

Backgrounder

Edmonton's Newest Light Rail Vehicle

Facts and Features

A total of 37 new SD160 Light Rail Vehicles (LRT) will be delivered between May 2008 and December 2009 by Siemens Canada Ltd. The cars are manufactured in Sacramento, California and shipped by rail to Edmonton.

Twenty-six vehicles were ordered to service the South LRT extension from Health Sciences to Century Park. An additional 11 cars were ordered by the Edmonton Transit System to increase capacity on the existing Health Sciences to Clareview line. The South LRT extension is expected to double LRT ridership from its current 50,000 weekday riders to 100,000.

The SD160 is a sleek, modern vehicle with many improvements and conveniences, including:

- > Vehicles are powered by AC traction motors instead of the DC traction motors of the existing fleet, reducing maintenance costs. Cars are air conditioned for passenger comfort.
- > Doors slide out slightly and then to each side for a roomier entrance and exit.
- > Driver's cab has been redesigned to make it more ergonomic and functional.
- > Electronic destination signs in the front, rear and side windows make it easier for passengers to see which train is coming. This will be especially important as new lines are built and passengers may need to transfer trains.
- > Each vehicle features an onboard CCTV security camera system.
- > Interior message signs inside each train allow passengers to see the upcoming stop.
- > Vehicles have a redesigned interior and a streamlined exterior.
- > Each car is mobility aid accessible (one door on each side is equipped with a self-levelling ramp).
- > Each vehicle seats 60 and about 100 standing passengers will fill each train comfortably.

The cars will undergo extensive certification testing to ensure they operate in accordance with the City of Edmonton's operating requirements and specifications. They will go into service in the fall of 2008.

The cars are similar to those operated in Calgary and Denver. They can operate at a speed of up to 80 km/hr and have similar operating characteristics as Edmonton's current fleet.

The new and old cars will not be mixed together in a train, as they cannot be coupled together electronically. However, they can be coupled together manually in case of emergency.

Funding

Government of Canada

Purchase of the 37 new LRT vehicles is made possible through funding from the Government of Canada through the Gas Tax Fund. Through this fund, the City of Edmonton has received more than \$43 million to date to expand and enhance light rail service and encourage more people to use municipal transit.

The Gas Tax Fund supports municipal infrastructure improvements to water, air quality and to reduce greenhouse gas emissions. It provides stable, long-term funding that enables municipalities to revitalize and develop their core public infrastructure. Through its Building Canada Plan, the Government of Canada extended the Gas Tax Fund for an additional four years to 2014 at \$2 billion per year, providing \$8 billion to municipalities across the country. Budget 2008 announced that the Gas Tax Fund will be permanent beyond 2014, which will provide municipalities, such as Edmonton, with stable funding for their infrastructure needs.

Government of Alberta

In addition, the City of Edmonton receives provincial funding for its LRT project through the ongoing Alberta Municipal Infrastructure Program and the City Transportation Fund. In 2008–2009, the City of Edmonton will receive more than \$210 million from the Alberta Municipal Infrastructure Fund and the City Transportation Fund. These grant funding programs are designed to provide support for priority municipal infrastructure projects including transportation and public transit undertakings such as the LRT lines and vehicles.

City of Edmonton

The City of Edmonton provides funding for the South LRT Extension and LRT vehicles through local taxes and borrowing. The federal gas tax fund will be used to help repay this borrowing.

Existing LRT Vehicles

The 37 existing LRT vehicles were also supplied by Siemens Canada. Fourteen vehicles were in service when the original LRT line opened in April 1978. Three additional units went into service with the Clareview extension in April 1981 and an additional 20 vehicles started service in 1983 when the Corona extension was completed. The first LRT vehicle was formally presented to former mayor Terry Cavanagh, on June 23, 1978, by Siemens Canada.

The 37 existing U2 LRT vehicles in the Edmonton Transit Service's fleet will be retrofitted over the next 5 years, beginning in the summer 2008, including changes to the interior, exterior, electrical panels and controls, and key mechanical components.

Benefits of Edmonton's LRT

By taking the LRT, Edmontonians are reducing air pollution because their travel results in significantly fewer pollutants and greenhouse gases. A transit rider creates 65% fewer greenhouse gas emissions than an auto user for the same trip. The LRT also reduces traffic congestion and the need for future road construction by reducing the number of vehicles on our roads. Each 4-car LRT train can replace nearly 600 vehicles.

LRT meets the City of Edmonton Transportation Master Plan's goal of increasing our transportation system's capacity to meet the needs of a growing population and economy.

Edmonton's City Council has made building the LRT a priority as it meets City Council's vision for infrastructure by contributing to the city's economy, vitality of its neighbourhoods, safety of its citizens, protection of the environment, and capacity to accommodate growth.

About Siemens in Canada

Siemens is one of the largest and most diversified companies in the world of electronics and electrical engineering, operating in the industry, energy and healthcare sectors. The company has more than 6,000 employees in Canada, working to develop and manufacture products, design and install complex systems and projects, and tailor a wide range of solutions for individual requirements. For almost 100 years in Canada, Siemens has stood for technical achievements, innovation, quality and reliability. Sales for Siemens in Canada for fiscal 2007 (ended September 30), were \$2.3 billion CAD. Further information about Siemens in Canada is available at www.siemens.ca.