Critical History of Rapid Transit Planning and Decisionmaking

Attempts by the city of Seattle to incorporate rail rapid transit into pending highway plans began in the 1950's. But the concept of a regionwide rail system developed in another forum as a component part of the business-led movement to regionalize municipal services and improve the physical infrastructure of the city.

Transit plans for the Seattle area were proposed in 1967, 1970, and 1972. The first two plans, which were financed by property tax bond issues, failed in **1968 and 1970 to gain the 60 percent voter approval required** for adoption. The financing for a shortrange bus plan involved the use of a new State excise tax on automobiles matched by a local sales tax. This plan, which required only a simple majority approval, was adopted in 1972.

While this short-range plan for an all-bus system is now being implemented, debate continues over the appropriate technology for the long-term development of transit in the Seattle region.

EARLY HISTORY OF TRANSIT IN SEATTLE

Seattle is a relatively young city; the first settlers arrived in Seattle in 1852. By 1884, a horse-drawn street railway had been constructed, and the first electric cable car began operating in 1889. In the decade that followed, Stone and Webster, a Boston engineering firm and owner of the largest electric power company in the Seattle area, began to integrate the nearly 70 miles of track owned by several transit companies into a consolidated interurban rail system.

The city of Seattle became involved in transit in 1914 when it began construction of two streetcar lines. During the First World War, problems with transit operations led the city to initiate negotiations to purchase the system, and in 1918 the voters approved city purchase of all portions of the system within its border. The railway system continued to have financial difficulties. A 1926 proposal by the City Planning Commission to build a rail transit system was ignored. In 1939, the three-member Seattle Transit Commission was created to operate and improve the system, which had fallen into dilapidated condition and financial distress. As happened elsewhere in the country, transit ridership increased during the World War II years but then fell off again.

TRANSPORTATION PLANNING IN THE 1950's

The city made a number of unsuccessful attempts during the 1950's to incorporate provisions for rail rapid transit into pending highway plans. To resolve the ensuing controversy, the city, county, and State agreed to conduct a comprehensive transportation study; and by the end of the decade they established the Puget Sound Regional Transportation Committee to define the scope of the study.

The subject of the first major debate in the early 1950's was the configuration of Seattle's Central Freeway, which the Washington State Toll Bridge Authority was authorized to construct as a toll facility in 1953. During the preliminary design stages, the Seattle Transit Commission suggested incorporating a 50-foot median in the design to allow for the future development of rail rapid transits This request was denied by the Toll Bridge Authority in' 1955.

In 1956, when the responsibility for the construction of the Central Freeway was transferred to the Washington State Highway Commission, the Transit Commission renewed its efforts to have rail transit facilities incorporated in the Central Freeway design, this time with the support of the City of Seattle Planning Commission. Both the transit commission and planning commission issued reports in 1957 recommending that the

⁵ Clifford Kurtzweg, Rapid Transit Development in Seattle, unpublished paper prepared for the University of Washington, June 1966, p. 5.

freeway design should provide space for rail that could be used by express buses until the rail system was constructed.

In early 1957, because of the controversy over rapid transit on the Central Freeway, the Mayor of Seattle appointed a committee to consider the problem. The committee—consisting of the Seattle City Engineer, the Director of Planning, the Seattle Transit General Manager, and representatives of the Chamber of Commerce, the Municipal League of Seattle, and King County—concluded that evidence of the need for rail transit was insufficient to merit a delay in freeway construction. b

Although rapid transit had lost the battle to gain a place in the freeway proposal, the controversy mobilized public interest in a comprehensive transportation study. In October 1957, the Puget Sound Regional Transportation Committee was formed, with representatives from the State Highway Commission, the city of Seattle, King County, and the Seattle Transit Commission. One year later, the committee employed Parsons, Brinckerhoff, Hall and MacDonald to conduct a survey to determine the scope and procedures for the comprehensive transportation study. In 1960, as an outcome of this work, the Puget Sound Regional Transportation Study was formed.

EFFORTS TO ACHIEVE METROPOLITAN GOVERNMENT IN THE 1950's

Advocates of rail transit in Seattle emerged in two different forums. Transit advocates were involved with the antihighway forces during the freeway debates. In addition, mass transit was a central concern of those who worked to create an umbrella organization with authority throughout the Seattle metropolitan region. The momentum behind this effort was led by James Ellis, a young lawyer who worked through the Municipal League of Seattle in the early 1950's. Ellis' concern focused on the inadequacy of weak and fragmented local governments to solve transportation problems along with other areawide problems involving sewage disposal, air quality, and the adequacy of recreational and cultural facilities. Ellis gave up his attempt to update the King County government after unsuccessful efforts at reform. ⁷The solution Ellis proposed was a countywide metropolitan council modeled after Toronto's Metro.

In 1956, the mayor of Seattle and the Board of King County Commissioners appointed the Metropolitan Problems Advisory Committee, chaired by Jim Ellis. This group recommended to the State legislature that it pass enabling legislation to permit cities and counties in urban areas to establish metropolitan councils. In 1957, the legislature passed the Metropolitan Municipal Corporation Act. The act stated that:

The people of the populous areas in the State . . . need to obtain . . . essential services not adequately provided by existing agencies of local government. The growth of urban populations and the movement of people into suburban areas has created problems of sewage and garbage disposal, water supply, transportation, planning, parks and parkways which extend beyond the boundaries of cities, counties, and special districts. For reasons of topography, location and movement of population, and land conditions and development, one or more of these problems cannot be adequately met by the individual cities, counties, and districts of any metropolitan areas.

It is the purpose of this act to enable cities and counties to act jointly to meet these common problems in order that the proper growth and development may be assured and the health and welfare of the people residing therein may be secured. ⁸

Pursuant to the State legislation, a major promotional campaign presenting the Metro concept to the people was directed by a new citizens' organization, the Metropolitan Council Action Committee, again organized by Jim Ellis. The measure lost by only 16,000 votes (out of an 187,000 vote total in the election of March 1958).⁹ Although it had gained voter approval within the city of Seattle, the measure was defeated because it failed to pass outside the city.

Finally, later in the same year, the voters approved a stripped-down Metro as a special purpose agency responsible for sewage treatment and water supply. Thus, the Municipality of

[•] Ibid., p. 6.

⁷ Robert Gogerty and David Whitlow, An Analysis of Forward Thrust, unpublished paper, 1967, p. 5.

⁸ Colcord, op. cit., pp. 70, 71.

^oGogerty and Whitlow, op. cit., p. 6.

Metropolitan Seattle was created which, with voter approval, had the potential to take on other critical areawide problems. This potential was reinforced when Metro gained national as well as local recognition for cleaning up Lake Washington.

While Metro was being created in 1957, so also was the Puget Sound Governmental Conference (PSGC). The PSGC was created by the elected officials of King, Kitsap, Pierce, and Snohomish counties to serve as a purely advisory organization charged with coordinating land use planning, undertaking studies of areawide problems, and making recommendations to member counties and cities.

TRANSPORTATION PLANNING BETWEEN 1960 and 1966

While the genesis of rail transit plans and the movement toward metropolitan-scale improvements occurred in the 1950's, it was during the 1960's that a regionwide rail transit system was first planned, designed, and taken to the voters.

As noted previously, the principal metropolitan transportation planning agency in Seattle at the beginning of this period was the Puget Sound Regional Transportation Study (PSRTS). Founded in 1960 by the Washington State Highway Commission in cooperation with local governments in the four-county Seattle metropolitan area, PSRTS was one of the Nation's first large-scale metropolitan transportation and land use planning agencies; most large urban regions subsequently established such programs as a result of the Federal-Aid Highway Act of 1962 and the comprehensive planning assistance program administered by HUD (then HHFA). PSRTS was responsible for an examination of the existing transit system to determine potential rail rapid transit corridors and to estimate potential patronage and construction costs.¹⁰

John Mladinov became the director of the Puget Sound Study in 1960. In an interview, he reported that immediately after his appointment a delegation of the Municipal League called upon him to request that a rail rapid transit system be studied, and that it be considered a part of any basic transportation network. The League further requested that any rail system be limited to the boundaries established for Metro, which included King County and Seattle only. Mladinov refused both requests, insisting that the form and extent of any rail proposal would have to be justified by PSRTS' analysis.

In October 1961, another citizens' committee, the Metropolitan Transportation Committee, was appointed to determine the best means for providing rapid transit in the metropolitan area.¹¹ The committee, which included James Ellis, concluded that Metro was the appropriate agency to perform the transit function. As a result, in February 1962 a promotional committee was formed called the Citizens' Committee for Metro Transit. The Citizens' Committee sought to get approval from Metro to prepare a rapid transit plan and financial program to present to the voters. In September 1962, despite an intense campaign, the effort failed. This time the proposal was supported by the suburbs but failed to get a majority of the city's votes.

City leaders, who were dissatisfied with PSRTS' automobile-oriented approach to transportation planning, began a parallel planning activity for rail rapid transit, initially through the auspices of the Seattle Transit Commission. The city strongly favored the engineerin, firm of parsons, Brinckerhoff, Quade and Douglas (PBQD), one of the principal firms involved in planning the BART system, However, the Puget Sound Governmental Conference, which was to put up the money, decided it would select a consultant by competition. Although PBQD was among the four finalists, it lost its lead position, and DeLeuw, Cather & Company was selected. When DeLeuw, Cather was authorized to begin its study in June 1964, the area it considered was the same as that being considered by PSRTS. Much of the data gathered by PSRTS was used in the DeLeuw, Cather transit study.

During this period, the leading force for rail transit within City Hall was Ed Divine, an administrative assistant to Mayor Gordon Clinton and then to Mayor James D. Braman, who succeeded Clinton in 1964. Prior to becoming mayor, as a member of the City Council and chairman of its Finance Committee, Braman was reported to oppose rail transit on the grounds that it was too expensive. Ed Divine is given credit for persuading Braman to change his position radically

ю Kurtzweg, op. cit., p. 11.

¹¹ Colcord, op. cit., p. 83.





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after he became mayor. Braman became a strong, open, and ardent advocate for rail transit.

Another event changed the national context for mass transit. The Urban Mass Transportation Act of 1964 allowed two-thirds of capital financing of transit projects to be allocated from Federal funds. (Prior to this, Federal grants had been available only for transit demonstration projects.)

In November 1964, the first of DeLeuw, Cather's two interim reports was issued. The report recommended that the new I-90 Lake Washington bridge be designed to provide for future rail transit facilities. This recommendation was adopted by the PSGC and transmitted to the Washington State Highway Department.¹² DeLeuw, Cather's second report, the Interim Report to the Puget Sound Governmental Conference on Feasibility of Rapid Transit Operation within the Seattle Area, was submitted in November 1965. The report strongly recommended the construction of a two-line rail rapid transit facility connecting the central business district to the northeast portion of the city and to Bellevue. The plan included a regional area transit plan to meet the Seattle area's transit needs until 1985 and a staged construction program.

A 13-member Rapid Transit Advisory Committee headed by James Ellis, which was appointed by Mayor Braman on October 18, 1965, endorsed the DeLeuw, Cather recommendations in a statement transmitted to the Mayor on November 1, 1965.13

Several months after the publication of DeLeuw, Cather's reports, the Puget Sound Regional Transportation Study summary report was released. This report concluded that no strong recommendation could be made for rapid transit. An analysis of the reasons for the difference in the study findings was summarized by Clifford Kurtzweg in a paper submitted to the University of Washington in June 1966:

Several basic concepts account for the failure of PSRTS to find rapid transit feasible in the Seattle area. First the PSRTS analysis assumes that the development of rapid transit corridors does not significantly change land use patterns or densities. Second, the PSRTS study assumes that increasing the amenities of transit service would not greatly increase patronage.

Third, the PSRTS study shows no definite economic advantage to a rail transit system. DeLeuw, Cather and Company in their analysis of rail transit feasibility assumes that the improved system will attract 8 percent more passengers than the present bus system and that development within the rail transit corridor would increase patronage by an additional 15.0 percent. Further, DeLeuw, Cather, and Company lists decreases in traffic congestion, reduction of air pollution, reduction of parking demand in the CBD, more efficient use of right-of-way, and increases in land values along the transit corridors as being benefits of rail transit instead of depending on strictly dollar-cost economics for justification. Basically the conflict of the two studies reduces to a conflict between highway-oriented values and transit-oriented values.¹⁴

Seattle newspapers carried a number of articles expressing the views of PSRTS Director John Mladinov. He criticized the DeLeuw, Cather plan and charged that the study director, Israel Gilboa, was prejudiced in favor of rail transit and that DeLeuw, Cather's analyses and benefit-cost evaluations were skewed to favor a rail plan. The disagreement between the two factions resulted in Mladinov's leaving the area, largely due to political pressure from the city government.

THE CREATION OF FORWARD THRUST

In the same month that the DeLeuw, Cather interim report was published, James Ellis called for the creation of "Forward Thrust." Ellis, the force behind Metro and other metropolitan improvement organizations, called for a coordinated program to finance areawide capital improvements in a speech on November 3, 1965, to the Seattle Rotary Club.¹⁵

Ellis suggested that there were three physical conditions necessary for the center city to perform its functions successfully: (1) it must have a high density of activities, (2) it must be attractive, with

¹² Kurtzweg, op. cit., p. 12.

¹³ Ibid., pp. 15, 16.

¹⁴ Ibid., **pp.** 14,15. ¹⁵ James **R.** Ellis, "**Transportation and the Shape of the** City," November 3, 1965, Selected Speeches on Forward Thrust and Februar, 13, 1968 Election Results, 1965-68, p. 2.

open plazas and easy pedestrian access to all facilities, and (3) there must be the capacity to move large numbers of commuters during peak hours.¹⁶

Ellis predicted that "on-street" transportation would not be able to meet the requirement of Seattle's core area:

The only pattern now known which permits both open space and dense development while moving large peakhour loads is the use of high-rise structures and some form of grade separated public transportation to supplement streets and highways. Rapid transit is the essential link in a balanced transportation system which is missing in Seattle. ¹⁷

Ellis stressed that rapid transit is only part of a bigger picture:

Transportation is only one of the physical elements which shape a city. To achieve a satisfactory total design the relationship between all of the shaping forces must be recognized. Transportation facilities become a more useful tool for urban design if they are integrated into the planning of other public facilities and private developments.

By reducing parking requirements public transportation may free downtown space for a plaza and this plaza in turn may be additionally enjoyable if designed in conjunction with a transit station. The relationship between public transit and arterial street requirements is both causal and complementary. Just as a system of sewage disposal is necessary to the enjoyment of beaches or waterfront parks so each of the basic sinews of the city has a direct relation to the more familiar projects for city beautification and human fulfillment. By the same token, the location of other public facilities should complement and support the transportation system. A big league stadium should be served by both public transit and freeways. All public capital purposes in a city are closely interdependent.¹⁸

To achieve these interdependent needs, Ellis called for a joint effort, a forward thrust, by the area's several governments and all interested private groups. He envisioned coordinating a series of capital improvements that had been contemplated by various groups and local governments into a unified 10-year capital program including:

- A basic rapid transit system;
- A major league sports stadium;
- Major arterial street improvements;
- Sufficient parks, plazas, and greenbelts to satisfy metropolitan needs and to permanently eliminate urban sprawl;
- A world trade center; and
- Matching funds for urban redevelopment. ¹⁹

Ellis' speech reflected a new approach to the goal of coordinating area wide improvement, with which he had been concerned for well over a decade. The concept gained the support of community leaders, and in March 1966, Seattle Mayor Braman and King County Commissioner Scott Wallace appointed a group to select the Forward Thrust Committee.

The organizations represented by the members of the committee covered a broad range of local government and business interests. Senior officials of large businesses formed the predominant element; academics comprised about 10 percent of the committee, and the only "public interest" figures in the present sense of the word were several conservationists. The composition of the committee was to influence its policies as well as public reactions as its work progressed.

THE FORWARD THRUST PROGRAM AND VOTER REJECTION OF TRANSIT BONDING

Once the Committee of 200 was selected, the Forward Thrust program began its work. The process was organized into three phases. The first, which lasted from September to December 1966, was a factfinding period for developing a broad consensus on areawide needs. It sought to identify the total capital improvement needs for King

¹º Ibid., p. 5.

¹⁷ Ibid., p. 6.

¹⁸ Ibid., p. 7.

¹⁹ Ibid., p. 8.

County by pulling together all existing local studies and proposals.

During the second phase, Forward Thrust subcommittees examined financing methods and local agency authority for fulfilling Seattle's needs, and presented **18 bills to the State legislature to create funding and the authority to administer the necessary programs.** One such bill, passed in 1967, permitted Metro to plan for a comprehensive public transportation system.

Next, from April through October 1967, a system of priorities was established relating the urgency of the various needs to financial capabilities. The legislative package, which both doubled the county's indebtedness limit and established State funding for various measures, enabled Forward Thrust's Economic Analysis Committee to determine how much each of the other subcommittees could "spend" for their various proposals. Once a set of programs was recommended to local governments and agreed upon by them, Forward Thrust's third-phase promotional campaign was begun.

In November 1967, Forward Thrust announced its final recommendations. The program totaled some \$2 billion of improvements, with \$819 million to be raised locally by general obligation bonds. Of this local share, \$385 million was for rapid transit nearly half of the entire program.

Transit planning was going on simultaneously under the auspices of PSGC. During November 1965, the same month Jim Ellis introduced the concept of Forward Thrust, PSGC adopted a regional transit plan as an element of a total regional transportation **system. The** adopted transit plan, based on the DeLeuw, Cather study, recommended a two-line grade-separated rail transit system with local and express bus feeder services. In July 1966, the same month of the first meeting of the Forward Thrust Committee, a second contract was signed between PSGC and DeLeuw, Cather to refine the transit plan.

The new study had two goals. First, the study was to reexamine the 1965 two-line plan in the light of the very large increase in population projected due to industrial expansion. These increased growth projections suggested that the region's population would grow from 1.6 to 3.1 million between 1965 and 1990. The study's other task was to do detailed engineering design and to take into consideration architecture, urban design, and economics as a basis for more detailed cost estimates.

During this study, under contract first with the PSGC and then with Metro but under the guidance of the Forward Thrust Transportation Committee, DeLeuw, Cather extended the transit plan to a 47mile system with two new legs. One of the new legs headed south to Renton and the other went northwest to Ballard, supplementing the earlier plan's northeast route and east route across Lake Washington to Bellevue. All four routes combined into a single line through the CBD. The 1985 plan included the following major elements:

- 47 miles of dual-track, grade-separated rail rapid transit routes with 32 stations. Automobile and bus-to-rail transfer facilities and parking were to be provided at appropriate stations;
- A 3-mile, grade-separated busway to west Seattle. To be converted in the future to rail rapid transit;
- 24 miles of grade-separated right-of-way for future rail rapid transit;
- 90 miles of express bus routes, which would operate on highways;
- 500 miles of local bus routes, which would operate on major arterials and serve rapid transit stations.

The total capital cost required to acquire and construct the system was estimated at \$1.155 billion over a 17-year period (assuming an inflation rate of 4.5 percent per year). Annual operating costs of \$29 million were to be covered by revenues by 1990. One-third of capital costs, or \$385 million, was to be raised through a general obligation bond requiring 60 percent voter approval for authorization as part of the Forward Thrust program. The remaining two thirds of the cost was to come from UMTA.

In October 1967, the plan was reviewed by a blue-ribbon board of consultants: an architect, Pietro Belluschi; an engineer from Toronto, W.E.P. Duncan; and a planner/urban designer, Henry Fagin. The board met in Seattle to review DeLeuw, Cather's work and to receive presentations from Mayor Braman, Forward Thrust President Jim Ellis, and C. Carey Donworth, Chairman of the Metro Council, as well as key members of the design consultant team. A letter of endorsement prepared by this board was included in the October report documenting the plan.

With the transit plan fully detailed, the next step was to achieve public support prior to the bond election. Forward Thrust's promotional campaign lasted 4 months and involved the work of more than 3,000 volunteers.

In addition to having representatives of the media on its Committee of 200, Forward Thrust employed a professional advertising firm with political campaign experience to carry out the promotional effort. The effort involved the writing of editorials, a mass mailing, paid advertisements in television and the press, and "an army of thrust boosters"²⁰ who canvassed the final weekend of the campaign. The theme of the campaign was to promise a better "way of life" for Seattle citizens.

In a survey conducted by Forward Thrust in September, the first of the two done during the campaign, transit ranked second in popularity with 64 percent of the respondents in favor, 19 percent opposed, and 16 percent undecided. During followup telephone surveys in January, support for transit had dropped to 49 percent of the respondents, with 23 percent opposed and 28 percent undecided.

Opposition to the Forward Thrust program and to the rapid transit proposal in particular came from several sources. The first formal opposition was voiced in the King County Democrat, the official organ of the King County Democratic Party. An antagonistic editorial entitled "Government by the Elite ?????" questioned the methods employed by Forward Thrust and called for more time to allow the communities involved to study the desirability of the proposals. The editorial also raised questions about a possible conflict of interest involving Ellis, whose law firm specializes in handling bonding' and is legal counsel to Metro. The editorial was the responsibility of Jeanette K. Williams, who at the time was the official spokesperson for the King County Democratic Party and who currently is the chairperson of the PSGC Transportation Policy Advisory Committee. Three weeks after publication of her editorial, she publicly apologized to Ellis. 21

The Association of Teamsters in Washington also opposed Forward Thrust. Through its official paper, The Washington Teamster, with a circulation of 33,000 in King County and 50,000 statewide, it voiced strong criticism of Forward Thrust.²² E d Donohoe, the managing editor, ran a series of cartoons and editorials attacking Forward Thrust for causing unnecessary increased taxation, personally attacking Jim Ellis for his alleged conflict of interest, and attacking the rapid transit proposal which, said Donohoe, "won't be rapid, won't haul the people they claim . . . (these rail systems) won't pay their way and they're no damned good for the north end, south end, or east end,"²³

A third opposition group was called Citizens for Sensible Transit. It criticized the support given by Pacific Northwest Bell, which had given Forward Thrust its billing lists as source material for canvassing. This group claimed that the company was not a private organization and therefore could not discriminate in its giving. ²⁴They contacted the Federal Communications Commission and asked for equal time to televise their answer to the pro-Forward Thrust editorials, which they were granted by the three major stations. Gogerty states that:

(T)he time authorized was based on all pro-Thrust editorials, even though opposition was primarily concerned with the transit proposal. The last week of the campaign, the opponents were in possession of extensive media time, and used it effectively. The major theme, ironically, was that Forward Thrust through rapid transit was trying to take away or alter the "way of life" in the Pacific Northwest.²⁵

The special election was held on February 13, 1968. Twelve tax propositions were placed before the voters of Seattle and King County. Under State law, each proposition required a 60 percent "yes" vote to pass as well as a 40 percent turnout of those who had voted in the past general election in the State. The Forward Thrust campaign elicited a much larger turnout than the 160,000 voters expected for the special election. A record-breaking 267,597 people voted, some 48 percent of the registered King County voters and a greater number than the 214,690 voter turnout of the

²⁰RobertE.Gogerty, Attitudes Affecting the Forward Thrust Campaign, unpublished paper, March 14, 1968, pp. 6, 7 of unnumbered pages.

²¹Gogerty and Whitlow, op. cit., **pp. 44, 45**. Gogerty and Whitlow speculate that Williams' apology may have been due to pressure from Senators Magnuson and Jackson.

²² Ibid., p. 46.

²³ Ibid., pp. 46, 47.

²⁴Gogerty, op. cit., p. 20.

²⁵ Ibid., p. 20.

previous general election. Seven of the propositions, totaling \$333.9 million, received the necessary 60 percent or more support. While the other five failed, they each received at least a 50 percent majority approval. The transit proposal, which was the most costly item, won support from approximately 51 percent of the voters, but this margin was not enough for approval. Since transit was considered by Forward Thrust to be the key to its effort, there was a feeling of defeat among the leaders of the campaign.

Robert Gogerty forwards several reasons for the defeat that involve the way the campaign was run. He points out that the campaign was not geared to show the low-income voter how the transit project would benefit him. In addition, Robert Gogerty indicated that many of the voters perceived the proposed arterial highway improvements as a less expensive and more desirable alternative to the transit proposal as a solution to the county's transportation problem. This involved a misunderstanding of Forward Thrust's concept that the arterial improvements were a part of an overall balanced transportation plan.

But in the last analysis, Gogerty attributes the defeat to a policy decision taken by Forward Thrust campaign officials:

Campaign officials admit that the September survey lulled them into thinking transit was safe and that by the time they realized that there was trouble it was questionable whether it could be saved. (The decision to give the stadium priority at that time pretty well settled the matter.) 20

SECOND DEFEAT OF THE FORWARD THRUST TRANSIT PROGRAM IN 1970

In March 1968, with the support of the mayor of Seattle, the chairman of the Board of King County Commissioners, and several civic organizations, the Forward Thrust Committee began a second effort to secure approval of the entire capital improvement program. Although the original intention had been that Forward Thrust should disperse after the February election, the results were sufficiently encouraging to keep the program alive. Starting in April 1968, more than 100 new members were added to the Forward Thrust Committee and additional private financing was obtained.

During September through December of 1969, background surveys were again conducted; the legislative program lasted from January 1968 to February 1970. The only bill relating to the transit proposal in the 1968 session allowed any municipality which operated a public transportation system to levy a 1 percent motor vehicle excise tax.²⁷The tax would replace one-half of the already existing 2 percent State motor vehicle excise tax. The tax proceeds so designated for transit would have to be matched by other locally levied tax funds also to be spent on transit. The bill also gave Metro authority (which local governments already had) to levy household utility excise taxes.

Once again, DeLeuw, Cather was retained for the transit studies, this time under a joint contract signed by the city of Seattle and Metro. Again, a team of engineers, architects, urban designers, and economists was assembled. By March 1969, the team had completed a comparative analysis of alternative transportation systems and concluded that a bus-rail concept was best for the Seattle metropolitan area.

The analysis examined four alternative transit systems: buses in mixed traffic, all-bus systems with metered freeways, all-bus systems with busways, and the bus-rail plan as modified from the 1967 plan. The first alternative was discarded as a long-range solution because it caused serious traffic congestion and minimal travel time improvement.²⁸ For the two remaining all-bus alternatives, it was assumed that grade-separated right-of-way would have to be provided to serve five major activity centers—downtown *Seattle, the* University District, Bellevue, the Duwamish industrial area, and Renton—in order to avoid serious conflicts with other transportation modes. As a result, the capital costs

... were quite comparable, but the operating deficit of each of the two all-bus systems was four times greater than the bus-rail system, on an annual basis. This can be explained largely by the fact that, with automatic train operation, a rapid transit train with a single attendant can carry more than 600 passengers, while

²⁰ Gogerty, op. cit.

²⁷ HB641, Chapter 255, Laws of 1969.

²⁸ DeLeuw, Cather & Co., op. cit., p. 40.

each bus with driver carries only about 47 passengers, fully loaded. This total payload factor is significant because about 80 percent of the total operating cost of a bus transit system is in the wages paid to vehicle operators.²⁹

With equal or better patronage forecast for the busrail system, the consultants concluded that it was **a** superior alternative, considering the higher operating costs of the all-bus system. This finding was supported by the Technical Advisory Committee of key agency personnel from Metro, PSGC, and the State Highway Department.

An additional analysis of alternatives was conducted by a voluntary group from Boeing. A Boeing executive who chaired the Forward Thrust Transit Committee got together a group of technicians to review DeLeuw, Cather's study of alternatives during the 1970 program. This group worked on a voluntary off-hours basis, investigating alternative types of technology to answer a concern that the system had been overdesigned and was more costly than necessary. They suggested the use of smaller vehicles and correspondingly less expensive track and supporting structures. Their studies showed a possibility for reducing the costs by as much as 25 percent, even if the number of miles to be tunneled, depressed, or elevated were kept constant. The technicians presented their findings to the Technical Advisory Committee and to the consultant. DeLeuw, Cather took a stand against considering unconventional technologies. Forward Thrust was opposed to public discussion of these alternatives before the election for political reasons, although it indicated analysis of lowercost technologies could be resurrected after the bond issue.

During the autum of **1969**, a series of community meetings was held to broaden the citizen participation effort.

Meanwhile, alinement studies and patronage projections had been conducted, estimates of capital cost were updated, and an initial bus system developed in more detail than had been done in the 1967 plan.

On February 19,1970, a report was published by DeLeuw, Cather documenting the "new" plan (see Figure 5). It included a letter of endorsement from a new blue-ribbon review board, this time consisting of William Boucher III, Executive Director, Greater Baltimore Commission; Guy Blain, Director of the Transportation Department of the Montreal Transportation Commission; Charles E. Shumate, Chief Engineer of the State of Colorado Department of Highways; F. Norman Hill, General Manager of the San Antonio Transit System; and Boris Pushkarev, Planning Director of the Regional Plan Association of New York City.

The 1970 plan differed from its 1967 predecessor in the following ways:

- There were 49 miles of rail this time instead of 47, still grade-separated. There were alinement shifts on all lines, a cutback of the northwest line, an extension of the northeast line, and a short extension of the east line.
- The mileage of local bus routes was expanded to 740 miles in comparison to the 500 miles included in the previous system.
- A plan for immediate improvement of the existing bus system was this time developed in greater detail than it had been in the first plan, with descriptions of service improvements to each of the community areas throughout the region.
- Instead of the 32 rail stations suggested previously, the new plan called for 34 stations, a number of them in new or modified locations.
- In addition to those in the earlier plan, **800** local bus shelters were to be provided, **32 community and neighborhood** bus stations, and 9 park-and-ride bus stations.
- There were only 8 miles of right-of-way reserved for future rail route extensions as compared to 24 miles reserved in the previous system.
- The total cost had risen from \$1.155 billion to \$1.321 billion, primarily due to inflation. The increase in total cost increased the local share from \$385 to \$440 million.³⁰

On may 19, 1970, 3 months after the February publication of the Metro transit plan, another special election was held. This time only four propositions were presented to the voters. The total cost was \$615.5 million: as in 1968, the transit plan, costin_g\$440 million, was the most expensive

²⁹ Ibid., p. 50.

³⁰ De Leuw, Cather & co., The Rapid Transit Plan for the Metropolitan Seattle Area, February 19, 1970, p. 39.







single item by far. Again a 60 percent majority of referendum voters was necessary. A worsening local economic situation, whose decline picked up momentum in late spring and did not bottom out until 1971, may have been the key factor in the defeat of the second transit proposal. This time the transit plan was supported by only 46 percent of the voters, and, in keeping with its original mandate, this time the Forward Thrust organization was disbanded.

1972 VOTER ACCEPTANCE OF A SHORT-RANGE BUS PLAN

After the second transit bond issue was rejected in **1970**, **transit advocates turned from a regional bus-rail system to a short-range bus plan for several reasons. Economic conditions** in the Seattle area continued to be poor, which would make voters wary of an expensive transit system. A bus system would require no bonded indebtedness and therefore only a **50 percent voter approval for its financing. And**, given UMTA's warm reception of bus approaches, Federal funding seemed likely.

By far the most important element in the decision to formulate a bus system in 1972 was the threat of a complete collapse of the Seattle Transit System and suburban private bus operators. During this period the Puget Sound Government Conference (PSGO, with Metro's concurrence, hired a new consultant with bus transit planning experience to prepare a short-term bus plan. Daniel, Mann, Johnson & Mendenhall in 1972 proposed a 650-mile system of express bus routes serving four activity centers (the Seattle and Bellevue CBD's, the Duwamish industrial area, and the University District) from a series of transfer points throughout the region. The transfer points were to be served by local buses and many would have parkand-ride facilities.

The new system was estimated to cost \$95.19 million, with new buses, park-and-ride facilities, and freeway bus stops being the largest budget items. Fares would be low to encourage patronage, and revenues were not expected to meet operating costs. Fare box revenues were to be supplemented by a 0.3 percent local retail sales tax plus matching State funds from a motor vehicle excise tax as provided for by the 1969 legislation. In addition, Federal and State gas tax funds were to be used for highway-related facilities in the plan, and UMTA capital grants were to be a source for buses and other facilities not covered by the highway-related funds.

PSGC took a more active role in leading this third round of the transit planning process. For the 1972 plan, PSGC supplied population, employment, and land use forecasts, and calculated the trip generation and distribution data. The data developed by PSGC indicate a much slower growth in the region. Two alternative bus systems were tested, one CBD-focused and one multicentered. The multicentered alternative that was chosen, although it



Seattle's transit system includes priority treatment for buses

does not give the highest quality service to the CBD, achieves the highest ridership overall. In comparison, previous plans sought to achieve the political goal serving the CBD.

This time, with only a 50 percent vote required, the transit scheme won approval. Financing required to implement the short-term bus transit improvement program was approved in public referendum, and Metro was authorized to develop and operate the region's public transit system.

CURRENT CONTROVERSY OVER THE LONG-RANGE PLAN

Since 1972, differences in opinion have resulted in rivalries between PSGC and Metro over the future of rail transit in the Seattle region. The Metro leaders still consider the bus plan to be an interim measure, designed to take advantage of UMTA's willingness to finance bus systems. The PSGC, which has an advantage over Metro in that it is charged with receiving and dispersing DOT funds, neither recommends nor specifically excludes rail transit.

Since 1972, Metro and PSGC have competed for major roles in mass transit planning. The agencies agree that the Seattle region can best be served by a range of technologies to be implemented incrementally and designed to meet specific transit needs in specific parts of the region. But their different orientations have led them to focus on different issues in their attempts to define their respective roles.

Metro, as the present transit operator, believes the main issue concerns the types of transit technology most appropriate for Seattle's longterm transit needs. Metro leaders consider the 1972 bus plan to be an interim measure designed to take advantage of UMTA's willingness to finance bus systems. They argue that in the long run some form of automated transit technology will be needed to diminish the bus system's high operating costs. Metro favors the provision of a range of technologies to meet different service needs throughout the region. It now has a study of transit technology systems underway whose goal is to develop a general plan, with strategies on how to achieve it incrementally.

The Puget Sound Council of Governments (PSCOG)³¹ is most concerned with the broader

issues such as how the capacity, speed, and location of a transit system are linked to land development intensity and timing issues. PSCOG's current longrange transportation plan calls for exclusive bus lanes on both highways and arteries, although it does not rule out fixed-guideway systems. The long-range plan is basically an extension of the policies in the adopted short-range transportation plan, which deals with the 1972-80 period. In addition to this conventional system, PSCOG staff have given serious attention to such new technology concepts as an automated small-vehicle CBD distribution network that would move people and goods and perhaps double as the solid waste collection system.

In the past year, this jurisdictional dispute has been overridden by the issue of how to use the funds allocated for the construction of Interstate Highway 90. The decision to include some kind of exclusive transitway in the proposed I-90 freeway is several years old, PSCOG initiated accelerated studies on several options, including variations on the Highway Department's transit-freeway scheme. One proposal endorsed by Seattle's Mayor Wes Uhlman involves electrified buses operating in tunnels under a pedestrian mall on either Third of Fourth Street in the CBD. The downtown tunnel would be linked by a busway to I-90. Other options that include constructing I-90 call for including rail in the freeway design and for including transit lanes in both Lake Washington bridges, with only a modest expansion of highway capacity compared to the original WSHD scheme done in the early 1950's. Options that include no highway or busway improvements in the I-90 corridor stress fixedguideway transit alternatives such as trolley or rail.

The amount of money at stake—\$500 million means that the decision on what to do with I-90 funds will be very important in shaping the longrun future of transit in Seattle. It seems unlikely that a decision not to build I-90 in any form will be taken.

Since the potential of massive amounts of funding was infused into the transit debate, the situation in the Seattle region has become very fluid. At best, this new potential has catalyzed fresh thought and has returned rail transit to the front of people's minds. At worst, the pressure to come up with a plan quickly could mean that the region will commit itself to a plan or a technology that has not been adequately thought through.

³¹ Th,PugetSound Government] Conference recently came to be known as the Puget Sound Conference of Governments.