

# Investment Strategy Update

Staff Presentation to:  
Metrolinx Board of Directors

June 13, 2008

# Investment Strategy Preliminary Concepts and Outline

# Purpose

- ❑ A suite of dedicated revenue sources and financial tools:
  - To fund and implement RTP network expansion over the next 25 years
  - To maintain/renew existing and future regional transportation infrastructure stock over the life-cycle
  - To sustain operating costs over the life cycle
  
- ❑ Pricing and incentives to motivate sustainable behaviour and choices
  
- ❑ Breakdown the long-term Investment Strategy into:
  - The first Metrolinx Annual, Five-Year and 10-Year Capital Plans, effective FY 2009-10

# A Strategy to Support the Three Pillars

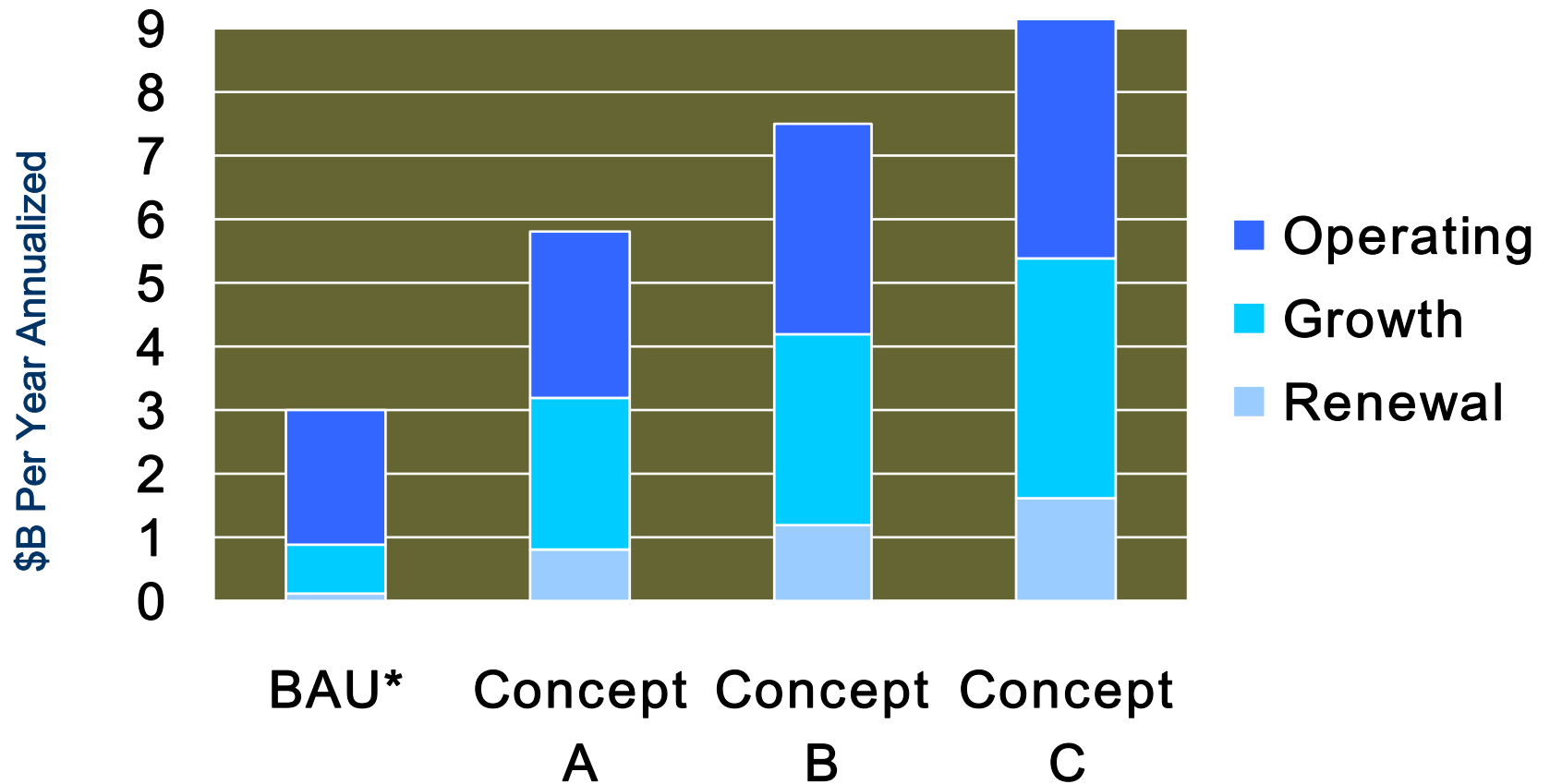
<b><i>A high quality of life</i></b>	Attractive, comfortable, reliable and safe transportation choices
<b><i>A healthy, protected and thriving environment</i></b>	An ecosystem approach, land conservation and a smaller carbon footprint
<b><i>A competitive, prosperous and strong economy</i></b>	Transportation that is efficient, fiscally sustainable, functional, integrated and secure

# Vision Principles

- Fair and equitable transportation costing and pricing
- Access to diversified funding sources and tools
- Full external-cost accounting
- Integrated, multimodal investment solutions
- A shared responsibility by all orders of government
- A meaningful private sector role
- Effective public and stakeholder outreach
- Performance measurement

# Total Estimated Needs

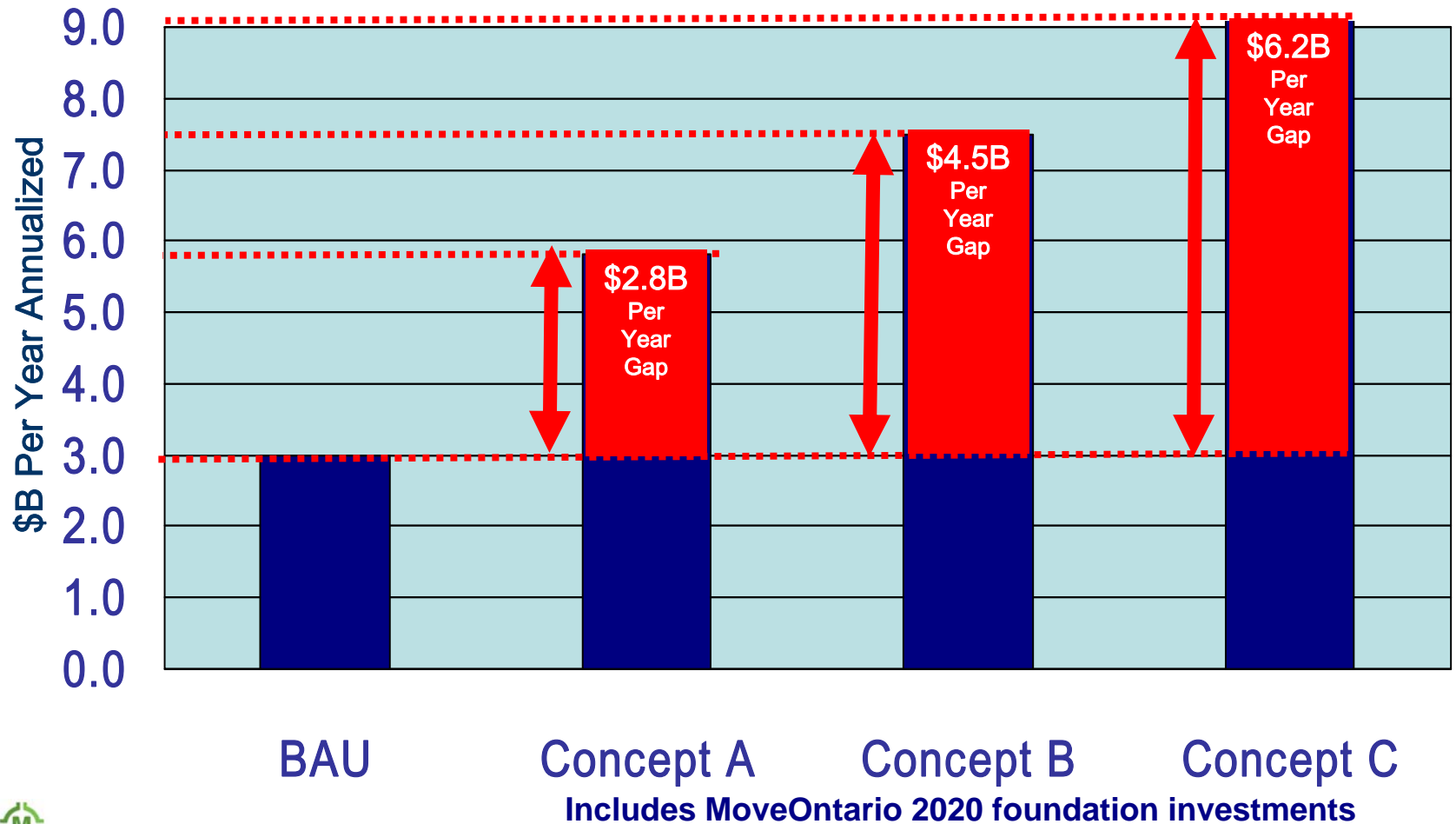
## Capital Expansion + Renewal + Operations



\* "Business-as-Usual" scenario

# Estimated Investment Gap

Capital Expansion + Renewal + Operations



# Potential Toolkit

<b><i>Traditional Government Sources</i></b>	Capital and Operating Grants
<b><i>Beneficiary Charges</i></b>	Development Charges Land Value Uplift and Capture Property Tax Payroll Tax Sales Tax Voluntary Participation Agreements
<b><i>User Charges</i></b>	Actual Vehicle-Km Travelled (VKT) Charge Gas Tax Parking Fee Road Pricing and Tolls Transit Fares Vehicle Registration Vehicle Sales Tax Vehicle-Use Impact Fees to capture external cost of: <ul style="list-style-type: none"> <li>• Carbon Footprint, Congestion, Environmental Degradation and Pollution, Public Health, Safety, Vehicle Disposal, etc.</li> </ul>
<b><i>Financing Strategies</i></b>	Alternative Financing and Procurement (AFP) Borrowing/Mortgaging Equity Investments Infrastructure Bonds Tax Increment Financing




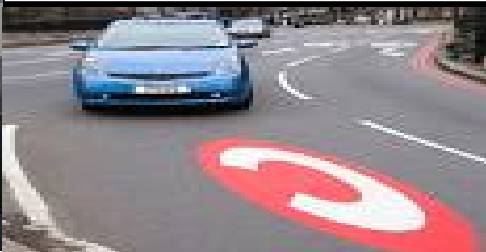



# International Practices

<i>Transportation Authority/Jurisdiction</i>	<i>Senior Govt. Grants</i>	<i>Local Govt. Grants</i>	<i>Fuel Tax</i>	<i>Debt</i>	<i>Sales Tax</i>	<i>Road Tolls</i>	<i>Hydro Levy</i>	<i>Parking License or Tax</i>	<i>Vehicle Registration</i>
Greater Toronto and Hamilton: Metrolinx									
Greater Montréal: Agence métropolitaine de transport (AMT)									
Greater Vancouver: TransLink						Effect. 2009		Discont'd 2007	
Greater Detroit: Detroit Department of Transport (DDOT)									
Greater San Francisco: Bay Area Rapid Transit (BART)									
Greater Chicago: Regional Transportation Authority (RTA)									
Greater Dallas: Dallas Area Rapid Transit (DART)									
Greater Boston: Massachusetts Bay Transportation Authority (MBTA)									
New York City: Metropolitan Transportation Authority (MTA)									
Greater London, UK: Transport for London									
Greater Perth, Australia: Public Transport Authority (PTA)									



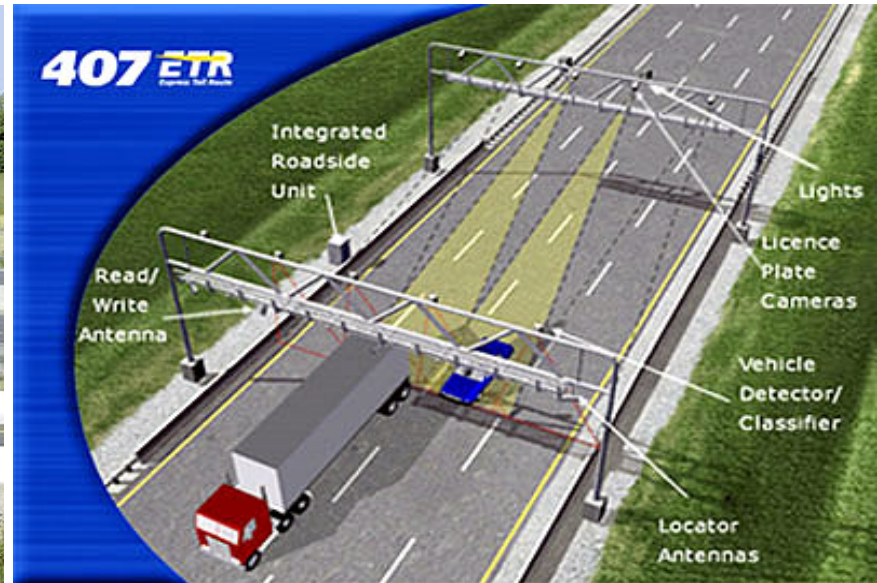
# International Practices (cont'd)

	<i>TransLink BC</i>	<i>Transport for London UK</i>	<i>San Francisco BART USA</i>
<b>Key Revenues and Tools</b>	Transit Fares Fuel Tax Capital Grants Property Tax	Transit Fares Operating Grants Debt Instruments Capital Grants	Debt Instruments Sales Tax Transit Fares Capital Grants
<b>Unique Tools</b>	Parking Tax* Emission Testing Bridge/Road Tolls**	Congestion Charge	Sales Tax
			

\* Eliminated by Provincial legislation in 2007

\*\* Planned 2009 introduction

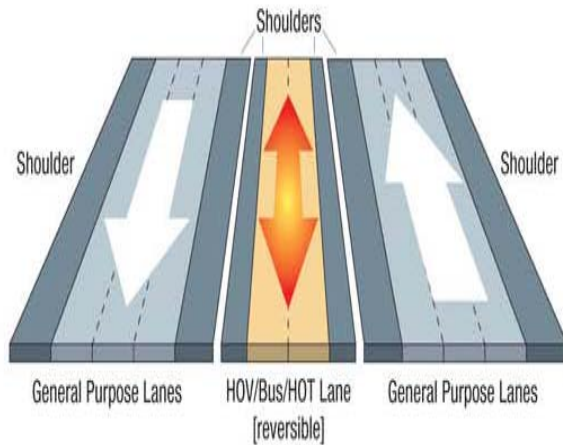
# Regional Road Pricing



## Example: All expressway lanes tolled

- ❑ Technology example: Highway 407 ETR, the world's first all electronic, barrier-free toll highway
- ❑ Inter-operable technical standards required to create seamless regional tolling network
- ❑ Variable pricing according to time and highway segment allows transportation demand management

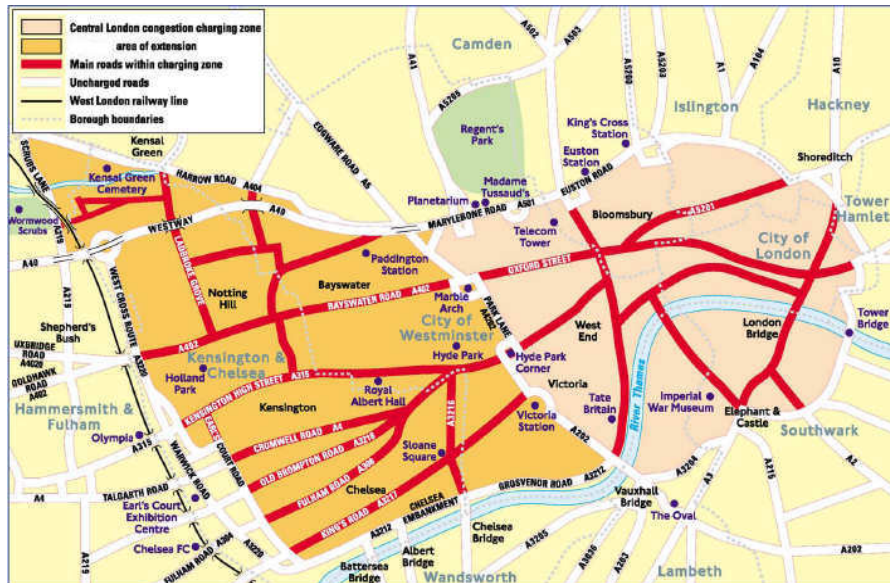
# Regional Road Pricing (cont'd)



## Example: High Occupancy Toll (HOT) Lanes

- Evolution of High Occupancy Vehicle (HOV) lanes in US metro areas
- Real time travel information and charging for HOT Lane use
- User controlled transponder on/off switch for HOV and HOT modes
- Designed to accelerate Single Occupancy Vehicle (SOV) commute times
- Revenue potential to support parallel transit infrastructure
- Key issues: Operating costs and "Lexus lane" image

# Regional Road Pricing (cont'd)



## Example: Central-Area Congestion Charge

- ❑ Key examples: London (shown) Singapore and Stockholm
- ❑ Approximately \$16 (CAD) charge for driving into Central London
- ❑ Traffic entering Central London reduced by 21% and cycling increased by 43%
- ❑ Key issues: High administration cost (42%), ready availability of transit alternatives, economic impact on downtown businesses and residents

# Regional Road Pricing (cont'd)












## Example: Satellite-Based Tolling

- Area-wide real-time tracking of transponder-equipped vehicles
- Ultimate road and parking pricing and demand management system
- Emerging use in Germany and European border crossings
- Under consideration in the Netherlands and UK
- Privacy concerns addressed by separating vehicle owner and trip information

# Regional Road Pricing (cont'd)

<i>Sample origin/destination points One-way trip</i>	<i>At 5 cents per km</i>	<i>At 10 cents per km</i>	<i>At 15 cents per km</i>	<i>At 20 cents per km</i>
<b>Downtown Toronto to:</b>				
<input type="checkbox"/> Markham	\$1.50	\$3.00	\$4.50	\$6.00
<input type="checkbox"/> Oakville	\$1.80	\$3.60	\$5.40	\$7.20
<input type="checkbox"/> Pickering	\$1.95	\$3.90	\$5.85	\$7.80
<input type="checkbox"/> Oshawa	\$3.00	\$6.00	\$9.00	\$12.00
<input type="checkbox"/> Hamilton	\$3.35	\$6.70	\$10.05	\$13.40
<b>Mississauga City Centre to:</b>				
<input type="checkbox"/> Oakville	\$1.00	\$2.00	\$3.00	\$4.00
<input type="checkbox"/> Hamilton	\$2.50	\$5.00	\$7.50	\$10.00
<b>Downtown Oshawa to:</b>				
<input type="checkbox"/> Pickering	\$1.05	\$2.10	\$3.15	\$4.20
<input type="checkbox"/> Vaughan	\$3.40	\$6.80	\$10.10	\$13.40
<input type="checkbox"/> Mississauga	\$4.05	\$8.10	\$12.15	\$16.20
<b>Price comparator:</b>				
<input type="checkbox"/> Highway 407 ETR variable toll rate for cars and light vehicles	18 to 19.25 cents per km			

# Carbon-Based Pricing

Vehicle	Annual Fuel Consumption	Annual CO2 Emissions
TOYOTA PRIUS 	820L	2 Tonne
TOYOTA COROLLA* 	1360L	3.3 Tonne
HONDA CIVIC* 	1420L	3.4 Tonne
CHEVROLET MALIBU* 	1640L	3.9 Tonne
DODGE GRAND CARAVAN FFV* 	2140L	5.1 Tonne
FORD EDGE* 	2160L	5.2 Tonne
LEXUS RX 350 4WD* 	2180L	5.2 Tonne
MERCEDES-BENZ E350 4MATIC 	2240L	5.4 Tonne
PORSCHE CAYENNE TURBO 	2940L	7.1 Tonne

\* Vehicles manufactured in Ontario

- ❑ “Smart” carbon-based pricing would impose proportionately higher charges on less efficient, higher-polluting vehicles
- ❑ Coordination required with any broader federal and provincial initiatives to reduce greenhouse gas emissions and climate change impacts



# GTHA Big Potential Tools

Estimated \$1.0B+ per year in Revenues or Financing

<b>Road Pricing</b>	10+ cents per km charge on provincial and municipal expressway network (Hwy 407 ETR: 18 to 19.75 cents per km)
<b>Parking Pricing</b>	\$1 per weekday per non-residential parking space
<b>Gas Tax</b>	20+ cents per litre
<b>Transit Fares</b>	50%+ operating cost recovery from farebox
<b>Transit Operating Grant</b>	50%+ operating subsidy from government
<b>Transit Capital Grant</b>	50%+ capital subsidy from government
<b>Sales Tax</b>	1%+ regional sales tax
<b>Debt Financing</b>	Supported by dedicated revenue stream

# Toolkit Evaluation Criteria

- Link to transportation users and beneficiaries
- Link to true external cost of transportation
- Implementation **and** administration costs, and simplicity
- Policy, legislative and institutional impediments
- Potential to motivate behavioural change
- Revenue/financing generation potential
- Market and social acceptance

# Critical Success Factors

## Key Lessons Learned from Other Jurisdictions

- ❑ Lever collaboration and momentum from supportive citizens and stakeholders
- ❑ Align Investment Strategy with “Big P” policy objectives of all orders of government
- ❑ Easy-to-understand, transparent revenue-generation and pricing mechanism
- ❑ Value for investment: Improved customer experience; ready availability of transportation alternatives
- ❑ Focus on – and implement – the initial investment priorities **now**
  - MoveOntario 2020 foundation investments (\$17.5 billion)
  - Metrolinx QuickWins (\$744 million)
- ❑ A matter of political priority and leadership

# Some Key Discussion Points

- Have we adequately captured investment needs and gaps?
- Take a quantum-leap or incremental approach to securing revenue and financing tools?
- One or two “Big Bang” tools, or a diverse set of smaller tools?
- Build now and finance later?
- How do we protect vulnerable socio-economic groups such as low to medium income families and small business?
- What revenues and tools should be assigned to Metrolinx?



# Investment Strategy Workplan and Next Steps

# Consultant/Advisory Team

<b>KPMG LLP</b>	<input type="checkbox"/> Team Lead <input type="checkbox"/> Investment Strategy Analysis <input type="checkbox"/> Investment Strategy and RTP Integration <input type="checkbox"/> Financial Analysis
<b>RAND Corporation</b>	<input type="checkbox"/> Economic Analysis <input type="checkbox"/> Transportation Policy Analysis <input type="checkbox"/> Other Public Policy Analysis
<b>MMM Group Limited</b>	<input type="checkbox"/> Transportation Engineering <input type="checkbox"/> Capital Costs and Planning
<b>iTrans Corporation</b>	<input type="checkbox"/> Demand Forecasting and Analysis
<b>Pollara Corporation</b>	<input type="checkbox"/> Stakeholder and Social Marketing Insight

# Stakeholder Engagement Milestones

Integrated with RTP Consultation Plan

<b>Investment Strategy Technical Advisory Group (TAG)</b>	<b><i>June 17 onwards</i></b>
<b>Multidisciplinary Expert Review Panel (MERP)</b>	<b><i>July 3 onwards</i></b>
<b>Stakeholder Consultation Roundtables</b>	<b><i>July 8 onwards</i></b>
<b>Advisory Committee (AC) to the Metrolinx Board</b>	<b><i>July 10 onwards</i></b>
<b>Stakeholder/Public Consultations</b>	<b><i>September 8 onwards</i></b>
<b>Interactive Web Consultation Tool</b>	<b><i>Ongoing</i></b>

# Critical Path Integrated with RTP Workplan

