

# Final Report

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Bloomington Metropolitan Planning Organization

Certification Review Report

July 2006

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Federal Highway Administration  
Indiana Division Office  
575 N. Pennsylvania Street, Suite 254  
Indianapolis, IN 46237

## Purpose

The primary purpose of the Bloomington Planning Review was to ensure that the planning requirements of 23 U.S.C. 134 and 49 U.S.C. 5303 to 5305 are being satisfactorily implemented. This process offers an opportunity to enhance the planning process and improve the quality of transportation investment decisions.

Although the Indiana Division interacts with MPO planning officials on a routine basis: reviewing and approving planning products, providing technical assistance, and promoting good practice, the formal structured assessment of a Planning Review forces a hard look at the process and provides an added stimulus for continued progress in implementing the regulations.

In addition, noteworthy practices can be identified and shared with other states, metropolitan planning organizations, and transit operators. Overall, such reviews can improve the effectiveness and efficiency of the planning process to assure that the planning process is addressing the major issues facing the area.

## Scope of Work

Under the provisions of 23 U.S.C. 134(i)(5) and 49 U.S.C. 5305(e), certification reviews are required in transportation management areas (TMAs), defined as urban areas over 200,000 population. Non TMAs, MPOs under 200,000 in population, are reviewed to accomplish the same objectives as TMAs but their review process does not require a certification action.

On an annual basis each urbanized area must self-certify that its planning process is being conducted in accordance with applicable planning, air quality, Title VI, DBE, and ADA requirements. The Federal certification review and planning review must verify these provisions from the self-certification, as well as taking a more detailed look at the technical and administrative elements of the process, such as:

- MPO Overview
- Cooperating Agencies
- Land Use and Growth Issues
- Air Quality Conformity
- Long Range Transportation Plan (LRTP)
- Transportation Technical Model
- Transportation Improvement Plan (TIP)
- Unified Planning Work Program (UPWP)
- Public Involvement

## Background

The Bloomington MPO has experienced some program setbacks in the past year. The MPO experienced personnel losses when most of their planners left for promotions with other cities in Indiana. The personnel issues resulted in the Long Range Transportation Plan (LRTP) not being updated in a timely manner. Also noteworthy is the political opposition to the I-69 corridor. Most of Bloomington's elected officials have opposed the I-69 project and there was concern by INDOT and FHWA that the project would not be included by the MPO in the 2030 LRTP. The Bloomington Policy Committee unanimously approved the Plan update, including the I-69 corridor and the opposition to the issue has subsided. It is anticipated that as the project advances and the need for INDOT to have the project placed in the TIP, the project will become an issue again.

The MPO is a section within the City of Bloomington's Planning Department. Only one of the Planning Department's employees is actually a full time employee dedicated to working solely on MPO activities. Other positions shared with the city include the MPO's Executive Director, Assistant Director, Long Range Planning Manger, and three other long range planners are all shared positions.

## Review Results

On May 11 and 12, 2006, the Indiana Division of the Federal Highway Administration (FHWA) conducted a planning review of the Bloomington Metropolitan Planning Organization. The MPO was provided with a complete list of review questions in advance of the review session and provided a thorough and comprehensive response to all questions. A copy of the MPO's responses is attached as Appendix A. The following is a list of corrective actions, if any, and recommendations made to the MPO Staff to improve their transportation planning process.

## Corrective Actions

There were no corrective actions identified during this review.

## Recommendations

Listed below are the recommendations that were identified during the review.

1. The Planning Review was scheduled to occur over a two day period. The Review was coordinated with the MPO to be held at a time when all of the staff could attend. Despite this advance coordination, both the MPO Executive Director and the Assistant Director were not present for the second day of the Review. Planning Reviews are an opportunity for the MPO's leadership to accurately depict the current status of the MPO's planning

process and it is FHWA's expectation that senior managers be present for such reviews. ***It is recommended that in future Planning Reviews, the MPO's leadership attend all sessions of the Planning Review to insure that the MPO is properly represented and the information being presented is accurate, current and represents the official position of the MPO's leadership.***

2. Another reoccurring issue that has occurred in past UPWP cycles is the use of member governments to perform planning work for the MPO. With the exception of consultants used to prepare Long Range Certifications and Traffic Demand Modeling, this is not a common practice. There was concern by FHWA in the past that the Third Party Practices or Service Agreements used by the MPO were not producing planning products but rather being used to fund member governments. ***Third Party Agreements or Service Contract Agreements for area governments is highly discouraged and it is recommended that the MPO discontinue this practice.***

3. Directly associated to the issue of Third Party or Service Contract Agreements is the practice of allowing some of the Policy and Technical Committee members to receive some or part of their salaries as a direct result of votes they have participated in. Specifically, the Monroe County Engineer and the Planner of the Town of Ellettsville are voting members of the Policy and Technical Committees and both members participate in votes dealing with the approval of Third Party or Service Agreements that are mechanisms for both Monroe County and the Town of Ellettsville to receive some form of remuneration. ***It is recommended that the Policy or Technical Committee membership not consist of members who will receive a direct or indirect financial benefit as a result of membership.*** The public does not always understand or condone such relationships and it is recommended that the MPO Policy and Technical Committee membership be free of any possible impropriety that the public might infer.

4. The MPOs project selection process was also discussed during the review. The project selection process the MPO uses is sufficient; however, it is not aligned to INDOT's Planning and Oversight Committee (IPOC) process. ***It is recommended that the MPO develop a project selection criterion that is aligned to the IPOC process.*** Such a process by the MPO will make project selection more compatible between the MPO and INDOT, thereby promoting consistency in transportation planning.

5. The MPO's source of funding was also an issue that was discussed during the Planning Review. The MPO does not have a fixed membership fee agreement with the City of Bloomington, Town of Ellettsville, or Monroe County. Each year the MPO must request funds from each government to plan its yearly activities. The MPO needs a constant and reliable stream up financial resources by which to plan transportation projects in the region and without some consistent method, the MPO cannot adequately plan for future transportation needs. ***It is recommended that the City of Bloomington, Town of Ellettsville and Monroe County work with the MPO to develop a funding mechanism that will provide a reliable financial stream.*** Many MPOs have developed membership agreements with local governments that require fees based upon a fixed cost per capita.

While this is not a Federal requirement, such funding agreements provide revenue to the MPO to budget for planning studies, personnel needs, and future equipment purchases.

6. During the Planning Review it was discussed that the MPO should be working over the next year to comply with the new SAFETEA-LU planning requirements. The new SAFETEA-LU legislation requires that both the State DOT and the MPO comply with all of the new requirements by July 1, 2007. ***It is recommended that the MPO work closely with INDOT and FHWA to make the next TIP and Transportation Plan SAFETEA-LU compliant to insure that all projects in the Plan and TIP can be obligated with Federal funds after July 1, 2007.*** MPOs that fail to meet these new Federal requirements are at risk of having transportation projects delayed and not included in the next INDOT Statewide Transportation Improvement Program that is currently scheduled for submission to FHWA by July 1, 2007.

## Findings

The overall planning process of the Bloomington MPO has adequate procedures for the development of the Unified Work Program, the Transportation Plan, and the Transportation Improvement Program. Based upon this Planning Review, the Bloomington transportation planning process is found to substantially comply with section 134 of Title 23 of the United States Code, Section 8 of the Federal Transit Act, Sections 174 and 176 (c) and (d) of the Clean Air Act.

If you have any questions, please contact David Franklin, FHWA at 317-226-7489.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "for Robert Tally, Jr.", is placed over a light yellow rectangular background.

Robert E. Tally, Jr., P.E.  
Division Administrator  
Federal Highway Administration

Attachment A  
MPO Questionnaire

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## TRANSPORTATION PLANNING REVIEW GUIDELINES

### METROPOLITAN PLANNING PROCESS

#### OVERVIEW

**Provide a general briefing of the metropolitan area, i.e. demographics, transportation issues, etc, and discuss the major transportation issues of the area, highlighting any changes in the past three years.**

A number of major transportation issues currently impact the Bloomington area. Most notably, the on-going process of developing the Interstate 69 corridor through Monroe County has had a significant impact on the community. While the general corridor through Bloomington has been mapped, final designs for access points and frontage road systems have not yet been determined. In addition, the corridor may be changed to a toll road, further altering access and traffic patterns along the route. The current uncertainty creates challenges in the implementation of locally desired roadway improvements in the vicinity of the I-69 corridor.

In general, east-west traffic movement in Bloomington is an issue. Many east-west road corridors through the community are incomplete. Some of the corridors that are connected from east to west have serious congestion problems. The recently adopted *2030 Long Range Transportation Plan* for the MPO proposes a number of projects to address this issue.

In Bloomington, and more recently in Ellettsville and Monroe County, there is a growing interest in alternative transportation amenities. Residents are supportive of greenway trail development, as well as the implementation of other features such as sidewalks, sidepaths, and bike lanes. The key challenge for alternative transportation is a lack of dedicated resources with which to implement such improvements. These amenities are recognized as a key component of economic development, environmental stewardship, and multi-modal accessibility in the community. More financial resources will need to be dedicated to these issues in the future.

In addition to bicycle and pedestrian amenities, public transit usage is also experiencing strong growth. In 2005, ridership on Bloomington Transit reached nearly 2.5 million passengers. Growth has increased in recent years due to a cooperative arrangement with the Indiana University Bus system to allow students to ride for free on any Bloomington bus. Local transit systems must continue to grow with ridership while maintaining their high level of service.

#### MPO ORGANIZATION

- 1. How are members chosen for the MPO's executive and technical functions and what jurisdictions do they represent? What is the committee structure and the responsibilities of each?**

The Bloomington/Monroe County Metropolitan Planning Organization adopted new bylaws in December 2005. These bylaws provide a specific description of the roles and membership for each of the three committees that comprise the MPO. The jurisdictions represented in the MPO are:

- City of Bloomington
- Monroe County
- Town of Ellettsville
- Indiana University

The three MPO committees are:

### *Policy Committee*

The Policy Committee serves as the decision-making body of the MPO. They provide oversight on all projects, policies, and programs pursued by the MPO. This includes official adoption of the Long Range Transportation Plan, the Unified Planning Work Program, and the Transportation Improvement Program. Membership of this committee is comprised of elected and appointed officials from the key jurisdictions.

### *Technical Advisory Committee*

The Technical Advisory Committee provides technical-level input on MPO projects, policies, and programs. The committee reviews these items and makes recommendations to MPO staff as well as to the Policy Committee. All business conducted by the MPO is required, per the adopted bylaws, to be reviewed by the Technical Advisory Committee prior to a decision by the Policy Committee. Membership of this committee is comprised of technical staff representing the same key jurisdictions as the Policy Committee membership.

### *Citizens Advisory Committee*

The Citizens Advisory Committee provides public input on MPO projects, policies, and programs. All business conducted by the MPO is required, per the adopted bylaws, to be reviewed by the Citizens Advisory Committee prior to a decision by the Policy Committee. Membership of the Citizens Advisory Committee is open to the general public, as well as a wide variety of key community organizations that are specifically invited to send representation.

## **2. Are all jurisdictions represented? Are all modes represented?**

All jurisdictions are represented across all three MPO committees. The committees also provide representation for all modes of travel the MPO area.

## **3. How is the MPO staff organized and what are its responsibilities?**

The staff of the Metropolitan Planning Organization is a subset of the City of Bloomington Planning Department staff. As such, the staff has responsibilities to the City Planning Department as well as to the Metropolitan Planning Organization. Generally, the MPO staff is arranged as follows:

- *MPO Director:* The Assistant Director of the Bloomington Planning Department serves as the MPO Director. Responsibilities include overall responsibility for MPO, including policy direction and administration.
- *Long Range/Transportation Manager:* This position is responsible for the day to day management of MPO staff, as well as the development of key MPO products such as the UPWP and the TIP.
- *Senior Transportation Planner:* This position provides the primary, full-time staff support for the MPO, with responsibilities for executing the Unified Planning Work Program.
- *Transportation Planner:* This position provides additional staff support for the MPO, focusing primarily on bicycle and pedestrian planning activities.
- *City Planning Director:* The Planning Director serves on the Technical Advisory Committee as a representative of the City of Bloomington as well as provides policy guidance to the MPO staff.
- *Third Parties:* Several third-parties have agreements with the MPO to execute portions of the UPWP. This includes staff from the City of Bloomington Public Works Department, the County Highway and Planning Departments, the Town of Ellettsville Department of Planning Services, and Bloomington Transit.



The responsibilities of the MPO staff are documented within the annual Unified Planning Work Program. Generally, these duties include:

- Execution of the annual UPWP
- Development and maintenance of the Transportation Improvement Program
- Regular updates and maintenance of the Long Range Transportation Plan
- Providing staff support for all MPO Committee meetings
- Bicycle and pedestrian planning activities
- Development and implementation of the MPO Traffic Counting Program
- Administration of the grants that fund MPO staff activities
- Coordination with regional, state, and federal partners on MPO transportation programs and activities
- On-going implementation of the MPO public involvement process

## COOPERATING AGENCIES

### 4. Who is the transit operator(s)? What areas does it serve? How is it funded?

#### *Bloomington Public Transit Corporation (Bloomington Transit)*

Fixed route service operates on nine numbered routes serving most areas of Bloomington (see Figure 3-2 of the 2030 LRTP). Days of service, span of service hours, and frequency vary by route (see Table 3-4 of the 2030 LRTP). The route structure currently includes five radial routes which operate in a hub and spoke fashion from downtown Bloomington, three campus-oriented routes, and one cross-town local route. Radial routes are interlocked, with downtown serving as the mid-point for the route. A downtown transfer facility is provided whereby passengers can make convenient transfers between routes. Bloomington Transit fixed route service is limited to the City of Bloomington corporate limits. Bloomington Transit is funded through Federal grants and fare box revenues.

Bloomington Transit also operates a curb-to-curb transportation service for persons with disabilities, known as “BT Access” service. BT Access provides vital mobility for persons with disabilities who cannot use regular fixed route service due to the nature of their disability. BT Access operates days and hours comparable to those that the fixed route service operates. The BT Access service area includes the entire city of Bloomington during weekdays. The service area is more limited on weeknights and weekends to include all areas within  $\frac{3}{4}$  mile of fixed routes operating during those days and times.

#### *Indiana University Campus Bus*

The Indiana University Campus Bus service is operated as an auxiliary enterprise of Indiana University and primarily serves student-oriented trips between locations on the IU campus. Some select satellite bus service is provided to off-campus locations, in addition to an extensive park and ride service located at the IU Memorial Stadium lot, as well as connections to the BT Downtown Transit Center. The service operates seven days a week, 7:30 A.M. until midnight. Routes and schedules are reduced during summer and other semester break-periods during the year, and it does not operate on Thanksgiving Day, Christmas Day, and New Years Day. The IU Campus Bus service is funded through the operating budget of Indiana University. Some Federal funds are used by IU Campus Bus for capital improvement projects related to the bus system.

#### *Rural Transit*

Rural Transit serves the residents of Monroe, Lawrence and Owen counties. The Area 10 Agency on Aging operates this combination fixed-route and demand response service. Rural Transit’s routes concentrate on the rural areas of Monroe County, outside the city limits of Bloomington, as

well as all of Owen and Lawrence counties. The service begins at the BT Downtown Transit Center in Bloomington and operates from 6:00 A.M. to 9:30 P.M., weekdays only. Transfers from Rural Transit to both the Bloomington Transit and Indiana University Campus Bus Service systems are available free of charge. Rural Transit is funded through Federal grants and fare box revenues.

**5. What is the role and how is the transit operator involved in the MPO's overall planning and project development process?**

The local transit operators are represented on the MPO Policy, Technical Advisory, and Citizens Advisory Committees. They participate in all facets of the planning and project development process. Bloomington Transit is one of the Third Parties that contract with the MPO to execute portions of the Unified Planning Work Program. They also participate closely in the development of the UPWP. The transit operators are also involved in the development of the Transportation Improvement Program, including the specific components that apply to their operations and capital improvements. The MPO has a strong relationship with all local transit providers that results in an effective process for their inclusion in MPO activities.

**6. What operations and maintenance responsibilities does the State DOT have within the metropolitan area? What is the role and how is the State DOT involved in the MPO's overall planning and project development process?**

INDOT maintains a sub-district office in Bloomington to service state facilities in the area. Specifically, the Bloomington MPO area contains State Roads 37, 45, 46, 48, and 446, as well as the projected route for Interstate 69. INDOT has representatives that serve on all three MPO Committees. INDOT representatives have voting privileges on all committees as well. In addition to their role on the MPO Committees, the MPO staff coordinates closely with INDOT during the development of key documents and programs, such as the Long Range Plan, the TIP, and the UPWP.

**7. How is the MPO involved in safety and security planning for the metropolitan area's transportation system? Is there an emergency preparedness plan in place that includes all metropolitan area transportation, safety, and law enforcement agencies? What is the role of the MPO in the coordination of civil defense and emergency preparedness planning involving transit, public safety and law enforcement agencies?**

The MPO has not been involved in safety and security planning for the metropolitan area's transportation system. The individual stakeholder jurisdictions within the MPO manage safety and security planning through their own police, fire, and rescue services. Likewise, the MPO has not been a part of coordination of civil defense or emergency preparedness. Any such planning has been conducted by local jurisdictions independently of the Metropolitan Planning Organization.

**8. Are there dedicated sources of transportation funding for local agencies? Are any innovative financing activities (tapered funding, state infrastructure banks) underway or contemplated?**

The local agencies utilize a number of dedicated funding sources for transportation improvements. Among these funding sources are:

- Motor Vehicle Highway Account (MVHA) Fund receipts for the City of Bloomington and Monroe County have varied substantially between 2001 and 2005 but are expected to stabilize in future years. MVHA funds must be used for the construction or reconstruction and maintenance of streets and alleys.
- Local Road and Street Account (LRS) Funds, including special accelerated allocations are available for capital investment; however, a portion of the funds must be set aside for

“preservation” projects such as resurfacing, intersection/signalization and safety improvements.

- Wheel Tax Funds for Bloomington and Monroe County are used for resurfacing and minor roadway rehabilitation projects.
- The Monroe County Cumulative Bridge Fund will continue to be dedicated to bridge preservation for the cost of construction, maintenance, and repair of bridges, approaches, grade separations and county-wide bridge inspection.
- The City of Bloomington and the Monroe County Cumulative Capital Development Funds may be used for major roadway capital investments.
- Both the City of Bloomington and Monroe County have utilized Tax Increment Financing as a key tool for transportation infrastructure projects.

**9. What was the process for smoothing the urbanized area boundary after the census? Have there been any changes to the metropolitan planning boundary since the previous planning review? Are there any contemplated or needed?**

MPO staff worked closely with INDOT staff in the process of revising the urbanized area boundary after the 2000 Census. Once the proposed urbanized area boundary was established, a review of the metropolitan planning area boundary was undertaken. Over a period of several months, MPO staff worked with state and federal authorities, local partners, and the MPO committees to create a proposed new metropolitan planning area boundary. The MPO Policy Committee endorsed the proposed boundaries with their vote in September 2005. The endorsed boundaries were submitted to INDOT for final approval at that time. Since then, no official action has been taken by INDOT, and the MPO awaits final confirmation of the proposed urbanized area and metropolitan planning area boundaries.

**10. Do interagency agreements between the MPO, State DOT(s), and transit operators exist and are such agreements current? Have there been any changes to interagency agreements among the MPO, State DOT(s) and transit operator(s) since the previous planning review?**

Interagency agreements between the MPO, INDOT, and the transit operator are on file with the Metropolitan Planning Organization. These agreements are current through the present fiscal year (FY 2006). There have been no significant changes to the agreement since the last self-certification process by the MPO in 2004.

## **LAND USE/GROWTH ISSUES**

**11. Is there a regionwide land use plan? How is it maintained and updated? Is it consistent with local zoning?**

While there is no region-wide land use plan, all three local planning jurisdictions have adopted comprehensive land use plans. The City of Bloomington has the Growth Policies Plan (GPP), Monroe County has the Monroe County Comprehensive Land Use Plan, and Ellettsville has the Ellettsville Comprehensive Land Use Plan. These plans are periodically revised and amended to reflect community trends and issues. Typically, a full revision process for the respective documents occurs every five to ten years. One of the main purposes of these land use plans is to provide guidance for local zoning regulations and right-of-way dedications (via the included Thoroughfare Plans). The City of Bloomington is currently in the process of updating its zoning ordinance to bring it in line with the most recent revisions to the Growth Policies Plan.

**12. Is urban sprawl an issue in the metropolitan area? Are there initiatives or policy(ies) already in place to control growth or encourage a more compact urban form including transit-oriented development? Does the transportation planning process consider land use solutions for transportation problems?**

Sprawl is an issue for the metropolitan area and there are several key initiatives and policies designed to mitigate urban sprawl. First, the City's Growth Policies Plan acknowledges the challenges of urban sprawl and specifically promotes a policy of compact urban form. This policy has led to zoning regulations supporting higher development densities and mixed uses, with provisions for access management, alternative transportation, and transit-oriented site design. Second, efforts are currently underway to create a utility service boundary that identifies appropriate service areas for sanitary sewer within and beyond the metropolitan area. Sanitary sewer service is fundamental for any new development. Through planned utility service areas, growth can be managed to ensure that a compact land use pattern is maintained. Third, the management of the Lake Griffy and Lake Monroe watersheds as low density, environmentally sensitive areas has helped to curtail development to the north, east, and southeast of the metropolitan area. In addition, the Sinking Creek area to the west has significant karst features. All of these environmental issues have led to the implementation of best management practices, further supporting compact urban form.

The transportation process has not always fully considered land use solutions for transportation problems. This is because the land use and development process has not been directly associated with the MPO transportation planning process. In recent years, these two processes have become more integrated with one another. Within the City of Bloomington, the majority of available land is built-out, making infill development the predominant focus of new growth. In these areas, the transportation system is well established, and improvements made as a result of new development are quite limited. In the southwest quadrant of the metropolitan area, transportation improvements have been integrated in advance of most land development approvals. Also, local land use decisions are often made in the context of the impact that such development would have on the transportation network. The recognition of the land use and transportation connection by local decision makers has often resulted in development proposals being scaled back to mitigate transportation impacts.

**13. Have any access management or corridor preservation initiatives been identified or begun? How is the MPO involved? How is the transit operator involved?**

The MPO has not established any overarching programs for access management or corridor preservation. Improvements to various road corridors for access and safety are typically managed by the local jurisdictions. The City of Bloomington, in conjunction with an engineering consultant and the MPO, is currently studying 3<sup>rd</sup> Street and Atwater Avenue one-way pair corridor to determine what improvements are needed for access management and corridor preservation. This project has been identified in the Long Range Transportation Plan as a key corridor enhancement for some time. Development of this study has included coordination with the IU Campus Bus and Bloomington Transit services, as these corridors are key routes for both providers due to their close proximity to the IU campus. The final recommendations will be released this summer, and will include a presentation to the MPO Policy and Technical Review Committees. The draft Fiscal Year 2007 Unified Planning Work Program for the MPO proposes a similar feasibility study is proposed for the 2<sup>nd</sup> Street corridor.

**14. Have any "brownfields" been identified in the metropolitan area? If so, what efforts are underway to effect reuse of those areas?**

There is not a specific program that identifies brownfield sites within the metropolitan area. However, such sites do exist and efforts to reuse these sites are initiated on a case by case basis through various grant opportunities and networking efforts by non-MPO stakeholders. Generally these efforts have been initiated through the actions of private property owners, consultants, and city/county elected officials. The City of Bloomington has been supportive of the redevelopment of underutilized sites throughout the community, and particularly in the downtown.

## TRANSPORTATION MODEL AND TECHNICAL PROCESS

### **15. How does the MPO come to agreement with member governments for population and employment growth?**

The City of Bloomington (COB) MPO staff established an “in-house” technical committee at the beginning of the *2030 Long Range Transportation Plan* development process in the fall of 2005. Members of this committee included the MPO staff, the COB Public Works Director, the COB Engineering Services Manager and City Engineer, the Monroe County Highway Engineer, the Monroe County Planning Director and Assistant Director, and the Director of Planning Services for the Town of Ellettsville.

During the *2030 Long Range Transportation Plan* development process, MPO staff shared all e-mail and technical memorandum communications between the MPO staff and the 2030 Transportation Plan consultant, thoroughly discussed all socio-economic alternative modeling assumptions, jointly reviewed all delivered products in draft form, and achieved unanimous consensus for the end products that were to be presented to the MPO Committees (Policy, Technical Advisory, and Citizens Advisory) and incorporated into the draft *2030 Long Range Transportation Plan*.

Population and employment (ES-202) growth forecasts were also developed in conjunction with the MPO staff and the Bloomington Economic Development Corporation to confirm the magnitude and timing of employment changes that may have occurred since the publication of the 2025 Long Range Transportation Plan.

Using the process outlined above, a draft set of population and employment forecasts were presented to the MPO Policy, Technical Advisory, and Citizens Advisory Committees prior to use as an elemental foundation for the *2030 Long Range Transportation Plan* alternatives forecast analysis. The forecasts included total population, group quarters, household population, households (occupied housing units), retail employment, total employment less farm and federal military, and net total employment to the year 2030. The socio-economic forecast alternatives considered Woods & Poole 2003-2005 editions, STATS Indiana, 30-year historical growth rate, 10-year historical growth rate, total population driven, 2030 Share of State, 30-year population change, and the I-69 corridor model. The consensus forecast accepted by the MPO were 2030 totals using the State of Indiana’s I-69 Corridor Model.

### **16. What modeling package is used for travel demand modeling? Who maintains and updates the data for the model? How is the model validated?**

The adopted *2030 Long Range Transportation Plan* and the underlying travel demand forecast model were developed using TransCAD Version 4.8 transportation GIS software licensed by the City of Bloomington Planning Department from the Caliper Corporation.

The annual software license for TransCAD is maintained and funded by the City of Bloomington Planning Department as a component of the UPWP. The MPO staff is responsible for maintenance of the MPO forecast model database. Updates of link volume data and other relevant information will be made on a semi-annual schedule subsequent to the adoption of the *2030 Long Range Transportation Plan* in March 2006.

The staff has a working knowledge of TransCAD and one staff member was a TransCAD “beta version” user prior to the public release of the product in 1994. Staff training will remain an on-going process.

The current model was validated in the fall of 2005 through a standard iterative calibration process with a consensus agreement of the Existing Plus Committed (E+C) Network, baseline traffic from

INDOT, and data from the City of Bloomington and Monroe County. Centroid connector adjustments and travel analysis zone (TAZ) disaggregations were validated on macro and micro levels. The updated TDM includes more than twice the travel analysis zones (TAZs) of the previous model, and includes an expanded modeled network. The consultant also completed the year 2030 No Build (without I-69) and year 2030 Build (with I-69) TAZ databases. The root mean square error (RSME) for the model averaged 29.29%.

**17. What sources are used to determine reasonable trip-making characteristics? Was information from the National Personal Transportation Survey (NPTS) or Census Transportation Planning Package (CTPP) used?**

The methodology used to update the 2030 *Long Range Transportation Plan* (LRTP) was the same protocol that was used for the 2025 LRTP. This methodology is detailed in the Technical Documentation Memoranda 2 and 6 for the 2025 plan and copies of these memoranda are available upon request. In summary of these memoranda, Bernardin, Lochmueller & Associates Inc. (BLA) conducted the technical development for a travel demand model which effectively served as the multi-modal model used in both LRTPs. The Census Transportation Planning Package (CTPP) served as one source for trip-making characteristics in the urban area for Transportation Analysis Zone (TAZ) development. A second source, IRMS program IN\_Trips, for trip generation was utilized in the model development (three modules). This is a proprietary statewide trip generation program was created by BLA at the request of INDOT. Last, a third method was also utilized that provided travel estimates on land use and socioeconomic characteristics. This third trip-making method based a cross-classification of household size (three categories) and family income (three categories) per the NPTS trip rate documentation.

**18. How is the travel demand model used in the project selection process? How is it used for long-range planning?**

The travel demand forecast model is used as a long-range strategic planning tool to identify major areas and corridors of growth and congestion. Projects recommended from the long range modeling process are typically major capital expenditures that will require eight to ten years of development from the initiation of design studies. Short range and intermediate range projects are identified through traffic studies, capacity analyses, and accident studies.

The travel demand model is also used as a macro level benchmark for growth analysis between census periods.

**19. How is truck traffic and delivery traffic modeled? Are k-factors used? If so, how are they developed? Are there areas where special trip generators are used? If so, where, and for what reason?**

The MPO consultant for the 2030 LRTP (BLA) utilized a Special Global Adjustment Factor for commercial vehicles for both trip attractions and trip productions. These adjustment factors were incorporated into the model calibration process. The trip production and trip attractions values were based on the original 1964 IRTADS data and regression equations (detailed in the 2025 LRTP Technical Documentation Memorandum 2 and 6). In some instances, site specific generators were established to better reflect trip-making characteristics. Generally speaking, commercial vehicle movements are predominately on the state highway route system and focused on established industrial areas west of State Road 37 and on large “commercial box” concentrations. Commercial vehicles volumes are, however, measured by the Engineering Department as a routine component of the HPMS and traffic volume counting programs for the MPO.

The 2030 LRTP travel demand model uses a gravity model where F-factors in trip distribution

were used to develop the trip tables (F-factors reflect the spatial separation effects on trip interchange). All gravity models use F-factors. However, K-factors are used only when the validation of the model dictates (K-factors account for the social, economic, and other influences on travel flows). They are generally not believed to be stable over time and consequently were not used in the development of the Bloomington/Monroe County model.

**20. How is transit travel demand modeled? What efforts are underway to update the model that includes a more accurate prediction of transit travel demand?**

Transit routes were not specifically modeled in the Transportation Model. However, BLA utilized an adjustment factor for student trip-making where transit use was evaluated in the 2025 LRTP and presumably carried over with the 2030 LRTP. Transit routes were considered in development of the current 2030 LRTP transportation needs analysis, but limited resources have not enabled the Bloomington/Monroe County MPO to fully integrate and develop a transit component that can be directly applied to the modeling process at this time.

**21. Discuss any corridor or FTA New Starts alternative analysis studies that have been completed or that are underway.**

The MPO does not have any corridor or FTA New Starts alternative analysis studies that have been completed or are underway.

**22. Are there any corridor or subarea planning studies recently completed or underway?**

The MPO completed a *State Road 37 Corridor Accessibility Study* in August 2004. Currently, the City of Bloomington Engineering Department is conducting a feasibility study for the 3<sup>rd</sup> Street and Atwater Avenue corridors (*3<sup>rd</sup> Street and Atwater Avenue Corridor Improvement Study*).

The MPO will undertake a 2<sup>nd</sup> Street Corridor Feasibility Study through a consultant services contract as outlined in the Draft FY 2007 Unified Planning Work Program. The study area will extend from Walnut Street to Patterson Drive.

The MPO has also identified a potential corridor study for the 10<sup>th</sup> Street/14<sup>th</sup> Street corridor through the Indiana University campus to be undertaken with assistance of the Civil Engineering Department of the Rose-Hulman Institute of Technology. A reference to this study is outlined in the Draft FY 2007 Unified Planning Work Program.

## **LONG RANGE TRANSPORTATION PLAN (LRTP)**

**23. When was the LRTP adopted, what is the horizon year, and discuss how is the plan updated in a timely manner (every three years in nonattainment areas, every five years elsewhere)?**

The *2030 Long Range Transportation Plan* was adopted in March 2006, and is scheduled to be updated in 2010. This timeline is consistent with the status of the Bloomington/Monroe County urbanized area as an “attainment” area for air quality.

**24. How and when do local governments, the transit operator, and the State DOT provide the MPO with information about available and anticipated financial resources for the LRTP? Is this information accurate and is it provided in a timely manner? Does the financial plan show sufficient revenue for operations, maintenance and capital expenditures for the life of the LRTP?**

Long range highway transportation projects are reviewed on an annual basis to update current cost estimates. Transit system capital investments are also reviewed on an annual basis. Both of these reviews coincide with the development of the annual Transportation Improvement Program and

PDP/STIP meetings with the Indiana Department of Transportation. The accuracy of planned costs is critical in establishing a program of projects and to establishing development milestones and timelines for long term projects.

Barring significant national and international geopolitical events, the *2030 Long Range Transportation Plan* clearly shows that the City of Bloomington and Monroe County have sufficient revenue for operations, maintenance and capital expenditures for the next five years.

**25. Is there a bicycle/pedestrian element in the current LRTP? Discuss how bicycle/ pedestrian projects are identified and funded.**

The City of Bloomington is recognized as a “Bicycle Friendly Community” by the League of American Bicyclists and makes extraordinary efforts to fully incorporate bicycle and pedestrian needs into the MPO transportation planning process. (<http://www.bloomington.in.gov/egov/scripts/docs.php?path=doc&id=20183&id2=19283&linked=0&fDD=302-1305>)

The City of Bloomington’s *Alternative Transportation & Greenways System Plan* ([http://bloomington.in.gov/egov/docs/1144866433\\_802205.pdf](http://bloomington.in.gov/egov/docs/1144866433_802205.pdf)) and the Monroe County *Alternative Transportation System Plan* served as the principal guides for the bicycle/pedestrian element of the adopted *2030 Long Range Transportation Plan*. Both plans were developed as a grass-roots planning effort and incorporated extensive public involvement to address alternative choices for commuting and mobility within the community. The *Monroe County Alternative Transportation System Plan* is to be adopted by the county Plan Commission in April 2006.

The primary funding mechanisms for alternative transportation projects include Transportation Enhancement, Recreational Trail, Land and Water Conservation, and Surface Transportation Program funds. Public-private partnerships agreements are also used by the City of Bloomington for special development projects.

**26. How is the transit authority’s planning process coordinated with the MPO’s metropolitan planning process?**

Local transit operators are fully integrated partners in the urbanized area’s planning process with representation on the MPO Policy, Technical Advisory, and Citizens Advisory Committees. The MPO also maintains a third party agreement with Bloomington Transit for planning studies. A Downtown Passenger Transfer Facility Feasibility Study was completed as defined in the FY 2006 UPWP, and a Fixed Route Analysis Study will be completed in FY 2007. An update of the Transit Development Plan is proposed under the Draft FY 2007 UPWP. Finally, the MPO staff will undertake a Regional Transit Authority Analysis Study in FY 2007 to determine potential needs and requirements for Bloomington Transit to expand beyond its current operational boundaries.

Detailed profiles of public transit facilities and equipment, intermodal coordination and partnerships, performance analyses, and future public transit plans are contained within the *2030 Long Range Transportation Plan*.

**27. Describe the relationship between the MPO’s LRTP and the State’s LRTP? Are there any State DOT Corridor Studies in the MPO area? How is the MPO involved in those studies?**

The *2030 Long Range Transportation Plan* travel demand forecast model relied upon the major elements of the statewide travel demand model and the travel demand model developed by INDOT for the I-69 corridor study. The MPO long range plan also incorporates a ten-year timeline of INDOT projects consistent with their IPOC process. The MPO maintained close coordination with INDOT Central Office and Seymour District staff through all phases of the planning process.



**28. Is the LRTP fiscally constrained? Does the MPO intend to include illustrative projects in the next updated LRTP? Do local sponsors consult the MPO prior to requests for congressional earmarks? Are earmarked projects already in the LRTP?**

The *2030 Long Range Transportation Plan* is fiscally constrained for capital and operations/maintenance expenditures as evidenced in the Financial Forecast and Cost Feasible Plan chapters.

Current local sponsor earmark requests supported by the MPO and included in the Transportation Improvement Program involve Bloomington Transit's construction of a new downtown passenger transfer facility and a collaborative effort between Bloomington Transit and Indiana University to fully establish and expand upon a major park and ride facility. Given the uncertainty of earmark funding, no such projects are identified within the *2030 Long Range Transportation Plan*.

**29. Does the scope of the LRTP include the required 11 items of 23 CFR 450.322(b): Transportation demand of people and goods, Adopted operations and system management strategies, Bicycle and pedestrian facilities, Consideration of results of congestion management system, Preservation of existing transportation system, Sufficient detail of all proposed projects to develop cost estimates, Multimodal evaluation of plan impacts, Identify corridors for future MIS/NEPA studies, Reflect land use and other community plans, Include transportation enhancement activities, and Include a financial plan.**

The *2030 Long Range Transportation Plan* incorporates seven major items established under the guidance of TEA-21. The Draft FY 2007 UPWP Executive Summary highlights the incorporation of new items that are to be addressed with the passage of SAFETEA-LU.

## CONFORMITY AND AIR QUALITY PLANNING

**30. Describe the roles and responsibilities of all the organizations responsible for air quality monitoring and analysis. Will the proposed new NAAQS standards have any effect on this area?**

N.A.

## TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

**31. How is the TIP developed? What is the project selection process? How are projects prioritized? What process is used to ensure that projects can utilize the federal funds in the year for which they are programmed?**

Development of the Transportation Improvement Program (TIP) begins in the spring of each calendar year. MPO staff coordinates both formal meetings and informal discussions with government agencies interested in putting forward TIP projects. Agencies represented in this process include: 1) the City of Bloomington (Planning, Engineering, Public Works, Controller's Office, Transit), 2) Monroe County (Highway Engineer, Planning Director), and 3) the Town of Ellettsville (Town Planner). More informal discussions also occur with the Indiana Department of Transportation, Indiana University Transit, and Rural Transit.

The project selection process is informal in nature. Each agency submits project requests which are in turn evaluated for reasonableness and cost feasibility by MPO staff. Agency directors, particularly those from the various transit providers, are given discretion to put forward projects

which are consistent with agency goals. For street infrastructure projects, MPO staff assigns priority to projects which are consistent with the MPO's Long Range Transportation Plan.

The biggest decisions concerning project prioritization occur when the City of Bloomington and Monroe County each have street infrastructure projects that require Surface Transportation Program (STP) funding. In these cases, MPO staff facilitates discussion and eventual decision-making involving City Engineering/Public Works agency directors and the County Highway Engineer. Decision-making is informal, with MPO staff working cooperatively with agency directors to assign priority to projects in each funding year.

There is no specific process in place to ensure completion of projects within designated fiscal years. The burden of ensuring timely project completion has fallen to local agency directors. This has not proven to be a problem for either transit projects or County road infrastructure projects. However, the City of Bloomington has periodically lagged behind in completing TIP projects in accordance with designated funding years. As a result, process improvements in this area are being considered by MPO staff.

**32. How and when do the transit operator, State, and local governments provide information about available and anticipated financial resources for the TIP to the MPO? Is this information accurate and is it provided in a timely manner?**

Information about TIP financial resources is monitored throughout the year by MPO staff. For State resources, MPO staff receives its information through both its involvement in monthly MPO Council meetings as well as data submitted by INDOT prior to TIP development. At the local level, MPO staff coordinates with the City Controller's Office and Public Works Department to determine the adequacy of such sources as Local Roads and Streets (LRS) and Tax Increment Finance (TIF) funds. As for information concerning transit funding, MPO staff relies heavily on the information provided by each agency director. To date, there have been no problems concerning the accuracy and timeliness of funding information provided by these coordinating agencies.

**33. Does the TIP contain the required information - description of the project, estimated total cost, amount and source of Federal funds, agency responsible for carrying out the project? Does the TIP contain all of the federally funded projects that will be implemented during the year?**

All of this information is contained in the TIP.

**34. What are the procedures for TIP amendments (including public involvement)? What is the process for ensuring "rollover projects" are included in the TIP?**

All TIP amendments are evaluated by MPO staff, the Citizens Advisory Committee of the MPO, and the Policy and Technical Advisory Committees before finalization. As for rollover projects, all federally funded projects falling into this category are specifically noted in bold-faced text in the TIP so the MPO committees can identify that these projects are behind schedule for completion.

**35. Is the TIP fiscally constrained? How is that determination made?**

Yes, the TIP is fiscally constrained. For transit projects, agency directors are largely entrusted with determining whether the listing of projects being requested is consistent with revenue allocations for each agency. For non-transit projects, MPO staff works more in tandem with agencies such as the City Controller's Office, Public Works Department, and County Highway

Department to ensure that local funding sources are available for TIP projects. For street infrastructure projects requesting federal funding, MPO staff is responsible for determining that the cost of projects falls within funding allocation limits.

**36. Does the TIP include a listing of projects for which Federal funds were obligated in the preceding year? If not, how is this information provided to the public?**

A listing of preceding year projects is not included in the TIP. However, this information is readily available in the City Planning Department.

**37. After approval by the MPO and Governor, is the TIP incorporated without modification into the STIP, either directly or by reference?**

The approved TIP is incorporated directly into the STIP.

**38. What is the process for ensuring that the projects in the TIP are consistent with the MPO's Long Range Transportation Plan (LRTP) and the Statewide LRTP?**

Project consistency with the MPO's Long Range Transportation Plan is evaluated by MPO staff as part of the TIP development process. There is no MPO level process in place to evaluate project consistency with the State's Long Range Transportation Plan. MPO staff relies on INDOT to select State projects that are consistent with the State plan.

## **TITLE VI / ENVIRONMENTAL JUSTICE**

**39. What strategies and efforts has the planning process developed for ensuring, demonstrating, and substantiating compliance with Title VI? Have there been any Title VI complaints regarding the MPO or the transportation planning process? What is the Title VI reporting process?**

In 2002, the MPO adopted a specific Environmental Justice Policy Statement in an effort to comply with Title VI. Furthermore, an Environmental Justice section is included in the adopted *2030 Long Range Transportation Plan*. This section demonstrates that transit routes and street infrastructure investments are being put forth to serve lower income populations without causing any housing displacement in these areas. Environmental justice issues are also addressed in the MPO Public Involvement Process adopted in 2003.

Although there is no specific Title VI reporting process, no Title VI complaints have ever been filed regarding either the MPO or the transportation planning process.

**40. Has the planning process developed a demographic profile of the metropolitan planning area that includes identification of the locations of socioeconomic groups, including low-income and minority populations as covered by the Executive Order on Environmental Justice and Title VI provisions?**

As part of the community's Year 2000 census update as well as the last two Long Range Transportation Plans, all locations containing low-income and minority populations have been identified. These populations are both profiled and mapped in the Long Range Transportation Plan as a component of the Environmental Justice chapter.

**41. How does the planning process seek to identify the needs of low income and minority populations? What planning processes are in place to assess the distribution of impacts (including benefits and burdens) on these groups due to the transportation investments identified in the LRTP and TIP? What methods are used to identify imbalances? How does the planning process respond? Is there a data collection process to support this effort?**

There is no formal process in place designed to assess the needs of low income and minority populations. However, the MPO has a very active Citizens Advisory Committee representing 20 different local agencies. Included in this agency representation are such diverse entities as Indiana University, Bloomington Council of Neighborhood Associations, the Bloomington Council for Community Accessibility, Area 10 Agency on Aging, and the Bloomington Urban Enterprise Association. Because the MPO Bylaws require CAC review of both the LRTP and TIP, the distribution of impacts associated with transportation investments is being reviewed through this inclusive process.

While there is no formal data collection process to identify transportation investment imbalances associated with low income/minority populations, the City of Bloomington is making a concerted effort to develop neighborhood action plans for targeted low-income neighborhoods. These plans contain recommendations designed to facilitate investments in needed transportation infrastructure.

## **PUBLIC INVOLVEMENT**

### **42. What is the public involvement process? When was the current public involvement plan adopted by the MPO policy board? Is the process effective in obtaining input from all segments of the community?**

The Bloomington metropolitan area is unique in that in addition to the MPO there are other opportunities for public involvement at interrelated boards and commissions that deal with transportation needs, projects, and problems. These include the Bloomington Bicycle and Pedestrian Safety Commission, Public Transit Board, Bloomington Council on Accessible Transportation, the Traffic Commission, and the Council for Community Accessibility. The MPO supports an active Citizens Advisory Committee (CAC) that includes representation from a broad range of community groups and organizations, as well as interested citizens. Together, these opportunities provide meaningful and effective means to solicit public involvement.

The MPO adopted a Public Involvement Process in 2002 and a Citizens Guide to Transportation Planning in 2003. Both of these documents are slated for minor revisions and updates in the near future, but still provide sufficient and effective protocols and explanation on public participation in the MPO. Since their adoption there has been a steady increase in public participation by individuals, neighborhood associations, and interest groups. This trend is expected to continue as the MPO conducts further outreach and brings increased transparency to the local transportation planning process.

### **43. Are freight shippers and transit users given the opportunity to provide comment on the LRTP, TIP, and other MPO products? What involvement have they had in the metropolitan planning process?**

Historically these groups have not been active or officially identified as interest groups by the MPO. Their participation has never been excluded and is regularly encouraged and sought. The lack of freight shipper participation is a deficiency that MPO staff is aware of, and staff continues to explore new means to encourage their participation. Recently, MPO staff has been successful in outreach efforts with the Bloomington Chamber of Commerce in hopes that freight issues, as well as other business issues, are represented by this interest group.

A strong interest in transit and alternative transportation issues exists with numerous active CAC members. These members regularly provide comments on the LRTP, TIP, and other MPO products, but these members are not specifically associated with a specific transit user group. A local interest group, BTOP (Bloomington Transportation Options for People) has recently formed to help promote and foster alternative modes of transportation. Several members of BTOP are members of the CAC and regularly participate and comment on MPO products.

**44. What public involvement procedures are used by the transit operator(s) to gain input into their (transit operator's) planning process? What opportunities do private enterprises (i.e. private transit providers) have to participate in the planning process?**

BPTC solicits public input as part of the development of its annual Program of Projects (POP) funded under Section 5307. Customer bulletins are posted on all Bloomington Transit buses soliciting comments and suggestions for projects to be included in the proposed POP. A similar notice is also posted on the bulletin board at City Hall, on the BPTC employee bulletin board, and on the Bloomington Transit web site. These notices encourage the public to submit comments and suggestions for projects to be included in the proposed POP.

A legal notice is published advertising the proposed Program of Projects and advising the public of a public hearing on the proposed POP. This legal notice is published in the Bloomington Herald Times at least ten days prior to the hearing. Similar public notices of the hearing are posted on Bloomington Transit buses, the BT web site, and at City Hall. Unless substantive comments are received either in writing or at the public hearing, the proposed POP becomes the final POP. All comments received in writing, by telephone, or by email are considered by the Bloomington Public Transportation Corporation Board of Directors before the proposed Program of Projects is finalized. Any changes made to the proposed POP are published in final form in the Bloomington Herald Times.

The BPTC Board of Directors adopted a formal policy on February 20, 1996 which prescribes the public participation process for changes to BPTC fares and service levels. Specifically, the resolution states that any increase or decrease to published fares or a service level reduction of 10 percent or greater in revenue service hours shall require a 30-day comment period followed by a public hearing giving the public an opportunity to provide input prior to any final adoption by the BPTC Board of Directors.

BPTC also uses other methods to disseminate information about proposed fare and/or service changes including the posting of notices on buses, notices on the BPTC web site, notices posted in public locations in the BPTC offices, and printed informational packets available by mail or for pickup from the BPTC offices.

The Bloomington Council on Accessible Transportation (BCOAT) is an advisory committee developed by BPTC that includes persons with disabilities who are fixed route and/or paratransit users as well as their advocates. This advisory committee meets on a regular basis to advise BPTC on the development of service plans, policies, and procedures that affect persons with disabilities and their access to public transportation services. BCOAT meetings are advertised on the BPTC web site in advance. Meeting agendas are mailed to interested citizens and participants. BCOAT typically meets 3-6 times annually and provides invaluable input that is often used to change service policies and/or procedures.

Through the MPO Unified Planning Work Program, BPTC periodically conducts formal planning studies on a variety of topics. Recent study topics have included a feasibility study for a new or expanded downtown transfer facility, a transit development program study, and a bus transportation route and efficiency study. Depending on the type of study conducted, there often is a significant public participation element whereby community stakeholders, transit riders, transit employees, and the general public are encouraged to provide valuable input in the study process. Examples of public participation mechanisms used in past studies include one-on-one interviews with community stakeholders, soliciting public input at the downtown transit center from transit riders, on-board surveys of transit riders, and public meetings where the public is encouraged to attend and provide feedback.

BPTC periodically conducts rider surveys to determine customer satisfactions with transit services. Such surveys are done for both paratransit and fixed route riders. BPTC uses the survey

results to determine necessary improvements in quality control and operational management. Surveys results are compared from year-to-year to determine trends and patterns.

The BPTC is governed by a five-member Board of Directors who set policy for the organization. Three of the Board members are appointed by City Council. Two Board members are mayoral appointments. The BPTC Board generally meets two times monthly. All Board meetings are open to the public. Meeting agendas are posted at City Hall and at the BPTC offices at least 48 hours in advance of the meetings. Each meeting agenda includes an opportunity for the public to express opinions and comments to the Board on any items included or not included on the meeting agenda.

In the early stages of development of the annual program of projects, letters are sent to private transportation providers in the area soliciting comments and suggestions for projects to be included in the proposed Program of Projects. Any comments received by private transportation providers are shared with the BPTC Board of Directors prior to finalizing the program of projects and it is possible that adjustments can be made based on input from private providers.

Historically (since the 1980s) BPTC has contracted out a portion of its transportation services. BPTC prepares a request for proposals that specifies the type of service to be contracted, service standards, legal requirements, provider qualifications, and the scope of work to be performed. Private transportation providers submit proposals including costs that are considered by the BPTC Board. The Board awards contracts for the provision of transit services to the best qualified firm within the framework of the RFP evaluation criteria.

In addition, BPTC has contracted the management of the transit system to a private transportation provider since the 1980s. BPTC prepares a request for proposals that specifies the management services to be provided, legal requirements, provider qualifications, and the scope of work to be performed. Private transportation providers and/or management firms submit proposals including costs that are considered by the BPTC Board. The Board awards contracts for the provision of transit management services to the best qualified firm within the framework of the RFP evaluation criteria.

**45. Does the public involvement process have an identified strategy for engaging minority and low-income populations in transportation decision-making? What strategies have been implemented to reduce barriers to participation by such populations? Has their effectiveness been evaluated?**

The adopted Public Involvement Process (2002) identifies a strategy for engaging minority and low-income populations within the framework of the Environmental Justice Principles. The strategy includes making Environmental Justice a priority, increasing participation, maintaining project flexibility, promoting project equity, utilizing demographic analysis, and developing effective conflict resolution methods. In addition, techniques for public education, MPO newsletter, website, committee/public meetings, and media publicity are identified. Most of these techniques are regularly utilized to assist with public involvement with the exception of public education and a MPO newsletter which have been utilized intermittently.

To date, no technical evaluation has been conducted by the MPO to evaluate the effectiveness of public outreach efforts and public participation. However, cursory evidence suggests that public participation is diverse, robust, and effective by the continuous increase in public inquires, participation, and awareness of MPO activities and processes. Several Neighborhood Association representatives regularly participate and are identified as Low-Mod Income areas by the City Housing and Neighborhood Department. These neighborhoods are consistent with several of the Census Tracts identified in the Environmental Justice section of the *2030 Long Range Transportation Plan*. Two additional Census Tracts are also identified, but these areas are predominantly IU students, which is a historically difficult demographic group to consistently engage in public participation.

**46. Has public involvement in the planning process been routinely evaluated as required by the transportation planning regulations? Have efforts to improve involvement been undertaken? Have organizations representing low income and minority populations been consulted as part of this evaluation? Have their concerns been considered/addressed?**

Cursory and systematic evaluation of the public involvement process is conducted by MPO staff after all public meetings and periodically after committee meetings to modify and adjust methods to improve public participation. The adopted Public Involvement Process outlines four performance objectives: 1) Accessibility, 2) Diversity, 3) Outreach, and 4) Impact that are currently met by the MPO process.

Citizens and organizations have not been specifically asked to conduct this evaluation, but questions and requests related to the performance objectives are dealt with on a case by case basis. Inquiries of this nature generally relate to the timing of announcements by the various media outlets, over which MPO staff has little control. Press releases for public meetings are typically issued one week prior to the meeting date and committee meeting dates are posted on the internet well in advance of the scheduled meeting.

**47. Does the public outreach effort utilize media (such as print, television, radio, etc.) targeted to low-income or minority populations? What issues were raised, how are their concerns documented, and how do they reflect on the performance of the planning process in relation to Title VI requirements?**

The standard procedure for advertisement of public meetings is to coordinate a press release through the City's Communication Director. All regularly scheduled Policy/TAC/CAC meetings dates and agendas (as they become available) are posted on the internet and within City Hall on a community bulletin board. This basic information is not specifically targeted to groups within the community and no specific concerns or performance issues have been raised to the MPO in regards to Title VI requirements.

However, the City of Bloomington recently created The Latino Programs and Outreach division of the Community and Family Resources Department to serve our community's rapidly growing Latino immigrant population. Within this division is a Latino Outreach Coordinator who serves as the liaison for the Department and community organizations providing support to the Spanish speaking population and/or promoting diversity and cultures. This is one resource the MPO staff can utilize to further explore means to target public outreach to this minority population.

**48. Have primary languages other than English been identified as substantially used within the minority or low-income areas? If identified, have public outreach efforts been multi-lingual in order to reach those population segments where it has been identified where English is not the primary language?**

No primary language has been identified within minority or low-income areas. However, The City of Bloomington had identified Spanish as a primary language other than English for multi-lingual public outreach efforts. The MPO staff will work with the City to coordinate and build upon the bi-lingual program in the Community and Family Resources Department.

**49. Are there significant ADA issues in the metropolitan area? How has the planning process been utilized to implement ADA requirements?**

The current condition of sidewalks is the prevailing ADA issue that exists within the metropolitan area. Most of the public concerns relate to the lack of ADA accessible sidewalk ramps at street intersections. These concerns all deal with retroactive compliance issues and are typically dealt with on a case by case basis by the City. All new street improvement projects conform to ADA standards. The planning process does allow the community to provide comments on the design of such projects.

The City sponsored a community workshop on ADA regulations on March 22, 2006. The workshop was conducted by Robin Jones of Great Lakes ADA and Accessible IT Center and Lois Thibault of US Access Board.

Bloomington Transit (BT) supports transit needs for persons with disabilities in both the fixed route service and with the BT Access Service where paratransit service is comparable in days and hours of service, service area, fares, and capacity constraints. This segment of BT clientele currently represents about 1.5 percent of the total system ridership. BT continues to support high quality service for persons with disabilities.

## **UNIFIED PLANNING WORK PROGRAM (UPWP)**

**50. What is the process to develop and prioritize the work items in the UPWP? How are the needs of each unit of government in the region determined and addressed in the UPWP? How are the major regional transportation needs and policy priorities reflected in the UPWP?**

MPO Staff annually coordinates with a subcommittee of the TAC to review the past UPWP implementation performance and propose new work elements for inclusion in the next UPWP. During these coordination meetings the needs and priorities of each element are discussed in an open format where consensus is achieved. MPO Staff then evaluates the results of those discussions and develops a staff-level draft of the UPWP. The subcommittee of the TAC then has opportunity to provide comments and input on the draft UPWP. Revisions are made and then the draft is submitted to the CAC/TAC/PC for comments and review prior to adoption by the Policy Committee. INDOT and FHWA are also provided with the opportunity to review and comment on the draft UPWP prior to its adoption.

**51. Does the UPWP reflect all transportation planning activities in the MPO planning area, regardless of how they are funded? Is the annual UPWP update process completed in a timely manner?**

The UPWP does reflect all local transportation planning activities in the MPO planning area. Funding sources for the City of Bloomington, Monroe County, and the Town of Ellettsville reflect the collaborative effort to conduct a broad scope of transportation planning activities within the MPO.

The annual UPWP development process takes about two months from developing and prioritizing work elements to draft production and then final adoption. A shorter timeframe could be possible, but would not allow as much opportunity for participation by the 3<sup>rd</sup> party agencies and the committees of the MPO.

**52. What fiscal year does the MPO use for its operations? What is the source for the non-federal share of the UPWP? How many PL/5303 funds were carried over at the end of the last fiscal year? How does the MPO intend to spend down any carry-over funds?**

The fiscal year for the MPO is from July 1<sup>st</sup> to June 30<sup>th</sup>. Three sources are identified for the non-federal share of the UPWP: The City of Bloomington, Monroe County, and the Town of Ellettsville.

There is approximately \$100,000 in carryover funds from the FY 2005 UPWP. These funds provide a unique opportunity to conduct several consultant feasibility studies in the same fiscal year that will initiate key transportation projects. These studies typically could not happen in the same year because of limited funding, causing only the study with the highest priority to receive financial support from the MPO. In addition, the MPO experience significant staff turnover during the second half of FY 2005, resulting in a limited ability to execute many portions of the



UPWP. This contributed to the larger than normal carryover, which should be reduced in subsequent years due to the full staffing of the MPO.

**53. How is the MPO addressing the required seven factors in their planning process? (Economic Vitality, Safety and Security, Mobility Options for People and Freight, Environment and Energy Conservation, Connectivity, System Management and Operations, Preservation/Maintenance)**

The Vision Statement of the *2030 Long Range Transportation Plan* provides the best example for providing guidance on the implementation of the broad planning factors. The Vision Statement has the following core principles: Community Sustainability, Environmental Stewardship, Fiscal Responsibility, Connectivity for all forms of Transportation, Economic Vitality and Economic Development, Multi-modal Accessibility, and Cross-jurisdictional Coordination. Although these principles are not identical to the seven planning factors, they do provide guidance to accomplish very similar goals. Each year the UPWP and the Annual Completion Report provide an overview of the MPO's accomplishments. Taken together these can be used to further analyze the extent to which the MPO is addressing these seven planning factors.

**54. How does the MPO respond to the annual Planning Emphasis Areas (PEAs) provided by FTA/FHWA in FTA's annual apportionment Federal Register? Do PEAs typically meet the MPO's planning emphasis needs? How did the MPO respond to the Year 2003 PEAs?**

During the UPWP development process, MPO staff evaluates the PEAs to help with the prioritization of work elements. In most instances, existing UPWP work elements are modified to address one or more PEAs. In the past, new work elements were added to the UPWP in response to the annual PEAs, but this is the exception and not the rule. Typically, modifying existing work elements is the most efficient means to incorporate the intent of the annual PEA requirements.

Usually, the PEAs do meet the MPO's planning emphasis needs because most are broad enough to integrate with the MPO's planning emphases from year to year. However, a few PEAs do present conflicts in priorities with MPO needs. This is often a reflection of the size of the MPO, where a PEA may be directed towards larger MPOs that are classified as a TMA and not smaller MPOs like the Bloomington/Monroe County MPO.

The executive summary of the FY 2006 UPWP provides an overview of how the MPO responded to the 2005 PEAs. This response generally followed the development process detailed above. The forthcoming FY 2006 Annual Completion Report will also provide an overview of the MPO's accomplishments.

## **INTELLIGENT TRANSPORTATION SYSTEMS (ITS)**

**55. What is the status of Intelligent Transportation Systems (ITS) in the metropolitan area? Do you contemplate deploying ITS technologies in the area? What is the status of the regional architecture? What is the MPO's role in developing the architecture?**

The Intelligent Transportation Systems (ITS) for the MPO is in the initial development stage with the installation of the Turbo Architecture software package at the end of April 2006.

The MPO intends to use the ITS architecture to deploy ITS technologies along the 3<sup>rd</sup> Street and Atwater Street corridors, and along INDOT's added travel lanes corridor of the S.R. 45/46 Bypass extending from Walnut Street to 3<sup>rd</sup> Street in the City of Bloomington. The MPO anticipates that additional ITS technology deployments will become necessary for the S.R. 37 corridor if INDOT's proposed I-69 is located along the conceptual alignment.

**56. Has the MPO developed a locally defined ITS integration strategy to guide future investment decisions and foster integration and interoperability? Is the integration strategy part of the MPO's transportation planning process?**

The MPO has not yet developed a locally defined ITS integration strategy given the current stage of the ITS architecture. A future integration strategy will, however, be used to guide future investment decisions and to foster integration/interoperability between local and state jurisdictions.

**57. Which agencies are participating in the development of the ITS integration strategy and has it been documented as part of the LRTP? Does the TIP include projects from the integration strategy? Are the TIP and the regional architecture consistent?**

The MPO anticipates the inclusion of all transportation operators, law enforcement, fire protection, educational institutions, public media outlets, the business community and freight shippers. Regional architecture interface components that appear to have relevance for the Bloomington/Monroe County area include:

- a. Transit Vehicle Tracking
- b. Transit Fixed-Route Operations
- c. Transit Demand Response Operations
- d. Transit Passenger and Fare Management
- e. Transit Security
- f. Transit Maintenance
- g. Transit Traveler Information
- h. Multi-modal Coordination
- i. Broadcast Traveler Information
- j. Interactive Traveler Information
- k. Highway-Street Network Surveillance
- l. Street Surface Control
- m. Traffic Information Dissemination
- n. Traffic Incident Management System
- o. Traffic Forecast and Demand Management
- p. Standard Rail Grade Crossing
- q. Parking Facility Management
- r. Freight Administration
- s. HAZMAT Management
- t. 911 Emergency Response and Dispatch
- u. Emergency Vehicle Routing
- v. Weather Information Processing and Distribution

The FY 2007-2009 Transportation Improvement Program will include ITS architecture components for Bloomington Transit operations. Local highway and street ITS components have yet to be identified. The TIP and the local architecture are to be consistent when completed in 2006.

## **OTHER ISSUES**

**58. What is the status of GIS activities?**

Both the City of Bloomington and Monroe County governments devote resources to maintaining GIS databases. These databases provide ample information related to transportation planning including but not limited to: 1) land use, 2) Thoroughfare Plan street classifications, 3) bus routes, 4) traffic accident data, and 5) alternative transportation facilities. City and County GIS resources

are under continuous revision to ensure that the most accurate and up-to-date data is presented in each system.

**59. Does the MPO maintain a set of functional classification maps? How are updates made?**

Yes, these maps are kept by MPO staff. Updates to functional class maps are made in cooperation with INDOT and other MPO partners. Functional class maps still need to be updated by INDOT in response to changes in urban area boundaries accompanying the 2000 census.

**60. What was the MPOs involvement in the 2000 census?**

The MPO committees had no formal involvement in the Year 2000 census update. MPO staff in the City Planning Department performed a lead role in census mapping, data collection, and facilitating citizen responses to questionnaires.

**61. What is the status of the management systems in the metropolitan area? Is the output from any of the management systems used in the decision-making process?**

Both the City of Bloomington and Monroe County have pavement management systems in place. Additionally, the County has a bridge management program. Data generated from both programs are utilized to select street infrastructure and bridge projects that are included in the TIP.

**62. Describe MPO involvement with welfare to work activities including Access to Jobs**

There are no specific welfare to work activities that are the responsibility of the MPO. However, the MPO process is utilized to provide funding for both Rural Transit and Bloomington Transit. These agencies provide a critical accessibility option for community residents who do not possess personal vehicles.

**63. Program activities. How are federally funded transportation services, including paratransit services being coordinated?**

The MPO coordinates federally funded transportation services in several ways. First, MPO staff is responsible for processing all funding reimbursements associated with federal transportation services. Second, the MPO Work Program and TIP development processes are designed to ensure that eligible planning activities, operating expenses, and projects receive federal funding. As for paratransit services, the Bloomington Transit Corporation operates a well-respected BT Access program, with the MPO providing the mechanism for funding support.

City of Bloomington  
Planning Department  
May 3, 2006



To: MPO Planning Staff

From: Pat Martin  
Senior Transportation Planner

Date: May 4, 2006

Re: FHWA Certification Review – Transportation Model and Technical Process Questions

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## Background

The Bloomington/Monroe County Travel Demand Model used for the *2030 Long Range Transportation Plan* adopted March 31, 2006, was first developed and calibrated in May, 1999, using the TRANPLAN software modeling platform and the standard software modules (such as IN\_Trips, EXTRAVEL, etc.) found in the Indiana Reference Modeling System (IRMS). This model had a base year of 1997 and a future year of 2025. (See Bloomington/Monroe County Year 2025 Transportation Plan Technical Documentation Binder -- Technical Memorandum 2 & 6: Travel Demand Model Development and Model Technical Documentation; prepared for Bloomington MPO by Bernardin Lochmueller & Associates, Inc.; May 1999.)

In September 2003, the MPO TRANPLAN model was simply converted to TRANSCAD and validated (-0.17% VMT error, 1.745% loading error, 38.97% root mean square error). Thus, the TRANPLAN model retained the 1997 base year and 2025 future forecast year, TAZ geography, roadway network coverage, trip generation and attraction equations, special generators, the special IU student trip overlay, vehicle occupancy rates, etc. (See "Model Documentation/Model User Guide"; prepared for the Bloomington MPO by Bernardin Lochmueller & Associates; September 2003.)

In October of 2005, the TRANSCAD model for the Bloomington/Monroe County MPO was improved and validated (-0.02% VMT error, 2.8% loading error and 30.23% root mean square error). The improvements included disaggregated TAZ geography (a doubling of TAZs), a new base year of 2000, a new future year of 2030, new TAZ demographic (2000 Census) and employment (ES-202) data – the same as Indiana Statewide Travel Demand Model and I-69 Corridor Model, external trip tables derived from the I-69 Corridor Model with and without National I-69, new traffic counts, and an updated roadway network to year 2000 (based on completed roadway projects since the old 1997 base year). All other components of the model remained unchanged. The 2005 version of the travel model does a far better job of replicating “real world” traffic volumes than the original

Bloomington/Monroe County LRTP model or the 2003 TRANSCAD conversion.

## **FHWA Review Transportation Model Questions and Technical Responses**

**What sources are used to determine reasonable trip-making characteristics? Was information from the National Personal Transportation Survey (NPTS) or Census Transportation Planning Package (CTPP) used?**

The 2030 LRTP model trip production and attraction equations come from the Indiana Reference Modeling System (IRMS), prepared for INDOT by BLA in March, 1996. The household trip production is based on cross-classification rates (household size versus medium household income) based on several MPO household surveys in Indiana in the 1990's. The 1997 Bloomington/Monroe County Model began with the National Personal Transportation Survey (NPTS) rates. The 2000 Census data were used in the 2005 version of the model because of the new TAZ geography. Thus, CTPP data could not be used. Moreover, the CTPP does not yield trip production rates, only demographic data.

**How is truck traffic and delivery traffic modeled?**

Commercial vehicles represent one of the four person-trip purposes in the travel model, with an associated time friction factor curve. However, there is no separation of vehicle type in the internal-internal, internal-external or external-external trips. Thus, autos and trucks are not separately assigned nor reported in the daily travel model assignment results.

**Are K-factors used? If so, how were they developed?**

K-factors were not used for the 2030 Long Range Transportation Plan model. (Reference the 1997 model documentation page 29.)

**Are there areas where special trip generators are used? If so, where, and for what reason?**

First, there is a special IU Student Trip overlay of all zones based on a special IU Student Trip Survey in 1998. This was used because of the large number of students in dormitories (who revert to their cars for non-school trips) and the large number of off-campus students commuting to the campus by a variety of modes (auto, bicycle, transit and foot). This ensured that vehicle trips were not inflated, and alternative modes were considered. Second, the 1997 MPO model included nineteen (19) special generators to better replicate traffic volumes on roadways surrounding particular zones. The trip generators include: major shopping areas

(Downtown Motor Inn, Antique Mall, McDonalds/Pizza Hut/Motel 6/Fairfield Inn, Southridge Shopping Center, Walnut Park Shopping Center, Walmart/Sams Club, Whitehall Plaza, Whitehall Square, Walnut Station Shopping), large employers (ABB and General Electric), major sports facilities (Twin Lakes Sports Park, The Pointe Golf and Tennis Resort/Marina/Residential), and a few residential areas (such as Ellettsville). (Reference the 2003 Travel Model Documentation page 6 for a specific listing of generators and the applicable zones.)

**How is transit travel demand modeled? What efforts are underway to update the model that includes a more accurate prediction of transit travel demand?**

The 2030 LRTP model incorporates a special IU Student Trip Overlay that takes into account alternative transportation modes including transit, bicycle and pedestrian traffic. This ensures vehicle trips are not inflated by the IU student population both on and off campus.

Second, the conversion of person trips to vehicle trips has specific vehicle-occupancy rates by trip purpose.

Third, because the model generates person-trips, a modal split component for transit could be added. However, the Bloomington Travel Model is unique in including a special IU Student Trip overlay (*based on an actual survey with over 500 responses*) that accounts for all alternative modes, not just transit. This survey found that IU students revert to the car for non-school trips, and that their travel patterns mirror the general public for non-school trips. If a transit trip generator were added to the model, the special IU Student Trip overlay based on real data would be invalidated, and a special transit trip model would have to be validated involving the same time and expense as the general highway travel model.

Historically, small urbanized areas such as the Bloomington/Monroe County area have found the development of a transit model is not cost-ineffective in light of the facts that

- limited federal planning resources are provided to small urbanized areas
- transit vehicles in small urbanized areas are buses sharing the pathway with other motor vehicles and being subjected to the same congestion (not transit on independent right-of-way from other motor vehicles),
- transit accounts for less than 2% of the person-trips outside of the university campus,

- bus transit routes may change anytime (the route modeled today may not be the route tomorrow), and
- numerous transit operation options exist to fixed route transit (point-deviation, demand responsive, etc.) invalidating the fixed route transit model.

The Bloomington Planning Department wishes to acknowledge the generous assistance of David Ripple from Bernardin-Lochmueller & Associates for the technical responses noted above.

PPM/pm