

1ST REPORT OF THE
LTC LONG TERM GROWTH REPORT WORKING GROUP

Meeting held on December 7, 2011, commencing at 12:21 p.m.

PRESENT: Councillor N. Branscombe (Chair), Councillors J. L. Baechler, J. P. Bryant J. Swan, H. Usher and S. White and F. Berry and D. Winninger and H. Lysynski (Secretary).

ALSO PRESENT: G. Barrett, J. Braam, S. Brook, A. Cook, B. Debbert, L. Ducharme, M. Elmadhoon, J. Ford, A. Hynes, K. Killen, I. Listar, J. Lucas, S. McNally, S. Meksula, D. Menard, N. Musicco, L. Palarchio, K. Paleczny, C. Parker, C. Roy, C. Smith, B. Turcotte, J. Yanchula and P. Yeoman.

I YOUR COMMITTEE RECOMMENDS:

Positive
Economic
Impacts from
Transit
Investment in
London

1. That the following actions be taken with respect to the attached presentation from Professor J. Casello, School of Planning, Department of Civil and Environmental Engineering, University of Waterloo, with respect to the positive economic impacts from transit investment in London:

- a) the Civic Administration **BE ASKED** to report back to the Civic Works Committee with respect to the following:
 - i) identifying the "true" cost of owning/operating a car;
 - ii) identifying the "true (inclusive cost of transportation - economic, environmental, etc.;
 - iii) the options of doing nothing or remaining status quo with respect to the Transportation Master Plan; and,
 - iv) identifying the cost of both alternatives and translating them into property tax costs;
- b) the London Transit Commission (LTC) **BE ASKED** to determine if a utility model could be undertaken, such as the parking authority; and,
- c) Professor Casello's presentation **BE FORWARDED** to the Civic Administration and the Municipal Council, and be placed on the City of London website.

II YOUR COMMITTEE REPORTS:

Election of
Chair and
Vice- Chair

2. That the LTC Long Term Growth Report Working Group elected Councillor N. Branscombe as its Chair and Councillor J. L. Baechler, as its Vice-Chair for the term ending November 30, 2012.

Conventional
Transit –
Passenger
Riding and
Service
Performance
Update

3. (5) That the LTC Long Term Growth Report Working Group received the attached presentation and a communication dated December 7, 2011 from J.D. Ford, Director of Transportation and Planning and K.S. Paleczny, Director of Finance and Administration, London Transit Commission, with respect to an update on conventional transit, passenger riding and service performance.

4. That the LTC Long Term Growth Report Working Group noted and filed the following:

1st Report of
the LTCWG

a) (1) the 1st Report of the LTC Long Term Growth Report Working Group from its meeting held on June 16, 2010;

Committee
Appointments

b) (2) a Municipal Council resolution adopted at its meeting held on November 7, 2011 with respect to the appointment of Councillors H.L. Usher and S. White to the LTC Long Term Growth Report Working Group;

Resignation

c) (3) a Municipal Council resolution adopted at its meeting held on November 7, 2011 with respect to the resignation of Councillor D. Brown from the LTC Long Term Growth Report Working Group; and,

Transportation
Master Plan

d) (4) an information report from the Acting Director, Roads and Transportation, with respect to the present status of the Transportation Master Plan.

Next Meeting

5. That the LTC Long Term Growth Report Working Group will hold its next meeting at the Call of the Chair.

The meeting adjourned at 1:58 p.m.

Positive Economic Impacts from Transit Investment in London

Jeffrey M. Casello Ph.D., P.E.
School of Planning
Department of Civil and Environmental Engineering
University of Waterloo

Presented to:
Long Term Working Group – London City Council
December 7, 2011

Waterloo

Presentation Overview

- ❖ Understanding the benefits of “successful” public transport
- ❖ Assessing the success of London Transit
- ❖ Comparing recent investments / Land use changes amongst peer cities
- ❖ Making recommendations

The Economic Impact of Transit Investment:
A National Survey

Prepared by:

Metropolitan Knowledge International
McCormick Rankin Corporation
Dr. Jeff Casello, University of Waterloo

For:

The Canadian Urban Transit Association

Final Report – 31 January 2010

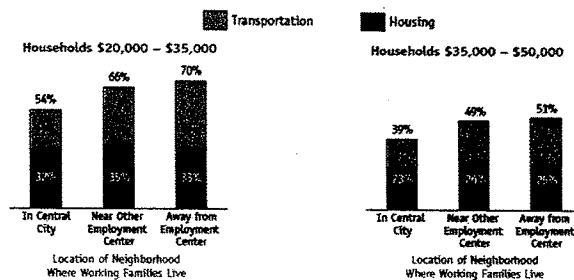
WATERLOO PUBLIC TRANSPORTATION INITIATIVE
Advancing Transit Solutions through Research

Benefits of Public Transportation

Successful Transit Systems:

❖ Lower household transportation costs:

- ✓ Transportation costs range from 15 – 40% of household expenditures; Larger burden in low-income households.
- ✓ *Presence of transit saves Canadian households \$5B annually;*



WATERLOOPUBLICTRANSPORTATIONINITIATIVE Center for Clean Air Policy, (2009)
Advancing Transit Solutions through Research

Benefits of Public Transportation

Successful Transit Systems:

❖ Improve accessibility / mobility:

- ✓ Likelihood of full time employment increases by 30% with access to transit (Kawabata, 2003);
- ✓ Sanchez (1999) notes link between labor participation and access to transit;
- ✓ As population ages, importance grows;

❖ Increase safety of transportation:

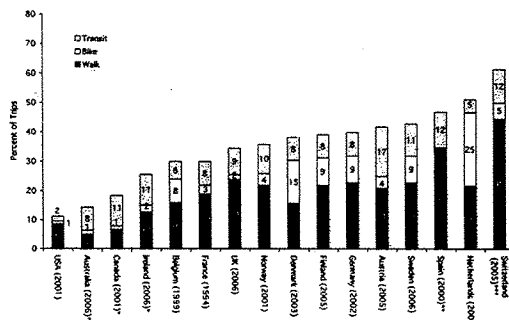
- ✓ Transit fatality rate approximately 1/20th of autos;
- ✓ *Transit saves Canada approximately \$2.5B in reduced accidents / property damage*

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Benefits of Public Transportation

Successful Transit Systems:

- ❖ Complement walking, cycling and active modes:



Journal of Physical Activity and Health, 2008, 5, 795-814



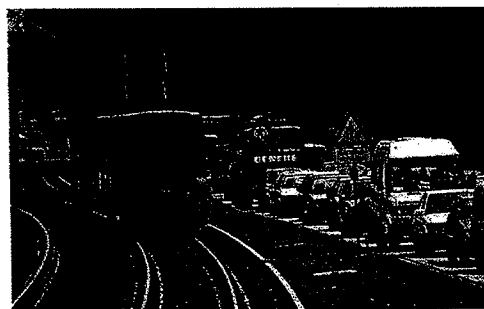
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Benefits of Public Transportation

Successful Transit Systems:

- ❖ Mitigate Congestion:

- ✓ 1 km of rail transit is 4x more effective than the 1 km of freeway;
- ✓ In US cities, presence of LRT has slowed congestion growth;
- ✓ Each pass-km of transit travel reduces congestion costs by \$0.30
- ✓ In US, absence of transit would increase travel costs by \$18B
- ✓ In Canada: estimated savings of \$5B.



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Benefits of Public Transportation

Successful Transit Systems:

❖ Improve public health:

- ✓ Transit riders average 19 minutes of daily walking;
- ✓ 29% of transit riders average > 30 minutes;
- ✓ Transit systems reduce obesity expenditures by \$4800 - \$9900 per year;
- ✓ *In Canada:*

RESULT

Social and Community Benefit Account	Unit	Project Case
Public Health - Air Quality Hospital Admissions Avoided	Hospital admissions	157
Public Health - Air Quality Economic Damage Avoided	Economic Damage \$	\$115,312,394

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Benefits of Public Transportation

Successful Transit Systems:

❖ Improve the local and global environment:

- ✓ GHG emissions ½ to ¼ of auto emissions;
- ✓ Emissions reductions save \$0.051 / passenger mile;

RESULTS

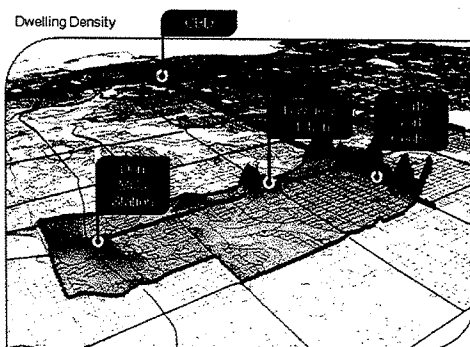
Environmental Account	Unit	Project Case
GhG Emissions Savings	Tonnes/Year	2,396,237
Monetary Value of GhG Emissions Savings	\$ (Total)	\$110,161,465
Critical Air Contaminants (CAC) Emission Savings	Tonnes/Year	119,319
Monetary Value of (CAC) Emissions Savings	\$ (Total)	\$22,390,790
Summary Metric: Environmental Benefits	\$ (Total)	\$132,552,255

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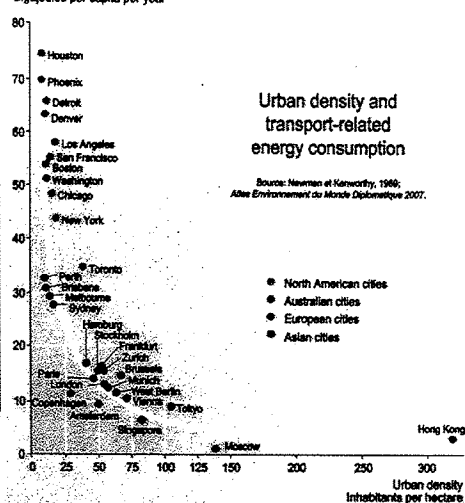
Benefits of Public Transportation

Successful Transit Systems:

- ❖ Promote intensification;
- ❖ Reduce energy consumption.



Transport-related energy consumption
Gigajoules per capita per year



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Summary

Successful Transit Systems:

- ❖ Lower household transportation costs;
- ❖ Improve accessibility / mobility;
- ❖ Increase safety;
- ❖ Complement cycling and walking;
- ❖ Mitigate congestion;
- ❖ Contribute to public health;
- ❖ Improve local / global environments.

Is London Transit “*Successful?*”

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LTC as a Successful System

Using Traditional Metrics:

❖ What is the R/C ratio – how much revenue is recovered from fares?

City	R/C	Rank
Toronto	70.4%	1
Hamilton	51.4%	3
Windsor	48.5%	4
Mississauga	47.6%	5
Ottawa	47.2%	6
Barrie	46.6%	7
Brampton	43.5%	8
Kingston	43.3%	9
Guelph	42.6%	10
York Region	39.9%	11
Waterloo Region	37.6%	12
Oakville	35.8%	13
Thunder Bay	34.4%	14
Ontario	59.0%	-
Ontario + GO	61.6%	-

Data Source: 3-year average values from 2008-2010 CUTA Transit Fact Book

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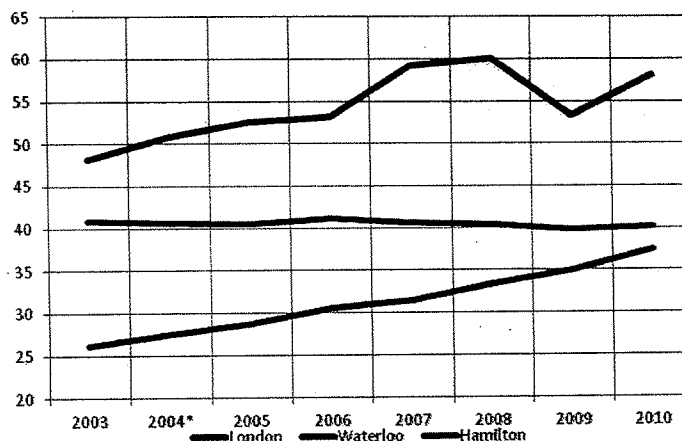
LTC as a Successful System

Using Traditional Metrics:

❖ How well-utilized is the system?

Data Source: 3-year average values from 2008-2010 CUTA Transit Fact Book

Passenger Trips per Capita



LTC as a Successful System

Using Traditional Metrics:

❖ How efficiently does LTC deliver service?

City	Direct Operating Costs \$/rev-veh-kms	Rank
Oakville	\$2.20	1
Thunder Bay	\$2.30	2
Kingston	\$2.31	3
Toronto	\$2.60	5
Guelph	\$2.61	6
Brampton	\$2.72	7
Mississauga	\$2.72	7
Ottawa	\$2.78	9
Hamilton	\$2.86	10
Barrie	\$2.88	11
Windsor	\$2.92	12
Waterloo Region	\$2.94	13
York Region	\$4.53	14
Ontario	\$2.73	-
Ontario + GO	\$2.77	-

Data Source: 3-year average values from
2008-2010 CUTA Transit Fact Book

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Summary

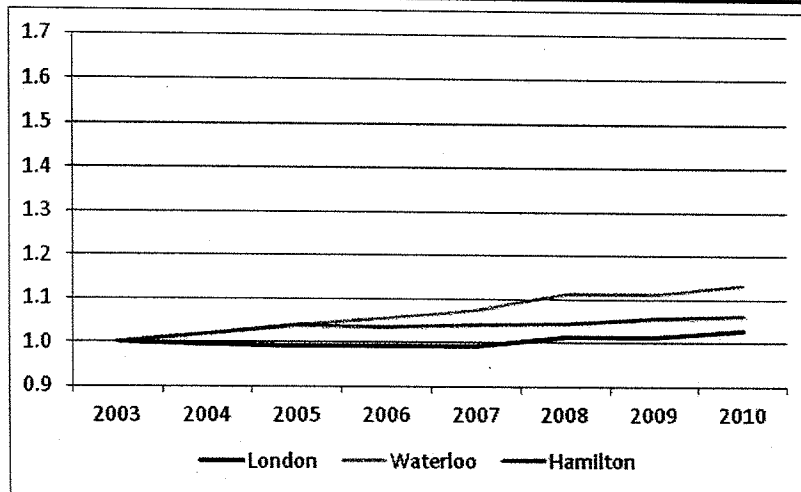
Compared to peer cities / agencies, LTC:

- ❖ Has very positive R/C ratios;
- ❖ Has very high utilization;
- ❖ Delivers services very efficiently.

Can London Transit be "*More Successful?*"

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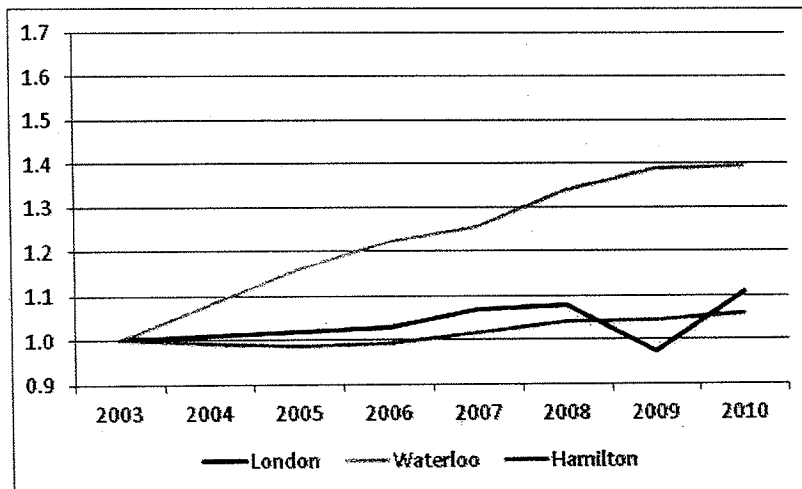
Comparing System Growth - Population



Data Source: 2003-2010 CUTA Transit Fact Book

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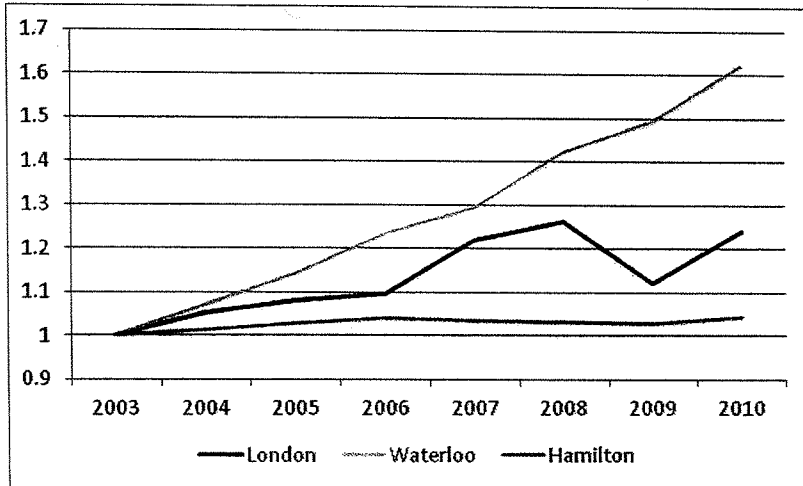
Comparing System Growth - Rev-veh-km



Data Source: 2003-2010 CUTA Transit Fact Book

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Comparing System Growth - Ridership

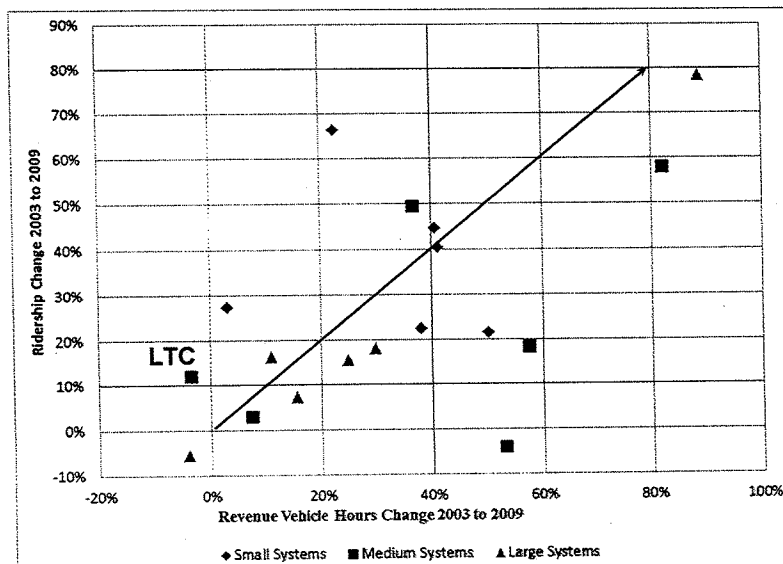


Data Source: 2003-2010 CUTA Transit Fact Book

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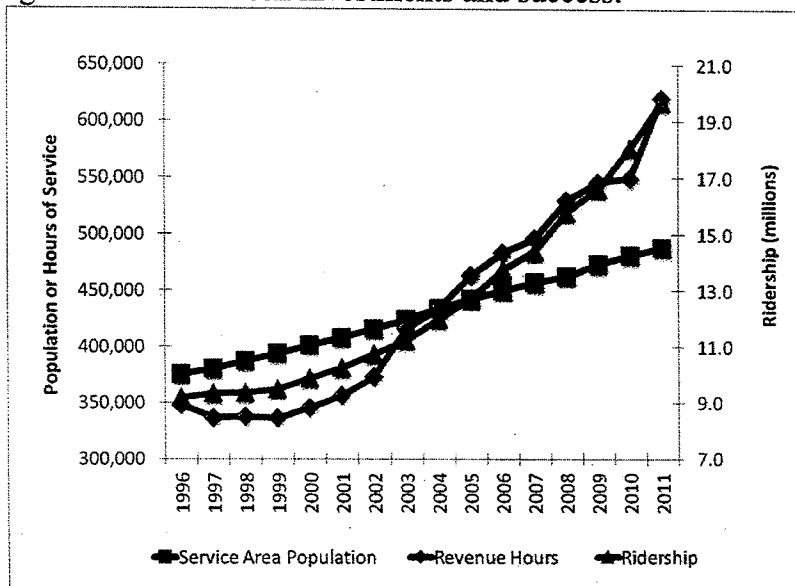
Relationship of Investments to Ridership Growth

Data Source: 2003-2009 CUTA Transit Fact Book

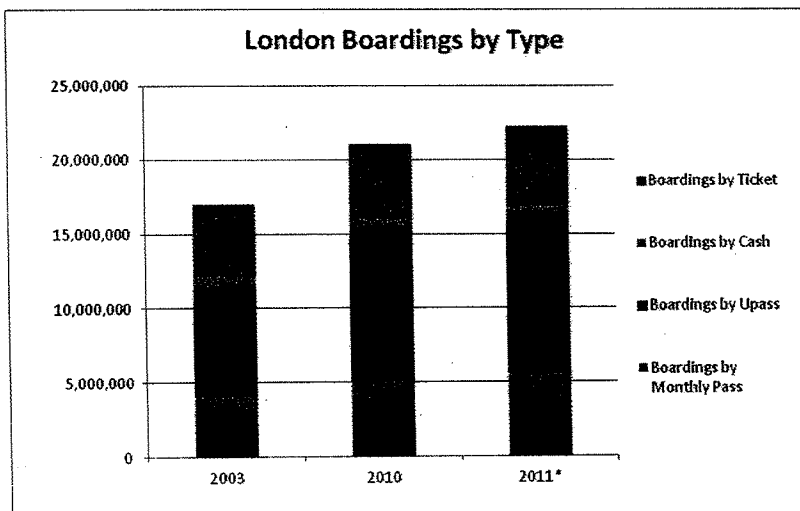


More Impacts of Increasing Supply

❖ A lag will occur between investments and success:



Growth in LTC a Function of UPass

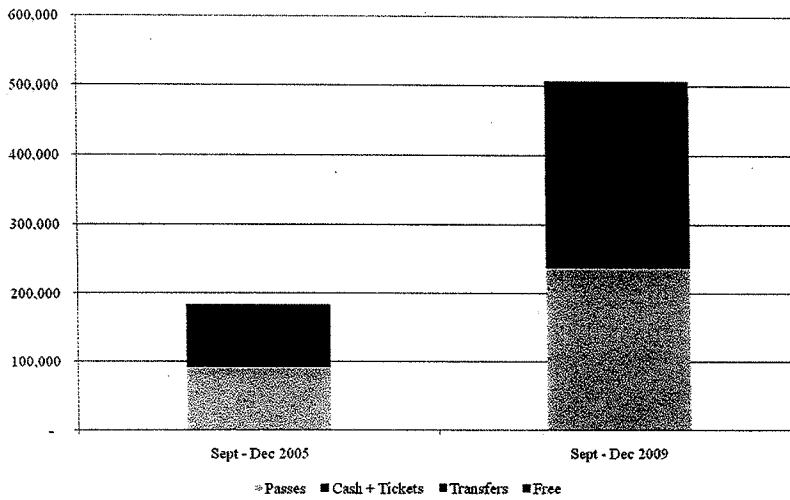


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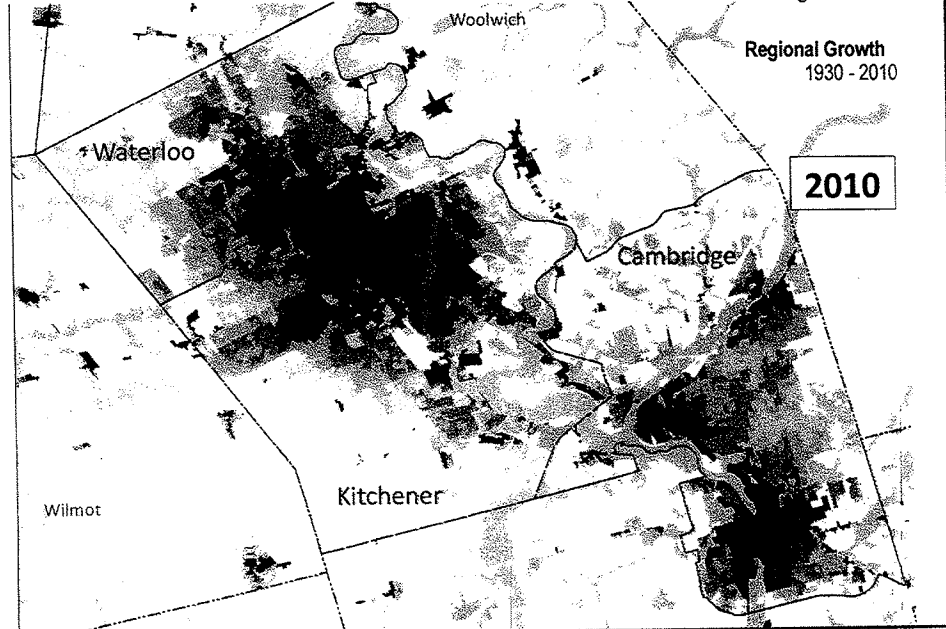
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Growth in Waterloo from Passes / Transfers



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HOW HAVE WE GROWN IN THE PAST?

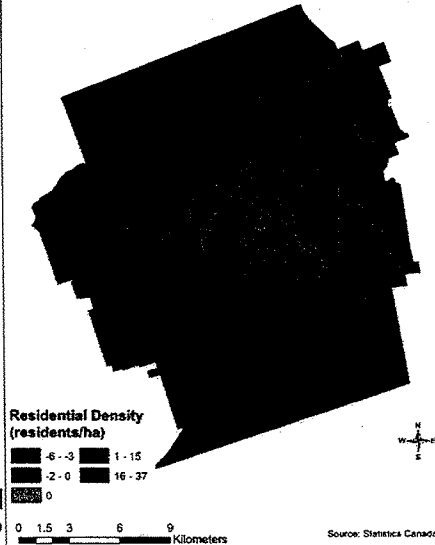


Achieving Success

Land Use Decisions

- ❖ London's change in density (1991-2006)

Change in Residential Density by Census Tract, City of London, Ontario, 1991-2006

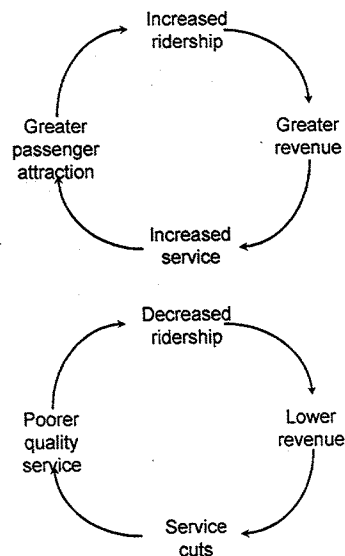


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Maximizing LTC's Success

Who are the players?

- ❖ Transit agencies / departments;
- ❖ Municipal decision makers;
- ❖ Higher-tier governments;
- ❖ Development industry;
- ❖ Residents (potential customers)



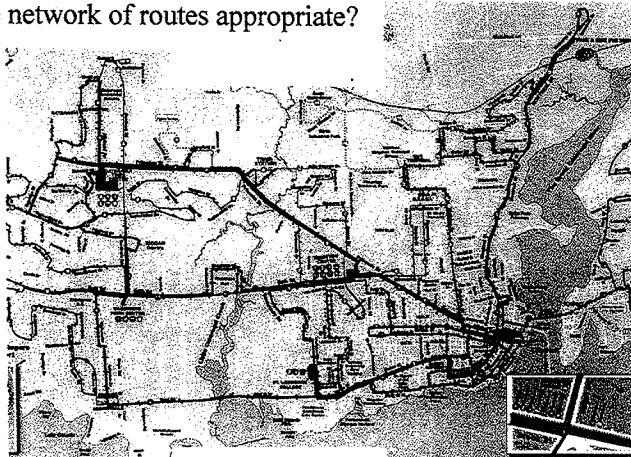
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Achieving Success

Who are the players / what are the metrics?

❖ Transit agencies / departments:

- ✓ Is the network of routes appropriate?



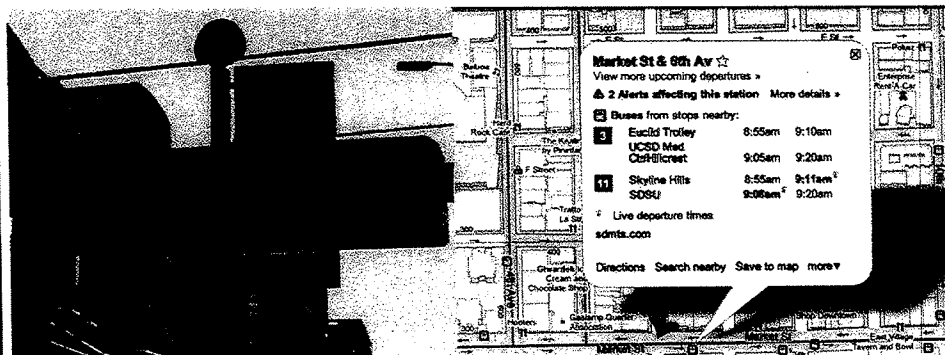
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Achieving Success

Who are the players / what are the metrics?

❖ Transit agencies / departments:

- ✓ Is the system reliable?
- ✓ Does the system compete with alternative modes?



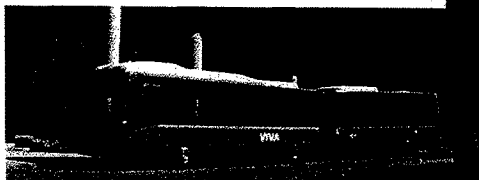
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Achieving Success

Who are the players / what are the metrics?

❖ Councils / staff who develop and implement policy:

- ✓ Is there a sense of innovation?
- ✓ Protect and promote your brand!



züm
See you sooner.

it's all about ü

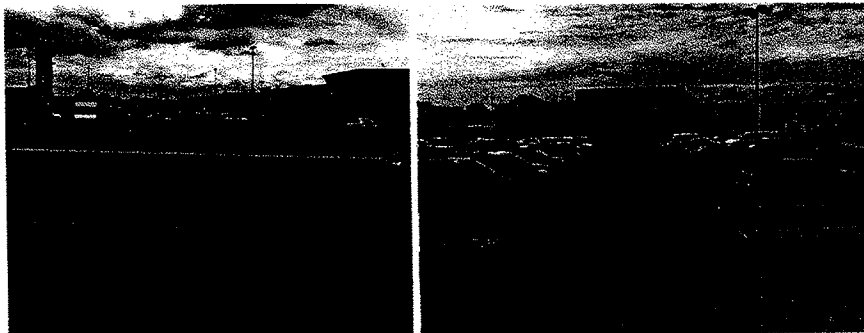


Achieving Success

Who are the players / what are the metrics?

❖ Councils / staff who develop and implement policy:

- ✓ Are decisions (land use, parking, design) made that are contrary to transit goals?
- ✓ Are economic incentives possible?



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Going Forward

Recommendations

❖LTC:

- ✓ The system is poised to grow very rapidly!
- ✓ Make good decisions – infrastructure, technology, routing;
- ✓ Continue to deliver service efficiently;
- ✓ Use the data that you're gathering to document quality;
- ✓ Create and emphasize your image.

❖Municipal decision-makers:

- ✓ Consider express / ROW upgrades;
- ✓ Understand long term costs / benefits of land use decisions;
- ✓ Think long term;
- ✓ Ask the right questions of your transit planners.

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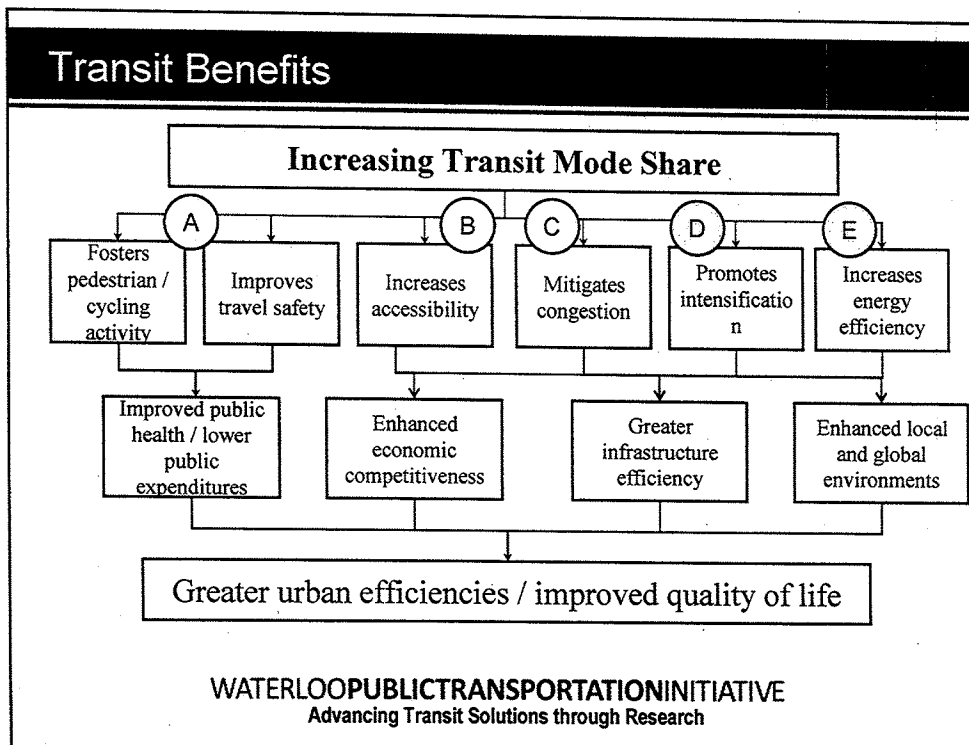
Going Forward

Concluding Remarks

- ❖The socio-political climate is right
- ❖We'd love to help
- ❖<http://www.civil.uwaterloo.ca/WPTI>
- ❖Thanks and Questions?

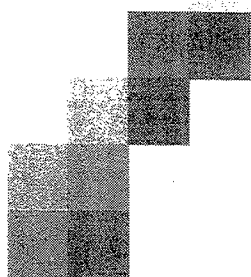
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Transit Benefits



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12/7/2011



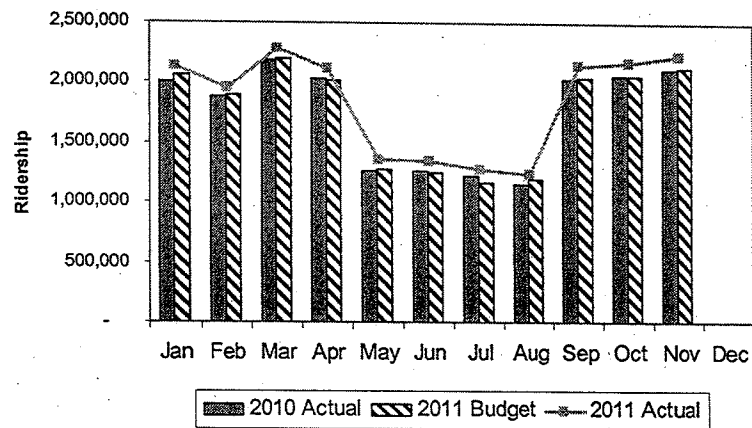
Conventional Transit Passenger Riding and Service Performance Update



Measuring Performance

- Quantity of Service
 - *How much did we deliver?*
- Quality of Service
 - *How well did we deliver it?*

Ridership - Exceeding Expectations



Service Levels

- Ridership is growing at 5% over 2010
- Service hours have increased by 2% over 2010

Ridership / Service Hrs = Rides per Service Hour

Year	Rides per Service Hour	% Change
2010	39.46	
2011	44.93	14%

The Challenge – Maintaining the Balance

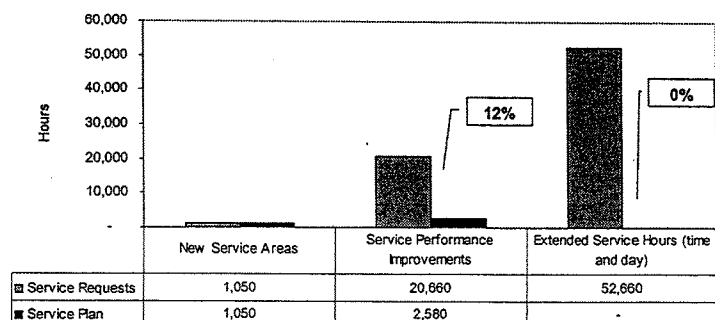
- Too much service
 - poor return on investment

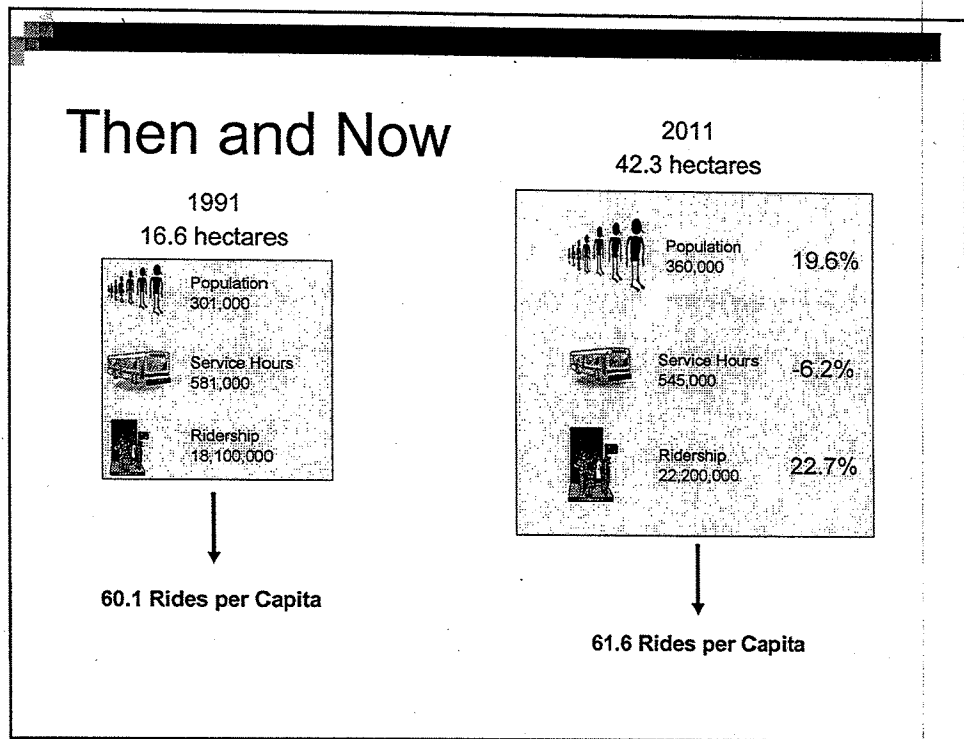
- Too little service
 - increased incidents of overcrowding (133%)
 - increased issues with schedule adherence (88%)
 - increase incidents of missed passengers (116%)

Addressing the Issues

- Service is not meeting expectations

2011 Service Plan vs Requests





- ## Addressing the Issues
- Requirements to maintain and build ridership:
 - Increase current service frequency
 - Expand coverage/catchment area
 - Provide extended hours of service (time of day & day of week)
 - Add express bus services – reduce travel time
 - Provide more direct routes – reduce transfer requirements
 - TMP 2030 and related Implementation Plan is expected to focus on transit

12/7/2011

Addressing the Issues

■ 2011 Measures

- Adjusted fleet makeup to increase 60' Articulated buses – to help with overcrowding issues
- Provision of additional rush hour buses when possible

■ Future Measures

- Implementation of TDM initiatives
- Service reductions on poor performing routes to offset increases on high demand routes
- Increased service hours (excluding TMP implementation)