# TRANSIT LEADERSHIP SUMMIT

### NEW YORK • APRIL 23-25, 2012

## **SUMMARY REPORT**





### About

#### **RPA**

Regional Plan Association is America's oldest and most distinguished independent urban research and advocacy organization. RPA works to improve the infrastructure, economic competitiveness and sustainability of the New York- New Jersey-Connecticut metropolitan region. A cornerstone of our work is the development of long-range plans and policies to guide the growth of the region. Through our America 2050 program, RPA also provides leadership in the Northeast and across the U.S. on a broad range of transportation and economic-development issues. RPA enjoys broad support from the business, philanthropic, civic and planning communities.

For more information about RPA, please visit www.rpa.org.

#### This effort was made possible by the support of VREF and C40.

#### VREF – investments make a difference

VREF, the Volvo Research and Educational Foundations, is the collective name under which four foundations collaborate to finance research and education in the area Future Urban Transport (FUT): How to deal with complexity. VREF finances FUT research for the purpose of contributing to new ideas and solutions within the complex structure that lies behind the design of sustainable transportation systems in cities. The challenge is to find urban transport systems that will provide accessibility for the masses while at the same time radically reducing transportation's negative local and global environmental impacts. Through the FUT programme, VREF currently supports 8 Centres of Excellence in Africa, South and North America, Asia, Australia and Europe, and accompanying events for networking, communication and debate on critical issues for urban transport.

#### C40 Cities Climate Leadership Group

The C40 Cities Climate Leadership Group (C40) is a network of large and engaged cities from around the world committed to implementing meaningful and sustainable climate-related actions locally that will help address climate change globally. C40 convenes networks of cities to accelerate the identification, development and implementation of projects, programs and policies in C40 cities through city-to-city collaboration. C40 Networks are currently being developed within 7 initiative areas: transportation, energy, waste management, sustainable development, measurement and planning, water drainage and infrastructure, and sustainable finance infrastructure and green growth.

C40 works in an aligned partnership with the Clinton Climate Initiative (CCI) Cities program, which was started by the William J. Clinton Foundation. CCI Cities became the delivery partner of C40 in 2006. The closer alliance between the two organizations – announced in the spring of 2011 – brings significant resources and infrastructure that will enhance and accelerate their historic activities and positions the combined effort as one of the preeminent climate action organizations in the world.

### Contents

Cities represented	
Participants	4
Lessons learned	5
Transit Systems	6
Barcelona	
Hong Kong	9
London	11
Los Angeles	13
Mexico City	15
Montreal	
New York	19
Santiago	21
São Paulo	23
Singapore	25
Stockholm	
Washington, DC	29
Kev metrics	30

# Cities represented



### Participants



**Daniel Bergeron** Vice-president of Strategic Information and Metropolitan Affairs, Montreal Agence Métropolitaine de Transport



Morris Cheung Human Resources Director, Hong Kong MTR



Choi Chik Cheong Deputy Director of Knowledge Management, Singapore Land Transport Authority



**Luiz Antonio Cortez Ferreira** Senior Environmental and Sustainability Specialist, São Paulo Metrô



**Carol Kissal** Deputy General Manager for Administration, Washington Metropolitan Area Transit Authority (Metro)



Arthur T. Leahy CEO, Los Angeles Metropolitan Transportation Authority (Metro)



Lew Yii Der Group Director of Corporate Planning & Research, Singapore Land Transport Authority



**Joseph J. Lhota** Chairman and CEO, New York Metropolitan Transportation Authority



Anders Lindström Managing Director, Storstockholms Lokaltrafik



Sergio Aníbal Martínez Sánchez Director General of Planning and Transport, Mexico City



Henrik Normark Director of Business Development, Storstockholms Lokaltrafik



**Patricio Pérez** Head, Transantiago



Howard R. Permut President, New York Metropolitan Transportation Authority Metro-North Railroad



Xavier Roselló Deputy Technical Director, Barcelona Autoritat del Transport Metropolità



Richard R. Sarles General Manager and CEO, Washington Metropolitan Area Transit Authority (Metro)



Elaine Seagriff Head of London Wide Policy and Strategy, Transport for London



William Wheeler Director of Special Project Development & Planning, New York Metropolitan Transportation Authority



David Yale Deputy Executive Officer for Countywide Planning and Development, Los Angeles Metropolitan Transportation Authority (Metro)

### Lessons learned

Many of these shared issues emerged over the course of two days, including:

#### Quality of the transit experience

A convenient, attractive and comfortable transit experience is key to helping transit agencies grow and diversity their customer base, thereby increasing modeshare and farebox revenue. Participants identified several components to a high-quality experience:

- Frequent and reliable service: Transit needs to be competitive with other modes of transit.
- Amenities: Comfortable seats, wi-fi and other amenities mean that customers can work and socialize while traveling. This is a critical advantage for transit, compared to other modes of transportation. A comfortable and productive commute is likely more important than a fast commute to attracting customers.
- Better communication with customers: This is particularly important with younger customers, who are committed transit users and sophisticated social media users. Real-time information is expected for this generation.
- Branding and good design: Customers' perception of transit is critical to its success.

#### **Fare policy**

Fares must be set effectively and equitably; but how? Raising fares is always sensitive politically; a structured formula set by an independent governmental body can help to ensure that fares keep up with inflation and increases in labor costs. Fares should be set high enough for the agency to provide quality service and amenities, but also be designed to accommodate those customers for whom transit costs are a significant portion of their income. New fare collection technologies can help facilitate this segmentation of the market. Transit agencies seeking to adopt a merchant-based fare system should work together with other agencies for a unified fare payment standard to reduce costs with banks.

#### Financing

Transit investments are expensive, and government funding is difficult to come by in these tough times. Transit agencies can diversify their funding sources:

• Farebox revenue: The farebox recovery ratios of the agencies participating in the Summit varied from 27% (Los Angeles) to 200% (Hong Kong). There are many reasons for these variations, of course, including the use of the system, the density of urban development, and operating patterns.

- Partnerships with the private sector: Involving the private sector in the development of new transit systems can help infuse a project with up-front cash, complement the skills of the public agency, and insulate the public sector from politically difficult situations like fare increases and labor negotiations. The public sector, however, should set the goals of the project and closely monitor its private partners.
- Value capture: Several transit agencies have engaged in successful partnerships with private developers to build dense, mixed-use nodes around train stations; and have captured, via those developments, new revenue. If a transit agency owns the underlying property, it can lease out the land for redevelopment. Even if the agency does not own the property, it can work with the local government to structure a property tax system that generates revenue for the transit system (taxincrement financing, for example). These dense residential or commercial development have the added benefit of generating new customers.
- Congestion pricing: London, Stockholm and Singapore the three cities with congestion pricing – as well as New York City – a city which has considered it – were all present at the Summit. In Stockholm and Singapore, pricing is primarily a congestion-management measure and the revenues do not go to transit. But in London, the revenues from pricing congestion are used to subsidize the transit system, which of course helps to provide a viable alternative to driving (the scheme New York considered also involved a similar crosssubsidy).

#### Making the case

Public transportation is too often taken for granted. But many of the most significant challenges that cities face today – stagnating economies, congestion, long commutes, carbon emissions, etc. – are best addressed by building a strong public transportation system. Building the environmental and economic case for public transportation is critical to ensuring that the government continues to fund transit at appropriate levels. New metrics for measuring the benefits of transit on greenhouse gas emissions, or on the economic climate, would be effective.

#### Governance

A civic organization independent from the government can be the most effective advocate for public transportation. The organization can make the economic and environmental case for transit to the public institutions that fund it, as well as to the public, helping to forestall any potential NIMBY opposition to projects.





(million <sup>City</sup>	s) Cit Me	City: 101 Metro: 3,239 Metropolitan residential gr 2000 2010 4.4 5.0		City: Metro	City: 16,000 Metro: 1,500	
Metropoli 5.0	tan 200			growth trajectory (millio 2020 5.1		
Annual 2000 HR metro 342	ridershi	p (millio <sup>Commuter</sup> 69	Bus 228	BRT -	Ferries –	
2010 HR metro 401	LR metro 24	Commuter <b>140</b>	Bus 358	BRT -	Ferries –	

2000		
HR metro	LR metro	Commuter
143	-	115
2010		
HR metro	LR metro	Commuter
164	60	128
under	construct	ion
HR metro	LR metro	Commuter
+41	±0	±7

### TRANSPORT METROPOLITÀ

#### Responsibilities

ATM plans all public transit (metro, light rail, bus, commuter rail) in the region.

Other transit agencies in the region Operations are run by various private entities: FGC operates the commuter rail, funicular, and Lines 6, 7, and 8 of the metro; TMB operates the rest of the metro and bus; RENFE operates commuter rail; TRAMMET operates light rail.

#### Governance

ATM is governed by a board of directors made up of representatives from the Government of Catalonia, the local administrative bodies, ATMU, and two observerving members from the central government.

Summit representative

• Xavier Roselló, Deputy Technical Director





4 Mi 8 Km		
Residents   Surface area (km2)	Density (res/km2)	HONG KONG MTR

Residents (millions) City 7.1 Metropolita

City: 1,104	Cit	ry: 6,400	
Metro: 1,104	μ Me	etro: 6,400	
Metropolitan re	esidential growth	h trajectory (millior	ıs)
2000	2010	2020	
6.7	7.1	7.7	
1			
archin (millio	20		

#### Annual ridership (millions)

2000 HR metro 778	LR metro	Commuter	Bus 2,116	BRT	Ferries <b>56</b>
2010 <sup>HR metro</sup> 1,410	LR metro 155	Commuter -	Bus <b>2,106</b>	BRT	Ferries <b>49</b>

#### Stations, metropolitan region

2000			
HR metro	LR metro	Commuter	
44	-	-	
2010			
HR metro	LR metro	Commuter	
84	<b>68</b>	-	
under c	onstructi	ion	
HR metro	LR metro	Commuter	
+19	+0	+0	

#### HONG KONG MTR

Responsibilities MTR operates Hong Kong's metro and light rail, as well as some bus.

Other transit agencies in the region Planning is handled by the Hong Kong Transport Department. Various private companies operate buses and ferries.

#### Governance

MTR is a private company that operates transit in Hong Kong and other world cities.

#### Summit representative

• Morris Cheung, Human Resources Director





Resider (million City 7.8	nts su s) C <sup>-</sup> M	Surface area (km2) City: 1,579 Metro: 27,833 Metropolitan residential gr		Density (res/km2) City: 5,000 Metro: 600 rowth trajectory (millions)	
		000	2010	_	2020
1/.	, /   1	15.5	1/	./	18./
<b>Annual</b> 2000	ridersh	ip (millio	ons)		
HR metro	LR metro	Commuter	Bus	BRT	Ferries
970	30	UNK	1,354	-	2
2010					
HR metro	LR metro	Commuter	Bus	BRT	Ferries
1,107	106	54	2,289	-	4

2000 HR metro 273	LR metro 34	Commuter
2010 HR metro 268	LR metro 79	Commuter 890
under HR metro +9	CONSTRUCTI LR metro +0	ON Commuter +0

#### **TRANSPORT FOR LONDON**

#### Responsibilities

TfL plans and operates all metro, light rail, buses and ferries in the region. It also operates the congestion charge, traffic signals and manages many of the region's main roads. It also regulates London's taxis.

**Other transit agencies in the region** Network Rail, a semi-public entity, manages the commuter rail network with services provided by private train operating companies.

#### Governance

TfL reports directly to the Mayor of London who is also supported by the Greater London Authority, the strategic land-use authority for London.

#### Summit representative

• Elaine Seagriff, Head of London Wide Policy and Strategy







Residen (millions City	<b>ts   s</b> i 5)   C M	Surface area (km2) City: 754 Metro: 86,393		<b>Densi</b> City: Metr	<b>Density (res/km2)</b> City: <b>5,000</b> Metro: 200	
S.O Metropolit 17.	an 2 9	letropolitan 000 <b>16.4</b>	residential 2010 <b>17</b>	. growth tr	rajectory (millions) 2020 <b>19.4</b>	
Annual 2000 HR metro 28	ridersh <sup>LR metro</sup> 30	nip (millio <sup>Commuter</sup> 7	Bus 359	BRT -	Ferries –	
2010 HR metro 48	LR metro	Commuter 12	Bus <b>400</b>	brt <mark>8</mark>	Ferries –	

2000		
HR metro	LR metro	Commuter
<b>16</b>	36	47
2010		
HR metro	LR metro	Commuter
16	53	55
16 under	53 constructi	<b>55</b> on
16 under HR metro	53 construction	55 0n Commuter
16 under HR metro +0	53 construction LR metro +16	55 on <sup>Commuter</sup> +0

#### LOS ANGELES METROPOLITAN TRANSPORTATION AUTHORITY (METRO)

#### Responsibilities

LA Metro plans and operates all metro, light rail, BRT and nearly all buses in the region. LA Metro also manages HOV lanes on some highways.

Other transit agencies in the region Metrolink operates the commuter rail. Some bus operations are assumed by Los Angeles Department of Transportation and AC Transit.

#### Governance

LA Metro is a state-chartered organization overseen by a board consisting of the mayor of Los Angeles, the five LA County supervisors, three mayor appointees, and rotating representatives of cities served.

- Arthur T. Leahy, CEO
- David Yale, Deputy Executive Officer for Countywide Planning and Development



### 4 Mi 8 Km

Resident (millions City	ts s	Surface area (km2)DensityCity: 1,486City: 6Metro: 7,815Metro:Metropolitan residential growth traj2000201018.421.2		Densi City: Metro	Density (res/km2) City: 6,000 Metro: 2,700	
Metropolita	an 2			2020 Unk		
Annual 1 2000 HR metro 1,393	LR metro	hip (millio <sup>Commuter</sup>	Bus 180	BRT	Ferries –	
2010 HR metro <b>1,410</b>	LR metro 29	Commuter 5	Bus <b>270</b>	BRT <b>147</b>	Ferries	

#### Stations, metropolitan region

2000			
HR metro	LR metro	Commuter	
140	12	-	
2010			
HR metro	LR metro	Commuter	
175	18	7	
undor	construct	ion	
unuer	construct	1011	
HR metro	LR metro	Commuter	
HR metro	LR metro +0	Commuter +0	

#### **MEXICO CITY DEPARTMENT OF PLANNING AND TRANSPORT**

#### Responsibilities

The municipal government of Mexico City plans the city's transit, and operates commuter rail, BRT and most bus lines within the city.

Other transit agencies in the region The Metro is operated by the Sistema de Transporte Colectivo Metro. Light rail is operated by Servicio de Transportes Eléctricos. Some bus lines are operated by regulated private companies.

#### Governance

The Department of Planning and Transport is controlled by the Secretary of Transport and Roads

#### Summit representative

• Sergio Aníbal Martínez Sánchez, Director General of Planning and Transport

#### Maps





Reside	nts	Surfa	ce area (l	(m2)	Density	(res/km2)
(millior	1S)	City:	365		City: 4,	500
City		Metr	o: 3,980	)	Metro:	900
1.0	.	Metro	opolitan re	sidential g	rowth traje	ctory (millions)
Metropoli	itan	2000		2010		2020
3.8		3.	3	3.8	8	4.0
<b>Annual</b> 2000	ride	rship	(millio	ns)		
HR metro	LR me	tro (	Commuter	Bus	BRT	Ferries
209	-		12	423	-	-
2010						
HR metro	LR me	tro (	Commuter	Bus	BRT	Ferries
239	7		15	475	-	-

2010 HR metro	LR metro	Commuter
2010 HR metro 68	LR metro	Commuter <b>51</b>
HR metro	LR metro	Commuter 40
		<i>.</i> .

#### MONTREAL AGENCE MÉTROPOLITAINE DE TRANSPORT

#### Responsibilities

AMT plans all public transport in the region, and operates commuter rail and a few bus lines. AMT also manages HOV lanes and park-and-ride lots in the region.

**Other transit agencies in the region** STM operates the Metro and most buses.

#### Governance

The state of Quebec oversees AMT and nominates four out of seven members of AMT's board. The other four represent Montreal and its suburbs.

#### Summit representative

• Daniel Bergeron, Vice-president of Strategic Information and Metropolitan Affairs





Residen (millions City	ts Sur 5) Cit Me	<b>Surface area (km2)</b> City: 486 Metro: 33,307			<b>Density (res/km2)</b> City: 16,800 Metro: 700	
Metropolit	<sup>an</sup> 20 <b>2</b>	<b>1.5</b>	residential g 2010 <b>22</b>	rowth tra	2020 <b>23.2</b>	
Annual 2000 HR metro 1,760	ridershi <sup>LR metro</sup>	p (millio <sup>Commuter</sup> 241	Bus 1,002	BRT -	Ferries <b>19</b>	
2010 HR metro 2,522	LR metro <b>21</b>	Commuter <b>261</b>	Bus 1,055	BRT -	Ferries	

2000 HR metro 481	LR metro 23	Commuter 399
2010 HR metro <b>481</b>	LR metro	Commuter 398
under <sup>HR metro</sup> +4	constructi LR metro +0	ON Commuter +0

#### NEW YORK METROPOLITAN TRANSPORTATION AUTHORITY

#### Responsibilities

MTA plans and operates nearly all heavy-rail metro, most commuter rail and most bus in the region. MTA also has jurisdiction over many road bridges and tunnels.

Other transit agencies in the region Commuter rail, light rail and buses in New Jersey are planned and operated by NJ TRANSIT, a New Jersey state agency. The Port Authority, controlled by New York and New Jersey, operates a small metro system between the two states. Various companies operate buses in the suburbs.

#### Governance

Members of the MTA's governing board are appointed by the New York State Governor and representatives of counties that MTA serves.

- Joseph J. Lhota, Chairman and CEO
- Howard R. Permut, President of MTA Metro-North Railroad
- William Wheeler, Director of Special Project Development & Planning





(millions) City		Surface area (km2) City: 641 Metro: 15,403			Density (res/km2) City: 9,200 Metro: 400	
Metropolit	an 2	Metropolitan residentia 2000 201 <b>6.2 6</b>		growth trajectory (millions) 9 7.5		ons)
Annual 2000	riders	hip (millio	ons)	DDT	Forrios	
208 2010	-	UNK	<b>1,300</b>	<b>–</b>	–	

Bus

1,197

BRT

7

#### Stations, metropolitan region

Commuter

9

2000		
HR metro	LR metro	Commuter
52	-	-
2010		
HR metro	LR metro	Commuter
108	-	18
under co	onstructio	n
HR metro	LR metro	Commuter
+0	+0	+0

LR metro

HR metro

640

4 Mi 8 Km

#### **TRANSANTIAGO**

#### Responsibilities

Transantiago was created in 2007 to unify the city's bus and metro systems. It contracts out the operations of the metro and bus systems to a mix of public and private entities.

Santiago

**Other transit agencies in the region** The Metro is operated by the Empresa de Transporte de Pasajeros. Various private entities operate buses. MetroTren, a division of the National Chilean Railway, operates the commuter rail.

#### Governance

Ferries

Transantiago is an administrative program of the national Ministry of Transport and Telecommunications, and reports directly to the Minister.

#### Summit representative

• Patricio Pérez, Head

#### Maps





São Paulo

TRANSIT LEADERSHIP SUMMIT 23



#### 4 Mi 8 Km

Residents (millions) City 5.1 Metropolitan 5.1		Surface area (km2) City: 712 Metro: 712 Metropolitan residential gr 2000 2010 4.0 5.1		Density (res/km2) City: 7,100 Metro: 7,100 rowth trajectory (millions) 2020		
						Annual
HR metro	LR met	ro Co	mmuter	Bus	BRT	Ferries
383	14	-		1,187	-	-
2010 HR metro	LR met	ro Co	ommuter	Bus	BRT	Ferries
755	37	-		1,167	-	-

#### Stations, metropolitan region

2000		
HR metro	LR metro	Commuter
51	14	-
2010		
HR metro	LR metro	Commuter
99	43	-
under	constructi	on
HR metro	LR metro	Commuter
+10	+0	+0

#### **SINGAPORE LAND TRANSPORT AUTHORITY**

Responsibilities

LTA plans all land transportation including public transit (Metro, light rail and bus) and highways in Singapore.

Other transit agencies in the region The operations of metro, bus and taxi are assumed by two private companies, SMRT and SBS Transit.

#### Governance

LTA is an agency of the national government.

- Lew Yii Der, Group Director of Corporate Planning & Research
- Choi Chik Cheong. Deputy Director of Knowledge Management







City: 187		City: 4,500
Metro: 6,30	4Density	Metro: 200
Metropolitan r	esidential g	rowth trajectory (millions)
2000	2010	2020
1.1	1.2	1.3
hip (millio	ns)	

2000 <sup>HR metro</sup> 284	LR metro	Commuter <b>61</b>	Bus 259	BRT	Ferries <b>UNK</b>	
2010 <sup>HR metro</sup> 310	LR metro 38	Commuter <b>70</b>	<sup>Bus</sup>	BRT	Ferries <b>3</b>	

+0	+8	+2
HR metro	LR metro	Commuter
under	construct	ion
2010 HR metro 100	LR metro 98	Commuter 50
2000 HR metro 100	LR metro 98	Commuter 50

#### Responsibilities

SL plans all public transit (metro, light rail, bus, commuter rail) in the region. Operations are run by private operators through competitve bidding processes.

Other transit agencies in the region The Metro is currently operated by MTR. Veolia operates the tram. Waxholmsbolaget operates ferries.

#### Governance

SL is owned by the Stockholm County Council.

- Anders Lindström, Managing Director
- Henrik Normark, Director of Business Development





under construction

LR metro

+10

Commuter

+0

HR metro

+5

#### WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (METRO)

Washington, DC

#### Responsibilities

WMATA plans and operates all metro and most bus in the region.

Other transit agencies in the region Commuter rail is planned and operated by VRE and MARC, two publicly owned companies under the jurisdiction of Virginia and Maryland.

WMATA is funded by its member counties and run by a board consisting of members appointed by MD, DC, VA, and the federal

- Richard R. Sarles, General Manager and
- Carol Kissal, Deputy General Manager for Administration

### Key metrics

Residents, central city and metropolitan area (millions), 2010

#### Car ownership per capita (city)









#### Annual ridership, by mode, 2000, 2010

#### Average distance between stations (km)



#### Year metro opened

												São Paulo			
												Santiago	Los	Angeles	
London				New York		Barcelona		Stoc	Stockholm			Washington			
1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
												0	C1		
											Wexic	o City	Singap	ingapore	
											Montreal	Hong	Kong		



#### Stations, by mode, 2000, 2010, and under construction

#### Average annual ridership per station, by mode, 2010







**Commuter rail** 

2000 2010 under const.







#### Additional data about Metro systems only (heavy-rail and light-rail)



#### Operating budgets: Revenues as a percentage of costs







































