# The Los Angeles Downtown People Mover

**EXECUTIVE SUMMARY** 

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Moving People in Los Angeles

April, 1980

# PREFACE

Filty years ago Henry Ford declared: "The City is dead—we shall solve the city's problem by leaving the city." Those who might have agreed with Henry Ford then, must question his wisdom today. The problems of the city, including noise, congestion, pollution, energy and the lack of open space, have descended upon the suburbs as well. Today, many are realizing that there is no escape from urban problems, and that future success of the suburbs is dependent on dealing with the many needs and problems of the major city centers.

The Los Angeles Cownsown People Mover is a single but necessary element of a comprehensive regional transportation system terving downsown Los Angeles, the oldest and largest city center in the region. The People Mover is needed to effectively complement and structure the shape of downtown, to help create the desire for more people to work and live in downtown, as well as give people the ability to get around in downtown. The People Mover will help return downtown streets to people and the type of people activities that cities and societies are really all about.

## PEOPLE MOVERS: A Proven Technology

People movers are an innovative type of public transportation service. Since 1971 the seventoen systems operating within the United States have collectively transported over 300 million pastengers safely, reliably and efficiently.

A people mover is like an elevator operating in a horizontal rather than vertical direction. It is a system of actomated vehicles operating on a fixed guideway. The guideway can be located adjacent to developments—much an elevators operate on the exterior of buildings—or it can be incorporated directly into developments. The people mover incorporated into the hotel facility at Disneyworld in Florida is an example of guideway integration within a major development. Other examples of station integration exist in Detroit's Fairlane Shopping Center and at airports including Seattle-Tacoma,

Tampa Bay, and Dullay-Fort Worth, Passenger vehicles stop at stations along public rights of way or within building lobbies. Access is usually provided to stations. at the second story level by means of elevators, escalators and stairs. People mover vehicles vary in size and carry between 20 to 100 passengers. Vehicles. can be coupled together to form trains and generally travel at speeds up to 30 miles per hour. Such speed is adequate for typical people mover applications where stations are spaced 2 to 4 blocks apart. Vehicles have no exhaust emissions and are relatively quiet. They are powered by electrical energy and thus are not dependent upon a continued supply of fossil fuels. People mover systems have the capacity to carry upto 15,000 passengers per hour per direction, Because vehicles are flush with the loading dock they are fully accessible to the elderly and handicapped.



Disneyworld Hotel, Florida



Pearfridge, Hawaii

Since 1971 the seventeen systems in operation throughout the United States have transported over 300 million passengers safely, reliably and efficiently. Dependability of people mover service is remarkable. The Dalfan-Fort Worth airport system in particular serves as proof. This system, operating since January 1974, averages over 3 million vehicle miles per year and has had a service availability rate of over 96 percent. Safety and security are provided by means of both personnel and electronic surveillance and control systems.

The people mover systems in operation have carried 300 million passengers without a single fatality incident due to system operations.

Not only do people movers offer urban areas many opportunities for improving the effectiveness of transit service, they also have the capability for reversing the unfavorable trend in public transit operating costs. The annual national transit deficit is presently around \$3 billion-an increase of 400 percent during the past decade. As the Urban Mass Transportation Administration Associate Administrator for Research and Development has pointed out-"Automated people movers are probably the one (if not the only one) alternative that can cover maintenance and operating costs from non-tax revenue sources, and still provide transit service levels far exceeding those alternatives requiring a driver for each vehicle for each shift of operation." People mover systems now in operation provide efficient dependable service at moderate operating cost levels.

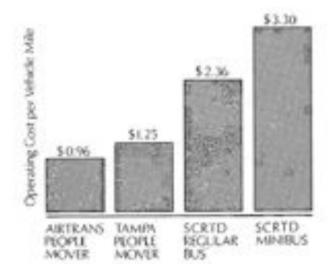
"Automated people movers are probably the one (if not the only one) alternative that can cover maintenance and operating costs from non-tax revenue sources..."



Miami Airport, Florida



Dallas/Fort Worth Airport, Texas



## THE LOS ANCELES DOWNTOWN PEOPLE MOVER WILL HAVE AREAWIDE BENEFITS

The Los Angeles People Mover Program is designed to address distribution needs of citywide transportation service as well as circulation needs of downtown Los Angeles. The program has two major elements; one element is regional intercept facilities for bus and train transfers and auto parking; the second element is the people mover which will link the intercepts to downtown and provide considerably improved access to activity centers within downtown.

The regional bus intercept and auto/park facilities will be located at Union Station and Consention Center. These facilities will function as regional transportation centers and will provide direct access to travel along six major corridors served by the following freeways; Pasadena, Santa Monica, Harbor, Pomona, Santa Ana and San Bernardino. Also the El Monte Busway will be extended directly into the Union Station bus intercept. Additional busways are being planned for the Santa Ana, Harbor, and proposed Century Freeways.

Union Station will become a major transfer point for bursway patrons as well as commuter rail and Amtrak wsers to reach downtown. These regional bus intercepts will also provide more efficient transfer service to thousands of bus riders who use downtown only as a transfer point. Today these people must come into the downtown area to transfer between buses. Tomorrow they will transfer at the regional bus intercept facilities which are strategically located at the fringe of downtown—thus eliminating unnecessary travel time on congested downtown streets.

Provision of auto/park facilities at the Convention Center and Union Station intercept sites will enable downtown to meet its future parking needs without creating further traffic congestion. The People Mover system includes locating 3,750 reasonably priced spaces at the fringe of downtown. Auto communers can then park their cars and transfer to the People Mover to reach their final downtown destinations. Locating parking at the fringe of downtown is an effective way of achieving environmental improvements for the pedestrian and allowing those who must drive an opportunity to reduce their parking costs.

The element that will enable these bus intercept and auto/park facilities to function successfully is the automated People Mover. This system will be 2.9 miles long and will have thirteen station stops. These stations will provide access to many of downtown's activity centers. In fact, the People Mover will serve about 1,500 businesses located within a five minute walking time of the thirteen stations.



1 st. and Broadway looking east toward City Hall

# THREE STEPS TO YOUR DESTINATION

Ride an Express Bus, Train, Carpool or Vanpool to Downtown



Transfer at the Intercept



And Ride the People Mover



# THE PEOPLE MOVER, ONE PART OF A REGIONAL TRANSIT DEVELOPMENT PLAN FOR LOS ANGELES

Intercept Regional Trains, Buses and Autos at Fringe Areas and Provide Downtown Service by Means of Automated Transit



## CONVENIENT PARKING



#### CONVENIENT TRAIN TRANSFER



#### CONVENIENT BUS TRANSFER



#### WHO WILL THE PEOPLE MOVER SERVE?

About 8,000 people currently live along the People Mover route. This figure will increase considerably with construction of 1,100 apartment units for the elderly and handicapped on Hill Street, 850 market rate condominiums on Bunker Hill, and 400 market rate condominiums in South Park. Construction has already begun for the elderly and handicapped apartment units and should be completed by 1982. Final plans for both the Bunker Hill and South Park condominiums have been approved and construction should begin within the next year.

Today, over 111,000 people work in the People Mover service area. By 1990 this will increase to over 147,000 people.

The Propie Mover will also serve a large visitor population. These are business people and tourists who reside temporarily in the 6,000 hotel rooms that already exist along the People Mover route.

About 1,500 businesses operate along the People Mover service area. Some of these are major establishments such as The Broadway, Robinson's, and Grand Central Market. But most businesses are of the smaller variety and include 400 retail, 400 general service establishments, and 110 restaurants. These businesses pay a considerable portion of the \$7 billion annual payroil generated by downtown and spent throughout the City and County of Los Angeles.

Although a considerable portion of the land in the service area is devoted to storing automobiles, even today there is deficiency of parking spaces along the West Side of downtown. Because of this shortage, parking costs have increased dramatically, and in some places the daily charge is over \$7, representing a 25 percent increase in the past year, As mentioned.

the People Mover will provide parkers the opportunity to use more reasonably priced parking at the fringes of downtown.



Looking north toward the Pershing Square station

By 1990 the people mover will provide service to 147,000 employees, 12,000 residents, and 1,500 businesses in the service area.



Convention Center station and parking structure looking east from the Convention Center

#### PEOPLE MOVER ROUTE



#### PEOPLE MOVER PATRONAGE 72,400 RIDERS PER DAY

Because the People Move: will provide service to so many downtown opportunities, there will be about 72,400 riders using the system each day by 1990. This total patronage estimate is comprised of three different types of trips. Each day 34,200 trips will be made by people who transfer between bases and the

People Mover for their commute to and from downtown; a total of 12,500 trips will be made throughout the day by people who will use parking provided at. Union Station and Convention Center stations; a total of 25,700 trips will be made daily for travel that begins and ends within the downtown area, i.e., leach and shopping trips, meetings, and trips between the Convention Center and hotels.

## WHERE PEOPLE RESIDE WHO WORK IN THE CBD, 1975

AREA OF RESIDENCE	PERCENT	NUMBER
San Gabriel Valley	17.6 •	31,699
Wilshire/Hollywood	14.0 *	25,131
Glendale/Burbank	10.2 .	18,435
East/Northrast	9.5	17,107
South Bay	9.1 *	16,445
West Central L.A.	8.7	15,585
San Fernando Valley	8.6	15,523
South Central L.A.	5.5	9,899
Mid-Cities	4.9 .	16,445
West L.A.	4.8	8.724
Other Counties	3.8 .	6,907
Central City	3.2	5,802
	99.9	180,052

# 55.1% From outside the City of Los Angeles

# APPROXIMATE STATION-TO-STATION TRAVEL TIME IN MINUTES Afternoon Peak Hour, 1990

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Linear Station	Ė	2	à	4	5	14	12			7	10	10	13
- Federal Building	2	-	1	3	3	33	m,	7					111
Little Tokyo:	3	1	=	В	3	11	19				7		100
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Mill Street		3	2	1	-	F)	7	3	2			3	9
Busher Hist			à		1	=	4	3	4	3		3	
World Trade Center	p		4	3	1		=		*	4	3		10
5th and Figueroa		2		3	3	3	1		1	0	1	2	4
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Pening Square	15	11	w			7		3	11	S		4	
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9th and Figures	Sh.		٠	P			à	7			T		9
Convention Center	19	ia.		٠	,	4			-2				-

## THE PEOPLE MOVER WILL PRO-VIDE SIGNIFICANT BENEFITS

# No Operating Subsidy Required

Today's citywide transit system operates by means of ever increasing tax subsidies. During the 1977 fiscal year alone the Southern California Rapid Transit District received \$122 million from tax revenues; \$108 million went for operations. One major long term cost savings of the People Mover is that it will not require general tax subsidies. The financial program is designed so that operating revenues estimated at \$4,77 million\* per year are derived from users of the system-through the fare box, parking, leases and through private sector funding. In March, 1979, both the Los Angeles Area Chamber of Commerce and the Central City Association endorsed the creation of a benefit assessment district by the City of Los Angeles for the purpose of funding \$1.3 million\* annually towards the operations of the People Mover. People Mover service can be implemented in other downtown centers without an increased drain on City, County, State, and Federal tax funds for transit operations. People Movers, in downtown and elvewhere throughout the City, will pay for themselves.

# Savings to Regional Bus System

Operation of the People Mover will yield cost savings as well as considerable economic benefits. Analyses indicate that at least \$3 million\* in capital costs and \$3 million\* in annual operating costs will be saved by enabling more efficient use of the freeway bus system. Under today's conditions those buses would have to function much as local buses and self-distribute their patrons on congested downtown streets. Freeway bus service is very successful, however, up to one third of total operating time is often spent on downtown streets rather than in providing commuter service between downtown and other City centers.

# Employment

Other benefits exist in terms of economic stimulus. Operation of the People Mover will generate 167 million in wages during the construction phase alone. Almost half these wages will be paid to laborers.

# Economic Impact

Once operating, People Mover service will reinforce the economic strength of downtown. It will generate \$515.2 million in additional retail sales by 1990, It will also reinforce downtown's contribution to the general tax base. By reinforcing development trends the People Mover will help yield cumulatively another \$8.8 million by 1990 in local property tax revenues.

The people mover will provide service to about 1,500 businesses within a 5 minute walk of the thirteen stations. These businesses include 400 retail, 400 general service establishments, 110 restaurants, and 6,000 hotel rooms.





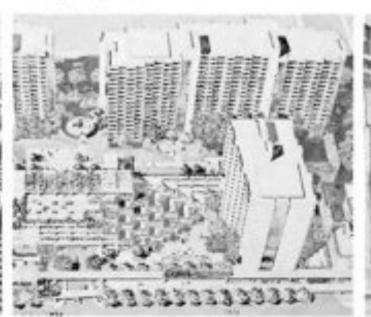






# **ECONOMIC BENEFITS**

Planned with other ongoing private and public investment, the People Mover will reinforce existing development trends. It is already inducing additional development in downtown.

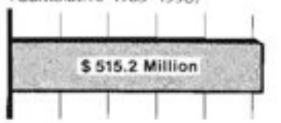




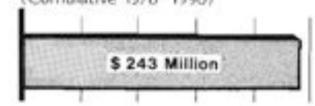
EMPLOYMENT DUE TO CONSTRUC-TION OF THE PEOPLE MOVER

\$67 Million

# RETAIL SALES INCREASE DUE TO THE PEOPLE MOVER (Cumulative 1983-1990)

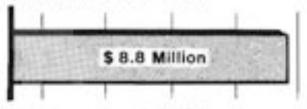


VALUE OF REAL ESTATE DEVELOP-MENT DUE TO THE PEOPLE MOVER (Cumulative 1978 - 1990)



LOCAL TAX REVENUES GENERATED BY INCREASED ECONOMIC ACTIVITY

(Cumulative 1978 - 1990)



All the above charts are in 1980 dollars

#### SOCIAL BENEFITS

The economic benefits resulting from new development in downtown and implementation of People Mover service will create additional employment for 8,200 people in the Central City. Strengthening downtown employment opportunities in a key factor in successfully implementing housing programs for the Central City Core and adjacent comresunities.

Housing redevelopment programs that are interrelated with downtown planning are located in the Pico-Union, Normandie, and Chinatown neighborhoods.

In addition to these projects which are located in communities adjacent to downtown, there are three in-town housing projects that lie within the People Mover corridor. These specific projects which are briefly described herein are South Park, Bunker Hill and Little Tokyo.

## South Park Planning Area

Implementation of the People Mover will encourage the realization of housing and related facilities in the South Park area. Housing plans for this area have been approved for 400 residential units for families, single persons, and elderly persons. The project will consist of townhouses, condominiums, recreational facilities and retail space.

## Bunker Hill Planning Area

In addition to reinforcing economic development on Bunker Hill, the People Mover will provide good transit service to the existing and future residential population. Today there are over 700 rental units on Bunker Hill. Plans to make this area a complete multiuse commercial and residential neighborhood include development of additional housing and related commercial activities. Construction has begun on a range of housing units, including 1,100 units for the elderly and handicapped, and 1,000 market-rate condominiums. Both projects will be ready for occupancy in 1980 and completed in 1982.

Future plans are to provide approximately 900 additional market-rate residential units in the Bunker Hill area.

## Little Tokyo Planning Area

The People Mover will also provide direct transit service to Littile Tokyo, the economic, social and religious center of the largest Japanese community in the United States. Since City Council approved redevelopment activities early in 1970, three hundred units of low-income elderly housing have been provided. An additional 100 units for low and moderate income families will completed by 1981.

Future plans are to provide an additional 200 units of low and moderate income family housing in Little Tokyo.

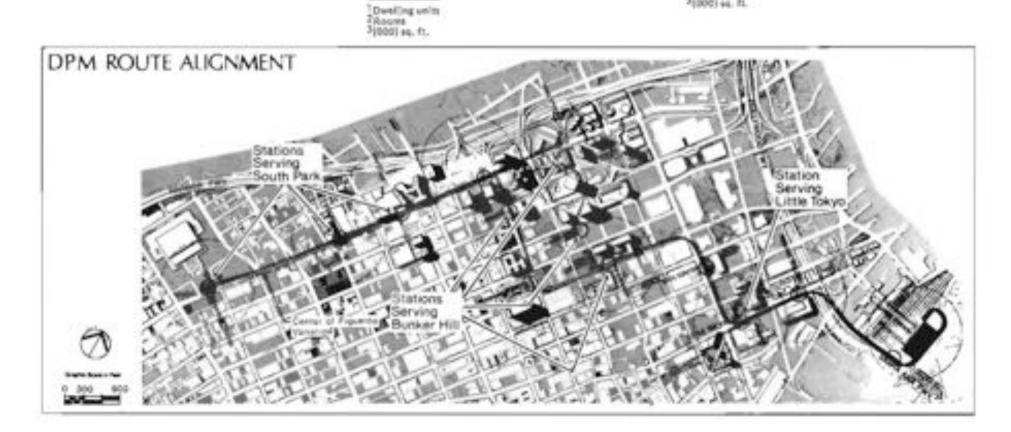
> Planned with ongoing housing programs, the people mover will increase accessibility of downtown residents to employment, social services, shopping and recreational opportunities.

BUNKER HILL Design for Development - 1990

LAND USE	CURRENT	1990
Residential 1	712	3,612
Hotel <sup>2</sup>	1,500	2,400
Retail <sup>3</sup>	300	720
Office <sup>3</sup>	2,800	10,520
Industrial <sup>3</sup>	65	65
Cultural <sup>3</sup>		225

# LITTLE TOKYO Design for Development - 1990

LAND USE	CURRENT	1990
Residential <sup>®</sup>	500	800
Hotel/Motel <sup>2</sup>	450	750
Office <sup>3</sup>	300	600
Retail <sup>3</sup>	300	550
Dwelling units Rooms 3(000) ea. ft.		



# THE PEOPLE MOVER IS PART OF THE CITIES TOTAL DEVELOP-MENT

In time, people movers may become to activity centers what today's elevators are to high-rise office buildings. Such integration of people movers into the total development of our city centers requires coordinated planning and, where possible, joint development.

There are unique economic and institutional conditions in downtown Los Angeles which are making joint development of the Downtown People Mover and new private construction a reality.

Following are several examples where joint development contracts were negotiated to provide for integration of the People Mover with the adjoining buildings:

- SECURITY PACIFIC BANK PLAZA-1972 easement through building for the guideway.
- WORLD TRADE CENTER-1975 easement above building for the guideway and a station.
- ANGELUS PLAZA~1977 easement adjacent to building for the guideway. and a station.
- WELLS FARGO-1979 integration of People station with the building's plaza level.
- CROCKER CENTER-1979 easement and tunnel shell for guideway through subterranean garage and reconstruction of existtimnel under Hope Street.

These negotiated joint development agreements also are providing a portion of the People Mover capital costs, representing a true partnership between government and private enterprise.









WORLD TRADE CENTER







# ACTIVITY CENTERS IN THE LOS ANGELES REGION THAT ARE POTENTIAL CANDIDATES FOR PEOPLE MOVERS



#### THE PEOPLE MOVER CAN BE REP-LICATED IN OTHER CENTERS

The economic impacts of a People Mover are significant not just because they can be achieved in downtown Los Angeles but because they can be replicated in other activity centers. The General Plan adopted by the Los Angeles City Council and the Los Angeles County General Plan set forth a public policy that directs growth towards numerous self-contained centers that provide a concentrated variety of activities. The transportation policy being initiated in downtown, with the assistance of state and federal funding commitments, represents a fiscally sound approach to providing public transportation services to these centers, thereby making them in reality self-contained.

# WHY THE DOWNTOWN PEOPLE MOVER?

For years urban planners have dreamed of relieving downtown traffic congestion by implementing some sort of elevated transit system. Traffic is seen as being in major conflict with the single evopose of a downtown-to provide a quality environment for social interaction. Downtowns are for people-not for automobiles. However, the dilemma has always been how to reduce downtown's dependence on the auto without reducing the number of people in downtown. Some cities have attempted to implement severe restrictions on autos, such as establishing auto-free zones. These attempts have generally not been successful unless an alternative means for access is provided. As illustrated in this report, people movers are a viable alternative to the auto. Their characteristics are much more in tune with the needs of a high-density people-oriented activity center. They are safe, owiet. non-polluting and unobtrusive; and they avoid conflict with pedestrian movement.

The Los Angeles Downtown People Mover will be effectively linked to other elements of the regional transportation system. And its integration into existing and new development will provide a convenient, if not exciting, means of travel for commuters and visitors in Downtown Los Angeles.

#### WHY NOW?

Few opportunities arise for integrating new public and private developments into one. This is particularly true with new technology. It took 40 years, for example, before changes in city structures permitted the elevator to catch on. However, downtown Los Angeles provides a unique opportunity. Over \$1.35 billion of new development is currently in progress. Most of this development—offices, housing, hotals and retail establishments—will be completed in the

mid-1980's. Design and construction of this development and the People Mover are being coordinated so that the public and private facilities are effectively integrated.

In addition, the El Monte Busway is being extended to the People Mover facilities at Union Station. This extension will be under construction soon and become operational in conjunction with the People Mover. The interrelation between the People Mover and other active public and private development give significance to the early completion of the project. With the commitment of local, State and Federal funds in hand, the City of Los Angeles will begin construction of the People Mover in 1980 and begin operation in late 1983.



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Acres view of 5 th and Especies St. Station Showing Spire Angelesis



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Civic Center Station Looking Northeast to City Half

# TECHNICAL APPENDIX

PEOPLE MOVER CAPITAL COST (All Costs in Millions of Inflated Dollars at 7% per Annum)

The second secon	IONS OF
Vehicles	\$23.6
System Equipment	24.1
Guideway	31.6
Stations	20.2
Right-of-Way	13.2
System Testing	1.8
Project Management	5.2
Contingency Reserves	10.1
TOTAL- PEOPLE MOVER CAPITAL COSTS (1982)	\$129.8

#### CONVENTION CENTER INTERCEPT FACILITY

Design and Construction	12.0
Right-of-Way	3.6
Project Management	0.7
Contingency Reserves	1.6
TOTAL— CONVENTION CENTER INTERCEPT (1982)	X17.9

#### UNION STATION INTERCEPT FACILITY

Right-of Way Project Management	1.0
Contingency Reserves TOTAL	- 24
UNION STATION INTERCEPT (1982)	127.3
TOTAL SYSTEM*	\$175.0

# \*(Inchares 129.2 Million Escalation to 1982 enthroint of sonstruction)

#### CAPITAL FUNDING (Millions of Inflated Dellars)

#### PEOPLE MOVER:

en a caracter of the	
Federal UMTA Section 3	103.6
State Proposition 5	14.2
Local Land Contributions	12.0
Total	129.8

#### CONVENTION CENTER INTERCEPT FACILITY

Federal UMTA Section 3	14.5
State Proposition 5	1.7
Local Land Contributions	1.7
Total	17.9

#### UNION STATION INTERCEPT FACILITY

Federal Aid Interstate	25.0
State \$8 1879	2.3
Total	27.3

#### TOTAL FROGRAM SUMMARY.

Federal UMYA Section 3	118,1
Federal Aid Interstate	25.0
State Proposition 5	15.9
State \$8 1879	2.3
Local Land Contributions	12.0
Local Cash Contributions	1.7
Total	\$175.0

## OPERATING COSTS (All costs in 1978 dollars)

90
4,000
5,000 5,000
5,000
8,000
9,000
3,000
9,000
5,000

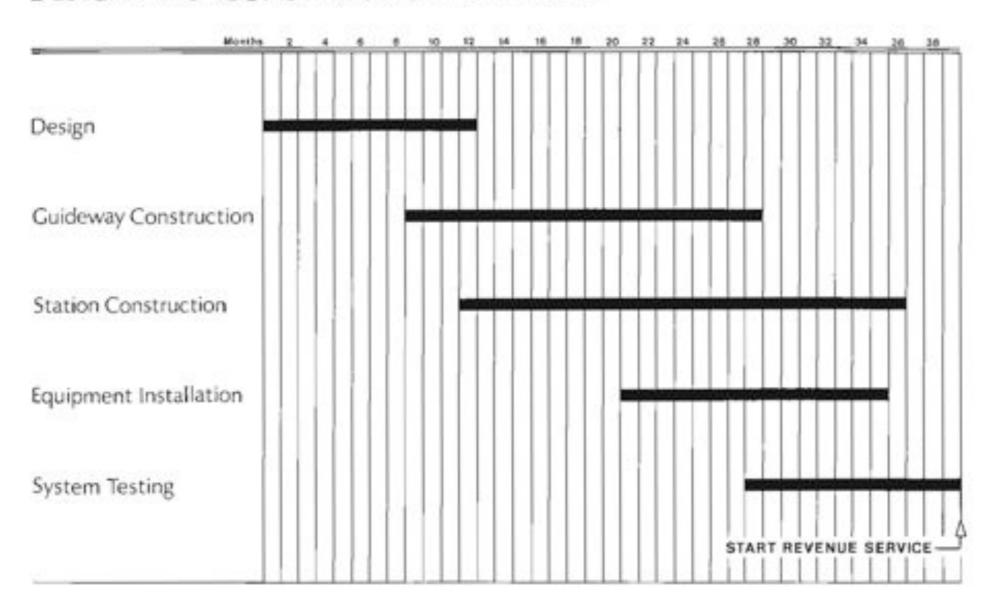
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(Millions of 1978 Dollars)	FISCAL YEAR 1989-1990
FARES PARKING LEASES PRIVATE SECTOR	\$2.10 0.75 0.63 1.29
TOTAL REVENUES LESS OPERATING COST	\$4.77 4.44
NET OPERATING CONTINGEN	ICY 10.33

#### INTERCEPTS

Convention Center Parking	165,000	
Union Station Parking	120,000	
Bus Stations	100,000	
TOTAL INTERCEPTS	\$385,000	
TOTAL SYSTEM	\$4,440,000	

# DESIGN AND CONSTRUCTION SCHEDULE



#### REPORTS PREPARED BY THE LOS ANGELES DOWNTOWN PEOPLE MOVER PROGRAM INCLUDE:

#### PHASE I STUDY DESIGN

Study Design

Goah and Objectives

Community Participation

#### PHASE II ANALYSIS OF SYSTEM ALTERNATIVES

Moving People in Las Angeles: A summary Report

Summary Environmental Impact Assessment and Response to Issues

Las Angeles Prople Mover: A Walk Along the Route

Citizens Advisory Panel Report

Residents View Public Transportation

Endorsement of Downtown Propile Mover Proposal

#### PHASE III PRELIMINARY ENGINEERING AND DESIGN

Community Participation Report, November, 1978

Final Environmental Impact Report, November, 1978

A Report with Recommendations to Mayor Bradley and the Los Angeles City Council on the Los Angeles Downtown People Mover, March, 1979

Final Environmental Impact Statement, April, 1980

This report provides information on the Los Angeles Downtown People Mover, an automated, elevated guideway transit service. The report is part of a continuing effort to inform and involve the public in design of the City's transit service. It contains a summary of key facts about the People Mover and activities connected by this service. TA 1207 L32

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The Los Angeles downtown people mover

ONE GATEWAY PLAZA 15th Floor LOS ANGELES, CA 90012

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