

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE)	RESOLUTION NO. 98-2648
METROPOLITAN TRANSPORTATION)	
IMPROVEMENT PROGRAM TO AUTHORIZE)	Introduced by
\$1,082,000 OF CONGESTION MITIGATION/)	Councilor Washington,
AIR QUALITY (CMAQ) FUNDS IN FEDERAL)	JPACT Chair
FISCAL YEAR 1998 FOR THE PURCHASE)	
AND INSTALLATION OF STANDBY POWER)	
AT UNION STATION AND PURCHASE OF)	
TWO CAB-CARS FOR THE PACIFIC)	
NORTHWEST PASSENGER RAIL PROGRAM)	

WHEREAS, Congress has designated the Pacific Northwest Rail Corridor which extends from Eugene, Oregon to Vancouver, B.C. through the Portland metropolitan area; and

WHEREAS, The Oregon Transportation Plan and the Portland metropolitan area Regional Transportation Plan support passenger rail service in this corridor as an alternative to motor vehicle use on I-5; and

WHEREAS, Oregon, Washington and British Columbia are working together to improve passenger rail service in this corridor incrementally; and

WHEREAS, New trains will operate in this corridor beginning in May 1998 with resulting improvements in travel times and service frequency; and

WHEREAS, Standby power could run onboard services for parked passenger trains at Union Station and allow the locomotives of these trains to be turned off; and

WHEREAS, Turning off locomotives would reduce emissions in the Portland airshed by 15.3 kg/day of CO, 67.2 NOx and 0.01 VOC kg/day; and

WHEREAS, The new improved service schedule requires an extra locomotive on each train to reverse trains at Portland and Seattle; and

WHEREAS, Cab-cars function as an extra locomotive in

reversing the trains but do not have diesel engines; and

WHEREAS, Replacing the extra locomotive on each train by a cab-car would reduce emissions in the Portland airshed by 22.5 CO kg/day, 87.2 NOx kg/day and 0.62 VOC kg/day; and

WHEREAS, Congestion Mitigation/Air Quality funds of \$1,082,000, including the local match, are available from the non-regional CMAQ allocation for the purchase of standby power and cab-cars; and

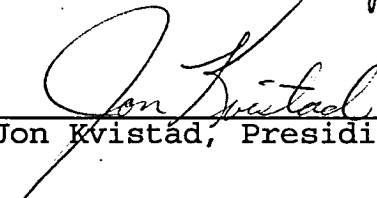
WHEREAS, That an amendment to the MTIP is needed to program the CMAQ funds for use within the Portland metropolitan area; now, therefore,

BE IT RESOLVED:

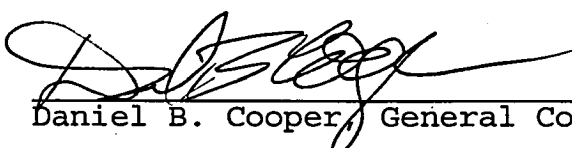
1. That the Metropolitan Transportation Improvement Program (MTIP) is amended to program \$1,082,000 of Congestion Mitigation/Air Quality funds in federal Fiscal Year 1998 for the purchase of standby power and two cab-cars for the Pacific Northwest Passenger Rail Project.

2. That Metro staff are directed to request appropriate amendment of the State Transportation Improvement Program (STIP) and are authorized to execute administrative adjustments needed to implement the project.

ADOPTED by the Metro Council this 21ST day of May, 1998.


Jon Kvistad, Presiding Officer

Approved as to Form:


Daniel B. Cooper, General Counsel

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 98-2648 FOR THE PURPOSE OF AMENDING THE METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM TO AUTHORIZE \$1,082,000 OF CONGESTION MITIGATION/AIR QUALITY (CMAQ) FUNDS IN FEDERAL FISCAL YEAR 1998 FOR THE PURCHASE AND INSTALLATION OF STANDBY POWER AT UNION STATION AND PURCHASE OF TWO CAB-CARS FOR THE PACIFIC NORTHWEST PASSENGER RAIL PROGRAM

Date: April 23, 1998

Presented by: Andrew Cotugno

PROPOSED ACTION

Approval of this resolution would amend the Metropolitan Transportation Improvement Program (MTIP) to program \$1,082,000 of Congestion Mitigation/Air Quality (CMAQ) funds for the purchase and installation of standby power at Union Station and the purchase of two cab-cars for the Pacific Northwest Passenger Rail Program. Both the standby power and the cab-cars would reduce emissions in the Portland airshed and support passenger rail service improvements scheduled to begin in May 1998.

ANALYSIS

The Pacific Northwest Rail Corridor extends from Eugene, Oregon to Vancouver, B.C. Oregon, Washington and British Columbia are working together with AMTRAK, the service operator, to improve passenger rail service incrementally. The latest improvement, beginning in May 1998, is a new round trip train service between Portland and Seattle and travel time savings on existing services between Eugene and Vancouver, B.C.

The purchase and installation of standby power would run onboard passenger services while the trains are in Union Station. Corridor trains use a 440 volt power system to operate onboard equipment such as heating, air conditioning, lighting and refrigeration. When the train is parked in the station, these services are currently run by the locomotive, which continues to run in order to generate the power.

The installation of transformers and power distribution lines to the tracks at Portland Union Station would provide standby power for parked passenger trains to keep onboard services running. The locomotives of these trains could then be turned off. This would reduce emissions from idling trains over 10 hours per day.

Of the \$1,082,000 CMAQ funds requested in this resolution, \$182,000 would be spent on the standby power.

The new service schedule, beginning in May 1998, requires an extra locomotive on each train in order to complete quicker turnaround at the Seattle and Portland stations. With a

locomotive at each end of the train, the train will be in position for its return trip without turning around. The extra locomotive will increase emissions as more operating locomotives enter, park and depart the Portland Union Station.

This resolution programs CMAQ funds for the purchase of two cab-cars to replace the extra locomotive on each train and reduce emissions. Cab-cars look just like a locomotive but have no engine. The compartment where the diesel engine would have been located has been converted to handle baggage. The cab-cars serve the same function as the extra locomotive without producing emissions. Use of them on the corridor trains will reduce the number of locomotives entering the Portland airshed, reduce idling at the station and dwell time required for trains changing direction. Cab-cars also increase the productivity of the passenger equipment by eliminating positioning movements.

The cost of a cab-car is \$450,000, rebuilt from an F-40 locomotive. This resolution includes \$900,000 to purchase two cab-cars for the corridor trains serving Portland Union Station.

Authorization of CMAQ funds for this project will not affect the anticipated CMAQ allocation for the Portland Metro region. The CMAQ funds for this project are coming from an allocation at the state level.

The project is within the Portland Metro boundary and is an Air Quality Maintenance Area for carbon monoxide and ozone. Both the standby power and cab-cars are expected to be exempt from conformity determination requirements and eligible for CMAQ funding under FHWA/FTA's guidance of March 7, 1996. FHWA will make the final determination prior to being added to the STIP.

Calculation of emission reductions shows a benefit from the purchase of the standby power and cab-cars of 37.8 CO kg/day, 154.4 NOx kg/day and 0.63 VOC kg/day, as shown in Table 1. This calculation assumes that the standby power and cab-cars combined will eliminate at least 17 hours of idle time and three hours of running time per day for locomotives.

Table 1

	<u>Emission Benefits (kg/day)</u>		
Standby Power	15.3	67.2	0.01
Cab-Cars	<u>22.5</u>	<u>87.2</u>	<u>0.62</u>
Total Emission Benefit	37.8	154.4	0.63