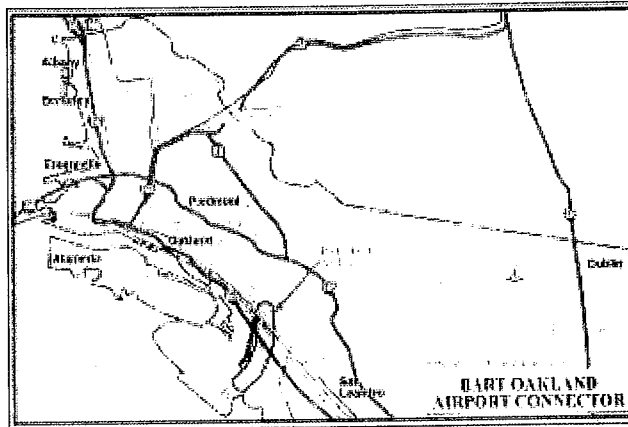


What The Voters approved in 2000

BART Oakland Airport Connector - BART

Sales Tax Funding	\$66,800,000	Tier 1 (plus \$7.2 M in Tier 2)
Other Funding Sources	\$64,200,000	Port, Bridge Tolls, and other sources
Project Cost	\$130,000,000	

This project provides an elevated guideway with automated vehicle operation between BART's Coliseum station and the Oakland International Airport. The project includes construction, rolling stock, and a maintenance facility required for operation.



4

November, 2000 – Alameda County Voters Approve Measure B (\$65.8 million for OAC)

Project Characteristics:

- \$130 million
- 2 stations, Coliseum BART & Airport
- \$2 fare

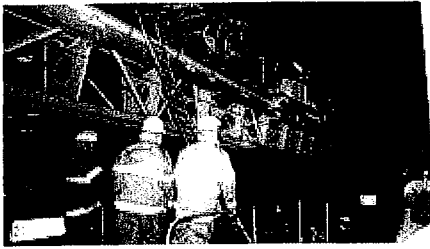
2006 ACTIA Board approves funding agreement

- \$230 million project
- Public Private Partnership
- 40% Private Financing
- 2 Stations, Coliseum BART & Airport with connection to AMTRAK
- 2020 Ridership: 12,200
- Average vehicle speed 33 mph vehicle, door to door in 12 minutes
- Pedestrian Bridge with moving walkways, escalators to avoid airport traffic
- \$2 fare

2010 – project as it stands today

- \$500 million project – nearly 300% increase adjusted for inflation
- 4,350 daily riders – 65% reduction from 2006, 70% reduction from 2009 presentation to Board
- 100% Public financing – nearly 4 times more than voters were told
- 2 stations, no connection to AMTRAK, dropped in parking lot at Airport
- Average vehicle speed 23 mph, door to door in 16.5 minutes, longer than Quality Bus in EIR
- FTA Title VI Civil Rights compliance issues described by FTA as "serious"
- Inconvenient – Significantly more walking with luggage than current AirBART
- Significant reliability concerns, 2 out of 5 of DCC's AGT projects were broken down for 3 consecutive months last year.

{Translated from Spanish by Google}



Mexico City-International Airport authorities confirm the City of Mexico, the Aérotrain collided at a speed of 28 kilometers per hour, due to human error when carrying out maintenance work.

The airport authorities explained that in the *time it made the change and adjustment pulley adjustment on the part of the company DCC (Doppelmayr Cable Car), to verify conditions Aérotrain vibration* and that at that time was not carrying passengers limber hit a maintenance up to the national park of Terminal 1, killing three workers sustained minor injuries.

The workers, members of the Doppelmayr Cable Car, were Humberto Martinez de la Cruz, Francisco José Casillas Ortega and Juan Carlos Barrientos Vargas. All three were only punches that did not require hospitalization, so they were discharged this Monday.

According to preliminary reports, the collision happened Aérotrain at a speed of 28 kilometers per hour, its maximum speed in normal operation is 45 km per hour and treatment of human error.

Aérotrain Service remains suspended until further notice, pending revisions carried out by experts and received a detailed report of the company DCC, to determine the status of Aérotrain and the amount of damages.

The DCC is the Austrian company that manufactures, installs, operates and maintains the Aérotrain, for which offers comprehensive insurance coverage in case of incidents. During Monday it has provided free bus service to passengers who have connecting flights between terminal 1 and 2.

The sites designated for ascent and descent of users are the door 6 in Terminal 1 and Gate 4 in Terminal 2, same as his journey takes 10 minutes.

Toronto Pearson Resolves People Mover Problem [Excerpt]

By Robert Nordstrom

An online enhancement to: [Airport Improvement Magazine - January-February 2010](#)

It was a combination third anniversary and grand re-opening when trains began rolling at Toronto Pearson International Airport last July. *LINK, the airport's automated people mover that debuted in July 2006, had been closed for three months while crews performed C\$4 million of repairs on trains and guideways* that originally cost C\$56 million.



Passenger safety did not prompt the shutdown or repairs, emphasizes Iouri Moutine, manager of people moving devices for the Greater Toronto Airport Authority. The LINK trains met all operational and safety standards, Moutine stresses, but a "latent issue" that emerged after the system began operating presented potential long-term complications.



Iouri Moutine

"We detected some lateral vibration during the movement of the train," he explains. "This vibration was causing deterioration of certain mechanical components of the train. Doppelmayr (the company that engineered and installed the system) came up with a solution and rectified the problem."

The vehicle bogies, which provide suspension beneath individual cars, were components most affected, and mechanics were replacing them more frequently than expected. The ride for passengers was also not as smooth as it should have been.

Doppelmayr Cable Car (DCC) determined that its contract to operate and maintain the system wouldn't be profitable until it resolved the vibration issue. After securing permission from the airport for a three-month suspension of service, DCC performed and warranted C\$4million of repairs. The airport, in turn, covered the cost of temporary bus service to areas previously served by the LINK trains - between terminals one

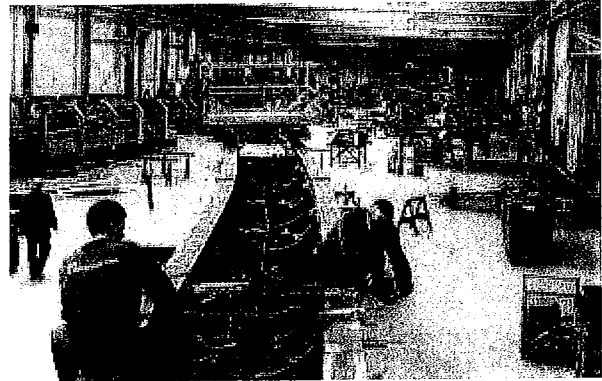
and three and to/from remote parking.

A Complex Challenge

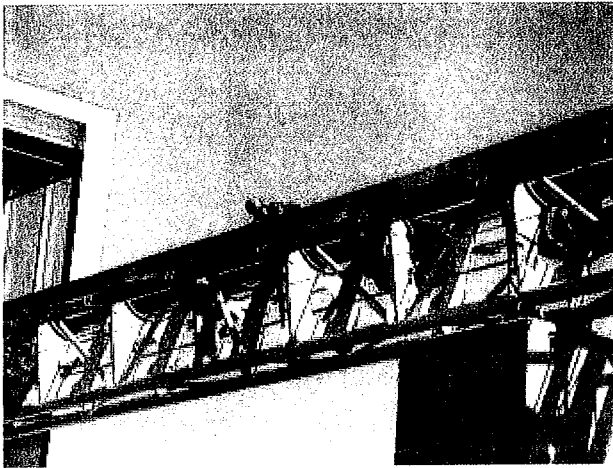
One of the key advantages to cable-propelled systems such as LINK is their relatively lightweight guideway structures - a particularly compelling factor at Toronto Pearson, where the system was constrained to a route that was vertically and laterally complex.

The complexity of the route, however, created design and fabrication challenges. Despite directional changes, guideway surfaces had to be smooth and free of bumps and deviations. Alignment tolerances were limited to two millimeters per two-meter length of guideway.

"The entire guideway alignment is very tricky," explains DCC senior project manager Markus Haemmerle. "The fabrication has to be very precise. While the initial fabrication work (for LINK guideways) met requirements,



we subsequently learned that the tolerances were borderline."



DCC tapped in-house personnel and outside consultants to devise a strategy to tighten the tolerances and correct the associated vibrations. Straightening and smoothing guideways with heat emerged as the optimal answer. A 50-meter mockup helped team members determine how to apply heat in the proper amount and duration to make necessary adjustments to guideway beams.

"The solution was very unique," Haemmerle says. "While heat is used to fabricate the beams, this is generally done in the shop where the structure is on the floor and not fastened together. The corrections are very

difficult to obtain when everything is torqued and tensioned. If too much heat is applied, the metal can bend in the wrong direction."

In addition to modifying the guideways, DCC installed new bogie systems in each car. Both fixes required crews to work 24/7 for the full three months available to them. Coordinating with airport safety inspectors and local authorities required careful planning - especially when work required the closing of an airport access road.

"It was a very aggressive project," recalls Moutine, noting that the airport authority is "very pleased" with the results. "***We had to essentially rebuild the system.*** Doppelmayr is a very professional company and they stand behind their product 100%. They followed the schedule and plans exactly as we had agreed upon and delivered the system back on line on the scheduled date."

The airport made the most of the system's downtime by performing maintenance to stations that could not occur while the trains were in operation. It also finished connecting one of the train stations to a parking garage.