5. PLAN DEVELOPMENT AND EVALUATION

5.1 Developing Solutions

In developing the original 2035 Plan (2007), seven working groups, called “goal groups” were formed, one for each of the seven plan goals. Members were drawn from the plan task force and the larger community. These groups reviewed public input and technical data, helped define problems to be solved, and brainstormed solutions: projects to build, initiatives to fund and undertake, and policies to guide future decisions in the region. These were referred back to the full planning committee for evaluation and ranking.

To develop the 2035 Plan–Update 2011, the full plan task force worked with staff to review public comment and the updated regional analysis. From identified needs, a list of potential new plan projects was developed. Staff and the committee also considered the status of projects (and initiatives) already on the 2035 Plan: whether they had been completed or had otherwise progressed, or whether the need for or commitment to them had diminished.

5.2 Task Force Evaluation and Ranking

For the 2035 Plan–Update 2011, both the newly proposed and the existing plan projects were evaluated using measures of effectiveness based on the adopted goals. For consistency, 2035 Plan–Update 2011 used the same measures that were developed for the original 2035 Plan. (See Evaluation Measures in Appendix D.) The plan task force used the evaluation data to rank projects in regional priority order.

Committed projects were identified and put in a separate list. For plan purposes, “committed” included both fully funded projects and projects in development that were expected to move forward and obtain construction funding. Committed projects were placed in priority order based on regional importance, urgency, and expected construction date. (See committed projects ranking table in Appendix D.)

Plan initiatives were updated and listed in their previous (2035 Plan) rank order. The plan task force (the standing TMACOG Transportation Planning Committee) and staff will set priorities for initiatives to be addressed each fiscal year. Plan policies were also updated.

More information on project ranking can be found in the original 2035 Plan report.

5.3 Fiscal Constraint Analysis

As detailed in Chapter 2, the 2035 Plan is fiscally constrained. Once projects were selected and ranked, the estimated dollar resources were used to determine where to “draw the line.” Projects for which funding is already committed, plus those for which funding is expected to be available, are included in the plan as committed and priority projects respectively. The remaining projects are shown on a reserve list and map (see Chapter 6).
5.4 Environmental Evaluation

5.4.1 Environmental Consultation

To insure that the region’s transportation plan is sensitive to protection of the natural and manmade environment, the current federal transportation law (SAFETEA-LU) calls for consultation with environmental agencies. That consultation is to include “…comparison of transportation plans to inventories of natural or historic resources, if available.”

TMACOG obtained environmental inventory information from the Ohio Department of Transportation (ODOT) and other sources. Staff mapped this data against draft transportation plan projects that fall within or adjoin sensitive areas. These maps show projects that potentially impact wetland areas, parks and preserves, significant stream habitats, wooded areas, prime farmland, the Oak Openings region, 100-year flood plains, historic sites, and Environmental Justice target areas (low income and minority neighborhoods).

These maps – along with a list describing all the draft plan projects – were posted on the TMACOG website. TMACOG staff also developed a table identifying the projects with the most potential to significantly impact key environmental resources (See Appendix E for table and for sample environmental maps. Additional maps are online at tmacog.org/onthemove.htm.)

In summary, many plan projects adjoin sensitive environmental resources. Required use of best management practices, plus environmentally sensitive project design (such as placing bikeways on boardwalks where they cross wetlands) should address most of these potential impacts.

The most significant environmental issue is the potential impact of projects at and near the Toledo Express Airport – highway relocation and runway expansion – on one of our region’s greatest environmental treasures, the Oak Openings region. These projects (Priority Project 30 and Reserve Project 57) will require review to determine specific impacts and mitigation strategies associated with wetlands, streams, and threatened and endangered species. “Section 4(f)” review and mitigation may also be required if the affected land falls within the boundaries of Oak Openings Metropark or the growing number of acres being purchased for the Oak Opening region nature preserves. See the environmental mitigation section of Appendix E for more details on how the potential impacts on the Oak Openings region may be addressed.

TMACOG requested comment from state and area environmental agencies. Materials sent to them were an early draft list of plan projects, the impacts on key environmental resources table, and a link to the environmental resources/draft projects maps. A table of environmental contacts and a summary of responses received are included in Appendix E.

5.4.2 Environmental Mitigation

Most of the projects in the 2035 Plan will use federal transportation funding and thus be subject to federal environmental requirements. (Typically these projects will be managed by – or completed by a local jurisdiction under the supervision of – the state’s Department of Transportation.) A detailed discussion of environmental mitigation issues, requirements and techniques is included in Appendix E. This appendix includes information developed by the Southeast Michigan Council of Governments (SEMCOG) and a link to additional resources posted on the SEMCOG website (www.semco.org)

It should be noted that similar actions/rules regarding environmental mitigation apply to other types of federal funding. An example is airport runway projects that would be funded through the Federal Aviation Administration.

As early as possible, agencies seeking to sponsor the projects in this plan should consider the potential environmental implications. Context-sensitive strategies and designs should be developed as part of a collaborative process. Through informal discussion with environmental groups and agencies at a preliminary stage, it may be possible to identify creative solutions that allow beneficial infrastructure improvements while protecting valuable natural and cultural resources.

### 5.5 Environmental Justice (EJ) Analysis

The U.S. Environmental Protection Agency (EPA) Office of Environmental Justice (EJ) defines EJ as:

“The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socio-economic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.”

EJ applies to all programs and activities of federal-aid recipients, whether specific programs and activities are federally funded or not. This means that any agency that receives federal funds must:

- make a meaningful effort to involve low income and minority populations in the processes established to make decisions regarding its programs and activities, and
- evaluate the nature, extent, and incidence of probable and adverse human health or environmental impacts of its programs and activities upon minority or low income populations.

The “TMACOG Public Involvement Policy” (available from TMACOG and on the TMACOG website) outlines how target populations are included in regional transportation planning. **Chapter 3** of this plan notes how target EJ populations were included in the public involvement process for the 2035 Plan.

In the project evaluation and ranking process, several measures of effectiveness helped to identify projects that would have either positive or negative impacts on low income and minority neighborhoods. Examples are indicated in **Table 5.1**.
Table 5.1
Project Evaluation Measures Related to Environmental Justice (EJ)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Relationship to EJ Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will environmentally sensitive areas (prime farmland, wetlands, floodplain, parkland, forest) be impacted?</td>
<td>Identify negative environmental impacts on EJ areas</td>
</tr>
<tr>
<td>Does the initiative support redevelopment of urban core areas (EJ + high density + CBD)?</td>
<td>Identify positive economic impacts on EJ areas</td>
</tr>
<tr>
<td>Percent of regional population served by full-service transit (in 2035)</td>
<td>Increase transportation for low income households</td>
</tr>
<tr>
<td>Serves reverse commute (Transit: # of potential trips between EJ/low income and minority areas and job concentration centers with new transit service)</td>
<td>Increase EJ area’s access to jobs</td>
</tr>
<tr>
<td>Non-auto (motorized) transportation: Improves frequency, reliability, amenities; increases ridership</td>
<td>Improve transportation for low income households</td>
</tr>
<tr>
<td>Improves safety for non-drivers</td>
<td>Improve safety for members of non-car households</td>
</tr>
<tr>
<td>Percent of elderly within ¼ mile of transit route</td>
<td>Increase transportation for low income elderly</td>
</tr>
<tr>
<td>Improves access to education facilities for non-drivers</td>
<td>Increase education options for low income households</td>
</tr>
<tr>
<td>Number of lane miles reconstructed, maintained, or upgraded for more effective use on existing alignment</td>
<td>Identify road upgrades with minimal impact on neighborhoods (no new right-of-way)</td>
</tr>
<tr>
<td>Development density of area served</td>
<td>Identify projects in urban core areas</td>
</tr>
</tbody>
</table>

Once projects were selected for the draft plan, they were mapped against low income and minority areas. A table was prepared summarizing the potential environmental impacts of projects in the EJ target areas. This confirmed that the target neighborhoods would receive a fair share of transportation investment: 66 out of 125 projects or 53% of all projects, including committed, priority and system preservation projects. Fifty-two of the projects in EJ areas, or 42% of all projects, would have minimal impact because they likely would be on existing alignment and not require additional right-of-way. (See Appendix F for the EJ project environmental impact table and maps.)

As plan projects seek federal funding through the TMACOG Transportation Improvement Program, or the through the states of Ohio or Michigan, and move towards construction, more detailed analysis will be required to identify any adverse impacts on neighborhoods.

5.6 Other Plan Analysis

Once the draft plan projects list had been determined, staff completed some comparisons designed to identify any significant shortcomings in relationship to plan goals. This included Environmental Justice analysis. Staff and the task force also looked at the balance of spending among transportation modes (see Figure 5.1). All modes were represented, and the proposed investment was found to be in keeping with the amount of travel per mode in the region.
Year 2035 congestion forecasts, prepared with TMACOG’s traffic forecasting model, were used to compare expected congestion with and without plan projects. (See Figure 5.2, “Build 2035 Congestion Locations” and Figure 5.3, “No-Build Congestion Locations.”) This analysis showed that with the addition of the proposed projects in the 2035 Plan–Update 2011, congestion on major thoroughfares would be reduced.

5.7 Air Quality Conformity Analysis

A final step in plan analysis was subjecting plan projects to air quality analysis. Through use of a forecasting model, it was determined that building the projects would not cause the region to exceed allowable levels of air pollution. For details, see Chapter 2, Section 2.7, Air Quality Conformity.

5.8 Disposition of Significant Public Comment

During the public review of the draft 2035 Plan, of the numerous comments received, the following were deemed of highest significance and were considered for possible modification of the draft plan. The issues raised and the TMACOG’s responses are as follows:

Project C-2 (Project 12 in 2035 Plan), Build North Baltimore area road improvements from I-75 to CSX intermodal yard (SR 18 bypass): In 2006-2007, local officials were concerned about the draft plan map, which showed a specific road location for this project. In 2010, as the CSX facility neared completion, citizens expressed various concerns about how increased truck and car traffic would be routed and what the impacts there would be on nearby communities. (See public comments in Appendix D.)

Actions taken: In 2006-2007, TMACOG staff met with local officials in the project area. In response to their concerns, the project was changed to a non-specific location (corridor) and...
reference to “SR 18 bypass” in the project description was deleted. These changes were carried over to the 2035 Plan–Update 2011. In 2010, communities with specific concerns were referred to ODOT, which was then in the process of conducting analysis to identify the preferred routing of improved connection to I-75.

**Priority Project 30** (formerly 4), U.S. 20A widening/relocation and **Reserve Project 57** (formerly 59), extend Toledo Express Airport north-south runway, and former 60, new east-west runway: Serious concerns were expressed by Metroparks of the Toledo Area, other environmental organizations and agencies, and several citizens, about impacts on the Oak Openings region.

Actions taken: The Metroparks and Port Authority (airport operator) representatives participated in a meeting with the plan task force to discuss this issue. Guided by this input, the task force voted to delete project 60, and modify the other two projects to add “pending evaluation of environmental impact on the Oak Openings region.”

**Former Project C-5** (removed from 2035 Plan–Update 2011 because soon to be completed), U.S. 24 new freeway: Comment was received from the Maumee Valley Heritage Corridor organization that a bike crossing is needed for National North Country Trail across the planned new U.S. 24 freeway. This major east-west trail is under development.

Actions taken: The task force strengthened plan policy 5 to emphasize need for bicycle/pedestrian accommodation on major bridges across expressways, rivers and railroads.

**Need to protect wildlife** from road impacts.

Actions taken: task force added policy 16 to address this issue.

**Project 9**, I-475 at SR 25 interchange upgrades, included widen SR 25 bridge and add pedestrian/bicycle facilities; address weave, I-475 between SR 25 and I-75 (formerly part of Project C-19, I-475 improvements): both during the preparation of the original 2035 Plan and 2035 Plan–Update 2011, the City of Perrysburg emphasized the importance of this project to them.

Actions taken: As part of 2035 Plan–Update 2011, the former “blanket” project (C-19) covering large sections of I-475 was broken down into relatively smaller, more specific projects reflecting the conclusions of a study conducted for ODOT. The Perrysburg area improvements ranked fairly well against plan goals, and were selected as Project 9.

Other comments received were determined to require no specific action. All comments were considered as the task force finalized the plan, and as appropriate were referred to a government jurisdiction or TMACOG committee for further consideration.
Roads predicted to be congested in 2035 after proposed projects are completed. The TMACOG traffic forecasting model used the following data:

- Socio-economic data (population, employment) for 2035
- Road network after building committed, Transportation Improvement Program (TIP), and 2035 Plan projects

*Level of service (LOS) is a quality measure describing operational conditions within a traffic stream. Six levels are defined from A to F, with LOS A representing the best operating conditions and LOS F representing the worst.

*LOS E* non-freeway (arterial) intersection

*LOS F* non-freeway (arterial) intersection

Congestion at non-freeway (arterial) intersection

Freeway congestion

^A single point does not indicate the entire intersection is congested; in most instances only one direction of travel is a LOS E or F.
2035 No-Build Congestion Locations

Roads predicted to be congested in 2035 if proposed projects are not completed. The TMACOG traffic forecasting model used the following data:

- Socio-economic data (population, employment) for 2035
- Road network after building projects with committed funds and Transportation Improvement Program (TIP) projects

*Level of service (LOS) is a quality measure describing operational conditions within a traffic stream. Six levels are defined from A to F, with LOS A representing the best operating conditions and LOS F representing the worst.

Downtown Toledo Inset

*A single point does not indicate the entire intersection is congested; in most instances only one direction of travel is a LOS E or F.*