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# dallas area transit

Prepared for the City of Dallas, Texas By Barton-Aschman Associates, Inc. Evanston, Illinois February, 1976

### CONTENTS

List of Figures and Tables, iii Synopsis, 1

Chapter 1 PREFACE: THE TRANSPORTATION SITUATION	3	Vehicles and the Hardware Evolution Transit Stations: Where the Action Is	19 21
The Transportation Dilemma Why Consider Mass Transportation for Dallas?	3 5	Chapter 5 TRANSPORTATION AND ITS ENVIRONMENT	25
Chapter 2 HOW SHOULD WE PROCEED?	7	Reduced Pollution Transit and Land-use	25 25
Determine Transit Needs Coordination of Planning	7 7	Chapter 6 A CALL TO ACTION	26
The Approach to Transit Planning Chapter 3 THE RECOMMENDED TRANSIT PLAN: A NOW CONCEPT FOR THE FUTURE	8	Staging the Plan Recommended Plan Stages Implementing the Plan What Will Transit Cost? What Are the Financial Resources?	26 27 29 31 33
The Regional Framework The Transit Plan Elements of the Recommended Plan Transituous and Stationary A.Nu. – Flue	11 12 13	Are the Costs Justified? Chapter 7 WHAT ACTIONS ARE NEEDED NOW?	35
Transitways and Stations: A New Element Other Primary and Secondary Routes The CBD: Heart of the System	14 15 17	Chapter 8 PROSPECTS—THE FUTURE OF THE CITY	20
Chapter 4 TRANSPORTATION COMPONENTS:			39

19

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### LIST OF FIGURES AND TABLES

### Figures

Prototypical Station Concept—Thanksgiving		Prototypical Concept–Major Activity	
Square Mezzanine	2	Center Station Concourse Area	24
Prototypical Station Concept—Thanksgiving		Dallas Transit Plan–Stage 1	27
Square Upper Platform	6	Dallas Transit Plan–Stage 2	27
Prototypical Concept–Medical Center		CBD Transit Plan-Stage 1	28
Station Platform	8	CBD Transit Plan–Stage 2	28
Prototypical Concept—Thanksgiving Square		Dallas Transit Plan—Stage 3	29
Station Plaza	10	Dallas Transit Plan—Stage 4	29
Development Concept	12	CBD Transit Plan–Stage 3	30
Existing and Committed Freeways	13	CBD Transit Plan–Stage 4	30
Dallas Transit Plan	15	1990 Dallas Transit Ridership	31
Transitway Service Area	16	1990 CBD Transit Ridership	31
Transitway Elevation	16	Prototypical Concept—Medical Center	
Typical Transit Trip	16	Station Ticketing Area	36
CBD Transit Plan	17		
Prototpyical Concept—Thanksgiving Square			
Station Area	18	Tables	
Transitway Cross Section	20		
Prototypical Concept–Medical Center		Proposed Transit Routes	14
Station Cross Section	21	Dallas Area Transit Plan—Four Stage	
Prototypical Concept–Medical Center		System Cost Estimate	32
Station Area	22	Financial Requirements (\$1,000,000)	32
Prototypical Concept–Medical Center		Typical Travel Costs for Auto and Transit	33
Station Concept	23	Estimated Transit Accessibility	34
		High Activity Center Access	34



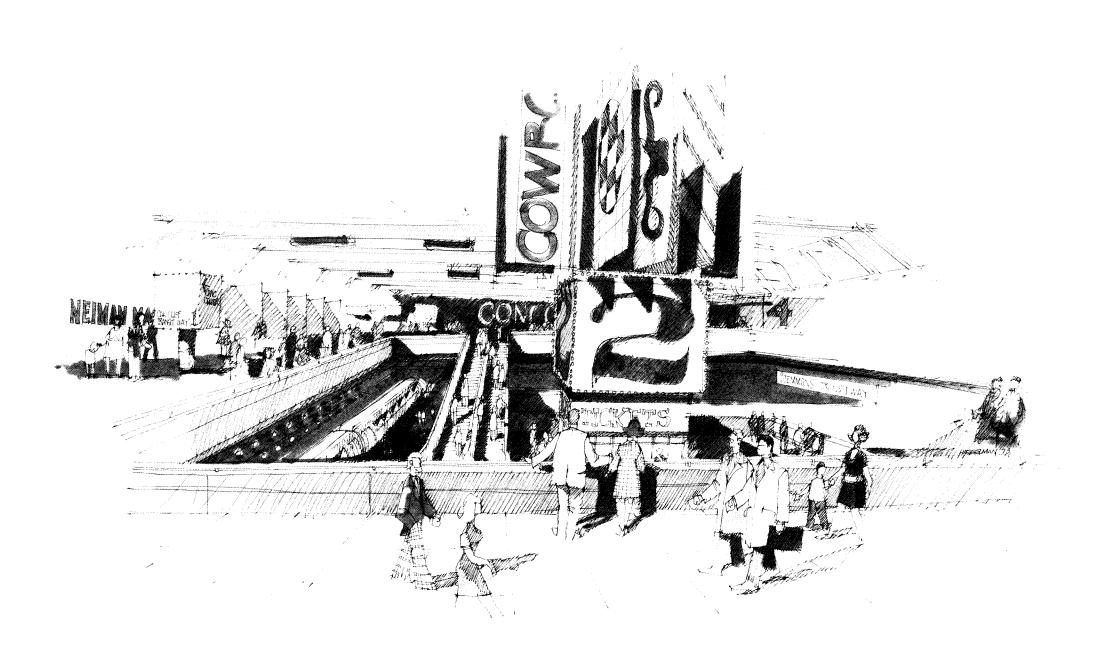
### **SYNOPSIS**

It is the joint recommendations of a combined city/consultant study team that the Dallas area undertake a major transit improvement program. Principally, a system of transitways should be created in the area to provide a high-level of public transportation service that would be an attractive alternative to the automobile.

The potential for such service exists and

circumstances indicate that it is appropriate to embark on a major program to improve public transit. The result can contribute to the life-style, mobility, economic well-being, and environment desired by the Dallas community.

As part of this program the community should adopt policies which will stimulate wider use of public transit.



### PROTOTYPICAL STATION CONCEPT-THANKSGIVING SQUARE MEZZANINE

# PREFACE: THE TRANSPORTATION SITUATION

One of the most noteworthy features of Dallas' history is the important role played by transportation. To a large degree, ground transportation systems were significant in the establishment of this community on the banks of the Trinity River. Even though air transportation has become increasingly important, as evidenced by the new D/FW Airport, ground transportation will continue to play the dominant role in the development and economic vitality of the urban area as well as assuring the personal mobility of citizens.

### THE TRANSPORTATION DILEMMA

Although the railroads have been and will continue to be a major transportation mode, particularly for the movement of goods, it is the private or personal modes of transporting people which have had the greatest impact on the development of the area. Two generations ago, this personal mode of travel was the horse; now, of course, it is the private auto.

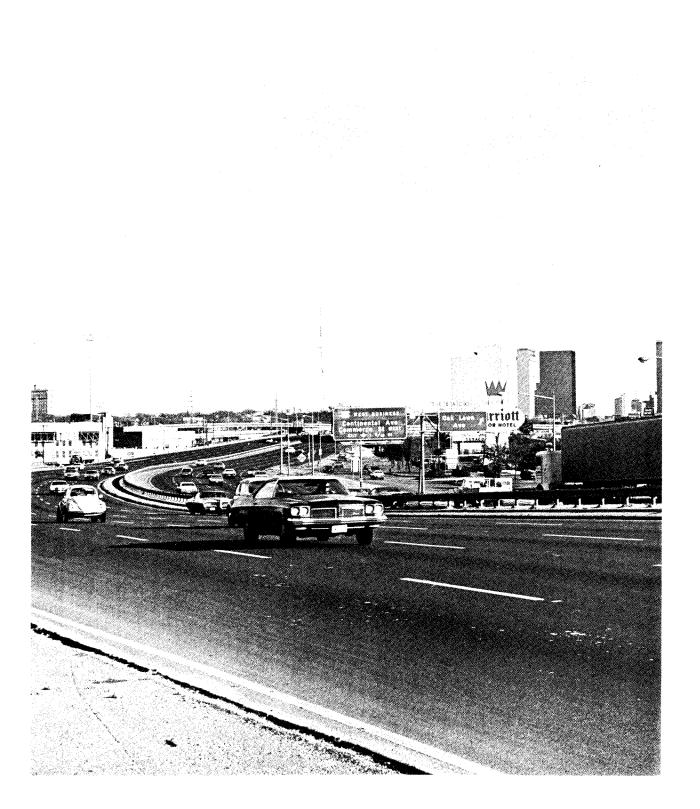
The overwhelming use of the auto results from the benefits it provides in terms of personal mobility. In the past two decades, higher personal incomes have resulted in a better standard of living. With this has come increased auto ownership and the desire for expanded living space. Extensive programs of street and highway improvements were implemented in response to these desires. They did more than meet the travel needs, they encouraged increased travel and use of the auto. Currently, people in the bi-county area make 7,000,000 person-trips per day; approximately 96 percent of them are made by auto with an average occupancy of 1.4 persons. This is a reflection of attitudes of personal independence characteristic of our society.

At a glance, the auto and its resultant street and highway network may appear highly successful. However, for a number of reasons there has been increasing desire to consider improving public transportation in the Dallas area. The energy crisis and the need to improve environmental quality have added an urgent dimension to this issue. However, given the historical desire for utilizing the auto, such requests may still seem somewhat incongruous or out of place in Dallas. The question must be asked: "Is there really a need for substantially improved public transportation?" As will be explained here, the answer is an affirmative one. This case for considering public transportation is based upon the conviction that it is becoming impractical and undesirable to meet the demand for transportation by the addition of more and more facilities for the personal auto and to accept the adverse environmental impacts produced by such additional facilities.

### Consequences of an Auto-oriented Society

In order to understand why the need for significantly improved public transportation has developed, the results of emphasizing the automobile should be recognized:

- Personal Immobility. Ten percent of the households do not have an auto; another 10 percent do not use the auto because of their inability or desire to not operate one. When new developments are located to primarily serve those persons having an auto, the distribution of benefits represented by these developments becomes unbalanced or inequitable. Also, the new developments tend to accelerate the obsolescence of the older areas of the city, particularly the commercial and institutional landuses. Thus, the auto-less person, in addition to not being able to enjoy all of the new urban opportunities because of inaccessibility, may see the existing developments, which are accessible to him, diminish in guality and scope of service.
- Auto Dependence. The auto has produced a major economic impact on the individual and community. The availability of an auto is necessary if a desired level of mobility is to be assured. Significant individual or family resources must be allocated to the auto. The local economy must also be devoted in large measure to the auto system with enterprises developed for automotive manufacturing, selling, operation, and maintenance and a variety of land-uses, such as drive-ins, designed specifically to serve the auto.
- Low-density Development. The emphasis on the auto affects development patterns, density, and design. The Dallas area has tended to be



low-density compared to other urban areas. Its overall density is only approximately 2,000 people per square mile. Also throughout the area, there is a consistent relationship between size of development and facilities needed to accommodate the auto.

- Highway Investment. Major investments have been made in freeways and major arterials to serve the increasing needs of auto travel. These investments are required because the auto makes undeveloped portions of the region more accessible. As a result, substantial shifts in population have taken place. New residential facilities and shopping centers have been built. The highway system has grown along with this dispersion of development.
- Air Pollution. The support of an auto-oriented transportation system requires a significant use of petroleum-based energy resources. Air pollution is produced as a by-product. Pollution control devices for autos, as required by the Clean Air Act of 1970, will play a role in the improvement of air quality. But the expected increase in auto ownership and use will counteract such benefits. Auto ownership in the Dallas area is estimated to increase from 680,000 to 1,420,000 by 1990, and the number of daily auto trips will increase from five million to 11 million. Thus, increased auto travel will outweigh the reduction in pollution created by mechanical devices. This means that to achieve desirable air quality over the long term, it will be necessary to control the use of the auto.
- Energy Depletion. During 1973, the petroleum shortage became a reality to America. Even though the expected availability of Alaskan oil will help balance petroleum demand and supply within five to eight years, large quantities of oil ultimately will be needed from the Middle East or from new resources such as oil shale. These sources seem rather tenuous, recognizing the sensitive political relationship between those countries and the United States

or the need for major new investments and research. The long-term availability of fuel for the auto at prices most people will pay cannot be guaranteed.

Traffic Congestion. Extensive use of the auto continues to tax the capacity of area streets and highways during morning and evening rush hours. Several freeways currently are carrying volumes of traffic that exceed planned capacity. Forecasts indicate that traffic in the central city will become severely congested if additional facilities are not provided. However, it is very difficult to construct new freeways in these fully developed sections of the city.

Thus, a transportation dilemma is created. Autos still represent a more desirable means of travel for the majority of individuals, but the auto-oriented system is creating demands that are becoming so great that this form of transportation may not represent the most efficient or effective use of Dallas' resources.

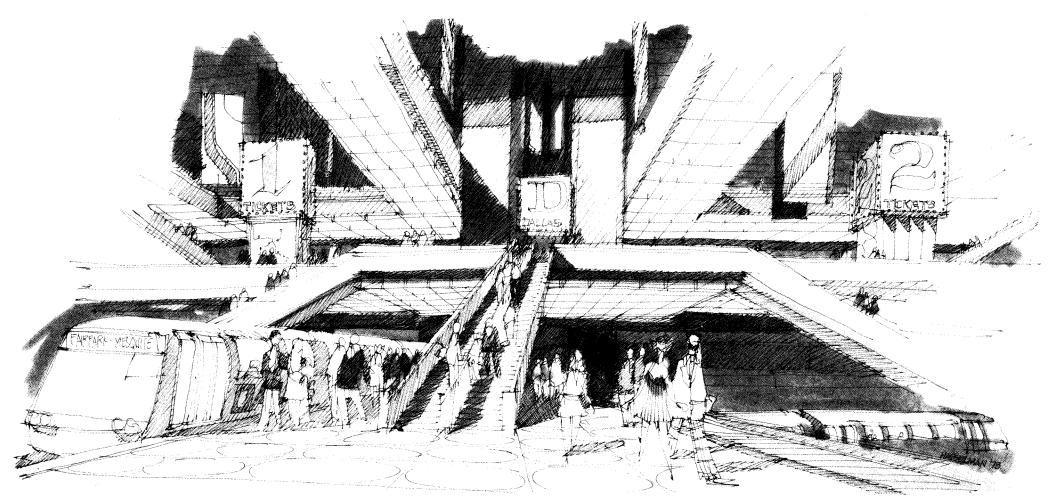
## WHY CONSIDER MASS TRANSPORTATION FOR DALLAS?

In view of the transportation dilemma, the question has been asked: "Is an improved public transportation system a viable way to complement the auto-oriented system in the short- and longrange future?"

### **Public Transportation Capabilities**

A solution to the problem requires that an alternative means of transportation be considered, or that the basic land-use patterns and life-style be reoriented so that the need for auto travel is substantially reduced. Any change in life-style or land-use patterns that would significantly reduce transport requirements is a very long-term proposition and would not eliminate the need to consider alternate modes of travel as well.

Considering the community desires expressed in the "Goals for Dallas" program public transportation has certain attributes qualifying it as a potential alternative to the auto-oriented system:



Public transportation systems could employ the use of centralized energy generating facilities. These could use non-petroleum fuels and result in substantially less air pollution than the aggregate result of an equivalent number of autos.

### Coordination with the Auto-oriented System

The use of improved public transportation should not be interpreted to mean that autos will be eliminated. Public transportation benefits would be achieved in harmony with the auto system. The goal should be to balance the two modes of travel in a total system so that the best attributes of each are employed to optimize transportation service to Dallas citizens.

- Public transportation could meet mobility needs since it has the potential to provide access to all sections of the Dallas area. It could be conceived as a public utility available to every citizen at a nominal cost. As such, access to home, work, and recreational opportunities could be made more equitable.
- Public transportation has a wide range of people-carrying capability. Hence, the service could be organized to complement a variety of land development patterns. It also requires substantially less physical space than the auto system. This allows more efficient use of land for development and creates more freedom in its design.

PROTOTYPICAL STATION CONCEPT-THANKSGIVING SQUARE UPPER PLATFORM

# 2

### HOW SHOULD WE PROCEED?

This review of the transportation situation clearly indicates that the Dallas area should take action to improve public transportation; but how should the community proceed?

### DETERMINE TRANSIT NEEDS

One of the first steps was to identify transit needs and opportunities. The results of this step are summarized in this report. Specifically, this summary describes a transit improvement program which considers short- and long-range needs and matches them with recommendations on routes, stations, technology, system costs, and implementation strategy. The improvement program illustrates:

- How public transportation can be developed as an alternative to an auto-oriented system.
- How public transportation can support a Dallas development concept.
- How public transportation can achieve socioeconomic objectives.

### COORDINATION OF PLANNING

Several other transportation planning programs are being conducted concurrently with the Dallas transit planning program. Public transportation systems for the greater Dallas-Fort Worth region, for the City of Fort Worth, and for the mid-cities suburban area are being examined. In addition, operational studies have been conducted for the existing Dallas and Fort Worth transit agencies. Finally, the Texas Highway Department is conducting a Level II review of their regional highway transportation plan.

In the context of determining what to do about transportation, these planning programs represent a coordinated approach. It is recognized that these efforts are concerned with specific geographical areas; but because of the interaction between these areas, their respective transportation systems need to be complementary and well coordinated.

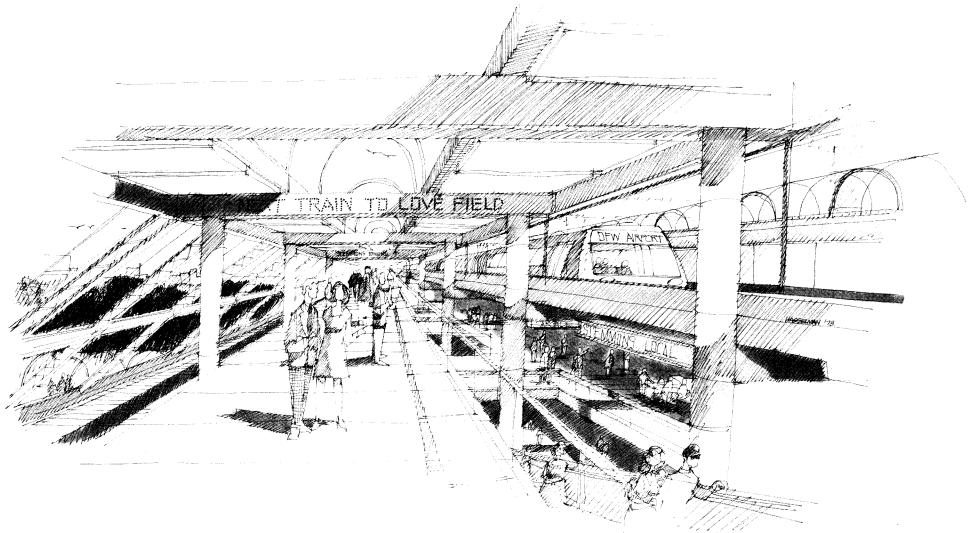
Thus, the analysis of transit needs and opportunities for the Dallas area has been undertaken in a manner to encourage the principles of regional planning. This emphasizes the need to plan public transportation as an element of an overall urban system.

### THE APPROACH TO TRANSIT PLANNING

The transit planning program has included a significant public participation effort. Private citizens and various organized groups were asked to become involved in the program throughout its course so that the results would reflect community concerns, values, and priorities. In carrying out this objective, four rounds of community meetings were held in eight sectors of the metropolitan area. The purpose of these meetings was to consider basic goals and objectives, priorities, alternative

plans, evaluation results, and preliminary recommendations. In addition, meetings were held with other groups representing overall community concerns or with special interests in such areas as the Dallas central business district.

Expressions of this public participation are reflected in the transit program recommendations. It is intended that the communication between citizen and government, created in this project, be maintained and utilized in subsequent stages of the transit improvement program.



### PROTOTYPICAL CONCEPT-MEDICAL CENTER STATION PLATFORM

### **Planning Philosophy**

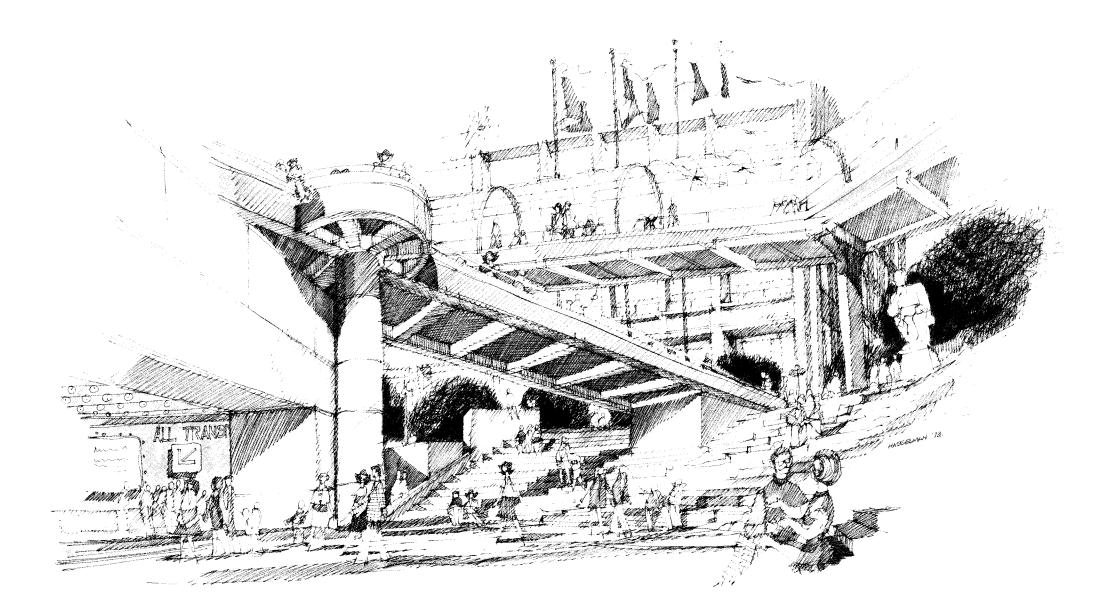
The technical work or end products were guided by an explicit planning philosophy, the key aspects of which were given special emphasis:

- The approach to development of the transit plan was goals-oriented; that is, the program is designed to achieve certain prescribed goals. This is based upon the idea that citizens can and should determine what they desire the community to be in the future and, in essence, control the community's destiny.
- The plan emphasizes the relationship between land-use and transportation. This means that transportation is basically viewed as a service for a variety of land-use activities.
- The plan delineates a public transportation system having various parts, each with certain functions, and all operating together to achieve maximum benefits.
- The plan emphasizes building transit ridership rather than building facilities.

### Flexibility of the Plan

The recommendations described in this report do not represent a rigid plan for the construction of transit facilities. Indeed, such items are suggested in the plan but only in the context of an overall program for action. Emphasis is given to the incremental development of a substantially improved and enlarged public transportation system. This is to be achieved through a basic strategy which outlines action to be taken over time. The approach does not attempt to detail every action and create an early commitment to major transit investments; instead, it attempts to create flexibility that permits certain options for future decisions but still enables the community to embark on a long-term transit improvement program. The detailed planning and decision-making can then occur as part of a continuing transportation planning activity, which appropriately follows the adoption of the general program recommended here.





PROTOTYPICAL CONCEPT-THANKSGIVING SQUARE STATION PLAZA

## **B** RECOMMENDED TRANSIT PLAN: A NOW CONCEPT FOR THE FUTURE

Since the transit plan for the Dallas area delineates a system to be created over a long period of time, it represents a *future* goal. It is composed of the principal routes, lines, and stations or access points, all of which are the major physical elements of the system. With an areawide system as the long-range target for the transit program, shortand intermediate-range implementation actions are prescribed to increase transit ridership from 110,000 person-trips to at least 350,000 person trips by 1990.

### THE REGIONAL FRAMEWORK

As a prelude to describing the recommended plan, it is necessary first to describe the framework of which it is a part. This framework is composed of a regional development (land-use) and transportation concept. The latter incorporates the recommended regional public transportation element and the long-range freeway plan.

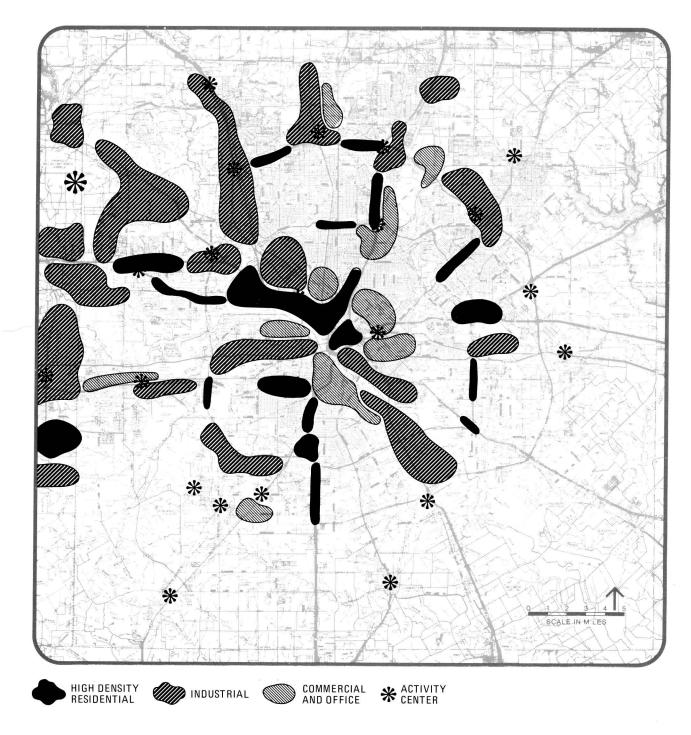
### **Development Concept**

The development concept represents a pattern of major corridors and activity centers closely related to population and employment forecasts for

Dallas. County population is expected to increase from 1.3 million to 2.3 million and employment from 844,000 to 1,200,000 by 1990. The Dallas central business district would be the major activity center. Others would be located in various sectors of the area, each located where high accessibility is created by the freeway and/or transit system. A primary development corridor would continue to be along the Stemmons Freeway. However, others would be encouraged along I-35E (south), I-45, I-635, and the North Central Expressway. The concept envisions an increase in development intensity in central Dallas and other places having high accessibility. The change in development intensity reflects the goal to increase the range of living and working opportunities available in the community. Further, the location of major development seeks to balance the area's growth so that each sector gains new development, new employment, and new service. This will yield a more heterogeneous or balanced urban environment. Specifically, development should be encouraged in South Dallas in the Lamar Street corridor and in Oak Cliff in the freeway corridor in addition to the development taking place in the Stemmons Freeway and North Central Expressway corridors to the north and northwest.

### **Transportation Elements**

The regional transit framework and freeway plan complement the development concept. Together, they will create high-accessibility corridors. These will focus on the Dallas central business district,



DEVELOPMENT CONCEPT

but will also create links to Fort Worth, the. mid-cities major development areas, the D/FW Airport, and support new crosstown corridors.

### THE TRANSIT PLAN

Conceived within the region framework, the recommended transit plan has two primary features: variability in the level of service and comprehensive geographic distribution of service.

### Variable Service Levels

Level of service should be compatible with the demand for transportation as required by the various land-uses in the urban area. For this reason, the concept employs three basic levels of service: primary, crosstown primary, and crosstown secondary. Each is characterized by speed, regularity of service, extent of coverage, design, and hardware features. They are designed to serve the estimated major travel patterns.

- Primary (transitway) service focuses on the major development corridors and activity centers including the Dallas CBD and the D/FW Airport. It would also be designed to provide the highest level of service to those residents of the inner city of Dallas who must rely on transit as their mode of transportation.
- Primary (premium bus) service is provided between and within non-CBD development corridors and areas. This will increase the coverage and convenience of transit service for these sectors.
- Secondary service is similar in configuration except it is the link between neighborhoods.

### Distribution of Service

The service distribution scheme incorporated in the plan represents a change from the radial transit concept which exists today. The plan seeks to create a "grid-like" form through use of crosstown routes. This configuration provides more flexibility in service for a variety of major activity centers outside of the CBD and for areas beyond Dallas. It also provides broader transit coverage, allows direct access to more locations, and is more easily expanded. In more specific terms, one of the important benefits of this feature is that the system would improve service between transitdependent neighborhoods and employment or institutional service centers.

### ELEMENTS OF THE RECOMMENDED PLAN

The transit system envisioned by the plan is composed of four types of facilities:

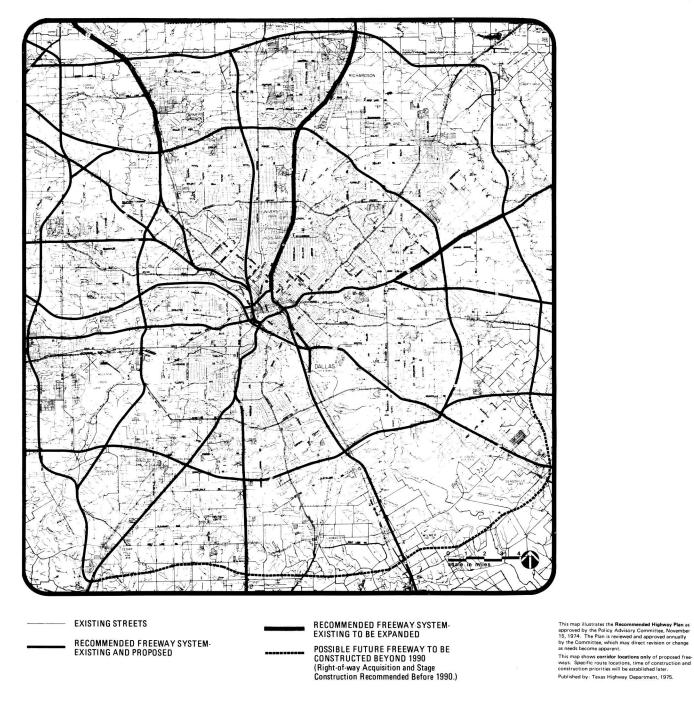
- Routes: transitways and surface routes.
- Stations and stops.
- Vehicles.
- Support Facilities: control system and power, maintenance, and storage facilities.

Even though all elements are important to the successful delivery of improved transit service to the citizens, the configuration of routes and the service function of these routes establish the overall character of the system.

The recommended plan includes 31 principal transit routes. They would provide the three levels of service. These routes represent the backbone of the system.

The primary transit routes will have the highest capacity. They will serve the development areas generating the greatest number of trips. These lines will also serve residential areas where trips begin. Hence, there will be a balance in the system; that is, high capacity lines are located in trip origin areas (residential) and trip destination areas (employment, commercial).

In addition to the three principal levels of service, neighborhoods and activity centers also would be served. Local transit service within neighborhoods and non-CBD employment areas probably would be provided by buses, although shared-ride taxi, jitney, or dial-a-ride would be considered. Activity centers would be served by a



**EXISTING AND COMMITTED FREEWAYS** 

### PROPOSED TRANSIT ROUTES

Class	Name	From	То
Primary (transitway):	1. Trans-regional	CBD (Union Terminal)	D/FW Airport
, , , ,	2. Stemmons	Inwood Road	Northwest Highway
	3. North Central	CBD (core)	1-635
	4. Northeast Dallas	CBD (core)	Loop 12
	5. Pleasant Grove	CBD (core)	Loop 12
	6. South Dallas	CBD	Loop 12
	7. Oak Clitt	CBD (core)	Loop 12
	8. West Dallas	CBD (core)	Loop 12
Primary (premium bus):	1. Northwest Highway	I-635 (east)	Irving
(pronnan) «dofi	2. North Dallas (1-635)	Garland	Flower Mound
	3. Stemmons-Walton Walker Blvd.	Belt Line Rd.	Ledbetter Dr.
	4. Ledbetter Drive	Walton Walker Blvd.	Buckner Blvd.
	5. Buckner Blvd.	Northwest Highway	Ledbetter Drive
	6. Highway 175	Scyene Road	1-635 (south)
	7. South Dallas (U.S. 75)	Ledbetter	I-635
	8. East Dallas (1-635)	Garland	U.S. 75
	9. D/FW Turnpike	Highway 360	Industrial Boulevard
	10. Dallas North Tollway	Stemmons	1-635
	11. North Central Expressway	Campbell Rd.	1-635
	12. U.S. 67	Ledbetter Dr.	1-635
	13. I-35E	Kiest Blvd.	1-635
	14. Airport Freeway (U.S. 183)	Walton Walker Blvd.	Highway 360
	15. I-20 (East) - I-30 (East)	CBD	1-635
	16. Garland Road	Northwest Highway	Buckner Blvd.
Secondary:	1. Inwood-Hampton Roads	Royal Lane	U.S. 67
	2. Davis Street	Walton Walker	Cedar Crest Blvd.
	3. Corinth-Cedar Crest-Forest Avenue	Davis Street (Oak Cliff)	Second Avenue
	4. Fitzhugh Avenue	Second Avenue	Inwood Road
	5. Polk-Sylvan-Preston-Hillcrest Rd.	Ledbetter Dr.	Belt Line Road
	6. Peak-Haskell-Harry Hines-Lemmon Avenue	Fair Park	Belt Line Road
	7. Westmoreland-Mockingbird Lane	Ledbetter Dr.	Buckner Blvd.
	8. Gaston-Abrams Rd.	East Grand Rd.	1-635
	9. St. Augustine-Easton-Plano Rd.	U.S. 175	Belt Line Road
	10. Illinois Avenue	Walton Walker Blvd.	U.S. 75
	11. Bruton Road	Highway 175	1-635
	12. Royal Lane	I-35E	U.S. 75
	13. Belt Line Road	I-35E	Jupiter Road
	14. Jim Miller-Sammuell-East Grand Rd.		Gaston Ave.

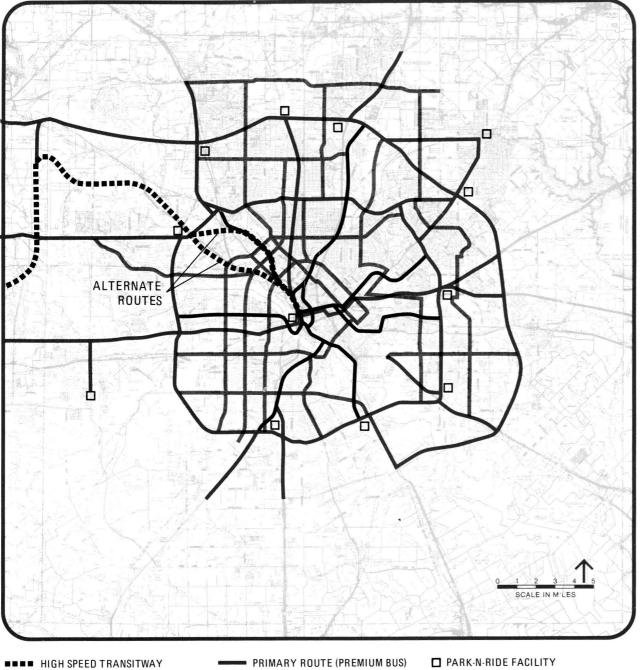
form of secondary transit. It would operate within a single activity area and employ a local bus, minibus, or automated people-mover similar to the AIRTRANS system being used at the D/FW Airport. Also, local buses would provide access to the CBD (within a distance of approximately three to four miles). These routes generally would be located on major streets.

## TRANSITWAYS AND STATIONS: A NEW ELEMENT

The primary transit elements would be a set of routes approximately 55 miles in length. These routes would require a significant capital improvement investment since separate rights-of-way would be required for the transit vehicles and, possibly, other multiple-occupancy vehicles (e.g. car pools). This will create the potential to achieve operating speeds of up to 60 to 70 mph which is paramount to providing a high-level of service.

### Transitways

For the primary routes with separate rights-of-way, it is proposed that transitways be constructed. A transitway can be either a separate express roadway for buses or a trackbed or guideway for other types of transit hardware. The recommended network of transitways would employ various types of construction; portions will be at-grade, elevated, or below ground. The recommended vertical alignment has been selected in order to create minimum costs while achieving desired land-use functional relationships.



#### **Stations**

A series of stations would be established along the transitways. Ultimately, approximately 53 stations could be provided as proposed in the long-range plan. They would be spaced at intervals of one to two miles along each route. The location and spacing of stations along the network is intended to maximize transit service accessibility. The need for more closely spaced stations will require further analysis and must necessarily consider potential demand and compatibility with land-use development policies. The system is planned to operate as a two-directional rather than a one-way system, i.e., inbound from residential areas in the morning to the CBD and the reverse in the afternoon. With two-way operation, communication could occur in both directions in the morning and afternoon.

The specific location of each station should be planned so that the facility will be an integral part of redevelopment and new development in each area. Many of the stations should include parkand-ride facilities. Some stations, such as at the medical center along the Stemmons Freeway or near the North Park Shopping Center, can become physically an integral part of the developments, themselves.

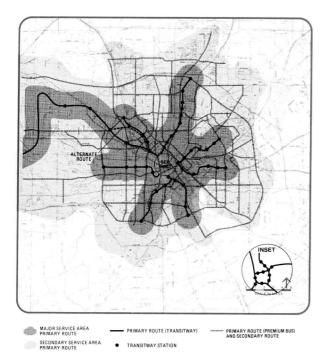
### OTHER PRIMARY AND SECONDARY ROUTES

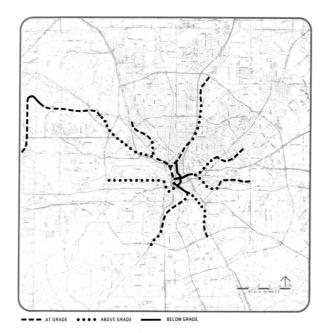
Primary (premium bus) service is characterized by buses operating with short headway times on major arterials in semi-express fashion, stopping only at intersections with other transit routes or at activity centers. These primary routes have been selected with regard for their potential to be converted to a separate transit right-of-way. This will give the system flexibility to vary the pattern of primary (transitway) service by converting routes with a crosstown configuration to routes with higher

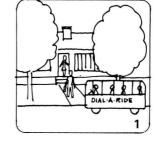
PRIMARY ROUTE (TRANSITWAY)

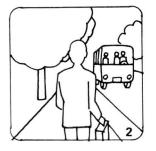
SECONDARY ROUTE

DALLAS TRANSIT PLAN









### **TRANSITWAY SERVICE AREA**

### TRANSITWAY ELEVATION

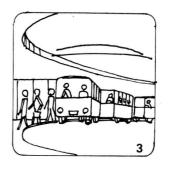
levels of service. This means that the radial configuration for primary (transitway) service could be changed in the future.

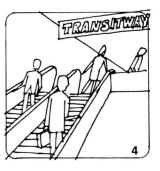
Secondary routes should be located to link neighborhoods together and serve non-CBD oriented work trips, with buses traveling on existing streets.

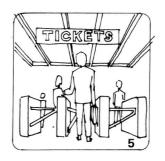
### **Operation of the System**

The recommended transit system would provide a vastly improved level of service, convenience, and comfort. The various parts of the system, i.e., primary, crosstown, neighborhood, or peoplemover, routes, would be interlocked so that the typical journey would be a convenient, attractive, and pleasant experience.

For example, for a typical trip to work in the morning, a citizen could walk to the neighborhood bus (less than one-half mile) or call the dial-a-bus to pick him up at his front door and ride in a modern air-conditioned bus for a five- to 10minute trip to the nearest transitway station. The bus would drop him off at the station entrance where he would ride an escalator to the station concourse and purchase a ticket at the automatic vending machine. He would walk to the gate, inserting his ticket in the turnstyle. He would then walk or ride an escalator to the transitway platform, wait no more than two minutes for the next transitway vehicle, board, and relax in a comfortable seat for the transitway ride at 70 mph. He would depart the vehicle at his destination station,









TYPICAL TRANSIT TRIP

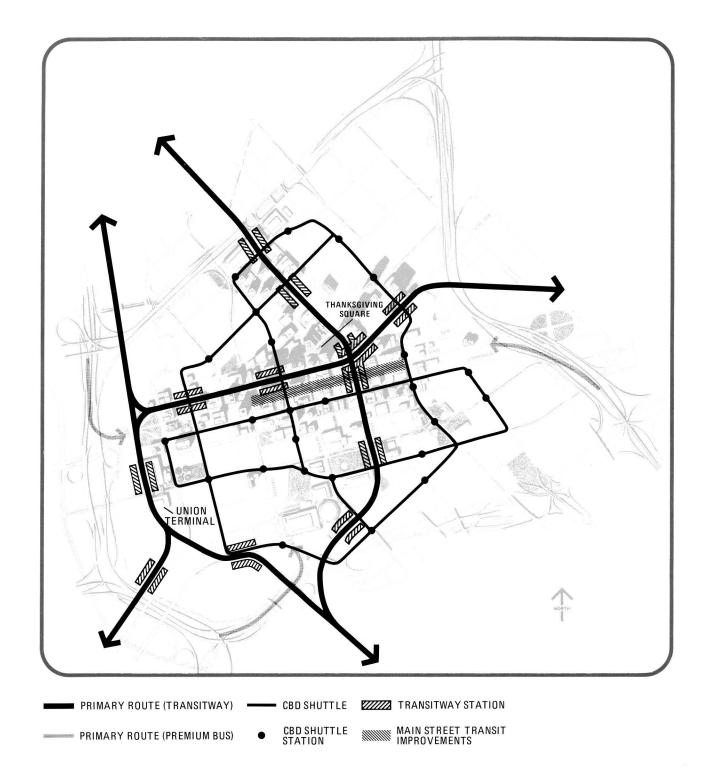
walk to the departure gate (inserting his ticket in the gate), pass through to the station concourse and then proceed to the pedestrianway which directs him to his office building or to the street for a short walk (less than one-quarter mile) to his place of employment or shopping.

This type of journey to work, shopping, or for other reasons could compete with the convenience offered by the automobile, considering increased freeway congestion and high auto operating costs. Further, if dual-mode vehicles become available, it could be possible to stay on the same vehicle boarded in the neighborhood, riding all the way to a destination on the transitway. No intermediate transfer would be necessary.

### THE CBD: HEART OF THE SYSTEM

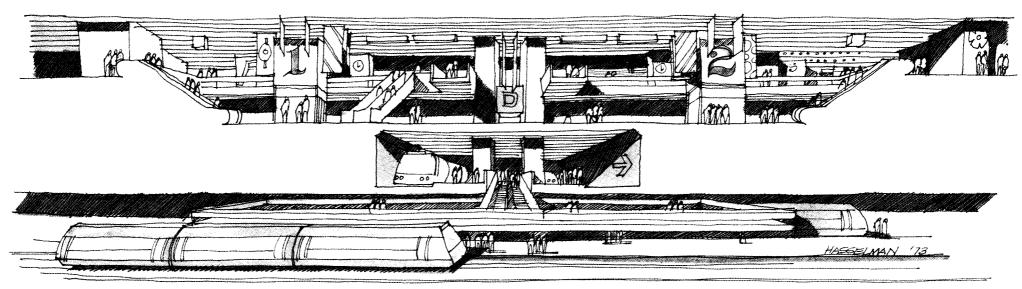
The Dallas central business district will continue as the dominant major activity center in the area with employment estimated to grow from 100,000 to 165,000 by 1990. The proposed transit plan provides the greatest level of accessibility to this area. Therefore, the CBD becomes the heart of the transit system.

In order to maximize accessibility to those blocks in the CBD where major development has or would occur, a subway system is proposed. Under this plan, two lines would penetrate the CBD core, crossing each other in the vicinity of Thanksgiving Square. A third line would be located along the westerly edge of the CBD serving the Union Terminal area. Eleven stations would ultimately be provided to achieve a high level of accessibility for the CBD. Station locations would be coordinated with the CBD pedestrianway network to create convenient connections for people to use in walking from the subway to CBD buildings. Such connections would be concentrated in the major pedestrian precincts including those between the subway mezzanine and pedestrianways to be developed along Elm Street, Ervay Street, and Akard Street in the center of the CBD.



CBD TRANSIT PLAN





PROTOTYPICAL CONCEPT-THANKSGIVING SQUARE STATION AREA

# TRANSPORTATION COMPONENTS: VEHICLES AND FACILITIES

As described in the previous scenario, the physical components of the system will have direct impact on the individual patrons. To a large extent, the design of these facilities will determine the success of the system. System configuration and plans are important, but success will depend upon the response of individual users. Hence, the vehicles and station facilities must be selected, designed, and operated in a manner consistent with a high level of service and attractiveness to the user.

### VEHICLES AND THE HARDWARE EVOLUTION

The recommended transit system has the potential to use several types of vehicles. In selecting the technology, an evolutionary approach should be employed. That is, the opportunity should be created to change from the existing form to new, innovative transit vehicle systems in the future as they become available and as the need for commitment to transit becomes more certain. This approach can be coordinated with the creation of separate rights-of-way for transit.

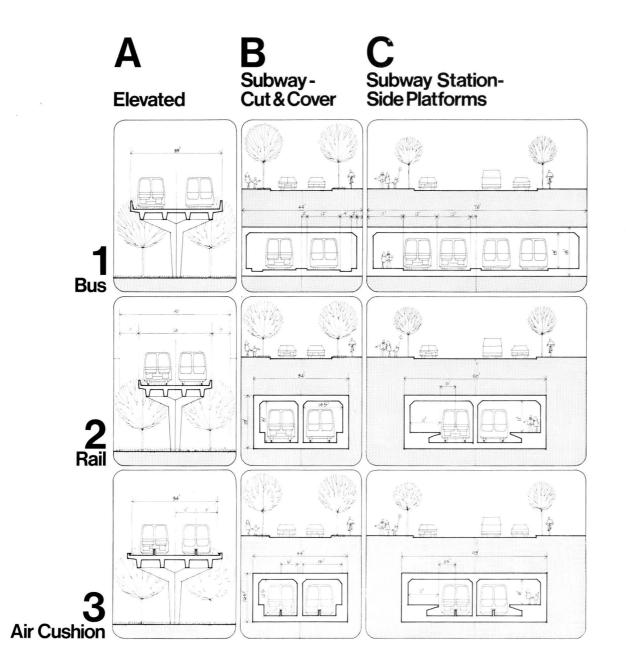
The potential forms of technology have been analyzed to determine the space each requires. On the basis of this information, non-restrictive design controls have been used to plan the recommended transitways. This will afford an opportunity to convert the transitway from one type of vehicle to another as new technologies emerge.

The technology analysis involved an evaluation of more than 100 potential systems. The basic

findings indicate that four groups of transit vehicle systems offer the greatest potential for ultimate use:

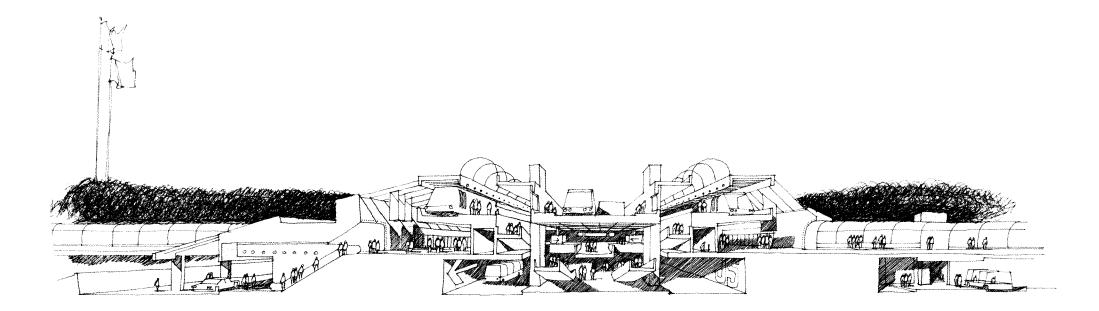
- Bus or manually controlled flexible route system.
- Conventional fixed-route rail rapid transit.
- Automated fixed-route systems employing large vehicles with new power and guidance (e.g., U-TACV).
- Automated small vehicle system (PRT). The decision as to which system should be selected is part of the implementation program. The bus is the first vehicle type recommended. Existing DTS buses are modern, up-to-date vehicles. The next step could be the use of improved buses which would be more comfortable and have higher operating speed. It would be anticipated that obsolescence would be controlled through a regularly scheduled vehicle replacement program. This would provide a continuing opportunity to equip the vehicles with the latest design features.

In the future, as it may become desirable to change the type of vehicle system, the basic goal of matching the convenience, comfort, and security afforded by the auto could guide the selection process. When using the auto, a person does not normally have to transfer from one vehicle to another. For this reason, the next step in transit vehicle evolution could result in a no-transfer trip. An approximation of such service could be effected by using standard buses which would operate in neighborhoods to collect riders then enter a transit-



way or separate express lanes on a freeway for high-speed (50 to 60 mph) service to the CBD or other major destination areas. As a further improvement, a dual-mode vehicle system could operate on local streets to pick up passengers and then move to an automated, high-speed transitway.

An alternate to this strategy could be to convert the operation to any one of several fixed-route hardware systems. The urbantracked air cushion vehicle development program, currently under way, and other similar programs may indicate the desirability of air cushion vehicles. These technologies would create a new image for transit which might be a necessary ingredient to achieve the desired public response in terms of ridership levels and a corresponding reduction in dependence on the auto.



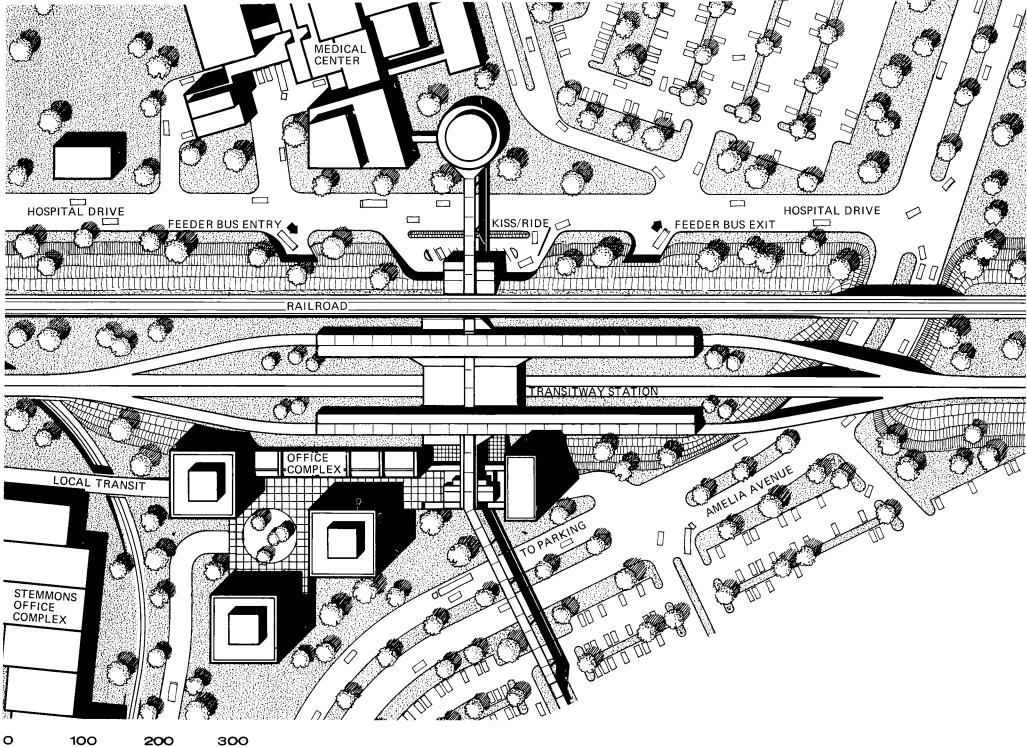
### PROTOTYPICAL CONCEPT-MEDICAL CENTER STATION CROSS SECTION

### TRANSIT STATIONS: WHERE THE ACTION IS

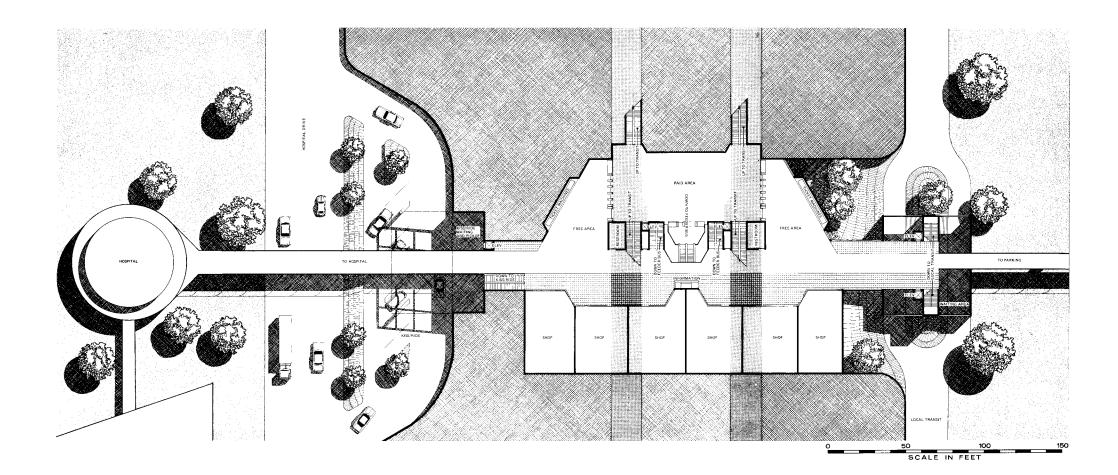
Transit stations are places where people change their mode of and/or direction of travel. They change from transitway vehicles to a local bus, auto, or people-mover or may choose to walk. Since people congregate at stations, they can also serve as the location for other activities, that is, commercial services, shopping, social, or recreation.

The basic principles guiding station design demand that each station serve the transportation linkages with maximum efficiency and that the relationship of each to the surrounding land-uses be optimized. In this way, stations can become the symbols of the system They can reflect the new image of public transportation; they can reflect images of the new city, the bright innovations in urban life to be found in Dallas.

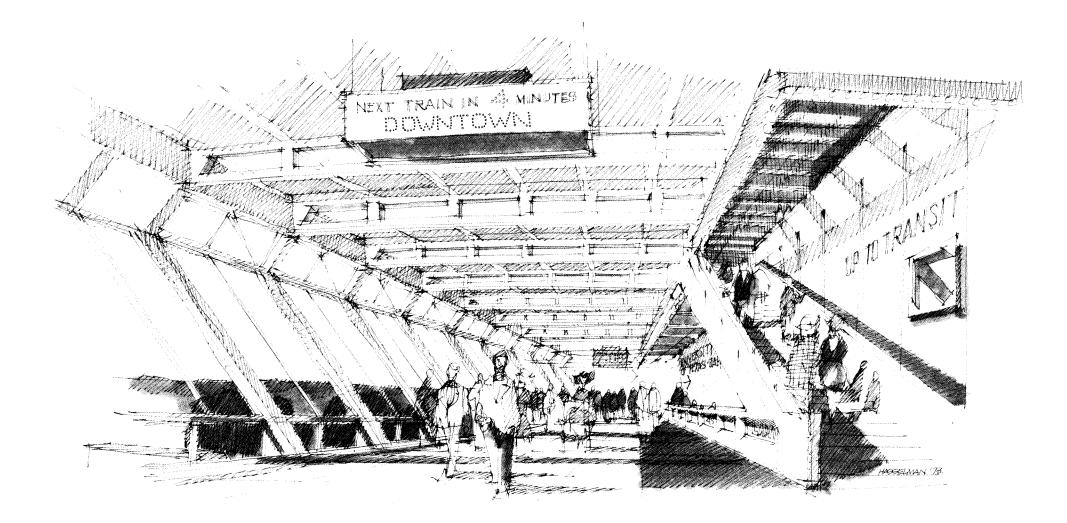
In order to express these principles, prototype station plans were prepared. These are for the Thanksgiving Square, Medical Center-Marts, and North Park Stations. The designs illustrate station development relative to pedestrian, local bus, or park-n-ride connections. They also show how the station might be integrated with existing and new development.



SCALE IN FEET PROTOTYPICAL CONCEPT-MEDICAL CENTER STATION AREA



PROTOTYPICAL CONCEPT-MEDICAL CENTER STATION CONCEPT



### PROTOTYPICAL CONCEPT-MAJOR ACTIVITY CENTER STATION CONCOURSE AREA

## 5 TRANSPORTATION AND ITS ENVIRONMENT

The transit system will have a positive impact on the environment in terms of the reduction of air pollution and, hopefully, noise pollution as well as other contaminations. Furthermore, because the plan has been developed with careful consideration of land-use relationships, transit could have a positive effect on land-uses.

### **REDUCED POLLUTION**

The estimated long-term use of the proposed transit system represents an increase to 350,000 person-trips per day by transit rather than by auto. That is, the transit system will cause a reduction in use of the auto by 250,000 trips per day. This is equivalent to 1,000,000 vehicle miles per day. Such a reduction in travel would be equivalent to eliminating all traffic on the Stemmons Freeway from the CBD to the LBJ Freeway. Further, the auto hydrocarbon emissions would be reduced as much as 10 tons per day.

If isolated, the noise produced by various forms of transit can be significant. Since the primary routes are located in high-accessibility corridors, they will become part of the general noise in the corridor and not increase the problem. In the future, there is a potential to use air or magnetically levitated transit vehicles which would be substantially quieter than conventional transit hardware.

### TRANSIT AND LAND-USE

The transitway alignment and stations are land-uses and have an impact on contiguous areas. The alignment can affect neighboring areas because of visual impacts, noise, or because it forms a barrier separating land-use activities. Various environmental studies were used to guide transit plan development making the recommended transit system sensitive to ecological concerns.

Transit facilities have been located in order to produce benefits. The alignment can be a dominant feature. Through the use of visually attractive design, it can be an asset to an area or, where the alignment forms a natural boundary, it can function as a barrier to protect a land-use area. Where appropriate, the transitway might be designed to blend into the environment as much as possible so that the impact of its presence is minimized.

Stations have been studied in a similar manner. In this case, general locations have been selected so that a rational land-use plan for the immediate area would emerge. Access was analyzed so that auto or local bus traffic moving to or from the station would not have an undesirable impact on the street or land-use system.

# 6 A CALL TO ACTION

The recommended transit plan is a major capital improvement undertaking for the Dallas urban area. It has the potential to effect major improvements in the transportation service and counteract the growing liabilities of an auto-dominant system.

The plan represents a long-term project, but one which should begin now. Achievement of a substantial change in the transportation system requires time because of financing and because the changes in personal travel habits and development patterns responding to new transportation service cannot take place quickly. An incremental approach is needed.

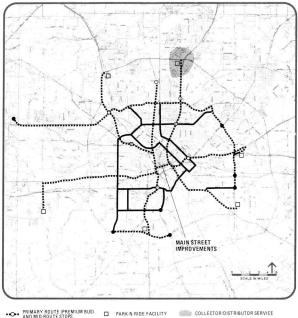
Some transit improvements have taken place and further major actions will occur in the near future. However, since the program is extensive, it may take 20 or even 30 years to implement the full plan. Considering that there are already existing fuel shortages and that a continuing depletion of petroleum resources is forecast over the next 20 years or a slightly longer time period, it becomes very clear that now is the time to enlarge and accelerate the commitment to public transit which already exists.

### STAGING THE PLAN

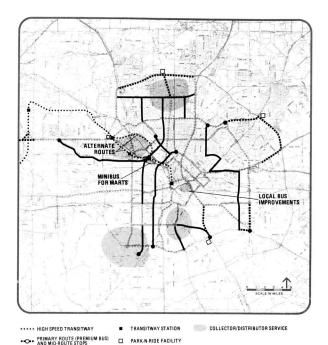
In order to implement the long-range plan, it has been organized into a series of manageable stages. Each stage would be implemented in successive time periods. The selection of the stages is determined, at a minimum, by certain physical and operational requirements and the availability of financial resources. The staging was developed as an extension of the plan goals, objectives, and priorities. By placing major emphasis on the latter, a strategy has been devised to guide the improvement of transportation service to achieve those benefits most important to the community.

Specifically, the results of the community consultation program were used to meld the priority objectives into a strategy to guide plan staging. This strategy has the following principal purposes:

- Provide access to high-activity centers.
- Assure mobility for all citizens.
- Pursue an orderly evolution of transit technology.
- Allocate priority to the movement of people rather than vehicles.



Secondary route
S



SERVICE CONNECTION TO

SECONDARY ROUTE

### **RECOMMENDED PLAN STAGES**

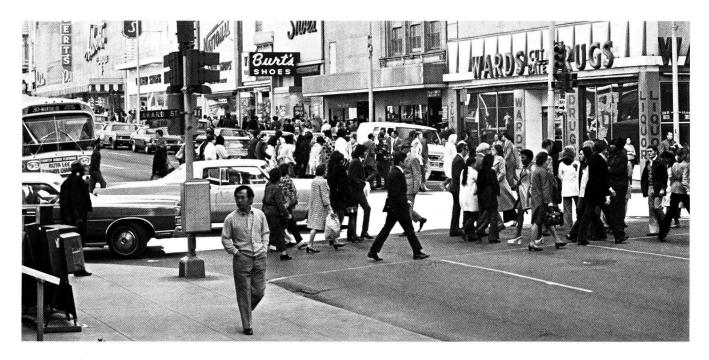
Using this strategy, four implementation stages were developed. The elements of each stage are listed below.

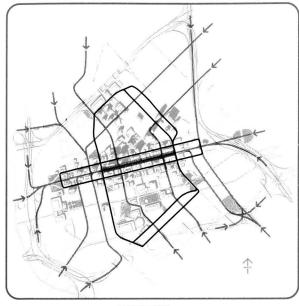
### Stage One

- Develop comprehensive express bus service.
- Develop satellite parking facilities along radial freeways.
- Develop new crosstown bus service.
- Restructure existing bus routes to feed freeway routes.
- Initiate improved neighborhood service.
- Develop and emphasize a comprehensive program to give preferential treatment to multiple-occupancy vehicles.
- Initiate Main Street pedestrian and transit improvements.
- Establish CBD shuttle bus service for fringe parking and as a collector distributor for long-distance transit routes entering the CBD.

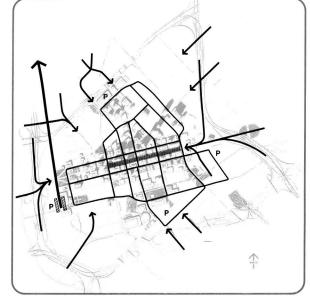
### DALLAS TRANSIT PLAN-STAGE 1

### DALLAS TRANSIT PLAN-STAGE 2





### **CBD TRANSIT PLAN-STAGE 1**



CBD TRANSIT PLAN-STAGE 2

### Stage Two

- Extend and add express bus service on the Freeway system.
- Implement the trans-regional route (possibly using U-TACV) from Dallas CBD to D/FW Airport.
- Develop demand-responsive local bus service demonstration projects in selected areas.
- Continue expansion of crosstown and neighborhood transit service.
- Initiate shuttle bus service in major activity centers such as the Stemmons Freeway corridor.
- Develop additional park-and-ride facilities.
- Continue development of Union Station as a transportation center.
- Complete Main Street improvement project.
- Add parking facilities in CBD fringe and expand shuttle service accordingly.

### Stage Three

- Develop transitways connecting the CBD with North Dallas, East Dallas, South Dallas, Oak Cliff, and West Dallas.
- Develop additional crosstown services.
- Expand demand-responsive service.
- Adjust long distance bus routes to provide collector-distributor service to transitway routes.
- Construct east-west transitway (subway) across the CBD along Live Oak and Elm.
- Construct six CBD transitway (subway) stations.
- Adjust CBD shuttle service to serve new transitway stations.

### Stage Four

- Develop Love Field and South Oak Cliff transitways.
- Extend North Central, Northeast Dallas, Pleasant Grove, Oak Cliff, and West Dallas transitways.
- Adjust feeder-bus routes to serve transitway routes.
- Expand crosstown service.
- Consider improvement via a new vehicle and/or automation in secondary transit (shuttle) service in the CBD and other activity centers such as the Stemmons corridor.
- Extend express service where needed.
- Construct north-south transitway (subway) and associated stations in the Akard-Ervay Street corridor.
- Adjust CBD shuttle service to complement new transitway stations.
- Examine the feasibility of converting bus shuttle service to automated vehicle system.

With expeditious approval and funding, these four stages could be completed in the 1974-90 period. This staging strategy is designed to provide improved levels of transit service that are consistent with community needs.

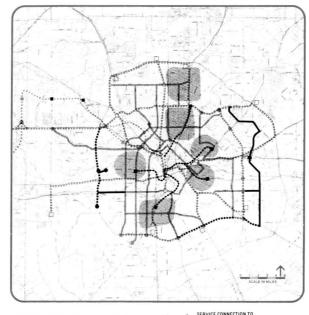
### IMPLEMENTING THE PLAN

The staging of capital and operating improvements is only part of the total implementation program. Other aspects concern the organization and management needed to carry out the improvements.

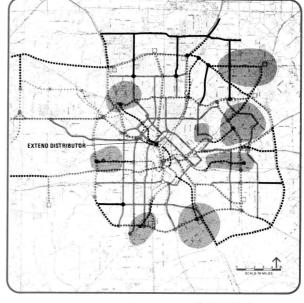
### Management

Of critical importance is the management organization needed to do the work. This has two principal aspects:

- Short-range planning, construction, operations, and maintenance.
- Long-range planning.



### DALLAS TRANSIT PLAN–STAGE 3



HIGH SPEED TRANSITWAY
SECONDARY ROUTE
SECONDARY ROUTE
SECONDARY ROUTE
SECONDARY ROUTE
SECONDARY ROUTE
SECONDARY ROUTE
SECONDARY
TRANSITWAY
TRANSITWAY
TRANSITWAY
PRIMARY ROUTE
SECONDARY
PRIMARY ROUTE
SECONDARY
PRIMARY ROUTE
SECONDARY
PRIMARY ROUTE
PREMIUM BUS
PARK.N RIDE FACILITY

### DALLAS TRANSIT PLAN-STAGE 4

Creation of a management organization is a difficult problem and one that will require additional local discussion and review. As recommended by the Regional Public Transportation Study, creation of a new regional transportation organization should be considered to implement and operate a regional system which would ultimately include transit for the Dallas area.

For Dallas, this approach is believed to be the best long-range goal. If the urban area is to be developed equitably, the system ultimately should be regional in scope, extending beyond the Dallas city limits. As such, close coordination between the City of Dallas and suburban communities will be necessary. To achieve the highest quality transportation service, the facilities should be planned, built, and operated as a unified system.

In the interim, however, before such regional service could be created and developed, an organizational mechanism for the City of Dallas must be established to assume responsibility for short-range planning, construction, and operations. A transportation administration with authority to coordinate the activities of those agencies of city government having transit-related responsibilities could fill this need.

The legal framework for a regional organization should be created at an early date to establish the vital coordination needed to direct special transit services, including the trans-regional route, SURTRAN, and certain transit services in the Mid-Cities subregion.

The important work to be coordinated would involve:

- Preparing federal/state grant applications.
- Developing compatible planning, design, and operational standards so that future transportation facilities and land-use development can be planned together.
- Coordinating efforts with respect to other transportation modes which overlap local jurisdictional boundaries.
- Initiating development of cost-sharing agreements between the various benefited communities in the transit service area.

Long-range transit planning for the City of Dallas could be accomplished under the same organizational mechanism. It should be emphasized that the nature of the staged implementation program will require a substantial ongoing technical effort. Data, analyses, and evaluation will be needed continually in order to develop and implement the plan. It is important that these management responsibilities and relationships be developed at the earliest date.

With an improved management system, there will be a series of activities and decisions to undertake. The staged implementation program involves, to a large extent, finding answers to many questions. Decisions will need to be related to a time sequence or time stage organized according to the various functional components of the recommended transit plan.

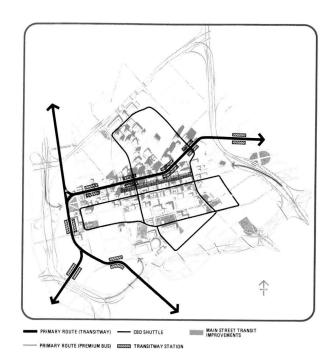
Another important aspect of the management process concerns the articulation of support activities required to implement physical improvements. These include four major areas of work:

- Financial programming.
- Advance right-of-way acquisition.
- Joint land-use/transportation development planning activities.
- Detailed planning and design of transit facilities.

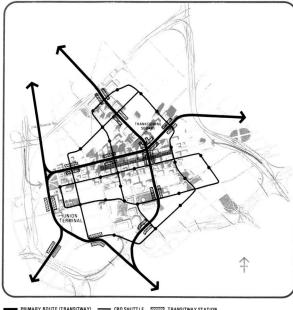
The staged implementation program indicates when a given physical facility should be available for service. In order to achieve such timing, the above four activities would have to take place in periods preceding construction. The coordination of this timing should be an essential part of the management responsibility.

### **Supporting Policies**

A most important part of the implementation program is the policies needed to support the public transportation system. These concern the transit system itself and land-use. The latter recognize the need to complement the transit improvement program with land-use policies in order to



CBD TRANSIT PLAN-STAGE 3



PRIMARY RUUTE (TRANSITWAY) CBU SHUTTLE ZZZZ TRANSITWAY STATION
CBU SHUTTLE TRANSIT
CBU SHUTTLE TRANSIT
MOPPONYEMITY
STATION

CBD TRANSIT PLAN-STAGE 4

create desirable land-use/transportation relationships and to achieve certain land-use and design objectives.

As a basic policy consideration, achievement of a *balanced* transportation system remains paramount. However, if a balanced transportation system with two or more modes of travel is to be feasible, a shift away from the auto to other modes is required by the consumer of transportation service. To achieve such a user reorientation, it will be necessary to consider certain public policies to encourage the use of public transportation and control the use of the auto. These measures will be needed to give public transportation a chance to fulfill its promise of better mobility for all.

Specifically, policies needed to support or complement public transportation are:

- *Commitment to Transit*—Definitive policy to undertake a transit program.
- CBD Development—A policy to reflect the CBD concept of variable intensity development (high intensity in axial corridors) with zoning changes if necessary; and a policy to institute controls designed to limit or exclude parking in the core area and concentrate facilities in fringe areas.
- Accessibility/Zoning—The zoning of land adjacent to transportation routes should be consistent with the levels of accessibility provided by the routes; i.e., land adjacent to a high-intensity transit route should be zoned for high-intensity development such as multifamily residential, offices, or industry.
- Residential Density—A policy to increase residential density to levels which can support transit service in selected locations along the primary transit routes.
- Transit Operational Priorities—A policy to give preferential treatment to buses through priority signal systems, reserved freeway lanes, bypass ramps, reserved thoroughfare lanes, and

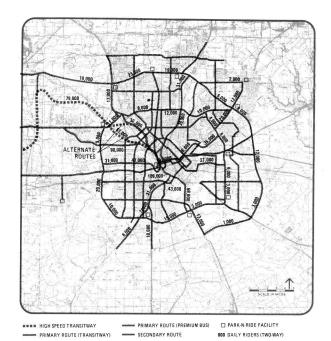
prime bus stop locations; this policy might be expanded to include all forms of multipleoccupancy vehicles (more than three people per vehicle).

- Pricing—A policy which increases registration or license fees for those owning more than one auto and discounts fees for transit or car pool operations; discounts tollway fees for autos carrying three or more persons; and imposes a parking fee tax.
- Transit Subsidy—A policy which does not require transit operations to be totally supported by fare box revenues.
- Land-use Controls—When transit routes penetrate vacant or redevelopment areas, require property owners to reserve space for such transit facilities as bus stops, access roads, guideways, pedestrian accessways, etc. This would apply to both vertical and horizontal dimensions of the facilities, where appropriate.
- New Technology—A policy which allows experimentation with and demonstration of innovative systems in order to determine their feasibility.

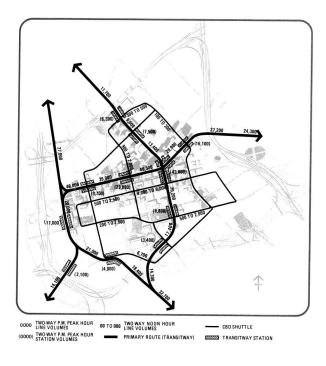
These actions would create the framework to convert the many potentials for transit service and positive impact into actual achievement. The policies do not apply exclusively to the City of Dallas but to the entire urban community. If transit is ultimately to have a service area as envisioned in the recommended plan, then these support policies must be adopted throughout the area.

### WHAT WILL TRANSIT COST?

The recommended subregional plan requires a local decision to commit to an extensive implementation and financing program. The estimated cost of the recommended Dallas area transit plan is \$1.516 billion (1974 dollars). Seventy percent of this cost would be devoted to transitways, stations, and vehicles.



1990 DALLAS TRANSIT RIDERSHIP



**1990 CBD TRANSIT RIDERSHIP** 

### FINANCIAL REQUIREMENTS (\$1,000,000)

	Revenues and Costs by Stage <sup>(1)</sup>			Local Funds Required		Annual(4)	
Development Stage	User Revenues(5)	Operating Costs(5)	Capital Costs	Federal-State(2) Grants-in-Aid	Capital(3) Costs	Operating Deficit	Debt Service by Stage
1	24.0	29.5	29.0	23.2	5.8	5.5	0.8
2	105.0	118.0	232.0	65.5-112.0	108.4-178.1	13.0	5.2-10.7
3	205.0	219.0	396.0	63.6-108.5	276.3-343.6	14.0	16.8-28.6
4	305.0	312.0	187.0	63.6-108.5	67.3-134.6	7.0	14.3-28.9

<sup>(1)</sup> All revenues and costs computed for year at end of stage.

(2) Based upon current federal budgets, pending legislation and approximations of local, regional, and state shares.

(3) Includes 20 percent share to match federal grants, and capital costs in excess of potential federal/state grants.

(4) Assumes issuance of local general obligation bonds at 6 percent for 20 years to finance fund needs, accumulated by stage, that is, represents annual debt service required to pay costs incurred during stage.

(5) Final Report, Task 103; Financial Evaluation; Regional Public Transportation Study; Barton-Aschman Associates, Inc.; February, 1974.

Note: All costs in 1974 dollars.

# DALLAS AREA TRANSIT PLAN-FOUR-STAGE SYSTEM COST ESTIMATE

System

1. Transitways (54 miles)	\$338,263,000
2. Stations (53 stations)	124,220,000
3. Guideway System Facilities	56,290,000
4. Rolling Stock (1,000 new vehicles)	127,230,000
5. Surface Transit Improvements	8,373,000
6. Right-of-Way and Property	78,270,000
7. Engineering, Contingency, etc.	
(15 percent)	111,355,000
Total:	\$844,000,000

These expenditures would be distributed over time, corresponding to the recommended staging of the plan. Accordingly, the cost by stage is estimated to be:

Stage 1		\$ 29,000,000
Stage 2	_	232,000,000
Stage 3	_	396,000,000
Stage 4	-	187,000,000
	Total:	· \$844,000,000

In the first four stages a comprehensive system with transit service extending throughout the subregion would be created. These improvement costs include 30 miles of transitway system most of which is located within the central city.

The estimates also assume the use of a highcost fixed route, high-capacity transit technology. Hence, they represent maximum potential costs. However, should a less expensive technology, e.g., bus only, be used, the cost would decrease. This reduction could be as much as approximately \$575,000,000 for the four-stage program. Such a system would employ buses and all subway portions would be replaced with elevated transitways. The alignment, land-use relationships, and level of service would not be as desirable, although it would be workable.

A final cost alternative would be the "nobuild" program. This program would not develop separate transit rights-of-way. It would represent an improvement in the basic bus system as exists today. As such, costs would drop to a low level, i.e., \$29,000,000. Again, such a program is workable but it would not achieve the goals and objectives stipulated for public transportation.

### TYPICAL TRAVEL COSTS FOR AUTO AND TRANSIT

To carry 10,000 passengers per hour on a typical segment of the transportation, the annual direct costs $^{(1)}$  would be:

Using auto Using express bus Using rail rapid transit Using PRT \$0.13 per passenger per mile \$0.03 per passenger per mile \$0.05 per passenger per mile \$0.05 per passenger per mile

If a typical six-lane freeway or a two-way transit guideway (reserved lanes or tracks) were used to their maximum carrying capacity, the annual direct costs<sup>(1)</sup> would be:

Using auto	\$0.032 per passenger per mile
Using express bus	\$0.017 per passenger per mile
Using rail rapid transit	\$0.020 per passenger per mile
Using PRT	\$0.023 per passenger per mile

For a typical 15-mile trip with 10 miles being on a freeway or primary transit route, the trip cost<sup>(2)</sup> would be:

Using auto	\$1.73 per passenger
Using express bus	\$1.61 per passenger
Using rail rapid transit	\$2.15 per passenger
Using PRT	\$2.35 per passenger

(1) Includes operating cost and amortized costs for physical facilities.

(2) Includes cost of time plus operating and amortized costs.

### WHAT ARE THE FINANCIAL RESOURCES?

The estimated cost of the transit improvement program could be financed by a combination of federal, state, and local resources. The federal portion could come largely from the capital funding programs of the U.S. Department of Transportation. Many state governments currently provide funds and this is another possible source. In total, it is estimated that an annual level of federal-state funds for Dallas could range from \$13 to \$22 million. This is based upon the assumption that the level of appropriation to UMTA and apportionments to states remains stable.

A portion of the local financial share would be derived from transit fares. Assuming a basic fare of 25 cents plus zone and transfer increments, the annual revenue from fares should increase from the present \$9 million to \$35 to \$40 million by 1990. The latter is based upon estimates of ridership for the recommended new transit system.

The amount of the estimated financial need ranges from \$10 million to \$16 million per year during the early stages of the program and will increase to \$30 to \$47 million per year during final stages. Comparing fare revenues and federal-state funds with estimated costs indicates that there would not be sufficient funds to finance the recommended transit program. Other funding sources would be required.

Such new funding sources could generally include taxes or fees of various types such as vehicle, emission, parking, sales, income, or possibly entertainment taxes, as is being tried in other states. Based upon the estimated population growth, future vehicle ownership, estimated retail sales, etc., these taxes could generate funds sufficient to meet the needs.

### ESTIMATED TRANSIT ACCESSIBILITY

Jurisdiction	Total(1)	Percent <sup>(2)</sup>	Zero to 16 Age <sup>(3)</sup>	Over 64 Age <sup>(3)</sup>	Employment <sup>(4)</sup>	Percent <sup>(5)</sup>
City of Dallas						
Primary Routes	629,000	<b>52</b> %	152,000	91,000	913,000	82%
Primary and Crosstown						
Primary Routes	1,159,000	96	322,000	95,000	846,000	98
Dallas County						
Primary Routes	1,337,000	58	334,000	136,000	937,000	81
Primary and Crosstown						
Primary Routes	1,936,000	84	542,000	159,000	1,107,000	95

<sup>(1)</sup> Estimate of 1990 population residing within service area of routes.

(2) Population of total city or county population residing within service area.

(3) Two age groups as part of service area population.

<sup>(4)</sup> Employment by place of work within service area of routes.

<sup>(5)</sup> Proportion of total city or county employment.

### HIGH ACTIVITY CENTER ACCESS

Type of Center	Total Number	Number Within One-Quarter Mile of Major Transit Route
Region Serving, Multipurpose	17	15
Major Educational	12	7
Major Medical	8	5
Cultural Centers	9	8
Outlying Major Shopping Centers	6	5
Outlying Employment Districts	15	10

### ARE THE COSTS JUSTIFIED?

This is a question to be answered by the community. Citizens and community leaders will have to examine the recommended program in light of their values and priorities to determine if the improvements merit the investment.

On the basis of the technical aspects of the study, the recommended program is believed to be justified. The new system will create various benefits that will be significant relative to achieving the basic Dallas goals of opportunity, accessibility, efficiency, and economy.

In more specific terms, the proposed transit system would achieve a variety of benefits. These include the following:

Level of Service

Reduced Transit Travel Time Higher Frequency of Service More Direct Routing of Service

### Patron Amenities

Improved Riding Comfort More Convenient and Easier to Use New and Improved Station and Stop Conveniences Increased Safety and Security

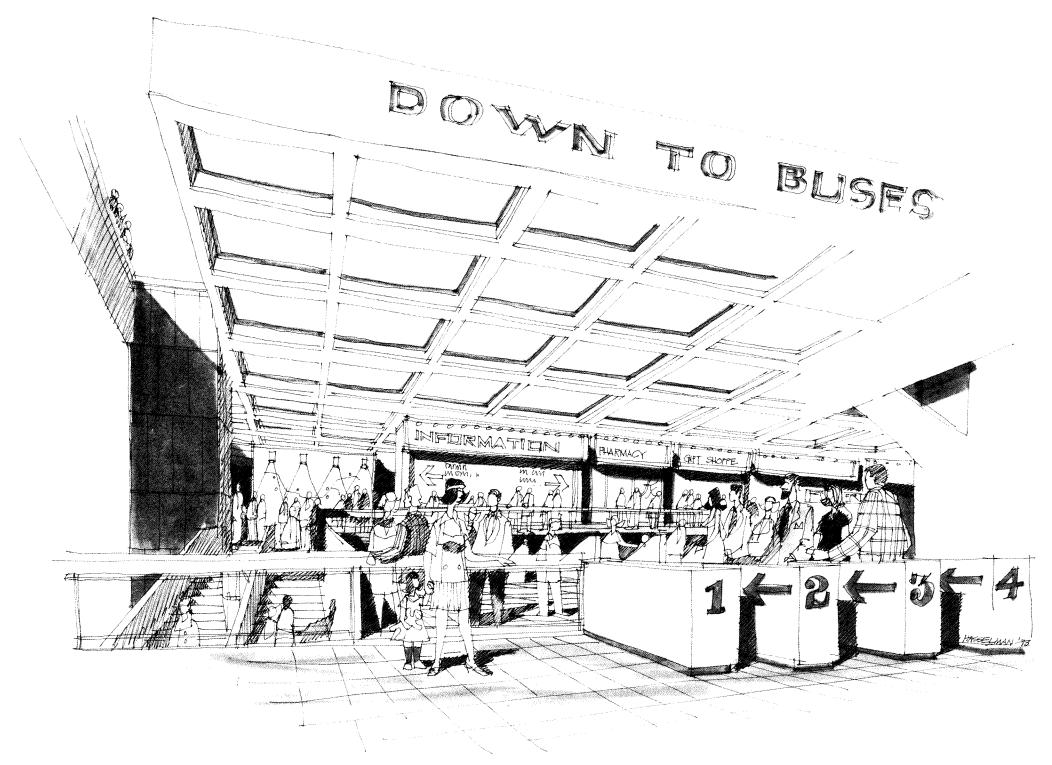
Land-use

Improved Transportation System Capacity Environmental Enhancement Improved Mobility Support of Land-use Development Concept

It is estimated that the high-level service elements of the recommended system would ultimately serve about 95 percent of the City of Dallas populuation and 80 percent of Dallas County population.

In economic terms, the use of transit on a wide scale represents a cost advantage as compared to an auto-dominant system. Typical costs per passenger per mile for alternative transportation technologies would be lower or at least competitive with auto costs. The coordinated use of auto and transit would appear to create the most optimal economic result.





PROTOTYPICAL CONCEPT-MEDICAL CENTER STATION TICKETING AREA

### WHAT ACTIONS ARE NEEDED NOW?

Making the necessary financial commitment is only part of the requirement to implement the transit improvement program. It will also require broad public acceptance, local political support, and administrative leadership.

Continuing the program of transit improvements already authorized by the Dallas City Council, including the new park-n-ride facilities and acquisition of new vehicles, the city should consider the following immediate actions:

- Adopt the long-range transit plan as the first step to guide proposal refinements and transit improvements during the next 20 to 30 years.
- In concert with adoption of the plan, approve an appropriate transit/land-use policy which will provide for coordinating land-use and transit development. This policy should assure that the extent and timing of transit systems and land-use developments are mutually supportive.
- Authorize the city manager's office to develop the transit planning organization and management as described in the transit program. As part of this action, a management or decision-

making program should be prepared as soon as practical to assist responsible staff in directing the program.

- Authorize the first-stage improvements, in the amount of \$29,000,000, for implementation by the city and DTS staff.
- Authorize the city staff to undertake preliminary engineering for the North Central, Stemmons, and Oak Cliff transitways. These programs would be directed toward a detailed description of right-of-way needs, the preparation of detailed cost estimates, and the preparation of the required environmental impact statements for such transitways.
- Submit an application to UMTA for the corridor planning funds and a preliminary capital grant application for the construction of first-stage improvements, the transitway program, and right-of-way acquisition.
- Authorize the city manager's office to undertake a legislative and financing study for purposes of preparing a recommendation for the development of required local financial resources needed to undertake the transit program.



### **B** PROSPECTS—THE FUTURE OF THE CITY

The transit program has been developed on the basis of its function (to move people) and its relationship to land-use as affected by accessibility. It is an essential element for the development of the central city, a needed alternative travel mode for many people, and a supporting mode for the auto-oriented system. However, in addition to these direct benefits, this program could mean much more to the Dallas urban area.

A capital expenditure of the scale envisioned (more than \$1 billion) could generate or encourage a great deal of investment as is occurring in other urban areas. It could help trigger a substantial reshaping of the urban area. The auto system (freeways, in particular) have induced great changes and will continue to do so. But the auto system has its limitations; development variety, with increasing intensity, cannot be supported by an auto-only system. A new high-capacity transit system would open the door to more opportunities. It represents a major upgrading of transportation choice, capacity, and accessibility.

These attributes could be followed by more innovative design and development. These would contribute to Dallas' life-style.

Unique design and development opportunities would be created in several areas, particularly in the downtown. The integration of transit and buildings could produce an exciting and inviting atmosphere that would be most consistent with Dallas' image as the city of the future.

Together, a major transit commitment could be the tool for achieving that new urban environment of a region which offers a vast range of personal opportunities and living environments.

### CITY OF DALLAS

#### **City Council**

Wes Wise, Mayor George Allen, Mayor-Pro Tem

Charles Terrell Pedro Aguirre Charles H. Storey Jerry Gilmore Ms. Adlene Harrison Garry Weber Russell B. Smith L. A. Murr Ms. Lucy Patterson

### City Manager

George R. Schrader

### Public Transportation Advisory Team

### Representatives of:

Central Business District Association Dallas Chamber of Commerce East Dallas Chamber of Commerce Greater Northwest Chamber of Commerce North Dallas Chamber of Commerce Oak Cliff Chamber of Commerce Pleasant Grove Chamber of Commerce Goals for Dallas League of Women Voters of Dallas **Regional Transportation Policy Development** Committee Texas Highway Department, District 18 American Institute of Architects Greater Dallas Planning Council Urban League Dallas Homeowners Association Save Open Space Dallas Board of Realtors, Inc. **Texas Society of Professional Engineers** Southwest Railroad Historical Society Dallas Metropolitan Home and Apartment **Builders** Association Dallas County Public Works U.S. Department of Transportation

### **Citizen Consultation Group**

#### Sector Committees

South Dallas Public Transportation Steering Committee

### City of Dallas

Traffic Control Public Works Planning and Urban Development Public Utilities

### Consultant: Barton-Aschman Associates, Inc.

Frederic M. Schweiger, Project Administrator Richard J. Hocking, Project Director Thomas F. Larwin, Assistant Project Director (resident)

### **Associated Consultants**

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# 6

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