



Hamilton

# Sustainable Mobility and Active Transportation Programs in Hamilton

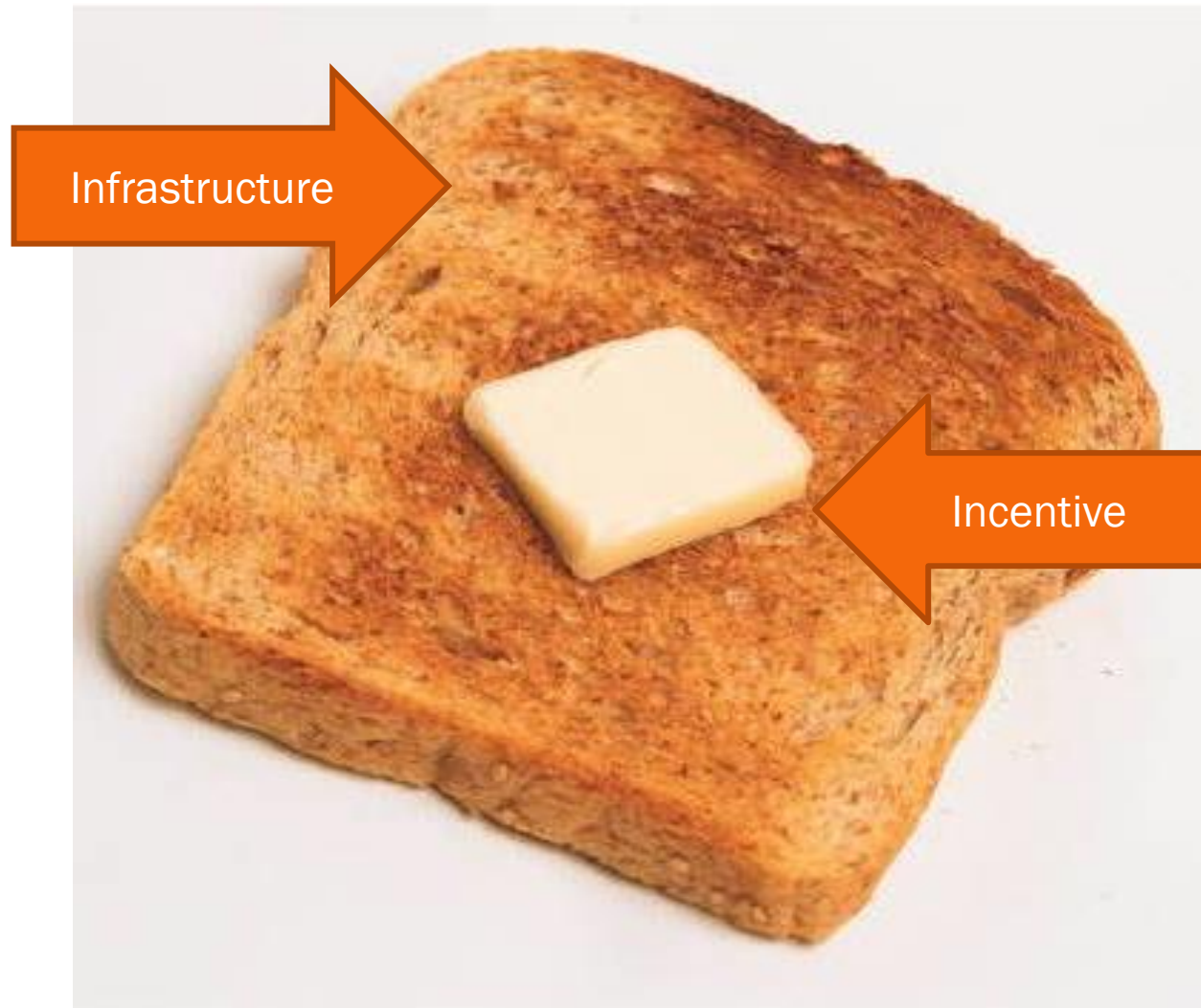


Clean Air Hamilton UWDW – Feb. 22, 2016

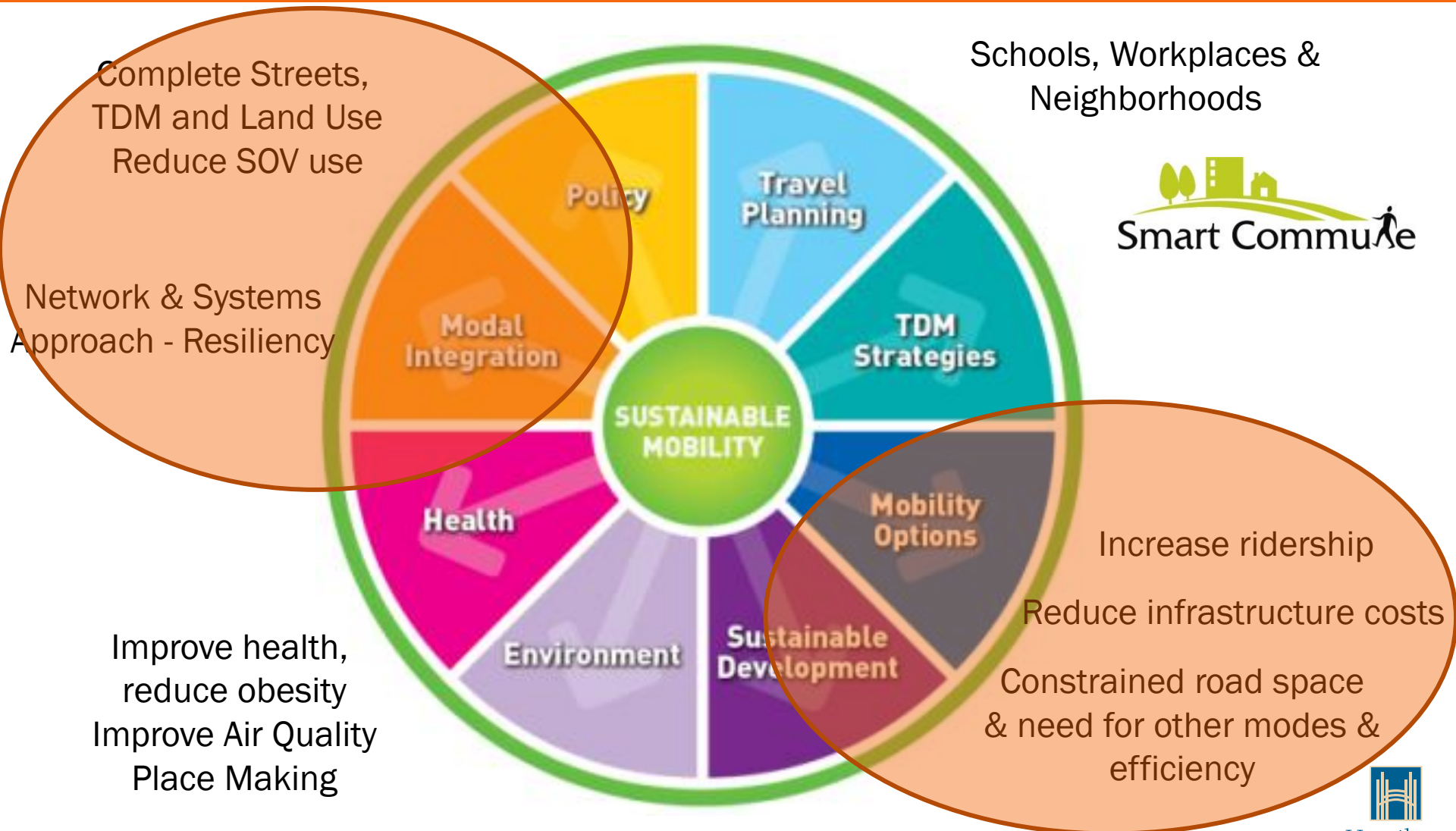
[Peter.Topaloivc@Hamilton.ca](mailto:Peter.Topaloivc@Hamilton.ca)

City of Hamilton – Transportation

# Overview



# Transportation Demand Management



# Making Infrastructure Work

Sometimes you have more to work with but infrastructure isn't always used as efficiently as it could be



Improving first/last mile commutes to transit or destinations is key – Low hanging fruit is investment in end of trip facilities





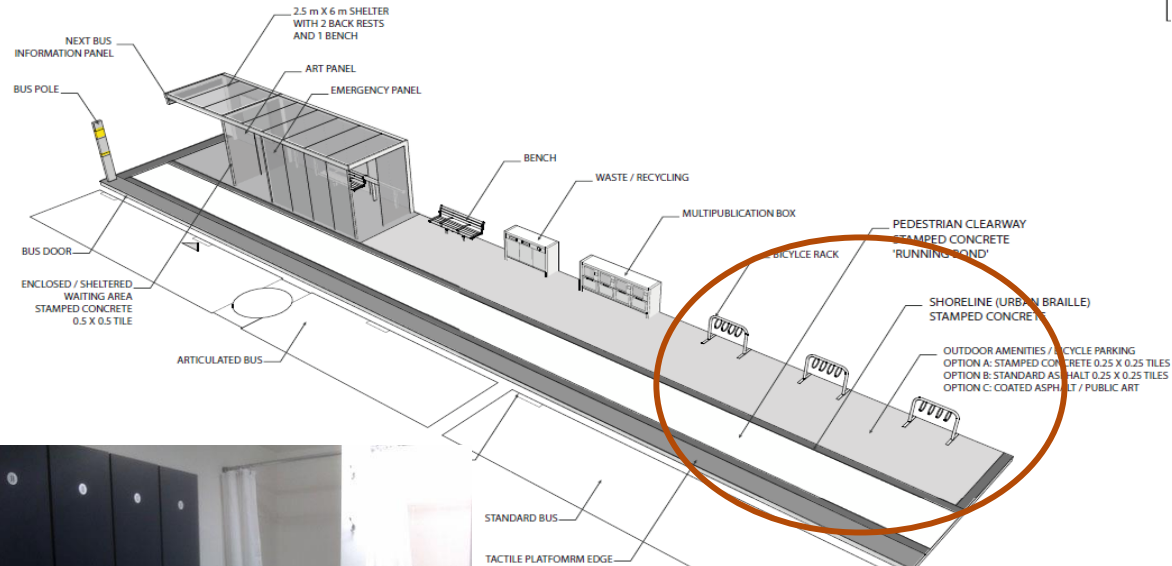
# Making Infrastructure Work

## Car-oriented End of Trip Facilities



# Making Infrastructure Work

## Cycling and Ped -oriented End of Trip Facilities



Things you already know – part b



# Making Infrastructure Work

## Cycling and Ped -oriented End of Trip Facilities





# Making Infrastructure Work

## Cycling and Ped -oriented End of Trip Facilities



Go Transit Covered Bike Parking vs.  
the reality at most bus stops



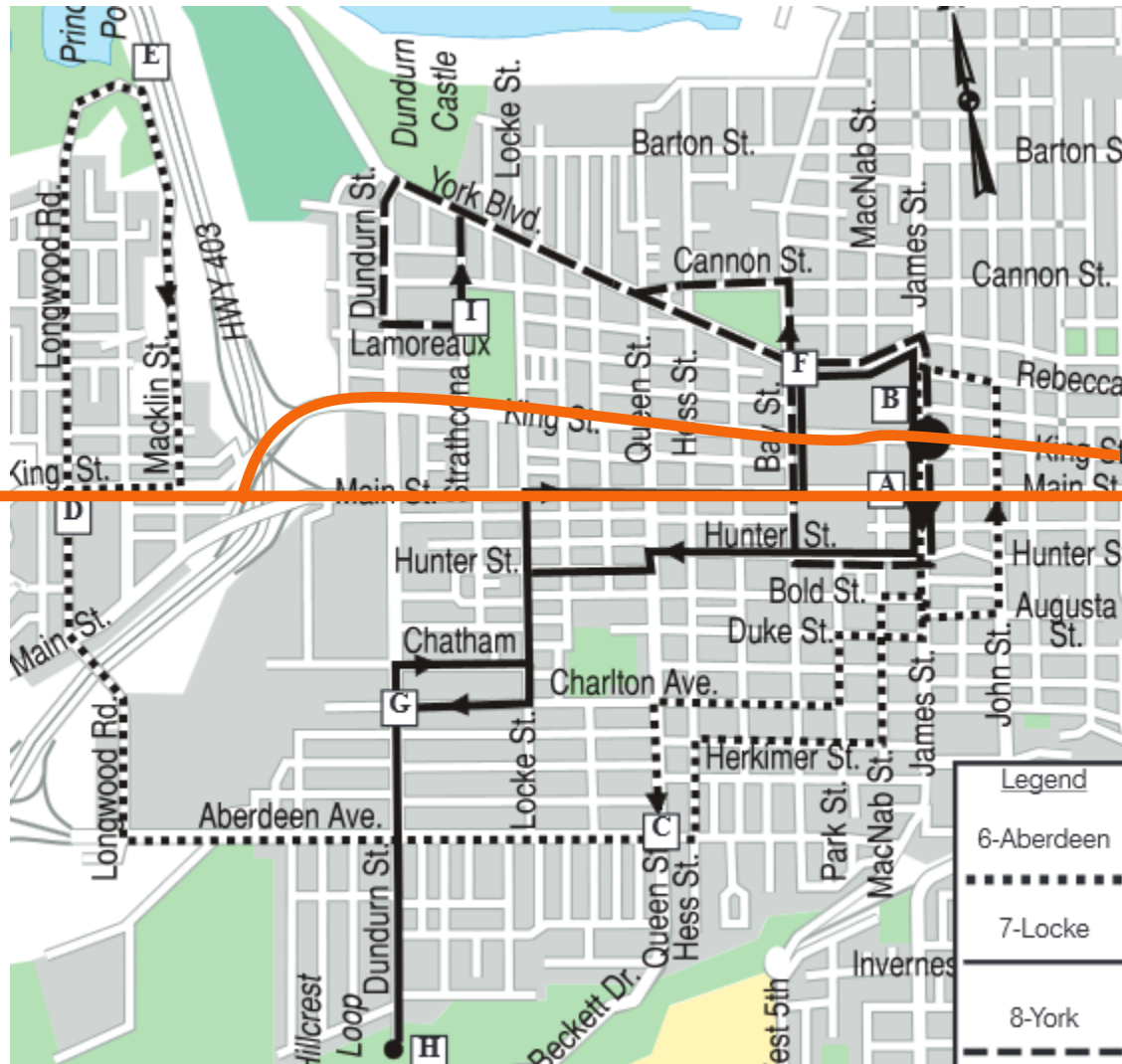
3 bikes  
max.



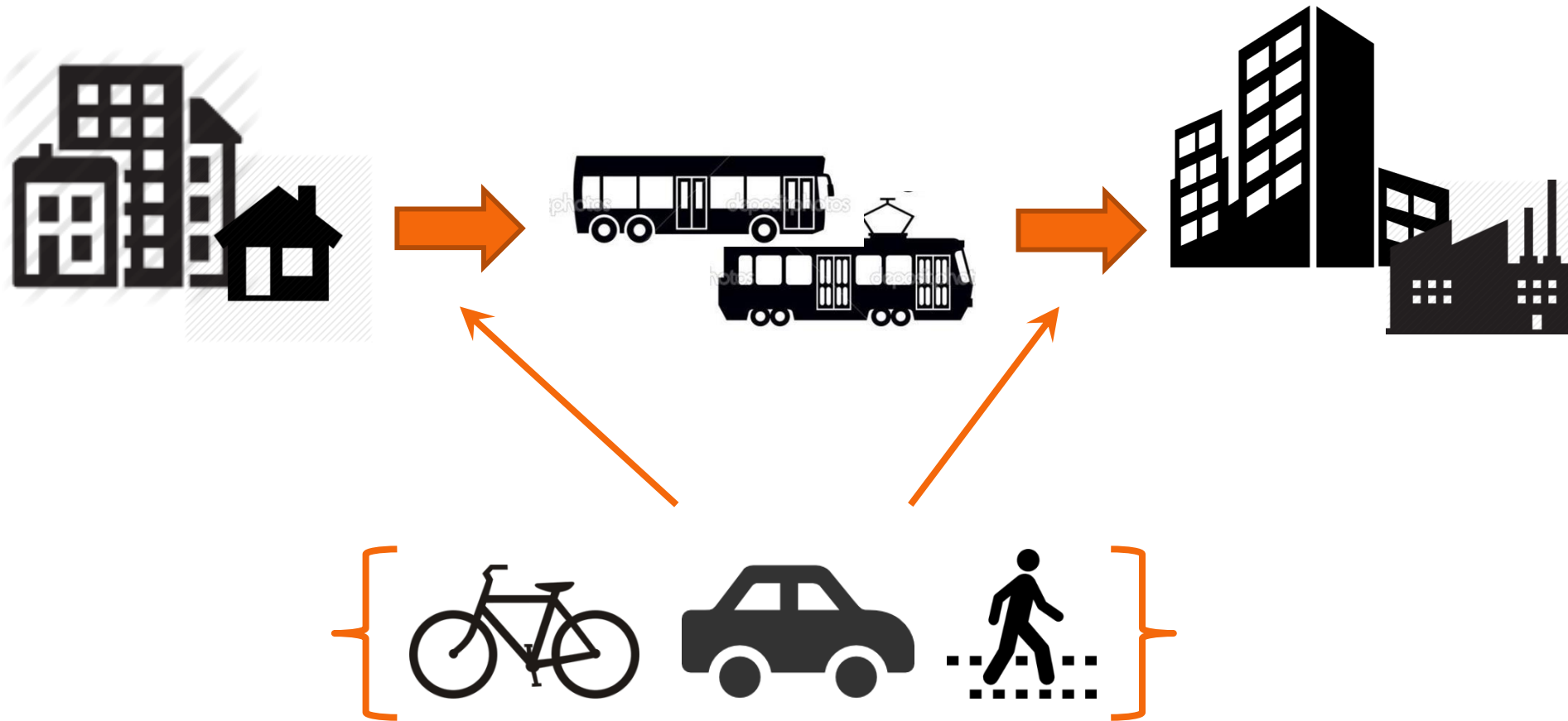
# How do we eliminate barriers to Transit/AT?

## Feeder Routes

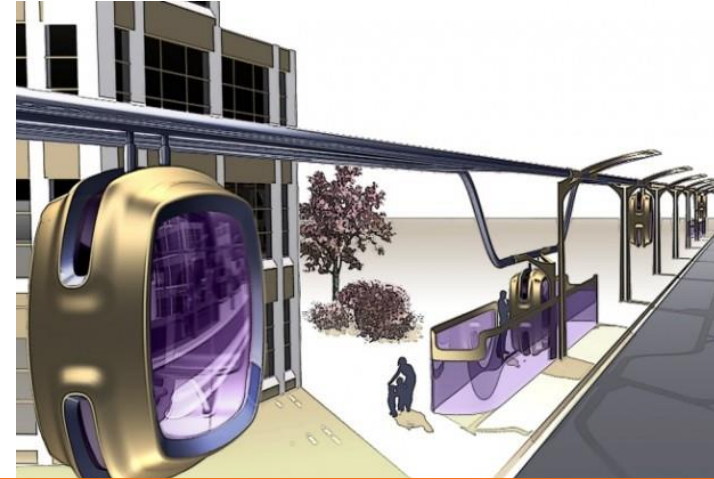
- ☞ Limited times of operation
- ☞ Limited frequency
- ☞ Need to make the most out of the route
- ☞ Don't respond to changes in demand



# How do we eliminate barriers to Transit/AT?



# Expanding the First/Last Mile Offer



Common Characteristic – Facilitation of 1-way, on-demand trips





# Bikeshare as on demand, 1-way transit



750 bikes | 100 hubs | Dundas to Stadium



# Evolution of Bike Share Programs

## What makes Social Bicycles' technology so unique?

Social Bicycles is revolutionizing bike share by pioneering the 'smart-bike' approach.



**DUMB BIKE - 1960**

free bikes,  
no payment,  
no protection,



**DUMB DOCK - 1994**

coin operated,  
no electronics,  
chain security



**SMART DOCK - 2005**

RFID locks,  
kiosk POS Interface,  
docking-point lock



**SMART BIKE - 2013**

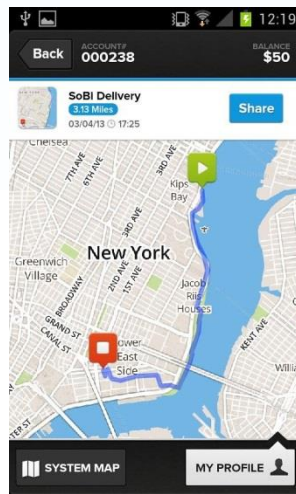
3G GSM connection,  
GPS, accelerometer,  
electronic lock

# Evolution of Bike Share Programs

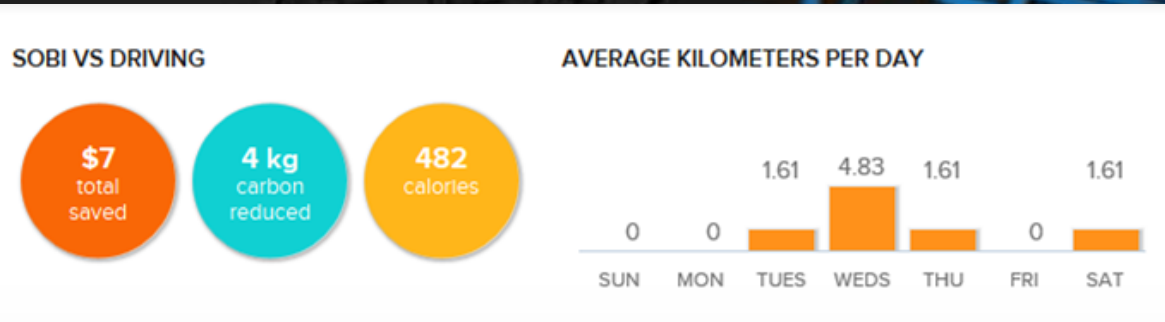
## Connectivity at **each bicycle**.

Each bike has a GPS enabled lock that works with regular bike racks.

Members can locate and reserve bikes using our web/mobile app, or using the bicycle keypad.



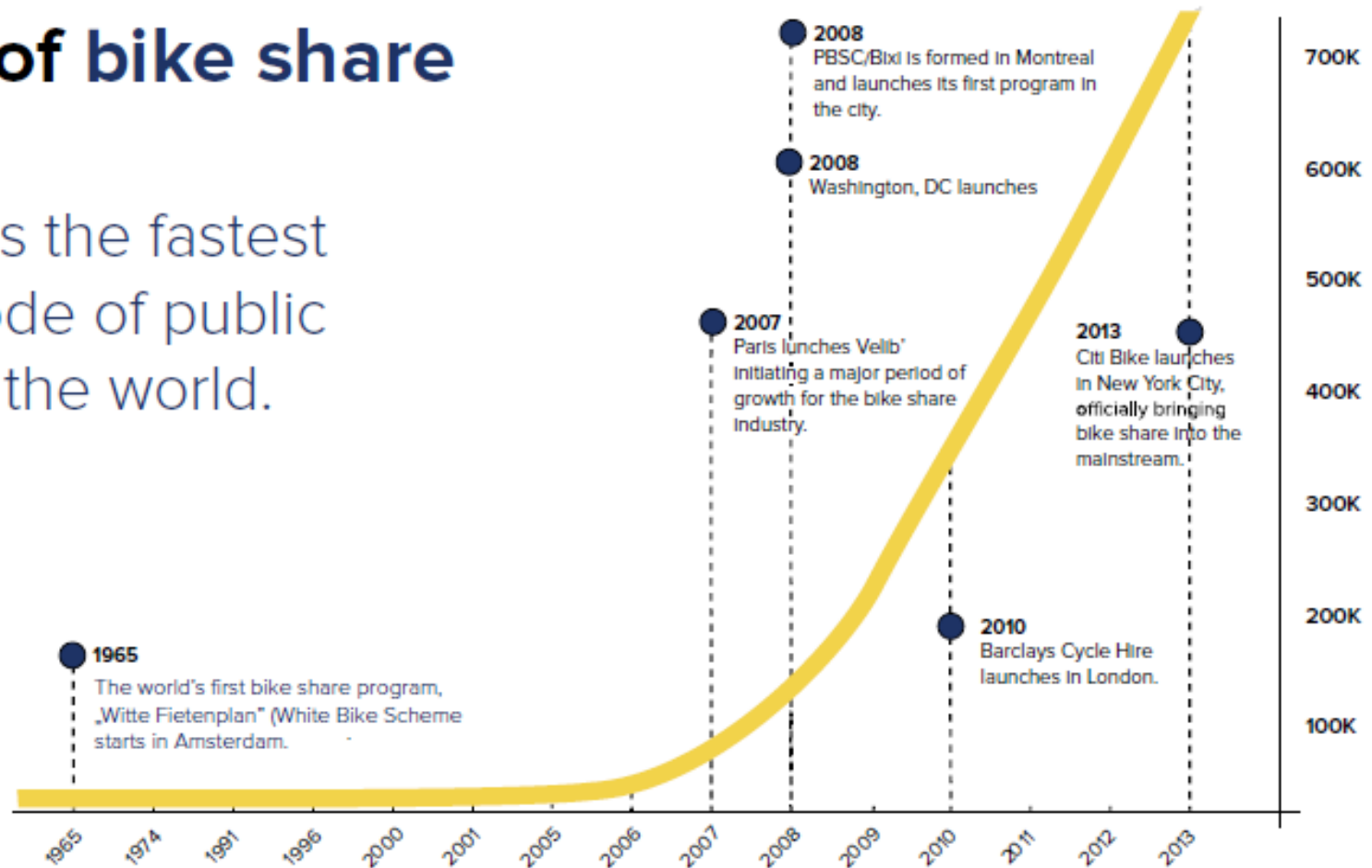
# Bikeshare and BIG Data



# Growth of Bike Share Programs

## The rise of bike share

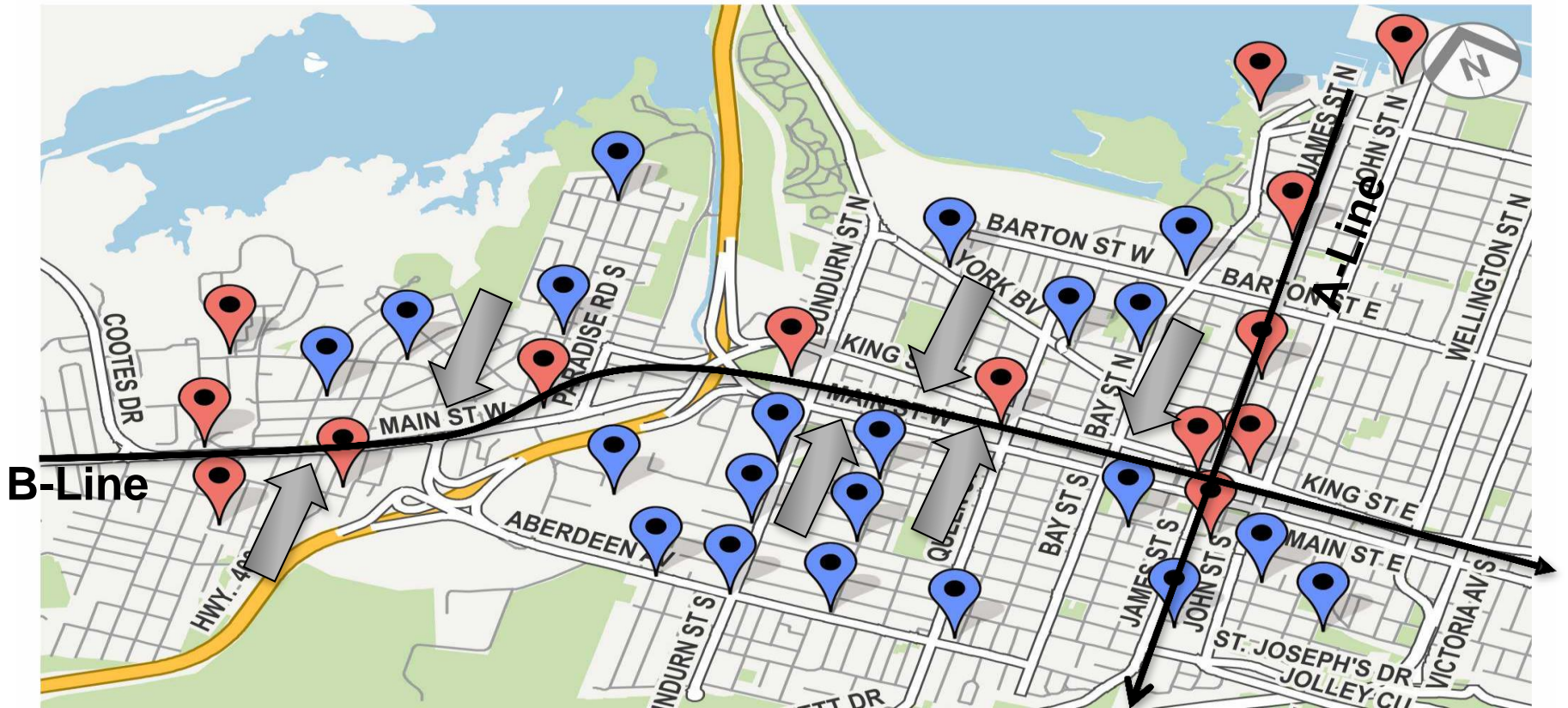
Bike share is the fastest growing mode of public transport in the world.



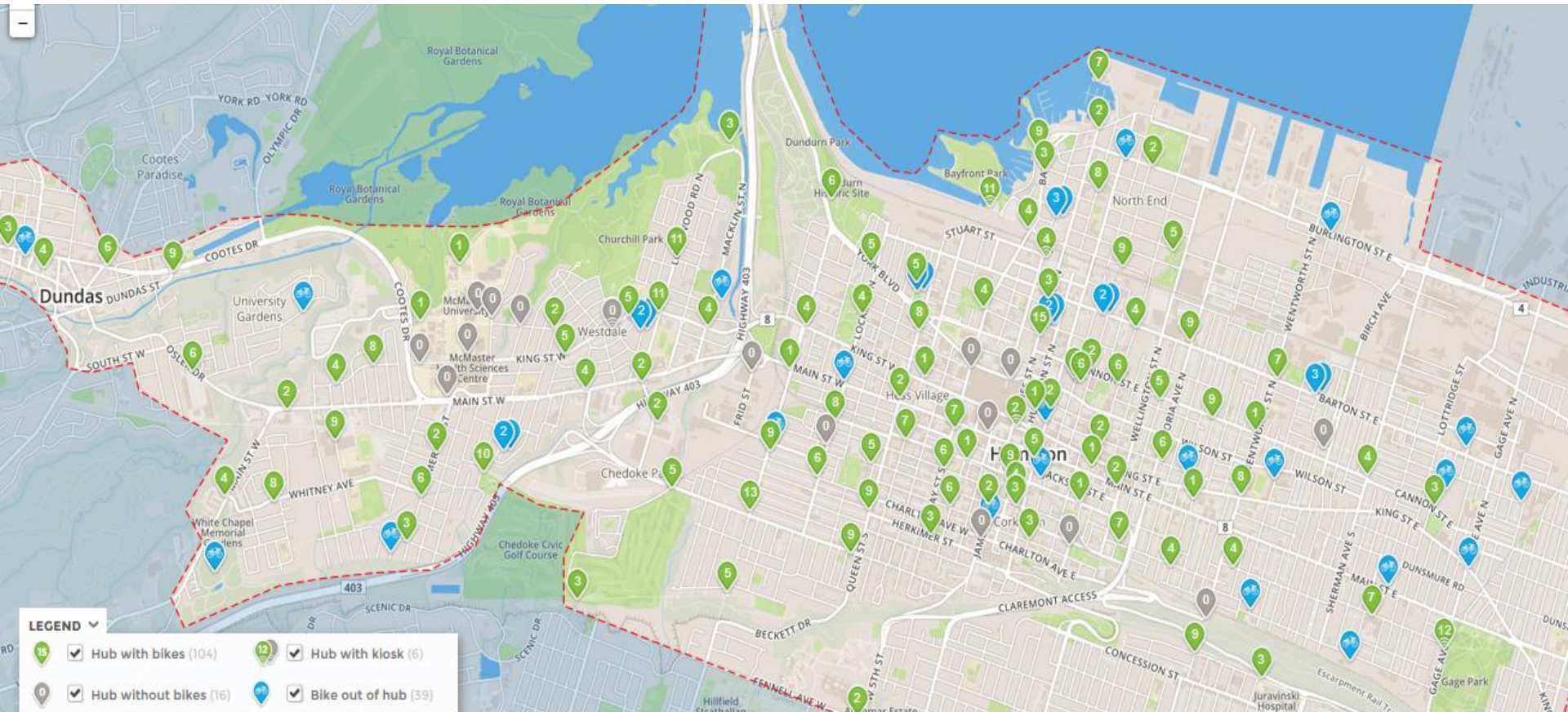


# Changing the Paradigm

One-way trip sharing as an on-demand rapid transit feeder



# Changing the Paradigm





# Making the Case

Traditional Costs: \$3500 – \$4500 per bike



x 40



x 400



Escarpment



Escarpment



# Making the Case

Traditional Costs: \$1500 – \$2500 per bike



x 112



x 750





# Making the Case

Operating Costs: \$500k with 40% recovered at usage fees



x 112



x 750



# Does it work and is it worth the investment?



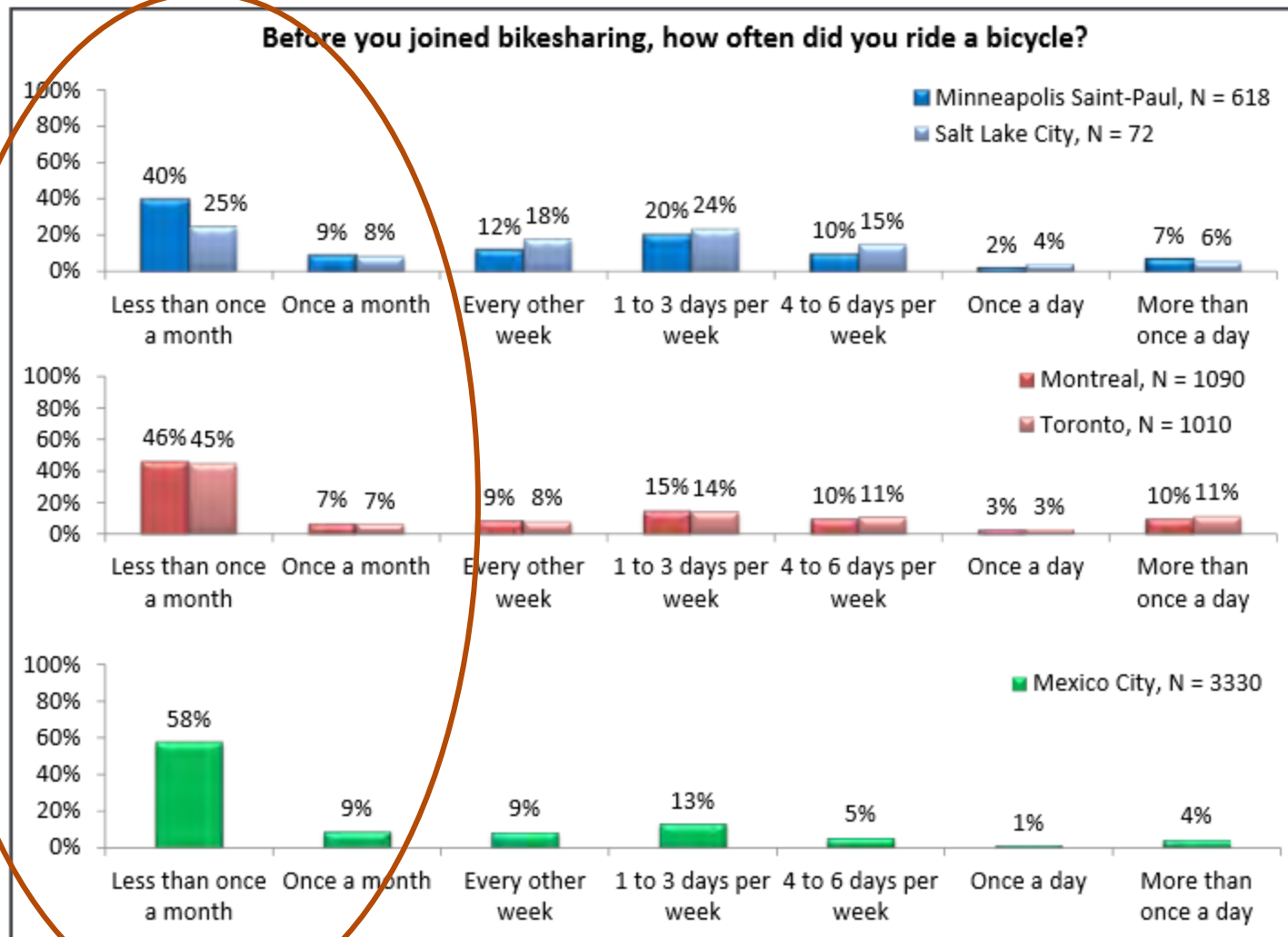
Minneapolis: Users report -  
10% increase in **rapid transit** use  
50% decrease in auto use  
10% increase in walking  
250,000 VKT reduction



Hamilton:  
First year:  
9000+ users  
220,000 trips  
450,000 km travelled

# Does it work and is it worth the investment?

Bikeshare attracts a significant amount of infrequent cyclists



**Figure 14. Bicycle Riding Before Joining Public Bikesharing**



# Bikeshare and Carshare are for BIG markets only?



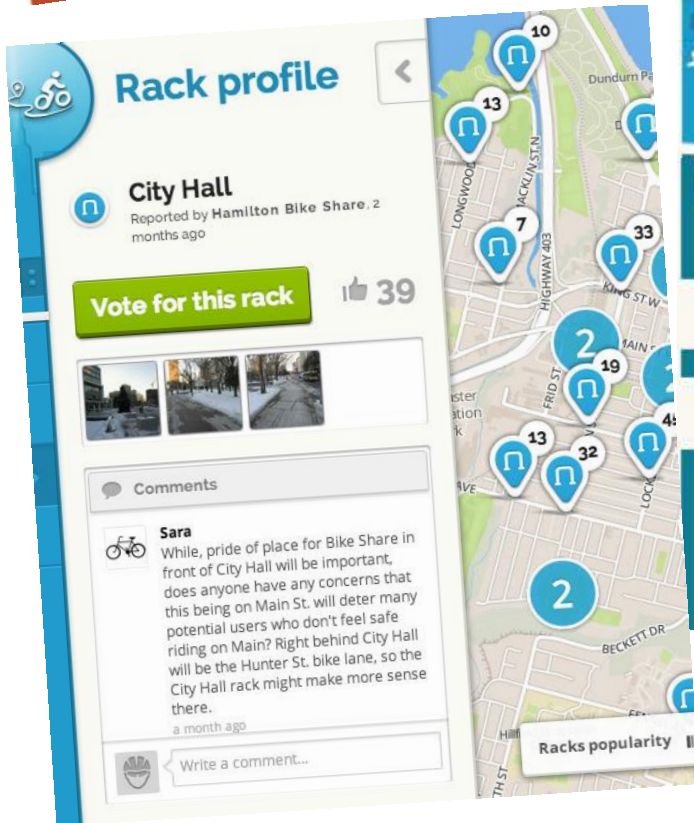
# Community engagement is vital

## OVERALL

3000 PEOPLE ENGAGED

500 PEOPLE VOTED

Through our intensive public engagement strategy, a total of 3000 people were engaged and 500 of them voted on and proposed bike share



## COMMUNITY

11 MAP LOCATIONS

301 STICKERS PLACED

There were 11 maps strategically placed within the city to ensure that a wide range of demographics were exposed to the plan and could give their input. These maps received 301 votes and proposals for hub locations by an average of 150 people.



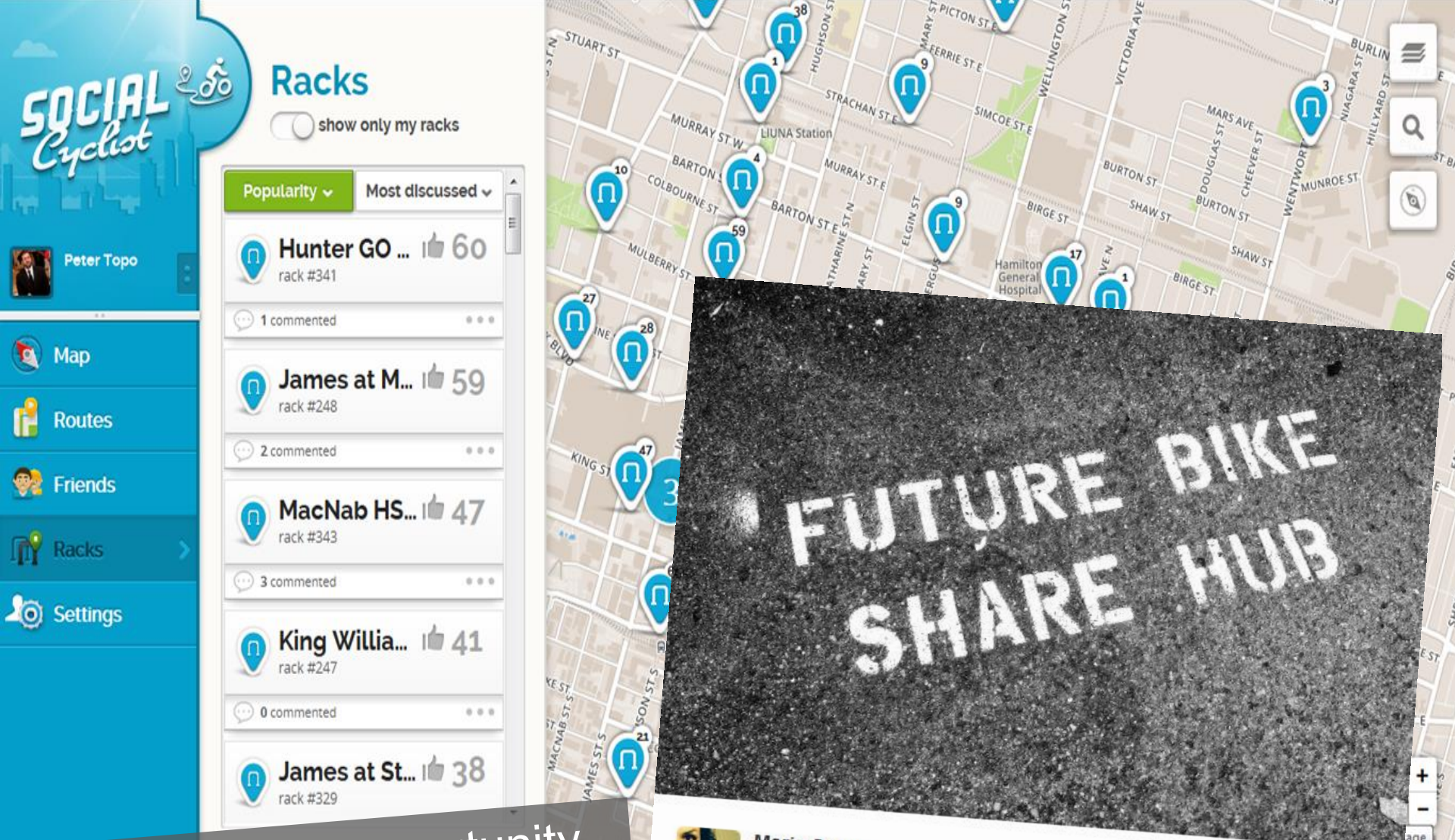
## SOCIAL CYCLIST ONLINE APP

759 UNIQUE VISITS

1945 VOTES PLACED

The Social Cyclist app was used to accumulate 1945 location votes and suggestions from 275 citizens in the Hamilton area. The app also received 759 unique visits throughout the engagement period.





Seize every opportunity  
for engagement, beyond  
the engagement period



**Maria Geleynse** @MariaGeleynse · Jun 23  
Love this!! Seen at Locke & Charlton. @SoBiHamilton #bikeshare  
#LockeSt #HamOnt [pic.twitter.com/eL8q3iMRoy](https://pic.twitter.com/eL8q3iMRoy)



# Supporting Infrastructure

Separated Bike Facilities – Cannon St. Bike lane pilot  
(400 - 1000 trips/day)



# Supporting Infrastructure

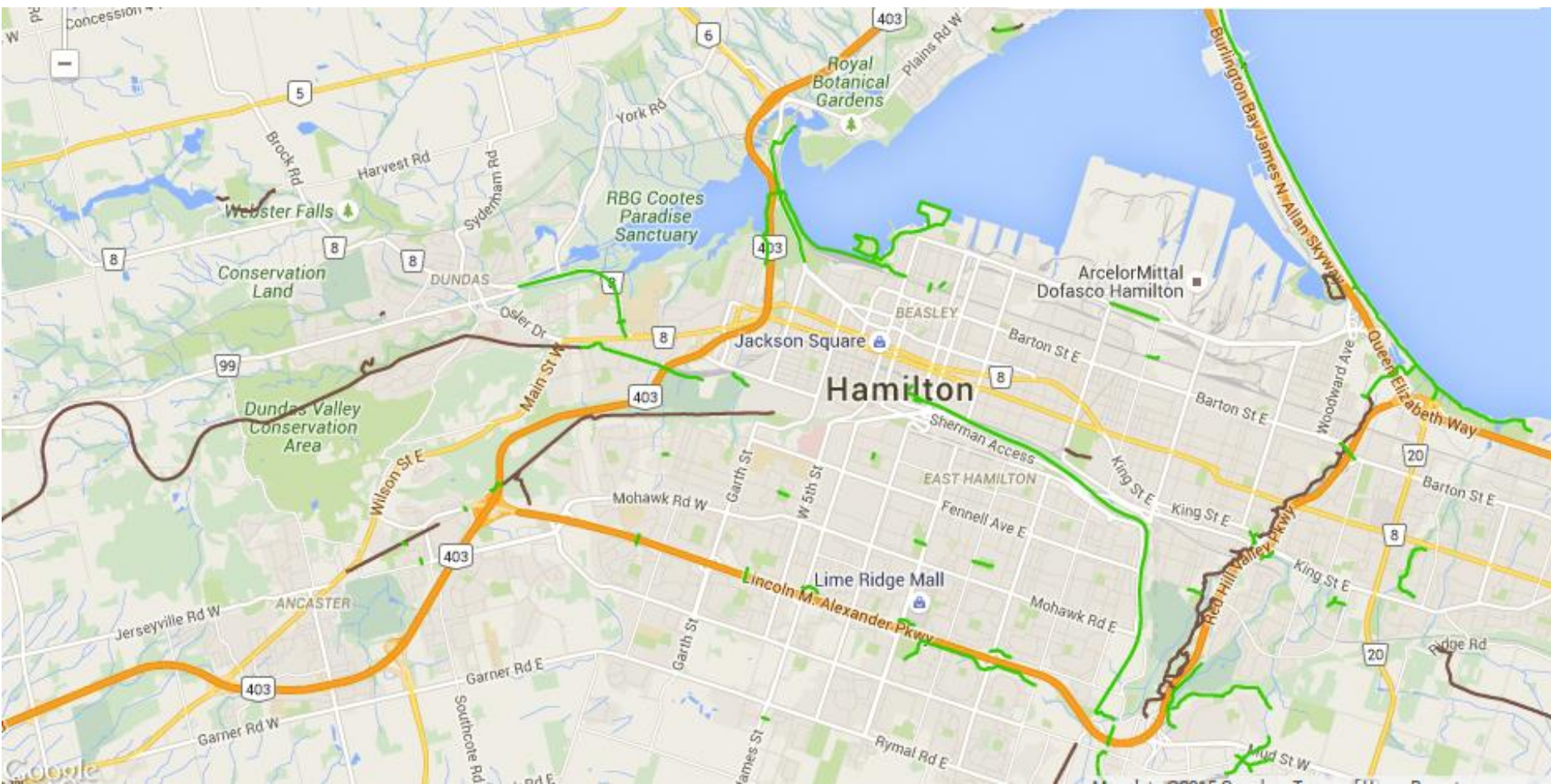
Separated Bike Facilities – Cannon St. Bike lanes  
Community led initiative with City support





# Supporting Infrastructure

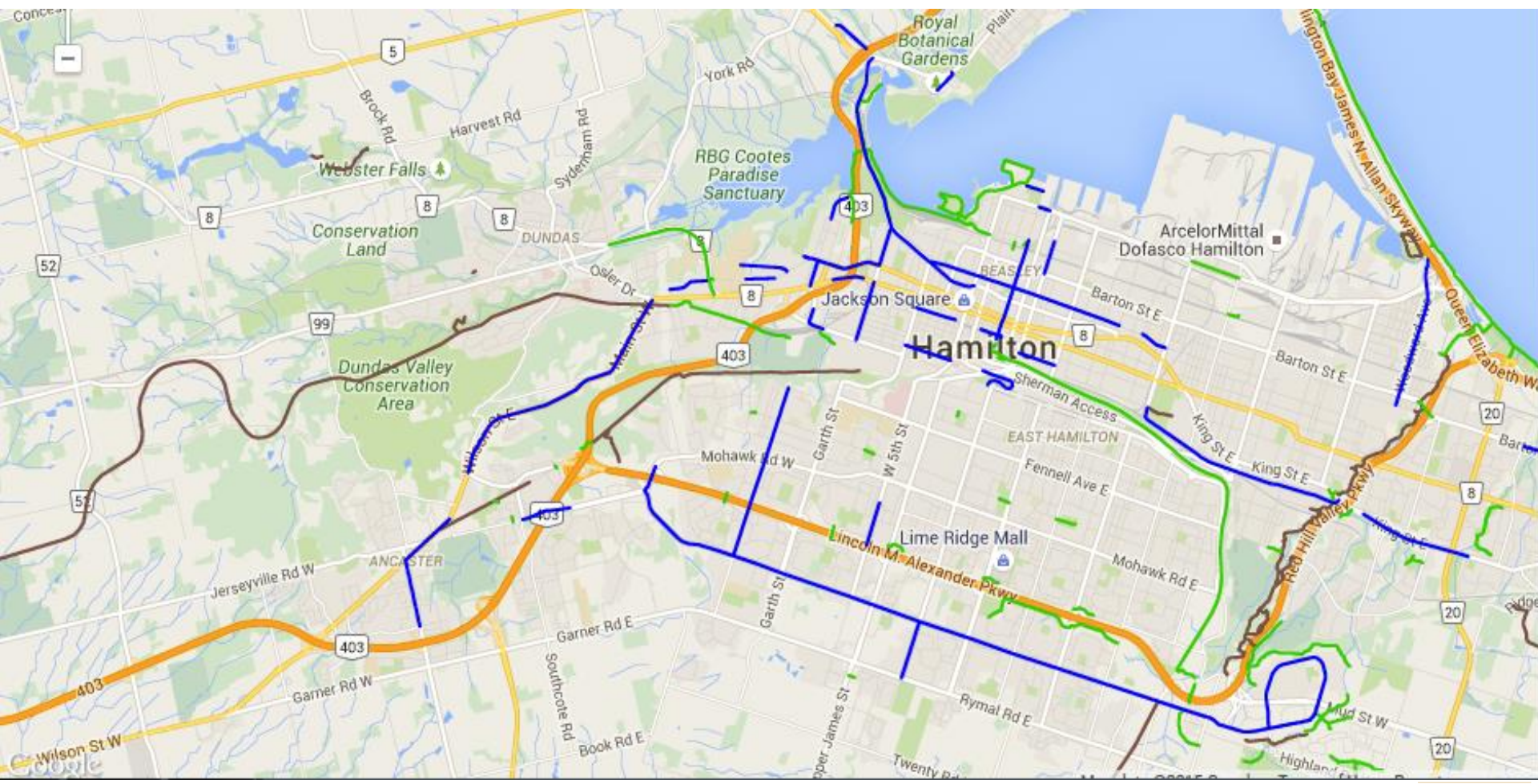
## Trail Network





# Supporting Infrastructure

Trail network with bike lane overlay (incl. Cannon Street)





# The Complete Streets Balancing Act

Road Diet:  
4 lanes to 3 lanes

Bike Lane added

JUL/13/2013









# The Complete Streets Balancing Act

## York Boulevard

Wider sidewalks  
and new store  
frontage

Green Streets &  
landscaping  
improvements

Transit bays  
provide better  
access

After

Before

Bicycle lanes &  
bike parking

Higher visibility  
street crossings

# The Complete Streets Balancing Act

## York Boulevard to the West



Mid block crossings installed to facilitate crossing the street through the boulevard

Buffered bike lanes help contribute to the complete street along the entire length

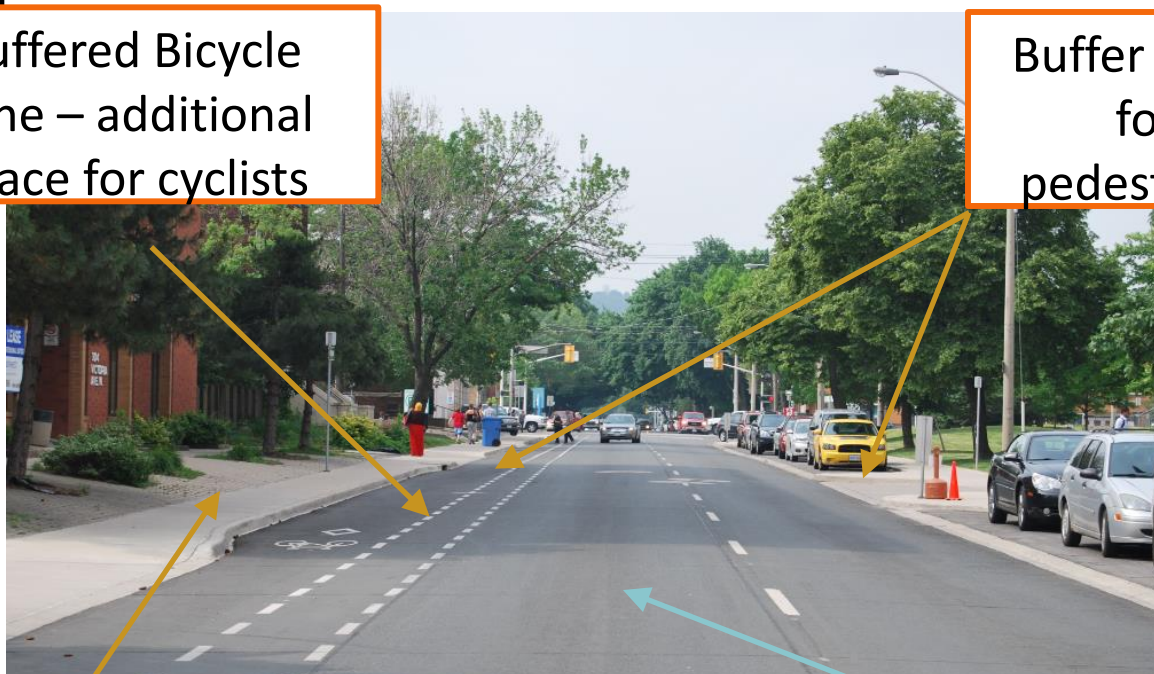


# The Complete Streets Balancing Act

## Applying the Complete Streets approach – Victoria Ave

Buffered Bicycle Lane – additional space for cyclists

Buffer space for pedestrians



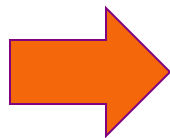
Improved surface and pedestrian clear zone

Reduction of travel lanes and lane widths



# The Complete Streets Balancing Act

## Strategic Road Safety program (100+ enhanced crosswalks)



**From tactical urbanism to City action**

# Changing the Paradigm — Current Projects

## North End Traffic Management Plan



Bump-outs / Bicycle Boulevards/  
2-way conversions

**Reduce speed limit on local roads with  
supporting physical measures**

# Changing the Paradigm – Current Projects

## Silver Designation & Recognition





# Changing the Paradigm — Current Projects

## Smart Commute Hamilton

**Hamilton's workplace TDM program in partnership with Metrolinx, operated by the City.**

**Interest and success has been on the rise in the last 2 years**



New Employers in 2014:

**3**

Total Employers:

**20**

Percentage increase:

**18%**

New Employees in 2014:

**1,070**

Total Employees:

**90,465**

Percentage Increase:

**1%**

Total Metrolinx Funding:

**\$100,000**

## Apply for Certification



## Active and Sustainable School Transportation Certification Program

A Toolkit to Support Environmental Initiatives in Hamilton Schools



# ASST Certification

**30  
Schools**



**30  
STPs**



**13  
Level 1**



**Next  
Steps**



**450  
Actions**



**17  
Level 2**

## Certificate of Achievement

This Certificate is awarded to

In recognition for efforts towards Active and Sustainable School Transportation

### Level One

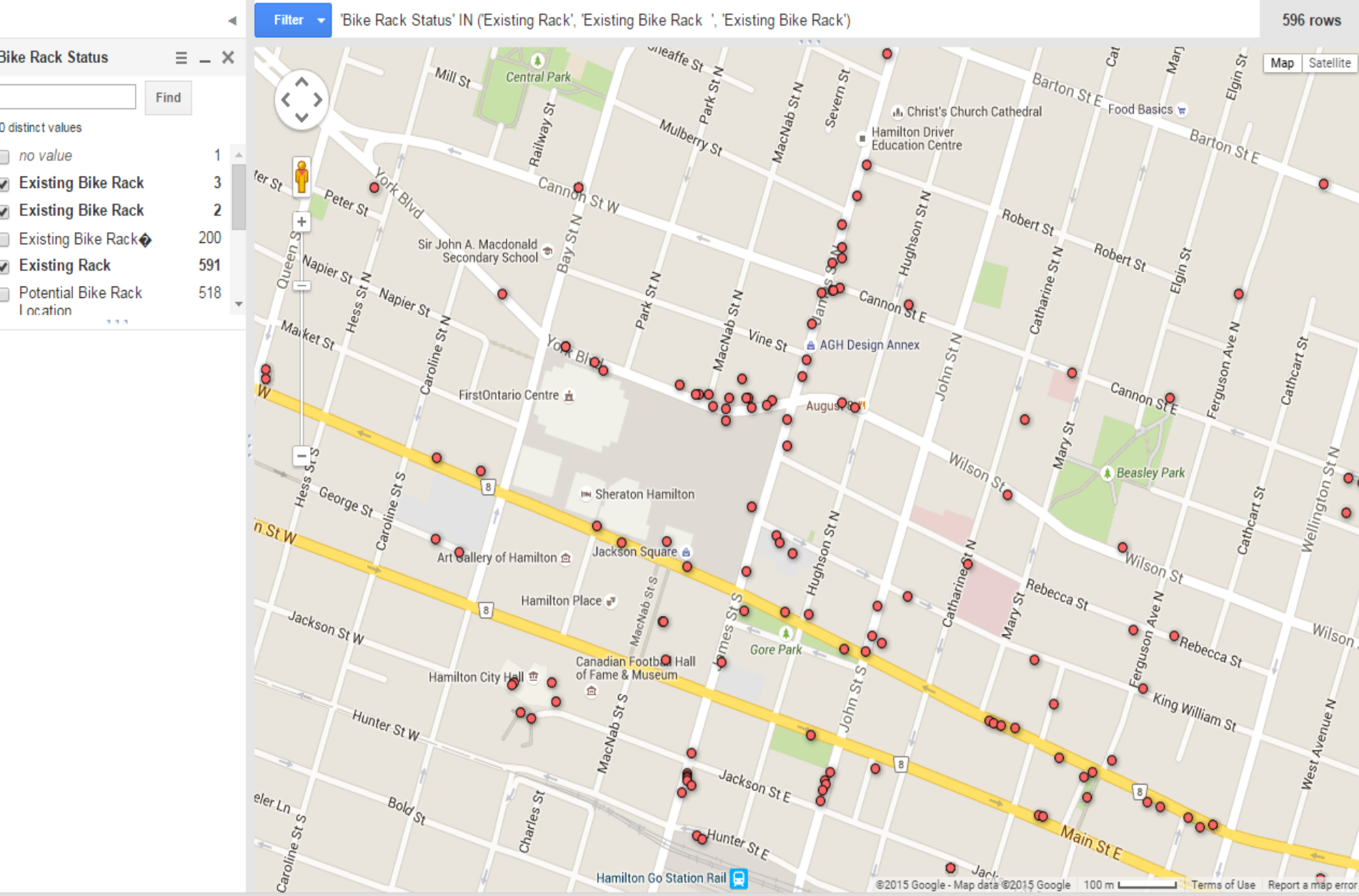
Signature

Date





# Audit and Mapping



# Data collection at every phase - collaborate to analyse



750 bikes, 115 hubs



# Data-based Engagement

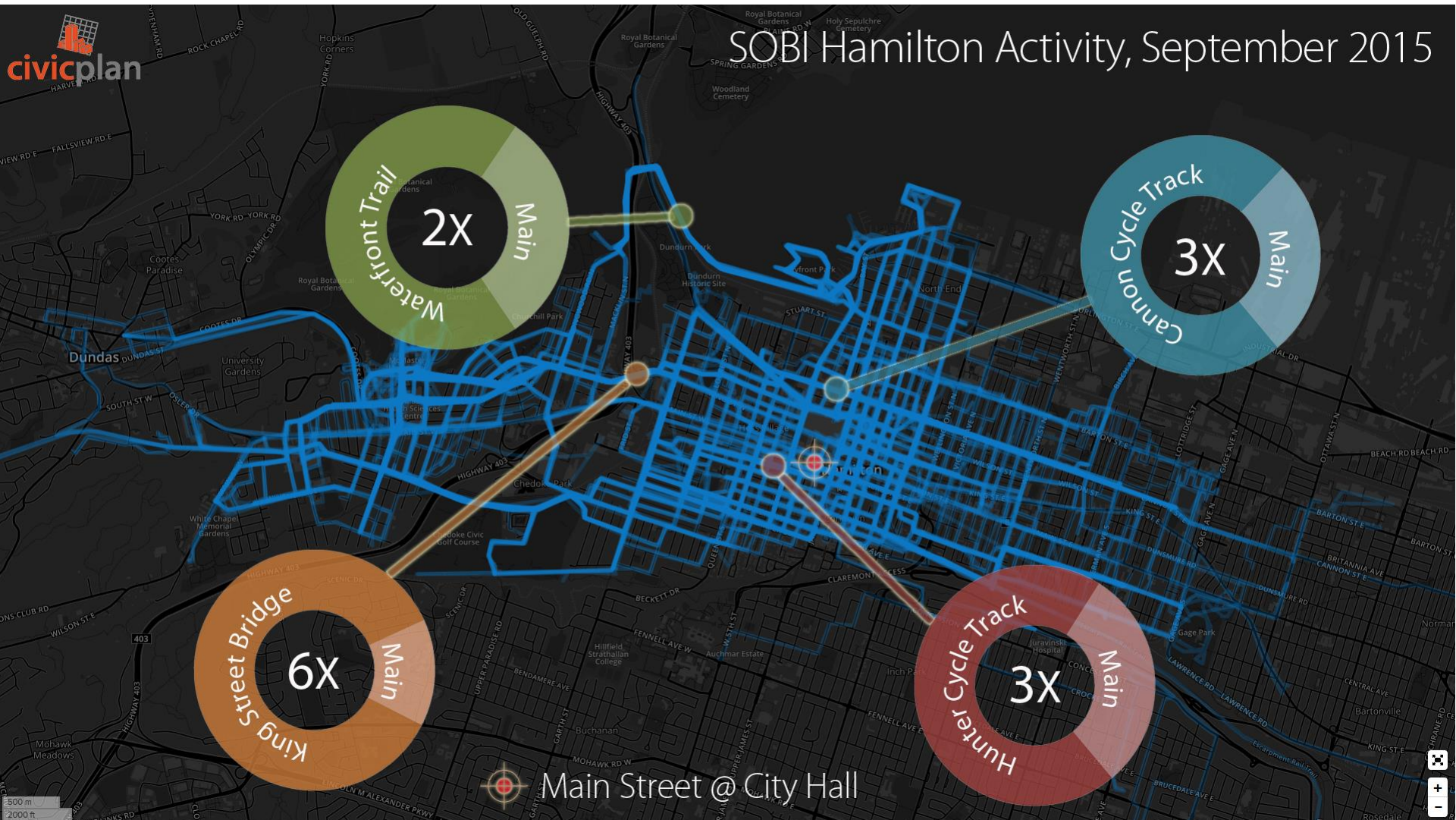
## Post Launch Station Planning (“Desire Line Analysis”)

Ridership data was used to determine additional stations or station tweaks:

- Where people locked outside of a station (no fee charged)
- What routes were the most used



# Data-based Engagement - Planning





# Engagement through Policy making



Community-led collaborative plan and policy development



Improved Sidewalks



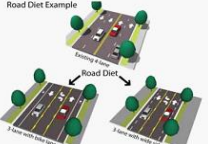
Buffered Medians/Street Trees



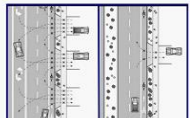
Crossing at Access



Clearance from Obstruction



Road Diet (Reduced No. of Lanes)



Safer Driveway



Lane Diet (Narrower Lanes)



Restrictions at Intersections

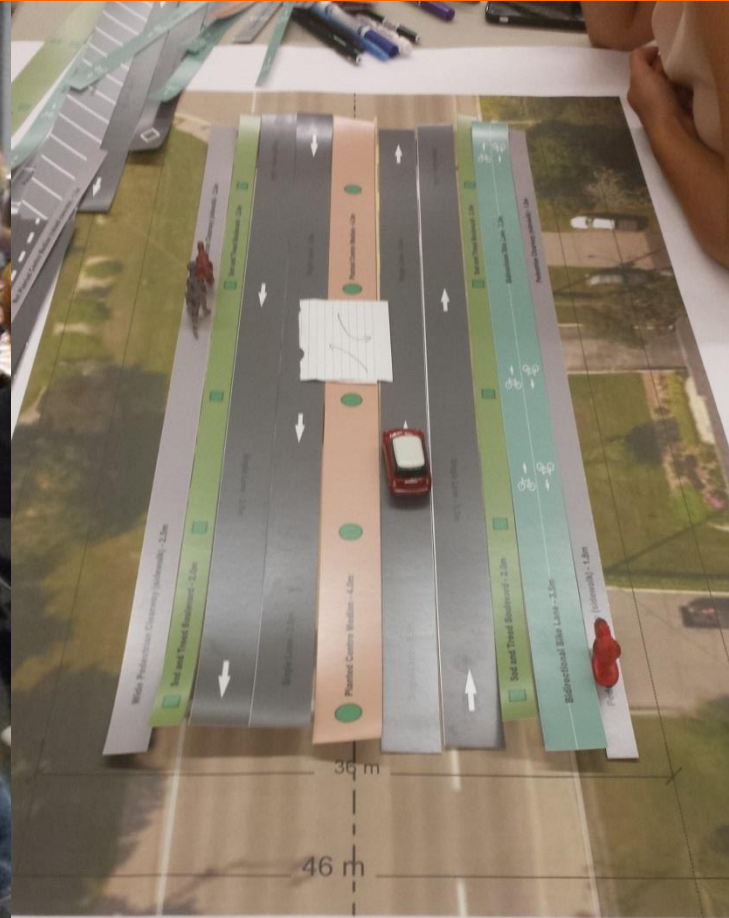


Reverse Angle Parking



Roadside Parking Management

# Community collaboration - engage diverse stakeholders through diverse channels & Imagine your dream street



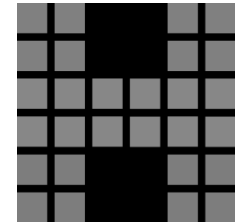
50 community events, 5000 people



**“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.” - Jane Jacobs**



# Partnerships are key



Virtual Hamilton





# Collaboration – City, McMaster and Others



# Moving Forward ... Virtual Hamilton

Community Collaboration and Learning using street tools, building tools, a rating system and social media to educate in a virtual

## Mary St (remix)

13.5m width (.1m room) ▼





# Moving Forward ... Virtual Hamilton



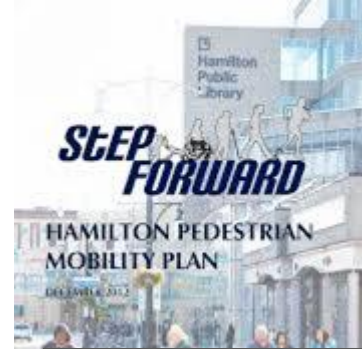
# Integrate plans, data, feedback and policies!



Engagement



Test & Data  
Collection



Tools & Routine  
Accommodatio



Community-  
led policy



Complete Streets  
Policy & Framework:

- 🔗 Evaluation Tool
- 🔗 Designer Guidance
- 🔗 Toolbox into action



# Why Bother?

If you can do it here, you can do it anywhere



zipcar®  
wheels when you want them



Hamilton

# Workshop

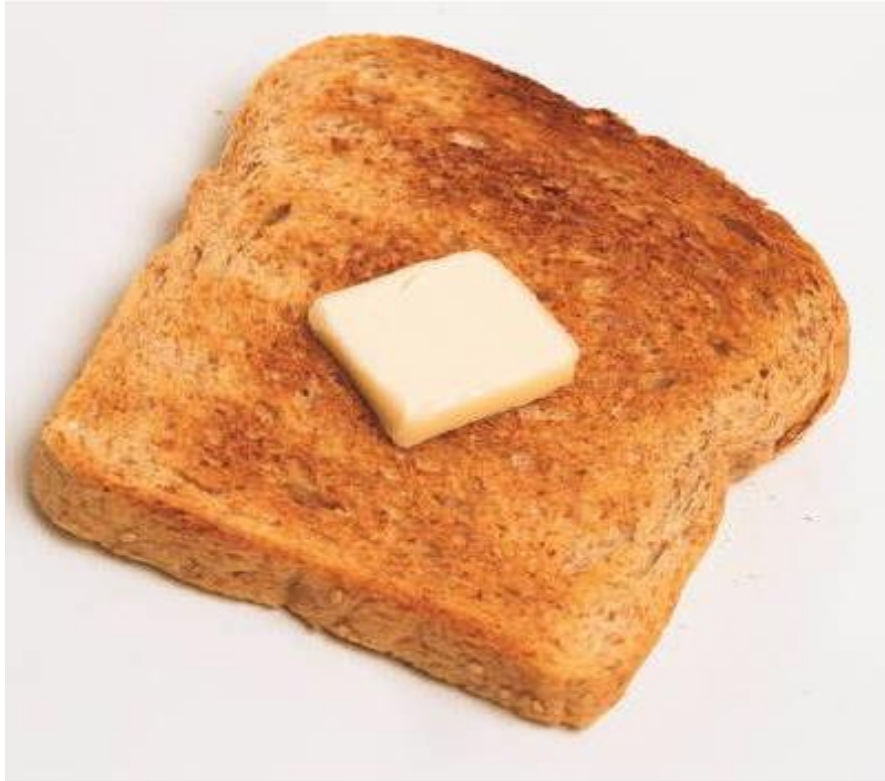
1. What do you love about getting around Hamilton?
2. What are some of the challenges?
3. What are the opportunities we can leverage?
4. Develop 3 top priorities/actions along the following categories:
  - Policy
  - Programs
  - Incentives





# Thank-you

This is our bread and butter!



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Hamilton