### City of Vancouver Public Bicycle Share System: Update and Next Steps

Presented to Vancouver City Council June 13, 2012 Sadhu Johnston, Deputy City Manager



### To discuss today

- 1. Background
- 2. Business/financial model
- 3. Project status
- 4. Key success factors and risk mitigation
- 5. Next steps

# 1. Background

## Why a public bike share system?

# Public bike system + cycling infrastructure = increased cycling, health benefits & GHG reductions.

### **Barcelona**

- 2005 to 2007: cycling mode share: from 0.8% to 1.8%.
- 10% of system users report their bike trip has replaced a car trip.

### Paris Paris

- 2007: bike share launched.
- Cycling mode share increased to 2.5% from 1.0% in 2001.

### Lyon

- Cycling mode share increased from less than 1% to 5% in first 2.5 years.
- Estimates that 7% of bike share trips replace a car trip.



### What is a public bike share system?



- Extension of existing transit system.
- Network of short-term self-service bicycle stations.
- Designed for short distance one-way urban trips.



# **Direction from Council**

### July 22, 2008 Council resolution

- THAT staff report back, including costing, on implementation of a public bike system in the City of Vancouver.

### • March 24, 2009 Council resolution

 AND BE IT FURTHER RESOLVED THAT Council direct staff to develop and issue an RFP for a Public Bike Share system within Vancouver for implementation by the summer of 2010 and that staff report back on this RFP with respect to financial and staffing implications, as well as coordination with, or impacts to, existing contracts and business units.

### • July 12, 2011 Greenest City Action Plan "Green Transportation" priority

 Pursue the development and installation of a bike-share program in Vancouver's downtown and other high-potential cycling areas. Multiple bike-share stations would provide easy access to affordable rental bikes for short trips around the city.



### Demo

http://www.youtube.com/watch?v=1nCtbU7Svs0



## Large systems in place

	NO. BIKES,	LAUNCH	BUSINESS/ CUSTOMER	HARDWARE/
СІТҮ	2011	YEAR	SERVICE	SYSTEMS
Montreal	5,050	2009	Bixi	Bixi
London, UK*	6,000	2010	Serco	Bixi
Washington, DC*	1,100	2010	Alta	Bixi
Minneapolis	700	2010		Bixi
Melbourne	600	2010	Alta	Bixi
Denver	500	2010		B-Cycle
Madison	350	2010		B-Cycle
Toronto	1,000	2011		Bixi
Boston	610	2011	Alta	Bixi
San Antonio	140	2011		B-Cycle
New York City*	10,000	2012	Alta	Bixi
Chicago*	3,000	2012	Alta	Bixi
Boulder	132	2012		B-Cycle



s \* Launching/expanding in 2012

## Background research/inputs into our work

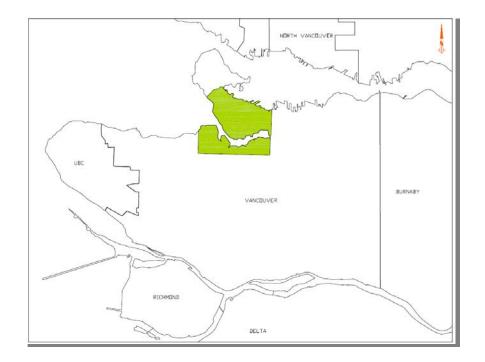
Staff has undertaken significant research, analysis and informationgathering.

- Translink Public Bike System Feasibility Study, March 2008.
- Regular information-sharing calls with network of approximately 20 peer cities through Urban Sustainability Directors' Network.
- Direct research with peer cities who have implemented or are in the process of implementing bike share systems.
- In- depth consultation with short-listed proponents.
- Consultation with potential system partners/supporters, e.g., UBC, Translink, BC Ministry of Transportation and Infrastructure.



### **Contemplated Vancouver system**

- 1,500 bikes, 125 stations.
- Downtown and metro core area.
- Integrated helmet system.
- Seven-gear bicycles.
- Expandable both within and beyond Vancouver borders.
- Proposal based on 2009 COV-Translink study.



System boundaries: Broadway, Arbutus & Main.



### **Stations**



- Placed every 2-3 city blocks.
- Each station accommodates approximately 20 bikes.
- Sited on public streets, sidewalks, plazas and parks, as well as on private lands.



### Station siting considerations

### **Opportunities**

- 1. Connections to transit.
- 2. High pedestrian areas.
- 3. Commercial/shopping districts.
- 4. Parks and community centers.
- 5. Educational institutions.

### **Considerations**

- 1. Competing interests for space (e.g., food carts).
- 2. Emergency access.
- 3. Utilities access.
- 4. Pedestrian volumes & flow.
- 5. Public amenities & existing infrastructure.
- 6. Building access and maintenance.
- 7. Private bike rental outfits.

## **Typical pricing scheme (Toronto)**



#### SUBSCRIPTION FEE OPTIONS

Annual	\$95.00
30-Day	\$40.00
72-Hour	\$12.00
24-Hour	\$5.00
+	
ACCESS FEES	
First 30 mins	\$0.00
Up to 60 mins	\$1.50
61 - 90 mins	\$4.00
Subsequent 30 minute periods	\$8.00

COST OF 8-HOUR RENTAL BY TOURIST ~ \$115. (By comparison, full day bike shop rental ~ \$25 - \$40.)

### **Key observations**

- Public bike share will help the City move toward increased use of cycling as a popular means of transportation.
- Some level of public support required by public bike share systems.
- Risks must be managed:
  - young industry and evolving business models,
  - success or failure relies on volume of ridership,
  - user fees primary source of system operating revenue,
  - helmets system unproven, increases risk.



### 2. Business/financial model

### **Business model options**

#### LESS CITY INVESTMENT, CONTROL AND RISK

#### MORE CITY INVESTMENT, CONTROL AND RISK

#### 1. THIRD PARTY OWNER-OPERATOR

Third party private or non-profit entity owns, funds and operates system.

City provides cash, inkind, loan guarantees and/or policy/ regulatory support.

Toronto (private) Paris (private) Minneapolis (nfp) Denver (private) NYC (private)

#### 2. CITY OWNS/THIRD PARTY OPERATES

Third party entity funds and operates system.

City owns system, provides cash, in-kind, and policy/ regulatory support.

Washington DC

**Boston** 

#### 3. CITY OWNS & OPERATES

City owns, funds and operates system.

Barcelona



# **Roles and responsibilities**

### **Owner-Operator**

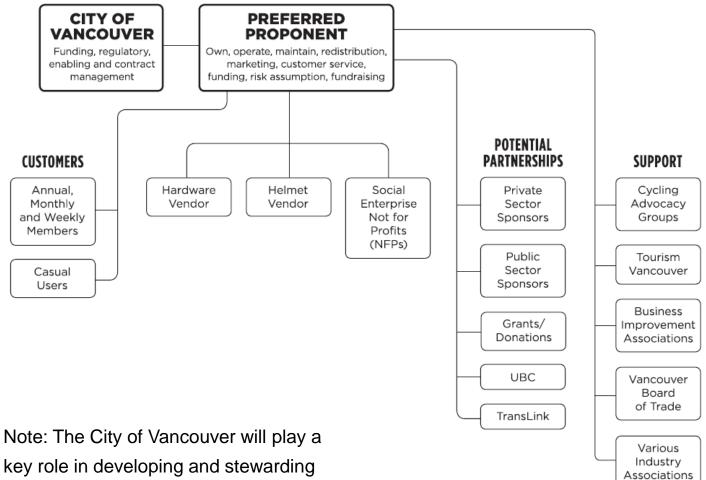
- 1. Own, operate and maintain equipment.
- 2. Bike and helmet redistribution systems.
- 3. Marketing, education and PR.
- 4. Customer service (call centre, website, etc.).
- 5. Funding and fundraising (sponsorships, user fees).
- 6. Primary risk assumption (financial, liability).

### **City of Vancouver**

- 1. Contract management.
- 2. Funding (some up-front capital, some ongoing).
- Regulatory (e.g., Zoning and Development Bylaw, Sign Bylaw, Street and Traffic Bylaw).
- 4. Enabling/supporting (e.g., station siting, communications and PR).



## **Roles and responsibilities**



partnership and support relationships.

## **Costs to the City: System support**

- Operator is responsible for system funding.
- City can support in various ways, specifics to be determined through contract negotiations; estimated order-of-magnitude cost to City is \$1.9 million p.a. (total cost amortised over ten years).
  - 1. Direct support options:
    - a. Up-front capital contribution.
    - b. Annual parking meter fee exemptions.
    - c. Annual off-street permits and licenses fee exemptions.
  - 2. Indirect support options:
    - a. Station siting.
    - b. Signage and wayfinding.
    - c. Marketing and communications.

Annual exemption amounts can be reduced as system stablises over time.



## **Costs to the City: Staffing**

- In-house staff will be required to support public bike share system.
  - Contract negotiation & contract management.
  - Station siting.
  - Regulatory and policy support.
  - Community engagement.



# 3. Project status

### **Procurement process**

### To date

- RFEOI issued in April 2011, six proponents responded.
- Short-listed two and undertook extensive evaluation process, working with:
  - the two proponents,
  - several peer cities,
  - potential local partners (Translink, UBC, BC Ministry of Transportation and Infrastructure).

### Current status

- Evaluating/in negotiation with preferred proponent Alta Bicycle Share.
- Plan to come to Council in Autumn 2012 with contract for Council approval.



# **Preferred proponent**



### Alta Bicycle Share

- System owner/operator (business operations, customer service).
- Would have primary relationship with City.
- Affiliated with Alta Planning + Design.
- Bixi (PBSC, Public Bike System Company)
  - Infrastructure & systems provider (bicycles, stations, pay stations).
  - Sub-contractor to Alta.
  - Current market leader in bike share systems.



### **Basis for selection**







- Business capacity. Business capacity and expertise, strength of underlying partnerships.
- 2. Business model. Viability of business/financial model, including degree of reliance on public funding.
- **3. Operational model**. Strength of the operational and systems design.
- 4. Ability to implement. Ability to implement effectively and on schedule.



4. Key success factors and risk mitigation

# **Risk themes**

- 1. Business viability
- 2. Operational viability
- 3. Financial
- 4. Legal
- 5. City staff resource requirements
- 6. City-owned land requirements
- 7. Reputational
- 8. Schedule







### Helmet requirement poses key risk

- No successful integrated helmet systems in place worldwide.
- Helmets impact ...
  - ridership,
  - capital costs, and
  - ongoing operating costs.





#### WELL OVER 50% OF TRIPS ARE SPONTANEOUS THEREFORE INTEGRATED HELMET SYSTEM IMPERATIVE.





**VENDING MACHINES & RETURN DEPOTS** 





**ON-BIKE** 







DISPOSABLE AND/OR SUBSIDISED HELMETS

### Helmets: International experience

### • Melbourne (Alta)

- Helmets subsidized \$5 helmet purchase, \$3 rebated if returned.
- Two vending machines in place.
- Introducing \$20 helmet purchase with membership.
- Brisbane (JC Decaux)
  - City fully subsidized 400 helmets, remain on bikes, no cleaning.
- Auckland (NextBike)
  - Has closed 170-bike system; current RFEOI exploring new system.
- Mexico City (Clear Channel Outdoor)
  - Created a helmet law exemption for adults after first year of operations.
- Tel Aviv
  - Recently exempted adults in urban areas.



## **Key mitigation strategies**

- 1. Select strong owner-operator.
- 2. Contract award contingent on delivering acceptable helmet system plan.
- Dedicate sufficient staff resources to contract/relationship management and system support.
- 4. External expert panel:

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- Provide expert advice and a third-party perspective designing the business relationship and implementing the system.
- Seven individuals with expertise in complex procurement, infrastructure and transportation, from for-profit, public and academic sectors.
- 5. Comprehensive third-party review within two years of launch.



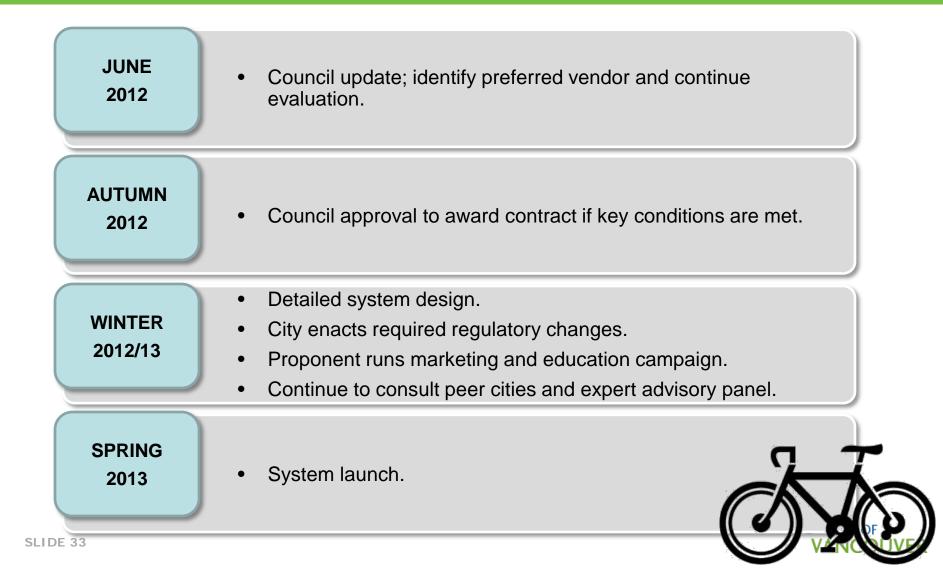




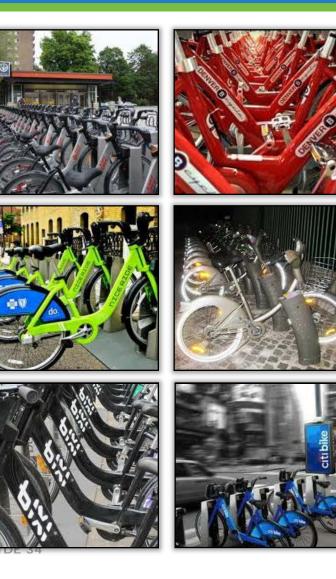
## 5. Next steps

Tim	eline			No ↓		C	
RESEARCH, RFEOI & PROPOSAL EVALUATIONS				NEGOTIATIONS & AWARD		SET-UP & LAUNCH	
JULY <u>2008</u>	MAR 2009	ОСТ <u>2010</u>	APRIL <u>2011</u>	JAN <u>2012</u>	JUNE <u>2012</u>	AUTUMN <u>2012</u>	JUNE 2013
Council direction to report back on feasibility and cost.	Council direction to enter procurement process and report back with financial and staffing implications.	Staff update to Council re: procurement process.	RFEOI issued, six respondents.	In-depth evaluation of short-listed proponents and significant analysis re: other cities' experiences.	Council update: Identify preferred vendor and continue evaluation.	Council approval to award contract if key conditions are met.	Target system launch.

## Next steps/timeline



### In conclusion



- Over 300 public bike share systems implemented worldwide.
- Significant opportunity to increase cycling in Vancouver.
- Have identified a preferred proponent.
- Working toward an agreement that will maximise benefits for citizens and visitors and minimise costs/risks to the City.
  - Will report back to Council in Autumn 2012.



### End