

BikeShare in Toronto



2000 to 2006

Herb van den Dool Chair, Community Bicycle Network

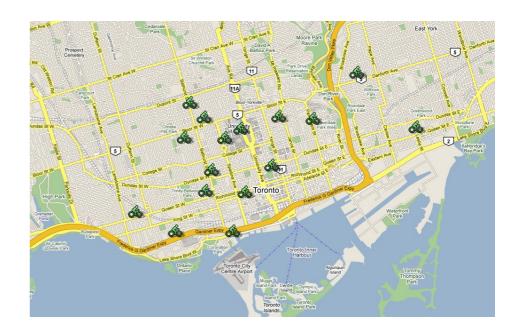
In this presentation

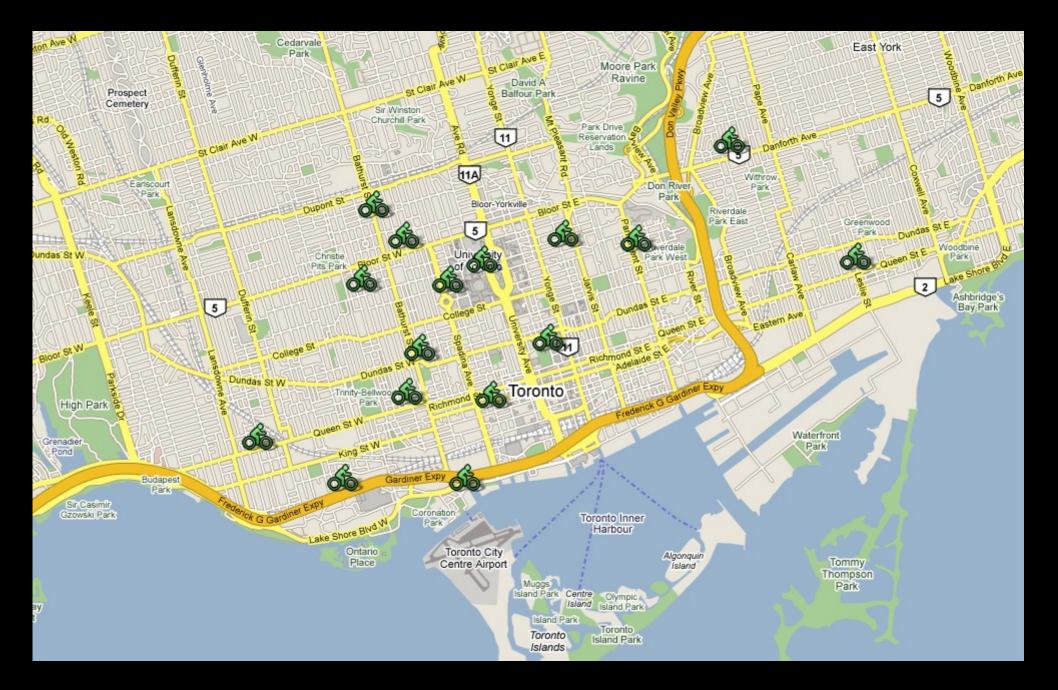
- How Bikeshare worked
- Popularity
- Benefits and drawbacks
- Why it failed
- How it could work
- CBN Now



A library of bikes

- 150 re-cycled bikes
- 16 hubs at cafes, comm. centres, stores
- \$25 membership card (\$50 in 2006)
- Sign out a bike for up to 3 days for free





How a Hub Operates

- 1) Sign waiver at CBN
- 2) Purchase membership card
- 3) Show card at any hub
- 4) Hub staff sign out bike online
- 5) Hub staff provide key



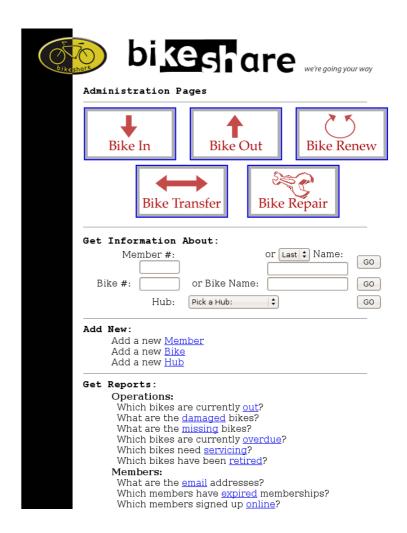
Using the Bike

- 1) Unlock bike at rack
- 2) Ride away!
- 3) Use for up to 3 days
- 4) Return and renew



Online Tracking System

- Tracks members,
 bikes and hubs
- Hubs record damaged, missing bikes
- Extensive reports
 on usage,
 membership,
 damage



Comparison with other systems

- Library model avoided problems of free community bike programs
 - Reduced theft
 - Increased revenue
- Low-tech approach worked without smart cards or cellphones
 - Lower capital and operating costs
 - More grassroots involvement
 - Less convenient

Personnel

- Staff: 2 (Coordinator and Mechanic)
- Volunteers: 75
- Hub volunteer staff time per week: 1.5 hours



Users (est. 2006)

- Cumulative users: over 2000
- Active users: 400
- Ratio users to bikes: 3:1
- Bikes out per day: 100 out of 150
- In 2004, 70% of members were temporary (tourists, visitors).
- Average number of trips per user: 6

Cost of Bikes

- Refurbishing a bike: \$380 (parts, paint and labour)
- New bike: \$150
 (more \$ in labour to replace cheap parts)

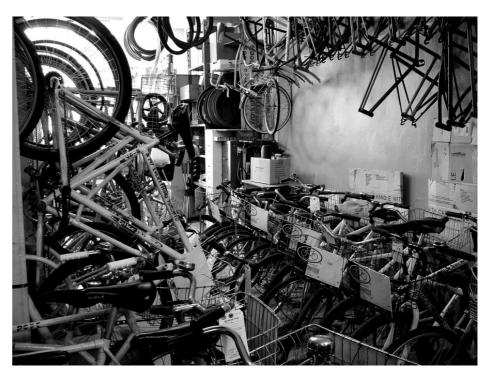


Photo Credit: Martin Reis

Finances (est. 2006)

- Budget: \$100,000
- Budget per member: \$250
- Revenue:
 - Member fees: 20%
 - ♦ U of T student levy: 10%
 - Public and private funders: 70%
 - Advertising: 0%

Funders and Sponsors

Public Funders

- Toronto Atmospheric Fund
- Moving On Sustainable Transportation
- EcoAction Fund
- Private Funders
 - CEDTAP (Carleton University)
 - TD Friends of the Environment
 - Bell Canada Community Development Fund
 - Ontario Power Generation

Theft

- 10 to 20 bikes lost to theft per year
- Up to 10 recovered yearly by leafleting
- Some systematic vandalism



Photo Credit: Martin Reis

Personalized Bikes

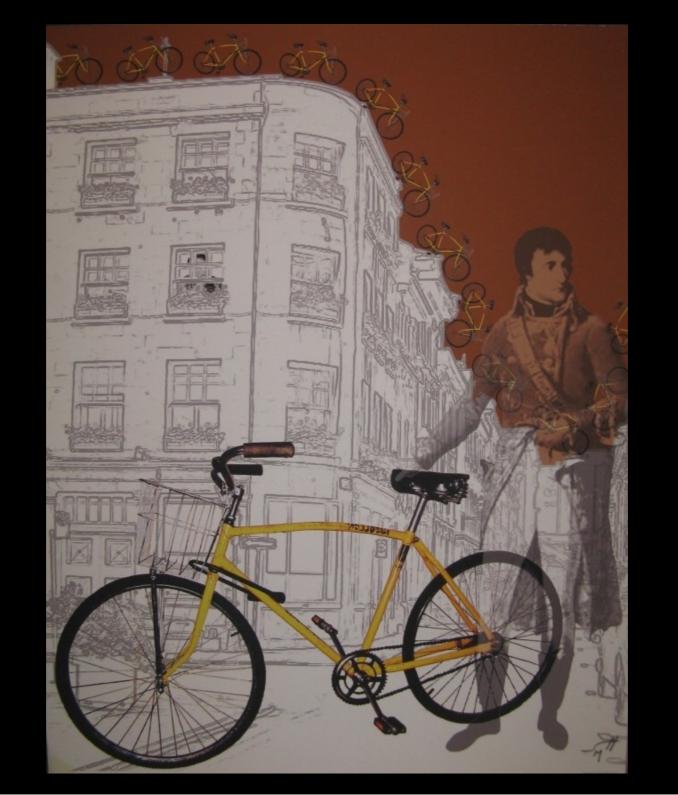
- Each bike was given a number and a name
- People developed relationships
- Name a bike for \$75



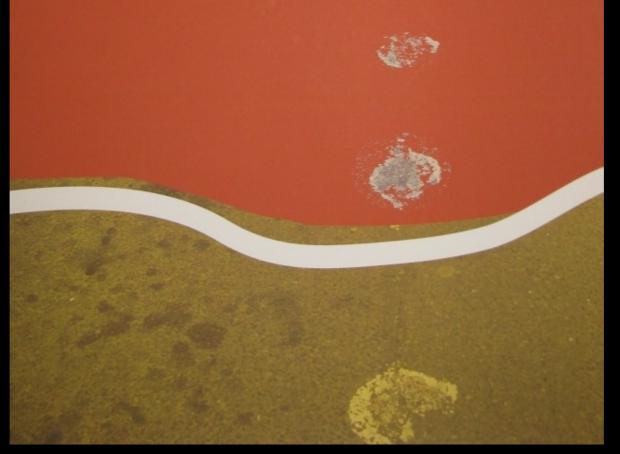


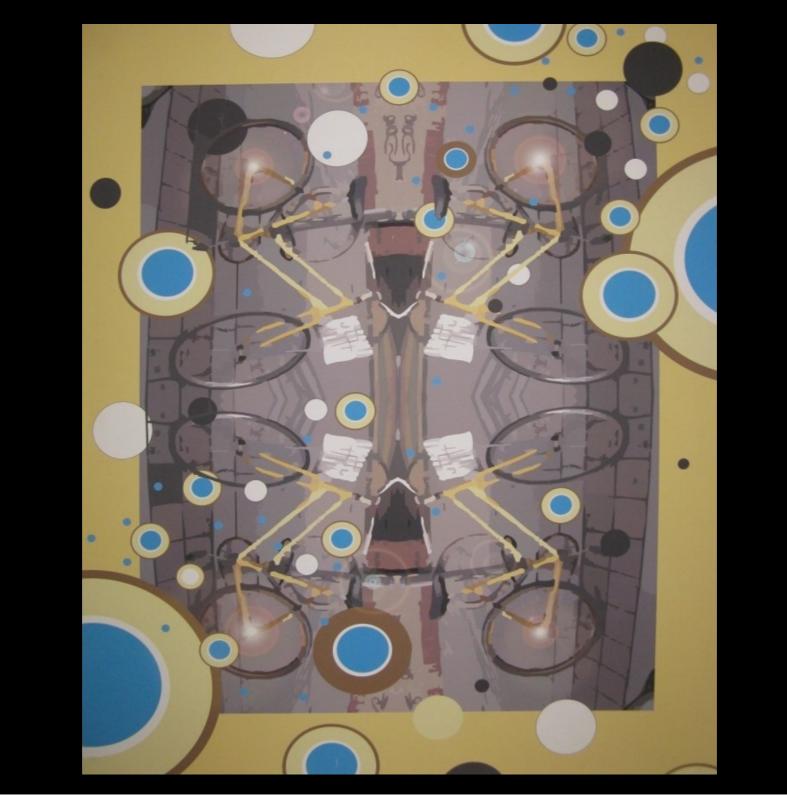
Popular

- Toronto media hits: many
- Toronto institution: tourist draw
- Featured in Vital Signs (Toronto Community Foundation)
- Inquiries from Austria to Israel on setting up similar systems
- Artsy: Bikeshare Poster Auction









This important public health message is brought to you by the Community Bicycle Network

Energy Consumption by Mode of Transportation (Petaleoles, 18 to the 18th Joules)
Statistics for Canada

	1990	1995	1996
	2,037.7	2.269.1	2.325.1
	2,037.7		2,320,1
	185.2	185.1	205.8
Jet fuel	179.7	181.0	201.9
Aviation gasoline	5.5	4.1	3.9
	1,494.4	1,631.3	1,661.0
Gasoline	1,176.0	1,213.7	1,229.4
Diesel	292.5	384.5	397.5
Other fuels	25.9	33.1	34.1
PIPELINE	142.4	245.3	254.5
Natural gas	133.1	232.9	241.5
Electricity	8.7	11.0	10.8
Diesel	0.6	24	2.2
RAIL	89.5	80.9	79.1
Distillate/Diesel fuel	89.5	80.9	79.1
· Freight rail	87.2	78.8	77.0
· Intercity passenger	2.3	2.1	2.1
TRANSIT	19.0	24.6	23.8
Electricity	3.1	3.0	3.0
Motor fuels			
- Gasoline	0.5	0.4	NS
- Diesel	12.8	13.4	12.7
· Natural gas	2.6	7.8	7.8
WATER TRANSPORT	107.3	102.0	101.3
Residual fuel oil	60.1	55.7	55.3
Distillate/diesel fuel oil	47.2	45.5	45.4
Gasoline	NS	0.8	0.6
CYCLING	0.0	0.0	0.0

CYCLISTS DOIT DOIT CLEANER

Impact (yearly)*

- Bikeshare kilometres: 26,000
- CO₂ avoided (tonne): 8.3
- Cost to avoid 1 tonne of CO₂ (current offset price \$10-30): \$9000
- Societal benefit if 200 Bikeshare users stop commuting by car: \$420,000

^{*}Based on 2004 Bikeshare Annual Report. "Quantifying the Benefits of Nonmotorized Transportation", VTPI.

Intermodal Public Transportation

- Transfer from other transportation modes: transit, walking, taxi.
- Bikeshare hub at Exhibition Place was pilot Intermodal Hub: GO Transit, TTC, taxis, bike lockers

Successes

- High demand on bikes
- Good coverage of downtown
- Support local business
- Grassroots support
- Reached low-income users
- Diverted bikes from waste stream
- Created interest in corporate fleets
- Was a "Gateway drug"?

Drawbacks

- No long-term sustainable funding
- Not enough funds to increase bike fleet
- Hub negotiation time-consuming
- Rich and poor pay same price
- Bike sign-outs restricted to opening hours
- Expensive way to provide bikes to lowincome groups (\$250 per year per member)

Why Bikeshare closed in 2006

- Failed to attract enough grants and advertising.
- Donor fatigue.
- Board and staff burnout.

How it could have survived

- Stable funding from government or corporations
 - Advertising revenue from street furniture deal
 - Advertising revenue from ads on bikes
 - Investment from carbon offsetting company
 - Special "levy" or budget item from City (like TTC)

CBN's Future: self-sustaining



Recycled Bikes

- Refurbish and sell donated bikes
- Give free bikes to marginalized groups
- Mentor at-risk youth as trainees



Education

- Mechanic workshops
- Women-only workshops
- DIY drop-ins with mechanic help



Photo Credit: Matt Rennick



Photo credit: flickr user Metrix X

