C-TRAN

C-TRAN BOARD OF DIRECTORS
MEETING MINUTES

December 8, 2009

The C-TRAN Board of Directors meeting was held Tuesday, December 8, 2009 at the C-TRAN Administrative Facility, 2425 NE 65th Avenue, Vancouver, Washington.

EXECUTIVE SESSION

At 4:30 p.m., Vice Chair Boldt stated pursuant to the Revised Code of Washington, 42.30.100, the C-TRAN Board of Directors would convene an Executive Session to discuss Employee Performance Review.

The Board adjourned the Executive Session at 5:35 p.m. after being in Executive Session for 65 minutes.

CALL TO ORDER

Vice-Chair Marc Boldt called the meeting to order at 5:39 p.m.

PLEDGE OF ALLEGIANCE

Vice-Chair Boldt led the Pledge of Allegiance.

ROLL CALL OF MEMBERS

PRESENT: Marc Boldt, Linda Dietzman, Bill Ganley, Jeanne Harris, Jim Irish (participated in the Executive Session only via telephone), Tim Leavitt, Tom Mielke, Jeanne Stewart, Steve Stuart

ABSENT: None

CHANGES TO AND APPROVAL OF THE BOARD AGENDA

STEVE STUART MOTIONED, LINDA DIETZMAN SECONDED, AND MOTION CARRIED TO APPROVE THE AGENDA.

CONSENT AGENDA

1. APPROVAL OF BOARD NOVEMBER 10, 2009 MINUTES,
2. TRANSMITTAL OF CLAIM VOUCHERS NUMBERED 082959 THROUGH 083233 PLUS PAYROLL FOR NOVEMBER, IN THE TOTAL AMOUNT OF $2,643,009.53
3. CONTRACT AWARD – DIESEL EMISSIONS FLUID DISPENSING SYSTEM, STAFF REPORT #09-065

   Beginning in 2010, the Environmental Protection Agency (EPA) will require significant reductions in nitrogen oxide (NOx) emissions for all on-road diesel vehicles. Selective catalytic reduction (SCR) is an emissions-reduction technology widely accepted industry solution with the ability to deliver near-zero emission of (NOx), a smog-causing pollutant and greenhouse gas for compliance to the new EPA standards. DEF is an essential component to SCR technology and will be required in trucks and other commercial vehicles meeting federal emissions standards. Virtually all heavy-duty engines in volume production today, that will continue to be sold after the new standards take effect, will require DEF. In order to meet this federal standard and be a responsible agency, setting a goal of near-zero emission of NOx, C-TRAN needs to install the necessary fueling equipment in order to fuel eight Gillig coaches being purchased in 2010. A request for funding to support this installation was included in C-TRAN's application for a grant through the American Recovery and Reinvestment Act (ARRA). The application was approved as submitted; therefore, this entire project will be funded by ARRA grant dollars.

   STEVE STUART MOTIONED, LINDA DIETZMAN SECONDED, AND MOTION CARRIED, TO APPROVE THE CONSENT AGENDA.

CITIZEN COMMUNICATIONS

SHARON NASSET, 1113 N. Baldwin St., Portland, OR said she attended the recent Project Sponsors Council meeting and stated additional discussions are necessary. Ms. Nasset asked for a response in writing from C-TRAN on whether or not an option for a bridge with six lanes connecting to I-5 was studied. Ms. Nasset reported at a recent meeting, attendees were expelled from the meeting and others were advised they could not film the meeting. Many people had signed up to speak but only 20 minutes was allocated for public testimony.

JIM KARLOCK, 3311NE 35th Avenue, Portland, OR submitted Exhibit A entitled, "Which Would You Choose?" and Exhibit B entitled, "Some CRU E-Mails". Mr. Karlock reviewed the information in the exhibits.

DEBBIE PETERSON, Ellsworth Springs, Vancouver, WA submitted Exhibit C, entitled "Rethinking Green: Save the Environment: Don't Take Transit." Ms. Peterson reviewed information in Exhibit C and advised of a congestion charge toll implemented in Stockholm in 2007, which reduced CO2 emissions in that city by roughly 16 percent last year, cut traffic by 18 percent, and led to a tripling of purchases of so-called green cars.

STAFF REPORT

1. 2010 STATE LEGISLATIVE AGENDA, STAFF REPORT #09-066

   Director of Development & Public Affairs Scott Patterson gave the staff report. C-TRAN has been an active participant with the Washington State Transit Association (WSTA) in the development of its 2010 Washington State Legislative Agenda. The WSTA 2010 Legislative Agenda has not yet been adopted by the WSTA Board of Directors. It has been C-TRAN's practice to endorse the WSTA Legislative Agenda while separately calling out C-TRAN's legislative priorities. Staff will return to the Board for approval of WSTA's legislative agenda when it is available.

   In the 2009 legislative session, C-TRAN successfully lobbied for the passage of the sub-district bill by amending the High Capacity Transit statute, RCW 81.104. However, prior to its final passage, an amendment was introduced that became part of the final bill to have the effective date be 2012. This change led to additional research on our part to analyze the potential of moving up the effective date to at least 2011.

   C-TRAN's 2010 State Legislative Agenda:

   - **HIGH CAPACITY TRANSIT SUB-DISTRICT EFFECTIVE DATE**
     Following last session's successful passage of the sub-district legislation, an additional action would be needed to move the effective date up from 2012. This action would be necessary were C-TRAN to seek a sub-district ballot measure prior to 2012.
   - **REGIONAL MOBILITY GRANT and SPECIAL NEEDS FUNDING**
     Maintain full funding for both of these important programs for the remainder of this biennium.
   - **COLUMBIA RIVER CROSSING PROJECT**
     In recognition of C-TRAN's role in the Columbia River Crossing Project, C-TRAN supports legislative efforts in the upcoming session that are necessary to advance the Project, provided the requests are consistent with C-TRAN's Board adopted Locally Preferred Alternative Resolution approved in July 2008.

Board Member Steve Stuart asked if the Federal Transportation Administration's (FTA) funding requirements for the Columbia River Crossing (CRC) project would influence the timeline for a vote. Director Patterson said FTA's timeline indicates approval for final design is scheduled in 2011; however, it is not clear if local funding must be in place prior to final design.

Board Member Steve Stuart questioned if C-TRAN should ask the voters for operating funds in 2011, then go back in 2012 asking for subdistrict approval for high capacity transit (HCT), or if both operating funds and subdistrict approval could be combined, with one measure for the subdistrict and a separate measure for the portions outside of the subdistrict.

Board Member Jeanne Stewart asked if 81-104 funds must be used for HCT. Director Patterson said all funding options are being considered, including the use of 3657 funds.

Board Member Jeanne Stewart said she feels the first ballot measure presented to the voters should only include operations funding with 3657 funds. The priority should be to sustain the current system. When HCT funding is sought, those funds should be 81-104 funds.

Board Member Bill Ganley concurred with Board Member Jeanne Stewart and said any ballot measures needs to show HCT funding as a separate issue. The top priority for C-TRAN should be to maintain the current bus service. Citizens in the East County area are asking for additional bus service.

Board Member Jeanne Harris asked staff to come back to the Board for a discussion on the detailed expenses associated with 81-104 funding, such as the requirement to convene an Expert Review Panel.

STEVE STUART MOTIONED, TIM LEAVITT SECONDED, AND MOTION CARRIED TO APPROVE THE C-TRAN'S STATE LEGISLATIVE AGENDA.

2. 2010 FEDERAL LEGISLATIVE AGENDA, STAFF REPORT #09-067

Director Patterson gave the staff report. In 2009, the C-TRAN Board of Directors approved four top funding and policy priorities for the 2010 Federal Legislative Agenda:

- A $5 million request from Federal Transit Administration (FTA) Section 5309 Bus and Bus Facilities program for the continuation of C-TRAN bus replacements to continue our ability to replace depreciated transit buses over the next few years.

This specific request would assist in replacing 30-foot, 40-foot, low-floor buses, and 25-foot C-VAN vehicles.

- A $1.75 million request from the FTA Section 5309 program for an Alternative Analysis (AA) for the selected priority high capacity transit corridor that is expected to be identified later this year. The AA will be used to select the specific alignment and mode necessary to advance the project under the FTA's New Starts or Small Starts Full Funding Grant Agreement for construction.
- Columbia River Crossing Project. Support legislation that would direct the Federal Transit Administration to determine the Section 5309 New Starts share of the project as a percentage of the entire multimodal finance plan. In addition, support other CRC requests provided they are consistent with C-TRAN's Board adopted CRC Locally Preferred Alternative resolution adopted at the July 2008 Board meeting.
- Support American Public Transportation Association (APTA) Recommendations on Federal Public Transportation Authorizing Law (Post SAFETEA-LU – Transportation for the Future approved by the APTA Board of Directors on October 5, 2008.)

The first three bulleted items above are at least partially included in the FY 2010 transportation appropriations bill; however, the bill has not yet passed both chambers of Congress. Specifically, the senate version, thanks to Senator Patty Murray, has $1.75 million for the Alternatives Analysis study for the high capacity transit corridor (Fourth Plain BRT project). In addition, Senator Murray has included $1.9 million in the senate bill for C-TRAN's ongoing bus replacement program. Finally, the legislative language for the Columbia River Crossing Project summarized in the third bullet is also in the senate version of the bill. Steve Palmer, C-TRAN's contract lobbyist reported to the Board on November 10, 2009, the bill is stalled as the debate over health care is taking priority. Recent reports suggest a number of appropriations bills, including transportation, could be rolled into one larger appropriations bill that may be adopted by the end of December.

Regardless of the outcome of the FY 2010 appropriations bill, C-TRAN's funding priorities will remain largely the same; namely additional funding for bus replacement and funding for the advancement of the Fourth Plain BRT project. Therefore, C-TRAN proposes the following for inclusion in its 2010 Federal Legislative Agenda:

1. A $3-5 million request (depending on outcome of 2010 appropriations bill) from Federal Transit Administration (FTA) Section 5309 Bus and Bus Facilities program for the continuation of C-TRAN bus replacements to continue our ability to replace depreciated transit buses over the next few years.

2. A $1.75 to $5 million request from the FTA Section 5309 program for either an Alternative Analysis (AA) for the 4th Plain BRT Project (if not funded in 2010 appropriations bill) OR for the next phase of project development; design/engineering and/or construction.
3. Columbia River Crossing Project. Support legislation (if not included in the 2010 appropriations bill) that would direct the Federal Transit Administration to determine the Section 5309 New Starts share of the project as a percentage of the entire multimodal finance plan. In addition, support other CRC requests provided they are consistent with C-TRAN's Board adopted CRC Locally Preferred Alternative resolution adopted at the July 2008 Board meeting.

In addition to the items above, C-TRAN will be asking for the following projects to be included in the upcoming Federal Transportation Reauthorization legislation:

- $15 million for C-TRAN's continuing bus replacement program;
- $1.75 million for the Alternatives Analysis (AA) for the HCT corridor (if not received in next year's appropriations bill);
- Authorization to proceed with a Small Starts HCT corridor project consistent with C-TRAN's 20-Year TDP, including both "Project Development" and "Project Construction Grant Agreement" as described in FTA's Small Starts Program.

STEVE STUART MOTIONED, JEANNE STEWART SECONDED, AND MOTION CARRIED TO AMEND THE FEDERAL LEGISLATIVE AGENDA TO INCLUDE AN ITEM SUPPORTING FUND FLEXIBILITY FOR FEDERAL DOLLARS ALLOCATED TO C-TRAN.

STEVE STUART MOTIONED, JEANNE HARRIS SECONDED, AND MOTION CARRIED TO APPROVE THE AMENDED FEDERAL LEGISLATIVE AGENDA.

ITEMS FROM THE CONSENT AGENDA – There were no items to be considered.

COMMUNICATIONS

From The Chair

1. Executive Director/CEO Evaluation

JEANNE STEWART MOTIONED, JEANNE HARRIS SECONDED, AND MOTION CARRIED TO APPROVE THE EXECUTIVE DIRECTOR/CEO'S 2010 COMPENSATION, TO REMAIN AT THE 2009 COMPENSATION LEVEL, AS FOLLOWS: BASE SALARY OF $122,036.87, MERIT OF $1,459.33 FOR A TOTAL 2010

SALARY OF $123,496.20; $10,000 PER YEAR TO DEFERRED COMPENSATION ACCOUNT PER EXECUTIVE DIRECTOR/CEO CONTRACT; TOTAL COMPENSATION OF $133,496.20.

TIM LEAVITT MOTIONED, JEANNE HARRIS SECONDED, AND MOTION CARRIED TO APPOINT A SUBCOMMITTEE CONSISTING OF JEANNE STEWART, LINDA DIETZMAN, AND JIM IRISH, TO REVIEW THE EXECUTIVE DIRECTOR/CEO COMPENSATION POLICY.

2. 2010 Executive Director/CEO Goals

   By consensus, the 2010 Goals were approved as presented.

3. Election of Officers for 2010

   STEVE STUART MOTIONED, JEANNE STEWART SECONDED, AND MOTION CARRIED TO ELECT CLARK COUNTY COMMISSIONER MARC BOLDT AS THE 2010 C-TRAN CHAIR.

   Staff was directed to add the election of the C-TRAN Vice-Chair to the January 2010 Board Agenda.

From The Board

Staff was directed to add a discussion of C-TRAN's representation to the Project Sponsor Council to the January 2010 Board Agenda.

From The Executive Director/CEO

ADJOURNMENT

The meeting was adjourned at 6:30 p.m.

Prepared By: Debbie Jermann

Which would you choose?

Bus: 15 Min.

or

MAX: 34 min.

C-Tran Route 105:

South to Portland

Morning trips travel south on 5th Ave.

Washington & Evergreen ❸	5th Ave. & Alder ❹	5th Ave. & Clay ❺
5:45AM	6:00	6:04
6:29	6:44	6:48
6:44	6:59	7:03
6:59	7:14	7:18
7:14	7:29	7:33
7:29	7:44	7:48
7:44	7:59	8:03
7:59	8:14	8:18
8:14	8:29	8:33
9:04	9:19	9:23
9:54	10:09	10:13
10:44	10:59	11:03
11:34	11:49	11:53

Bus: 15 min
Vancouver to Portland
(5th & Alder)

MAX: 30 min
Expo Cntr. to Portland
(5th & Morrison)

MAX: 34 min
Vancouver to Portland
(3.6 min Expo - Vancouver per DEIS)

MAX Yellow Line

Weekday — **To Portland City Center/PSU**

Expo Center MAX Station Stop ID 11498	N Lombard TC MAX Station Stop ID 11501	N Prescott St MAX Station Stop ID 11504	Interstate/Rose Quarter MAX Station Stop ID 11507	Union Station/ NW 5th & Glisan St MAX Stn Stop ID 7601	Pioneer Place/ SW 5th Ave MAX Station Stop ID 7646
4:57	5:04	5:09	5:16	5:20	5:26
5:34	5:41	5:46	5:53	5:57	6:03
6:04	6:11	6:16	6:23	6:27	6:33
6:19	6:26	6:31	6:38	6:42	6:48
6:34	6:41	6:46	6:53	6:57	7:03
6:49	6:56	7:01	7:08	7:12	7:18
7:04	7:11	7:16	7:23	7:27	7:33
7:19	7:26	7:31	7:38	7:42	7:48
7:33	7:40	7:45	7:53	7:57	8:03
7:48	7:55	8:00	8:08	8:12	8:18
8:03	8:10	8:15	8:23	8:27	8:33
8:18	8:25	8:30	8:38	8:42	8:48
8:33	8:40	8:45	8:53	8:57	9:03
8:48	8:55	9:00	9:08	9:12	9:18
9:03	9:10	9:15	9:23	9:27	9:33

Is The Bus Really that fast? Here is what C-Tran said:

"Our commuter buses along with non-commuter buses do their best to keep their given schedules, they are however subject to traffic issues. Generally, they are on schedule but may at times run into unavoidable difficulties particularly on Friday afternoons."

Downtown Portland

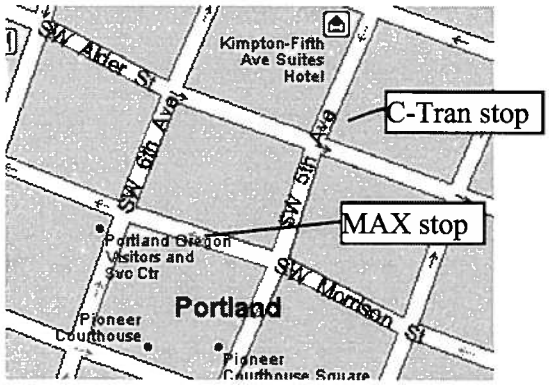

Exhibit: A

ation: NoBridgeTolls.com NoLightRail.com

Meeting Date: 12/8/09

Received By: D. Seimann

Some CRU Emails

39154709.txt
From: Tim Osborn <t.osborn@xxxxxxxxx.xxx>
To: mann@xxxxxxxxx.xxx,imacadam@xxxxxxxxx.xxx
Subject: Briffa et al. series for IPCC figure
Date: Tue, 05 Oct 1999 16:18:29 +0100
...The data are
attached to this e-mail. They go from 1402 to 1995, although **we usually stop the series in 1960 because of the recent non-temperature signal**
Tim Osborn is listed as contributing author for IPCC AR4, chapters 6 & 8

1120593115.txt
From: Phil Jones <p.jones@xxxxxxxxx.xxx>
To: John Christy <john.christy@xxxxxxxxx.xxx>
Date: Tue Jul 5 15:51:55 2005
The scientific community would come down on me in no uncertain terms if I said the world had cooled from 1998. OK it has but it is only 7 years of data and it isn't statistically significant.

Phil Jones is head of the CRU, a Draft Contributing Author for the Summary for Policy Makers, and Coordinating Lead Author of Ch3 for the IPCC AR4.

1255523796.txt
Oct 14, 2009, at 10:17 AM, Kevin Trenberth wrote:
Hi Tom
How come you do not agree with a statement that says we are no where close to knowing where energy is going or whether clouds are changing to make the planet brighter. **We are not close to balancing the energy budget. The fact that we can not account for what is happening in the climate system** makes any consideration of geoengineering quite hopeless as we will never be able to tell if it is successful or not! It is a travesty!

Kevin Trenberth Draft Contributing Author for the Summary for Policy Makers, contributing author to Ch 1, a lead author for Ch 3, and contributing author to Ch 7, IPCC AR4.

1047390562.txt
From: Phil Jones
To: rbradley, mhughes, srutherford, "Michael E. Mann", tcrowley
Subject: Fwd: Soon & Baliunas
Date: Tue, 11 Mar 2003 08:49:22 +0000

Exhibit: B
Meeting Date: 12/8/09
Received By: D Jermann

I will be emailing the journal to tell them **I'm having nothing more to do with it until they rid themselves of this troublesome editor.** A CRU person is on the editorial board, but papers get dealt with by the editor assigned by Hans von Storch.

Phil Jones is head of the CRU, a Draft Contributing Author for the Summary for Policy Makers, and Coordinating Lead Author of Ch3 for the IPCC AR4.

1228330629.txt
Phil Jones, Dec 3, 2008:
About 2 months ago I deleted loads of emails, so have very little – if anything at all.
Almost one year later: Phil Jones, Nov 24, 2009 Guardian
We've not deleted any emails or data here at CRU.
(http://www.guardian.co.uk/environment/2009/nov/24/climate-professor-leaked-emails-uea)
Phil Jones is head of the CRU, a Draft Contributing Author for the Summary for Policy Makers, and Coordinating Lead Author of Ch3 for the IPCC AR4.

From: Phil Jones
To: "Michael E. Mann"
Subject: **IPCC & FOI**
Date: Thu May 29 11:04:11 2008
Can you delete any emails you may have had with Keith re AR4?
Keith will do likewise. He's not in at the moment - minor family crisis.
Can you also email Gene and get him to do the same? I don't
have his new email address.
We will be getting Caspar to do likewise.
I see that CA claim they discovered the 1945 problem in the Nature paper!!

Phil Jones is head of the CRU, a Draft Contributing Author for the Summary for Policy Makers, and Coordinating Lead Author of Ch3 for the IPCC AR4.

1189722851.txt
From: Phil Jones [mailto:p.jones@xxxxxxxxx.xxx]
Sent: Wednesday, September 12, 2007 11:30 AM
To: Wahl, Eugene R; Caspar Ammann
Subject: Wahl/Ammann

Ammann/Wahl - try and change the Received date! Don't give those skeptics something to amuse themselves with.
Phil Jones is head of the CRU, a Draft Contributing Author for the Summary for Policy Makers, and Coordinating Lead Author of Ch3 for the IPCC AR4.

From: Benjamin D. Santer, Date: 19/03/2009 16:48 (1237496573.txt)
If the RMS is going to require authors to make ALL data available - raw data PLUS results from all intermediate calculations - I will not submit any further papers to RMS journals.
Santer is a contributing authjor to IPCC, AR4, Ch 1, 9 & 10

From: Phil Jones, Date: Thu Jul 8 16:30:16 2004 (1089318616.txt)
I can't see either of these papers being in the next IPCC report. Kevin and I will keep them out somehow - even if we have to redefine what the peer-review literature is!

Phil Jones is head of the CRU, a Draft Contributing Author for the Summary for Policy Makers, and Coordinating Lead Author of Ch3 for the IPCC AR4.

Exhibit R 12/9/09

Rethinking Green: Save the environment: Don't take transit
<http://www.nationalpost.com/news/story.html?id=2314104#ixzz0Z4avNzKi>

Exhibit: C

Meeting Date: 12/8/09

Received By: D. Jemann

*Kevin Libin, National Post *

Ian Lindsay/Canwest News Service

*In this five-part series, the **/National Post/** looks at unexpected ways to help the environment. **.*

When the Toronto Transit Commission announced in November it would hike fares a 25¢ in the new year -- a roughly 10% increase -- it blamed the usual suspects: rising costs of fuel and wages.

The system, said TTC chairman Adam Giambrone, faced a $100-million shortfall in next year's operating budget.

When the bad news broke, the Torontoist , compared the inflation of the TTC's 21 fare hikes in the past 30 years against the price of gasoline and against the inflation rate.

Consistently, the analysis found, TTC fares had risen faster than inflation, and far faster than the price of gas. Between 1980 and 2010, the cash fare, adjusted for inflation, soared more than 80% and token prices are up 50%. The price of a litre of unleaded gas? Up about 30%, without inflation. As for wage increases, Statistics Canada reported last year that the median full-time, full-year salary of average Canadians has hardly increased at all since 1980.

Although it is charging more than ever, getting heftier federal, provincial and municipal subsidies than at any time in its history, although fuelling a car is pricier; and though its customer base has never been larger or keener to reduce its carbon footprint, the TTC, the largest system in the country, is struggling as much as ever to stem its losses. If this is the future of public transit, it does not look bright.

As other major systems across the continent strain in similar circumstances, the strategy of public transit system boosters has been to promote the service as an environmental necessity. In the name of Mother Nature, North American transit systems have received billions in subsidies in recent years - even though they were never developed for environmental purposes in the first place.

If the goal is to reduce carbon dioxide emissions, air pollution and gas consumption, and maximize the environmental impact of sustainability spending, we may be better off without publicly funding transit at all.

"Subsidized transit is not sustainable by definition," says Wendell Cox, a transport policy consultant in St. Louis, and former L.A. County Transportation commissioner. "The potential of public transit has been so overblown it's almost scandalous."

It's not that environmentally minded transit promoters are being dishonest when they argue that city buses are more efficient than private cars: It's that they're talking about a fictional world where far more people ride buses. Mass transit vehicles use up roughly the same energy whether they are full or empty, and for much of the time, they're more empty than full.

For the bulk of the day, and on quieter routes, the average city bus usually undoes whatever efficiencies are gained during the few hours a day, on the few routes, where transit is at its peak.

Last year, policy analyst Randal O'Toole ran the numbers for the CATO Institute, where he is a senior fellow, comparing mass transit vehicles to private vehicles, ranking each based on how much energy they consume and how much CO2 they emit. The average motorized city bus, he reports, burns 27% more energy per mile than a private car and emits 31% more pounds of CO2. The U.S. Bureau of Transportation Statistics confirms that the average city bus requires 20% more energy per passenger than the average car.

"Unfortunately, right now the state of the art is that you're generally better off with private automobiles when you're talking about energy utilization. About the only way that transit can be competitive for energy or for environmental quality is if the transit lines gets an incredible amount of use, far higher than is now normally the case," says Tom Rubin, a transit policy consultant in California, and former chief financial officer of the Los Angeles County Metropolitan Transportation Authority. But crowded systems are a turn-off for riders, he says, so more passengers means even more buses and rail cars. "It's almost impossible to make transit more attractive without spending a huge amount of money."

The bus may be the most inefficient part of any major city's transit network, but they're the most vital part. Wider use of subways and light rail relies utterly on a feeder system of buses, says Michael Roschlau, president of the Canadian Urban Transit Association. "You can't just run [Calgary's] C-Train by itself and expect everyone to drive to the stations," he says. "Same thing for the subway in Toronto or Skytrain in Vancouver."

Without buses to carry them from their neighbourhood to the train stations, even fewer citizens would ride the trains, making trains, in turn, less efficient per passenger. Already, when trains, subways and streetcars are combined, the average public transit system is still no more efficient that private cars, according to the CATO study. All transit together does emit less CO2 than passenger cars carrying the same number of people the same distance (about 13% less) but even that gap is disappearing -- fast.

The U.S. Bureau of Transportation Statistics data shows that while transit's energy efficiency has worsened in recent decades- transit buses today consume 4,235 per passenger mile, or about 50% more energy than in 1980 -- the trend in cars has been the opposite direction: Today's cars are already about 20% more efficient than they were 25 years ago, down from 4,348 BTUs per passenger mile in 1980 to 3,525 in 2006.

The environmental case for public transit is falling just as fast, now that hybrid cars are achieving mass market status, with 65 models set to hit North American roads next year, Chevrolet planning to launch its electric Volt by 2011 and manufacturers rolling out super-high efficiency vehicles. In the next few years especially, the average energy consumption of passenger vehicles, and their emission levels, will only improve, with projections by the International Council on Clean Transportation showing the average auto could beat all public transit modes for efficiency and CO2 within the next five years.

"At this point, a Toyota Prius is less greenhouse-intensive than New York City Transit," Mr. Cox says. "Whatever advantage that transit has at the moment is going away very quickly."

Once eco-conscious urbanites realize the bus is worse for the planet than cars, they'll have little reason to keep riding, making transit's comparative per-passenger environmental footprint look even worse. And while transit system operators talk of "greening" their fleet, the fact is they face substantial limits. Whatever green gains transit can make, automobiles can probably do better, Mr. Rubin says.

When the federal government, the B.C. government and BC Transit revealed plans to run 20 hydrogen-powered buses in Whistler, B.C., in February for the Olympics, even the hard-green David Suzuki Foundation balked at the preposterous $2-million-per-bus price tag -- four times the price of a standard diesel -- arguing that the money would have been better spent on traditional transit initiatives, which "are on life support as far as the financial needs go," Ian Bruce, the group's climate-change campaigner, said.

He's surely right about the pointlessness of what will amount to a four-year, $90-million showpiece of technology not even remotely realistic for actual, financially strapped public transit systems.

And more money for diesel-powered buses may be hardly more worthwhile: The fact is that despite best efforts of transit planners and funding governments, and surveys showing a public keen on environmentalism, most commuters simply will not, or cannot, ride.

Last year's census data confirmed that the vast majority of Canadians have little use for transit. Just 216,000 more people rode at least once than did in 2001, a half-a-percentage increase, but that's actually a decrease relative to the 5.4% population growth over the same period. At the same time, Statistics Canada shows that operating costs for Canadian transit system has ballooned, up 30% from $3.7-billion in 2003 to $4.8-billion in 2007. In the United States, public transit's market share for travel has fallen by a third since 1980, from 1.5% to 1% in 2005. If anything were to get people out of their cars to stand at a bus stop, it would be the severe pain of soaring gas prices. But even as fuel in the United States. approached the unseen price of $4 a gallon in 2008, public transit ridership rose a mere 3.3%.

Transit boosters insist that we must go further, and redesign our cities to support transit systems. "Our cities continue to approve the suburban sorts of development that are very difficult to serve using public transit," Stephen Hazell, executive director of the Sierra Club of Canada, told reporters upon release of last year's disappointing ridership data. But the thousands of delivery trucks, taxi drivers, emergency vehicles, service trucks, car-bound workers and buses mean even high-density cities will keep needing highways, ring roads, bridges and flyovers. Meanwhile the massive cost of overhauling cities is just more billions to address an automobile environmental problem that is already on the way to resolving itself -- money that might be better, and more effectively deployed toward other earth-friendly measures, such as reducing traffic congestion.

A congestion charge toll implemented in Stockholm in 2007, for instance, reduced CO2 emissions in that city by roughly 16% last year, cut traffic by 18%, and, because it exempts low-emissions vehicles, led to a tripling of purchases of so-called green cars. Best of all, it sustains itself.

More roads, and more efficient roads, still won't address public transit's original, non-environmental purpose: providing mobility for citizens who lack their own. But where public transit is absent, or impractical, solutions for the small minority totally lacking other means have readily sprung up. Ridesharing applications for smart phones -- users enter their location and desired destination and a cost-conscious carpooler responds -- are already in wide use, Mr. Rubin says. Self-sustaining, small-scale private jitney systems have successfully operated for years in Atlantic City and Puerto Rico (all North America's early public transit systems were privately operated until they were nationalized). And with billions freed up from public transit funds, it appears entirely feasible to simply offer subsidized Prius taxis, or even car subsidies, to the small portion of the public entirely reliant on public mobility. A study last year by HDR Decision Economics, commissioned by the Canadian Urban Transit Association, found that Canada's public systems will need $78-billion more in infrastructure spending and $3.6-billion in annual subsidies to reach optimum capacity. For that kind of money, Canadian governments could, if they wanted, hand out $16,000 car or taxi allowances to every single Canadian who rides transit even casually, and still have $50-billion left over at the end of the decade. That plan wouldn't please the public unions and other transit-reliant lobbies pressing for more green-related transit funding. But it would relieve Canadians from having to perpetually prop up a system that's increasingly unsustainable -- financially and environmentally. /National Post/