

Seattle Center Director's Report

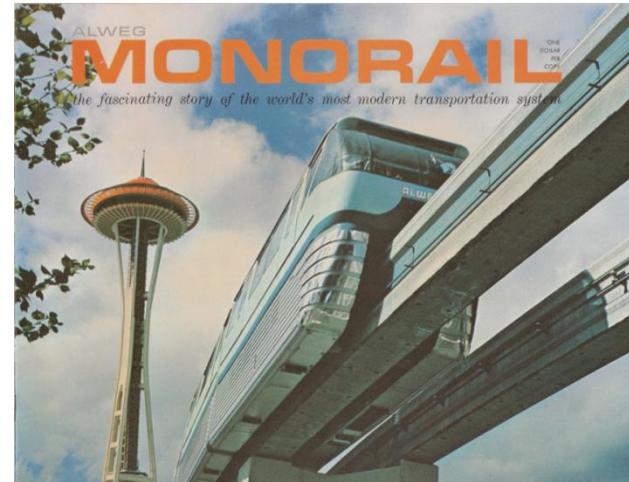
**Parks and Seattle Center Committee
August 4, 2011**

**Seattle Center Monorail
Deferred Major Maintenance Program
(DMMP)**



History

- Seattle Center Monorail was built by the Alweg Company of Germany for the 1962 Seattle World's Fair.
- It was the world's first full-scale monorail mass-transit application.
- The Monorail was acquired by the City of Seattle after the World's Fair.





- Until the mid-1990's, the Monorail was operated by Seattle Transit, METRO, and Seattle Engineering Department.
- Following an RFP process in 1994, City Council approved a concession agreement with Seattle Monorail Services to operate Seattle Center Monorail.
- In 2002, Seattle citizens voted to build a new monorail system, and SC Monorail was slated for demolition.
- With demolition planned, the monorail was no longer eligible for Federal Transit Administration (FTA) capital grant funding, its primary source of capital funding, and thus, maintenance work outside of safety items was deferred.
- Plans for a new monorail system were abandoned in 2005.
- DMMP has been implemented over the last five years, phased to keep at least one train in operation for public use.

DMMP Project Focus

In 2006, a reliability review of the monorail recommended the highest priority major maintenance projects, known as the DMMP, to undertake in order to increase:

- System Reliability
- Passenger Safety
- Operating Life of the System

Nearly 60% of the DMMP was devoted to renovation of the “Big 3” systems on the blue and red trains:

- Bogies (Suspension System – 8 per train)
- Low Voltage Electrical System
- Pneumatic System



Project Budget

DMMP Revenue Sources

\$5.17 million	City of Seattle LTGO Bonds
\$1.95 million	FTA Capital Grant Funds
\$1.00 million	FTA ARRA Funds
\$0.43 million	Monorail System Revenues
\$8.55 million	Total

DMMP Revenue Uses

\$6.00 million	Train Rehabilitation
\$1.67 million	Guideway Repairs and Improvements
\$0.88 million	Station Improvements
\$8.55 million	Total

Additional FTA grant funds pay over half the annual debt service on the 2007 Monorail LTGO bonds.

The remainder of the debt service is paid from City capital funds in Seattle Center's CIP.



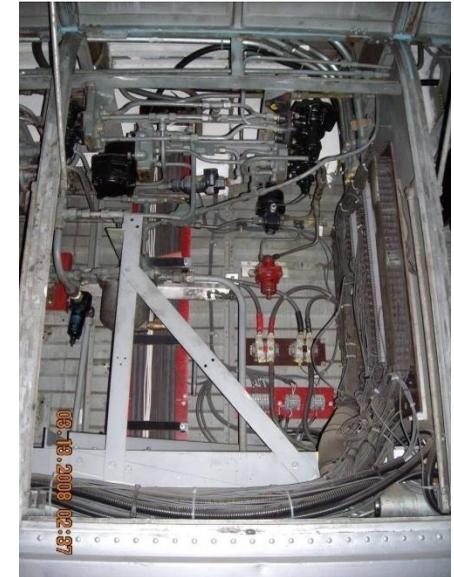
Bogies in Process



Bogies After



Pneumatic/Electrical Before



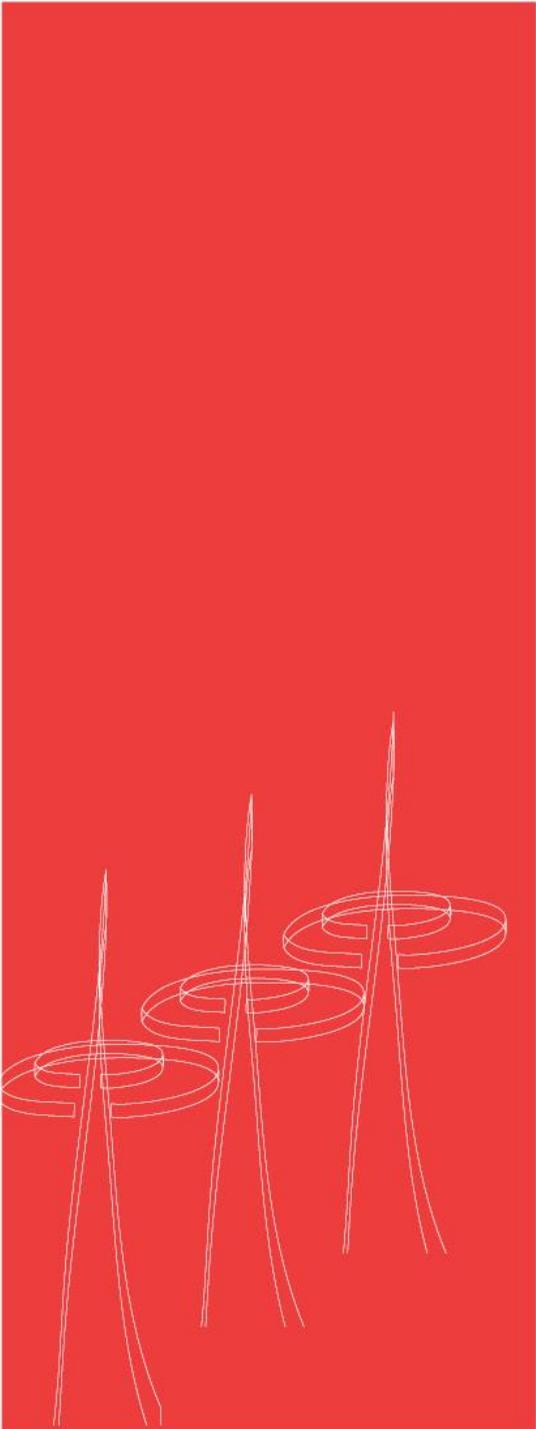
**And
After**



Drivers Console Before



And After

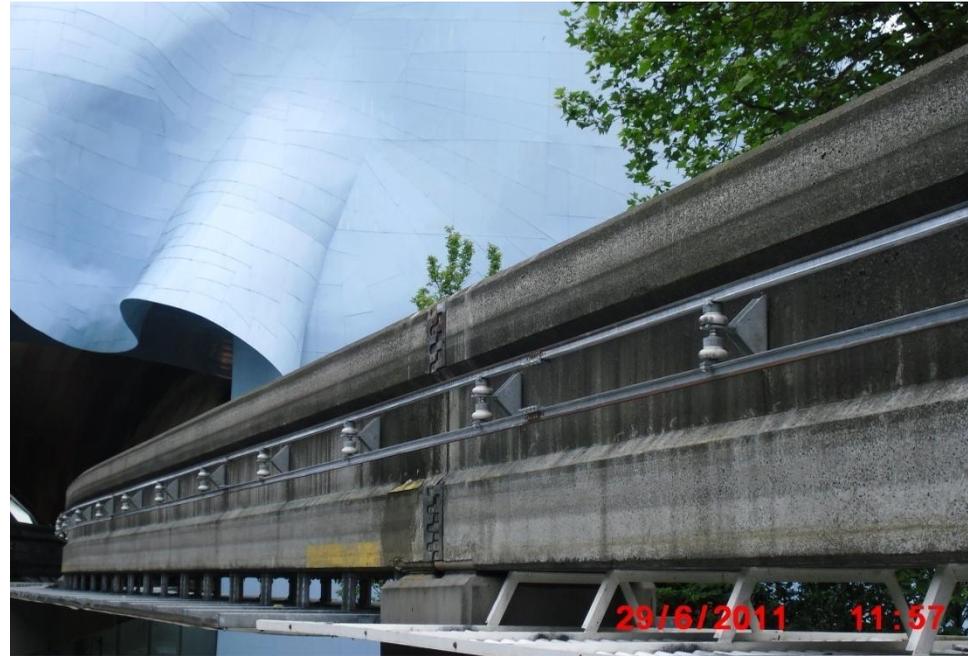
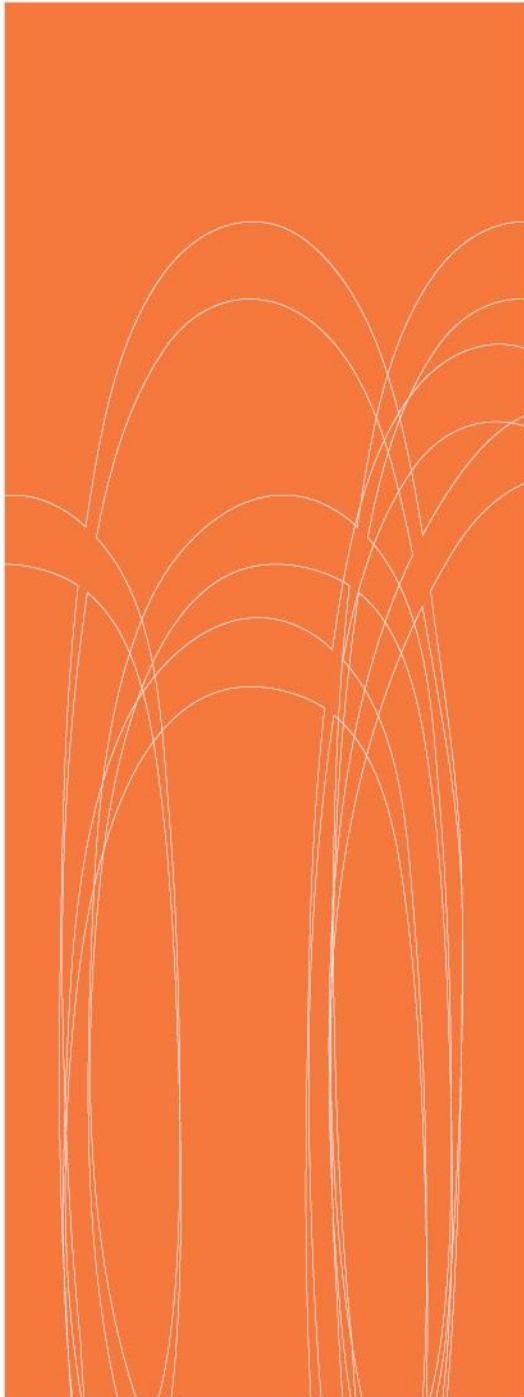


Beam Joints Before



Resurfaced Beam Joint





A \$1 million Federal Transit Act American Recovery & Reinvestment Act (ARRA) grant in 2009 funded the replacement of the power conductor rails on both train guideways.

Station & Service Improvements

- Renovation of the Westlake Station Gate and Ramp System
- Making the Seattle Center Station More Visible to the Public
- The Monorail has not experienced an out of service day since December 2008.

Increases in Ridership

- 2010 ridership of 1.79 million was 11% above 2007.
- Through June, 2011 ridership is up 8% over 2010.
- July 2010 was the biggest ridership month since 2003.
- In 2011 we should come close to the 2 million passenger level, a level not reached since 2003.



DMMP Key Partners

- SMS
- SDOT
- FTA
- Executive and City Council

The DMMP used over 140 different contractors and suppliers, Of these, 89 were from Washington State, 49 with Seattle addresses. They worked tirelessly and creatively to update the 50-year old systems so that the trains will remain highly functional throughout the next fifty years.

Future Monorail Renovation Work

- Additional guideway beam joint resurfacing
- Replacement of the power collector assemblies on each train
- Replacement of the passenger doors on each train.

DMMP renovations, together with continued FTA-funded asset preservation investments, will allow the monorail to operate reliably for years to come.

Monorail - an integral part of the regional transportation system

- Connection to Link Light Rail to and from the airport
- Commute connection to and from work to busses downtown
- An essential carrier for major festivals and other high attendance events at Seattle Center
- A key link for the 50th Anniversary celebration in 2012



**Our thanks and appreciation to
Seattle City Council for your support
throughout the DMMP project!**

