

# THE GATEWAYS OF DELAWARE COUNTY

A STUDY OF THE MAJOR VEHICULAR ROUTES  
OF DELAWARE COUNTY AND MUNCIE, INDIANA

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OF DELAWARE COUNTY AND MUNCIE, INDIANA**

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Gateways Study Team  
College of Architecture and Planning  
Ball State University, Muncie, Indiana

Cover: Lansat satellite scene of Delaware County  
with major road network and water features  
delineated via color overlay.

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# FOREWORD



## FOREWORD

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### THE STUDY SPONSORS

This study was commissioned by the **Gateways to Delaware County Task Force** of the **Muncie-Delaware Chamber of Commerce**. Funding for the study was provided by:

**Delaware Advancement Corporation**  
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**Community Foundation of Muncie and Delaware County**

"In-kind" support was provided by the **Chamber of Commerce** in Task Force meetings facilitation and by **Ball State University** in the form of computer and visual simulation equipment use and staff support.

### The Study Team

The primary study team was comprised of six members of the faculty of the College of Architecture and Planning at Ball State University. These were:

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*Computer graphic symbol design and insertion*  
*Computer graphics editing*

Additionally, several members of the College of Architecture and Planning faculty and other experts contributed advice and expertise to the study effort. Within the college,

these faculty—and their respective areas of expertise—were: **Professor Harry Eggink**, *urban design*; **Professor Gary Oliver**, *plant materials*; **Professor Francis Parker**, *land use legal issues*; **Professor John Russell**, *zoning ordinances*; **Professor Ronald Spangler**, *plant materials*, and **Professors Laseau and Mackey**, *computerized printing techniques*. Expert advisors from outside the college were: **John Craddock**, Director of Division of Water Quality, Muncie Sanitary District; **David Ellis**, District Operations Manager, Greenfield District, Indiana Department of Transportation; **Professor Ronald Hicks**, Chair, Department of Anthropology, Ball State University; **Larry Loveall**, Billboard Coordinator, Greenfield District, Indiana Department of Transportation; and **David Osborne**, Director of Engineering, Muncie Sanitary District.

### THE CLIENTS FOR THE STUDY

The study team operated on the basic premise that the entire citizenry of Delaware County was, and is, the "client" for this study and as a consequence attempted to develop and maintain during its deliberations, an understanding of the broad range of attitudes and interests that exists within the Delaware County populace regarding the use and importance of the vehicular routes.

As a practical matter, it was not possible to solicit opinions or information from every individual, or even every interest group, in the county. Consequently, the team relied heavily upon the Gateways to Delaware County Task Force, as representatives of the larger county community, for input and reaction. This input took the form of discussions of issues, in-process reaction to the study, and the specific perceptions and recommendations of sub-groups of the task force who developed "visual and perceptual inventories" of trips along county routes. The members of the Gateways to Delaware County Task Force, the "representational client" for the study, are:

**Edgar H. Seward**, *Task Force Chairman*  
**J. Bradley Allamong**  
**Douglas A. Bakken**  
**Walter L. Berry**  
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## FOREWORD

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**Samuel L. Reed**  
**William L. Skinner**  
**Russ Sloan**  
**Van P. Smith**  
**Robert A. Terhune, Sr.**  
**Scott I. Truex**  
**James W. Wingate, Jr.**  
**Richard M. Wolfe**

In the latter stages of the study, as it became necessary to provide more focused, specific input and critiques of the study, an ad hoc subcommittee of the task force was appointed for this purpose. This group provided important direction and insights for the study. Members of this "Liaison Group" were:

**Douglas A. Bakken**  
**Melissa A. Durr**  
**Marta Moody**  
**Samuel L. Reed**  
**Edgar H. Seward**  
**William L. Skinner**

### OTHER RESOURCES FOR THE STUDY

In addition to the knowledge and experience of the Study Team, the expertise of other members of the College of Architecture and Planning faculty and other experts and input from the Gateways to Delaware County Task Force and its "Liaison Group," the team utilized a number of other sources of information or data. These included the following:

City street and county highway traffic counts provided by the Delaware-Muncie Plan Commission

City of Muncie and Delaware County zoning ordinances

County highway traffic counts, classifications, and billboard ordinances provided by the Indiana Department of Highways

Maps showing locations of historical Delaware County Indian village and camp sites provided by the Department of Anthropology, Ball State University

Official city, county, and town zoning maps

"Remote-sensing" (satellite) photogrammetry of Delaware County

Studies of "single" vehicular corridors in other states

Zoning ordinances and development guidelines from other communities

Related studies:

*Central City Master Plan*  
Rundell, Ernstberger & Associates  
UDA Architects, Inc., 1989

*Community Assets and Liabilities Study*  
The Fantus Company, 1986

*S.R. 332 Charrette Study*  
College of Architecture and Planning  
Ball State University, 1988

*The Recreation Potential of the White River*  
Indiana Department of Natural Resources, 1979

*White River Master Plan*  
Muncie Parks and Recreation  
Urban Parks and Recreation Program, 1983

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# INTRODUCTION





## INTRODUCTION

### ORIGIN OF THIS STUDY

This study did not originate out of a vacuum; it is a resultant of a number of factors and influences.

Its primary "parents" were the SR 332 Charrette and the Muncie-Delaware Chamber of Commerce. One of the recommendations of SR332 study was that a task force be established to guide and supervise the implementation of a master plan for SR 332. The Muncie-Delaware Chamber of Commerce assumed the responsibility for establishing and assembling this task force. As a result of discussions within the task force, the focus was expanded in scope to include all county "gateways" ("gateways" being defined as the county's major vehicular routes), and the following mission statement for the "Gateways to Delaware County Task Force" was adopted:

To assist East Central Indiana by formulating a comprehensive plan which will promote orderly development and future growth along Delaware County access highways and thereby improve our image while moving traffic as safely and expeditiously as possible.

The task force determined that to fulfill this mission, a study of the county "gateways" should be mounted. Funding was then acquired and the Ball State team was engaged to conduct the study.

A less direct but nonetheless significant factor in the birth of this study is the prevailing attitudinal climate in Muncie. Muncie is enjoying a resurgence of interest and involvement in improving the image and fabric of the city. There also appears to be a heightened understanding of the need to establish community goals and to focus the energies of governmental and civic bodies on the accomplishment of these goals in a concerted and coordinated manner; in short, to plan. In the absence of this favorable climate, this study could not have been considered, let alone funded and completed.

### RATIONALE FOR THE STUDY

Even in light of recent heightened interest in planning, and the manifestations of this interest in studies such as the Central City Master Plan and in the community enhancement initiatives of many civic and governmental groups, it is necessary to establish why money and energy should be expended on a study focussing specifically on the quality of county and city highways, roads, and streets. Some could ask, "Why bother; what's so important about roads? Aren't roads simply conduits that carry vehicles through the county, city and towns in the same way that pipes carry water to our homes, and if so, aren't they all right as long as they don't have holes in them?" There is some truth in this perception; our highways, roads, and streets do indeed comprise an essential community resource, one as important to the conduct of our daily lives as is the availability of the water that is piped into our homes. However, there is one crucial difference between highways/roads/streets and water pipes; roads carry people, people who can be favorably or unfavorably impressed, good-humored or frustrated, and clearly directed or disoriented as they traverse the county or move about Muncie by car, truck, or public conveyance. The extent to which its highways/roads/streets promote the more favorable of each of these paired responses is a measure of the quality of a community's image, the level of its aspirations, and its potential for economic growth. In support of this statement the following:

In traffic and planning studies, major highways, roads, and streets are often called "arterial routes", "arteries" or "arterials" in recognition of the fact that the economic "life blood" of a community is carried by its roadway system. This system connects residents and non-residents with places of work and entertainment, cultural and governmental facilities, restaurants, homes of friends and relatives, and shops. It carries local deliverers of goods and services, and it brings produce and manufactured goods into the community and takes the county's produce and manufactured goods out. If the roadway system, especially the major arterial system, is well-maintained, understandable, and free of constrictions and congestion, then it will move goods efficiently and quickly, expedite the delivery of

services, and encourage residents and visitors to patronize local shops, restaurants, and entertainment and cultural facilities. If on the other hand, major portions of the roadway system are poorly maintained, confusing and congested, goods and services will not flow freely, prospective visitors will shop or find entertainment opportunities in other communities, and residents will avoid these areas of congestion or constriction. The first scenario depicts a roadway system that promotes economic vitality, the second scenario is of a roadway system that contributes to economic decline.

A second aspect, one that is often overlooked when evaluating the effectiveness, or lack thereof, of a roadway system, is the "frustration" or "annoyance" factor. Residents for whom the choice of route is optional might respond to repeated en route frustrations or annoyances by avoiding streets or intersections they know to be problem areas. But what about the people who have no route choice: the worker to and from his/her place of work, the bus driver, the pizza deliverer, the household appliance repairer, and many, many others whose destinations are within the "problem areas"? For these people, the frustrations experienced during their trips exact a daily emotional toll, and in instances such as the household appliance repairer, travel time is nonproductive time and consequently a financial cost to the employer and an added cost for the consumer. It might be possible to calculate the "lost time" costs that an employer, and consumer, suffers due to an inadequate or poorly functioning roadway network, but the "frustration costs" exacted on, for example, the to-and-from work traveler, shopper, or ambulance driver are not easily translated into financial costs. However, one might pose a few questions regarding how these frustrations, or even at times hazards, might affect residents of the community. For example:

Could the build-up of these frustrations over time adversely affect the attitude and consequently the productivity of the worker for whom use of roads or streets is integral to the performance of his/her job, e.g., the bus or ambulance driver, the appliance repairer, or the trucker?

How do these frustrations affect the degree to which the resident feels affiliation with his or her community? Do mutterings behind the wheel of a car or truck such as, "I don't know why this city can't have a street system that works," manifest themselves in a more general community disaffection or alienation?

Similarly, do "on-road" frustrations translate into lack of confidence in local government's ability to provide even the basic amenity of a smoothly functioning road system and consequently result in a lack of faith in its leadership in other areas?

One should not make too much of these "frustration costs"; they are of a lesser import than other considerations. Nevertheless, they should not be discounted as a reason for identifying and eliminating sources of constriction, congestion, and disorientation on our major highways, roads, and streets.

The third aspect, one that is almost always undervalued, is that of the visual quality of the highway, road, or street. This "roadside view" is important to the community from at least three points of view. These are, in no priority order, those of: the resident, the visitor, and the prospective business locator.

For the resident, what is seen/perceived from the roadway, is a factor in how the resident feels about his/her community. If, as one drives about a city, every view is one of squalor, the conclusion is that the city is squalid, and consequently a source of embarrassment. Conversely, attractive views along every artery give the observer a sense of satisfaction and pride in one's community. For in a "motorized age", most of us see our environment, outside our immediate neighborhoods, from the window of a car, and many of our impressions of our community—county, city, or town—are formed from this perspective. Consequently, if a community wishes to enhance its image and the sense of community pride among its residents, it should look seriously at

improving "the view from the road".

Visitors are even more susceptible to forming an opinion of a community based upon what they see from their car windows, for these images comprise a greater percentage of their knowledge of the community than it does for the resident. How often have we commented, as we drive through a town or city, "This looks like a nice—or prosperous—town" or "This is a clean—or well-kept—city"? Our roadways are the "front lawns" of our community, and the messages conveyed by these "front lawns" comprise a large portion of what visitors think of us. We cannot underestimate how susceptible these images are to what appear to be minor variances. Studies have demonstrated just how subtle these messages can be. In one such study, two groups of similar composition were asked to estimate the average cost of the same group of homes. When the first group visited the neighborhood, the lawns were freshly mowed and the streets newly swept. Before the second group's visit, the lawns were allowed to grow to a height only slightly beyond that at which they would usually have been mowed, and a few scraps of paper were distributed along the street gutters. The estimates of the costs of the same homes in the same neighborhood were drastically lower for the second group of viewers than for the first. A couple of minor differences, an extra inch in lawn grass length and a few scraps of paper in the street, made a big difference in the viewers' evaluation of the quality of the neighborhood. Therefore, if Delaware County and Muncie wish to create a favorable impression for visitors to, or travelers through the county and city, an impression that will encourage them to return, attention must be given to not only the major, but also the minor aspects of the environment of the roadways, especially the major arteries.

The prospective business locator visiting a community also forms much of his/her impression via the routes into and through the community. Perhaps

more importantly, these impressions are almost always the first impressions. In recent years, economic developers have begun to assign much more importance to "quality of life" as a factor in business attraction. Reduced to elementary terms, the "quality of life" question becomes, "Is this a good place to live?" Many of the elements that comprise "a good place to live" are easily catalogued: Does the community have a university?, a civic theater?, a symphony orchestra?, a museum?, an art gallery? Others are less tangible. Questions like, "Is there a high level of civic pride in the community?," and "Does the community have aspirations for qualitative as well as quantitative growth?," are ones that do not succumb to a quick "yes" or "no," but are arrived at through observation. A manifestation of civic pride is pride in the appearance of the community, and a measure of the community's aspirations is its concern for the quality as well as the quantity of its development; a community that will accept any type of development and allow that development to be sited anywhere and built in whatever manner the developer wishes, has both low aspirations and poor self-image. Because much of the community's appearance and apparent concern for quality is expressed by way of the development along its primary vehicular routes, these images become major inputs into the prospective business locator's perception of the "quality of life" of the community, and consequently are worthy of the community's special attention and concern.

In summary, there are three reasons for taking a serious look at the county's major vehicular routes. These are the following:

1. They are the "arteries" through which the economic "life blood" of the community flows, and consequently it is important that this flow be as free of impedance as possible.
2. They have the potential, if allowed to become congested or constricted, to frustrate, even anger, county and city residents and as a consequence negatively

affect productivity, community morale, and confidence in local government.

3. They and their bordering environs are the "front lawns" of the community and therefore are a major determinant in how residents and visitors "see" the community and as a result are important to community pride for residents, and attractiveness to business locators and other visitors.

**SCOPE OF THE STUDY**

Three aspects of the scope of this study are worthy of comment and clarification.

First, the original scope of the study was a somewhat limited one; the stated and contracted intention of the study was to deal only with the county's major vehicular routes outside the city of Muncie. As the study evolved, it became clear to the study team that this was an unrealistic limitation; that if the study were to provide a complete picture of vehicular routes and destinations within the county, it would have to include those routes into and through the county seat. Although these Muncie suburban and urban routes represented, in the expanded scope of study, only a twenty-five percent increase in the total length of roadway, their inclusion, by virtue of their lack of clear definition and diversity of use, had the effect of significantly increasing the complexity of the study. It is estimated that this expanded study is four times as complex as was the original, contracted, one.

Second, because the use, or misuse, of highways, roads, and streets is so intertwined with land use, zoning, and other planning considerations, the team was drawn into issues that are more appropriately addressed in the context of a Comprehensive Master Plan rather than a "gateways" study. In many instances the distinction between a "master planning" scope and a "gateways study" scope was difficult to establish, but the intention of this study is to deal primarily with issues that are directly related to enhancing the functional and visual aspects of our highways, roads, and streets. In a few cases this report contains com-

mentary that, although roadways-related, is stretching the limits of the scope of the study. In these instances, this commentary is labeled as "comment" and placed in italics.

Finally, the scope of this study "dove-tails" with another related study: the "Central City Master Plan." Although some recommendations contained in this study will have implications in this area, the intention is to give the downtown study room to develop without the encumbrance of another layer of detailed recommendations.

**GOALS OF THE STUDY**

The primary role of any roadway system is to provide an effectively and efficiently functioning network for the movement of people, goods, and services. Consequently, a primary intention of this study was to develop mechanisms whereby the basic functional aspects of the county roadway system can be maintained or improved. However, as noted previously, the city and county routes should provide more for the community than basic functionality. The following scenarios depict two roadway systems. The first describes a system that ignores all aspects of the system beyond its basic function, the second depicts a system that recognizes its full potential. These two scenarios are entitled respectively: "The Minimal System" and "The Optimal System".

**The Minimal System**

Provides a smoothly functioning system for the movement of traffic, but:

1. Ignores Context  
Screens or obscures the messages of the unique cultural aspects of the community: sub-communities, historical settlement patterns, and landmarks
2. Disguises Heritage  
Suppresses, removes or reclothes historic elements to favor "in-vogue", transient, visual styles

**3. Communicates Disarray**

Conveys a fractured and disjointed set of images of land use, activities, and architecture

**4. Snubs Nature**

Masks, conceals, or ignores the natural attributes of the environment

**5. Encourages Disconnection**

By virtue of the lack of the provision of a roadway environment of visual quality or perceptual interest, encourages the motorist to view the route as only a conduit from one point to the next

**The Optimal System**

Provides a smoothly functioning system for the movement of traffic, but also:

1. Respects Context  
Offers messages of earlier settlement patterns and other unique aspects of the county or city
2. Communicates Heritage  
Exhibits community growth and change over time via the co-existence of a historical continuum of buildings, landscapes, and landmarks
3. Displays Variety within Unity  
Communicates variations in lifestyle, activity and neighborhood boundaries within a unifying framework of community-established qualitative expectations
4. Embraces Nature  
Uses the opportunities presented by routes crossing, intersecting, or paralleling special features of the landscape to highlight these features

## INTRODUCTION

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### 5. Promotes Connection

Displays the cultural and historical diversity of the community in a coherent and controlled manner, thereby encouraging a sense of community pride and belonging for residents and garnering admiration from visitors

In actuality the "Minimal System" almost certainly cannot exist. A roadway system that ignores context, disguises heritage, communicates disarray, snubs nature and encourages disconnection also creates confusion and disorientation for the motorist and impedes traffic flow, thereby inhibiting the system's basic functionality. But, the purpose of these counterposed scenarios is to point out that the goals of this study extend beyond the mere functionality of the roadway system to the development of a framework of recommendations that will provide Delaware County and Muncie with an "Optimal" roadway system.

### **SIGNIFICANCE OF THE STUDY**

This is the only study of this type that has been undertaken in Delaware County, and it is almost certainly unique in the state and rare nationally; in its research, the team was unable to discover another study of the scope of this one. There have been many "single corridor" studies, but, apparently few, if any, county-wide corridor studies. Consequently, this study positions Delaware County and Muncie in the national forefront in this area of investigation and progress.

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# REPORT ORGANIZATION AND CONTENTS

**REPORT ORGANIZATION**

This study has five major sections. These sections and their general intentions are as follows:

**Anatomy of the System**

The establishment of the pattern and identity of the routes that comprise the primary roadway system of Delaware County and Muncie and the basic parameters that guided the establishment of the system

**Analyses****Extra-County Contexts**

Analyses of the role that the roadway system performs in connecting Delaware County and Muncie with other areas in East Central Indiana, the state, and the four contiguous states

**County Contexts**

A detailed analytical commentary on, and implications of the current "state of the system" in the light of diverse, sometimes divergent, functional, visual, cultural, developmental, and perceptual contexts

**Recommendations**

General and specific measures or actions recommended for improving the functional and visual aspects of the system

**Case Study**

A graphic illustration of the effect that the implementation of the study recommendations could have on a single route of travel between the county border and downtown Muncie.

**Implementation**

Suggestions/Proposals for implementation of the recommendations

Two aspects of the organization and content of the study should be further explained. These are the following:

1. The "Analyses/County" and "Recommendations" sections of the report are organized into similar sub-sections. Therefore, this report has corresponding areas in the "Analyses/County" and "Recommendations" sections that can, if wished, be read in tandem, thus providing the reader with the option of counterposing, for example, the analyses of the "Rural Routes" with recommendations for the "Rural Routes." Alternatively, the "Analyses" and "Recommendations" sections can be read sequentially.
2. Although one intention of the "Analyses" section of the report is the delineation of the existing "state of the system", this section also contains observations that could be termed "focused suggestions" for the enhancement of the routes. While some of these suggestions have not been formally elevated to the status of recommendations in the "Recommendations" section of this report, they should nonetheless be viewed as important aspects in the overall context of the improvement of the system.

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# ANATOMY OF THE SYSTEM

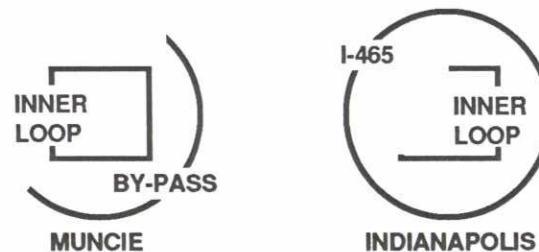
As a general rule, the first order of business for any study report is to communicate the specific focus of the study. For this report, this means identifying the routes that have been established as comprising the primary roadway system of Delaware County and the city of Muncie. It should be pointed out that the make-up of this system was not established at the beginning of the study. It was developed incrementally during the course of the study; as additional sets of information were developed and evaluated, individual components of the system were added, deleted, or re-defined. During this process, the study team operated within the following parameters in the determination of this primary roadway system.

1. The county's federal and state highways would be the "givens" of the study and would therefore comprise the base system and be the core around, or within which the "fleshing out" of the system would occur.
2. The county's primary roadway system should provide a means to traverse the county to and from the four primary—north, east, south, west—and four secondary—northeast, southeast, southwest and northwest—points of the compass.
3. The composition of the city of Muncie's primary roadway system should recognize the following:
  - a. Current use patterns
  - b. The need to expedite the movement of county highway travelers into, out of, through, or around Muncie
  - c. The need to provide an efficient system for the movement of intra-city traffic
  - d. That motorists are, attitudinally, "motorized pedestrians" and carry with them the pedestrian habit of seeking the shortest route between two points, a tendency that makes the diagonal streets and avenues—the "shortest" motoring distance between two points—important routes of the city roadway system

- e. That travelers arrive and depart Muncie by air as well as by road.
4. The primary roadway system would be developed within the fabric of the existing inventory of highways, roads, and streets. That is, recommendations for minor or major improvements to existing routes or linkages would be within the scope of the study, but the proposing of totally new county routes would not be considered.

The pattern of Delaware County's primary roadway network, as illustrated in Figure 1, bears a strong resemblance to the state's primary roadway network. The basic similarities of the two networks are the following:

1. Indiana's major highways, the interstates, are basically radial about Indianapolis (Illustrated in Figure 3a) and Delaware County's highway's are predominantly radial about Muncie.
2. Both Indianapolis and Muncie have partial or complete "outer loops" and "inner loops." However, the completeness of these "loops" is reversed in the two systems: Muncie's "outer loop," the By-pass, is only a "half-loop," but Indianapolis' "outer loop," I-465, is complete, while Muncie's "inner loop," comprised of McGalliard, the Broadway/Madison pair, Memorial and Tillotson, is complete, but Indianapolis' I-65/I-70 "inner loop" has only two and one-half sides—one half of the north side and all of the west side are missing. These counterposed outer and inner loop conditions are illustrated in the diagram below.



3. In both the Muncie and Indianapolis systems, "outer connectors" link the "inner loop" with the "outer loop" and with the rest of the system, and "inner connectors" link the "inner loop" with areas within it.

Within this general context, the narrative and illustrations which follow further identify Delaware County's and Muncie's primary roadway system.

LEGEND

- The County
- Primary Routes
- Rivers
- Muncie CBD

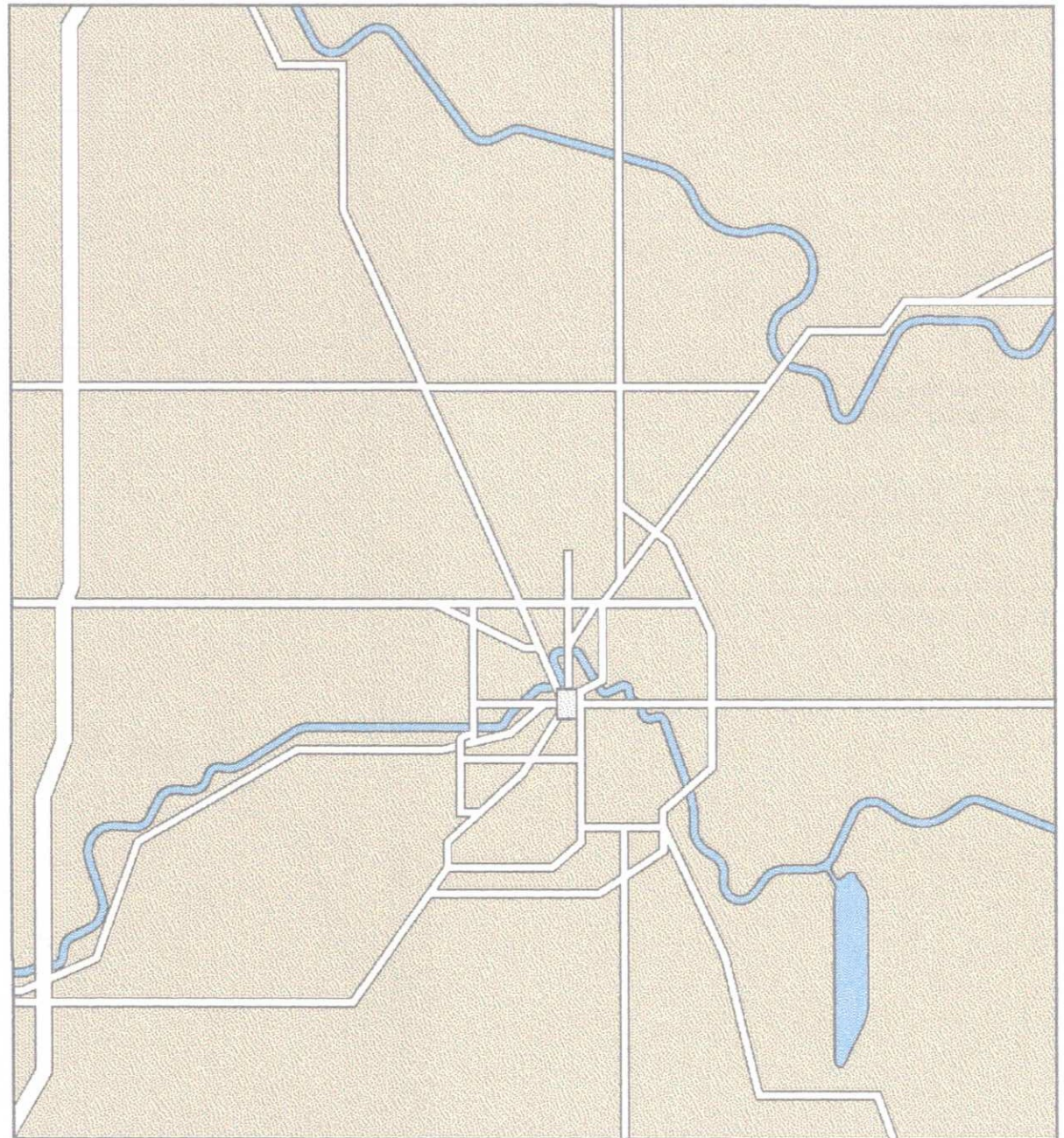
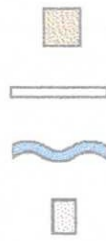


Figure 1 : The Roadway System Pattern

Delaware County's counterpart to the state Interstate system, shown in green in this illustration, is the following:

**Federal Highways**

- I-69
- US 35

**State Highways**

- SR 3
- SR 28
- SR 32
- SR 67
- SR 332

**Proposed "County" Highway**

- Wheeling Pike (WL)

Muncie's "Outer Loop," also shown in green in this illustration, is the By-pass (BP)

The letters in parentheses are the abbreviations used in the illustrations for the route names

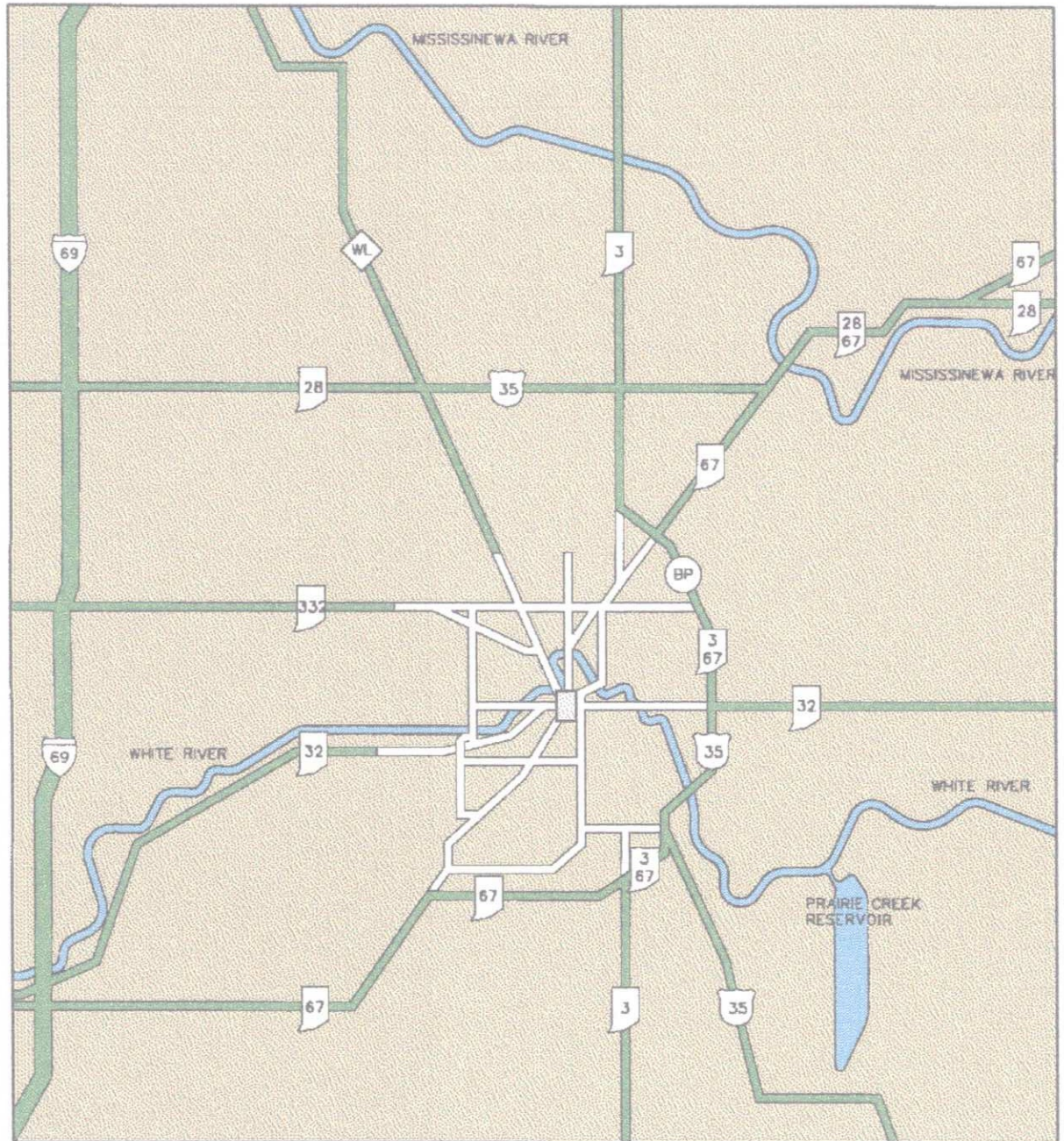


Figure 1a : The County "Interstate System" and "Outer Loop"

**Muncie's "Outer Connectors,"** shown in orange in this illustration, are:

Broadway Avenue (**BW**) between McGalliard Road (**MG**) and the By-pass.

Macedonia Avenue (**MC**) (Old S.R. 3) between Broadway Avenue and the By-pass.

McGalliard Road between Broadway Avenue and the By-pass.

Jackson Street/Main Street (**JK/MN**) between Madison Street (**MD**) and the By-pass

Madison Street-29th Street (**29**) between Memorial Drive (**MM**) and the By-pass

Macedonia Avenue between 29th Street and the By-pass

Business 67 (**67**)(Madison Street) between 29th Street and the By-pass

Hoyt Avenue (**HT**) between Memorial and Business 67

Tillotson Avenue (**TL**) Extension between Memorial and Hoyt Avenue

Bethel Avenue (**BL**) between SR 332 and Tillotson

Walnut Street (**WN**) north of McGalliard as the "outer connector" with the airport.

**Muncie's "Inner Loop,"** shown in red in this illustration and in Figure 1c, is comprised of:

McGalliard Road/Broadway Avenue-Madison Street/Memorial Drive/Tillotson Avenue

In the absence of the north and west segments of the By-pass, three county routes connect directly to the "inner loop," serving the dual role of county route and "outer connector," These **"County Highway/Outer Connector"** segments, shown in green, are:

SR 32 SW/ Kilgore Avenue (**KL**) connecting directly to Tillotson

SR 332 connecting directly to Tillotson

Wheeling Pike/Avenue (**WL**) connecting directly to McGalliard

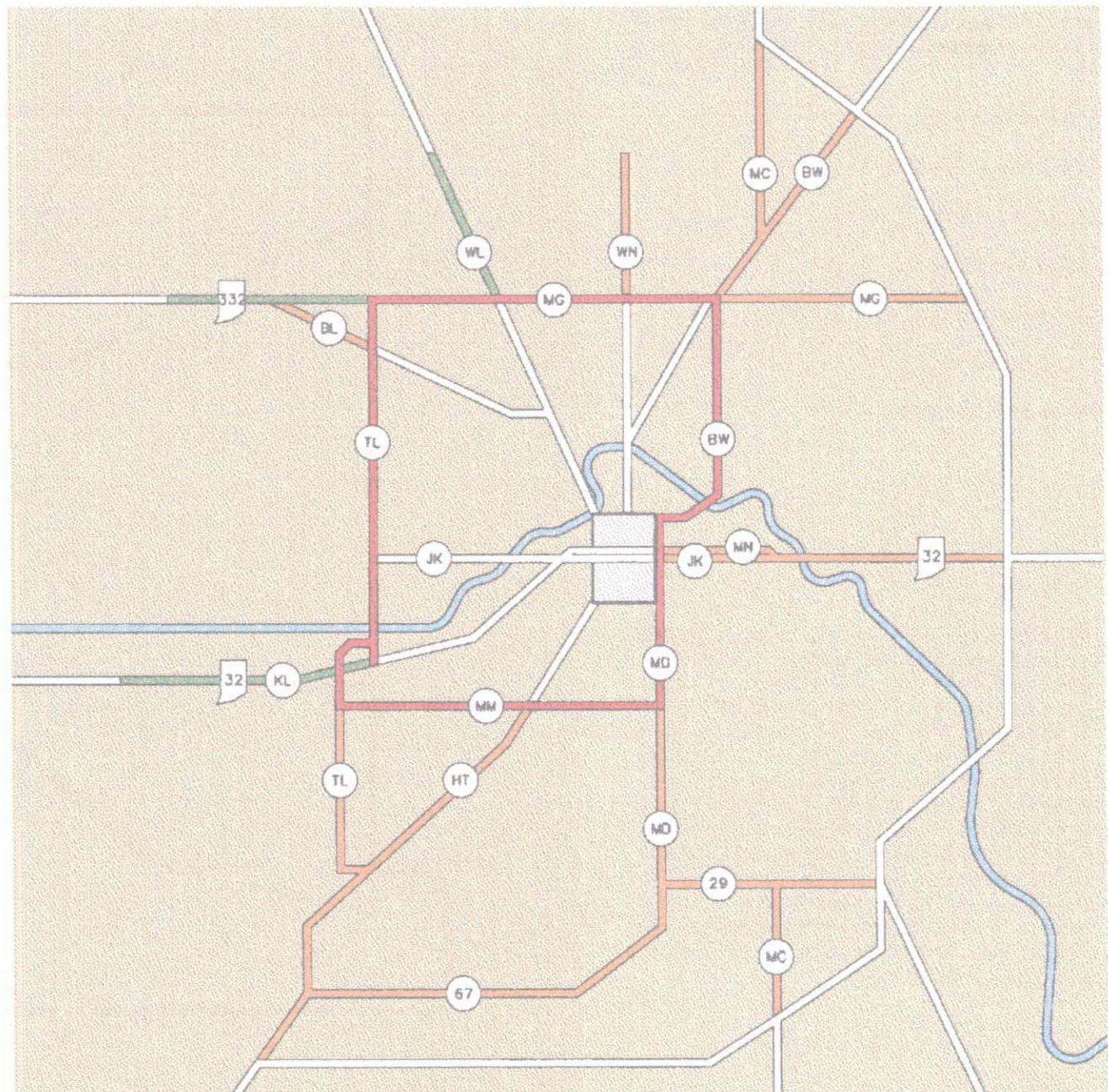


Figure 1b : Muncie's "Outer Connectors" and "Inner Loop"

Muncie's "Inner Connectors" between the "Inner-Loop" and downtown, shown in red in this illustration, are:

- Walnut Street (WN)
- Granville Avenue (GV)
- Hoyt Avenue (HT)
- Kilgore Avenue (KL)
- Jackson Street/Main Street (JK/MN)
- Bethel Avenue (BL)
- Wheeling Avenue (WL)

*Comment:*

*It should be noted that the team is aware that the designation of the McGalliard/Broadway-Madison/Memorial/Tillotson loop as the "inner loop" of the system is at variance with the Delaware-Muncie Plan Commission's designation of this loop as the city's "outer loop." However, it was felt that with inclusion of the By-pass as the city's "outer loop," the most appropriate designation for McGalliard/Broadway-Madison/Memorial/Tillotson loop would be that of "inner loop." If it is considered necessary to bring these two terminologies into concurrence, one approach might be to: 1) adopt this study's recommendations for the designations of the "outer loop" and "inner loop" and 2) change the current Plan Commission designated "inner loop" to "inner city loop".*

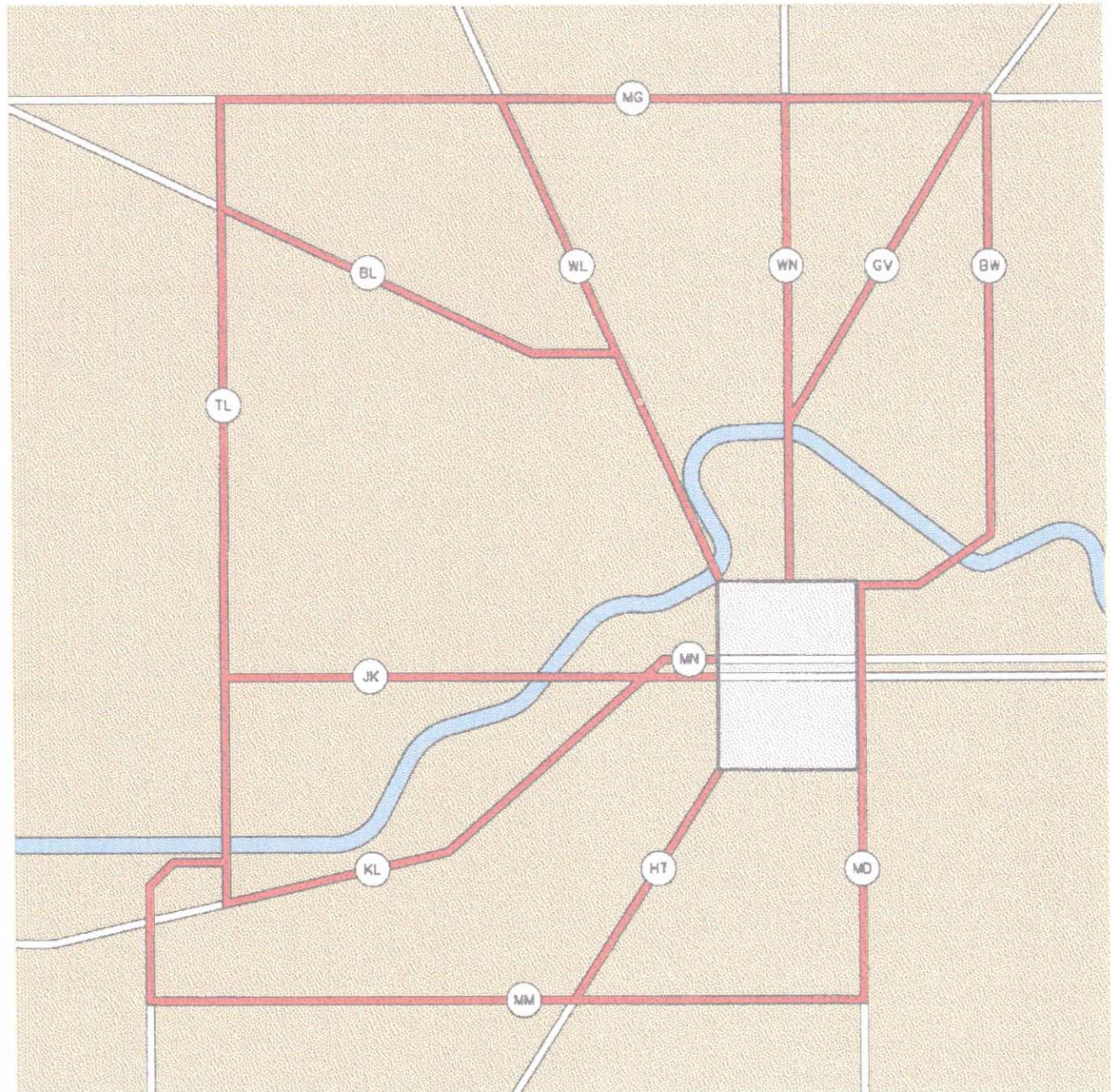


Figure 1c : Muncie's "Inner Loop" and "Inner Connectors"

This is the county/city major roadway system that has been established as the focus of the study. The remainder of this report will develop: 1) a more detailed analysis of the context and character of the system and its components, 2) a set of recommendations for improving the functionality and attractiveness of the system, and 3) suggestions for implementing these recommendations.

It should be noted in this context that there were two additional "inner connector" routes that were considered, but ultimately not included in the primary system. These were: Riverside Avenue between Tillotson and Wheeling, and Centennial Avenue connecting Wheeling, Walnut, and Granville. These two routes were not included for the following reasons.

1. By virtue of its route through the center of Ball State University, traffic on Riverside Avenue is subject to hourly, sometimes lengthy, stoppages at Warwick Road as students cross at this point moving between classes. This situation is especially severe, and potentially dangerous, at the pre-8:00 a.m. confluence of incoming university employee traffic, cross-town traffic, and students on their way to 8:00 classes. The team felt that a route subject to this type of traffic impedance—one that is major in nature and not subject to ready means of alleviation—could not be considered an efficient carrier of traffic and consequently could not be promoted as a major urban route.
2. The future traffic-carrying status of Centennial Avenue is unclear. A portion of its role as a connector between Wheeling Avenue, Walnut Street and Granville Avenue has been transferred, by motorist preference, to the new Minnetrista Parkway. The team felt that until this situation is further clarified, it is not possible to establish Centennial Avenue's importance within the system.





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ANALYSES: EXTRA-COUNTY CONTEXTS

### INTRODUCTION

Although a primary function of Delaware County's primary roadway system is to connect points of origin and destination within the county, it also serves the equally important role of connecting Delaware County with other parts of the state and nation.

Therefore this section will delineate the connective role of the county roadway system in three "extra-county" contexts. These are:

#### **The East-Central Indiana Regional Context**

Connections with the neighboring counties of Blackford, Jay, Randolph, Wayne, Henry, Madison, and Grant, with emphasis on the connections with the five-county East Central Indiana Economic Development Region.

#### **The Indiana Context**

Connections with other areas within the state.

#### **The National Regional Context**

Connections with the contiguous states of Michigan, Ohio, Kentucky, and Illinois.

### EAST CENTRAL INDIANA CONTEXTS

Figure 2 illustrates the role that the county highways perform in connecting Delaware County and Muncie to the neighboring counties and county seats. Specifically, these connections, are:

SR 3 N to Blackford County and Hartford City

SR 67 NE to Jay County and Portland

SR 32 E to Randolph County and Winchester

US 35 SE to Wayne County and Richmond

SR 3 S to Henry County and New Castle

SR 32 SW and 67 SW to Madison County and Anderson

SR 332 or SR 28/US 35 W via I-69 to Grant County and Marion

These connections are extremely important to this area of the state, especially for the five county economic development region of Delaware, Blackford, Jay, Randolph, and Henry. Muncie is the entertainment, cultural, industrial and retailing center for this region, so the roadway system must accommodate: inter-county commuting workers (The 1980 census showed over 5,500 workers commuting between Delaware County and the neighboring counties of Blackford, Jay, Randolph, and Henry), shoppers, movie-goers, and patrons of Muncie's restaurants, and of plays, concerts, and other cultural facilities and events.

This brief analysis points out that every one of the county's state and federal highways performs a role in connecting Delaware County with the other four counties in the East Central Indiana Economic Development Region and with the other three neighboring counties.

# ANALYSES / EXTRA-COUNTY CONTEXTS

## LEGEND

East Central Indiana  
Economic Development Region

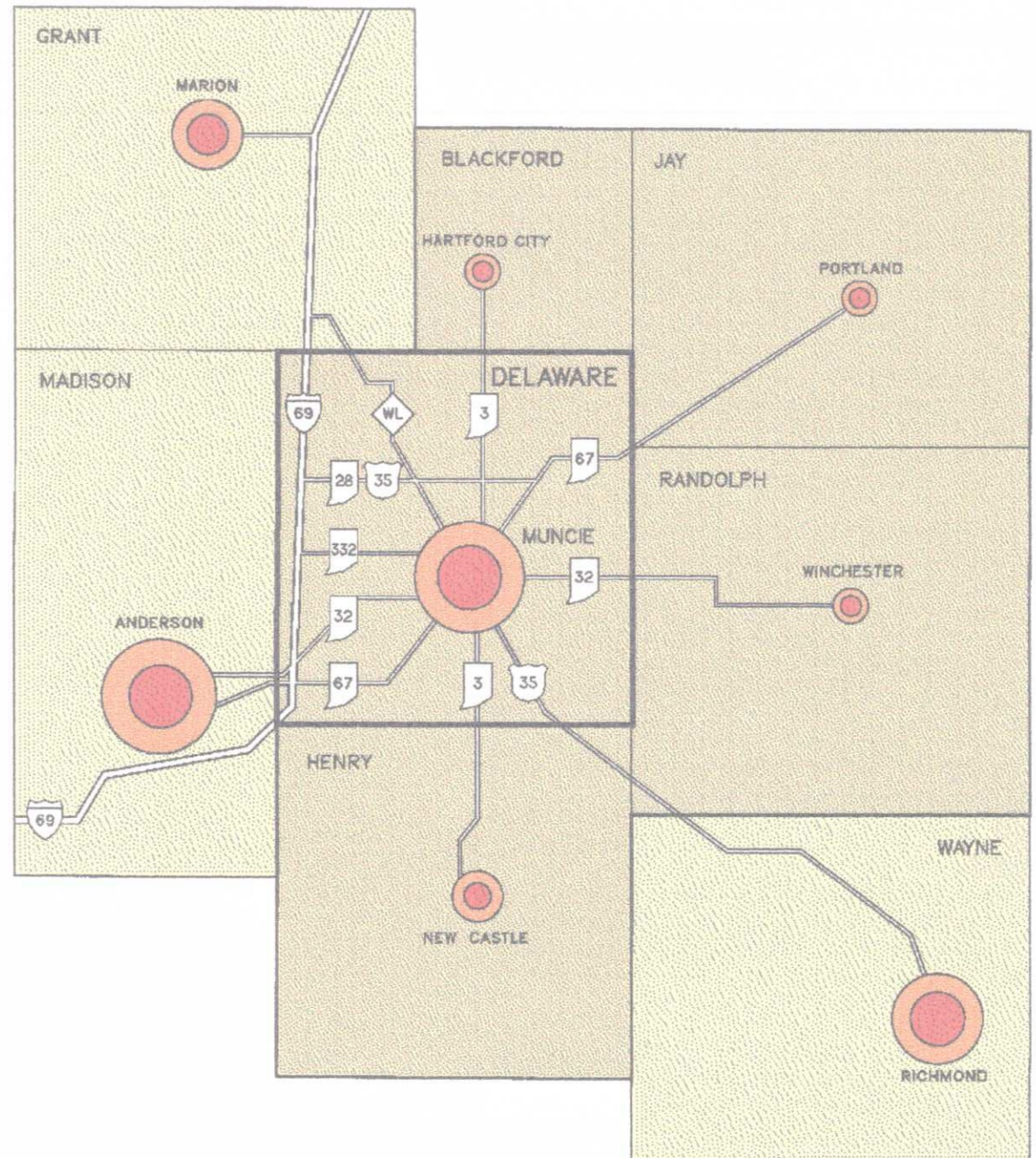


Figure 2 : East Central Indiana Regional Connections

INDIANA AND NATIONAL REGIONAL CONTEXTS

Statewide Connections

Another role that the county highways perform is that of connecting Delaware County with the rest of the state. For most travelers, this connection equates to access to the interstate system. Figure 3a illustrates that the county's only firm attachment, and Muncie's nearest access to the interstate system, is I-69, and that the only other interstate highway that is within a relatively short driving distance from Muncie and the county is I-70. However, only I-69 is useful as a connection to in-state destinations.

Therefore, the county's primary linkages with the interstate highway system, and consequently with in-state destinations, are SR 28/US 35 W and SR's 32 SW, 67 SW and 332. And of these routes—for the near future—the only four-lane, divided, connection will be SR 332.

Upon accessing I-69, Delaware County travelers have reasonably direct routes to Indianapolis, to Ft. Wayne and other cities in the northeast quadrant of the state, to the middle western third of the state, and to the southeast, but poor, "roundabout," connections to the northwestern, northern middle, eastern middle, and southwestern parts of the state. The "directness" or "indirectness" of these connections to other parts of the state is, in general, the natural result of I-69 being one of the "spokes" of an interstate system that is radial about Indianapolis—the single exception being that poor access for the county to the southwest part of the state is not a result of the composition of the system, but due to the absence of a southwestern "spoke."

The conclusion that can be reached from looking at the statewide context for the county's highways is that SR 28/US 35 W, SR's 332, 32 SW, 67 SW, and 3 S and US 35 SE are the primary "statewide" routes. In support of this conclusion, the following:

1. SR 28/US 35 W and SR's 332, 32 SW, and 67 SW are the most important county and city connections, via I-69, with the northeast, middle, western middle, and southeastern parts of the state.

2. For travelers to the northwestern and northern middle parts of the state, two alternatives are available: I-69 south to Indianapolis and then north via SR 31 or I-65, or connections to SR 31 or I-65 via SR 28/US 35 W (or alternately I-69 and then SR 26). Consequently, the same four routes SR 28/US 35W and, SR's 332, 32 SW and 67 SW are the Delaware County linkages.
3. Connections for the county to the eastern middle portion of the state are either I-69 south to Indianapolis and then east on I-70, or SR 3 S and US 35 SE.

National Regional Connections

Figure 3b illustrates that the county's access to the four contiguous states almost mirrors the county in-state access picture: relatively direct interstate highway access to the west to southern and central Illinois, to the south to Kentucky, and to the northeast to Michigan, but less direct connections to northeastern Illinois (Chicago) and to the east to Ohio.

As a result, the county highways that were identified as the intra-state linking routes are also the interstate linkages, SR's 332, 32 SW, 67 SW and SR 28/US 35 W linking with I-69 to Michigan, to Kentucky via I-65, to central and southern Illinois via I-70 and I-74, and to Chicago via I-65; and SR 3 S, and US 35 SE connecting to the east. The only difference between these interstate connections and the intra-state connections is that SR 3 and US 35 are not direct links but connect to Ohio locations via I-70 or I-74.

One additional point must be made in the context of state and inter-state connections. For Jay and Randolph counties, their primary connections to Indiana's interstate system are through Delaware County. For Jay County one of the most important of these connections is to I-69 via SR 67 NE, the By-pass and SR 67 SW. For Randolph County an important route is SR 32 E, the By-pass, and SR 67 SW to I-69. The implications for Delaware County routes are:

1. Although the By-pass is not a priority route for statewide or interstate connections for Delaware County residents, it plays an important role in this context for two other counties in the East Central Indiana Economic Development Region.
2. SR 67 SW is a priority route for statewide and interstate connections not only for Delaware County, but for Jay and Randolph as well.

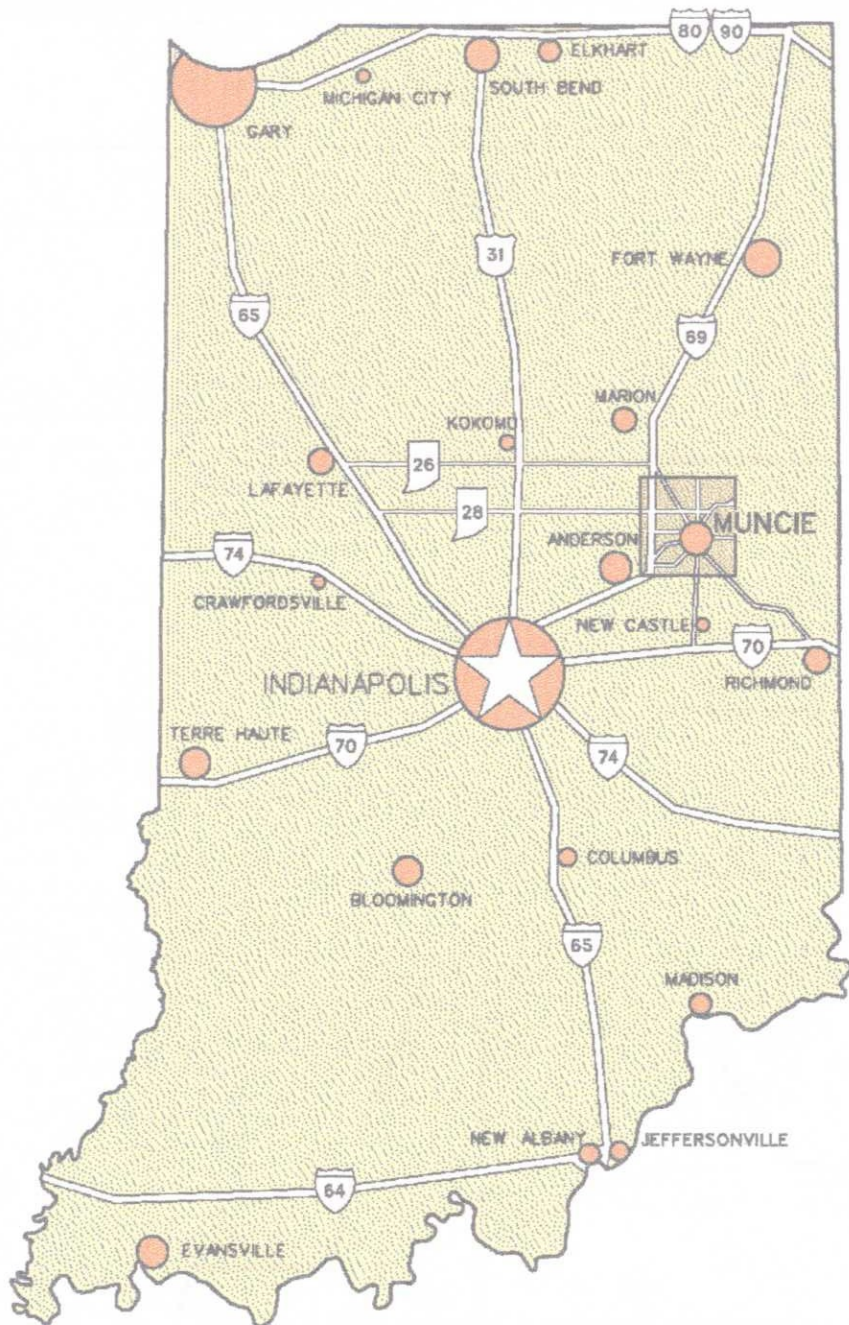


Figure 3a : Statewide Connections

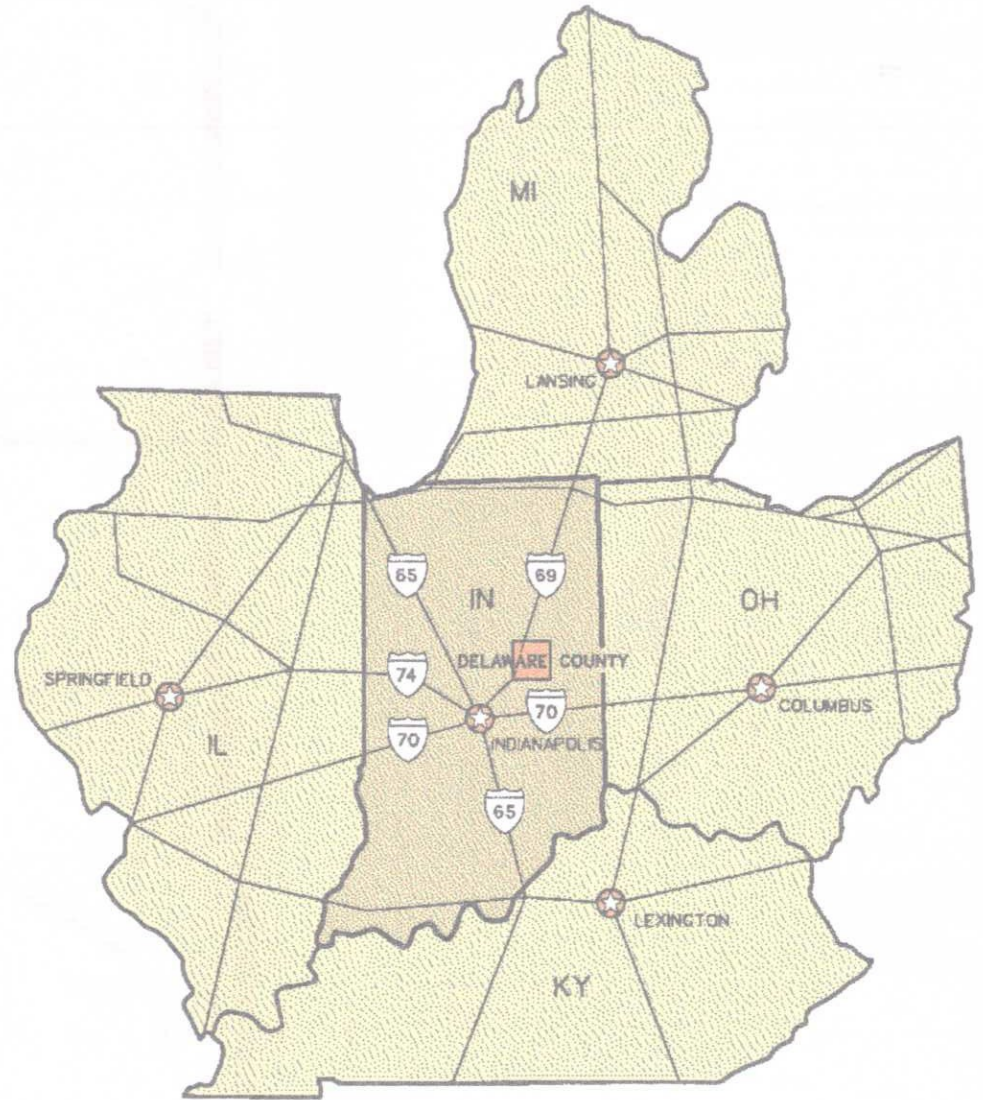


Figure 3b : National Regional Interstate Connections

# ANALYSES / EXTRA-COUNTY CONTEXTS

## SUMMARY

The implications for the county highways of these brief analyses of the state regional, statewide and national regional contexts are summarized in the matrix below. In this matrix, a filled rectangle indicates utilization as a primary link, an open rectangle indicates utilization as a secondary link, and the absence of either a filled or open rectangle denotes non-importance as a link within the specific context. The last column in the matrix summarizes the other three by designating the routes that are important as connectors in all three contexts and consequently "priority routes" for the county for extra-county travel. These routes are coded in red in the illustration opposite.

ROUTES	CONTEXT			
	STATE REGIONAL	STATE	NATIONAL REGIONAL	PRIORITY ROUTE
I-69	■	■	■	■
SR 28 W/US 35 W	■	■	■	■
SR 3 N	□ <sup>2</sup>	□ <sup>2</sup>	□ <sup>2</sup>	□
SR 67 NE	■	■	■	■
SR 32 E	■	■	■	■
US 35 SE	■	■	■	■
SR 3 S	■	■	■	■
SR 67 SW	■ <sup>1</sup>	■	■	■
SR 32 SW	■ <sup>1</sup>	■	■	■
SR 332	■	□ <sup>2</sup>	□ <sup>2</sup>	■
Wheeling Pike	■	□ <sup>2</sup>	□ <sup>2</sup>	■

### Notes:

1. SR 32 SW is the major connector between Muncie and Anderson for most passenger car traffic, but SR 67 SW is the major carrier of inter-city truck traffic.
2. SR 3 N and Wheeling Pike provide access to SR 28 /US 35 W and SR 332 for linkage with I-69, I-65, or US 31.

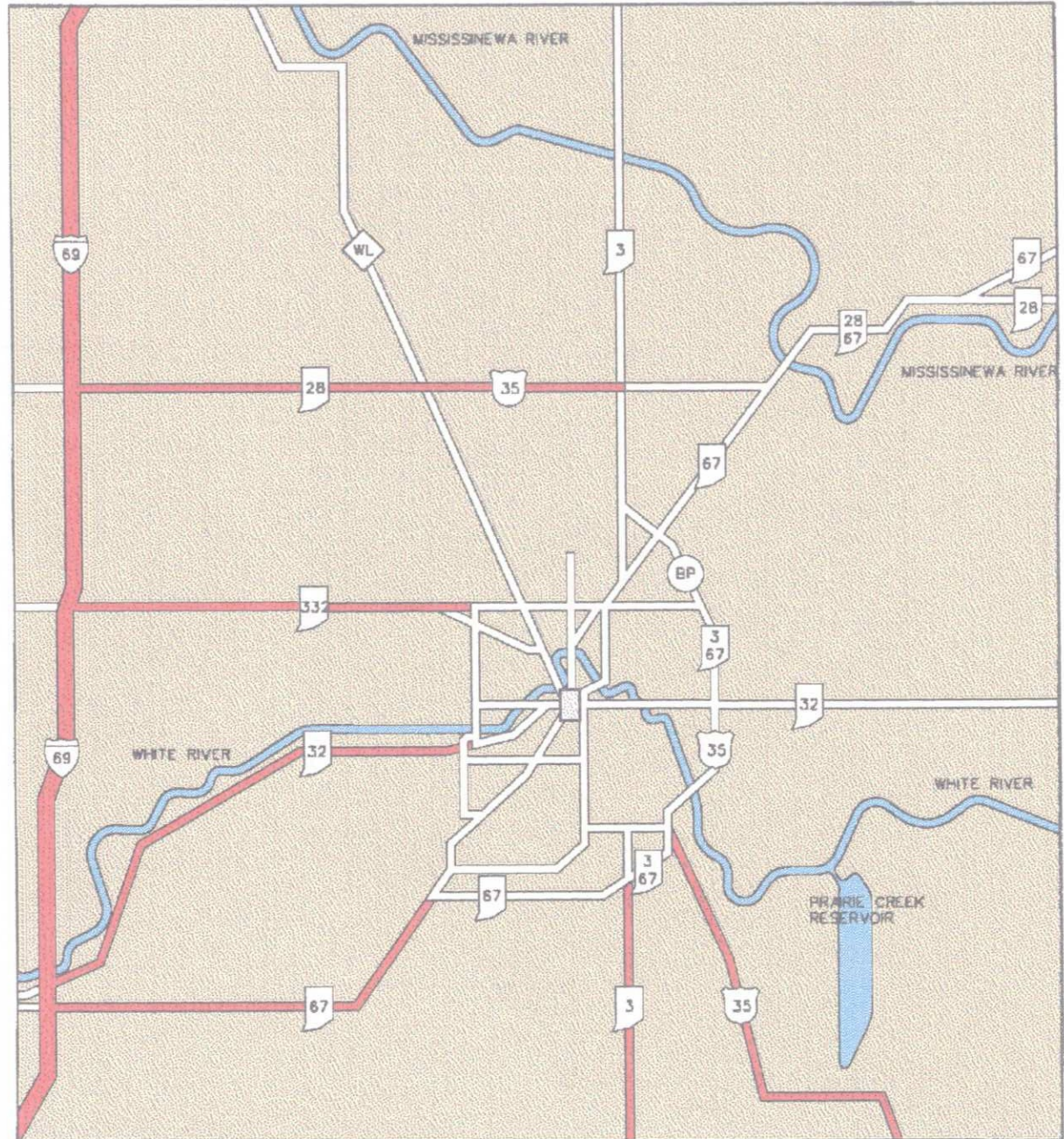


Figure 4 : Priority Routes for Extra-County Travel

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ANALYSES: COUNTY CONTEXTS



**ROUTE CHARACTER ZONES**

Having established a general overview of the state east central regional, statewide, and national regional contexts within which the county roadway system exists, and the functions that the system performs within these larger contexts, it is now possible to take a more detailed investigative look at functional and visual aspects of the system within the context of Delaware County.

Over the course of the study, as a result of traveling and inventorying the individual routes of the system and evaluating data relating to the type and extent of their use, a general framework for looking at the system emerged. The routes were found to fall predominantly into three general categories. These were: **rural routes**, **suburban routes**, or **urban routes**. However, it was also determined that there were segments of several of the routes that did not fit comfortably into one of these three categories. The most extreme examples of route segments of this type are in the area "sandwiched" between the southern leg of the Bypass and the southern corporate limits of Muncie. The descriptors of these route segments are the following: 1) tendrils or "outposts" of residential, commercial, or industrial development exist in an otherwise rural environment, 2) these areas of development, while being manifestations and extensions of suburban Muncie, are situated outside Muncie's jurisdictional limits, and 3) although contained within a strong physical statement of "entry" to Muncie, the Bypass, the development along these routes is amorphous in character, conflicting with the expectation of arrival at suburban Muncie. The term that was determined to best describe these areas of the routes was "**suburban/rural**".

Moreover, with further investigation, this terminology was determined to be applicable beyond the limits of the immediate environs of the roadways; that is, if the routes could be described as being rural, suburban/rural, suburban, and urban in character, then the areas in which they existed could similarly be described as **rural**, **suburban/rural**, **suburban**, and **urban "character zones"**. The limits of these route character zones are illustrated in Figure 5.

These zones are further described and illustrated in figures 5a through 5d



Rural Route

US 35 SE at CR 700 S



Suburban Route

Broadway Ave at Purdue Ave



Suburban / Rural Route

Bus 67 at Cowan Rd



Urban Route

McGalliard Road at Walnut Street

LEGEND

- Rural Character Zone
- Suburban/Rural Character Zone
- Suburban Character Zone
- Urban Character Zone

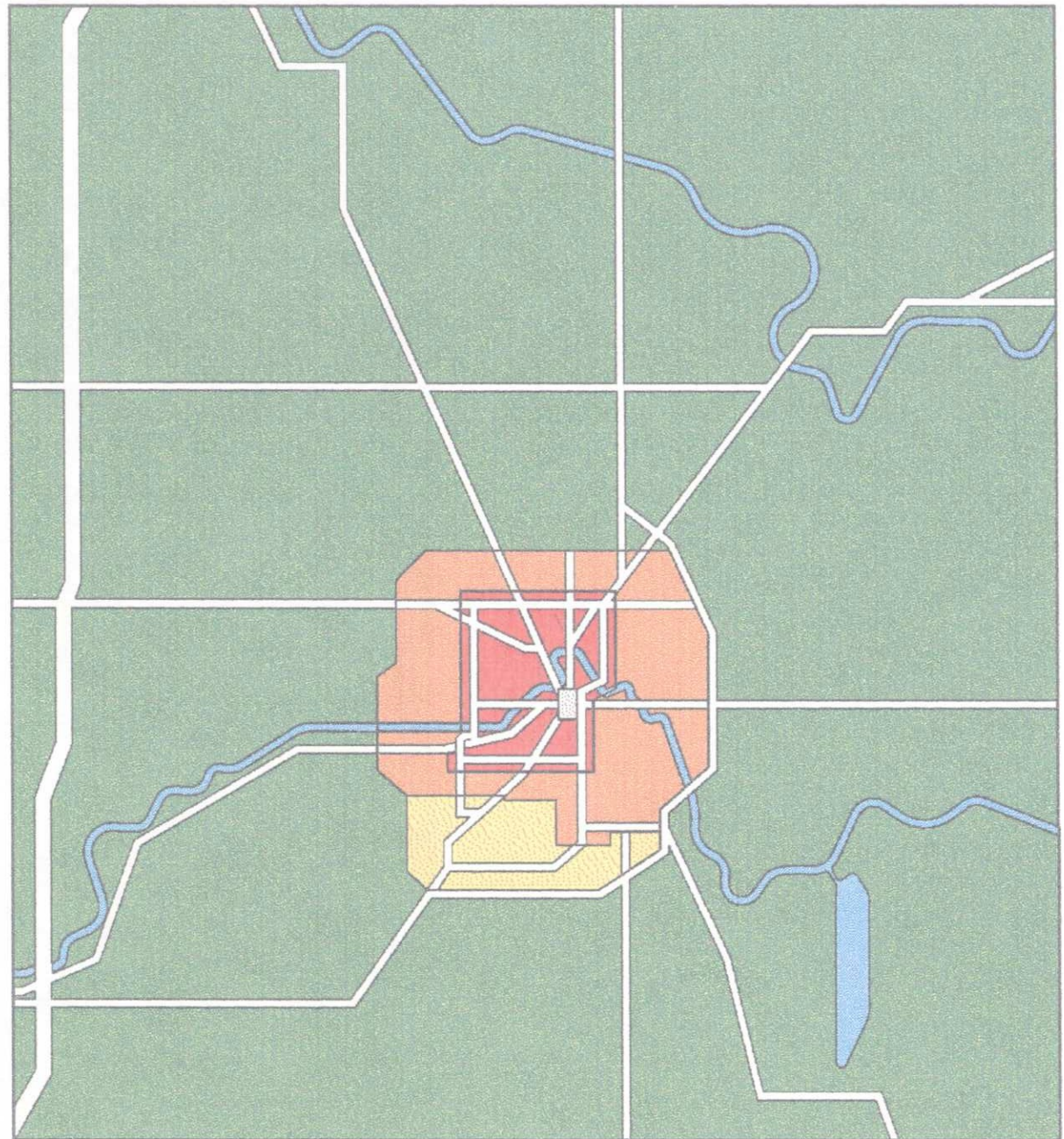


Figure 5 : Route Character Zones

**RURAL CHARACTER ZONE**  
(Coded green in this illustration)

**Outer Boundary**  
The county border

**Inner Boundary**  
Outer limits of either the "suburban/rural zone" or the "suburban zone", depending on the location. Roughly described by Riggins Road on the north, the By-pass on the east and south and the city limits extended on the west, with angled connections between these limits on the northwest and southwest

Rationale for establishment of inner boundary:

In traveling these routes from the county borders towards Muncie, it was found that Muncie development began to have a strong influence on the character of the routes at the points where this inner boundary line crosses the routes. Where this line intersects the routes at the corporate limits of Muncie, the "suburban zone" begins, where it does not, the "suburbanruralzone" begins.

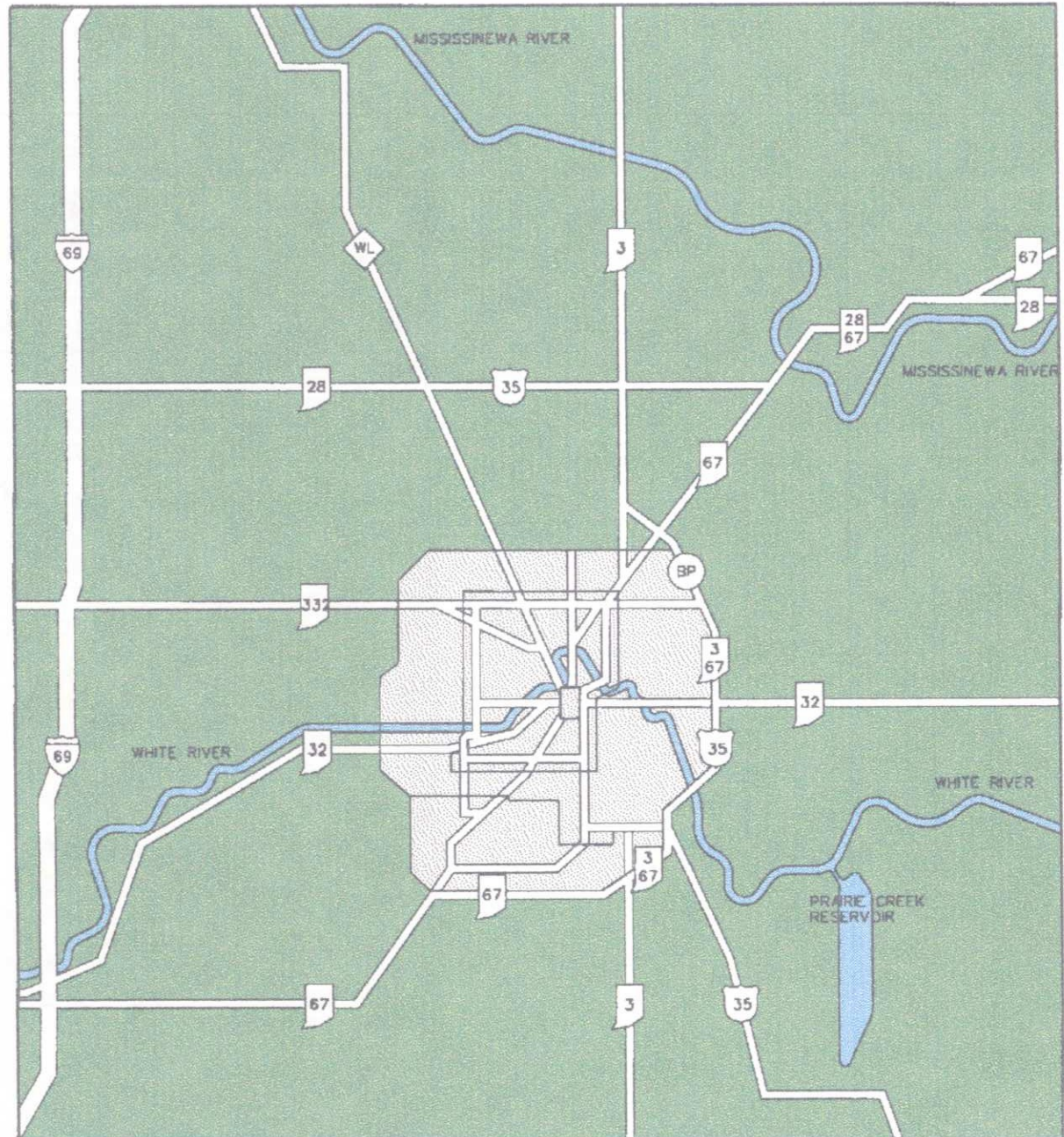


Figure 5a : Rural Character Zone

**SUBURBAN/RURAL CHARACTER ZONE**

(Coded yellow in this illustration)

**Outer Boundary**

The By-pass on the south and east and the CR 300 W (Morrison Road) line on the west

**Inner Boundary**

Southern outer boundary of the "suburban zone." This boundary roughly approximates the corporate limits of Muncie, crossing the routes at the same points as do the corporate limits, but otherwise "smoothing out" some of the variations in the city limits line. To provide a frame of reference, the corporate limits are shown in this illustration and in Figure 5c.

Rationale for establishment of inner boundary:

It was felt that in order to reinforce and clarify the statement of entry to "Muncie proper," it was necessary to have the beginning of the "suburban zone" — and the end of the "rural zone" or "suburban/rural zone"—occur at the same points on the routes as do the corporate limits.

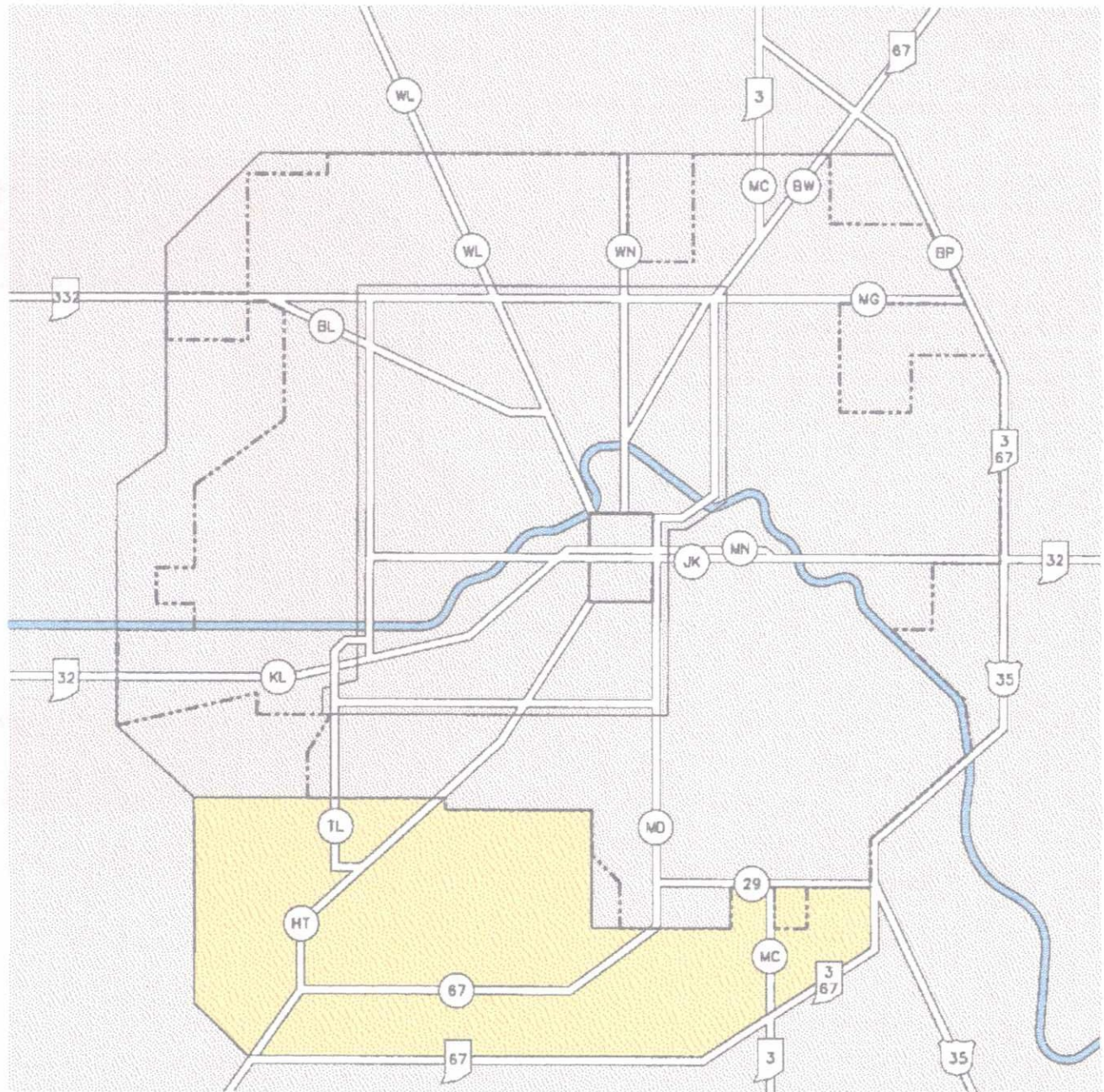


Figure 5b : Suburban/Rural Character Zone

**SUBURBAN CHARACTER ZONE**

(Coded orange in this illustration)

**Outer Boundary:** Inner boundary of the "suburban/rural zone" or "rural character zone" depending on the location.

**Inner Boundary:** The "Inner-Loop" of McGalliard, Broadway/Madison, Memorial, and Tillotson

Rationale for establishment of inner boundary:

The area within the inner loop and its immediate environs is the urban heart of the city. As one travels or crosses the inner loop, the pattern of development—in concentration and character—is easily observed to be undeniably urban, and consequently the beginning of the "urban zone" and the end of the "suburban zone."

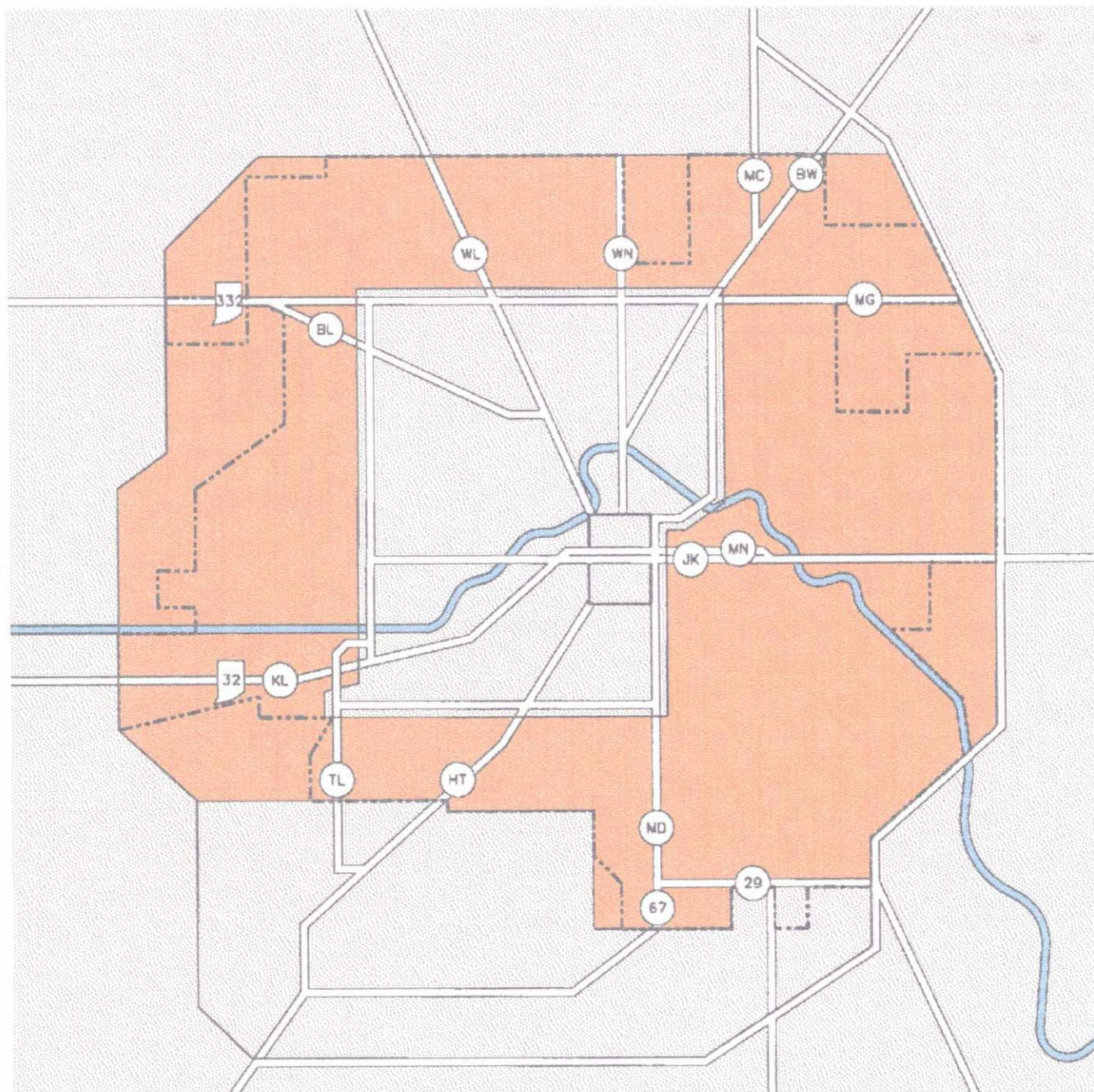


Figure 5c : Suburban Character Zone

**URBAN CHARACTER ZONE**

(Coded red in this illustration)

**Outer Boundary:** The Inner Loop**Inner Boundary:** The CBD

(For the purposes of this study)

The remainder of this report will utilize this terminology and these defined areas as the vehicle for observations, analyses, and recommendations. Before progressing further, a final point should be made regarding the rationale for the adoption of this terminology.

One might question the use of this terminology in lieu of the traditional terms of highways, roads, streets, and avenues. There are three reasons that this was judged to be the better approach: 1) this terminology more accurately represents the intrinsic character and uses of the routes than do the traditional labels, e.g., a highway maintains its designation as "State Road" or "U.S. Highway" as it traverses the county, but its character can change dramatically from rural to urban and back to rural as it passes through Muncie or from rural to suburban as it approaches Muncie, 2) the highways intermittently divide, converge, or overlap—S.R. 28 and U.S. 35 share the route from S.R. 3 N to I-69, the By-pass carries the designation of three highways, S.R.'s 67 and 3 and U.S. 35, etc.—making highway identification and investigation difficult and an attempt to do so confusing to both investigator and reader, and 3) this approach organizes the report into geographic areas that reflect governmental jurisdictional boundaries, i.e. the rural and suburban/rural zones are within county jurisdiction and the suburban and urban zones are within the city of Muncie's corporate limits, thus defining within which governmental authority the responsibility for reaction, and subsequent action regarding these study findings and recommendations resides.

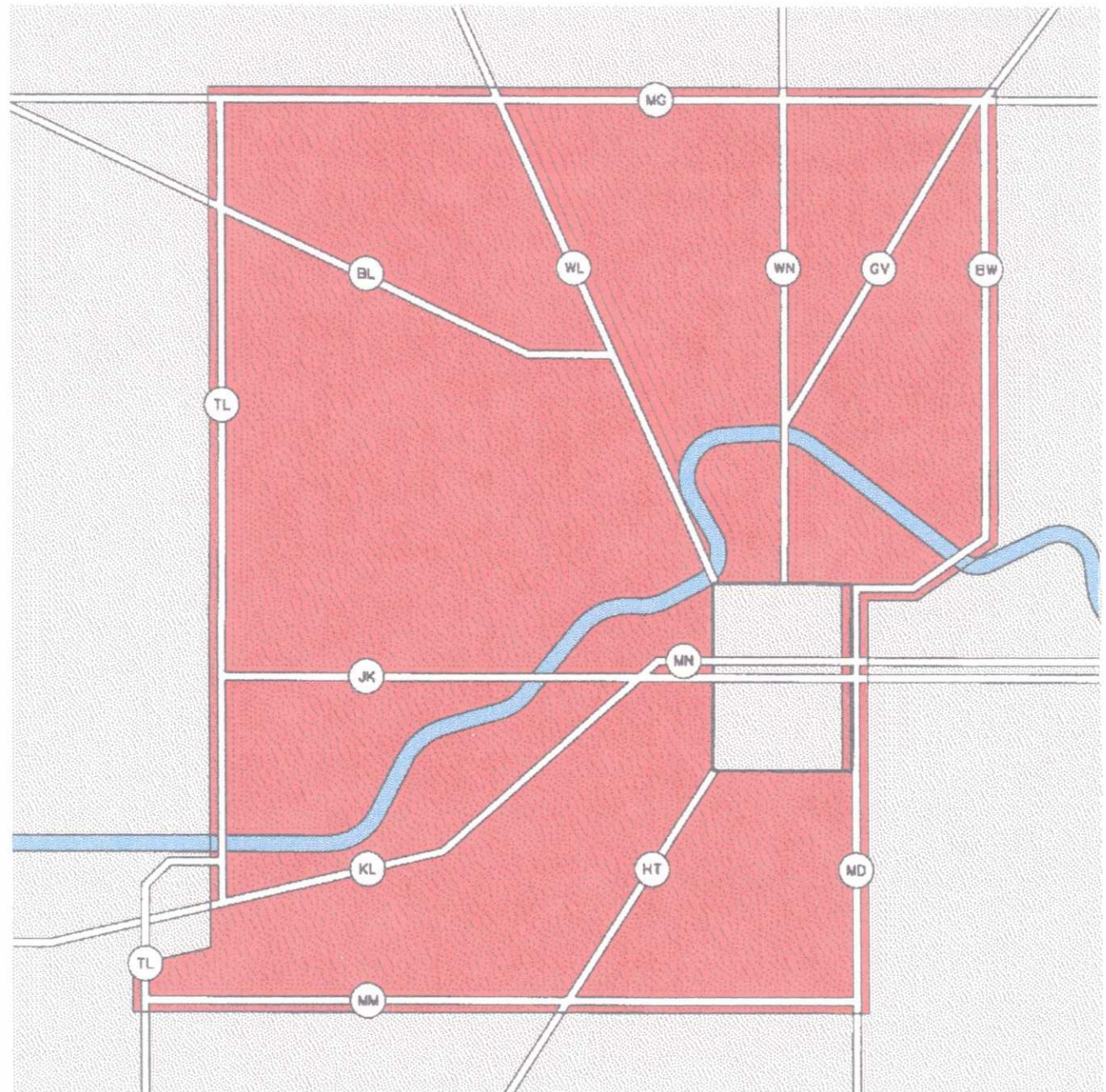


Figure 5d : Urban Character Zone

**ANALYSES OUTLINE**

In the succeeding sub-sections of this section, these four categories of routes will be examined from several aspects, an outline of which is provided below. It should be noted that while these analyses will focus sequentially on each category of route or zone, the illustrations will include other "zones" as necessary in clarification of a concept or point.

**Rural Routes**

- Identification
- The Landscape and Cultural Heritage
- Traffic Patterns
- Busses, Planes, and Trains
- Impact of Commercial Development
- Impact of Industrial Development
- County Image and Identity

**Suburban Routes**

- Identification
- Greenways and Open Spaces
- Traffic Patterns
- Busses, Planes, and Trains
- Impact of Commercial and Industrial Development
- Community Image and Identity

**Urban Routes**

- Identification
- Greenways and Open Spaces
- Traffic Patterns
- Busses, Planes, and Trains
- Impact of Commercial and Industrial Development
- City Destination and Image

**Suburban/Rural Routes**

- Identification
- Characteristics of the Routes

## IDENTIFICATION

The routes, or portions of routes, that comprise the Rural sections of the county major roadway system are those within the Rural Character Zone, shown in green in this illustration. These are:

I-69  
 Wheeling Pike  
 S.R. 28/US 35 W  
 S.R. 3 N  
 S.R. 67 NE  
 S.R. 32 E  
 U.S. 35 SE  
 S.R. 3 S  
 S.R. 67 SW  
 S.R. 32 SW  
 S.R. 332  
 The By-pass

It must be noted here that although I-69 is listed as one of the county routes, it is not included as a subject of analysis or recommendations in this report. I-69 is excluded because the regulations pertaining to interstate highways are not subject to requests for grants of exception, e.g., for special county identification signs, city or commercial directional signage, etc. Consequently, in the face of little or no prospect for implementation, it was considered counterproductive to develop recommendations for this route.

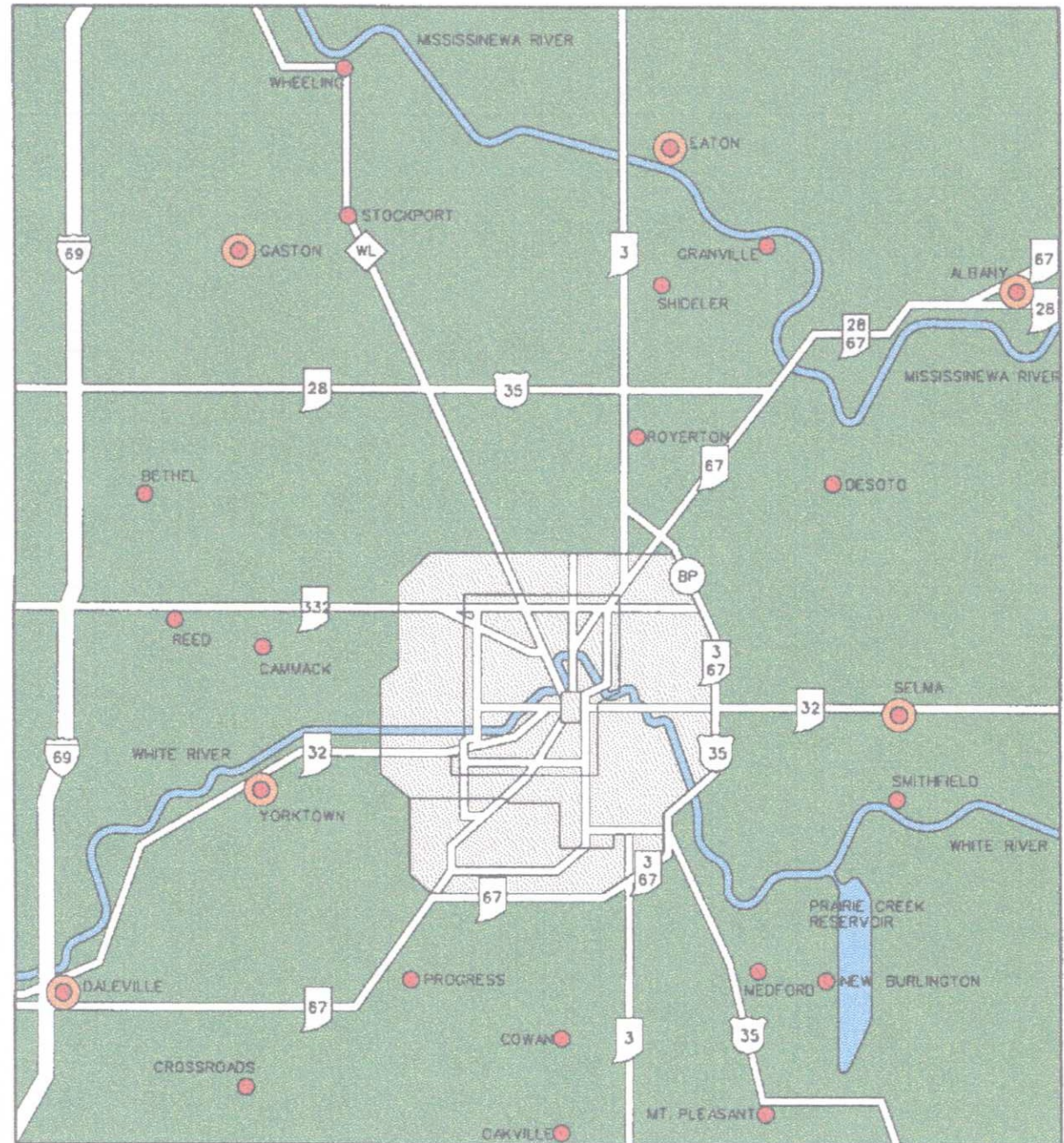


Figure 6 : Rural Routes



### THE LANDSCAPE AND CULTURAL HERITAGE

The Delaware County landscape is a rich and diverse one, especially as it is expressed along the county's rural routes. The current compositions of Delaware County's rural landscape contain variations and combinations of wood lots, fence rows, livestock, crop fields, farmplex buildings, drainage ditches, bridges, and, of course, roads. These elements are poised in a complex of natural features including rivers, streams, wetlands, and various glacially derived topographic features.

This scenario is typical of the east central Indiana rural landscape. However, a number of natural and cultural phenomena in Delaware County's pre-history and early history build a unique story that could be more effectively communicated to county visitors and residents alike as they travel its rural routes.

The natural and cultural features that, in combination, impart a unique character to Delaware County's landscape include the following:

1. Two major historic and scenic rivers, the White and the Mississinewa, cut through the county.
2. Many natural streams as well as man-made drainage ditches carve and sub-divide the landscape as they flow to the rivers.
3. Zones of rolling to, in some areas, rough topography evidence the glacial geologic build-up (end moraines) generally extending about a half-mile to the north of both the White and Mississinewa Rivers.
4. Hilly bands and mounds composed of glacially deposited sands and gravels (eskers and kames) rest in generally southwest to northeast lines giving unique relief to some areas of the county (especially as seen along SR 67N from Desoto Road to Black Cemetery Road).
5. Zones of denser and more frequent fence rows, wood

lots, and forest cover are characteristic of the rougher terrain (described above) and most of the stream, river, and floodplain corridors.

6. Veins of glacially formed peat bogs and wet prairie openings (kettle depressions), if not previously drained, continue to punctuate the rural landscape of the county, especially along the Gaston/Yorktown and Wheeling Pikes.
7. Historical Indian village and camp sites (including major village sites in and near Muncie and between Yorktown and Daleville) and their trail or trace system connecting the various settlements which eventually became the basis for the radial pattern of pikes, roads, and highways that now focus on Muncie's contemporary city center.
8. Early settlement patterns and varied ethnic influences impart observably different farm house and farmplex building styles to different portions of the county, i.e., the oldest farmsteads near the White River basin in Delaware County exhibit qualities more typical of earlier Pennsylvania and Ohio cultures, whereas farmsteads around the Mississinewa River show evidence of Virginia and Appalachian influence.

This landscape of natural history and of prehistoric and early settlement was overlaid by the uniform grid survey of county, township, and section. The current agricultural landscape pattern of Delaware County is representative of a combination of these natural features and man-made land use patterns.

Towns followed a similar pattern of development. Early towns were platted as simple grids aligned with the compass. Indian traces and high ground ridgelines were used to connect settlements and towns in a pattern of informal diagonals across the grid landscape. These "pikes," as they became known, have been, and remain, important intra-county transportation links; their pattern is especially

strong in the connection of outlying towns with Muncie, the county seat of government and commerce. Wheeling, Bethel, Granville, Burlington, Jackson, and Middletown Pikes radiated out from Muncie as spokes. These pikes remain the shortest routes from many outlying areas to the county center, and as such are locally important routes to the central city.

The effect that railroads have had in the development of the landscape patterns of Delaware County is similar to that of roads. In some cases rail lines cross through the county reinforcing the grid pattern. In many instances, rail lines were developed between major cities of the region, such as the line connecting Richmond, Muncie, and Marion. In other cases, main lines between national rail centers, such as Cincinnati and Chicago, were connected via intermediate stations in smaller cities such as Muncie. In both of the latter examples, rail lines cut across the county grid pattern paralleling the older pike roads, establishing additional diagonal land patterns.

The implication for the county's rural routes is that there is a subtle, but rich cultural and landscape heritage that can and should be communicated to travelers along these routes. There are ample opportunities for the county to protect or enhance the beauty of its historic landscape features or areas and to define and promote the cultural history of the county.

Figure 7 provides a representation of the location of these features and opportunities.

LEGEND

Woodlots

Note: Woodlots of under ten acres in area are not shown

Glacial Deposits

End Moraines

Eskers and Kames

Wetlands

Major Streams

Indian Settlement Sites

Villages

Camp Sites

Note: Only verified village and camp sites of the Woodland and Historic periods are shown

Pikes

Bethel



Gaston/Yorktown



Burlington



Granville



Eaton/Albany



Jackson



Eaton / Wheeling



Middletown



Wheeling



Towns

Incorporated



Unincorporated

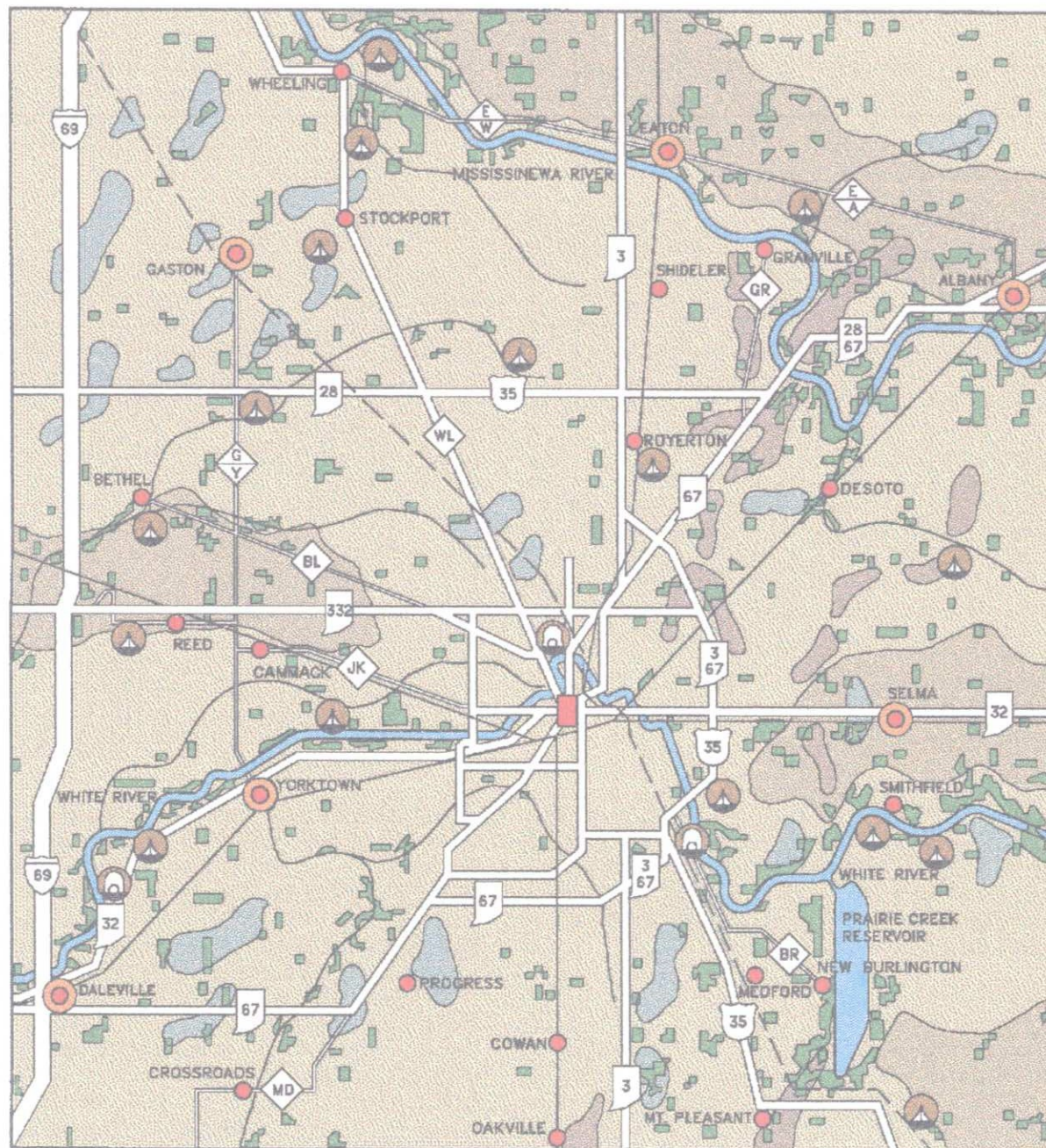


Figure 7 : Natural and Cultural Aspects and Features

## TRAFFIC PATTERNS

Figure 8 illustrates, diagrammatically, the traffic volumes and patterns of the county and city routes. A brief analysis of, and commentary on this traffic follows.

### Historical Development

The most significant aspect of the historical usage picture for the county highways is that there has been no increase in traffic volume on any of the highways that were in existence ten years ago. The only exception to a steady-state ten year traffic picture for these county highways is a slight average decrease in traffic volume on what one might call the "SR 28 northern cross-county route"—the SR 28/US 35W-SR 28/SR 67NE route between I-69 and the east border of the county. Both of these phenomena can be partially explained by the addition of another major highway, SR 332, connecting Muncie with I-69. This new highway has taken the Muncie/I-69 traffic that would have contributed increased volume to SR'S 67 and 32 SW and SR 28/US 35 W. The other obvious explanation for the lack of significant increase in traffic volume on the county highways is that east central Indiana has not experienced a growth in population over this ten-year period.

### Current Patterns

#### The I-69 Pattern

Figure 8 shows that I-69 experiences a gradual north to south increase in traffic volume as it passes through the county. This pattern is illustrative of the net outflow of Delaware County workers commuting to and from places of work to the south of the county, primarily Anderson and Indianapolis, and of shoppers traveling to and from these same locations.

#### Major Traffic Carriers

Again referring to Figure 8, it can be seen that the By-pass is the rural route experiencing the heaviest traffic volume, followed closely by SR's 67 SW and NE, 32 SW and E, 332 and 3N, while SR 28/US 35 W, SR 3 S, and US 35 SE are

significantly less heavily traveled. In this context it is noteworthy that Bethel Pike carries, on the average, as much traffic on the five mile segment contiguous to Muncie's city limits as do either SR 3S or US 35 SE for the same length and location.

#### Truck Traffic

There are two major county truck routes, one is the SR 67 SW/By-pass/SR 67 NE route, the other is SR 28/US 35 W. The distinction between these two is that much of the truck traffic on the SR 67/By-pass route has Muncie as its destination or origin, while the SR 28/US 35 route is predominantly a "county route." Apart from these two routes, the only other rural route carrying a significant amount of truck traffic is SR 332, serving as a connector for truck traffic between I-69 and the commercial development along SR 332 and McGalliard Avenue and its cross-axes.

#### Commuter Traffic

The increase in traffic volume towards Muncie is the typical pattern of residents in rural areas or of neighboring towns moving to and from "city" places of work, shopping, entertainment, government, or commerce. The By-pass also participates in this pattern as it collects and distributes commuting traffic between eastern county highways and suburban connectors.

It is not possible to draw detailed conclusions from these traffic patterns. Although some rural routes can be observed as being favored by truck traffic—SR 67, the By-pass, and SR 28/US 35—or heavily utilized as commuter routes—SR's 32, 67 and 332 and Wheeling Pike—one cannot follow this observation with a recommendation that one type of use should be favored over the other. On the contrary, both of these uses as well as resident and visitor shopping traffic, airport traffic, traffic generated by patrons of entertainment and cultural events and facilities, and other types of traffic, must receive equal accommodation by the system. Moreover, no matter what the traffic volume, or whether it is increasing or decreasing—county-

wide or on individual routes—the issues that must be addressed are the same. However, it is possible to derive a few broad implications from this traffic data. These are:

1. The destination centrality of Muncie for county motorists is strongly reinforced by this traffic pattern.
2. The traffic volume on Wheeling Pike validates its designation as the northwest radial "spoke" of the county primary roadway system.
3. Traffic-impeding development on the most heavily traveled routes should be stringently controlled if these highways are to be preserved as efficient carriers of traffic.

### SR 67 SW Four-Laning

The prospect of the four-laning of SR 67 SW between Muncie and I-69 presents the county and the state with a rare set of opportunities. However, as is usually the case, these opportunities carry with them a counterposed set of potential pitfalls.

The opportunities that the 67 four-laning present are the following:

1. To align the route in a manner that respects the rights of the home-owners along the right-of-way to maintain their current set-back distances from the highway. This approach would imply the acquisition of right-of-way in an "asymmetrical" manner rather than the traditional approach of acquiring the needed right-of-way equilaterally from the center line of the route.
2. To plan the route in a manner that will protect and/or enhance its present pleasant rural character. This would require a consideration of woodlot and tree-lined fence row protection and of right-of-way plantings that would enhance and reinforce those traditional aspects of Indiana rural landscape that currently exist along the route.

3. To protect the route against haphazard commercial development, proliferation of non-essential accesses and the consequent impedance of traffic flow and unsightly route image by limiting access to only major intersecting routes and disallowing contiguous commercial development for its entire length.

If these opportunities are not capitalized upon, the four-laned SR 67 SW will fall victim to the pitfalls of: the depreciation by its construction of the livability and value of the homes along the route, the destruction of the existing appealing character of the route via the combined effect of the depletion of woodlots and fence row plantings by its construction and the further loss of these natural elements, as well as valuable farmland, to displacement by commercial buildings and parking lots, and the traffic carrying capacity of the route severely diminished by the proliferation of accesses and traffic lights.

*Comment:*

*If much of the justification for the four-laning of SR 67 SW is invested in the improvement of the economic fortunes of the south side of Muncie, it must be noted that uncontrolled strip development along its length will all but eliminate any possibility of this potential benefit ever materializing.*

**LEGEND**

Traffic Volume



Note: At the time of the writing of this report, the most recent comprehensive traffic data available were from 1988 counts. The highest traffic count in the county at that time was on McGalliard Road and was just over 27,000 vehicles per 24 hour period.

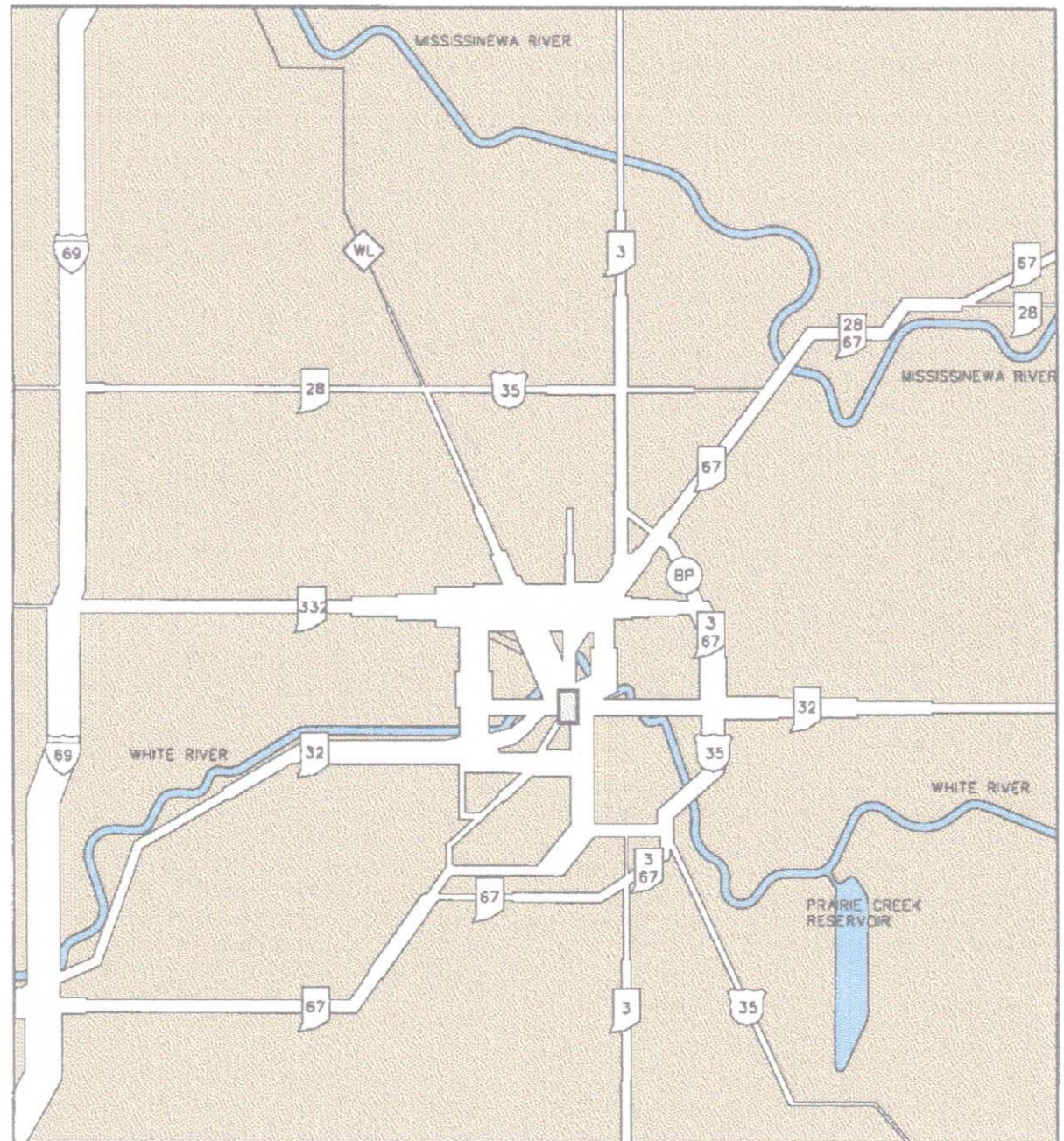


Figure 8 : County Traffic Patterns

## BUSSES, PLANES, AND TRAINS

Figure 9 contains information relating to the impact that forms of transportation other than cars or trucks—inter-city busses, air travel, and railways—have on the rural routes. A commentary on, and implications of these impacts follow.

### Inter-City Busses

The inter-city, ABC, bus station is located on Howard Street in downtown Muncie and utilizes SR 32 SW as its linkage to and from Indianapolis and Ft. Wayne and points en route. The obvious implication is that this highway is an important route as it relates to the image of the county for inbound and outbound inter-city bus passengers.



Inter-City bus route

SR 32 at CR 400 W

### Airport Traffic

The location of the Muncie Airport on Walnut Street north of Riffin Road currently makes McGalliard Road between Tillotson Avenue and Broadway Avenue the "next-to-last" leg for many county and city travelers to and from the airport. This places these travelers on the most heavily traveled route in Muncie, a situation not conducive to easy access to and from the airport.

There appears to be no solution to this problem for airport travelers whose points of origin are within the city or along S.R.'s 32 SW and 332. However, for airport traffic originating along S.R.'s 67 SW and NE, 3 S and N, 32 E, and 28, US 35, and Wheeling Pike, alternatives to the McGalliard

Road airport linkage could and should be developed and promoted. The goal in identifying these linkages should be to provide county travelers less congested routes to and from the airport while decreasing the traffic volume on McGalliard Road, especially between Wheeling and Broadway Avenues. These alternative linkages and recommendations relating to these linkages are identified and detailed in the "Rural Corridors" sub-section of the "Recommendations" section.



Airport route

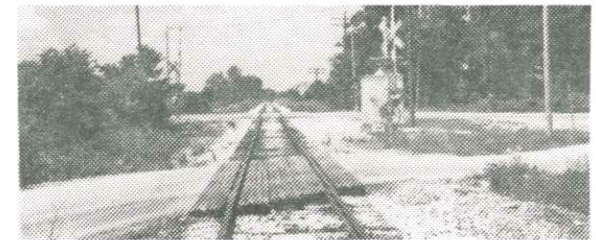
McGalliard Rd. at Broadway Ave

### Railways

The impact of the railways on the rural routes is almost exclusively related to grade level railway crossings. This does not appear to be a major problem. With the abandonment of the northwest Penn Central line and the impending abandonment of the CSX line (formerly Chesapeake and Ohio) from the northwest to the southeast (shown as a dashed line in Figure 9), there will be only two grade level rail crossings of the rural routes: on SR 28 east of SR 3 N and on the By-pass west of SR 3 S. Therefore, the only implication for the rural routes in the context of "rails" is that these crossings should be maintained in a manner that does not create a danger to motorists, i.e., that the crossings not be of a physical nature or condition that creates a driving hazard, and that they be "well-signaled" to alert motorists to the passage of trains.



A special point must be made regarding the opportunity presented by the abandonment of the CSX rail line, a point

that has a connection to the issue of the quality of the rural routes. The abandonment of this rail line creates a unique opportunity for the county (and the city) to create a north-west to southeast greenway/biking, hiking, and cross-country skiing trail. The acquisition and development of this railway right-of-way for this purpose would provide county residents with a north-south greenway and recreational corridor that would be a counterpoint to the east-west corridor of the White River. The implications for the rural routes are that the development of a biking/hiking/skiing trail along the CSX right-of-way could create visual enhancement as greenway vistas along SR 28/US 35 W, SR 3 N and US 35 SE and opportunities for special events, e. g., biking/hiking/skiing "depots" along these routes.



CSX right of way north of SR 28

LEGEND

- Airport 
- Grade Level Rail Crossings 
- Intra-city Bus Route 
- Rail Lines 
- CSX Rail Line 

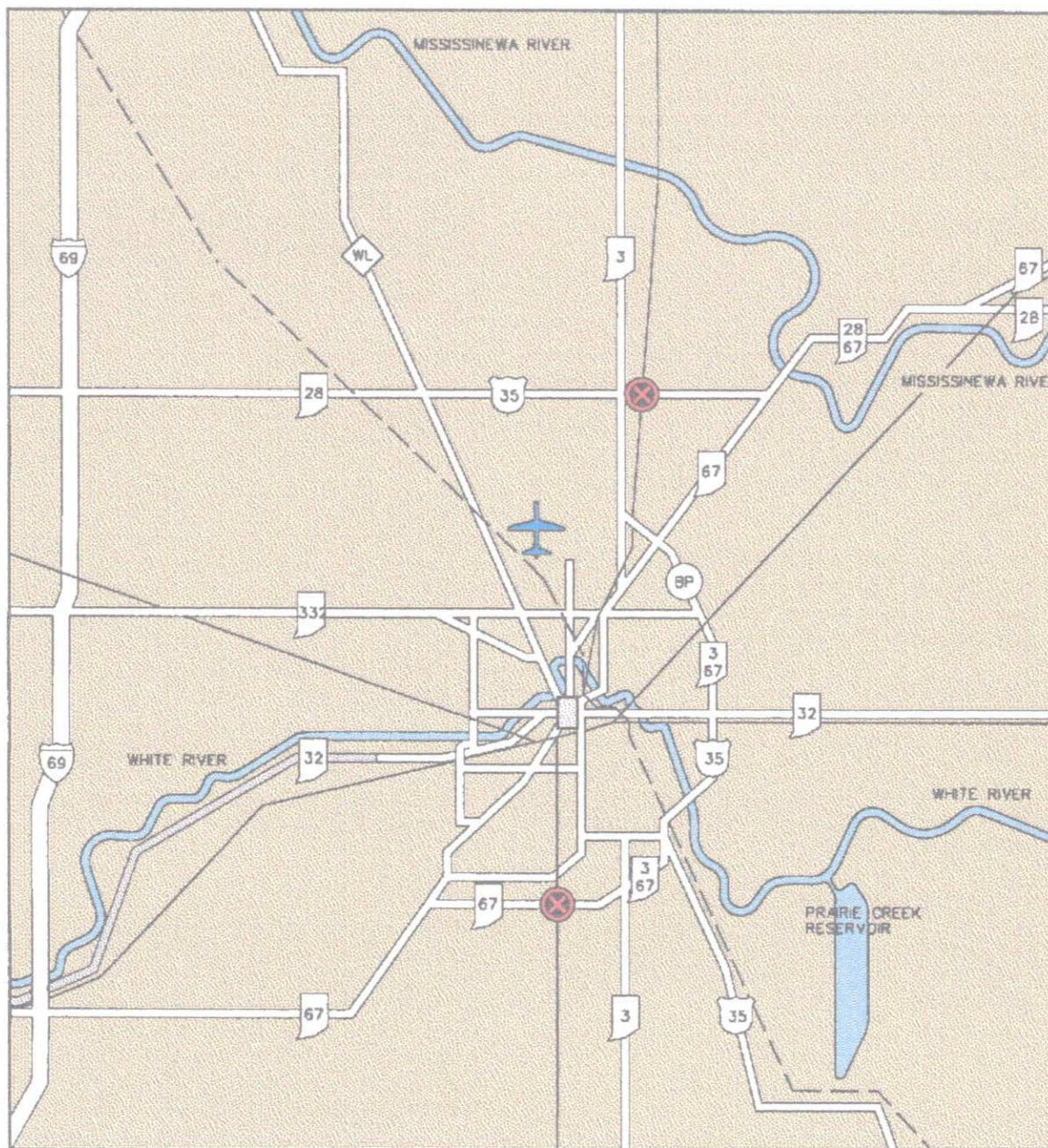


Figure 9 : Impacts of Other Modes of Transportation

### IMPACT OF COMMERCIAL DEVELOPMENT

Figure 10 illustrates the retail business zoning patterns along the major routes of Delaware county and Muncie. This retail use is impacting or could impact the quality of the rural routes in a number of areas and in several aspects. These are the following:

#### Suburbanization of the Routes

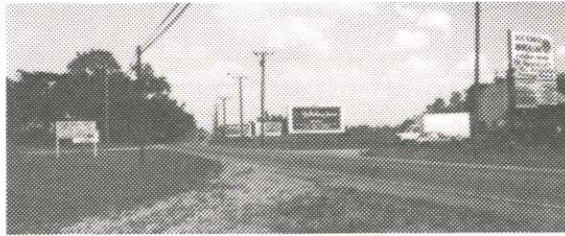
The rural routes are becoming "suburbanized" in two ways. First, isolated, scattered, sites on the routes have been and are continuing to be converted to commercial uses that are, in character and type, more typically "suburban." And secondly, the commercial districts of the towns along the rural routes are being gradually "suburbanized," that is, establishments are being sited back from the road with large "front lawns" and utilizing signage that is of a scale and type that is of a "suburban" rather than "rural village" character.

The result is that the distinctive, varied and pleasant motoring sequence of rural countryside and concentrated rural town is giving way on many route segments to a monotonous suburban sameness.

#### Signs of Progress?

Billboards are having a major disruptive impact on the visual character of the rural routes. These signs have the dual detractive effect of blocking pleasant views of the rural countryside while adding to the image of the "suburbanization" of these routes.

To understand the impact that this signage has on the visual quality of the route one has only to compare the character of the relatively "sign-free" routes of SR 3 S and US 35 SE with that of the "billboard-studded" segments of SR's 332 and SR 32 SW.



Billboards along SR 32 east of Yorktown town center

#### The I-69 Interchanges

All three of the I-69 interchanges in Delaware County are zoned for variety business in two or more quadrants of the interchange. However, none of them have been fully developed commercially. These areas represent special opportunities for the county. Two of these interchanges, at SR's 67/32 and at SR 332, have unique natural features (the White River at the 67/32 interchange and the woods and stream at 332) which could, with sensitive design, be incorporated into the development of these areas. Moreover, all three interchanges provide opportunities for development that is sympathetic with the rural character of their context.

Conversely, if the natural features and context of these sites are ignored and they become typical amorphous clusters of franchise commerce, their potential benefit to county image will be lost.

#### SR 332

Figure 10 also clearly illustrates that Muncie is the retail center of the county. What Figure 10 does not show is that the most heavily patronized retail businesses are those along the east-west McGalliard/S.R. 332 corridor and those along the north and south "offshoots" of this corridor. Also, this graphic does not show that the historical trend of Muncie's retail development over the last 20 years has been the shift northward to McGalliard and then east and

west along this route.

The primary current implication of this phenomenon for the rural routes is that the McGalliard/SR 332 development trend now has only one preferred outlet: westward on SR 332. If this trend is allowed to continue, the following will almost certainly occur:

1. SR 332 will become increasingly congested with local traffic and traffic lights and its utility as an unobstructed, rapid, connection to I-69 will be destroyed.
2. The image of SR 332 will become that of the "honky-tonk" strip development of "Anywhere, U.S.A."
3. SR 332 development will experience a localized manifestation of the city-wide retail development picture, which is:
  - a. retail business development growing at a rate disproportionate to growth in other sectors of the economy; as a consequence,
  - b. new retail development occurring at the expense of existing retail; and
  - c. businesses that see their patronage falling because of a new, similar, business "down the road" on 332 attempting to improve their fortunes by moving "ahead of" the competing business, creating a "leap-frogging effect" down SR 332 and a string of marginally successful businesses or vacant business locations behind.
4. Prime, high-producing, agricultural land being converted to unneeded and consequently, at best, marginally successful business uses.

LEGEND

Areas Zoned for Retail Business Use

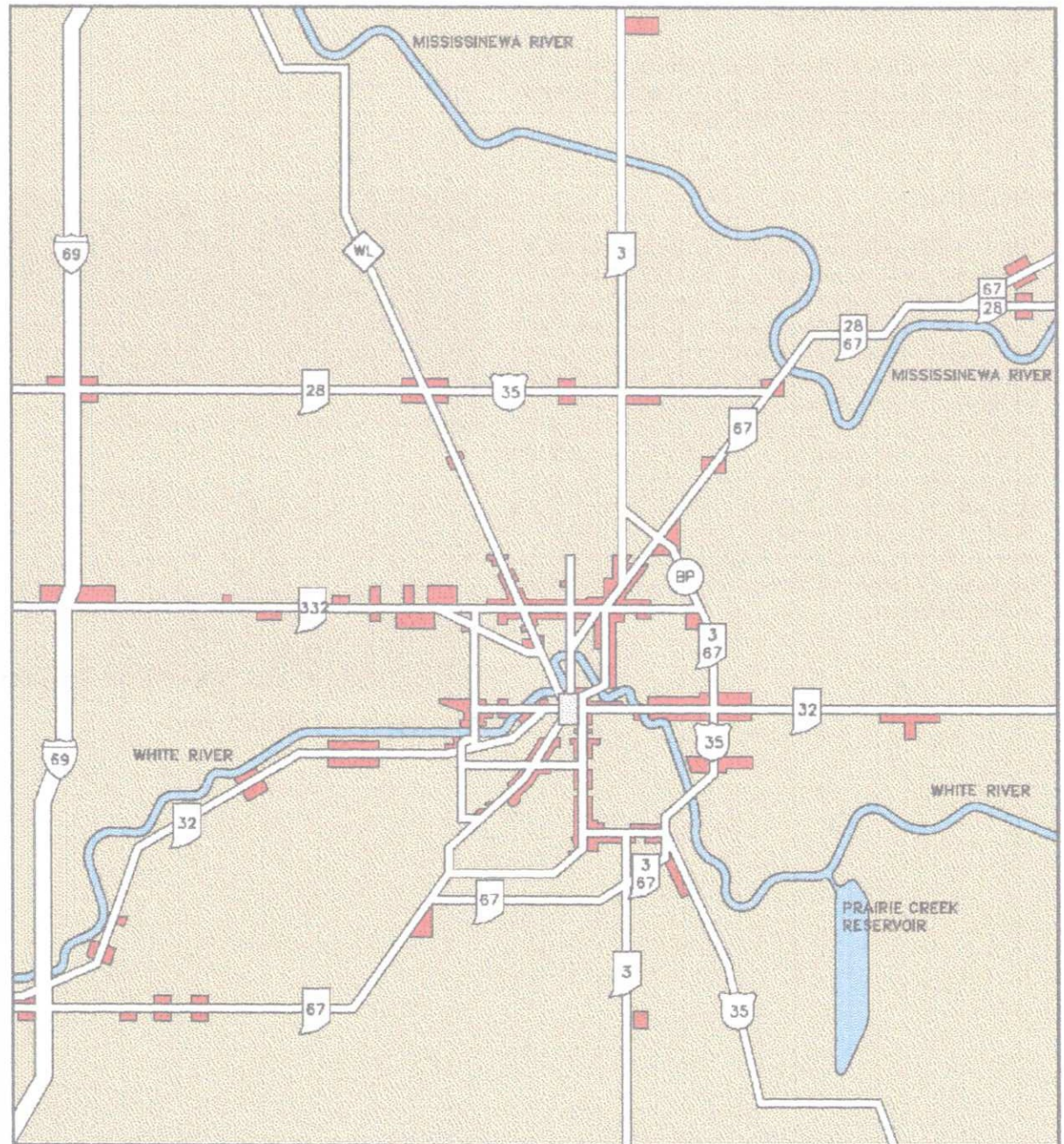


Figure 10 : Retail Business Zoning Patterns

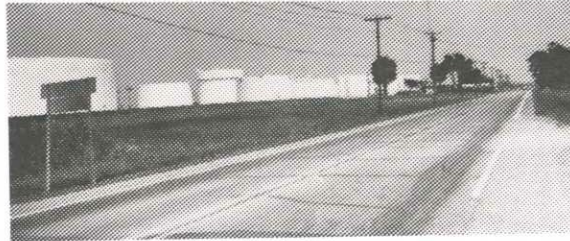


**IMPACT OF INDUSTRIAL DEVELOPMENT**

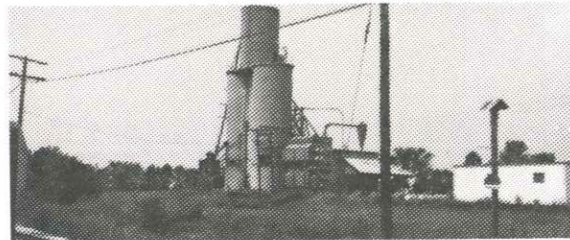
Figure 11 shows the industrial use zoning patterns in the county. There are two aspects of these zoning patterns that have implications for the rural routes.

**Rural Industry**

The rural routes themselves are not strongly impacted, at least in the traditional sense of "smoke-stack" industry, by industrial use. However, industrial images exist on these routes, the most common of these being grain elevators, quarrying operations, and oil tank farms. These uses are generally characterized by large scale structures or landforms that are compatible in many ways with the speed of travel of the route and the scale of the surrounding landscape. But, the rural routes are also the location of scattered light industrial facilities and industry-related uses such as truck terminals. Although perhaps necessary elements of inter-state commerce, these facilities, if insensitively sited and designed, distract from an otherwise pleasant rural landscape and add avoidable congestion to these high speed routes.



Tank Farm on SR 28/US 35W east of SR 3



Grain Elevator at New Burlington

**Muncie Industrial Development**

Obviously, Muncie is the industrial center for the county, and for that matter, for the East Central Indiana Economic Development Region. Moreover, the industrial zoning pattern shows a much higher concentration of industrially zoned property in the southern half of the city than in the northern half. What is not illustrated in this graphic is that there are a number of available industrial sites and buildings within these zoned areas.

The implications for the rural routes of this city industrial "scenario" are:

1. There should be little pressure for the establishment of new industry along the rural routes.
2. SR 67 SW and the south and southeast sections of the By-pass are the accesses to the industrial areas in the southern half of the city and consequently are the highway segments experiencing the highest volume of truck traffic.

LEGEND

Areas Zoned for Industrial Use

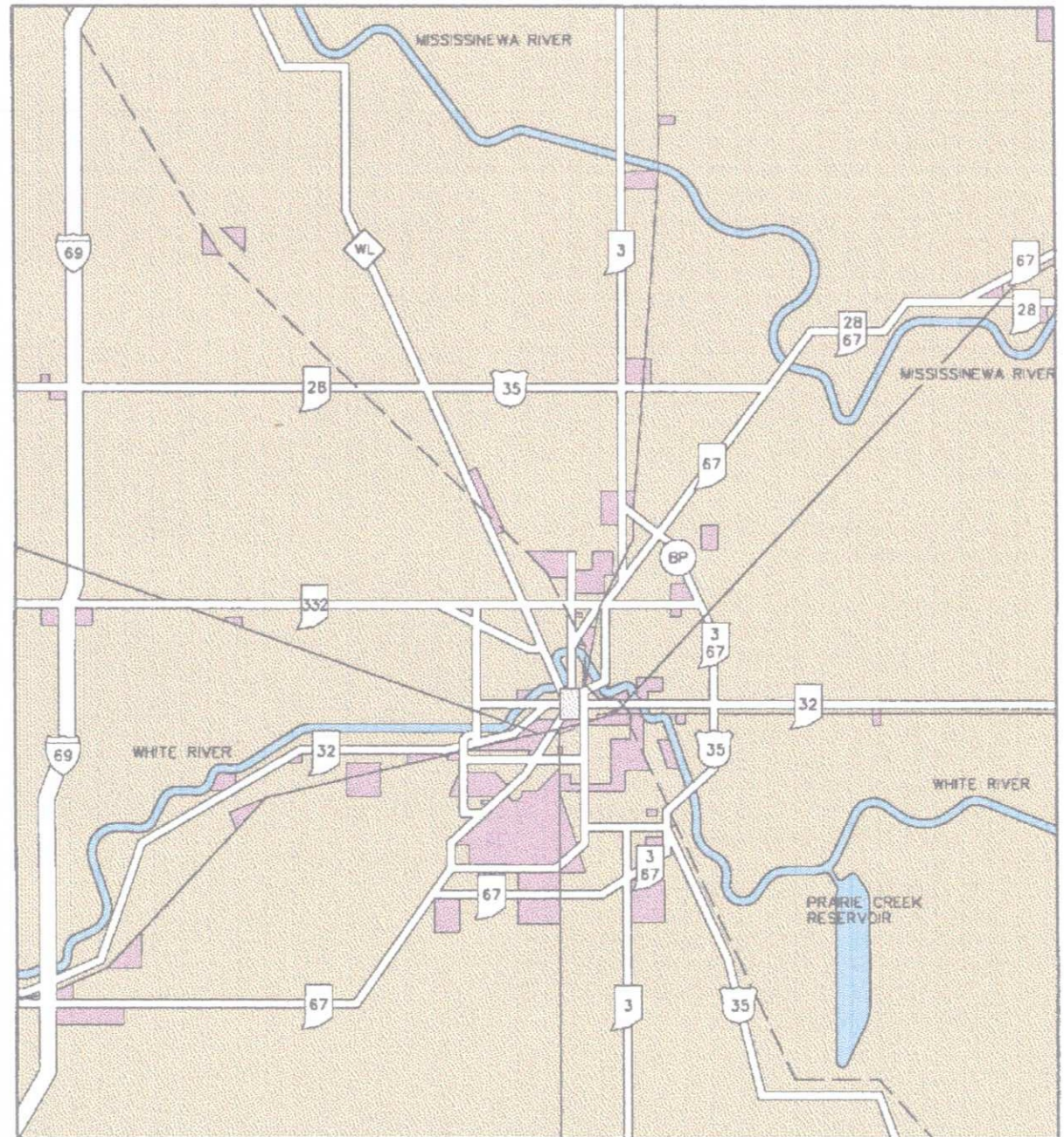


Figure 11 : Industrial Zoning Patterns

## COUNTY IMAGE AND IDENTITY

Figure 12 illustrates the major settlement concentrations in the county. Not surprisingly, Muncie dominates the county in the extent of its influence; of the approximately 400 square miles of county area, over 50 square miles, over ten per cent of the total, can be identified as the settlement area directly tied to Muncie. There is not another "city" in the county. Of the twenty-three other urban settlements, six—Albany, Daleville, Eaton, Gaston, Selma, and Yorktown—are incorporated towns; the other seventeen towns are unincorporated. An interesting anomaly is that of these twenty-three towns, only five—Albany, Daleville, Stockport, Wheeling, and Yorktown—sit directly astride one of the major county routes, and only another three—Mt. Pleasant, Royerton, and Selma—abut a major route. Consequently, outside Muncie, travelers along the major rural routes experience urban settlements in only eight locations.

The implications of this picture for the image and identity of the county are the following:

1. Outside the Muncie environs, the image of the county is predominantly rural. Travelers along major county routes are presented with the recurring image of farm land and farmplexes, infrequently punctuated by urban settlements. Even on route areas lined with residences, it is clear that this is generally only a residential "lining" of an otherwise agricultural area. Moreover, the image of the towns that are on or along the routes is, for the most part, that of the "rural village" rather than that of a high level of urbanization or industrialization.

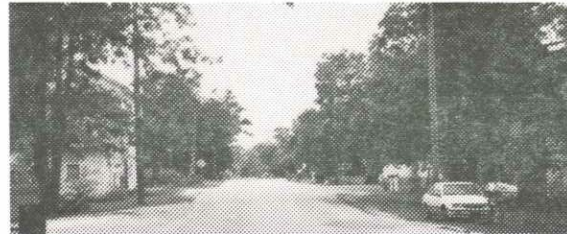
In the judgment of the team, this is an image that should not be undervalued. It is one that evokes the image of solid values, a strong work ethic, and genuineness, and as such is an appropriate one for the county and one that should be preserved and enhanced, even celebrated and promoted.



US 35 SE at CR 700 S



Albany downtown

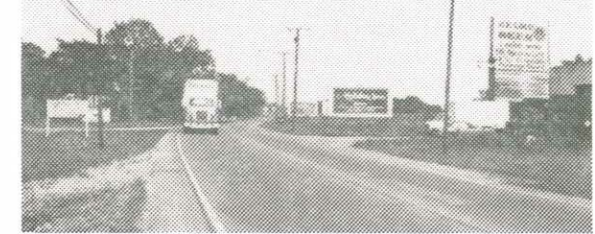


The Town of Wheeling

2. Delaware County's qualitative image is strongly interconnected with that of Muncie; Muncie is the county seat, the county's only city, and the place of residence for approximately sixty percent of the population of the county. The implication of this county/city interrelationship for the county roadway system is that travelers along these routes will reflexively connect roadside development—and its quality, or lack thereof—with Muncie, and conversely, visitors will judge the county by the qualitative stature of its county seat.



SR 332 Development



SR 32 Development

3. Muncie is the destination for most extra- and intra-county motorists and as a consequence, visitor directional and orientational information within the county should recognize this fact.

LEGEND

Muncie

Approximate Urban Area



Approximate Developmental Impact area



Towns

Incorporated



Unincorporated

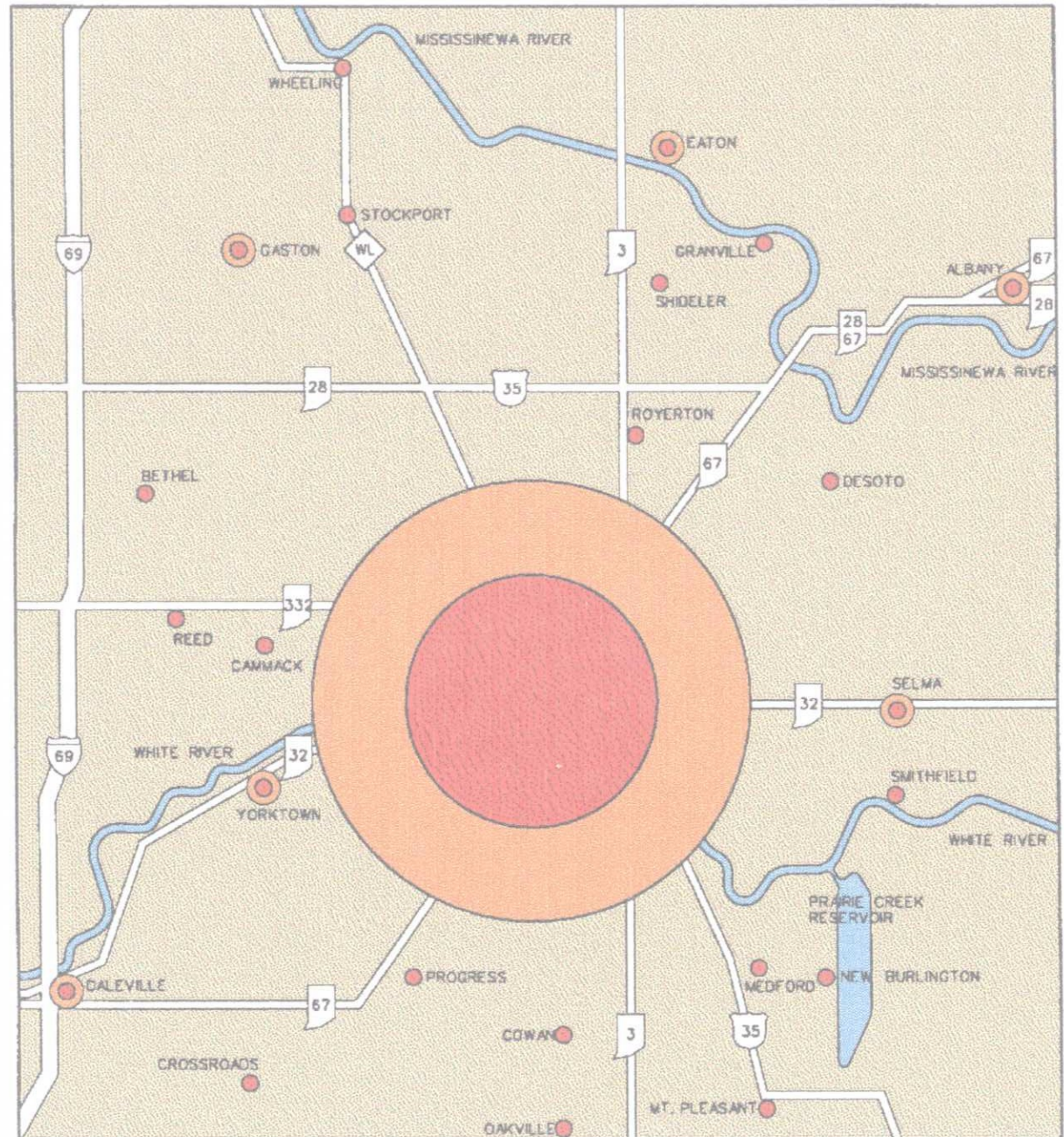


Figure 12 : County Settlement Patterns

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## IDENTIFICATION

The routes, or portion or routes that comprise the **Suburban** sections of the city major roadway system are those within the **Suburban Character Zone**, shown in orange in this illustration. These are:

Walnut Street (**WN**) between the city limits (Riggin Road) and McGalliard Road (**MG**)

Macedonia Avenue (**MC**) (Old S.R. 3) between the city limits (Riggin Road) and Broadway Avenue (**BW**)

Broadway Avenue between the city limits (Riggin Road) and McGalliard Road

McGalliard Road between the city limits (the By-pass) and Broadway Avenue

Jackson Street (**JK**) and Main Street (**MN**) (SR 32 E) between the city limits (the By-pass) and Madison Street

29th Street (**29**)/Madison Street (**MD**) between the city limits (the By-pass) and Memorial Drive (**MM**)

Business 67 (**67**) / Madison Street between the city limits and 29th Street

Hoyt Avenue (**HT**) between the city limits and Memorial Drive

Tillotson Avenue extension (**TL**) between the city limits and Memorial Drive

Kilgore Avenue (**KL**) (SR 32 SW) between the city limits and Tillotson Avenue (**TL**)

SR 332 between the city limits and Tillotson Avenue

Bethel Avenue (**BL**) between SR 332 and Tillotson Avenue

Wheeling Avenue (**WL**) between the city limits and McGalliard Road

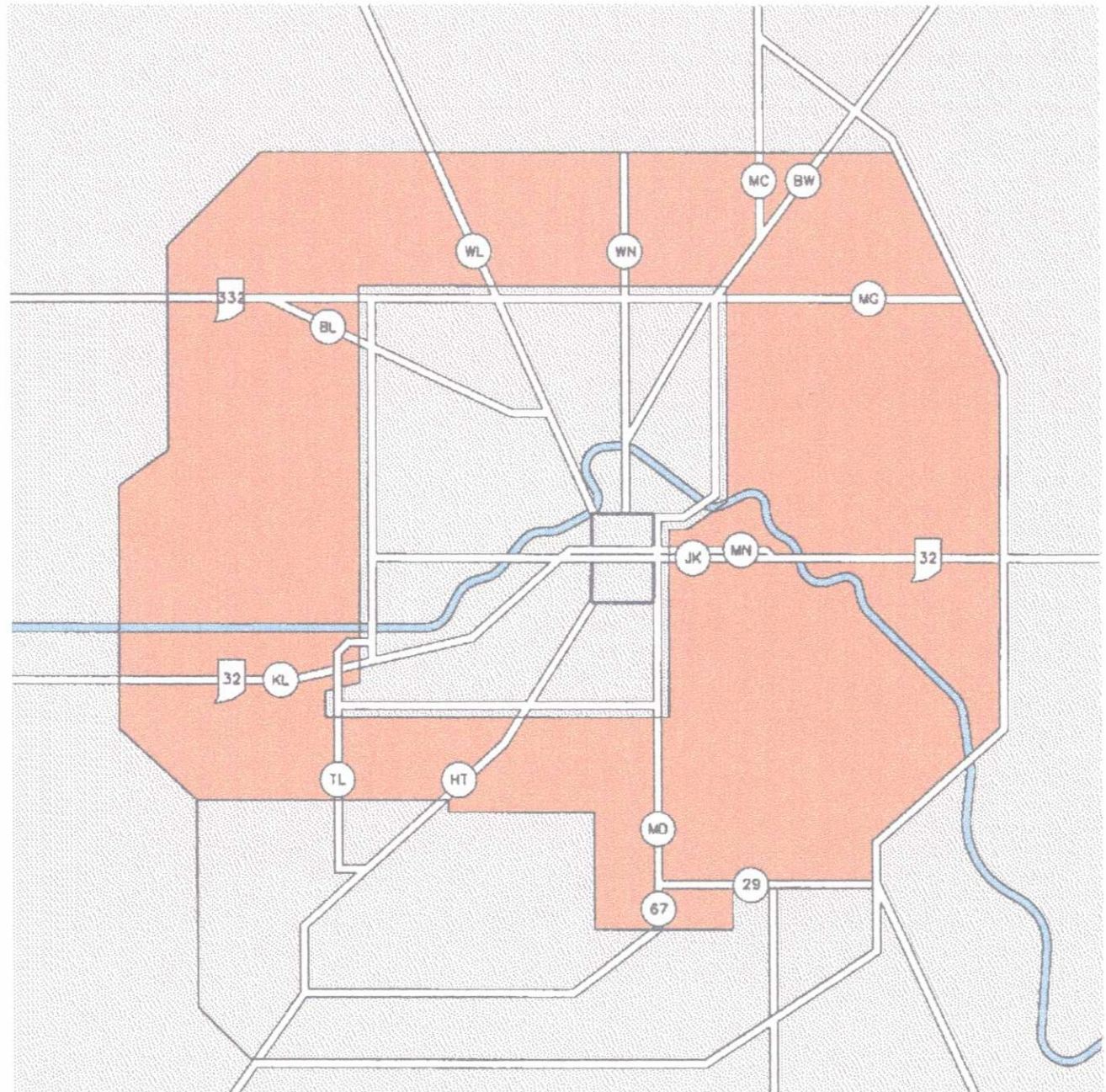


Figure 13 : Suburban Routes

### Greenways and Green Spaces

The most noticeable aspect of "Greenways and Green Spaces" along the suburban routes is their absence, at least in the traditional sense. With the exception of the Jackson Street crossing of the White River, not another significant green area exists along a suburban route. As shown in Figure 14, there are only five parks in the suburban zone, three in the southern quadrant, one in the western quadrant, and one in the eastern quadrant, and none of them abuts a major suburban route. (Although Heekin Park is sited within the suburban zone, it is adjacent to the Madison Street/Memorial Drive inner loop intersection and is consequently "seen" as an "urban park").

The implication of this "greenway/green spaces" scenario for the suburban routes is that, short of establishing new city parks abutting these route segments, the only mechanism that would provide "greenway" experiences for motorists in this part of the city would be to transform the roadways themselves into tree-lined "parkways", thus imparting the imagery of "linear parks" for these routes. While not providing the functional aspects of city parks—although the inclusion of sidewalks and bike lanes on these routes could provide needed accommodation of biking and jogging activity—these parkways would contribute the visual attributes of parks via the concentration of natural elements and the alleviation of the otherwise unrelieved image on many route segments of pavements, buildings and signs.

*Comment:*

*It should be noted that although the parkway concept has validity with or without an increase in city parks within the suburban zone, a desirable addition would be an increase in the number of parks along these routes. Not only would these new parks provide enhancement to the routes, but they would also provide much-needed recreational amenities for an area of the city that appears not to be well-served by the city park system.*

LEGEND

Parks

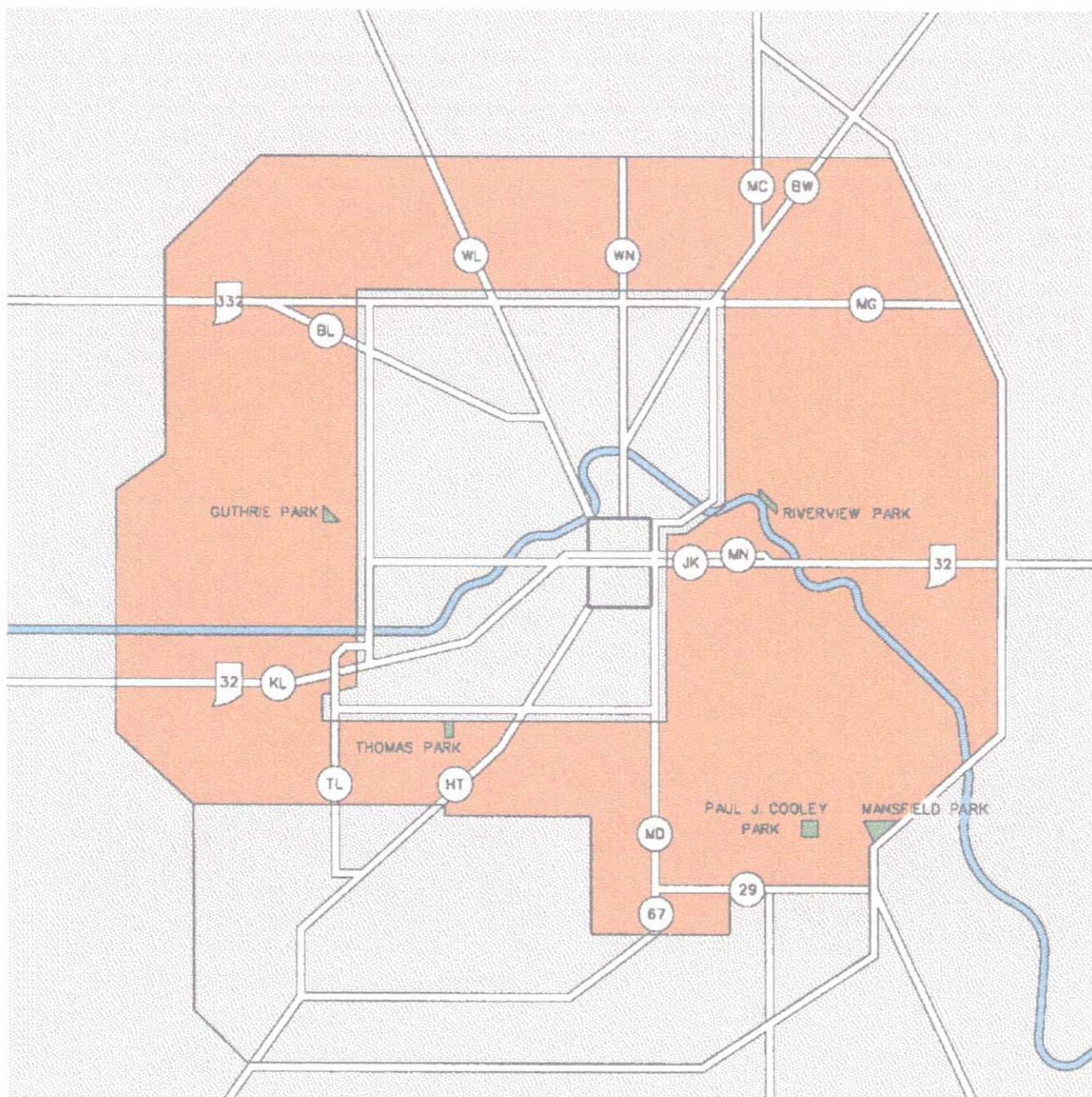


Figure 14 : Suburban Park Locations



## TRAFFIC PATTERNS

The dominant image of the traffic patterns along the suburban routes as illustrated in Figure 15 is that of suburban dwellers moving between the suburbs and destinations within the urban core of Muncie. The obvious implications for these routes is that, especially for commuting workers, these routes must move traffic as efficiently as possible, which in turn dictates that special attention should be paid to the maintenance of the roadbed elements, and to the limitation—to the minimum necessary for adequate access to businesses along these routes—of curb cuts that create impedances to traffic flow as a result of motorists entering and leaving these access points.

There are two suburban routes that are worthy of special mention in the context of traffic volume and flow. These are Bethel Avenue and Wheeling Avenue. Bethel Avenue between SR 332 and Tillotson, a narrow two-lane route, carries an average daily traffic volume that is over one-half the average daily volume of I-69 as it passes through the county, and Wheeling Avenue shares — with McGalliard Road, the Main Street/Jackson Street pair, Madison Street and Kilgore Avenue — the distinction of being the third most heavily traveled suburban routes as they connect to the inner loop; the only routes with higher traffic volumes are SR 332 and Broadway Avenue. The implication for these routes, respectively, are: 1) Bethel Avenue is too narrow to efficiently move this volume of traffic and 2) Wheeling Avenue's status as a major route is reinforced.



Broadway Avenue at McGalliard Road at 5:00 p.m.



Bethel Avenue at Tillotson Avenue at 1:00 p.m.



Madison Street at Memorial Drive at 5:00 p.m.



Wheeling Avenue at Tillotson Avenue at 8:00 a.m.

LEGEND

Traffic Volume

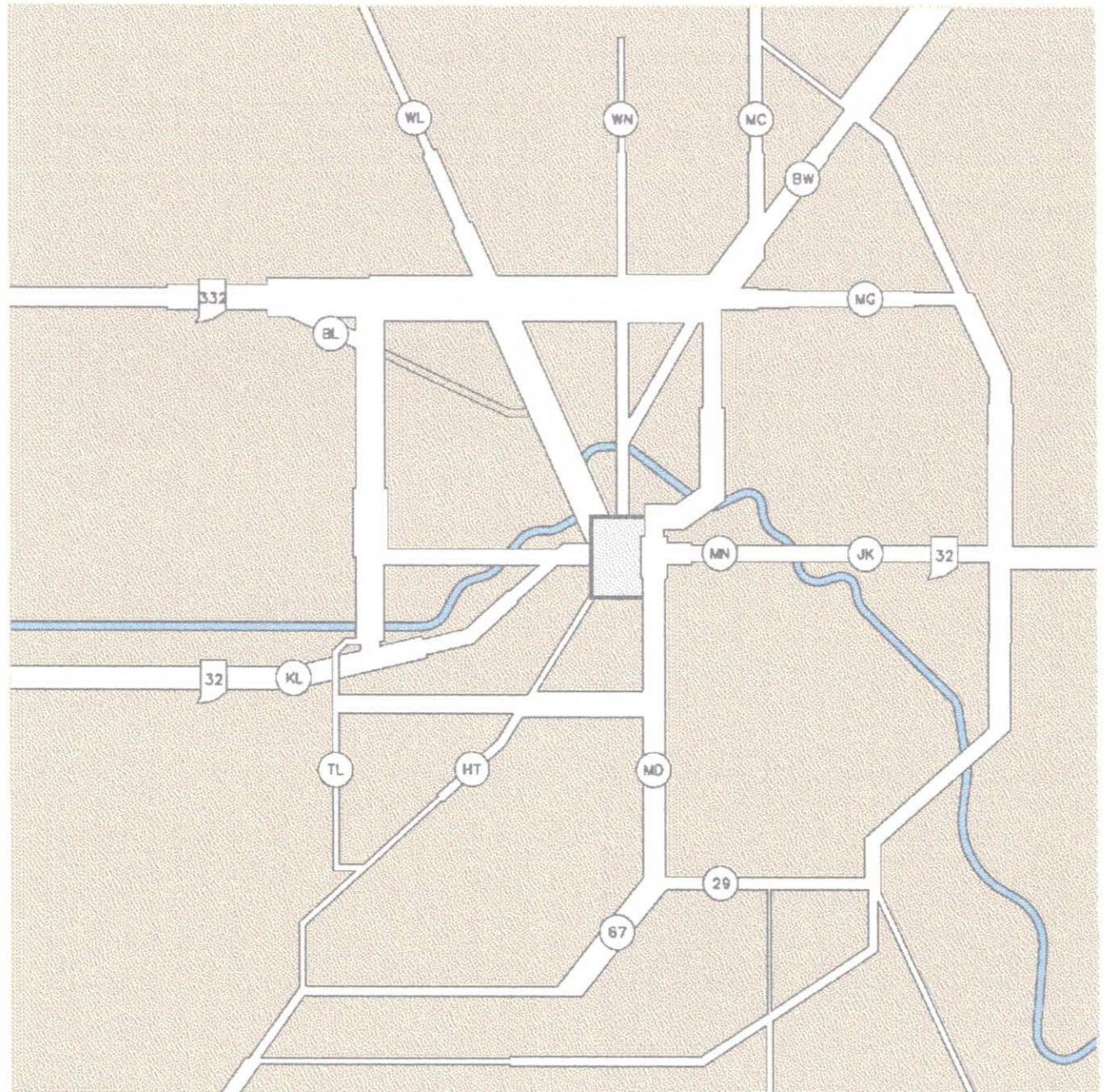
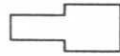


Figure 15 : Traffic Patterns

**BUSSES, PLANES, AND TRAINS**

Figure 16 contains information relating to the impact that forms of transportation other than cars or trucks—inter-city and intra-city busses, air travel, and railways—have on the suburban routes. A commentary on the implications of these impacts follows.

**Busses/Inter-City**

Inter-city (ABC) busses enter and exit Muncie via Kilgore Avenue. Consequently this suburban route is an important “image route” for inter-city bus travelers.



Inter-City bus route

Kilgore Avenue

**Busses/Intra-City**

The portions of the suburban routes utilized by the MITS busses are also coded on Figure 16. The obvious implications in this regard are that: 1) if these busses are to maintain their schedules, traffic must flow smoothly on these routes, and 2) bus passengers view and evaluate suburban Muncie as they ride along these routes.



Intra-City busses route

East Jackson Street

**Airport Traffic**

The suburban section of Walnut Street between Riggan Road and McGalliard Road is a major carrier of traffic to and from the airport. Therefore, this route provides the first and last, and consequently important, image of Muncie for visiting air travelers.



Airport route

N. Walnut Street

**Railways**

There are only two grade-level rail crossings of the suburban routes: on Macedonia Avenue north (Old SR 3) and on Jackson Street (SR 32E). These locations are noted in Figure 16. The implication for traffic flow and motorist safety at these locations is that these crossings must be well-maintained and well-signalled.

LEGEND

Airport



Airport Route



Grade Level Rail Crossings



Bus Routes

Inter-City Busses



Intra-City Busses

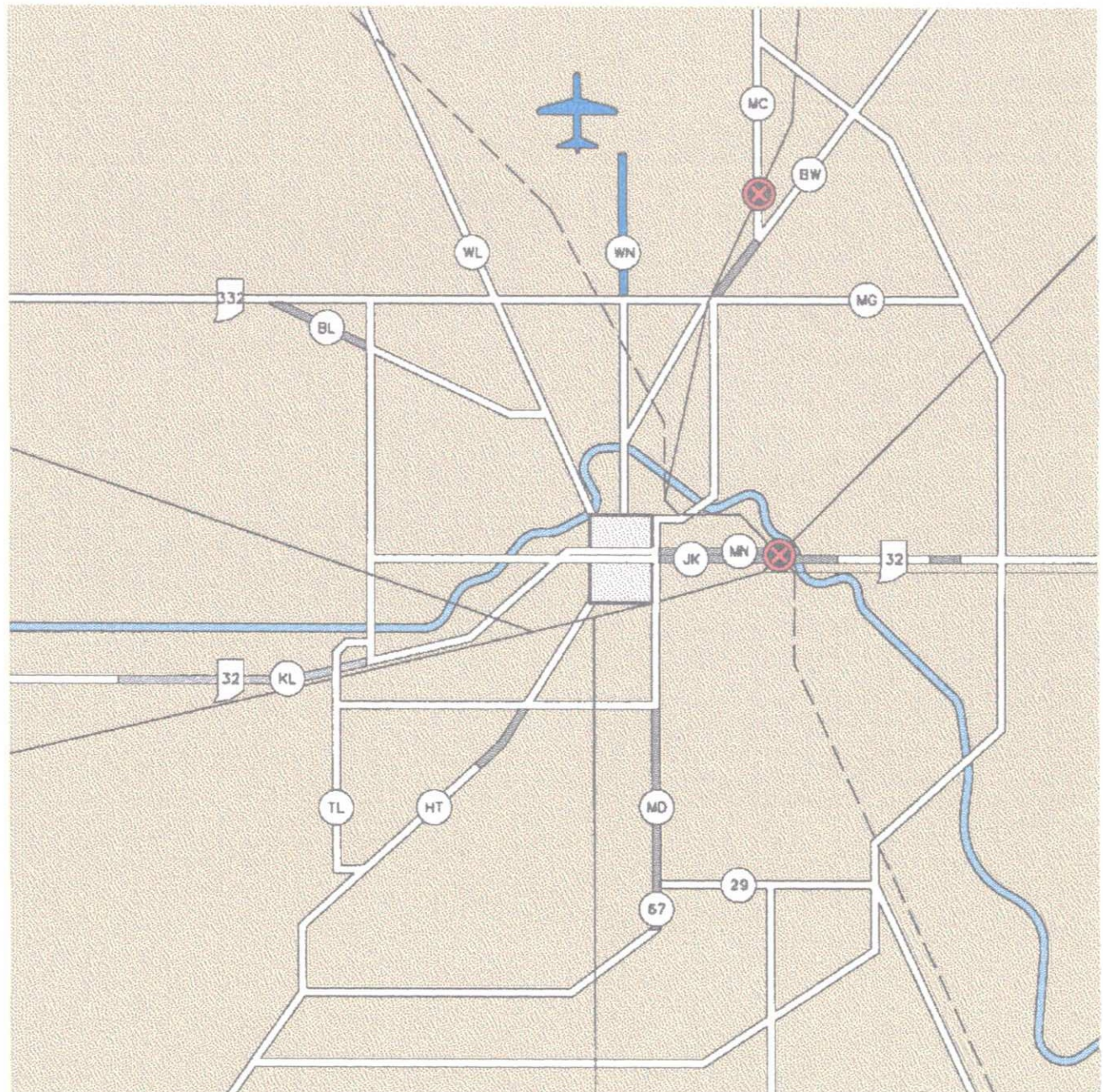


Figure 16 : Busses, Planes, and Trains

## IMPACT OF COMMERCIAL AND INDUSTRIAL DEVELOPMENT

### Impact of Retail Development

Figure 17 illustrates the retail business zoning patterns within Muncie and its immediate environs. Many of the conclusions that can be drawn from the history and patterns of this development have been stated earlier in this report in the "Rural Routes" sub-section, or will be addressed in the "Urban Routes" sub-section. However, it should be noted within the context of the suburban routes, that much of the efficiency and image of many of these routes is dependent upon the quality and the control of the retail development along them. Most of these routes have retail establishments along some part of their length, and consequently, the degree to which this retailing image can be enhanced will be the measure of the quality of the "first impression" that is communicated to arriving city visitors and of the daily impressions conveyed to Muncie residents. The level of control that can be exercised over orientational and commercial signage, curb cuts, and other elements that can either aid or impede traffic flow, will be the measure of the effectiveness of the route as a conduit for the movement of vehicles. There are three suburban routes that are particularly affected by access and signage "overkill." These are Wheeling Avenue between McGalliard Road and Riffin Road, Broadway Avenue between McGalliard Road and Riffin Road, and Madison Street between Memorial Drive and 29th Street. These are the route segments that are in greatest need of remedial action in regard to the proliferation of accesses and signage if they are to move traffic as expeditiously as is expected of an arterial route.



Broadway Avenue Commercial Development



Madison Street Commercial Development

### Impact of Industrial Development

Figure 17 also illustrates that there is a low incidence of industrially zoned property along the suburban routes. Areas of only four of these routes—Hoyt Avenue for portions of its length; Jackson Street at the river; Kilgore Avenue, predominantly at Borg Warner; and Walnut Street at the Airpark Industrial Center (as a far ground image)—could be considered to be industrial in character. Nevertheless, these are important route areas. For visitors and residents alike, the degree to which these areas or businesses convey an image of prosperity and vitality will be the level of the perception of the city's industrial health and vitality.



Borg Warner



Indiana Steel and Wire

LEGEND

- Areas Zoned for Retail Business Use ■
- Areas Zoned for Industrial Use ■

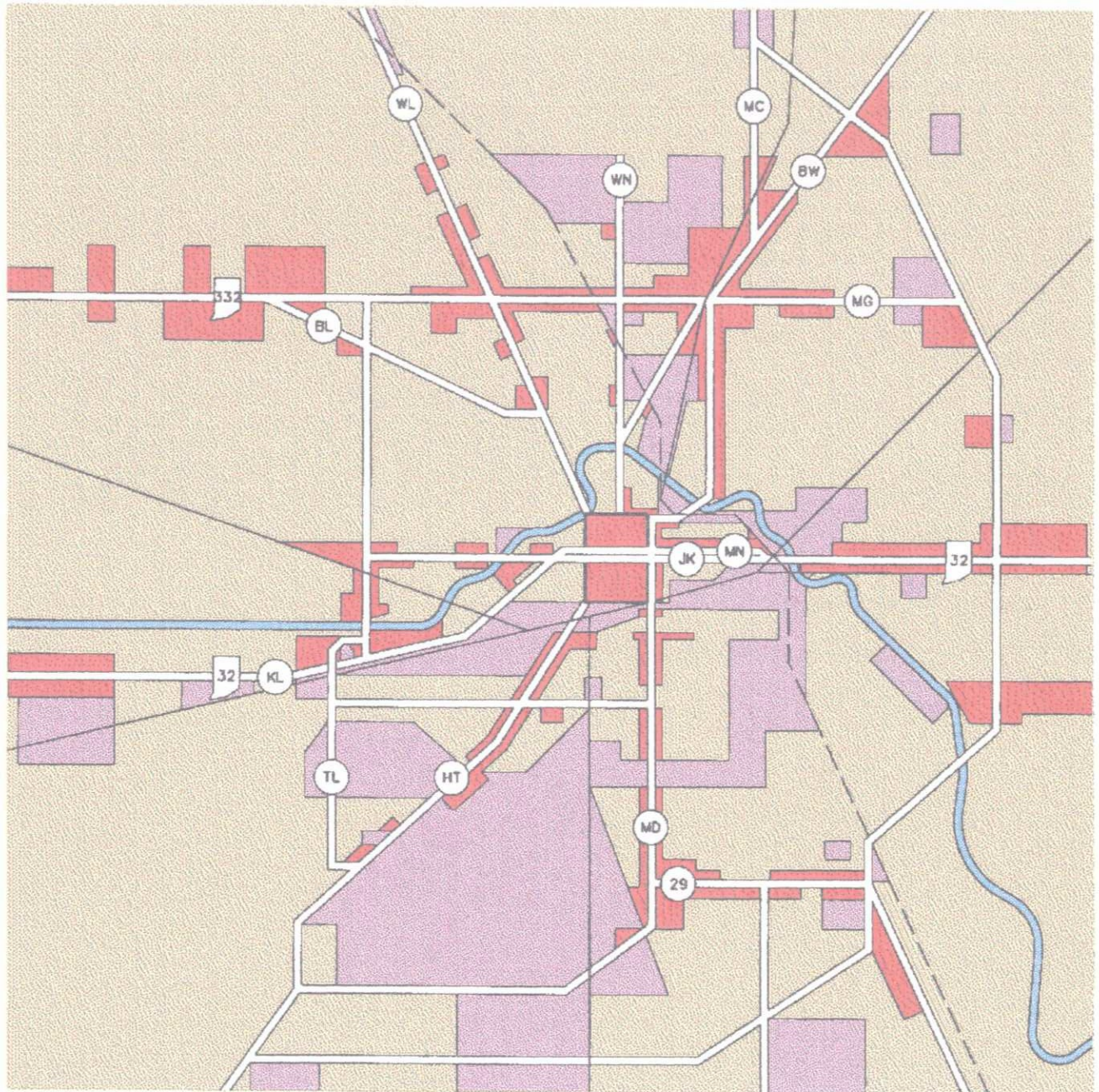


Figure 17 : Retail Business and Industrial Zoning Patterns

## COMMUNITY IMAGE AND IDENTITY

The suburban zone is where "corporate Muncie" begins. Consequently, it is the point at which the image of the route is identified with the "City" and the point at which travelers begin to draw conclusions about the character and quality of the community from this image. Therefore, these are critical portions of the city's roadway system because these are the initial points at which the city can demonstrate for incoming motorists that it is in control of its physical environment; that it cares about its image and is willing to take measures to improve or maintain its quality.

The quality of this image has many aspects, basically revolving around the following:

1. Informed and well-considered land use allocation decisions
2. Design control and maintenance of the "streetscape": directional, informational, and commercial signage, lighting, utility poles and lines, and plant material
3. The maintenance of the roadbed elements: curbs, sidewalks, and the roadway pavement itself
4. The control of curb cuts and other traffic-impeding aspects



Wheeling Avenue at Rosewood Avenue

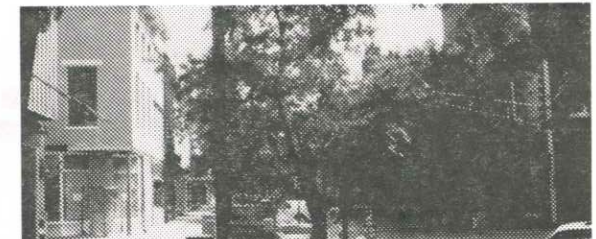


McGalliard Road at Broadway Avenue

Also, this is the point at which Muncie can begin to convey the message of the richness of the array of services and amenities that the city offers. A well-designed system of directional signage for these visitor attractions or destinations (Identified in Figure 18) would not only be welcomed by visiting motorists, but would also remind residents of the vitality and regional importance of their city.



Ball State University



Central Business District



Minnetrissa Cultural Center

LEGEND

Airport



Ball State University



Fairgrounds



Hospital



Indiana Vocational Technical College



Minnetrissa Cultural Center



Central Business District



- City Hall
- County Building
- Horizon Center
- Justice Center
- Main Library
- Muncie Civic Theatre
- Radisson Hotel

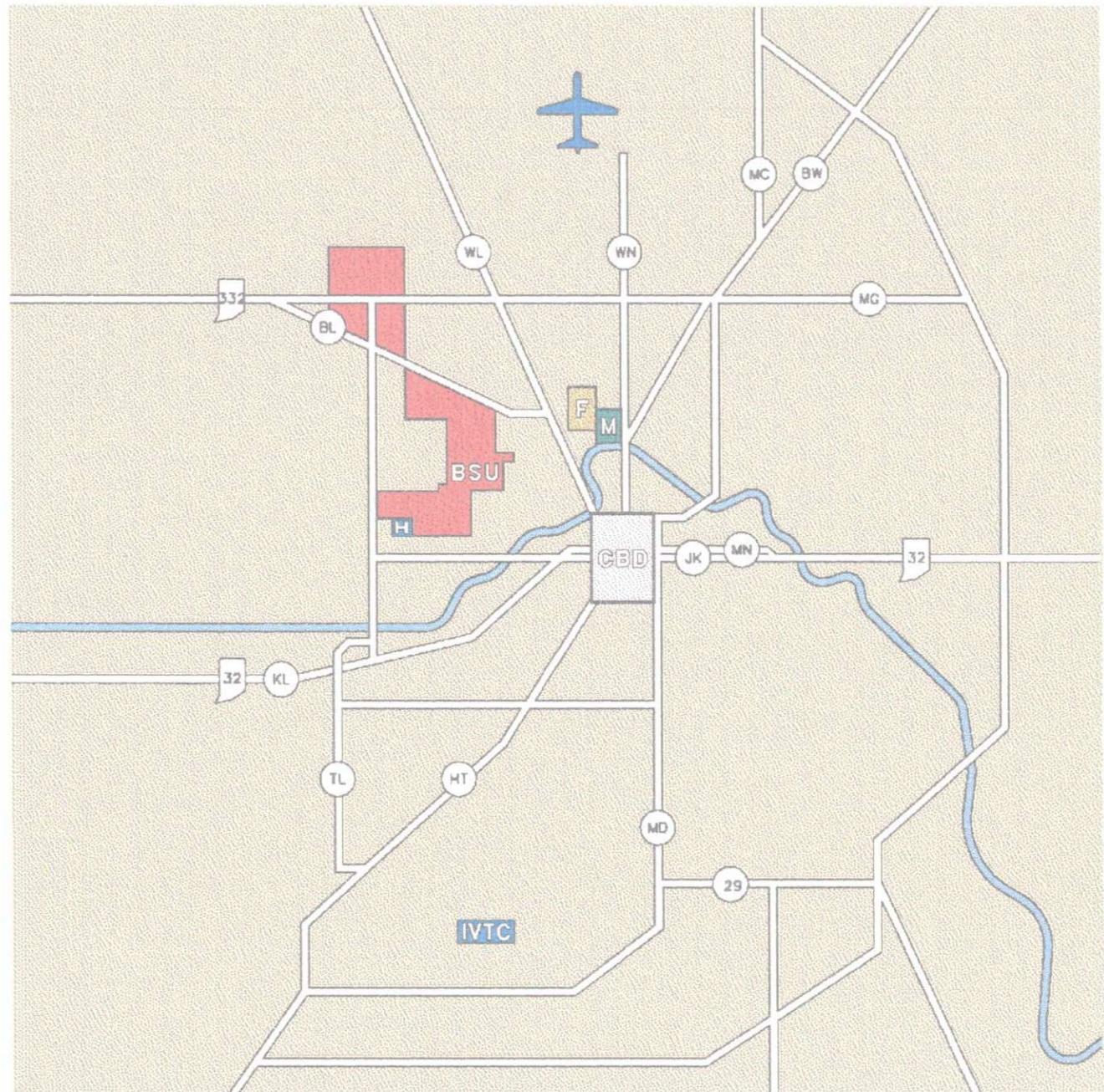


Figure 18 : Muncie Destinations





**IDENTIFICATION**

The routes, or portions of routes, that comprise the **Urban** sections of the county major roadway system are those within the **Urban Character Zone**, shown in red in this illustration. These are:

**The "Inner Loop":**

McGalliard (**MG**)/Broadway-Madison (**BW-MD**) / Memorial (**MM**) / Tillotson Avenue (**TL**)

**The "Inner Connectors":**

- Walnut Street (**WN**)
- Granville Avenue (**GV**)
- Jackson Street/Main Street (**JK/MN**)
- Hoyt Avenue (**HT**)
- Kilgore Avenue (**KL**)
- Bethel Avenue (**BL**)
- Wheeling Avenue (**WL**)

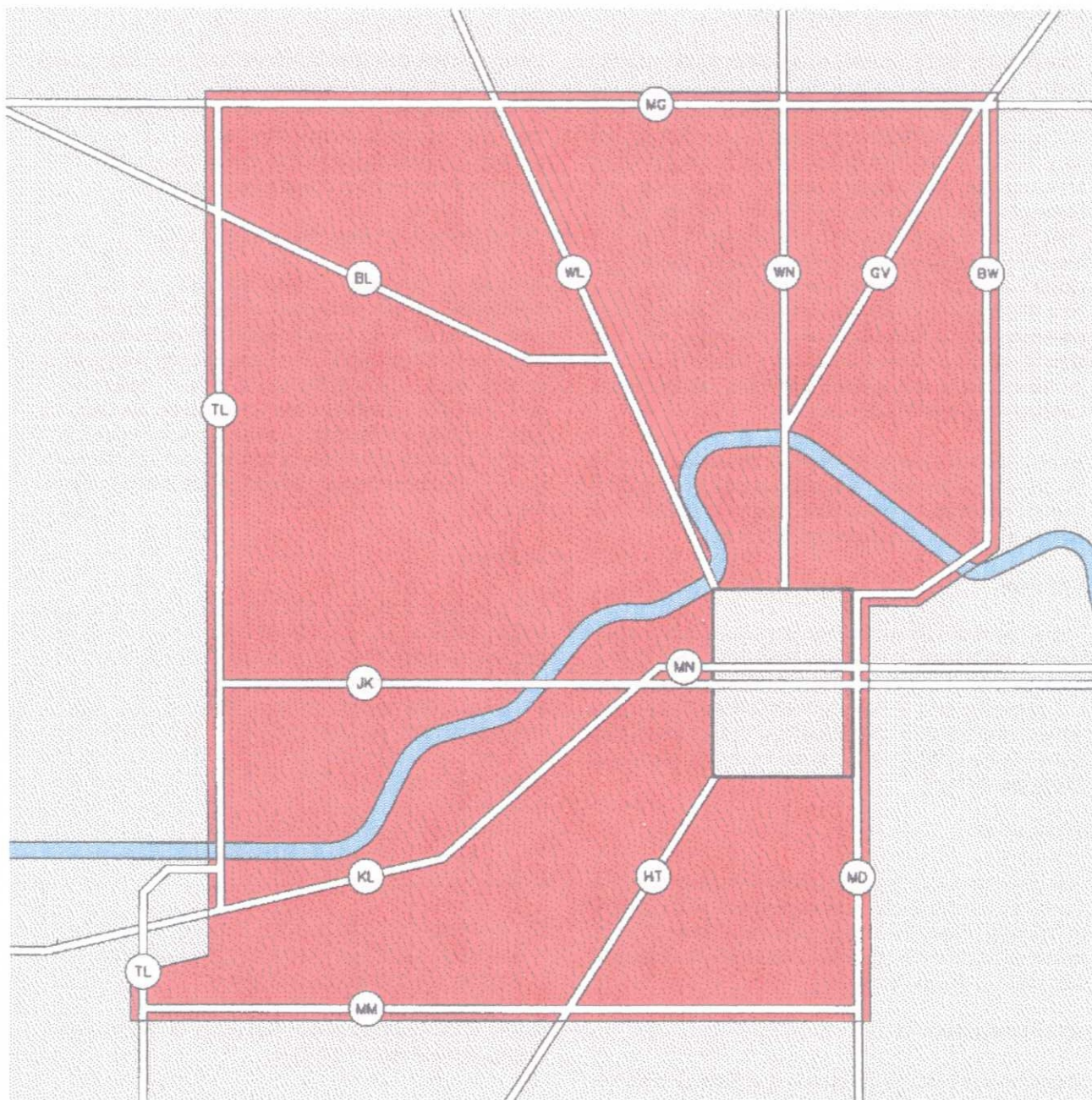


Figure 19 : Urban Routes

## GREENWAYS AND GREENSPACES

"Green areas" are extremely important to the urban areas of the city. They serve to soften and enhance an image that in many areas would otherwise be predominantly one of the hard surfaces of buildings, pavements, and signs, and they provide micro-climatic benefits of shading/cooling, moisturization, and oxygen production for an urban environment that in the absence of the intervention of plant material could become a "man-made desert": arid, sun-baked or wind-swept and hostile to human occupation. Because the urban routes surround and traverse the urban core of the city, attention to the existing greenways and green spaces along these routes and the "greening" of the right-of-ways themselves would have a beneficial impact for the residents and workers within this area while enhancing the image of the routes.

Muncie has a number of opportunities (Illustrated in Figure 20) to enhance the image of its urban routes, and the areas through which these routes pass, via the use and care of natural elements. These are the following:

### City Parks

There are four city parks that abut the urban routes: Heekin, McCulloch, Tuhey, and Westside. These parks could be strong image-enhancers for these routes, providing concentrations of trees and other natural elements while conveying, through the quality of the upkeep of park elements, the quality-consciousness and effectiveness of its city government.

### White River

The urban routes cross the White River at five locations. Consequently there are multiple opportunities for the city to develop, through the care, treatment, and use of its major natural feature, attractive vistas from its routes and an enhanced image for the city.

### Other Green Spaces

Four other areas along the routes, Ball State University's

Christy Woods, Ball State University itself, the Fairgrounds, and Minnetrista Cultural Center contribute, either by their intrinsic character or the sensitive design of their settings, "park-like" images to several urban routes. Of these four, the Fairgrounds is the area that has the greatest potential for the strengthening of the quality of its image.

### CSX Rail Right-of-Way/"Rails to Trails"

The opportunity for the county presented by the abandonment of this rail line was noted earlier in this report. The potential benefit of the development of this right-of-way as a greenway/biking, hiking, and cross-country skiing trail is perhaps even greater for the city of Muncie. This railway right-of-way crosses three major urban routes, McGalliard, Walnut and Granville, creating three additional opportunities for providing green areas or vistas along the urban routes, while providing a north-south greenway through the city.

### Integration

The greenway and green space features detailed above could provide a set, or series, of experiences along the urban routes that could enhance the attractiveness of the routes. Also, it is important to note that the urban routes and these "green experiences" could constitute two overlapping and interrelated systems. The interconnections of the roadway system itself are automatic and obvious; every route connects to another and traffic flows from one route to the other. However, the potential for the interconnections of the greenway/green space "system" are not as obvious. The potential inter-relationships for this system are the following:

1. The White River "greenway" connecting the four green spaces of: Westside Park, Tuhey Park, Minnetrista Cultural Center, and McCulloch Park.
2. The CSX "greenway" connecting to the White River greenway at McCulloch Park

3. McCulloch Park becoming the biking/hiking/skiing "interchange" for the CSX and White River greenway/recreation corridors.

### Comment:

*There are two routes that, although not included as a part of the major roadway system, could be important elements in the visibility, enjoyment and interconnection of the city's greenways and green spaces. These are White River Boulevard and Bunch Boulevard. These two routes parallel the north bank of the river for much of its length, pass by three of the city's urban parks (plus a suburban park, Riverview) and connect between major routes. White River Boulevard connects between Tillotson, Jackson, and Wheeling, and Bunch Boulevard connects East Jackson with Broadway. These routes are ideal candidates for development as river parkways—tree-lined routes along a river—and as such would provide the vehicular linking counterpart to the White River greenway. Significant segments of both of these boulevards are already lined with mature, in many cases, majestic trees. All that would be required to insure the future of these routes as "parkways" would be in-fill planting—and the maintenance—of tree species that would grow to the stature of the current species.*



White River Boulevard

LEGEND

Urban Green Spaces

Route Crossings of the White River

CSX Right of Way

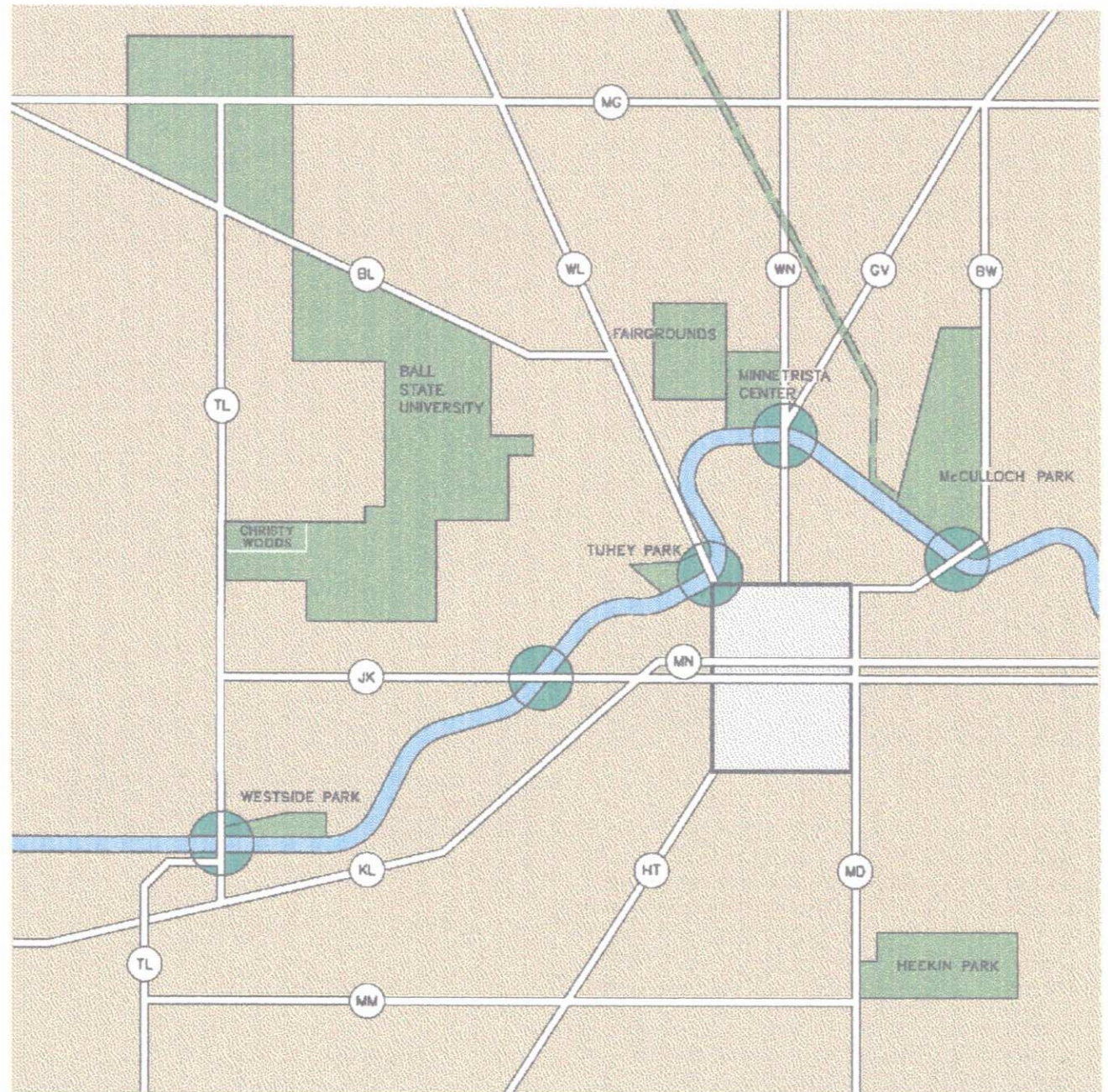


Figure 20 : Greenways and Green Spaces

## TRAFFIC PATTERNS

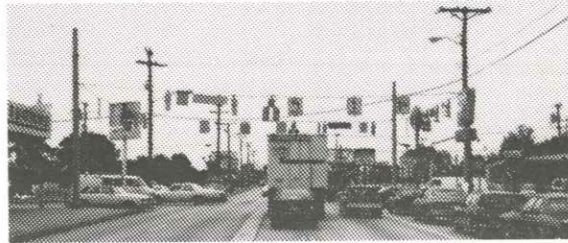
Additional informational elements have been included in the traffic picture of the urban routes that is illustrated in Figure 21. These added elements are the "bubbles" at the intersections, representing the total traffic volume through these intersections. The following are the implications of the traffic along the routes in combination with the traffic through the intersections: the "bubbles."

The most obvious, and most critical, condition represented by Figure 21 is the high traffic volume on McGalliard Road—the traffic volume on this route between Walnut Street and Broadway Avenue is almost fifty percent greater than the highest traffic count on the Delaware County segment of I-69. Moreover, seven of the twelve busiest intersections in Muncie are on this northern leg of the inner loop. Obviously, McGalliard Road is in need of very special developmental control and reduction of excess curb cuts along its length if it is to move this volume of traffic safely and efficiently.



McGalliard Road at Walnut Street

Tillotson Avenue is the second most heavily traveled segment of the inner loop and contains four high-volume intersections. Fortunately, this route, for most of its length, has not been as heavily commercialized as has McGalliard Road, and as a consequence, it has not fallen victim to the proliferation of curb-cuts and in-turning and out-turning motorists that clog traffic flow. If Tillotson is to be an efficient traffic carrier (and maintain its relatively pleasant character), every effort must be made to prevent any further encroachment of commercial development along its length from the north and the south.



Tillotson Avenue at Jackson Street

Wheeling Avenue is the highest traffic volume inner connector. It combines aspects of both McGalliard and Tillotson. The development along the northern one-quarter of the route is an off-shoot of the McGalliard commercial development, while major segments of the remainder of the route remain in residential use. Consequently, two approaches are needed: 1) the protection from further commercial use encroachment into the residential areas and 2) a "clean-up" of the commercial areas by the reduction, where possible, of the number of curb cuts along the route.



Wheeling Avenue at McGalliard Road

The remaining leg of the inner loop that is in need of a "clean-up" of the type recommended for McGalliard and Wheeling is the Broadway/Madison pair, especially the northern half of Broadway Avenue and almost all of Madison Street.



Madison Street at Memorial Drive



Broadway Avenue at McGalliard Road

This brief survey of the four most heavily traveled urban routes suggests that for all of these routes, their future as efficient movers of traffic is dependent upon two actions: 1) protection from further encroachment of commercial development for those segments currently in residential use, and 2) the remedial "cleaning-up" of the "over-accessed" areas of those routes that are lined with commercial uses.

LEGEND

Route Traffic Volume



Intersection Traffic Volume



Note: In 1988, the highest volume intersection was McGalliard and Wheeling with an average daily traffic count of over 41,000.

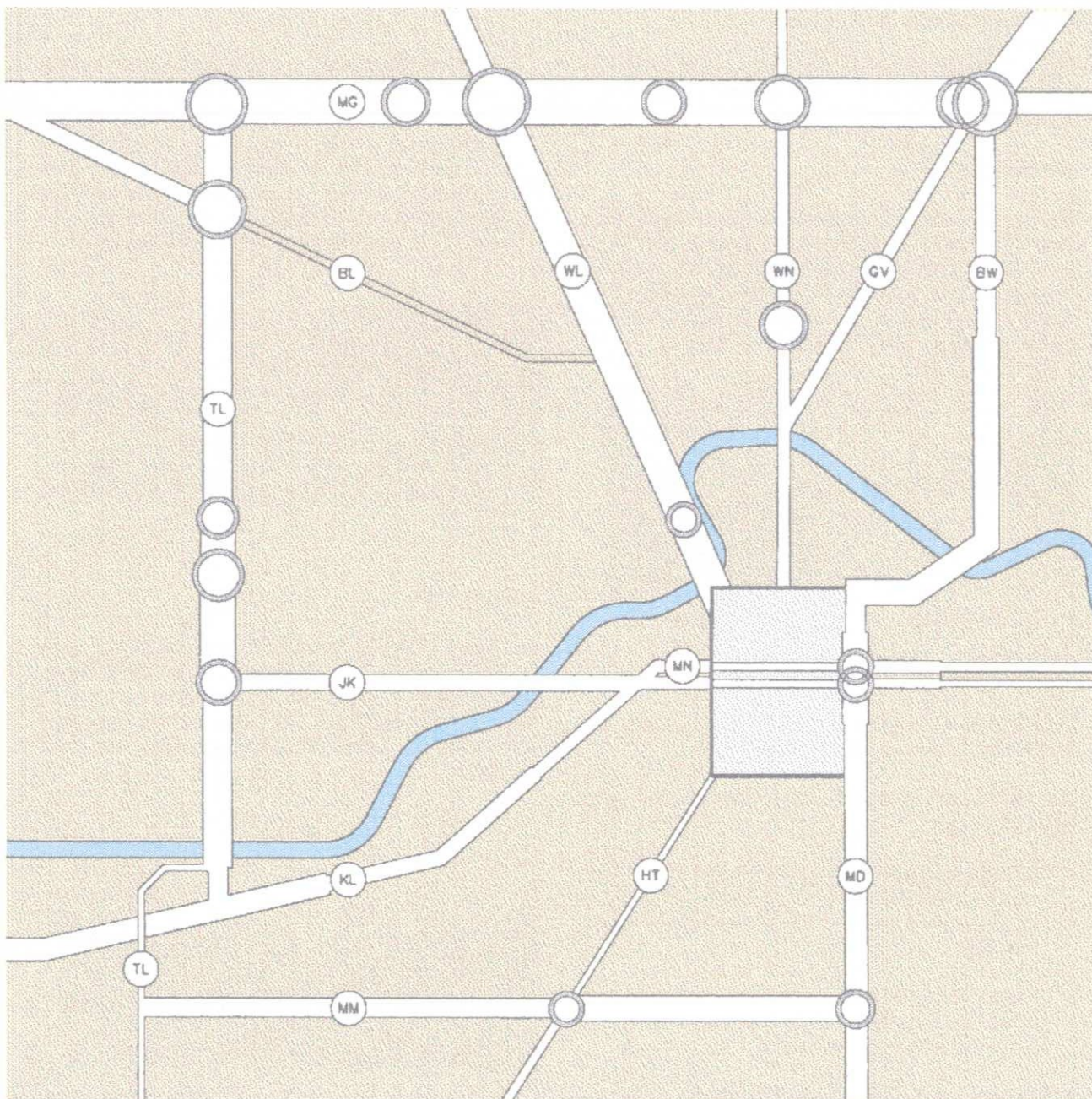


Figure 21 : Traffic Patterns

**BUSSES, PLANES, AND TRAINS**

Figure 22 illustrates the impacts of bus, plane, and train traffic on the urban routes. The following is a description and the implications of these impacts.

**Busses/Inter-City**

Inter-city busses utilize three segments of the urban routes: Kilgore Avenue from the Tillotson Avenue to Power Street (inbound) and Wheeling Avenue from the CBD to Neely Avenue, and Tillotson Avenue from University Avenue to Kilgore Avenue (outbound). As a consequence, these are the urban "image routes" for inter-city bus riders.



Inter-city bus route                      Kilgore Avenue

**Busses/Intra-City**

The portions of the urban routes utilized by the intra-city (MITS) bus system are shown on Figure 22.

The implications for the urban primary system of its use by MITS busses are:

1. MITS passengers see and judge the city as they ride, and consequently the quality of the routes used by these busses is critical to these riders' perceptions of their city.
2. If MITS busses are to maintain their schedules, traffic along these routes must be free of prolonged, or recurring, slowing or interruption.
3. Busses require longer turning radii than do automob-

biles. Consequently, a high priority should be assigned to lengthening the radii of the curbs at the points of MITS bus turnings, thus expediting the movement of these vehicles through the intersection and lessening their impedence of other traffic. The lengthening of these radii for bus turnings would have the beneficial side-effect of also expediting the passage of large trucks through these intersections.



Intra-city bus route                      McGalliard Road

**Airport Traffic**

McGalliard Road is a major traffic carrier for city travelers to and from the airport, and Walnut Street is the major airport/downtown route. As a result, these two urban routes must be congestion-free and attractive routes if they are to convey the desired image for resident and visiting air travelers.



Airport route                                      N. Walnut Street

**Railways**

There are grade-level rail crossings of the primary urban routes at six locations. The implications for these routes are that the crossings and crossing signals must be well maintained and signalled and, perhaps most importantly, that switching operations must be conducted in a manner that does not block the intersections.

LEGEND

Grade Level Rail Crossings



Bus Routes

Inter-City



Intra-City



Primary Airport Route

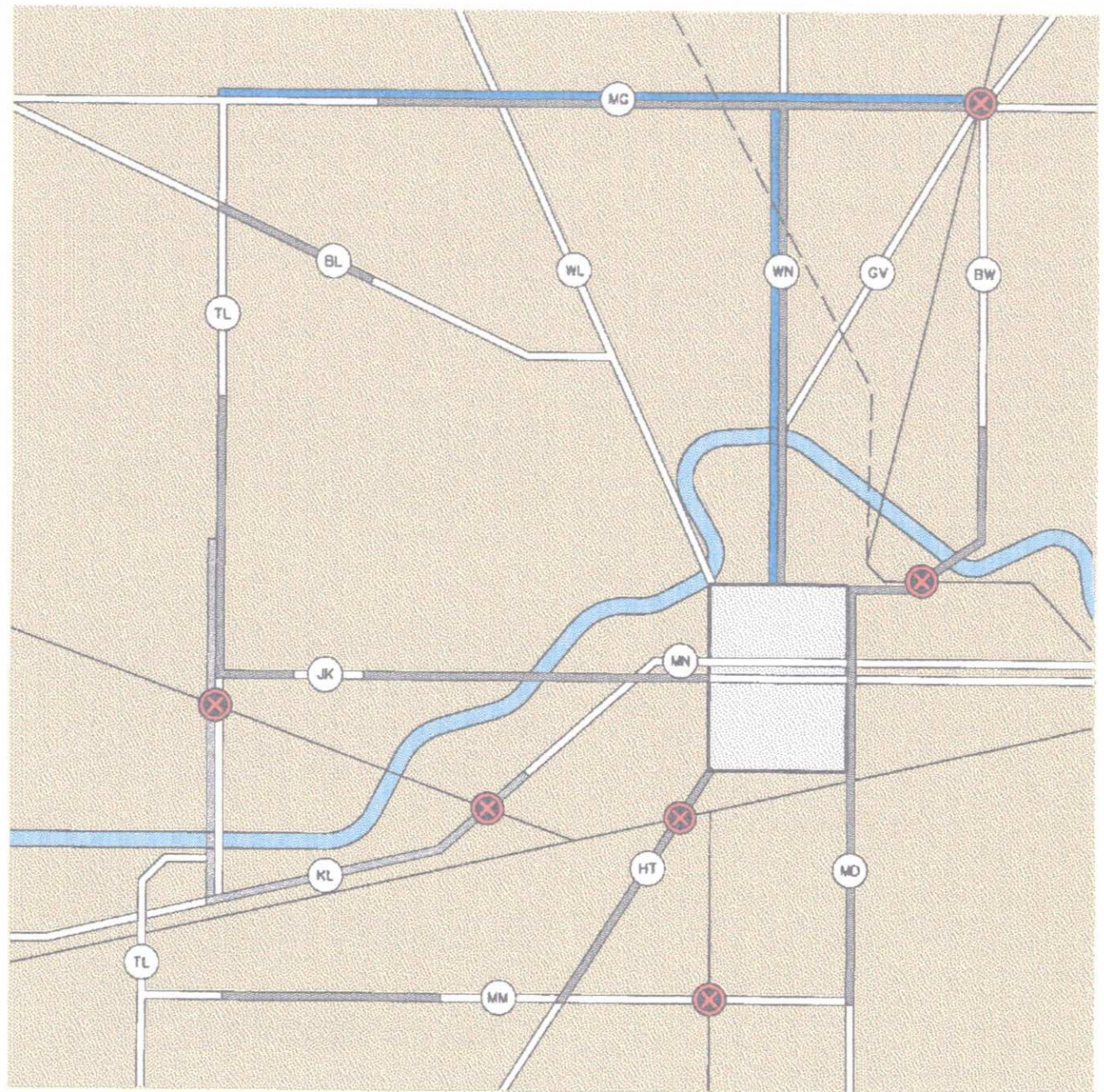


Figure 22 : Impacts of Other Modes of Transportation



### IMPACT OF COMMERCIAL AND INDUSTRIAL DEVELOPMENT

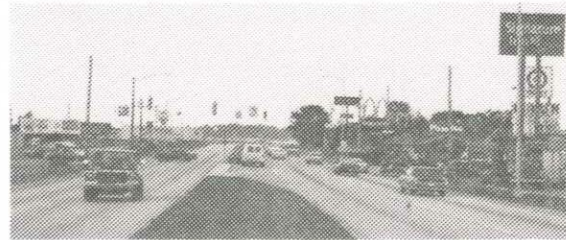
Figure 23 illustrates the retail business and industrial zoning patterns within the urban character zone. The following commentary describes the impact of this development on the urban routes.

#### Impact of Commercial Development

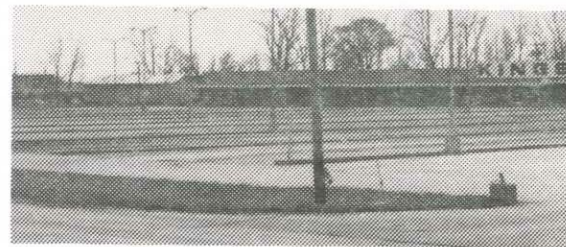
Figure 23 amply illustrates the degree to which retail business dominates the image of the urban routes. Every one of the eleven urban collectors and connectors is to some degree impacted by retail business. Much of what could be implied from the dominance of this type of development along these routes has been stated previously in this report. However, one additional point must be made regarding what the McGalliard/SR 332 development represents and the impact that it has had on other retail areas of the city, and consequently, upon the images of other city routes. The McGalliard/SR 332 retail development from Bethel Avenue to Broadway Avenue has become Muncie's "Main Street" in the retail shopping sense. If one looks at this strip diagrammatically, it becomes one of the traditional models for a "Shopping Center": anchors at two ends (The Muncie Mall, Northgate Shopping Center, et al, complex on the east end and the Lyndenbrook/Target development on the west end) and "impulse" shops (McGalliard strip development), a major cross axis (Wheeling Avenue) and a secondary anchor (Northwest Plaza) in between. In short, if one were to take the Muncie Mall, turn it ninety degrees and stretch it out to a vehicular, as opposed to pedestrian scale, it would almost replicate the above-described organization of the McGalliard/332 development.

The impact of this "vehicular-scale shopping center" along McGalliard and SR 332 has been that because Muncians and county and east central Indiana regional shoppers can, for the most part, "find what they want" somewhere along its length, they gravitate to this shopping area, and older shopping areas have become virtual "shopping non-entities". The resultant decline of these older shopping areas has had a severely detractive effect on the image of

several of the major routes. The Meadows Shopping Center imparts a blighted retail picture to Jackson Street and Kilgore Avenue, Southway Plaza presents a saddened visage to Business 67/ Madison Avenue, and the Central Business District can claim few healthy retailing areas. If Muncie is to develop a consistently prosperous image for its major routes, it must reverse the trend of new retail development at the expense of established retail areas.



Lyndenbrook Plaza



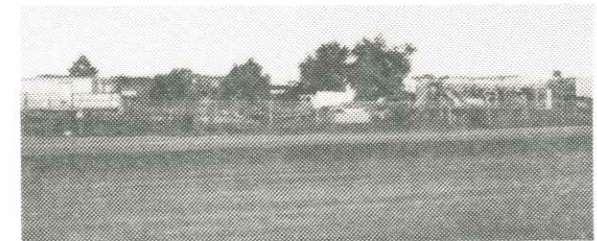
Southway Plaza



Meadows

#### Impact of Industrial Development

The image of industrial development along routes within the urban character zone is not of major impact. The only routes upon which industrial development has an effect are Hoyt Avenue on the near south side, on Walnut Street and on Granville Avenue. Of these images, the one of greatest concern is the abandoned Marhoeffer Plant on Granville Avenue. Its current, vacant and deteriorating, presence is a constant reminder of a once-thriving industry that has ceased operations. Moreover, the disheveled nature of the development surrounding this plant site heightens the unfavorable image of this entire area.



Marhoeffer Plant area

LEGEND

Areas Zoned for Retail Business Use



Areas Zoned for Industrial Use

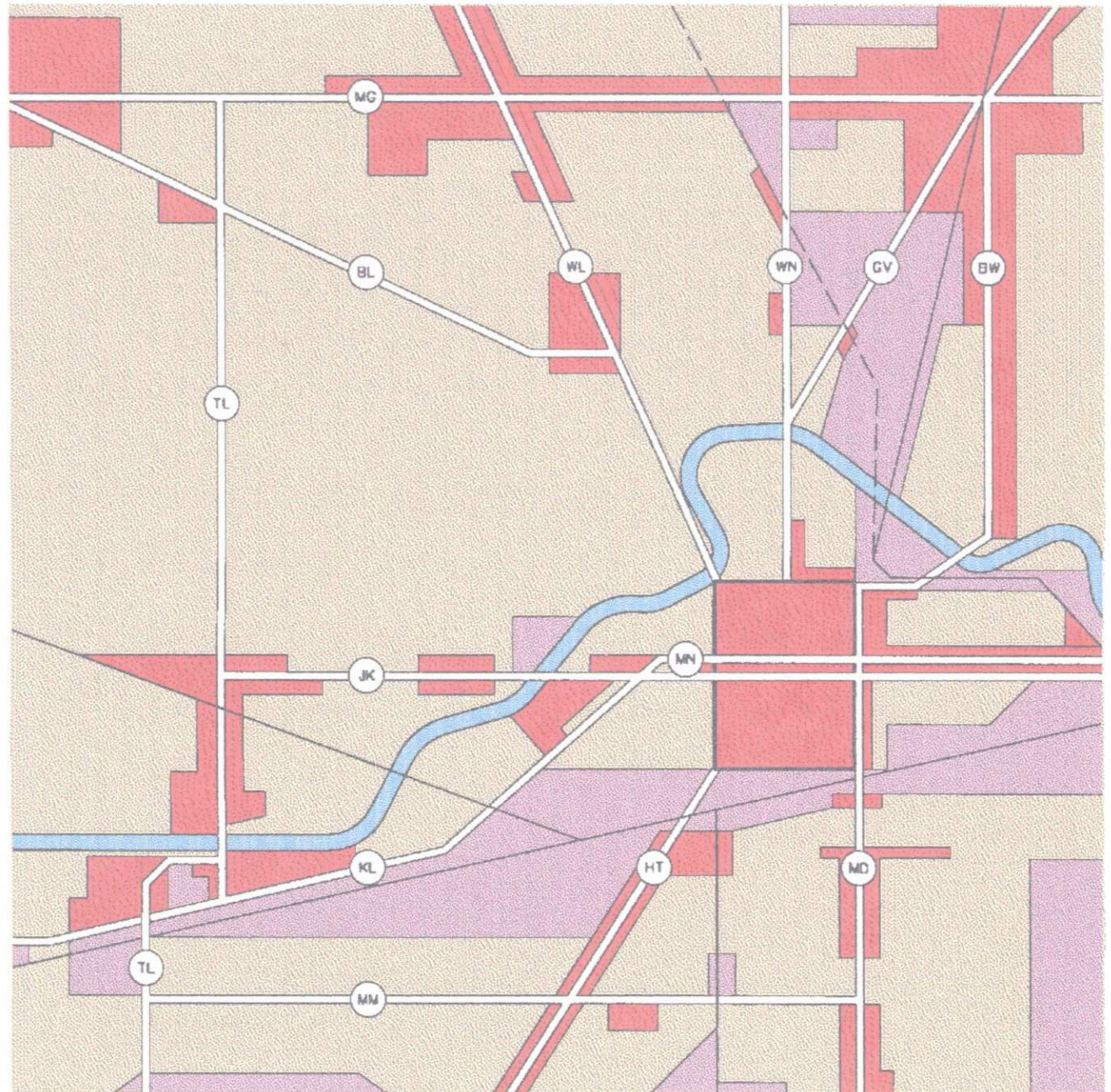


Figure 23 : Retail and Industrial Zoning Patterns

## DESTINATION AND IMAGE

As the major routes of the county converge on Muncie and then focus further on the "City Core", the strength of Muncie's "image of centrality" becomes of crucial importance. If one is moving towards a destination, when does one arrive at this destination and what are its unique elements? There are a number of areas in which Muncie can distinguish itself as being different, in fact unique, in the composition of the image of its "City Core". Obviously, the Central Business District must be the point of beginning for this image. However, every city has a CBD, many of equal "imageability" to that of Muncie. Although Muncie's CBD contains a number of elements that are rare for cities of similar size—The Horizon Convention Center, a downtown hotel (the Radisson), major banking and industrial headquarters buildings, governmental buildings, and distinctive commercial or historic areas—other cities can claim to possess similar or equally attractive CBD characteristics. However, Muncie has four areas that in combination, and in tandem with its CBD, can comprise a unique image for its "City Core". These are:

1. A major river/greenway contiguous to the CBD
2. Minnetrista Cultural Center, directly across the river from the CBD.
3. The Delaware County (Lion's) Fairground, contiguous to the Minnetrista Cultural Center and one of only a handful of Indiana county fairgrounds in such a strategically central location.
4. A major state university, Ball State University, within two miles of the CBD.

If Muncie can bring these five aspects—its CBD, Ball State University, the Fairgrounds, Minnetrista Cultural Center, and the White River corridor—into a coordinated visual and functional entity, it will have a "City Core" of unique character and attractiveness.

The advantages for the roadway system would be: 1) an understandable and memorable destination image for

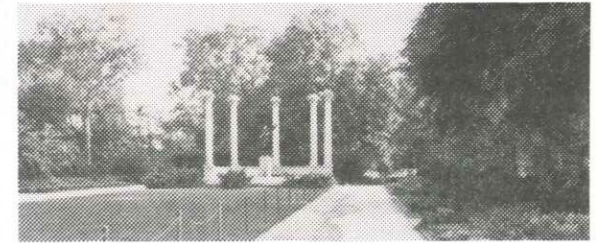
Muncie and Delaware County residents and visitors, providing a sense of arrival and departure for motorists, and 2) visual enhancement of the routes within this area via the coordination of the visual aspects of the entire area.

The question, of course, is what are the boundaries of this "City Core" and what are its identifying characteristics? The specific boundaries of this district should be established—if such a district is determined to be appropriate—by, and after study by the Delaware-Muncie Plan Commission. Should this "City Core" be established, its identifying characteristics might include the following:

1. A consistent street tree program for the primary and secondary routes within the district
2. A "City Core" street signage system for its primary and secondary routes that would be of a distinctive and consistent character
3. Signs marking the entrance (and exit) points of the "City Core"
4. A system of public transport that would connect the major destinations—the CBD, the Minnetrista Cultural Center, the Fairgrounds, and Ball State University—and utilize White River Boulevard as part of its route.



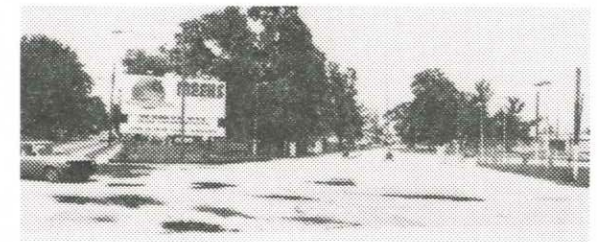
Central Business District



Ball State University



Minnetrista Cultural Center



Fairgrounds/Entrance



The White River at Wheeling Avenue

LEGEND

Central Business District



- City Hall
- County Building
- Horizon Center
- Justice Center
- Main Library
- Muncie Civic Theatre
- Radisson Hotel

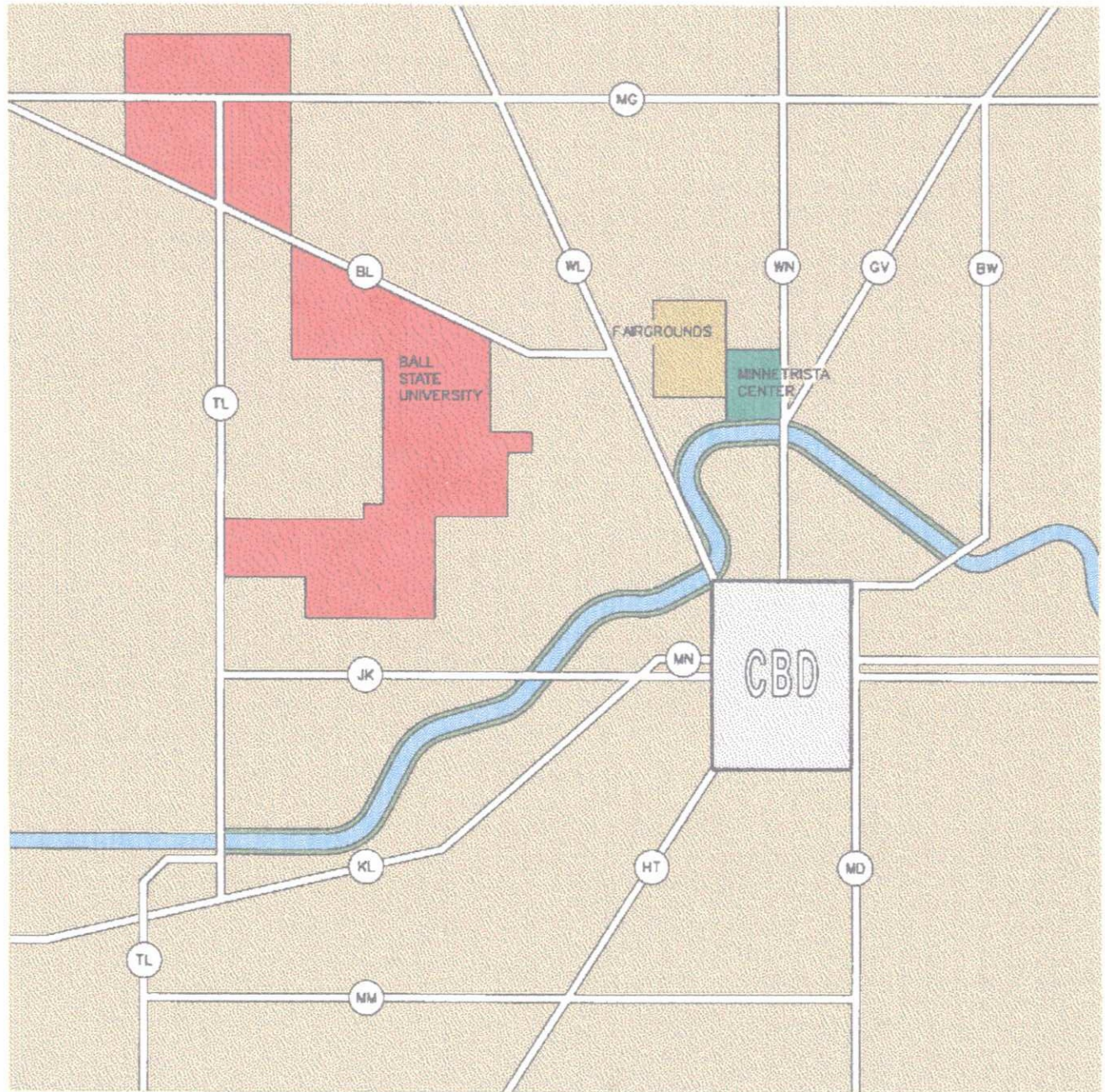


Figure 24 : Muncie "City Core" Components

**IDENTIFICATION**

The routes, or portions of routes that comprise the **Suburban/Rural** sections of the county major roadway system are those within the **Suburban/Rural Character Zone** shown in yellow in the illustration opposite. These are:

Macedonia Avenue (**MC**) between the city limits at 29th Street (**29**) and the By-pass (**BP**)

Business 67 (**67**) (Madison Street) between the city limits (approximately the 250 South line) and the By-pass

Hoyt Avenue (**HT**) between the city limits at 23rd Street and Business 67.

Tillotson Avenue Extension (**TL**) between the city limits and Hoyt Avenue

**Route Characteristics**

The suburban/rural zone is the "ambiguity zone" for its contained routes. This ambiguity arises from three sources: 1) This zone is generally one of mixed suburban and rural use with neither dominating the character of the routes within the zone 2) This zone is within county governmental jurisdiction, while the development is perceived as, and is locationally, continuous with Muncie's suburbs, and 3) This zone is located within the perceived "gateway" to Muncie, the By-pass.

*Comment:*




*In this context, it should be noted that the team observed that if one views the extent of Muncie's developmental impact area as the determining factor in the establishment of the limits of the city's incorporated area, most of this "Suburban/Rural Zone" should be within "the city." And further, the team concluded that the established jurisdictional boundary that would minimally include most of the Muncie's developmental impact area, and consequently be a more "logical" corporate boundary for Muncie, would be Center Township— with three incorporated "appendages" on the west side where the city's current limits extend*

*beyond the Center Township boundary. The obvious advantage for the roadway system would be that Muncie's developmental influence would be co-terminus with its governmental boundary, thus bringing both the responsibility for, and authority over development along the routes within the same governmental jurisdiction, as opposed to the current anomaly of city responsibility/county authority. To provide a basis of comparison, both the Muncie corporate limits and Center Township limits are shown on Figure 25.*

However, the current status of these routes is "suburban/rural", as described above. Figure 26 provides an illustration of the observed land use along these routes and a per route characterization follows.

It must be noted that there are other areas of the rural routes contiguous to Muncie's corporate limits, most discernably route segments on the north side of the city, that exhibit characteristics that are "suburban/rural" in nature. These areas have not been included as "suburban/rural" routes because they do not possess the third of the above criteria: an emphatic "urban delimiter", e.g., the By-pass, as a boundary. However, these route segments, most critically Wheeling Pike and SR 332, should be the subject of special control regarding the further conversion of agricultural land to commercial use if they are not to continue to degenerate into amorphous and conflicting use patterns along the routes.

LEGEND

- Suburban / Rural Character Zone 
- Muncie Corporate Limit 
- Center Township Limit 

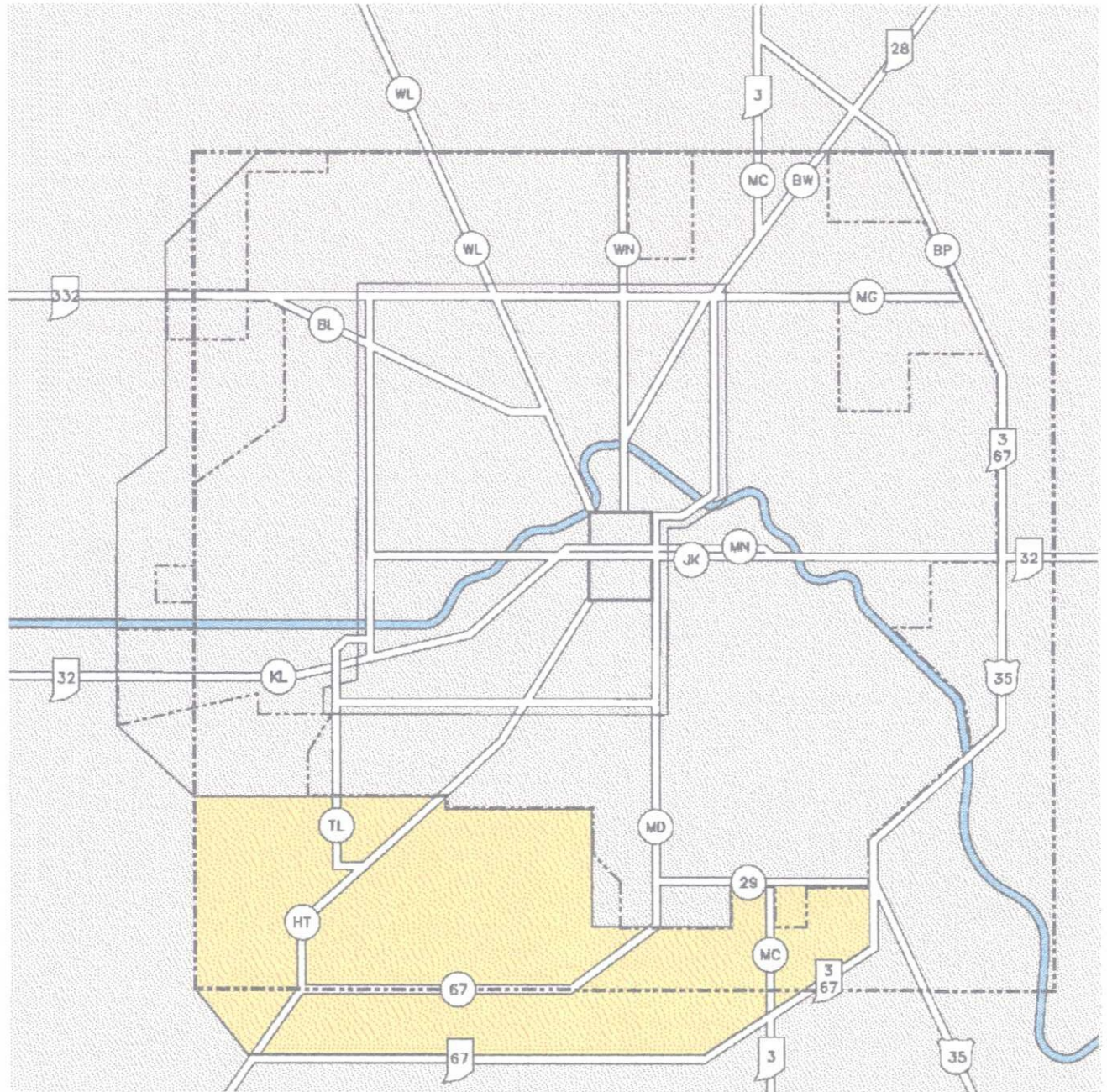


Figure 25 : Suburban/Rural Routes

**Macedonia Avenue between the city limits (29th Street) and the By-pass**



Of the four routes in this zone, this route is perhaps the most intriguing. As one passes under the By-pass, presumably with the expectation of leaving the "rural" and entering the "suburban", one is presented with a "captured" microcosm of Indiana farmland. With the exception of the church in the northwest quadrant of the Macedonia/By-pass intersection, the image of midwest agriculture prevails: tilled field, woodlot and tree-lined fence row. However, the contradiction of its location notwithstanding, the clarity and purity of its image and the circumscribed nature of its setting—the By-pass on the south and the highly "suburbanized" character of 29th Street on the north—imparts a jewel-like quality and consequently extremely attractive character to this route segment.

**Business 67 (Madison Street) between the city limits (approximately the 250 South line) and the By-pass**



Contrary to governmental intention—almost all of the property on the north side and over one-half of that on the south side of this route is zoned for industrial use—the

character of this route is not industrial. The image that dominates the route between the By-pass and the railroad is that of housing and farming with agricultural imagery dominating two-thirds of this segment and vying with residences for dominance on the remaining third. With the exception of the Delco Battery plant, industrial development, when seen, is a far-ground image on the north side of route. Moreover, the segment of the route between the railroad and the city limits at Walnut (Southway Plaza), although zoned predominantly for industrial use, is an uneasily co-existing jumble of agricultural, residential, and commercial uses, with farm land, houses, filling stations, food markets, etc. sited in apparent disregard of either the existing zoning or, in many instances, of the juxtapositioning of basically incompatible uses. The end result of these conflicting images is of a route, and an area, yet to establish a cogent identity or purpose.

**Tillotson Avenue between the city limits and Hoyt Avenue**



This route segment also delivers a deceptive image to the incoming motorist. The first half of the route winds through a mature residential area, thereby imparting the message to the motorist of entering suburban Muncie. However, at 26th Street, the character of the use adjoining the route changes abruptly to agriculture, and this use is maintained, not only to the city limits, but all the way to Memorial Drive. Moreover, this dichotomy also exists in a functional context. The route up to and through the residential area is tortuous and constricted, whereas the route segment in the agricultural area is straight and open. This gives rise to three interrelated questions: Why is a major connector to

Muncie from a county highway routed in a manner that creates a contradictory sequence of images for the arriving motorist?, Why is this major connector routed along such a confusing, and convoluted alignment?, and Why is this high volume of traffic routed through the heart of a residential area?

**Hoyt Avenue between the city limits (23rd Street, approximately the 170S line) and the By-pass**



The image of this route is also one that does not conform to its dominant zoning. Much of this route is zoned for industrial use, but its current use characteristics are a mix of residential and agricultural with each use vying intermittently for dominance along the route. There are occasional near ground and far ground images of industry and the discordant image of a large "junkyard", but for the most part, the message is of an uneasy co-existence of housing and farming, not an image one would expect for Hoyt Avenue after leaving SR 67.

One additional point must be made regarding the importance of this zone to the county major roadway system. It is easily determined from Figure 26 that of the nine major routes into Muncie, two pass into the suburban/rural zone and as these major routes branch into thirteen alternative routes, four of these branches are within this zone. As a consequence, the "image building" role of this zone for incoming motorists is crucial for a significant number of the entrances into the city.

LEGEND

- Suburban / Rural Character Zone
- Muncie Corporate Limit
- Observed Land Use
  - Commercial
  - Industrial
  - Residential
  - Rural
  - Rural / Residential

(A rural / residential use is one where residential use abuts the route but is only a "lining" for extensive, and intensive agriculture occurring "behind" the residences.)

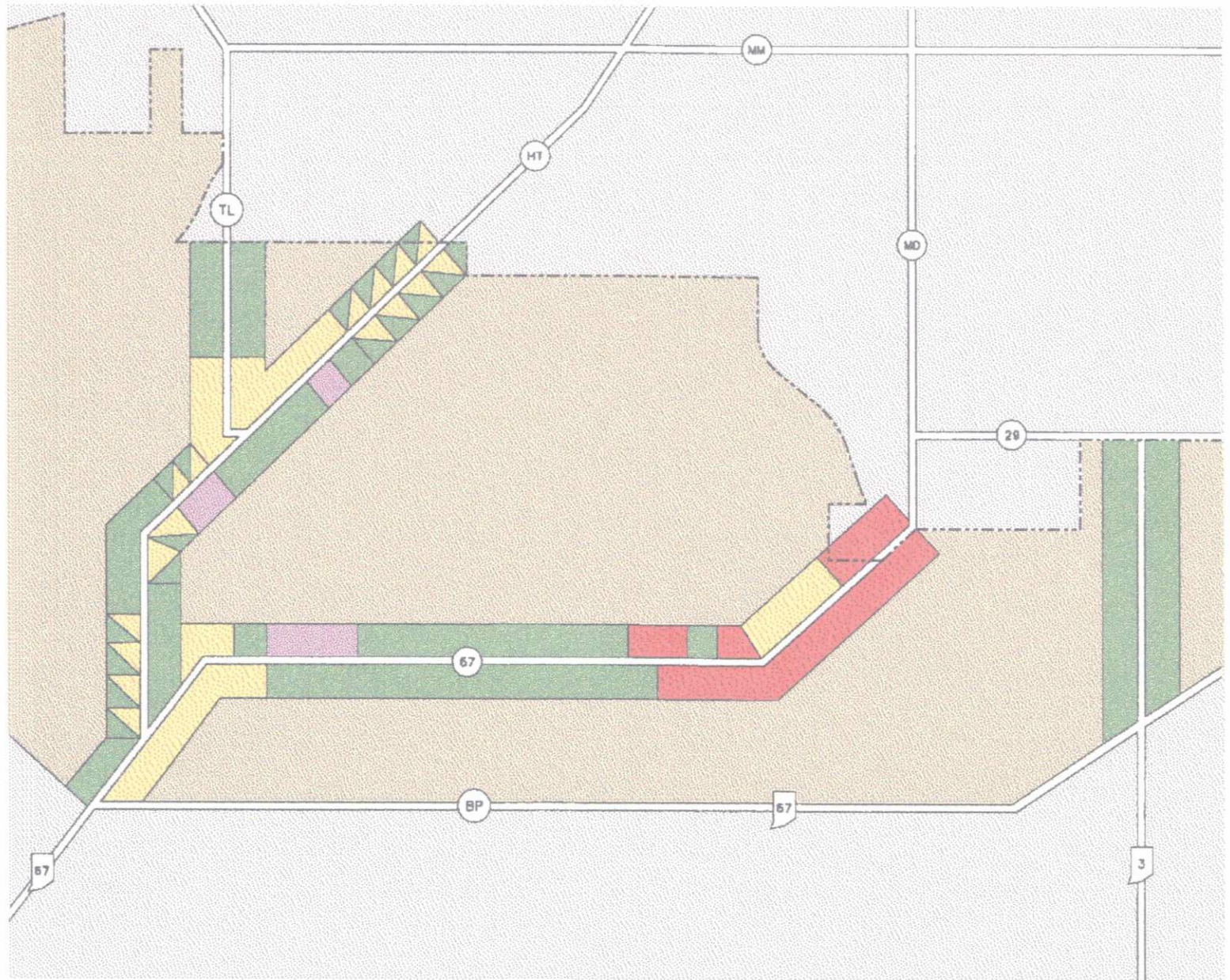


Figure 26 : Observed Land Use of Suburban/Rural Routes





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## RECOMMENDATIONS



This section contains the team's major recommendations for improving the functional, visual, and orientational aspects of the primary roadway network of Delaware County and of its county seat, Muncie, Indiana.

These recommendations are based in large part on the preceding analyses and are therefore in response to the problems and potentials that were identified during this exercise. However, the recommendations are also developed within a set of principles that were established during the course of the study as being central to a Delaware County roadway network that would provide residents and visitors with a motoring environment that would be smoothly flowing, easily understood, and visually pleasing.

These seven principles are as follows:

1. The vehicular roadway system of the county and city is an important community resource, the value of which is directly proportional to the degree to which it facilitates the movement of people and goods. Consequently, the functionality of the system should not be allowed to be diminished to the advantage of only a few, but be protected and preserved for the benefit of all county residents.
2. No hindrance to the smooth flow of traffic, no matter how minor it may appear, should be considered unworthy of consideration and remedial action. For even small hindrances, when experienced many times over the course of a journey or trip, become a major annoyance in the mind of the motorist, or a seemingly minor slowing in the traffic flow on a heavily traveled route can, due to the volume of traffic, create a chain reaction of disruption and delay.
3. By creating for the motorist discernible images that identify points of entrance or exit, the sense of entering or leaving "a place" is imparted, thus communicating a lasting image of both location and uniqueness.
4. The visual imagery along a route should reflect the community within which it exists. That is, it should be "of" the community and "by" the community: it should be

expressive of the natural and cultural environment of the community and it should be representative of the community's resolve to develop measures by which it can be enhanced or maintained.

5. The creation of an image of quality and attractiveness for the "view from the road" is not dependent upon the quality, or even presence, of buildings. The designed use and control of plant material, signage, lighting, and other roadside elements, coupled with a diligent attention to the maintenance of these elements and of the roadway itself, can, in the aggregate, convey an image of cohesiveness and high quality.
6. "Visual clutter" along the roadway is not only an aesthetic issue. It also imparts a message of community disinterest, and it is disorienting for the motorist: identifying the sign of a business or shopping destination that is one among a jumble of signs while traveling at thirty miles per hour—44 feet per second—is not only frustrating but also potentially dangerous, and route directional signs submerged in a "sea" of other signs lose their identity, and consequently their effectiveness for the motorist.
7. Motorists are sensitive to the "messages of passage." They receive and retain favorable or unfavorable impressions as they drive through a county, city, or town and they draw conclusions about a community based on these impressions. Also, they are aware of the journey or trip as a series of experiences that may be interesting or dull, informative or unenlightening, intelligible or confusing, pleasantly varying or monotonous, attractive or ugly. In this context, the linear movement along a roadway can be "read" by the traveler as one reads a book or "experienced" as one listens to a symphony, as a sequence of passages that vary in content, but conform to a set of compositional rules, with each passage leading logically and understandably to the next. Consequently, the degree to which the passages along the roadways of Delaware County can be "composed" or "orchestrated" will be a measure of the favorability of the message they impart.

These seven principles, when applied to Delaware County's context and history, yielded the following general recommendations:

1. Decisions regarding development along all major routes should be based on sound land planning and site design concepts. Uncontrolled growth, spot zoning, and leap-frog development which taxes the extension of municipal services should be avoided; clustered development which efficiently and sensitively utilizes land resources and existing infra-structure is preferable to uncoordinated, disconnected development. Reasonable land use controls and standards for site and architectural appearances and provisions for review of detailed development proposals are not only warranted, but if adopted will project a positive community image to residents, visitors, and potential community investors.
2. In order to insure the protection of valuable natural resources and provide recreational opportunities in the county and along its major routes the White River Park Master Plan should be updated and implemented. A similar study encompassing the Mississinewa River and tributaries of both rivers should be undertaken. These studies should include an investigation of the recreation potential of lands controlled by county drainage districts. In the interest of conservation of water resources, especially wetland conservation and storm water management, all new development in the county should protect and preserve waterways for public use.
3. Rural areas of the county have a striking pattern of rectilinear field patterns enclosed by woodlot and fence-row planting. Care should be taken to conserve the economic viability and, as a result, the visual quality of this regional pattern of agriculture. A rural forestry program should be implemented. When development of rural land occurs, a pattern of woodland enclosure similar to that found in the agricultural landscape should be continued, providing a consistent edge condition of urban development to rural land, and preserving the rural image for travelers along the routes.

4. Route clarity should be reinforced via a comprehensive information system along the routes. This system should include county, town, and city welcome, informational, and directional signs. Additionally, to direct visitors to distant commercial services, a rural highway services sign system should be implemented—where appropriate—similar to that on federal interstate highways and a Visitor Information Map coordinated with a directional signage system be developed. In combination, these initiatives could gradually phase out the need for billboards along rural highways in the county.
5. Standards for both county and municipal right-of-way development should be updated. Lighting, street and road identification, public sidewalk development, and a system of street/road right-of-way plantings can be coordinated to establish a visual identity for the community's major roadways. Parking lot setback provisions from the rights-of-way lines should also be established. Standards for private signs should be reviewed and revised and commercial signs should relate to the type of street on which they are located. Flashing, mobile temporary, and off-premise signs are unsafe highway distractions, and additionally often project an image of unregulated, overly commercialized, competitively saturated development. Commercial signs, while indicators of economic vitality, should represent the solid image of commerce, relate to the driving speed of passing motorists, and not contain elements that distract motorists from safe driving.
6. People will walk or ride a bicycle if it is safe, comfortable, and convenient to do so. Standards for commercial and residential street development, especially major routes, should include sidewalk provisions and a buffering street-tree planting strip. Interconnected bicycle and pedestrian walk systems should provide access from residential neighborhoods to commercial areas.
7. Trees have been shown to have a substantial positive effect on urban climate. A street tree planting program should be implemented for major routes. Street improvement engineering standards should be revised to include street-tree planting provisions for these routes,

and private parking areas should include provisions for planting of trees.

8. Consistent visual patterns should be encouraged within each route character zone: rural, suburban, urban. While recognizing unique attributes of each route, this consistent zone image would also assist in orienting the resident and visitor to the community. One should have a clear, consistent sense of being in rural Delaware County, as opposed to the mixed visual clues that result from suburban development carelessly allowed in the rural zone. To reinforce this pattern of character zones, the zones might extend just beyond the public right-of-way of some route segments; in other instances the corridor might extend to include the visual boundaries of the landscape the route traverses. Some corridor design guidelines might include provisions only for improvements to the right-of-way and contiguous elements—street and commercial signs, lighting, walk configuration, street tree plantings—while others could be more complex, extending to design requirements for the “viewshed”: what can be seen from the road.
9. Route identity—rural, suburban, and urban—should be reinforced by establishing definitive entry/exit statements at zonal boundaries: Entrances to county/rural corridor and zone, and changes from zone to zone, rural to suburban and suburban to urban, should be delineated.

In the succeeding sub-sections of this section, specific recommendations for routes or portions of routes will be developed in the same sequence as in the previous section, the categories of rural, suburban, urban, and suburban/rural. However, it is necessary at this point to introduce and define one final pair of terms. The term “Gateways” was adopted by the “Gateways to Delaware County Task Force” to represent the county's major vehicular routes. To further define these routes while avoiding confusion with the term “Gateways”, two terms “Portals” and “Corridors”, were adopted. “Portals” are the entry/exit points of the three major character zones—rural, suburban, and urban—and consequently are the entry/exit points for the county, corporate city (city limits), and city

urban center (area within the “inner loop”). “Corridors” are the portions of the routes between the “portals.”

Figure 27 illustrates these portals and corridors of the county and city primary routes. The basic ingredients of the portal/corridor approach are the following:

1. The overarching objective of the portal and corridor approach is to provide travelers with discernible “messages of progression” along the routes. Within this general aim, the specific roles of the portals and corridors are as follows:
  - a. The “portals” mark the points of change of zonal character, i.e., from “rural” to “suburban” (or vice versa) and “suburban” (or “suburban/rural”) to “urban” (or vice versa), or in the case of the “rural portals”, they mark points of entry or exit for the county.
  - b. The “corridors” are the zonal character “image builders”. For inbound motorists, the corridors build on and add definition to the zonal character introduced in the portal; for outbound motorists, they introduce and carry a zonal character image that ends with a portal.

Consequently, the portals and corridors are the primary route compositional elements that are to be “read” by county/city motorists.
2. Within individual portals or corridors, other compositional elements can be highlighted, augmented, or added. These elements are intended to provide points of visual interest while developing or reinforcing zonal character. These elements might be:
  - a. Historic structures or complexes
  - b. Natural features such as glacial kames or eskers.
  - c. Flanking woodlots augmented to provide “mini-portals” within a portal or corridor.

LEGEND

- Rural Portals
- Rural Corridors
- Suburban Portals
- Suburban Corridors
- Urban Portals
- Urban Corridors
- Suburban/Rural Corridors

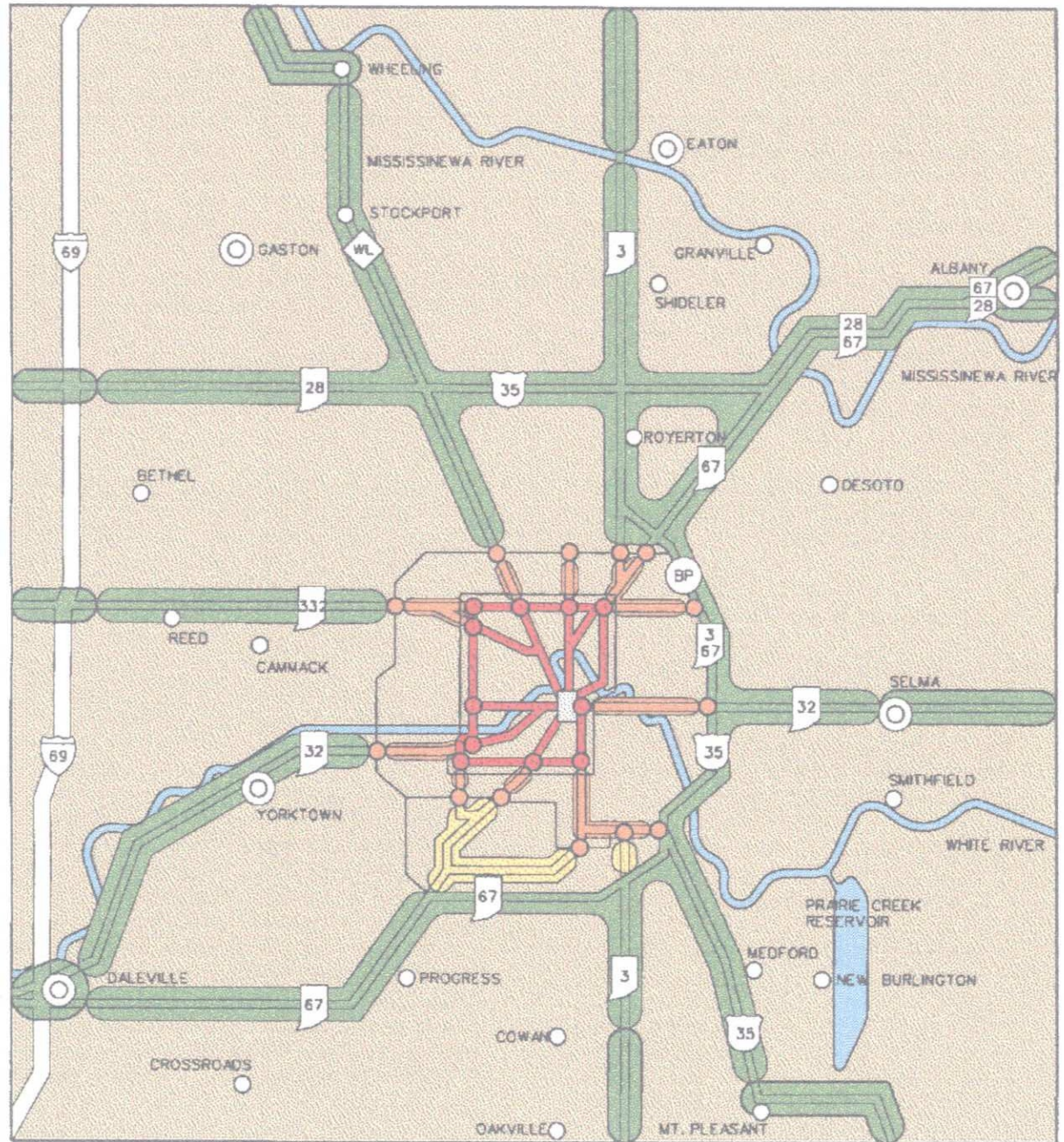
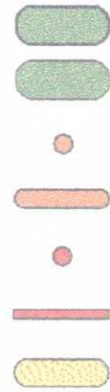


Figure 27 : Portals and Corridors

- d. Parks and other recreational areas
- e. Crossing rivers or other greenways
- f. High quality commercial or industrial development that is warranted by need and is consistent with the zonal character.
- g. Distinctive county, city, and town signage.
- h. County or city cultural or historical features or sites

These elements would, therefore, serve as "punctuation" for the portal and corridor passages.

3. The establishment of the extent of the portals must recognize:

- a. The "perceptual lag time" of the observer, i.e., the time it takes for the motorist to realize that there is "something different" occurring along the roadway, and
- b. the speed of travel.

4. Each portal should have logically located termini, i.e., they should begin and end at points that can be perceived by the motorist as having, or be developed as having, a definitive identity. Consequently—from the sequence of progression of the incoming traveler—the termini of the three portal types are as follows:

a. Rural Portals

Outside terminus: County border

Inside terminus:  
(per portal)

SR 3 N	—	Misissinewa River/ Eaton-Albany Pike
SR 67 NE	—	Albany
SR 28 E	—	Albany

SR 32 E	—	Selma
US 35 SE	—	Mt. Pleasant
SR 3 S	—	Cowan access road (CR 578S) intersection
SR 67 SW	—	Daleville
SR 32 SW	—	Daleville
SR 332	—	I-69
SR 28 W	—	I-69
Wheeling Pike	—	Wheeling

b. Suburban Portals: These portals are the city limits of Muncie. The speed at which motorists are traveling in these segments of the routes is such that these "point experiences" will be passed very quickly. As a consequence these portals must present strong imagery if they are to be recognized and understood by motorists.

c. Urban Portals: These portals are the intersections of the routes with the "inner loop". All but one of these intersections are traffic-lighted, and the one not having a traffic-light has a stop sign. Consequently, since motorists must stop, or slow to very low speeds at these intersections, these portals can be compressed to the point of intersection.

There are two types of portal/corridor sequences on the county/city routes. These two types can be easily traced in Figure 27. The only difference in these two types is the presence or absence of a suburban/rural corridor. Excluding this suburban/rural corridor, the sequence, for incoming motorists, is: rural portal—rural corridor—suburban portal—suburban corridor—urban portal—urban corridor. Including the suburban/rural corridor, the sequence is: rural portal—rural corridor—suburban/rural corridor—suburban portal—suburban corridor—urban portal—urban corridor. The recommendations in the following subsections will address the routes in the former sequence leaving the suburban/rural corridors to be treated in the last sub-section of this section. Additionally, a "next-to-last" sub-section deals with "Impedances and/or Enhancements to Traffic Flow" and consequently relates to all of the route character zones.

The Rural (County) Portals are shown in green in this illustration.

The following recommendations are intended to provide the foundation, the base condition, for developing a distinctive character for the portals—entry/exit points—of Delaware County, a character that will be memorable and expressive of the natural and cultural environment of the county.

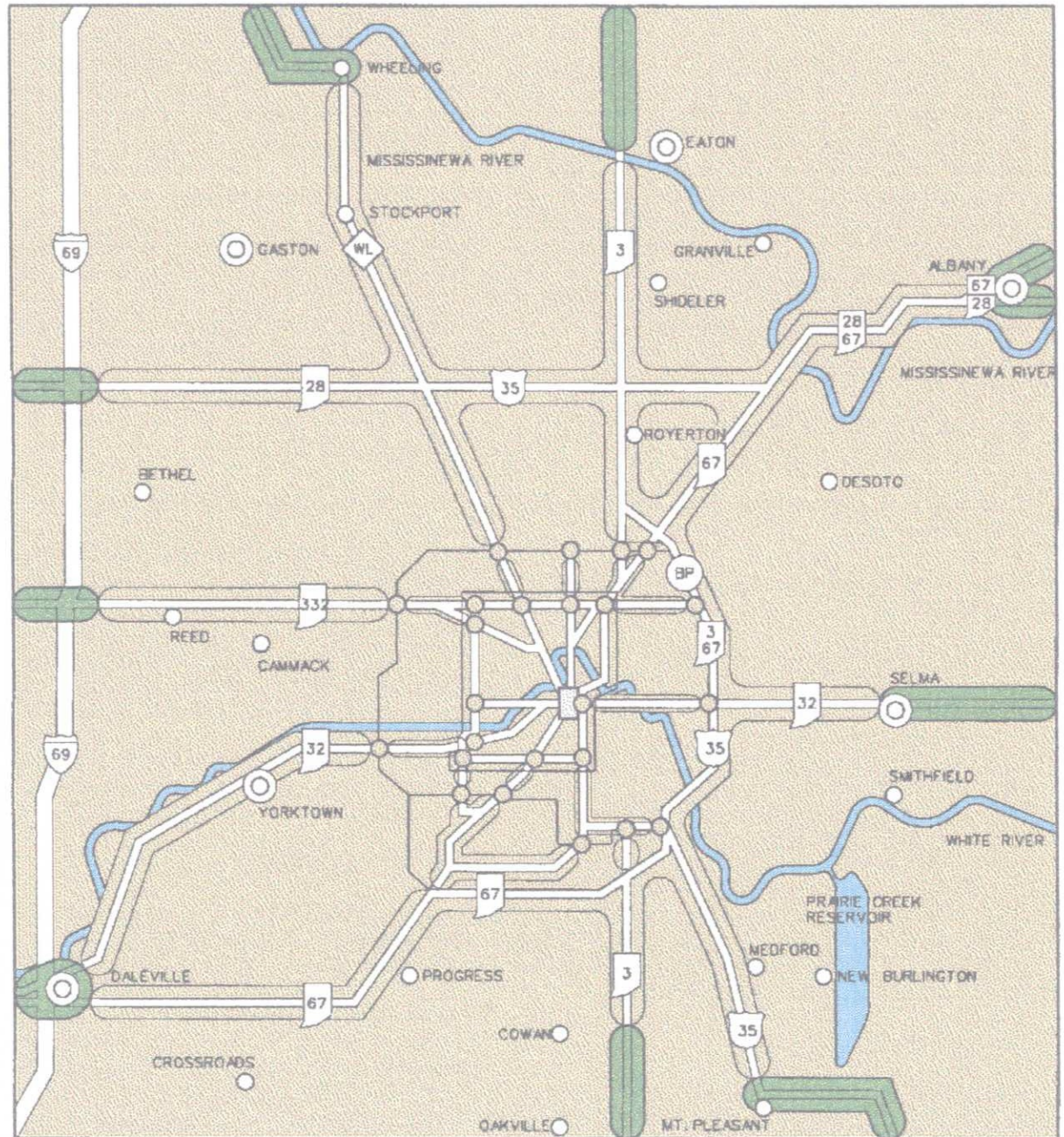


Figure 28 : Rural Portals



**LAND USE**

It is recommended that the land use in the rural portals be predominantly that which is congruent with Indiana's and Delaware County's agricultural heritage. The end result of the acceptance of this recommendation would be that further re-zoning of areas within these portals for conversion of agricultural use to commercial or industrial use would be prohibited and that the conversion of agricultural use to residential or other non-commercial or non-industrial use would be stringently tested against the stipulations of Indiana state law for zoning changes, which states that zoning, "shall pay reasonable regard to":

1. the comprehensive plan,
2. current conditions and the character of current structures and uses in each district,
3. the most desirable use for which the land in each district is adapted,
4. the conservation of property values throughout the jurisdiction, and
5. responsible development and growth.

**I-69 INTERCHANGES**

There are areas within these portals, most notably those contiguous to I-69, that are presently zoned for uses other than agricultural. It is the opinion of the team, given the location of these areas and their potential for development, that the I-69 interchange areas should be ones where "non-agricultural" uses should be encouraged, but controlled. It is important that these areas be developed in a manner that will communicate an image for the county of quality-consciousness, pride and uniqueness to motorists passing through or utilizing these interchanges.

**COUNTY BORDER MARKERS**

The entry/exit points of the county should be the points at which travelers receive the first indication—or final re-

minder—that they are entering or leaving a distinct, and distinctive, area of the state. The first sign of entering, and the last sign of leaving the county is a literal one: the county identification sign. Consequently the initial and final impression that travelers have of the county can be enhanced by improving the image of this signage.

Therefore it is recommended that:

1. The county develop a custom-designed signage system for its entry/exit points incorporating the following:
  - a. A message welcoming visitors to the county or thanking visitors for visiting the county
  - b. A county logo
  - c. The county name
  - d. The names of the County Commissioners
2. Approval by the State Department of Transportation be obtained for placement of these signs, on both sides of the right-of-way, at a distance of 300' inside the state-placed county identification signs, thus locating the county signs 3 to 4 seconds in driving time after the state signs for county-entering motorists and the same interval before the state signs for exiting motorists.
3. Subsequent to, and contingent upon state approval, the design of a county sign be commissioned, or a competition for the design of the sign be mounted.

**VISITOR INFORMATION**

The entry points of the county are also the locations at which visitors should receive information about points of interest or destinations in the county and in Muncie.

There are fifteen locations—counting four exits from I-69 in addition to the eleven county entries—at which visitor information should be provided. The ideal solution to the provision of visitor information would be free-standing "Visitor Information Centers," but it is unrealistic to assume

that such centers could be provided at each of these locations. Therefore it is recommended that free-standing visitor information centers be located, if desired and financially feasible, only at state highway locations immediately east of I-69. Of these four possible locations, the three priority sites would appear to be, in priority order: 1) at the SR 332 exit, 2) east of I-69 on SR 67 contiguous to the SR 32/67 exit, and 3) at the SR 28 exit. These locations would provide conveniently located sources of visitor information for seven of the county entry locations: for the county entry points on SR's 67 SW, 332 and 28 W, for SR 32 and SR 67 SW travelers exiting I-69 from the south, and for I-69 exiting travelers, from both the south and north, for SR's 332 and 28. For the other eight entries, the most feasible solution would appear to be the provision of visitor information within existing businesses in towns along the route. These towns, per route, could be the following:

SR 3 N	— Eaton
SR 67 NE and 28 NE	— Albany
SR 32 E	— Selma
US 35 SE	— Mount Pleasant
SR 3 S	— Cowan
SR 32 W	— Daleville
Wheeling Pike	— Wheeling

These potential Visitor Information Sites are shown in Figure 29.

In each of these situations—the free-standing visitor information sites and the visitor information/business "contract" sites—directional signage to, and identification signage for the sites should be provided. This signage should be compatible with the previously recommended county border signage and the city directional and city limits signage recommended later in this report and consequently should be included in the design commission or competition recommended for the county border sign.

The reason that the issue of visitor information is addressed in this study is that the process of directing or attracting visitors to destinations within the county or city often generates a proliferation of signs of varying size, type, and character, a practice that detracts from the

LEGEND

Freestanding Visitor Centers

Visitor Information Contract Site Towns

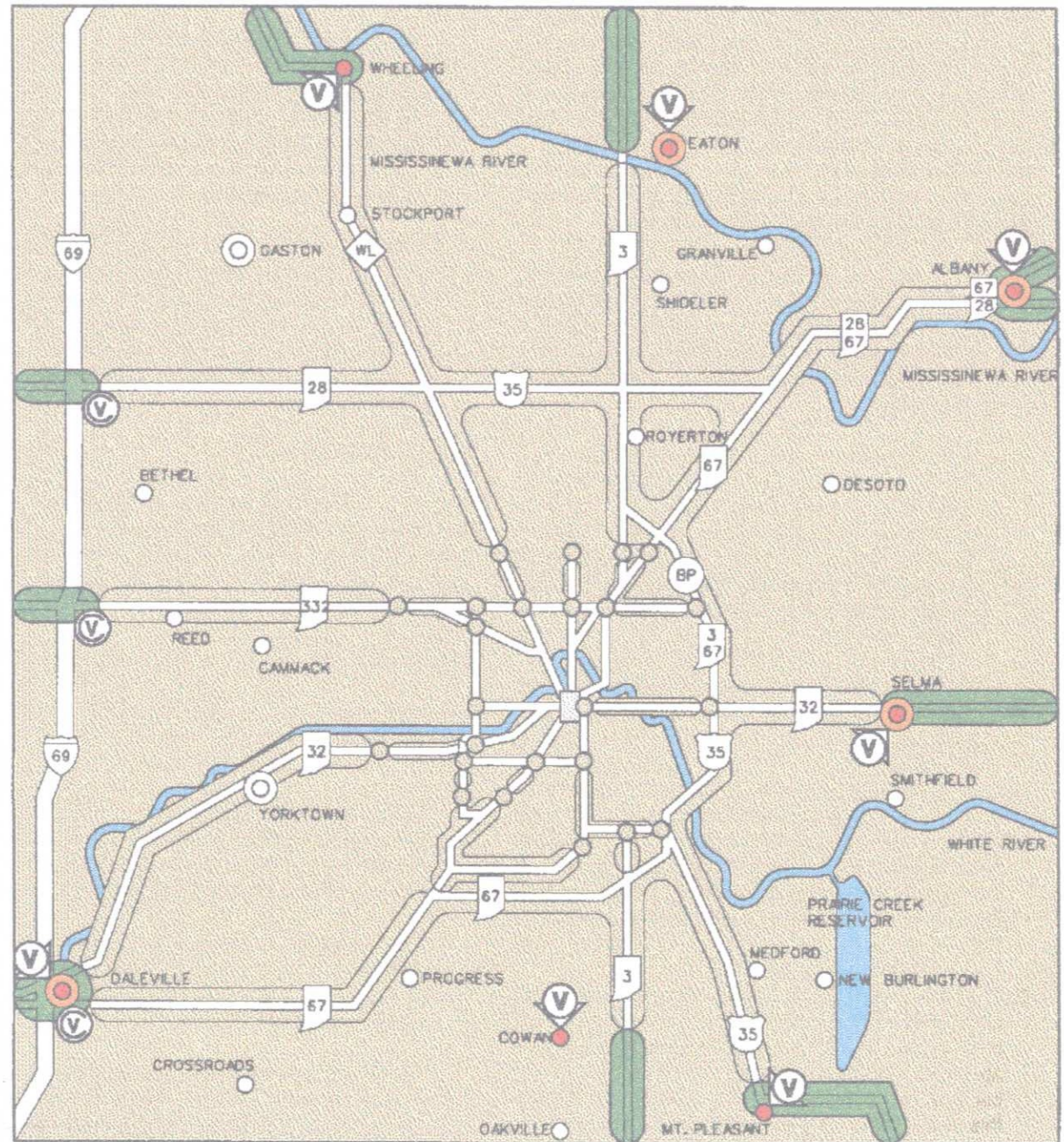


Figure 29 : Potential Visitor Information Sites

effectiveness of individual signs and the attractiveness of the rural routes. Visitor Information Sites, in combination with an alternative approach to directing visitors to points of interest or destination, or for attracting patronage for local businesses, could decrease the necessity for highway billboards, mobile—in many instances “flashing”—signs and other dissonant signage. The recommended alternative visitor directional information system would have the following characteristics and rationale.

1. A Visitor Information Map of Delaware County and Muncie—showing the county on one side and Muncie, at a larger scale, on the other—would be designed and produced. In addition to the usual highway/street information, these maps would include directional information as follows:
  - a. The locations of county points of interest and Muncie community, governmental, cultural, educational, or service sites, e.g., Airport, Ball State University, City Hall, Convention Center, County Building, Hospital, Indiana Vocational Technical College, Justice Complex, Main Library, Minnetrista Cultural Center, etc., would be included without charge.
  - b. Locational information for hotels, restaurants, and other commercial establishments would be included for a fee.
2. Each point of interest/facility, e.g., Horizon Center, Ball State University, etc., should be required to submit a logo or symbol for inclusion on the map and for use in directional signage. Visitors could then be directed to their destinations by signage utilizing this logo or symbol; visitors could be directed to “follow the logo or symbol.”
3. The inclusion of commercial signage type information on the map would decrease the necessity for billboards, mobile signs and other roadway advertisements that attempt to alert travelers to the identity and location of commercial establishments; this map would provide this information in more detail and with greater accu-

racy.

4. This map should be updated on an annual basis and distributed to all locations coded on the map, as well as to all “Visitor Information Centers,” thereby providing a means of getting updated maps into the hands of frequent visitors, and an aid to hotels, for example, in providing directions for patrons of restaurants or other commercial establishments.
5. The design of this map should be “representational” not literal, but at a level of detail that would give motorists accurately depicted routes. Moreover, on the city scale map, in addition to major routes, only those roads, streets, or avenues that would be the most logical routes to map-encoded potential destinations should be shown.

#### COMMERCIAL SIGNAGE

Based on the assumption that the “Visitor Information Center/Visitor Directional Map” system will be implemented as an alternative to roadway signage, the following rationale and recommendations are offered in regard to roadway commercial signage.

#### Billboards

The basic premises upon which these “billboard” recommendations are based is the recognition by the judiciary that:

The highway advertiser is essentially “seizing for private benefit an opportunity created for a quite different purpose by the expenditure of public money in the construction of public ways.”<sup>1</sup>

“The regulation of billboards and their restriction is not so much a regulation of private property as it is a regulation of the use of the streets and other public thoroughfares”<sup>2</sup>

“The right to view (from the highway) of the owner or occupant of the abutting property is limited to such right as is appurtenant to that property and

includes the right to display only goods or advertising matter pertaining to business conducted thereon.”<sup>3</sup>

- <sup>1</sup> *General Outdoor Advertising Co. v. Department of Pub. Works*, 193 N.E. 799, 808 (Mass. 1935), appeal dismissed, 297 U.S. 725 (1936).
- <sup>2</sup> *Churchill & Tait v. Rafferty*, 32 Philippines 580, 609 (1915), appeal dismissed, 248 U.S. 591 (1918).
- <sup>3</sup> *Kelbro, Inc. v. Myrick*, 30 A.2d 527, 530 (Vt. 1943).

These legal precedents must be viewed in relation to the current outdoor advertising control context within Delaware County. If categorized in respect to the control of outdoor advertising, there are two types of highways in Delaware County: those routes on the Federal-Aid Primary System and those not on this system. All routes, or portions of routes, in Delaware County are on the Federal-Aid Primary System except those coded in gray in Figure 30 and are the following:

1. SR 332
2. SR 32 from the By-pass west to the county line
3. SR 28 from the SR 67/28 junction at Albany east to the county line.

The significance of this distinction is that for Federal-Aid Primary highways “Outdoor Advertising” is regulated under a state agreement with the federal government, but for “non-Federal-Aid Primary” highways, “Outdoor Advertising” is under local control. Because state/federal controls are more stringent than are county controls, there is a “double-standard” in the county in this regulatory area.

Therefore, it is recommended that all highways in Delaware County—including Wheeling Pike as a “County Highway”—be brought into concurrence with the Federal-Aid Primary System regulations regarding outdoor advertising.

The major impact of this action would be a limitation on the areas in which billboards and other "off-premise" signs could be erected and maintained. The Federal-Aid Primary System regulations permit "off-premise" signs only on land zoned for "commercial or industrial uses," whereas county regulations permit "off-premise" signs in all "non-residential zoning districts." Therefore, a consequence of bringing the county ordinance into concurrence with the Federal-Aid regulations for "off-premise" signs would be that additional signs could not be located on property not zoned for commercial or industrial uses and those signs currently on other than industrially or commercially-zoned property—primarily on land in agricultural use—would become "non-conforming" under the provisions of the ordinance.

Under the current provisions of the county ordinance, a non-conforming sign, existing at the time of the enactment of the ordinance, may be continued provided that the following conditions are met:

1. That said existing sign is not expanded in size, or relocated, unless such expansion or relocation brings the sign into conformity with the Ordinance; and
2. that no additional signs are placed on the same sign apparatus upon which said existing sign is located.

**Illegal Signs**

Additionally, in the context of billboard signage, it should be noted that there appear to be billboards sited along Federal-Aid Primary routes in contravention of state regulations. That is, these signs are located on sites that are in agricultural use and not zoned for industrial or commercial use. If this is in fact the case, these illegal signs should be identified and removed.

**Mobile Advertising Signs**

The county ordinance appears to include no provisions for the control of mobile signs. It is the opinion of the study team that the use of these signs should be strictly limited to the advertising of special events, e.g. sales, business

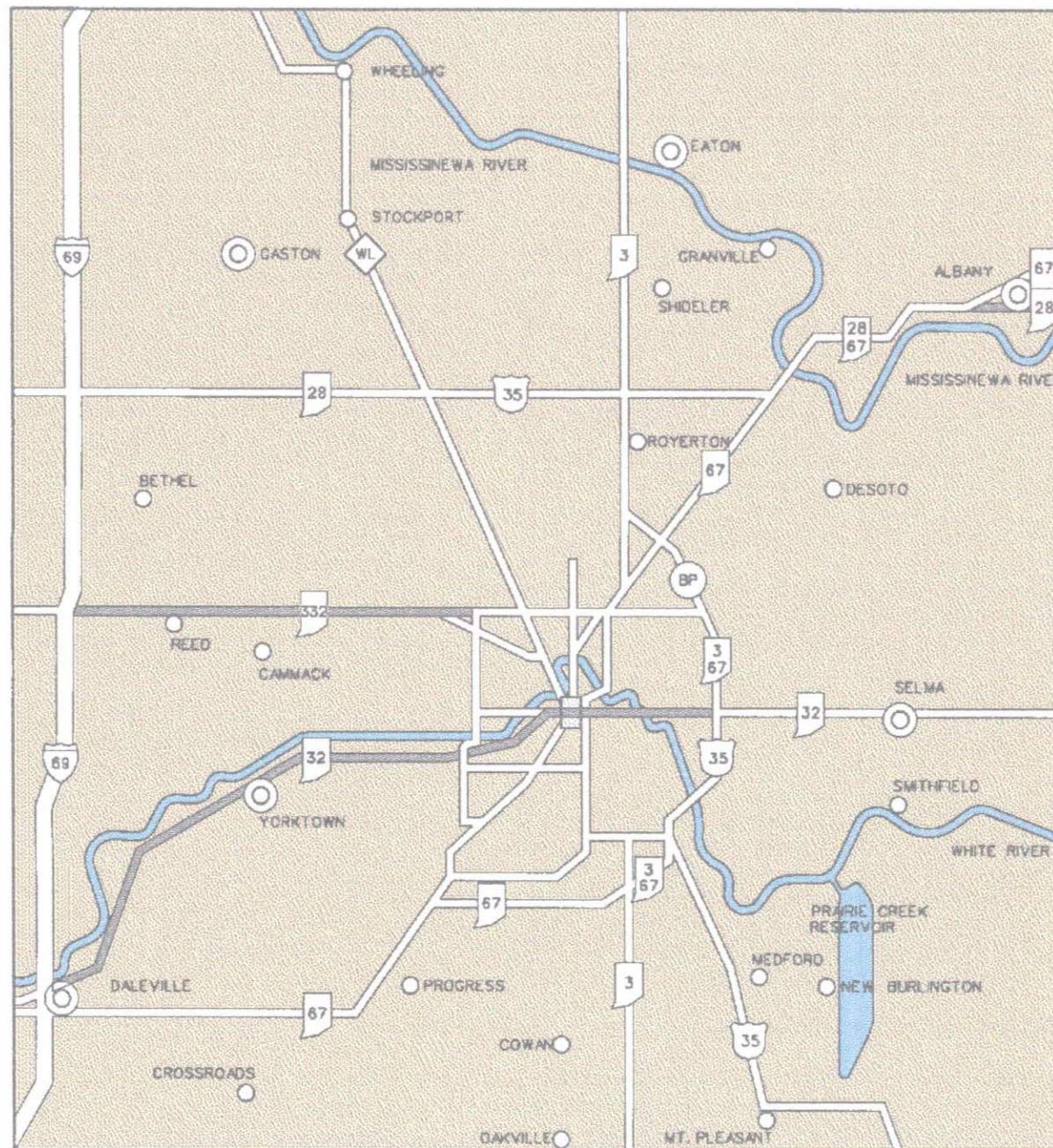


Figure 30 : Non-Federal Aid Primary Highways

openings, or other similar short-duration uses, not as a continuing substitute for permanent business signage or as an alternative to more substantive approaches to attracting and retaining business custom. Therefore, it is recommended that the following limitations be placed by ordinance on mobile signs:

1. Mobile signs be permitted only as on-site signage
2. A sign permit be obtained prior to each placement of a mobile sign
3. That a \$10.00 permit fee be required for each placement of a mobile sign
4. No mobile sign shall be maintained, displayed or placed on a property for a period of longer than sixteen (16) days after the issuance of the permit, sixty (60) days must expire before the permittee can reapply for a new permit for said sign on the property and a new permit must be obtained for each sixteen (16) day period.
5. Mobile signs may be illuminated internally or externally, but spot lights or flashing illumination shall not be used under any circumstances with a mobile sign.
6. A fine equal to the sign permit fee be assessed for each day that a sign remains in place beyond the sixteen (16) day limit.

The study team recognizes that the administration of the above provisions could become time-consuming and burdensome and consequently susceptible to a gradual erosion of diligence in enforcement. However, it would appear that the utilization of a microcomputer to track the placement and scheduled removal of these signs could significantly reduce the staff time that would have to be devoted to monitoring the usage of this type of signage.

#### Commercial Informational Signage

Within a three-mile segment of SR 332/McGalliard Road—between Lyndenbrook Plaza and Broadway Avenue—there are at least 40 restaurants and five hotels on or

contiguous to this route. This rich concentration of motorist traveler amenities within ten miles of I-69 is largely invisible to motorists on this interstate highway, as well as to motorists exiting to utilize the Amoco station in the north-east quadrant of the interchange. The team feels that to remedy this situation, as well as to preclude individual restaurant or hotel owners attempting further unilateral solutions, the following system might be implemented:

1. Two single, well-designed, signs containing the identification—names and logos—of unique, and cooperatively financed by, all of the restaurants and hotels within this three-mile segment be placed on I-69, one north of the SR 28 exit and one south of the Anderson SR 109 exit signage, the intention of the latter location being to alert northbound I-69 motorists to the amenities available at the SR 332 interchange before they are captured by those available at the SR 109 interchange.
2. A signage system replicating the Indiana interstate traveler information system be utilized for SR 332. This signage should be organized as follows:
  - a. Signage should be placed at the I-69 interchange advertising the Lyndenbrook Plaza restaurants and hotels as being "7 miles" along SR 332.
  - b. The same type of signage be placed just west of the Bethel Avenue (Lyndenbrook Plaza) intersection designating arrival at the restaurants and hotels at this location as well as advertising restaurants further along the route.

#### PORTAL TOWNS

Seven of the county portals—those of SR's 28 and 67 NE, SR's 32 and 67 SW, US 35 SE, SR 32 E, and Wheeling Pike—terminate at five towns (These portal towns are noted on Figure 31). As a consequence, these communities—respectively, Albany, Daleville, Mount Pleasant, Selma, and Wheeling—as portal towns, and as the first Delaware County towns that motorists experience as they enter the county, have special responsibility for the quality of the image of these portals.

The following measures—in roughly ascending order of magnitude, effort, or cost—if implemented, would significantly enhance both town and portal image:

1. The placement of well-designed, distinctive town limits signs
2. The mounting of a clean-up/paint-up/fix-up, program that would simply "spruce-up" the town, removing unsightly elements, painting buildings along the route, and "fixing-up" those buildings in obvious state of disrepair
3. The implementation of a tree planting program that would provide an "alleé" (corridor) of trees along the right-of-way within the town limits. If a town were to select a single tree species—one chosen from a selection of species that have good survival rates for the climate and location—this program would have two beneficial effects:
  - a. It would impart a unique character to the segment of the route through the town, and thereby distinguish the community as "different from" hundreds of other similar towns along Indiana highways.
  - b. It would provide an image-enhancing terminus for the county portal
4. The enactment of signage controls that would "de-suburbanize" the signage within the town, that is, develop commercial signage that in scale (size and height) and location would be more appropriate for a specific, unique,

LEGEND

Portal Towns

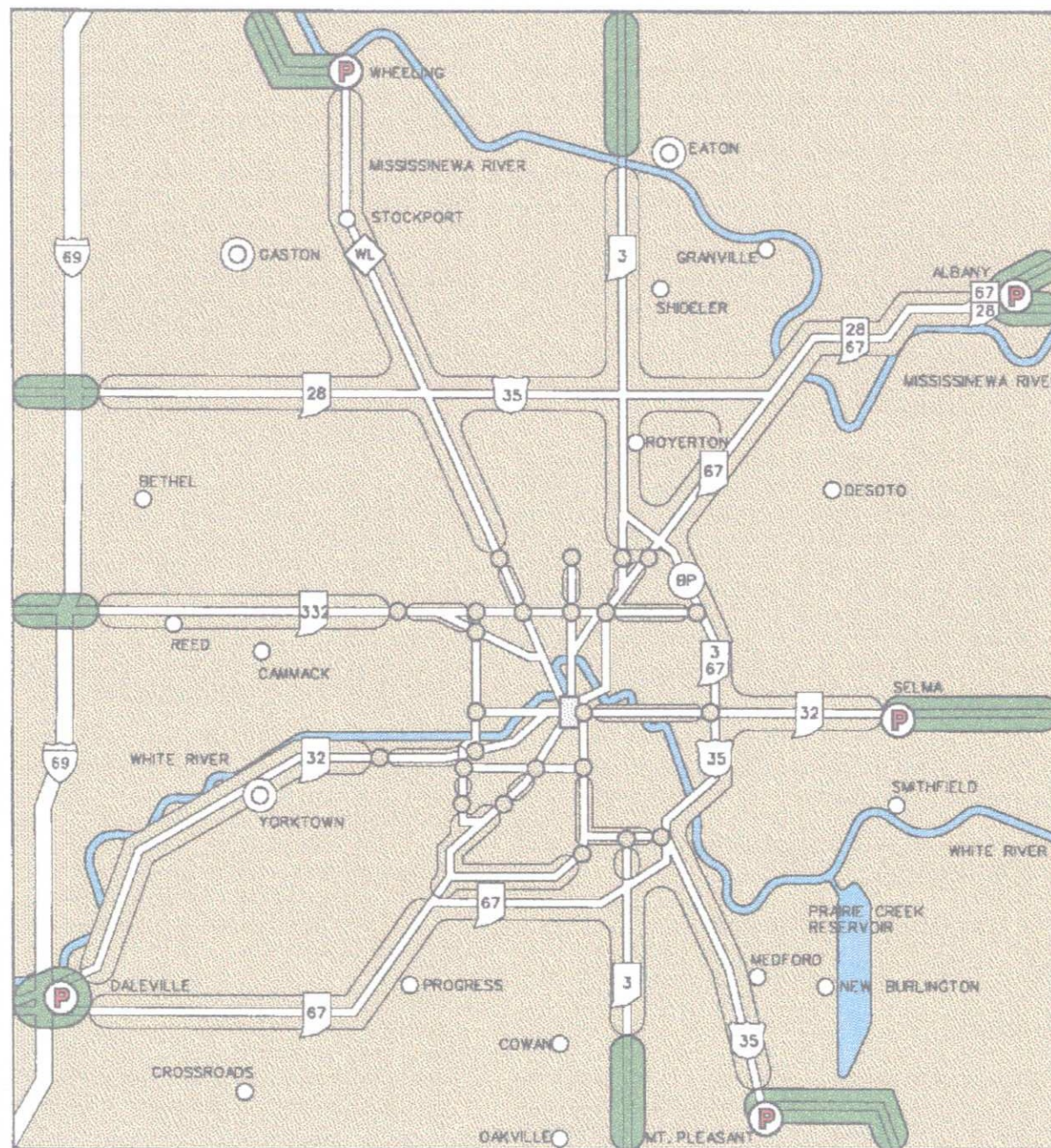


Figure 31 : Portal Towns

town in Indiana, not "Anytown" in "Anywhere, U.S.A."

5. The installation of town center street lights of a size and character befitting "town" image and character
6. For those larger portal towns whose centers are bisected or transversed by a major route—Albany and Daleville—the development of a town building facade improvement program. This program would have the alternative purposes of restoring, where possible, the historic character of town facades or upgrading those "non-historic" facades in need of improvement.
7. The use of banners or other festive elements to add color to the "townscape" and impart information about town events or aspects

Moreover, there are three towns within the SR 3 N and SR 3 S portals—Eaton, Cowan, and Oakville—that are within one mile of the highway. A tree-planting program implemented by these communities that would create a tree-lined corridor along the highway on either side of the primary town access road from SR 3 of a length roughly corresponding to the size of the community—one-mile in length for Eaton and one-half mile for Cowan and Oakville—would, in combination with well-designed, distinctive, town directional signage on the route, yield the following benefits:

1. It would provide a distinctive announcement of town location and of its entrance from the highway.
2. It would provide strong terminating elements for the SR 3 Portals, as follows:
  - a. Eaton and Cowan—inner termini
  - b. Oakville—outer (county border) terminus

*Comment:*

*In this context, several points must be made regarding the current plight and the importance of the towns of Delaware County. A number of these towns, through no fault of their*

*own, are in danger of extinction as a result of loss of economic viability; the costs of maintaining their town services are exceeding their revenue base, and finding the funds for a major improvement, e.g., an expansion to the town sewage treatment plant, is a fiscal impossibility.*

*On the other hand, the survival of these towns must be a major concern for the county. These towns represent much of the cultural history of the county; many of them sit astride historic county pikes and/or are historic Indian encampment or county settlement sites. The status of these towns can be equated to that of historic buildings in a city. If they are lost, an irreplaceable piece of the county's physical history, culture and personality is lost. Further, these towns provide a needed variety of choice of living environments for county residents and social centers for their surrounding rural areas.*

*Obviously, the implementation of the recommendations contained in this report for towns on or near the county routes is not going to insure the survival of these communities. Moreover, when faced with the previously cited financial crisis of a required expansion to a sewage treatment facility, "cosmetic" measures are not likely to be assigned a high priority. However, these recommendations should not be undervalued as a source of vitalization for these towns, for the following reasons:*

1. *Many of these recommendations are low cost measures and can be accomplished through private funding and/or volunteer efforts. The placement of distinctive town limits signs, a clean-up/paint-up/fix-up program, and a "buy and plant a tree" campaign could be accomplished without the expenditure of public funds. And, the control of the character of town commercial signage is a matter of the strength of a community's resolve, not its financial position.*
2. *Enhancing the appearance of a community can yield two primary benefits and an important by-product. With more attractive physical surroundings a community will feel better about itself while presenting a more appealing face to potential investors. And, the act of accom-*

*plishing these improvements through citizen action should improve community spirit, pride, and sense of purpose.*

3. *The implementation of these measures would provide a higher town profile image while demonstrating community cohesiveness and the resolve of the towns to remain "of importance" in the county.*

**PORTAL LANDSCAPE TREATMENT**

A low cost initiative that would add character and uniqueness to all of the portals would be the establishment for their entire length (outside of towns) of native wildflower and grass colonies along the roadway shoulders. These native plant colonies would add color to these route portals while communicating an image representative of Indiana's historical landscape character.

**OTHER PORTAL LANDSCAPE OPPORTUNITIES**

There are other specific areas within the rural portals that could benefit from appropriate landscape enhancement or preservation measures. These are the following:

**1. SR 28/US 35 W**

"Fence row" style planting around the perimeter of the truck plaza at I-69 would provide a more appropriate image for this development within its rural setting.

Also, the view from this route of the proposed residential development to the southwest would benefit from this same perimeter "fence row" planting.

**2. SR 32 E**

Woodlot restoration and fence row enhancement at the county border end of this portal would mitigate a visual image that is currently rather too open and "untended" in nature.

**3. US 35 SE and US 3 S**

No enhancement measures other than rural conservation/preservation initiatives are recommended for these portals. The major recommendation for these rural routes, both portal and corridor, is to expend every effort to preserve a route character that is currently shared by these highways as being the most scenic and attractive among all of the rural routes.





The Rural Corridors of the county are shown in green in this illustration.

The following recommendations are intended to provide the foundation, the base condition, for developing a distinctive character for the rural corridors of Delaware County, a character that will be memorable and expressive of the natural and cultural environment of the county.

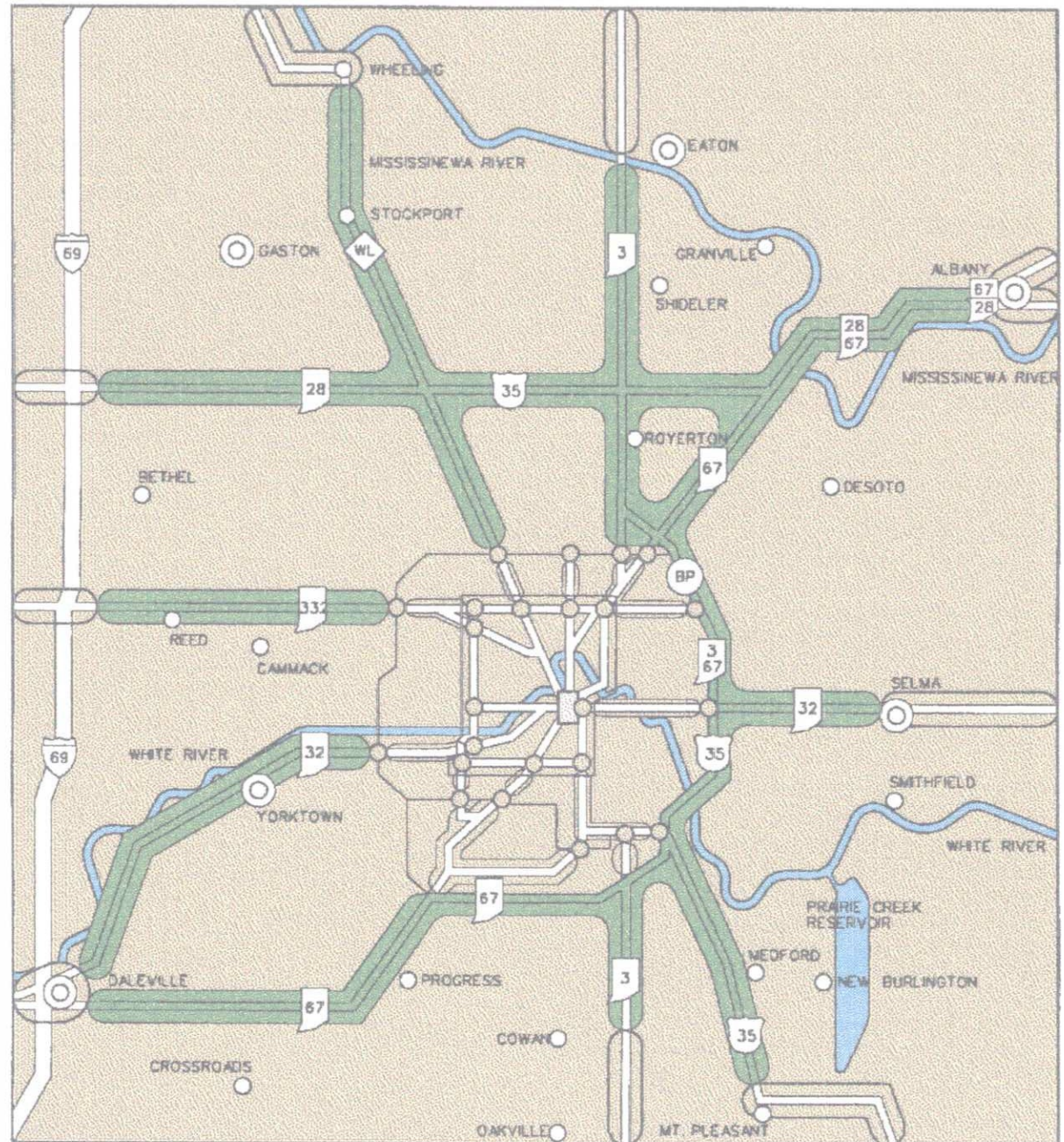


Figure 32 : Rural Corridors

**LAND USE**

In the judgment of the study team, the rural corridors should be protected from "suburbanization" to the same degree as the rural portals. Consequently, it is recommended that the land use controls proposed for the rural portals should also be placed on the rural corridors.

**COMMERCIAL SIGNAGE**

It is recommended that measures for the control of "commercial signage"—billboards and mobile signs—be the same for the rural corridors as those proposed in the previous section for the rural portals.

**MUNCIE DIRECTIONAL SIGNAGE**

There are nine locations on the rural corridors where directional signage is critical to visitor identification of routes to Muncie, the county seat. Seven of these locations are on the By-pass and two are on SR 28/US 35 W. These locations are noted in Figure 33. It is recommended that these also be locations where custom-designed signage should be utilized. This signage should include: a City of Muncie logo, the city name and a directional arrow. The design of this sign should be coupled with the county sign design as part of the same design commission or competition, thereby providing a vehicle for requiring that these signs be compositionally coordinated.

One additional point must be made regarding the utilization of this directional signage. There is the natural tendency for the community to use this signage to direct travelers to those routes that are determined to be the "most attractive" and thereby convey a "better" image for visitors entering Muncie by road. It is recommended that this temptation be resisted; that a "non-judgmental" approach be adopted for providing directions to Muncie, that is, visitors not be directed away from the most direct route into the city for the sake of bringing them into the city by a "preferred route." This recommendation is made for the following reasons:

1. Directing incoming traffic to a few "preferred" routes would overload and congest those routes and the intersections where they meet the "inner loop."
2. Businesses located along arterial routes are partially dependent upon visitor traffic for their livelihood, and directing visitors away from some routes would benefit businesses on the preferred routes at the expense of those on non-preferred routes.
3. The "preferred route" approach could result in the relegation of improvement in the function and appearance of the "non-preferred" visitor routes to a low priority, thereby denying these routes the level of attention they should receive as crucial routes for Muncie commuters and intra-city motorists.

LEGEND

Critical Muncie Directional Signage Locations

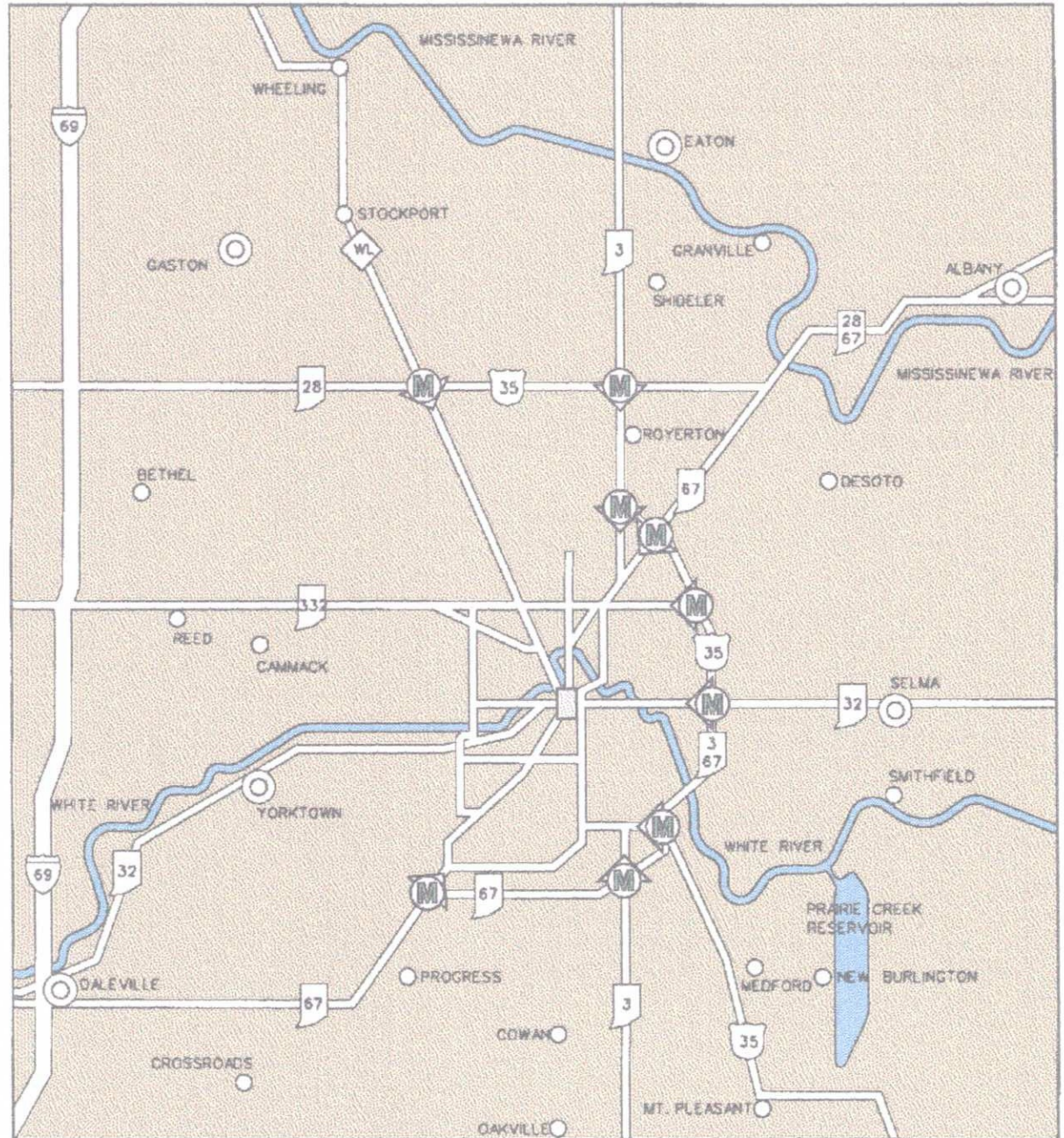


Figure 33 : Location of Muncie Directional Signage

**AIRPORT ROUTES AND DIRECTIONAL SIGNAGE**

The issue of travelers to and from the Airport was addressed in the "Rural Routes" sub-section of the "County Context Analyses" section. In reiteration, the basic aspects of this problem are the following:

1. Many motorists traveling to and from the airport now utilize McGalliard Road as the connection, from the east and the west, to the Walnut Street final link to the Airport.
2. This practice places airport travelers on the most heavily traveled and congested route in the city, a situation that is not conducive to easy access to the airport.

A solution to this problem is the designation, where possible, of alternative routes to the airport for county air travelers. This routing is illustrated in Figure 34, and includes the following as elements:

1. Airport travelers on SR's 332 and 32 SW would continue to be directed to the airport via the McGalliard Road/Walnut Street route
2. Airport travelers on SR's 67 SW, 3 S, and 32 E and US 35 SE would be routed along the By-pass to Riggins Road and then west to the airport.
3. Travelers on Wheeling Pike and SR's 3 N and 67 NE north of SR 28 would be routed along SR 28/US 35 to Walnut Street Road and then south to the airport.
4. Travelers south of SR 28 on Wheeling Pike, SR 3N and SR 67NE would be routed to the airport via Riggins Road.

This routing would provide county travelers easy, quick, access to and from the airport by avoiding the most congested area of McGalliard Road, that segment between Wheeling Avenue and Broadway Avenue, and would remove one traffic component, airport traffic, from this area of McGalliard Road.

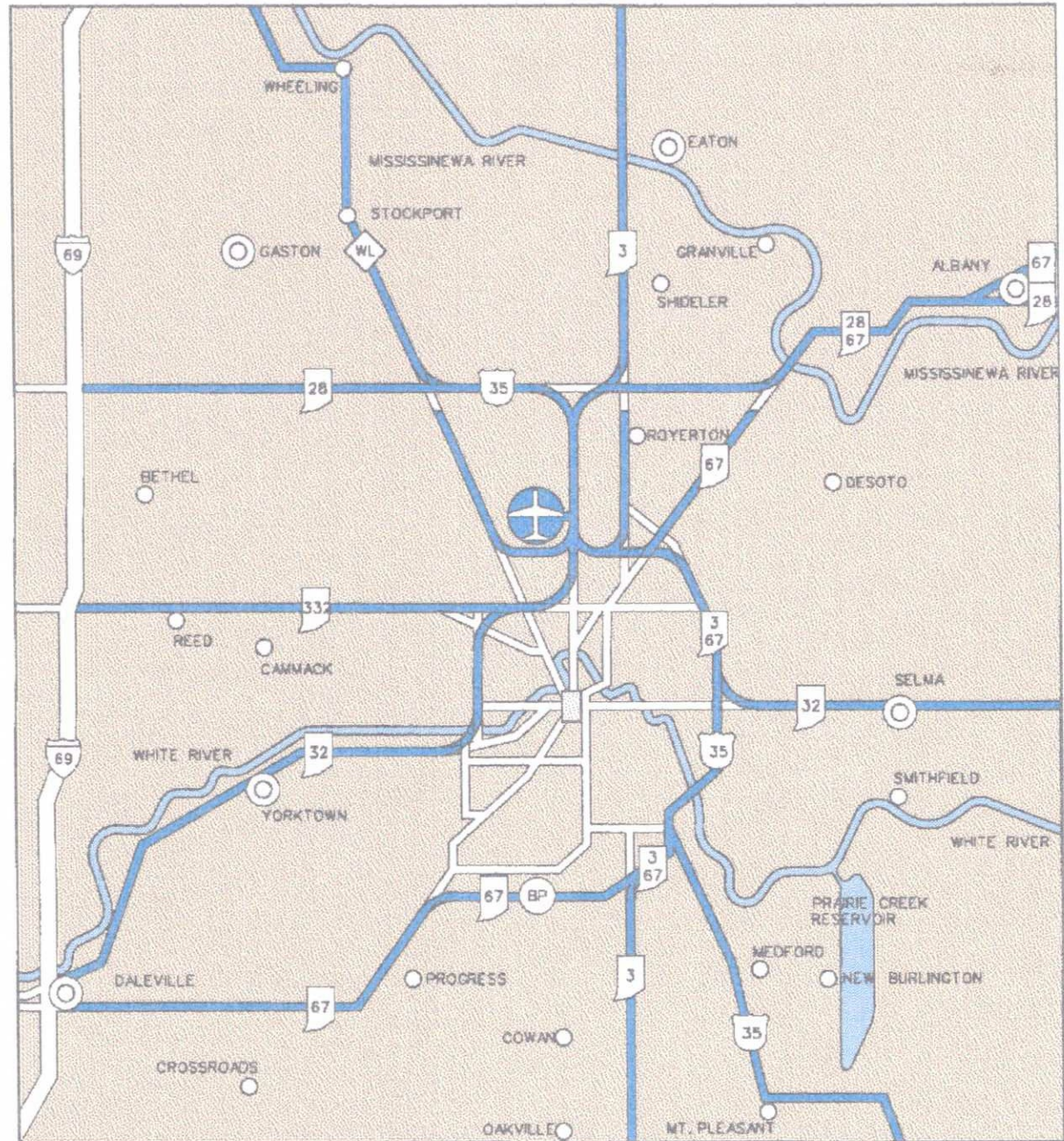


Figure 34 : Recommended Airport Traffic Routing

### CORRIDOR TOWNS

The towns that are on or abut the rural corridors—Yorktown, Stockport, and Royerton—have similar positions to those of the towns on the portal segments of the routes. Therefore, the measures outlined earlier for the enhancement of the portal towns are as relevant for corridor towns, having the effect of enhancing the image of the towns while providing “mini-portals” along the routes (These towns are highlighted and designated with a “c” in figure 35).

### CORRIDOR LANDSCAPE ENHANCEMENT POTENTIALS

As noted earlier in this report, Delaware County offers multiple opportunities to enhance the quality of its major routes by clarifying, developing, or promoting natural features on or near the routes. Although those features adjacent to the routes would provide the greatest direct visual impact, the communication as well of natural or recreational sites close to the routes would impart more of the message of the richness of Delaware County’s natural and recreational setting.

Figure 35 illustrates the locations of the following opportunities for route enhancement via natural features and elements.

#### Mississinewa River

The Mississinewa intersects two of the major routes, SR 3 N and SR 67 NE. These areas present ideal sites for the enhancement of the image of these routes—and rest areas for motorists—via the introduction of roadside parks and the provision of county recreational opportunities by developing canoe landings and fishing access within these parks.

#### CSX Rail Line

The potential presented by the impending abandonment of the CSX rail line for the creation of a biking/hiking/skiing trail was noted earlier in this report. The development of this natural/recreational corridor through the county would

present a number of enhancement opportunities for three of the county routes as well as recreational opportunities for county residents and others. This rail line crosses SR 28/US 35 W and Wheeling Pike, creating opportunities for green accents at these locations as well as refreshment stations for the hikers and bikers during the summer and cross-country skiers during the winter. Moreover, these sites could “double” as refreshment stops for motorists on these routes as well as locations for roadside sale of agricultural produce. This rail right-of-way is also contiguous to US 35 for the northern one-third of its length, thus providing the potential for a two and one-half mile “green border” on the east side of this route. Moreover, multiple biking/hiking/skiing, motoring refreshment and produce sale “depot” opportunities present themselves along this route. The two most promising locations would appear to be at the point at which the rail right-of-way passes under the By-pass (approximately one-half mile north of the US 35/By-pass interchange) and at Medford (although not the closest point of this right-of-way to the highway, it is the only location at which the highway, the railway right-of-way and a town are in close proximity).

#### White River

The White River parallels SR 32 SW for all of its length and passes under the By-pass just east of the US 35 SE interchange. Currently, views of this river from these routes are accidental or minimally acknowledged as opposed to fully developed. A concerted effort to promote the river as visual amenity by opening or enhancing river views would contribute significantly to the visual quality of SR 32 SW and the By-pass.

#### Man-made “Natural” Features

There are a number of “natural” features along the rural corridors that owe their existence not to natural forces, but to urban growth. These are, most notably, “borrow areas”; areas where material has been “borrowed” for other uses: borrow pits for highway construction or abandoned gravel pits and stone quarries that once provided construction material for diverse uses. These “borrow areas” have over

time become natural features. A number of the highway construction borrow pits along the By-pass, especially, provide unique opportunities for green accent areas as well as potential recreational sites along this route.

#### Glacial Land Forms

Several examples of glacial landforms—eskers (ridges), kames (mounds) and moraines (glacier edge deposits)—exist in Delaware County. The most pronounced of these is the esker along SR 67 NE from Desoto Road to Black Cemetery Road (The “Muncie Esker”). This feature is unsurpassed by other less prominent glacier deposits along other rural routes. It has excellent potential for public recreation (sledding, hiking, etc.) and for upland, sand/gravel soil wildlife habitat establishment. The acquisition and development of this area for these uses would provide the advantage of enhancing this route for much of its length.

#### County Creeks

A number of creeks intersect the rural corridors, among these Bell Creek, Buck Creek, and Little Buck Creek. These intersections of the rural corridors—SR 67 SW, SR 3 S, 32 SW—are important “green accent” opportunities for these routes.

#### Sinks and Wetlands

There are two areas where wetlands abut or straddle the rural corridors. These are the “Selma Sink” west of Selma, and the wetland on Middletown Pike and SR 67 SW. The preservation or restoration of these areas would host an abundance of wet prairie species of wildflower and flowering tree and shrub species and would be unique punctuations for the routes while also providing environmental benefits and a home for wildlife species indigenous to these habitats.

NEARBY FEATURES

There are a number of natural and recreational features or areas near the rural corridors that if communicated to travelers of these routes—via a well-designed and coordinated informational signage system—would impart a richer image of the natural features and recreational opportunities of the county. These areas and the routes upon which the signage should occur are the following:

1. Prairie Creek Reservoir / US 35 SE
2. Golf Courses (Cardinal Hills and Delaware Country Club/SR 32 E, Lakeview/SR 3N, Maplewood Golf Club/SR 3S and Walnut Grove/SR 67 NE)
3. Gaston Prairie Swamp north of Gaston along CR 600 W and Wheeling Pike

Comment:

*It must be noted that it was not possible for the team to investigate and recommend in the context of landscape areas and features along the county routes without becoming aware of potentials beyond the immediate environs of the routes themselves. The picture that emerges as one looks more broadly at the "county landscape" is of the potential for an interconnected system of county greenways, open spaces, recreational sites and settlements. A few of these potential interrelationships:*

1. Mississinewa River

*If canoeing and fishing were to be facilitated and promoted on this river, parks containing—in various combinations—canoe landings, fishing areas, refreshment areas, recreational facilities and campgrounds could be developed at Albany, SR 67/28 NE, Granville, Eaton, SR 3 N and Wheeling. The benefits that would result from this initiative are the following:*

- a. *An additional recreational amenity for county residents and a visitor attraction for the county*

- b. *Additional park and recreational facilities for Albany, Granville, Eaton, and Wheeling*

- c. *A source of revenue and employment for these same towns*

- d. *The park facilities along SR's 3N and 67/28 NE also being utilized as rest/visitor information areas for motorists and as agricultural produce sale sites*

- e. *Enhancement of the image of the routes via the park areas at the river*

*These facilities should be developed as an integrated system, with canoe landings and other facilities, and signage, being visually and physically coordinated via a Comprehensive Master Plan for the entire system of sites.*

2. CSX Railway/"Rails to Trails"

*This biking/hiking/cross-country skiing route could be developed in the same manner—with trail "depots" at Gaston, SR 28/US 35 W, and Wheeling Pike on the north segment, and at the By-pass, and Medford on the south—and would provide the same benefits as would the development of canoeing and fishing on the Mississinewa. These benefits would be:*

- a. *Another additional recreational amenity for county residents and visitor attraction for the county*

- b. *Additional park and recreational areas and revenue and employment for Gaston and Medford*

- c. *The trail depots on SR 28/US 35 W, the By-pass (at US 35 SE) and on US 35 SE at Medford doubling as rest areas for motorists and sale sites for agricultural produce, and, in the case of the SR 28/US 35 W and By-pass/US 35 SE sites, as Muncie visitor information locations.*

- d. *The connection of this trail to the south end of the reservoir, linking trail users with a major county natu-*

*ral/recreational area.*

- e. *Enhancement of the image of the routes upon which the trail depots/parks would be sited.*

*This trail and its related service areas should also be a subject of a Comprehensive Master Plan if it is to provide the appropriate image and accommodation of users.*

3. Borrow Pits

*Those borrow pits areas along the By-pass that are not currently being utilized for residential, recreational, or other uses provide unique opportunities for the development of green accent areas coupled with rest areas and Muncie visitor information sites for the By-pass and routes that they abut. One of these borrow pits, the one at the US 35 interchange, is located at a potential "Rails to Trails" depot site, thereby presenting the possibility for an overlap between these two potential green space/recreation sub-systems.*

*The implementation of these three projects would provide a strong foundation for a county parks and recreation program. Other isolated or interconnected opportunities could be developed in the future, but the basic system would be in place.*

*Moreover, because the CSX rail line continues through Muncie and because the development of a richer park/open space/recreation system for the county would have implications for Muncie's park system, it would seem prudent for city and county officials to collaboratively develop a city/county system that would recognize not only county needs but also open space and recreational needs of the "under-parked" areas of the city and the need for an integrated approach to the conversion of the CSX rail line to recreational use.*

**LEGEND**

**Greenways / Green areas**



**CSX/Potential "Rails to Trails" Conversion**



**Most Prominent Area of the "Muncie Esker"**



**Wetlands**



- GPS - Gaston Prairie Swamp
- MPW - Middletown Pike Wetland
- SS - Selma Sink

**Creeks**



**Borrow Pits**



**Golf Courses**

- Cardinal Hills
- Delaware County Club
- Lakeview
- Maplewood Golf Club
- Walnut Grove

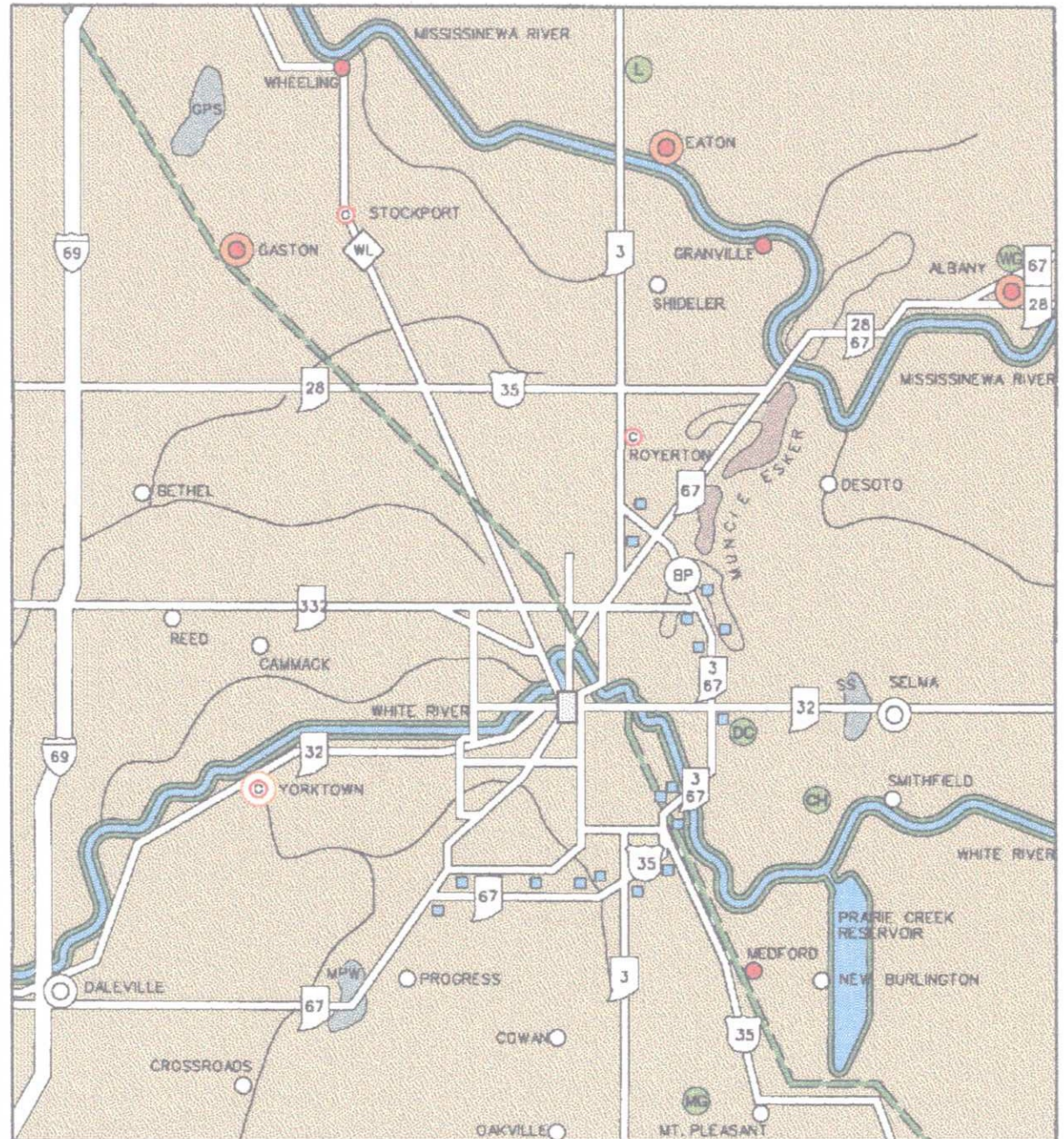


Figure 35 : Landscape Features and Opportunities





The **Suburban Portals** are shown in orange in this illustration.

The suburban portals are the points at which the routes intersect the corporate limits of Muncie. In most instances these are route segments within which traffic is still moving at a relatively high rate of speed. As a consequence, this entry statement (portal) for Muncie, if it is to be acknowledged and understood, must be an emphatic one.

The following recommendations are intended to provide a statement of entry of a scale appropriate for the speed of travel of incoming motorists and of a quality appropriate for the county seat. These entry statements should have two aspects:

1. A custom-designed sign placed at both sides of the route at all suburban portals that incorporates the following:
  - a. A message welcoming inbound motorists or thanking outbound motorists for visiting the city.
  - b. The city name
  - c. The city logo
  - d. The city's official slogan
  - e. The name of the Mayor

It is recommended that the design of this sign also be included in the previously recommended "signs" design commission or competition.

2. A landscape treatment for each portal designed to augment and emphasize the portal entry statement. This treatment should incorporate the city limits signs as the anchoring, generative elements, but should be site specific, recognizing the special context of individual portals.

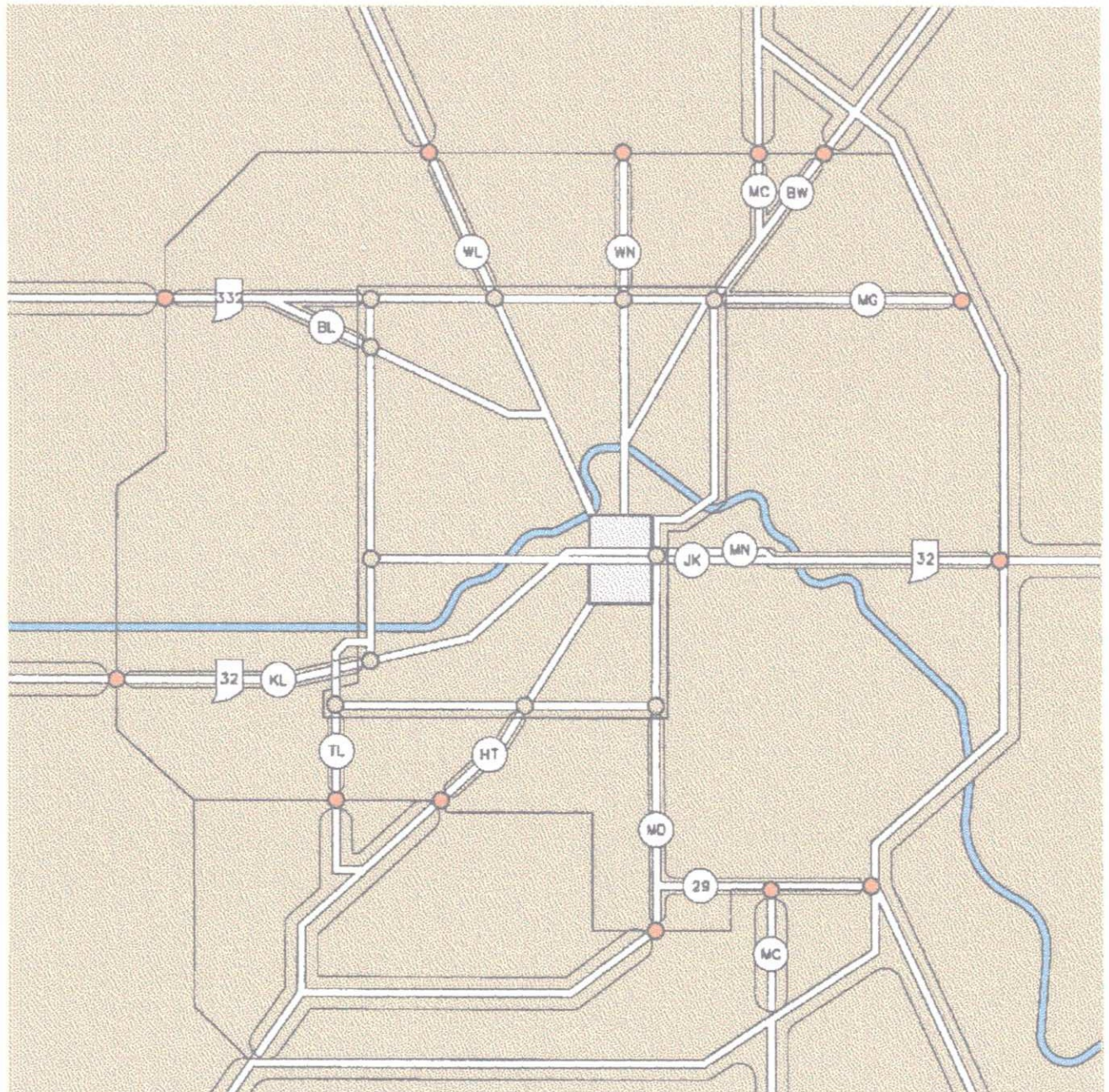


Figure 36 : Suburban Portals



The **Suburban Corridors** are shown in orange in this illustration.

The following recommendations are intended to provide the foundation, the base condition, for the development of suburban corridors for Muncie that convey the image of a progressive, proud, well-governed community.

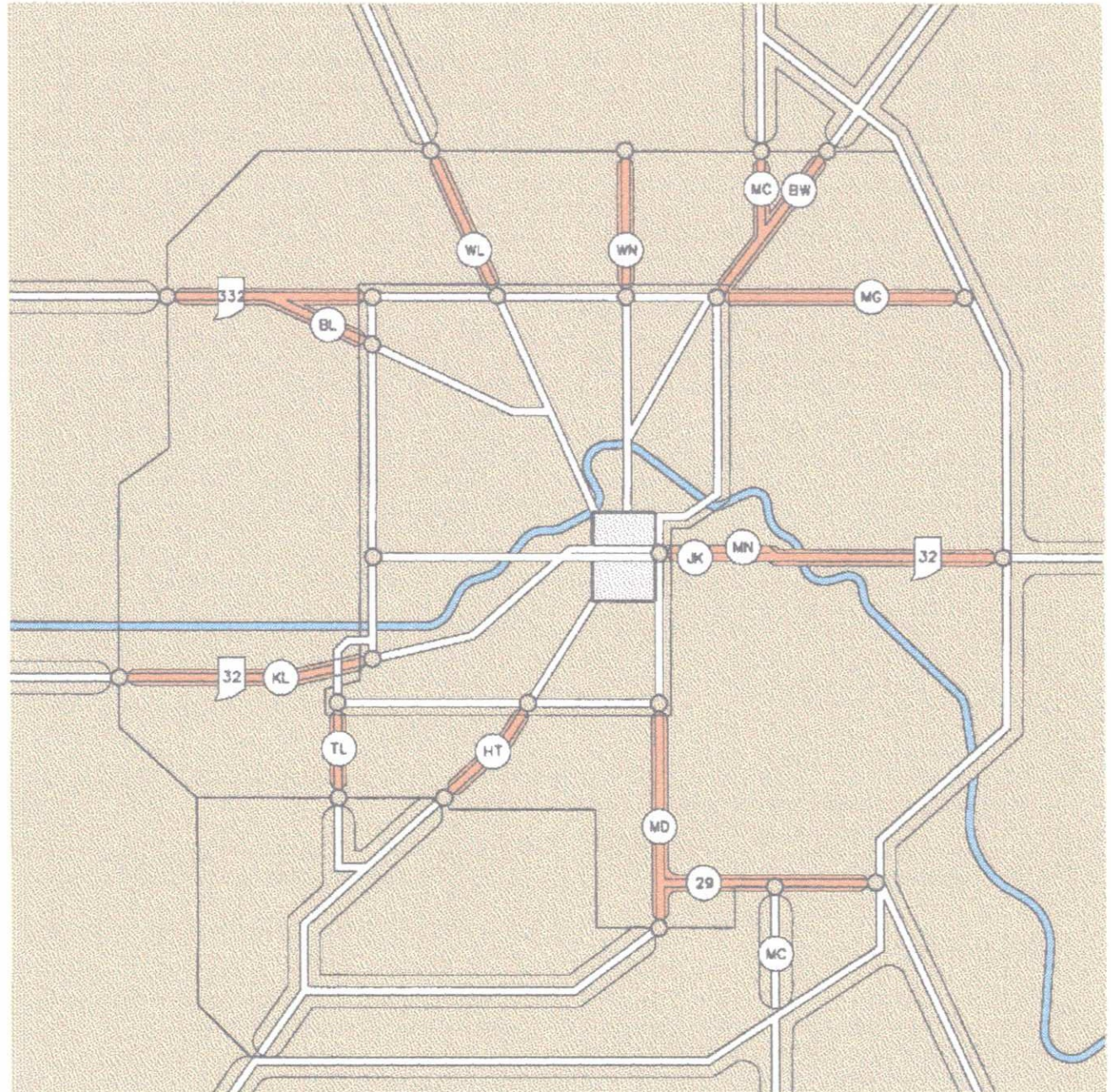


Figure 37 : Suburban Corridors

**STREET LIGHTING**

A sign of urbanization that traditionally begins at the corporate limits of cities is the beginning of city "street lighting." In Muncie, as in most cities, support for this lighting is provided in a rather ad hoc fashion. Light fixtures are situated on lighting-only supports, on lighting stanchions that also support utility lines, or on utility poles also supporting lighting fixtures; in some instances, utility poles sport: utility lines, lighting fixtures, street signage, and highway signage. The study team could not find an economically feasible alternative to this practice and consequently recommend its continuance. However, it should be noted that there are two aspects of this approach that contribute to the rather disheveled image for some segments of the suburban corridors. These are:

1. An apparent lack of coordination between placement, spacing, and location of lighting fixtures on lighting-only stanchions and lighting fixtures on utility poles, with lighting on differing supports occurring in a seemingly unplanned arrangement.
2. Lighting stanchions and/or lighting fixture-supporting utility poles that in some locations are several degrees off-vertical, oftentimes in opposite directions for adjacent stanchion or pole locations. The visual result for the motorist is the vista of poles and lighting reeling drunkenly along the roadway ahead.

Two relatively simple measures, a coordinated approach to the spacing of fixtures on whatever the type of support, and the "plumbing" of the lighting fixture supports (stanchions or poles), would produce a significant improvement in the quality of the image and the efficacy of street lighting within the suburban corridors.

**MOBILE ADVERTISING SIGNS**

It is recommended that the provisions for the control of this type of signage that were proposed for the county zoning ordinance (See p. 90 in the "Rural Portals" sub-section of this section) also be enacted for the city ordinance.

**MUNCIE DESTINATIONS SIGNAGE**

The desirability of signage on the suburban routes directing visitors to major destinations within the city was noted earlier in the report. There are four locations on the suburban routes where this type of signage is not only desirable, but crucial to visitor orientation (These locations are noted on Figure 38). The design of this signage should also be coordinated with the recommended Muncie city directional and limits signage system.

**PARKWAY TREATMENT**

The landscape treatment that is recommended for the Muncie suburban portals is that of an "urban parkway," a tree-lined urban thoroughfare. The specifics of this treatment—the spacing and types of trees that would be utilized in creating this "parkway image"—is beyond the scope of this study. But, it should be noted that this is the time at which the city can make an investment in the visual, and environmental quality of its suburban routes for the next century. A street planting program initiated now will produce suburban routes lined with stately trees by the year 2020 and will provide a uniquely attractive parkway image for the routes as well as carbon dioxide absorption and oxygen production during the summer and natural color display in the autumn. Consequently, it is recommended that a Master Plan be developed for the phased, per route, development of these suburban parkways. This plan should include:

1. An inventory of tree species currently existing along the routes
2. A planting plan for each route that recognizes the existing dominant tree species characteristics of each
3. An implementation plan phased for completion by the year 2000
4. Recognition of the need for ongoing care, maintenance, and possible replacement of plantings

LEGEND

Crucial Muncie Destinations  
Signage Locations

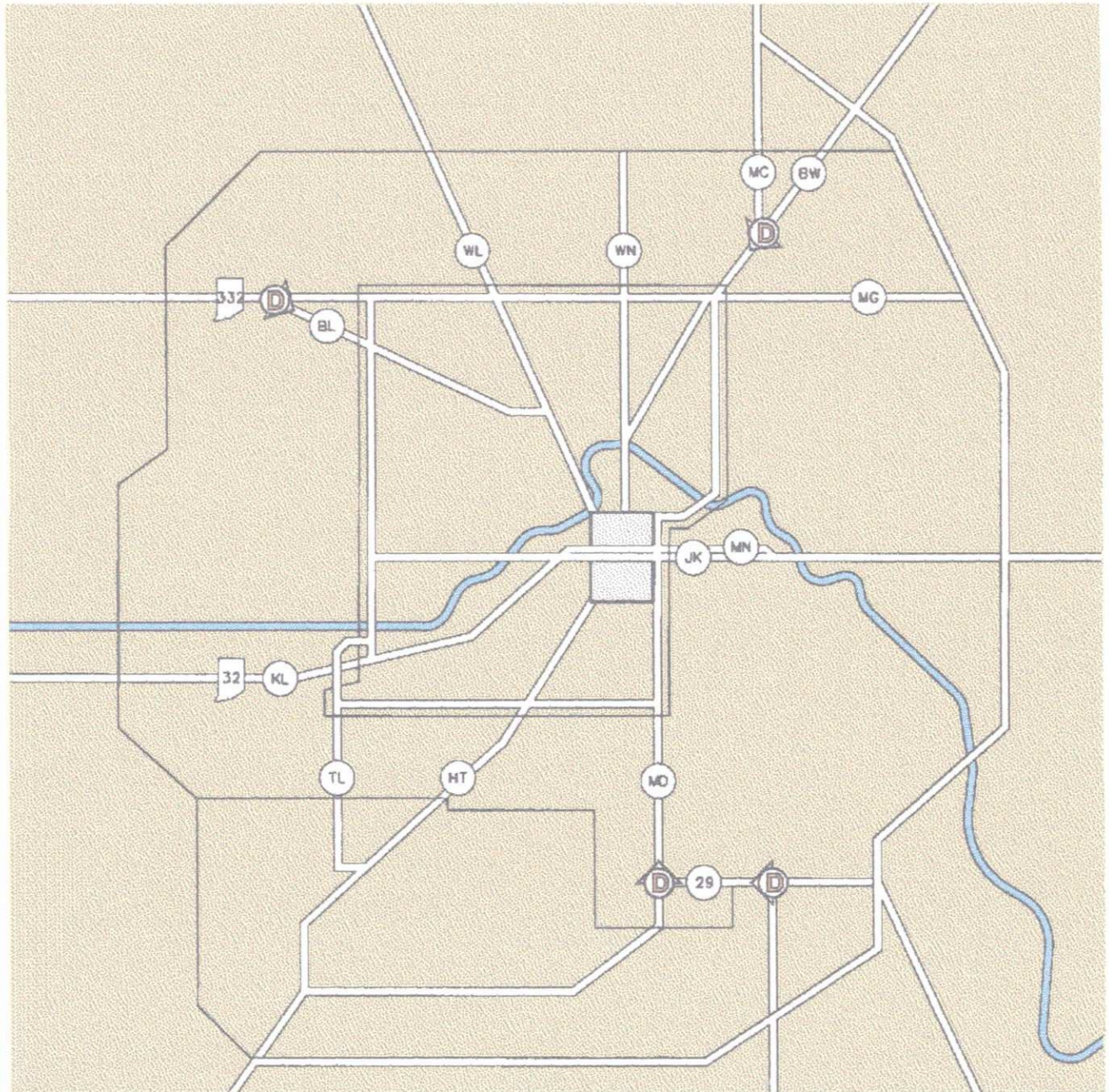


Figure 38 : Muncie Destinations Signage



The **Urban Portals and Corridors** are coded red in this illustration.

The urban portals of Muncie are the points at which the city begins to fully reveal its distinctive personality. The suburban areas of the city are more likely to be of disparate characters, strongly influenced by neighborhoods or isolated pockets of development and consequently perceived as "patterned," i.e., of the nature of a patchwork quilt, having an overall perceivable pattern, with distinct sub-patterns within the overall. On the other hand, the highly urbanized part of the city, by virtue of its concentration and evenness of development is "textured," having a character that could be compared to that of a multi-colored carpet. Consequently, the entry/exit points of this area are the points at which motorists perceive themselves as entering or leaving the urban "heart" of the city.

The following recommendations are intended to provide the elements that would impart an image of uniqueness and quality to the entry-exit points and routes within Muncie's highly urbanized area, i.e., those routes that are circumscribed by and abutting the "inner loop."

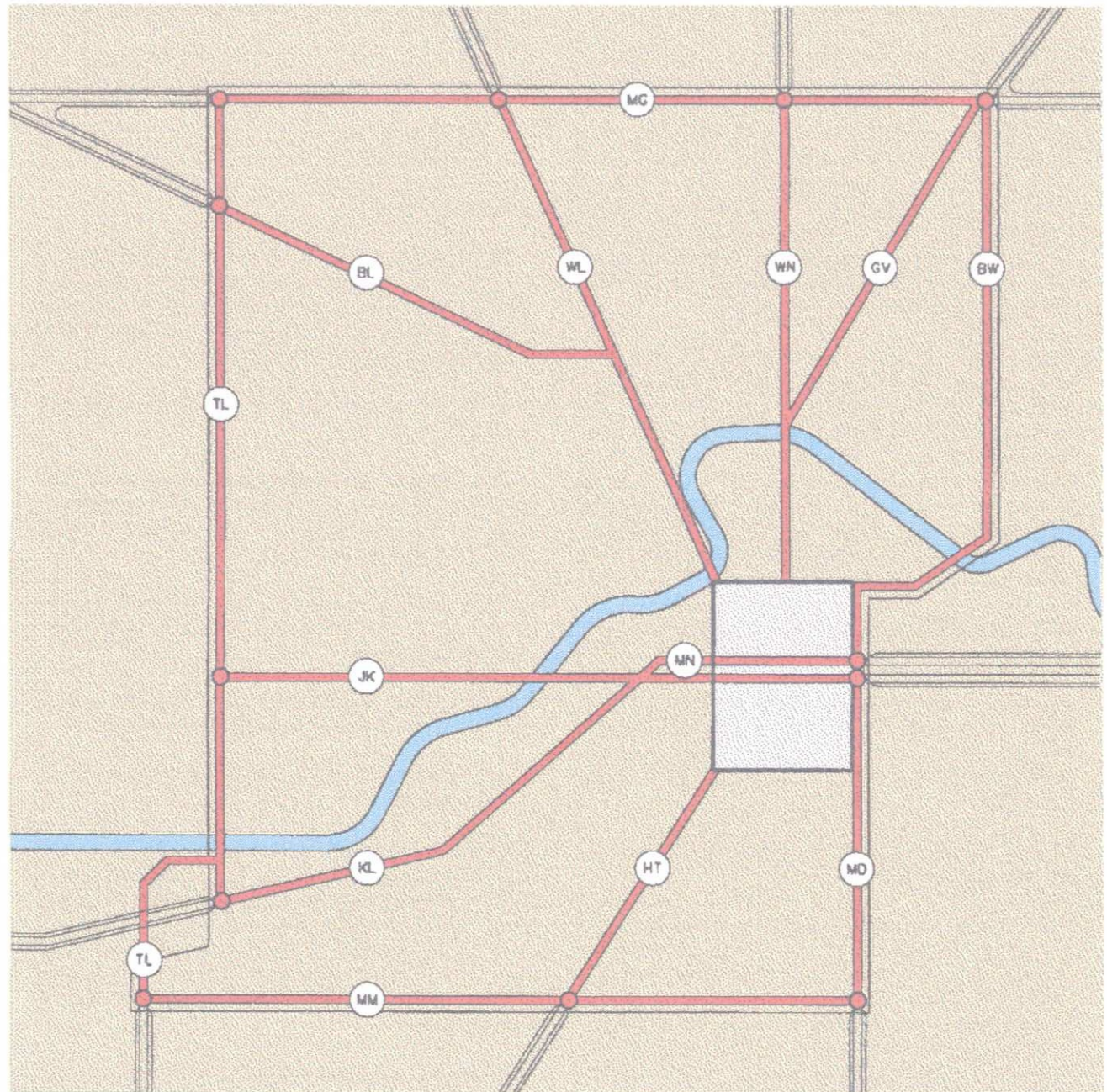


Figure 39 : Urban Portals and Corridors



**UTILITY POLES AND WIRES**

A dramatic change in the character of the urban routes of the city and a major enhancement to the quality of their image could be accomplished by the removal of utility poles and the burying of utility lines. The study team recognizes that this is a major and costly undertaking, but is of the opinion that there is no other single measure that would be of greater benefit to the image of these routes and a more emphatic proclamation to citizens and visitors alike that Muncie is a community that is uniquely proud of its appearance than would be the removal of utility poles and the "crazy-quilt" pattern of overhead utility lines.

Therefore, it is recommended that Muncie develop a "ten-year strategic plan," including a per-route order of implementation and an identification of funding sources, for the removal of utility poles and wires from its major urban routes. One aspect of this plan could be the assignation of high priority for utility line removal to those routes where improvements such as pavement widening would require the relocation of the utility poles. This would create an opportunity to "piggy-back" the burial of the lines with the "already-required" pole removal.

**CITY DESTINATIONAL AND DIRECTIONAL SIGNAGE**

The urban portals are critical points of orientation for visitors to almost every potential Muncie destination, and many are locations of highway directional signage and consequently are the points at which special measures should be taken to provide directional signage for these destinations.

The recommended approach to this signage would have the following aspects:

1. A single structure type would be designed for all the urban portals, a structure that would be supported at the four corners and have spanning elements at each of the four faces of the intersection. These structures would replace the system of poles and cables currently seen at many of these intersections; the vertical supports for the structure being at the current pole locations and the

spanning elements being at the current location of the cables.

2. The spanning elements of the structure would contain:
  - a. Traffic lights
  - b. Highway directional signage
  - c. Intersection lighting
  - d. Street Signage
3. Muncie destinations signage would be located on the vertical supports and be integrated graphically with the "Visitor Information Map" described previously in this report, employing a "follow the logos" approach to directing visitors to their destinations.

The utilization of a system of this type would yield the following benefits:

1. It would replace, with a single well-designed structure, the present haphazard image of a variety of types of supports for an uncoordinated arrangement of signs, traffic lights, and street lighting.
2. It would collect and present motoring orientational information and traffic control in a coordinated and understandable manner.
3. It would provide lighting not only for the signage but also for the intersecting streets for their entire width.
4. It would provide literal statements of entry and exit at the urban portals.

The combined effect of the removal of the utility poles and lines and the installation of the above described "urban portal structures" would be uncluttered well-lighted urban portals providing clearly presented, easily understood directions to motorists, thereby expediting traffic flow through these intersections and imparting a progressive and attractive image for these critical points on the Muncie roadway system.

There are four additional locations, noted in Figure 40,

where visitor destination signage is required at intersections of urban corridors. These are: at the point south of the river where Martin Luther King Jr. Boulevard meets Tillotson Avenue, at the intersection of Kilgore Avenue with Jackson Street, at the Granville Avenue / Walnut Street intersection, and at the intersection of Bethel Avenue and Wheeling Avenue (Assuming, as recommended later in this report, that this becomes an important intersection within the system). It is recommended that informational "kiosks" or "pylons" that closely resemble in design the vertical elements of the portal structures be placed at these intersections.

LEGEND

Muncie Destinalional Signage Locations

Signage on Portal "Overstructure"



Signage "Pylons"

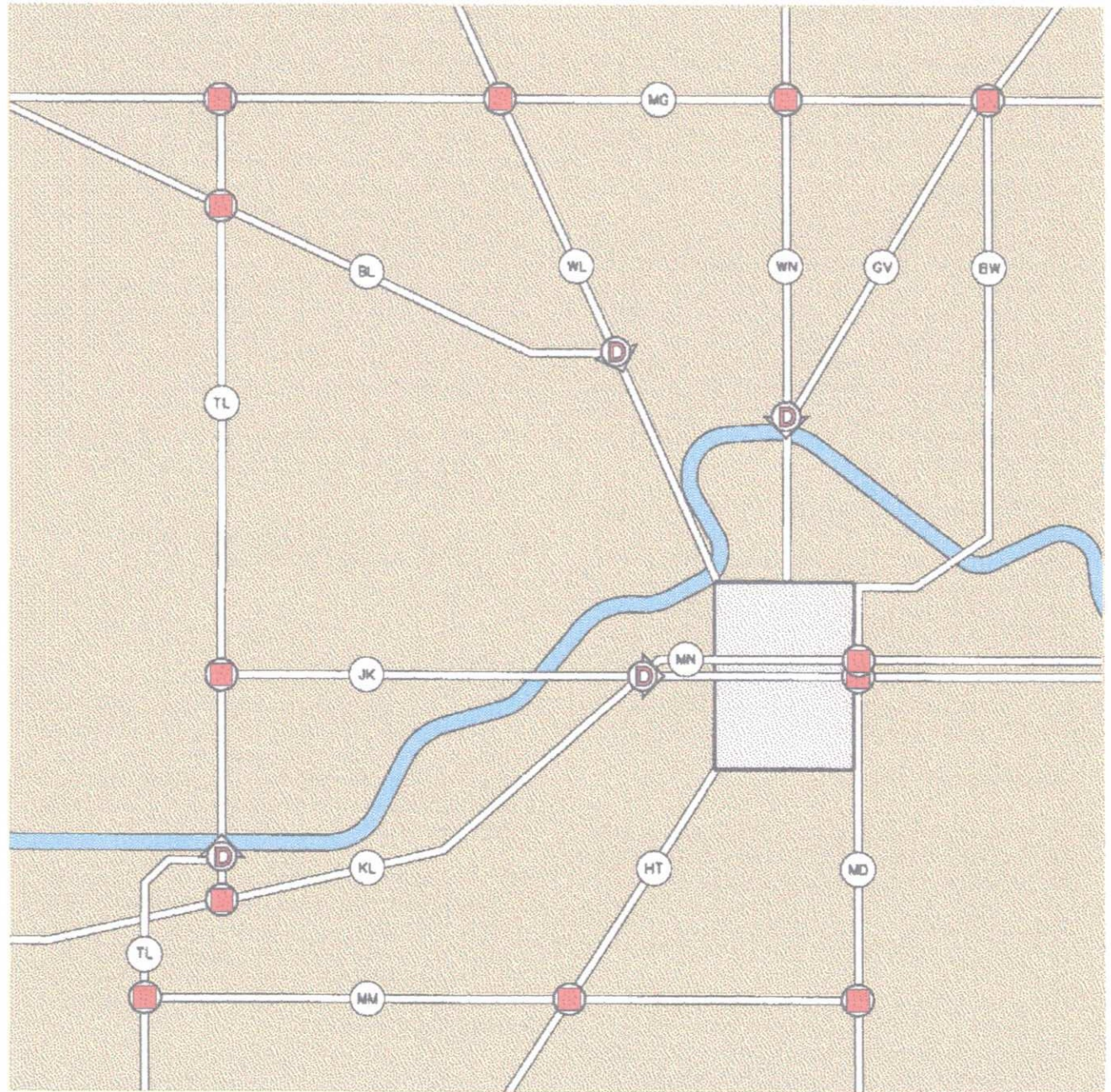


Figure 40 : City Destinations Signage

**MOBILE ADVERTISING SIGNS**

It is recommended that the provisions for the control of mobile advertising signs that were proposed for the county zoning ordinance (See p.90 in the "Rural Portals" section of this document) also be enacted for the city ordinance.

**STREET LIGHTING**

The elimination of power poles and the attached street lights would create an opportunity to clarify and enhance the image of urban street lighting. The lowest cost option would be simply "filling in" the gaps created by the removal of the utility pole-supported street lights with the street light stanchions of the type currently in place. The much better, although more costly, option would be to take advantage of this opportunity to replace all of the lighting stanchions along the major streets with a more distinctive, better designed and scaled type.

**VISITORS BUREAU BANNERS**

The Muncie events banner system initiated and implemented by the Muncie Visitor's Bureau imparts an air of festivity while communicating civic vitality via the announcement of current events, and consequently is most appropriately utilized to reinforce the image of the "urban core." Therefore it is the recommendation of the study team that the placement of these banners commence at the urban portals and be utilized on all urban corridors.

**LANDSCAPE TREATMENT**

The beginning of the urban character zone is the point at which a "different" landscape treatment should be developed, a treatment that should signal the beginning of the urban character zone of the city while also reinforcing the unique image of this zone. The recommended elements of this treatment are as follows:

1. That the "parkway" approach recommended for the suburban corridors also be employed for the urban portals and corridors. However, it is recommended that the "urban" street trees be of lesser height than their

"suburban" counterparts, thus enabling them to be more easily inserted into the concentrated commercial and residential fabric of the urban character zone. Also, it is recommended that those species be selected that provide spring blossoms, thereby adding spring color to the image of the urban routes. And, finally, it is recommended that the city develop a ten-year phased plan for the implementation of a tree planting program for the urban corridors that is a part of the process outlined for the suburban corridors.

2. That the following be utilized on a per route basis to the degree permitted by route right-of-way width and use characteristics:
  - a. Hedge or shrub planting lining the route
  - b. Special "park-like" treatment of bus stop/shelter areas (Including bench seating not containing commercial advertising)
  - c. Earth berms as screening for large parking areas or other less attractive visual aspects.
  - d. Sidewalks
  - e. Bike lanes

Because the urban routes differ significantly in width of right-of-way, type of use, and character of existing plant material, each route would require a focused study to determine the extent to which these additional enhancements could be incorporated into a total landscape treatment.

Footnote: Should the concept of a "City Core District" be pursued, the landscape treatment recommended for the primary urban routes should be extended to the other important routes within the district, i.e., Neely, Riverside, et al, thereby providing an extension of the urban landscape treatment while developing an identifying and unifying element for the district.



## SPECIFIC PROBLEM / POTENTIAL AREAS

The following are six specific segments or points within the county/city primary roadway system that were determined to be impedances to the smooth flow of traffic, and/or opportunities to improve the system.

**The SR 332 Outward March of Traffic Lights**

SR 332 is undergoing a westward migration of commercial development. This development is accompanied by a westward march of traffic lights that started at the Bethel Avenue (250 W) intersection and has now reached County Road 400 west—an addition of three locations west of Tillotson where motorists must periodically come to a full stop/wait (Shown in Figure 41). Motorists are already beginning to opt for alternative routes to and from I-69 because of the traffic congestion on SR 332 created by the combination of commercial development and the necessity that this development has created for more traffic control via traffic lights.

If SR 332 is to be a functional link to I-69, additional commercial development to the west beyond CR 300W—excepting the I-69 interchange—must be prohibited. Otherwise, the proliferation of traffic lights will continue (These potential additional traffic light locations are also noted on Figure 41) and SR 332 will become a congested, non-functional, “local shopping street”, I-69 to Muncie or Muncie to I-69 motorists will find other, less congested and constricted, routes, and the original purpose of this four-lane connection to the interstate system will be negated.

**Wheeling Pike**

Wheeling Avenue becomes Wheeling Pike at the city limits. It has been proposed as a major route in the county system because it is the only existing vehicular route through the northwest quadrant of the county. It provides the only logical route for residents in this area—of Stockport, Wheeling, and other areas—to Muncie and to connections to I-69.

For these reasons, it is proposed that Wheeling be as

signed the status of “County Highway,” the implication being that it be assigned the highest priority by the county for roadway maintenance and snow removal.

**SR 67 SW Link**

The connection from SR 67 to the Tillotson Avenue extension is convoluted and poorly designed and defined. If a smoothly functioning route from SR 67 to the west side of Muncie is to be provided, this linkage must be improved. This will become especially critical if SR 67 becomes a dual-lane highway. The recommendation is that a new interchange be developed in the vicinity of CR 300W and routed along the current alignment of CR 325W to CR 250S and then along the west side of Buck Creek, connecting with the Tillotson extension north of Cornbread Road. This proposed linkage is diagrammed in Figure 41.

In the interim—or in the absence of a new, better, link—Muncie destination signage of the type recommended for the suburban and urban routes should be placed on the current link at the two locations shown on Figure 41.

**Bethel Avenue between SR 332 and Tillotson**

Bethel Avenue between SR 332 and Tillotson has become a major connector between SR 332 and Ball State University and Wheeling Avenue. It is of inadequate width for the traffic volume that it is expected to carry. It should be widened for its entire length if it is to provide an effective link from SR 332 to the University, the Fairgrounds, Minnetrista Cultural Center, and the downtown.

**Bethel Avenue/New York Avenue/Centennial Avenue**

There are two problems at this point in Bethel Avenue. The first is that the confusing intersection of three high volume traffic carriers—Bethel Avenue, New York Avenue, and Centennial Avenue—creates a traffic situation equivalent to a “six-way stop.” The second problem is the misdirection of traffic that has as destinations, areas south of the Bethel Avenue/Wheeling Avenue intersection, e.g., the Fair

grounds, Minnetrista Cultural Center, and the downtown. This traffic is directed north along Centennial Avenue—by the priorities of street widths and signage—before it can turn south on Wheeling Avenue.

The recommendation is that Bethel Avenue be designated as the priority route, that all stop signs be oriented giving Bethel Avenue preference, that the Bethel/New York/Centennial intersection be clarified, and that Bethel from Centennial to Wheeling become the priority link to Wheeling Avenue.

**Flooding of the Madison Street Underpass**

At periods of very heavy rainfall, the Madison Street underpass of the Norfolk and Southern rail line is rendered impassable by the storm water flooding. It is unlikely that there is a low cost solution to this problem; the cost of the most obvious solution, a separate storm water sewer line from this area to the river, could exceed \$250,000 and might be \$500,000, or more. The only observation that the team can offer in this regard is that because of its importance as the southeast leg of the “inner loop,” Madison Street should not be allowed to continue to suffer periodic closure due to high water levels in this underpass, especially given the fact that at times of extremely heavy rainfall, motorists are already experiencing poor driving visibility and pavement surface conditions and as a consequence are most desirous of reaching their destinations and least tolerant of a blockage in their route.

LEGEND

SR 332 Traffic Lights

Existing Location



Potential Locations



(If development westward is allowed to continue)

Wheeling Pike / "County Highway"



Improved SR 67 SW Link



Bethel Avenue Narrowness



Bethel Avenue Misdirection



Madison Street Flooding



Muncie Destinations Signage

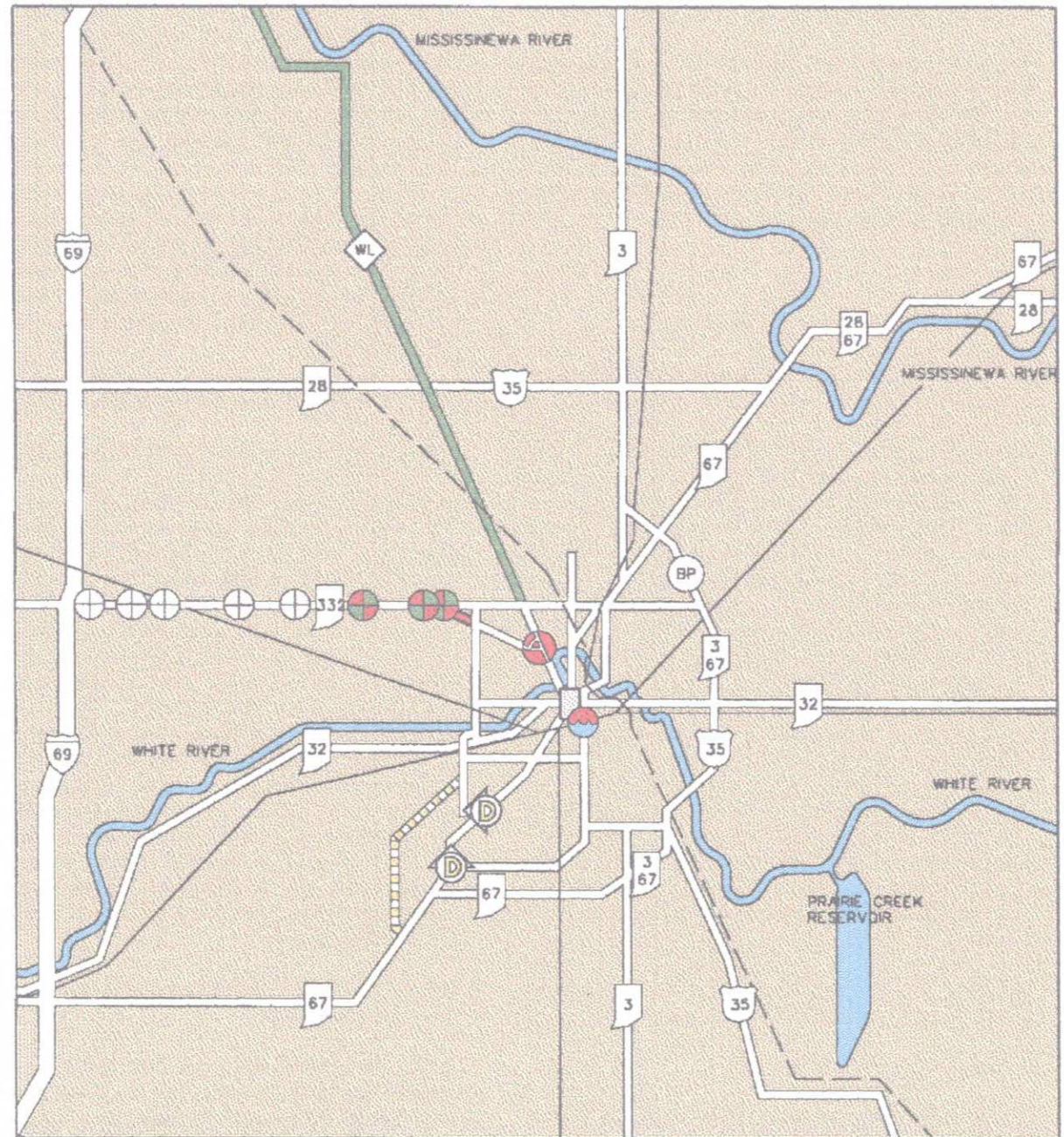


Figure 41 : Problem / Potential Areas

**ACCESS OVERKILL AND DISORIENTING SIGNAGE**

There are portions of both the urban and suburban routes that are suffering impedances to traffic flow as the result of the interrelated problems of excessive curb cuts and a confusing proliferation of signs. The route segments that are the most severely impacted by this combination are shown in red in Figure 42. The alleviation of this problem can be found in four interrelated remedies.

These are:

**1. Decrease the number of access points**

There are numerous examples of single businesses with three curb cuts, two—sometimes single building-occupying—businesses with four or more, and a linear string or cluster of four or more adjoining businesses with a curb cut for each business into what is, or could be, a single parking lot serving all of these businesses. In a majority of these cases, these multiple accesses can be reduced to two access points, one lane for entrance, and two adjacent lanes—a left turn and right turn lane—for exit. There are, of course, special circumstances which would prohibit the concentration of entrance/exit points, e.g., some franchise food locations with drive-up windows would in many instances be unable to function with fewer than three access points. On the other hand, there is no reason why a food franchise, even with a drive-up window, should have, for example, four openings on a major thoroughfare other than as a result of poor internal organization of the site, i.e., the business is essentially using, and congesting, a major route by utilizing it as an access lane for different locations on the same site, a function that should be accommodated within the business's property, not outside it.

In this context of "access overkill" two special situations should be noted. These are the following:

**Gas station conversion**

Gas stations are granted multiple accesses on each

side of a corner location, many of which are often within 10' to 20' of the intersection. Accepting this as a special accommodation for the needs of our motorized society—although one questions the wisdom of this practice when attempting to exit a gas station located at an intersection clogged with rush hour traffic—does not mean that the same access provisions should be permitted for a use that replaces a gas station. There are numerous examples of vacated gas station sites being occupied by a different use. When this occurs, all but one access to the site should be eliminated, and this one access should be at the maximum distance from the intersection that the limits of the business property will accommodate.

**Major thoroughfare as a parking lot access lane**

There are two examples of this problem, one more serious than the other. In general, this is the practice of paving a parking lot for its entire extent up to and abutting the roadway pavement, making the public thoroughfare, either visually or literally a part of private parking. The less objectionable of these is in situations where adequate area is available for a defined access point and internal parking lot circulation, but the "pave up to the street" approach has been adopted as an expedient, less expensive, option, making the public route visually a part of the parking lot. The more serious of these is where there is enough space for parked cars, but not for an internal access lane, a condition which in operation makes the public route an actual part of the parking lot. Both of these situations must be eliminated. In the first instance, curbs and a defined entrance, as a minimum, should be required. In the second, the parking lot should be eliminated. Moreover, both of these practices should be absolutely disallowed in future development.

**2. Develop linkages between adjoining businesses or business groupings**

There are locations along suburban and urban routes where separate businesses could be joined by providing short paved linkages between them. In some of

these locations, motorists have developed their own, albeit muddy and potholed, connections. It would appear advantageous to encourage these connections, for three reasons:

- a. Allowing motorists to move between separate adjacent destinations would partially relieve the traffic congestion created by motorists leaving one business location only to turn into another one "next door" or "around the corner."
- b. In combination, a number of these "short circuits" could provide an internal connection to a traffic-lighted intersection, thus giving the motorist controlled access to the major thoroughfare while removing the number of "turn-outs" and "turn-ins" on the thoroughfare.
- c. This practice could increase custom; in two ways. First, if a "returning-from work" motorist could plot a course for picking up, for example, a few grocery items, the dry cleaning, and a home video for weekend viewing that would involve only short "hops" between internally linked businesses rather than three separate "dives" out of and into the rush hour traffic of the thoroughfare, he or she would favor the business groupings that provide this convenience. Secondly, people shop from their car windows and creating 15 MPH "drive-by" traffic via these linkages would provide individual businesses opportunities to convey information about themselves—their "wares" or special sales or campaigns—that would not be seen, let alone understood, by the motorist moving at 30 MPH to 40 MPH on the thoroughfare.

Further, it is suggested that if obvious "short-circuits" do not exist, they might be created by developing short access lanes parallel to the major route between businesses.

LEGEND

Access and Signage Overkill Areas 

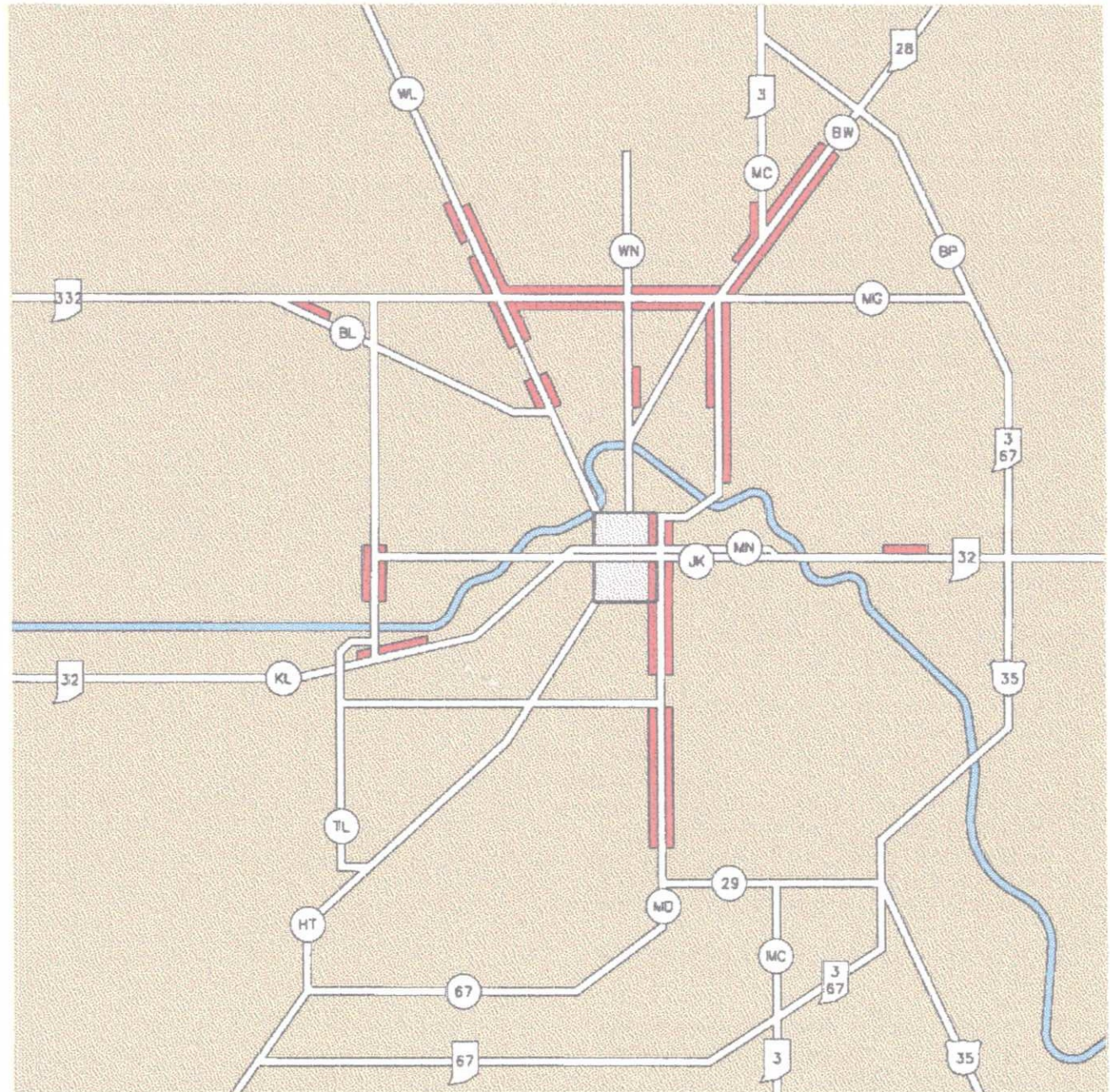


Figure 42 : Access and Signage "Overkill" Areas



In general, the advantages of decreasing the number of points where motorists can exit or enter the major urban thoroughfares are:

- a. A decrease in traffic entering and leaving the thoroughfare, thus alleviating the congestion of those motorists "looking for" exit destinations and inserting themselves at slower speeds into the traffic stream
- b. A diminishing of the traffic hazard that is the result of motorists entering and leaving numerous points on both sides of a high traffic route
- c. More parking area; eliminated accesses can be converted to parking spaces
- d. Higher visibility entrances to businesses or business groupings; the elimination of some entrances/exits will make the remaining accesses more visible and "important"

**3. Concentrate signage**

The multiplicity of signs tends to diminish the effectiveness of any individual sign, creating for the motorist a confusing image of "signage" rather than an understandable image of identifiable "signs."

As a consequence, the recommendation is that individual street signs for pairs, triads, or groupings of adjacent businesses be aggregated in one location. Further, it is recommended that an "identity" be developed, by name and place, and symbol or logo, for these groupings. That is, a place name and address, and a logo, would be promoted via advertising as the "place" where a specific business could be found, and potential customers could be directed to "look for" a specific group identity logo.

This approach would have the following beneficial effects:

- a. More real identity for individual businesses; fewer sign locations, giving each individual sign or sign cluster higher visibility

- b. Less "sign" competition with directional signage, thus giving this important motoring information more visibility
- c. Reduction of visual clutter and consequently an enhanced image for the roadway

**4. Locate the signage for individual businesses or sign "clusters" for business groups at site entrance points**

This approach would provide the motorist with two mutually reinforcing cues: the identity of the business or business group and the point of access to the business, thus eliminating the motorist's visual/mental "groping" for first the identifying sign and then for an entrance located separately from the sign.

These measures in combination with the landscape, lighting, signage treatments recommended earlier in this report, would have the twofold benefit of improving traffic flow while dramatically enhancing the image of the city's major arterial routes.

**MOTORIST ORIENTATIONAL INFORMATION**

The effectiveness of motorist orientational information directly affects the efficiency of the function of a roadway system. Poor or missing directional information confuses motorists and consequently impedes traffic, whereas complete and timely information clearly directs motorists and facilitates the smooth flow of traffic. The issue of motorist information—signage—has been addressed in a number of contexts in this report. The following is a reiteration and summary of previous “signage” recommendations as well as one additional aspect of route signage recommended for attention.

**1. County/City Signage System**

The following types of county/city signage have been recommended to be included in a single design commission or competition:

- a. County Border Sign
- b. Directional and Identification Signage for Visitor Information Sites
- c. County Points of Interest Signage — natural features, recreational sites or areas, etc.
- d. Muncie Directional Sign
- e. Muncie City Limits Sign
- f. Muncie Destinations Directional Signage (a sign pylon coordinated compositionally and informationally with the urban portal “overstructure”)

The advantage of these signs being coordinated compositionally, i.e., variations on a single “theme,” while recognizing the differences in context—rural, suburban, or urban—would be that county and city travelers would be provided with a consistent set of directional information while at the same time receiving contextual cues as the signage varied to fit the rural, suburban, or urban character of the area in which it would be located.

**2. Urban Portal Structure and Signage**

The urban portal structure and signage should be either the subject of a separate design commission or competition or a part of the above-recommended signage commission or competition. However, if separate commissions or competitions were to be developed, they should not be concurrent. One should succeed the other, thus providing the opportunity for the second design to be required to coordinate compositionally with the first. Moreover, the portal structure signage should be required to graphically incorporate the visitor information map and logo system detailed earlier in this report.

**3. Street Identification Signs**

In traveling and evaluating the character of the city’s major routes, the team observed that a significant number of the signs identifying intersecting streets were, variously: canted at a severe angle from the horizontal, bent, or otherwise damaged, turned ninety degrees from their original placement, or, in some cases, missing altogether. For the motorist, disorienting or missing street signage creates a confused slowing while groping for the intended turn and consequently creates impedance to traffic flow. And, the disheveled appearance of this signage imparts an unfavorable image for the city.

As a minimum, all of the current street identification signs on the major routes should be restored to their original condition. Optimally, special street identification signage should be installed along these routes, signage that is more substantial, better designed and of a scale more suited to the speed of traffic. Larger, well-designed and well-maintained signs would enable motorists to identify and move quickly onto intersecting streets, thus expediting traffic flow, and would communicate a much more favorable impression of the quality of the community.

**ROADWAY PAVEMENT CONDITIONS**

On the whole, pavement conditions on the county’s major routes outside Muncie are in good condition. A notable exception is Wheeling Pike north of SR 28. Major segments of this route are in need of resurfacing.

On the other hand, the team observed that many areas of the city’s major routes are in need of pavement repair or replacement. In this context, the team would note only that well-maintained pavements are the minimal expectation of a city roadway system, and that poor pavement conditions create traffic slowing and hazards—and damage to vehicles— and communicate an “untended”, and consequently unprosperous, image for the community.



The **Suburban/Rural Corridors** are shown in yellow in this illustration.

These route sections exist in a zone that is searching for a character: either suburban or rural. The recommendation, in general, is that areas within this zone be "pushed" or "guided" toward an understandable and distinctive character.

The suburban/rural corridors have been determined to fall into two categories. These categories are: "The Protected" and "The Propelled." An explanation of these two categories and recommendations relating to each are provided in the following narrative and illustration.

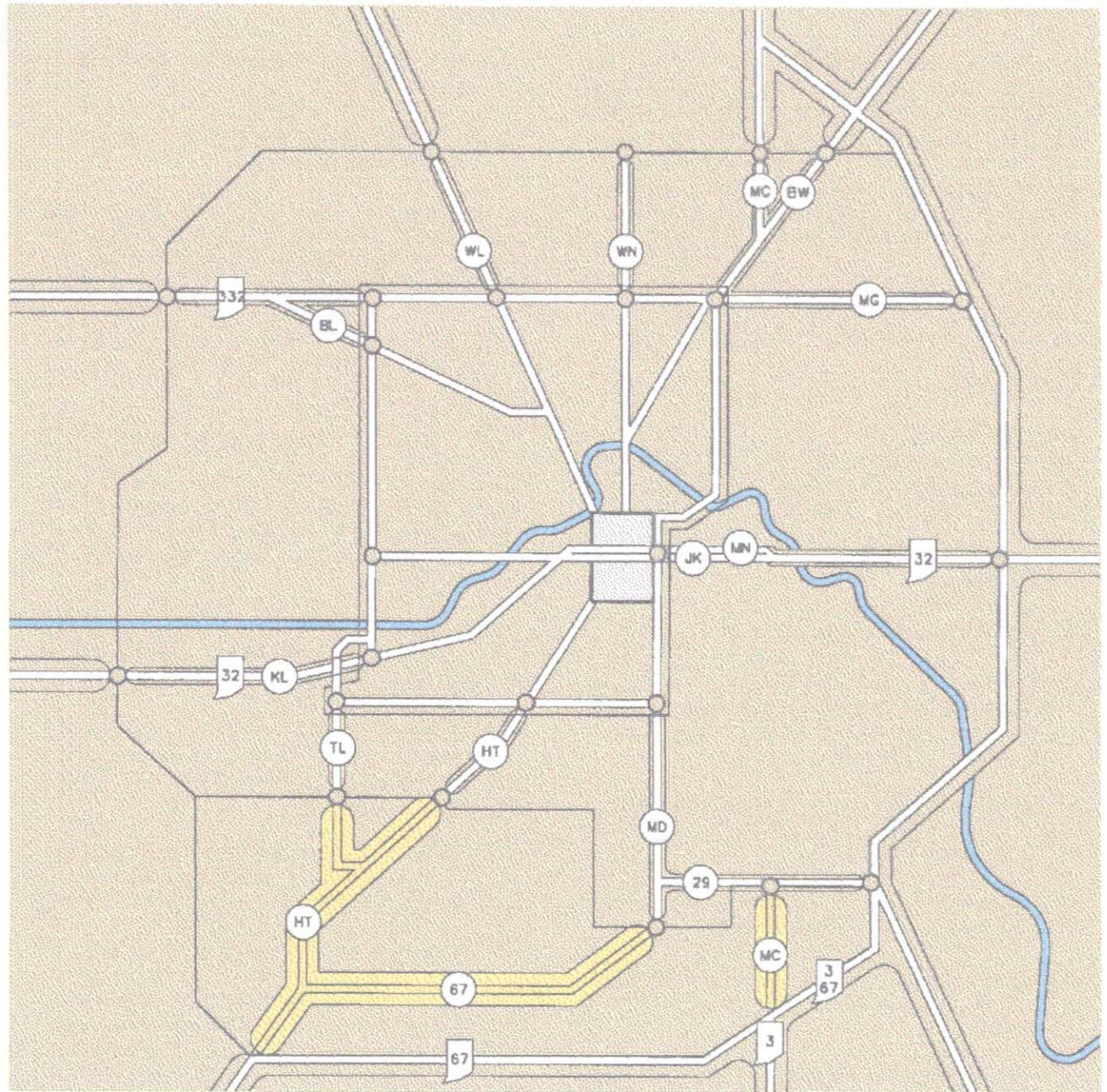


Figure 43 : Suburban/Rural Character Zones

**“THE PROTECTED”**

Despite the fact that its agricultural character within a four-lane highway—the By-pass—conveys a contradictory image to incoming motorists, the study team determined that the suburban/rural segment of Macedonia Avenue, by virtue of its pure and unique characterization of Indiana and midwest agricultural vernacular, should be preserved in its current use, and that any efforts to convert this route segment to alternative uses should be prevented.

Further, it is recommended that in order to further purify the rural “jewel-like” quality of this route segment, three existing commercial signs be removed.

**“THE PROPELLED”**

The other three routes of the suburban/rural zone are within an area that has more unrealized industrial development potential than any other in the county. The descriptors of this area are as follows:

1. The largest expanse of industrially zoned property in the county
2. Convenient rail and rail siding access
3. Close proximity to four major highways—the By-pass, SR 67, SR 3S and US 35 SE—and short-interval access via SR 67 to I-69 and via the By-pass to SR 32E, SR 67 NE, and SR 3 N
4. Buck Creek, a potentially developable natural amenity circumscribing the area on a portion of the west boundary, on the north, and on the east
5. The abandoned stone quarries on Cornbread Road as a potentially major recreational amenity
6. An attractive and substantial green space and recreational site, Crestview Golf Course, on the east side of the area
7. A nearby shopping center, Southway Plaza, also on the

east side

8. A campus of Indiana Vocational Technical College located within the area
9. A significant area of undeveloped land available for conversion to appropriate uses

Given these available opportunities, it is recommended that a Master Plan for a “Planned Industrial Development” be collaboratively commissioned by the county and the city for the area circumscribed by: Buck Creek, the new SR 67/ Muncie link ( The “Buck Creek Parkway” recommended in the previous subsection) and the By-pass. This Master Plan might consider the following scenario:

1. The potential of a linear park along Buck Creek of a depth that would provide facilities for tennis, softball and baseball, children’s playgrounds, and other recreational and outdoor leisure uses, and incorporate, visually, Crestview Golf Course, the end result of this park development being the provision of much-needed recreational areas for residents of the south side of Muncie as well as for,
2. additional residential development that would incorporate existing residential areas and be integrated with the Buck Creek linear park, and
3. provide housing for employee’s of the industries that would be persuaded by the attractiveness, amenities, and available infra-structure of this “Buck Creek Planned Industrial Community,” to
4. locate in the industrially-zoned “core” of this development, an area which comprises over 40% of the over 4,000 acres of this proposed development.

The basic premises of this recommendation are that:

1. The industrial development potential represented by the combination of underutilized infra-structure, industrially-zoned property, developable area, natural features, and educational and training facilities in this area

is unrivaled by any other in the county.

2. This area is potentially an extremely important economic asset for the city and county.
3. The growth and vitality of the Industria Centre and Southway Plaza will not succumb to piecemeal measures, but must be the result of a comprehensive strategy.
4. An integrated development of the type described would propel areas of the county routes that are now negatively impacting motorists into ones that would impart a positive, prosperous, image.

LEGEND

- Limits of proposed "Buck Creek Planned Industrial Community"
- Muncie Corporate Limits
- Areas Zoned for Industrial Use
  - Industria Centre
  - Other Areas
- Rail
  - Main Line
  - Siding
- Abandoned Quarries
- Crestview Golf Course
- Southway Plaza
- Major Corridors 
  - Buck Creek Parkway
  - By-pass
  - Hoyt Avenue
  - Memorial Drive
  - Business 67 / Madison St.
- Local Connectors 
  - Cornbread Road
  - Cowan Road
  - Tillotson Extension
  - Walnut Street
  - 26 th Street
  - 34th Street

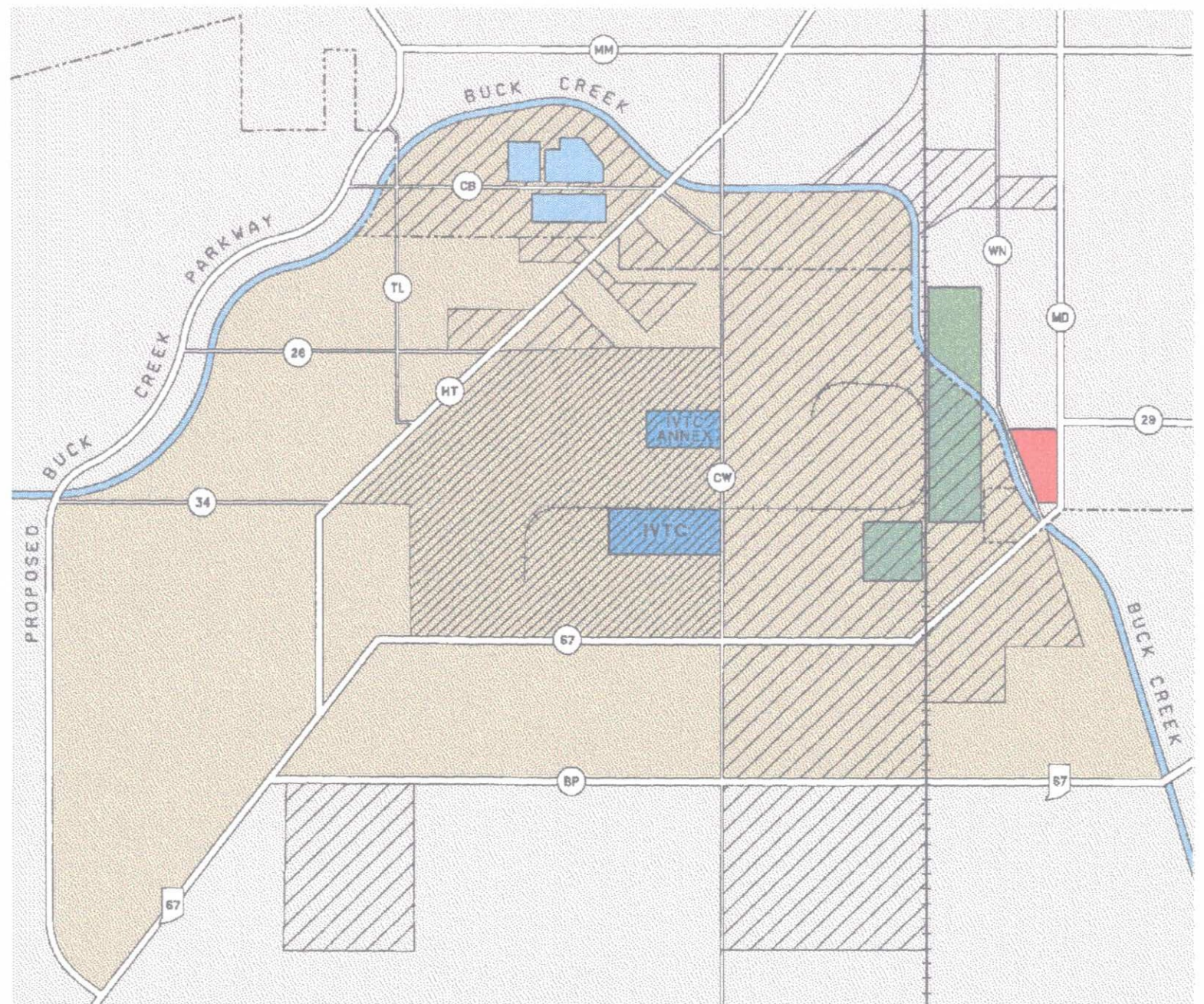


Figure 44 : Buck Creek Planned Industrial Development Area



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## CASE STUDY





The following is a visual case study of one of the routes of travel between the county border and downtown Muncie. This route includes as components: SR 332 between the county border and Tillotson Avenue, McGalliard Road between Tillotson Avenue and Wheeling Avenue, and Wheeling Avenue between Tillotson Avenue and the river. This route includes almost all of the basic route elements described earlier in the report. These are, as coded in this illustration: 1) Rural Portal at the county border, 2) Rural Portal at I-69, 3) Rural Corridor enhancement, 4) Suburban Portal, 5) Suburban Corridor, 6) Urban Corridor, (Inner Loop), 7) Urban Portal and, 8) Urban Corridor (Inner Connector). The succeeding "before and after" images are intended to convey the beneficial impact that the implementation of the recommendations of this report would have on segments of this specific route, and by implication on similar segments of other routes.

The specific sign elements, lighting fixtures, intersection structures, etc. illustrated are representational only. As noted earlier in this report, the actual design of these elements should be the subject of a comprehensive design commission or competition. Moreover, the placement of this signage and other streetscape elements including trees, shrubs, hedges, etc. and the "cleaning up" of "over-accessed" and "over-signed" routes should be the subject of per route master plans.

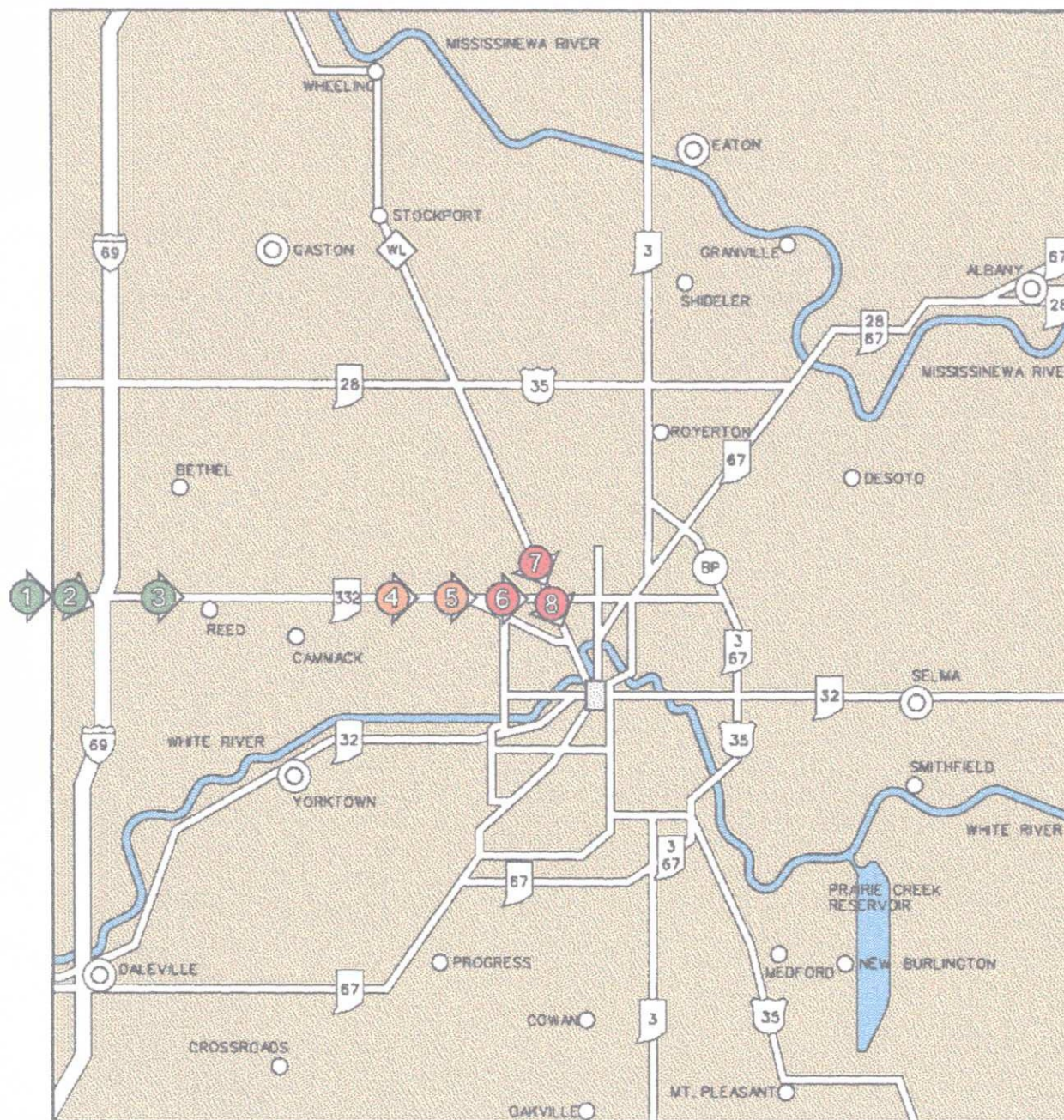
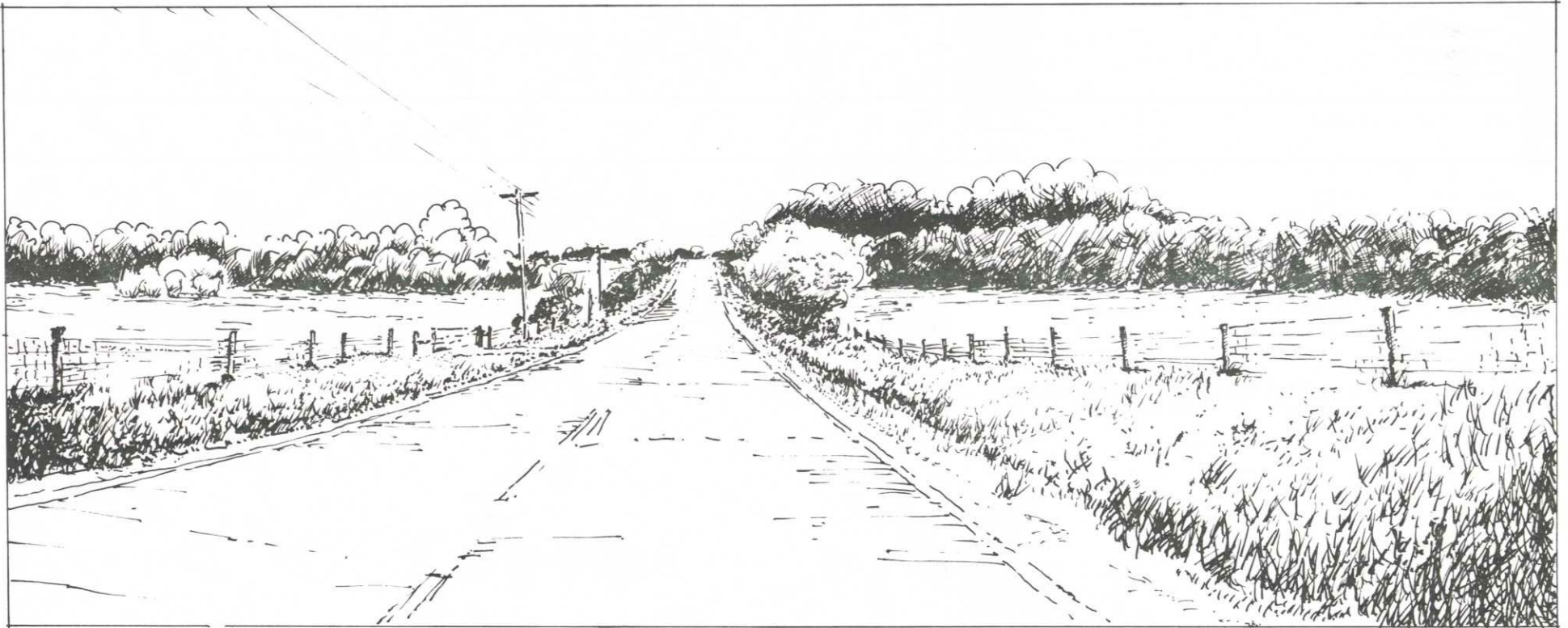


Figure 45 : Case Study Components

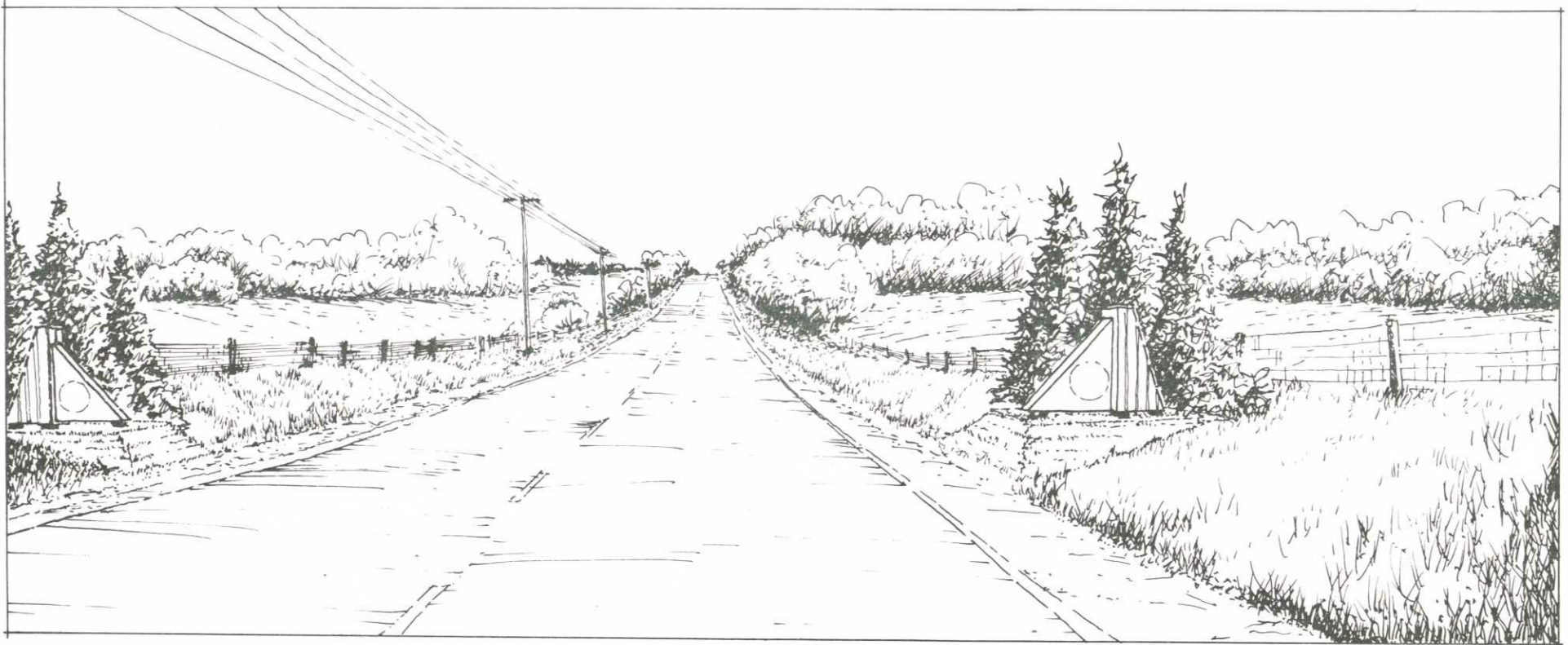


**Present**

No indication of entry/exit to Delaware County, hence no sense of arrival at or departure from "a place"

"Empty" Image



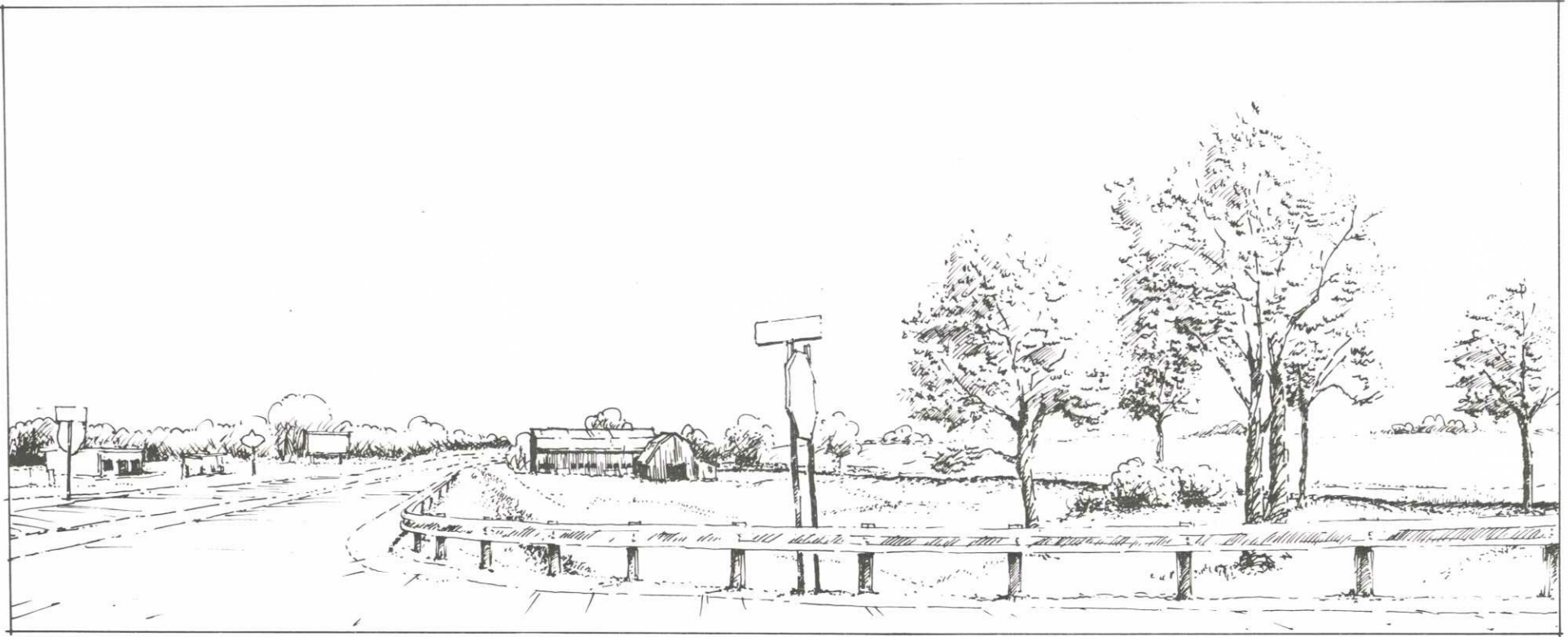


**Potential**

Addition of entry/exit signs with planting accents

Insertion of informal shade tree clusters near county boundaries to frame roadways with "fence row" imagery

Sense of "arriving" or departing a "place" imparted



**Present**

Existing rural imagery is pleasant and interesting

Intersection has unique natural features in its southeast quadrant

No expression of the character of Delaware County/Muncie for motorists using or passing through this interchange

No sense of entry/exit at the interchange





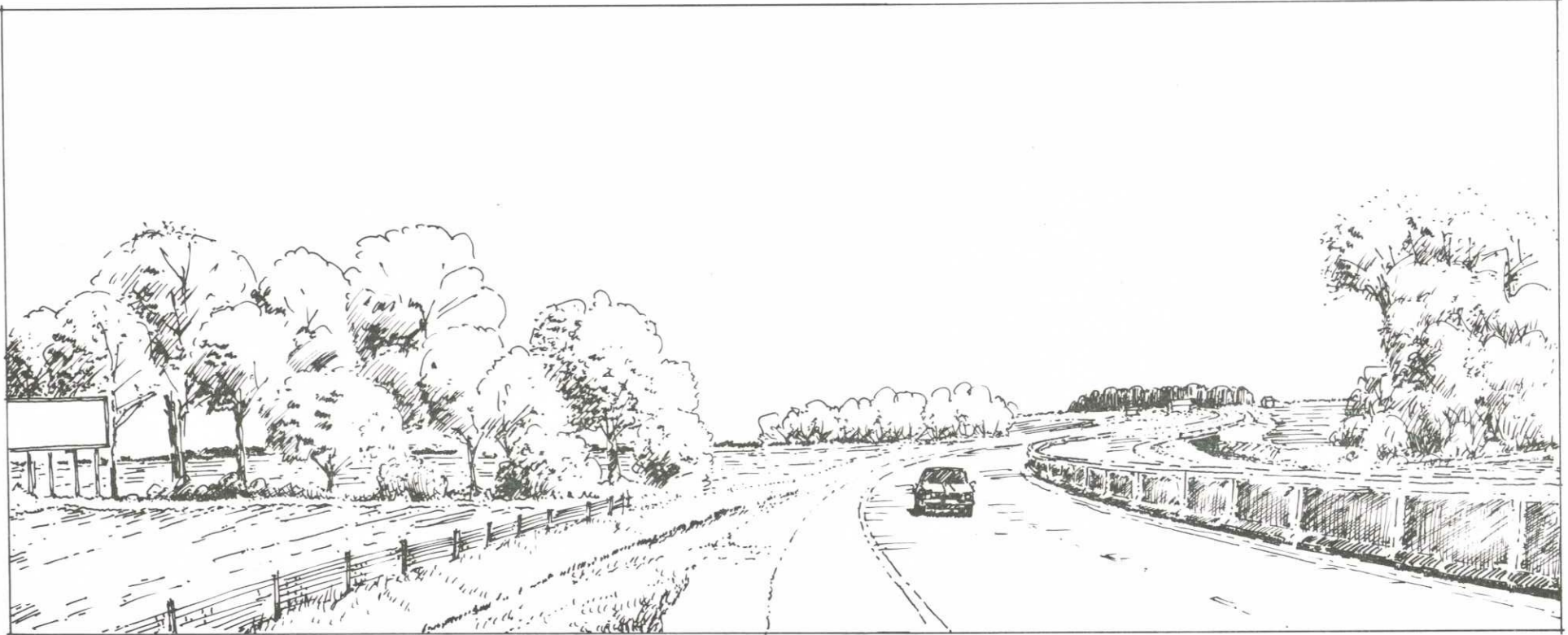
**Potential**

Establishment of image of "rural village" for new commercial development

New development carefully integrated within rural landscape

Potential to create roadside park, visitors center, and other community services while conserving rural imagery

Potential to demonstrate natural environment enhancement (wetland restoration area)



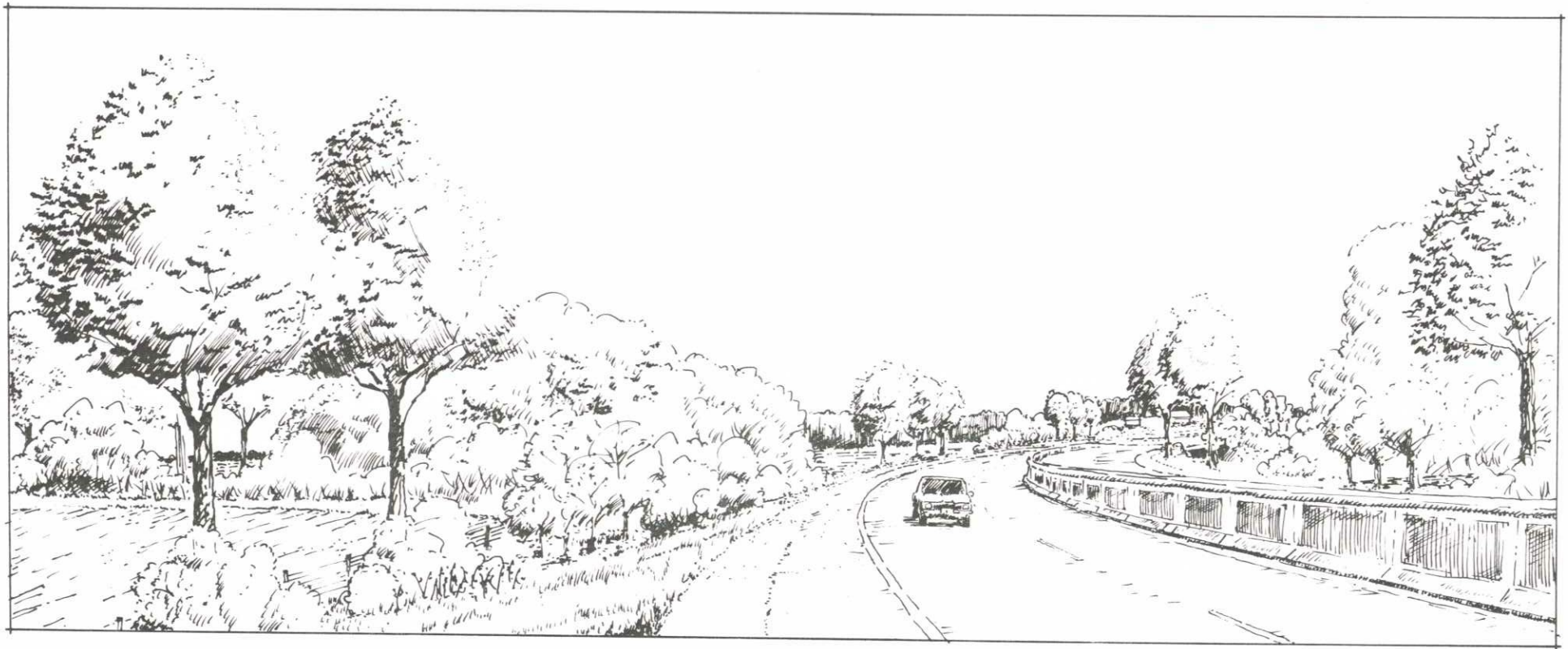
**Present**

Fence rows planting and woodlots are sparse

Billboards visually conflict with the rural landscape

Stream and ditch crossings are barren



**Potential**

Use of state highway approvable plant material (shrubs, small flowering trees) within highway easements to reinforce fence row and woodlots edges (forming more emphatic "green mini-portals")

Addition of occasional cluster of large trees where approved to resemble settings often seen along small county roads

Phase out of billboards in rural zones

Special "naturalized" plantings of native shrubs, grasses, wildflowers and trees at stream and ditch crossings





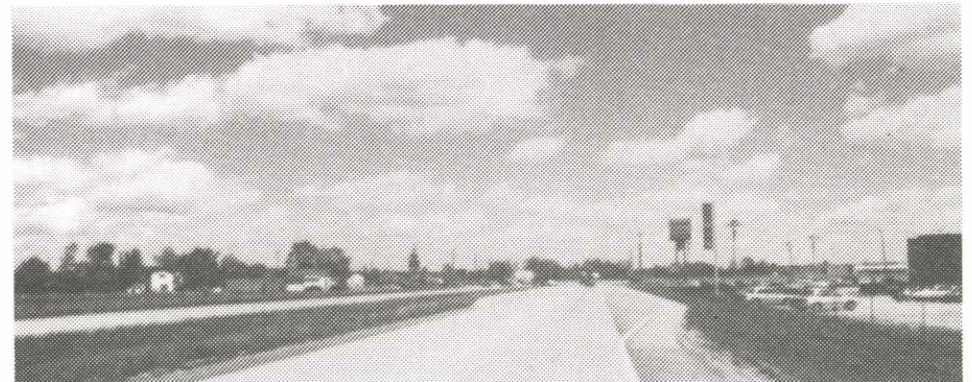
**PRESENT**

Barren and nearly imageless except for commercial elements

Uncoordinated sign system

Weak "city limits" markers

No sense of "arrival" or "departure"





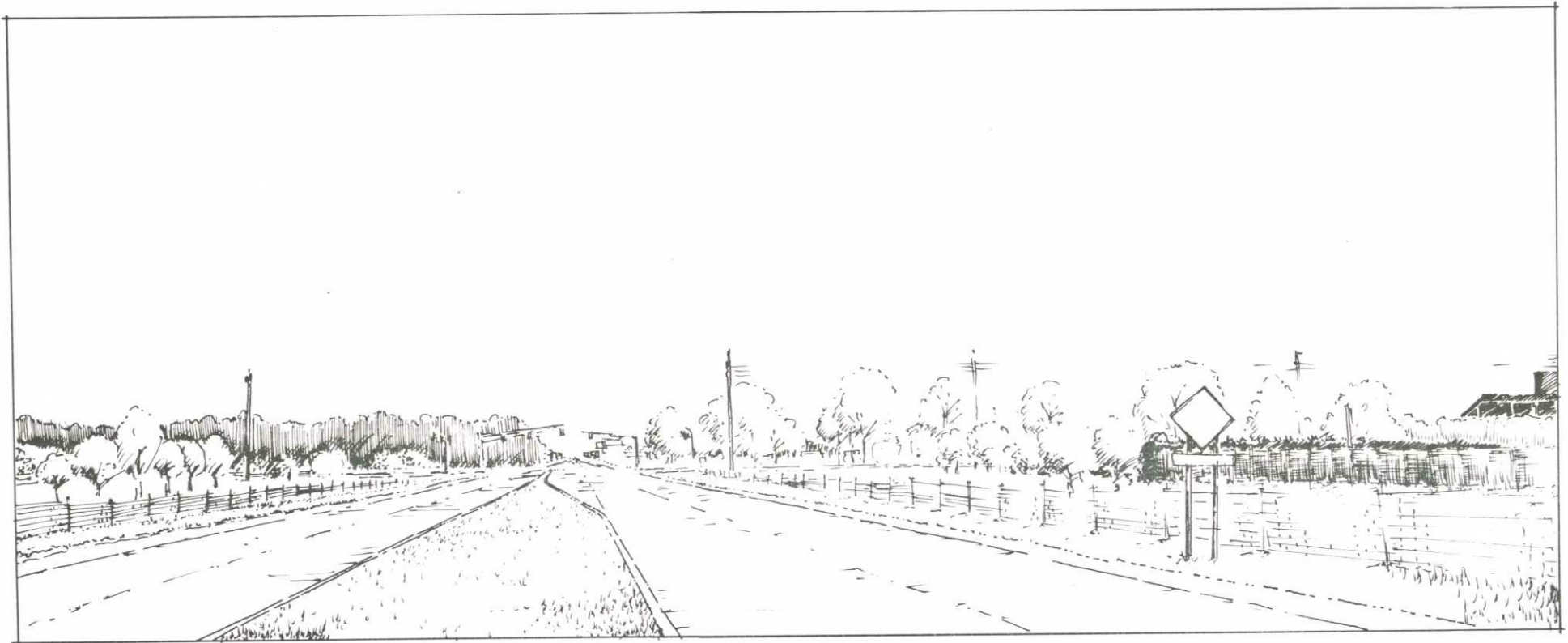
**POTENTIAL**

Begin tree-lined edge—"parkway"—landscape treatment using large tree species

Develop occasional median plantings and wildflower zones (especially at city limits)

Introduce specially designed city limits signage and landscape setting

Develop lower profile for commercial signs



**PRESENT**

Beginnings of a "green" image, but shapeless and undefined

Roadway lacks important directional and community activity information

Important crossroads are not highlighted





**POTENTIAL**

Continue formal large species tree-lined landscape treatment

Increase plantings in median strips

Introduce informational/directional pylon sign system

Add intersection portal structure to organize traffic lights, lighting and signage and give urban "gateway" experience



**PRESENT**

Existing office/commercial complex is visually coordinated except for signage, but lacks natural elements

Huge billboards are out of scale and overwhelming

Street lighting is "generic" and unattractive





**POTENTIAL**

Continue tree-lined parkway treatment, but with smaller scale, flowering, tree species

Develop coordinated low-profile commercial signage system

Continue informational/directional pylons

Incorporate hedge/landscape buffer and pedestrian/bicycle way

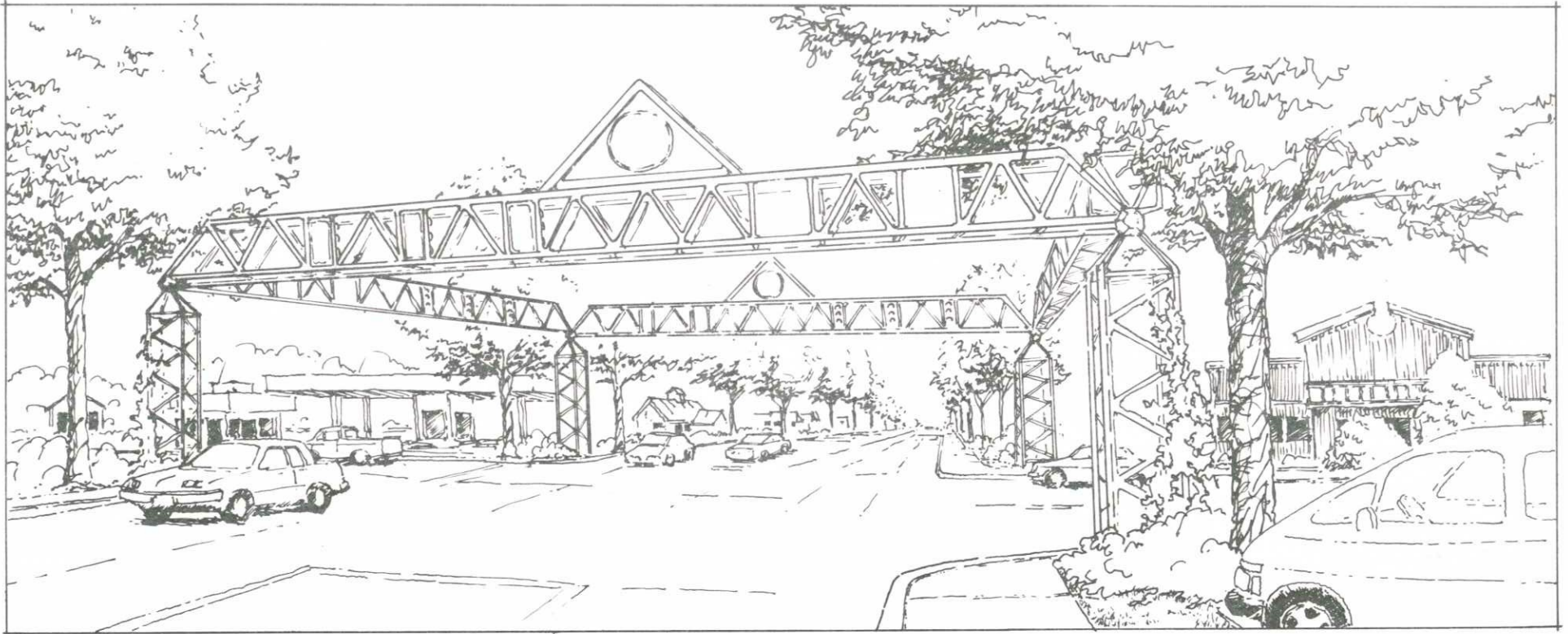
Replace current street lights with fixtures designed to provide a more distinctive image and support community banner program.



**PRESENT**

Important "pivotal" intersection for residents and visitors is visually cluttered, confusing, and lacking in clear directional system.



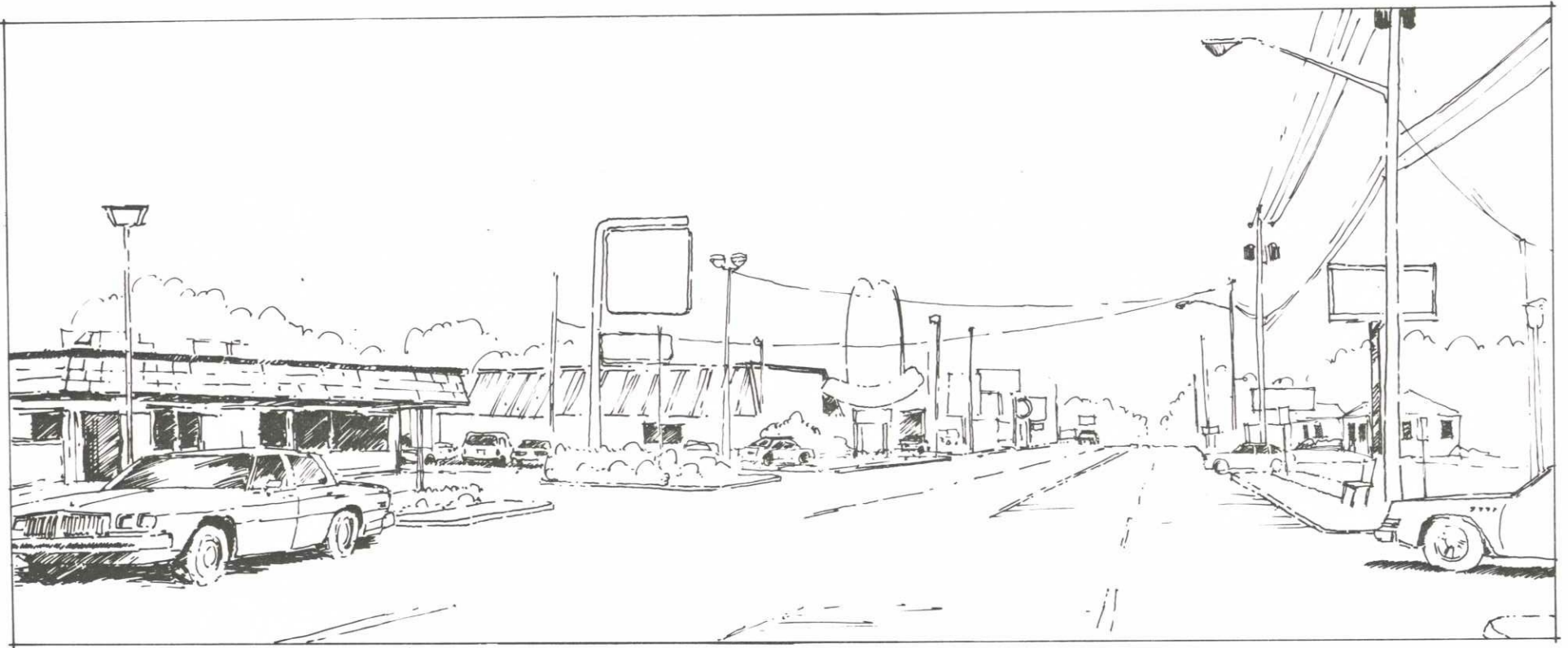


**POTENTIAL**

Introduce overhead structure to organize traffic lights, intersection lighting, and signage

Create additional landscape planting to "unify" and simplify existing cluttered image.





**PRESENT**

Commercial architecture and signage "overkill" in conflict with potentially pleasant approach to city center

Excessive number of access points in and out of commercial strip creates frustrating and dangerous traffic movement patterns

Plant material sparse and uncoordinated





**POTENTIAL**

Continue tree lined streets to provide continuity, homogeneity, and sense of enclosure

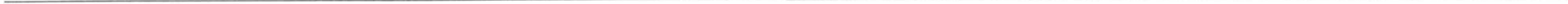
Continue to promote low profile/coordinated sign systems for commercial signage

Develop comfortable bus stop and rest pavilions that will promote more pleasant pedestrian settings and encourage use of mass transit system

Develop landscape buffered pedestrian/bicycle way along east and/or west side of Wheeling.

Continue information pylons and introduce lower scale lighting focusing on pedestrian ways.

Combine business accesses where possible



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# IMPLEMENTATION

# IMPLEMENTATION

## INTRODUCTION

The recommendations contained in this report are those that are believed to be essential ingredients in the development and maintenance of a major roadway system that will be: 1) smoothly functioning, 2) attractive and image-enhancing, and 3) expressive of the unique character and culture of Delaware County and Muncie, Indiana. However, the key ingredient is implementation. If these recommendations are not put into effect, it is a safe prediction that many stretches of the county and city primary roadway system will become, in varying degrees, clogged, blighted, cluttered, and unattractive, conveying a poor image for the community, and communicating little that would distinguish one of the county or city routes from routes anywhere in the nation. Consequently, this final chapter offers suggestions/recommendations in this critical area of implementation.

The foundation for implementation is community consensus that something should be done and can be done, and the key to building consensus is communication. So it is hoped that the community will employ all available means to disseminate the recommendations of this study. Primary among these must be the acceptance by an organization or individual of the role as sponsor/patron/spokesperson for the study. Without the support of such an organization or individual it is unlikely that this study will be accepted as representing the community as a whole.

Assuming that this communication and sponsorship can and will be achieved, the following are advanced as implementational approaches, mechanisms, and techniques.

## DEMONSTRATION PROJECTS

The most effective type of implementation is on-site demonstration of enhancement measures. The study team recommends that Wheeling Pike/Avenue be the route chosen for eight demonstration projects. Wheeling Pike/Avenue is recommended for this attention for the following reasons:

1. Wheeling Pike/Avenue is not a state highway, and consequently not subject to state controls. Therefore projects can be implemented along this route under local authority without the overlay of state approval of every project.
2. By having all of these projects on one route they will be experienced in sequence and combination, with projects building on and reinforcing one another.
3. Wheeling Pike/Avenue is one of a system of historic county pikes. During the course of the study, the team had occasion to investigate and appreciate the historic significance and cultural importance of these roadways. While recognizing their importance in a historical and cultural sense, the team felt that they did not qualify, with the exception of Wheeling, for inclusion in the county's primary roadway system. However, a treatment of Wheeling Pike/Avenue as a part of this study could serve as a model for all Historic Pikes in the county and by extrapolation provide a guide, in lieu of a separate study, for the treatment of the pikes system in general.

The demonstration locations and projects recommended for Wheeling Pike/Avenue, noted in Figure 46, are the following:

1. **Location:** Rural Portal/County Border  
**Project:** Design, production and placement of a county entry/exit sign prototype.
2. **Location:** Rural Portal  
**Project:** Planning and implementation of the planting of native wildflower and grass colonies along the route within the portal.
3. **Location:** Rural Portal/Town of Wheeling  
**Project:** Implementation, to the degree possible, of the "Portal Towns" recommendations outlined in this report. The attractiveness of Wheeling's natural setting and its small size would suggest that only minor adjustments need be made. Distinctive town entry signs and a clean-up/paint-up/fix-up

program for areas—such as the cemetery—and buildings along the route, in combination with the natural beauty of Wheeling's surroundings, would produce a strikingly attractive "Portal Town"

4. **Location:** Rural Corridor/Town of Stockport  
**Project:** Implementation, to the degree possible, of the "Corridor Towns" recommendations outlined in this report. Only minor adjustments are necessary for Stockport as well. Primarily, this town is in need of definition and identity. Town entry/exit signs and the planting of a tree corridor along Wheeling Pike within the limits of the town are probably all that are necessary to provide this town identity.
5. **Location:** Suburban Portal/City Limits  
**Project:** Design, production, and placement of city entry/exit sign prototype in conjunction with the design of the landscape setting.
6. **Location:** Suburban Corridor  
**Project:** The implementation of a comprehensive plan for the corridor including:
  - a. the consolidation of curb cuts and signage where possible in order to clarify business entry points and decrease impedance of traffic flow, integrated with
  - b. the implementation of a prototypical suburban street tree "parkway" program.
7. **Location:** Urban portal  
**Project:** Design and installation of portal "structure" prototype
8. **Location:** Urban Corridor  
**Project:** The implementation of a comprehensive plan for the corridor including:

## IMPLEMENTATION

- a. the consolidation of curb cuts and signage where possible in order to clarify business entry points and decrease impedance of traffic flow, integrated with
- b. the implementation of a prototypical urban street tree and landscape treatment .

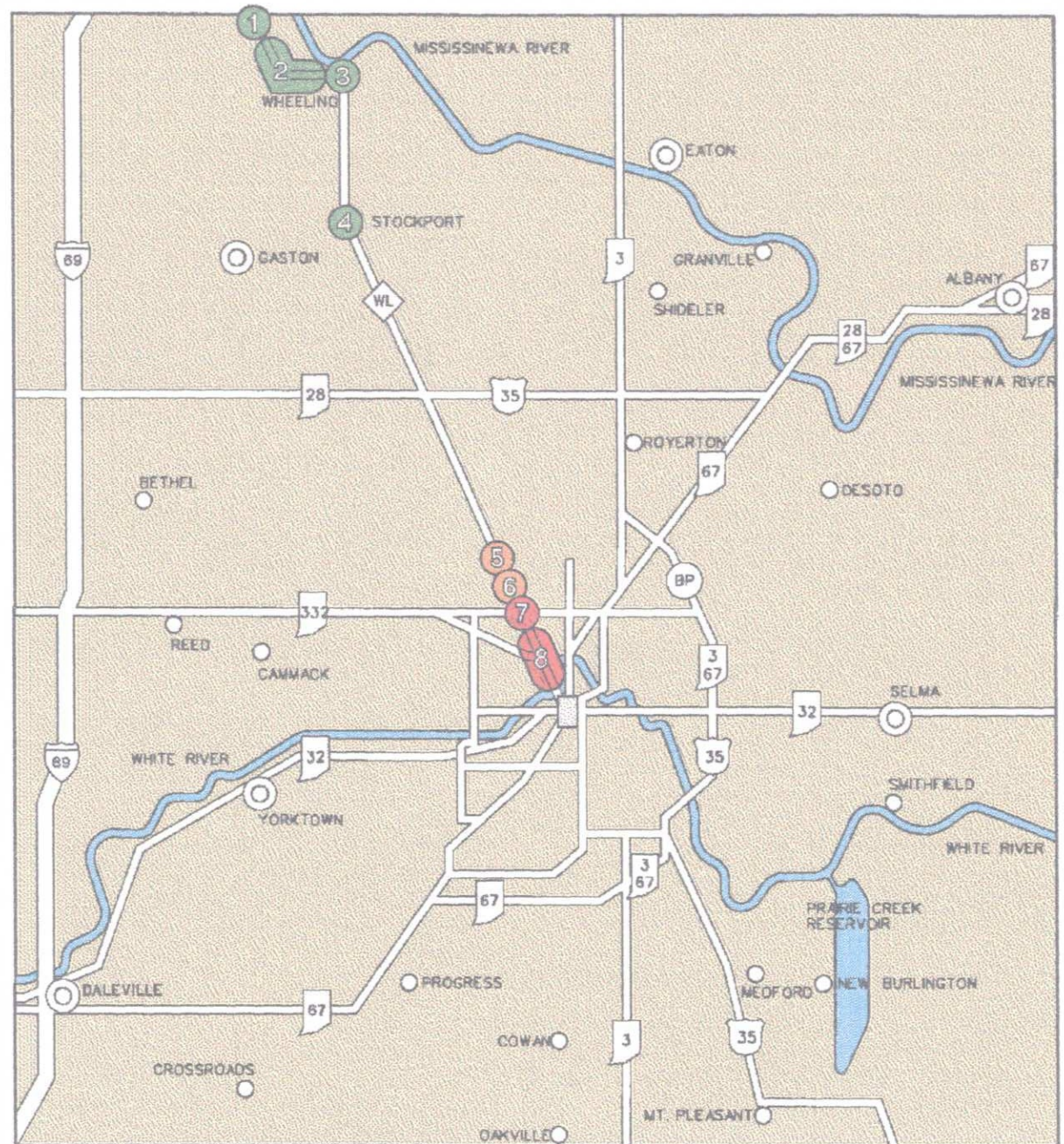


Figure 46: Locations of Demonstration Projects

## IMPLEMENTATION

### COMMUNITY REGULATORY ACTION

It became clear to the team during the process of this study that the major roadway system of Delaware County and Muncie is in need of special control, in many cases remedial action, if it is to provide smoothly functioning movement of people, goods, and services and visually pleasing experiences for residents and visitors.

The mechanism recommended as the vehicle for this special control is the establishment of Corridor Overlay Zoning Districts for all of the major routes. Corridor Overlay Zoning Districts have been utilized by many other communities and have the following characteristics:

1. They are established for vehicular routes that are determined by the community to be in need of protection and/or enhancement. The width of these districts might vary. In some areas, such as heavily urbanized sections of routes, the width might include only route frontage property, in others, such as scenic rural sections, the width might include the "viewshed": what can be seen from the road.
2. Special zoning, site development and signage provisions for these districts "overlay" the existing zoning regulations, in many instances these provisions include: special land use controls, three-dimensional as well as two-dimensional development controls, a stipulation requiring the submission of detailed, two and three dimensional design proposals for each development, and review of these proposals by a committee especially established for this purpose.

The following is proposed as a procedure for the establishment and management of these overlay districts.

1. The Delaware-Muncie Plan Commission conduct the process whereby the per route districts would be established. The actual facilitator of the process might be either a Plan Commission staff member or a consultant hired by the Plan Commission. The establishment of the districts would include the following:

- a. Establishment of the width of the corridor for differing conditions. The approach recommended is different widths for the rural, suburban, and urban route character zone.
  - b. Development of provisions for the regulation of districts of different character. Again, these provisions might be based on the reinforcement of the rural, suburban, and urban character zone concept. There are many examples of these types of provisions that have been implemented by other communities. This exercise could be as simple as the assemblage of these examples and the adoption of those provisions that are considered most appropriate for Delaware County and Muncie and for the desired effect on the different route sections.
  - c. The discussion of the proposed district widths and provisions with an ad hoc committee of 15 to 20 citizens who would be representative of those groups directly affected by the enactment of the districts and the contained provisions. In some instances these representatives might be from "sub-committees" for each route or route segment, while others might be representatives of groups having an interest in all of the routes.
  - d. The final determination, via citizen input and expert evaluation, of the provisions that should be recommended by the Plan Commission to the appropriate governmental entity for adoption.
2. A Corridor Districts Advisory Committee be established by the Delaware-Muncie Plan Commission to advise the Commission staff on proposals for development within the corridor districts. This committee might include:
    - a. A City Councilman
    - b. A County Commissioner
    - c. The Executive Director of the Delaware-Muncie Plan Commission

- d. A member with expertise in, or responsibility for, economic development
- e. A member with expertise in, or responsibility for, tourism attraction
- f. Three additional members with expertise in: architecture/urban design, landscape architecture/rural preservation, and urban design/urban planning.

The intention in recommending the establishment of this committee is that detailed, two and three dimensional, designs for all proposals for development within the corridor districts would be reviewed by this committee. The committee would be charged with the responsibility to advise the Plan Commission staff that: 1) a proposal should be approved as presented, 2) a proposal not be approved in any form, or 3) if changes are made to the proposal, and verified, it should be approved.

The basic rationale for the establishment of this committee is that a set of development guidelines cannot be developed that will produce a totally predictable result, but a comprehensive set of guidelines coupled with the requirement of a detailed design and a thorough and expert design review should produce a more predictable result.

#### *Comment:*

*A few additional observations and suggestions can be offered in the context of community regulatory action, specifically in regard to the current and future status of land use regulation as it relates to community goals and objectives. The existing Comprehensive Land Use Plan has no discernible impact on land use—zoning—decisions in the county. This is partially the result of this plan being outdated—it has not undergone a comprehensive review and update since its adoption in 1977. However, it can be further observed that even when this plan was "newly minted," it was not assigned the status of a controlling instrument in land use decision-making. There appear to be two reasons for this current and historical disregard of the*

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*Comprehensive Land Use Plan: 1) The State of Indiana has not been among the states that have embraced comprehensive, strategic, planning as a necessary quality control measure in directing development and growth, and 2) because the original Comprehensive Land Use Plan was prepared with little community participation or input, it was a plan that was developed "for" the community as opposed to one developed "by" the community and consequently lacked the crucial component for community support: a sense of "ownership."*

*In the absence of the overarching guidance provided by a community endorsed and supported Comprehensive Land Use Plan, the current operational mode for land use decision-making—as manifested in decisions relating to re-zoning—appears to be an ad hoc, case-by-case, approach dependent largely upon public reaction and political exigencies rather than on sound planning concepts and principles.*

*An alternative to this "ad hoc" approach to planning can be found in the development of an updated Comprehensive Land Use Plan that is supported by the community and adhered to by public officials in the making of land use allocation decisions. The process whereby this could be achieved would be strategic in nature and community participative in implementation. This strategic planning process would involve citizen committees in identifying key planning issues and establishing community goals and actions relating to these issues. For the City of Muncie these key issues might be—in alphabetical order—the following:*

1. Architecture, Landscape Architecture, and Urban Design
2. Commercial and Industrial Development
3. Historic Preservation
4. Housing
5. Infra-structure/Transportation

6. Neighborhoods
7. Parks and Open Space
8. Recreation, Tourism, and Arts

*For Delaware County, outside Muncie, these eight "city" issues might translate into the following:*

1. Architecture and Design of County Towns and Rural Landscape Design
2. Rural Economic Development
3. Farmland and Natural and Cultural Features Preservation
4. Housing/Residential Options of County Towns
5. Infrastructure/Transportation
6. Viability of County Towns (The county "neighborhoods")
7. County Park System
8. County Recreation and Tourism

*Procedurally, the total process would include the following phases and aspects:*

### **Phase 1. Strategic Planning**

#### **a. Issue Identification**

*This exercise could be simply the adoption of the previously listed set of issues or, alternately, the development of a set of issues seen as being more appropriate for Muncie and/or Delaware County.*

#### **b. Goals and Objectives Establishment**

*This exercise would involve the per issue establishment of a prioritized set of goals and objectives by individual issue focused citizen committees.*

#### **c. Strategic Actions Establishment**

*These actions, also generated by the citizen committees, would be those seen as crucial to the achievement of the goals and objectives.*

#### **d. Consolidation and Coordination**

*The recommendations of the citizen committees would be brought into a coordinated, non-duplicating, set of strategic goals, objectives and actions by an "executive committee" comprised of a representative from each of the individual "issue-focused" committees and persons with specific expertise or responsibility.*

### **Phase 2. Comprehensive Land Use Plan**

*The strategic planning exercise would provide the parameters within which an updated Comprehensive Land Use Plan would be developed.*

### **Phase 3. Zoning Changes**

*The updated Comprehensive Land Use Plan would, in turn, provide the base from which revised official zoning documents—maps and ordinances—would be developed.*

*This process should provide a vehicle whereby citizens could assume authorship and ownership of the resulting land use controls and consequently be more generally supportive of the strict adherence to these controls.*

*The implementation of this process would be a lengthy and time-consuming and would require professional direction and support. The Muncie-Delaware Plan Commission would be the most logical agency for the coordination of the process, and Ball State University could provide expert assistance in a number of areas. However, given the magnitude of this effort, it would almost certainly be necessary to employ additional staff to manage the process. The model for this approach, the Indianapolis Regional Center Plan (Downtown Plan) Update, is currently being conducted, and for this effort, a director, four full-time staff, and four student interns are being employed. Obviously, fewer*



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*people would be required for the Muncie/Delaware County effort; the exercise would be significantly less arduous than for the central area of a city of the size and complexity of Indianapolis.*

*The team recognizes that: 1) this would be an ambitious undertaking, and 2) various planning studies and activities, focusing primarily on economic development issues, have already been conducted in the county. However, it is suggested that this broader-based strategic planning exercise would produce more comprehensive benefits for the community and could potentially yield greater economic gains than the "economic development-focused" approach.*

