T RANSIT ALK VOL. 20

'Transit Holocaust' re-enacted in Edmonton

Vote to scrap trolleybus system will destroy \$115 million in publicly owned green infrastructure

In what could well be the most irresponsible move made by any North American city in the 21st century, seven city councillors relegated Edmonton's extensive 140 km trolley network to scrap in a vote on June 18th, high oil prices and recent diesel supply concerns notwithstanding. The move is reminiscent of what has been termed the 'transit holocaust' of the 1930's-50's, where internal combustion engine and tire manufacturers conspired to decimate electric transit in North America.

Onlookers watched in disbelief as council voted 7 to 6 to phase out electric buses in favor of diesel-fuelled vehicles. Ignoring citizen protests and present-day health and environmental concerns over the emissions from diesel engines, a slim majority of councillors succumbed to an anti-trolley campaign waged publicly by city administrators and a fellow council member over the past several years. The deciding vote was reportedly cast by Councillor Linda Sloan, a long-time supporter of the trolleys, who had a change of mind.

In a distorted portrayal of worldwide transit developments, newly installed Transportation General Manager Bob Boutilier, who was involved in a failed scheme to eliminate electric streetcars in Toronto prior to coming to Edmonton, attempted to convince councillors that trolleys were a technology of 1948. Boutilier quoted from Wikipedia as his professional source that diesel hybrid buses were the way of the future. During question period, he ruled out trolleys even as a precursor to electric rail--a role they have played in other cities--and thundered that diesel buses were the way. Boutilier also suggested that an investment in trolleys would take away funding from LRT construction. He told Council that the funds needed for trolleys, identified as \$100 million spread over 20 years, would build "half the LRT line to NAIT"; two days later the projected total cost of the NAIT line was revealed to be \$1 billion.

Two consultant reports presented by the administration-one by Booz Allen and Hamilton and the other by U of A Prof. David Checkel, an internal combustion (con't p. 2)

ALSO IN THIS ISSUE:

- → Transit Workers Sue over Diesel Exhaust Exposure
- High Fuel Prices, High Ridership bring trouble for Transit
- + Hybrid Buses flop in Winnipeg
- → Trolleybuses return to Spain and Germany
- → New Life for Retired Vancouver Trolleys
- + Diesel Rail goes Electric in Response to Fuel Costs

Vancouver Celebrates Beginning of 60 More Years of Electric Trolley Service

Vancouver's TransLink regional transportation authority and Coast Mountain Bus Company ushered in the next 60 years of zero-emission electric trolleybus service with a ceremony in Stanley Park on August 16th. Six vehicles, representing each generation of electric trolleys operated in Vancouver, made a procession from the new Vancouver Transit Centre to Stanley Park that morning to kick off the celebration. Led by a 1947 CCF-Brill trolleybus driven by veteran operator Angus McIntyre, the procession entered the park, filling the recently built Stanley Park loop with fume-free vehicles in near silence except for the cheers and applause of onlookers. The celebration drew large numbers of people from the public as well as visitors who had traveled from other cities around the world. Cake and refreshments were served as officials addressed the crowds.

"It's fitting that we're in Stanley Park for this event," said TransLink CEO Tom Prendergast. "Vancouver's first leaders had the foresight to set aside this land for preservation, and those who came after showed similar vision in 'going electric' and staying electric. Unlike some other cities that abandoned zero emission transit systems, we're proud to continue that commitment to sustainability, and I'm proud to be part of this."

(more Vancouver p. 2)



The ultra modern and the timeless classic at Vancouver's 60th Anniversary Celebrations. [Photo: Transit Talk/ETC]

News Bulletin of the Edmonton Trolley Coalition Sustainable Transit for Liveable Communities www.trolleycoalition.org

Member of the Alberta Environmental Network and Electric Mobility Canada Edited by Robert R. Clark, retired supervisor of transit planning



'Transit Holocaust' in Edmonton (con't from Page 1)

engine specialist—had failed peer review a week earlier at a public hearing, where professionals testified they were fraught with cost-loading problems and bias. Those professionals included several U of A professors, an engineering consultant and well-known energy issues consultant Dr. Richard Gilbert. Administrative claims of \$100 million in savings by abandoning trolleys could never be achieved, they told Council. The reports were based on old diesel prices of 0.76 and 0.82 per litre, which the consultants had projected would hold for 20 years. The emissions analyses in the reports compared local power plant emissions to emissions for the production of diesel fuel from U.S. light crude rather than from the energy intensive tar sands, where much of the local fuel supply originates. In total, 27 speakers appeared at the June 10th hearing to voice opposition to the trolley abandonment proposal, taking up most of the day.

A smug David Checkel appeared before Council on June 18th, chiding trolley supporters as 'nostalgic', while administrators tried to defend the reports as objective and unbiased. However, it was revealed that Checkel held a bias against electric vehicles long before he began his study for the City. In a 2002 statement to *U of A Express News*, Checkel categorically dismissed the future of electricity as a transportation fuel. The Checkel study cost Edmonton taxpayers over \$159,000—more than the estimate for a trolley-LRT crossing in Belgravia/McKernan that would have enabled trolley service to continue in those communities.

Administration also brought forward a geologist from Calgary who stated there was no need to worry about future oil supplies as U.S. EIA data show 48 years of oil left in the world at present rates of consumption. He claimed electricity shortages would occur as a result of need for more power to extract crude from the oil sands. The folly was evident to both Councillors Henderson and Iveson, who pointed out that more electricity generation can always be brought online and from different energy sources, but there is no simple answer to declining oil supplies.

During discussion period, Councillor Karen Leibovici quoted from the American Public Transportation Association's recent survey of U.S. transit operators that "while diesel prices have almost tripled in just four years, electricity prices have increased less than 20 percent. Transit agencies relying more heavily on diesel to power public transportation vehicles, most often bus operators. are facing the most immediate and substantial effects on operating budgets." Leibovici brought forward letters from the Toronto Transit Commission stating that the abandonment of trolleybuses in that city in 1993 had been a mistake, and that the TTC was embarking on a study to see how they could be re-introduced. The TTC is facing a \$35 million operating shortfall due to the rising cost of diesel fuel. Administration's reaction to the information was dismissive.

Councillor Ron Hayter echoed the concerns of citizen groups like the Central Area Council of Community Leagues, the Chinatown and Little Italy Business Association, the 124th Street and area Business Association and the Edmonton Transit System Advisory Board, all of whom had expressed concerns about the increased noise and in-street emissions of diesel buses. He was critical of a public consultation conducted by Leger Marketing, which compared 28-year old trolleys that were "long in the tooth" to brand new diesel and hybrid buses. Leger admitted that it did not consult the public about new, low floor trolleybuses and had not been told by administration that one was on test in the city. 45 of the 46 Edmonton communities served by trolleybuses were never consulted by the local marketing firm during its public opinion survey.

"Council's decision defies common sense," said Kevin Brown, Chair of Citizens for Better Transit, an advocacy group that has consistently supported retention and expansion of the trolley service. "Here we are, a city aspiring to be modern and responsible, and we do one of the most backward and irresponsible things we could possibly do. In the 1950's, going diesel may have been regarded as progressive, but we live in the 21st century now, in a world facing very different issues. Today, scrapping an electric trolley system is truly a contemptible thing."

"From the administrative angle, the trolley debate has had little to do with reason, logic and common sense", said Bob Clark, retired supervisor of transit planning for ETS. "It has been more about an administration trying to 'save face' when confronted with public opposition to their plans. The taxpayers and citizens of Edmonton are being victimized here through the destruction of a huge publicly owned asset. It's obscene. Edmonton has turned its back on the groundbreaking work of Don MacDonald, Llew Lawrence and others that has been applauded, if not emulated by transit systems all over North America. Compared to the rest of the world, Edmonton is going backward."

Vancouver Celebrates (con't from page 1)

Electric trolleybuses clearly stand out among the many initiatives that the Vancouver region has undertaken to earn its reputation for quality of life. "Sustainable transit systems like the trolleybus make Vancouver – in fact, the whole region – one of the most livable in the world," said City Councillor and Deputy Mayor Heather Deal, who proclaimed "Trolley Week" on behalf of the City of Vancouver.

Aided by a seeing-eye dog, Rob Sleath, Chair of Translink's Access Transit Users' Advisory Committee, took the stage to applaud how Vancouver's new fleet of electric trolleys were helping to improve the quality of life for seniors and people with disabilities. "With their low floors, ramps and increased floor space in the front, the new trolleybuses have made TransLink's bus fleet fully accessible," he said. "That allows people with disabilities

Vancouver (con't)

to truly integrate with society. It's a big step along the road to full accessibility of the public transit system as a whole."

Vancouver's present trolley fleet numbers 228 vehicles. Another 34 new trolleybuses are on order and scheduled to arrive next year. [Sources: TransLink News Release, Aug. 16, 2008; local reporters]



Vancouver City Councillor Heather Deal addresses the crowd at Vancouver's 60th Anniversary Celebrations: "Sustainable Transit Systems like the Trolleybus make [the] Vancouver [region] one of the most livable in the world". [Photo: Transit Talk/ETC]



Councillor Heather Deal and Translink's Drew Snider unveil an official proclamation declaring the week of August 16th to 22nd "Trolley Week" in Vancouver. The proclamation is signed by Vancouver Mayor Samuel Sullivan. [Photo: Transit Talk/ETC]



Above: A seeing eye dog eyes the birthday cake during the cake cutting ceremony in Stanley Park, August 16th, 2008.

Right: Veteran Coast Mountain Bus Company operator Angus McIntyre sports a 1970's BC Hydro uniform in front of a vintage 1947 CCF Brill trolleybus from Vancouver's first generation of zero-emission electric trolleys. [Photos: Transit Talk/ETC]





Denver to Electrify Commuter Rail in Response to High Diesel Prices

Soaring oil prices have the Denver RTD changing to electric trains on its FasTracks commuter rail line to the Denver International Airport and Arvada-Wheat Ridge. Whereas diesel powered trains were once believed to be the most economical on the 18-mile North Corridor, high oil prices have all but eliminated the \$80 million that the RTD thought it could save by not having to string overhead wires. The economic advantage of electric trains got even better when the RTD realized that it would also not need to invest \$18 million in noise attenuation walls through Commerce City and Thornton, owing to the quieter operation of the electrics.

[Source: Rocky Mountain News, Sept. 24, 2008]

High Fuel Prices and High Ridership bring Trouble for Transit

Public transit providers across the United States and Canada are in serious trouble, owing to high fuel prices and booming ridership, according to a September report in the Chicago Tribune.

Some years ago, today's ridership levels were what transit providers dreamed about. But what they didn't envision were today's costs.

The public certainly are leaving their cars and switching to transit in numbers not seen in recent decades, mostly owing to high fuel costs. Increases in transit ridership do generate more revenue, but growth in demand also requires more service to meet that demand, and rising operating costs also need to be covered just to maintain existing levels of service. So while growing transit use may have its benefits for society, for transit providers the reality is that the increase in revenue is never enough to offset rising costs or cover the expenditures necessary to add more service.

According to information supplied by the American Public Transportation Association, the trade group that represents transit agencies, at least 85% of transit providers report overcapacity problems—demand at a level much higher than they can meet with current resources. 65% say they don't have sufficient funding to increase service levels to be able to meet demand. 61% of transit agencies are considering fare increases as a means to cover rising fuel costs, while 35% are pondering service cuts to balance their budgets. 33% are cancelling planned service enhancements, almost 40% of agencies are turning away passengers due to overcrowding.

[Source: Chicago Tribune, September 15, 2008]

Hybrid Buses Bomb in Winnipeg

Winnipeg Transit wants to cancel order

Last February, Winnipeg Mayor Sam Katz proudly ushered in diesel-electric hybrid buses. But now, Winnipeg Transit's efforts to "go green" with hybrids appear to have crashed.

The introduction of 20 of the hybrid buses for the city fleet is poised to be scuttled because of poor performance during recent trials. City spokesperson

Transit Workers Sue over Diesel Exposure

13 transit workers from New York State filed a lawsuit August 18th against manufacturers of diesel engines and buses, citing health conditions ranging from heart and lung disorders to cancer resulting from exposure to diesel exhaust fumes. Of the 13 workers, among them both drivers and mechanics, nine had become ill with cancer, four had pulmonary arrest or heart conditions. Two named in the suit have already died; family members filed on their behalf.

The workers spent a combined 252,000 hours in job conditions which exposed them to diesel exhaust. "Sometimes, buses were left to idle all night because if the engines were turned off, they wouldn't always start in the morning," John Dearie, co-counsel for the bus workers, told reporters. They are seeking unspecified damages from General Motors, Detroit Diesel and 11 other companies whose equipment replaced electric transit systems in New York several decades ago. "They gave no warning," said Dearie, "yet they knew the belching of these fumes was a dangerous byproduct."

Emidio DeStefano, 71, said that diesel fumes from city buses had caused him to develop throat cancer. "Doctors asked me, 'how many packs of cigarettes did you smoke?', and I'd say, 'I never smoked a day in my life," DeStefano said.

General Motors, the biggest company named in the lawsuit, declined comment. Attorneys say they believe this could be a landmark case, and expect many more sick transit workers and their families to come forward. A previous Washington Appeals Court ruling established a causal link between diesel exhaust exposure and cancer. Although medical studies have linked diesel exhaust to illnesses, no legal link existed prior to that ruling. Lawyer John Durst said described the lawsuit as "just a taste of things to come." With millions of transportation workers with diesel exhaust exposure facing heart problems and malignancies, Durst anticipates many lawuits will follow.

Durst felt that the use of particulate filters on diesel engines may be a preventative measure. But California's Natural Resources Defense Council cautions that "the truth is that today's exhaust-control technology still doesn't eliminate all the air pollution and ill effects of diesel combustion."

[Sources: NY1 24 Hr. Local News, Aug. 18, 2008; METRO New York, Aug. 19, 2008; AM New York, Aug. 19, 2008; NRDC "Green Diesel: Fact or Fiction?" (www.nrdc.org)]

Pam Sveinson confirmed that Winnipeg Transit's purchase of the vehicles from local manufacturer New Flyer Industries -- each at a price of about \$1 million – now looks uncertain, mostly because of problems with the vehicle's fuel consumption. "The concerns are related to efficiencies in terms of fuel savings and reduced emissions," she said, adding the city is now looking at other alternatives.

Winnipeg sources also pointed to performance problems with the hybrid's batteries in cold weather. City Councillor Russ Wyatt said maintaining heat in the buses was also difficult, adding the city has no choice but to back away from the buses if they don't work well. "It would be irresponsible to spend \$20 million on something with problems," he said. "The last thing we want is something that doesn't work properly." [Source: Winnipeg Sun, June 14, 2008]

International News

Retired Vancouver Trolleys find New Life in Argentina

With a fleet of over 200 new low floor trolleybuses now operating on Vancouver's streets, it appears that some of its previous trolley fleet will find new life in a new home. 80 of the city's 25-year-old Flyer E900 trolleys were finding their way to the Fraser docks aboard flatbed trucks in early September for shipment to Mendoza, Argentina. While their stepped entryway is considered a barrier to accessibility for Vancouver, Mendoza, a city of about 900,000 welcomes the used trolleys.

The old trolleys "just don't meet our needs because we need to get the whole fleet up to accessibility standards", explained Drew Snider, spokesperson for TransLink. But the buses are still safe and fit for use. The used trolleys will fetch about \$2,300 each for TransLink, as opposed to only \$1,000 each if sold for scrap. "As we turn over our electric trolley fleet in Metro Vancouver, it's good to know that we're able to help another metropolitan area maintain their fleet and make their own contribution to environmental protection," says TransLink CEO Tom Prendergast.

While diesel buses are typically retired after twelve to eighteen years of service, it is not uncommon for trolleybuses to see two to three times this service life. Often trolleybuses retired by one city are sold for use elsewhere. Valparaiso, Chile operates American-made trolleybuses in daily service that were built in the 1940's; Guadalajara uses ex-Chicago trolleybuses built in the early 1950's. A number of Flyer trolleybuses retired by Edmonton in 1987 are still in active service in Mexico City. [Source: Vancouver Sun, Sept. 11, 2008]

Meridians take Pride in New Trolleybus System

It literally changed their life, says an August 19th press release from the Venezuelan Agencia Bolivariana de Notiicias. The press release refers to the impact of the brand new electric trolleybus system that is up and running in Merida, one of Venezuela's major cities. "Talking about Merida means talking about before and after the trolleybus," says the press release, as "it is the one thing that lends a futuristic and modern vision to this otherwise bucolic and conservative city".

Since 45 modern trolleybuses went into service on June 18, 2007, over 3 million people have been carried on the system. Powered entirely by electricity without any curbside emissions, Meridians now ride daily in the smooth and quiet comfort of the air conditioned and ecologically friendly vehicles. 18 more kilometers of trolleybus line are under construction and will be completed by December of 2009.

The Meridian people are clearly proud of the implementation of this electric mass transportation system developed under the guidance of the Ministry of Infrastructure (Minfra) and with the support of the Merida State government. "Having the trolley is a blessing," says Alejandrina Moran, a government worker who travels more than 4 km to work each day. "It is quiet, comfortable and very fast. It used to take me three hours to go from home to my job, now I only spend ten minutes in the trolley; it's a great ride."

[Source: Agencia Bolivariana de Notiicias, Aug. 19, 2008]

Schaffhausen, Switzerland to renew and expand trolley operations

City Council in Schaffhausen voted September 16th to continue trolleybus operations in that city and renew the city's aging trolleybus fleet. The Swiss city of 75,000 people operates a single trolleybus line, Route 1, using a fleet of eight trolleybuses.

Factors motivating the decision included the instability of oil prices and the trolley's zero in-street emission and low noise credentials. Tenders will be sought for seven new trolleybuses in 2009.

Schaffhausen Council also voted to consider the expansion of trolleybus service by converting Route 3 from diesel bus operation in 2013. [Source: Swiss Trolley Coalition, http://www.proaktiv.a.ch/trolleybus]

Leipzig, Germany to reintroduce Trolleybuses

Tests prove hybrids offer poor value

After tests of new hybrid buses proved to offer minimal savings and advantages over regular diesel vehicles, the German city of Leipzig has now decided to move forward with a reintroduction of electric trolleybuses as a way of gaining freedom from the growing global problems surrounding the price and supply of crude oil. "With trolleybus technology, we can gain independence from world developments with respect to oil—after all, nobody really knows how high oil prices are going to soar," explains Ronald Juhrs, technical manager for the local transit authority. "Electricity is pretty much a locally produced commodity, and so it makes more economic sense."

Initially, the Leipzig transit authority had considered hybrid buses to be the solution. But testing showed that the small savings on fuel didn't justify the hybrids' higher purchase price. "The higher purchase cost of hybrids—about 100,000 to 250,000 Euros (con't p. 6)

Leipzig (con't from p. 5)

more than a diesel—cannot be offset by fuel savings over the 12 year life of the vehicle," explains Juhrs. Instead of an expected 20-25% fuel savings, tests revealed that hybrids offered only about 10% better fuel economy than regular diesels in real-world conditions. That discovery gave the finance people at Leipzig Transport cause for concern. "Trolleybuses are a proven, mature technology," says Juhrs. "Their purchase cost is similar to hybrid buses, but they last 16 to 20 years, so it is easier to amortize the initial investment."

When technicians in Leipzig studied the operating costs of trolleys vs. hybrids, they found that the energy cost of trolleys was only 40% of that of the hybrids. "That's when we said, we need to look closer at this [trolleys]," says Juhrs, "we can't just ignore this".

Leipzig also operates a light rail (tram) system, and substations that power the light rail services could easily be used to power trolleybus lines as well, even if the capacity of the substations needs to be increased. Preliminary examination found that diesel bus routes 60 and 70 could relatively easily be electrified for trolleybus operation. A concept plan is currently in the works for the electrification of Route 60. The transit authority envisions adding 25 new trolleybuses to its fleet around 2015. [Source: LVZ/LVB, August 11, 2008; http://www.protrolleybus.ch/protrolley/news/news_detail.php?id =294]

by Robert R. Clark



In the 1950's and 60's, five of the six major North American bus manufacturers ceased production, leaving General Motors in a monopoly position. Edmonton Transit superintendent Don MacDonald was faced in 1962 with the need to place a large order for buses to deal with burgeoning ridership. Approaching GM for a quantity discount on a large order, he was told that since they were the only supplier, he would have to pay whatever they demanded. As a prudent manager, MacDonald made worldwide enquiries, resulting in orders being placed with Daimler of Great Britain and Nissan of Japan at a cost saving of more than 25%.

The end result of this strategy was to force GM to reduce

Trolleybuses return to Spain !! New system opens in Castellon de la Plana

19 years after the closure of the trolleybus system in the Spanish city of Pontevedra, trolleybuses have returned to Spain in a move to introduce modern, attractive alternatives to the motorcar. With much ceremony, the city of Castellon opened a 2 km stretch of trolleybus service on its Route 1 serving the University and Ribalta Park on the morning of June 25th, 2008. Three Cristalis Civis model trolleybuses provide the service, operating entirely on a reserved right-of-way with optical guidance. A short gap in the overhead wiring at the turn into Ribalta Park is traversed using the vehicle's auxiliary propulsion system.

Extensions to the route will open later this year, as wiring is completed to permit service via the Old Town Centre to Grao Harbour. In 2010, a further extension will take the trolleybus service along the coastline to Benicassim, and a second trolleybus route to Almassora/Burriana will open in the 2011-2012 timeframe. The operating company TVR-CAS, which prides itself on being ecologically responsible, is planning to market the new system under the name TRAM. [Source: International Trolleybus News/R.C DeArmond/W. Young, June 27, 2008]



Opening Day, Castellon de la Plana

[D. Budach]

the price of their products in following years. Today we have a similar situation with New Flyer nearly in a monopoly situation as reflected in the exorbitant prices quoted for new trolleybuses and the high cost of hybrids.

In recent years, eight other North American cities have placed orders for new trolleys, only two of them going to New Flyer. Two cities purchased vehicles made largely by off-shore suppliers, and one realized huge savings by recycling and upgrading the electrical components from its previous trolley fleet.

It is very striking to note that both with its trolleybuses AND LRT cars, Edmonton again disadvantaged itself by not inviting competitive bids. And lest anyone should imagine that there were compatibility issues motivating the LRT decision, it should be noted that newly delivered cars cannot be coupled with the existing LRT fleet in spite of coming from the same manufacturer. Isn't it time we took a few lessons from the past?