TRANSIT TALK

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Vancouver ushers in New Era in Public Transport

With unveiling of Canadian built low floor electric trolley bus

Amidst the greenery of Stanley Park and a crowd of onlookers, greater Vancouver area officials received the keys to Canada's first low floor electric trolley bus on July 20th, 2005. The vehicle is the first of 228 new trolleys that will arrive between now and 2008, replacing Vancouver's 23-year-old existing trolley fleet and continuing a 57-year tradition of zero-emission electric bus service in the West Coast city. (story con't on page 2)

Photos: Above left: A 1982 Flyer stands alongside the new bike rack equipped trolley bus. Above right: Officials pose for a photograph at the ceremony, left to right are: Paul Smith of New Flyer Industries, Pat Jacobsen, CEO of Translink, Thomas Weber of Vossloh-Kiepe, Michael Roschlau of the Canadian Urban Transit Assoc. and Doug McCallum, Chair of the Translink Board. Below left: A demonstration of the new trolley's accessibility features for persons with reduced mobility. Below right: The new trolley bus features the latest technological advances, including lightweight aluminum poles, to maintain better contact with the overhead wires. (A. Wong)

Canadian Low Floor Trolley Bus Arrives In Vancouver (cover story con't)

The new trolleys are being built in Canada by New Flyer Industries of Winnipeg and will be powered by an electric propulsion system made by Vossloh Kiepe of Germany. The trolley bus order is valued at $273-million in total and will include 188 standard, 40-foot vehicles, and 40 articulated, 60-foot vehicles – the first articulated trolley buses to be operated in Canada. All of the new vehicles will operate out of the new Vancouver Transit Centre currently under construction on the southern edge of the city and scheduled to open in 2006.

"Through the purchase of these new trolleys, Translink is delivering on its promise to provide an effective, efficient and environmentally-sound transportation system for Greater Vancouver," said Translink Chair Doug McCallum, who joined other guests on a test drive in Vancouver's West End. The new low floor trolleys will provide easy access to wheelchair users and persons with mobility impairment, and will also be equipped with bike racks to enhance alternative mobility choices in the Vancouver area. "We're also carrying on a proud tradition of operating electric trolleys in Vancouver that goes back almost 60 years," McCallum said.

Trolleys have been in use in Vancouver since 1948, and the existing fleet is the third largest in North America after San Francisco and Mexico City. Currently, the trolleys move an estimated 245,000 passengers daily on 13 routes serving Vancouver and Burnaby, utilizing a 305-kilometre grid of overhead wires.

Officials lauded the decision to continue with trolleys in Vancouver, calling it a wise move for the future. "These buses are quiet and emission-free, so they're well suited to an urban environment," said Denis Clements, president and CEO of Coast Mountain Bus Co. Thomas Weber, Managing Director of Vossloh Kiepe, noted that trolleys represent a cost-effective alternative to diesel buses and an important future alternative in the face of dwindling world petroleum supplies. A number of European cities are turning to trolleys as a key to future sustainability.

The remaining 227 trolleys in the Vancouver order will start rolling off the assembly line in Winnipeg next year, after the pilot vehicle has been thoroughly tested and any necessary refinements completed. "Our goal is to customize these vehicles to meet the unique needs of Translink and its customers," said Pablo Batista, Senior Program Manager for New Flyer Industries. "When we're finished, these trolleys will be tailor-made for Vancouver transit operations."

One of the most interesting features of the new trolleys is their modern, AC traction power system – highly reliable, low maintenance technology similar to the propulsion systems used in light-rail rapid transit vehicles and hundreds of trolley buses all over the world.

"This will enable the trolley buses to accelerate exceptionally well, even on hills or with heavy passenger loads," said Klaus Peter Canavan, Project Manager for Vossloh Kiepe. Reliability is improved, too, over previous trolleys. New technology for the trolley poles, for example, will make it less common for the poles to detach from the overhead wires. The new trolleys can also operate for some distance away from the overhead wires using an auxiliary power unit, and the poles can be retracted automatically from the driver's seat when the auxiliary power unit is engaged.

The buses will sport stylish ergonomic seating, sophisticated on-board electronics to increase the safety of operations, and graffiti-reducing features, such as stainless steel seat frames and a special lining on the windows.

[Sources: Translink, Vossloh-Kiepe. Further info please contact: Ken Hardie, Director of Communications, Translink, at 604-453-4606]

Transit Conferences and Expos

American Public Transportation Association (APTA) – Dallas, Texas
September 25-28th
www.apta.com

Salzburg Transportation Conference
Salzburg, Austria
September 29th and 30th
"Transportation Systems for Better Urban Quality of Life".
www.regionale.schienen.at

Canadian Urban Transit Association (CUTA) – Vancouver, BC
November 19-23rd
www.cuta.org

California plans further Crackdown on Diesel Emissions

Vancouver rejects purchase of more diesel buses

Continuing in the direction of ever more stringent emissions standards, air quality regulators in the state of California are proposing new rules to reduce further the proportion of air pollution contributed by heavy duty diesel engines. The current round of proposals will specifically address the emissions from diesel transit buses and would mandate all transit agencies in the state to buy or lease only alternative fuel vehicles as of 2007. Existing legislation that came into effect in 1999 required transit agencies to reduce harmful emissions, but allowed a choice of either natural gas engines or diesel engines fitted with exhaust filters. That legislation also required a move toward zero emission vehicles by requiring them as a portion of every major fleet after 2010.

If passed, the new California Air Resources Board (CARB) requirement would require large investments in non-diesel technologies for many transit systems in the state. While a number of California systems have recently invested in compressed natural gas (CNG) buses and other technologies like gasoline-electric hybrids, many had chosen under existing legislation to continue with diesel and invest in pollution control equipment. AC Transit, which serves about 230,000 riders per day in the East Bay area recently invested $120 million in overhauls to its diesel fleet in an effort to improve air quality. Even the San Francisco Municipal Railway (MUNI), which already operates over 350 zero emission electric trolley buses, would need to find an alternative to the 540 diesel buses in its fleet. While natural gas vehicles may be a choice for some agencies, MUNI spokesperson Maggie Lynch said they were not an appropriate choice in San Francisco because of they lacked sufficient power to climb the city's steep hills.

The state of California has taken a lead in recent years in identifying and trying to address the health impacts of diesel exhaust exposure. Studies have shown diesel exhaust is a major source of particulate (fine particle) pollution, which is directly related to lung problems, heart disease and cancer. Over 70% of particulate pollution in California air has been blamed on diesel engines. Despite advances in filter devices for diesel tailpipes, emissions researchers and environmental groups have repeatedly asserted that diesel emissions will always present greater health risks than those from other fuels because of the inherently more toxic nature of diesel particles.

The Air Resources Board will vote on the new proposal on September 15th.

Vancouver rejects diesel, too. The California proposal follows on the heels of a decision by the greater Vancouver area's Translink Board on July 20th to opt for natural gas buses instead of diesels in its upcoming vehicle purchase. Translink Board members rejected an administrative recommendation for 100 new diesel buses which had been based on the claim that new emission controls made them "as clean as natural gas".

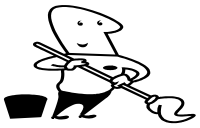
[Sources: San Francisco Chronicle, Aug. 28, 2005; Vancouver Sun, July 21, 2005]

High Oil prices poised to Hit Transit Hard

The worldwide demand for oil continues to soar in spite of limited production capacity. According to the Energy Information Administration (EIA), the world demand for oil in 2004 averaged 82.5 million barrels per day, and this is expected to jump to 84.7 and 86.7 million per day in 2005 and 2006, respectively. This has resulted in continual hikes in the price of crude oil on the international market, from $10.83 in 1998 to the recent high of $70 per barrel this August. While news reports have been quick to blame investor insecurity due to events in Iraq and the U.S. for recent price spikes, the long term forecast is that soaring oil prices will continue. At the current rate of increase in consumption, some experts are predicting world oil reserves will be in effect drained by the year 2024.

While soaring pump prices are bound to drive motorists from their cars, public transit in North America—with a few exceptions--is not well positioned to present much of a transportation alternative. With its thirst for diesel fuel and little investment being made in non-petroleum alternatives, transit is destined for a future of sharp fare hikes and massive service cuts. An August 19th report in the Chicago Tribune indicated the 2006 budget for the Chicago Transit Authority, one of the largest and most well-known transit providers in the U.S., will require an injection of $10 million just to cover the rising cost of diesel fuel. Whether the funds will come from increased fares or whether service cuts will be made to make ends meet, remains to be seen according to CTA Board Chair Carole Brown. This news comes in the aftermath of transit service cuts in a number of U.S. cities that were required to offset fuel price hikes in 2005. Closer to home, Mobile Equipment Services reports a 107.5% increase in the base cost of oil to the City of Edmonton since the year 2000. According to the city's proposed 2006 Business Plan, the 2006 budget anticipates a 15% increase in fuel costs for the upcoming fiscal year, and no transit service increases are planned.

While the issue of extending the electric trolley bus system to Northgate is due to come before Council as part of 2006 budget deliberations in November and LRT expansion to Heritage was approved this spring, the investment in diesel alternatives for the transit fleet has much catching up to do to soften the blow of rising oil prices for public transit in Edmonton. [Sources: Kathmandu Post, Aug. 14, 2005; City of Edmonton 2006 Proposed Business Plan; Chicago Tribune, Aug. 19, 2005]



Old Strathcona Diesel Mop-Up to take 3 Years

The oil slick on Lake Wabamun won't be the only petroleum mop-up operation going on in the Edmonton area this Fall. After catching the last of this year's Fringe Festival, visitors to Old Strathcona may be greeted by the sight of crews working to clean-up underground pools of diesel fuel leaked from the former diesel bus operation at the Strathcona Bus Barns. "We don't have an idea how much has been released, or how long they were leaking," said project officer Ken Friedrich. Remediation consists of drilling several horizontal wells beneath the Knox Evangelical Church and the Old Strathcona Library to extract the leaked fuel, an operation expected to take three years. The clean-up is required by Alberta Environment and will add $2 million to the city's environmental bill. [Source: Edmonton Journal, July 9, 2005]

INTERNATIONAL NEWS

NEPAL EYES TROLLEYS AS OIL ALTERNATIVE – Nepal's transportation sector depends heavily on oil from India and must contend not only with worldwide crude prices, but export duties imposed by Indian authorities to cover their own rising costs. Electricity, on the other hand is easily generated from hydroelectric and other sources, and supply in recent years has usually exceeded demand. Electric trolley buses from Chinese manufacturers have been used successfully in Kathmandu for several decades, and the city now envisions expansion of its system with vehicles from suppliers such as TATA and Ashok Leyland. In addition, Nepal hopes to capitalize on the flurry of battery electric vehicles entering the market in both China and India to displace gasoline and diesel fuelled cars. Electric scooters, small cars, battery operated three wheelers and small electric vans, such as are being introduced in China for the 2008 Olympics, are destined to become future import commodities in Nepal. [Kathmandu Post, Aug. 14, 2005]

ITALY TURNS TO TROLLEY BUSES – Following on the heels of the recent reintroduction of trolley buses in Rome, another Italian city now plans to include them in its transit system. The city of Lecce will introduce a three-route trolley system and construct a new depot and maintenance facility. 12 low floor trolley buses have been ordered from manufacturer Van Hool, to be outfitted with Vossloh-Kiepe electrical equipment. The first of the new routes will form a ring around the city center, the second will connect downtown with the university, and the third will provide a Bus Rapid Transit link between an outlying Park-and-Ride facility and the downtown. Each of the new articulated trolleys will be 100% low floor and provide seating for 74 passengers. The vehicles will be outfitted with battery auxiliary propulsion to enable them to traverse sections of the routes planned without overhead wires at up to 60 km/h. The system will open in 2007. [Source: Vossloh-Kiepe]

ZURICH ORDERS DOUBLE ARTICULATED TROLLEYS – Included in an order for 33 trolley buses for Zurich, Switzerland are 17 double articulated trolleys. These powerful, super-capacity trolley buses contain three sections and two articulated joints, and they carry 35% more passengers than regular articulated vehicles. They offer passenger capabilities similar to light rail and are intended to address overcrowding on Zurich's route 31, saving the system an estimated 570,000 Franks in annual operating costs. The vehicles will be manufactured by Hess with electrical equipment by Vossloh-Kiepe, and will debut in service between 2006 and 2008. The Swiss cities of Geneva and St. Gallen are also investing in double articulated trolleys. [Source: Vossloh-Kiepe]

TROLLEYS PROVE RECIPE FOR SUCCESS – Trolley buses in Quito Ecuador have proven so superior at attracting passengers that the city's renowned trolley operated Bus Rapid Transit system is now filled to capacity. To address the capacity issue, a conversion to light rail is planned. Light rail will allow coupling of cars to handle the steadily growing passenger loads. The experience was recently paralleled in Berne Switzerland and Innsbruck Austria, where trolley buses were also so successful that replacement by light rail is now being undertaken to boost capacity. [Source: ETB News]

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