

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** December 9, 2014

**SUBJECT:** TTC OVERVIEW

## **INFORMATION ITEM**

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### **RECOMMENDATION**

It is recommended that the Board receive a presentation for information.

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# The Road to Modernization

**Andy Byford, CEO**  
**Toronto Transit Commission**

**December 9, 2014**  
**TTC Board Presentation**



# Agenda

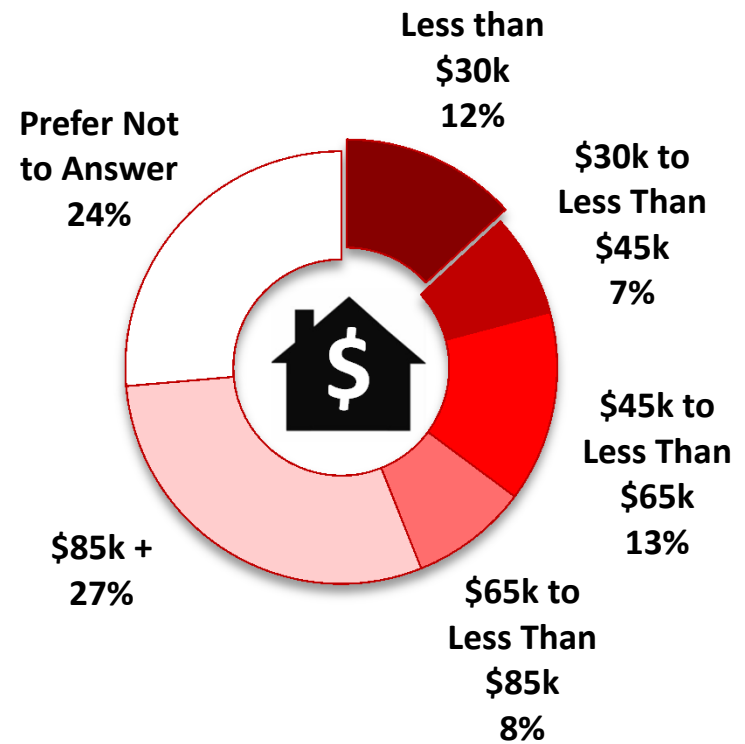
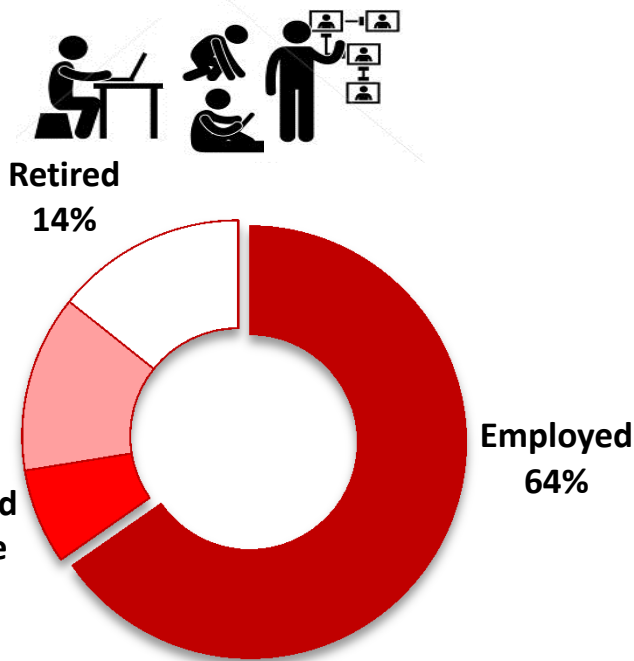
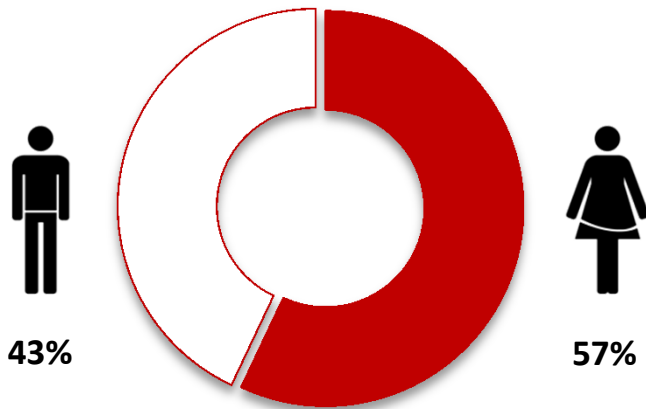


1. The TTC at a Glance
2. Making Progress
  - Building the Team
  - Laying the Foundations
  - Delivering Efficiencies
  - Getting Things Done
3. Looking Forward
4. Pulling It All Together
5. Next Steps and Final Thoughts



# The TTC at a Glance

## About Our Customers

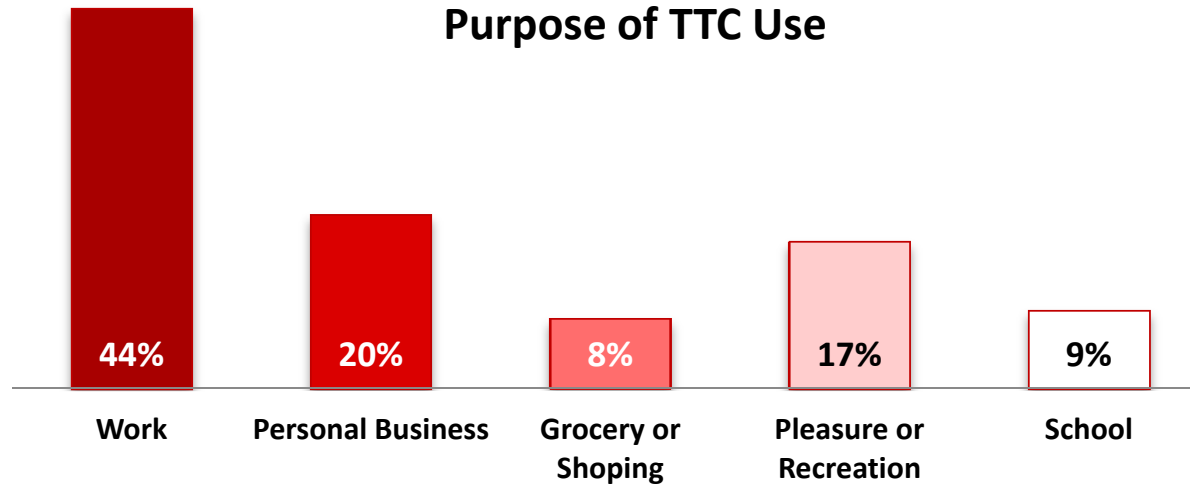


# The TTC at a Glance

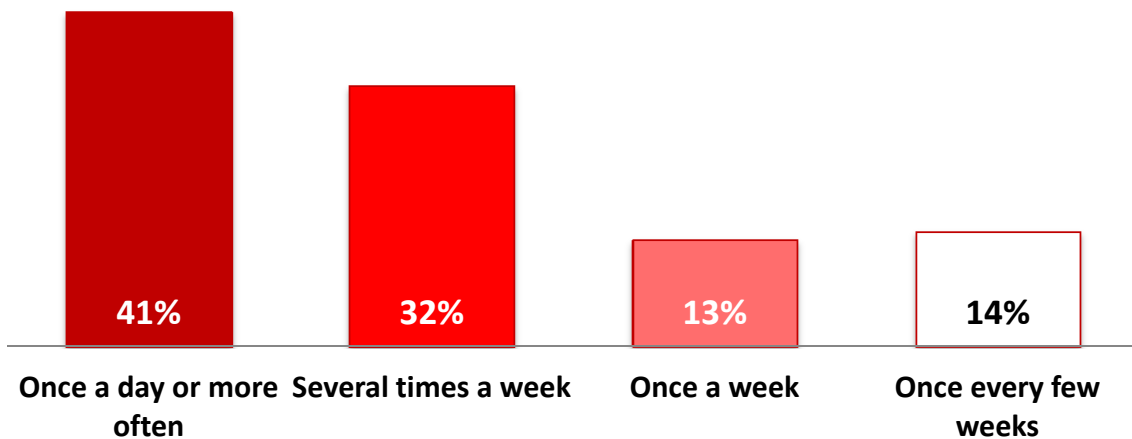
## About Our Customers



### Purpose of TTC Use



### Frequency of TTC Use



# The TTC at a Glance

About Our Customers



74%

**Last Trip  
Rated 7 to 10 out of 10**

74%

**Customers are  
“Proud of TTC  
and What it Means to Toronto”**



# The TTC at a Glance

About Our Customers



91%

**Score Average or Above on  
Value for Money**

70%

**Believe Best Way to Improve is  
More Service**

15%

**Believe Best Way to Improve is  
Lower Fare**



# The TTC at a Glance

## Network



### Travel Questions

**Website:** [ttc.ca](http://ttc.ca)  
**By phone:** 416-393-4636 or 1-866-642-9882  
 (8:00 a.m. - 6:00 p.m. daily).\*

**TTY Hearing Impaired Service:**  
 416-481-2523 (8:00 a.m. - 6:00 p.m. daily).\*

**Elevator status ("Lift Line"):**  
 416-539-5438 (LIFT).

### Connect with Us

To get information, view our maps, plan your trip and stay up-to-date at all times, visit [ttc.ca](http://ttc.ca).  
 Download the Transit App from your mobile app store to get updates on vehicle arrival times.

**Follow us on Twitter:**  
 • @TTCnotices • @TTChelps  
**See us on YouTube:**  
 • YouTube.com/OfficialTTCchannel  
**Like us on Facebook:**  
 • www.facebook.com/TTCnotices

### Lost Articles Office

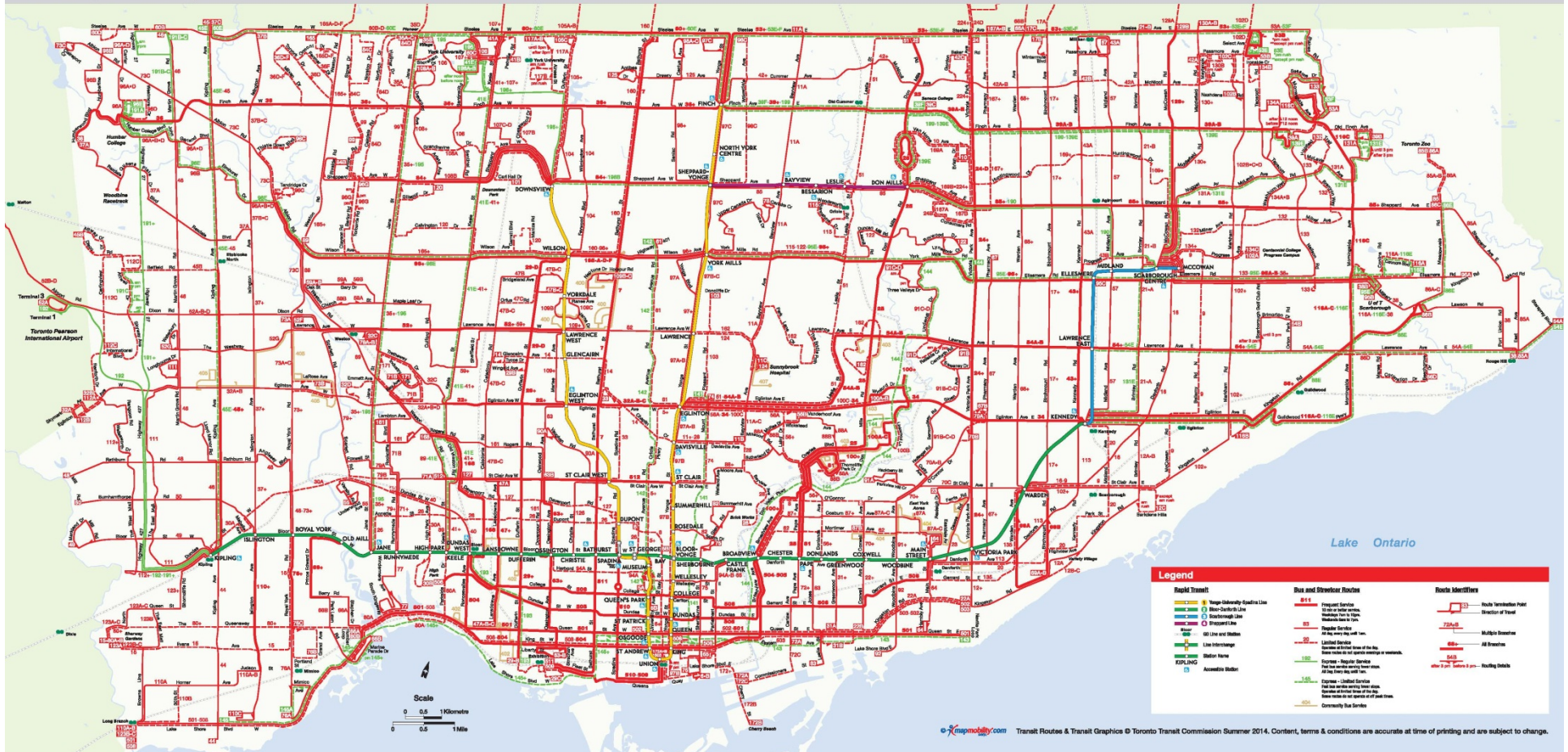
**By phone:** 416-393-4100,  
 TTY 416-338-0358  
 (12:00 noon - 5:00 p.m. weekdays).  
**In person:** Bay subway station  
 (8:00 a.m. - 5:00 p.m. weekdays).\*

### Customer Service

**By phone:** 416-393-3030  
 (7:00 a.m. - 10:00 p.m. daily).  
**TTY Hearing Impaired Service:**  
 416-338-0357 (7:00 a.m. - 10:00 p.m. daily).  
 \*Except statutory holidays

"Getting There" by Jerry Waese.  
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 Commissioned by the Toronto Transit Commission.  
 Reproductions are available for sale.  
 Visit [shop.ttc.ca](http://shop.ttc.ca) for more details.

## TTC System Map





# The TTC at a Glance

Network



540 Million Customer Trips / Year

Largest  
in  
Canada

3<sup>rd</sup>

Largest  
in North  
America

Fully Integrated & Multimodal  
(A True Strength)

4 Subway  
Routes

11  
Streetcar  
Routes

150  
Bus  
Routes

Wheel  
Trans

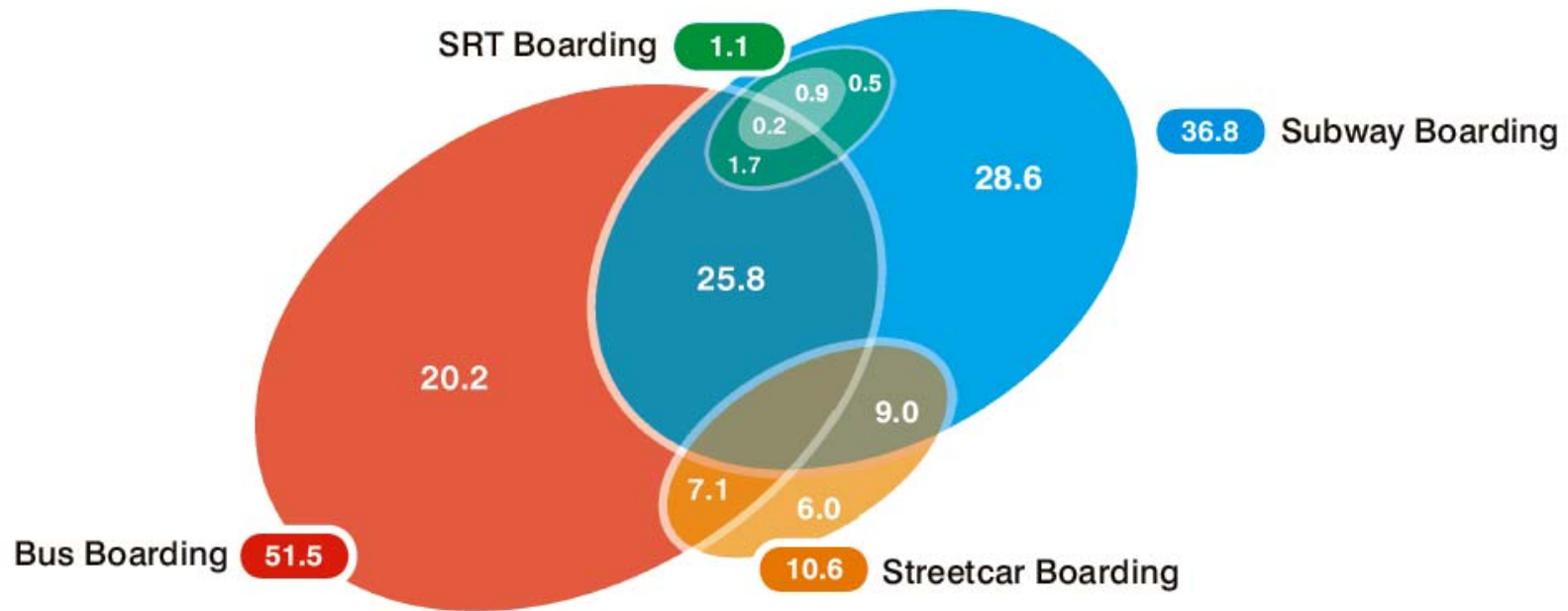


# The TTC at a Glance

## Network



### Fully Integrated & Multimodal (A True Strength)



# The TTC at a Glance

## Network



### Busiest Routes

### Ridership

1	Line 1 – Yonge University	750,000 / day
2	Line 2 – Bloor Danforth	500,000 / day
3	504 King	60,000 / day
4	510 Spadina / Harbourfront	55,000 / day
5	501 Queen	52,000 / day
6	Line 4 - Sheppard	50,000 / day
7	32 Eglinton West	50,000 / day
8	35 Jane	46,000 / day
9	Line 3 - SRT	45,000 / day
10	36 Finch West	44,000 / day



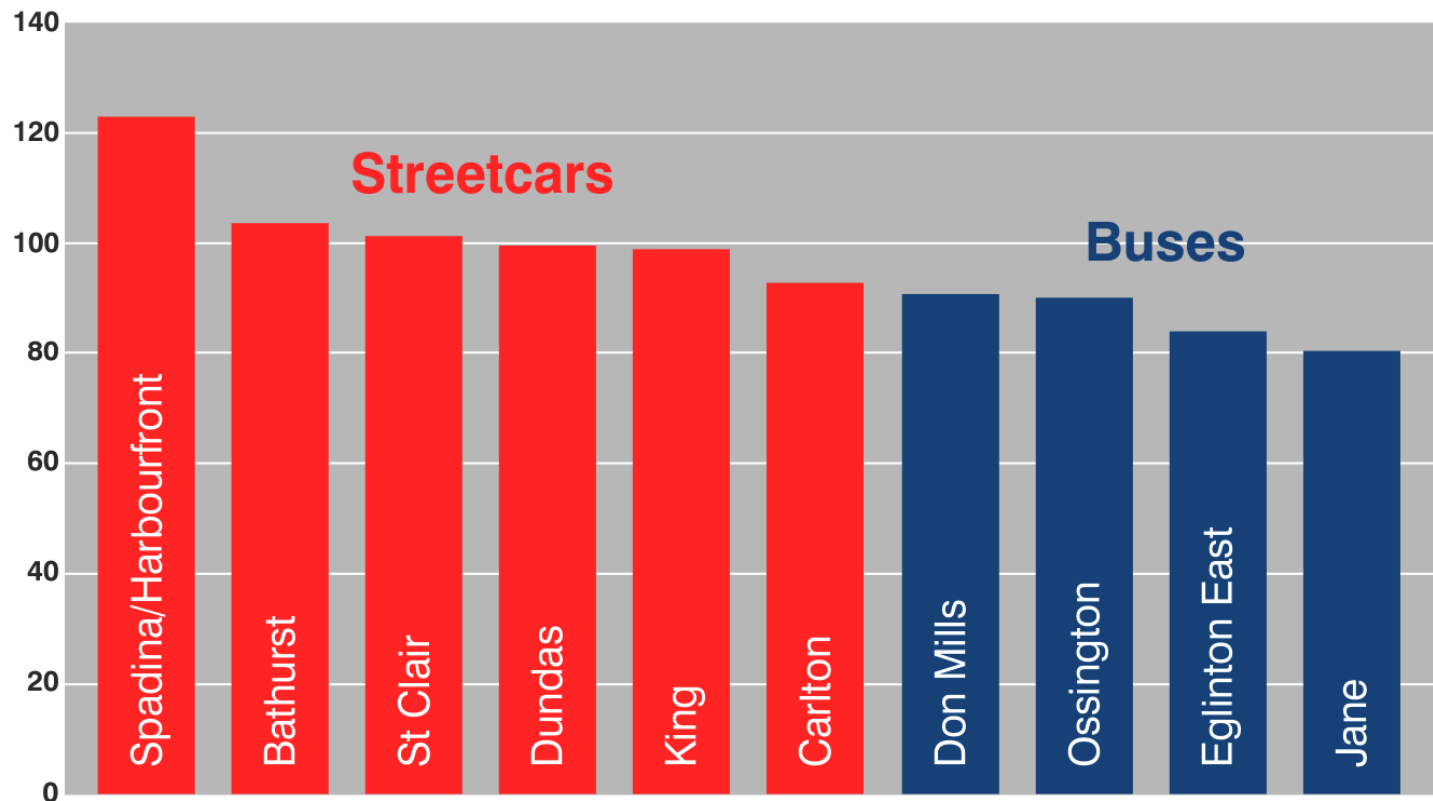
# The TTC at a Glance

MATCHING MODE TO DEMAND



## TTC's 10 Most Productive Routes

Passengers Per Service Hour



TTC-SP-19-10-2011 DRG. No. 12151c

Matching mode to demand drives efficiency

- Subways efficient because of size of vehicle
- Streetcars come next
- Buses becoming more efficient with articulated buses

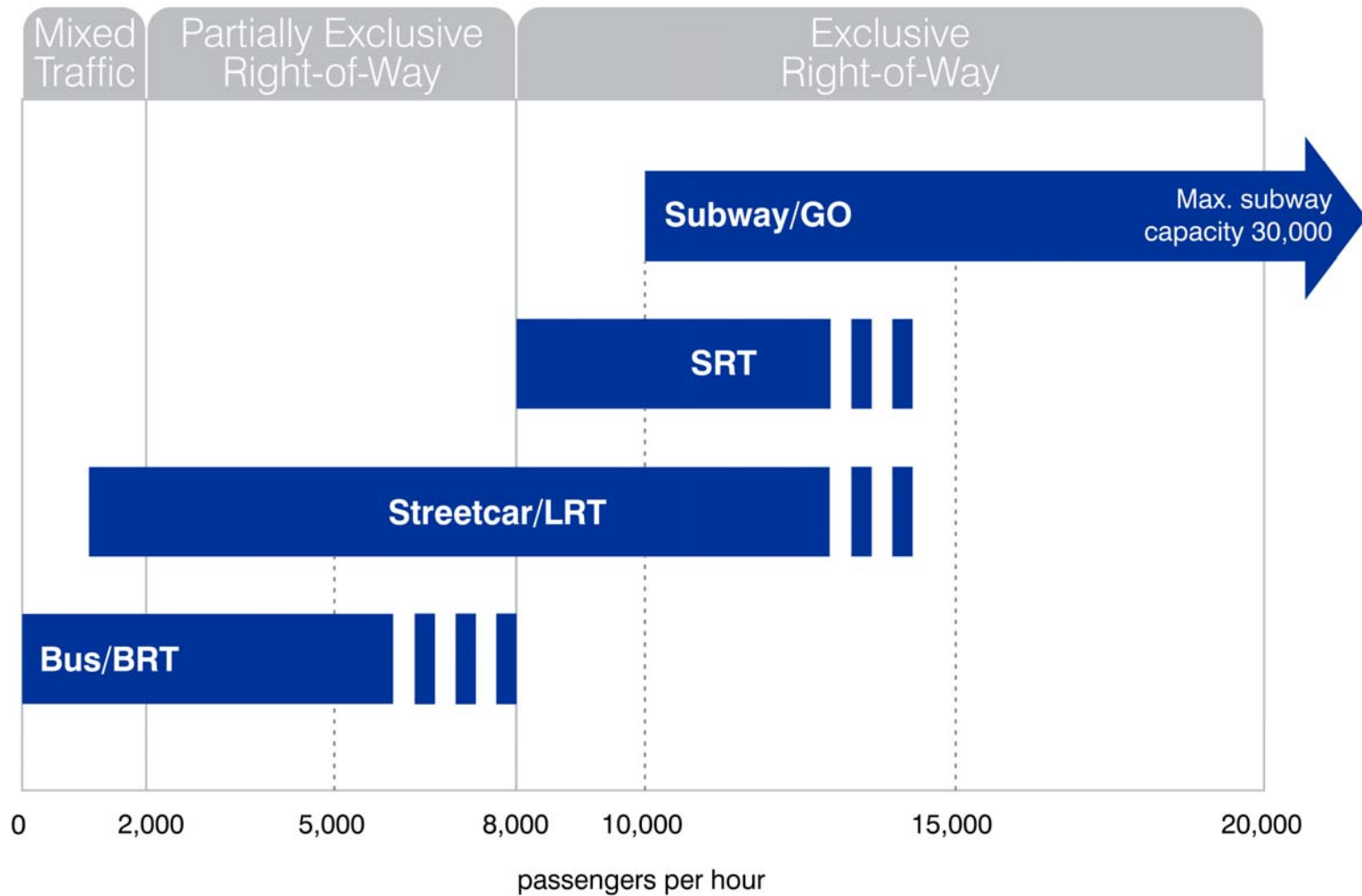


# The TTC at a Glance

MATCHING MODE TO DEMAND (continued)



Capacity of different choices



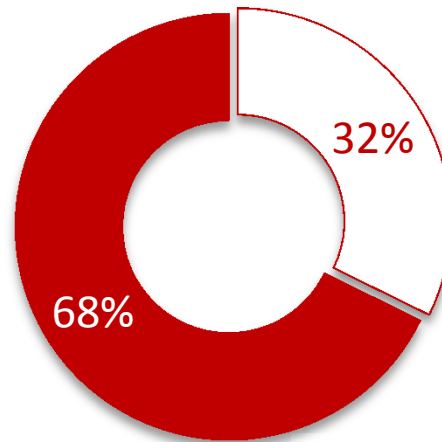
# The TTC at a Glance

## 2014–2023 Base Capital Budget



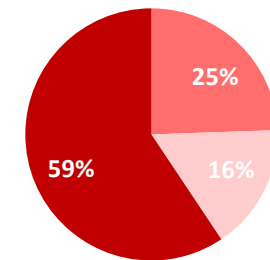
**\$9.3 Billion over 10 Years**  
(TTC Requested Base Budget)

**\$6.3 Billion**  
Council Approved  
Budget



**\$3 Billion**  
Unfunded

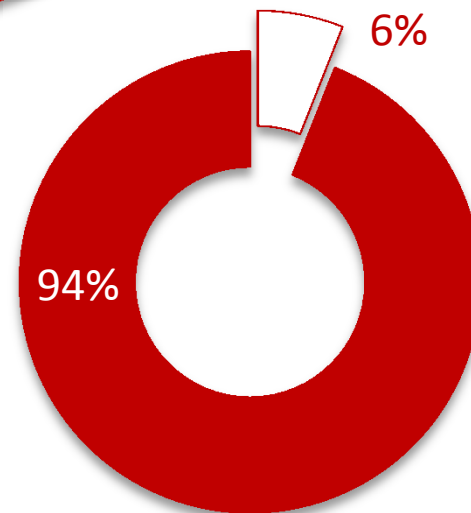
### Funding Sources



- Total City Funding
- Provincial Funding
- Federal Funding

**\$8.7 Billion**  
State of Good Repair

- Replace subway trains
- Replace buses
- New bus garage
- Subway track
- Bridges and tunnel



**\$0.6 Billion**  
Other

- Legislative
- Improvement, and
- Expansion



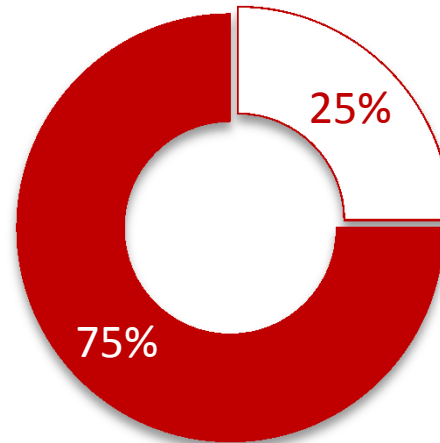
# The TTC at a Glance

2014 Operating Budget



**\$1.6 Billion**

**\$1.2 Billion**  
from Customers



**\$0.4 Billion**  
from City of Toronto

**Great Leverage  
Ratio**

**Transit Unmatched  
in this Regard**



**Paid by City**



**Paid by Customers**

## **Variable Elasticity**

- \$0.20 fare rise  
~ -1.3% customers
- \$0.40 fare rise  
~ -3.0% customers

## **2011 Service Cuts did Tremendous Damage**

- Crowded Vehicles
- Less Service
- Long Term Problems



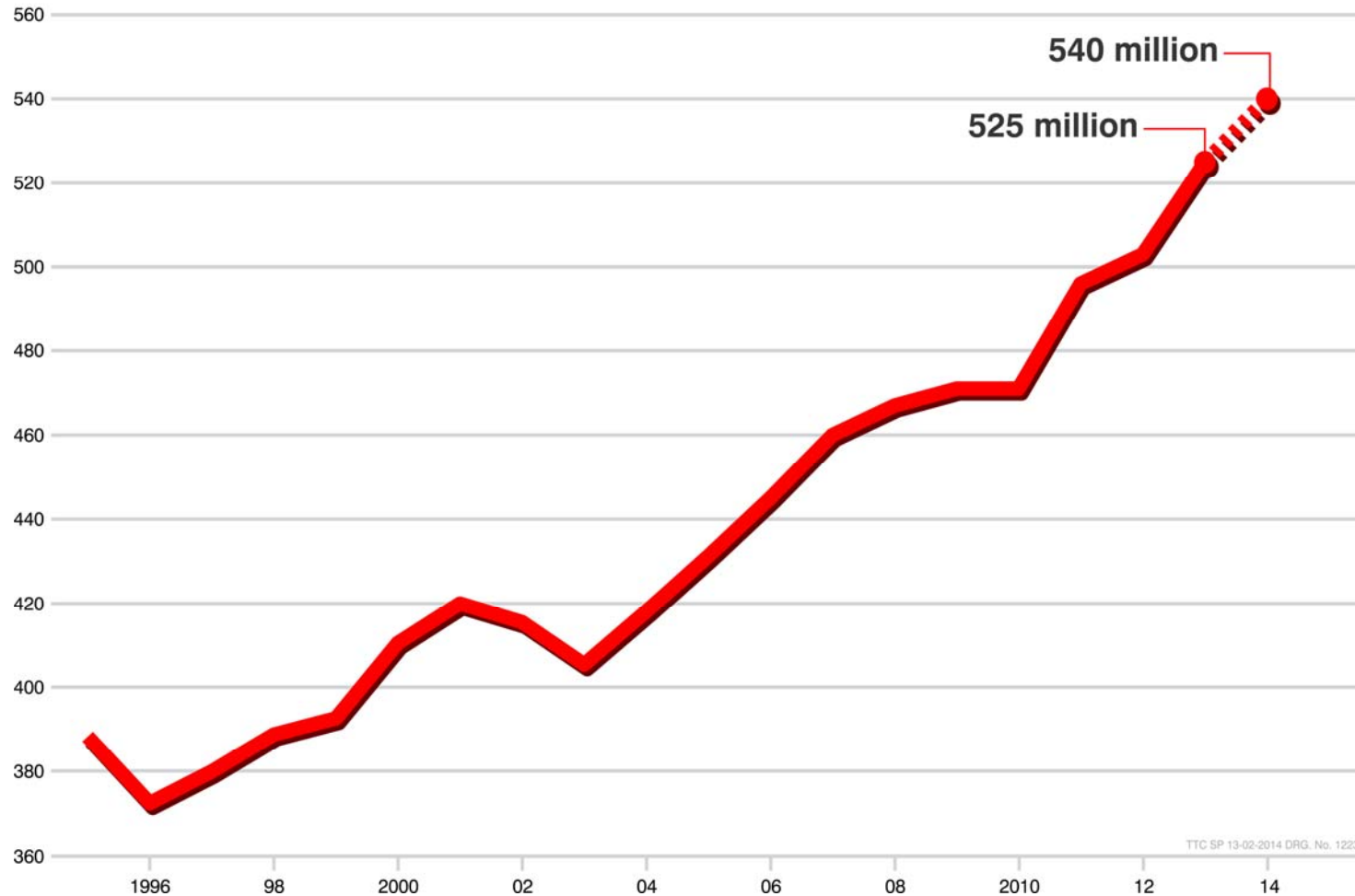
# The TTC at a Glance

## Ridership Demand



### TTC Annual Ridership

from 1995 - 2014, millions



TTC SP 13-02-2014 DRG. No. 12236





# The TTC at a Glance

## Operating Subsidy



Transit System	SUBSIDY (\$M)	REVENUE/ COST RATIO	TRIPS (M)	SUBSIDY/TRIP
York Region	100	33%	22	\$4.49
Durham Region	36	37%	10	\$3.46
Brampton	52	45%	18	\$2.82
Los Angeles	882	29%	349	\$2.53
Mississauga	77	49%	35	\$2.21
Philadelphia	527	36%	271	\$1.95
Boston	506	38%	262	\$1.93
Edmonton	151	43%	83	\$1.83
Hamilton	38	48%	22	\$1.76
Chicago	683	44%	407	\$1.68
Ottawa	163	51%	101	\$1.62
Vancouver	380	54%	235	\$1.62
Calgary	150	53%	102	\$1.47
Montreal	478	54%	413	\$1.16
New York	2,365	60%	2,301	\$1.03
<b>TTC</b>	<b>411</b>	<b>73%</b>	<b>528</b>	<b>\$0.78</b>

\*TTC 2013, Can 2012, US 2011 figures



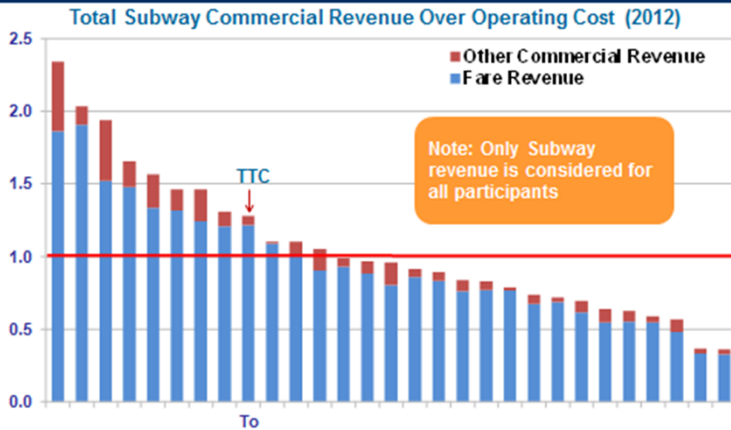
# THE TTC AT A GLANCE

## BENCHMARKS

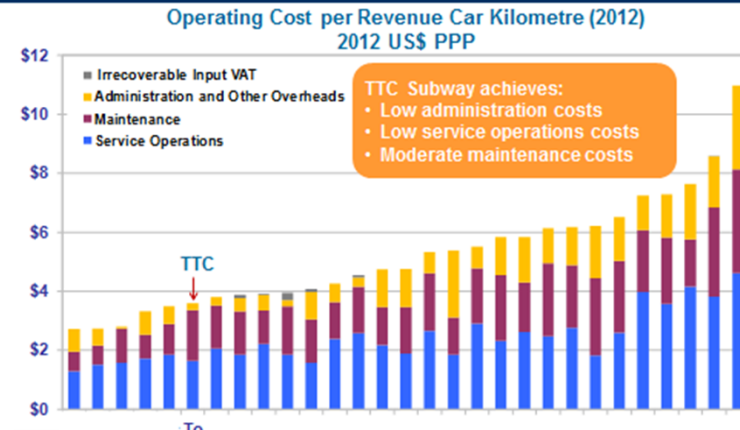


- COMET / NOVA world benchmarking studies (2012 numbers have improved)

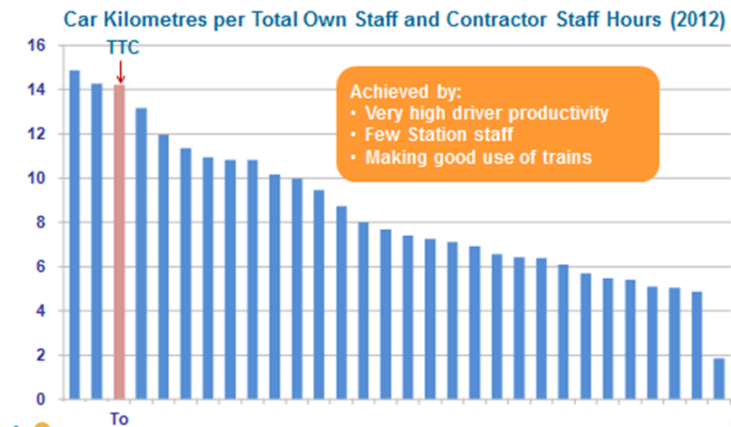
**TTC is one of only 2 subways outside of Asia and South America that covers its own operating costs**



**TTC subway operating costs are low by international standards**



**TTC subway labour productivity is exceptionally high**



In Conclusion

When compared with other metros in the world, Toronto's Subway offers excellent value for money





# Making Progress

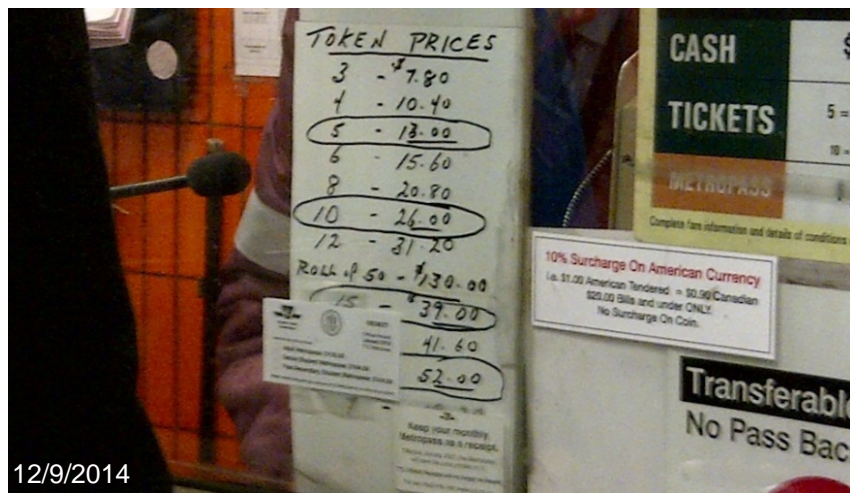


# Laying the Foundations

2011 Quick Wins



- Immediate action taken
- Short term intervention required
- Challenge mediocrity
- Quick wins as evidence of credible management
- Credibility = support = funding
- Provided “goodwill” for inevitable disruptions
- Provided time to develop longer term plans



# Laying the Foundations

2012 Immediate Priorities

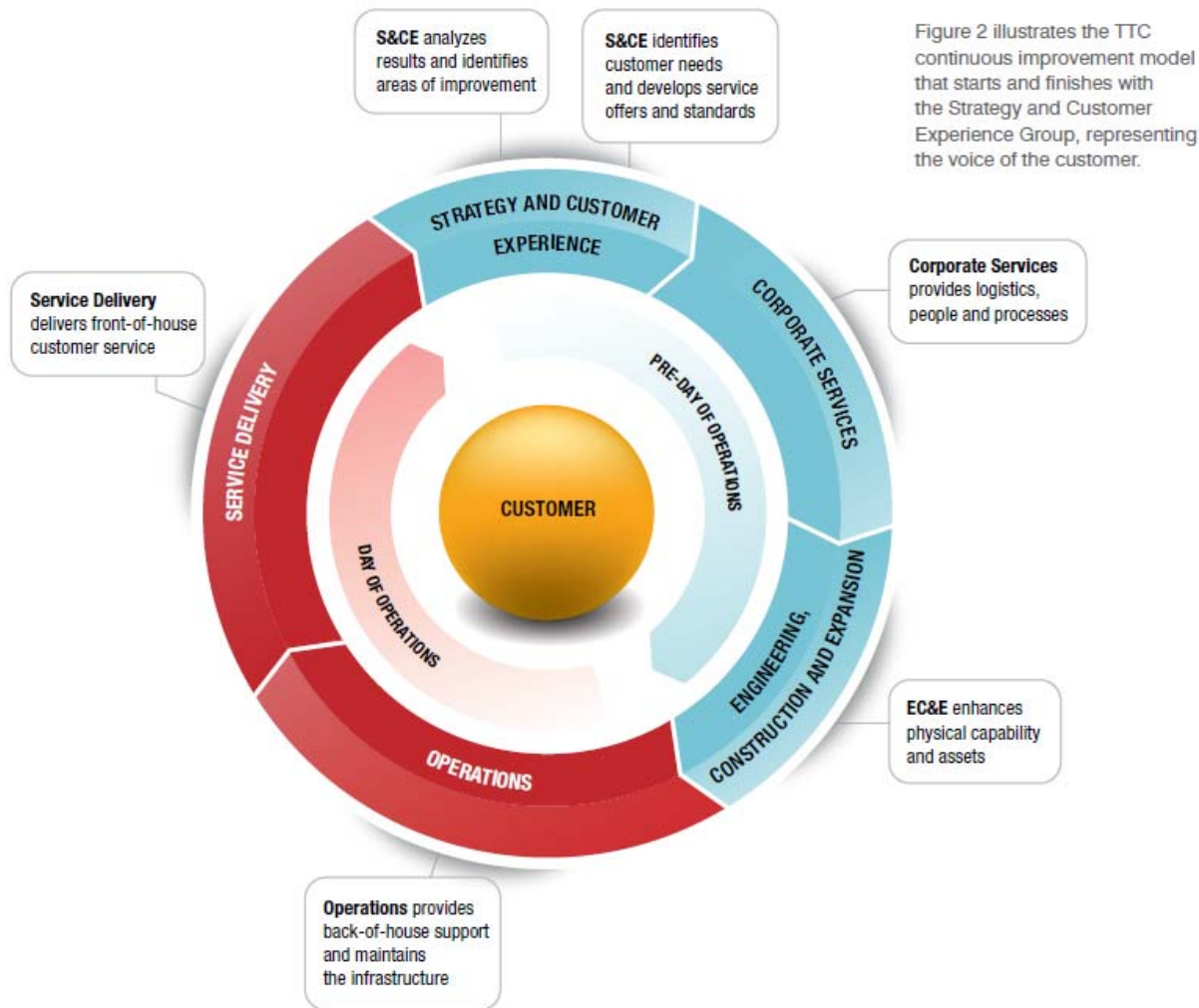


1. Identify the vision, determine the philosophy
2. Develop a master plan, targets and tools
3. Get right people in right jobs in new structure
4. Hold everyone accountable
5. Delight the customer with quick wins
6. Re-engage employees
7. Re-engineer processes, systems and equipment
8. Visible, effective management
9. Rebuild stakeholder confidence
10. Get the basics right, all day, every day



# Building the Team

## Clear Purpose and Accountabilities



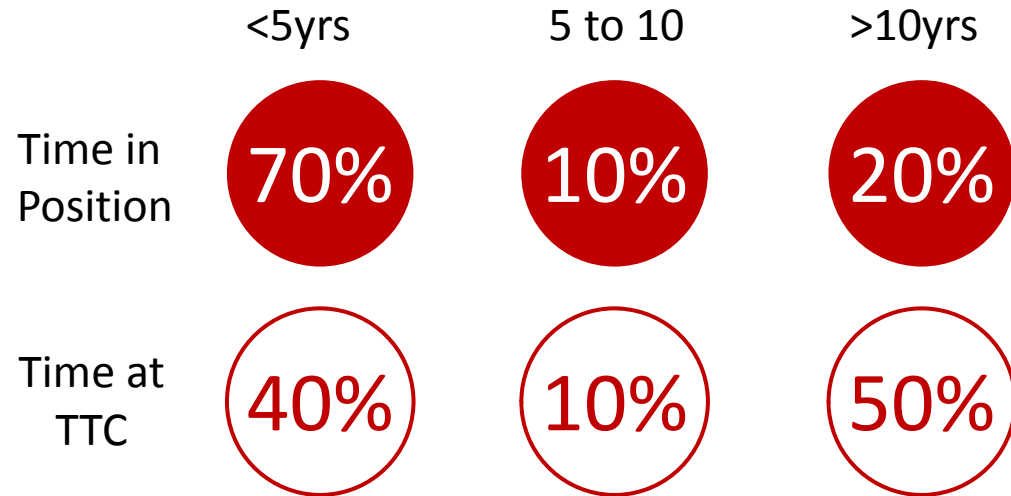
# Building the Team

## LEADERSHIP GROUP



### Executive Team

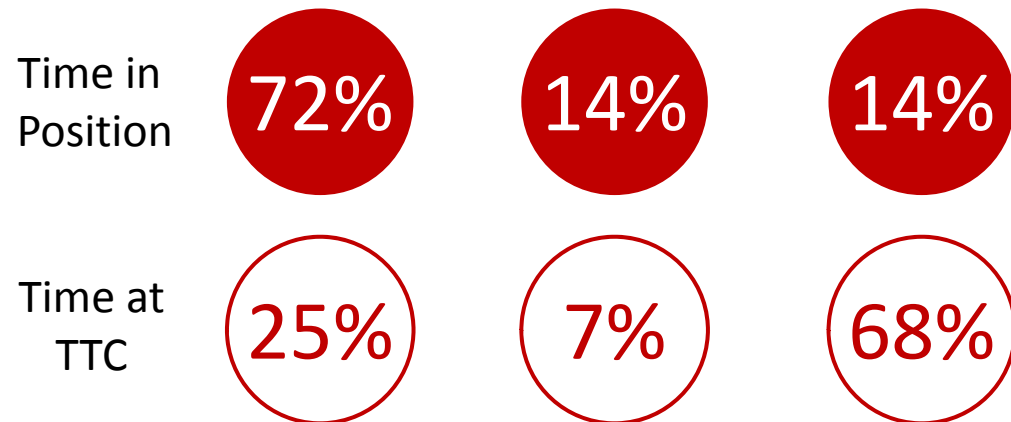
- Broad range of experience and service
- Balance of new thinking and highly valuable corporate knowledge and experience



### Senior

### Management Team

- International experience
- Attracting talent from other properties and from the private sector
- People want to work for the TTC again



# Building the Team

## EMPLOYEE ENGAGEMENT



- Hearts and minds
- Capability vs Conduct
- Listening and engaging
  - Monthly “Meet the Exec”
  - 4 Town Halls for 2,000 staff
  - 100 Town Halls for 8,000 union employees
- Address issues such as:
  - Washroom cleanliness
  - Break rooms
  - Uniforms





# Laying the Foundations

2013 – 2017 Corporate Plan



Developed a five year plan with seven Strategic Objectives:

- Safety
- Customer
- People
- Assets
- Growth
- Financial Sustainability
- Reputation



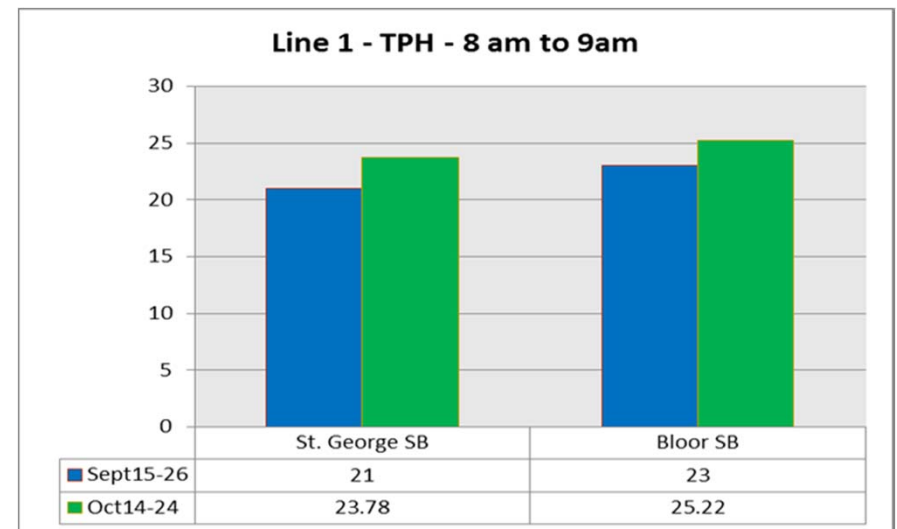
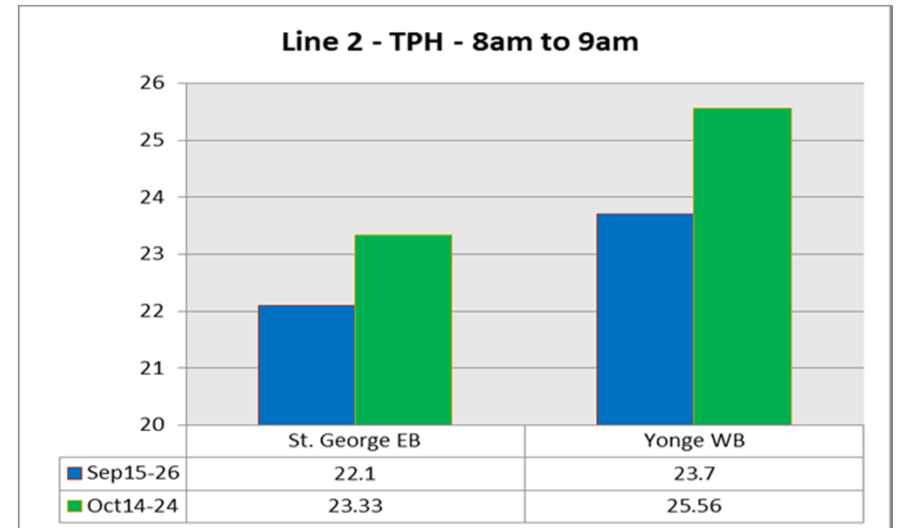
Each strategic objective supported by detailed action plans and tracking mechanisms

# Getting Things Done

## Subway Service



- New DCOO, new thinking
- Improved train throughput – extra trains
- Improved journey times – less holding of trains
- Improved end terminal operations – less “blocking back”
- Safety and financial benefits

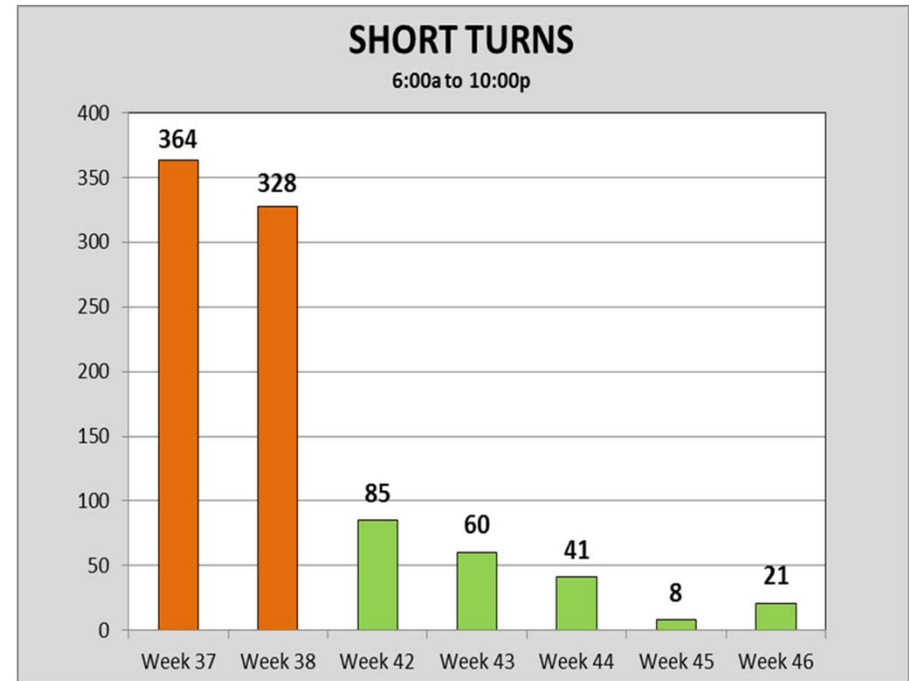


# Getting Things Done

## Bus & Streetcar Service



- New Chief Service Officer, new thinking
- Mandate to tackle bunching, gapping and short turns
- Intensive focus on 29 Dufferin bus and 512 St Clair streetcar
- Very positive customer feedback
- Techniques to be rolled out to other routes



# Getting Things Done



## 2013 – 2017 Corporate Plan Achievements (As of December 3, 2014)

Key Initiative	Date Completed	Key Initiative	Date Completed
✓ Develop a New Station Management Model	Q1 2013	✓ Deploy Articulated Buses	Q4 2013
✓ Delivery of Toronto Rockets	Q2 2013	✓ Duty Station Manager Introduction	Q1 2014
✓ Develop Corp Fire Safety Program	Q2 2013	✓ Improved Wheel Trans Accessibility	Q2 2014
✓ Approve Emergency Management Program	Q3 2013	✓ Implement System Cleanliness - Stations	Q2 2014
✓ Develop Positive Political Engagement	Q4 2013	✓ Establish Support Persons Id	Q2 2014
✓ Complete Pape Station Modernization	Q4 2013	✓ Pilot Narrowcasting at Operating Divisions	Q3 2014
✓ Enable Wi-Fi and Cell at Two Stations	Q4 2013	✓ Corporate Emergency Plan	Q3 2014
✓ Develop a New TTC System Map	Q4 2013	✓ Carry Out Wheel Trans Survey	Q3 2014
✓ Develop Employee Rewards and Recognition	Q4 2013	✓ Accommodate Customer Call Volume	Q3 2014
✓ Implement Operator Refresher & Recert.	Q4 2013	✓ Develop a P.O.P & Fare Enforcement Strategy	Q3 2014



# Getting Things Done



## 2013 – 2017 Corporate Plan Achievements (As of December 3, 2014)

Key Initiative	Date Completed	Key Initiative	Date Completed
✓ Deploy New Uniforms	Q3 2014	✓ Pilot Increase Subway Run Time	Q4 2014
✓ Create Case for a Revenue Protection Team	Q3 2014	✓ Pilot Double Step Backs at End of Terminal	Q4 2014
✓ Create Subway Car Fleet & Facility Plan	Q3 2014	✓ Complete Emergency Mgmt Simulations	Q4 2014
✓ Initiate New Streetcar Deployment	Q3 2014	✓ Complete Station Modernization at Dufferin	Q4 2014
✓ Create Bus Fleet & Facility Plan	Q3 2014		
✓ Create Streetcar Fleet & Facility Plan	Q3 2014		
✓ Carry Out Town Halls	Q4 2014		
✓ Conducted Employee Engagement Survey	Q4 2014		
✓ Complete Subway Stn Track Level Cleaning	Q4 2014		
✓ Complete Subway Stn Wall Cleaning	Q4 2014		



# Getting Things Done

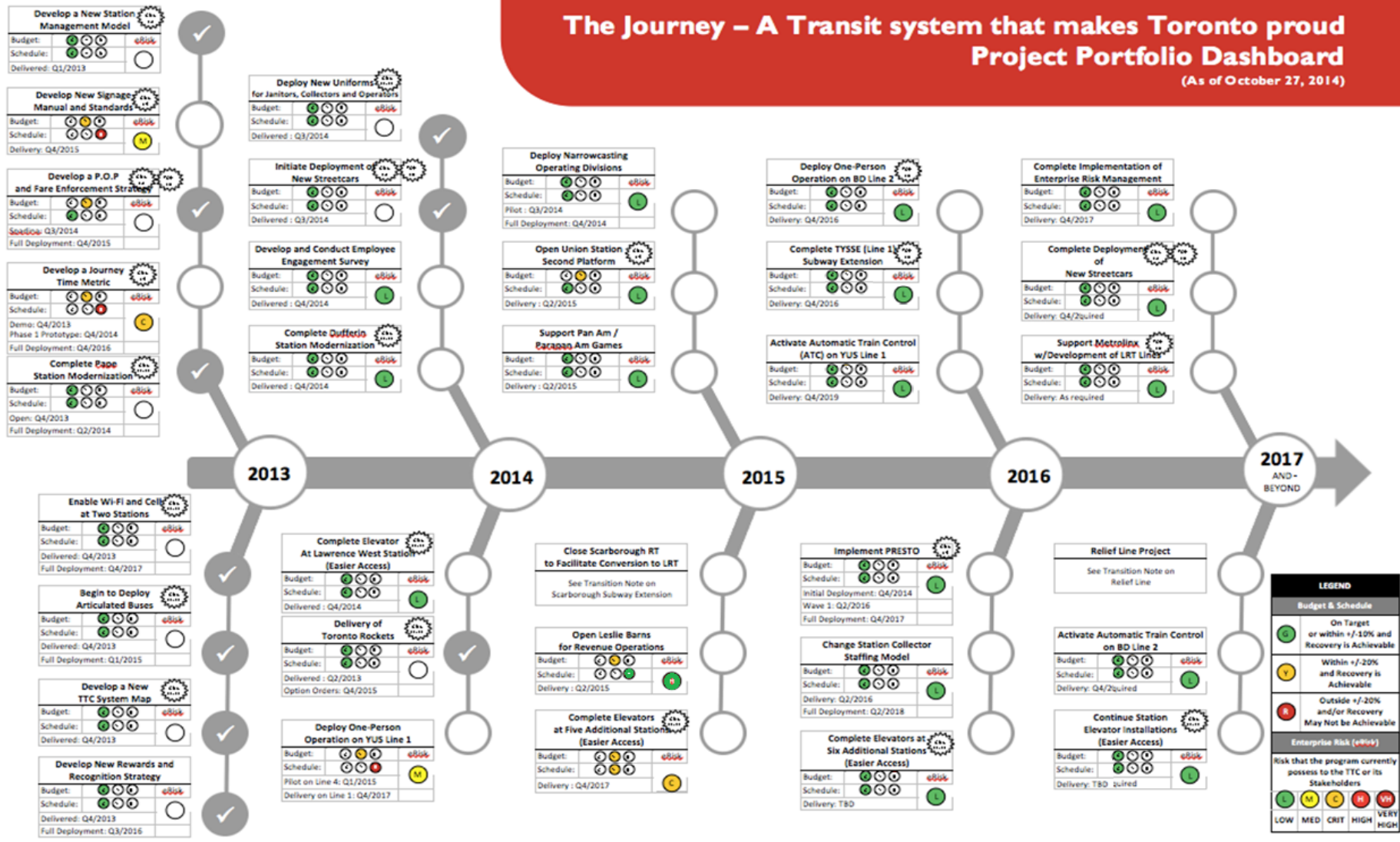
## Project, Program, and Portfolio Management



### The Journey – A Transit system that makes Toronto proud

### Project Portfolio Dashboard

(As of October 27, 2014)



# Getting Things Done

## MEGA-PROJECT 1: SPADINA EXTENSION



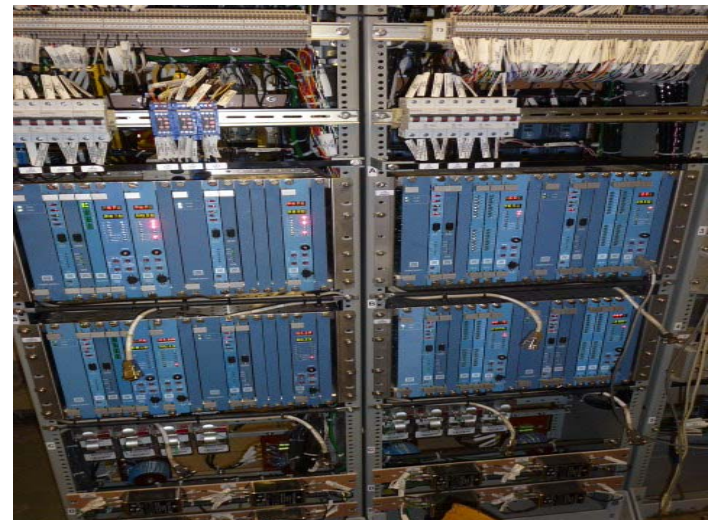
- Tunnels are complete
- Stations progressing
- Track being laid
- Schedule is at risk
- International panel brought in to review options on remaining work
- Everything possible will be done to protect budget and schedule



# Getting Things Done

## MEGA-PROJECT 2: AUTOMATIC TRAIN CONTROL (ATC)

- Union to Eglinton signals are original 1954 equipment
- System is safe but increasingly unreliable
- First task is to replace existing equipment and make it reliable
- Then install ATC
- This is painstaking, safety critical work that can only be undertaken when trains are not running
- The capacity hike and transformed reliability will be worth the wait





# Getting Things Done

## MEGA-PROJECT 3: PRESTO



- Contract signed in 2013
- 14 stations in operation today
- New streetcars went live last month
- 11 additional stations will be online in 2015
- Full roll-out by 2017
  - Exploring options to expedite
  - New faregates a visible change
- Allows for new pricing models
- Free up “Collectors”



# Getting Things Done

## MEGA-PROJECT 4: NEW STREETCARS



- 204 state-of-the art streetcars
- Very positive customer feedback
- Car house opens Q2 2015
- Presto enabled
- Roll-out plan and fleet plan developed
- Additional mitigation on 504 King
- Proof of Payment and fare inspection regime



# Getting Things Done

## MEGA-PROJECT 5: CULTURE CHANGE



- Our hardest challenge but arguably, the most important
- To be world class, we need our customers to feel valued
- We want staff to “think like a customer”
- Employee engagement is therefore critical
- Signature policy of the CEO
- Early, encouraging signs of progress



# Delivering Efficiencies



- Since 2011 significant savings - \$35+ million / yr
- Corporate downsizing
  - Eliminated 300 administrative positions = \$21.6m / yr
- Articulated buses
  - More efficient vehicles = \$5.7m / yr
- Contracted out garbage, public washrooms, service line = \$2m / yr
- Joint purchasing with City
  - Employee benefits, electricity, diesel = \$3m / yr
- Push province to change accident claims
  - “No crash, no cash” = \$2-5m / yr
- New Collective Agreement
  - No new WT garage (\$190M), same fleet, reduced OT (\$1M+)

**Looking Forward**



# Looking Forward

## OPPORTUNITIES TO IMPROVE TRANSIT NOW



1. All door boarding and POP on streetcars
2. Reduce waiting and crowding on bus & streetcar routes
3. Ten-minute-or-better route network
4. Express bus route network
5. Transit priority measures
6. Improve service reliability
7. Operate all routes all day, every day
8. Time-based transfer
9. Expand overnight bus and streetcar service



# Looking Forward

## OPPORTUNITIES TO IMPROVE TRANSIT NOW



- Significant improvements to on-time performance via:
  - Queue jump lanes
  - Transit signal priority
  - Parking restrictions
  - Signal changes (left turn etc.)
  - Implementation of CAD/AVL = reduction in bunching/gapping/short turns
- Time-based transfers in 2015
- Off-peak improvements in 2015
- Expanded overnight service in 2015
- Peak improvements in 2017
- Increased express buses in 2017
- Net annual cost by end of 2017 = \$51m

# Looking Forward

## OPPORTUNITIES TO IMPROVE TRANSIT NOW



- New streetcars on most routes
  - +40% capacity
- Marked improvement in subway performance
  - Reduction in signal failures
  - Reliability and capacity with SRT improvements
- Transit Priority on arterials
- PRESTO delivered

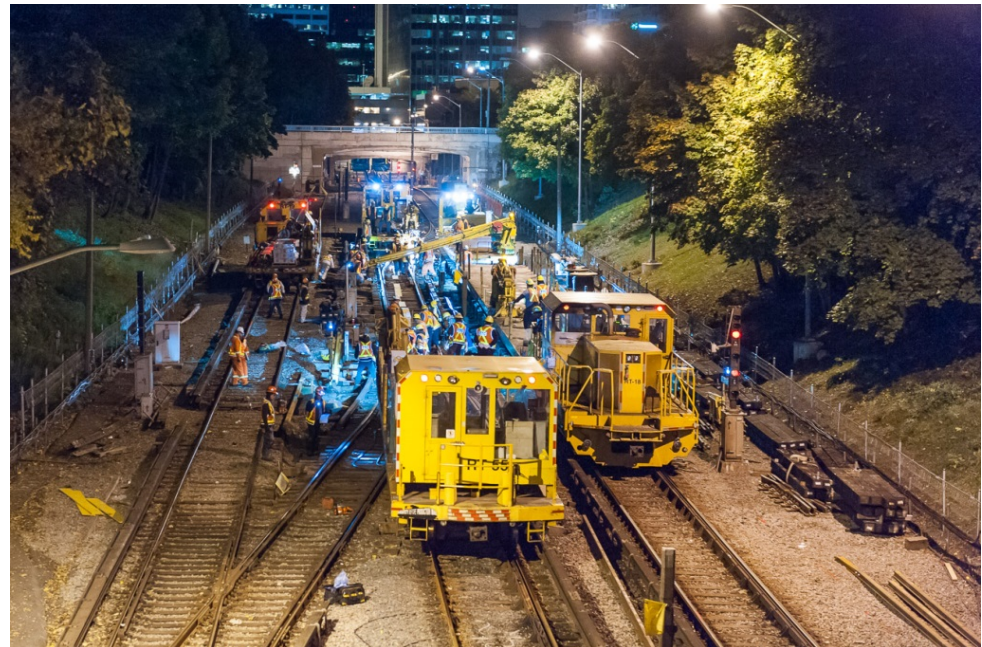




# Looking Forward



- Introducing business case methodology
- Asset management strategy underway
  - Life cycle costing
  - Preventative maintenance rather than on failure
- Enterprise Risk Management
- Health, Safety and Environment
- All help guide priority



# Looking Forward



- Fare purchase – Debit and Credit
  - 2012 expanded Metropass from 8 stations to all 69
  - All products at all stations by end of 2014
- Station partnerships
  - Development entrance connections and refurbishment
- Bunching and Gapping
  - Have improved on-time by 10% cut short turns by 50%
  - Modern control system (CAD/AVL) purchased and now being executed
- New signal system on Line 1 (+25% capacity)

# Looking Forward



- One person operation on subway
  - Eliminate Guard position for savings and improved reliability (pilot early 2015)
- Surface Vehicle Control (CAD / AVL)
  - Unified control room, deploy supervisors, address bunching / gapping / short turns
- Automate processes (SAP)
  - Finance / HR etc
- Top to bottom organizational review

# Looking Forward

## TAKING THE TOUGH DECISIONS (1)



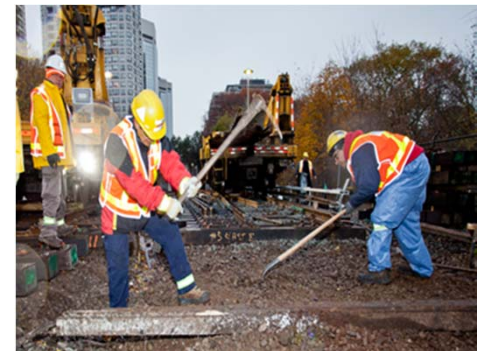
- We run our buses for longer hours, and for more years than most other properties
- We need to double bus reliability to equal best practice
- A two year program will achieve this and deliver more buses on the road
- This is an example of short-term pain for long-term gain



# Looking Forward

## TAKING THE TOUGH DECISIONS (2)

- In many areas, track is 50-60 years old
- Track and signals are safe – but worn-out and increasingly unreliable
- We must bite the bullet and undertake work that should have been addressed 10 years ago
- This will mean more weekend closures, bus shuttles and cost but the benefit will be worth it

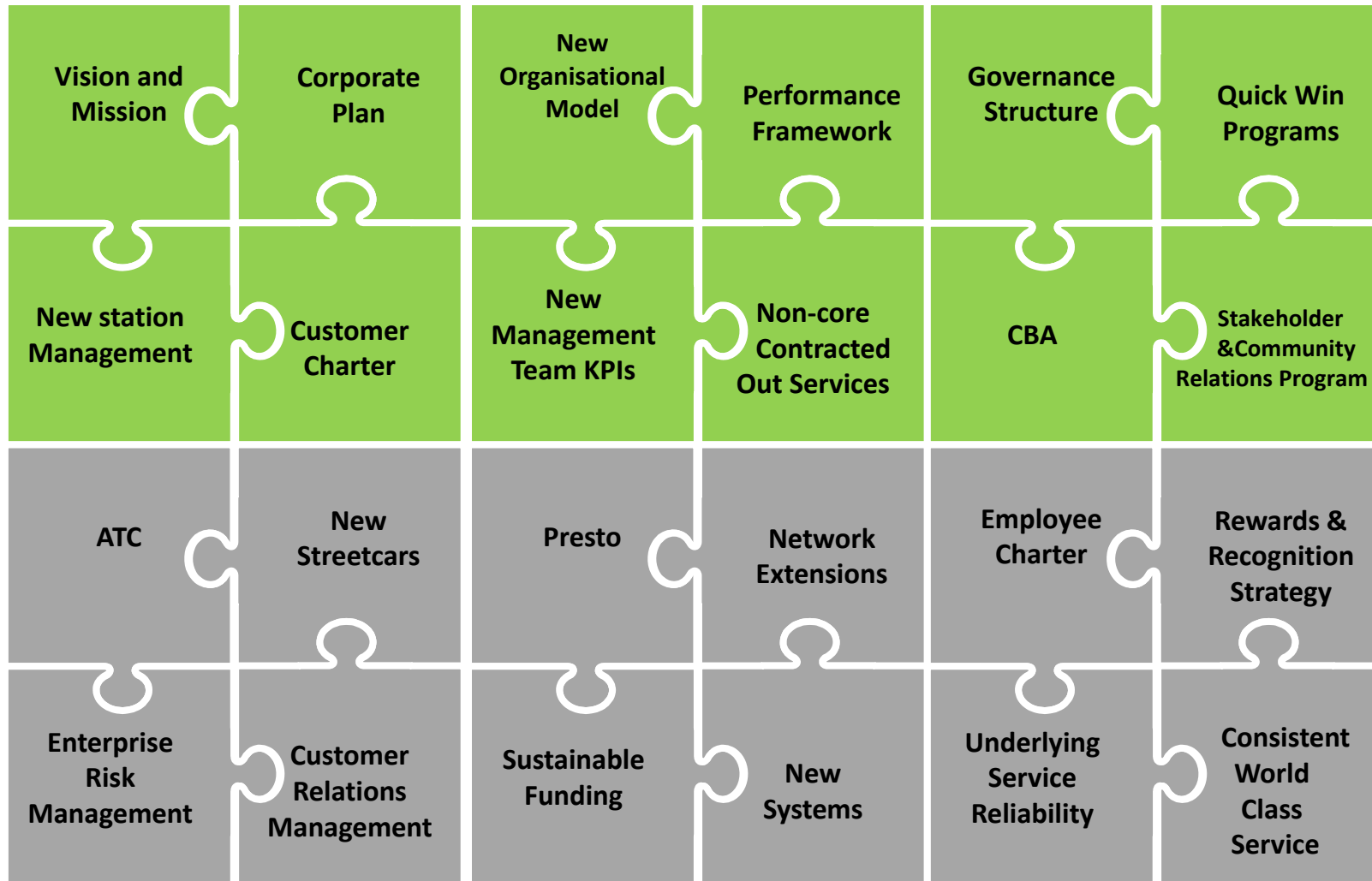




# Pulling It All Together



# PULLING IT ALL TOGETHER





# Next Steps and Final Thoughts





# NEXT STEPS AND FINAL THOUGHTS



## Continue to Make Progress:

- Aggressive internal targets: 50% cut in delays (all modes) over the next 5 years
- Support Pan Am Games
- Refreshed 5 year plan



## What we need from you:

- Clear and strong stewardship and advocacy
- Challenge when appropriate
- Time to enable us to embed change

# Thank you



Our Vision – A transit system that makes Toronto proud

