7 Transportation

Dothan residents that responded to our Citizen Survey conducted in early 2007, indicated that their number one concern was the amount of traffic in the City. Often vehicles contain only one person. Consequently, the number of vehicles on any of Dothan's roads at any given moment during weekday peak hour travel time is representative of the number of persons employed at various work centers in Dothan coupled with the amount of transient, through-town traffic and hundreds of high school and college students going to and from class. Car pooling is not something prevalent in Dothan because, for the most part, traffic congestion really isn't that bad except in a few areas where there really aren't any feasible alternative routes.

Part of the problem is that Dothan is not a walkable City. Walkable cities are characterized by the provision of sidewalks or pedestrian paths that provide connections between residential areas and activity centers. We should strive to incorporate other modes of transportation into our thought processes when development is being proposed. As the price for gasoline continues to be volatile, alternative modes of transportation will become more attractive to a broader range of the population. Still, there is a segment of the community that doesn't own or have access to a car.

We cannot rely upon a 'building our way out' philosophy to solve our transportation problems either. Costs are just too great. Land use and transportation plans need to incorporate multimodal opportunities for now and for the future. Undoubtedly, the automobile will remain an important way to travel. The City should embrace a "complete streets" philosophy where streets are treated as part of the public realm and every opportunity is pursued to make them more livable for everyone, not just cars. The goal is to design and operate a roadway system for all modes of transportation; bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. Implementing a Complete Streets policy into the development process, can incorporate all modes of transportation into our present system as well as future improvements. It also could be the first step in lessening the amount of traffic congesting our roadways and promoting exercise and healthy lifestyles for our citizens.

COMPLETE STREETS

As our community grows, so does the most basic component of our infrastructure; streets. Streets are a significant component of the public realm, making up a majority of the total land use of our City. They contribute in a major way to the livability of our community. For many years, streets were designed and constructed primarily to move cars rather than people. The result can be seen in the sprawl of our communities, in traffic congestion and in the fact that there are few places that are safe and convenient for pedestrians, bicyclists, those dependent on a wheelchair or transit riders. Our City streets should be designed for everyone regardless of age or mode of transportation and not be mean and hostile.

Many feel that streets should be designed with the complete movement in mind, especially as our City sprawls out into the countryside leaving limited opportunity for other modes of travel. Street design should focus on being safer, more livable, and welcoming to everyone. A complete street is one that is designed and operated for all users. Instituting a complete streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind - including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.

A recent federal survey found that seventy-five percent (75%) of walking trips take place on roads without sidewalks or shoulders, and only about five percent (5%) of bicycle trips occur on bike lanes. The survey also revealed that the percentage of accidents involving pedestrians and bicyclists is disproportionately high compared to the percentage of actual trips taken. Those accidents occur on roads that lack sidewalks or crosswalks, where the lanes are too narrow to share with bicyclists, where there is little or no room for transit riders, and where the sidewalks were not designed for people with disabilities; essentially an incomplete street design.

A Complete Streets policy is a change in the traditional road construction philosophy of a project-by-project consideration of bicycle and pedestrian-friendly design practices. A Complete Streets policy requires designers of all road construction and improvement projects to begin by evaluating how the right-of-way serves all who use it. Although the Federal Highway Administration has endorsed this approach since 2000, it has yet to be widely implemented.

MOBILITY AND ACCESSIBILITY

How land is used and how it is accessed are critical components of a successful development strategy. The previous chapter addressed land use concerns and policies. The focus of this chapter is the transportation system and its role in serving and supporting development patterns, its success in balancing access and mobility and its ability to move goods and services throughout the community efficiently, but not to the detriment of the community or its neighborhoods.

As growth continues in our City, the amount of local traffic will increase in proportion to the location and type of development. Through traffic has always been a significant issue for our City since Dothan is located at the crossroads of several major U.S. Routes; 84, 231 and 431 for passenger car and truck traffic with destinations and origins in Florida. Efforts to relieve the traffic congestion and safety concerns that accompany this pass-though traffic are the genesis of the I-10 Connector project discussed later in this chapter.

Mobility is more about providing options for movement across the network. Key to mobility is the interconnection of streets and roads and is strongly influenced by the existence of man-made and natural barriers such as Ross Clark Circle or a major stream or wetland. In recent years, market forces have also played an important role in mobility. The better the connectivity, the easier local traffic can disperse through the network rather than piling up onto one street and causing congestion. As connectivity increases, the capacity of existing streets to accommodate traffic is preserved.

Connectivity also is an important life-safety consideration. Residential and commerical subdivisions with one-way-in and one-way-out should be avoided where possible. Severe weather is not uncommon in southeast Alabama resulting in high winds and saturated ground that can easily topple trees potentially blocking access by emergency vehicles. Developments should be planned and designed to provide a primary and secondary means of access, especially when there are a significant number of housing units and residents.

Non-motorized or pedestrian-oriented mobility is often overlooked as a viable part of any transportation system. As part of the on-going, long range planning effort of the City, the development of a plan for a City-wide hike/bike trail system should be undertaken. This plan would serve as the identifier of potential corridor routes that could sustain the construction of a network of trails along abandoned or little used railroad

lines, creeks, rivers, minor arterials and collectors, and residential neighborhood streets and utility easements such as the one to the left. The illustration on page 18 in Chapter 6shows a possible trail alignment along Beaver Creek near Westgate Parkway and running west to John D. Odom Road and possibly beyond to Brannon Stand Road. This trail could be easily linked to Westgate Park via several existing residential roads.

TRAFFIC CALMING

When residential streets and roads are used for purposes of movement, especially through movement of vehicles, the result is often a higher volume of traffic travelling at speeds unacceptable for residential areas. The City often receives complaints regarding speeding traffic or traffic cutting through residential areas and is expressed as a personal safety and property damage issue. The root of the problem~~s~~ lies with the failure to understand that connected roads must be designed in a manner that accommodates how they will be used.

As discussed in the previous section, connected roads are a good thing from an access and public safety perspective. However, they must be designed to minimize direct access where they will be connecting to major thoroughfares. This process starts with a carefully contemplated street layout that considers existing and future points of connection and the proposed land use of the area. Three-way stop signs and speed humps are an all too common tool used to react to speeding cut-through traffic. Local roads should have short block lengths, subtle curves and off set intersections. Street width and on street parking are also design factors which can be used to encourage slower traffic speeds.

The design of each street, from its width, length, curvature and intersection design, when combined with reduced setback distances, on-street parking, positioning of street trees and other hardscape improvements, can be effective strategies to help influence driver behavior in residential neighborhoods.

TRANSPORTATION PLANNING

The City transportation system basically serves two functions; access to property and mobility. These functions are best described as a continuum across a network of streets. Streets that try to do both functions usually do neither very well with congestion and compromised safety of the traveling public being the result. For instance, driveways directly accessing a major arterial cause conflicts with vehicles traveling at a high rate of speed. To help minimize these conflicts and create a logical and safe transportation system that promotes better decision-making by the Planning Commission and developers, it is helpful to classify streets according to how they function in the network. Functional classification of the local street network is key to implementing a major street plan which is included as part of this Plan. A functional classification system defines the hierarchy

of movement that any particular route plays in determining how trips flow through a highway network. Streets are typically classified as a freeway, principal, major or minor arterials, major or minor collectors or local streets.
Major and minor arterials are the primary surfaces which conduct traffic movement into and out of a city and are usually a single, continuous road. Collectors may be a continuous road or a series of connecting roads that allow a secondary movement of traffic through an area, or from an intersection with a major or minor arterial to another major or minor arterial. Collectors may also be the primary access into and from a neighborhood which feed the residential lots within the subdivision boundaries, but are not designed to be extended into neighboring and adjacent undeveloped or developed land.

The conflicting functions of movement and access are increased or decreased depending on the character and volume of traffic using the road. For instance, a principal arterial (Ross Clark Circle), is designed with wider lanes, stronger pavement, and an increased length in order to accommodate more and heavier cars and trucks. While at the opposite end of the spectrum, the design and construction of a cul-de-sac only needs to be sufficient to provide access to individual houses rather than to other major streets in the road network. When the functions of access and movement are "compressed", neither function dominates causing higher crash rates, fuel consumption and excessive vehicular emissions. A good set of access management policies can minimize the effects of compressed street function, increase the efficiency of the system and preserve the public investment in street improvements.

The Minor Arterial and Collector Plan (MACPlan) is the City's major street plan as authorized by Ala. Code 11-52-50. It illustrates the projected primary roadway network designed to serve the Dothan area over the next 20 years. It is a combination of the roads classified by the Alabama Department of Transportation in their functional road network and other non-network City streets. The Plan identifies highways, roads and streets by the character of service they provide for transportation planning purposes. Basic to this process is the recognition that individual routes do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

Some existing roads and streets in Dothan do not have sufficient right-of-way width to accommodate anticipated traffic growth. The MACPlan identifies where these deficiencies exist and how much right-of-way is needed to accommodate the function of the road. Design standards contained in the Subdivision Regulations define the amount of right-of-way needed to accommodate the type of facility proposed. These requirements are shown in the following table.

Typical Right-of-Way Requirements by Facility

Roadway Type	Right-of-Way (ft.)	Easement (ft. each side)
Freeway/Expressway	150	NA
Arterial	100	NA
Collector	80	NA
Collector	60	10
Minor commercial and industrial streets	60	NA
Minor residential streets (including cul-de-sacs)	60	NA
Minor residential streets (including cul-de-sacs)	50	10
Marginal access streets	50	NA
Access Lane (Alley)	20	NA

The MACPlan also indicates where future roads or streets may be appropriate given the direction of growth and availability of supporting infrastructure. If adopted by ordinance, land must be set aside and dedicated to the City where adjacent to an existing right-of-way or in its entirety if contained completely within a parcel of land to be subdivided. If not adopted by ordinance, implementation of the recommendations contained in the MACPlan should be addressed on a case-by-case basis.

The MACPlan identifies where right-of-way is 'adequate', if 'additional widening needed' and 'no right-of-way exists'. In the case of an arterial having an 'adequate' designation, no additional right-of-way is necessary to accommodate planned improvements. In the case of 'additional widening needed' designation, an amount needed to accommodate the planned road is identified.

The City Commission may apply its requirements in the police jurisdiction which is equivalent to the urban growth boundary. A representation of the MACPlan is presented on the last page of this chapter.

Transportation Improvements

The following transportation improvement projects should be implemented.

1. *Murphy Mill from U.S. 231 North to John D. Odom Road; widen 2/3 lanes to 3/4 lanes.* Murphy Mill functions as a minor arterial linking U.S. 231 North to John D. Odom Road. It is currently carrying 9,635 vpd and is characterized by multiple turning movements, either directly into residential driveways or onto residential subdivision streets. Existing right-of-way

is insufficient to accommodate an expanded three lane facility with a turn lane at Brookside Drive. A raised landscape median would be impractical along this segment because of the multiple residential driveways, but provisions should be made to accommodate bicycle and pedestrian movements and street trees.

2. *Honeysuckle Road from U.S. 84 West to Fortner Street; widen from 2/3 lanes to 4/5 lanes and bridge upgrade and intersection improvements.* This section of Honeysuckle Road is currently carrying 15,704 vpd and serves as an alternative north-south connection paralleling Ross Clark Circle. It is used extensively by local traffic on the west side of the City and turns into Westgate Parkway north of U.S. 84. As with John D. Odom Road, there is little opportunity for further development along this segment and the improvements should include a raised landscaped median where appropriate, with provisions for bicycle and pedestrian movements and street trees.
3. *Honeysuckle Road from AL. 52 (Hartford Highway) to Taylor Road; widen 2 lanes to 3 lanes plus intersection improvements at Highway 52 and South Park.* This section of Honeysuckle Road traverses a section of the City with significant areas of vacant land zoned either Agriculture-Conservation or General Industry. A majority of the property zoned for industrial use is significantly impaired by areas prone to flooding. The location of access points to developable land along this mile long rural segment of road should be restricted to quarter mile spacing. Direct driveway access should be restricted to locations where sight distance is maximized. The intersection of Honeysuckle, South Park Avenue and Hatton Road should be realigned to provide a four leg intersection.
4. *Denton Road from Ross Clark Circle to Westgate Parkway; widen from 2/3 lanes to 4/5 lanes plus bridge upgrade and intersection improvements.* Denton Road is classified as a minor arterial and links Ross Clark Circle to Westgate Parkway. The ability of this road to accommodate project traffic is expected to fall to unacceptable levels in the near future necessitating expansion to five lanes. There is little opportunity for further development along this segment and the improvements should include a raised landscaped median to control the location of turning movements, as well as bicycle and pedestrian facilities and street trees.

PUBLIC TRANSPORTATION

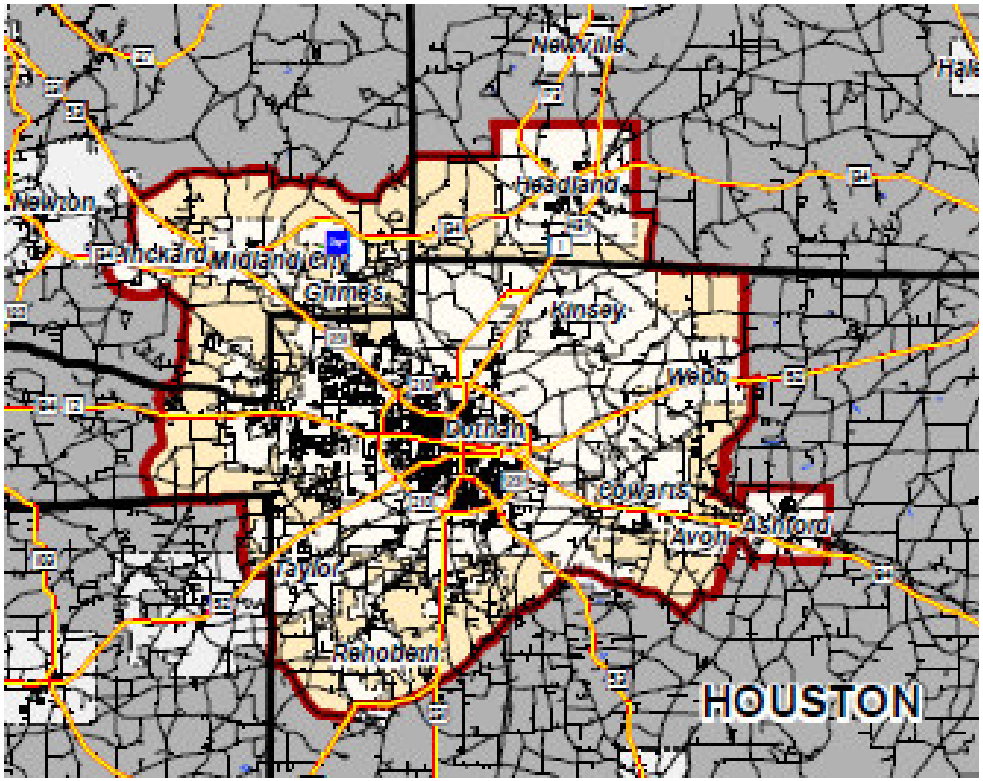
Dothan residents responding to a survey conducted in early 2007 indicated their desire to have a public transportation system with fixed routes. Currently, the Wiregrass Transit Authority operates a "demand response" type of transit system that offers scheduled pick up and transportation to destinations specified by the user and return trips if scheduled. This service does not have specified and established routes, nor does it pick-up other individuals from designated 'transit stops' along the route.

Through the MPO, a feasibility study was prepared by a consultant to determine the conditions under which a fixed route bus service could be operated in the City. Funding for the study was provided by the Metropolitan Planning Organization (MPO) and the City of Dothan. The study measured the potential ridership, identified areas where ridership is in demand, identified locations within the City of possible destinations for those individuals utilizing the service, identified routes and time schedules for runs,

and estimated the cost of operating a transit system in Dothan. The study concluded that significant resources would be required to initiate and operate a fixed route system in the City and no decision has been made to date on implementation of the study's recommendations.

SOUTHEAST WIREGRASS METROPOLITAN PLANNING ORGANIZATION

The City of Dothan is a member of the Metropolitan Planning Organization or MPO for short. The MPO is responsible for conducting a transportation planning process that is **comprehensive**, including all modes, **cooperative**, involving a broad array of stakeholders and other interested parties and **continuous**. The planning process is established in Federal Statute and is required for areas designated as "urbanized" (with a population of 50,000 or more).



The Southeast Wiregrass MPO study area depicted below includes portions of Dale, Geneva, Henry and Houston Counties, and the entire cities of Ashford, Cowarts, Dothan, Grimes, Hedland, Kinsey, Midland City, Napier Field, Pinckard, Rehobeth, Taylor and Webb. Each unit of government is represented on the MPO Policy Committee where decisions are made concerning the distribution of federal funding for road improvement projects.

The Wiregrass MPO receives a direct allocation of about $1.2 million per year that is programmed through the Transportation Improvement Program (TIP) that is collectively approved by member governments. The TIP is a capital funding program that allocates all federal funding to road projects in the area. Besides the "Dothan Attributable" money, all other state and federal funding that is allocated to a road improvement project is scheduled through the TIP.

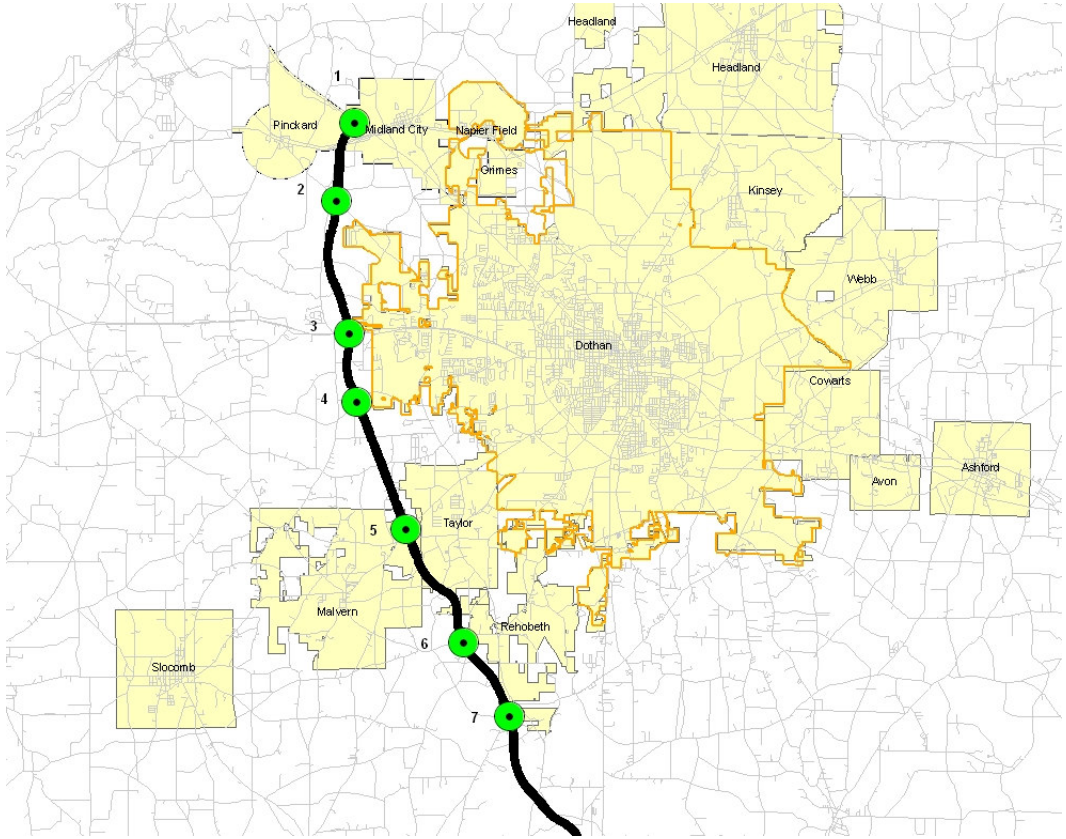
The process starts with a Long Range Transportation Plan that considers all transportation modes and supports metropolitan community development and social goals. It is based on socio-economic data on population, households, employment and proposed development. The Plan and its component programs leads to the development and operation of an integrated, intermodal transportation system that facilitates the efficient and economic movement of people and goods (23 CFR 450.300). The Code of Federal Regulations includes specific requirements to be included in the Long Range Transportation Plan. These major elements are:

- A 20-year planning horizon;
- Includes long-range and short-range multimodal strategies that facilitates efficient movement of people and goods;
- Be updated every five years;
- Identify transportation demand over the Plan horizon;
- Includes citizen and public official involvement and participation in the Plan development process;
- Consider local comprehensive and land use plans; and
- Include a fiscally constrained financial plan.

In order for a road to receive federal funding, it must be identified in the Long Range Transportation Plan as a candidate for improvement. If included, members of the MPO may advance a project and request 80% federal funding. Sponsors must be prepared to provide the 20% match in order to advance the project to design and construction. Projects moved into this phase are listed in the Transportation Improvement Program or *TIP*. The current *Transportation Improvement Program* and *Long Range Transportation Plan Update* for the Dothan MPO is posted on the Transportation Planning page of the Planning Department's website and includes more detail on Plan development as well as the projects and programs recommended.

I-10 CONNECTOR

Long discussed and long awaited, it may be that within a few years of the date of this Plan, that the 24 mile I-10 Connector (a planned limited access bypass linking U.S. 231 N. to U.S. 231 S.) may be realized. This Plan incorporates the I-10 Connector as currently proposed (shown below). The project was initiated with special funding appropriated in the Transportation Equity Act for the 21st Century (TEA-21). Subsequent legislation has continued to provide funding for the project but only within the State of Alabama. No similar legislation has been introduced for a portion of the corridor that might extend to I-10 or beyond.



The preferred alignment (illustration to the right) advanced by the Draft Environmental Impact Statement or DEIS for the project was approved in November of 2007. It states that "in Alabama, the primary transportation problem in this corridor is the congestion on Ross Clark Circle". Ross Clark Circle was originally constructed in the 1950's as a traffic bypass of Dothan because several major US roadways; U.S. 231, U.S. 83, and U.S. 431 all intersected here.

However, a lack of strong land use and transportation policies caused major commercial land uses to shift out to locations around The Circle. Not only did this cause the "death" of downtown, it eventually led to increased congestion on The Circle. Now that the City has grown to a respectable size generating some congestion in its own right, this project basically is a bypass of the bypass. The danger, of course, is that it will cause major land uses to shift again to take advantage of the increased accessibility the connector promises.

The new connector, as planned, would begin at an interchange with U.S. 231 N. in the town of Pinckard. It would then head south, passing over or under Hwy 134, Bethlehem Road, as well as Murphy Mill Road, and interchange with U.S. 84 W. before continuing south over or under Fortner and County Line Roads before it interchanged with Alabama Highway 52. It then continues south not interchanging with any other road along its course until its termination at an interchange with U.S. 231 S.

Still, the project is important to the economic well-being of Dothan by enabling a stronger connection to other major population centers in the region as well as a new major airport in north Alabama and the possibility of an enlarged and deepened port in Panama City. Both facilities would bring a significant amount of truck traffic through Dothan distributing freight throughout the southeast United States.

Equally as important to relieving congestion, a limited access connector would also provide for safer travel. The DEIS reports that a crash rate comparison in the later half of the 1990's shows that crashes occur at half the rate when on a limited access facility as opposed to unrestricted access.

The construction of the I-10 Connector should alleviate some of the congestion caused by pass through traffic currently traveling south along U.S. 231, and Ross Clark Circle. However, some of that traffic will probably continue into Dothan via Ross Clark Circle due to the presence of restaurants, gas stations and hotels. Once Community Centers develop at the proposed interchanges that offer similar restaurants and lodging opportunities as found on U.S. 231 and Ross Clark Circle, travel patterns will change in response. Thus, if constructed, the Connector will have a definite impact on land use in the City by pulling development westward.

The Connector will also contribute to Dothan's sprawl, although, in this case it might not have negative connotations. Presently, much of Dothan's congestion is caused by commuter traffic being funneled into only a few east-west transportation arteries crossing The Circle. Adding additional roads west to east is impractical if not impossible but the addition of a major north/south connection between these east/west arteries is expected to impact the distribution of traffic with destinations within the City. In addition, the eventual development of new employment centers and Community and Neighborhood Centers on what today is the extreme western periphery of the Dothan area will also cause a redistribution of traffic flow during peak and off peak hours.

An alternative alignment has been proposed that basically mirrors the preferred alignment but continues on past the Alabama-Florida border and connects directly to I-10 near Chipley. This alignment is the focus of a comprehensive revenue study

commissioned by the Alabama Department of Transportation. This study does not rely on information available from other sources but relies on primary data collected in the field expressly for the purpose of determining what the potential bonding capacity would be if the facility was constructed as a toll road. At this point in the process, funding for the facility does not appear to be feasible given the data included in the study.

IMAGE CORRIDORS

Our major streets and roads serve to funnel traffic by and to the major activity centers in a city. As a result, they are often the first impression that a visitor has of a community. In Dothan's case, we are blessed with several major traffic corridors into the City, U.S. 231, U.S. 84, U.S. 431 and Ross Clark Circle. Because these are highways of the United States, the City's influence over their design, construction and operation are limited. However, the City has full and complete control over the appearance of the land uses accessing these highways and to a large degree, how they are allowed to be accessed from a proposed development.

The image these corridors convey to residents and visitors alike is of fundamental importance to the economic viability of the businesses along the corridor and to the community as a whole. Thus, these gateway corridors should be a valued and protected community asset and enhanced where possible; either as the result of private development or from a public initiative. Each gateway corridor should convey a welcoming introduction and reflect the best that the community has to offer. Careful planning and design of proposed developments should be the preferred strategy employed to assure that a positive image of the community is reflected.