

THE DOWNTOWN SEATTLE TRANSIT PROJECT:
IS A TUNNEL THE APPROPRIATE ALTERNATIVE?

by

ELIZABETH LAUREN GOTTERER

Bachelor of Arts
University of Washington
1982

SUBMITTED TO THE DEPARTMENT OF URBAN
STUDIES AND PLANNING IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER IN CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

May, 1988

(c) Elizabeth Lauren Gotterer

The author hereby grants to M.I.T. permission to reproduce and to
distribute copies of this thesis document in whole or in part.

Signature of Author _____

Department of Urban Studies and Planning
May 13, 1988

Certified by _____

Peter Cook
Visiting Lecturer
Thesis Supervisor

Accepted by _____

Donald A. Schon
Chair
Master of City Planning Committee

MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

AUG 16 1988

Rotch LIBRARIES

THE DOWNTOWN SEATTLE TRANSIT PROJECT:
IS A TUNNEL THE APPROPRIATE ALTERNATIVE?

by

ELIZABETH LAUREN GOTTERER

Submitted to the Department of Urban Studies and Planning
on May 13, 1988, in partial fulfillment of the
requirements for the Degree of Master in City Planning.

ABSTRACT

This thesis examines the public planning and decision making processes leading to the choice of a dual-mode transit tunnel as the solution to a congestion problem in the downtown of the city of Seattle, Washington. It outlines the chronology of the processes, concentrating on the critical period between March 1981 and November 1983. It identifies the issues which emerged as central in the debate about what the most appropriate alternative for the Downtown Seattle Transit Project was.

I analyze the public process lead by Metro, the municipal agency whose responsibilities include the operation of transit in Seattle and King County. I assess whether the public involvement techniques used by Metro were effective in eliciting the input of the general public into the processes. I conclude that, despite Metro's successful use of numerous public involvement techniques, there was little opportunity in the process for certain affected parties to make their wishes known.

Thesis Supervisor: Peter Cook
Title: Visiting Lecturer

Acknowledgements

Though I think I have often had a tendency to be a rather ungrateful wretch, I am hereby turning over a new leaf. I want to thank my advisor, Peter Cook for taking the time to guide me and the two other transportation devotees in the D.U.S.P. class of 1988. I am afraid that he could have had no idea what he was getting himself into when he agreed to be our thesis advisor.

Various old friends of Baltimore origin, whether they were there in Baltimore, here in Boston, or in various and sundry other locales, provided me with the emotional support which helped me to continue working even when it was most difficult. My old Seattle friends were always there for me, even if most often at the other end of a long distance telephone call. The folks at Metro were those who originally inspired me to get a planning degree. New M.I.T. friends, will, I hope, join the ranks of my old friends.

My entire extended family--my aunt, uncle, and cousins--have provided me with support as I have worked on completing my degree. My grandmothers have been inspirations, even now when they are both well into their eighties. My brothers have, through their lives, given me a new perspective on my own life. My parents, all of them, have encouraged me in almost every endeavor that I have undertaken, including this one. My sister, Rebecca, deserves special recognition for being patient with me even when I was most difficult to live with.

TABLE OF CONTENTS

CHAPTER	PAGE
1. INTRODUCTION	2
A. PHYSICAL CONTEXT OF SEATTLE	2
B. ROAD TRANSPORT SYSTEM	7
C. WATER AND AIR TRANSPORT	9
D. RAILROAD TRANSPORT	11
E. POPULATION GROWTH, THE REGIONAL ECONOMY, AND EMPLOYMENT	11
F. TRANSIT IN SEATTLE	13
a. THE HISTORY OF METRO	13
b. PRESENT TRANSIT SYSTEM	16
2. THE TUNNEL CONTEXT	19
A. THE TUNNEL CONTEXT	20
B. PHASE I	20
C. PHASE II	23
D. PHASE III	23
E. PHASE IV	24
3. THE TUNNEL DECISION	27
A. MARCH 1981-AUGUST 1981	28
B. SEPTEMBER 1981-FEBRUARY 1982	31
C. MARCH 1982-AUGUST 1982	34
D. SEPTEMBER 1982-FEBRUARY 1983	35
E. MARCH 1983-AUGUST 1983	35
F. SEPTEMBER 1983-NOVEMBER 1983	38
4. THE ISSUES EMBODIED IN THE TUNNEL DECISION	40
A. THE ISSUES	41
B. CONGESTION	42
C. GROWTH AND DEVELOPMENT	46
D. CHOICE OF TECHNOLOGY	52
E. TRANSIT USER AESTHETICS, SAFETY, AND SECURITY	55
F. COST AND FUNDING	59
G. DOWNTOWN CHARACTER	60
H. NEIGHBORHOOD EFFECTS	65
I. BENEFICIARIES	66
5. PUBLIC INVOLVEMENT IN THE PLANNING AND DECISION MAKING PROCESSES	70
A. PUBLIC INVOLVEMENT IN THE PLANNING PROCESS	71
B. TECHNIQUES FOR PUBLIC INVOLVEMENT	72
C. THE EFFECTIVENESS OF EACH PUBLIC INVOLVEMENT TECHNIQUE	79
D. OVERVIEW OF THE PLANNING PROCESS	83
E. SUGGESTIONS FOR ADDITIONAL PUBLIC INVOLVEMENT TECHNIQUES	86
6. CONCLUSIONS	89
A. WINNERS AND LOSERS	90
B. THE LENGTH OF THE PROCESS & THE METRO COUNCIL STRUCT.	91
C. RAIL IN SEATTLE	91
D. TWO VISIONS OF SEATTLE	92
APPENDIX-METHODOLOGY	94
BIBLIOGRAPHY	98

LIST OF FIGURES

	PAGE
FIGURE 1: SEATTLE AREA/VICINITY MAP	4
FIGURE 2: SEATTLE CBD BASE MAP	6
FIGURE 3: SEATTLE AREA ROAD MAP	8
FIGURE 4: THE STRUCTURE OF THE METRO COUNCIL	17
FIGURE 5: TUNNEL CHRONOLOGY	21-22
FIGURE 6: CONGESTION	45
FIGURE 7: GROWTH AND DEVELOPMENT	53
FIGURE 8: CHOICE OF TECHNOLOGY	56
FIGURE 9: TRANSIT USER AESTHETICS, SAFETY, AND SECURITY	58
FIGURE 10: COST AND FUNDING	61
FIGURE 11: DOWNTOWN CHARACTER	64
FIGURE 12: NEIGHBORHOOD EFFECTS	67
FIGURE 13: BENEFICIARIES	69

Chapter 1: Introduction

Introduction

Seattle Metro is currently supervising the construction of a dual-mode transit tunnel running under the downtown area of Seattle, Washington. The tunnel is the result of a lengthy planning process for what is known as the Downtown Seattle Transit Project. The public planning process leading to the decision to build the tunnel, the interest groups that played a part in the process, and the issues which surfaced in the course of the process are the subjects of this paper.

Specifically, I examine in the paper the degree to which Metro's process allowed the public the opportunity to influence the outcome of the decision-making. I examine both the chronology of the process and the public involvement techniques used by Metro and use them to assess what the primary factors were that lead to the process outcome, the decision to build a bus tunnel.

Though the process took place over the course of more than five years, this paper concentrates on the thirty-two month period of the process from March 1981 to November 1983. This period is the most crucial one for examining the factors which are the focus of this paper.

Physical Context of Seattle

The planning process in question must be placed in a context. The wider context for this planning process is the city of

Seattle. Seattle is located in King County, in the Puget Sound area of western Washington. (See Figure 1) Seattle is the financial, cultural, and economic center of the region known as the Pacific Northwest, that region including the four states of Washington, Oregon, Montana, and Idaho.

Seattle is a city, which, like many cities, is situated on a large body of water. More specifically, Seattle is located on Elliott Bay, a natural deep water harbor on the Puget Sound. Seattle is a city, which, like Rome, is a city built upon hills.

The fact that Seattle is located on water and built upon hills, may seem insignificant. However, the physical location and geological structure of the city, in some sense, dictate its potential. They dictate its limitations as well.

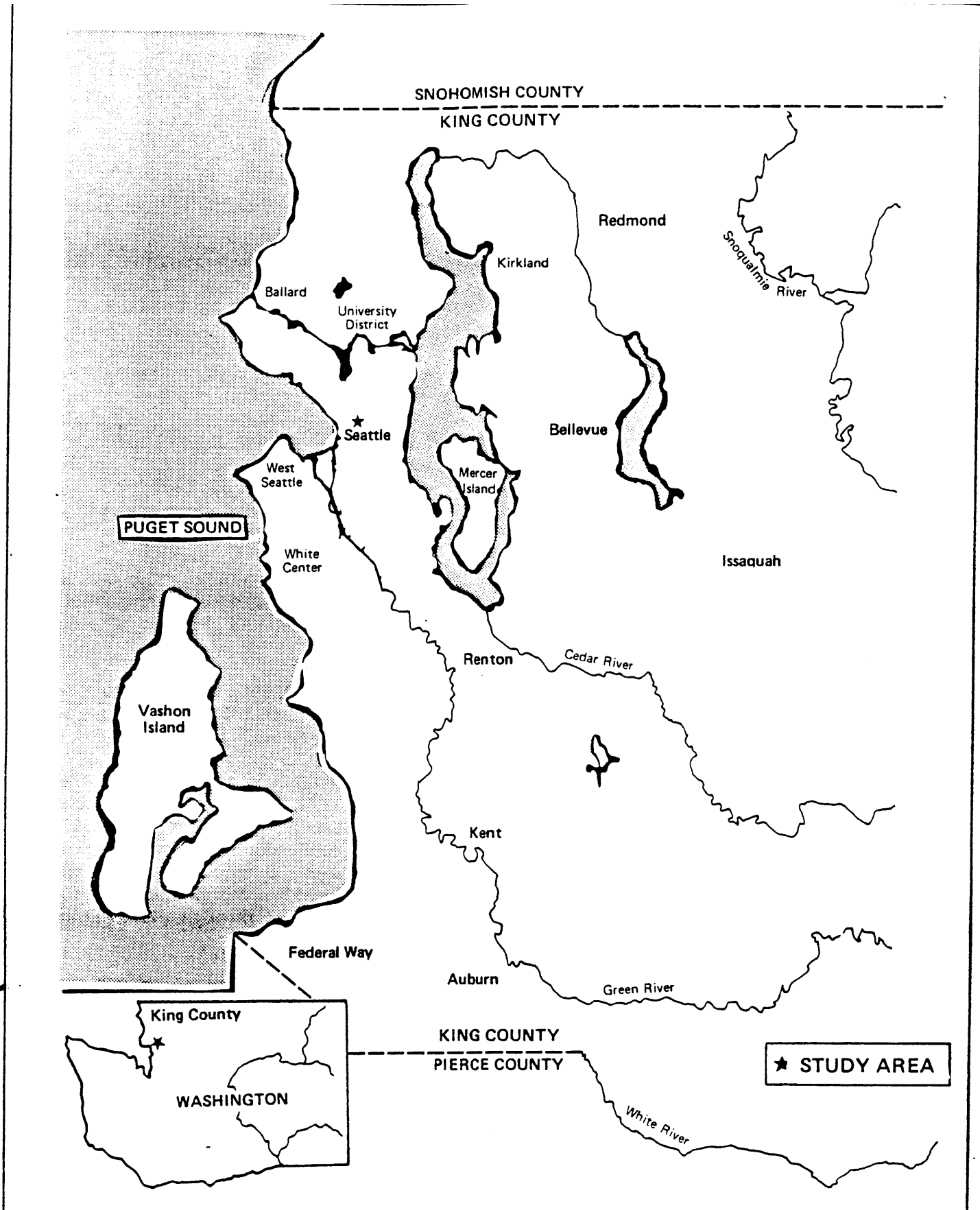

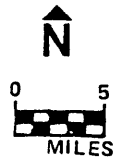


FIGURE 1
Area/vicinity map

 **DOWNTOWN SEATTLE TRANSIT PROJECT**

 **METRO**

 **City of Seattle**

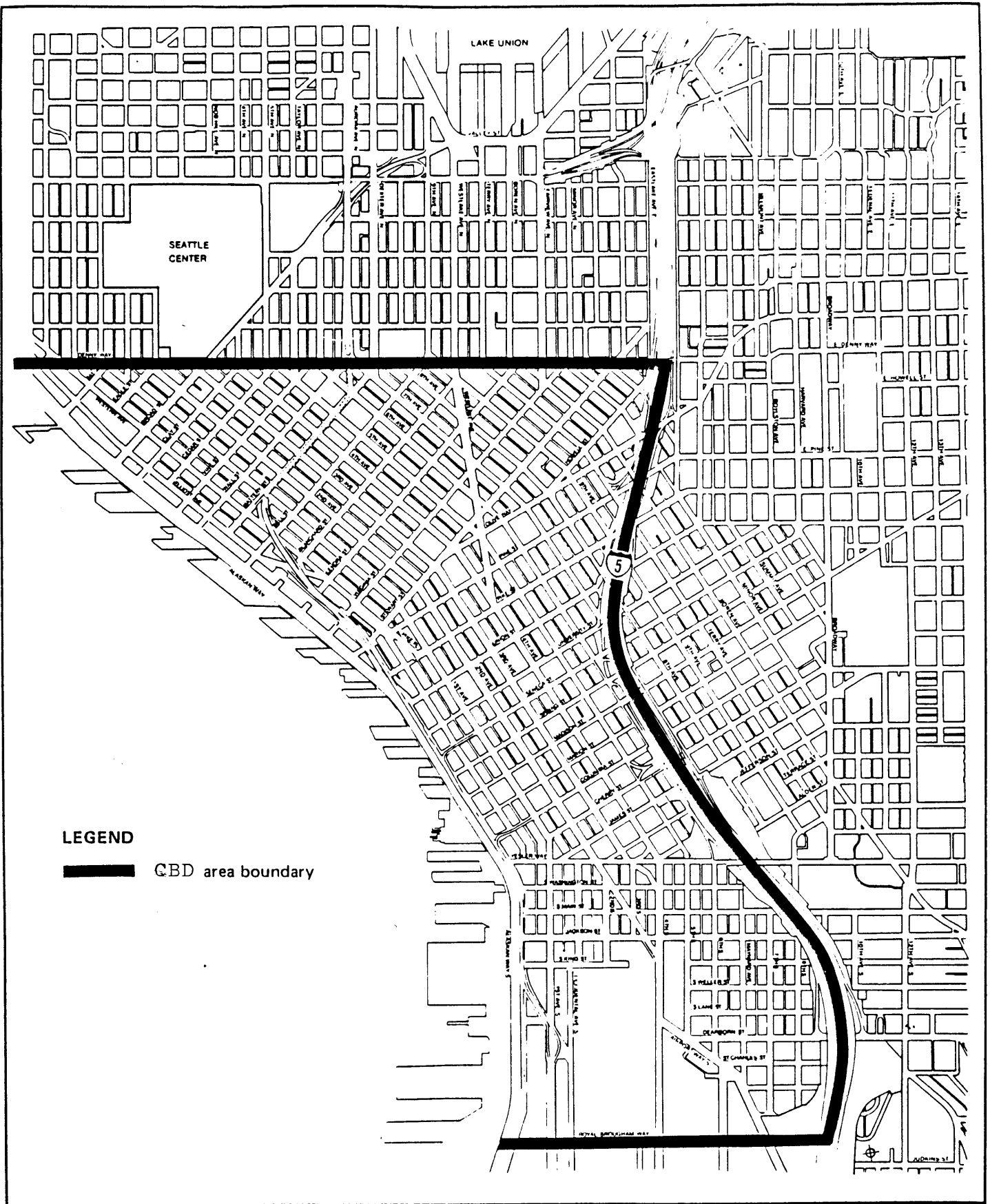


Seattle's downtown area, or more specifically, its central business district (CBD) is the primary focus of most of the discussion to follow. (See Figure 2) Bounded on the west side by Elliott Bay and on the east side by the north-south alignment of Interstate 5, the CBD is spatially constrained. North-south travel in the CBD is limited to five major streets. East-west travel within or through downtown is not facilitated by east-west streets, as they are extremely steep, some with grades up to 18%.¹

Because Seattle's CBD is not bounded on the north and south in the same way that it is bounded on the east and the west, the north and south ends of downtown extend beyond the cramped quarters of the CBD. Picture the downtown area of Seattle, as seen from the air, as the cinched waist of a full-figured woman, a woman often described in local guide books as having an hourglass figure.

I stress again the importance of the physical attributes of Seattle's downtown because these attributes ultimately play a part in dictating what options the city has. To further situate Seattle's CBD within the physical context of the Puget Sound area, I describe the road transport and other links which connect the CBD to the rest of the region.

¹ Department of Transportation. Urban Mass Transportation Administration with Municipality of Metropolitan Seattle and the City of Seattle. Draft Environmental Impact Statement for the Downtown Seattle Transit Project in Seattle, King County, Washington (March 1984), p. S-1.

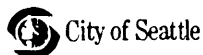


LEGEND

 CBD area boundary



**DOWNTOWN
SEATTLE TRANSIT
PROJECT**



0 250 500
FEET



FIGURE 2
CBD base map

Road Transport System

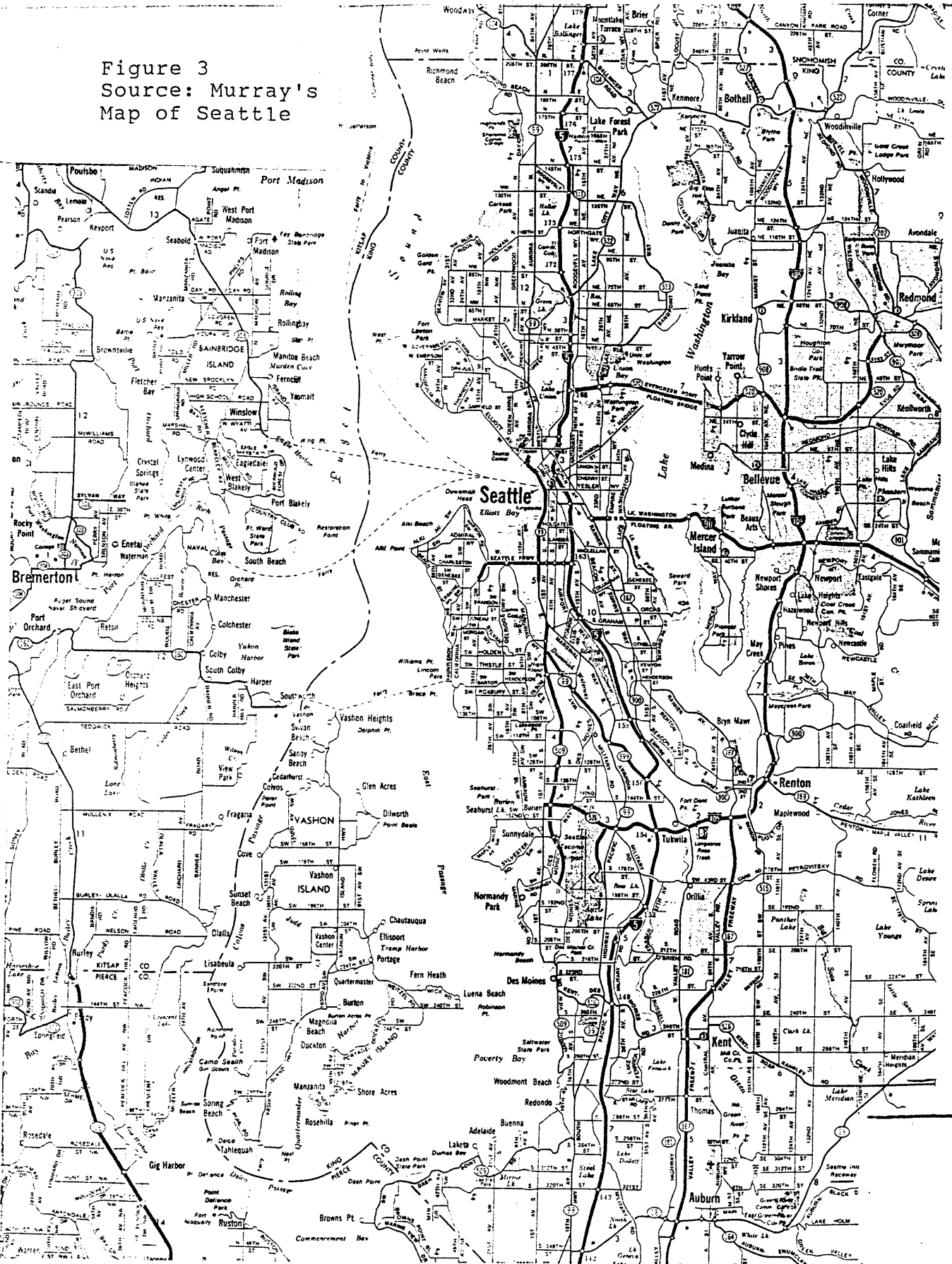
The road transport system of Seattle-King County is relatively simple. (See Figure 3) There are two principal north-south thoroughfares, one on either side of Lake Washington; in most locations, they are parallel to each other. That on the west side of Lake Washington is Interstate 5; it slices through Seattle proper, east of the downtown area and Elliott Bay. It is the west coast's principal thoroughfare between Mexico and Canada and points in between, essentially serving the same role in west coast road transport that Interstate 95 does in the east. The major thoroughfare on the east side of Lake Washington is Interstate 405.

The other principal north-south thoroughfare is Interstate 405, which passes through communities south and east of Lake Washington. In the north end of Lake Washington, Interstate 405 eases gradually westward. Eventually, it connects with Interstate 5 in Lynnwood, the community just north of the King County/Snohomish County line.

An additional major thoroughfare which has a north-south alignment is State Highway 99, which, until the construction of Interstate 5 in the nineteen-sixties, was the only interstate highway in the area with a north-south alignment. Highway 99 runs through downtown Seattle along the waterfront. It is west of and parallel to Interstate 5 and Interstate 405.

There are two major east-west thoroughfares in King County, Interstate 90 and state highway 520. The older and southernmost

Figure 3
Source: Murray's
Map of Seattle



of the two, Interstate 90, is the same highway which originates in Boston as the Massachusetts Turnpike. Within the state of Washington, Interstate 90 links Seattle with Ellensburg and Spokane, the city centers of central and eastern Washington respectively.

Interstate 90, then, serves as a link between Seattle and the rest of the nation and the state. But more significantly, it serves as a primary link between Seattle and the suburban communities of Mercer Island, Bellevue, and Issaquah, on the east side of Lake Washington. Interstate 90 crosses Lake Washington on a floating bridge.

The newer and northern-most east-west thoroughfare is State Highway 520, extending from Seattle, also on a floating bridge, across Lake Washington, through Bellevue and Kirkland to the community of Redmond. Unless one prefers a detour around either the north or south ends of twenty-four mile long Lake Washington, Interstate 90 and Highway 520 serve as a driver's only road links to the east side of Lake Washington, known simply as "The Eastside" to area residents.

Water and Air Transport

Elliott Bay, Seattle's harbor, is a deep water port with depths of up to six hundred feet. The Port of Seattle has continuously expanded and modernized its facilities over the past twenty years, such that it now has sixteen commercial piers, forty-six ship berths which can handle ships up to 1400 feet in

length, and large expanse of warehouse and other storage space. The Port's growing status as a center for international trade is reflected in recent port statistics. Between 1985 and 1986, the Port of Seattle increased its share of international trade on the West Coast from 25 to 30 percent. ² Imports and exports coming through the Seattle Customs District in 1986 were valued at \$14.8 billion and \$13.3 billion, respectively.

The Seattle-Tacoma International Airport (Sea-Tac), located 13 miles south of downtown Seattle, is operated by the Port of Seattle. One of the nation's most modern and efficient air traffic facilities, "it is served by 13 all-cargo carriers and 30 scheduled commercial airlines, including 11 international carriers." ³ In 1986, Sea-Tac handled 157,000 metric tons of air freight. It also handled more than 13 million air passengers in 1986, up from approximately 8 million in 1980. ⁴

The Washington State Ferry system operates regular passenger/automobile ferry service in and out of the Port of Seattle. Ferry service is also expanding, as the number of passengers served rose from 14 million in 1980 to 17.7 million in 1986. ⁵ The Seattle CBD is the destination of thousands of workers, students and others who commute daily on Washington

² Jim Mayfield, Economic Review, Seattle Chamber of Commerce, (Seattle, Washington, 1987), p. 5.

³ Introducing Seattle, Seattle Chamber of Commerce, (Seattle, Washington, 1987), p. 4.

⁴ Ibid.

⁵ Mayfield, p. 4.

State ferries to downtown ferry terminals from the suburban island community of Bainbridge Island, the Kitsap peninsula city of Bremerton. During the summers, downtown Seattle ferry terminals are the termini for Washington State ferries serving the Canadian city of Victoria, Vancouver Island. Seattle also serves as the southern terminus of the Alaska Marine Highway System which operates year-round passenger/automobile ferry service to and from Alaskan cities.

Railroad Transport

Seattle is the northwestern terminus for Amtrak passenger service. Amtrak operates daily service from Seattle to Chicago, Denver, Salt Lake City, and Southern California. In addition, Seattle serves as a major rail freight transfer point.

Population Growth, the Regional Economy, and Employment

While the U.S. population grew 11.5 percent between 1970 and 1980, the population of the Pacific Northwest grew 26.5 percent. Though the 1980 population of the city of Seattle was 493,846, down 7 percent from the 1970 figure of 530,831, the population of the Seattle SMSA had grown to 1,606,765, up 13 percent from 1970. By 1986, the population of Seattle had dropped 1 percent, but the SMSA had climbed to 1,746,300, up 10 percent from the 1980 figure.⁶ Since the Seattle central business district is the preeminent business center for the Pacific Northwest and Alaska,

⁶ Introducing Seattle, p. 3.

its growth has been and will continue to be strongly influenced by the level of economic activity it serves."⁷

For a long time, the economy of Seattle and the Pacific Northwest region was resource-based, relying primarily on the lumber, fisheries, and food-processing industries.⁸ During World War II years, the local economy became more manufacturing-based, specifically due to the presence of the Boeing Company, manufacturer of airplanes.⁹ Boeing, manufacturer of the 747, and the new 757, and 767, to this day, stands as one of the giants in the aerospace industry both within the United States and the world. "About 50 percent of the commercial aircraft capacity operational in the world was built by Boeing, and there are good reasons to expect that this ratio will continue for the foreseeable future."¹⁰

While Boeing has certainly maintained its prominent position in the Puget Sound regional economy, the economy has diversified, reducing the dependence of the area on Boeing. Not only has Seattle and the Puget Sound region become less dependent on Boeing in particular, it has become less dependent on the manufacturing sector in general. Three-fourths of the Seattle

⁷ Bob Shindler, Downtown Seattle Transit Project Technical Report: Travel Forecasting, Puget Sound Council of Governments, (Seattle, Washington, November, 1983), p. 7.

⁸ Ibid., p. 1.

⁹ Roger Sale, Seattle, Past to Present, (Seattle: University of Washington Press, 1976), p. 187.

¹⁰ Shindler, p. 7.

economy is involved in non-manufacturing activities. ¹¹

The growth pattern in the Puget Sound region in general and in Seattle-King County in particular is such that population growth has been occurring primarily in the suburban areas. Employment in King County grew (51%) from 432,000 jobs in 1970 to 651,000 jobs in 1980. 23,000(11%) of this gain of 219,000 jobs were jobs which went to the Seattle CBD, while 68,000(31%) went to the rest of the City of Seattle, and the remaining 128,000(58%) went to King County outside the City.¹²

Transit in Seattle/King County

The History of Metro

The legislation that originally provided for the creation of the Metro Council of Seattle-King County was passed by regional voters in 1958. At that time, voters declined to authorize Metro to take on transit development or regional planning functions. It was authorized only to operate in the capacity of a regional water and sewage treatment agency. ¹³ In the mean time, the Seattle Transit System ran up deep deficits, operating transit services within the City, and the privately owned Metropolitan Transit Corporation did the same, operating service outside the City limits.

Despite the inclusion of the Metro bond issue on several

¹¹ Introducing Seattle, p. 4.

¹² Shindler, p. 6.

¹³ Sale, p. 200.

ballots in the preceding decade, King County voters did not give Metro the authorization to expand its functions to those of transit development and regional planning until 1972. In September 1972, King County voters approved a levy of a three-tenths of one percent sales tax so as to allow Metro to establish and begin operation of a transit system. The voters having granted their approval, Metro immediately took an assertive stance and aggressively took on the task of getting a successful and innovative transit system operating. It was able to do this with the help of the largest single capital grant ever made to an all-bus system by the federal government. The grant "totaled \$124.3 million, with an initial increment of \$36.3 million."¹⁴

In the ten years following January 1, 1973, the day the system started operation, Metro developed an exemplary transit system, so exemplary that the American Public Transportation Association, in 1983, awarded it the first Public Transportation System Achievement Award. Metro did this, in part, by opening more than 50 free park-and-ride lots, with a total of more than 9,000 parking spaces, along major freeways and arterials, an endeavor no other bus system had undertaken so extensively. Other creative Metro strategies for transit included a "Ride Free" area downtown, the first fleet of articulated buses in the country, an extensive accessible service program, an expansion of the electric trolley system, and a part-time driver contract with

¹⁴ Bus Roots: The Ten Years of Metro Transit: 1973-1983, Municipality of Metropolitan Seattle, (Seattle, Washington, 1983), p. 10.

local 587 of the Amalgamated Transit Union.¹⁵

Metro was able to finance both its expansion and the above-mentioned creative strategies using an unusual funding arrangement. This arrangement is a state-local partnership passed by the Washington state legislature in 1969 for the benefit of Metro and other transit properties in the state. It allows Metro access to the Motor Vehicle Excise Tax(MVET) which is collected on all vehicles registered in King County.

As mentioned above, Metro has access to a state sales tax, raised by voters in 1980 from three-tenths of one percent to six-tenths of one percent. By 1983, Metro had received federal capital grants totalling more than \$190 million and operating grants totalling \$43 million, and yet, because of strong local and state support, federal operating grants have averaged less than 10% of the annual operating budget."¹⁶

During the ten-year period between 1970 and 1980, ridership doubled from an initial 32 million riders a year to 66 million riders a year. Sources say that half of the growth in ridership is due to the creative new approaches mentioned above and half of the growth was due to other factors such as increases in employment, real transit fares, and the limited availability of and the increase in the price of gasoline. By 1986, ridership had dropped to 63 million riders a year.

Metro, short for the Municipality of Metropolitan Seattle, is

¹⁵ Ibid., p. 6.

¹⁶ Ibid., p. 10.

a municipal corporation governed by a federation of local governments, the Metro Council, now a thirty-eight member council.¹⁷ The Council has a Transit Committee, which meets and makes recommendations for resolutions regarding transit, to be passed by the Metro Council as a whole. (See Figure 4)

The Council also has several standing committees, one of which is the Citizen's Transit Advisory Committee (CTAC). "This always-active group of transit advocates is appointed by the Metro Council on a district basis and numbers about 45 members and 18 alternates."¹⁸ The CTAC examines transit issues and sends resolutions to the Metro Council. While they are non-binding, they have a history of being accepted by the Council at large.

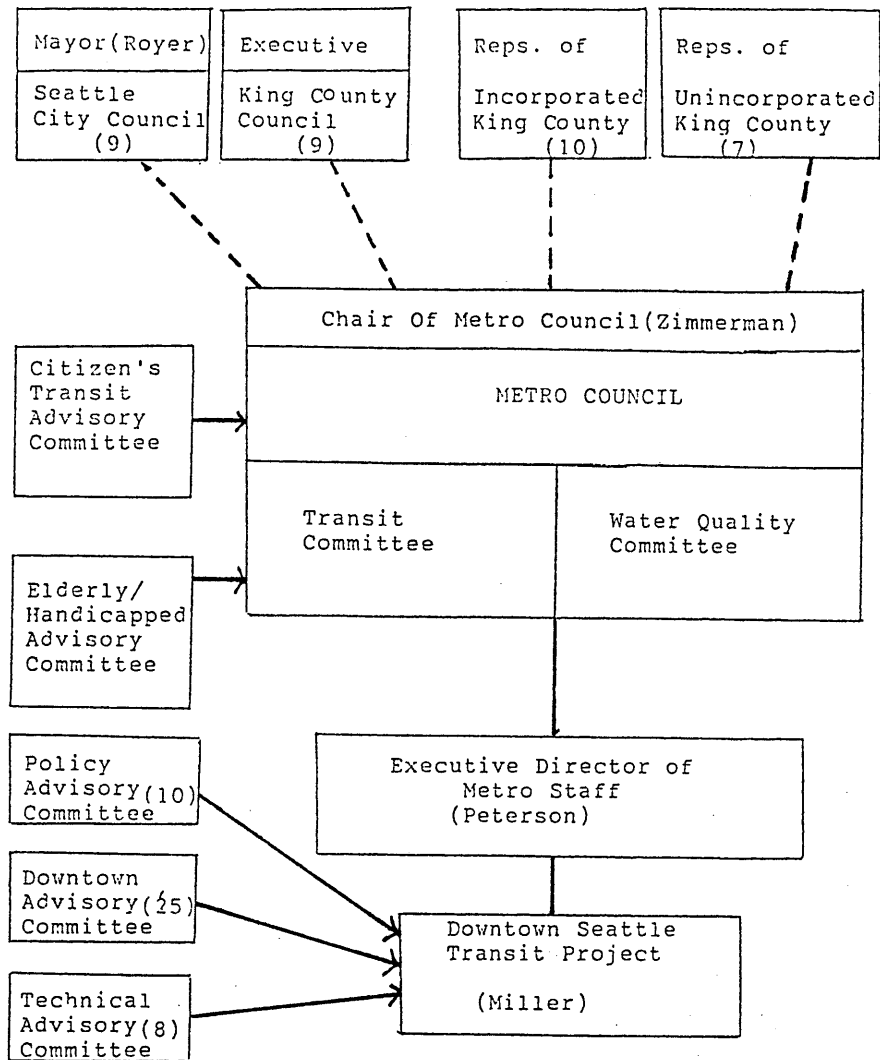
Present Transit System

Currently, Metro's transit system consists of approximately 175 routes, its service area covering 2128 square miles. As of 1986, the service area population was 1,361,700, and Metro served 63.2 million revenue passengers. Metro's fleet of 1,070 revenue vehicles includes standard buses, articulated buses, electric trolleys (trackless), and a Waterfront Streetcar. As of 1982, these vehicles operated 34,122,896 miles in 2,416,517 revenue

¹⁷ Ibid., p. 40.

¹⁸ Bus Roots, p. 29.

FIGURE 4: The Structure of the Metro Council



PAC members-

Charles Royer (chair)
 Jeanette Williams (chair of City Council Transportation Comm.)
 Gary Zimmerman (chair of Metro Council)
 Bob Neir (chair of Metro Council Transit Committee)
 Dan Barash (D.S.A.) James R. Ellis (D.S.A.)
 Joe Murphy (D.S.A.) Jon Runstad (D.S.A.)
 Milton Smith (D.S.A.) Neil Peterson (ex-officio)

DAC members-25 members of downtown business community, downtown property owners, and downtown residents.

TAC members-8 staff members of Metro, the City, UMTA, and WSDOT

- > -advises larger body.
- -belongs to larger body.
- -is subsidiary to larger body.

hours. Metro employed 2978 people.¹⁹

Downtown Seattle is the focus of the transit system, with 85 percent of all routes providing direct service to downtown.²⁰ Because downtown is the focus of the system, it serves as a major transfer point for routes which connect to communities all over King County. In 1980, 25 percent of daily trips to and from downtown and 40 percent of peak hour trips to and from downtown used transit.²¹

The pattern of public perception in North American cities is such that the regular use of public transit typically implies the low economic status of a user and/or confers a low social status on a user, but the pattern in Seattle is different. As the regional administrator of the Urban Mass Transportation Administration (UMTA) told me, in Seattle, "everybody rides the bus. It's clean, it's reliable, and it doesn't mark you as a member of the lower class to ride the bus." ²² One travels comfortably, quickly, and safely around the greater Seattle area, relying on Metro as primary means of transportation.

¹⁹ Ibid., p. 38.

²⁰ Shindler, p. 19.

²¹ Ibid., p. 17.

²² Interview by author, Seattle, Washington, January 1988.

Chapter 2: The Tunnel Context

The Tunnel Context

People in Seattle have been talking about the possibility of building a transit tunnel in downtown Seattle for a number of years. The idea goes back at least as far as the late nineteen-sixties when the discussion centered around the possibility of a heavy rail tunnel running through downtown Seattle.²³ However, it was not until the mid-seventies, when Metro staff started to work on the 1990 Transit Plan in an effort to contain downtown Seattle's increasingly worse congestion and concomitant noise and air pollution that the idea of building a downtown transit tunnel became a real possibility. (See Figure 5)

Phase I

In 1975, Metro launched its work on the 1990 Transit Plan. The 1990 Plan was an effort to define transportation goals for post-1980 Seattle-King County. The series of four studies which came out of this effort were the Metro TRANSITION documents. The first one in the series to emerge was "Metro TRANSITION-Phase I." Put forth in 1975, it outlined various potential alternatives for alleviating downtown Seattle's congestion problems. These alternatives covered the transportation spectrum all the way from exclusive transit lanes, extensions of the monorail left over from the 1962 World's fair, bus center and terminal options, to

²³ Walt Crowley and Elizabeth Kaye, "Downtown Seattle Transit Tunnel: Tunnel Vision or Transit Breakthrough?", Issue Brief, Vol. II, No. 7, Transportation, Municipal League Foundation, (Seattle, Washington, July, 1986), p. 4.

Figure 5: DSTP CHRONOLOGY

- March 6, 1975 Metro Council authorizes MetroTRANSITION planning process for post-1990 downtown Seattle.
- October 1976 UMTA indicates federal funds may not be used for studying rail alternatives for Seattle region.
- February 1977 Phase IV, the final one of the MetroTRANSITION planning process, begins, with Downtown Seattle Task Force, headed by Robert Buck, spearheading the effort.
- April 28, 1980 The Buck Report, final result of the MetroTRANSITION planning process is submitted, with the recommendation that a mall with terminals be constructed, as a mid-term alternative, followed by a bus tunnel, as a long-term alternative.
- March 19, 1981 Metro Council approves the 1990 Plan, but does not indicate approval of a particular alternative.
- April, 1981* Metro opens Downtown Seattle Transit Project office with Joe Miller appointed as Project Manager. Three committees, a Policy Advisory Committee, a Downtown Advisory Committee, and a Technical Advisory Committee are appointed to assist the project.
- August 6, 1981 Metro authorizes Memoranda of Agreement with the City and Puget Sound Council Of Governments for assistance with midterm EIS, outlining the alternatives which are to be included. Because it is still only considered a long-term alternative, tunnel alternative is not included.
- November, 1981 Neil Peterson, Executive Director of Metro, visits West Germany, noting the operation of dual-mode vehicles there.
- December 3, 1981 Metro Council approves first contract with CH2M Hill, outside engineering consulting firm, to do initial work necessary for EIS.
- December 14, 1981* Metro and City hold two public scoping meetings.

January 21, 1982 Metro Council authorizes the filing of a grant application for \$1.1 million in federal funds for technical studies of the alternatives.

June 3, 1982 Metro Council approves second contract with CH2M Hill, to continue with environmental and financial analyses necessary for EIS.

February 17, 1983 Metro Council approves another contract with CH2M Hill, this one for studies of a transit mall with close-in terminals as the mid-term alternative.

April 19, 1983 Policy Advisory Committee recommends the construction of a transit mall with terminals as a mid-term alternative.

April 21, 1983 Metro Council approves filing a \$1.5 million grant application for preliminary engineering studies for the project and sets a June 30 deadline for declaration of a preferred alternative.

June 9, 1983* Metro Council Transit Committee declines to declare a mall with terminals as its preferred mid-term alternative, instead adds tunnel to list of mid-term alternatives. Metro Council concurs with the action of the Transit Committee.

June 30, 1983* Self-imposed Metro Council deadline for declaration of a preferred alternative passes, without such a declaration.

September 22, 1983 Metro receives letter from UMTA requesting that a preferred alternative be declared by November 30, 1983.

October 6, 1983 Neil Peterson presents a tunnel, his preferred alternative, to the Metro Council.

October 31, 1983 City Council expresses preference for a bus tunnel with a Third Avenue and Pine Street alignment.

November 3, 1983* Metro Council declares a bus tunnel with Third Avenue and Pine Street alignment as its preferred alternative.

* denotes key decision point.

single and double-level bus tunnels.

Phase II

"Transit Alternatives Beyond 1980, Metro TRANSITION", a study looking closer at alternatives outlined in the earlier document but also including two additional alternatives, emerged in early 1976. The new alternatives were regional, one a 27-mile light-rail option, and the other, a 52-mile light-rail option. The Phase II study made no specific recommendations regarding which alternative should be pursued.

Phase III

During the second half of 1976, when work on a third study, "Results of Public Review of Transit Alternatives Beyond 1980, Metro TRANSITION Phase III", was nearing completion, an administrator from UMTA paid a visit to Metro. The administrator announced that the federal government would be unwilling to fund any transit feasibility studies which included rail alternatives. This message was in keeping with UMTA's long-standing preference for bus systems over rail systems and changed the direction that the study was taking.²⁴

From this point on, Metro confined its studies to bus-only alternatives. Consequently when "Metro TRANSITIONS Phase III", came out in October 1976, it was a document that looked in detail at three bus-only alternatives for downtown Seattle. The Phase

²⁴ Ibid.

III study was like the Phase II study in that it explored options but did not make recommendations.

Phase IV

The fourth and final phase of the 1990 Transit Plan, as the culmination of the three earlier phases, was an effort that involved input from parties outside of Metro's staff. These parties included the Downtown Seattle Association(DSA), a group representing downtown business people, downtown property owners, downtown residents, and other members of the downtown community.

A Metro Council committee working on Phase IV made a recommendation in February 1977 that ensuing work concentrate on downtown Seattle and downtown Bellevue. Being the two primary activity centers and two of the most congested areas in King County, any effort to define regional transportation alternatives would necessarily focus on them.²⁵

Shortly after the committee made this recommendation, in early 1978, the Metro Council and the City Council appointed a citizen's task force, the Downtown Seattle Task Force, to help further develop alternatives specifically for downtown Seattle. In April 1980, after almost two years of discussion, the Downtown Seattle Task Force forwarded its final report, the Buck Report, to the Metro Council and to the City.

The Buck report examined alternatives proposed earlier, but its real significance was its suggestion that a multi-stage

²⁵ Ibid.

approach be used for planning downtown Seattle transportation. The Task Force generated two new alternatives, each incorporating many features of earlier alternatives, and, each in keeping with its recommendation for a multi-stage approach. The preferred alternative of the Downtown Seattle Task Force was the "Integrated" alternative.²⁶ It included a transit/pedestrian mall as a mid-term solution, followed by terminals, and, finally, for the long term, a tunnel for light rail, or dual-mode vehicles.

The 1990 Transit Plan, then, was a series of documents discussing different mid-term(pre-1990) and long-term(post-1990) transit options culminating in the Metro TRANSITION Phase IV Buck report. Work on the 1990 Transit Plan lasted for five years, from mid-1975 to late 1980.

Despite the recommendations of the Buck report, there were still points of disagreement between Metro, the City and the downtown business community. The major one was that between Metro's Neil Peterson and Mayor Royer. Peterson was pushing for a tunnel. Royer was concerned primarily with bringing about the construction of a mall with terminals, but was resisting a tunnel.

During the course of fall 1980, DSA members met privately with members of both the City and Metro in an effort to arrive at a consensus. Though there was no unanimity, eventually they were able to agree that Metro should open a Downtown Seattle Transit

²⁶ Ibid.

Project(DSTP) office, and they agreed on the composition of three advisory committees to be appointed to DSTP. They were able to agree as well on the desirability of a mall with terminals, and the City was persuaded to give the go-ahead to a long-term tunnel alternative feasibility study. ²⁷

The result was that on November 17, 1980, by Resolution 26455, the Seattle City Council, with the concurrence of the Mayor, endorsed the 1990 Plan, indicating tentative approval of the "Integrated" alternative initially proposed by the Buck Report. Efforts, for the moment, would concentrate on the mid-term alternative, the mall with terminals. The tunnel, a long-term alternative would wait.

On March 19, 1981, the Metro Council stated simply that a solution to downtown's congestion problems would be priority for the 1980's. In keeping with this statement, it recommended that major capital improvements be made for transit in downtown Seattle. It did not, however, formally approve the adoption of a particular transit alternative.

²⁷ Unpublished working paper of Metro staff.

Chapter 3: The Tunnel Decision

Introduction

A bus tunnel was not even on the Metro Council list of mid-term alternatives; it was merely one of four long-term alternatives identified for further study in March 1981 by the Council. Yet, by November 1983, it came to be the "preferred [mid-term] alternative". I believe that the story of the transformation of the bus tunnel alternative from one of four long-term alternatives into the "preferred [mid-term] alternative" is the key portion of the story of the planning process.

March 1981-August 1981

In April 1981, Metro opened the Downtown Seattle Transit Project(DSTP) office. At that time, Neil Peterson, Executive Director of Metro, appointed Joe Miller, a former acting superintendent of Seattle City Light and Bellevue city manager, to serve as the project manager of the DSTP. ²⁸

Also in April 1981, Metro appointed those advisory committees previously agreed upon by Metro, the City, and the DSA, to assist DSTP staff with project planning and agency coordination. These committees were the Policy Advisory Committee, the Downtown Advisory Committee, and the Technical Advisory Committee.

The Policy Advisory Committee(PAC) was small. It had Charles Royer, Seattle's mayor, and also head of the Seattle City

²⁸ Downtown Transit Project: A report to the community, Municipality of Metropolitan Seattle, no. 1., (Seattle, Washington, October 1981).

Council, at the helm. Jeanette Williams, Chair of the City Council's Transportation Committee was the other representative of the City. Gary Zimmerman, as Chair of the Metro Council, was included. Robert Neir, the head of the Metro Council Transit Committee was the other Metro Council representative. Neil Peterson, as executive director of the Metro staff, was to be an ex-officio member of the PAC but was without voting privileges. Citizen and business representatives from the DSA were Dan Barash, James R. Ellis, Joe Murphy, H. Jon Runstad, and Milton Smith.²⁹

The Downtown Advisory Committee(DAC) was a larger committee. It was chaired by Dan Barash and included 25 members of the downtown business community, downtown property owners, and downtown residents, some of whom were also members of the Downtown Seattle Association. The Technical Advisory Committee(TAC) was made up of engineering and other technical staff from Metro, the City, the Washington State Department of Transportation, and UMTA.

Work on the project got under way immediately, though, upon examination of several written primary sources, it appears that the first five to six months of work on DSTP were done quietly, in house, and with little press coverage. The only event noted during that period, an event not particularly notable, was a briefing of the Metro Council by a Metro staff person on June 1,

²⁹ Rebecca Boren, "Metro and the City sign a cease-fire in the downtown transit war", The Weekly, (Seattle, April 27, 1983), p. 11.

1981. The message of the briefing was that local funds would keep the EIS and preliminary engineering work on schedule until federal dollars became available.

Sources indicate that on August 6, 1981, the Metro Council authorized Memoranda of Agreement with the City and with the Puget Sound Council of Governments (PSCOG) for assistance in the preparation of the EIS for the DSTP.³⁰ The four mid-term alternatives to be examined in the EIS were:

1. do nothing.
2. low capital cost alternative - additional exclusive bus lanes, freeway ramp revisions and an improved downtown circulation system.
3. transit mall; and
4. transit mall with terminals.

On August 17, 1981, the Seattle City Council approved Guidelines for Downtown Alternative Plans: Downtown Land Use & Transportation Project, a document produced by City staff. This document stated that "a permanent electric shuttle transit and pedestrian priority mall will be constructed" and that "permanent transit intercept terminals located at each end of the mall will be constructed... Planning and implementation of the mall and terminals will proceed in such a manner so as to preserve the option of and to investigate the earliest possible development of

³⁰ Unpublished working paper of Metro staff.

a closed-lid, non-diesel transit tunnel."³¹

Evidence exists for ongoing disagreement amongst members of the PAC about which alternative to support. The disagreement revolved around Metro staff's Neil Peterson's continuing push for a mid-term tunnel alternative and Mayor Royer's resistance to it. Peterson had the support of the downtown business community on his side. ³²

On August 24, 1981, Joe Miller reported to the PAC that, if Metro expected to receive UMTA funding for studies of the alternatives, the committee would have to reach a consensus, if for no other reason than to present itself publicly, at least, to UMTA as if in agreement. Miller indicated to the committee the advisability of linking mid-term and long-term alternatives in their funding proposals. If Metro did not, it risked losing certain UMTA funding for alternative studies.³³

September 1981-February 1982

At the September 3, 1981 Metro Council meeting, Joe Miller recommended to the DAC that work on the EIS for a mid-term alternative be completed, even as Metro staff continued work on defining a long-term alternative. A later discussion of the DAC, on October 1, 1981, centered around the City Council's prior

³¹ Guidelines for Downtown Alternative Plans: Downtown Land Use & Transportation Project, City of Seattle, (Seattle, August 1981), p. 18.

³² Boren.

³³ Unpublished working paper of Metro staff.

approval of the "Integrated" approach. Indeed, it was argued, the City Council had given its approval, but with the express stipulation that tunnel feasibility studies be completed before it could be chosen as the long-term solution.

The gist of these and other meetings in September and October of 1981 was that City officials were quite anxious to go ahead with a transit mall, but Metro and DSA members were still insisting on including a tunnel alternative whether for the mid-term or the long-term.³⁴

On December 3, 1981, the Metro Council approved an initial consulting contract with CH2M Hill, a national consulting engineering firm based in Bellevue, Washington, to start developing environmental and financial analyses of mid-term alternatives for a DSTP EIS. Joe Miller told the PAC on December 6, 1981 that the study of the mid-term alternatives would be funded by UMTA, but, because of the committee's inability to come to an agreement earlier, the study of the long-term alternatives would have to be locally funded. Even so, work on the two studies would be done concurrently.

In the mean time, Neil Peterson, had taken a trip to West Germany and while there, noted that most major cities have "some sort of grade-separated transit right-of-way".³⁵ He also took a look at dual-mode vehicles, "buses with the capability of

³⁴ Unpublished working paper of Metro staff.

³⁵ Downtown Seattle Transit Project report to the community, Municipality of Metropolitan Seattle, no. 4., (Seattle, May 1982).

operating on electricity or diesel fuel".³⁶

As part of the effort to meet federal and state requirements dictating public involvement in the planning and decision process, Metro, the City, and UMTA held two public scoping meetings on December 14, 1981. Examination of the scoping meeting rosters indicates that the more than fifty people present fell essentially into two categories. The first was that of people representing government agencies (their presence was requisite), and the second was that of private citizens whom, it can be assumed, were curious about the project. Members of the press were also present. There were few representatives of community groups present, at least not those who identified themselves as such.

Discussion at the meetings was primarily in response to Metro staff explanations of the four mid-term alternatives already under consideration. The DSTP office had been open for more than seven months, and Metro staff reviewed project history, costs, timetable, etc. for those present. People at the meetings voiced various concerns.

One concern voiced at the December 14 meetings was that proposed mid-term alternatives would not be compatible with long-term alternatives. An extension of that concern was the suggestion by several that Seattle move immediately to a light rail system instead of preserving rail as a long-term

³⁶ Ibid.

solution. 37

In the January 1982 DSTP newsletter, Metro announced a Metro staff Speakers' Bureau. In the next eighteen or so months, Metro speakers made 65 presentations, addressing more than forty such groups ranging from various local Chambers of Commerce to the Shriners.

March 1982-August 1982

A major topic of discussion at the PAC meeting of May 3, 1982 was the strategy of implementing staged mid-term and long-term alternatives. Mayor Royer expressed concern that construction of a mall with terminals, a mid-term alternative, not be held up by environmental or other studies of a bus tunnel, a long-term alternative, in progress at that time.

On June 3, 1982, the Metro Council approved another contract allowing CH2M Hill's environmental and financial analyses of transit mall alternatives to continue. A phenomenon which was called the "fatal flaw" of project implementation was discussed at the DAC meeting of June 10, 1982. The "fatal flaw" was the dubious long-run compatibility of the mall and tunnel concepts, and the dubious manageability of constructing both projects simultaneously. The entire framework within which alternative analysis had been done for the previous year needed serious consideration and revision.

37 Ibid.

September 1982-February 1983

Here again, during the next six to eight month period, there appears to have been a lull, not necessarily in activity or work accomplished, but in the amount of attention that DSTP was receiving from the press and the general public.

The next action of any note was the Metro Council's approval of another CH2M Hill contract on February 17, 1983. This contract authorized the consulting firm to do an analysis of a transit mall with terminals closer to the center of downtown than those which had previously been considered. This was interpreted by Mayor Royer and others as another Metro push for a mid-term tunnel alternative since a mall with close-in terminals was just a tunnel " 'with a piece out of it'." ³⁸

The only indication I have of what was happening behind the scenes is a February 28, 1983 staff memo to Joe Miller indicating the "possibility of a staff preferred alternative on the horizon." ³⁹ The logical inference from this mention of a staff preferred alternative is that staff work was already under way on what was in October 1983 to be presented by Neil Peterson to the Council as his preferred mid-term alternative, a bus tunnel.

March 1983-August 1983

On April 19, 1983, despite entreaties from Neil Peterson and some members of the downtown business community, the PAC

³⁸ Boren.

³⁹ Paul Casey, TSL. February 28, 1983.

recommended that Metro build a transit mall with peripheral bus terminals and internal surface circulation, and a federal grant be used for preliminary engineering for this alternative. This recommendation on the part of the PAC in favor of a mall was considered a major victory for Mayor Royer because it was the mall for which he and the other City representatives had been lobbying. And, yet, even after the PAC had made its recommendation, Neil Peterson made known his intent to keep the mid-term tunnel alternative alive, with a portentous threat that "the process is just beginning."⁴⁰

The Metro Council, two days later, on April 21, 1983, authorized application for a \$1.5 million federal grant, to be used for preliminary engineering for DSTP. Congress had already approved such funding for the project.⁴¹ At the same time, the Metro Council set itself a June 30, 1983 deadline for the identification of a preferred mid-term alternative.

Jon Runstad, president of the Downtown Seattle Association and downtown developer, addressed Bob Neir of the Metro Council in a letter dated May 31, 1983. In it, he urged Metro "to move the project ahead as expeditiously as possible in order to avoid the very negative effects that could be encountered by excessive congestion in Downtown and the possibility of 'band-aid' solutions such as contra-flow bus lanes or a diesel bus mall. We

⁴⁰ Boren.

⁴¹ Downtown Seattle Transit Project News, Municipality of Metropolitan Seattle, (Seattle, May 1983).

wish to adamantly reaffirm our opposition to such solutions... In addition, we would like to encourage an accelerated study and review of a long-range solution consisting of a tunnel through Downtown with intermediate stations." 42

On June 9, 1983, the Metro Council voted to accept the \$1.5 million grant, the application for which they had approved just a couple months earlier, in April, 1983. Also on that day, but more significantly, the Metro Council Transit Committee voted and rejected the declaration of a mall with terminals and/or a mall with close-in transit centers as the preferred mid-term alternative. The Metro Council concurred with the Transit Committee vote.

The fact that the Metro Council voted to include a bus tunnel as a mid-term alternative instead of voting to approve a transit mall with terminals as its preferred mid-term alternative was an overt sign that the tunnel advocates were making inroads. A bus tunnel, had, until that time, only been formally considered by the Council as a possible long-term alternative. The Council subsequently requested that technical analyses of a tunnel mid-term alternative be completed at the same level of detail as those completed for the other mid-term alternatives.⁴³ The June 30, 1983 deadline, which Metro Council had set itself for the declaration of a preferred alternative, passed without such a

⁴² Jon Runstad, TSL. May 21, 1983.

⁴³ Downtown Seattle Transit Project News: A report to the community, Municipality of Metropolitan Seattle, (Seattle, July/August 1983).

declaration.

September 1983-November 1983

During the months of August and September, the Transit Committee of the Metro Council met to discuss the DSTP, and the City Council did likewise. On September 22, 1983, Aubrey Davis, UMTA's regional administrator, sent a letter to Neil Peterson, requesting that Metro declare a preferred alternative by November 30, 1983.

On October 6, 1983, Neil Peterson made a presentation of his preferred mid-term alternative, a bus tunnel, to the Transit Committee of the Metro Council. A fourteen-page document which had been prepared by Metro staff, entitled Downtown Seattle Transit Project Preferred Alternative, and dated the previous day, was issued. It included descriptions and diagrams of an L-shaped electric-bus tunnel running under Third Avenue and under Pine Street, downtown circulation improvements, and street and sidewalk improvements for both Third Avenue and Pine Streets. In response to what had apparently been quite a convincing argument on Peterson's part, the Transit Committee requested that a resolution be drawn up declaring Peterson's preferred alternative as the Metro Council's preferred alternative.

In a Halloween day vote, the Seattle City Council followed the initiative set by the Metro Council and expressed its preference for a bus tunnel with a Third Avenue and Pine Street alignment and directed that a feasibility study for the same be started immediately. Though the tunnel story was by no means over on

November 3, 1983, an essential chapter was finished. On that day, the Metro Council voted, by Resolution 4243, to declare a transit bus tunnel its preferred mid-term alternative.

Chapter 4: The Issues Embodied in the Tunnel Decision

The Issues

Many of the specific issues subsumed in the decision to construct a transit tunnel underneath downtown Seattle are not issues unique to the tunnel, or to the city of Seattle, for that matter. The same issues are subsumed in decisions made in other locations, but, in Seattle, they are subsumed in the tunnel decision. The issues revolve, to a large degree, around the impacts, both primary and secondary, that the tunnel is expected to have on Seattle. However, they also revolve around the arguments made as to the necessity, or lack thereof, of some type of mid-term capital-intensive transportation intervention in Seattle's CBD.

I concentrate on these issues and the arguments made about each in this chapter. I describe the arguments as they were made to me by people I interviewed. They were people representing interest groups involved in the decision making and planning processes leading to tunnel construction. The issues fall roughly into eight different categories. They are:

1. congestion.
2. growth and development.
3. choice of technology.
4. transit user aesthetics, safety, and security.
5. cost and funding.
6. downtown character.
7. neighborhood effects.
8. the beneficiaries.

These issue categories are not easily divisible; they necessarily overlap with one another. Though I address each of them separately below, the reader will see how intertwined each issue is with each of the others.

There seems to be relatively little disagreement amongst interviewees about what the actual impacts of the tunnel will be. The most consistent pattern of disagreement is that between the City and Metro. Whereas the City seems to concentrate on the long-term impacts of the tunnel, Metro seems to concentrate on the short-term effects.

Aside from the fairly consistent disagreement between the City and Metro, much of the prevailing disagreement is with respect to the desirability of the tunnel impacts. If they are seen as undesirable, there is disagreement as to whether they might have been avoided, had the end result of the decision making process been a different one. If the impacts are seen as desirable, there is disagreement as to the beneficiaries of those desirable impacts.

Congestion(See Figure 6)

The congestion problem in Seattle's CBD was not insignificant, nor was it subtle. The view from office buildings downtown was no longer simply that of Washington State ferries slipping smoothly across Puget Sound or even of snow-covered Olympics, Cascades, or Mt. Rainier in the distance. The view was of "a wall of buses", a phrase used frequently to describe the

unbroken line-up of Metro buses crowding the CBD. Particularly during the peak morning and evening commute hours, the wall was indomitable. The wall extended the length of each north-south avenue downtown, making travel either along it or across it, by either pedestrian or vehicular traffic, extremely slow and difficult.

Here was Seattle, stuck in downtown traffic. There was no difference of opinion amongst interviewees about congestion in Seattle's CBD having gotten noticeably worse. Congestion was on the tongue tip of almost all. CBD congestion was being created both by "the wall of buses" and by other vehicular traffic, causing a significant increase in downtown trip travel time for both transit users and automobile users. In addition to causing an increase in CBD travel time, congestion was causing poor air quality and creating street level noise disturbance; downtown streets had become increasingly unpleasant for both drivers and pedestrians.

CBD congestion was having the effect of decreasing operating speed and schedule reliability on many Metro bus routes. As mentioned in the introduction, eighty-five percent of Metro bus routes provide direct service to downtown Seattle. Consequently, when the many buses running these routes became entangled in downtown congestion, they ran slowly, and their drivers were unable to maintain published route schedules.

Lack of schedule adherence was costing Metro millions of dollars a year in operating expenses, millions of dollars that

might otherwise have been spent by Metro either to expand bus service to new areas or to increase frequency and type of service to those areas already served. Lack of schedule adherence would spell doom for Metro's transit ridership because schedule adherence had been a major factor both in attracting new riders as well as in keeping current ones.

The CBD was the missing link in the otherwise free-flowing regional transportation network, some interviewees pointed out. Relatively low-cost transit improvements in the CBD had been suggested and approved; Transportation System Management (TSM) schemes such as exclusive transit lanes and transit contra-flow lanes were implemented. Indeed, at first, the congestion situation improved, but once again deteriorated. Major capital improvements for transit in the CBD had been suggested. How about a transit mall? Sure, a transit mall in downtown would be nice. Denver had one, somebody said. Dayton had one, someone else added. A transit mall was then under consideration.

A transit mall was limited however, as explained in the introduction, by the fact that downtown Seattle already had a very constrained supply of just that resource which a transit mall would demand: land, street surface, dedicated right-of-way. So, for several interviewees, a bus tunnel was the obvious answer. It would provide the dedicated right-of-way that Seattle's transit so dearly needed, without demanding from downtown that which it could not afford to give up, land-street surface.

Figure 6: Interest Group Positions on Congestion in 1983 ⁴⁴

	CBD congestion has gotten worse.		Tunnel will ⁴⁵ decrease CBD congestion.		Tunnel will decrease regional congestion.	
	Yes	No	Yes	No	Yes	No
Metro	X		X		X	
City of Seattle	X			X		X
UMTA	X		N.A.		N.A.	
PSCOG	X		N.A.		N.A.	
ATU	X			X		X
Downtown Neighborhood Advocacy Group	X			X		X
Land Use Lawyer	X			X		X
Consultant-UW Professor	X			X		X
Other concerned citizens	X			X		X

⁴⁴ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue in question or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative shows mixed feelings. The interview sample is not statistically representative.

⁴⁵ All interviewees agreed a tunnel would decrease congestion for a period of time. Metro interviewees concentrated on that period of time.

Growth and Development(See Figure 7)

What, the reader asks, was causing the congestion in Seattle's CBD? Growth was and still is the answer. Growth and development were the most prominent issues addressed by the interviewees. Growth and development, of course, can be of numerous varieties, each of which may be present in varying degrees, depending on circumstances. Growth and development can be increases in construction, either for housing, or for industrial or commercial purposes. They can be increases in employment. They can be increases in population density. These varieties of growth and development can be coexisting or not. Growth and development, in the circumstances of the Seattle CBD, came in all of these varieties to one degree or another, and all these varieties of growth and development potentially have an impact on the transportation infrastructure, transit, and their adequacy.

Several of the people whom I interviewed were of the opinion that growth and development are inevitable, whether or not the growth and development in question is that in downtown Seattle or that in the suburbs of King County. For these people, growth and development were basic assumptions, ones which could not be assumed away in any of various scenarios which might be posited. Growth and development, for this group, were not phenomena that had to be avoided, protested, or even minimized, as they were for others whom I interviewed. Growth simply was inevitable.

Since growth and development for these interviewees was inevitable, the principal challenge for them seemed to be simply

those of growth and development management. Growth and development had to be managed so that they would occur when and where they would be most useful, most beneficial, and most efficient. Such management leads this group to conclude that a tunnel would be the most appropriate solution to the CBD congestion problem. Their reasoning went like this: The bus tunnel, if built, would, of course, be downtown. Growth and development, of all varieties, would concentrate around the tunnel. Growth and development had been occurring, and were continuing to occur in the CBD in any case, and so, it seemed to them, the most desirable pattern of growth and development was that which would concentrate them where they already seemed to have a propensity to concentrate, in the Seattle CBD, and around a transit tunnel.

The interviewees who reasoned this way were not of the opinion that concentrated growth and development in the CBD would necessarily eliminate growth in the suburbs, but several seemed to think that growth in the CBD would lead to slower and thereby, ultimately, less growth in the suburbs. Their reasoning went essentially like this: Offices of many of the region's most important cultural, commercial, financial, legal and governmental institutions were already located downtown. Office building construction was occurring and would continue to occur in the CBD. New businesses would locate in these new downtown office buildings, old businesses, if not already there, would relocate there as well. The result would be that the CBD would become

even larger as a regional employment center than it already was. A bus tunnel would cause employment growth to continue to concentrate where employment had traditionally concentrated, in the CBD.

A large group of King County residents would continue to commute to work places in the CBD from their homes in the suburbs. Moreover, construction and rehabilitation of housing in those areas of downtown zoned for such use would come about, and those people who lived downtown would also work there. People who lived in the suburbs would be satisfied, because the suburbs would stay suburban. People in the city would be satisfied because the CBD would remain the primary activity center it had always been. That was the reasoning of a group of the interviewees.

The reasoning of this group continued: The transportation network, both in terms of infrastructure and transit routes serving the region was, essentially, in place. Major highway corridors in the County had been completed or were in the process of rehabilitation and soon to be completed. An extensive system of High Occupancy Vehicle(HOV) lanes and electronic highway traffic control devices had been implemented on Interstate 90 and Interstate 5. Transit centers, as well as park-and-ride lots had been or were being constructed in many suburban centers. All was running smoothly, except downtown. Downtown, as mentioned earlier, was the only missing link.

What I realized after talking with a number of the people in

the group was that a bus tunnel was not an end unto itself. What several acknowledged outright and others acknowledged implicitly was that they expected that the tunnel would ultimately be the centerpiece of a regional light rail system. The decision that appeared to be one between transit mall and transit tunnel in fact was hiding the real decision, to work with the bus system Metro already or to push towards a future including rail.

Since the federal administration had been pushing bus systems and agreeing to finance capital expenditures only for such systems, Metro's hands had been tied. Construction of a transit mall was indicative of a long-term Metro commitment to bus as primary mode, a commitment Metro managers were no longer willing to make. A bus system had worked well for Seattle in the past, but it was bound to reach a point where not even Metro's innovative management could keep transit moving smoothly throughout King County.

Construction of a tunnel meant that rail could eventually be put in place in downtown with relative ease. As it turns out, the tunnel stations, points of articulation, and floors have been designed and are being constructed to accommodate both dual-mode and light-rail vehicles. No major tunnel reconstruction will be required when conversion to rail becomes desirable.

Other interviewees, those who felt that growth need not be a basic assumption, acknowledged the difficulty, if not the impossibility of persuading others that it need not be. They had agreed to work within the framework of assumptions that others

were making. They were willing to assume that growth and development would occur. However, they had a different opinion about when and where growth and development would be most useful, beneficial and most efficient. They had different opinions about how growth and development should be managed.

This other group of interviewees advocated the polycentric approach to growth management and planning. There was no good reason why growth had to continue to concentrate downtown. This group was of the opinion that downtown had experienced enough "Manhattanization", the term one interviewee used. As much as growth had been occurring in the CBD, it was also occurring in the suburbs. Growth occurring in the suburbs was likened, by more than one of the interviewees, to that phenomenon which is well known to have occurred in the Los Angeles area. Urban sprawl, from which the Seattle area had been relatively immune, was beginning to win out.

One problem, as this group saw it, was that Metro was devoting a disproportionate amount of its attention and energy, and most of its available funds, to the CBD. They acknowledged that Metro was building transit centers in suburban centers such as Bellevue, Kirkland, and Renton, but these centers were small investments compared to a tunnel.

The angle this group had on the issues was bound, from the beginning, to be different from that of the first group. First of all, these interviewees were dissatisfied with the current transit network, a radial network with the Seattle CBD at its

center. The decision to build a tunnel was, as they saw it, a commitment to the maintenance of this radial network. They were of the opinion that the maintenance of this downtown-centered radial network would, not only "consume a large chunk of the resources", but would be "a disservice to suburban people and a disservice to downtown neighborhoods" as well.

This group was fearful that, in committing itself to the construction of the tunnel, Metro would not only commit itself to a radial network, but would also commit to downtown Seattle, more than its fair share of available funds, local and federal. Funds that might have been available in the future to meet the increasing needs of a growing suburban population would not be available.

One interviewee in this group described the situation in the following way: "To fund the tunnel, we've had to close the door on development for later. We're overtaxing Metro's debt capacity now, what we'll need to meet the rest of the county's needs later. When we don't get the ridership later, we will have to not only cut back on current routes, but sacrifice future routes."

This same interviewee felt that by building the tunnel, Metro was just "addressing the needs of the downtown commuter, or at best the citizens of the west side." In the worst case, "the tunnel will provide more incentives for more growth, and by the year 2000, rush hours will extend to three to four hours, and there will be increased delays which will more that offset the

savings in travel time that the tunnel may initially provide."

Another member of this group of interviewees added several important points to the argument. One was the following: There were roughly 120,000 jobs in the Seattle CBD, out of a total of 600,000 plus in King County. That meant that the total number of jobs located in the CBD was, at best, twenty percent of the total in the County, and a smaller percentage of the larger metropolitan area. For him, the issue boiled down to one of equity. He questioned the wisdom of devoting such a disproportionate percentage of regional transportation funds to the downtown area.

This interviewee was willing to make numerous concessions. He acknowledged the veracity of the tenet that says that face-to-face interaction between parties was necessary to successfully conduct business. He acknowledged that downtown Seattle was the Pacific Northwest's regional center. But, still, he insisted, there was "no need to pack four to five thousand people into one building anymore", that there was "no need for ten to fifteen buildings holding that many people, all in one place."

Choice of Technology(See Figure 8)

Another issue discussed by some of the interviewees was the type of vehicles chosen to run in the tunnel. The tunnel, though designed to accommodate rail ultimately, would initially accommodate only buses operating on electricity, specifically dual-mode buses. These are buses which have both diesel and

Figure 7: Interest Group Positions on Growth and Development in 1983 ⁴⁶

	CBD growth is inevitable without tunnel.		CBD growth is inevitable with tunnel.		CBD growth is desirable.		Tunnel benefits regional growth pattern.	
	Yes	No	Yes	No	Yes	No	Yes	No
Metro	X		X		X		X	
City		X	X		X	X		X
UMTA	X		X		N.A.		N.A.	
PSCOG	X		X		X		X	
ATU	X		X		X	X	X	X
Downtown Neighborhood Advocacy Group		X	X			X		X
Land Use Lawyer		X	X			X		X
Consultant-UW Professor		X	X			X		X
Other concerned citizens	X	X	X		X	X	X	X

⁴⁶ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue in question or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative shows mixed feelings. The interview sample is not statistically representative.

electric fueling capabilities, the latter, given, of course, that overhead electric trolley infrastructure is in place.

There were various reasons given for this choice of technology. One interviewee noted that the Pacific Northwest, and Seattle in particular, had had a "traditional love affair with electricity." Seattle's original transit system, a system of electric rail trolley lines, had been dismantled, to the dismay of many, in the forties and fifties, when automobiles became the dominant mode of transportation. The same interviewee went on to say that electricity, as a power source, had traditionally been inexpensive in the Northwest. Electricity was clean; therefore, it was environmentally sound. An additional point was that electric vehicles had faster pick-up on Seattle's steep hills.

With respect to the current situation, dual-mode buses would provide the flexibility that Metro needed. While in the CBD, dual-mode buses could operate cleanly, quietly, efficiently, and at relatively low speeds, in the tunnel. The elaborate ventilation system that would have been necessary if the tunnel were to have accommodated diesel-only buses was not necessary. When the buses left the tunnel, they could continue to operate on routes within central Seattle, where electrical overhead wiring was in place. On routes that served either out-lying areas of the City or the suburbs of King County, the dual-mode buses could run, on diesel fuel, at higher speeds, along freeways, and in areas where no overhead wiring was in place. Both the emotional

appeal of and the practical reasons for using dual-mode buses in the tunnel existed.

Two points concerning the use of dual-mode technology came up during the interviews. Their purchase cost, \$425,000 apiece far exceeded that of standard coaches at \$150,000 apiece. However, as a couple of the interviewees mentioned, tunnel operation using dual-mode buses was projected to save Metro millions of dollars in operating expenses each year. Consequently, the expense of the buses, though mentioned, did not seem to be one of the issues of most concern to the interviewees.

The other point with respect to dual-mode technology was the question of its reliability. Though dual-mode vehicles were already in use in two European cities, Nancy, France and Essen, West Germany and it seemed to work well in both locations, planners were intending to use it on a larger scale in Seattle than it was being used in either of the other two cities. Metro's plans called for having a fleet of 236 dual-mode coaches in operation by the mid-nineties.

Transit User Aesthetics, Safety, and Security (See Figure 9)

It was the opinion of several interviewees that the Seattle CBD had not been, until recently, a particularly unpleasant place to wait for a bus. Admittedly, the sidewalks were sometimes congested, pedestrians having to dodge transit riders awaiting a bus. But that situation occurred predominately during the peak commute hours and/or at bus zones adjacent to major department

Figure 8: Interest Group Positions On Choice of Technology in 1983 ⁴⁷

	Dual-mode is energy- efficient & cost-efficient.		Dual-mode is reliable.		Dual-mode if for interim use.		Light-rail is desirable later.	
	Yes	No	Yes	No	Yes	No	Yes	No
Metro	X		X		X		X	
City	X		X		X	X	X	X
UMTA	X		X		X	X	X	X
PSCOG		N.A.		N.A.	X		X	
ATU	X	X	X	X		X	X	X
Downtown Neighborhood Group		N.A.		N.A.		N.A.		N.A.
Land Use Lawyer		N.A.		N.A.		N.A.		N.A.
Consultant-UW Professor		N.A.		N.A.		N.A.		X
Other concerned citizens	X	X	X	X		N.A.	X	X

⁴⁷ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue in question or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and the No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative showed mixed feelings. The interview sample is not statistically representative.

stores and other popular retail locations. Sidewalk congestion aside, waiting at a bus zone afforded the opportunity for peoplewatching, and, at many zones, it also afforded the opportunity of gazing at breathtaking vistas of either of two mountain ranges, 14,410 foot Mt. Rainier, or Elliott Bay. Riding in a bus in the CBD afforded these same opportunities that waiting for a bus afforded.

Once the tunnel were complete, interviewees worried, the aesthetics of waiting for or riding in buses in the CBD would not nearly as pleasant. Those riders whose routes would be diverted into the tunnel would catch their buses in the dark underground. Not only did the underground seem unappealing on an aesthetic basis, it seemed unsafe. The same resistance the first users of Boston's underground had felt a century earlier was now being felt by Seattle users.

Metro, it seemed, was doing all within its power to minimize rider aversion to the underground environment, whether that aversion was on the basis of aesthetics or of safety and security. Each of the five stations along the 1.3 mile alignment of the tunnel was being elaborately designed and decorated so as to fit the character and style of the area in which it would be located. Security and safety in the tunnel were to be addressed by a rather elaborate electronic monitoring system.

Figure 9: Interest Group Positions on Transit User Aesthetics, Security, and Safety in 1983 ⁴⁸

	Tunnel travel will be appealing.		Tunnel travel will be safe.		Tunnel will reduce CBD pollution.		Tunnel will attract riders.	
	Yes	No	Yes	No	Yes	No	Yes	No
Metro	X		X		X		X	
City	X	X	X	X	X	X	X	X
UMTA	X		X		X		X	
PSCOG		N.A.		N.A.		N.A.		N.A.
ATU	X	X	X	X	X	X	X	X
Downtown Neighborhood Group	X	X		N.A.		N.A.		X
Land Use Lawyer		N.A.		N.A.		N.A.		N.A.
Consultant- UW Professor		N.A.		N. A.		N.A.		N.A.
Other concerned citizens	X	X	X	X	X	X	X	X

⁴⁸ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and the No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative shows mixed feelings. The interview sample is not statistically representative.

Cost and Funding (See Figure 10)

The projected capital costs of the DSTP including tunnel construction and dual-mode vehicle acquisition is \$415.7 million, though original cost projections started in the neighborhood of \$200 million and climbed as ground-breaking approached. The cost of any large capital transportation project is bound to cause many people to gasp in disbelief and to elicit objections from some. The DSTP was not an exception.

By the time that I did my interviewing, most people had gotten over the initial shock of the expense of the tunnel. Though approximately half of the capital costs were to be paid by the federal government, certain people were not pleased about the prospect of Metro tax dollars paying for the other half. There was a disagreement about who would benefit most from the construction of the tunnel and whether those people were paying their share. I describe this disagreement in the issue section on beneficiaries below.

Downtown Character (See Figure 11)

Most interviewees acknowledged that the character of the Seattle CBD would be changed as a result of tunnel construction. Some looked at the change in character as an upgrading. They viewed the tunnel and the growth to follow as signaling the time for the City to take its rightful place amongst cities. Seattle, in their perception, might finally receive the recognition, the attention, and the infrastructure, that it deserved.

Figure 10: Interest Group Positions on Cost and Funding in 1983 ⁴⁹

	Tunnel is too expensive.		Too much local money is being used for tunnel construction.		Too much federal money is being used for tunnel construction	
	Yes	No	Yes	No	Yes	No
Metro		X		X		X
City	X		X		X	
UMTA		X		X		X
PSCOG		X		X		X
ATU	X		X	X	X	X
Downtown Neighborhood Group	X		X		X	
Land Use Lawyer		N.A.		N.A.		N.A.
Consultant-UW Professor	X		X		X	
Other concerned citizens	X	X	X	X	X	X

⁴⁹ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative shows mixed feelings. The interview sample is not statistically representative.

Others, like the downtown activist who bemoaned the "Manhattanization" of downtown, felt that Seattle was losing the small-city character that had made it distinctive and appealing. This boom in construction, as he saw it, was simply "imitative behavior." There were several buildings to be demolished to make way for tunnel construction. Though the number would not be large, there was still nostalgia on the part of many about the loss of certain sites. The face of downtown Seattle was changing. Many of the changes would not be the direct result of the construction of the tunnel; many changes would be a result of the induced effects or secondary effects, but the difference was unimportant.

Though only eighteen units of housing would actually be demolished in the face of tunnel construction, these eighteen units were low-income units, and low-income units, once very easy to find in downtown Seattle were fast becoming a scarce resource. Ultimately, downtown would in total housing units. However, new or renovated housing created in downtown in response to tunnel construction would be too expensive for many who had been downtown residents for years, those for whom downtown had been, in the recent past, the only affordable neighborhood.

Downtown, perhaps in anticipation of the tunnel, perhaps because of the tunnel, or perhaps in spite of the tunnel, was experiencing a renaissance of sorts. People were beginning to discover, to remember, to realize that downtown had a lot of amenities, not the least of which was its view of the Sound, and

it just might not be a bad place to live after all.

Figure 11: Interest Group Positions on Downtown Character in 1983 ⁵⁰

	CBD character will change without tunnel.		CBD character will change with tunnel.		CBD character will benefit from tunnel.	
	Yes	No	Yes	No	Yes	No
Metro	X		X		X	
City		X	X			X
UMTA	N.A.		N.A.		N.A.	
PSCOG	N.A.		N.A.		N.A.	
ATU	X		X		X	X
Downtown Neighborhood Group		X	X			X
Land Use Lawyer	X		X			X
Consultant-UW Professor		X	X			X
Other concerned citizens	X	X	X		X	X

⁵⁰ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates that the representative(s) had no opinion on the issue in question or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and the No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative show mixed feelings. The interview sample is not statistically representative.

Neighborhood Effects (See Figure 12)

The neighborhood about which I heard the most concern voiced, was the downtown neighborhood. As I mentioned above, the character of the neighborhood was changing. But, it was not just the character that was changing; the residents of downtown Seattle were changing. Downtown, as I mentioned above, long a low-rent district, was fast becoming a high-rent district. Homelessness, vagrancy, and aggressive panhandling, were phenomena with which the Seattle CBD was fast becoming familiar. Though the tunnel was not yet constructed, downtown was already changing.

Few of the interviewees mentioned the effects of the tunnel on neighborhoods adjacent to downtown, but a number of newspaper and other articles describing various public meetings did. The neighborhood besides the downtown neighborhood mentioned most often was the International District (ID). The ID was an area along the southeastern edge of downtown, and it had long been an area inhabited by Asian-Americans, many of them older, an area with many restaurants, groceries, and other retail stores offering Asian specialty goods.

ID residents had many concerns, all of them interrelated. Union Station, at the edge of the ID was expected to be the southern terminus of the tunnel and a staging area for buses heading into the tunnel. ID residents were concerned that their neighborhood would become a parking lot for downtown. As the availability of parking in the CBD decreased and the cost of

parking in the CBD increased, people who were neither residents of the ID nor patrons of ID businesses might leave their cars on ID streets and in the less expensive parking lots in the area while conducting business downtown.

Other concerns ID residents voiced were of secondary effects of the tunnel, such as a decrease in the availability of low-income housing. The same concerns which were voiced with regard to the ID were voiced with regard to the Denny Regrade, First Hill, and other neighborhoods on the edges of downtown.

Beneficiaries(See Figure 13)

Many residents of the towns outside the city of Seattle felt that City residents would be the prime beneficiaries of the tunnel simply because the tunnel was located in Seattle, and because it was Seattle CBD congestion that the tunnel was designed to eliminate.

City residents felt the opposite, that the suburbs would derive the most advantage from the tunnel. As far as this group could tell, it was the many suburban residents who worked in the CBD who were the cause of the congestion. It was the pattern of their commuting from suburban homes to work in the CBD that this group perceived as causing the congestion. Besides, the tunnel would be constructed, at least partially, so as to eliminate the need for suburban passengers to transfer in order to arrive at CBD destinations. Other alternatives considered would have

Figure 12: Interest Group Positions on Neighborhood Effects in 1983 ⁵¹

	Ngbhds. near to CBD will be adversely affected by tunnel.		Low-income housing in and near CBD will be lost due to tunnel.		Ngbhds. near CBD will be used by non-residents for parking.	
	Yes	No	Yes	No	Yes	No
Metro		X	X			X
City	X		X		X	
UMTA		N.A.	X			X
PSCOG		N.A.		N.A.		N.A.
ATU	X	X		N.A.		N.A.
Downtown Neighborhood Advocacy Group	X		X		X	
Land Use Lawyer	X		X		X	
Consultant-UW Prof-	X		X			N.A.
Other concerned citizens	X		X		X	X

⁵¹ Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue in question or that the representative did not address the issue. An instance where there is an X in both the Yes and the No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative shows mixed feelings. The interview sample is not statistically representative.

required suburban passengers to alight their buses at terminals at either end of downtown and either walk to or transfer to another bus to arrive at their destinations. Transfers were unappealing to suburban riders, and for that reason and others, Metro wanted to avoid additional transfers.

The degree to which each of the above issues were addressed in the tunnel decision becomes more clear upon closer examination of the planning and decision-making processes which were their context. In the next chapter, I examine the degree of public involvement in the process by looking at the various techniques used by Metro in its effort to allow the public to inform the agency.

Figure 13: Interest Group Positions on Beneficiaries in 1983 ⁵²

	Seattle benefits from the tunnel.		Suburbs benefit from the tunnel.		CBD business people and developers benefit from the tunnel.		Region benefits from the tunnel.	
	Yes	No	Yes	No	Yes	No	Yes	No
Metro	X		X		X		X	
City		X	X			X		X
UMTA		X		X	N.A.		N.A.	
PSCOG	X		X		X		X	
ATU	X	X	X	X	X		X	
Downtown Neighborhood Group		X		X	X			X
Land Use Lawyer		X		X	X			X
Consultant-UW Professor		X		X	X			X
Other concerned citizens	X	X	X	X	X		X	X

⁵² Interviews with representatives of the different interest groups were conducted by the author in December 1987 and January 1988. N.A. indicates either that the representative(s) had no opinion on the issue in question or that the representative(s) did not address the issue. An instance where there is an X in both the Yes and No column indicates that the opinions of two or more different representatives did not concur or that the opinion of a single representative shows mixed feelings. The interview sample is not statistically representative.

Chapter 5: Public Involvement in the Planning and Decision-making Processes

Public Involvement in the Planning Process

Though, technically speaking, the role of lead agency of the Downtown Seattle Transit Project was shared by Metro, the City of Seattle and UMTA, the role of lead agency in the public planning process for the DSTP was played by Metro. Metro lead the process, and in so doing, it complied with federal and state laws governing public involvement in the planning process.

Metro's own stated objectives for public involvement are:

- inform and educate citizens about project alternatives;
- communication with directly and indirectly affected constituencies;
- flexibility for constituency input to influence project preferred alternative;
- and to provide for maximum citizen access.⁵³

The first two objectives can be categorized as signifying the purpose or function of allowing Metro, the lead agency to inform the public about DSTP. The second two objectives can be categorized as signifying the purpose or function of allowing the opposite, allowing the public to inform Metro.

Metro used various public involvement techniques. What I outline below is each of these techniques, both those required and those voluntary. I also outline the function that each of the techniques serves in the planning process. Using Metro's stated objectives for public involvement in the planning process

⁵³ Downtown Seattle Transit Project, Municipality of Metropolitan Seattle, (Seattle, Washington, 1983), p. 36.

as a guide, I define the intended function of each technique as one of the following:

1. allows lead agency to inform the public.
2. allows the public to inform lead agency.

Techniques for Public Involvement

The National Environmental Policy Act dictates that an Environmental Impact Statement be prepared for projects such as the DSTP, to assist in evaluating specific project options. To narrow down the issues that are to be considered in an EIS, or to determine the "scope" of a project, the lead agency goes through a procedure known as the "scoping process." The scoping process "begins with a notice that an EIS is to be prepared; it ends when the appropriate government agency determines the scope of the EIS and assigns specific responsibilities for its preparation. Aside from the initial notice, the scoping process does not require any documents to be prepared or any meeting to be held." 54

Other principal aspects of the scoping process are the identification of other environmental and consultation requirements, and the indication of any public environmental documents which are being prepared or will be prepared related to the project scope. Also included are inviting the participation of affected and interested individuals, groups, and agencies as well as allocating assignments for preparation of the EIS among

54 Rodney Proctor, Manager of Metro's Environmental Planning Division, TDS, December 4, 1981, Metro Library, Seattle, Washington

the lead and cooperating agencies.⁵⁵ The intended function, then, of a scoping process is twofold. Though the primary intended function of the scoping process is to allow the public to inform the lead agency, it is also, to a lesser degree, to allow the lead agency to inform the public.

Despite the lack of a specific federal requirement to hold a "scoping" meeting, Metro staff apparently decided that such a technique would be useful, nevertheless, and held two scoping meetings on December 14, 1981. (See Chapter 3) Other techniques besides scoping, listed by Metro in the DSTP report published in the fall of 1983, for ensuring public involvement in the planning process are the following:

Publications

- Newsletters(bimonthly)
- Fact Sheets
- Project Update
- News brief
- Questionnaire

Downtown Tenant Briefings

Speakers Bureau

Cable T.V.

Media Briefings

Downtown Project Display

Community Meetings

Review Committees

- Policy Advisory Committee
- Downtown Advisory Committee
- Seattle City Council/King County Council
- Downtown Seattle Association
- CTAC
- Elderly and Handicapped Committee
- Municipal League of Seattle/King County
- International District
- Neighborhood Coalitions

Internal Staff Briefings

⁵⁵ Ibid.

Metro sent bimonthly DSTP newsletters to the public, those whose names appeared on its mailing list. The first DSTP newsletter was published in October 1981, and newsletters were still being published at least as recently as April 1987. The intended function of the newsletter was primarily to allow Metro, the lead agency, to inform the public.

DSTP Fact Sheets and Project Updates, for all intents and purposes, are the same as DSTP newsletters. The only difference is that they were not published with the same regularity with which the newsletters were published. As of the fall of 1983, one Fact Sheet and two Updates had been published and sent to the public. The intended function of both the Fact Sheet and the Updates was to inform the the public.

News briefs were primarily in print, articles which appeared in various local newspapers and magazines, though there were some on the broadcast media. The intended function of these news briefs was to allow Metro to inform the public.

Another technique listed above is a questionnaire. In late 1982 and early 1983, Metro mailed a total of 180 questionnaires to ground floor tenants of Third Avenue and of Pine Street, the projected alignment of the DSTP. The questionnaires were accompanied by a cover memo from the president of the Downtown Seattle Association. "The purpose of the questionnaire was to assist Downtown Seattle Transit Project public affairs staff in assessing and addressing needs and concerns of businesses and residences affected by project proposals. Specific objectives

included:

- Assessing tenants' knowledge of project proposals.
- Locating potential conflict areas.
- Assessing nature of affected businesses and residences.
- Refining mailing list and establishing key contact person within each business or residence." ⁵⁶

At the time that the questionnaire was distributed, a transit mall, rather than a tunnel, was the mid-term alternative being considered. Responses from 130 questionnaires were collected and compiled. The questionnaire did not mention a transit tunnel, because, at that time, a tunnel was not yet being discussed as a mid-term alternative. The function of the questionnaire was primarily that of allowing the public to inform Metro. Included in the questionnaire mailing were informational packets. The intended function of the packets was to allow Metro to inform the public.

Downtown Tenant Briefings are listed above, but I am unable to find any further reference to them either in the DSTP report or elsewhere.

A Metro Speakers' Bureau was announced in the January 1982 DSTP newsletter. Metro made its staff available to address "groups, clubs, councils, or organizations about the DSTP and its regional impact." Sixty-five such groups heard Metro speakers between January 1983 and the fall of 1983. The intended function of the Speakers' Bureau was to allow Metro to inform the public

⁵⁶ Downtown Seattle Transit Project, Municipality of Metropolitan Seattle, (Seattle, Washington, 1983), Appendix 7.

about DSTP.

A cable T.V. program with a focus on Downtown Seattle Problems was shown on April 21, 1983. The viewing audience was established as 1,800. Another cable T.V. program with a focus on Downtown Alternatives/Regional Compatibility was shown on September 26, 1983. The intended function of the cable T.V. programs was to allow Metro to inform the public.

Though I do not have very specific information about the Downtown Project Display listed, I know that it was an informational exhibit placed in a conspicuous location in downtown Seattle, with diagrams and text representing and describing the alternatives that were being considered for the DSTP. The intended function of such a Display would have been to allow Metro to inform the public.

Metro held various Community Meetings at locations around the County, primarily during the spring of 1983. The stated objectives of the meetings were to:

- inform broad based constituency of project alternatives;
- receive input from general public and riders;
- build foundation for support;
- identify issues and possible future problems;
- identify interested public, riders, etc.
- project providing open communication;
- bring key Metro Council members into the process by having them chair meetings;
- bring CTAC members by active participation;
- bring key Metro staff into process by active participation;
- expand mailing list;

-document meetings to meet UMTA requirements. 57

The intended function of these Community meetings was both to allow Metro to inform the public and to allow the public to inform Metro.

Included among the Review committees listed above are the PAC, the DAC, and the TAC. As mentioned in Chapter 3, the PAC, the DAC, and the TAC were three advisory committees to the DSTP, the composition of which were negotiated late in 1980. The intended function of these three committees was for the public to inform Metro.

Other groups listed above under Review committees are the nine-member Seattle City Council and the nine-member King County Council. Each group is elected by the voters at large, of Seattle, and of King County, respectively and thereby is responsible for representing its respective constituency. CTAC, is also on this list of public groups involved in the public planning process. Another group is EHTAC, the Metro Council standing committee appointed to provide citizen advice on elderly/handicapped transportation issues. All of these groups, though not elected, appointed, or designated specifically to give Metro feedback about DSTP would have had the opportunity to do so. The intended function, then of these three groups was primarily to allow the public to inform Metro. They might also have served to allow Metro to inform the public.

57

Paul E. Casey, Metro's Public Affairs Coordinator, TDS, March 30, 1983, Metro Library, Seattle, Washington

My sources do not indicate that there was an independent Downtown Seattle Association committee which participated in the planning and decision-making processes. Nevertheless, the DSA was party to certain key negotiations. Most notable is the pivotal role that the DSA played in the fall 1980 negotiations which determined the composition of the PAC, the DAC, and the TAC. Furthermore, DSA members held key positions on the first of the two committees. The DSA, by virtue of the visibility and prominence of its members in the community, performed its intended function of allowing the public to inform Metro, with or without an independent committee.

Another group listed is the Municipal League of Seattle/King County. The League is an independent civic organization which sees itself as a regional information resource. It is a research center which studies regional public policy issues and informs the wider community about them, in most instances, before they become problems. The League did not take a position on DSTP, though it published numerous issue analyses which served to inform its membership. The Municipal League did not have a formal role in the planning process, but its intended function was to allow the public to be informed.

The remaining Review committees listed as playing a part in public involvement are an International District committee and Neighborhood Coalitions. Groups representing the International District and other neighborhoods adjacent to the CBD held meetings with Metro on various occasions as well as wrote letters

to Metro expressing concerns about how the DSTP might impact their areas. (See Chapter 4) The function of both the ID committee and other neighborhood groups was to allow the public to inform Metro.

Though internal staff briefings are listed as a public involvement technique, I see little evidence that they would have served the function either of allowing Metro to inform the public or of allowing the public to inform Metro.

The Effectiveness of Each Public Involvement Technique

Metro, as the lead agency for DSTP, most clearly made use of multiple techniques in its effort at public involvement in the planning and decision-making processes. As I peruse the list of techniques and their intended functions, there seems to be a good balance between those techniques whose intended function is to allow Metro to inform the public and those whose intended function is to allow the public to inform Metro. However, upon examining each technique and determining the actual role each played in the planning process, I arrive at the conclusion that very few of the techniques that were intended to allow the public to inform Metro performed that function in a way that had a significant effect on the outcome.

The Scoping process

The scoping process was the first technique that seemed to be lacking. The fact that it occurred seven months after the DSTP

office opened and years after formal discussion and study had begun, the fact that so few were present, and the fact that half of those present were representing government agencies, conspire to make me doubt the effectiveness of the scoping process in performing its intended function of allowing the public to inform the lead agency.

Questionnaire

The questionnaire which Metro distributed to ground floor tenants along the proposed alignment of the DSTP seems to be useful, but the group chosen to answer the questionnaire was a small one, and not representative of the multiple groups of people who would be affected by the project. I am confident that Metro staff used the information gathered in the questionnaire responses, but I am unaware of any decision or change in plans that was made based on that information. I am of the opinion that the questionnaire served its intended function, but to a minimal degree and for a certain small group.

Community Meetings

Community meetings would seem to be ideal occasions for the general public to inform Metro and for Metro to respond to its requests. Nevertheless, both by virtue of their being scheduled late in the process and Metro's devotion to having them meet multiple objectives aside from that of allowing the public to influence the outcome of the process, the community meetings do

not appear to have performed their intended function of allowing the public to inform Metro.

Review Committees

I describe various review committees above, committees whose intended function was to allow the public to inform Metro. Only three distinguish themselves as having possibly served their intended function to the degree that they influenced the outcome. The three are the Policy Advisory Committee, the Seattle City Council/King County Council (in fact, two separate groups), and the Downtown Seattle Association.

The King County Council, as a body, did not play a big role in the planning process. Still, by virtue of their positions on the King County Council, several of its members serve on the Metro Council and consequently were in positions to influence the outcome of the process. The King County Council, though it influenced the process indirectly, served the function of allowing the public to inform Metro.

The Seattle City Council, as a body, played a more central role in the process than did the King County Council. Because technically the City shared the role of lead agency with Metro, and because the City Council was the legislative body representing the City, the role of the City Council was more central. While, as a body, they were not in the primary position of influence with respect to the process, it was able to pass various resolutions that helped to push the process in different

directions. In addition, those members of the City Council sat on the Metro Council were in a position to influence the outcome. Members of the City Council also served on the PAC. The City Council served well the function of allowing the public to inform Metro.

The Downtown Seattle Association is a group whose membership seems to have been curiously well positioned to influence the process. They were, as mentioned above, party to the negotiations about who would sit on the PAC. As it turned out, several members of the group were on the PAC, and once the process was under way, those members were well situated to influence decisions. The DSA served its intended function of allowing the public to inform Metro.

The PAC would appear to have been the public group which would have the potential to play the key role in the planning and decision making process. The PAC was a select group all of whose members were ostensibly in a position to represent those parties who could potentially be affected by the project. Yet, curiously, in the end, it was not from the core of the group that the impetus to build a tunnel seems to have come. Rather, the impetus seems to have come from the only member of this group who did not have group voting privileges. The impetus seems to have come from Neil Peterson, the Executive Director of the Metro staff.

Despite the many turns of event and the many decisions which can be traced back to members of the PAC, whether in their

capacities as elected officials or in their various other capacities, the key decision can be traced back to Neil Peterson and the Metro staff. The PAC was the group best in a position to serve its intended function of allowing the public to inform Metro. And though it did so, what seems peculiar, at least initially, is that it did so only upon the exhortation of that member who would seem to be in the least powerful position.

Overview of the Planning Process

I have assessed each of the various public involvement techniques Metro used in the planning process. The techniques whose intended function was to allow Metro to inform the public seemed to do just that. However, the techniques whose intended function was to allow the public to inform Metro were not as successful, except in the cases of the Seattle City Council, the King County Council, the DSA and the PAC. These successful techniques involved the public contingent best in a position to influence the decision, namely, prominent politicians, prominent downtown business people, and the Metro staff.

I have examined the variety of techniques which Metro used in its effort to provide the public with an opportunity to influence the outcome of the planning and decision-making process. In the end, it seems that what influence the planning and decision making processes the most was not these different techniques per se, but the ability of one person, the executive director of the Metro staff, to synthesize the various preferred alternatives of

the groups into one preferred alternative, a transit tunnel.

Some of the interviewees were satisfied with the planning and decision making processes as well as the result. The regional director of UMTA, in particular, called the decision to build a transit tunnel "a compromise between conflicting points of view." ⁵⁸ In a speech made to the City Club of Seattle, he described how "Neil Peterson recommended in September[1983] a package proposal that had something for every one. A bus tunnel with dual-mode vehicles operating under electric wires in the tunnel to satisfy the community aversion to diesels but using diesel power on freeways where electric trolley are impractical..This would remove over half of the buses from the surface streets leaving primarily electric trolleys without imposing the burden of transfers on the suburban riders. He also included the improved downtown circulation system that all proposals had included and a transit boulevard on Third and Pine Streets to be locally funded by Metro to avoid UMTA's rules against investing in malls for autos." ⁵⁹

Other interviewees were skeptical, even bitter. One in particular, a community activist, described the process as pro forma. It was, he said, "the coming together of political interests, namely the downtown developers, to overwhelm the political process, despite the input of community groups." This interviewee was disappointed in the elected City officials,

⁵⁸ Interview by author, Seattle, Washington, January 1988.

⁵⁹ Ibid.

saying that he would have expected them to be more accountable to public needs and that, as far as he could see, "they were caving in to the development interests."

It is not surprising that the assessments of different interviewees varied. As Gakenheimer writes in a discussion of transportation planning in Boston, "There is no workable single position as the vantage for the organization of transportation study. The mosaic of actor perspectives on the problem reminds one of the story of Rashomon, in which each actor observes the same events but interprets them within the framework of his projected identity. Selective perceptions of the same problem can be so different as to be almost mutually exclusive in content." 60

Because the perceptions of various actors involved in a public transportation planning process almost always diverge, it seems impossible to imagine that there would ever be a process which could be called ideal. So, the DSTP planning process that led to the decision to build a transit bus tunnel underneath the Seattle CBD is not and will not be seen by all as having been the ideal process. The fact that Metro staff went to such elaborate ends to use so many techniques for public involvement in the planning process and the fact that there was some agreement amongst interviewees about the issues is to the credit of the staff. Despite the relative success of Metro in carrying out

⁶⁰ Ralph Gakenheimer, Transportation Planning as Response to Controversy: The Boston Case, (Cambridge, MA., MIT Press, 1976), p. 3.

this process, I believe that it might very well have been an even better one if Metro had carried out just a few additional techniques. Should there be an occasion where Metro is planning another large project, I would suggest that they look into the techniques which I suggest below.

Suggestions for Additional Public Involvement Techniques

Community Workshops

While Metro used multiple public involvement, I suggest that, several other techniques, which may have allowed the general public to more directly influence the outcome of the process. One technique which could have been used is that of participatory workshops. Workshops, particularly workshops run by parties other than the lead agency(Metro), could have been used. "Citizen participants can be quite 'independent' if they are selected by someone other than planning agency members, based on social or geographic characteristics and not on friendship or political connections. Independence is also strengthened if participants' work is given publicity directly, not just after their findings are 'processed' by the central agency." ⁶¹

⁶¹ Phil Herr and Associates with assistance by Carr, Lynch Associates, Community Planning Guides, Division of Community Services, Massachusetts Executive Office of Communities and Development, September 1985.

Surveying or Polling

Another possible technique is that of extensive surveys, or a poll, again done by someone independent of the lead agency. Had either a survey or a poll been taken, Metro might have been better able to gauge the preferences of citizens at large with respect to the DSTP.

County-wide Vote

The last technique which I suggest is the ultimate public involvement technique. That technique is a county-wide advisory vote. Metro has not taken a county-wide vote since 1980 when it narrowly received County voters' approval for an increase in sales tax. Were it to have done so before committing itself to a transit tunnel, I might surmise that, depending on the wording on the ballot that either of two things might have happened. One would have been that the citizens of the region would have voted against the tunnel and for one of the other alternatives. The other is that citizens would have voted for the tunnel, and in doing so, would have shown that the preferences of those representing them, whether elected officials or self-appointed, were indeed the preferences of those whom they represented.

There are those who will argue that elected officials, simply by the notion that they are elected, are those best qualified to represent their constituency. I would agree that in some circumstances that that might be the case. However, in the particular circumstances of the Downtown Seattle Transit Project,

I believe that a county-wide vote would have been wise.

The particular circumstances which I believe justified a vote are the following. First, the region has a history of urban populism and strong citizen participation in decision-making.⁶² Second, the Downtown Seattle Transit Project is an expensive project, and while half of the funding comes from the federal government, the other half comes from taxes paid by regional citizens. Third, the nature of the Metro Council is such that its members sit on the Council by virtue of their positions on other government bodies and as such are accountable primarily to local constituencies, rather than the region as a whole. I agree with the following words of a Municipal League writer.

The tunnel compromise is... a delicate construction, precariously woven from strands of both public and special interest, and both regional and parochial concerns. If any one thread snaps, the whole network could collapse. Would the hand of a county-wide advisory vote lie too heavily on this gossamer framework?...

Metro's role has evolved far beyond that of merely being a regional utility implementing specific public purposes, into that of a key, if not the most important, political decisionmaker in the region...

There is nothing remotely dishonest or corrupt in this: it is a legal game played in the light of full disclosure and press and public scrutiny, but when planning processes drag on for years, citizen and journalistic interest understandably flags. Only the insiders and most tenacious kibitzers stay in the game to the last hand, and when it is finally dealt, only the dealer--the Metro staff--may know where the game really stands.⁶³

⁶² From Skid Road to High Tech: Seattle in Transition, program on Seattle public radio station, KUOW, aired in fall 1987.

⁶³ Crowley and Kaye.

Chapter 6: Conclusions

Winners and Losers

Gakenheimer states that, despite what some planners would prefer to believe, "Transportation planning has to be considered a technical activity serving conflicting positions and choosing a winner and a loser on each project." ⁶⁴ I believe that there was a winner in the case of the DSTP and that it was that group of people who are intent on developing downtown Seattle.

The planning process leading to the decision to build a tunnel was an extremely long one. I believe that the length as well as nature of the planning process served to allow primarily those whose immediate interests are served by having a tunnel built to influence the planning and decision making process. Those whose immediate interests are served by having a tunnel built are those whose needs are met if the CBD remains the development center of the region. Those whose needs are met if the CBD remains the development center of the region are those who were in a position to remain vigilant throughout the entire process. I believe that the so-called compromise alternative which Neil Peterson carved out ultimately benefits this group of people.

The length of the planning process made it amenable to being influenced by a group of people who have a certain vision of Seattle. It appeared at various points in the process as though decisions had been made, but then, in the ensuing phases of the process, yet another decision was made, and that one superceded the earlier so-called decision. This extended "decision-making"

⁶⁴ Ibid, p. 4.

seems to have favored only those who were involved over the long haul. Some Seattleites won; others lost.

The Length of the Process and the Metro Council Structure

The nature and the length of the process, I think, can be traced back to the structure of the Metro Council. I think that the Council's heavy reliance on its staff, and its heavy reliance over the long term, for recommendations leaves room for decisions such as the DSTP decision to be influenced disproportionately by groups who otherwise would not have had such influence.

Such staff-brokering of decisions is inevitable given Metro's federated form of governance. The elected officials who make up the the Metro Council and its key committees for water quality and transit must pay priority attention to their own jurisdictions, and must, therefore rely heavily on staff guidance in performing their Metro duties...

Metro directors and staff members, however, are not politically accountable if their recommendations prove wrong or imprudent...We could, of course blame the staff, but it would correctly counter that it works for the elected officials of the Metro Council, and the responsibility is theirs.

...given the cost, scale and implications of the decisions it is making today and facing tomorrow, it is appropriate to question whether a form of governance designed almost thirty years ago for a regional utility is adequate for an institution that is becoming a de facto regional government.⁶⁵

Rail in Seattle

"Some deplore the changes the City is going through. Others say that [they] will put Seattle on the list of major

⁶⁵ Crowley and Kaye.

cosmopolitan centers of industry and the arts." ⁶⁶ It is my belief that those who were in a position to influence the decision to construct a tunnel are those who want to put Seattle on that proverbial list, and they saw a tunnel as the way to do it.

There is a group of people who subscribe informally to the belief that the indicator of whether a city is a major cosmopolitan center is the presence or absence in that city of a rail transit system. I believe that there was and still is a small group of people in Seattle who subscribe to that belief. Despite the fact that UMTA told Metro ten years ago not to consider planning a rail transit project for Seattle if it wished to receive federal funding for the project, I think there was a group who still held out hope that they could bring about rail in Seattle. A tunnel through downtown Seattle would be both the literal and figurative centerpiece for a regional rail system. And so, they believed that by building a tunnel they were hastening that day when rail might run in Seattle, the day when Seattle's name would be included on the list of major cosmopolitan centers of industry and the arts.

Two Visions of Seattle

"In Seattle today, there is a debate over what some see as a plethora of development, but [historian] David Burge says there

⁶⁶ From Skid Road to High Tech: Seattle in Transition, program on Seattle public radio station, KUOW, aired in fall 1987.

has always been a conflict between visionaries in Seattle's history.... 'one side has a very moralistic vision of the city. On the other hand, you have the other group which looks on business at any cost. You have today development in the downtown throwing people out of their homes simply to get those bank towers in.'" 67

I believe that ultimately the decision to build the tunnel was influenced disproportionately by a group of people who have a vision of a Seattle which will continue to grow and develop at a fast pace. However, I would ask that group to listen to words of caution from Folke Nyberg, University of Washington Professor of Architecture and Urban Design, "Seattle has always been a developing city. The vision, of course has been one of development. We're getting to the point where we're being overdeveloped, and that vision becomes less believable as a future, as a good future." 68

67 Ibid.

68 Ibid.

Appendix-Methodology

Methodology

During the fall of 1987, I narrowed down my topic and prepared a thesis proposal. I was interested in finding out how it was that a dual-mode transit tunnel had come to be constructed in downtown Seattle. I wanted to know what the expected impacts of the tunnel on Seattle and the region were. I wanted to know what public planning process Metro had gone through.

I did my initial library research on the use of community input in transportation planning. I also did some reading about Seattle's history as well as its more recent economic and employment situation of Seattle. I gathered this general information so as to be able to put what specific information I gathered about the tunnel planning process into perspective.

Since I wanted to get as many different angles on the planning process leading to the decision to build a dual-mode transit tunnel, I collected different types of data. To get the views of people who had been involved in the planning process, during December 1987 and January 1988, I carried out interviews with people who had played different roles in the process. At the time, I knew that I wanted to speak to representatives from Metro, the City, UMTA, and the state of Washington. In the course of contacting people and then subsequently when I was actually interviewing them, many gave me names of other people to whom they thought I should speak. It was in this way that I selected those whom I interviewed. Those with whom I spoke were planners, union representatives, administrators, financial

analysts, community activists, transportation consultants, engineers, etc. While the interview sample was not representative statistically speaking, I feel that I got varied responses and opinions from the group such that I thought they represented a broad spectrum of both experience and opinions.

In addition to the data I gathered in my interviews, I also gathered data from written sources. While in Seattle, I gathered copies of working documents, technical reports, public relations brochures, minutes of various meetings, staff memos, newspaper articles, tapes of radio programs, and other materials that I hoped would shed light on the planning process.

I used the materials from my interviews to piece together a history of the DSTP. What struck me was the manner in which the tunnel alternative seemed to have emerged at the last minute, relatively speaking, immediately before the time that it had been voted the preferred alternative. I subsequently decided to concentrate on the period of time that seemed as though it would yield the clue to the decision. That was the period between March 1981 and November 1983.

Using notes from my interviews, I identified those major issues which had been addressed most frequently by the interviewees. I was able to discern a consistency in the positions that different interviewees had taken on these issues. Subsequently, I charted where each of the interviewees stood with respect to each major issue that I had identified.

Next, I looked more closely at the public planning process

itself, identifying the various techniques that had been used to incorporate community input into the decision. I concluded with an interpretation of what factors had influenced the process and why it was that the process had the outcome that it did.

BIBLIOGRAPHY

Boren, Rebecca. "Metro and the City sign a cease-fire in the downtown transit war", The Weekly, Seattle, Washington, April 27-May 3, 1983.

Bus Roots: The Ten Years of Metro Transit: 1973-1983, Municipality of Metropolitan Seattle, Seattle, Washington, 1983.

Chemnick, Patricia J. Downtown Seattle Transit Project: Displacement, Relocation, and Neighborhood Impacts, Municipality of Metropolitan Seattle and CH2M Hill, July 1983.

Cowley, Geoffrey. "Is There a Subway in Seattle's Future?", The Weekly, Seattle, Washington, October 26-November 2, 1983.

Crowley, Walt. "A Tale of two tunnels", The Weekly, Seattle, Washington, February 22-February 28, 1984.

_____. "Rendezvous With Gridlock", The Weekly, Seattle, Washington, March 14- March 20, 1984.

_____. "Is Seattle's Transit Project Caving In?", The Weekly, Seattle, Washington, March 6-March 12, 1985.

_____. "The Suburbs move up from the back of the bus", The Weekly, Seattle, Washington. March 20-March 26, 1985.

Crowley, Walt and Elizabeth Kaye. "Downtown Seattle Transit Tunnel: Tunnel Vision or Transit Breakthrough?", Issue Brief, Vol. II, No. 7., Municipal League Foundation, Seattle, Washington, 1986.

Downtown Seattle Transit Project, Municipality of Metropolitan Seattle. The City of Seattle. Seattle, Washington, 1983.

Downtown Transit Project: A report to the community, Municipality of Metropolitan Seattle, Seattle, Washington, March 1981.

Downtown Transit Project: A report to the community, Municipality of Metropolitan Seattle, Seattle, Washington, May 1982.

Downtown Seattle Transit Project News, Municipality of Metropolitan Seattle, Seattle, Washington, May 1983.

Downtown Seattle Transit Project News: A report to the community, Municipality of Metropolitan Seattle, Seattle, Washington, July/August 1983.

Downtown Seattle Transit Project Preferred Alternative
Municipality of Metropolitan Seattle, Seattle, Washington,
October 1983.

Gakenheimer, Ralph. Transportation as Response to Controversy:
The Boston Case, Cambridge, MA.: M.I.T. Press, 1976.

Getting There...Seattle's New Underground!, Municipality of
Metropolitan Seattle, September 1986.

Guidelines for Downtown Alternative Plans: Downtown Land Use
Transportation Project, City of Seattle. Seattle,
Washington, 1981.

Herr, Phil and Associates, and Carr, Lynch and Associates.
Community Planning Guides, Massachusetts Executive Office of
Communities and Development, Division of Community Services,
September 1985.

Introducing Seattle, Seattle Chamber of Commerce, Seattle,
Washington, 1987.

Light (Rail) at the End of the Tunnel?, League of Women Voters of
Seattle, May 1987.

Mayfield, Jim. Economic Review, Seattle Chamber of Commerce,
Seattle, Washington, 1987.

Mayor's Recommended Land Use and Transportation Plan for Downtown
Seattle, City of Seattle, May 1984.

Pisarski, Alan E. Commuting In America: A National Report on
Commuting Patterns and Trends, Eno Foundation for
Transportation, Westport, Connecticut, 1987.

Sale, Roger. Seattle, Past to Present, Seattle, Washington,
University of Washington Press, 1976.

Shindler, Bob. Downtown Seattle Transit Project Technical Report:
Travel Forecasting, Puget Sound Council of Governments,
Seattle, Washington, 1983.

Susskind, Lawrence E. and Louise Dunlap. "The Importance of
Nonobjective Judgments In Environmental Impact Assessments",
Environmental Impact Assessment Review, Vol 2, No. 4,
Cambridge, MA. December 1981.

Tang, Terry. "Dark at the End of The Tunnel", The Weekly,
Seattle, Washington, February 12-February 18, 1986.

- _____. "Downtown Balks at a Bill for the Transit Tunnel", The Weekly, Seattle, Washington, March 12- March 18, 1986.
- _____. "The Tunnel Of No Return", The Weekly, Seattle, Washington. August 13-August 19, 1986.
- _____. "Vanishing Bus Riders", The Weekly, Seattle Washington, April 1-April 7, 1987.
- _____. "Slipping the Tunnel Bill" The Weekly, Seattle, Washington, May 6-May 12, 1987.
- _____. "The Little Commuter Train That Couldn't", The Weekly, Seattle, Washington, December 23-December 29, 1987.
- U.S. Department of Transportation. Urban Mass Transportation Administration. The Municipality of Metropolitan Seattle. The City of Seattle. Draft Environmental Impact Statement for the Downtown Seattle Transit Project in Seattle, King County, Washington. Washington, D.C., 1984.
- U.S. Department of Transportation. Urban Mass Transportation Administration. The Municipality of Metropolitan Seattle. The City of Seattle. Final Environmental Impact Statement for the Downtown Seattle Transit Project in Seattle, King County, Washington. Washington, D.C., 1985.
- U.S. Department of Transportation. Urban Mass Transportation Administration. The Municipality of Metropolitan Seattle. The City of Seattle. Comment Letters and Hearing Transcript for the Downtown Seattle Transit Project in Seattle, King County, Washington. Washington, D.C., 1985.
- Wachs, Martin. Technique vs. Advocacy in Forecasting: A Study of Rail Rapid Transit, photocopy.