Managed State & Federal Preservation Programs				
(OSTP, IM, BR, NHS, 100% state)	$19,875	$27,300	$737,100	$764,400
ODOT Managed State and Federal Capital Programs	$26,025	$26,250	$708,750	$735,000
(Safety & Other)				
MDOT Managed State and Federal Capital Program	$2,990	$2,990	$80,730	$83,720
County Engineers Association of Ohio Administered CSTP & LBR	$400	$400	$10,800	$11,200
Transit Funds				
Operating Revenue	$4,511	$4,647	$125,469	$130,116
Non-Operating Revenue	$26,379	$26,379	$712,233	$738,612
Federal Capital	$4,543	$4,543	$122,661	$127,204
Other State Funds				
LTIP	$3,894	$3,894	$105,138	$109,032
Issue 2 (assuming program is extended)	$1,473	$1,473	$39,771	$41,244
ODOT Operations - Lucas & Wood***	$19,687	$19,687	$531,559	$551,246
MDOT Programmed Projects	$851	$851	$22,977	$23,828
Local Funds				
Operations & Maintenance and Capital***	$99,746	$101,332	$2,735,964	$2,837,296
Totals	**$266,383**	**$353,669**	**$6,307,386**	**$7,889,155**

* Annual growth projected at 1 percent
** Estimated TRAC funding based on awards to Lucas and Wood counties in SFY2007-2012 plus 10 percent of the estimated funds from 2013-2035 ($9,214)
*** 2002 figure adjusted for inflation (12% according to CPI)

4.2 Expenditure Forecast

In order to conform to the fiscal constraint, the plan identifies the resources needed to meet plan goals or regional priorities. **Table 2** shows the estimated regional expenditures through 2035. For a transportation plan to conform to the federal guidelines, the allocated resources cannot exceed the available resources. This plan meets those requirements by allocating only those resources that are estimated to be available between 2007 and 2035.

The total funding estimated to be available during this plan period is $7,889,155,000 as detailed in **Table 1**. The first step taken was to subtract operations, maintenance, and "steady state" capital investments ($5,589,692,000) from the total resources. This left a total of $2,299,463,000 remaining for preservation and non-routine capital projects.

Based on the regional priority to preserve the existing transportation system, the next category of project funds subtracted were those that address the backlog of capital investments needed to reconstruct or replace deficient roadway and bridges ($739,600,000). This leaves a little over $1.5 billion dollars for new capital projects. Overall, this plan has dedicated slightly over 80 percent of all available funding to preserving and maintaining the existing system.

Next, the already committed TIP, TIP Pipeline, TRAC Tier I and Tier II projects were subtracted from the total, leaving a balance of just over $600,000,000 for other plan projects. In another step of the 2035 Plan process, the task force decided that each of the goal groups were able to select the top 10 percent of their prioritized projects for inclusion into the plan and could nominate others that the task force would vote on. These top 10 percent projects cost $216,700,000 and were deducted from the total resources. In additional, the task force voted to allocate $4,500,000 to plan initiatives which were also subtracted out. This left $379,513,000 for additional priority projects to include in the plan.

Finally, the task force evaluated the remaining projects using a point system based on the plan goals and measures. The projects were then ranked in priority order with funding capped at the amount of funds ($379,513,000) that remained. These projects cost a total of $379,410,000. Overall, the plan has a remaining balance of $103,000 and thus does comply with the fiscal constraint.

Table 2: Funding Ledger

Steps	Subtotal (in '000's)	Annual Amount (in '000's)	Number Represents
1. Estimate total resources	**$7,889,155**		A general estimate of all resources from all sources for transportation in the region 2007-2035: allocations of both federal highway funding designated for our area plus a "fair share" of statewide allocations, a "fair share" of state funding allocations, local Issue 2 funds, local programs including general revenue funds devoted to transport related items
2. Subtract operations	**$1,519,692**	**$54,275**	Transportation systems operations (de-icing, sign and signal maintenance, roadside mowing, minor drainage work, etc.) – determined by system operators
3. Subtract maintenance - e.g. upkeep / minor upgrades	**$2,000,000**	**$71,429**	Pavement overlays and resurfacing, small safety upgrades (replace signs, add turn lanes, etc.), other - determined by system operators
4. Subtract "steady state" capital investments (investments on the system to maintain acceptable condition)	**$2,070,000**	**$73,929**	Pavement replacement and reconstruction/replace appurtenances/replace bridges and projects not directed to new capacity improvements or current backlog of reconstruction projects – determined by system operators (can be funded through TIP or other sources)
5. Subtotal – available for non-routine capital projects	**$2,299,463**		
6. Subtract backlog of capital investment to maintain system	**$739,600**	**$26,414**	Current backlog of reconstruction / replacement of currently deficient roadways and bridges
7. SUBTOTAL AVAILABLE FOR NEW IMPROVEMENTS	**$1,559,863**		
8. Subtract already committed projects and TRAC Tier II Projects (include in plan without further evaluation)	**$959,150**	**$34,255**	Committed projects have: 1) an eligible project sponsor actively pursuing right of way, design or preliminary engineering; and, 2) some recognized level of commitment for construction funding (e.g. TIP, TIP pipeline, TRAC Tier I or II)
9. SUBTOTAL AVAILABLE FOR PROJECTS NOT COMMITTED	**$600,713**		
10. Subtract core plan projects (include in plan without further evaluation)	**$216,700**	**$7,739**	Top 2035 Plan projects addressing each goal to be in plan based on goal group recommendation - per approved task force list October 31, 2006
11. Subtract initiatives	**$4,500**	**$161**	Research, education and collaborative efforts supported from transportation funds
12. FUNDING AVAILABLE FOR OTHER PRIORITY PLAN PROJECTS	**$379,513**		Funding available for additional priority projects
13. Subtract additional priority projects	**$379,410**		2035 Plan projects evaluated, ranked and approved by the task force
Final Balance	**+$103**		

The projects that could not be funded were placed on the reserve list (**Table 3**). If a project is removed from the list for any reason (i.e. change in regional priorities or lack of a sponsor), a reserve project can be added to the project list provided that the overall plan still complies with the fiscal constraint. A project on the reserve list is not an officially approved plan project and does not appear on the plan projects map. A reserve project would typically be the next project included in the project list but until it is approved, it is not part of the official plan.

Table 3: Reserve Projects

Project Description	Project Cost ($Mil)
I-75/SR 582 interchange: add signals and turn lanes at ramp terminals	$3.5
Improve local roads off of SR 795 serving industry	$4
Redevelop private roads and add link to turnpike providing access to air freight facilities at Toledo Express Airport	$10
SR 64/SR 65/Mechanic St. 3-way stop at intersection (signalization, turn lanes and possible roundabout)	$3
Add new I-75 interchange north of Bowling Green	$15
US 6 from Napoleon to Fremont: widen to 4 lanes	$230

5. Safety and Security

SAFETEA-LU requires metropolitan transportation planning organizations like TMACOG to work to increase the safety and security of the transportation system for motorized and non-motorized users. The long range plan should include a safety element that summarizes the priorities and projects for the metropolitan area contained in the state's Strategic Highway Safety Plan as well as other safety and security-related planning efforts in the region.

5.1 TMACOG Safety Studies and Location Based Response System

TMACOG is currently participating in Ohio's strategic highway safety planning efforts. In December 2006, TMACOG held a roadway safety workshop in conjunction with the Ohio Department of Transportation and the Ohio Department of Public Safety. At the workshop, state and local presenters reviewed current crash data and outlined the state's safety programs and goals. A core goal is to reduce the rate of fatalities in Ohio to no more than 1.0 fatality per 100 million vehicle miles traveled or no more than 1,100 deaths by 2008.

Workshop participants—representing various government jurisdictions, emergency responders, and members of the Lucas County traffic safety program—identified more than 90 locations and issues of concern. The next step in TMACOG's safety planning process is to evaluate these safety concerns against crash data and prioritize them, and to develop a formal safety work plan including potential countermeasures. The goal is for project sponsors to then implement effective

countermeasures, seeking state safety funds as appropriate, and to reduce the number of crashes, injuries, and deaths in the region.

As part of the safety plan process, TMACOG develops Geographic Information System (GIS) mapping of crash data. This information is available to local jurisdictions to use in preparing safety studies and applying for project funding. To produce the GIS mapping, TMACOG began with traffic crash location data, and underwent a major clean-up process to render the data usable.

In Wood County, the crash sites are mapped to specific geographic locations using Wood County's Location Based Response System (LBRS). The LBRS, a statewide initiative, is based on an accurate road centerline file containing valid address ranges for every road. The goal of this project is to develop a statewide multi-jurisdictional asset to ensure the quick and rapid response of emergency responders to natural and man-made disasters. In other words, emergency responders are provided with accurate GIS mapping that enables them to quickly identify any location. In Lucas County, similar road centerline and address information is maintained by the County Auditor's office, although not at the same level that the LBRS specifies. The TMACOG crash data was mapped using Lucas County GIS information where available, supplemented by additional data.

5.2 ODOT District 2 Safety Priorities

As part of the 2035 Plan process, the plan task force established a work group on how best to address the plan goal of improving safety and efficiency. This work group reviewed the Ohio Department of Transportation District 2's safety program, which identifies high-crash locations, high-crash corridors, and top congestion locations. Based on the recommendations of the work group, the ODOT priority safety locations have been incorporated into the 2035 Plan. Some of the major safety locations were ranked as priority plan projects. The remainder are listed as potential future safety projects—see **Chapter VII.**

5.3 Security Planning

Several major transportation facilities in the region have developed security plans and strategies. These facilities include the Port of Toledo, Toledo Express Airport, Toledo Area Regional Transit Authority (TARTA), and Amtrak. For example, TARTA has increased its use of security cameras and mandated employee training. Each of the seaport terminal operator companies have implemented U.S. Coast Guard-approved terminal security plans. (The Coast Guard has overall responsibility for seaport security and patrols the harbor and Lake Erie.) Amtrak has developed a Security Threat Level Response Plan, issued an employee security handbook, improved baggage restrictions, and instituted passenger identification procedures. At the local level, Amtrak conducts training exercises with local police, fire and paramedics on how to respond to train disasters.

County emergency services and management agencies in the TMACOG area have developed or are developing plans for dealing with homeland security, emergency relief and disaster preparedness. For example, a Lucas County Weapons of Mass Destruction Advisory Committee has been established as part of the national Urban Area Security initiative. A key focus has been

to implement a Lucas County-wide communications system, critical for coordinated response to security threats and natural disasters. (See the **Appendix A** for a security planning summary.)

The 2035 Plan process identified the need for more regional coordination among transportation facilities and emergency planning agencies. For example, Amtrak's security planning is done primarily at the national level, with minimal coordination between local station managers and county emergency management agencies. As a result of this concern, the following initiative is included for funding in this plan: "*Facilitate coordination among transportation modes and local emergency management agencies regarding transportation safety and security*." This initiative will include completing a comprehensive inventory of security plans and convening stakeholders to insure region-wide coordination.

6. Public Participation

The 2035 Plan was developed in compliance with the public participation requirements of the 2005 federal transportation law (SAFETEA-LU) and the guidelines of the "TMACOG Public Involvement Policy for Transportation." Once federal rules were published for SAFETEA-LU (February 2007), the TMACOG public involvement policy was updated to be in compliance with SAFETEA-LU.

Federal requirements for public participation are extensive. There are general requirements that apply to all aspects of federally-funded transportation planning, as well as provisions aimed specifically at developing the long range plan and required documents. Some key elements, and how the 2035 Plan process addressed them, are summarized in the following table:

Table 4:
Federal Requirements for Public Participation in Developing a Transportation Plan

Federal Requirement:	TMACOG Actions Included:
Provide public notice of participation opportunities	News releases to public media; paid newspaper advertisements; TMACOG newsletter articles; postings on website; posting public meeting schedule at TMACOG; fliers distributed to local organizations, governments, and libraries
Use visualization techniques* to describe the plan	Maps of plan projects; displays and slide shows that included photos and drawings illustrating project types; video clips (example, how roundabout intersections work); on-line "information sheets" on projects (data, location map; and photo or drawing)
Public information available electronically	All meeting notices, plan development information, and draft plan posted on website; notices and documents e-mailed to interested public on request
Hold public meetings at convenient and accessible locations and times	Public meetings held at public libraries and other public locations (town halls, senior center). Included daytime and evening meetings. Sites located across region, including ones accessible by public transit.
Consider and respond to public comment	All public comment provided to plan task force. Response to significant comment was documented

Table 4: (Continued)
Federal Requirements for Public Participation in Developing a Transportation Plan

Federal Requirement:	TMACOG Actions Included:
Seek out and consider needs of traditionally underserved, such as low income and minority households	Public meetings held in low income and minority neighborhoods and at senior center; recruited minority, disabled and other nondrivers to task force; incorporated regional transit study recommendations (which were based on extensive input from underserved populations); solicited student input
Provide comment opportunity to wide range of citizens, groups, and transportation stakeholders	Public input at annual transportation stakeholder summits; special meetings for economic development/business representatives; recruited civic groups to co-sponsor public meetings; involved stakeholders serving on TMACOG committees (including Freight, Passenger Rail, Pedestrian & Bikeways); direct mailings to major institutions and local governments

* *Visualization techniques:* to fully involve the public, elected officials, and other stakeholders, it is important to use clear and easily accessible formats such as maps, pictures and/or displays to promote understanding of existing or proposed transportation plans and programs.

It should be noted that the transportation plan task force (itself broadly representative of the public) and TMACOG staff were strongly committed to full public involvement. A public outreach subcommittee of the task force helped develop an extensive input process, including, for example, a series of informational displays and survey forms at all 36 public libraries in the region.

For more details on public participation, see **Chapter III,** Public Involvement Process; **Chapter IV**, Needs Assessment; and related materials in the **Appendices B and C**.

7. Air Quality Conformity

This section summarizes the air quality conformity analysis for the "On the Move: 2007-2035 Transportation Plan" (2035 Plan) for TMACOG in accordance with the requirements of the Clean Air Act Amendments of 1990. It specifically addresses paragraph 182(b)(1) and paragraph 187(a)(7) of the act that requires that the plan satisfy the requirements of the act. Also included for conformity is adherence to the regulations issued November 24, 1993 by the Environmental Protection Agency; 40 CFR Parts 51 and 93, Air Quality: Transportation Plans, Programs, and Projects; Federal or State Implementation Plan Conformity.

7.1 Requirements of Conformity

The Clean Air Act Amendments of 1990 expanded transportation's role in contributing to national clean air goals. The 1990 amendments expand the definition of "transportation conformity" to:

> *. . . conformity to the (air quality state implementation) plan's purpose of eliminating or reducing the severity and number of violations of the national*

ambient air quality standards and achieving expeditious attainment of such standards; and that such activities (transportation projects) will not (i) cause or contribute to any new violations of any standards in any area, (ii) increase the frequency or severity of any existing violation of any standard in any areas, or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

A fourth requirement is that plans, programs and projects do not delay the timely implementation of Transportation Control Measures (TCMs) in the applicable air quality State Implementation Plan (SIP). TCMs are transportation strategies which may be included in a region's SIP to help an area achieve or maintain the national ambient air quality standards. The TIP is to describe the region's progress toward implementing any identified TCMs. The SIP for the Toledo non-attainment area does not include any TCMs.

The conformity determination for the 2035 Plan was conducted in accordance with the Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, 40 CFR Parts 51 and 93, issued November 24, 1993.

Basically, conformity requires that the total estimated emissions from the transportation system, including projects in the 2035 Plan, are less than the allowable emission amount (called the budget) established in the State Implementation Plan (SIP) for air quality. This comparison is made for each of the years 2009, 2018, 2025, and 2035. The estimation procedure must use the most up-to-date approved forecasts of regional growth, the newest approved estimation model, and computer simulation networks that include all TIP and 2035 Plan projects.

7.2 Conformity Analysis Procedures

The 2035 Plan air quality analysis is performed on a systems level for Lucas and Wood counties in Ohio. The analysis is a cooperative effort of TMACOG and ODOT. TMACOG creates and maintains the area transportation model (called CUBE/VOYAGER) and the various model input files for Lucas and Wood County, Ohio and the southern third of Monroe County, Michigan. The input files include the socio-economic data and forecasts and the network files for the required analysis conditions. ODOT maintains the air quality model (Mobile 6.2) and all the input assumption files for that model (fleet composition, time of day factors, etc.).

Procedures for the analysis are consistent with those defined through the Interagency Process that includes representatives from the MPO, ODOT, Federal Highway, Federal Transit Authority, Ohio EPA, and U.S. EPA. The conformity analysis was performed using the latest model network. The 2009 scenario included all projects that are scheduled for completion in the TIP by 2009. The 2018 scenario included the TIP projects, TIP pipeline projects and 2035 Plan projects scheduled for completion by 2018 and compared to the emission budgets for 2018. Similarly, 2035 Plan projects scheduled by 2025 and 2035 are included in the 2025 and 2035 analysis respectively. The Air Quality Conformity Report of the TMACOG "2008-2011 Transportation Improvement Program" lists all network changes modeled for air quality conformity. This information has also been published separately as the "Air Quality Conformity Analysis and Determination for On the Move: 2007-2035 Transportation Plan."

The analysis included the current approved socio-economic data set used for all traffic forecasts and planning at TMACOG. This data was developed for the 2035 Plan. The Air Quality Conformity Report of the 2008-2011 TIP and the separate "Air Quality Conformity Analysis and Determination for On the Move: 2007-2035 Transportation Plan" provide a summary of the full conformity document.

7.3 Conformity Analysis Results

Table 5 presents the results of the conformity analysis. **Appendix B** of the 2008-2011 TIP and the separate air quality conformity report for the 2035 Plan also present the results of the emission modeling for the area and shows comparisons to the SIP budget for this area. For all years and for both pollutants, the forecasted emissions are below the SIP budget, demonstrating conformity of the 2035 Plan.

The complete Conformity Document was submitted separately to ODOT. It describes, in full, the conformity determination for the Toledo metropolitan area Transportation Improvement Program (TIP) and for the "On the Move: 2007-2035 Transportation Plan." See **Appendix H** for a letter from the Federal Highway Administration stating both documents are in conformity with federal requirements.

Table 5: Comparison of Air Pollution Estimates to Allowable Budgets for the 2008-2011 TIP and the On the Move: 2007-2035 Transportation Plan (estimated daily tons)

Pollutant	ALLOW-ABLE BUDGET 2009*	With current facilities completed by 2009	ALLOW-ABLE BUDGET 2018*	With current facilities, TIP, and plan projects to be completed by 2018	With current facilities, TIP, and plan projects to be completed by 2025	With current facilities, TIP, and plan projects to be completed by 2035
VOC (tons/day)	18.99	16.30	11.20	9.62	7.74	7.90
NOx (tons/day)	33.75	28.86	14.11	12.06	8.53	7.50

*8-Hour SIP Redesignation Plan budget, 15 percent increase from the on-road emissions.

8. Relationship to the Congestion Management Process and Operational/Management Strategies

SAFETEA-LU requires that metropolitan transportation planning processes include a Congestion Management Process (CMP). The new CMP is a reworking of the previous requirements of the Congestion Management System (CMS). The main changes were to rename it to CMP, to emphasize that it was to be part of the planning process rather a separate activity, and to emphasize management of the existing infrastructure.

The federal definition of CMS, the predecessor of the CMP, was a systematic process for managing traffic congestion and providing information on transportation system performance. This is to be an information processing system to support decision-making. It will identify and monitor congestion, both currently existing and anticipated to occur in the future. Secondly, the CMS will evaluate the effectiveness of a number of transportation alternatives or strategies that might alleviate that congestion. Finally, after strategies are implemented, the CMS will examine the implemented strategies to measure how successful they were in alleviating congestion. If they have not proven successful, new or additional solutions may be explored.

At TMACOG, results of the CMS and subsequent congestion analyses have been reported to decision-makers, and contribute to development of regional plans and policy. The TMACOG CMS Manual of Practice was approved October 1998. The first CMS report, TMACOG's Status Report on Transportation System Congestion for the Toledo Metropolitan Area, was completed in November 1998.

While not documented as a separate CMP, results of TMACOG's traffic forecasts and congestion analysis, plus other information on transportation system performance, were utilized in the process of creating the region's long range transportation plan "On the Move: 2007-2035 Plan" (2035 Plan). This data was also used in evaluating projects for TMACOG's four-year federal capital improvement budget known as the Transportation Improvement Program (TIP). TMACOG is currently investigating the requirements of SAFETEA-LU in order to document this work as the CMP, which is slated for completion during Fiscal Year 2008.

A related requirement of SAFETEA-LU is that the regional plan shall include "operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods." The 2035 Plan process addressed this requirement by creating a subcommittee, the Safety and Efficiency Goal Group that was specifically charged with developing projects, initiatives and policies to reduce congestion and improve safety. Group members used system analysis and congestion forecast maps and data to identify the areas of concern. In addition to recommending highway widening projects, they identified many locations and corridors at which traffic management strategies such as Intelligent Transportation System applications, should be considered. Their recommendations are included in the **Appendix D** (Plan Development and Evaluation). They focus on use of freeway management systems, traffic signal coordination, access management plans, and completion of safety studies to identify both low cost/short term and longer term solutions.

For a list of the specific projects and initiatives incorporated in the plan to address congestion and safety in the region, see **Chapter VI-1**. (Safety and Efficiency Goal). To view the congestion maps used in the development and analysis of this long range plan, see **Chapter V**, Plan Development and Evaluation.

9. Consultation on Plan Development

In order to minimize conflicts, in developing its metropolitan transportation plan, TMACOG should consult with agencies and officials responsible for other planning activities are affected by transportation. Recommended groups to contact, according to federal rules, include planning

and economic development agencies, environmental protection agencies, airport operators, and freight transportation stakeholders.

TMACOG consulted with these groups throughout the plan process, first of all by inviting representatives of these groups to participate in the plan leadership group. Inclusion of these representatives provided a direct communication link between key agencies and stakeholders and the plan process, allowing for coordination of efforts.

The following table summarizes the consultation process. More details on consultation with the environmental agencies are found in **Chapters II** and **V** and **Appendix E.** A complete list of consultation contacts is documented in the "On the Move: 2007-2035 Transportation Plan Development Report," a reference book on file at TMACOG.

Table 6
Summary of Groups Consulted During 2035 Plan Development

Type of Agency	Agency	Interaction
Economic development	Regional Growth Partnership	Seats on plan task force. Provided input on future growth and development. Transportation analysis zone population and some employment sector data revised to reflect planned growth (example, in Levis Commons area).
	Toledo Area Chamber of Commerce	
	Toledo-Lucas County Port Authority	
	Wood County Economic Development Commission	
Environmental protection	Environmental Protection Agency	TMACOG obtained natural resources data (wetlands, prime farmland, etc.) Provided early draft of plan projects and solicited comments and concerns. Input incorporated into plan.
	Department of Natural Resources	
	Various others: see **Appendix E**	
Airport operations	Toledo-Lucas County Port Authority	TMACOG obtained airport master plan, met with airport staff to review short and long-term plans and surface transportation access needs. Incorporated runway extension and improved road access in 2035 Plan.
Freight movement	Toledo Trucking Association	Seats on plan task force and/or TMACOG Freight Committee (provided input to task force). Identified freight transportation needs based on existing conditions or future plans. Several freight-related projects and initiatives included in plan.
	Freight railroad companies	
	Toledo-Lucas County Port Authority	
	Freight shippers (industry)	

Table 6 Summary of Groups Consulted During 2035 Plan Development		
Type of Agency	**Agency**	**Interaction**
Land use management	Lucas, Wood and Monroe County planning departments	Consulted with planning department staff, reviewed regional plans for consistency with 2035 Plan employment and population forecasts. Adjusted forecasts as needed. Reviewed Monroe County greenways plan and incorporated into 2035 Plan bikeway network.
Natural resources and conservation	Maumee River Remedial Action Program (RAP)	Worked with RAP representatives to review RAP stage 1 and 2 plans. Utilized / compared data from both documents in 2035 Plan development.
	Metroparks of the Toledo Area	Seat on plan task force. Consulted on location of sensitive areas and potential environmental impacts. Incorporated information and input as appropriate.
	Natural areas conservancies	
	Various others: see **Appendix E**	
Historic preservation	Ohio Historic Preservation Office	Contacted during environmental consultation process. Obtained, mapped and used historic building and district location information in plan evaluation.
Human service transportation providers	Office on Aging	Seats on plan task force. Reviewed Office on Aging data on trips provided to seniors for medical services. Incorporated several transit projects, initiatives and polices in plan.
	Ability Center (disabled clients)	
	Toledo Area Regional Transit Authority (paratransit provider)	
	TMACOG Commuter Services Council (various agency representatives)	
Units of local government	Cities, villages and townships in planning area	Direct mailings to request input on needs, suggested projects and comment on draft plan. Concerns/suggestions were referred to the task force (goal groups) for consideration during the plan development process.