

Transportation and Urban Development in Houston

1830-1980

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Metropolitan
Transit Authority
of Harris County

METRO

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Transportation and Urban Development in Houston 1830-1980

Acknowledgements

The concept for the undertaking of the writing of a history of transportation in Houston and its relationship to the development of urban form originated within the Metropolitan Transit Authority of Harris County, the heir to a legacy of public transportation which extends back to 1868. Staff in MTA recognized that no real source existed for an overview which led to the present-day context. Since planning is an anticipatory process, and essentially evolutionary in its basis, if the future may be set in the present, then the past might inform present decisions. My own interest in cultural geography and urban history causes me to believe that perspective is determined by a view-point, and that a reference depends on a degree of distance. Therefore, I was enthusiastic about the opportunity to undertake a history of transportation in Houston.

Thanks must be given to Miki Milovanovic, Urban Systems Planner of MTA for discussing the project with me and proposing the work internally, and to Linda Cherrington, Manager of Planning and Programming, for supporting the undertaking of this project.

The scope of the project and the means to its realization were unanticipated, inasmuch as virtually nothing was in existence. The tolerance of the sheer length of time required to put together the research, go through it and structure it in some fashion where it became a narrative has created an atmosphere of support for the project, and for this reason special thanks are due to these two individuals.

Other individuals who have been directly supportive are the entire staff of the Texas and Local History Department, Houston Public Library, especially Mrs. Doris Glasser, Carol Lee and Doug Weiskopf, who tolerated my hoarding of materials, helped when asked, and made useful suggestions during the course of the project. Mr. Ron Heiser, Assistant Director of the Houston City Planning Department and Debbie McCann, Librarian, assisted in adding sources to my bibliography and contributing materials for the duration of the work. Mr. Chris Olavson of the Houston Urban Office, State Department of Highways and Public Transportation gave useful advice and provided further materials in initial phases of research. My colleagues at Rice University, Drexel Turner and Stephen Fox, deserve thanks for their commentary and "leads" during conceptual and substantive phases of the project.

Finally, special thanks belong to Dolores Kaup, my secretary at Rice University who not only typed the manuscript but assisted by facilitating the entire manner of its production and to Barbara Goldberg of MTA for her help in final implementation.

Foreword

When I agreed that a history of the development of transportation technologies and concepts would, in essence, be a history of Houston's physical urban form, I had no idea that large portions of the story had never been written. For a story which extends over 150 years, concepts which we now take for granted represent only the last 60 years, and for nearly half of that time existed in forms which today seem rudimentary.

Houston's Department of City Planning has existed since 1939, and the Houston Urban Office of the Texas Highway Department since 1946. The Houston Metropolitan Research Center, located in Special Collections of the Central Branch/Houston Public Library which facilitates patronage through the Texas and Local History Department, has been active since 1976, although Miss Julia Ideson, Houston's first City Librarian, had the foresight to begin a collection of urban development materials from the early days of this century. It was the immediacy of Miss Ideson's collection and the real history represented in the archival resources of HMRC which caused me to contemplate the necessity for capturing the contemporary perspectives of urban problems in my narrative.

From my survey of planning documents (studies, reports, surveys, and actual plans), none of the agencies actually had a complete historical archive in their libraries. My work took on the character of a "detective story"; tracking down obscure sources, dating materials, building up a chronological sequence from the still-contemporary-sounding proposals of Arthur Coleman Comey in 1913; Because of the somewhat *ad hoc* acquisitions of the basic source libraries, cataloguing was often inconsistent and indices virtually non-existent. For all my friends and colleagues at the agencies involved, I am pleased that one output of this effort is an awareness of who has what, and, as possible, reproduction of materials which might be shared in one another's collections.

For contemporary planners and students of urban development, transportation is a basic medium for an understanding of Houston's growth. From having traced the impact of various technologies as they have each exerted an impact of the structure and form of Houston, and the manner by which history informs the shape of the present, I believe that a holistic view is critical, to measure the future from a larger framework.

Technical materials, particularly studies since the advent of the use of the electronic computer (in Houston, the 1953 surveys), are important source references. To this end, and as the primary guiding structure in this research, I built up a collection of these references which were housed in the Texas and Local History Department/Houston Public Library. The chronological listing, whose entries in turn also contain in many cases their own bibliographies, constitute *Appendix A* of this report.

One of the critical elements in planning is perception of the issues. The immediacy of decisions is conditioned by values, and it is this second, *qualitative* aspect of history which I felt had to flavor the narrative. These contemporary points of view have been particularly significant as they reveal perceptions of the needs of the future; what runs through our history are those prophecies which repeat over and over again.

What people actually think was best found in popular sources and accounts. Magazines in Houston, particularly after the Progressive period at the turn of the century, have been valuable sources for this point of view, and consequently I have used direct quotation as much as possible, as it were to "put it in their own words". Since no index exists for most of the magazines, such as the excellent *Houston* which began in 1919 and formally became a document of the Chamber of Commerce in 1930, or *Progressive Houston* from 1909, whose pages are unnumbered, or *Gargoyle* a humor/social magazine of the late 1920's, the only way to locate references was to go through every issue. Tedious though the process was, it was interesting as the process gave me a sense of a story unfolding. Footnotes have been used to document these varied sources, and a review of the footnotes should give a picture of how transportation and traffic have been a continuing part of Houston's history.

Other secondary outputs of this project include a chronological compilation and organization of the last twenty years of Transportation clippings in the newspaper clipping file of the Texas and Local History Department; subsequently these will be filmed on microfiche and should aid future researchers in surveying this material in a more readily accessible fashion.

Transit-related chronologies, which had never been compiled, are included in *Appendix B* (a history of the transit company) and *Appendix C* (transit fares). There were often conflicting dates, but after considerable cross-referencing I believe both are now accurate.

In the final analysis, this work represents a mere skeleton outline of the complex narrative, but hopefully has structured the basic material in reasonable fashion that it might serve as a guide to further research. For my colleagues at the Metropolitan Transit Authority of Harris County, I trust this narrative will function to give their staff an overview of the continuous evolutionary process not only of which they are now a part, but also toward which historical events have been directed. From this point, they are in a unique position to write the future history, and should draw encouragement from the weight of evidence from the past.

Peter C. Papademetriou, AIA

Introduction

Houston, whose official existence as a city is still less than 150 years old, now ranks as one of the major metropolitan areas not only of the United States, but also on an international scale. Its rapid development is even unique to those cities of the American West, with a consistent history of doubling population every two decades since 1850 and a physical growth of nine square miles of incorporated area in 1840 to over 556 square miles in 1980. In the face of changing national economics, this growth has been a fact which Houstonians have accepted from the very beginning, yet a fact which continues both to astonish and concern, as it has continued largely unabated. In the late years of the Twentieth Century, Houston has come in a sense to represent the accepted norm of urban growth in the United States, and its nearly geometrical progression of increased development sustains the image of its newness, a phenomenon which belies the very real fact that urban issues at a variety of scales have been a part of its history from the very beginning. This image also is at variance with the evolutionary history of urban growth, and while the scale of things which are new tends to obscure the existence of a past, the past is not only there but also the generative reason for the shape of our present realities. Understanding the history of urban development is a viewpoint for a perspective on the present. Such a point of view is not one of purely nostalgic interest but rather a critical framework whose nature is normative. That is, the present may continually be evaluated to the past and seen beyond its own immediate assumptions; the criteria for looking at urban development and to establish a measure for the quality of life may have a reference frame, one outside its own immediacy and contributing to a larger sense of what may be regarded as "progress". In this sense, we may become kin to our predecessors in realizing that many of the concerns which seem to be on our minds have been here for some time.

Historical circumstance has, in fact, helped to maintain Houston's momentum, a force which has perhaps obscured the sense of *deja vu* one achieves in seeking out the evolution of cause and effect which is the reality of the present situation. It is the attempt of this book to show first that such a history exists, second that many of the concerns we have today are not new but only accentuated by our physical size, and finally that a certain degree of inevitability exists in the turn of historical events.

From the historical perspective, the most useful analogy in explaining the character of Houston's evolution is that of a *palimpsest*. Not only has the urban narrative been rewritten, or in large part erased as in the manner of the old parchments, but also similarly as was often the case, there is the simultaneous coexistence of several layers of narrative, and one or more shows through the others. To apply this analogy in a specific way, the reality of urban growth is its evolutionary nature and, as a consequence, one thing builds on another in often surprisingly organic ways. Previous generations, their concerns, their efforts and their plans have affected the context within which we find ourselves. A city is not an abstraction, it is the parchment on which is written cultural history and its form evolves in response to these events. Even with the tremendous change since 1940, where Houston's population has increased 300%, there may still be seen the physical pattern extending back to the city's origins.

From the very beginning, transportation and the technologies used in providing it have been basic factors in the vitality of Houston's urban development and its physical form. This has been, however, a responsive and interactive process, for technologies have been drawn upon to facili-

Introduction

tate the movement of goods and people within the urban network, and have also acted to shape that network within which goods and people have had to move. It is only in this century and more specifically within the past fifty years that direction of the interaction of these forces has been seen as not only possible but desirable, and that the concept of urban planning has emerged as a function of urban government, the arena in which urban forces have inevitably come together. It is perhaps natural in Houston, where growth, change and development have produced a constantly-evolving form that a reasonable equation might be made to the history of transportation and its technologies as basic to the understanding of urban history, the thin end of the wedge in a way to pry open an understanding of the dynamics which have brought us to the present day.

The myth of the American West was long sustained by Frederick Jackson Turner's concept of "modes of advance", where the frontier experience was seen as a neat progression from Indian trader to farmer, to "... 'men of capital and enterprise' who typically transformed the 'small village' of the previous occupants into 'a spacious town or city'..."¹, a theory not in conformity with actual fact. For much of the West, and Houston was no exception, the founding of towns preceded rural settlement and the frontier, in effect, had its origins in hundreds and thousands of "planned" communities. As John Reps has observed "... towns led the way and shaped the structure of society rather than merely responding to the needs of established agrarian population for markets and points of distribution."² Therefore, Houston was conceived as an urban settlement from the beginning, its development and form were always that of a city, and its problems have been those unique to cities.

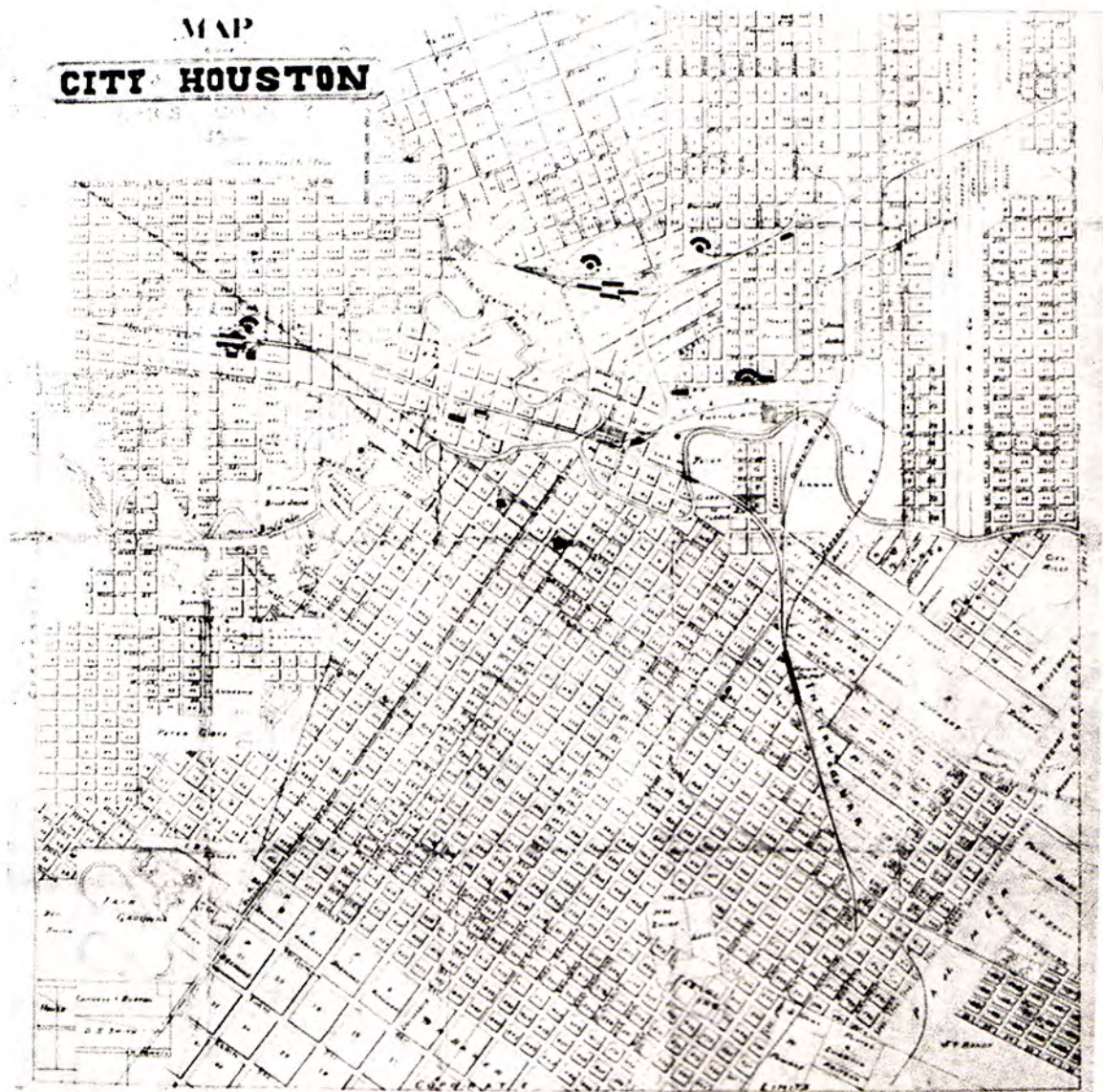
1

Reps, John W. *Cities of the American West* Princeton University Press (Princeton) 1979 P. ix

2

op cit P. x

Figure 1
Map of the "city" of Houston, circa 1880: growth of fabric takes place by extension of the grid block.



Appendix A

Chronology of Transportation Planning Documents

Houston — Tentative Plans for Its Development
by Comey, Arthur Coleman (report to Houston Park Commission) George Ellis Co. (Boston), 1913

The City Plan of Houston (Report of the City Planning Commission)
by Hare and Hare, Kansas City, Mo. (consultants), 1929

Houston Traffic Survey — City of Houston 1939
by Reader, Earl J. National Safety Council (Consultant) Works Progress Administration, 1939

Traffic Way Plan for Houston Metropolitan Area and Harris County
by Haile and McClendon (Consulting Engineers), 1939

Staggered Hours Plan
Office of Defense Transportation and City of Houston, June 1942

**The Major Street Plan for Houston and Vicinity
(Report of the City Planning Commission)**
Ellifrit, Ralph S. (City Planning Engineer) Hare and Hare (City Planning Consultants), November 1942

**A Report on Proposed Rerouting of Bus Lines
of the Houston Transit Company**
by Ong, Joe R., Cincinnati, Ohio (Consulting Transportation Engineer), July 1950

Houston Metropolitan Area Traffic Survey
by Texas Highway Department in cooperation with the City of Houston and U.S. Dept. of Commerce, Bureau of Public Roads, 1953

Houston Central Business District Parking Survey
by Texas Highway Department in cooperation with the City of Houston and U.S. Dept. of Commerce, Bureau of Public Roads, 1953

**A Need for Expressway Designations in the
Houston Urban Area and Harris County**
approved by City Council/City of Houston, Commissioners Court of Harris County, Houston Chamber of Commerce, July 1953

A Railroad Study for Houston
by DeLeuw, Cather & Co., Engineers, Chicago, Illinois (for Railroad Crossing Committee) October 23, 1953

Comprehensive Plan — Houston Urban Area Background for Plan
Houston City Planning Commission
Part 1a Purpose and Scope, April 1958
Part 1b Economic Base, July 1958
Part 1c Population, Land Use, Growth, December 1959

1975 Freeways and 1925 Thoroughfares?
Highway Committee, Houston Chamber of Commerce, 1958

Sources —

Texas and Local History Collection, Houston Public Library/Main Branch
Houston City Planning Department
Texas State Department of Highways and Public Transportation/Houston Urban Office

Origin-Destination Survey/Houston Metropolitan Area Transportation Study
by Texas Highway Department in cooperation with City of Houston and U.S.
Dept. of Commerce, Bureau of Public Roads, 1960

Houston Transit Study
by Wilbur Smith and Associates, New Haven, Conn. (Consultants) 1960

Freeway Phase Report
Houston Metropolitan Transportation and Transit Study (Report No. 1),
August 1961

Designing A Transportation System With You In Mind
City of Houston, County of Harris, Texas Highway Department, February
1962

Projection of Land Use and Population
Houston Metropolitan Area Transportation Study (Report No. 2), June 1962

Public Transit
Houston Metropolitan Area Transportation Study (Report No. 3), July 1963

**A Study of Thoroughfare Development in the Southeast Area
of Metropolitan Houston and Harris County**
Houston City Planning Commission, August 1963

World-Wide Transit Study
by Owsley, Clinton (Director of Public Service, City of Houston), November
1963

Existing Street Network
Houston Metropolitan Area Transportation Study (Report No. 4),
Houston-Harris County Transportation Study, 1966

Newsletter
Houston-Harris County Transportation Study, begin with Vol. 1, No. 1
(October 1966)

Houston-Harris County Transportation Plan — Vol. 2 — 1960-1980
Houston-Harris County Transportation Study, November 1967

Southwest Area Traffic Study
Turner, Collie and Braden, Inc. (Consulting Engineers) for City of Houston,
October, 1968

**Road and Transit Report, A Projection of
Adequacies and Deficiencies 1975-1990**
Houston-Galveston Area Council, November 1969

Houston Central Business District
Houston Metropolitan Area Transportation Study (Report No. 5),
Houston-Harris County Transportation Study, November, 1970

Newsletter

Houston-Galveston Regional Transportation Study begin with Vol. 1, No. 1
(January 1971)

Houston-Harris County Transportation Plan — Vol. 3 1960-1980
Houston-Harris County Transportation Study, April 1971

Newsbriefs

Transit Action Program begin with Vol. 1, No. 1 (July 1971)

Basic Characteristics of the Transit System in Houston
Alan M. Voohees and Assoc. (Program Consultant) Bernard Johnson Inc.,
DMJM (Assoc. Consultants) Transit Action Program, October 30, 1971

Transit Customer Profile in the City of Houston
Alan M. Voohees and Assoc. (Program Consultant) Bernard Johnson, Inc.,
DMJM (Assoc. Consultants) Transit Action Program November 19, 1971

Mass Transit in Houston — A Survey of Citizen Attitudes
Southwest Center for Urban Research, 1973 (?) (undated)

Transit Program for Houston Vol. I & II
Alan M. Voohees and Assoc. (Program Consultant) Bernard Johnson, Inc.,
DMJM (Assoc. Consultants) Transit Action Program, 1973

TransPlans

Office of Public Transportation, begin with Vol. 1, No. 1 (April 1977)

1978 Update of the Transit Action Program
Rice Center for Community Design and Research, July 1978

Transportation Sketch Planning Report
Rice Center for Community Design and Research, July 1978

A Mass Transportation Concept for Metropolitan Houston
Texas Transportation Institute, Texas A&M University 1979 (?) (undated)

Houston's Public Transportation System
Report by the Internal Audit Division, City of Houston Controller's Office,
February 12, 1979

Houston Year 2000
City Planning Commission, City of Houston, June 1980

Houston Downtown Data Bank — 1980 Update
City Planning Commission, City of Houston, July 1980

Preliminary Design of a Mass Transit System for the City of Houston
Aerospace Engineering Department, Texas A&M University, August 1980

Metro Update (Transit Talk name change)
Metropolitan Transit Authority, begin with Vol. 1, No. 1 (August 1980)

Appendix B

Houston Mass Transit Chronology

compiled by
Peter C. Papademetriou, AIA

Sources

- Atwood's Catalogue of U.S. and Canadian Tokens
(3rd edition) American Vecturist Association (Boston) 1970 and Supplement 1977
- Greater Houston Telephone Directory
Southwestern Bell Telephone Co. (various years)
- Houston City Directory
(various years)
- Houston A Chronological and Documentary History
Buchanan, James E. (ed.), Oceana Publications (Dobbs Ferry, N.Y.) 1975
- Houston Scrapbooks
Houston Public Library/Texas and Local History Collection
- H-Transportation Clippings File
Houston Public Library/Texas and Local History Collection
- Houston The Bayou City
McComb, David G., University of Texas Press (Austin) 1969
- Houston Transit Study 1960
Wilbur Smith Associates for City of Houston
- "Houston"
by Sherwood, Wilbur G. in *Motor Coach Age* Motor Bus Society, Inc. (July 1969)
- "Galveston-Houston Electric Railway"
by Woods, Herb (*Interurbans Special No. 22*) Vol. 16, No. 4 Interurbans Publications
(Glendale, Ca.) 1976

Houston City Railroad 1868-1970

April 8, 1868

first mule-drawn streetcar

Houston City Street Railway Co. 1870-1896 (state charter)

McKinney Street Line 1874 (first service)

(incorporates Bayou City Street Railway Co. 1884) (Company 1881-1884)
(second Bayou City Street Railway Co. 1889-1890)

September 18, 1890

both competing companies
consolidated

June 12, 1891

first electrified streetcars

Panic of 1893

bankruptcy and several
receiverships

July, 1897

"demonstration" by
streetcar operators

February, 1898

continuing unrest

March 18, 1898

strike, followed by "scab"
workers

March 30, 1898

Militia intervenes

Houston Electric Street Railway Co. 1897-1907 (name change)

October 26, 1901

receivership sale to Stone
and Webster syndicate

March 3, 1904

strike, unrest for seven
months, settled in October

* Houston Electric Company 1907-1946 (name change)

January 21, 1924

anti-"jitney" ordinance
passed (#1137B)

April 1, 1924

first motor bus on Austin
Street Line

January, 1925

introduction of first
suburban bus express line
in United States

June 13, 1927

first overall use of motor
buses

(Texas Bus Lines August 1, 1928

organized as subsidiary of
H.E.C. providing
Galveston-Houston service)

(Stone & Webster sell public stock 1910-1913, maintain control to 1935)
(National Recovery Act (NRA) 1935-April 1, 1941 reorganizes HEC,
organizes Galveston-Houston Corporation to replace holding company,
bond debt refinanced by private GHC in 1941)

(Galveston-Houston Corporation 1940-1961 subsidiary companies:

Houston Electric Company
Texas Bus Lines
Galveston Street Railway)

June 9, 1940

last electric streetcar run
(Houston becomes largest
all-bus city system in United
States)

September 29, 1942

authorization to scrap
streetcar tracks for war

(Parallel Transit Options 1911-1968)

**** (Galveston-Houston Electric Railway 1911-1936 "Interurban")**

December 5, 1911	opening run
November 1, 1936	final run

chartered originally March 2, 1905, succeeding an earlier company formed June, 1903

January 31, 1906	new franchise requested
June 10, 1906	Stone and Webster
	syndicate secures control
March 28, 1910	construction begun on redesigned route

(Pioneer-Gill Bus Company 1936-1942)

1943	Certificate of Convenience required by City Ordinance
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(Pioneer Bus Company 1944-1967) (name change)

May 30, 1951	City franchise
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(Yale Street Bus Company 1945-1947)

(Yale Street Transportation Company 1947-April 1958) (name change)

(acquired by Pioneer Bus Company 1946)

(Acres Homes Transit Company April 1958-July 1968)

(Principal World War II Bus Lines:

**Airport Transit Inc.
Ellington Field Bus Line
Emergency Transit Lines
Employees Transportation Service Company
Shipyards Bus Lines)**

Houston Transit Company 1946-1961 (name change)

March 15, 1946	takes over H.E.C.
August 2, 1947	CIO Transport Workers Union of America vote to unionize defeated
August 3, 1949	Local 260/CIO Transport Workers Union of America voted as union for H.T.C.
November 3, 1949	bus strike (lasts 12 hours, 10 minutes)
November 4-24, 1950	bus strike

(Galveston-Houston Corporation puts company up for sale in 1959)

***** Rapid Transit Lines, Inc. 1961-1974 (name change/private sector purchase)**

June 1, 1961	Bernard Calkins of Wichita, Kansas takes over H.T.C.
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(bought by National City Lines, February 1966, retains name)

(subsidiary Houston City Lines, Inc. acts as owner of bus fleet, committed to use by Rapid Transit Lines after acquisition by N.C.L.)

(incorporates Pioneer Bus Company September 1967)

(incorporates Acres Homes Transit Co. July 1968)

October 6, 1973	HARTA Referendum (defeated)
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****** HouTran 1974-1978 (public sector purchase) (Houston Transit System)**

April 14, 1974	City of Houston buys bus company (administration by Office of Public Transportation operated by private operator HouTran, Inc.)
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November 5-December 21, 1974	bus strike
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November 24, 1976-January 18, 1977	bus strike
October 5, 1977	HMTA Interim Board appointed by Mayor Hofheinz

August 12, 1978	MTA Referendum (passed) (essentially translation of OPT to Metropolitan Transit Authority)
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October 1, 1978	1% sales tax authorized for MTA financing
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December 21, 1978	MTA, Local 260/TWU AFL-CIO sign pact
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METRO 1979 (county authority purchase)

January 1, 1979	MTA takes over bus company
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*(refer to Galveston-Houston Electric RR)

** (refer to Houston Electric Company)

***Legislation under home-rule principle

May 22, 1957 "Houston Transit Authority" bill passed by Texas Legislature empowers 5-man (sic) authority under power granted by cities to purchase and lease bus companies (House Bill 386)

****Legislation creating county transportation authority

May 21, 1973 bill passed by Texas Legislature empowers creation of county transportation authority with Tax powers pursuant to voter referendum (Senate Bill 642) Article 1118x, amended June 21, 1975; August 29, 1977.

Appendix C

Houston Transit Fares Chronology

compiled by
Peter C. Papademetriou, AIA

Adult Fares	Cash	Token	Others
12/12/03*	\$.05		Child fare \$.03
9/19/18	.06		Child fare \$.03
1/20/22	.07		Child fare \$.03
6/13/27	.10	4/\$.30	Weekly Pass \$.25 + \$.05/ride
5/2/42	.10	4/\$.30	Weekly Pass \$.25 + \$.05/ride
12/15/45	.10	5/\$.35	Weekly Pass \$.25 + \$.05/ride
10/11/47	.10	3/\$.25	Weekly Pass \$.40 + \$.05/ride
6/15/48	.10	4/\$.35	— (child fare increase)
1/9/49	.10	4/\$.35	+ \$.05 outside Houston City Limits (\$02 for child outside Houston City Limits)
11/10/49	.10	(discontinued)	+ \$.05 outside Houston City Limits (\$02 for child outside Houston City Limits)
1/1/50	.10	—	+ \$.05 outside Houston City Limits (\$02 for child outside Houston City Limits) (City Limits Extended)
11/24/50	.15	—	
5/22/54	.20	3/\$.50	+ \$.05 outside Houston City Limits
7/1/54	.20	3/\$.50	+ \$.05 outside Houston City Limits (child fare increase)
11/4/57	.22	5/\$1.00	+ \$.05 outside Houston City Limits
+.05 zone fares established — 7/2/56 adults crossing T + NO RR on River Oaks Line			
12/31/56 City Limits extended zone fare for new services 5½ miles from Main + Texas (\$05/each 1½ miles thereafter)			
4/11/57 adults crossing T + NO on Briarcroft Shuttle			
6/1/59 (replaced by Westheimer)			
1/2/58 adults crossing — Bellfort/South Park			
6/1/59 adults crossing T + NO RR on Alabama Line			
6/1/59 adults crossing T + NO RR on Westheimer Line			
11/26/59	.23	4/\$.85	+ \$.05 outside Houston City Limits
9/16/65	.28	9/\$2.00	\$.48 max/cash \$.42 max/token
3/16/67	.30	.25	\$.50 max/cash \$.45 max/token
11/15/68	.35	.30	\$.55 max/cash \$.50 max/token
11/5/70	.45	.40	\$.65 max/cash \$.60 max/token
10/20/75**	.40		\$.10 for each 2 zones \$.20 seniors, students, handicapped

*first city council ordinance

**Public sector ownership

Primary Source — Wilbur Smith & Assoc. *Houston Transit Study* (1960)

Special thanks to Carol Lee, Librarian, Texas and Local History Department/Houston Public Library for her help in validating and tracing the more obscure dates in this chronology.

Transportation and Urban Development in Houston

Transportation and Urban Development in Houston, 1830-1980

Peter C. Papademetriou, Houston: Metropolitan Transit Authority of Harris County, 1982. 108 pp., 139 illus.

The scholarly study of the interrelationship between transportation and urban form has been long neglected. Planning professionals have largely concentrated on the analysis of transportation technology optimization while architects and urban designers have focused on the physical form of the city. In recent years, the growth of transportation problems in Houston and the obvious impact of the freeway system on development patterns have generated increased interest in this interrelationship but until the publication of Peter C. Papademetriou's *Transportation and Urban Development in Houston*, its history had never been written.

The pioneering quality of Professor Papademetriou's work cannot be overestimated. When he began, the archives of transportation-related materials for Houston were mostly uncatalogued and no comprehensive bibliography of such materials existed. Thus, this book must be regarded as particularly significant because it has established a framework for the study of transportation and urban geography for the southeast Texas region. It is the work to which future researchers will refer.

The field may have been neglected because the story is so difficult to trace. Multiple issues—technological, financial, political and social—are involved and myriad personalities on local, state and national levels have important roles.

Although Professor Papademetriou begins his narrative in 1830, the major threads of development appear in the

1880's and 1890's. Two separate developments are significant—mass transportation and individual transportation. The rise of the electric street railways following Frank Sprague's construction of the first trolley system in Richmond, Virginia in 1887, was an expression of the first development. By 1890, 51 cities had operating trolley systems. In Houston, the electric street cars began operation in 1891. By 1910, near the height of the proliferation of electric street railways across the United States, Houston had more than 50 miles of trolley line. The development of individual transportation technology was initiated about the same time. The automotive experiments of the 1890's succeeded in producing only a few vehicles regarded as toys for the rich, but the application of mass production and the appearance of the Model T in 1908 signaled the spectacular rise of individual automotive transportation in this country. In concert with this technological advance was the rise of the "Good Roads" Movement, initially a product of the bicycle craze of the 1890's, but given its ultimate direction by the appearance of the automobile, automobile clubs, and a need for streets, roads and highways for auto travel.

The extension of the first trolley lines in cities led to the first major burst of suburban growth in the United States. Today the shape of such cities as Boston, New York and Philadelphia reflects the form of the street railroads even though many of these have disappeared. Houston, in contrast, remained a small city through the first decades of the 20th-century, with a population which did not reach 400,000 until the 1940's. By the time the significant growth of Houston began, mass transit was in decline and the decentralized form of the city resulted from a total automobile orientation. As Professor Papademetriou demonstrates, in the 1950's and 1960's decentralized auto orientation was regarded as the wave of the future. The construction of freeways, pushed through parks and stable communities, was heralded as the height of progress. The dependence of the Houston economy on the consumption of motor fuels reinforced the belief in freeway development, automobile transportation and the decentralized city. In the 1960's and 1970's, the freeways generated their own city form producing Houston's unique combination of linear and multi-nodal development.

Mass transportation in the form of diesel buses (after the phaseout of electric street railways in Houston in 1940) never became a significant influence on the form of the city. Instead, buses followed in the wake of the decentralized sprawl with route extensions resulting in increasing mileage but often decreasing patronage. As the peak of Houston freeway construction was reached about 1970, the bus system, nearing financial collapse, was beginning to suffer from physical deterioration as well. Public ownership, viewed as the option of last resort, came in 1973, but physical deterioration of the bus system accelerated until the system was in near ruins by 1978.

The decade of the 1970s was marked by changing attitudes toward mass transportation in Houston due to the failure of the freeways to handle Houston's tremendous growth and the recognition of limits on the availability of fossil fuels necessary to serve the decentralized city. This change was clearly shown by the August 1978 vote creating Metro.

This complex story is somewhat difficult to follow in the text, if only because it has so many interwoven threads to which this review cannot do justice. The story is aided considerably by the 139 illustrations provided by Professor Papademetriou, including maps, charts, photographs, advertisements and magazine covers, which combine to demonstrate how people of each period viewed their environment and what they perceived as issues in city planning and transportation systems development. Unfortunately, some of the maps have not reproduced well and can be difficult to read, but this is a minor flaw. In addition, Professor Papademetriou assumes his readers will have at least a cursory familiarity with Houston. Without this, it might be difficult to follow the references to various locations, although the central themes and major points will still be clear.

This book is a significant addition to any collection of Houston history and must be regarded as essential reading for those who wish to understand the historical background of Houston's transportation network and its unique urban form.

Jeffrey Karl Ochsner