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## **INTRODUCTION**

The Indianapolis Regional Transportation Plan (the Plan) will guide the development of the area's transportation system for the next twenty-five years. The Plan will help ensure that facilities and services necessary to support the mobility needs of the community and its future growth are anticipated and available. It will provide decision makers information upon which to base "first things first" decisions. Advance knowledge of the community's mobility needs can facilitate the allocation of resources, preservation of rights-of-way, and coordination with land use decisions.

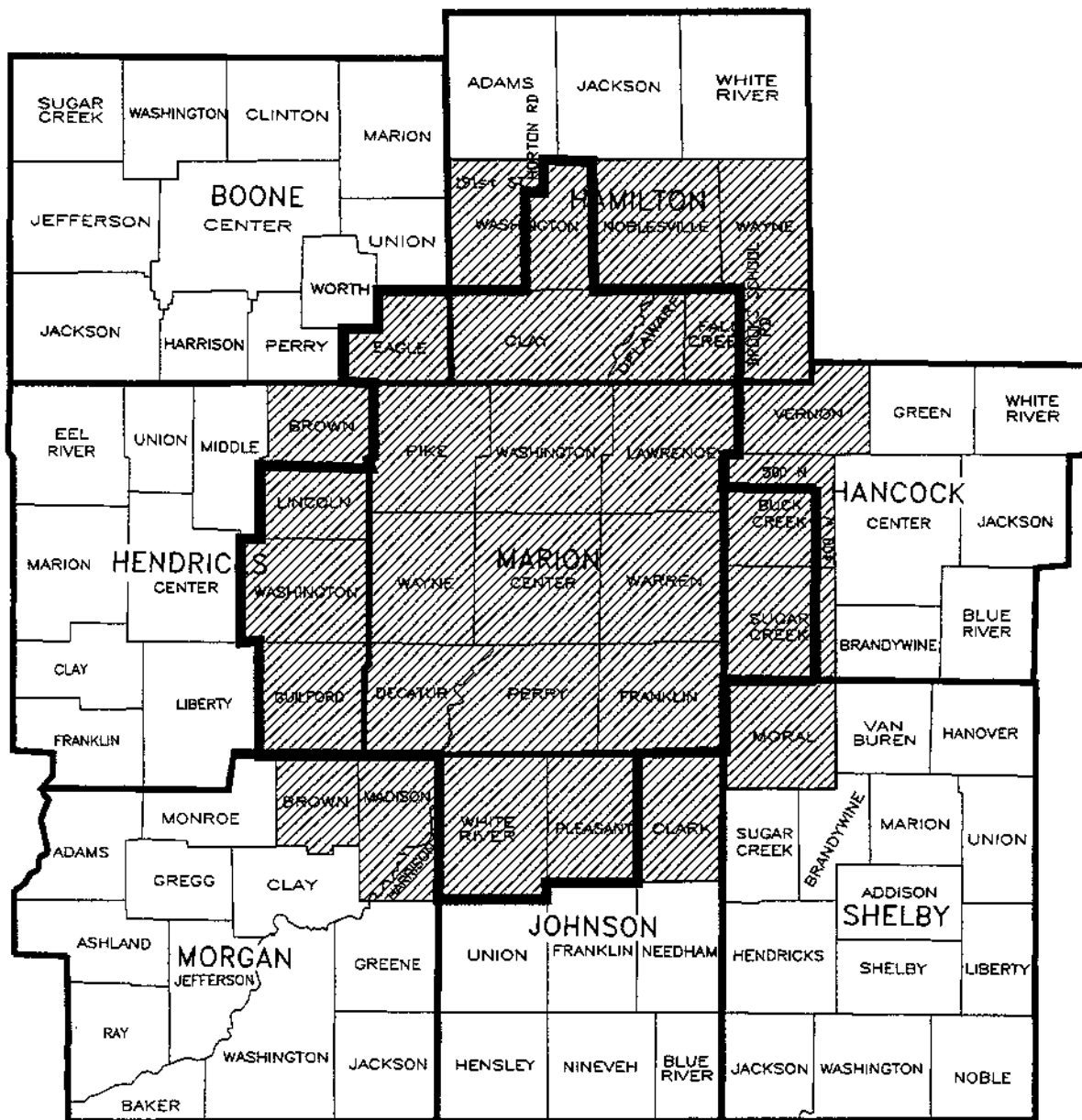
The Plan represents a cooperative effort of citizens, planners, engineers and public officials. For nearly two years the Indianapolis Regional Transportation Council, the Citizens Advisory Committee and the Study Review Committee have been working with the Indianapolis Metropolitan Planning Organization and a team of consultants in the development of the Plan. The consultant team was led by The Corradino Group. The study was managed by the Planning Division in the Indianapolis Department of Metropolitan Development, which serves as staff to the Indianapolis Metropolitan Planning Organization. An organizational chart and a full list of the study participants is provided in Appendix A.

The Plan is regional in scope and covers the area called the "Indianapolis Metropolitan Planning Area" (MPA) that includes Marion County and portions of Hamilton, Boone, Hendricks, Johnson, and Hancock counties. It includes the towns of Fishers, New Whiteland, Speedway, Westfield and Whiteland and the cities of Brownsburg, Cannel, Greenwood, Indianapolis, Plainfield and Zionsville. The planning area consists of the area defined by the Census Bureau as urbanized in 1990 plus the contiguous area expected to be urbanized by the year 2020. The planning area is depicted on Map 1.

Development of the Plan built on past versions of the Long Range Transportation Plan and was consistent with the requirements of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA, pronounced as "ice tea"). This Act, which is summarized in Appendix B, mandates that 15 metropolitan planning factors be considered and reflected in the planning process. The 15 factors were introduced and discussed at the community meetings in September 1993. They address many activities which were previously undertaken independently, but ISTEA requires that they be brought together under one plan. The ISTEA also introduces new requirements, such as the need for the plan to be multi-modal and cost feasible. The completion of the Plan and the ongoing planning process will allow communities in the Indianapolis Urbanized Area to continue to receive approximately \$11.4 million per year in federal funds for regional surface transportation projects and \$3.8 million per year for transit operating costs.

The Plan is dynamic and responsive to changing conditions. It will continue to evolve in response to changing conditions as part of the on-going transportation planning process. Several components of the ISTEA requirements are undergoing analysis in a process separate from that of the Plan. Once those studies are complete, their recommendations will be incorporated into the Plan. One assurance of a dynamic process is the intention to update the Plan every three years and to amend it as necessary.

# Map 1



## INDIANAPOLIS METROPOLITAN PLANNING AREA

[ AS ADOPTED BY RESOLUTION NO. 93-P-097, 1993 ]

**NOTE: ALL ROADS ON BOUNDARY LINES ARE EXCLUDED  
EXCEPT MARION COUNTY'S EAST AND SOUTH COUNTY LINES**

-  **PLANNING AREA**
-  **MODELING AREA**



OCTOBER, 1994  
DEPARTMENT OF METROPOLITAN DEVELOPMENT  
PLANNING DIVISION  
INDIANAPOLIS-MARION COUNTY, INDIANA

## FACTORS INFLUENCING PLAN RECOMMENDATIONS

When developing a plan for twenty-five years into the future, an essential consideration is the area's growth potential. Assessing the growth potential must take into account physical growth, as well as the driving forces of population growth, increases in the number of households, and employment growth. The outlook for the Indianapolis region is positive for all of these factors. A strong and diversified economy should continue to grow, producing increased employment. The strong local transportation network will play a critical role in assuring this economic growth.

A strong economy in the future bodes well for population growth and increases in the number of households. With strong employment opportunities the Indianapolis region is expected to retain its existing population base and continue to attract new residents. An ample supply of land and water will also encourage residential growth.

This ample supply of land and the existing transportation network are likely to result in a continuation of a dispersed development pattern. This dispersed trend is firmly entrenched in the region and there are no foreseeable impediments that are likely to force a significant change. Consequently, nearly all of the new development is expected to occur in suburban portions of the planning area. One exception to note, however, are the current developments in Marion County's Center Township. Increased commercial, retail and residential activity will enhance the attractiveness of the central area, which will stimulate healthy competition for the region. A strong regional core will support and benefit the surrounding suburban area.

From these development scenarios the resident population, number of households and employment are forecasted. For the Plan these forecasts go to the year 2020 and modeling area totals are presented in Table 1. The modeling area is shown as the shaded area on Map 1. It is slightly larger than the Metropolitan Planning Area and includes entire townships. It was established for ease of developing socio-economic forecasts and for travel simulation modeling purposes. Plan recommendations are limited to the official Metropolitan Planning Area.

Table 1  
Indianapolis Metropolitan Modeling Area  
Year 2020 Socio-Economic Forecasts

	<b>Actual 1990</b>	<b>Forecast 2020</b>	<b>1990 - 2020 % Change</b>
Population	1,056,703	1,345,245	27%
Households	409,871	564,600	38%
Total Employment	728,997	1,049,800	44%
Retail-Employment	130,143	197,800	52%
Non-Retail Employment	598,854	852,000	42%

The population in the modeling area is projected to increase by 27% between 1990 and the year 2020. This compares to a projected state growth of nearly 40% in the same time period. A critical component in these population projections is the anticipated average household size, which is expected to continue to decline to a varying degree for each of the counties in the modeling area. The assumed average household size in the year 2020 ranges from 2.14 persons per household for Johnson County to 2.33 persons per household for Morgan County. Because of the decline in household size, the future number of households in the modeling area is increasing at a greater rate than the overall population.

A second key socio-economic forecast is employment. Retail trade employment is projected to increase by 52% between 1990 and 2020, and non-retail trade employment is projected to increase by 42% over the same time period. Total employment is expected to increase by 44% by the year 2020. These employment increases are substantially higher than projected population growth.

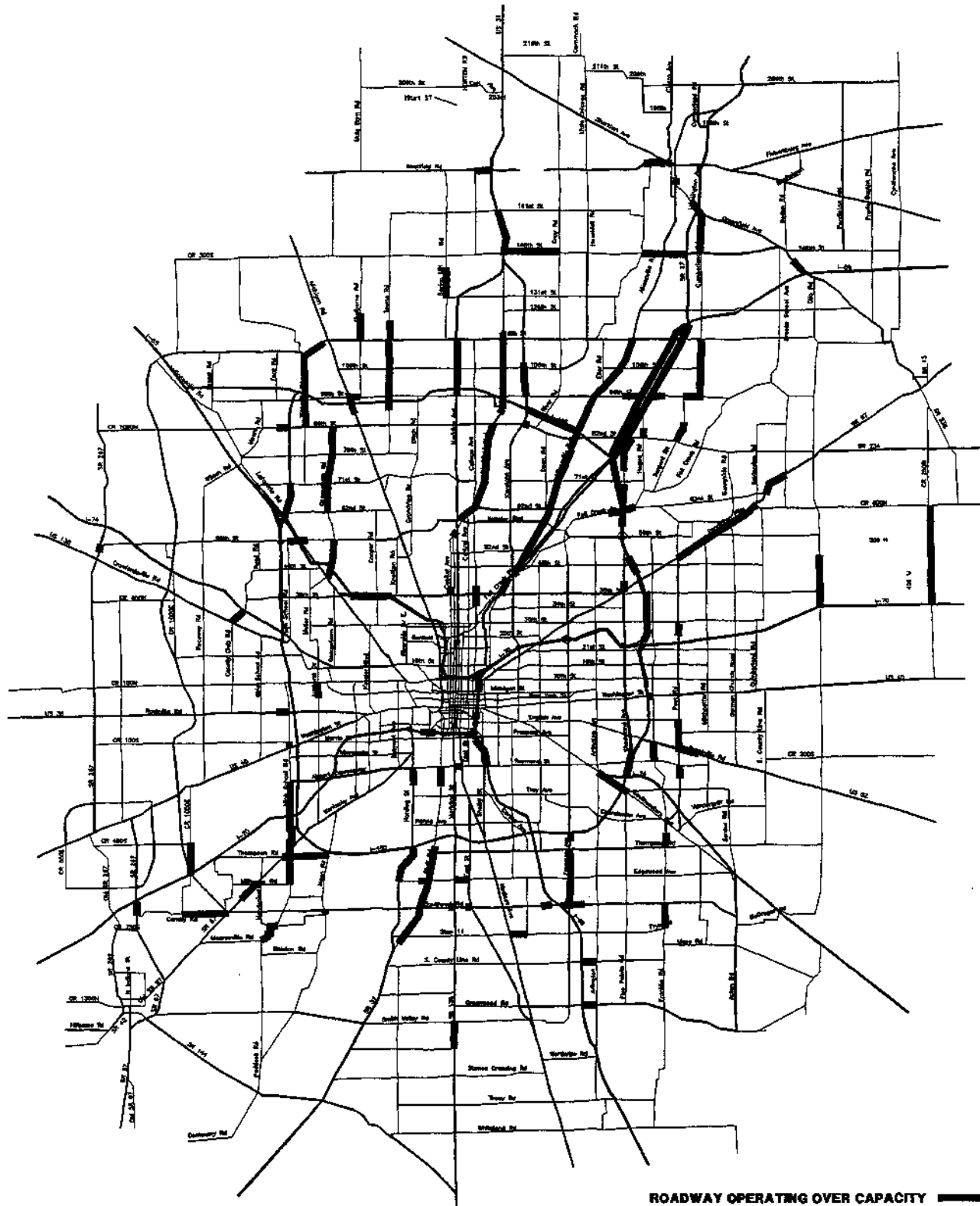
When the socio-economic forecasts are incorporated into the trip-making equations they result in substantial increases in travel for the modeling area (see Table 2). Between 1990 and 2020 there will be a 48% increase in the number of person trips made within the modeling area. This in turn will result in a 69% increase in the aggregate vehicle miles travelled in the modeling area and a 77% increase in the vehicle hours of travel. These robust increases in predicted travel will place heavy demand on the area's transportation system. Map 2 identifies roadway segments operating over capacity in the year 2020 assuming no improvements are made to the roadway system except the committed projects identified in Appendix C. "Committed projects" are those for which funding has been identified through 1997.

Table 2  
Indianapolis Metropolitan Modeling Area  
Year 2020 Travel Demand Forecast

	<b>Estimated 1990</b>	<b>Forecast 2020</b>	<b>1990 - 2020 % Change</b>
Total Daily Person Trips	3,658,297	5,411,583	48%
Daily Vehicle Miles of Travel	26,192,580	44,369,420	69%
Daily Vehicle Hours of Travel	604,254	1,071,424	77%

NOTE: Forecast includes existing transportation network plus committed projects.

An anticipated dispersed trend of development greatly influences the future transportation needs of the area. This dispersed pattern of development is highly dependent on the automobile as a principal mode of transportation in addressing the Indianapolis region's



**MAP 2**  
**YEAR 2020 TRAFFIC**  
**EXISTING PLUS COMMITTED STREET SYSTEM**  
**INDIANAPOLIS METROPOLITAN MODELING AREA**



CITY OF INDIANAPOLIS  
 PLANNING DIVISION  
 DEPARTMENT OF METROPOLITAN DEVELOPMENT  
 MARCH 1995

existing and future travel. The resulting low population densities limit the effectiveness of transit, and the greater travel distances limit the viability of bicycling or walking in significantly reducing traffic congestion.

The net effect of this development trend is a need to expand the roadway system to meet future travel demand. As growth moves further out into the suburban areas and autos provide the principal mode of travel, the increased traffic will overwhelm the existing roadway network. To maintain an acceptable level of service, roadway expansions are necessary. It is important to emphasize this is a consequence of anticipated development trends, not a preordained continuation of traditional transportation policy. However, roadway expansions should not overshadow a continuing need to provide a range of mobility options.

Given the positive growth forecasts for the modeling area, particularly in the suburban portions, a need is projected for improvements to the roadway system and transit operations. Specific projects and programs are, or will be, identified that will assure the continued smooth flow of travel in the region. The extent and magnitude of the projected need greatly exceeds any reasonable estimate of available funding resources, as is reflected in the development of the "needs plan" into a "cost feasible plan". Consequently, only a portion of the projected total need is likely to be funded. This will mean difficult choices for policy makers, as they weigh the relative merits of needed projects. The Plan provides a factual basis for these deliberations.

## **PLAN DEVELOPMENT**

Completion of the Plan involved the participation of the Indianapolis Regional Transportation Council, the Study Review Committee, and the Citizens Advisory Committee. These groups worked with the consultant team and the Metropolitan Planning Organization staff to assure that the plan reflects the true needs of the area.

In this effort the study group was guided by a set of goals which, together with their corresponding objectives, reflect the 15 planning factors mandated by the ISTEA. These goals were:

*Goal 1* Preserve existing transportation facilities and seek to maximize the return on transportation investments.

*Goal 2* Provide for the safe and efficient movement of people and goods.

*Goal 3* Ensure the coordination of transportation plans with the overall regional social, environmental and land-use goals.

*Goal 4* Provide for the essential mobility needs of all citizens.

Adherence to these goals was assured by the extensive participation of citizens and communities throughout the planning area. The Indianapolis Regional Transportation Council, as shown in Appendix A, includes representatives from all parts of the metropolitan planning area. In addition to the Citizens Advisory Committee, a series of public meetings were held to present the study design, interim findings, and final recommendations.

Development of the Plan was a multi-step process. The Plan recommendations are the culmination of several intermediate steps and efforts. Figure 1 outlines the basic steps leading to these recommendations.

**Assessment of current conditions** - 1990 is the "base year" for the Plan. Utilizing a wide range of resources, including census data, financial records, land use plans and other materials, a current picture of the planning area emerges. Some of the factors analyzed are population and employment levels, land use patterns, an inventory of existing transportation facilities, travel demand estimates, existing deficiencies in the transportation network, and current levels of transportation funding. This step includes the development of a transportation network for computer modeling purposes which simulates the roadway system as it existed in 1990. This is referred to as the existing system. Committed projects, projects that are planned for implementation through 1997 and have an identified funding source, are then added to the existing system. The resulting network is referred to as the existing plus committed network.

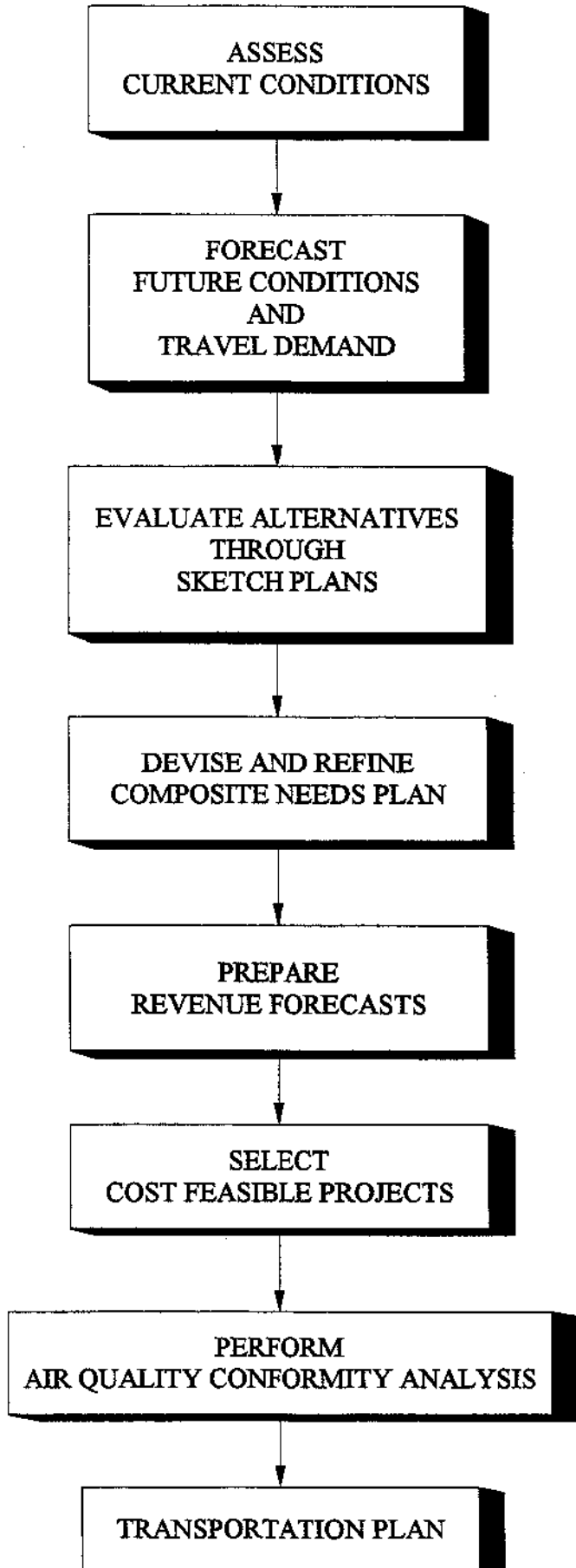
**Forecast of future conditions** - in this case the year 2020, twenty-five years into the future. This step begins with a forecast of future land use trends and development patterns. Historical trends combined with local expectations of anticipated growth form the basis for a reasonable prediction. These predicted land use trends are used to forecast population and employment levels for the planning area. These in turn are used to forecast year 2020 travel demand.

Combining the future travel demand with the existing plus committed transportation network, future system deficiencies and needs are identified. These highlight the particular roadway segments or interchanges where projected travel demand exceeds capacity. This step also identifies transit service deficiencies. Identification of where the transportation system must be modified to meet anticipated demand is the result of the second step.

**Devise transportation alternatives** - to correct any identified service deficiencies or capacity constraints (areas in the system where there is not enough roadway capacity). This includes roadway expansions, transit expansions, system management improvements (e.g. intersection improvements), or other actions and projects to correct capacity problems.

These initial transportation alternatives are then evaluated for effectiveness by a sketch plan process. Any expansions or improvements are incorporated into the transportation network

**Figure 1**  
**Steps in Developing**  
**Indianapolis Regional Transportation Plan**



computer model and run against future travel demand. It is then determined if the proposed alternative solves the demand or capacity problem.

Based upon the computer modeling outcomes, proposed projects or activities are then presented to the advisory groups for a decision on whether to include the project in the recommendations. The projects that are judged to be effective are then incorporated into the "needs plan". This is a listing of projects and actions deemed necessary to meet future travel demand without regard to funding limitations.

***Assemble a financial plan*** - including a compilation of funding expected to be available over the planning time horizon. For this study it is a 23-year period, from 1998 to 2020. This provides a limiting factor in the number and range of projects or activities that can reasonably be included in the "cost feasible plan". Fiscal constraints are a very real limitation, because the transportation need greatly exceeds the available resources.

***Compare the projects in the "needs plan" with the financial plan*** - to produce a "cost feasible transportation plan". For roadway expansion projects this was done through project evaluations, cost benefit analysis and committee discussions. The evaluation criteria reflected consideration of the 15 metropolitan planning factors. For transit projects the evaluation focused on projected ridership and potential cost. For preservation, improvement and enhancement activities, projects were not specified. Pending completion of the six management systems mandated by ISTEA (see Figure 2) and other studies currently underway, the Plan has specified the funds needed for this category of activities without identifying specific projects. A brief description of the management systems is presented in Appendix B.

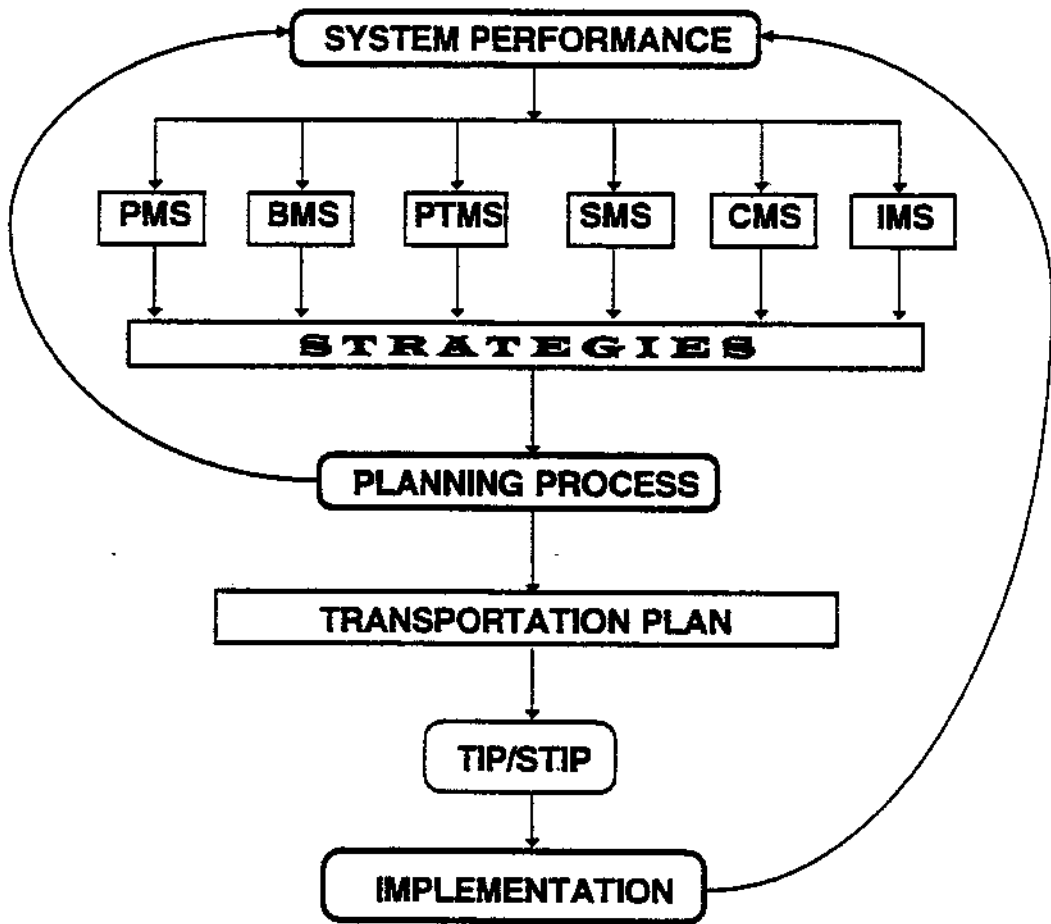
## **THE PLAN AND ITS COMPONENTS**

The Plan has several intermediate elements that collectively provide an understanding of the recommendations. These elements are summarized here to provide the framework for presenting the Plan findings and an indication of how the final recommendations evolve from the technical analysis, policy review and public input. The Plan components are:

- I. Evaluation of Sketch Plan Alternatives
- II. Composite Needs Plan
- III. Financial Plan
- IV. Air Quality Conformity Analysis
- V. Cost Feasible Plan

Figure 2

ISTEA Mandated Management Systems



- PMS - Highway Pavement Management System
- BMS - Bridge Management System
- PTMS - Public Transportation Management System
- SMS - Safety Management System
- CMS - Congestion Management System
- IMS - Intermodal Management System
- TIP - Transportation Improvement Program
- STIP - State Transportation Improvement Program

## I. EVALUATION OF SKETCH PLAN ALTERNATIVES

Three sketch plan alternatives were developed and evaluated to determine the effectiveness of different potential approaches to addressing future year 2020 deficiencies. The alternatives were designed to isolate the impact of the three distinct approaches being tested to determine their relative impact on the transportation system. The sketch plan alternatives were not intended as self-sufficient multi-modal alternatives and were built on the existing plus committed roadway network. The information from the sketch plan alternatives was used to eliminate options that were not effective and to identify those having the greatest potential. The three plan alternatives that were tested are:

- A. Transit Alternative
- B. Transportation System Management/Transportation Demand Management Alternative
- C. Highway Alternative

The three alternative sketch plans are summarized below.

### **A. Transit Alternative**

The transit alternative tested the effectiveness of a major fixed-guideway light rail transit investment without highway capacity expansion projects. Specifically the transit alternative considered four light rail corridors creating a 57-mile light rail system. The four corridors included were:

- The northeast corridor from Noblesville to downtown Indianapolis
- The north corridor from Carmel to downtown Indianapolis
- The west corridor from downtown Indianapolis to the Indianapolis International Airport
- The south corridor from Greenwood to downtown Indianapolis

The light rail system was tested under the best possible conditions. It was coordinated with an improved bus system. Ample stations and frequent headways were also assumed. Computer modeling indicated the 57-mile light rail system was not cost effective. The \$683 million dollar capital investment would only increase transit boardings from about 30,000 passengers per day in 1993 to about 47,000 passengers per day in the year 2020. The lack of the necessary population density within the Indianapolis region is the principal explanation for these results. In addition, even with the future levels of congestion projected, it is difficult for transit to compete with the travel time provided by the private automobile.

After presentation to the Study Review Committee and the Citizens Advisory Committee, the transit recommendation was recast to include:

- The elimination of any proposed light rail system.
- Considerations from "The Strategic Plan for Public Transportation", completed in January 1994;
- A refocusing of the existing bus system to ensure the provision of service to the physically and medically disadvantaged;
- The addition of neighborhood circulators to feed the existing radial routes and new cross-town routes to serve commercial and employment centers; and
- The preservation of corridors that have the potential for future mass transportation.

### **B. Transportation System Management Alternative**

The transportation system management alternative tested preservation and improvement of the highway and transit system without single occupant vehicle capacity expansion. These focused on high occupancy vehicle (HOV) corridors and interstate ramp metering. Specifically, the transportation system management alternative considered:

- HOV lanes for the northeast corridor of I-69/SR37 from Fishers to downtown Indianapolis;
- Ramp metering along I-70 from the northeast inner loop interchange in downtown Indianapolis to the east leg of I-465; and
- Ramp metering along the northeast quadrant of I-465 beginning at the I-465 Interchange at Michigan Road eastward to the I-465/I-70 East Interchange.

Computer modeling indicated the high occupancy vehicle lanes and ramp metering had some merit, although they alone did not have a significant impact on the capacity problems in the northeast quadrant of the planning area. Following discussions with the Study Review Committee and the Citizens Advisory Committee, they were retained as recommended actions in the "needs plan".

### **C. Highway Alternative**

The highway alternative included adding general purpose travel lanes to roadways operating at levels considered as "over capacity" in the year 2020.

Computer modeling indicated additional improvements would be needed to meet the forecasted travel demand in the year 2020. Specifically, the need for additional general purpose travel lanes in each direction of Allisonville Road from 46th Street through Fishers; 96th street from Keystone Avenue to Allisonville Road; Camby Road corridor from Kentucky Avenue to Mooresville Road; and, other isolated locations. These additional projects were added to the "needs plan" following discussions with the Study Review Committee and the Citizens Advisory Committee.

## **II. COMPOSITE NEEDS PLAN**

The composite needs plan, referred to as the "needs plan", contains the best features of the three alternative sketch plans plus the committed projects. Committed projects are those for which funding has been identified through 1997. The needs plan did not take into consideration funding limitations. Therefore it contains many more projects than can reasonably be implemented. The projects in the needs plan for which funding can not be identified at this time will be identified in the 2020+ time frame of the "cost feasible plan", which is beyond the current planning period. A combination of the committed projects, the cost feasible projects and the 2020+ projects make up the needs plan. The deficiencies identified as part of the needs plan, but not addressed as part of the cost feasible plan will be reconsidered in subsequent updates of the plan and as part of other special studies.

### **FINANCIAL PLAN**

Preparation of a financial plan requires preliminary cost estimates for the activities and projects in the needs plan and forecasts of all revenues of funding available for transportation. These include local, state and federal sources of funds. The cost estimates are for all projects needed over a twenty-three year time period. Consequently, the revenue forecasts are presented in phases covering the same twenty-three year time period. The aggregate project cost estimates and revenue forecasts are presented in Table 3.

The numbers in Table 3 present an enormous need for the planning area. Out of \$858,754,256 available for local roadway (non-state) projects, \$616,319,394 are needed for preservation, improvement and enhancement activities between 1998 and 2020. The remaining \$242,434,863 is considered available for non-state expansion projects. For the Indiana Department of Transportation projects in the metropolitan planning area, \$644,000,000 was estimated to be available over the 1998-2020 time period. The cost of state projects is estimated to be \$596,139,694 (93% of the available funds). For transit, \$829,474,210 is estimated to be available between 1998 and 2020. Transit project operating and capital costs for that time period are estimated at \$812,732,577 (98% of the available funds). Only the highest priority activities and projects are included in the Plan recommendations. Other projects remain in the plan as needed, but are not assigned a funding priority.

Table 3. Summary of Financial Plan for Indianapolis Regional Transportation Plan						
	PHASE I 1998-99	PHASE II 2000-06	PHASE III 2007-15	PHASE IV 2016-20	Total 1998-2020	Annual Avg 1998-2020
Local						
Estimated Funds Available for Capital Projects	\$ 60,062,925	\$ 229,624,267	\$ 346,727,398	\$ 222,339,666	\$ 858,754,256	\$ 37,337,142
Set Aside for						
Preservation, Improvement, Enhancement	\$ 43,106,564	\$ 164,799,054	\$ 248,842,807	\$ 159,570,968	\$ 616,319,394	\$ 26,796,495
Expansion Projects	\$ 16,956,361	\$ 64,825,213	\$ 97,884,591	\$ 62,768,698	\$ 242,434,863	\$ 10,540,646
Funds Available for Expansion Projects in						
Urbanized Area (UZA)	\$ 14,347,313	\$ 54,850,663	\$ 82,823,248	\$ 53,110,580	\$ 205,131,805	\$ 8,918,774
Non-urbanized Area (non-UZA)	\$ 2,609,048	\$ 9,974,550	\$ 15,061,343	\$ 9,658,117	\$ 37,303,058	\$ 1,621,872
Total Available	\$ 16,956,361	\$ 64,825,213	\$ 97,884,591	\$ 62,768,698	\$ 242,434,863	\$ 10,540,646
Estimated Cost of Expansion Projects in						
Urbanized Area (UZA)	\$ 14,306,598	\$ 53,068,642	\$ 93,011,043	\$ 46,210,566	\$ 206,596,849	\$ 8,982,472
Non-urbanized Area (non-UZA)	\$ 11,358,075	\$ 5,336,668	\$ 12,456,392	\$ 7,392,523	\$ 36,543,658	\$ 1,588,855
Total Estimated Cost	\$ 25,664,673	\$ 58,405,310	\$ 105,467,435	\$ 53,603,089	\$ 243,140,507	\$ 10,571,326
As Percent of Available Funds						
Urban Projects	100%	97%	112%	87%	101%	101%
Rural Projects	435%	54%	83%	77%	98%	98%
State						
Estimated Funds Available for State Projects	\$ 56,000,000	\$ 196,000,000	\$ 252,000,000	\$ 140,000,000	\$ 644,000,000	\$ 28,000,000
Estimated Cost of State Projects	\$ 27,324,000	\$ 144,855,948	\$ 356,010,213	\$ 67,949,533	\$ 596,139,694	\$ 25,919,117
State Projects as % of Available	49%	74%	141%	49%	93%	93%
Transit *						
Estimated Funds Available for Transit Projects	\$ 77,893,755	\$ 221,230,582	\$ 331,056,545	\$ 199,293,328	\$ 829,474,210	\$ 36,064,096
Estimated Cost of Transit Projects	\$ 74,767,389	\$ 220,426,318	\$ 325,118,953	\$ 192,419,917	\$ 812,732,577	\$ 35,336,199
Transit Projects as % of Available	96%	100%	98%	97%	98%	98%
Special Projects						
Estimated Funds Available for Special Projects	\$ 10,208,302	\$ 36,821,926	\$ 0	\$ 0	\$ 47,030,228	\$ 2,044,793
Estimated Cost of Special Projects	\$ 10,208,302	\$ 36,821,926	\$ 0	\$ 0	\$ 47,030,228	\$ 2,044,793
Special Projects as % of Available	100%	100%	N/A	N/A	100%	100%

\* Includes capital and operating revenues and costs.

Developing the estimate of future revenues was very difficult due to the lack of documentation and a consistent reporting format among the various jurisdictions within the Metropolitan Planning Area. As part of the Plan it is recommended that the Indianapolis Regional Transportation Council establish a task force for the purpose of developing a standard accounting format for all transportation expenditures.

#### IV. AIR QUALITY CONFORMITY ANALYSIS

Marion County is classified as a maintenance area for the ozone pollutant. As such, the capacity expansion projects proposed in the Plan must be analyzed using a sophisticated computer model developed by the U.S. Environmental Protection Agency. The model measures the amount of pollutants that will be emitted as a result of implementing the projects contained in the Plan. The emissions cannot exceed the emissions budget specified in the State Implementation Plan (SIP) developed by the Indiana Department of Environmental Management in conjunction with the Indianapolis Air Pollution Control Division and the Metropolitan Planning Organization staff.

The federal regulations governing air quality conformity require that certain time periods be analyzed. Table 4 presents the emissions data for each time period along with the 2006 redesignation emissions budget. The conformity analysis was reran in July 1997 incorporating the revisions to Map 4 and Table 6 found in this document. As shown in Table 4, none of the emissions in the budget are exceeded by the Plan for any of the four time periods. Therefore, the Plan can proceed as proposed.

All expansion projects for single occupancy vehicles will be further analyzed for alternative congestion relief measures in the congestion management system process.

Table 4 (Revised July, 1997)  
Marion County  
Air Quality Conformity Analysis  
Cost Feasible Plan

Emissions Tons Per Day	1990 Base		2006 Action	2006 Emission Budget	2015 Action	2020 Action
HC	107.20		56.92	71.70	59.93	63.78
CO	731.50		358.84	521.60	387.20	418.15
NO <sub>x</sub>	63.44		51.25	63.10	54.29	57.33

## V. COST FEASIBLE PLAN

The cost feasible plan is the final step in the plan development process. It includes committed projects, cost feasible projects (a subset of the projects from the needs plan) and provisions for the maintenance and preservation of the existing and future transportation system. An outline of the components included in the cost feasible plan is presented in Figure 3.

The cost feasible plan cannot meet all of the forecasted travel demand placed on the year 2020 transportation system at the same level of service we are experiencing today. There will be more congestion and more travel delays, particularly during travel to and from work.

If the Year 2020 Cost Feasible Plan is implemented, it is expected that 74 percent of the street capacity will be used during the peak commuting periods, compared to 51 percent in 1990. The Year 2020 overall average operating speed will be decreased by 3 percent. For comparison, the 1990 system speed was 41.4 miles per hour and the forecasted speed in Year 2020 with recommended improvements will be 40.1 miles per hour. Table 5 shows key system performance characteristics for the modeling area. Map 3 identifies roadway segments operating over capacity in the year 2020 assuming implementation of the cost feasible plan.

Table 5  
Indianapolis Metropolitan Modeling Area  
Systemwide Performance Characteristics  
Average Weekday

Performance Characteristic	Year 1990 Existing Network	Year 2020 Cost Feasible Network	1990 - 2020 % Change
Percent Roadway Capacity Used	51%	74%	+45%
<b>Congested Speed (MPH)</b>	41.4	40.1	-3%
Delay (in vehicle-hours)*	30,903	115,899	+275%
Accident Cost	\$113,290	\$197,880	+75%
User Cost	\$3,580,103	\$6,095,422	+70%

\* The difference between actual trip travel time and unimpeded trip travel time.

While it has not been demonstrated that transit or other modes of travel will have a significant impact on year 2020 travel demand, the Plan provides opportunities for various modes of travel. The need for transit, bicycle and pedestrian facilities was repeatedly

SUMMARY OF COST FEASIBLE PLAN  
INDIANAPOLIS REGIONAL TRANSPORTATION PLAN

A. Maintenance Activities - Funds not identified, projects not specified

B. Preservation Activities - Funds reserved for unspecified projects

1. Bridge Replacement/Rehabilitation (from Bridge Management System)
2. Pavement Resurfacing (from Pavement Management System)
3. Safety (from Safety and Congestion Management System)
4. Transit Service Maintenance (from Public Transit Management System)
5. Intermodal Facilities (from Intermodal Management System)
6. Other TSM/TDM Strategies (from Congestion Management System)
  - a. Ridesharing Program
  - b. Work Hour Rescheduling
  - c. Preferential Treatment for High-Occupancy Vehicles (Needs Plan)

C. Improvement Activities - Funds reserved for unspecified projects

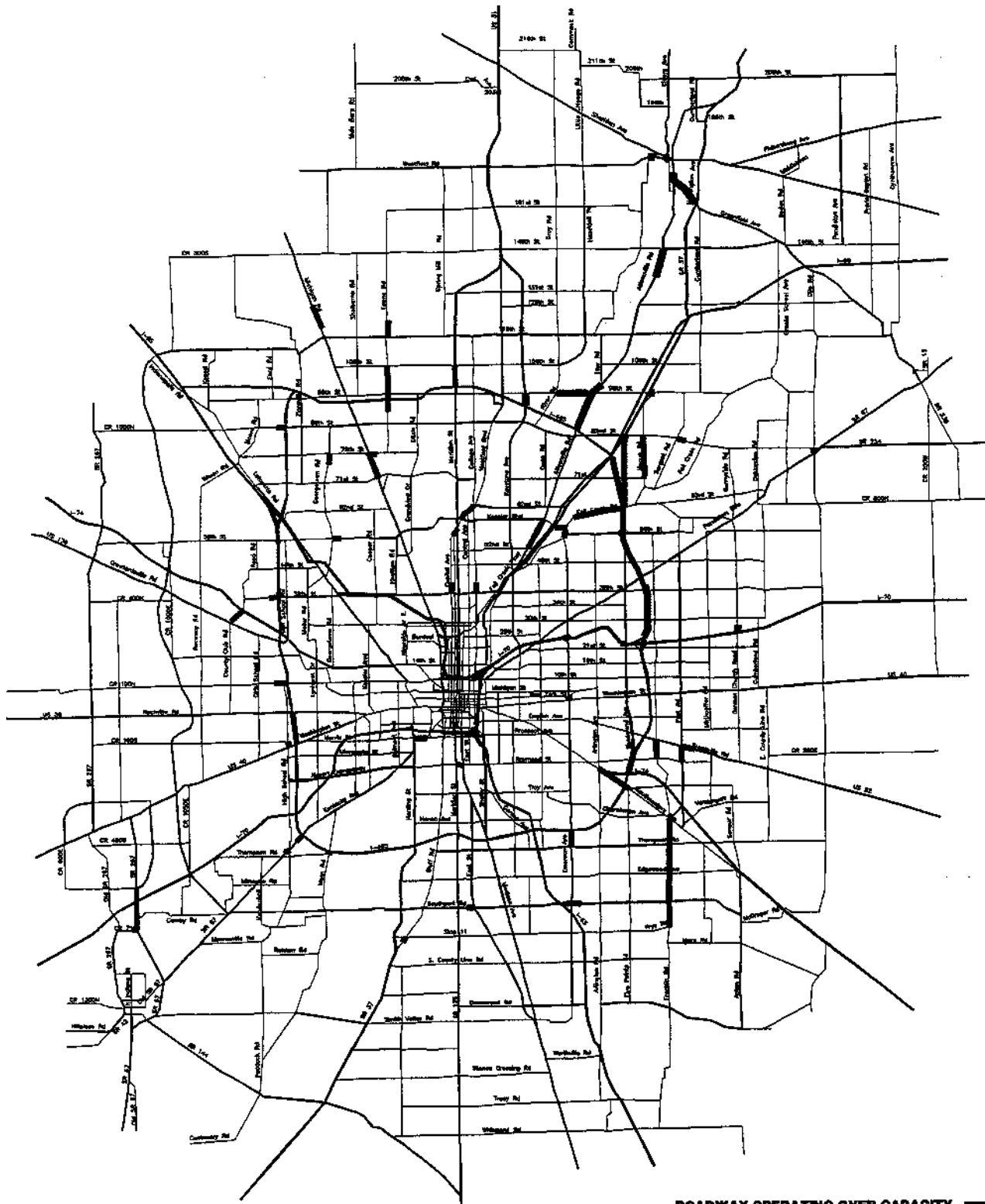
1. Road Replacement (from local and state capital improvement programs)
2. Access Control (from Congestion Management System)
3. Interchange Modification (from Congestion Management System)
4. Transit Service Improvements (from Transit Strategic Plan, Public Transportation Management System, and Transit Development Programs)
  - a. Facility Replacement/Rehabilitation
  - b. Service Adjustment/Reconfiguration (within existing Resources)
    - i. New Crosstown Routes
    - ii. New METRO Circulators and Shuttles
5. Intermodal Facilities (from Intermodal Management System)

D. Enhancement Activities - Funds reserved for unspecified projects

1. Bicycle and Pedestrian Facilities (from Bicycle/Pedestrian Plan, Application Requests)
2. Corridors Preservation (from Corridor Plans, Rail Study, Application Requests)
3. Historic Transportation Structure Preservation (from Application Requests)

E. Expansion Activities

1. Major Transit Investment
2. Highway Capacity Expansion Projects
  - a. Major Investment Studies (to be determined)
  - b. Major Roadway Capacity Expansion Projects



ROADWAY OPERATING OVER CAPACITY 

**MAP 3**  
**YEAR 2020 COST FEASIBLE PLAN**  
**INDIANAPOLIS METROPOLITAN MODELING AREA**



CITY OF INDIANAPOLIS  
 PLANNING DIVISION  
 DEPARTMENT OF METROPOLITAN DEVELOPMENT  
 MARCH 1995



mentioned by members of the Citizens Advisory Committee as an important community concern.

As stated in the introduction of this Plan Overview, the development of the Transportation Plan is a dynamic process. The Plan is scheduled to be updated every three years and will be amended as conditions warrant and new information becomes available. In addition, the roadway expansion projects in the Plan will be subjected to more intensive community and technical review should they reach implementation.

The major components of the cost feasible plan are summarized below. A brief description of the component is provided, followed by an explanation of how the component is addressed in the Plan. In some cases this will include identification of specific recommendations, in others the status of ongoing studies will be provided.

**A. Maintenance**

This category includes transportation planning, administration and routine maintenance of the facilities (e.g. pavement patching, minor bridge repair, painting and cleaning, minor guardrail repair, traffic control device upkeep, mowing and trash pick-up, minor drainage and shoulder repairs, and debris and snow removal). Because of the large volume and routine nature of the maintenance projects they are not specified in the Plan.

**B. Preservation, Improvement and Enhancement**

This group of activities are focused on less capital intensive projects that build upon existing elements of the transportation network. Preservation activities include low-cost capital projects to preserve the capacity, structural integrity and operational capability of the existing transportation systems, as well as to improve the level-of-service and safety. Improvement activities include more capital intensive projects to preserve the capacity, structural integrity and operational capability of the existing transportation system. These could include the construction of high occupancy vehicle lanes and ramp metering. Enhancement activities include the development of bicycle and pedestrian facilities, the preservation of historic transportation structures and abandoned transportation rights-of-way. These are collectively referred to as the Transportation System Management component.

The Plan identifies \$616,319,394 for preservation, improvement and enhancement projects at the local level. As information from the management systems and other studies identified below become available the Plan will become more specific regarding this category of projects.

**Management Systems** - Completion of the six statewide management systems mandated by ISTEA will provide information needed to make the Plan more project specific regarding preservation, improvement and enhancements. ISTEA requires that all of the management systems be operational by October, 1998. The primary purpose of the management systems is to provide additional information needed to make effective decisions on the use of limited resources. The Indiana Department of Transportation is working in cooperation with the Metropolitan Planning Organizations in developing the management systems. The

Indianapolis Metropolitan Planning Organization has the primary responsibility for *the Congestion Management System*.

**Congestion Management** - In late December 1994, the MPO retained the services of a local consultant team, led by Howard, Needles, Tammen and Bergendoff (HNTB), to develop a Congestion Management System Plan for the Indianapolis Metropolitan Planning Area. The consultant team is to develop a plan that provides relevant, technically sound information to support and complement the Transportation Plan. They are also to provide information on the status of the transportation system and present the costs and benefits of alternative congestion management strategies. When completed (scheduled for October 1995), the recommendations from the Congestion Management System Plan will be incorporated into the Transportation Plan.

**Bicycle/Pedestrian** - Also in late December 1994, the MPO retained the services of HNTB to prepare a Metropolitan Planning Area Bicycle and Pedestrian System Plan. The study will develop a plan that will integrate bicycle and pedestrian facilities planning into the overall transportation planning process and the Transportation Plan. It is scheduled for completion in August 1995, and at that time the recommendations from the Metropolitan Planning Area Bicycle and Pedestrian System Plan will be incorporated into the Transportation Plan.

**Rail** - A third study was initiated in late December 1994 when the MPO retained the services of a consultant team to prepare an Indianapolis Comprehensive Rail Study. The consultant team is led by I.T. Business Corporation, with R.L Banks & Associates and KPMG Peat Marwick serving as sub-consultants. The study will evaluate the metropolitan area's existing rail network and examine the future rail network and its anticipated use. The study will assist local government agencies in making timely and better informed decisions concerning the ever changing rail network. The study is also expected to provide valuable information for use in the Bicycle and Pedestrian System Plan. The study is expected to be completed in June 1995, and the findings will be reflected in an amended Transportation Plan.

**The 1-69 Corridor Study and the U.S. 31 Corridor Study** - The 1-69 Corridor Study and the US 31 Corridor Study were initiated by the Indiana Department of Transportation in the Fall of 1993. They are scheduled for completion in the Spring of 1996. The Corradino Group has been retained to conduct the 1-69 Corridor Study which is examining 1-69 from 1-465 to SR 238, SR 238 from 1-69 to SR 37, and SR 37 from 1-465 to SR 238. The firm of Bernardin-Lochmueller Associates is conducting the US 31 corridor study. It is examining US 31 from 1-465 to 191st Street. Both the 1-69 and US 31 corridor studies are analyzing how to best address the existing and future traffic demand within the corridors. The studies will conclude with specific recommendations that will likely impact the recommendations in the Plan.

The recommendation from the Transportation System Management Sketch Plan Alternative pertaining to high occupancy vehicle lanes and ramp metering will not be included in the Plan at this time pending completion of the SR-37/I-69 Corridor study.

## C. Expansion

This category includes projects or activities that increase the capacity of the roadway and public transportation systems, including construction of new roads, adding lanes or widening intersections. For public transportation it would include the addition of new bus routes or increasing the number of buses.

*Roadway* - The plan identifies \$243,140,507 million for local roadway expansion projects between 1998 and year 2020. Projects included in the Plan are presented on Map 4. A full listing of the projects is included in Appendix C. The roadway network is a critical element of the transportation system in the planning area. The Plan focuses on the "thoroughfare system" which is made up of interstates routes, expressways and arterials that function as an interconnected system of roadways designed to carry large volumes of traffic (16,000 vehicles a day on a two lane arterial and up to 140,000 a day on an eight lane interstate such as 1-70 East inside 1-465). The purpose for designating a thoroughfare system is to channel traffic off of residential and local streets and onto the thoroughfares which are designed to safely handle the traffic. The challenge of ensuring that the thoroughfare system maintains the carrying capacity necessary to support existing and future anticipated growth becomes difficult as the area becomes more built out. For this reason it is important to anticipate needed roadway improvements far in advance of their need so that rights-of-way can be preserved. This helps to avoid the relocation of homes and businesses when a roadway project is implemented. The greatest opportunity for preserving rights-of-way exists in areas not yet developed. The implementation of any roadway project must weigh the need to increase roadway capacity with community and environmental impacts.

The Plan includes 150 miles of roadway expansion projects. Of these, 126 miles are projects which increase the capacity on existing thoroughfares and 24 miles are new thoroughfares. The northeast quadrant of the planning area (the area east of US 31 and north of 1-70 East) will continue to experience the greatest travel demand. This is due to the trips between Indianapolis, Cannel and Fishers. As a result, many of the recommended roadway expansion projects are located in this quadrant of the planning area, e.g. along Allisonville Road, Keystone Avenue and 1-69. A major new facility is recommended for Hendricks County. It is currently referred to as the North-South Corridor and connects 1-70 with 1-74. This new road parallels 1-465 on the west side and is anticipated to relieve congestion on that facility.

*Transit* - The Plan includes \$812,732,577 for transit operations and capital projects. At this time the Plan does not include any major expansion projects for the transit system. Based on the revenue forecasts for transit, improvements to the system are limited to current funding constraints. In addition, a Riders Advisory Council is working with IPTC-METRO in developing a set of recommendations from the "The Strategic Transit Plan for Public Transportation" completed in January 1994. Those recommendations will be incorporated into the Plan once they have been completed and approved.

## **CONCLUSION**

The Plan meets the air quality requirements for the area, is cost feasible and reflects consideration of the 15 metropolitan planning factors.

The Plan is viewed as a dynamic document. The components pertaining to congestion management, bicycle/pedestrian facilities, and rail will be incorporated once the studies are complete. Completion of the management systems will augment the preservation, improvement and enhancement component of the Plan by improving the quality and quantity of available information. In addition, the needs and financial program will become the basis for subsequent programming and budgeting decisions. This information will also be refined over time. The Plan is to be revised every three years and amended as necessary in response to changing conditions.

The Plan will provide the planning support for programming projects, particularly those using federal funding, in the Indianapolis Regional Transportation Improvement Program. Projects, as they near implementation, will be subjected to more intensive community and technical review.

## **CONTACTS**

For more information about the plan, or comments you might have, please contact Mike Peoni (327-5133) or Lori Miser (327-5136) of the Metropolitan Planning Organization staff.

## **APPENDIX A: STUDY PARTICIPANTS**

# ORGANIZATIONAL CHART

INDIANAPOLIS METROPOLITAN  
PLANNING ORGANIZATION

INDIANAPOLIS METROPOLITAN  
DEVELOPMENT COMMISSION

## LOCAL GOVERNMENTS

- \*CITY OF BEECH GROVE
- \*TOWN OF BROWNSBURG
- \*CITY OF CARMEL
- \*TOWN OF FISHERS
- \*CITY OF GREENWOOD
- \*CITY OF INDIANAPOLIS
- \*CITY OF LAWRENCE
- \*TOWN OF NEW WHITELAND
- \*TOWN OF PLAINFIELD
- \*CITY OF SOUTHPORT
- \*TOWN OF SPEEDWAY
- \*TOWN OF WESTFIELD
- \*TOWN OF WHITELAND
- \*TOWN OF ZIONSVILLE
- \*BOONE COUNTY
- \*HAMILTON COUNTY
- \*HANCOCK COUNTY
- \*HENDRICKS COUNTY
- \*JOHNSON COUNTY
- \*MORGAN COUNTY
- \*SHELBY COUNTY

## INDIANAPOLIS REGIONAL TRANSPORTATION COUNCIL

- \*POLICY COMMITTEE
- \*INTER-AGENCY TECHNICAL  
COORDINATING COMMITTEE

## OTHER PUBLIC AGENCIES

- \*FEDERAL HIGHWAY ADMIN.
- \*FEDERAL TRANS. ADMIN.
- \*INDIANA DEPT. OF ENVIR.  
MANAGEMENT
- \*INDIANA DEPARTMENT OF  
TRANSPORTATION
- \*INDPLS. DEPT. OF CAPITAL  
ASSET MANAGEMENT
- \*INDPLS. AIRPORT  
AUTHORITY
- \*INDPLS. PUBLIC  
TRANSPORTATION CORP.

## CITIZENS ADVISORY COMMITTEE

- \*AREA REPRESENTATIVES
- \*SPECIAL INTEREST  
REPRESENTATIVES

DEPARTMENT OF  
METROPOLITAN  
DEVELOPMENT  
DIRECTOR

PLANNING  
DIVISION  
ADMINISTRATOR

## OTHER STAFF RESOURCES

- \*ADMINISTRATION
- \*CITIZEN PARTICIPATION
- \*INFORMATION/DATA/  
POLICY ANALYSIS
- \*IMAGIS
- \*LAND USE PLANNING
- \*ENVIRONMENTAL PLANNING
- \*REGIONAL CENTER  
PLANNING
- \*SUPPORT STAFF

## TRANSPORTATION TECHNICAL STAFF

- \*TRANSPORTATION MNGR.
- \*PRINCIPAL PLANNER
- \*PRINCIPAL PLANNER
- \*SENIOR PLANNER
- \*SENIOR PLANNER
- \*PLANNER

## **Indianapolis Metropolitan Planning Organization**

### **Metropolitan Development Commission**

1. Mr. Walt Niemczura (President)
2. Mr. Lance L. Bundles
3. Ms. Lillian Charleston
4. Mr. James J. Curtis, Sr.
5. Dr. Jack H. Hall, M.D.
6. Mrs. Mary Ann Mills
7. Mr. Steve Schaefer
8. Mr. Mel Seitz
9. Mr. Randolph L. Snyder

INDIANAPOLIS REGIONAL TRANSPORTATION COUNCIL

POLICY COMMITTEE

March 1995

1. Fred Brinkman, President Town Board  
Town of Whiteland
2. Jose Campos, Assistant Planning and Research Engineer  
Federal Highway Administration
3. Richard Carlucci, Town Manager  
Plainfield Town Hall
4. Jeff Colvin, Director  
Johnson County Planning Commission
5. Ken Cooper, Town Council President  
Town of Zionsville
6. Katherine R. Lyon-Davis, Deputy Commissioner  
Indiana Department of Transportation
7. Steve Dillinger  
Hamilton County Commissioners Office
8. Robert Fans, Sr., Representative  
Town of Speedway
9. Gordon Gilmer, Councilman  
City of Indianapolis
10. Donald Gismondi, Acting Regional Director  
FTA/Region V
11. Steve Goldsmith, Mayor  
City of Indianapolis
12. Larry Hopkins, Town Manager  
Town of Fishers
13. Dick Hunt, President  
Yellow Cab Company
14. Robert Jarzen, Director  
Hendricks County Planning Commission

15. Ted Johnson, Mayor  
City of Cannel
16. Jerry March  
Boone County Area Planning Commission
17. Margaret McGovern, Mayor  
City of Greenwood
18. Joyce Newland  
Indiana Department of Environmental Management
19. Dan C. Orcutt, Executive Director  
Indianapolis Airport Authority
20. Jerry Ott, New Whiteland Engineer  
Ott Engineering
21. Ted Rieck, General Manager  
IPTC/Metro
22. Jerry Rosenberger, Town Manager  
Town of Westfield
23. Thomas Schneider, Mayor  
City of Lawrence
24. William Silvey, President  
Hancock County Board
25. Randy Snyder, Metropolitan Development Commission  
National City Bank
26. Nannett Tunget, Mayor  
City of Southport
27. Mark White, Town Manager  
Town of Brownsburg
28. J. Warner Wiley, Mayor  
City of Beech Grove

#### OTHER

1. Sharon R. Clark  
Hamilton County Commissioner

INDIANAPOLIS REGIONAL TRANSPORTATION  
TECHNICAL COORDINATING COMMITTEE

March 1995

1. Tim Belcher, Town Engineer  
Town of Plainfield
2. Herb Bollinger, Zionsville Town Engineer  
ENTB
3. Dan Buck, Planner, INDOT  
Indiana Government Center North, Room N901
4. Larry Buckel, Program Manager  
Indiana Dept. of Transportation
5. Michael Buening, Planning Engineer  
Johnson County Planning Commission
6. Bruno Canzian, Technical Engineer  
Indiana Dept. of Transportation
7. Joseph Copeland, Highway Engineer  
Hancock County Highway Department
8. Bob Curry, Town Engineer  
Town of Brownsburg
9. Clinton E. Ferguson, Director, Dept. of Planning and Zoning  
City of Greenwood
10. Donald Gismondi, Acting Regional Director  
FTA/Region V
11. Bill Hall, Beech Grove Engineer  
United Consulting Engineers
12. Greg Henneke, Director  
Indianapolis Department of Capital. Asset Management
13. Merritt Hoffman, Area Engineer  
Federal Highway Administration
14. Roger Johnson, Director of Long Range Planning  
Town of Fishers

15. George Julius, City Clerk  
City of Southport
16. Jerry March  
Boone County Area Planning Commission
17. John W. Myers, Speedway Town Engineer  
BENTTB
18. Daniel Orcutt, Executive Director  
Indianapolis Airport Authority
19. Jerry Ott, New Whiteland Engineer  
Ott Engineering Inc.
20. Walt Reeder, III, Highway Engineer  
Hendricks County Highway Department
21. Ted Rieck, General Manager  
IPTC/METRO
22. Paul Satterly, Westfield Town Engineer  
HNTB
23. Tom Stevens, Director of Highways  
Hamilton County Highway Department
24. Tom Welch, Cannel City Engineer  
City of Carmel
25. Lamar Ziegler, Lawrence City Engineer  
City of Lawrence

OTHER

1. Joyce Newland  
Indiana Department of Environmental Management
2. Rich Emery  
Indiana Dept. of Transportation

CITIZENS ADVISORY COMMITTEE

1. Lloyd Bandy, Hamilton County
2. Pete Bisbecos, Moderator  
Transit Riders Advisory Council
3. Douglas Bohan  
Greenwood
4. Sharon Byrkett, Chairman  
Metro Advisory Committee
5. Ray Cannarella  
Central Indiana Bicycle Association
6. Richard Carlucci, Town Manager  
Plainfield
7. Michael Carter  
Historic Landmarks Foundation of Indiana
8. Joseph Copeland  
Hancock County
9. Kenneth E. Cragen, President  
Indiana Motor Truck Association
10. Martin S. Dezelan  
Indianapolis Chamber of Commerce
11. Robert M. Garner  
The Indiana Railroad Transportation Group
12. Robert A. Geiger  
Speedway
13. William Gervasio  
Johnson County
14. Shirley King  
Southport
15. Andy Knott  
Hoosier Environmental Council

16. Phillip McGeath, President  
Indiana Association of Rail Passengers
17. Daniel A Novreske  
Brownsburg
18. James A Purucker, Aviation
19. Yvonne Shaheen  
Cannel
20. Stanley M. Shartle  
Hendricks County
21. Lisa Shortridge  
Ridesharing Coordinator
22. Richard Vonnegut  
Indianapolis "Mayor's" Bicycle Task Force
23. John Zerbo  
Fishers
24. Lisa Hamilton  
Indianapolis
25. Dorothy Mack  
Community Based Transportation
26. Tim Maslanka  
IPTC/METRO
27. Joyce Newland  
Indiana Dept. of Environmental Management
28. Stacey Green  
Transit Riders Advisory Council
29. Hadi (Mike) Yamin  
Nora Community Council
30. Andrew Zehner  
Transit Riders Advisory Council

## STUDY REVIEW COMMITTEE

1. Edward Sagebeil  
Department of Metropolitan Development
2. Robert Faris, Sr.  
Town of Speedway
3. Ed Ferguson, Planning Director  
City of Greenwood
4. Gordon Gilmer, Councilman  
City of Indianapolis
5. Roger Johnson, Long Range Planning Director  
Town of Fishers
6. James Maslanka  
IPTC/METRO
7. Dan Orcutt, Executive Director  
Indianapolis Airport Authority
8. Walt Reeder, III, Highway Engineer  
Hendricks County Highway Dept.
9. Steve Smith  
Indiana Department of Transportation
10. Mayor Thomas Schneider  
City of Lawrence
11. Tom Stevens, Director of Highways  
Hamilton County Highway Dept.
12. Larry Tucker, P.E.  
Federal Highway Administration
13. Mayor Nannett Tunget  
City of Southport
14. Tom Welch, Carmel City Engineer  
City of Carmel

15. Clay Whitmire  
Department of Capital Asset Management
16. Mayor J. Warner Wiley  
City of Beech Grove

#### DMD - PLANNING DIVISION STAFF

1. Lori Miser, Program Manager  
Department of Metropolitan Development
2. Michael Peoni, Principal Planner  
Department of Metropolitan Development
3. Sweson Yang, Chief Transportation Planner  
Department of Metropolitan Development
4. Steve Cunningham, Senior Planner  
Department of Metropolitan Development

#### CONSULTANT TEAM

1. Vince Bernardin  
Bernardin-Lochmueller Associates
2. Joann Green  
Claire Bennett Associates
3. Kenneth D. Kaltenbach, P.E., Project Manager  
The Corradino Group
4. James Klausmeier  
Pflum Klausmeier & Gehrum
5. Fred Sanborn, Senior Vice President  
Resource Planning Associates, Inc.

## **APPENDIX B: SUMMARY of ISTE A**

# INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT

## SUMMARY

**Intermodal Surface Transportation Efficiency Act** - The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA - Pronounced icetea) is the current federal legislation governing all transportation planning and programming activities. The rules govern both metropolitan and statewide planning. Planning activities are to be coordinated within the metropolitan area, with the State and with other local agencies and organizations. Likewise, it is to be conducted cooperatively and in such a manner that provides for continuous and substantive public participation.

The 1991 ISTEA emphasized all modes of transportation, not just roadways, and requires inclusion of other modes in the transportation plans and programs that are developed. Specific funds are designated for Transportation Enhancement Activities (TEA) which include such items as facilities for pedestrians and bicyclists, preservation of historic transportation corridors, and landscaping and scenic beautification of developments adjacent to transportation facilities.

The ISTEA provides the rules and regulations for the development of the Transportation Improvement Program (TIP), the Long Range Transportation Plan (LRTP) and seven transportation management systems as well as a number of other activities, including the development of the planning work program and related administrative responsibilities.

The ISTEA lists fifteen (15) planning factors that must be considered, analyzed as appropriate and reflected in the products of the planning process. Those 15 factors were reviewed by the Metropolitan Planning Organization staff and a Status Report was prepared which provides information on how those factors will be considered and applied in the long range transportation planning process.

### 15 Metropolitan Planning **Factors**

1. Preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing transportation facilities more efficiently;
2. Consistency of transportation planning with applicable Federal, State, and local energy conservation programs, goals, and objectives;
3. The need to relieve congestion and prevent congestion from occurring where it does not yet occur including:
  - I. The consideration of congestion management strategies or actions which improve the mobility of people and goods in all phases of the planning process; and
  - II. In TMAs, a congestion management system that provides for effective management of new and existing transportation facilities through the use of travel demand reduction and operation management strategies shall be developed.

4. The likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with the provisions of all applicable short- and long-term land use and development plans (the analysis should include projections of metropolitan planning area economic, demographic, environmental protection, growth management, and land use activities consistent with metropolitan and local/central city development goals (community, economic, housing, etc.), and projections of potential transportation demands based on the interrelated level of activity in these areas);
5. Programming of expenditures for transportation enhancement activities;
6. The effects of all transportation projects to be undertaken within the metropolitan planning area, without regard to the source of funding (the analysis shall consider the effectiveness, cost effectiveness, and financing of alternative investments in meeting transportation demand and supporting the overall efficiency and effectiveness of transportation system performance and related impacts on community/central city goals regarding social and economic development, housing, and employment);
7. International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation areas, monuments and historic sites, and military installations (supporting technical efforts should provide an analysis of goods and services movement problem areas, as determined in cooperation with appropriate private sector involvement, including, but not limited to, addressing interconnected transportation access and service needs of intermodal facilities);
8. Connectivity of roads within metropolitan planning areas with roads outside of those areas;
9. Transportation needs identified through the use of the management systems (strategies identified under each management system will be analyzed during the development of the transportation plan, including its financial component, for possible inclusion in the metropolitan plan and TIP);
10. Preservation of rights-of-way for construction of future transportation projects, including future transportation corridors;
11. Enhancement of the efficient movement of freight;
12. The use of life-cycle costs in the design and engineering of bridges, tunnels, or pavement (operating and maintenance costs must be considered in analyzing transportation alternatives);
13. The overall social, economic, energy, and environmental effects of transportation decisions (including consideration of the effects and impacts of the plan on the human, natural and man-made environment such as housing, employment and community development, consultation with appropriate resource and permit agencies to ensure early

and continued coordination with environmental resource protection and management plans, and appropriate emphasis on transportation-related air quality problems;

14. Expansion, enhancement, and increased use of transit services; and

15. Capital investments that would result in increased security in transit systems.

Management Systems - The ISTEA requires the development of six(6) statewide transportation management systems and a traffic monitoring system to improve the efficiency and safety of the system and to protect public investment in the nation's infrastructure. The primary purpose of the management systems is to provide additional information needed to make effective decisions on the use of limited resources.

The lead responsibility for developing the management systems (except the Congestion Management System) rests with the state, however, ISTEA specifies that "within all MPO areas, CMS, PTMS, and IMS shall be part of the metropolitan transportation planning process." The MPO has the lead responsibility for the Congestion Management System in cooperation with the State.

The outputs of each management system shall be integrated into the metropolitan planning process and the statewide transportation planning process and shall be considered in the development of metropolitan and statewide transportation plans and improvement programs and in making project selection.

The six (6) management systems and operational deadlines required by ISTEA are:

- Pavement Management System (October 1, 1995 for the National Highway System/ October 1, 1997 for Non-National Highway System Federal Highways);
- Bridge Management System (October 1, 1998);
- Highway Safety Management System (October 1, 1996);
- Traffic Congestion Management System (October 1, 1995);
- Public Transportation Facilities and Equipment Management System (October 1, 1995), and;
- \* Intennodal Transportation Facilities and Systems Management System (October 1, 1996).

**APPENDIX C: FULL LIST OF ROADWAY EXPANSION PROJECTS**

**TABLE 6 (REVISED 5/21/97)  
FUTURE TRANSPORTATION PROJECTS  
HIGHWAY SYSTEM  
CAPACITY EXPANSION PROJECTS ONLY**

ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
<b>1998-2006 URBAN PROJECTS</b>										
F1	FIS	116th Street	Hague Road to I-69	1.00	3	Roadway widening	2	Widen 2-lane to 5-lane	URBAN	\$ 3,500,000
200	DCAM	South County Line Road	Meridian Street to Shelby Street	1.00	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,034,431
40	FIS	Allisonville Road	Hamilton Hills Lane to 96th St.	0.58	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,133,166
109	DCAM	Michigan Road (US 421)	I-465 to 86th St.	0.89	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	URBAN	\$ 3,010,000
75.2	DCAM	Harding Street	Raymond St. to Hanna Ave.	2.00	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 7,100,000
102.1	DCAM	Lafayette Road	I-65 to 62nd Street	2.20	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 4,000,000
201	DCAM	82nd Street	I-465 to Bash Road	1.00	3	Roadway widening	3	4-lane divided to 6-lane divided	URBAN	\$ 2,543,040
47.3	DCAM	Brookville Road	Arlington Ave. to Hunter Drive	1.05	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,500,000
76	DCAM	Harding Street	Hanna Ave. to I-465	0.78	2	Roadway widening	2	2-lane to 4-lane divided	URBAN	\$ 4,264,488
39	FIS	Allisonville Road	106th St. to Hamilton Hills Lane	0.44	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 1,618,264
51	DCAM	County Line Road	Madison St. to Emerson Ave.	1.83	4	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 4,700,000
37.2	FIS	Allisonville Road	S. of 126th Street to Shadow Lawn Dr.	1.06	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,898,544
27.1	DCAM	79th Street	Fall Creek Rd. to Sunnyside Rd.	0.98	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,815,716
59.2	DCAM	Franklin Road	42nd to 38th	0.40	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,000,000
54.2	DCAM	Emerson Avenue	Shelbyville to Southport Rd.	1.48	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 5,100,000
65	DCAM	Georgetown Road	58th St. to LaFayette Rd.	1.38	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 5,080,980
<b>1998-2006 URBAN PROJECTS SUBTOTAL</b>									<b>\$</b>	<b>58,098,629</b>
<b>2007-2015 URBAN PROJECTS</b>										
37.1	FIS	Allisonville Road	141st Street to S. of 126th Street	1.66	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 6,105,268
19	DCAM	38th Street	Industrial Blvd. to Cold Springs Rd.	1.46	3	Roadway widening	3	4-lane divided to 6-lane div.	URBAN	\$ 2,000,000
20	DCAM	38th Street	Cold Springs Rd. to Dr. M.L. King Jr.	0.89	2	Roadway widening	3	4-lane divided to 6-lane div.	URBAN	\$ 5,215,124
133.2	JOH	Smith Valley Road	Meridian (SR 135) to East St. (US 31)	2.76	3	Roadway widening	3	Widen 2-lane to 4-lane div.	URBAN	\$ 10,150,927
73	DCAM	Hague Rd.	96th St. to 82nd St.	1.68	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 6,179,193
63	DCAM	Georgetown Road	86th St. to 62nd St.	3.05	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 11,217,510
64	DCAM	Georgetown Road	62nd St. to 58th St.	1.01	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,725,317
25	DCAM	56th Street	Dandy Trail Road to I-465	0.89	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,282,501
59.1	DCAM	Franklin Road	38th St. to 21st St.	2.04	4	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 13,437,405
129.2	DCAM	Shadeland Avenue	42nd St. to Pendleton Pike	0.40	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 1,452,759
41	DCAM	Allisonville Road	96th St. to I-465	1.41	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	URBAN	\$ 5,527,617
13.2	HAM	146th Street	Spring Mill Road to Westfield Blvd.	1.98	3	Roadway widening	3	Widen 2-lane to 4-lane div.	URBAN	\$ 7,287,336
117	HEN	North-South Corridor	300N at 1000E to 58th St.	4.23	5	New Roadway	11	2-lane on 4-lane divided ROW	URBAN	\$ 9,892,591
<b>2007-2015 URBAN PROJECTS SUBTOTAL</b>									<b>\$</b>	<b>85,473,547</b>
<b>2016-2020 URBAN PROJECTS</b>										
7	CAR	116th Street	Westfield Blvd. to Gray/Moontown Rd.	2.00	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 12,039,381
56	DCAM	Fall Creek Road	Hague Rd. to I-465 (Shadeland)	1.05	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,848,157
27.2	LAW	79th Street	Sunnyside Rd. to Oaklandon Rd.	0.98	3	New roadway	12	4-lane divided	URBAN	\$ 6,928,032
42	DCAM	Allisonville Road	82nd St. to Kessler Blvd.	3.13	2	Roadway widening	2	Widen 2-lane to 4-lane div.	UZA STP	\$ 15,305,678
<b>2016-2020 URBAN PROJECTS SUBTOTAL</b>									<b>\$</b>	<b>38,119,248</b>
<b>1998-2020 URBAN PROJECTS TOTAL</b>									<b>\$</b>	<b>181,691,424</b>

ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
<b>2020+ URBAN PROJECTS (UNFUNDED)</b>										
54.1	DCAM	Emerson Avenue	I-485 to Thompson Rd.	0.62	3	Roadway widening	3	Widen 4-lane to 6-lane div.	URBAN	\$ 2,430,584
10	CAR	131st Street	Keystone Ave. to Cherry Tree Rd.	1.72	3	Roadway widening	12	Reconst./widen to 4-lane div.	URBAN	\$ 12,117,562
161	DCAM	Zionsville Road	76th St. to 71st St.	0.60	3	Roadway widening	2	38 feet to 4-lane divided	URBAN	\$ 500,000
156	DCAM	West Street	Raymond St. to Bluff Rd.	0.41	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,007,831
160	DCAM	Zionsville Road	96th St. to 86th St.	0.96	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,530,757
43.1	DCAM	Allisonville Road	Kessler Blvd. to Fall Creek Pkwy	2.04	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 9,975,586
26.2	DCAM	56th Street	LaFayette Road to Georgetown Rd.	1.32	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 4,854,791
127	DCAM	Rockville Road	Lynnhurst Drive to Washington St.	0.83	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 4,058,694
129.1	DCAM	Shadeland Avenue	71st St. to Fall Creek Pkwy	0.93	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,420,421
45	DCAM	Bluff Road	West St. to Troy Ave.	0.60	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,951,600
149	DCAM	Thompson Road	Kentucky Ave. to High School Rd.	0.25	3	New Roadway	12	4-lane divided	URBAN	\$ 1,745,070
131	DCAM	Shadeland Avenue	38th St. to ConRail (N. of I-70)	1.64	3	Roadway widening	3	From 4-lane div. to 6-lane div.	URBAN	\$ 6,444,967
152.1	DCAM	Township Line Road	96th St. to 79th St.	2.06	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 7,576,416
53	DCAM	Dandy Trail Road	Crawfordsville Rd. to 34th St.	0.65	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,398,708
100	DCAM	Kessler Boulevard	Fall Creek Pkwy to SR 37	0.40	2	Roadway widening	2	Widen 38ft. to 4-lane div.	URBAN	\$ 1,955,997
104	DCAM	Mann Road	Kentucky Rd. to Southport Rd.	3.58	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 13,160,529
75.1	DCAM	Harding Street	I-70 to Washington St.	0.80	2	Roadway widening	13	6-lane divided	URBAN	\$ 11,310,941
29	DCAM	79th Street	Michigan Rd. to Township Line Rd.	0.67	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,464,174
159.2	WHLD	Whiteland Road	Center Rd. to US 31	0.79	5	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 1,762,525
159.3	WHLD	Whiteland Road	US 31 to Conrail RR	0.47	5	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 1,048,591
67	DCAM	Girls School Road	Rockville Rd. to 21st St.	2.05	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 7,555,085
43.2	LAW	Aultman Avenue (56th St)	Lee Rd. to Pendleton Pike	0.76	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,795,183
21	DCAM	46th Street	Pendleton Pike to Mithoeffer Rd.	1.44	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 5,283,263
2	DCAM	10th Street	Raceway Rd. to Country Club Rd.	1.04	3	Roadway widening	12	Reconst./widen to 4-lane div.	URBAN	\$ 7,338,874
134	DCAM	Southport Road	Mann Rd. to SR 37	2.64	5	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 5,887,725
111	DCAM	Moller Road	30th St. to Lynnhurst Dr.	1.16	3	New roadway	12	4-lane divided	URBAN	\$ 8,169,491
152.2	DCAM	Township Line Road	79th St. to 71st St. (Westlane Rd.)	0.80	3	New Roadway	12	4-lane divided	URBAN	\$ 5,636,075
74	DCAM	Hague Rd.	82nd St. to Fall Creek Rd.	1.81	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 6,666,143
68	DCAM	Girls School Road	Crawfordsville Rd. to 21st St. (ptSR134)	0.69	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,553,179
125	DCAM	Post Road	Brookville Rd. (US 52) to I-74	2.14	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 7,870,646
60.1	DCAM	Franklin Road	Brookville Rd.(US 52) to Troy Ave.	2.80	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 10,298,042
52	DCAM	County Line Road	Five Points Rd. to Franklin Rd.	1.37	5	New Roadway	11	2-lane of 4-lane divided ROW	URBAN	\$ 3,196,324
31	DCAM	82nd Street	Hague Rd. to Fall Creek Rd.	2.08	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 7,651,445
147	DCAM	Stop 11 Road	Madison St. to McFarland Rd.	0.61	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,243,502
44	DCAM	Bluff Road	Thompson Rd. to SR 37	3.87	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 14,216,446
148	DCAM	Thompson Road	Mendenhall Rd. to Kentucky Ave.	0.75	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,758,404
136	DCAM	Southport Road	Meridian Rd. (SR 135) to East (US 31)	0.58	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 2,133,166
66.1	DCAM	Georgetown Road	38th St. to 30th St.	1.00	3	Reconstruction	2	4-lane (35ft.) to 4-lane div.	URBAN	\$ 3,692,216
101.2	DCAM	LaFayette Road	30th Street to Tibbs Avenue	0.40	3	Roadway widening	2	Widen 42 feet to 4-lane div.	URBAN	\$ 1,471,149
137	DCAM	Southport Road	Emerson Ave. Franklin Rd.	3.40	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 12,507,707
57	DCAM	Fall Creek Road	Shadeland Ave. to E. of Kessler Blvd.	1.85	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 9,046,487
49.1	DCAM	Camby Road Extension	Mooresville Rd. to Mann Rd.	1.49	5	New Roadway	11	2-lane on 4-lane divided ROW	URBAN	\$ 3,496,198
66.2	DCAM	German Church Road	Pendleton Pike to 56th St.	0.45	3	New Roadway	12	4-lane divided	URBAN	\$ 3,170,292
49.2	DCAM	Cooper Road	Michigan Road to 62nd Street	0.90	3	New Roadway	11	2-lane on 4-lane divided ROW	URBAN	\$ 3,940,340
126.1	DCAM	Reed Road	Realignment at 46th to Eagle Ck.Pkwy.	0.40	3	New Roadway	11	2-lane on 4-lane divided ROW	URBAN	\$ 1,751,262
119.2	DCAM	Payne Road	79th Street to 71st Street	0.68	3	New Roadway	11	2-lane on 4-lane divided ROW	URBAN	\$ 2,977,145
48	DCAM	Camby Road	Kentucky Ave. to Mooresville Rd.	2.00	5	Roadway widening	12	Widen 2-lane to 4-lane div.	URBAN	\$ 7,887,552
28	DCAM	79th Street	Georgetown Rd. to Michigan Rd.	1.40	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 5,149,021

6/2/97

ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
150	DCAM	Thompson Road	High School Rd. to Mann Rd.	1.40	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 5,134,677
135	DCAM	Southport Road	SR 37 to Meridian Rd. (SR 135)	2.04	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 7,492,193
50	DCAM	County Line Road	SR 37 to Morgantown Rd.	0.41	5	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 914,728
32	DCAM	86th Street	Moore Rd. to I-465	0.96	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 3,530,757
58	DCAM	Franklin Rd.-Post Rd.	Post Rd.at I-74 to SE Ave. at Franklin	0.64	3	New roadway	12	4-lane divided	URBAN	\$ 4,491,247
24	DCAM	56th Street	Raceway Rd. to Dandy Trail Road	1.99	5	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 4,448,032
102.2	DCAM	Lynhurst Drive	Rockville Rd. to Washington St.	0.85	2	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 4,132,533
60.2	DCAM	Franklin Road	Southeastern Ave. to Stop 11	3.80	3	Roadway widening	2	Widen 2-lane to 4-lane div.	URBAN	\$ 13,965,983
<b>2020+ UNFUNDED URBAN PROJECTS TOTAL</b>										<b>\$ 297,168,256</b>
<b>1998-2006 PROJECTS WITH GROUP 2 URBAN FUNDING</b>										
T	PLAIN	Stafford Road	Six Points Road to S.R. 67	2.78	5	Roadway widening	2	Widen 2-lane to 4-lane div.	SPECIAL	\$ 4,500,000
<b>1998-2006 PROJECTS WITH GROUP 2 URBAN FUNDING SUBTOTAL</b>										<b>\$ 4,500,000</b>
<b>1998-2006 URBAN PROJECTS WITH SPECIAL FUNDING</b>										
132	DCAM	Six Points-Camby Road	I-70 at Six Points to Ky. at Camby Rd.	1.95	5	New Roadway	12	4-lane divided	URBAN	\$ 7,674,982
35.1	FIS	96th Street	Allisonville Rd. to Lantern Rd.	2.78	3	Roadway widening	2	Widen 2-lane to 4-lane div.	SPECIAL	\$ 10,208,302
34.1	HAM	96th Street	Brandt Rd. to River Rd.	0.70	3	Roadway widening	2	Widen 2-lane to 4-lane div.	SPECIAL	\$ 2,573,407
<b>1998-2006 URBAN PROJECTS WITH SPECIAL FUNDING TOTAL</b>										<b>\$ 20,456,691</b>

**TABLE 6 (REVISED 5/21/97)  
FUTURE TRANSPORTATION PROJECTS  
HIGHWAY SYSTEM  
CAPACITY EXPANSION PROJECTS ONLY**

ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
<b>1998-2006 RURAL PROJECTS in MPA</b>										
114	HEN	North-South Corridor 1000E	I-70 at Six Points Rd. to US 40	2.88	5	New Roadway	12	4-lane divided	RURAL	\$ 11,358,075
38	FIS	Allisonville Road	Shadow Lawn Dr. to 106th St.	0.86	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 3,162,970
71	GWD	Greenwood Road	Interstate 65 to Arlington Ave.	0.33	4	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 2,173,698
<b>1998-2006 RURAL PROJECTS IN MPA SUBTOTAL</b>										<b>\$ 16,694,743</b>
<b>2007-2016 RURAL PROJECTS in MPA</b>										
116	HEN	North-South Corridor 1000E	Morris Rd. at 1050E to 300N at 1000E	3.56	5	New Roadway	11	2-lane on 4-lane divided ROW	RURAL	\$ 8,324,627
115	HEN	North-South Corridor 1000E	US40 to Morris Rd.	1.77	5	New Roadway	11	2-lane on 4-lane divided ROW	RURAL	\$ 4,131,764
<b>2007-2016 RURAL PROJECTS IN MPA SUBTOTAL</b>										<b>\$ 12,456,392</b>
<b>2016-2020 RURAL PROJECTS in MPA</b>										
13.3	HAM	146th Street	Westfield Blvd. to Gray/Moontown Rd.	2.01	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 7,392,523
<b>2016-2020 RURAL PROJECTS IN MPA SUBTOTAL</b>										<b>\$ 7,392,523</b>
<b>1998-2020 RURAL PROJECTS IN MPA TOTAL</b>										<b>\$ 36,543,657</b>
<b>2020+ RURAL PROJECTS in MPA (UNFUNDED)</b>										
36	FIS	Allisonville Road	146th St. to 141st Street	1.00	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 3,677,872
151	HAM	Towne Road	146th St. to 96th St.	5.00	5	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 11,154,551
124	PLAIN	Plainfield Circle Rd.	east side and NW side of town	4.65	3	New Roadway	11	2-lane on 4-lane divided ROW	RURAL	\$ 20,358,421
113	HAN	Mt.Comfort-McCordsville Rd.	38th St. to I-70	0.53	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 1,949,272
5	HAM	116th Street	Spring Mill Rd. to Meridian St.	0.38	3	Roadway widening	12	Reconst./widen to 4-lane div.	RURAL	\$ 2,677,136
8	HAM	116th Street	Gray/Moontown Rd. to River Ave.	1.27	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 9,354,902
77	HAM	Hazeldell Road Extension	146th St. to 106th St./Gray Rd. 767	4.64	5	New roadway	11	2-lane on 4-lane ROW	RURAL	\$ 10,864,082
22	HEN	56th Street	SR 267 to N/S Corridor	2.62	5	Roadway widening	12	Reconst./widen to 4-lane div.	RURAL	\$ 10,334,665
23	HEN	56th Street	N/S Corridor to Raceway Rd.	0.99	5	Roadway widening	12	Reconst./widen to 4-lane div.	RURAL	\$ 3,890,141
6	HAM	116th Street	Meridian St. to Westfield Blvd.	1.66	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 10,788,904
33.1	HAM	96th Street	Michigan Rd. to Shelborne Rd.	0.40	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 1,471,149
159.4	JOH	Whiteland Road	Conrail RR to I-65	2.00	5	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 4,462,088
158	JOH	Whiteland Road	SR 144 to Meridian Rd. (SR 135)	2.38	5	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 5,309,885
159.1	JOH	Whiteland Road	Meridian Rd. (SR 135) to Center Rd.	3.00	5	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 6,893,132
159.5	JOH	Whiteland Road	I-65 to Franklin Rd.	0.83	5	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 1,851,767
133.1	JOH	Smith Valley Road	Mann Rd. to SR 37	2.56	5	New Roadway	11	2-lane of 4-lane divided ROW	RURAL	\$ 5,986,728
35.2	HAM	96th Street	Lantern Rd. to Sarget Rd.	0.38	3	Roadway widening	2	Widen 2-lane to 4-lane div.	RURAL	\$ 1,397,591
1	HEN	10th Street	N/S Corridor to Raceway Rd.	0.70	5	Roadway widening	12	Reconst./widen to 4-lane div.	RURAL	\$ 2,752,361
3.1	HAM	116th Street	Michigan Rd. to Shelborne Rd.	1.12	5	Roadway widening	12	Reconst./widen to 4-lane div.	RURAL	\$ 4,417,029
<b>2020+ RURAL PROJECTS IN MPA TOTAL</b>										<b>\$ 119,391,876</b>
ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
<b>1998-2006 STATE PROJECTS</b>										
Q	INDOT	U.S. Route 31	Mills Avenue to Southern Avenue	3.50	3	Roadway widening	3	6-lane to 7-lane divided	State STP	\$ 10,792,200
R	INDOT	U.S. Route 31	86th Street to 96th Street	1.00	3	Roadway widening	3	Added turn lanes	State STP	\$ 6,250,000
108.1	INDOT	Michigan Road (US 421)	121st St. to 96th Street	2.70	3	Roadway widening	3	Widen 2-lane to 4-lane div.	State STP	\$ 13,790,000

ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
153	INDOT	Washington St. (US 40)	I-456 East Leg to Franklin Rd.	0.21	3	Roadway widening	3	58ft to 6-lane divided	State STP	\$ 823,654
154	INDOT	Washington St. (US 40)	Franklin Rd. to German Church Road	3.00	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	State STP	\$ 23,000,000
209	INDOT	Washington St. (US 40)	German Church Road to Buck Creek	1.20	3	Roadway widening	3	Widen 4-lane div. to 5-lane div.	State STP	\$ 13,900,000
108.2	INDOT	Michigan Road (US 421)	96th St. to I-465.	0.19	3	Road widening/Int. Mod	3	Widen 4-lane div. to 6-lane div.	State STP	\$ 3,000,000
98	INDOT	Kentucky Avenue (SR 67)	I-465 to Thompson Rd.	1.02	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	State STP	\$ 4,013,991
47.2	INDOT	Brookville Road (US52)	Franklin Rd. to Post Rd. (94-IDT-1055)	1.38	3	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 5,075,463
141	INDOT	State Road 37	I-465 to Edgewood Rd.	1.40	2	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS	\$ 8,228,177
105	INDOT	Meridian St. (US 31)	146th St. to 106th St.	4.83	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS	\$ 18,935,030
120.2	INDOT	Pendleton Pike (US36/SR67)	Franklin Rd. to Post Rd. (94-IDT-1002A)	1.08	3	Reconstruction	2	4-lane to 4-lane divided	State STP	\$ 3,898,544
142	INDOT	State Road 37	Edgewood Rd. to Bluff Rd.	2.57	5	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS	\$ 5,756,859
47.1	INDOT	Brookville Road (US52)	I-465 to Franklin Rd.	0.82	3	Roadway widening	3	Widen 4-lane to 6-lane div.	State STP	\$ 3,214,643
120.1	INDOT	Pendleton Pike (US36/SR67)	I-465 to Franklin Rd. (94-IDT-1002A)	0.44	3	Roadway widening	3	4-lane to 6-lane divided	State STP	\$ 1,708,857
99	INDOT	Kentucky Avenue (SR 67)	Thompson Rd. to Camby Rd.	2.79	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	State STP	\$ 10,937,626
121	INDOT	Pendleton Pike (US36/SR67)	Post Rd. to 56th St. (94-IDT-1049)	1.44	3	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 5,313,054
122	INDOT	Pendleton Pike (US36/SR67)	56th St. to 65th St. (94-IDT-1049)	2.42	3	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 8,899,715
143	INDOT	State Road 37	Bluff Rd. to Smith Valley Rd.	2.78	5	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS	\$ 6,241,831
128	INDOT	Rockville Road (US 36)	N/S Corridor to I-465	3.51	3	Roadway widening	3	Widen 4-lane to 6-lane div.	State STP	\$ 13,748,478
157.3	INDOT	Westfield Blvd. (US 31)	161st St. to 146th St.	2.02	5	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS(out)	\$ 4,531,193
88	INDOT	Interstate 65 (south leg)	I-70 West to Raymond St.	1.07	2	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 11,823,959
157.1	INDOT	Westfield Blvd. (US 31)	216th St. to 186th St.	3.33	5	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS(out)	\$ 7,484,356
78.2	INDOT	Huntington Ave. (SR 37)	146th Street to I-69	2.51	3	Roadway widening	3	Widen 4-lane div. to 6-lane div.	State STP	\$ 8,846,215
157.2	INDOT	Westfield Blvd. (US 31)	186th St. to 161st St.	2.27	5	Roadway widening	3	Widen 4-lane div. to 6-lane div.	NHS	\$ 5,102,527
123	INDOT	Pendleton Pike (US36/SR67)	65th St. to SR 234 (94-IDT-1049)	2.53	3	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 9,291,776
<b>1998-2006 STATE PROJECTS SUBTOTAL</b>										<b>\$ 216,588,148</b>
<b>2007-2015 STATE PROJECTS</b>										
93	INDOT	Interstate 69	N of '96th St. to I-465	2.56	4	Roadway widening	1	6-lane div. to 8-lane div.	NHS	\$ 37,033,640
92	INDOT	Interstate 69	N of '96th St. to I-465 + 3 I-changes	2.56	4	Roadway widening	12	Add 2-lane C/D @ side	NHS	\$ 104,122,250
91	INDOT	Interstate 69	SR37 to N. of 96th St.	2.95	4	Roadway widening	1	6-lane div. to 8-lane div.	NHS	\$ 42,582,215
90	INDOT	Interstate 69	SR37 to N. of 96th St. + 3 I-changes	2.95	4	Roadway widening	12	Add 2-lane C/D @ side	NHS	\$ 111,064,848
98	INDOT	Interstate 74 (94-IDT-1126)	I-change on N-S Corridor (CR 1000E)	0.50	5	New interchange	1	Add diamond interchange	NHS(out)	\$ 3,609,569
97	INDOT	Interstate 74	Widen Post Rd. over I-74	0.50	3	I-change improvement	1	Widen Post and adjust ramps	NHS	\$ 4,071,186
106	INDOT	Meridian Street (SR 135)	Smith Valley Rd. to SR 144	3.98	5	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 8,871,077
107	INDOT	Michigan Road (US 421)	146th St. to 121st St.	1.79	5	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 3,987,322
17.2	INDOT	176th Street (SR 32)	Oak Ridge Rd. to Moontown Rd.	2.93	5	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 6,546,329
<b>2007-2015 STATE PROJECTS SUBTOTAL</b>										<b>\$ 321,888,236</b>
<b>2016-2020 STATE PROJECTS *</b>										
101.1	INDOT	Keystone Ave. (SR 431)	I-465 to US 31	5.60	4	Roadway widening	3	Widen 4-lane div. to 6-lane div.	State STP	\$ 47,066,290
95	INDOT	Interstate 70	Interchange at German Church Road	0.50	3	New interchange	1	Add diamond interchange	NHS	\$ 4,071,186
140	INDOT	State Road 267	SR 67 to SR 267 S. of I-70	2.03	5	New Roadway	11	2-lane on 4-lane divided ROW	State STP	\$ 4,746,028
9	INDOT	116th Street (SR 334)	Zionsville Rd. to Michigan Rd. (US421)	1.07	4	Roadway widening	2	Widen 2-lane to 4-lane div.	State STP	\$ 7,048,050
<b>2016-2020 STATE PROJECTS SUBTOTAL</b>										<b>\$ 62,931,564</b>
<b>1998-2020 STATE PROJECTS TOTAL</b>										<b>\$ 600,407,938</b>
<b>1998-2006 STATE URBAN PROJECTS WITH INTERSTATE MAINTENANCE FUNDING</b>										
202	INDOT	Interstate 465	Emerson Avenue interchange		2	Interchange Modification	1	Urban Single Point Interchange	Int. 4-R	\$ 9,100,000

ID#	Agency	Facility	Location	Length	Area	Improvement Type	Code	Description	Funding	Amount
203	INDOT	Interstate 465	I-74 (east) Interchange		3	Interchange Modification	1		Int. 4-R	\$ 19,000,000
204	INDOT	Interstate 465	US 52 interchange		3	Interchange Modification	1		Int. 4-R	\$ 5,900,000
205	INDOT	Interstate 465	Shadeland Avenue Interchange		3	Interchange Modification	1		Int. 4-R	\$ 6,400,000
206	INDOT	Interstate 465	US 40 Interchange		2	Interchange Modification	1		Int. 4-R	\$ 4,300,000
207	INDOT	Interstate 465	56th Street (east) Interchange		3	Interchange Modification	1		Int. 4-R	\$ 46,000,000
208	INDOT	Interstate 465	I-70 (east) Interchange		2	Interchange Modification	1		Int. 4-R	\$ 30,000,000
<b>2016-2020 STATE PROJECTS SUBTOTAL</b>										<b>\$ 120,700,000</b>
<b>2000-2006 STATE PROJECTS WITH SPECIAL FUNDING</b>										
94	INDOT	Interstate 70	Six Points to I-465	4.39	5	Roadway widening	1	6-lane div. to 8-lane div.	NHS	\$ 31,724,502
<b>2020+ UNFUNDED STATE PROJECTS *</b>										
89	INDOT	Interstate 65 (outside UZA)	S. of Greenwd Rd. to S. of Whiteland Rd.	4.73	5	Roadway widening	1	Widen 4-lane div. to 6-lane div.	NHS(out)	\$ 34,121,978
145	INDOT	State Road 37 HOV	46th St. to NS RR crossing	0.90	2	Roadway widening	3	4-lane div. to 6-lane div.	State STP	\$ 5,273,721
144	INDOT	State Road 37 HOV	I-69 to 46th St.	5.80	2	Roadway widening	3	4-lane div. to 6-lane div.	State STP	\$ 32,836,875
148	INDOT	State Road 37 HOV	Fall Ck. Pkwy to NE I-65/70 I-change	3.41	5	Roadway widening	11	New 2-lane in NS RR ROW	State STP	\$ 7,982,616
80	INDOT	Interstate 465	S. of I-70E to E of SR431+5 I-change	10.72	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 270,397,640
87	INDOT	Interstate 465	N of I-70 to S of SR67SW + 2 I-chnges	0.83	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 69,728,449
85	INDOT	Interstate 465	N of I-74 to S of US40W+4 I-changes	4.02	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 173,632,750
83	INDOT	Interstate 465	71st to N of I-65 NW + 71st I-change	1.49	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 35,981,653
86	INDOT	Interstate 465	S of US 4 to N of I-70W + 1 I-change	2.43	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 64,003,339
81	INDOT	Interstate 465	E of SR431 to W of US31+2 I-chnges	2.60	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 85,320,200
82	INDOT	Interstate 465	W of US31 to US421+ US421 I-change	3.89	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 85,089,308
79	INDOT	Interstate 465	US40E to S of I-70E + US40 I-change	1.54	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 36,693,861
84	INDOT	Interstate 465	N of I-65 to N of I-74NW + 3 I-chnges	3.77	4	Roadway widening	1	Widen 6-lane div. to 8-lane div.	NHS	\$ 112,252,877
<b>2020+ UNFUNDED STATE PROJECTS TOTAL</b>										<b>\$ 1,023,317,317</b>

\* Identified problem areas for study outside the INDOT statewide 20 year transportation plan.