02/22/2011
Ashbridge's Bay LRV Storage & Maintenance

Councillors,

It is no longer necessary to build a brand new half billion dollar LRV storage & maintenance yard at DVP/Lakeshore and Leslie Street. There is plenty of space for more cost-effective facilities at two existing, better-located TTC sites; one of which already handles heavy maintenance of streetcars.

The decision to save $200 million+ in badly needed TTC expansion funding, will not put the downtown fleet or the new LRV order at risk. The facts indicate that the opposite is true. By more prudently employing TTC funds, sources to cover the cost of the downtown fleet are more assured.

Several conditions have changed, so that the original assumptions for Ashbridge's Bay no longer apply. LRV delivery has been delayed by Bombardier and more TTC space has been found.

It is no longer necessary to create a traffic problem at east Toronto's single busiest intersection (58,000 vehicles daily), where 8 lanes of traffic from the DVP/Lakeshore corridor meet Leslie Street. We do not need to severely inhibit Queen LRV service, with 75% of the entire city's fleet moving through up-and coming Leslieville.

It is no longer necessary to add to the gridlock and economic losses of our City and create even longer commuting times for residents in east Toronto. We do not need to create an industrial blight on our eastern waterfront and disrupt the Martin Goodman Trail.

About 25% of the Hillcrest facility is currently used for streetcar heavy maintenance. Recent changes mean that now about 33% of the same site is currently unused or questionably used.

Investigation of the existing Exhibition Loop reveals it can quickly and cost-effectively be adapted for storage of a large number of LRVs. In combination with Hillcrest, storage is not a problem, and storage during fleet transition is not a problem. Hillcrest itself means heavy maintenance is not a problem.

The combination of Hillcrest and Exhibition Loop along with existing facilities at Roncesvalles and Russell means storage of about 25% of the fleet in each of 4 corners of the city, with heavy maintenance at Hillcrest, and daily maintenance at the other 3.

According to our expert team of transit facility and finance planners, this will undoubtedly save non-revenue LRV travel (deadhead cost), new construction cost, new track cost, contaminated soil removal cost and other unnecessary costs. Why would we waste one-quarter billion dollars at this point in time? I urge you to review this important file carefully.

Mary-Margaret McMahon, Ward 32

REPORT

Proposed Ashbridge's Bay LRV Storage & Maintenance Facility

Changing conditions have altered the assertion that beginning construction on the proposed Ashbridge's Bay LRV Storage facility is urgent. Storage and maintenance needs for the new LRV fleet can now be accommodated with relatively minor modifications until 2016 or later.

New information and changing conditions mean that this project may not represent a prudent investment, despite its inclusion in the 2011 and future years capital budgets. It is likely not cost-effective and not essential. Lower cost alternatives are being explored in light of new information.

NEW INFORMATION

- New cost elements and increasing project costs
- Developments at existing TTC sites that create new possibilities
- New information about the MOE request to satisfy the new City Council
- New information on the timetable for LRV delivery and renovations at existing properties.
- New and unpublished information on the TTC location study, partnership agency concerns, handling of public concerns, sound and vibration test failures, potential liability, public health risks, Aecom Traffic Study, and more.

RECOMMENDATIONS:

1. That City Council supports the TTC decision at the Feb 2, 2011 Executive meeting to direct staff to investigate the feasibility and costs of storing and mainatining new LRV streetcars at the Hillcrest Yard and/or the adjacent hydro corridor and Exhibition Place loop. Pending the outcome of the investigation, capital budgets could be reallocated accordingly.

2. That City Council does not support the simultaneous decision to proceed immediately with the soil removal and capping contract for the Ashbridges LRV Maintenance and Storage Facility; or any other contracts related to a new facility on the Ashbridge's site, as this would be presupposing the finding of Recommendation 1 above.

3. That this review is not to exceed 90 days.

AGREEMENT ON STUDY

On Jan 24, 2011 (BU 8.4) Budget Committee referred motions similar to the above to the General Secretary, TTC for consideration and report to the February 10, 2011 final budget wrap-up meeting.

On Feb 2 2011 TTC Commission supported a motion to direct staff to investigate the feasibility and costs of locating some of the new streetcars at the Hillcrest Yard and/or the adjacent hydro corridor and Exhibition Place loop.

It also decided to proceed immediately with the soil removal and capping contract for the Ashbridges Facility. As the above investigation is intended to review the decision regarding the location of the facility, this would presuppose the findings of the investigation.

RATIONALE

The rationale provided is that the TTC will need more storage and more maintenance facilities to accommodate the new LRV fleet; and that the Ashbridge's facility is critical to providing these needs.

The TTC agreed that the first 100 LRVs to arrive can be accommodated at existing Russell & Roncesvalles facilities with minor modifications to these facilities. Catwalks and cranes will be added to make it possible to conduct all but 'heavy maintenance' and to accommodate functions leading to heavy maintenance, which will be conducted at the Hillcrest facility.

These sites currently include free employee parking areas that should be seen as unnecessary, along with trailers housing rail maintenance functions which could be moved to other TTC properties without impacting maintenance effectiveness.

NEW DEVELOPMENTS AT EXISTING SITES

- New plans and new space at 23-acre Hillcrest site
- New space found at Roncesvalles and Russell yards
- New ideas for Exhibition Loop

NEW TIMETABLE FOR LRV DELIVERY
Due to LRV delivery delays, and assuming a positive outcome from reexamining the CNE Loop, here is the current schedule:

New LRVs Arriving	Number	Planned Storage
Dec 2011	3 Prototypes for tests*	Russell Yard
2012	0	
2013	33	Russell Yard
2014	33	Russell & Roncesvalles
2015	33	Roncesvalles Yard
2016	33	Exhibition Loop
2017	33	New location(s)
2018	33	New location(s)
2019	33	New location(s)
* Tests will change assumptions about operations, storage and maintenance		

We have 6 years. What's the rush?

Note: According to TTC management, many of the assumptions about storage, operations and maintenance have been made on the basis of the old vehicles and will be revised after receipt of three prototypes at the end of this year and after one year of tests.

DOWNTOWN LRV FLEET NOT AT RISK
The downtown fleet will not be at risk by studying this for a few months. Saving about $200 million in unnecessary capital investment is critical to help close the 27% gap that has existed in the past two decades between transit supply & transit demand in Toronto.

This will NOT put the downtown fleet at risk or the LRV order at risk. On the contrary, wasted TTC funds will indeed put responsible system expansion at risk in the future.

Spending an extra few months to review the new information and consider the half billion dollar cost, traffic disruption, community destruction, quality of life, health and waterfront implications of this project is more than worthwhile.

NEW INFORMATION ABOUT THE MOE REQUEST
In its Notice to Proceed on this project the Ministry of the Environment noted that the New Council should be satisfied.

This prompted TTC Chair Stintz in December to delay construction one-month, noting that Councillor McMahon and East Toronto residents should be satisfied that the new facility can be justified. They are not.

SPACE AT CNE LOOP

The TTC has agreed to re-examine the Exhibition Loop as a possible storage and light/medium maintenance option. Earlier analysis has suggested it could accommodate a few LRVs, but a closer examination has revealed a much different possibility.

The scale drawing above shows 36 LRVs could very easily fit within the property, the expanse of which is indicated by the blue area.

MORE THAN 36 LRVs

Transit planner Karl Junkin prepared the drawing below showing tracking that would allow for far more than 36 LRVs, and perhaps as many as 80 or 100, depending on maintenance facility decisions. The CNE Loop is located below the Gardiner Expressway with no surrounding residential neighbours. It is already on streetcar lines, meaning no new deadhead track would be laid to get to and from the facility.

MINIMIZE DEADHEAD LOSSES

Because the CNE Loop is well located near the foot of the Bathurst and Spadina lines it may make a very potent partner site, geographically, with the Hillcrest facility in the north at the top of these lines, permitting flexible decisions regarding both storage and maintenance. Hillcrest is also already on streetcar lines, already handles heavy maintenance which will be phased out or upgraded with the arrival of new LRVs; and well located in proximity to St.Clair and College lines.

CNE, Hillcrest, Roncesvalles in the west and Russell in the east make for excellent geographical dispersity for streetcar storage and maintenance locations.

They also offer more than adequate space, and numerous potential savings.

SPACE AT CNE LOOP

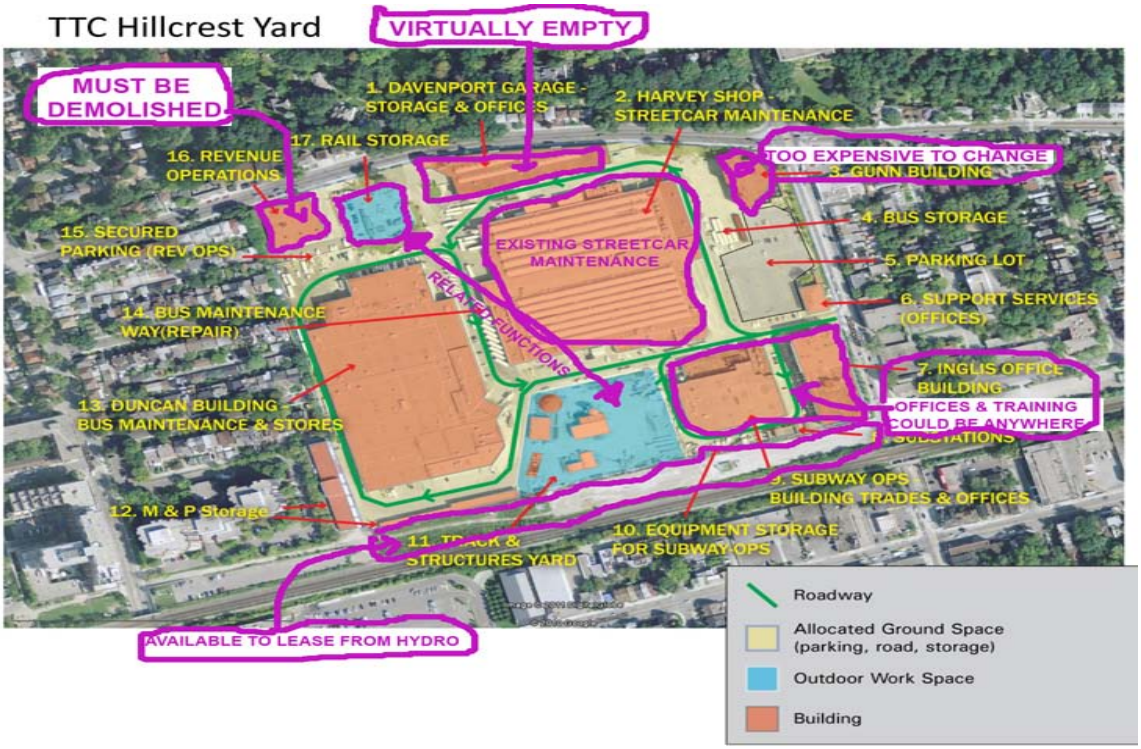
SPACE AT HILLCREST

Further investigation will verify that about 1/3 of the 23 acre Hillcrest site is used questionably or unused. In addition, the existing heavy maintenance for streetcars undertaken in part of Harvey Shop ca be adapted for the new LRV fleet, while the the three other locations Russell, Ronbcesvalles and Exhbition Loop are used for LRV storage during transition.

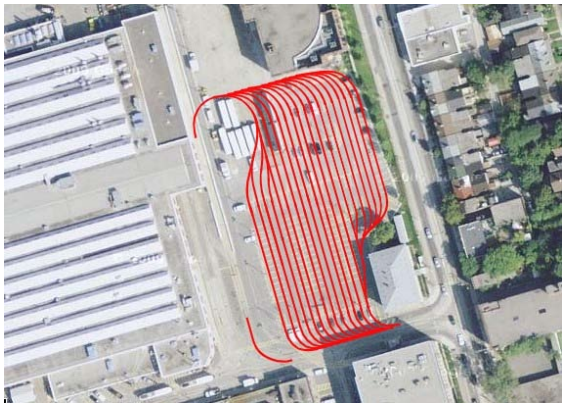
Other changes
It was recently announced that financial functions in one of the buildings are scheduled to be moved out in the near future. Two buildings on the north side are structurally unsound and empty.

Free employee parking
There is more than adequate space for 300 employee vehicles parked on this TTC site for free. Most employees arrive at work during TTC operating hours. An existing lease arrangement for the Hydro corridor to the south offers additional possibilities.

Of the 1200 employees who work at Hillcrest, about 700 do work related to the three critical functions of the site: Duncan & Harvey heavy maintenance, Gunn Transit Control. The other 500 do not need to be located on this valuable and strategically located urban real estate. Three kinds of training take place there using training space. Again, two of the three types could be located elsewhere.

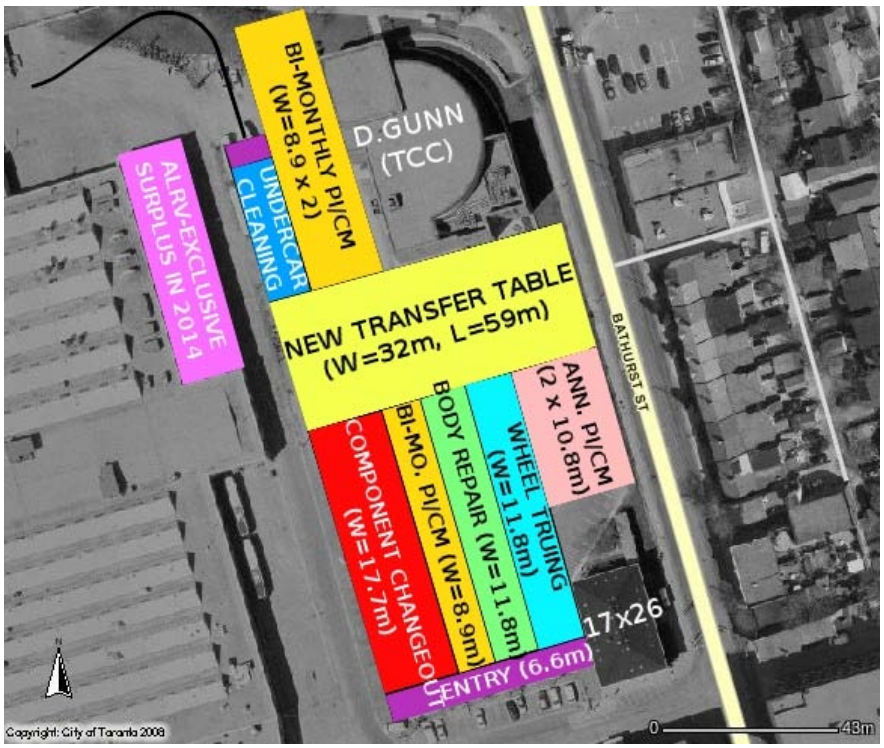


Even without demolishing a single building or relocating any employees there is space outside on this 23-acre site to store at least 50 LRVs overnight.



MAINTENANCE, STORAGE & TRANSITION PLANNING USING HILLCREST

Heavy Maintenance Functions and Bay Sizes	Dimensions		Quantity	Notes	Phasing by Function		
(as per Ashbridges Drawings)	Length	Width	(Bays)		Hillcrest Ph1	Hillcrest Ph2	Hillcrest Ph3
Bi-Monthly Preventative Inspection/Corrective Maintenance	33.0m	8.9m	7		6 out of 7	**Yes**	Ph2
Bi-Monthly Preventative Inspection/Corrective Maintenance	33.0m	6.6m	5	Adjacent to larger bays	No	**8.9 x 3, 6.6 x 2**	Ph2
Annual Preventative Inspective/Corrective Maintenance	33.0m	10.8m	2		**Yes**	Ph1	Ph1
Component Changeout (Bridge Cranes, Floor Hoists Incl.)	33.0m	17.7m	3		2 out of 3	**Yes**	Ph2
Undercar Cleaning	33.0m	10.0m	1		**Yes**	Ph1	Ph1
Wheel Truing	**66.0m**	11.8m	1		**Yes**	Ph1	Ph1
Body Repair	33.0m	11.8m	2		**Yes**	Ph1	Ph1
Body Repair	33.0m	8.9m	1	Light Maintenance	Exhibition	Exhibition	**Yes**
Sand Replenishment	33.0m	10.0m	3	Light Maintenance	Exhibition	Exhibition	**Yes**
Interior Cleaning	33.0m	8.9m	1	Light Maintenance	Exhibition	Exhibition	**Yes**
Train Wash	33.0m	10.0m	1	Light Maintenance	Exhibition	Exhibition	**Yes**
Paint Booth	33.0m	11.8m	1	Light Maintenance	Existing Hillcrest	Existing Hillcrest	Existing Hillcrest



NEW COST ELEMENTS AND INCREASING PROJECT COSTS

Potential Savings by NOT Building the Ashbridges Bay MSF

Immediate Savings:

TTC current estimate for Asbridges Bay MSF $435M

Including:

- **Leslie St track $25M**
- **Water Utility mod'n $2.5 to 10M**
- **Hydro One Conduit $10 to 15M**
- **Soil removal $51.4+M**

Sub-total for Immediate Savings ➔ $90 to 100M

Necessary New Costs:

- **Heavy Maint'ce Facility at Hillcrest $130 to 170M**
- **Additional Tracks at the EX Loop $38 to 62M**
- **Light Maint'ce facility at EX Loop $???**

Sub-total for Necessary New Costs ➔ $185 to 240M

Additional Savings:

Deadhead Savings: $2.9M/Yr x 33% = $1.0M x 25 yrs ➔ $25M

Net Savings: ➔ $220 to 275M

PAST ERRORS WHEN RUSHING MAJOR PROJECTS

1. St. Clair line original estimate $48 million - Final bill $120 million
2. Birchmount Garage deadhead original estimate $330,000 per year
   - Actual cost is $1.2 million every year (in 2011 dollars), 10 million+ total to this point.

NEW INFORMATION ON THE AECOM TRAFFIC STUDY

How is it possible that the Aecom Traffic study could conclude that 58,000 vehicle in the busiest intersection in east Toronto would be unaffected by 230 daily interruptions by 100-foot long LRVs? One clue comes on page 10 of the report, which states:

> *Streetcars were estimated to have a passenger car equivalency of **four** based on their length of 30 m. Therefore, streetcar volumes were multiplied by **four** to estimate an equivalent number of passenger cars for use in the analysis.*

In reality, passenger cars are 4.0 or 5.0 metres long, which means a 30.0 metre LRV is equivalent to **six or more passenger cars, not four**. Secondly a 100-foot long LRV is very different in its impact on traffic than even six small cars.

Although this and other questionable methodologies cast doubt on the Aecom study, The traffic numbers in the study are presumably reliable. The next section shows that the traffic numbers present a problem for the current plan.

QUESTIONABLE ASSUMPTION IN LOCATION ANALYSIS

One of the key assumptions made before beginning the storage planning was that a new site would be needed and that this site would require 22 acres of land. This assumption led to many other very expensive and disruptive conclusions.

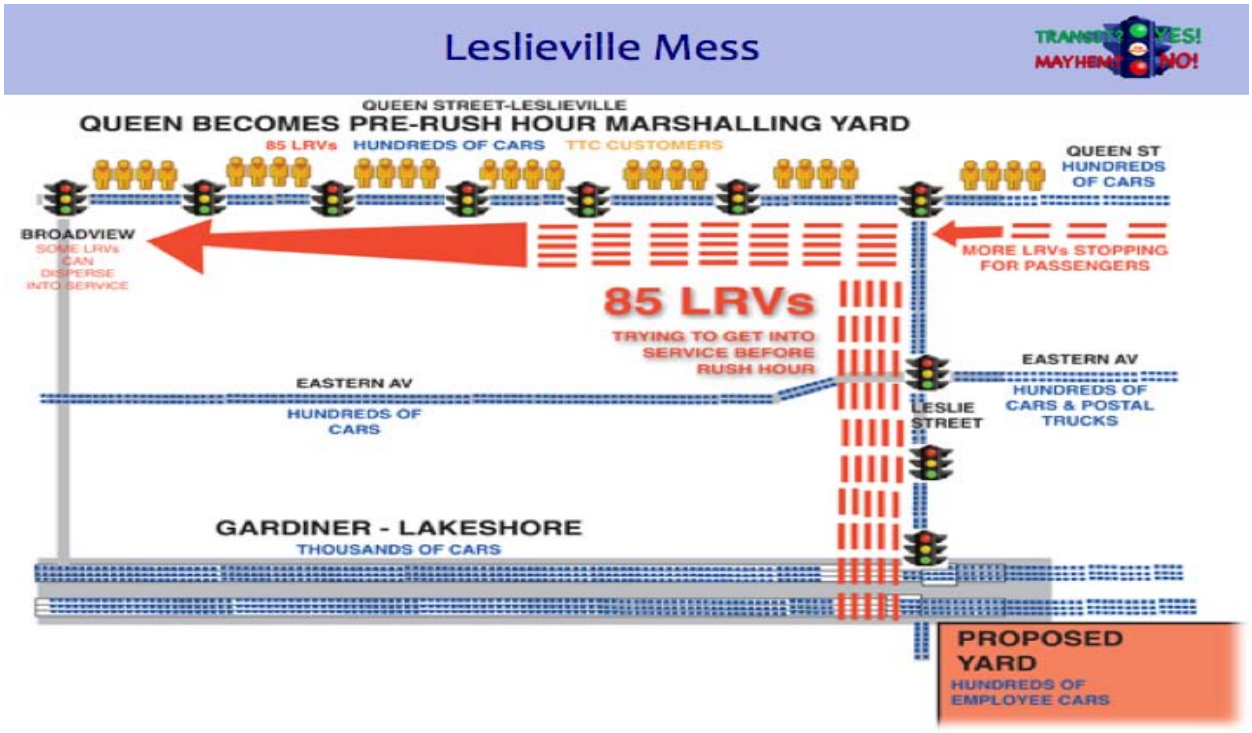
PROBLEMS WITH THE ASHBRIDGE'S BAY PLAN

LESLIE STREET LOGISTICS 5AM - 7AM
The existing plan is to move 85 LRVs from the proposed storage site north up Leslie Street to Queen Street westbound and into 'deadhead service' for many of the downtown streetcar lines.

TRAVEL & TURNING TIME FOR PAIRS OF LRVs
According to the Aecom traffic report, the fastest the LRVs could move across Lakeshore, up Leslie* and complete the turn onto Queen, if they sent the LRVs in pairs, would be about 2 minutes* each pair or a total of 90 minutes for all 85 LRVs, if kept in pairs.

TRAFFIC SIGNALS
This assumes all green northbound signals at the 4 signal lights**. If Transportation Services decides that east/west traffic should be permitted to move on Lakeshore Blvd., (currently abut 2,000 vehicles during this time period) the shortest available traffic signal cycle of about 1 minute would shorten the available travel time to about 60 minutes (within 2 hours) to send 42 pairs of LRVs up Leslie.

This means each 200-foot long pair of LRVs would travel an average of 1.3 minutes behind the previous pair, arriving on Queen westbound say, the same distance apart. They would then begin the process of separating and presumably enter into 'deadhead service' 39 seconds apart to prevent queuing. The first opportunity to thin out the wall of streetcars 39 seconds apart on Queen would be Broadview, six traffic signals to the west. These six traffic signals would have to be co-ordinated to remain green for about two hours. Thirty-sixty minutes of these two hours, would now be during the morning rush'.



*About 18 seconds for two LRVs to get up to speed & clear the Lakeshore Blvd intersection. About 72 seconds to drive .501 km up Leslie, assuming steady 25 km per hour, the maximum in order to comply with the sound by-laws. There are several reasons they might have to travel more slowly. About 25 seconds minimum for both LRVs to make the Queen Street turn.

As unlikely as it is that this precise operation of feeding streetcars into service 39 seconds apart would go smoothly each morning, it is even more unlikely if it is considered that during these hours, regular Queen street service also operates, bringing passengers downtown from the Neville Loop and Kingston road lines. This will add LRVs to the Leslieville stretch of Queen Street every 5 or 10 minutes, LRVs that will need to make stops to pick up passengers. Each stop will take a minimum of about 20 seconds, but the average will be more than 20 seconds.

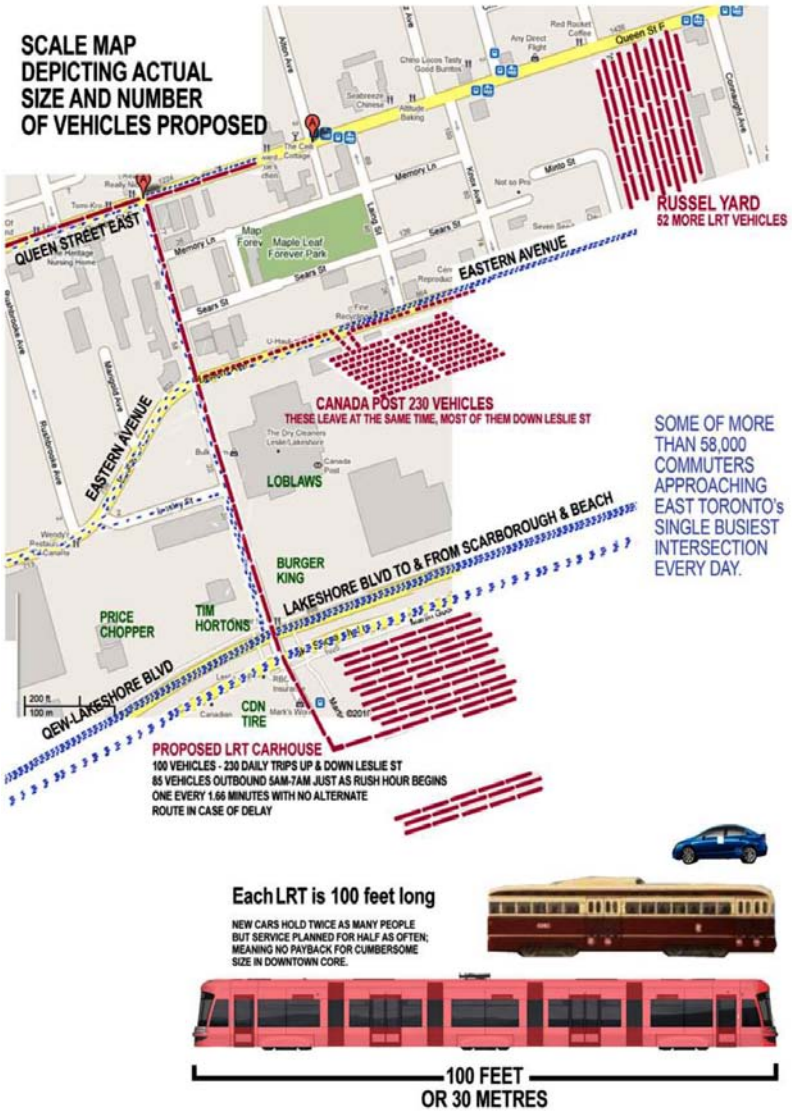
The plan will also be frustrated by about 300 other vehicles on Queen Street that normally attempt to travel westbound through Leslieville during this time period. These drivers navigate carefully through all kinds of slippery weather conditions, and hundreds of pedestrians.

Leslie Street traffic signals cannot be easily coordinated. The four signals now on lower Leslie Street operate under three different computer systems. As of this writing they cannot be co-ordinated by Traffic Services without significant IT project work.

This will complicate any plan to co-ordinate traffic signals to ensure green lights along Queen through Leslieville between Leslie and Broadview, for these two hours. Bunching of LRVs is inevitable and Queen Street in Leslieville will become the equivalent of a TTC marshalling yard every morning for two hours, before and during the morning traffic rush. The regular Queen Street streetcar service meanwhile, which already has numerous reliability problems, will become much worse.

ALL GREEN LIGHTS, ALL LRVS MOVING

Another idea might be to move the LRVs into service even faster, by sending one long queue of them up Leslie Street. Even if Transportation Services agreed to literally -stop all traffic- to allow a steady stream of all 85 LRVs up Leslie in a continuous line, it would take about 20 minutes; and we would then have 85 100-foot long LRVs lined up bumper to bumper along Queen Street to start the service day. Could they be sent quickly into 'deadhead service,' about 10 or 15 seconds apart?



- **58,000 cars daily**
  -Busiest intersection in East Toronto
- **115 monster LRVs**
  -100 feet long, inbound
- **115 monster LRVs**
  -100 feet long, outbound
- **200+ extra monster LRVs**
  -100 feet long, thru Leslieville
- **400 employee cars**
  -inbound daily
- **400 employee cars**
  -outbound daily
- **230 Canada Post vehicles**
  -in and out 1 block east
- **200+ Canada Post vehicles**
  -in and out 2 blocks west
- **52 more monster LRVs**
  -in and out daily
  2 blocks east on Queen
- **Trucks all day**
  -full of contaminated soil for 10 months or more

Under this scenario all traffic on Queen Street, Eastern Avenue and Lakeshore Blvd. would have been at a standstill for 20 minutes. According to the traffic study, this means about 1500 vehicles backing up for a combined 7 kilometres of queuing, just prior to the many thousands of vehicles headed into the area for the morning rush.

OTHER DAY PARTS
This discussion does not address numerous problems associated also with the storage yard plans affecting the afternoon rush and other parts of the day.

PUBLIC SAFETY: DRIVERS AVOID MAJOR ARTERY
Under all of these scenarios, within a few weeks of the first gridlock, drivers of 58,000 car, trucks, vans, etc. will begin choosing routes that do not include the 6-lane/8-lane Lakeshore Blvd. artery, so vital to efficient movement in East Toronto.

Much of this traffic could be added to current volumes on Gerrard and Dundas, which are both one lane in either direction and contain thousands of cyclists. Thousands may choose residential streets to avoid Leslie Street. Accidents on residential streets, Gerrard and Dundas will increase. Pedestrians and cyclists will be injured or worse. Wards 30 and 32 will become a nightmare. Drivers from six or seven other wards will make new choices.

No matter what scenario takes place, Leslieville, the Beach and the rest of East Toronto will be seriously impacted by a poorly located TTC Facility and the TTC Queen service will be irreparably impaired.

MARTIN GOODMAN TRAIL & TREES
The 100-foot long LRVs will also block the Martin Goodman Trail and a 15 foot high permanent wall will be erected beside the trail. Part of the trail will be closed during construction while 500+ trees are removed and contaminated soil is trucked away for 10 or 12 months.

NEW INFORMATION ON PARTNERSHIP AGENCY CONCERNS & HANDLING OF PUBLIC CONCERNS

More that 500 written submissions have been received by the TTC expressing concerns with the proposed facility. Council should be concerned with some of the responses from the TTC

Such as:

TTC Response to noise and vibration concern from condominum owners on Leslie:

Although the Bombardier Flexity Vehicle that will be commissioned for this project is widely used in other jurisdictions, the TTC has established specific criteria for those which were recently purchased. ***These details are considered confidential as part of the tender award and thus not available to the public.*** *TTC's vehicle procurement specification defines both noise and vibration criteria based on international vehicle guidelines and past TTC vehicle performance experience.*

In fact the available data indicates that the site failed 3 of 4 sound/vibration tests:

Noise Effect Summary for Transportation Sources

Time Period	Noise Effect at Nearest Properties West of Leslie Street (7 m from track Centre Lane)	Noise Effect at Nearest Properties East of Leslie Street (10 m from track Centre Lane)	Sound Level Limit
Day (0700– 2300)	65 dBA	62 dBA	63 dBA
Night (2300 – 0700)	67 dBA	65 dBA	59 dBA

TTC Response to concerns about the location:
The new streetcar facility will definitely be at Ashbridges Bay. There are some who are opposed to it in this location, but this is the one selected by the TTC…

In addition the TTC received responses from the stakeholders below, but have not published these responses:

- Bell Canada
- Canadian Environmental Assessment Agency
- Canadian Tire
- City of Toronto – City Planning,
- City of Toronto – Parks, Forestry and Recreation
- City of Toronto – Public Health
- City of Toronto – Real Estate
- City of Toronto – Toronto Fire Department Services
- City of Toronto – Transportation Planning
- City of Toronto – Transportation Services
- City of Toronto – Urban Forestry
- City of Toronto Police Services
- Emergency Medical Services
- HydroOne
- Ministry of Culture
- Ministry of Energy and Infrastructure
- Ministry of Municipal Affairs and Housing
- Ministry of Natural Resources
- Ministry of the Environment

- Ontario Provincial Police
- Rogers Cable
- Tim Horton's
- Toronto and Region Conservation Authority
- Toronto Cycling Committee
- Toronto Hydro-Electric System Limited
- Toronto Pedestrian Committee
- Loblaws

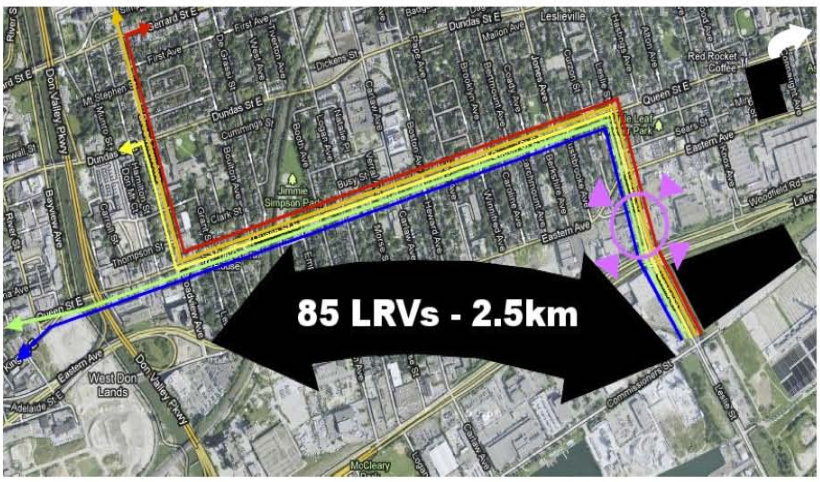
There is a great quantity of other information which has not be placed before Council and properly reviewed, including information on health risks, sewage odour for 470 TTC employees, destruction of trees, natural habitats, closure of the Martin Goodman Trail during the summer etc.

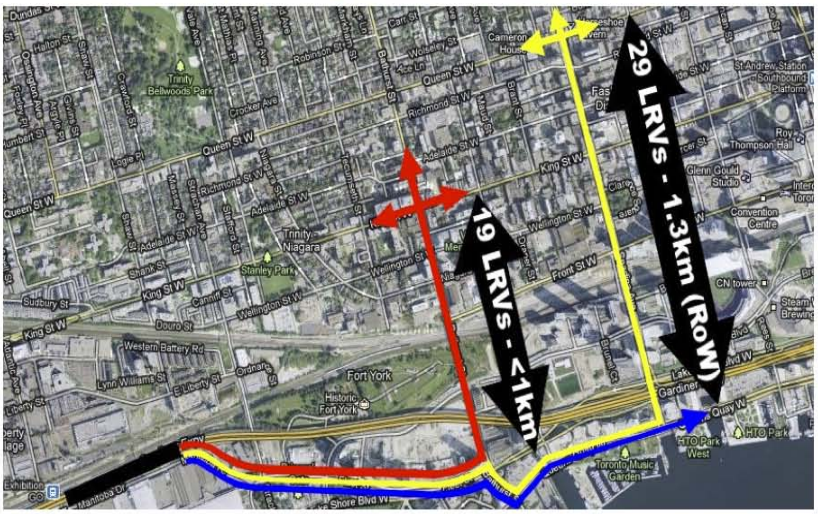
DECREASING DEADHEAD COSTS:
TO CENTRALIZE OR NOT TO CENTRALIZE

Should we choose existing properties with affordable renovations or brand spanking new buildings and tracks? The current plan is to keep 75% of the fleet, 154 vehicles in the southeast corner of the city at Ashbridge's Bay and Russell; and the other 50 vehicles at Roncesvalles. This creates a great deal of unnecessary construction and deadhead cost.

Another plan would be to use Hillcrest and Exhibition Loop instead of Ashbridge's Bay, saving hundreds of millions in construction and new track costs. Coxwell/Danforth is also under consideration.

Combined, these 5 existing TTC locations already offer more than enough capacity for all of the new LRVs and several decades of expansion.


85 LRVs - 2.5km


29 LRVs - 1.3km (RoW)
19 LRVs - <1km


20 LRVs - 2.2km

NEW DEADHEAD ANALYSIS

Carhouse	DH Destination	DHkm	Enter Service As	Vehicles (Estimated)	Notes
Ashbridges	Queen/Broadview	2.5	WB/NB 504, WB 501		
	Dundas/Broadview	2.9	WB/NB 505		
	Gerrard/Broadview	3.2	EB 506		No N->W

Carhouse	DH Destination	DHkm	Enter Service As		Notes
Russell	Queen E/Connaught	0	EB 501/502/503		
	Coxwell/Lower Gerrard	1.35	EB/WB 505		

Carhouse	DH Destination	DHkm	Enter Service As		Notes
Roncesvalles	Queen W/Queensway/King W	0	EB/WB 501, NB/EB 504		
	Roncesvalles/Howard Park	1.4	EB 506		
	Dundas West Stn	2.1	EB 505		
	Lansdowne Loop	2.3	WB 506		
	Bathurst/Queen	3.5	NB/SB 511		
	Spadina/Queen	4.2	EB 502		
	Spadina/King	4.4	NB/SB 510, EB 503		
	Fleet Loop	5.1	EB 509, NB 511		
	Bathurst/St Clair	7.8	EB/WB 512		

Carhouse	DH Destination	DHkm	Enter Service As	Vehicles (Estimated)	Notes
Hillcrest	Bathurst/St Clair	0.95	EB/WB 512	20	1:1.2 ratio
	Bathurst Station	1.05	SB 511	4	1:1.25 ratio
	Bathurst/College	2.2	EB 506	6	No west side turns
	Bathurst/Dundas	2.6	EB 505	5	
	College/Spadina	2.8	NB/SB 510	5	1:1 ratio
			TOTAL	*40*	6 spares (in shop)

Carhouse	DH Destination	DHkm	Enter Service As	Vehicles (Estimated)	Notes
Exhibition	Exhibition Loop	0	EB 509, NB 511 (+1 510 to Union)	4 + 5 + 1	1:1.25 ratio on 509
	Spadina/Queens Quay	1.9	NB 510	9	1:1 ratio
	Bathurst/King	2	WB 504, EB 503	12 + 2	1:1 ratio on 504
	Spadina/Queen	3.2	EB/WB 501, EB 502	4/5 + 1	
	Spadina/Dundas	3.7	WB 505	3	No N->E, No W->S
	Spadina/College	4.25	WB 506	6	No W->S
			TOTAL	*51*	8 spares

Carhouse	DH Destination	DHkm	Enter Service As	Vehicles (Estimated)	Notes
Russell	Queen E/Connaught	0	EB 501/502/503, WB 501/504	6/3/3 + 7/14	1:0.8 ratio on 501
	Coxwell/Lower Gerrard	1.35	EB/WB 505	10	1:1.25 ratio
			TOTAL	*43*	6 spares

Carhouse	DH Destination	DHkm	Enter Service As	Vehicles (Estimated)	Notes
Roncesvalles	Queen W/Queensway/King W	0	EB/WB 501, EB/NB 504	4/15 + 8/2	
	Roncesvalles/Howard Park	1.4	EB 506	7	1:1.25 ratio
	Dundas West Stn	2.1	EB 505	4	
	Lansdowne Loop	2.3	WB 506	3	1:1.25 ratio
				43	7 spares
			In Service Total/Spares Total:	177	27
				FLEET TOTAL:	*204*

There was already enough space in the Hillcrest Yard to store about 50 LRVs. Recently it was announced that some operations now undertaken at the site will be moved off-site. A review of plans at Roncesvalles and Russell has revealed that they will be re-fitted to accept storage and daily maintenance of at least 50 LRVs each. In addition, a tour of Exhibition Loop revealed enough storage for 20 LRVs right now; potentially 30, with minor changes.

Alternate solution studied

WHAT IF WE CAN SAVE $300 MILLION, DECENTRALIZE & SAVE MILLIONS MORE EVERY YEAR IN DEADHEAD LOSSES?

Storage Location	Streetcar Line	No. of LRVs	Totals
Russell	Kingston	12	
Russell	Queen	29	
Russell	Spares	19	
Russell Total			60
Roncesvalles	King	41	
Roncesvalles	Lakeshore	2	
Roncesvalles	Dundas	16	
Roncesvalles Total			59
Hillcrest	St. Clair	20	
Hillcrest	Carlton	29	
Hillcrest	Spares	11	
Hillcrest Total			60
Exhibition	Bathurst	8	
Exhibition	Spadina	14	
Exhibition	Harbourfront	6	
Exhibition Total			28
TOTAL			207

One TTC manager suggested that centralizing overnight storage and light maintenance was more prudent, while another TTC manager in the published Aecom study said the opposite. A third TTC manager said that drivers are instructed to pick up passengers when driving to and from routes that are distant from storage facilities and that these distances are therefore sometimes not counted when calculating deadhead costs. The same manager admitted that many drivers do not follow the requirement of picking up passengers that are not on their actual line.

The TTC maintains that some driver check-in and clerical functions would have to be duplicated with an extra storage yard. The precise functions are now being investigated, but appear to present a nominal threat compared to deadhead losses through poorly diversified location planning.

A mentioned, one of the key assumptions made before beginning the storage planning was that a new site would be needed and that this site would require 22 acres of land. This assumption led to many other very expensive and disruptive conclusions.

EXPERT TEAM

The information contained in the foregoing analysis emerged during tours and interviews conducted by Councillor McMahon's unpaid expert team. The review has revealed conflicting information, changing information and unpublished information of relevance to the decisions Council must make on this one-half billion dollar project. The team unanimously rejects the idea that adequate study has been undertaken to begin building at Ashbridge's Bay. Team members include:

Ed Levy -Internationally renowned transportation planner and author
Karl Junkin -Architectural Technologist, Transit specialist & designer,
Technical Research Lead with Clean Train Coalition
Bruce Budd -President of Transport Action Ontario, Transit Financing Specialist
Steve Fry -International Infrastructure Funding Specialist.
Stephen Wickens -Transit specialist, international journalist and author

Ashbridges Bay meetings to date:

Nov 20	Walking tour of area with TTC Staff, Transportation Services and others.
Nov 21	Councillor and TTC Consultants
Nov 25	TTC representatives special meeting with Councillor Elect at City Hall
Nov 30	Councillor & Sewage Treatment Plant Expert
Dec 3	Councillor with TTC Chair Karen Stintz
Dec 13	Councillor addresses Commission at Davisville
Dec 11	TTC Hillcrest Facility Tour
Dec 15	TTC Commission at City Hall -Councillor request granted
Dec 17	Councillor/staff and citizen's group
Dec 20	Councillor and City Planning Dept.
Dec 21	Ward 32 staff and Mayor's staff TTC designate, Mark Towhey
Dec 15	Councillor & Mayor's Chief of Staff, Nick Kouvalis
Dec 30	Ward 32 staff & Sewage Treatment Plant Expert
Jan 05 & 12	Councillor, staff & consultants
Jan 14	Tours of Russell, Roncesvalles, Exhibition Loop
Jan 16-26	Numerous meets with Commission members, Mayor's office
Jan 24	Second tour of Hillcrest

NUMEROUS MEETINGS AND TOURS IN FEBRUARY