

LONG-RANGE
TRANSPORTATION PLAN
for
AUSTIN/TRAVIS COUNTY

AUSTIN TRANSPORTATION STUDY

Austin, Texas

September 4, 1979

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CHAPTER I

INTRODUCTION

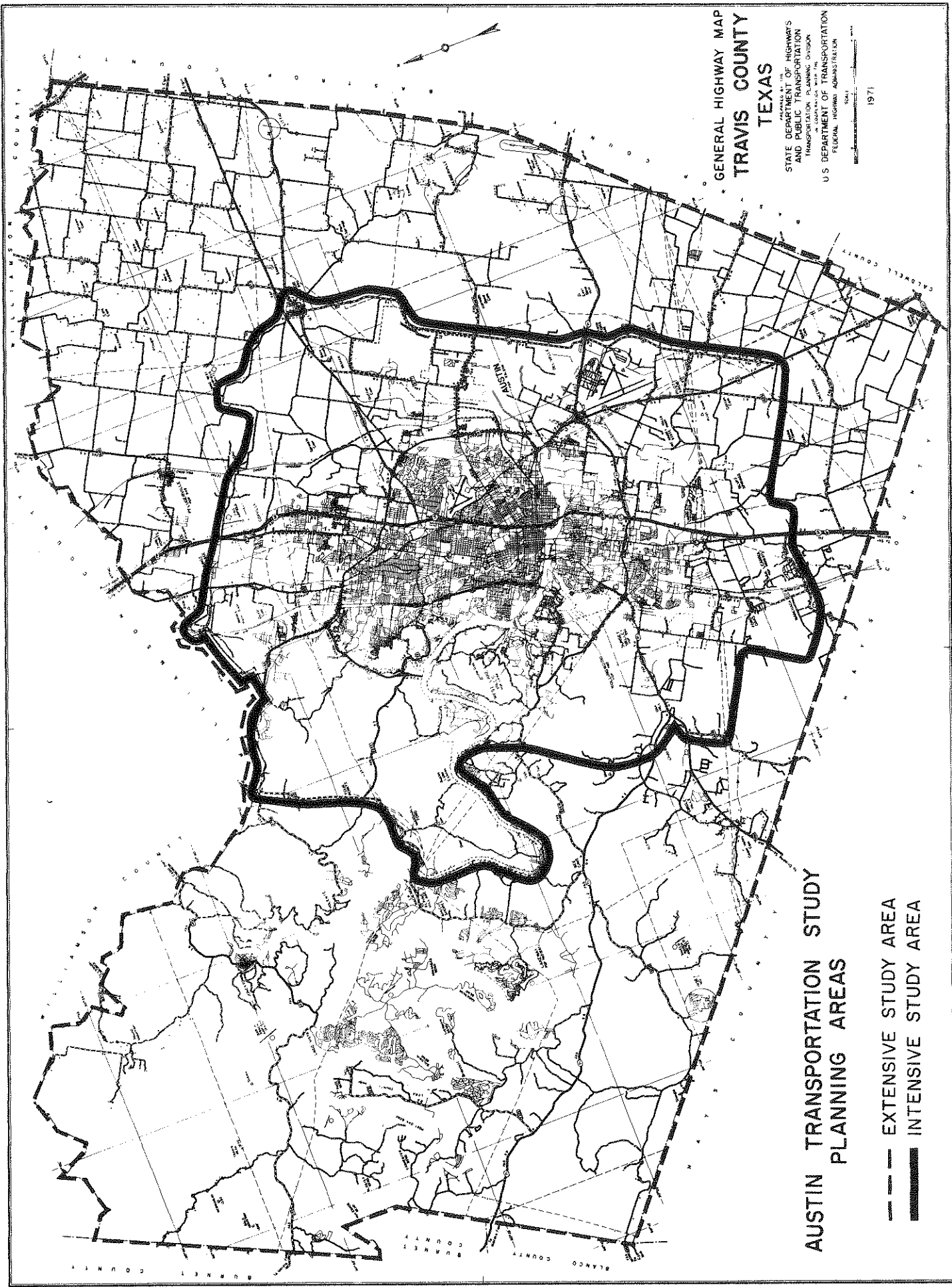
The formulation of a long-range transportation plan for the Austin/Travis County area (Exhibit 1) is essential to providing a suitable quality of life for present and future citizens of this area. In conjunction with other plans to guide development over an extended period of time, the transportation plan serves as a major component to provide the means of travel within the area. It is the responsibility of area governmental entities (City of Austin, County of Travis, and State of Texas) to provide improved transportation facilities and services for use by the general public in a safe, efficient, comprehensive, timely, and cost-effective manner. To help insure this development, the transportation plan provides a unifying, long term perspective within which cooperative implementation of the transportation system can occur consistent with each agency's individual responsibilities.

There are major uncertainties which can have significant influence on the development of the transportation system. Energy sources and supplies for transportation, availability of financial resources, projection of future development and population, and changes in public attitudes are among those uncertainties which cannot be predicted with a high degree of confidence at the present time. In acknowledgement, the new transportation plan does not set forth specific design requirements for a fixed-year system. Rather it establishes a general framework of major transportation corridors and identifies a mixture of roadway and transit emphasis that can be anticipated to occur over the next 20-30 years within each corridor. The various levels of roadway or transit emphasis are described in terms of characteristics concerning function, physical features, rights-of-way, and land use relationships.

This plan is the initial step in reaching a consensus on the future development needs for the area's transportation system. Individual corridors will be studied by the staffs of the three governmental entities, in close cooperation with neighborhood groups and interested citizens. No corridor study involving the expenditure of Federal funds will be initiated without prior approval of the Metropolitan Planning Organization. Each study will define the existing and anticipated problems and needs within the corridor; develop, analyze, and evaluate a multiple number of alternative improvement strategies covering the short and long term perspectives; and recommend a set of strategies for the implementation of improvements to the governmental entities for approval.

Although it can be expected that the short term recommendations may be more detailed than many of the long term recommendations, the corridor study process inherently recognizes the need to develop a perspective of each corridor's relationship to the immediate area it serves and the areawide transportation system. Upon completion and adoption of a corridor study, it becomes an integral part of the transportation plan. From these studies, specific programming actions are planned by the appropriate agencies in order to proceed with the corridor's development.

It is important that the transportation plan be an "ongoing document" which provides a chronicle of the studies and decisions affecting the development of the transportation system, and which evolves concurrently with the area. The plan will be reviewed and reevaluated in order to redefine and identify appropriate goals, policies, objectives and resultant transportation needs. Thus, this planning effort is to create a comprehensive multimodal transportation system responsive to the current and future requisites of the area citizenry.



GENERAL HIGHWAY MAP
TRAVIS COUNTY
TEXAS

PREPARED BY THE
STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION
TRANSPORTATION PLANNING DIVISION
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

1971

AUSTIN TRANSPORTATION STUDY
PLANNING AREAS

--- EXTENSIVE STUDY AREA
— INTENSIVE STUDY AREA

CHAPTER II

DEVELOPMENTAL POLICIES FOR THE TRANSPORTATION SYSTEM

The developmental policies for the long-range transportation plan are identified in the Austin Tomorrow Comprehensive Plan approved by the Austin City Council. This plan includes urban growth management guidelines, transportation goals, objectives, and policies, as well as specific relationships to policies regarding urban design, neighborhood protection, and environmental impact. Based on extensive citizen involvement through the Austin Tomorrow Goals Program, the Comprehensive Plan has implications which are vital to the development of a long-range transportation plan for the Austin/Travis County area. The transportation-related goals, objectives and policies from the Comprehensive Plan are the following:

SECTION I: URBAN DESIGN

GOAL 120.0 PROTECT AND IMPROVE THE DESIRABLE IMAGE AND CHARACTER OF NEIGHBORHOODS AND DISTRICTS.

Objective 121.0 Assure that development is responsive to the established identity of areas and districts.

Policy 121.1 Establish special design districts within the city.

Policy 121.4 Recognize the natural boundaries of separate or distinct districts and promote their harmonious connection.

Objective 123.0 Reduce negative effects of automobile traffic in neighborhood environments.

Policy 123.1 Protect residential areas for excessive levels of noise pollution and physical danger from traffic.

Policy 123.2 Provide adequate buffering for residential neighborhoods against the effects of high traffic volumes.

GOAL 130.0 IMPROVE THE RELATIONSHIP BETWEEN SURFACE TRANSPORTATION NETWORKS AND THEIR ADJACENT ENVIRONMENTS.

Objective 131.0 Ensure that transportation networks emphasize desirable urban development patterns.

- Policy 131.1 Encourage transportation patterns that reinforce the image and identity of distinct areas and districts.
- Policy 131.2 Develop a city-wide plan for street landscaping to indicate the relative importance of streets.
- Policy 131.3 Develop a city-wide plan for street lighting to facilitate clear, safe and efficient vehicular and pedestrian movement, and aid crime control.
- Policy 131.4 Improve the ease of movement along transportation systems and support facilities.
- Policy 132.3 Remove unsightly and cluttering elements from streets rights-of-way.

GOAL 140.0 IMPROVE EXISTING PEDESTRIAN ENVIRONMENTS AND ADEQUATELY PROVIDE FOR PEDESTRIAN AMENITIES IN PROPOSED URBAN DEVELOPMENT.

- Objective 141.0 Assure that new development is responsive to pedestrian needs.
- Policy 141.2 Encourage development that provides human scale and interest to pedestrian areas while maintaining an optimum level of safety, security, convenience and comfort.
- Objective 142.0 Assure the retention of the positive characteristics of pedestrian environments.
- Policy 142.1 Recognize, protect and reinforce existing pedestrian environments.
- Policy 142.2 Develop a community-wide plan that would ensure safe and convenient access to recreational space.

SECTION II: ECONOMIC DEVELOPMENT

GOAL 210.0 AUSTIN'S ECONOMY SHOULD PROVIDE A STABLE, HIGH LEVEL OF EMPLOYMENT AND FULLY UTILIZE HUMAN RESOURCES WHILE MAINTAINING NATURAL AND CULTURAL PRESERVATION.

- Objective 212.0 Anticipate and control the environmental impact of economic growth.
- Policy 212.3 Environmental impact analysis of economic development should include evaluation of impacts arising from infrastructure construction required to provide utility and transportation facilities in all developments and redevelopment.

SECTION III: ENVIRONMENTAL MANAGEMENT

GOAL 310.0 PRESERVE LARGE AMOUNTS OF OPEN SPACE AND ASSURE THAT THE MOST SUITABLE NATURAL AREAS ARE SO RESERVED.

Objective 311.0 Discourage development in the areas of greatest environmental or agricultural value.

Policy 311.2 Require impact assessments for all major extensions of utilities and roads.

GOAL 320.0 ASSURE THE SENSITIVITY OF DEVELOPMENT TO ENVIRONMENTAL FEATURES.

Objective 322.0 Create strong environmental standards for new development.

Policy 322.8 Create development standards based on noise impact and air quality.

Objective 323.0 Establish environmental standards for extending streets and utilities into environmentally sensitive areas.

Policy 323.2 Reduce cutting and filling for highway construction.

GOAL 350.0 ABATE NOISE DISTURBANCES.

Objective 351.0 Reduce transportation related noise.

Policy 351.1 Minimize road vehicle noise.

Policy 351.2 Improve the design of residential areas relative to major arterials, and promote the use of buffers along major traffic routes.

GOAL 360.0 ABATE AIR POLLUTION

Objective 361.0 Reduce the use of the automobile.

Policy 361.1 Upgrade the service and convenience of public transportation.

Policy 361.2 Facilitate pedestrian and bicycle movement.

Policy 361.3 Provide incentives for car pooling.

GOAL 370.0 ABATE LIGHT POLLUTION

Objective 371.0 Restrict use of high intensity lighting, and obtrusive flashing lights, except where essential for public safety or other emergency situations.

Policy 371.2 Devise standards for glare and reflection near major traffic arterials.

SECTION V: HOUSING AND NEIGHBORHOODS

GOAL 510.0 IMPROVE HOUSING AND NEIGHBORHOOD QUALITY.

- Objective 511.0 Assure the continued identity and improve quality of Austin's existing residential neighborhoods.
- Policy 511.1 Develop and implement specific, detailed plans tailored to the needs of each neighborhood.
- Policy 511.3 Increase the power of neighborhood residents in decisions affecting the neighborhood.

SECTION VI: PARKS, OPEN SPACE, AND LEISURE FACILITIES

GOAL 620.0 IMPROVE DESIGN CRITERIA AND EVALUATION PROCEDURES TO ACCOMPLISH A HIGH QUALITY PARK SYSTEM.

- Objective 621.0 Establish design criteria for park facilities and programming.
- Policy 621.4 Coordinate planning activities to provide a hike and bike trail system throughout the city within open space, parks, and street corridors.
- Policy 621.5 Acquire and develop park land adjacent to new thoroughfares where feasible.
- Objective 622.0 Consider the mobility-impaired population of Austin in all planning and construction phases.
- Policy 622.1 Determine and identify the needs for the mobility-impaired population of Austin with respect to facilities, and transportation which are related to leisure activities.
- Objective 623.0 Consider the overall aesthetic setting of Austin in the planning and development of parks and open space and municipal projects.
- Policy 623.2 Develop a municipal street tree planting and landscaping program.

SECTION VII: TRANSPORTATION SYSTEMS

GOAL 710.0 DEVELOP A BALANCED, SAFE, AND EFFICIENT SURFACE TRANSPORTATION SYSTEM.

- Objective 711.0 Encourage development and use of public transportation systems.
- Policy 711.1 Establish an effective, internal public transportation circulation system within the core area and other major activity centers which would integrate with the local transportation system.

- Policy 711.2 Promote services and increase passenger amenities to encourage transit use, especially for commuter trips during peak hours.
- Policy 711.3 Establish a low or pre-paid fare structure for transit in order to increase ridership.
- Policy 711.4 Develop an intra-city transit system serving all areas within the metropolitan area.
- Policy 711.5 Develop transit service programs tailored to the needs of existing and potential users, including, but not limited to the development of braille bilingual and culturally oriented transit information and special shopping and recreation service programs.
- Policy 711.6 Develop high intensity transit travel corridors by integrating various community infrastructure elements and restricting high density and major activity development to these major corridors.
- Policy 711.7 Develop core area terminal facilities interfacing inter-city bus and rail passenger service with appropriate major urban mass transit system routes, feeder services, taxi services, bikeways, and pedestrianways.
- Policy 711.8 Develop terminal-transfer facilities at strategic locations throughout the city interfacing intra-city transit, taxi, bicycle, pedestrian, and parking facilities.
- Policy 711.9 Establish routes (streets or lanes) or entrance/exit ramps where low-occupancy vehicles are restricted during specified periods of particular days.
- Policy 711.10 Better city-wide taxi service by insuring 24-hour service, minimizing response time to calls, and encouraging multiple passenger fare-structure.
- Policy 711.11 Establish taxi fares that will provide sufficient revenues for the operators yet not be burdensome to the user.
- Objective 712.0 Expand and establish planning, funding, implementation and operation of multi-modal transportation systems, including but not limited to transitways, roadways, bike-ways, and pedestrianways.
- Policy 712.1 Develop and implement management programs that promote operationally compatible multi-modal transportation corridors.
- Policy 712.2 Establish partial or total "auto-free" zones in conjunction with other simultaneous efforts to maintain or increase the level of accessibility to the zones.

- Policy 712.3 Improve the safety and security of all transportation facilities and their users through educational programs and appropriate facility design.
- Policy 712.4 Modify design of hazardous drain inlets and remove obstacles to insure both pedestrian (including mobility-impaired persons) and cyclist safety.
- Policy 712.5 Evaluate annually, the implementation and operation of the multi-modal transportation system through one and five-year programs.
- Policy 712.6 Develop and refine the total transportation system that anticipates and is consistent with long-range plans and land use, housing, environmental and social services objectives, utilizing short-term strategies and programs to correspond to various lifestyles.
- Policy 712.7 Develop corridors in which long and short-term coordination of transportation and land use improvements consistent with community transportation objectives, modal choices, and movement patterns within the corridor are focused.
- Policy 712.8 Develop mechanisms to provide for the planning, implementing, and operating multiple use of right-of-way.
- Policy 712.9 Identify a system of transportation corridors based on movement characteristics.
- Policy 712.10 Implement an effective and efficient management program to guide the existing transportation elements into a multi-modal system.
- Policy 712.11 Construct or modify bridges to provide for safe movement of people, utilizing all modes.
- Policy 712.12 Protect or eliminate all roadway-railway at-grade crossings at major streets and protect crossings at other streets. Discourage at-grade crossings in new developments.
- Objective 713.0 Develop a safe and effective network of bicycle and pedestrian facilities.
- Policy 713.1 Develop a comprehensive and all-weather pedestrian network in areas where people would desire to walk alongside space dominated by vehicular movements and/or in space reserved exclusively for pedestrian movements, including but not limited to alleys.
- Policy 713.2 Establish a comprehensive set of standards which will govern the degree of separation between pedestrian and vehicular movements.

- Policy 713.3 Provide pedestrianways (by means of Public Use Easements where appropriate) in all new areas concurrent with other construction work.
- Policy 713.4 Improve pedestrian safety and access along major streets and intersections. This could be accomplished through use of special phasing, pedestrian-activated traffic control signals, other traffic control devices, and maximum separation between the pedestrianway and roadway while avoiding major obstacles such as trees.
- Policy 713.5 Provide pedestrian amenities and increase the comfort and convenience of pedestrianways, especially in high activity centers.
- Policy 713.6 Develop a community-wide bikeway network based on a comprehensive plan which includes, where appropriate, hard surface bike trails along linear parks and creeks.
- Policy 713.7 Improve the channelization of bicycle and motor vehicular movements along streets and at major intersections.
- Policy 713.8 Establish standards governing parking of vehicles in on-street bicycle facilities.
- Policy 713.9 Develop a community-wide bikeway network based on a comprehensive plan which includes hard surface bike trails along linear parks and creeks, bikeway facilities in high traffic volume areas and in all new developments.
- Policy 713.10 Encourage a single state-wide bicycle identification (licensing) system.
- Policy 713.11 Expand safety and educational programs dealing with non-motorized transportation.
- Policy 713.12 Establish a comprehensive set of standards which will govern the degree of separation between pedestrian and vehicular movements.
- Objective 714.0 Encourage the efficient use of roadways and other existing transportation elements.
- Policy 714.1 Develop an active program designed to encourage and assist businesses and institutions to develop and implement incentive measures for the use of high occupancy vehicles such as transit, car pooling, or other ride-sharing vehicles and non-motorized transportation.
- Policy 714.2 Encourage the establishment of staggered working hours within the core area and other major activity centers.
- Policy 714.3 Improve the flow of traffic through such techniques as synchronized traffic signals, lane control, surveillance systems and one-way streets and left turn lanes.

- Policy 714.4 Restrict on-street parking after taking into consideration the traffic flow, adjacent land uses, and alternate available routes, including alternative forms of transportation.
- Policy 714.5 Uniformly enforce all laws and regulations pertaining to traffic operations.
- Policy 714.6 Minimize the interference of utilities with the use of transportation ways.
- Policy 714.7 Design and develop circulation patterns in the core area to de-emphasize thru traffic.
- Policy 714.8 Develop comprehensive parking plan and policy based on desired land use/transportation relationships.
- Policy 714.9 Establish parking allocations as one of several means of supporting the multi-modal use of the transportation system.
- Policy 714.10 Establish a workable set of guidelines for exemptions from parking regulations.
- Policy 714.11 Regulate access along roadways.
- Policy 714.12 Provide emergency service vehicles with improved routing and control systems to minimize response time and insure safe operations.
- Policy 714.13 Establish a maintenance program for bike, pedestrian, transit, and road facilities.
- Policy 714.14 Develop an advertising program that encourages the use of the transit system.
- Policy 714.15 Pave all unpaved streets.
- Policy 714.16 Develop user-oriented marketing programs that encourage the efficient use of various transportation modes.
- Objective 715.0 Improve basic mobility for all mobility-impaired individuals.
- Policy 715.1 Coordinate special transportation service programs and funding for maximum efficiency and effectiveness.
- Policy 715.2 Develop barrier-free pedestrianways with specific provisions for ramps and crosswalks.
- Policy 715.3 Provide adequate pedestrian signal time to allow mobility impaired persons to safely negotiate selected street intersections.
- Policy 715.4 Provide for mass transit or alternative services for mobility impaired individuals.

Policy 715.5 Reserve appropriate parking spaces for the mobility-impaired in public parking facilities.

Policy 715.6 Require all public use buildings to be made physically accessible to mobility-impaired persons.

GOAL 720.0 ENSURE THAT THE DESIGN AND USE OF THE TRANSPORTATION SYSTEM ENHANCES AND MAINTAINS THE ENVIRONMENTAL QUALITY OF THE METROPOLITAN AREA.

Objective 721.0 Maintain acceptable noise level standards.

Policy 721.1 Develop appropriate noise standards for each classification of transportation ways and include noise consideration in design operation and maintenance of the facilities.

Policy 721.2 Limit the operation of vehicles engaging in motor freight carrier operation to designated truck routes for through-city movement.

Policy 721.3 Use various means of buffering sound to reduce noise impacts on areas adjacent to transportation facilities.

Policy 721.4 Control the location and design of noise sensitive land uses in areas where existing transportation facilities create noise levels non-harmonious with such land uses.

Policy 721.5 Vigorously enforce applicable noise regulations.

Objective 722.0 Maintain and enforce acceptable air quality standards.

Policy 722.1 Develop appropriate air standards for each classification of transportation ways and include air considerations in design, operation, and maintenance of the facilities.

Policy 722.2 Allow the operation of only those vehicles which conform to established emissions guidelines.

Policy 722.3 Control emissions from indirect, transportation-related sources.

Policy 722.4 Regulate overall vehicle miles traveled within the urban area by encouraging more efficient distribution patterns of services and open space.

Objective 723.0 Improve control of transportation-related storm water runoff.

Policy 723.1 Use special pavement materials, street curb geometry, and other methods to reduce water runoff and creek pollution.

GOAL 730.0 ENHANCE THE RELATIONSHIPS BETWEEN THE TRANSPORTATION SYSTEM AND ADJACENT LAND AND LAND USES.

Objective 731.0 Ensure the functional compatibility between the transportation system and adjacent land and land uses.

- Policy 731.1 Require a study of the impact between significant changes in land use or transportation in order to insure compatibility.
- Policy 731.2 Prevent interference with sight distances along transportation ways.
- Policy 731.3 Coordinate the location and appearance of traffic control devices to maximum extent possible.
- Policy 731.4 Install efficient and economical street lighting to promote safety of traveled ways while not detracting from adjacent areas.
- Policy 731.5 Use buffer zones as appropriate to provide compatibility between transportation ways and adjacent areas.
- Policy 731.6 Ensure that development of major transportation ways produce minimum negative impact on neighborhoods either through location or design factors.
- Policy 731.7 Develop physically identifiable areas for separate transportation functions so as to minimize conflicts with activities on adjacent land.
- Objective 732.0 Ensure aesthetic, compatibility between transportation facilities and adjacent land and land uses.
- Policy 732.1 Design bridges and overpass structures to enhance surrounding environmental features.
- Policy 732.2 Develop landscaping and tree planting programs to enhance overall efficient vehicular and pedestrian movement.
- Policy 732.3 Encourage enhancement of the overall appearance of transportation routes.
- Policy 732.4 Develop beautification and buffering performance standards for all parking facilities.
- Policy 732.5 Design and place street lighting and other transportation support devices according to safety criteria in order to enhance safety for all modes of transportation and enhance nearby aesthetic features.

GOAL 740.0 PROVIDE ADEQUATE AIR TRANSPORTATION FACILITIES.

- Objective 741.0 Provide safe, efficient, and convenient movement of people and freight via air carrier and general aviation.
- Policy 741.1 Coordinate all metropolitan surface and air transportation operations.
- Policy 741.2 Develop an Airport Master Plan for the short, medium and long-range periods and update it at regular intervals.

- Policy 741.3 Implement Master Plan phasing to provide for adequate airline terminal facilities, aircraft sales and service facilities, as well as runway, taxiway and navigational aids.
- Policy 741.4 Establish an Airport/Impact District which is subject to special zoning and policies to provide for environmental and land use compatibility.
- Policy 741.5 Set user charges to offset the operating and capital costs of the airport.
- Policy 741.6 Provide adequate vehicular parking for airport facilities.
- Policy 741.7 Improve airport freight and loading facilities.

GOAL 750.0 ENCOURAGE EFFICIENT MOVEMENT OF GOODS AND SERVICES BY SURFACE TRANSPORTATION WITHIN THE URBAN AREA.

- Objective 751.0 Encourage coordination between all public and private agencies involved in goods and services movement.
 - Policy 751.1 Develop a "goods and services movement" plan.
 - Policy 751.2 Encourage a single rail-trucking terminal facility.
 - Policy 751.3 Encourage a single package express facility for bus companies.
 - Policy 751.4 Encourage joint delivery services for a concentration of retail stores, like-service oriented businesses, etc.
- Objective 752.0 Encourage efficiency in roadway related goods movement and its impact on the transportation system.
 - Policy 752.1 Prohibit parking for pick-up or delivery except in specified loading zones and prohibit parking in areas reserved for deliveries.
 - Policy 752.2 Explore the feasibility of designating areas in which deliveries can only be made during specific hours.
 - Policy 752.3 Where alleys are available, require the use of alleys in commercial areas for delivery purposes.
 - Policy 752.4 Require off-street load dock areas.
- Objective 753.0 Encourage efficiency in railroad related goods movement and its impact on the transportation system.
 - Policy 753.1 Encourage the establishment of a single rail yard facility for all railroads.
 - Policy 752.2 Establish areas in which deliveries can only be made during specific hours, as appropriate.

Policy 752.3 Where alleys in commercial areas are available restrict and require their use for delivery purposes only.

SECTION VIII: HEALTH AND HUMAN SERVICES

GOAL 810.0 IMPROVE THE PLANNING, MANAGEMENT, FUNDING, AND DELIVERY OF HEALTH AND HUMAN SERVICES WITHIN THE CITY OF AUSTIN.

Objective 813.0 Begin immediately to address the specific problems and to consider the specific recommendations concerning current health and human service programs which were identified by the Goals Assembly.

Policy 813.4 Improve emergency health care.

In conjunction with these goals, objectives and policies for the metropolitan Austin area, additional ones are necessary for the rural growth areas of the county. These goals, objectives, and policies are as follows:

GOAL: DEVELOP A BALANCED, SAFE, AND EFFECTIVE TRANSPORTATION SYSTEM

- | | |
|---------------|---|
| Objective 1.1 | <u>Eliminate hazardous conditions which exist on county roadways.</u> |
| Policy 1.1.1 | Widen all county roadways with traffic volumes over 50 vehicles per day (vpd) to a 20 foot minimum pavement width, or if unpaved, a 24 foot minimum crown width. Widen major county roadways with traffic volumes over 125 vpd to a 24 foot minimum width. |
| Policy 1.1.2 | Provide and maintain improved roadway signing and striping in conformance with the <u>Texas Manual on Uniform Traffic Control Devices.</u> |
| Policy 1.1.3 | Minimize the presence of hazardous water crossings by upgrading low-water crossings; reconstructing structurally unsound bridges; and eliminating unsafe bridge-approach conditions, bridge sidewalls, and culvert headwalls. All bridges should exhibit a drainage capacity sufficient to carry the 25-year flood. |
| Policy 1.1.4 | Construct all new bridges and reconstruct existing bridges to a 26 foot minimum roadway width. The preferred width for bridges with traffic volumes over 400 vpd is 34 feet roadway width. |
| Policy 1.1.5 | Prevent interference with sight distance along roadways and encourage the improvement of roadway alignment to meet the American Association of State Highway Officials standards. |
| Policy 1.1.6 | Encourage systematic arterial and collector roadway development within subdivisions which will reduce intersections with and traffic on existing county roadways not meeting collector or arterial standards. |
| Policy 1.1.7 | Update road construction standards for subdivisions under County jurisdiction. |
| Policy 1.1.8 | Develop construction barricade standards. |
| Policy 1.1.9 | Develop procedures that will insure that utility constructors restore roadway and drainage conditions to the County's road construction standards. |
| Policy 1.1.10 | Develop a computerized traffic accident file and analyze periodic reports to determine the feasibility of projects to minimize accidents and increase traffic safety. |

Objective 1.2 Improve roadway surface conditions on county roadways.

- Policy 1.2.1 Increase the use of engineered designs for major construction/reconstruction of bridges and roadways.
- Policy 1.2.2 Encourage the development of systematic maintenance and reconstruction programs.
- Policy 1.2.3 Search for an equitable reimbursement policy to assist small incorporated areas with road maintenance and/or construction.
- Policy 1.2.4 Establish a uniform policy for paving of unpaved county roads.
- Policy 1.2.5 Establish and enforce load limits on county roadways.
- Policy 1.2.6 Encourage the development and use of new materials and techniques for construction which may produce more economical or longer lasting roadways.
- Policy 1.2.7 Encourage the development of truck routes away from residential areas as alternatives to truck routes penetrating residential areas.

Objective 1.3 Improve county residents' accessibility to transit services.

- Policy 1.3.1 Promote intergovernmental cooperation necessary to achieve the efficient coordination of transit services and funding mechanisms throughout the Travis County area.
- Policy 1.3.2 Provide a basic level of special transit service to mobility impaired persons residing outside of incorporated areas.
- Policy 1.3.3 Encourage the development of remote parking areas in the county with express transit service provided to Austin's core area and other major activity centers.

Objective 1.4 Develop a safe and effective network of bicycle and pedestrian facilities.

- Policy 1.4.1 Develop a bike route system along county roads and highways where bicycle use is anticipated or encouraged.
- Policy 1.4.2 Remove hazardous conditions for bicyclists along the bike route system.
- Policy 1.4.3 Develop warrants and engineering designs for locations where separate bikeway right-of-way is required parallel to roadways.
- Policy 1.4.4 Develop recreational bikepaths in major county parks including but not limited to Pace Bend County Park.
- Policy 1.4.5 Develop a safe pedestrianway network serving schools.

Objective 1.5 Encourage the efficient use of roadways and other existing transportation elements.

Policy 1.5.1 Provide incentives to County employees for the use of high occupancy vehicles such as transit, carpooling, or other ridesharing vehicles and nonmotorized transportation.

GOAL 2: PROVIDE A TRANSPORTATION SYSTEM THAT MINIMIZES THE NEGATIVE AND MAXIMIZES THE POSITIVE IMPACTS TO THE NATURAL, PHYSICAL, AND SOCIAL ENVIRONMENTS.

Objective 2.1 Require roadway designs and alignments which are compatible with the natural, physical, and social environments.

Policy 2.1.1 Investigate alternative roadway alignments so as to minimize cut and fill requirements for roadway construction.

Policy 2.1.2 Establish development standards which minimize the crossing of creekbeds and discourage the location of roadways in floodplains.

Policy 2.1.3 Encourage designs which minimize roadway construction on land with slopes greater than 25%.

Policy 2.1.4 Establish standards on road gradients/slopes, and roadside drainage construction methods which will prevent excessive erosion.

Policy 2.1.5 Design bridges and culverts to enhance surrounding environmental features.

Policy 2.1.6 Improve control of roadway-related stormwater runoff, including erosion and sediment control.

Policy 2.1.7 Encourage staged development of land with all transportation facilities constructed as platted. Require more complete road construction plans prior to the County's filing of the final plat.

Policy 2.1.8 Establish areas within county parks which are accessible only to nonmotorized vehicles and activities.

Policy 2.1.9 Incorporate pedestrian malls into the County Courthouse Complex.

Objective 2.2 Promote the redirection of new development into areas of minimum environmental sensitivity as identified in the Comprehensive Plan for the City of Austin.

Policy 2.2.1 Coordinate with the City of Austin, the location and funding of transportation improvements for areas likely to be annexed by the City. This coordination should take place very early in the City's annexation process.

- Policy 2.2.2 Encourage highway impact zoning along major highways to promote land uses which are compatible with the type of service provided by the facility and the surrounding natural and social environment.
- Policy 2.2.3 Discourage transportation system development for urbanizing areas outside the desirable growth locations as identified in the Comprehensive Plan for Austin.
- Policy 2.2.4 Promote the preservation of prime agricultural lands.
- Objective 2.3 Establish air pollution control strategies which will allow Travis County to maintain the National Ambient Air Quality Standards established in the Federal Clean Air Act.

GOAL 3: INSURE THAT TRANSPORTATION IMPROVEMENTS ARE EFFICIENTLY, EFFECTIVELY, AND RESPONSIBLY PROVIDED FOR THE RESIDENTS OF TRAVIS COUNTY.

- Objective 3.1 Develop the necessary tools to insure that desirable transportation improvements will be provided for county residents.
- Policy 3.1.1 Monitor a broad range of county roadway conditions and provide a computerized roadway information file.
- Policy 3.1.2 Develop a system to identify roadway conditions and needs on a countywide basis to assure that funds are directed to the areas with the most pressing transportation problems.
- Policy 3.1.3 Actively encourage the state legislature to grant ordinance-making power to Travis County.

CHAPTER III

LONG RANGE TRANSPORTATION PLAN

GENERAL

In order to provide an overview of the development of the transportation system and associated land use that would impact or be impacted by the system, the Austin/Travis County metropolitan area has been divided into developmental areas (Exhibit 2). Following for each of the developmental areas are general land use/maximum transportation characteristics which are intended to provide guidelines for the implementation of current goals and policies presented as a part of this plan in Chapter II. These characteristics do not restrict the provision of interim services. As an example, exclusive transit would allow for the evolution of intermediate and priority services as interim services. It is inherently understood that over time, as new goals and policies may be adopted, these general characteristics shall be modified accordingly. More comprehensive information concerning the developmental areas and characteristics are contained in Appendix A.

1. Area One: Core

a. Roadway General Characteristics:

- (1) No development of freeways or expressways;
- (2) Limited development of new major arterials primarily for increasing access across Town Lake and for continuity of the existing arterial network;
- (3) Limited development of minor arterials except to provide for needed additional circulation capabilities and additional operational efficiencies of these roadways;
- (4) Application of strong transportation system management techniques to maximize vehicle occupancy of vehicles with urban core destinations.

b. Transit General Characteristics:

- (1) Development of exclusive transit service through the urban core on a north-south axis that would connect the central business district, the Capitol Complex, and the University of Texas campus;
- (2) Development of a system of reserved lanes in roadways to facilitate movement of priority transit service within and through the urban core;
- (3) Development of intermediate transit service to connect "near in" neighborhoods within the core area;
- (4) Development of an internal circulation system within the urban core to facilitate circulation within the urban core and to provide connections with exclusive transit service.

c. Associated Land Use Implications:

- (1) Discourage major drive-in facilities such as drive-in banks, major parking structures, etc., from having access to major arterials;

- (2) Encourage intense use of land within four blocks of transit stations/terminals except where existing land uses (parks, historical zoning, etc.) would not justify.

2. Area Two: Urban

a. Roadway General Characteristics:

- (1) Development at or near the urban boundary of an urban freeway ring to provide through traffic bypass of the area within;
- (2) No development of additional freeways or expressways within the urban freeway ring, except for U.S. Highway 290 east of Berkman Dr;
- (3) Limited development of major arterial streets except for the purpose of aiding east-west movements between freeways or major arterials located to the north and south of the urban core;
- (4) Limited development of minor arterial streets, except where existing roadways are critically substandard;
- (5) Primary emphasis on minor improvements to minor arterials, particularly at intersections, to maximize operational efficiency and minimize diversion of through traffic in neighborhoods;
- (6) Application of strong transportation system management techniques to maximize vehicle occupancy during peak hours especially within freeway and major arterial corridors.

b. Transit General Characteristics:

- (1) Development of exclusive transit service to connect major activity centers with the urban core;
- (2) Development of priority transit service to connect other activity centers and the suburbs with the urban core;
- (3) Development of intermediate transit service to facilitate movements in secondary travel corridors, east-west and north-south crosstown movements and internal circulation systems within major activity centers.

c. Associated Land Use Implications:

- (1) Application of special land use/development controls within impact zones along higher type (freeway, expressway) roadways and around transit stations and/or transit terminals;
- (2) Encourage new commercial (office, retail) and apartment development to occur in multiuse activity centers located where major roadway facilities and transit service are available to service the multiuse activity center;
- (3) Encourage only land uses which can be supported by the existing transportation system or by transit system improvements;
- (4) Encourage innovative transportation improvements to respond to distinct and unique land characteristics in the urban area.

3. Area Three: Urban Fringe

a. Roadway General Characteristics:

- (1) Development of major radial freeways for short segments outside the urban freeway ring to facilitate the transition

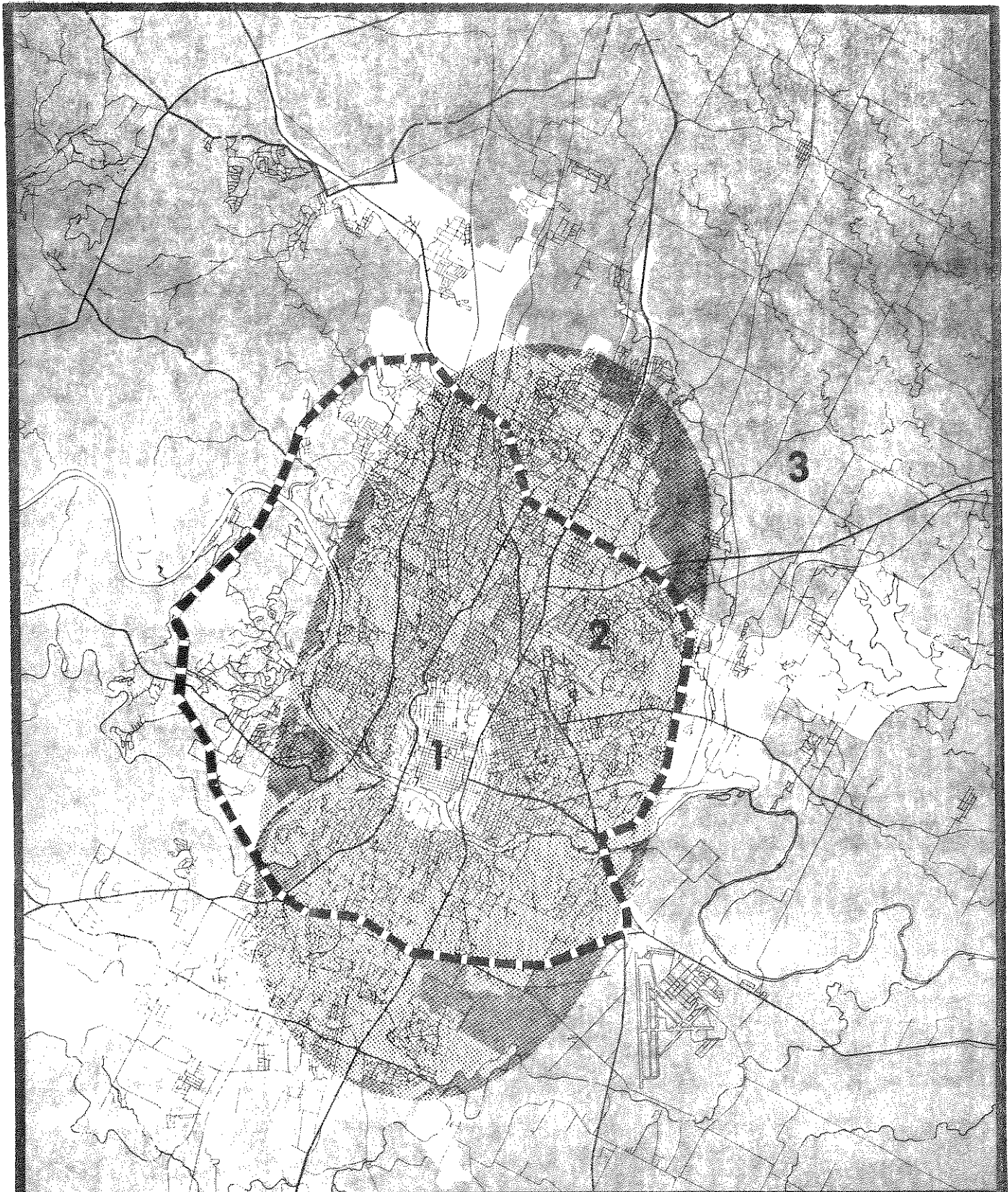




EXHIBIT 2: DEVELOPMENTAL AREAS

AREA ONE: CORE
AREA TWO: URBAN 
AREA THREE: URBAN FRINGE
URBAN FREEWAY RING 

- from higher to lower type roadway design;
 - (2) Development of major radial urban expressways from outside of the urban ring roadway to the fringe of the urbanizing area;
 - (3) Development of major arterials to provide access to freeways or expressways, to provide for through movement in the urban fringe area;
 - (4) Development of minor arterials for movements between residential areas and access to larger roadways.
- b. Transit General Characteristics:
- (1) Development of park-and-ride terminals and exclusive transitways along major roadways served by priority transit to the urban core;
 - (2) Development of intermediate transit service in selected areas to provide access to exclusive transit and provide for movement across urban/suburban development in the urban fringe area.
- c. Associated Land Use Implications:
- (1) Application of special land use/development controls within impact zones along freeways and expressways and around transit terminals;
 - (2) Encourage new commercial (office, retail) and apartment development to occur in multiuse clusters located near the intersection of major roadways and/or transit terminals;
 - (3) Application of land use/development controls within a corridor to prevent overloading of the corridor's roadway and transit facilities.

In addition to the development of the major transportation modes, it is necessary to encourage the development of other forms of transportation. Some of the major characteristics of the other modes within the system are described below:

- 1. Development of a pedestrianway system along all streets within the urban and urbanizing areas;
- 2. Development of a bikeway system along all major and minor arterials and collector streets within the urban and urbanizing areas;
- 3. Development of bikeways and of pedestrianways across freeways, expressways, railroad tracks, and other physical barriers to travel;
- 4. Provide facilities for bicycle and pedestrian access to and between schools, transit stations/terminals, activity centers, neighborhoods, and parks;
- 5. Provide a highly developed, integrated pedestrianway (malls, sidewalks, aerial walkways, etc.) system within major activity centers;
- 6. Require all building and transportation facilities used by the public to be architecturally barrier free for the elderly and mobility impaired;

7. Provide specialized transit service for the mobility impaired;
8. Encourage timely planning and implementation for municipal airport improvements and/or relocation in order to satisfy both air carrier growth and to provide for general aviation needs.
9. Encourage the development of a single passenger terminal for intercity common carriers, such as bus lines and Amtrak;
10. Examine the relocation of railroad lines (M.P., S.P., M.K.T.) currently located within the urban ring.

Levels of Roadway and Transit Emphasis

The Long-Range Transportation plan identifies major transportation corridors within the Austin/Travis County area. Since most travel occurs within these identified corridors, varying emphasis will be placed on roadway and transit facilities and services.

There are numerous transport facilities which are not identified as major transportation corridors. Such roadway facilities as collector and local streets; transit services including local, feeder, and demand responsive transit; and nonmotorized transportation including cycling and walking, provide necessary transport functions in the total transportation system. In relation to major facilities, however, their service is more localized in nature, and thus they are planned for and operated by the appropriate unit of government.

Four levels of roadway emphasis and three levels of transit emphasis are specified in the Long-Range Transportation Plan. The level of emphasis shown for each facility is set forth to reflect the anticipated maximum expected development of roadway and transit within each corridor. If growth, development, and travel conditions change significantly in ensuing years, then the specified level of transit or roadway emphasis can be redesignated to a lower or higher level to reflect current conditions. The levels include the following:

| <u>Roadway</u> | <u>Level of Emphasis</u> | <u>Transit</u> |
|----------------|--------------------------|----------------------|
| Freeway | I | Exclusive Transit |
| Expressway | II | Priority Transit |
| Major Arterial | III | Intermediate Transit |
| Minor Arterial | IV | |

A more detailed description of each level of emphasis in the previous table can be found in Appendix B.

Identification of Corridors and Levels of Emphasis

Based on analysis of existing and future travel ways, major transportation corridors have been identified. Each corridor is expected to have specific emphasis of roadway, transit, or combination roadway-transit activities. These levels of emphasis which are expected to be the maximum development,

are presented for each corridor on Exhibit 3. The lines indicated on Exhibit 3 indicate general location or routing of various corridors and not the designation of specific facilities, nor a commitment to construct any project.

Corridor Study Priorities and Procedures

Because there are many significant transportation corridors, it is necessary that priorities be established on an annual basis in order to identify sequentially those requiring study and analysis. Procedures for the conduction of corridor studies will set forth a systematic and technically adequate process for the comprehensive examination of all transportation (roadway, transitway, bikeway, and pedestrianway) needs within the corridor.

As a result of these corridor studies, along with concurrent neighborhood and activity center studies, the Long-Range Transportation Plan will provide specific courses of action to be followed in the development of the area's transportation system.



INSET 'B'
See following page

INSET 'A'
See following page

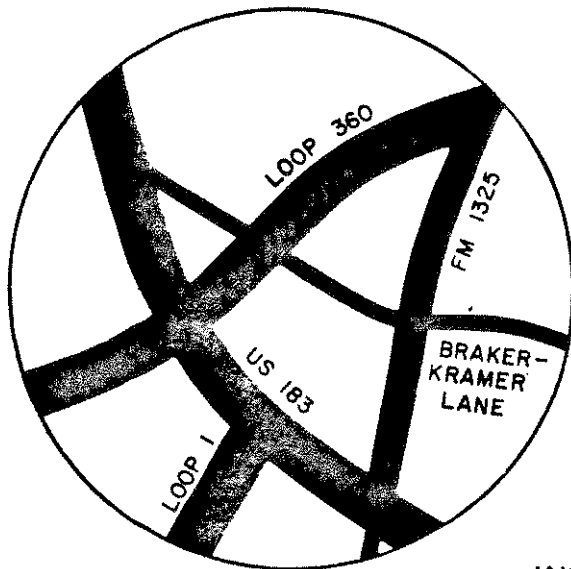
- I FREEWAY
- II EXPRESSWAY
- III MAJOR ARTERIAL
- IV MINOR ARTERIAL
- Denotes emphasis designation not approved. Refer to inset 'A' options.

LONG RANGE
TRANSPORTATION PLAN
LEVELS OF ROADWAY EMPHASIS

NOTE: THE LINES INDICATE GENERAL LOCATION OR ROUTING OF VARIOUS CORRIDORS AND NOT THE DESIGNATION OF SPECIFIC ROAD FACILITY LEVELS OF EMPHASIS ARE ANTICIPATED MAXIMUMS

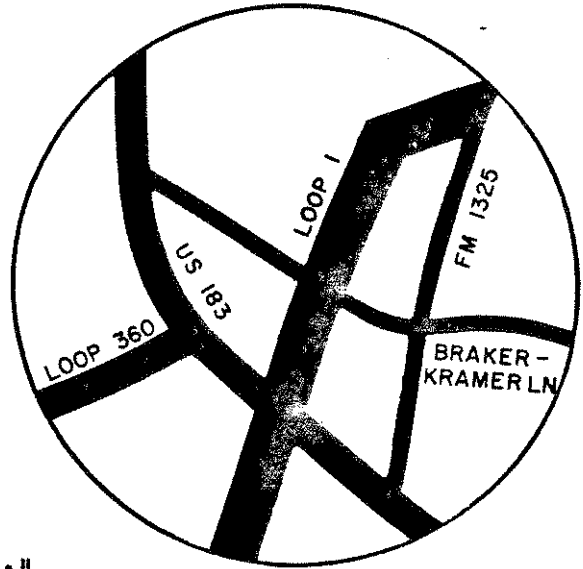
THIS EXHIBIT SHOULD BE CONSIDERED ONLY IN CONJUNCTION WITH THE LONG RANGE TRANSPORTATION PLAN DATED

EXHIBIT 3A
SHEET 1 of 2

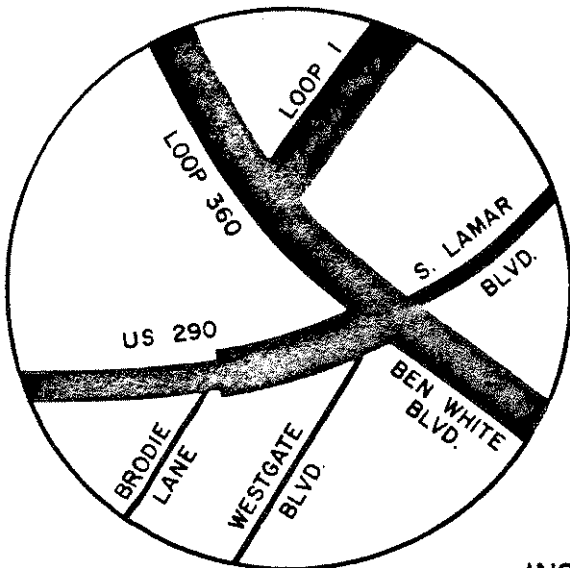


OPTION 1

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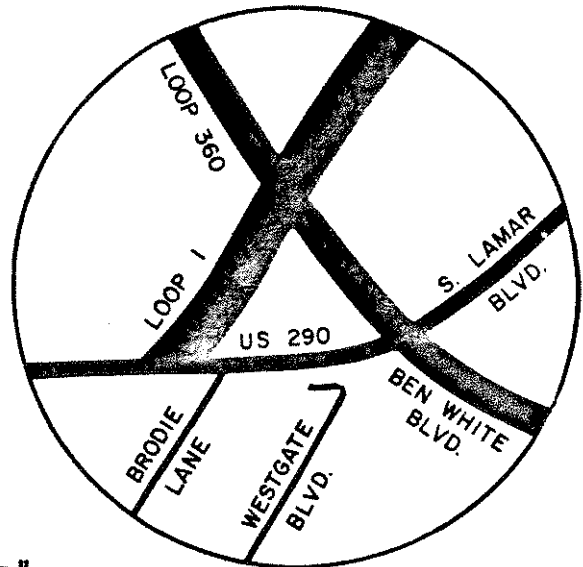


OPTION 2



OPTION 1

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OPTION 2

EXHIBIT 3A

SHEET 2 of 2

LEVELS OF ROADWAY EMPHASIS

| | | |
|--|-----|----------------|
| | I | FREEWAY |
| | II | EXPRESSWAY |
| | III | MAJOR ARTERIAL |
| | IV | MINOR ARTERIAL |

NOTE:

Options indicated do not preclude other possible alternative configurations.

APPENDIX

- A. Developmental Areas and Characteristics and Corridor Designations
- B. Definitions of Levels of Emphasis

APPENDIX A
DEVELOPMENT AREAS AND CHARACTERISTICS
AND CORRIDOR DESIGNATIONS

Development Areas

As a part of the proposed Long-Range Plan, development characteristics have been identified for three different areas within the county. The concentric rings that form the boundaries between these areas generally represent the limits of various stages of urban development. While these development stages are relatively homogenous throughout any one area, they vary between each. Similar development stages within each area include:

- * population density
- * population and transportation activity
- * transportation facility costs
- * transit service costs
- * relative "fixedness" of land use, road alignments, etc.

To some degree the similarities within and the variation between areas produces transportation problems and needs unique to each area. How these problems are to be addressed, and how the uniqueness of development within the areas is to be preserved require application of transportation development characteristics suitable for the individual area. By categorizing the transportation development characteristics, they are tailored to the appropriate problems and needs of an area.

The boundaries of Areas 1 and 2 as depicted by Exhibit 2 in the Long-Range Plan represent generally the limits respectively of the intensively developed core area and that of the urban area. These developmental area boundaries have been selected with planning convenience in mind, and whereas the core area may be considered more relatively fixed, neither it nor the urban boundary is intended to be totally rigid. With justification, developmental characteristics may be applied across the boundaries on a case by case basis.

The three areas illustrated in Exhibit 2 in the Long-Range Plan have been designated as follows:

- Area 1 - This area is for the most part totally developed, and characterized by a collection of intense and specialized activity centers. Changes in land use are generally a result of redevelopment activities. The location and widths of transportation facilities are expected to remain predominantly fixed.
- Area 2 - This area is composed primarily of developed urban areas which are currently experiencing infill development and some redevelopment. The alignments for providing transportation services are relatively fixed.

Area 3 - This area is mainly composed of areas of undeveloped land within the county. There are, however, isolated pockets of development, and a few areas already completely urbanized, particularly adjacent to the inner boundary of Area 3. The locations of major roadways and transportation services are not fixed, nor unduly constrained.

Development Characteristics

The development characteristics which have been identified in the Long-Range Plan reflect an intent for the manner in which the transportation system should develop in each of the three areas. As written, they speak to the type of mobility to be offered by the transportation system. The desired relationship of the transportation system with the environment, neighborhoods, urban development, and aesthetics is not directly identified even though, in some cases, it may be directly implied.

The intent of the development characteristics in Area 1 is to:

- * Encourage revitalization of the urban core.
- * Increase or optimize the person carrying capacity of existing roadways primarily through the use of transportation system management (TSM) strategies and allowing minor roadway reconstruction.
- * Encourage use of transit to Area 1 destinations by providing good service from Areas 2 and 3 and an excellent circulation system within Area 1.

The intent of the development characteristics in Area 2 is to:

- * Encourage large scale redevelopment to occur in multiuse activity centers located at points served by major transportation facilities.
- * Maximize the use of TSM strategies to improve existing roadway facilities with only limited roadway development to improve safety and allow traffic movement on roadways which do not penetrate and are buffered from residential areas.
- * Improve transit to provide a better-than-basic service within Area 2 and a high level of service to Area 1 and other major activity centers.

The intent of the development characteristics in Area 3 is to:

- * Allow and encourage urban development to occur in conformance with the growth corridors (as identified in the City of Austin Comprehensive Plan) by providing transportation facilities and access.
- * Insure that the function of the transportation facilities are not overly impaired in the future by "improper" land use adjacent to the facility or within the corridor.

- * Foster the use of priority transit into Areas 1 and 2 from outlying locations within Area 3, and of intermediate transit in contiguous development in Area 3.

A few additional development characteristics are identified for application to the entire area. The intent of these is to:

- * Promote substantial development of bicycle and pedestrianway networks.
- * Promote architecturally barrier-free buildings and transportation facilities.
- * Encourage coordination of intercity surface passenger transportation at a single terminal.

Transportation Corridors

Exhibits 3A and 3B in the Long-Range Plan identify the corridors to be emphasized for transit or automobile use in the future. The corridors and transportation emphasis in conjunction with the applicable area development characteristics identify the manner in which the transportation system should be developed.

Within Area 1, no new roadways are proposed except a possible new bridge across Town Lake as an extension of Barton Springs Road northeasterly. TSM improvements are implied to establish an integral set of north/south one-way pairs to facilitate movement and foster revitalization of the urban core. East/west movement is encouraged onto the most appropriate facilities. Transit service in this area is characterized by a north/south spine with good east/west circulation and connections with the rest of the transit corridors. Again, local service is implied.

Within Area 2, Exhibit 3A indicates the most appropriate roadways on which to concentrate auto traffic and at the same time minimize the level of traffic on other roads and through neighborhoods. Roadway facilities which presently exist will remain with TSM improvements applied to promote more efficient operation. No new freeways are shown inside the freeway ring beyond those already programmed. The transit emphasis within Area 2 illustrates a pattern with crosstown routes and priority and exclusive transit radial routes. Local transit service has not been shown but is implied as essential to provide an adequate level of service throughout Area 2 and to provide access to the priority and exclusive transit corridors. The major transit corridors are superimposed onto major arterial alignments which will have high levels of activity and numerous destinations along their length.

Within Area 3, the designation of roadway corridors is to provide access to and reinforce the growth region as identified in the City Comprehensive Plan while also recognizing the need to accommodate the momentum of urbanization out the U.S.183 north and U.S.290 west corridors. Transit service extending into Area 3 is composed of priority and intermediate levels of service with no construction of fixed transit facilities. The provision of local transit service is not identified.

Implied throughout the entire area is a coordinated and strong pedestrian/
bicycle system to complement both roadway and transit systems.

APPENDIX B

DEFINITIONS OF LEVELS OF EMPHASIS

LEVELS OF ROADWAY EMPHASIS

LEVEL I: FREEWAY

Physical Design: Multiple-lane roadways which are separated by a continuous median strip or barrier.

Functional Characteristics: A high speed, high capacity facility which serves as a primary route for long distance rural-urban, inter-urban, and intraurban through movement of persons, and goods.

Access: The control of access is fully exercised to give preference to through traffic by:

- 1) Providing grade-separated access connections with selected public roadways.
- 2) Prohibiting crossings at grade and driveway connections to main lanes.

Full control of access for the freeway is accomplished by a) public purchase of any existing access rights that may have accrued to adjacent land along the roadway alignment, or b) provision of frontage roads contiguous to and generally paralleling the main roadway that would intercept, collect, and distribute traffic desiring to cross, enter, or exit from the freeway, and that would also furnish access to adjacent properties which have access rights.

Land Use Relationship: Each method of achieving full control of access will generate or be responsive to different land use characteristics of the adjacent property. The provision of frontage roads will encourage or reinforce the development of higher intensity residential or non-residential land uses in a linear fashion along the freeway corridor, as well as in the areas where access connections are provided with other roadways. The purchase of access rights or the lack of frontage roads along the freeway will discourage the development of adjacent land between points of access and encourage the development of higher intensity land uses along crossing roadways near the points of freeway access. Special "Impact Zones" may be created along a freeway corridor to define the public policies pertinent to the relationships between existing and proposed development of nearby land, access, and the desired roadway operations.

Right-of-Way: The amount of space required by a freeway varies depending upon considerations such as topography, number of freeway travel lanes, provision and width of frontage roads, design of interchanges with other roadways, utility and drainage requirements. The specific design of a freeway determines the actual right-of-way requirements. In general, right-of-way width for a freeway (excluding interchanges) could be expected to range from 200-400 feet, or 61.0 to 122.2 meters.

Examples of freeways in Austin:

With frontage roads - Interstate 35

Without frontage roads - MoPac Blvd. (Loop 1) from Enfield Road to North Hills Drive

LEVEL II: EXPRESSWAY

Physical Design: Multiple lane roadways which are separated by a median strip or barrier along most of the facility.

Functional Characteristics: A moderately high speed, moderately high capacity facility which may serve as a primary or secondary route for long distance rural-urban, interurban, and intraurban through movements of persons and goods.

Access: The control of access is partially exercised to give preference to through traffic by grade-separated access connections which are usually provided at intersecting major roadways, controlled at-grade crossings with minor streets, and limited direct private driveway connections. The number, location, and geometric layout of these private driveway connections are controlled so as to insure the general safety of roadway users and to insure that roadway operations are not impaired by the availability of access to adjacent land.

Land Use Relationship: The partial control of access inherent in the design of expressways is intended to allow some access to abutting land, but on a limited basis. In areas where land use intensity is generally low or scattered (such as rural areas), direct driveway connections can suffice for the limited volume of traffic entering or exiting from those points. However, in areas where higher intensity land use concentrations may exist along an expressway (within urban areas), high volumes of entering and exiting traffic may require additional design measures to provide access without impairing safety and roadway operations. Examples include the provision of frontage roads to separate through traffic and local access traffic along short segments of an expressway, the provision of internal street networks within the abutting properties which would have access to the expressway at controlled locations or a combination of both. Special "Impact Zones" may be created along an expressway corridor to define the public policies pertinent to the relationships between the existing and proposed development of adjacent land, access, and the desired roadway operations.

Right-of-Way: The amount of space required by an expressway varies depending upon considerations such as topography, number of travel lanes, provision of frontage roads, design of interchanges with other major roadways, utility and drainage requirements. In general, the right-of-way width of an expressway would range from 150-250 feet, or 45.7-76.2 meters.

Examples of Expressways in Austin: Ben White Blvd., Research Blvd., and SH 71E; however, the application of the usual expressway concept as defined is very limited in Austin due to the limited number of grade separated crossings and the excessive number of private driveway connections along these facilities.

LEVEL III: MAJOR ARTERIAL

Physical Design: Multiple lane roadways which are often separated by a median strip along much of the facility or a single, undivided roadway. Both types include separate or designated lane spaces for turning traffic at all major intersections.

Functional Characteristics: A moderate speed, moderate capacity facility which may serve as a primary route for long distance interurban and a secondary route for long distance rural-urban and intraurban through movement of persons and local movement of goods, or serve as a primary route for short distance intrarural or intra-urban movement and for collection and distribution of traffic between higher and lower level roadways in urban and rural areas.

Access: The control of access is not exercised to limit the number of points of ingress or egress, except through governance of the placement and geometric layout of private driveway connections. These are located and designed to insure the safety of roadway users and to insure that roadway operations are not overly impaired by the availability of access to adjacent land.

Land Use Relationship: The minor control of access inherent in the design of major arterial roadways is intended to allow limited access to abutting land. Higher intensity land uses will generally occur in a linear fashion along the roadway, with a resulting demand for numerous driveway connections whose ingress and egress traffic can cause the general roadway operations to deteriorate. In some instances, abutting property owners may be encouraged to establish a single, common driveway for several land parcels that would coincide with the median opening.

Right-of-Way: The amount of space required by a major arterial facility varies depending upon considerations such as topography, number of travel lanes, utility and drainage requirements. In general, a major arterial could be expected to range from 100-150 feet, or 30.5-45.7 meters.

Examples of Major Arterials in Austin:

Divided: William Cannon Drive, Anderson Lane

Undivided:

w/o center left turn storage: Burnet Road (45th-Koenig Lane)

w/ center left turn storage: Airport Blvd. (45th-Lamar; Manor Rd.-East 7th St.), Lamar Blvd. (Ben White Blvd.-Barton Springs Rd; Guadalupe St.-Morrow St.)

LEVEL IV: MINOR ARTERIAL

Physical Design: Multiple lane roadways which may be separated by a median strip along some of the facility or a single, undivided roadway. Both types may contain separate or designated turning lanes at major intersections.

Functional Characteristics: A medium speed, medium capacity facility which may serve as a primary or secondary route for short distance intrarural or intraurban movement and for collection and distribution of traffic between higher and lower level roadways in rural and urban areas.

Access: The control of access is not exercised to limit the number of points of ingress or egress, except through governance of the normal placement and geometric layout of private driveway connections.

Land Use Relationship: The minor control of access inherent in the design of minor arterial roadways is intended to allow substantial access to abutting land. A mixture of low and higher intensity land uses can be expected along a minor arterial (except in the urban core) and much of the higher intensity commercial land use tends to concentrate around intersections with other important roadways. Access to land which is adjacent or near intersections requires evaluation to insure that local ingress or egress to these properties will not significantly impair traffic movements through the intersections.

Rights-of-Way: The amount of space required by a minor arterial varies but in general the right-of-way could be expected to range from 70 to 110 feet, or 21.3 to 33.5 meters.

Examples of Minor Arterials in Austin:

Divided: Rundberg Lane

Undivided: South 1st Street

LEVELS OF TRANSIT EMPHASIS

LEVEL I: EXCLUSIVE TRANSIT

Physical Design: A fixed guideway or busway for exclusive use of transit vehicles.

Functional Characteristics: A high speed, high capacity facility which serves as a primary route for long-distance urban transit movement of persons within major urban corridors. Service is very frequent with 5 to 10 minute headways in peak hours. This level of emphasis also applies to exclusive guideway internal circulation systems for major activity centers.

Access: Passengers would enter and exit the system at transit stations or transit terminals. Transit vehicles would stop only at these (station/terminal) points.

Land Use Relationship: Transit stations/terminals and the surrounding area should foster moderate to intensive land use occurring in a clustering or nodal fashion around the station/terminal. Within one-half mile, non-motorized (walking and cycling) access to the transit station/terminal should be emphasized. Within one to one-fourth mile, internal circulation systems and feeder transit should serve as the major form of access. Multi-use (commercial, retail, office, high-density residential) major activity centers and major special purpose (U.T., Capitol Complex, Municipal Airport, etc.) centers should be served by rapid transit facilities. Special "Impact Zones" should be considered for implementation up to one-half mile from the station/terminal.

Right-of-Way: The amount of space required for an exclusive transit facility varies depending on the transit mode and whether the facility is a subgrade, at-grade, or elevated facility. Generally, right-of-way of 40 to 80 feet (12.2 to 24.4 meters) is sufficient for transit-way development. Additional R-O-W is required near the stations.

Examples of Exclusive Transit: Shaker Heights (Cleveland) light rail transit-line and Shirley Highway (Virginia) busway.

LEVEL II: PRIORITY BUS TRANSIT

Physical Design: A specially treated roadway designed to give priority to movement of transit vehicles. Examples of priority treatment are reserved travel lanes, signal pre-emption, and freeway bypass ramps, etc.

Functional Characteristics: A high to moderate speed, moderate capacity facility which serves as a primary route for urban-to-suburban and urban movement of persons within major urban-to-suburban and major urban corridors. Service is frequent with 10 to 20 minute headways during peak hours.

Access: Passengers would enter the system at transit stations, transit terminals, or curb-side transit stops. Transit vehicles would stop only at the stations or terminals and at selected infrequent curb-side stops.

Land Use Relationship: Priority bus service should foster a moderate use of land around stations or terminals where non-motorized trips and feeder transit service are emphasized as the primary means of access. Where park-and-ride (auto access) access is emphasized, the station/terminal should have little influence on the immediate land use. Park-and-ride access would emphasize service from primarily low density, single family residential areas via auto to the transit system. The curb-side transit stops would not significantly influence the surrounding land use, other than possibly to reinforce existing land use.

Right-of-Way: The right-of-way for priority bus services would be within the roadway of an existing or proposed roadway facility. One or two travel lanes, 12 to 24 feet (3.7 to 7.3 meters), may be reserved for exclusive use by transit during specified time periods.

Examples of Priority Bus Transit: Trolley operations within the roadway and Dixie Highway (Miami, Florida) busway.

LEVEL III: INTERMEDIATE BUS

Physical Design: A roadway where transit and other vehicles share the use of the travel lanes.

Functional Characteristics: A moderate to low speed, moderate to low capacity facility which serves as a secondary route for urban or suburban movement of persons within urban and suburban corridors. Priority is given to providing frequent to very frequent service with 5 to 20 minute headways during peak demand periods. Intermediate bus service would also apply to internal circulation service in activity centers where this service is operated in mixed traffic within the roadway.

Access: Passengers would enter the system at curb-side transit stops that are frequently spaced (every 2 to 4 blocks) along transit routes or at transit stations/terminals where priority local transit routes intersect exclusive transit and/or priority bus routes.

Land Use Relationship: Intermediate bus should not have a significant impact on surrounding land use. The system's capacity and speed are too low and the frequency of transit stops too numerous to channel the volume of people through a specific point that would be necessary to induce major changes in land use. The service could possibly stabilize or reinforce existing land use.

Right-of-Way: No transit right-of-way would be required due to the fact that intermediate bus service will operate in mixed traffic (in the same lanes as other roadway vehicles) on roadways.

Examples of Intermediate Bus: U.T. Shuttle Bus routes to campus--
Enfield Road, Intramural Field, North Riverside, etc.