

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AMENDING THE)	RESOLUTION NO. 83-422
BANFIELD SCOPE OF WORK TO INCLUDE)	
THE ADDITION OF SEVEN LIGHT RAIL)	Introduced by the Joint
VEHICLES)	Policy Advisory Committee
)	on Transportation

WHEREAS, The Banfield light rail project includes the purchase of 26 light rail vehicles; and

WHEREAS, The Tri-Met agreement with Bombardier for Banfield light rail vehicles has a September 30, 1983, deadline for ordering additional vehicles without a price increase; and

WHEREAS, After September 30, 1983, the price of each vehicle could increase by \$300,000 to \$400,000; and

WHEREAS, Local match funding will be provided without affecting other non-Banfield Section 3 projects; and

WHEREAS, Funds are available in the full funding contract for the purchase of additional vehicles; and

WHEREAS, Purchase of additional vehicles requires a change in the work scope and concurrence by Congress; now, therefore,

BE IT RESOLVED,

1. That the Metro Council endorses amending the work scope to include purchase of seven (7) light rail vehicles.

2. That the TIP and its Annual Element be amended to reflect this amendment.

3. That the Metro Council finds the revised work scope in accordance with the region's continuing, cooperative comprehensive

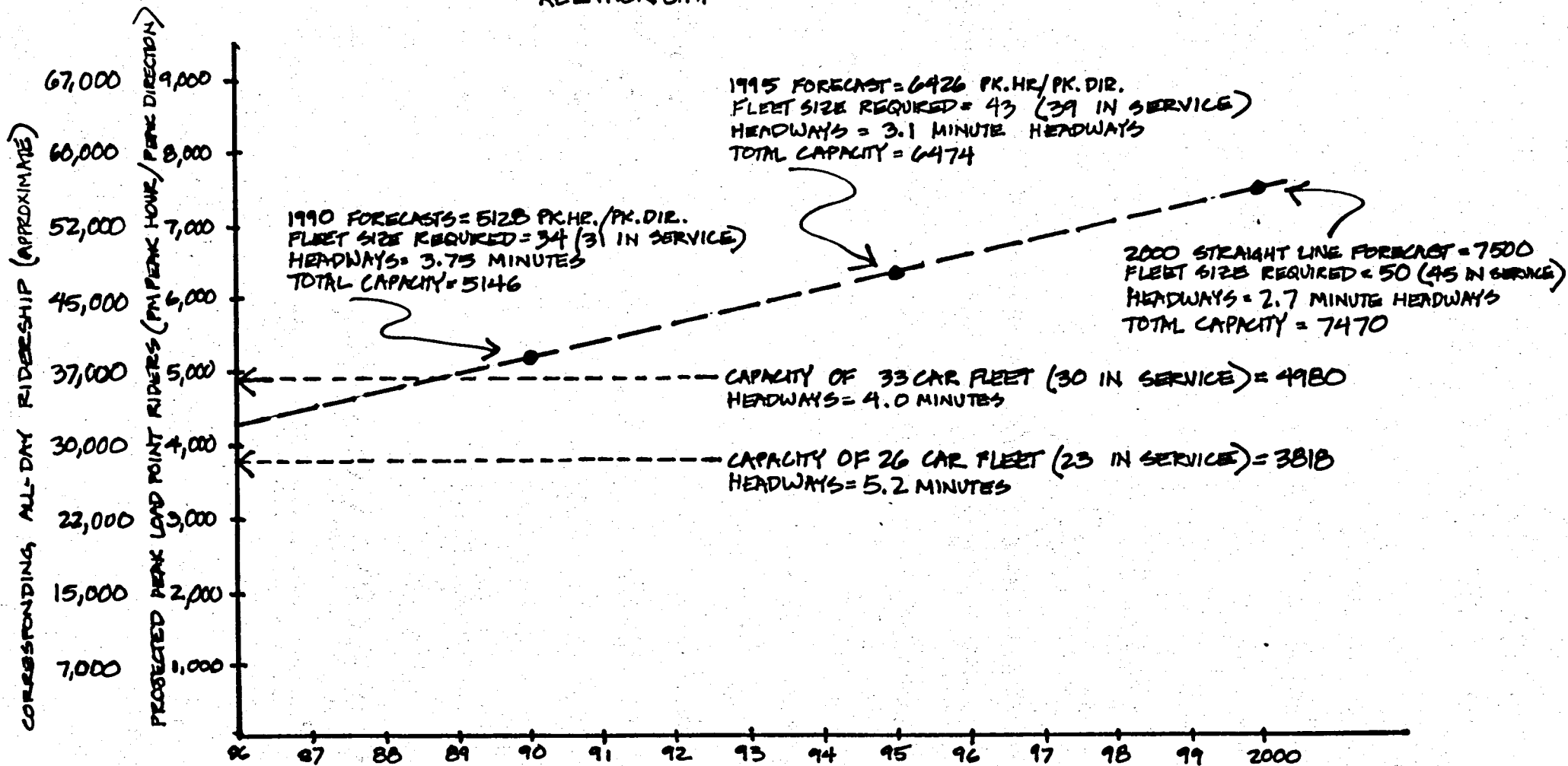
planning process and, thereby, gives affirmative A-95 Review approval.

ADOPTED by the Council of the Metropolitan Service District
this 25th day of August, 1983.


Deputy Presiding Officer

AC/gl
9159B/353
8/01/83

BANFIELD LRT VEHICLE REQUIREMENTS / PEAK LOAD POINT RELATIONSHIP



- ASSUMPTIONS:
- PEAK HR. VEHICLE CAPACITY OF 166/CAR (4 PERSONS/SQ. METER STANDER DESIGN STANDARD)
 - 10% SPARE VEHICLE RATIO
 - ASSUMED RUNNING TIMES: 11th/MORRISON TO GATEWAY = 25 MINUTES
GATEWAY TO GRESHAM TERMINUS = 25 MINUTES
11th/MORRISON TO GRESHAM TERMINUS = 50 MINUTES + LAYOVER

CONSIDERATION OF RESOLUTION NO. 83-422 FOR THE
PURPOSE OF AMENDING THE BANFIELD SCOPE OF WORK
TO INCLUDE THE ADDITION OF SEVEN LIGHT RAIL
VEHICLES

Date: July 27, 1983

Presented by: Andy Cotugno

FACTUAL BACKGROUND AND ANALYSIS

During the past six to nine months there has been periodic discussion about the need for additional light rail vehicles and the need to decide before September 30, 1983, under the contract with Bombardier. Because of the deadline, it is now time to decide or drop the matter altogether. Presented below is a discussion of the issues associated with the purchase:

Description

7 Light Rail Vehicles	@ \$ 859,497 ea.	\$6,016,479
7 Vehicle Recorders	@ 20,143 ea.	141,001
Contingency (escalation)	@ 120,503 max.	843,521
	7 @ \$1,000,143	<u>\$7,001,001</u>

Timing

It is essential to finalize whether or not to increase the order for light rail vehicles as soon as possible to take advantage of the current contracted price. The current LRV contract (plus recent change orders) allows the purchase of additional cars for \$1,000,143 each. However, this option for additional cars must be exercised by September 30, 1983, or the preferred price is lost. After September 30 the purchase price is subject to escalation, the size of the order and prevailing bid prices so the exact financial impact of delay is uncertain. However, the impact could easily be \$300,000 to \$400,000 per car for a total of \$2 to \$3 million additional cost. The Banfield cost estimate prior to receiving the favorable Bombardier bid assumed \$1.35 million per vehicle which would escalate further with delay.

The urgency of the September 30, 1983, deadline is compounded by the fact that the addition of seven cars to the project is a scope of work change that would require Congressional action. During the next two months it is, therefore, necessary to concur locally on the addition of seven vehicles, obtain UMTA support, obtain Congressional concurrence and notify Bombardier.

Project Justification

As shown on the attached graph, the additional seven cars are needed to carry short-range patronage projections for the Banfield route only. Peak-hour ridership expected before 1990 will require 30 vehicles in operation plus 10 percent spares, thereby, providing the ability to operate two-car trains at four-minute headways (the maximum permitted by the Landmarks Commission). Purchase of additional cars beyond these seven would be to serve other corridors beyond the Banfield, a long-range, more speculative ridership forecast or a better than four-minute headway. Since these seven cars do not exceed any of these circumstances, and will be needed to carry ridership demands soon after opening day, the expenditure is justified. In addition, the Banfield staff would prefer a 25 percent spare ratio rather than 10 percent, citing the San Diego experience at 18 percent and San Francisco at 21 percent. If this operating standard were applied, 11 cars would need to be purchased rather than seven to allow operation of 30 cars in service with 25 percent spares.

Acquisition of these additional cars essentially returns the Banfield LRT to the 1990 capacity called for in the EIS. Changes that have occurred in the past several years to reduce the capacity of the original 26 cars include:

1. Longer running time due to extension from Pioneer Square to 11th;
2. Longer running time due to extension from the Fairgrounds in Gresham beyond Cleveland Avenue;
3. Speed reduction along Burnside from 45 mph to 35 mph; and
4. Reduction in peak load capacity from assumed Duwag car to Bombardier car (from 183 to 166 passengers per vehicle).

Budget Impact

Presented below is a comparison of the March 31, 1983, cost estimate for completion of the Banfield as currently designed in relation to revenues anticipated.

Cost		Revenue	
		Fed. Share	Match
Highway Funded	31,275,884	FHWA e(4)	26,584,501
Transit Funded	273,708,000	Transit e(4)	147,470,376
Mult. Co. Design Review	500,000	Sec. 3 - orig.	8,900,000
Gresham Design Review	200,000	- CBD	5,000,000
	274,408,000	- "Trade"	20,150,000
		New Start	58,140,544
		Subtotal	239,660,920
 GRAND TOTAL	305,683,884		<div style="border-top: 1px solid black; border-bottom: 1px solid black; padding: 2px;"> 266,245,421 53,763,203 </div>
			320,008,624

As shown, the various funding sources provide a budget of \$320 million while current cost estimates are \$305.7 million, leaving a balance available of \$14.3 million. In addition, the cost estimate includes a contingency of some \$11.9 million. If the \$7 million additional cost of the cars were funded, the balance available would be reduced to \$7.3 million (plus whatever portion of the contingency remains).

Relationship to Other Changes in Project Scope

A number of additional items have been discussed for inclusion in the Banfield project, some of which can be included with minor interpretations by UMTA within the existing Full-Funding Contract, some of which can be funded from alternate sources and some of which will require Congressional approval for addition to the full-funding contract. Since \$7.3+ million remains, it is recommended that these not be sought concurrent with the seven additional vehicles. Items to be funded within the existing scope or an alternate source involve dealings with the Seattle office only and are, therefore, not subject to the September 30 constraint imposed on the additional cars.

Furthermore, the other items that do require Congressional approval will require much more effort to convince UMTA and Congressional committees. As such, a more deliberate effort involving Bob Duncan, Congressman AuCoin and Senator Hatfield should be undertaken leading up to inclusion in the FY 85 Appropriations Bill beginning in March 1984. Since the additional light rail vehicles are clearly a part of the light rail project (without interpretation) and are needed to meet the original project objectives defined in the EIS, UMTA support and Congressional approval are expected.

TPAC and JPACT have reviewed this project and recommend approval of the Resolution.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adopting the attached Resolution.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On August 8, 1983, the Regional Development Committee unanimously recommended adoption of Resolution No. 83-422.

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8/11/83