Fort Worth

CBD sector report

lawrence halprin and associates
Prepared by
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San Francisco

for the
City Center Sector
Planning Council
Burl B. Hulsey Jr., Chair.

in cooperation with the
Fort Worth City
Planning Department
David Farrington, Dir.

October 1971
City Plan Commission Resolution

WHEREAS, the City Center Sector Planning Council was organized on September 11, 1969; and

WHEREAS, the members of the City Center Sector worked diligently with Lawrence Halprin & Associates to prepare a sector plan and a planning report for the CBD; and

WHEREAS, the Central Business District plan will serve as a model and guide for the growth of downtown Fort Worth; and

WHEREAS, the final report and plan was submitted to the City Plan Commission by the Sector Planning Council on November 1971; and

WHEREAS, the City Plan Commission has reviewed the report of the Sector Planning Council and considered the recommendations of the planning consultant and the professional staff of each city department;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY PLAN COMMISSION OF THE CITY OF FORT WORTH:

1. THAT this Central Business District Plan and Report be approved and adopted as the tenth volume of the General Plan of Fort Worth.

2. THAT the City Council be commended for their work and efforts and that appreciation be extended to them for participating in Fort Worth’s Sector Planning Program.

3. THAT the City Council be urged to approve the Central Business District Plan as the Comprehensive Plan for future development of downtown Fort Worth.

Chairman

City Council Resolution

WHEREAS, it is desirable that there be a plan to help guide the growth and development of the Central Business District to avoid mistakes and hence incur the least possible inconvenience and expense to its citizens; and

WHEREAS, the City Plan Commission has submitted to City Council for approval a recommended general plan for the Central Business District;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, TEXAS:

1. That the CBD Sector General Plan be hereby approved as the long-range guide plan for future development of Fort Worth;

2. That the city departments use the plan to assist them in the preparation and implementation of their work programs;

3. That the citizen boards and commissions take notice of the plan as a general reference to assist them in making decisions required in their assigned scope of authority;

4. That other governmental agencies responsible for public improvements and services affecting this sector of the city are urged to become acquainted with the plan and to utilize it as a guide for future improvements in this area of the city;

5. That the citizens of the City of Fort Worth are hereby urged to acquaint themselves with the Central Business District Report.

6. That approval of this report as a long range guide does not imply approval of any specific project or recommendation contained therein. Any projects or recommendations requiring Council approval will be submitted individually to the Council for its acceptance or rejection.
25 October 1971

Burl Hulsey, Jr., Chairman
City Center Sector Planning Council
Texas Electric Service Company
Fort Worth, Texas 76101

Dear Mr. Hulsey:

We are pleased and proud to transmit to you, and to the residents of Fort Worth, this Central Business District Sector Report. The Report represents the results of a joint effort between our firm, your sector council and the City of Fort Worth to define together the major problems facing the downtown core, and to formulate a realistic plan of action to meet these needs and to develop an exciting and productive downtown.

During the course of our eighteen months of work we have employed several innovative techniques, including a unique community workshop, designed to maximize the involvement of those Fort Worth citizens and organizations which are most directly concerned with the growth of the downtown. Inherent in our planning approach is the strong concept that early and continuing community participation will provide the best possible chance for effective implementation of recommendations.

We are extremely pleased with the results so far of the planning process and very gratified at the excellent reception with which our joint recommendations have been met. The continuing involvement of the City Center Sector Planning Council has been of vital importance, as has been the unusual amount of interest and participation exhibited by leaders of the Fort Worth City Government. Needless to say, we have benefited greatly from the close working relationship which has existed all along with the City Planning Commission and the City Planning Department, headed by David Farrington.

We trust that this report will be a first step in a forward thrust for an economically healthy and beautiful downtown. We look forward to helping you with its implementation.

Very truly yours,

Lawrence Halprin & Associates
To the City Plan Commission:

We are pleased to transmit to you this report of a framework for growth of the Fort Worth central business district. The report has been approved by the City Center Sector Planning Council and we respectfully request your acceptance and approval.

The report is the reflection of inputs from many individuals and groups. It was developed jointly by the firm of Lawrence Halprin and Associates, the City of Fort Worth Planning Department, and the City Center Sector Planning Council, assisted by a large number of concerned individuals.

The recommendations contained in the report are forward-looking, realistic and workable. They are aimed at a more attractive, viable and revitalized downtown. If implemented, they should take Fort Worth into a new era of intelligent, planned, coordinated development of downtown -- to the benefit of all its citizens.

Our hope is that this report will become a living document -- that it will not be filed away and forgotten. The report itself is only a beginning.

Respectfully,

Burl B. Hulsey, Jr.
Chairman
City Center Sector Planning Council
Fort Worth, Texas
Central Business District (CBD) Study Area
# Table of Contents

## INTRODUCTORY STATEMENT
- Introduction
- Acknowledgements
- Credits

## OBJECTIVES, ASSUMPTIONS, AND IMPLICATIONS
- Objectives
- Assumptions and Implications

## SUMMARY AND CONCLUSIONS

## CBD STUDY PROJECT ORGANIZATION
- The Growth Framework Concept
- The Current and Anticipated Projects
  - Listing of Projects
  - Implications of Projects
- The Short Range Growth Program
  - Short Range Development Opportunities
  - Short Range Development Strategies
    - Public Sector Strategies
    - Required City Action
    - Implied by Framework Proposals
    - Private Sector Strategies
    - Joint Public-Private Strategies
    - Funding for Implementation
- The Long Range Growth Framework
  - Long Range Development Opportunities
  - Long Range Development Strategies
    - Public Sector Strategies
    - Private Sector Strategies

## PROJECT DESCRIPTIONS
- 35. A. Access, Circulation and Parking
  - Access and Circulation
  - Circulation and On-Street Parking
  - Off-Street Parking
  - Off-Street Parking Projects

## CBD STUDY PROJECT ORGANIZATION
- Public Transportation
  - Public Transportation Regional Mass Transit
  - The M & O Subway
  - The Fort Worth Transit Company
  - Inter-City Bus Services
  - Public Transportation Projects

## APPENDICES
- The Role of Downtown Fort Worth in its Metropolitan Area
- The Fort Worth CBD Workshop
- Remodeling and Sign Control Recommendations
- Landscaping Materials Recommendations
- BIBLIOGRAPHY
introductory statement
Illustrative Plan of the Fort Worth CBD
This plan shows all projects proposed in this report.
Introduction

To the Citizens of Fort Worth:

It is with a great deal of pleasure that we convey to you this Report on a recommended growth framework for the Fort Worth Central Business District.

The Report represents some nine months of data gathering, analysis, and plan development performed by this office in close cooperation with the City Center Sector Planning Council and the City of Fort Worth Planning Department.

In several ways this study has been a unique one. In addition to the standard planning techniques, we have made a serious and time-consuming effort to:

1. use new techniques such as carefully-formulated community workshops in order to actively involve interested citizens in the planning program, and to maintain a "feedback" process through which their comments and suggestions have been blended into the plan;

2. prepare plans to meet problems which are actually felt by Fort Worth residents rather than problems simply perceived by professional planners;

3. develop a carefully staged series of proposals keyed to a growth pattern for Fort Worth rather than specific static target dates. Such project phasing has been formulated on an open-ended basis and can be accelerated or decelerated depending upon choices made by Fort Worth leaders themselves; and

4. involve decision-makers continuously in the process of evolving the plan.

Thus, it is our conviction that the recommendations contained in this Report are not only forward looking, but are realistic and workable. We have attempted to offer solutions to problems which we have defined together with Fort Worth citizens, particularly those interested in the Central Business District.

If the suggested development guidelines are followed, they will provide the structure for the effective public and private investment vital for the regeneration of downtown Fort Worth. We are confident that a more viable, convenient, and handsome downtown environment will be the result.

We would like to thank the Mayor, members of the City Council, the City Manager, members of the City Plan Commission, and members of the City Center Sector Planning Council who generously contributed to this report.

Lawrence Halprin & Associates
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objectives, assumptions, & implications
Objectives

This Study has been initiated at a time when the City of Fort Worth, generally, and its Central Business District (CBD), specifically, have reached a critical period in their evolution. A resolution of complex urban issues is needed with far-reaching and difficult decisions lying ahead. It is felt that this CBD Study and this Report will make a significant contribution to a clearer notion of appropriate needs, policies, priorities, proposals, and strategies for the continued development of the CBD. This Study was undertaken in order to reach four generalized objectives:

1. to ascertain and evaluate the present and future needs of Fort Worth's CBD;

2. to propose a Long Range Growth Framework for the CBD which evolves from present and future needs;

3. to propose from within this Long Range Framework, a Short Range Growth Program of specific proposals selected for their economic, social, and environmental impact; and

4. to propose public policy and methods of implementation which will achieve these projects and programs.

With respect to the first objective, this Study emphasizes an evaluation of Fort Worth's present and future needs, necessary strategies for attaining them, and their physical implications. Throughout the course of the Study, community workshops, work sessions, and discussions have taken place between Lawrence Halprin & Associates; the City Center Sector Planning Council; the City Manager; the City Planning Department; the Downtown Fort Worth Association; the City Plan Commission; various City officials including Mayor Stovall and Mayor Pro-tem Sarsgard; and interested citizens. A continuous dialogue has been established and maintained which we feel has considerably enriched the study. This work was further supplemented by written and mapped data provided by the City Planning Department in our efforts to understand the CBD of Fort Worth as a unique place with specific present and future needs.

The techniques and results of the workshop process are summarized in the Appendices. Preliminary and interim data, opinions, and alternate directions were explored during work sessions with all participants. Preliminary and interim description of our Study is documented in the Planning Kit (Sept. 13, 1970) and the CBD Working Interim Report (Dec. 15, 1970). The continuous dialogue with and input of these various groups and that of concerned citizens formed the basis of our work. The final recommendations contained in this Report reflect the very positive nature of those interchanges and our jointly held optimism for the future of Fort Worth.

This Report, unlike many such reports, does not stress the City's present condition or deficiencies since these have been well documented by the City Planning Department in their six Sector Planning Program Reports (see Bibliography). Neither does this Study repeat the often-described vague generalizations regarding the potentials of the Fort Worth CBD.

In considering the second objective, a Long Range Growth Framework was conceived in light of the City's present and future needs; the role to be assumed by the CBD in fulfilling these needs: political, social, and eco-
nomic realities; and accepted planning practices. This Framework evolved from a thorough and multi-sourced view of the present and future conditions and the appropriate public and private responses.

The democratic and dynamic aspects of the American city require flexibility in planning and administration. On no issue is this more apparent than in goal, priority, and process selection. Since it was drawn from a single time perspective, the Growth Framework will predict future conditions and responses only in broad terms. The Framework should not be taken too literally, and must be capable of accommodating change. Modification, deletion, or addition of proposals is considered desirable. The Framework should not be permitted to atrophy, but should be reviewed and adjusted as presently unforeseen conditions arise, and as early proposals are completed and evaluated.

We feel strongly, however, that the Growth Framework is a realistic and workable one which should be respected. It represents intensive study and considered judgement, and it provides for a great degree of internal flexibility both in general and in its individual proposals. The programs are only specified in conceptual terms and in their essential features which are of public concern. Additionally, many parcels and many conceivable functions have not been specified. Undesignated or "soft areas," are important to the flexibility of the Framework. Such areas should remain unplanned until economic pressures or private initiative bring them into the development process.

Implementation of the Growth Framework and those who administer it must be concerned with an overview with respect to objectives, strategies, environmental realities, key proposals, and improvement of the Downtown's aggregate (physical, social, and economic) environment.

In regard to the third objective, the Short Range Growth Program was conceived jointly by the City Center Sector Planning Council, the City Planning Department, and Lawrence Halprin & Associates. This is viewed as an "action program" of specific projects and programs within the Growth Framework which would provide stimulus, incentive, and direction for private and public investment in Fort Worth's future. It provides the first test of the viability of the Long Range Growth Framework.

With respect to the fourth objective, public policy and methods of implementation have been outlined throughout this Report. It is intended that this Report contain highly realistic and implementable proposals as well as implied or specified strategies for their achievement.
Assumptions and Implications

Proposals derived from serious study of a subject as complex as Fort Worth’s CBD must be conditioned on certain assumptions regarding future conditions in the city and among its residents. Responses to these conditions in the form of development implications likewise concern this Study. This section of the Report highlights the primary assumptions made by the planning participants and the implications of these assumptions. All such implications are considered in appropriate sections of this Report.

ASSUMPTION A
Development guidelines are required if the CBD is to continue as Tarrant County’s major financial, governmental, commercial, retail, and office center.

IMPLICATIONS
1. Increased demand will be placed on existing private and public services and facilities.
2. New private and public services and facilities will be required.
3. Improved access to the CBD by private and public transportation will be necessary.
4. Additional convenient long and short term parking will be required.
5. Less overall retail square footage will be required in new facilities than in those which they replaced due to modern merchandising techniques.
6. The City Planning Department recommends an additional CBD residential population of 15,000 persons is necessary for its economic, social, and environmental improvement.
7. To the extent that the above six implications are not actualized in facilities and programs, CBD growth will be arrested in favor of growth in Fort Worth’s suburban areas or beyond City boundaries.

ASSUMPTION B
Completion of the Regional Airport will benefit the CBD.

IMPLICATIONS
1. Convenient public and private access between the Airport and the CBD will be required to achieve maximum benefit from Airport activity.
2. In addition to Airport-CBD access, additional convention-related facilities will be required to attract significantly more convention activity to Fort Worth.
3. If early growth and commitment to continued growth of the CBD is demonstrated, Fort Worth will receive greater growth benefits than will Dallas because of higher CBD land costs in the latter.

ASSUMPTION C
The automobile will remain the primary mode of travel in the foreseeable future.
IMPLICATIONS

1. Dispersed regional growth will continue.

2. Improved CBD access will be required.

3. Additional long and short term parking will be required and should be planned and regulated by a parking authority. Nearly 20,000 more spaces (430 acres) will be required by 1985.

4. A public mass transit system should serve the suburbs, CBD, Regional Airport, and Dallas. Its primary use will likely be for commuters, conventioneers, airline passengers and other visitors.

ASSUMPTION E

The CBD is an invaluable asset to the City and must be supported by programs to increase its competitiveness in the disbursed metropolitan area. Improved economic, social, and environmental status will accrue with execution of programs and with recognition that the CBD cannot provide a full range of all goods, services, and facilities needed by the metropolitan area.

IMPLICATIONS

1. Secondary but important and competing retail, office, residential, and industrial nodes will continue to emerge in suburban and outlying areas.

ASSUMPTION D

The "Linear Corridor" pattern of city development is the most realistic and appropriate choice of generalized forms for Fort Worth's future growth. The CBD qualifies as the major Node at the center of these corridors by virtue of its historic role, present investments, available goods and services, economic and governmental significance, and future potential.

IMPLICATIONS

1. Other forms of city growth (concentric, concentrated, etc.) would be in conflict with pervasive economic and cultural factors presently at work in Fort Worth and in many other cities.

2. The CBD is relinquishing its dominance but should retain and improve its position by seeking added competitive advantages.

3. Certain CBD functions, activities, and facilities which can better be served by location outside the CBD should be encouraged to relocate.

4. Certain CBD functions, activities, and facilities should be expanded and others which would benefit from CBD location must be encouraged to locate there for their own and the City's benefit.

4. Non-physical programs such as social services are not treated in this Report, but their improvement is as important to CBD growth as spatial programs. The City's socio-economic climate is closely linked to its physical environment.
ASSUMPTION F

As CBD improvements are made by influential, committed, and economically viable participants, other existing or potential new participants will also reap the economic and psychological rewards of these early efforts thus enabling them to join in succeeding developments.

IMPLICATIONS

1. Early efforts should be chosen, organized, and executed to achieve maximum economic and psychological impact.

2. Dispersion of early enthusiasm and efforts should be avoided. The public and the private sectors should each select and execute one significant project as their initial contributions. Concurrently, one joint public/private project should be chosen and completed to demonstrate their ability to work together in the City’s interest.

3. A public relations program, an economic development coordinating body, a transit authority, a parking authority, and any other appropriate device could be employed to gain consensus, expertise, or funds to achieve CBD goals.

ASSUMPTION G

Opportunistic planning techniques and frameworks for growth are superior strategies to employ in pursuit of CBD needs than are abstract planning concepts and detailed blueprints for future growth.

IMPLICATIONS

1. Opportunism implies adjustment and flexibility over time which in turn requires a clear view of priorities and key objectives.

2. Infrastructure projects such as public transit lines, highways, parks and malls, etc., should be located and executed as early as practicable to serve as “anchors” or “organizers” (known conditions) for future development.

ASSUMPTION H

Public sector involvement, coordination, and execution of Study–recommended proposals will require greatly increased cooperation between State, County, and City agencies.

IMPLICATIONS

1. Increased interagency dialogue and planning is necessary.

2. Sponsorship and support of joint programs and proposals are necessary.
The Fort Worth CBD has a viable future, but it must make the most of the transition it is undergoing during metropolitan dispersion. The CBD has moved from its past position of centralized metropolitan dominance to its current status as the area's major node. The CBD is in competition with its "suburban self." This competition with shopping centers, office parks, and industrial parks which offer attractive packages of easy access, parking, and modern facilities will and should continue. However, CBD development must occur to increase its competitiveness vis-a-vis these outlying nodes.

The CBD no longer can or should supply all goods and services to its metropolitan area. It is apparent that the CBD continues to be the financial center of the County. With additional facilities and other incentives, the Convention Center will play an increasingly important role in the CBD. Retail dominance of the CBD in the metropolitan area has loosened to that of a major focal point. Development of retail and convention-related facilities will undoubtedly serve to re-energize the CBD. The CBD position as economic, governmental, and employment center of metropolitan Fort Worth remains undisputed, but its orderly growth will require an increasing supply of public and private goods and services.

Future action must be characterized by dynamic leadership and cooperation from both the public and private sectors. Both sectors will best be served and growth will best be promoted by such cooperation. For example: property lines, rights-of-way, and "bargain basement economics" must be transcended if the existing city core of somewhat outmoded small blocks, narrow streets, and multiple landowners is to be shaped into a revitalized environment. Recent and anticipated construction of both public and private facilities show continued faith in the CBD, often demonstrating the qualities described above.

These and anticipated projects have dispersed CBD activity to the west from its historic location near Main Street. The Growth Framework proposes to rebalance this westwardly dispersion with its effects of compaction and concentration on the Main Street and Houston Street areas. The introduction of mass transit and its allied uses should aid in this rebalancing.

THE LONG RANGE GROWTH FRAMEWORK

The Framework recognizes that major investments have and will continue to be made in areas outside the CBD. It does not attempt to directly curtail these developments. The principles on which the Framework concept is based seek to guide future development by means of providing a competitive attraction and a superior infrastructure. By creating an urban core with high quality vehicle access, parking, transit, city services, pedestrian environments, social harmony, and economic diversity; future development will seek to locate in the CBD to take advantage of these existing and planned facilities. It is on this principle that the Long Range Growth Framework is based.

The major value of the urban core appears to be that people prefer to be in an area where they can live, work, and interact without having to travel great distances. Much of recent American development has run counter to this assumption, manifesting itself in the resultant urban decay and suburban sprawl with which we are now faced.
Nonetheless, the world's great cities are viable because they have interrelated and mutually reinforcing concentrations of business, institutions, housing, residents, and entertainment. Buyers and sellers, businessmen and bankers, conventioneers and restauranteurs, students and librarians all prefer proximity. An urban center such as that envisioned for Fort Worth would improve and increase these interactions. It would provide the diversity and proximity of transportation, employment, services, housing, and recreation which can make the CBD the focal point of the Fort Worth metropolitan area.

The following maps and drawings show the result of the Long Range Growth Framework (Illustration 1).

THE SHORT RANGE GROWTH PROGRAM

A Short Range Growth Program has been selected from within the Framework by an evaluation of Fort Worth's immediate needs and current resources. Its implementation will increase the CBD growth rate, but its accomplishment will require a maximum effort of the private and public sectors individually as well as their efforts in joint or cooperative proposals.

Fort Worth must establish priorities toward fulfillment of its long and short range growth, since its resources are limited and must be effectively coordinated for maximum impact. In view of current development activities and proposals, the consultants believe the City now has the capacity to accomplish the following major proposals which are in addition to those currently proposed or anticipated.

1. The Loop Road System

This system of one way distributor roads is necessary to gain circumferal access to the CBD (Illustration 2). It would act as a perimeter to the CBD (controlling its growth) while improving traffic circulation and reducing congestion within the loop. The reduction or alleviation of pedestrian-vehicle conflicts and CBD ground space devoted to vehicles is essential to the improvement of the pedestrian, business, and recreation environments. At present this system is almost complete, and will require only a limited amount of street improvements, right-of-way acquisition and traffic light signalization, to complete it.

2. The Off-Street Parking Program

To alleviate parking and traffic congestion, to conserve CBD ground space, and to bring coordination and planning to bear on parking problems; it is recommend that an Off-Street Parking Program be initiated immediately. A Fort Worth Parking Authority should be established with sufficient mandate to achieve the much needed overview, coordination, and stimulation of this activity. On-street, off-street, on-grade, and structured parking should become recognized land uses and zoned as appropriate. An immediate parking structure program should be undertaken to augment existing and proposed structures.

3. The Houston Street Mall

The increased pedestrianization of Fort Worth's major shopping street is seen as vital to the development of CBD retail activity (Illustration 3). Houston Street between Weatherford and Ninth Streets should be narrowed from four lanes plus parking to two lanes plus parking with the
Illustration 2.

The Loop Road System
The plan diagram shows the proposed route of one way traffic in the CBD to alleviate congestion in the downtown and indicates areas of proposed structured parking.

Illustration 3.

The Houston Street Mall
The proposal widens sidewalks, plants trees and installs street furniture from Weatherford to Ninth Street.
Illustration 4.

The Pedestrian Network
This plan diagram locates the projects, overhead links, and below grade links (dashed edges) proposed for the CBD. This climate-controlled system of walkways would provide an alternate path for pedestrians which is free of both weather and vehicle interference.

Illustration 5.

The Trinity River Overlook and Riverfront Park
This sketch shows the County Courthouse, Paddock Park, the Main Street Bridge over the Trinity River, and the proposed Overlook restaurant on the bluffs.
space recovered from each side devoted to pedestrian paving, trees and street furniture. Renovation of all adjacent properties should be actively sought. The resulting shopping mall would give a sense of identity and order and would greatly enhance all properties on or near Houston Street to better equip them for competition with suburban retail centers. Lawrence Halprin & Associates believes this project (2a) should be undertaken by a first joint venture of the public and private sectors.

4. An Enclosed Pedestrian Network

An enclosed and climate controlled second story network is deemed essential to efficient, uncongested, and auto-conflict free pedestrian movement in the CBD (Illustration 4). The first phase of its development would provide second level public arcades through certain existing and proposed buildings. Except for Main Street crossings and existing underground passages, second level pedestrian bridges should span streets to connect blocks of buildings. The network should eventually encircle the CBD making almost any point within conveniently accessible. Pedestrian movement systems such as escalators and moving sidewalks should be investigated in conjunction with this network.

5. A Major Retail Development

The private sector should embark on an extensive program of renovation, upgrading, sign control, etc., while one or more major investors develop a new major multi-function retail development which will provide an image-enhancing focal point and improved competition with suburban retail areas. The Report recommends the development of the two blocks owned by and north of the Fort Worth National Bank Tower now under construction as this project.

6. The Trinity River Overlook and Riverfront Park

Until recently the CBD has turned its back on the Trinity River and its potential as a resource that could be developed to enhance the entire downtown. It is recommended that a park should be developed in cooperation with the Streams & Valley Committee in the area east of the North Main Street Bridge. With its special historical significance, being adjacent to the site of the original settlement, it would provide an initial physical link between downtown Fort Worth and the River. (Illustration 5).

SUBJECTS FOR FUTURE STUDY

In addition to the above short range proposals, there are areas of investigation and directions of future growth that should be further explored, but that go beyond the possible scope of this Study. The City Planning Department and the City Center Sector Planning Council should continue to cooperate in the developing of programs, projects, and strategies for orderly growth. The key subject areas for such investigation are listed below.

Mass Transit

The City is currently participating in a comprehensive Regional Transit Study of great importance which should affect the transit and transportation recommendations of the CBD Study. In like manner, the Transit Study ought to reflect and enhance the objectives and concepts set forth in the CBD Study. This CBD Study recommends public
sector ownership, expansion and coordination of the M & O Subway (Projects 2b, 3d) and the Fort Worth Transit Company (bus). This recommendation should be investigated and detailed by the Mass Transit Study for possible use as a first priority public sector commitment.

Pedestrian Ways

Planning should begin on the pedestrianization of other streets and alleys which should be selected in view of the guidelines and framework established in this Report. Planning should include narrowing or closing of streets to vehicles; widening of sidewalks; street lighting, furnishing and landscaping; and installation of new pedestrian and traffic controls.

In conjunction with the study of the pedestrianization of existing street, a vigorous Capital improvements program should be initiated to improve the deteriorated sidewalks within the CBD. The program should be of such a nature that various materials, textures, and techniques of surface finishing will be used. These pre-selected ranges of materials would enhance and add interest to the surrounding environment.

Pedestrian Movement Systems

The City in cooperation with the City Center Sector Planning Council should investigate various pedestrian movement systems which might be incorporated into new construction to enhance the enclosed pedestrian network. Guidelines and performance specifications should be established for integration of these systems into future construction.

Parks and Open Space

The City should establish a vigorous program of urban landscaping and open space development in conjunction with private and public projects or proposals. Such a program would alleviate the deficiency of green, pedestrian, and open spaces within the CBD as well as enhance the image and attraction of downtown. In conjunction with this program, studies should be initiated to determine the economic advantages that will encourage private developers to include plaza, parks, and arcades in their development proposals. Open space could result from building or ground floor set backs, roof gardens, or site coverage ratios.

Review Standards and Development Procedures

The City Plan Commission should explore the various methods of civic and urban design review. They should be encouraged to actively participate in the review of all public and private projects, and their approval should be mandatory before the issuance of any permits, zoning changes, or ordinances. If necessary, their power should be enlarged by charter amendment.

Institutional and Residential Growth

The public and private sectors should join in an effort to attract a university extension campus to the CBD and to relocate the Main Library within the CBD. The encouragement of at least an additional 15,000 person CBD residential population is likewise important to a broadened CBD economic and cultural base.

Zoning, Coordination, and Communication

The City should study new zoning, land use controls, and other legislative proposals to provide incentives for developers to proceed in the CBD within the guidelines established.
All efforts of the City should be directed toward supporting the development underway and planned, and coordinating the work of City departments and agencies toward established goals. Through its Planning Department, the City should continuously study major areas of possible future development. At present these should include (Illustration 9):

1. the warehouse area southeast of the Convention Center;
2. the area adjacent and west of Henderson Street; and
3. the long range potential development and land use of rights-of-way including air rights of railroad land on the south and east edges of the CBD. This proposal is based on the anticipated consolidation and amalgamation of existing railroad properties.

Illustration 6.
Major areas of Possible Future Development
The geometric diagram locates three major development opportunities.
Fort Worth citizens have expressed their desire to improve the image and rate of growth of their CBD. Actualizing these desires will require human and economic resources well above those spent on providing routine and functional improvements. These expenditures, however, may well repay the City many times over in revenues generated by increased business and visitor activity while revitalizing the City's irreplaceable nucleus.

This Report should be viewed as a first step or beginning point from which a concerned citizenry, a committed economic and business community, and an effective political leadership can move Fort Worth forward.
The Growth Framework Concept

The Growth Framework and this Report seek to illustrate to the City Center Sector Planning Council, public officials, and residents, the physical potentials of downtown Fort Worth. It is also intended to inspire those actions necessary to implement those projects and programs. An equally important function of this Report will be to serve as a realistic basis for preliminary cost estimates and land acquisition discussions. The proposals are more specific in certain portions of the Report, such as where we feel the highest priorities lie, and less precise in other portions. Landscape treatment of major public open space (existing or proposed) such as malls, streets, plazas, etc., will be described in greater detail, to furnish a firm basis for municipal budgeting, and to provide a meaningful framework for private development decisions. For example the City's firm commitment to build a mall, provide a parking facility, or improve a street, should stimulate private investments on sites benefited by such improvements.

The Framework has been phased, indicating which projects should have priorities. Phasing is based on actual growth and necessary precedents rather than on an explicit time schedule. For example, a "ten year plan" would probably not reflect either realized growth or un-met and prematurely-met needs or changing resources, goals and commitments. Each project is identified by a key number which indicates its proposed phase number and by a key letter which suggests its general priority within its phase given one logical development sequence employed by the planners. Thus, proposal 2a, The Houston Street Mall, is considered to be the prime development opportunity in Phase Two. Since other development sequences are as likely to emerge as the one employed, less importance should be ascribed to phase letters. Current and anticipated projects (Phase One) are lettered randomly.

Before implementation of any of the proposals made within this Report, they should be supplemented with sufficient economic and market feasibility studies and detailed description of public and private financing. This data should be utilized to adjust or reformulate the proposals.

The three project categories discussed in the remainder of this section are: Current and Anticipated Projects; The Short Range Growth Program; and The Long Range Growth Framework. Projects which are briefly discussed in this section will be reorganized by use types in subsequent sections where they will be described in detail (Illustrations 7, 8).
Illustration 7.

Time concept for the Long Range Growth Framework

Illustration 8.

Project categories within the Long Range Growth Framework
The Current and Anticipated Projects

The following compilation and discussions of current and anticipated projects are randomly listed without regard to their impact, investment size, or completion date (Illustration 9).

Listing of Projects

1a. Carter Foundation Water Garden

1b. Fort Worth City Hall

1c. Texas Employment Commission Building

1d. 600 Houston Street
   including parking structure with retail and future office space, future overhead connection to Monnig's, and subsurface connection to Continental National Bank (CNB) Garage.

1e. Continental National Bank Garage
   including overhead connections to the CNB Building via the Baker Building and future subsurface connection to 600 Houston Street

1f. Fort Worth National Bank Tower, Parking Garage, and Motor Bank
   including overhead connection to Monnig's and future subsurface connection to the First National Bank

1g. Southwestern Bell Telephone Building

1h. Southwestern Bell Telephone Expansion and the Tenth Street Mall

1i. Tarrant County Convention Center Parking
   temporary on-grade parking

1j. General Services Administration Parking Structure

1k. First National Bank Expansion

1l. Miller's Mutual Development

1m. Housing for the Elderly
city acquisition of Birkley Apartments

1n. Union Bank Expansion
   including new Motor Bank, office, retail, and parking facilities

1o. Texas Electric Service Company Headquarters Building

1p. Chamber Development Corporation
   First Stage
   Operation Front Door
Implications of Projects

The sixteen major projects listed above represent a substantial public and private commitment to Fort Worth's CBD. In turn, these investors need and deserve public cooperation to augment, enhance, and insure the success of their ventures. The Southwest Freeway, the Loop Road system, the enclosed pedestrian system, the Houston Street Mall, the off-street parking program, and public ownership of the bus and subway systems have all been introduced in the previous section. These proposals which should form the basis of initial public and private commitments are discussed in subsequent sections of this Report.

Recent, current, and anticipated projects have had the effect of shifting the "axis" of CBD activity west from its original location near the symbolic axis of Main Street. These projects have also tended to disperse CBD activity. The Growth Framework will rebalance this westwardly dispersion with its tendencies toward compaction and focus on the Main Street and Houston Street vicinity. The introduction of mass transit and its allied uses should aid in the geographic rebalancing of investment.

The expansion of banks, utilities and public agencies which is reflected in Phase One developments is encouraging as is the recognition of the important contribution that parks and open spaces play in an urban environment.
The Short Range Growth Program

The Short Range Growth Program consists of the Phase Two and Phase Three Development Opportunities which are taken from the Growth Framework and which are listed below (Illustration 10). These projects have been selected for their contribution to the CBD economic, social, and physical environment and/or their ability to improve its accessibility and compactness. The order of listing within each phase is not necessarily indicative of absolute priority, size, or completion time. However, certain projects require concurrent scheduling such as transit lines and their stations. Phase Two and Phase Three proposals are equally implementable, but the latter are viewed as somewhat more distant in need or are dependent on completion of one or more Phase Two proposals.

Prerequisite Projects

Before the initiation of any of the projects within the Short Range Growth Program, a firm commitment to three projects should be made. Although not mandatory, their implementation and completion will encourage the success of the subsequent projects. They are: the Southwest Freeway, the Loop Road System, and the construction of additional off-street parking facilities in conjunction with the formation of the Parking Authority.
Short Range Development Opportunities

2a. Houston Street Mall
    Belknap to Ninth Street

2b. Subway Extension First Stage
    widening and extension to Fifth and
    Throckmorton Streets

2c. Fort Worth National Bank Commercial
    Development
    including an overhead connection to the
    F.W.N.B. Tower and the parking garage

2d. Regional Transit System First Stage
    Regional Airport to 5th/Commerce and
    to 5th/Throckmorton Streets

2e. Regional Transportation Terminal
    First Stage
    transit station (5th/Commerce) and
    parking structure

2f. Interchange Building
    transit and subway stations (5th/Throck-
    morton) and commercial development
    above with overhead and underground
    connections to F.W.N.B. Tower

2g. Loop Road Parking Structure

2h. Renovation of Burnett Park
    including closing of Burnett Street to
    extend the Park to the Medical Arts
    Building

2i. Residential Development
    including a subway station (Trinity
    River) and parking facilities below re-
    sidential levels

2j. Riverfront Park and Overlook
    (See Trinity River Study)

2k. Tarrant County Government Facilities
    Expansion First Stage

    two block first stage of the six block
    public/private development

2l. Commercial/Parking Development
    including an overhead connection to
    the Regional Transportation Terminal
    and to the Sheraton Fort Worth Hotel

3a. Commercial and Institutional Develop-
    ment Second Stage
    four block second stage of the six
    block public/private development (re-
    commended Main Library site)

3b. Hotel/Commercial Facilities

3c. Regional Transportation Terminal
    Second Stage
    inter-city bus terminal, commercial
    development and parking structure

3d. Subway Extension Second Stage
    extension to Twelfth and Throckmorton
    Streets and subway stations at 9th/
    Throckmorton (City Hall Park) and
    12th/Throckmorton (Convention Cen-
    ter)

3e. Chamber Development Corporation
    Second Stage
    Operation Front Door Development

3f. Urban Lake Development First Stage
    including a parking structure, subway
    station and recreation facilities
    (See Trinity River Study)

3g. Education Extension Campus First
    Stage
    renovation of Medical Arts Building

3h. Public Square Park
    site in vicinity of location shown
Illustration 10.

Short Range Development Opportunities

- Land uses:
  - Commercial
  - Mixed
  - Parking
  - Institutional
  - Residential
  - Parks & Open Space
  - Existing
  - Loop Road
  - Subway
  - Interchange
  - Rapid Transit

- Phase 2
- Phase 3

FORT WORTH CBD

Prepared for:
City Center Sector Planning Council
City of Fort Worth
Lawrence Haupin & Associates
San Francisco, California

Map Scale: 1" = 400' or 1:4800

Illustration 10.
Short Range Development Strategies

Public Sector Strategies

By its nature, the public sector is committed to the Fort Worth CBD. The active involvement and cooperation of City, County, and State authorities is essential to achieve significant improvement. This effort should take the form of a loosely organized City/County directed team which has achieved consensus on the major problem areas, generalized solutions, and the form and extent of public participation. The public sector must maintain the public and investor confidence in Fort Worth’s future. For this reason, high impact projects are recommended for the early phases. In order to begin immediately, low-cost projects not requiring large bonding should be initiated. Improvements in parks, street furniture, and traffic flow are examples of such projects. Legislation to encourage investment, convention activity, and an enclosed pedestrian system or to control land use, billboards and signs, parking, and vertical zoning are other examples of early and inexpensive public participation.

The public sector should establish specific qualitative and quantitative goals, investigate existing and predictable situations, and encourage private enterprise to satisfy market needs. Overregulation of growth or unnecessarily rigid goals can discourage investment, but underregulation or lack of consensus will aggrevate existing conditions or fail to achieve consistent results.

The public sector should act as a coordinator and catalyst by sponsoring or actively supporting the following projects:

1. an impact study of the Regional Airport on the Fort Worth CBD;

2. an economic development commission or board to coordinate the efforts of banks, utility companies, Chamber of Commerce, etc.

3. a City/County facilities merger study;

4. a City parking authority;

5. improved land use and parking zoning;

6. a local and national public relations program; and

7. continued support of the Sector Planning Council Program.

Additionally, they should support and assist individual or group improvement ventures, and should actively seek and assist corporations, developers, and retailers to locate in the CBD.

The public sector should immediately become involved in one major project, which will establish its commitment to CBD development and encourage large scale investment. Lawrence Halprin & Associates recommends the public acquisition, widening, extension, and coordination of the M & O subway (Projects 2b, 3d) and the Fort Worth Transit Company as such a project. Two thirds Federal funding from the Department of Transportation should be available for this project. Alternate projects could be either construction of coordinated parking facilities or a significantly improved pedestrian movement system within the CBD.

The public sector should also immediately embark on one major joint venture with the private sector.
Required City Action Implied by Framework Proposals

Land Use

In order to achieve the goals represented in the long and short range proposals the City must develop a combination of land use controls and incentives. New and more flexible zoning, to provide bonuses to developers for superior design, function, and provision of public spaces will be required. In addition, height controls may be applied to maintain the visual continuity and control high density proposals which would conflict with the surrounding character. In order to be effective, these controls must be combined with public improvements and amenities which will attract a developer downtown. These should include efficient and convenient transportation, parking for private vehicles, streetscapes and walkways which will attract the pedestrian, and a variety of cultural and recreational activities.

Transportation

The City must commit itself to providing regional and sub-regional transit with a primary terminus within the CBD. This commitment should include the ownership and extension of the M & O Subway and the Fort Worth Transit Company as well as the establishment of a regional transit system which will provide an attractive alternative to the automobile. Adequate parking should be provided at convenient locations within the CBD. However, the circulation, distribution and through movement of traffic within the CBD should be minimized by providing for these movements on the periphery, utilizing parking facilities integrated with major activity centers. The completion of the Loop Road System must precede downtown development since it will alleviate CBD vehicle congestion and encourage pedestrian activity. The recognition and importance of the role of the pedestrian, in an automobile-oriented society, must be made. The concepts are analogous to the popular suburban shopping centers: the lessons to be learned from their success must be reapplied downtown.

Public Facilities

The availability, the location and the quality of the public facilities will be one of the most important factors in attracting developers to the CBD. Parking facilities play an especially important role and will continue to influence the location of major downtown uses if provided prior to these developments. The efficiency of the street system will also be an important factor. Streets will have to be altered so that pedestrian areas are respected. The installation of traffic lights, street lights, walkways, landscaping, transportation nodes and other public facilities oriented to the pedestrian will materially influence the image and attraction that the CBD can provide.

Urban Design

The design and coordination between the public facilities which are provided, and their relationship to private development, both existing and anticipated, will be a most important factor. While the "aesthetic" often loses out when the realities of the municipal budget are considered, it must be recognized that without the necessary attention to good urban design, the CBD will not attract the people who make it live.
Private Sector Strategies

As in the public sector, the individual private entities must organize themselves on the basis of mutual self-interest. Large and small bankers, retailers, realtors, and hotel owners need an organizing force and a self-coordinating body which can assist members in evaluating their present condition and coordinating their future investments. The private sector must begin with each existing investor group determining the extent to which it is willing to protect its investment by increased commitment to the CBD. The aggregate of these commitments is the base from which a greater Fort Worth can be built.

Lawrence Halprin & Associates feels the private sector should, individually or through its representative associations, co-sponsor or actively support the seven programs previously listed in Public Sector Strategies.

Private sector short range strategies should be generally similar to those of the public sector—short term, high impact, relatively low cost, and evenly distributed in the CBD. The initial strategy should be to maintain and strengthen downtown retail, office, and hotel facilities by a general upgrading of existing facilities, coupled with one major new construction which will integrate new, relocated, and existing facilities and provide an image-enhancing focal point for the CBD. Such a project should incorporate or have access to parking, transit, office, retail, hotel, and open space, and be of significant location, size, design, and quality to act both as a base for CBD development and a competitor with suburban centers. At the present time, the Fort Worth National Bank Commercial Development Proposal (2a) appears to be best suited to these objectives.

Private sector mechanisms should encourage multi-owner cooperation and improvements to sidewalks and alleys, sign control and upgrading, second-level building connections, and common public or private spaces. See Parks, Malls, and Open Spaces and Appendices for descriptions of these forms of cooperation and improvement.

Joint Public—Private Strategies

Today neither the public nor the private sectors can operate completely autonomously on any problem area, but in certain areas especially close cooperation and joint financing is required. The proposed new parking/transit/commercial/office/hotel complex is an example of such a venture. A Fort Worth parking authority is another type. A legislative committee to investigate proposed zoning changes is a third. Planning groups to investigate the feasibility and design of specific open spaces, alleys, etc., might also become a joint concern, as would the study of bus, subway, or rapid transit improvements. In all instances, the public sector should lay the groundwork, set publicly acceptable and beneficial parameters, and act as a catalyst for growth and improvement.

The public and private sectors should immediately embark on one major joint venture. This project should be selected and executed to demonstrate the public sector's commitment to work as a co-partner with private investors. It should also demonstrate the private sector's pledge to improve its facili-
ties and increase its rate of growth. Lawrence Halprin & Associates recommends the Houston Street Mall (Project 2a) as such a project.

**Funding for Implementation**

**Public Revenue**

In addition to tapping a steadily improving tax base, issuing securities, and imposing assessments for improved services; the City and County can use its influence for donations or sponsorship of specific projects by individuals or groups. The appropriate State departments and State Legislature are additional sources of assistance. Federal (e.g., Department of Transportation, Department of Housing and Urban Development) funding may be available for highways, parking facilities, bus and transit improvements, and housing. Since special bond approval will need to be obtained for all of the larger investments, the importance of initial and sustained enthusiasm for redevelopment cannot be overstated.

**Private Revenue**

The climate for private investment will be influenced by present enthusiasm and analysis of existing conditions as well as the past, present and projected future investment potential of Fort Worth. Out-of-state, as well as out-of-city investments must be obtained by sustained local efforts. The larger, the more successful, and the less recession-affected local corporations must share in the development of downtown with the economic consequences of their efforts permitting the remaining enterprises to join. Group assessments, private sector bonds, and fund raising drives can supplement private corporate investment in obtaining revenue.
The Long Range Growth Framework

The remainder of the Long Range Growth Framework consists of the Phase Four Development Opportunities listed below (Illustration 11). These projects will make significant contributions to the CBD, but are generally dependent on completion of Phase Two or Three projects or are based on future trends and assumed directions.

Long Range Development Opportunities

4a. Regional Transit System Second Stage westward extension, and a transit station (5th/Throckmorton) with parking structure

4b. Main Street Shopping Arcade including a parking structure

4c. Main Street Mall
   Weatherford to Ninth Street

4d. Second Street Mall
   Taylor to Commerce Street

4e. Renovation of City Hall Park
   including a subway stop (9th/Throckmorton)

4f. Commercial Redevelopment
   redevelopment of former Library block
   with underground connection to the Convention Center

4g. Urban Lake Development Second Stage
   (See Trinity River Study)

4h. Riverfront Residential Development

4i. Fort Worth City Hall Expansion

4j. Loop Road Parking Structure

4k. Convention Related Development
    including an underground connection to
    the Convention Center

4l. Commercial Development

4m. Commercial Development including parking structures

4n. Education Extension Campus Second and Third Stages
Long Range Development Strategies

Public Sector Strategies

The public sector will bear the responsibility of maintaining and expanding the initiatives which are evidenced in the early phases of CBD development. Longer range, more intricate, and increasingly costly public investments will require implementation and funding strategies from the public and private sectors. Careful building of public confidence and the CBD tax base is central to City/County investment strategies. Early results must justify continued enthusiasm and investment.

The public sector should continue the initiative and support outlined for the early stages while seeking large and long-term investors. The City and County should seek to upgrade their services and to invest in new government, civic, and cultural facilities.

Private Sector Strategies

Natural population growth, airport-related growth, and the impact of early phase programs will increase receipts for all retailers including the smaller stores which may then feel in a position to participate in the redevelopment by relocating, remodeling, or upgrading their properties. Similar growth will likewise encourage office, hotel, restaurant, and banking interests to increase their participation.

Specific and detailed private sector strategies must be determined by the participants, but Lawrence Halprin & Associates has outlined the general strategies and prime development areas. The Study proposes a skeletal growth framework of access: circulation; parking; transportation; parks, malls, and open space; commercial and retail; institutional; and residential uses. If the participants can utilize this framework to gain a consensus for building a consistent and efficient urban fabric, both public and private investment can take place in an orderly and profitable manner (Illustration 12).
project descriptions
Project Descriptions

This section describes in detail all of the projects outlined in the previous section. Projects have been reorganized for descriptive purposes into six functional use categories.

A. Access, Circulation, and Parking
B. Public Transportation
C. Parks, Malls, and Open Spaces
D. Commercial and Retail
E. Institutional
F. Residential

In each category, projects have been listed and described in an alphanumeric order. It should again be noted that phasing (numbers) is somewhat flexible and sequence (letters) is considered logical but subject to considerable alteration during the detailed planning and execution periods.
a. access, circulation, & parking
Access and Circulation

The population of Fort Worth is expected to double by 1990, causing among other consequences, a need for 25,000 additional parking places in the CBD over the next fifteen years unless alternatives are provided. During the past ten years, Fort Worth began to feel the impact of the sharp increase in automobile ownership. The CBD is partially surrounded by an inadequately sized and designed freeway system. Land for additional freeways and points of access is rapidly being allocated to noncirculation uses. Vehicle flow is isolating blocks of buildings and their inhabitants from each other.

The 200 foot square existing street grid system is extremely small in scale for today's needs. New developments have increasingly been located on multi-block sites. Congestion due to the frequency of traffic intersections has only been partly relieved by the introduction of one-way streets. Downtown streets are relatively narrow and aggravated by on-street parking. The removal of such parking on selected streets could encourage traffic to utilize these streets in lieu of others which might thereby become relatively more pedestrian or service oriented.

The Fort Worth CBD is relatively compact. This fact is particularly advantageous in terms of pedestrian movement and service access but disadvantageous with respect to internal vehicle movement unless peripheral vehicle circulation can be encouraged.

The proposed Southwest Freeway should supplement the East West Freeway in providing a northern bypass of the CBD connecting Highways 121 and Interstate 21 as well as redistributing peripheral traffic flow. New accesses should be constructed at Calhoun, Jones, North Main, Henderson, and Seventh Streets. This proposal and existing access conditions are shown in the following diagrams (Illustrations 13, 14).

In addition to the Freeway, five major arterial improvements are proposed (Illustration 15):

1. a direct connection from Hemphill Street to the Jennings Avenue Tunnel.
2. the widening and improvement of Henderson Street and connection to the Southwest Freeway.
3. an exit from Seventh Street just east of the Trinity River which would connect it to Forest Park Boulevard and West Fifth Street to distribute inbound traffic among these roads which are presently underutilized.
4. a direct connection from the North Main Street Bridge to Throckmorton Street. This would be done in conjunction with the Houston Street Mall.
5. an improved connection from Samuels Avenue to Belknap and Weatherford.

A loop road system with preferential traffic flow is proposed to surround the CBD (Illustration 16). This perimeter circulation system should be established on existing city streets in one-way pairs. It should have direct access to all freeway and major feeder streets and should be adjacent and easily accessible to all future parking structures.
Existing CBD Access Points
This geometric diagram shows the location of major points of access to the downtown.

CBD Arterial Improvements
This geometric diagram shows the location of five improvements to the arterial street system.

New CBD Access Points
This geometric diagram shows new points of access from the Southwest Freeway Loop.

Loop Road System
The loop road system will alleviate congestion and provide easy access to existing and new structured parking facilities.
Circulation and On-Street Parking

With the advent of the Loop Road system and in response to increasing downtown street congestion, the following proposals are made affecting traffic flow.

Houston Street is Fort Worth’s main shopping street, but is presently congested with through traffic, delivery trucks, and vehicles seeking short and long-term on-street parking. Through traffic should be discouraged from using Houston Street and should be encouraged to use the Loop Road System or Throckmorton Street to reach the East West Freeway or other areas of the CBD. Except for Houston Street deliveries, trucks should not be permitted on Houston Street. It is recommended that Houston Street from Weatherford to Ninth Street be reduced to two lanes of moving traffic plus two lanes for delivery and standing. The narrowing of the street would accommodate the widened sidewalks of the Houston Street Mall. South of Ninth Street, Houston Street would remain four lanes of traffic and two parking lanes.

In order to accommodate the additional traffic removed from Houston Street, the traffic capacity on Throckmorton Street would be increased. It is recommended that all on-street parking be removed from Throckmorton Street. Five traffic lanes would replace the existing four lanes, with three lanes southbound and two lanes northbound.

In addition to the improved access and street alignments, an enforced program of controlled parking, standing, and loading will increase traffic flow and street efficiency throughout the day—especially during peak traffic hours.

Truck loading and deliveries:

New construction: all new buildings should be required to provide adequate off-street loading areas.

Loading zones: special curbside zones should be provided for truck use only. These may be reserved for trucks during specific hours, and for general use all other times.

Loading time: in addition to regulating truck loading and delivery times to non-peak traffic hours, bulk loaders such as department stores, hotels, etc., should be encouraged to schedule deliveries before 8 a.m. or after 5 p.m.

Standing:

Areas in front of hotels, theaters, etc., should be designated “limited waiting areas.” Waiting should not be allowed during peak traffic hours along specific streets. Special congestion problems related to existing Motor Bank access should be relieved by adjustment of traffic patterns, timing, or regulations.

On street parking:

“No Parking,” “Metered Parking,” and “Tow-Away Zones” should be introduced and enforced to increase traffic flow along specified streets. Major thoroughfares and retail streets should not permit parking before 9 or 9:30 a.m. to discourage all day parking. After this hour parking should be limited to two hours. Tow Away Zones should be used to enforce all parking regulations.
Curb coding:

Street curbs should be painted specific colors to indicate appropriate use. A minimum number of street signs should be used to supplement the color code.

- Red - No Parking
- Yellow - Loading Zone
- White - Standing
- Green - Short term parking (i.e., 20 minutes)
- Natural - Parking

"No Turn" intersections:

Between 11 a.m. and 2 p.m., and between 4 p.m. and 6 p.m., selected intersections should have "No Turn" intersections to improve the flow of traffic. This technique is most effective for outbound peak hour traffic.

Right turns on red light:

On red lights, right turns from the right lane should be permitted after a full stop. Likewise, left turns on red lights from the left lane of a one-way street into another (left moving) one-way street should also be permitted. These measures will markedly increase traffic flow.

Specific street recommendations:

- Belknap-Weatherford Streets,
  Cherry-Burnett Streets,
  Throckmorton Street
  No Parking Anytime
  No Standing 7-9 am/4-6pm daily
  No Loading 7-9 am/4-6pm daily

- Texas-Tenth Streets,
  Calhoun-Jones Streets
  No Parking 7 am-6 pm daily
  No Standing 7-9 am/4-6 pm daily
  No Loading 7-9 am/4-6 pm daily

- Henderson Street
  No Parking Anytime
  No Standing Anytime
  No Loading 7-9 am/4-6 pm daily

- Seventh, Sixth, Fifth, and Fourth Streets
  No Parking 7 am-6 pm daily except Sunday
  No Standing 7-9 am/4-6 pm daily except Sunday
  No Loading 7-10 am/4-6 pm daily except Sunday

- Commerce, Main, Houston, Taylor, and Lamar Streets
  No Parking 7-9 am/4-6 pm daily except Sunday
  No Standing 7-9 am/4-6 pm daily except Sunday
  No Loading 7-10 am/4-6 pm daily except Sunday

Street cleaning:

To increase efficiency of street cleaning, a program of "alternate side of the street parking" should be introduced. Street cleaning in the CBD should occur either in the evening or early morning before 7 a.m. Alternate side of the street parking should be in effect from 7 p.m. - 7 a.m.:

- Monday, Wednesday, Friday south and east sides
- Tuesday, Thursday, Saturday north and west sides
Refuse collection:

To increase efficiency of collection of private and public refuse, and to relieve street congestion, refuse collection in the CBD should be made during the night or early morning hours. All collections should, however, be made before 7 a.m. Refuse containers should not be allowed to stand in public rights-of-way, streets, or sidewalks during the day.

Off-Street Parking

Presently there are 18,500 off-street parking places in the CBD causing a deficit of 4,500 places for current needs. By 1985, 20,000 additional places will be required. If all present and required CBD parking were placed on grade they would consume 430 acres. If all were garaged on one city block, they would require a structure of 430 floors or over 3/4 of a mile high. A more reasonable solution is to provide a peripheral structured parking system.

At present, in the H Zoning District which includes most of the study area, off-street parking is categorized as a supplemental land use which is provided at the discretion of the landowner and not subject to public regulation, planning, coordination, or guidelines. The relationships of off-street parking to its access, street circulation, public transit, and CBD access should be planned and regulated in the public interest.

Nonconforming on-grade parking within the CBD core area bounded by Weatherford-Commerce-Ninth and Tenth-Lamar should be given a termination date (e.g., 15-20 years) after which they should be eliminated in favor of more intense, tax profitable and "higher use" development. This procedure might also be employed in dealing with unsightly used car sale lots and vehicle parts or service facilities. These uses might be stimulated to relocate and consolidate in an area southwest of Fifth and Henderson Streets. Both on-grade parking and used car and vehicle facilities may relocate of their own accord as land values rise.

Long term on-street parking should eventually be phased out as off-street parking facilities are made available in order to free this space for pedestrian activity, vehicle traffic, or short term retail-related parking.

Zoning of three parking use categories should be established along the guidelines shown below and administered by a parking authority (Illustration 17).

Area P1 no off-street parking permitted unless presently existing structured parking or new structured parking with direct off-street loop road access and its own "pull on" and "pull off" lanes

Area P2 structured parking only.

Area P3 structured or on-grade parking.

Off Street Parking Area Ratios

Parking area to floor area ratios for new construction should be established and incorporated into the zoning codes. Adoption of standards similar to those listed below is essential to prevent overburdening of proposed parking structures and to obtain minimum feasible parking-to-work distances.
<table>
<thead>
<tr>
<th>Ratio of parking:floor area</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:2</td>
<td>retail</td>
</tr>
<tr>
<td>1:2</td>
<td>commercial</td>
</tr>
<tr>
<td>1:5</td>
<td>hotel</td>
</tr>
<tr>
<td>1.5 spaces:unit</td>
<td>residential</td>
</tr>
</tbody>
</table>

Site owners required to provide parking facilities for proposed new construction within Area P1 would be required to provide conforming facilities on-site or contract with authority regulated off-site parking facilities.

Illustration 17.

Off-Street Parking Zones
The plan diagram illustrates suggested boundaries for the zoning of off-street parking which would be administered by a parking authority.

Parking Authority

A Fort Worth Parking Authority should be established to locate, plan, coordinate, construct, regulate, and maintain parking facilities for the CBD. The Authority should be a public/private sector joint venture with both sufficient overview scope and adequate legal mandate to effectively deal with macro and micro parking issues. These issues are critical to Fort Worth's CBD growth. The Authority should have sufficient power to provide the following functions:

1. to establish in cooperation with appropriate public and private agencies the location, capacity, design, fees, and maintenance policies for parking facilities in the CBD;

2. to set the ratio of spaces and rates for short term (retail) parking versus long term (commuter) parking;

3. to augment police department activity in regulation and enforcement of on-street parking and two-way enforcement;

4. to participate in planning, coordination, development, and regulatory functions with city and with regional transit management;

5. to plan, stage and develop future long term peripheral parking facilities; and

6. to develop a program of retail parking validation.

Existing privately owned parking facilities should be permitted to continue operations under Authority guidelines. New private parking facilities should be encouraged if conforming to authority guidelines.
Peripheral Parking

Using current estimates, the projected auto parking demands will eventually saturate even an extensive CBD parking structure program. Much of the CBD’s long term and all-day commuter parking could be more effectively accommodated in facilities peripheral to the CBD. The location and capacity of these peripheral parking facilities should be established in conjunction with the Regional Mass Transit Study presently underway and should be reviewed and updated by the parking authority and by the transit authority. Peripheral parking should locate adjacent to or over (air rights) regional transit rights-of-way or should be served by express bus feeder lines. Time and costs of using peripheral parking facilities plus travel to and from the CBD must be significantly less than CBD parking in order to make peripheral parking attractive and thus alleviate CBD congestion. The Study recommends that final locations for peripheral parking be selected by the Regional Transit Study in cooperation with the City Planning Department.

Off-Street Parking Projects

Nineteen parking projects are anticipated or proposed as part of the Long Range Growth Framework and its Short Range Growth Program (Illustration 18). Not all parking projects listed are wholly devoted to parking. Many integrate parking with other development and are described under the Report section which deals with their predominant land use.

1d. 600 Houston Street

This project will include two floors (25,000 sq. ft.) of retail occupancy as well as ten floors of parking (525 cars) and will be structured to receive five floors of office space by future vertical expansion. Pedestrian ways are planned to Monig’s Department Store (overhead) and to the Continental National Bank Garage (Project 1e) (subsurface).

1e. Continental National Bank Garage

This project will include one floor (10,000 sq. ft.) of retail space, ten floors of parking (530 cars), and will be structured to receive five floors of office space by vertical expansion. Pedestrian ways are planned to 600 Houston Street (subsurface) and to the CNB Bank Building via the Baker Building (overhead). Future agreements are anticipated that would connect it to the relocated Texas Electric Service Company Building (Project 1f) and the Continental Life Building.

1f. Fort Worth National Bank Tower, Parking Garage, and Motor Bank

800 cars
See Commercial and Retail Project 1f.

11. Tarrant County Convention Center Parking

This project will provide 300 plus temporary on-grade parking places to serve commuters from the south. Future development may include structured parking (1800 cars) and pedestrian connections to the subway station and Convention Center. A motel, a
commercial development, and a convention-related retail development are anticipated as a subsidiary use for this site by developing air rights over the parking facility (Illustration 19).

1j. General Services Administration Parking Structure

This anticipated federal project will provide for approximately 1200 cars.

1k. First National Bank Expansion

This project will expand the existing Motor Bank and parking facilities. The expansion will span a new Cherry Street right-of-way as part of the loop road system and close Burnett Street except for parking access.

1n. Union Bank Expansion

See Commercial and Retail Project 1n.

2e. Regional Transportation Terminal, First Stage

500-600 cars

See Public Transportation Project 2e.

2g. Loop Road Parking Structure

This two block proposal would provide short term (retail parking in proximity to the western CBD retail areas and longer term parking for nearby commercial/office structures.

2i. Residential Development, Lower level parking

See Residential Project 2i.

2k. Tarrant County Government Facilities Expansion, First Stage, Lower level parking

See Institutional Project 2k.

2l. Commercial/Parking Development Upper level parking

See Commercial and Retail Project 2l.

3a. Commercial and Institutional Development, Second Stage, Lower level parking

See Commercial and Retail Project 3a.

3c. Regional Transportation Terminal, Second Stage

500-1500 cars

See Public Transportation Project 3c.

3f. Urban Lake Development, First Stage

This proposal consolidates existing on-grade parking into structured long term parking and provides some commercial, retail, and recreational facilities as well as a subway station. Parking and subway facilities would serve commuters from the north and west areas. Details of this proposal appear in the Trinity River Study Report (Illustration 20).

4a. Regional Transit System, Second Stage

See Public Transportation Project 4a.
4b. Main Street Shopping Arcade and Parking Structure

This two block proposal includes a first floor (Main Street) retail arcade with approximately three levels of short term parking above and one level below. Overhead pedestrian ways would connect the arcade with Stripling's Department Store and the regional transportation terminal (Project 3c). Integrated commercial towers could be provided (Illustration 21).

4m Commercial Development and Parking

This eight block area would include commercial and office development as well as a large capacity long and short term structured parking facility. The development's direct access to the loop road system as well as the Southwest Freeway via Calhoun and Jones Streets would serve shoppers and commuters from the north and east areas of the City.

4j. Loop Road Parking Structure

This proposal would increase parking capacity on the loop road system for users from the north and west areas.
Illustration 19.

Tarrant County Convention Center Parking
This sketch shows an air rights development of convention-related facilities built over the convention center parking. Throckmorton Street is in the foreground and the Convention Center is in the background.

Illustration 20.

Urban Lake Development
This sketch shows structured parking, residential and recreational uses on the Trinity River. The M&O Subway tracks are shown in the foreground and the Henderson Street Bridge is in the background.

Illustration 21.

Main Street Shopping Arcade and Parking Structure
This sketch of Main Street looking toward the Courthouse shows the shopping arcade along the sidewalk with parking behind and above. Commercial space could be provided above and in towers.
b. public transportation
Public Transportation

Accommodating the increase in population, improving access to the CBD, and avoiding unacceptably large areas devoted to private vehicle circulation and storage requires the provision of an extensive public transportation network. Such a network would be especially beneficial to commuters, visitors, and shoppers but would benefit all CBD users to the extent that it relieved road and parking congestion. The growth of downtown Fort Worth may ultimately depend more on efficient public transportation than any other single factor. The importance of completion of the first phase of the rapid transit link between the CBD and the Regional Airport is seen in this light.

In order to maximize the potential use of all forms of public transportation, it is proposed that a city-wide or metropolitan transit authority should be established to coordinate routing, scheduling and interchanging of modes. The existing M & O Subway, the Fort Worth Transit Company, intercity bus routes, and the proposed regional mass transit system should all be placed under its supervision.

The following geometric diagram (Illustration 22) conceptually defines the proposed relationship between freeway access to downtown major parking facilities, the loop road system, the regional transit system, the subway system and the pedestrian way system.
Regional Mass Transit

A comprehensive Regional Transit Study is currently underway, offering a unique opportunity to evaluate the city's and region's public transportation requirements and to propose methods for their solution and implementation. This Study, which is being conducted by Alan Voorhees and Associates, Inc., encompasses both Tarrant and Dallas Counties and includes a study of Fort Worth's existing subway and bus systems as well as a proposed regional rapid transit system to link Dallas and Fort Worth with the new Regional Airport.

To date, cooperation between the Transit Study and the CBD Study has been evidenced and preliminary agreement reached on the corridor and station locations within the CBD (Illustration 23). Current recommendations call for subsurface routing within the CBD beneath Fifth Street with initial stations at Fifth and Commerce (regional transportation terminal) and Fifth and Throckmorton (subway/transit interchange). The first phase of the transit system (Project 2d) would run from these stations (Projects 2e, 2f) to the Regional Airport with later extension to Dallas. In Fort Worth, the second phase (Project 4a) would extend service westwardly beneath Fifth Street, surfacing near the Trinity River from where it would proceed to the western suburbs. The CBD Study recommends a third downtown stop near Fifth and Henderson to include a large structured parking facility. Other considerations including mode, equipment, non-CBD stations, etc., are being investigated in the Mass Transit Study.

The M & O Subway

The M & O Subway which is privately owned by Leonard's Department Store, presently provides a commuter-shopper shuttle service from its extensive on-grade parking facilities near the Trinity River to its downtown store. Until recently Leonard's provided this service free to its thousands of users, but increasing operating costs have necessitated the initiation of a fare. The M & O Subway has provided a private mass transit facility which alleviates CBD congestion and increases pedestrian activity and sales in and near Leonard's.

Because we are convinced of the viability of this subway and because we recognize that no private business could or ought to provide such transit for the entire CBD, this Study recommends that the M & O subway be purchased, widened, extended, and operated by the public sector. Such growth should be coordinated and supervised by the previously described transit authority. Funds for two thirds of the cost of these improvements might be borne by federal Department of Transportation.

The subway right-of-way should be widened to two tracks, new rolling stock provided, and additional stations added along its extension from 1st/Taylor to the Convention Center parking area on 12th/Throckmorton (Project 1b). These stations should include 5th/Throckmorton subway/transit interchange (Project 2f), 9th/Throckmorton-City Hall Park (Project 4e), and 12th/Throckmorton-Convention Center (Project 3d). In addition, the existing Leonard's on-grade parking near the Trinity River should be consolidated into structured parking to permit development of residential and recreational uses along the Trinity River (Projects 2i, 3f, 4g). The existing station at 1st/Taylor should be remodeled.
to serve the six block development (Project 2k, 3a). We recommend a feasibility study to explore the possibility of tunneling rather than the cut and fill method be used in extending the subway because the latter method requires major and prolonged disruption of retail and office activity.

The Fort Worth Transit Company

The privately owned Fort Worth Transit Company operates Fort Worth's intra-city bus system. The system is not providing adequate service or receiving adequate revenue. Only 40% of the routes earn more than their operating cost. It is necessary to find means of reversing this trend beginning with a study to determine why people shun use of this system in view of the CBD's access and parking problems.

This Study recommends the public sector ownership, coordination, expansion, and improvement of the city's bus system including free transfer with the Regional Transit and subway systems, new vehicles, and a "shopper's shuttle" (smaller buses) on Houston, First, Main and Eighth Streets.

Inter-City Bus Services

In order to ease CBD street congestion, give direct freeway access, increase passenger use, and improve ease of transfer to other transportation modes; current inter-city bus terminal facilities should be consolidated and relocated in a new regional transportation terminal (Project 3c). Convention-related facilities such as parking, restaurants, and shops might be developed on one or both sites vacated by the bus terminals (Project 21) and connected to both the Convention Center and the regional transportation terminal.
Illustration 22.

Transportation and Parking Relationships
This geometric diagram conceptually relates the freeway, loop road, parking, subway, and regional transit systems.

Illustration 23.

Transit Network
This plan diagram shows subway and mass transit corridors, their stations, and transit-related projects in the CBD. The shaded areas indicate a three minute walking radius.
Public Transportation Projects

Nine transportation projects are proposed as part of the Long Range Growth Framework and its Short Range Growth Program (Illustration 24).

2b. Subway Extension, First Stage

This proposal includes new rolling stock, widening and extending the subway right-of-way to 5th/Throckmorton including remodeling of the existing subway station at 1st/Taylor. See also Project 3d.

2d. Regional Transit System, First Stage

This proposal consists of providing regional transit facilities from the Regional Airport into the CBD via Fifth Street. Within the CBD the system will run subsurface. Recommended transit stations within the CBD are shown (Projects 2e, 2f, 4a). See also Project 4a.

2e. Regional Transportation Terminal, First Stage

This two block, first stage, proposal would include a regional transit station and parking structure for 500-600 cars which would serve as the downtown terminus of airport to city transit service and could provide "park-ride" service to 5th/Trockmorton interchange from which the downtown bus and subway systems would be accessible. The parking structure would have direct access to both spur 280 and the loop road system to encourage its use without increasing internal street congestion. The transportation terminal would stimulate development along the eastern edges of the CBD. See also Project 3c.

2f. Interchange, Transit and Subway

This half block proposal consists of subway and regional transit stations with commercial and office space above. Pedestrian ways (overhead and subsurface) would connect the Interchange Building with the Fort Worth National Bank Tower and through it to the entire pedestrian way network. Illustrations 25, 26).

21. Residential Development, Subway station

See Residential Project 2i.

3c. Regional Transportation Terminal, Second Stage

This second stage proposal would provide parking for 500-1500 additional cars. Both long and short term parking would serve commuters and other users from the east areas. The second stage would also provide an inter-city bus terminal serving all regional public carriers. Direct access and adjacency to the freeway network, loop road system, parking, and the regional transit system would significantly increase the use of all modes. Commercial and retail space, car rental, and airline ticketing and baggage facilities would be included (Illustrations 27, 28).

3d. Subway Extension, Second Stage

This proposal includes extension of the subway right-of-way from 5th/Throckmorton to 12th/Throckmorton including stations at 9th/Throckmorton and 12/Throckmorton. The latter would emerge in the Convention Center parking...
facility which would eventually include hotel, commercial and office uses and possible pedestrian ways connecting it to the Convention Center (overhead or subsurface).

3f. Urban Lake Development, First Stage, Subway station

See Parking Project 3f.

4a. Regional Transit System, Second Stage

This proposal includes a subsurface extension of the regional transit system to the western suburbs and construction of a third CBD transit station near 5th and Henderson Streets. The station would include extensive structure long and short term parking for commuters and other users from the west and south areas.

Illustration 25.
Interchange, Transit and Subway
This section looking west is taken thru the Transportation Interchange at Fifth and Throckmorton Streets.
Illustration 26.

Interchange, Transit and Subway
This sketch of the interior of the Transit Interchange shows the potential for an active and colorful environment with shops, and connections to the pedestrian network.

Illustration 27.

Regional Transportation Terminal
This section looking north is taken thru the parking structure of the Transportation Terminal and thru the adjacent Hotel and Commercial Facilities (Project 3b).

Illustration 28.

Regional Transportation Terminal
This section looking west is taken thru the Terminal showing the relationship between the regional transit, commercial space, parking, and street and plaza activities.
c. parks, malls, & open spaces
A study of land use distribution in the downtown area indicates an entirely inadequate supply of parks and open space facilities. Only one per cent of the total CBD land is devoted for this purpose. While the overall per capita park acreage in Fort Worth is higher than many cities of its size, the geographic distribution of these facilities lacks proper balance. Perhaps no other public policy contributes to the livability of a downtown environment more than an aggressive program for development and improvement of parks and open spaces. These can relieve monotony and provide for a change of pace. Fort Worth should immediately embark on an extensive program to develop high quality parks, malls, and open spaces as a component of its development framework.

Recreation is another activity which is an extremely critical issue. Fort Worth has its share of very beautiful parks and many recreational facilities in the suburbs, but few places downtown where thousands of people spend time working or shopping. Both active and passive recreational activities must be considered. Active recreational activities include such items as tennis, volleyball, swimming, squash, etc., and could be either indoor or outdoor activities. Passive recreational activities include mostly outdoor individual pursuits. Open spaces, plazas, small parks, gardens, shopping malls, and supporting street furniture should be designed to provide pleasant surroundings to pass through, wait, sit, talk, watch, and eat in. Size is no criteria for success. Many of any city's most active and appreciated spaces are small but strategically located.

By utilizing its prerogative to amend zoning, taxation and, building codes, the public sector can influence private sector decisions to provide open space amenities in its developments. Such legislation should be adopted immediately as an inexpensive and effective public commitment to provide such amenities.
Park, Malls and Open Spaces Projects

Ten parks, malls, and open spaces projects are anticipated or proposed as part of the Long Range Growth Framework and its Short Range Growth Program (Illustration 29).

1a. Carter Foundation Water Garden

This anticipated project is a gift to the city by the Carter Foundation and is a major component of Operation Front Door. As a setting for the Convention Center and as an enhancement of the CBD when seen from approaching freeways, this project will be of great benefit. As development proceeds around its periphery, it will become the focus of outdoor activity in the southwest CBD area and will become a major urban parkscape.

1h. Southwestern Bell Telephone Expansion and the Tenth Street Mall

This anticipated project includes the expansion of facilities beyond existing building lines in exchange for provision of private mall space achieved by closing Tenth Street between Throckmorton and Houston. Provision of adequate landscaping and activity will attract city residents, workers, and visitors.

2a. Houston Street Mall, Weatherford to Ninth Street

This high priority project consists of increased pedestrianization and development (new/remodeling) of properties fronting Houston Street. Traffic would be reduced to two lanes plus two lanes of parking. Sidewalks would be replaced and widened. Trees would be planted and coordinated street furniture installed. Store fronts should be remodeled with their openings, signs, materials, colors, lighting, and displays coordinated. Trucks and large buses should be discouraged from using Houston Street. Standard buses should be substituted with smaller ones which should loop through the CBD as "shopper's shuttles" (Houston, First, Main, Eighth). Shuttles should be ridden free or for a reduced fare (Illustrations 30, 31, 32, 33, 34). See also Landscaping Materials Recommendations in the Appendices.

2n. Renovation of Burnett Park

This project involves redesign of Burnett Park to achieve a more useful and dramatic urban space that might include an outdoor restaurant, landscaping, fountain, and pools. Burnett Street should be closed between Fifth and Seventh Streets to extend the Park to the remodeled Medical Arts Building which is proposed as the first stage of an Education Extension Campus (Project 3f.)

2j. Riverfront Park

This project includes a riverfront park, an overlook/restaurant, and redesign of Paddock Park. Development guidelines are set forth in the Trinity River Study Final Report. (Illustration 35)

3h. Public Square Park

This project would provide a focus for noon time and evening CBD activity, would stimulate commercial and retail trade, would link Houston and Main Streets, and would provide urban park amenities such as fountains, music, and flower/newspaper stalls. The location shown is tentative with several other sites equally suited to this important need.
4c. Main Street Mall, Weatherford to Ninth

This project should regenerate the historical and symbolic relationship to the city which Main Street possesses. Traffic reduction, sidewalk widening, landscaping, and street furniture should be similar to the Houston Street Mall, but should reflect the differing character of Houston and Main Streets. Example: existing brick streets should remain as should historically significant street furniture. In conjunction with the shopping arcade (Project 4b) and the new hotel/commercial facilities (Project 3b), this project could succeed in reestablishing Main Street's economic and commercial importance (Illustrations 36, 37). See also Landscaping Materials Recommendations in the Appendices.

4d. Second Street Mall, Taylor to Commerce

This project should include closing of Second Street except to emergency vehicles with the resulting space devoted to a pedestrian environment of landscaping, street furniture, exhibits, outdoor concessions, etc. This greenway mall would connect Houston and Main Streets as well as linking existing and new retail developments along its length.

4e. Renovation of City Hall Park

This renovation of an existing city park would incorporate access to the extended subway and a station beneath Throckmorton Street. The Park should be improved functionally and aesthetically to increase its use by the addition of landscaping, water, and furnishings (Illustrations 38, 39).

4g. Urban Lake Development, Second Stage

This project includes widening of the Trinity River and providing recreation facilities for its use after consolidating parking into structures. Development guidelines are set forth in the Trinity River Study Final Report (Illustrations 40, 41).
Illustration 30.
Houston Street Mall
This sketch looking north on Houston Street shows proposed improvements from Ninth to Weatherford Streets.

Illustration 31.
Houston Street Mall
This plan diagram illustrates the location of the proposed improvements.

Illustration 32.
Houston Street Mall
This plan drawing shows the character of a typical block along the Houston Street Mall. Major features include new (widened) sidewalk and crosswalk paving, trees, traffic signals, and other street furniture such as pedestrian sidewalk lighting, seating, bus shelters, information kiosks, clocks, newspaper machines, and trash containers.
Illustration 33.

Houston Street Mall
These section drawings show the character of Houston Street before and after the construction of the Houston Street Mall. The suggested arcade along the edge of the building has additionally widened the sidewalk paving and has provided weather protection for the pedestrian.

Illustration 34.

Houston Street Mall
These street elevation drawings show the character of 1 block along Houston Street before and after the construction of the Houston Street Mall. The addition of trees, paving, and street furniture is supplemented with unification of building facades and signage. (See Appendix)
Illustration 35.

Riverfront Park
This sketch shows the park on the Trinity River in relation to the Overlook/Restaurant project as well as the County Courthouse, Paddock Park and Main Street Bridge.

Illustration 36.

Main Street Mall
These sketches show two views of the Main Street Mall looking north toward the County Courthouse. The first view, from Fifth Street, describes paving, lighting, street furniture and tree planting improvements, as well as the hotel and commercial facilities (Project 3B). The second view, from Fourth Street, shows the Mall improvements and the Main Street Shopping Arcade and Parking Structure (Project 4b).
Illustration 37.

Main Street Mall
This sketch shows the Mall improvements from Seventh Street to the Convention Center.

Illustration 38.

Renovation - City Hall Park
This aerial sketch shows the location of the Ninth Street subway station. The old library and the old City Hall are in the lower right and lower left respectively.

Illustration 39.

Renovation - City Hall Park
This sketch, looking north along Throckmorton Street, shows the Subway Station and Park environment.
Existing On-Grade Parking

Existing Conditions

Trinity

Existing M&O Subway

Riverfront Park Development

2i Residential Development: Partial consolidation of existing on-grade parking into structured parking below residential development, connected to CBD via subway

First Stage Urban Lake

Urban Lake Parking & Commercial Development

2nd Stage Urban Lake with Waterfront Recreation and Riverfront Park Development

3f Urban Lake Development, First Stage: Remain on-grade parking consolidated into new parking/commercial development

Illustration 40.

Urban Lake Development
These four conceptual diagrams trace the staged growth of this project.

Illustration 41.

Urban Lake Development
This illustrative plan shows the relationship of this project to the downtown.
d. commercial & retail
General Design Recommendations

Many circumstances are causing an out-migration of chain stores and other retail business activities from downtown Fort Worth. Competition from suburban shopping centers, coupled with older and less attractive facilities downtown which are generally less accessible, have all contributed to the decline of the CBD as the retail center of Tarrant County. Today, only three department stores remain to anchor the CBD retail area along Houston Street and in the vicinity of Main and 7th Streets. It is often quicker, cheaper, and more efficient for customers to drive to suburban shopping centers than to invest time and energy, driving downtown to buy the same products. It is often less expensive for developers or businessmen to buy land in outlying areas and to build modern facilities with parking in these locations than to redesign or rebuild an obsolete downtown store where customers are discouraged by poor access to inadequate parking and prevalence of other urban ills. In suburban shopping centers the environment can be controlled more easily and integrated more efficiently with other activities such as dining or movie going.

The decline in downtown retail sales has led to the consequent resistance of the business community to invest within the CBD. Before the needed influx of capital to the CBD can occur, some assurance must be given to developers that there are distinct advantages in being part of a dynamic central area. These assurances can only emerge from a definite and coordinated commitment on the part of the city to make advancements on many of the problems which have already been stated in this Report. It is imperative to solve downtown problems so that the tax base of the city can be strengthened and encouraged to grow. Out-migration of stores, causes a definite loss in dollars to the total community, since it is possible for various activities to locate outside the city boundaries while maintaining the same market population. In such cases, the loss is twofold—a trade loss and a taxation loss.

The public and private sectors must cooperate in any program or project to stabilize existing commercial and retail facilities, as well as to attract new growth as the county continues to expand.

Industrial land use should be discouraged anywhere within the CBD. Expansion of existing facilities should be avoided and negotiations should be entered into whenever possible to relocate industry in properly designed industrial parks or in areas where adequate services can be provided without detriment to or conflict with other land uses. Industrial land within the CBD should be reclaimed whenever possible and converted to uses sympathetic to downtown development. This recommendation should exclude certain small and highly specialized services industries within the central area when their presence may be absolutely essential to the functioning of certain central area activities. For example, printing, photographic work, machinery service, and retail oriented warehousing should be retained.

Excepting parking facilities, the largest category of current or anticipated projects is devoted to office space. The proposed Fort Worth National Bank Tower will help satisfy present demands. The Sector Planning Report No. 2, produced by the Fort Worth City Planning Department, details commercial and retail conditions. The amount of future commercial development may depend on Regional Airport-related growth or expansion generated by a
development board or improvements in the region's general economic climate. Vigorous action by such groups as a development board or the Chamber of Commerce are needed to persuade new business activity to locate in the CBD.

In conjunction with the development of new retail areas within the CBD, a program of street improvement should be initiated. Houston Street and later Main and Second Streets should be improved. Improvements such as those proposed for Houston and Main Streets should be considered for other streets and alleys as their success is evaluated. Fort Worth has had many beautiful brick streets which have been paved over in the interest of economy. Such unique features of the city have all but disappeared. The few brick streets remaining are also threatened, and if these disappear, Fort Worth will have streets identical to every other city. Every effort should be made to retain the remaining brick streets, especially Main and Seventh, and where possible, to restore other brick streets to their original condition. In addition, the unique blue and white tiled curb street markings should be restored as an integral part of the streetscape.

Shop fronts at street level create a total confusion of signs, canopies, posters, and neon lights and give a general impression of disorder. Existing street furniture adds to the general clutter of sidewalk life, but if properly designed and installed could enhance and beautify the city.

Lawrence Halprin & Associates urges that general design recommendations be seriously considered by both the public and private sectors working jointly to develop CBD commercial and retail facilities.

1. Future private and public downtown construction should be encouraged to provide public pedestrian amenities such as wide sidewalks, street furniture, landscaping, first floor arcades, and unified signage.

2. Future land uses should be mixed but compatible. Large areas of single use zoning should be discouraged and office, retail, and entertainment should be mixed to provide a vibrant and exciting downtown.

3. Future developments should provide architectural harmony in size, shape, and materials. An urban design study group of consultants and/or local professionals should draw up guidelines for voluntary subscription or legislative adoption.

4. Ground floor to site area ratios and/or frontage sidewalk setbacks should be considered for incorporation into future construction to provide public open space.

5. A joint public/private venture should be formed to plan and coordinate an enclosed pedestrian way system.

6. A program of commercial/retail remodeling and renovation should be established complete with a financing program available to qualified participants.
Enclosed Pedestrian System

An enclosed system of climate-controlled pedestrian ways throughout the CBD would be extremely beneficial in attracting new business activity and linking existing facilities. Such a system, including pedestrian movement systems, is both technically feasible and economically viable. The downtowns of Minneapolis, Minnesota; Saint Louis, Missouri; and San Francisco, California, each offer examples of the beginnings of pedestrian systems.

Second story pedestrian ways should be favored in lieu of subsurface corridors, except when subsurface facilities are existing and offer adequate access and design. Likewise bridge crossovers between blocks should be favored over underground connections except when crossing Main Street. This exception is desired in order to preserve the vista along Main Street between the County Courthouse and the Convention Center. Bridges which span intersections diagonally should be avoided for aesthetic reasons.

Escalators and elevators should be provided to and from street levels and direct access to shops, restaurants, and building elevators should be available in order to insure and to expedite heavy pedestrian use. Bleak corridors should be avoided in favor of active and colorful walkways, promenades, retail, dining, and meeting places. Nodes of day and evening activity should be encouraged through a system to create a second streetscape in the sky. Monotonous, confining, and linear spaces should be shunned in preference to spaces which vary in illumination, acoustics, size, materials, and activity. Disorientation of pedestrians must be avoided by providing clear directional graphics and views of the streetscapes below.

Lawrence Halprin & Associates recommends the establishment of a public/private joint venture to plan and coordinate this pedestrian system. Matters of routing, access, financing, safety, security, and maintenance require mutual resolution. The joint venture, in cooperation with city officials, should propose legislation with respect to new or remodeled construction within the CBD which would establish: (1) incentives for participation in the pedestrian system; (2) a floor level datum of approximately 18-20 feet above street level, which all new construction would be required to meet; (3) a staged network plan subject to periodic revision; (4) procedures for dedication of private space to public use; (5) performance specifications for design of network components; and (6) public, private, and joint responsibilities for the system’s financing, regulation, and maintenance. The adequacy and equity of these determinations is central to the success of the pedestrian way system. (Illustrations 42, 43).
Illustration 42.

The Pedestrian System
This plan diagram locates the links and projects related to this climate-controlled system of walkways. Additional or substitute links and projects could be provided to extend or modify the network.

Illustration 43.

The Pedestrian System
This section shows the possible relationships between the sidewalk, building lobby, pedestrian way, and other space uses.
Commercial and Retail Projects

Twenty-two commercial and retail projects are anticipated or proposed as part of the Long Range Growth Framework and its Short Range Growth Program (Illustration 44). Most of the projects listed incorporate other uses into their commercial and retail activities.

1d. 600 Houston Street, 25,000 sq. ft., retail, two floors

See Parking Project 1d.

1e. Continental National Bank Garage, 10,000 sq. ft., retail, one floor

See Parking Project 1e.

1f. Fort Worth National Bank Tower, Parking Garage, and Motor Bank

This multi-story tower will provide in excess of 400,000 square feet of prime commercial space as well as extensive parking and Motor Bank facilities. The parking garage will have an initial capacity of 800 cars, but will be structures to receive 300 additional cars by vertical expansion. A pedestrian way is planned between the bank and the parking garage/Motor Bank (overhead). A future subsurface connection to the First National Bank Building would be possible.

1g. Southwestern Bell Telephone Building

Southwestern Bell plans future expansion of its facilities in the CBD as part of its programs to improve and expand regional service. Present plans call for a seven story building with future vertical expansion anticipated. This building to be located southeast of the Convention Center, will form, with the Carter Foundation Park, the anchor projects for Operation Front Door.

1h. Southwestern Bell Telephone Expansion and the Tenth Street Mall

See Parks, Malls, and Open Spaces Project 1h.

1k. First National Bank Expansion, Motor Bank and Parking

See Parking Project 1k.

1l. Miller's Mutual Development

This anticipated project will consist of a new headquarters building for the Miller's Mutual Insurance Company.

1m. Union Bank Expansion

This project will provide new commercial facilities, parking facilities, and a new Union Motor Bank. An overhead pedestrian way is recommended to connect the six block development (Project 3a) as well as an internal subsurface connection across Main Street.

1n. Texas Electric Service Company

With completion of the new Fort Worth National Bank complex, the Texas Electric Service Company plans to expand its facilities by relocating in the existing Fort Worth National Bank Building.

1p. Chamber Development Corporation, First Stage

The land acquired by the Chamber De-
development Corporation as part of Operation Front Door should be developed with compatible land uses. It is recommended that due to its relationship to the CBD and in light of anticipated growth, that this land should be developed with commercial, entertainment, and office facilities including self-contained enclosed parking.

2c. Fort Worth National Bank Commercial Development

This two block proposal for a multi-tenant arcaded commercial/retail structure promises to be an exciting private development providing significant impact on the downtown economy. Overhead pedestrian ways to the F.W. N.B. Tower (Project 1f) and the Commercial and Institutional Development (Project 3a) should be provided.

2f. Interchange, Transit and Subway, Commercial and Office Space

See Public Transportation Project 2f.

2l. Commercial/Parking Development

This proposal would consist of several levels of commerce with parking above. Overhead pedestrian ways are proposed to the transportation terminal (Project 2e) and to the Sheraton Fort Worth Hotel via an existing parking structure.

3a. Commercial and Institutional Development, Second Stage

This four block, second stage, of a proposed six block public/private joint development would include public parking on lower levels and commercial and institutional development above (Illustration 45). A major retail tenant and several minor tenants are recommended as commercial occupants. The consultants feel this location and setting is also the ideal site for construction of the new main Fort Worth Library. Overhead pedestrian ways could link this development with the Fort Worth National Bank Commercial Development (Project 2c), the first stage (Project 2k), the Union Bank Expansion (Project 1n), and Strippling's Department Store (Illustrations 46, 47).

3b. Hotel/Commercial Facilities

In conjunction with the completion of the Regional Transportation Terminal (Projects 2e and 3c), a new first class hotel should be opened. The proposed site would allow direct access to the terminal and via rapid transit to the Regional Airport. It would also be within convenient walking distance of the Convention Center and would provide the much needed boost of convention-related facilities. The completion of this project as well as Projects 1e, 1n, 1o, 3h, and 4b should return Main Street to its former status.

3c. Regional Transportation Terminal, Second Stage, Commercial and Retail Facilities

See Public Transportation Project 3c.

3e. Chamber Development Corporation, Second Stage

See Project 1p.
3f. Urban Lake Development, First Stage, Commercial and Retail Facilities

See Parking Project 3f.

4b. Main Street Shopping Arcade and Parking Structure, retail arcade, one floor

See Parking Project 4b.

4f. Commercial Development of Former "Library Block"

After relocation of the Main Library, this proposal would redevelop the block for convention-related retail, entertainment, dining, and office use including a possible subsurface connection with the Convention Center. (Illustration 45).

4k. Convention-Related Development

With completion of the inter-city bus facilities in the Regional Transit Terminal, the land occupied by the former bus facilities can be redeveloped. Due to the location of this site in proximity to the Convention Center, convention-related facilities such as shops, restaurants, etc., are appropriate uses. A possible subsurface connection to the Convention Center is indicated.

4l. Commercial Development with Parking Structures

These are general areas for long range commercial development, with office towers and related retail development. Area 4m with its proximity to the Loop Road would contain parking.

Illustration 45.

Commercial and Institutional Development
This aerial sketch shows the development as seen from the northeast. The County Courthouse tower is in the foreground.
Illustration 46.

Commercial and Institutional Development
This section taken thru the Development shows the relationship of its components to the Riverfront Residential Development (Project 4b).

Illustration 47.

Commercial and Institutional Development
This sketch shows the character of a Retail Arcade with offices above to be included in this project.

Illustration 48.

Commercial Development of Former "Library Block"
This aerial sketch shows a proposal for convention-related redevelopment of this key block. Throckmorton Street, the former library building, and Houston Street are shown in the lower left, center, and right respectively.
General Design Recommendations

The number, location, quality and vitality of CBD institutions is an effective measure of public and civic commitment to the downtown. The Fort Worth CBD lacks its share of institutions which are dispersed throughout the city. The Amon Carter Museum of Western Art, the Fort Worth Art Museum, and the proposed Kimbell Museum, are located outside the city center. Until there is a definite trend in the development of the downtown area it will be extremely difficult to encourage first class facilities such as these to locate within the central area. The provision of specialized and higher educational facilities would also encourage young people to use and live in the CBD and to remain during the evening and support the night life of the area. Downtown Fort Worth is presently lacking in all of these activities. There are no up-to-date libraries, art galleries, museums, or art theaters. Other forms of night life and entertainment are likewise in short supply.

The recent construction of the Tarrant County Convention Center has paved the way for the development of convention-related entertainment and non-working activities in the CBD. This has been a very successful project which will do much to develop convention-related facilities that will also be patronized by others. Specifically needed is at least one additional first class hotel of 1000 rooms. Hopefully the Convention Center will give a much needed boost to the provision of the many entertainment facilities which the CBD presently lacks. In addition, the revisions of archaic drinking laws will do much to encourage high quality dining establishments to locate downtown and to institute the essential transition which must occur between working and night activity. There is a close relationship between cultural, recreational and entertainment facilities which must be considered concurrently if developments are to be successful. Provision of needed entertainment facilities would also do much to help Fort Worth attract new conventions. An area of development between city activity and convention activity should be recognized and developed with facilities to serve both.

City and County population growth has resulted in the need for additional governmental facilities. The new Fort Worth City Hall, the Convention Center, and the impending expansion of county facilities represent a spark of civic development which should be supplemented by other high quality facilities in the CBD such as a new main public library and a new university or college extension campus.
Institutional Projects

Seven institutional projects are anticipated or proposed as part of the Long Range Growth Framework and its Short Range Growth Program (Illustration 49).

1b. Fort Worth City Hall

This new three story city hall is currently under construction and will replace the existing facility which will become the city police headquarters.

1c. Texas Employment Commission Building

This multi-story, one block, facility for the Texas Employment Commission is currently under construction.

2k. Tarrant County Government Facilities Expansion, First Stage

This two block, first stage, of a proposed six block public/private joint development would include public parking on lower levels and county facilities above. An underground pedestrian way to the County Courthouse Annex should be provided (Illustration 50).

3a. Commercial and Institutional Development, Second Stage

This four block, second stage, of a proposed six block public/private joint development would include public parking on lower levels and commercial and institutional development above. The consultants feel this location and setting is the ideal site for construction of the new main Fort Worth Library (Illustration 51). This location was chosen for its centrality to potential users, its accessibility by auto, bus and subway and its proximity to retail, financial, governmental, and office functions.

3g. Education Extension Campus, First Stage

This proposal would renovate the Medical Arts Building on the edge of Burnett Park for use as the first stage of a university or college extension campus (Illustrations 52, 53).

4i. Fort Worth City Hall Expansion

This proposal for future expansion of the new City Hall would include parking and additional office facilities.

4n. Education Extension Campus, Second and Third Stages

This proposal would involve expansion of the extension campus to as yet undesignated properties to the south and west.
Illustration 50.

Tarrant County Government Facilities Expansion
This aerial sketch looking from the northwest shows the Government Facilities Expansion (right) adjacent to the Commercial and Institutional Development (center) (Projects 3a, 4l). The County Courthouse is seen in the lower left.

Illustration 51.

Education Extension Campus
This aerial sketch looking north shows the Medical Arts Building (which would be renovated for educational use) adjacent to Burnett Park which would become an actively-used and education-related City park.

Illustration 52.

Commercial and Institutional Development
This sketch shows the character of the proposed outdoor courtyard in the new Fort Worth Public Library which is recommended to be a part of this project.

Illustration 53.

Education Extension Campus - Park
This sketch shows the character proposed for the redevelopment of Burnett Park or for the development of a new Public Square Park (Project 3a) in the general vicinity of Main-Houston/3rd-4th Streets.
f. residential
General Design Recommendations

The basic function of a Central Business District is to supply specialized goods and services as well as to provide comparative shopping which cannot be done elsewhere in the city. It is usually the center of government, commerce, and banking, and is often the center of retail trade, entertainment and cultural activities. Most successful city centers have also a relatively large resident population of diverse socio-economic backgrounds to support secondary shopping activities, small stores, groceries, etc. Such a population generates a demand for the wide range of activities necessary for a vibrant downtown.

Due to the absence of an economically significant resident population in Fort Worth, the CBD lacks even a basic self-contained or guaranteed retail market. Any appropriate proposal for downtown residential development should be encouraged, since it would do much to stabilize the economic base and social climate of the CBD. An ultimate resident population of at least 15,000 persons would be extremely desirable in economic and social terms. A resident population has a value which far exceeds the value of the land which those persons occupy or the taxes which they contribute. The whole atmosphere and economic base of the city center in all of its functions is favorably altered. Perhaps no other type of development is more necessary to the revitalization of retail and entertainment facilities than a significant resident population.

The CBD has been rapidly losing population. Homes which have been displaced by other uses have not been rebuilt. The housing which remains is mostly sub-standard accommodation for a population which is predominantly poor and non-white. These two facts speak for themselves. The consequences which follow are near cliches. Families in the CBD have a high divorce rate (36%), a low educational level (8.7 media years), a low family income ($2,500 per annum) and a high rate of crime. Many persons are on welfare, only 12% of the population own their own homes, and the incidence of tuberculosis and venereal disease is very high. These issues affect society in general. They are not the intrinsic problems of any particular minority or economic group. They can only be corrected by the involvement and the expense of the whole population. It is beyond the scope of this Study to propose solutions or approaches to these social problems, although they are inextricably tied to physical development.

Highest priority should be given to the marked improvement of economic, social, and physical conditions for existing CBD residents. This indication of public and private commitment to existing CBD residential conditions should be a first step in attracting additional residents to the projects proposed below and others which should be considered to attract all socio-economic classes to downtown Fort Worth.

This Study recommends diversity of density, size, amenities and unit types as a key component in all housing proposals. Ownership, rental, cooperative, and condominium forms of title should be investigated. Concentrations of relatively dense, urban subdivision scaled, high amenity proposals of a patio house, rowhouse, townhouse, and medium rise apartment nature are recommended. Proposed site locations, in addition to the qualities described above, should be carefully evaluated before in-town housing is constructed. Access to existing CBD amenities, competitive rent/ownership costs, security, internal amenities, and good neighborhood quality are all components of successful urban housing developments.
Residential Projects

Three residential projects are anticipated or proposed as part of the Long Range Growth Framework and its Short Range Program (Illustration 54).

1m. Housing for the Elderly, Birkley Apartments

This project will acquire the existing Birkley Apartments for reuse as city-owned housing for the elderly.

2i. Residential Development

This residential development includes parking facilities and a new subway station located below a multi-level residential neighborhood. Public long term parking would serve commuters from the north and west areas. Housing would be of a mix of townhouse, terrace house, and rowhouse types with internal amenities as well as direct access to downtown by auto or subway (Illustration 55).

4h. Riverfront Residential Development

This river-oriented residential development would include a variety of clustered and courted townhouses, rowhouses, patio houses, terrace houses, and medium rise apartments. The two sites selected should be supplemented with additional ones which offer similar amenities. The site north of the six block development (Project 2k, 3a) should be joined at the second level to the downtown pedestrian way system by bridging across Bluff and Belknap Streets (Illustration 56).
Illustration 55.

Residential Development
This sketch looking northeast illustrates the proposed character of the housing development to be built near and over the M&O Subway right-of-way. Parking would be provided on the lower level. The Urban Lake Development (Project 3f) and the Trinity River are seen in the background.

Illustration 56.

Riverfront Residential Development
This sketch illustrates the proposed character of this urban housing development which is only one block from the County Courthouse and overlooks the Trinity River.
The Role of Downtown Fort Worth in its Metropolitan area

This Appendix was written by the Fort Worth Planning Department, and has been abridged and incorporated by Lawrence Halprin & Associates, because it succinctly expresses many important concepts and positions held by both organizations.

The Role of the Central Business District

The Fort Worth urban area is rapidly expanding in population and physical size at an increasing rate of growth. A rising demand for goods and services will accompany this growth. For the community to function efficiently, physical, economic, social, and political activities require proximity. Historically and currently, the principal concentration of these goods and services has been the Central Business District. The capability of downtown Fort Worth to concentrate goods and services has been the catalytic factor that turned the "Cowtown" of a few decades ago into a modern metropolis.

Many business activities are interdependent and need face-to-face contact for mutual benefit. Downtown is the place where this interrelationship can best flourish. The high accessibility provided by freeway, highway, thoroughfare, public transit, and pedestrian systems and its geographic centrality enable downtown Fort Worth to provide an array of goods and services that are unequalled elsewhere in the metropolitan area. This phenomenon is a tacit recognition of the fact the CBD has certain inherent advantages to offer both the urban distributors and consumers. Substantial benefits will accrue in the future by maintaining the CBD as the political, economic, social, and administrative focus of the metropolitan area.

The CBD Role Specialization vs Diversification

One of the most difficult and controversial questions facing American planners and policy-makers is the determination of a preference for either a specialized or diversified role for the Central Business District. Specialization would imply a downtown predominated by activities such as banking, insurance, government, the professions, and their related facilities such as convention halls, restaurants, office suppliers, etc. Residential, institutional, and recreational uses would be more than adequately represented, but would be secondary in importance. Cast more broadly, the specialized CBD may be said to predominately contain these facilities which the downtown would best be equipped to provide for its metropolitan area. Diversification would imply the need and ability of a CBD to provide a full range of goods and services for its metropolitan area—either dominating or competing on an equal basis with its environs. Such a CBD would contain and concentrate all regionally appropriate goods and services. In addition to its specialized roles, the CBD would become the metropolitan area's major reservoir of entertainment, cultural, and recreational facilities as well as become its near monopolizer of expanded opportunities and developments in education, commerce, employment, shopping, and housing.

Various studies conducted for downtown Fort Worth revealed that the CBD is in the rapid process of moving from diversification to specialization. The retail, housing, and entertainment activities are continuing to decline or relocate, providing space primarily for office, government, transportation, and parking facilities. The primary
catalysts in this metamorphosis have been the automobile and suburban development. Powerful social and economic trends are at work and not easily reversed. This Report describes a process by which Fort Worth can implicitly choose specialization as its generalized goal and develop itself utilizing its strengths and potentials to be a vibrant place in which to work, shop, live, and entertain.

The CBD Relationship to its Suburbs

As the Fort Worth metropolitan area continues to grow, the percentage of population living in the suburbs will continue to rise. The city now has only 54 per cent of the total county population, with most of the remainder living in suburban areas. With the continued proliferation of suburban retail facilities, many suburban residents suffer from the misconception that what happens in the CBD does not affect the functioning of their community life. In actuality, this independence is more apparent than real because, economically, socially, psychologically and physically the suburbs are an integral part of Fort Worth. Much of the suburban investment is provided by banks and other financial institutions in the CBD. A number of major businesses (i.e., department stores) have administrative offices in the CBD. The CBD provides employment to a vast number of suburban residents. Most of the governmental activities at the federal, state, and local levels are concentrated in the Central Business District. The fulfillment of Fort Worth’s desire to attract new industries providing more jobs and better income will be largely dictated by the economic strength of downtown where most of the Tarrant County’s financial institutions are located.

The prosperity of the suburbs is dependent on the prosperity of the Central Business District. Without access to the financial and administrative resources concentrated in the CBD, it is doubtful that suburbs in Tarrant County could survive simply because they could not generate the economic and administrative capabilities available in downtown Fort Worth on their limited resources. On the other hand, the position of the CBD would be extremely weak without suburban demand for the resources located in the downtown area. This functional relationship between the CBD and its suburban markets must be put to mutual benefit by making them complementary to each other through the systematic planning and organized development of each.

The CBD as a Tax Base

The 1970 ad valorem tax revenue provided by the Fort Worth Central Business District amounted to 1.22 million dollars. This represents slightly over 13 per cent of the City’s total real estate taxes. An average acre of CBD land currently returns tax revenues of $9,000 compared to $1,350 for the Seminary South Regional Shopping Center. The finest residential section returns only $750 per acre while the deteriorating sections are taxed at the rate of $300 per acre. Taking vigorous action to strengthen the Central Business District so that it can provide the nationally established "normal" share of 20 per cent of the city’s tax revenue would mean reduced tax burdens for the rest of the city. On the other hand, a declining tax base for downtown will have to be offset by the corresponding tax increase in other parts of the city. While tax exempt downtown public facilities are extremely important for the functioning of both the CBD and the city, replacement of deteriorating
properties in the CBD with new private uses will help strengthen and stabilize the CBD tax base.

The CBD as an Employment Center

Currently, 44,650 persons are employed in the Fort Worth CBD. This figure represents about one-sixth of the total employment in the Fort Worth urban area, making downtown Fort Worth second only to the Dallas CBD as the largest employment center in the 10-county North Central Texas region. Downtown Fort Worth is predicted to have a total employment of 69,000 persons by 1985. Over 50 per cent of this employment will be in the office (private and public) category. Over the next fifteen year period, downtown Fort Worth will add an additional 25,000 workers to its current employment base. How to accommodate this substantial gain of employment through the supply of needed land, necessary public facilities, adequate transportation, parking, and related facilities is a major question facing policy-makers and planners. The weakening of the downtown role as an employment center could only weaken the basic fabric of the entire city as a place in which to live, work and play.

The CBD as a Metropolitan Retail Center

The retail strength of the Fort Worth CBD has been declining at an unnecessarily rapid rate since 1950. U.S. Government business statistics indicate that the CBD’s share of total metropolitan retail sales is declining. However, it still exceeds twice the sales volume of Seminary South Shopping Center. Retail outmigration has left the CBD in a state of emerging obsolescence and potential blight. Actions are urgently needed to reverse the process and stop the outmigration of retail activities. This Report outlines the public and private efforts which must be launched to provide investment incentives for attracting new comparison retail facilities to downtown Fort Worth. Projections indicate 1.6 million square feet of retail space must be added to the current level of supply, if the CBD is to rebuild its retail base to maintain downtown as a major retail center.
The CBD as a Convention and Recreation Center

To complement the success of the Tarrant County Convention Center another first class hotel of at least 1,000 rooms must be added to the existing downtown hotel system. The CBD has an inadequate number of eating and drinking places for its daily and convention-related needs. Efforts must be made to encourage the location of new, high quality, restaurants and clubs in the areas between the business and convention districts. Additional movies, theaters, and after dusk entertainment activities must be added to downtown in order to maintain its vitality after working hours.

At the present time, downtown Fort Worth desperately needs more parks and open space facilities. No other public facilities can contribute more to the viability and liveability of an urban environment than a lively, well-used, system of parks and open spaces. The opportunities presented by the Trinity Valley for the development of a linear park system and for the creation of water-oriented recreational facilities must be utilized to the fullest extent.

The CBD as an Office Center

The rapid growth of the urban area has created a rising demand for public and private office activities. Office development has been occurring in the CBD and vicinity in a random manner without benefit of a development plan. By 1985 there will be an additional demand of 2.3 million square feet of office space beyond the 1970 supply. This demand should be met in a manner that will strengthen the functional role of downtown Fort Worth as a metropolitan financial and business center.

The CBD as a Residential Center

The CBD has continued to lose residential population since 1950. The vacuum created by the exodus of the middle class white population has been filled by low income families who by their condition cause further strain on overburdened city services and on the CBD environment. A variety of social ills has emerged and must be corrected at the expense and to the benefit of the entire community. We must bring back a substantial population of middle and upper income residents to make their homes in or near the CBD. Vigorous private and public efforts to construct an additional 5,000 dwelling units in the CBD by 1985 will enable 20 per cent of the net CBD employment increase to live and work downtown. The success of this effort will largely determine the fate of downtown retail activity.

The CBD as an Institutional Center

The provision of certain institutional facilities will be a basic step towards providing residential development in or near the downtown by 1985. For example, the provision of excellent educational facilities (elementary to high school) close to future residential sections will contribute to CBD growth. Fort Worth needs a new upgraded Central Library. It should be so located that it adds to the cultural strength of downtown. With the expanding program of the Tarrant County Junior College Systems and the need for university extension facilities, every effort should be made to locate a junior college or university extension in or near the Central Business District. Besides attracting
additional young residents, this activity will complement and strengthen the cultural and educational role of downtown Fort Worth.

The CBD as an Industrial Center
Appropriate action should be designed to discourage further expansion of these activities in the Central Business District. At the proper level, necessary negotiations should be initiated to reclaim the grossly under-used railroad rights-of-way and freight yards and to utilize this recovered space to accommodate high intensity land use functions which will contribute to the strength of the CBD.
The Fort Worth CBD
Workshop June 1970

Purpose of the Workshop

1. To expose the workshop participants to their city using an intense two-day session.

2. To establish a common language of awareness between the various city leaders (business, financial, and political) and the design team.

3. To record all information, thoughts, feeling and responses, to share it with each other—in an attempt to synthesize this information, as well as to increase their own awareness, of the overall and detailed problems.

4. To introduce the leaders of Fort Worth to the design team and to provide an opportunity for these leaders to express their views of the city's resources, potentials, problems, and needs.

5. To explore, by citizen participation, observation, and discussion, the user needs of Fort Worth.

Near the end of the workshop, the workshop participants were asked to design an ideal city and to design Fort Worth given several contexts. The task they were given is stated below and their responses follow. It should be emphasized that they were freed from practical considerations and many important issues were by-passed in order to comprehensively fantatize. As such, their responses to this gaming technique are not to be taken as their actual responses to these issues in real situations.

(See Illustration 57).

Design Session
Saturday Afternoon

Part I. Individually

a. Design an ideal city for any place you wish in the world. Allow yourself to fantasize freely about what you would like and how you would like to live.

Part II. In groups (select one of the following groups)

a. Start as if you are in the year 1840. Assume Fort Worth as it was then. Design Fort Worth knowing what you now know but with the givens of the 1840 situation.

b. Start as if you are in the year 1940. Assume Fort Worth as it was then. Design Fort Worth knowing what you now know but with the givens of the 1940 situation.

c. Starting now, design Fort Worth as you would like it to be in 1980—include implementation.
Synopsis of Participant's Designs

1840 - 1980 Planning Group

In the future, the growth of the city would be controlled and the increase in population would be absorbed by increasing the overall density of land uses.

The ideal size varied between 200,000 and 1/2 million people.

The railway switching yards and elevated freeways would be removed and the city limits would be established by the natural boundaries and a proposed green belt.

The form of the city would be a pyramid with the apex being the CNB sign.

In general similar uses were grouped together. All were within walking distance and connected by green ways and malls.

The main feature of the design would be a continuous mall along Main Street from the Convention Center to the Trinity River (Court House was located elsewhere). Below the mall ran a subway that connected the CBD with the Regional Airport and Post Office complex.

Service and parking for the buildings adjacent to the mall would be underground and connected to bridges over the Trinity in the area of Houston and Calhoun Streets.

The main retail area would be in the form of a regional shopping center along the mall.

With the exception of the Science & History Museum all cultural activities would be downtown.

Mixed types, and high density housing would be provided along the Trinity River in addition to alternative housing in the areas of Benbrook and Eagle Mountain. Connection to the CBD would be by both freeway and rapid transit.

1940 - 1980 Planning Group

The underlying planning assumption was that as the city and county grew, the CBD would also grow and the functions would not disperse as the residential population moved to the suburbs.

The entire core was contained by a modified loop road system that connected to east-west freeways north and south of the city. This fixed loop road would also encourage higher density land use.

The northern freeway which extended to the Regional Airport was separated from the Trinity River by a continuous park.

The freeway to the south would be either depressed or elevated over the existing railway tracks.

Mixed density residential areas would be immediately adjacent on the east and west of the core, which separated high income and government built housing.

Retail growth was anticipated to expand to encompass a 25 block area. Servicing would be either at night, leaving the streets clear during the day, or, if second story air conditioned malls were used, then on-grade servicing during the normal working day would be possible.
All local, state, and federal government functions were grouped together north of the retail area.

To the east and west of the retail were the major office and financial areas.

A two block strip of hotels was used to link the retail area to the Convention Center, with underground all-weather connections connecting all three areas.

Parking structures that surround the Convention Center were connected to the various peripheral parking lots by an intra-city transit system. This system is connected to the regional transit system with a transfer link in the hotel complex.

South of Burnett Park, a superblock was formed to provide room for a medical and hospital complex.

Although each function would have its own open space plan, they would be separated from each other by a few major roads which would alter the grid system and change the internal road and traffic patterns.

1970-1980 Planning Group

It was assumed that the existing major buildings and those anticipated in the near future would remain until 1980. An extensive second story air conditioned pedestrian way network would connect all major buildings.

A major three block parking structure, that could be expanded to nine blocks, would be constructed over the Poly Freeway exits and extend to Commerce Street. Other parking structures would be built near freeway exits.

Main and Throckmorton Streets and possibly First, Second and Third Streets, would be closed and become pedestrian malls with the cross streets left open for vehicular movement. Servicing would be along the east–west streets.

High rise and garden apartments within walking distance of the CBD would be provided along the bluffs in the Samuels Avenue area as well as west of Henderson and north of Belknap.

Burnett Park would be redesigned with a city-owned 1000 car garage below and the Medical Arts Building would become an apartment building.

The northwest freeway loop would be completed and linked to the city via Calhoun and Jones Streets.

A parking structure-hotel complex would be built adjacent to the west side of the Convention Center.

A transportation terminal would be constructed southeast of the Sheraton Hotel and connected to the regional rapid transit system.

The proposed Regional Post Office would be located at the new Regional Airport and the proposed site would be a light industry and service distribution area.
Fort Worth CBD Community Workshop Score

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**Illustration 57.**

Fort Worth CBD Workshop Score

This "score" of activity describes the sequence of events in which Workshop participants were engaged.

**Notes:**

This Workshop is designed to focus feelings on prime goals of Workshop. The Workshop provides a structure in which we STOP, LOOK, and LISTEN to Fort Worth, and as an important final step, RECORD our feelings.
Areas of Investigation
Recommended by Workshop Participants

Throughout the course of the workshop many ideas, thoughts, and areas of study were generated. Below are the major ones as categorized by specific topics.

Urban Design
A. COMMERCIAL
   1. Encourage the development of new hotels, office and retail space, and a downtown cultural center
   2. Consolidate blocks for more economical development
   3. Create a superblock through consolidation of land bounded by 13th, Houston, Lancaster, and Jennings Streets
   4. Explore the potential of air-rights and rights-of-way usage
   5. Consider mixed-use zoning
   6. Evaluate zoning variance procedures
   7. Provide malls on Main, Throckmorton, Houston, 1st and 2nd Streets
   8. Improve the deteriorated condition of Main Street, north of 5th Street
   9. Utilize private and public alleys

B. HOUSING
   1. Provide high rise apartments, southwest and northwest of Henderson Street
   2. Build high rise apartments along Bluff Street
   3. Provide mixed density housing in the CBD

C. OPEN SPACE AND PUBLIC AMENITIES
   1. Provide underground and all-weather connections between facilities with possible shops along corridors or arcades
   2. Provide cross-over connections linking Leonard’s, the new Fort Worth National Bank complex, Shiek, Monnig’s, Stripling’s, and Fort Worth National Bank (Texas Electric)
   3. Commence a program of sidewalk widening and tree planting
   4. Provide places for pedestrians to stop and rest (mini-parks and street furniture)
   5. Commence planning for a downtown sign control ordinance

10. Explore potential of riverside development

11. Provide a Post Office at the Regional Airport
6. Launch a vigorous program of improving signs, and other design elements that affect the streetscape

7. Redesign Burnett Park

8. Provide public restrooms downtown

9. Reevaluate the aesthetic value of brick streets

10. Improve the visual appearance of first floor fronts

11. Locate all utility lines below grade

12. Provide more open space

13. Use the flood plain for golf courses

14. Create an urban lake at the confluence of the River

15. Include river front amenity potential in all future CBD plans

Circulation and Parking

A. PARKING

1. Restrict on-street parking, and utilize tow-away zones in the CBD

2. Provide two types of parking: all-day (for commuters) and short term (for shoppers)

3. Improve on-grade parking lots

4. Zone off street parking lots

5. Subsidize off-street parking lots

6. Charge shoppers for parking

7. Provide all-weather connections between parking garages and buildings

8. Provide parking structures near freeways with shuttles to the CBD

9. Provide parking structures over the Poly Freeway exits

10. Investigate possible parking facilities below Burnett Park

11. Investigate possible parking facilities under all malls

B. TRAFFIC

1. Consider motor-banking access requirements in traffic planning

2. Evaluate the need for a Calhoun-Jones access to the East-West Freeway extension

3. Consider vehicular-pedestrian separation at key intersections

4. Reduce the number of intersections

5. Restrict service delivery hours
6. Close Burnett Street between Burnett Park and the Medical Arts Building

C. MASS TRANSIT

1. Evaluate the need for a central transportation terminal

2. Commence planning for a regional transportation system linking the Regional Airport, the Fort Worth Convention Center or central terminal complex and Dallas

3. Coordinate plans for inter- and intra-city transportation systems

4. Extend the M & O subway to the Convention Center with a possible link to the regional system

5. Use existing rights-of-way for rapid transit

6. Advocate the advantages of mass transit for commuters (city-initiated campaign)

7. Evaluate the advantages and efficiency of a city-owned bus service
Remodeling and Sign Control Recommendations

Lawrence Halprin & Associates recommends a vigorous program of CBD remodeling and sign control of appropriate retail and service facilities. It is suggested that this joint public/private venture should consist of a public relations/membership component; a guideline, technical assistance, and review component; and a financial component.

The following principles have been included to indicate the nature, scope, and detail of guidelines which we feel should be adopted by a remodeling and sign control program in pursuit of its objectives.

For purposes of descriptive simplicity, the typical 3-4 story building facade in downtown Fort Worth has been treated as if composed of three elements—upper story area, canopy and sign area, and sidewalk elevation and pedestrian area. Basic principles for the redesign of these areas are presented here, not to recommend a particular style of architecture, but to guide in the shaping of an evolutionary form which is both appropriate and consistent to Fort Worth. At present, the CBD streetscape consists of chaotically styled, colored, sized, and signed structures which visually and economically compete for the eye and dollar of CBD users. This competitive appearance of facilities and solitary attitude of owners should be eschewed in favor of physical, economic, and social cooperation. (Illustrations 58, 59).

Upper Story Area

This area establishes the "mass" of the structures and the basic "texture" of the block. These areas of the facade are generally a "no man's land," long since abandoned in use and maintenance by merchants in favor of the ground level. Their individual designs of differing materials, colors, and openings are competitive and distracting to the pedestrian level. The upper stores of buildings within a block should be a backdrop for the pedestrian level and should, therefore, be deemphasized. There is a need to simplify the appearance of building fronts in the CBD in order to create a more orderly and less chaotic appearance. Also, by reducing the visual confusion of the upper stories, additional emphasis is placed on the pedestrian level which contains displays and entries. Restraint and simplicity should guide remodeling of upper story areas.

Cleaning, removing of unnecessary objects or visual emphasis, and painting are minimal but effective efforts. The use of attractive screens, grills and cladding should only be considered if the above efforts would not deemphasize the upper story area. Multi-story buildings should be treated as a single design element rather than each floor receiving a different expression. If extensive remodeling is to occur, consideration should be given to the overall effect on the block and streetscape as to scale, sign locations, color, and appearance to both pedestrian and vehicle traffic.

Canopy and Sign Area

This area establishes the focus and identity of the structure from a distance. This area of the facade has traditionally been an architectural afterthought, painted, hung or protruding in an arbitrary manner. Any one
block contains every imaginable type, size, color, and style of sign, canopy, and awning. No single facade area detracts more from block scale unity. If redesigned, these elements have the greatest potential to unify facades.

Signs generally degrade their facades by being inappropriate to the building's architectural expression, unnecessarily repetitious, misleading in emphasis, inadequate in message, ill proportioned, and overlapping to or unseen by the pedestrian. Five sign design elements should be considered: (1) location or placement; (2) size and shape; (3) letter style and size; (4) letter and background color; and (5) materials and attachment. Good sign design is dependent on a successful interrelationship of these design elements and a consistent result on the streetscape as a whole.

Principles for the Improvement of Signs

1. Signs are an integral part of the store front and should be designed by professionals (not sign painters) to coordinate with the building facade and generally with the Central Business District.

2. The merchants and property owners within at least one block and possibly the entire CBD should adopt a limited number of letter styles, colors, sizes, and materials from which individual choices might be made.

3. The choice of materials from which signs are constructed should be durable and compatible.

4. The choice of type, letter styles, and background shape should enhance a sign's legibility.

5. The choice of colors used on any one sign should be limited to two and coordinated with the general building color scheme.

6. Each establishment should have only one name sign and no product advertisement signs.

7. When a sign is not an integral part of a store front, the maximum square footage should be limited to three times the lineal feet of the building frontage.

8. When a sign is an integral part of a store front the maximum size of the actual space covered by lettering should be limited to one and one-half times the lineal feet of the building frontage.

9. Projecting signs should be discouraged and limited to 42 inches from the face of the building, a minimum of 12 feet above the sidewalk and the maximum area allowed should be limited to one and one-half times the lineal feet of building frontage.

10. Signs or lettering should not project above the buildings parapet wall or into the pedestrian level. The bottom edge of signs and backgrounds should be aligned whenever possible.

Canopies and awnings generally cast the same confusion of shape, color, and individuality on the streetscape as does signage. They provide relief from the weather, a sense of enclosure which eases the transition from outdoors to indoors, and shape the store and displayed merchandise. As with signage significant improvement of the streetscape requires cooperation. Unified canopies, awnings, and arcades which run the length of one or more blocks can give a retail area a fine sense of order. They are
able to reduce the pedestrian space to a more intimate scale generally resulting in the use of small store signs mounted under the canopy or arcade roof or on and above shop windows in lieu of large building-mounted signs. For certain conditions, a canopy or arcade proposal may be thought inappropriate, too costly, or less important than landscaping, sidewalk improvements, or other projects. In such cases, awnings offer an inexpensive substitute which can achieve excellent results if properly designed, consistently used, and adequately maintained.

Principles for Improving the Canopy of Arcade Area

A. If a unified canopy or arcade is used across the entire block:
   1. keep the effect as simple as possible by using only a few materials and colors;
   2. construct the canopy or arcade at a uniform level along the entire block;
   3. incorporate small pedestrian-oriented signs on the underside along with lighting and sound,
   4. combine items such as parking meters and downspouts into support columns when possible; and
   5. incorporate optional small vehicle-oriented signs on the face of the canopy or arcade.

B. If stores provide their own individual canopies or arcades, the structure should relate to all others on the block or blocks as to shape, size, color, and style.

Principles for Improving Awnings

1. Use bold but solid colored canvas and simple design.
2. Coordinate colors with those of the overall color scheme for the building and block.
3. Repair or replace old or faded awnings before they become dilapidated. Periodic block-wide color changes can be built into the maintenance program.

Sidewalk Elevation and Pedestrian Area

This area of the facade is the setting of retail and pedestrian activity. It is by far the most renovated and chaotic element although it usually contains common elements. Close visual association and pedestrian movement within reach of these elements suggest these areas should be designed at a more intimate scale in order to invite—not offend—the pedestrian. Street level entrances to second levels should be appropriately treated.

Principles for the Improvement of the Pedestrian Level

1. Simplicity and block-wide cooperation are fundamental to well designed storefronts and streetscapes. Merchants and property owners within at least one block and possibly the entire CBD should adopt a limited number of pedestrian level remodeling materials from which individual choices might be made. All materials should be compatible and durable.
Illustration 58.
Remodeling and Sign Control
This drawing of a portion of Houston Street illustrates the visually chaotic and competitive nature of the design elements in the existing pedestrian environment.

Size, shape, color and location of signs, window shape, color and material of storefronts; narrow, uneven sidewalks; lack of shade and poorly designed and installed street furniture all contribute to an uncoordinated appearance and to the pedestrian's physical and visual discomfort.

Illustration 59.
Remodeling and Sign Control
This drawing of the same portion of Houston Street illustrates the character of proposed improvements. Signs have been coordinated in size, shape, and location and a range of colors selected. The number of window shapes, building facade materials, awning types, and colors have all been reduced and coordinated. New and wider sidewalk surfaces of several compatible finishes have been installed. Street furniture of coordinated design has been carefully installed. Adequate shade has been provided by awnings and street trees. The total effect will produce visual coordination, physical comfort, and shopper interest.

1. Highly reflective surfaces and materials are not as desirable as matte finished ones. Materials on the pedestrian level are viewed quite close and should appear as intimate or warm rather than impersonal or cold.

2. In addition to glass, no more than two other materials should be used on one storefront and these two materials should complement each other in finish, texture and color.

3. No more than two dominant colors should be selected and used with neutral colors on the pedestrian level.

4. Merchandise in display windows should be kept as simple as possible in order to eliminate a cluttered appearance. Window signs should be minimal.

Principles for the Improvement of Second Story Entrances

1. If the doorway is to serve as a public entrance, it should be as distinct as any other ground level business entry.

2. Entrances which are no longer used or serve only as a supplemental access should be removed or be deemphasized to the point where they no longer appear as public entrances.
Landscaping Materials
Recommendations

Street Furniture

Street furniture as used in this Appendix are the component items and materials exclusive of actual buildings and advertising media which make up the total street scene. This includes, but is not limited to, street signs, traffic signs and lights, mail boxes, trash receptacles, monuments, light standards, fire hydrants, phone booths, bus stops, tree guards, parking meters, kiosks, and all of the many other items which we find on or around our sidewalks and streets.

Generally street furniture is publicly owned and publicly used, but there are exceptions. Whether owned by the City or by an individual, it should be considered a part of the street scene in which we live and will have a great effect on the environment we perceive. Street furniture may be ordered, designed, constructed, installed, and maintained by many individuals, groups, and agencies. Their presently exists no coordinating body to recommend or review the need for any given item, its design, or its location. The effect is that there is a gradual accumulation of item upon item until the streets and intersections are thoroughly saturated. During this gradual buildup people become accustomed to what they see and do not readily sense the growing accumulation of items. We seldom see traffic signs or street furniture removed.

Lawrence Halprin & Associates recommends the establishment of a CBD streetscape urban design study to continue investigation of existing conditions, recommend additional courses of action, suggest alternative sets of items, suggest financing and variances, and suggest cooperative proposals for sharing costs of items, installation, and maintenance among agencies and individuals.

The following principles should serve as a guide to the selection, design, and placement of existing and new street furniture.

1. Eliminate everything that is not absolutely necessary and combine as many related items of street furniture as possible.

2. For each type of street furniture select one mutually compatible design and one coordinated color (trash cans, fire hydrants, benches, light standards, etc.).

3. Strive to find an inconspicuous location which will serve its particular function and will contribute to the attractiveness of the street scene. Certain items need not be as readily accessible or visually dominant as others.

In order to illustrate these principles and to further describe a schematic design for the proposed Houston Street Mall and the proposed Main Street Mall (Projects 2a and 4c), we have gathered a sample of street furniture which is currently available and a plan view showing its placement on a typical block of Main or Houston Street. (Illustrations 60, 61).

Paving Materials

Due to either their high purchase cost or their high installation cost, many materials are not feasible as street paving materials. They have become a luxury and are used only as infrequent patterns, points of interest, or breaks from the large expanses of the less expensive modern paving materials. It is unfortunate that the cost of labor has so limited our selection
of materials that in most instances we must be content to use only those pavings which can be applied by modern mechanized methods. Fort Worth's few remaining brick streets should be repaired and preserved because they are part of the City's heritage and because they can provide much of this surface variety.

In many situations such as access arterials and heavily traveled streets, the only feasible materials available are asphalt and concrete. However, circumstances change when we travel from the much used roadway to the city side streets and to walkways for predominantly pedestrian use. Not only has the wear and tear of high speed and large weights been reduced, but the visual scale of the walking person is much slower than that of the vehicle. Therefore, more time is available to observe details. Concrete or asphalt as used for high speed traffic is of necessity a smooth surfaced material which has little detail or variety when viewed close at hand. However, there are other ways to treat these materials and to have a finish which has a great deal of interest and scale.

There are too few changes in the patterns and textures of paving materials used downtown. Most of the materials are selected for the sake of economy, a limited knowledge of available materials, a general lack of aesthetic consciousness and "just old habits." Asphalt and concrete are not the only materials and a changing pattern of pavement can be a wonderful everyday experience. Different areas with different functions should be indicated with a change in texture or pattern.

Concrete can be finished with inexpensive techniques to yield a great variety of finishes and colors or to expose a stone aggregate within. Panels of concrete paving can be separated by tooled joints or by wood, brick, tile, metal or concrete separators. Inexpensive patterns can be introduced by forms, tools, separators, and color. Brick and tile are available in an array of sizes, shapes, and colors and can be assembled in any number of patterns using many types of joints. Asphalt in blocks or in its more traditional form can be used in combinations with the above materials. The main concern in the use of these materials should be to obtain a consistent result by the use of one or more predominant materials supplemented with accentuating materials at appropriate locations. Paving materials should be seen in the context of the entire streetscape.

Street Trees

Since the 1920's increasing numbers of cities have excluded plants and trees from their business districts to make room for progress and growth. Today it appears that the movement has gone full cycle, for if improvements are to be made we must redesign our downtown areas and allow plants and trees to once more become a part of our street scene. The initial investment of money and materials in tree and other plants in the CBD is nominal. The benefits would be immeasurable in monetary and aesthetic terms.

Trees planted within Fort Worth's CBD can be of several kinds, but may be restricted as to placement. When street tree planting follows a linear pattern it would be better to choose not more than one or two types of trees to be planted at repeated intervals on both sides of the street. This applies particularly in cases where sidewalks are to remain at the existing widths and in situa-
tions where parallel parking is to be removed and replaced by wider pedestrian walking areas. Tree locations must be limited to avoid interference with existing underground or overhead utilities, passing traffic, and building access. Street trees probably should maintain a height below 30 feet to preserve the streetscapes pedestrian scale. In form, color and size, trees will have to respond to design considerations and to pedestrian movement. This will usually imply the need for trees of uniform appearance in a given situation. For this reason, nursery grown stock should be preferred over forest dug stock. A decision is necessary as to both the desired kind of shade the tree should provide (e.g., dense or filtered) and the desired seasons of shade (e.g., winter as well as summer).

In addition to the above constraints, the street tree must be selected for its ability to survive in the urban ecology offered by Fort Worth. Proven ability to withstand the urban microclimate, including air and soil pollution, reduced light, increased wind velocity, and artificial hydrology. All street trees will require mechanical irrigation from pipes laid below the sidewalk. The maintenance characteristics of the tree species and the amount of abuse anticipated from vehicles, pedestrians, and animals all need to be considered.

Lawrence Halprin & Associates has contacted several nurseries in the Fort Worth-Dallas area and based on their recommendation and our experience in the region, we suggest consideration of the following trees for street use. These trees should be of high quality, nursery grown, stock of 3-4" caliper minimum and should be of consistent form for each installation.

Platanus Acerrifolia (Sycamore). This species is a universally employed street tree, resistant to the urban microclimate, a strong broad oval form, large leaf, medium dense shade. The sycamore is widely grown and is available in sufficient quantities at a variety of sizes.

Quercus Shumardii (Texas Red Oak). This is a native species with good form and a proven history of use as a street tree. The Texas Red Oak is widely grown in the region and is available in sufficient quantities at a variety of sizes.

Quercus Virginiana (Live Oak). This species is the beloved Texas tree which in its single stem form can be a good street tree except that its trunk is invariably somewhat contorted and its form is inconsistent. Live Oaks are more appropriate in less structured settings such as parks and riverbanks than as street trees.

Ulmus Crassifolia (Cedar Elm). The elm species has similar characteristics to the Live Oak. It is naturally multistemmed and somewhat loose and inconsistent in its form. Unlike the Live Oak it is deciduous. It can function reasonably well as a street tree in certain situations, but is not as highly recommended as Sycamore or Texas Red Oak.

Magnolia Grandiflora (Southern Magnolia). This tree has shown its ability to flourish downtown in Burnett Park, and might be considered for street planting. Its disadvantages include its extremely dense year round foliage that would diminish available winter light, its exceedingly slow growth, and its high maintenance costs (soil and water).
Gleditsia Triacanthos Inermis (Honey Locust). Although rather weak in form and very light in shade, this is a well proven street tree and should be considered for selected applications. It grows rapidly and is widely available.

Liquidamber Styraciflua (Sweetgum). This tree is more columnar than the Red Oak or Sycamore, but a reasonable street tree with good fall color.

The species mentioned above are listed randomly and final choice is seen as a function of availability, budget, design and maintenance factors. However, we feel the most pragmatic choices will be Texas Red Oak and Sycamore. Southern Magnolia, Honey Locust, or any of the others described might be used in limited quantities for accent and variety. Representatives of the Park and Public Works Department, the Planning Department, landscape architect consultants, nurserymen, and interested citizens should make the ultimate choice of trees in view of the design and other considerations listed above.

Illustration 60.

This sketch of a portion of Houston Street further shows the results of improvements described in Illustration 59.
Illustration 61.
Street Furniture
This drawing of a typical block of Houston Street shows the proposed location of street furniture. Letters refer to items shown in Illustration 62.

Illustration 62.
Street Furniture
This drawing of two systems of street furniture shows the proposed character of these items. Items include: A. bus shelter, B. tree guard with parking meter (2 views), C. bollard, D. newspaper rack, E. drinking fountain, F. trash container, G. bench (2 views), H. information kiosk, I. clock, J. sidewalk light, K. crosswalk light, L. traffic and crosswalk light, and M. traffic, crosswalk, and street light with street signs.
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Fort Worth CBD Study

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