

SMART

Sustainable Mobility & Accessibility Research & Transformation

New Mobility: The Emerging Transportation Economy
AROUND THE WORLD IN 180 MINUTES

June 11, 2008





A warm welcome from SMART members

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SMART members

Susan Sherer

Eric Wingfield

AND MANY THANKS

TO PROGRAM &

ORGANIZING COMMITTEE

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Ford: Star Sponsor and Project Partner: Lead: David Berdish



Royal Dutch / Shell: Lead: Niel Golightly



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AND THANKS TO YOU!

The SMART learning community

(scholars, business people, entrepreneurs, government,
labour, ngo's from different parts of the world)



In the spirit of social research...

POLL:

EXPERTS ON ALL ASPECTS OF
THE FUTURE OF URBAN TRANSPORTATION?

RAISE YOUR HAND



GOALS AT THIS MEETING - FUTURE OF SUSTAINABLE URBAN TRANSPORTATION

- share new conceptual frameworks
- share knowledge and experience on implementation
- explore emerging markets, business & employment opportunities
 - formalize a collaborative research network
 - establish a collaborative industry network
- enrich and support SMART learning community
 - not duplicate efforts



THE FUTURE OF (SUSTAINABLE) URBAN TRANSPORTATION

Implementation (beyond talking about the problem)

Integration (connecting the dots)

Innovation (conceptual, institutional, product, service, system)

Industry Development (NM Economy - emerging market)

Inspiration (Moving Minds)

The Future of Urban Transportation



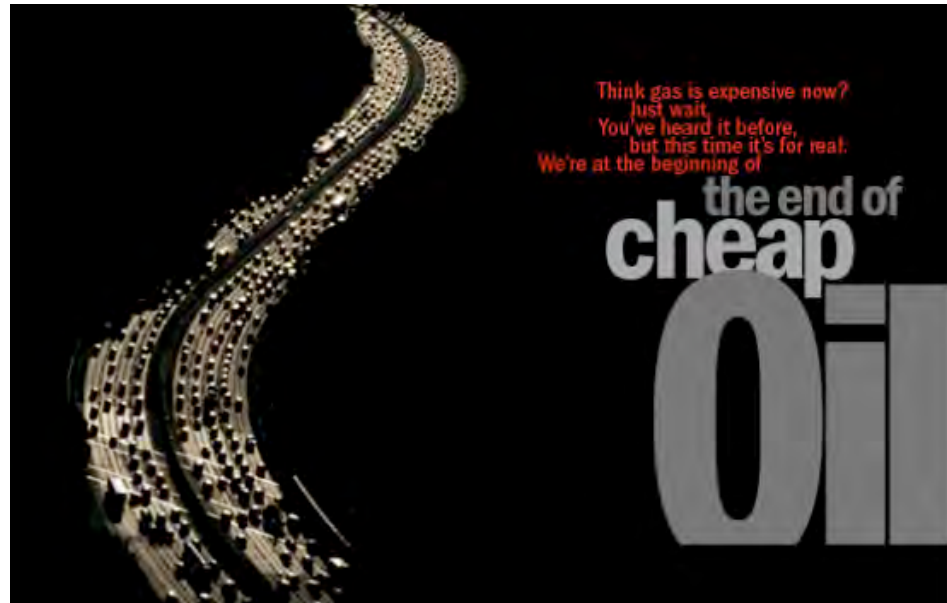


The JETSONS





Urbanization: From 50% - 2/3 by 2025; 90 % world economy



OTHER DRIVERS



**There is No Silver Bullet
(not even alternative fuels or pricing)**

SERVICE

- Zipcar
- BikeShare
- GoLoco
- Home Delivery
- Senior Chauffeur
- Auto Rickshaw
- Taxi, Pedicab
- Communal cab
 - etc

TECHNOLOGY

- Fare payment (cell, card)
- Wayfinding / information
- Seamlessness / signalling
 - Clean fuel
- Congestion pricing
- Mesh Networking
- Border crossing
 - Security
 - etc.

PRODUCT / MODE

- Car
- Bus
- Bike
- Shoes / Skates
- Accessories
 - etc.

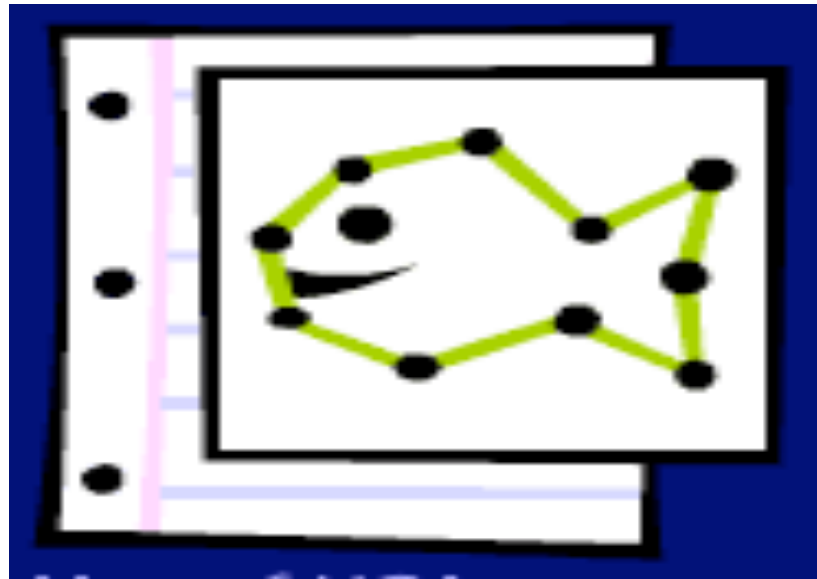
DESIGN

- Product design
- System design
 - Hub design
 - Real Estate
- Community / Urban design
 - etc.

moving people
moving goods
moving less

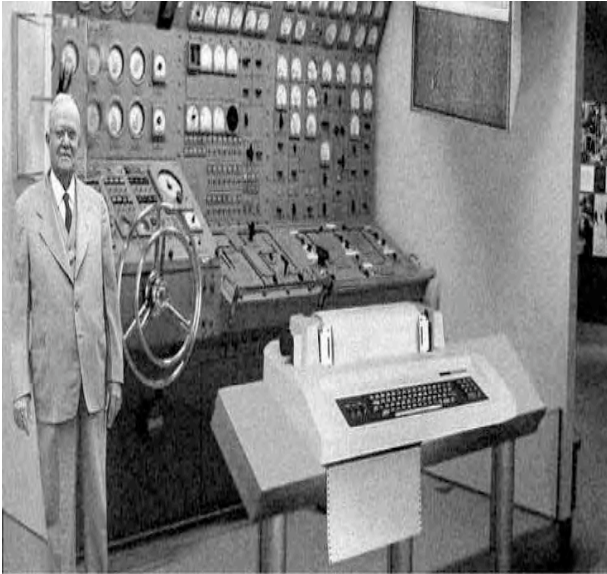






CONNECTIVITY

Emerging New Mobility Industry



The current value of New Mobility markets can be measured in the billions of dollars.”

Building a New Mobility Industry Cluster in the the Toronto Region (MTE & ICF)

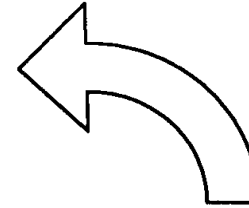
In ecological terms, it should come as no revelation that as cities grow and become more complex and diverse, they begin to create more efficiencies. Ecosystems grow from simple systems with a few pioneering species to more mature ecosystems with diversity and interconnection.

Thus, after a fire or flood, or some other disturbance, a cleared piece of land will begin developing the structure of its ecosystem with an emphasis on rapid simple growth. After a period it becomes more diverse and more efficient as it establishes a more complex network of interactions -- Peter Newmann

The Evolution of Transportation

21st Century: The Emergence of New Mobility

Information technology, communications, and New Economy drivers transform transportation once again. Innovative services, technologies, and products provide seamless access to all modes and decouple mobility from motor vehicle ownership. Major urban areas around the world evolve towards transportation systems that provide a wide range of mobility services that are integrated, smart, clean, service-based and user-focused.

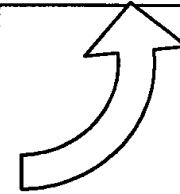


Today: Transport Meets the New Economy

New approaches emerge as congestion, high infrastructure costs, expanding cities, poor urban air quality, limited mobility for those without motor vehicles, and the possible near-term end of cheap oil all lead to growing recognition that future demand for mobility can only be met through major innovations.

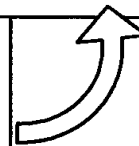
20th Century: Roads Take Over

The internal combustion engine, Henry Ford's production techniques and massive public investment allow roads to dominate transportation. Trucks capture most goods movement, while automobiles transform lifestyles and give rise to a new urban form. Arterials and highways fan out from downtowns, connecting sprawling suburbs to job centres and shopping malls.



19th Century: The Age of Rail

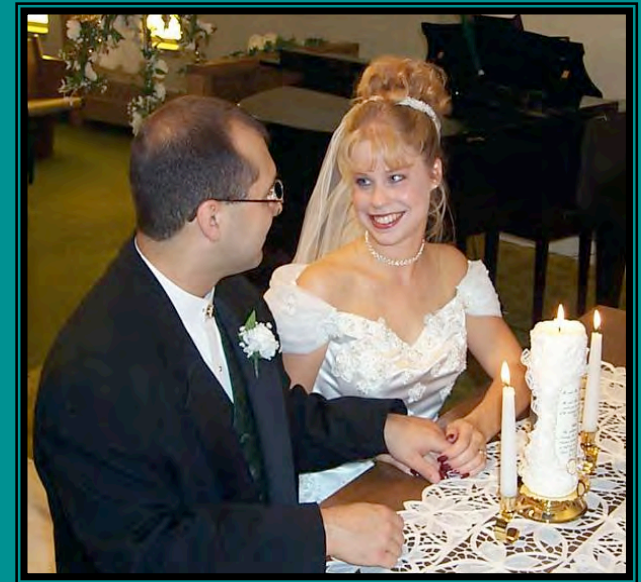
From an agrarian society with little need for mobility, the industrial revolution concentrated workers in factories. Cities exploded and freight distribution networks soon followed. Rail dominated—heavy rail for moving goods and people long distances, and streetcars, tramways and underground railways for getting around major towns.



Qualities of New Mobility:

...Like the Ideal Life's Partner ...

- ✓ Multi-talented
- ✓ Clean
- ✓ Connected
- ✓ Integrated
- ✓ Smart
- ✓ Tech savvy
- ✓ Sophisticated
- ✓ Confers status
- ✓ Convenient
- ✓ Sexy
- ✓ Innovative
- ✓ Saves money
- ✓ Socially equitable
- ✓ Service-oriented
- ✓ Creates jobs
- ✓ Caters to your needs
- ✓ Accessible to all
- ✓ Other?

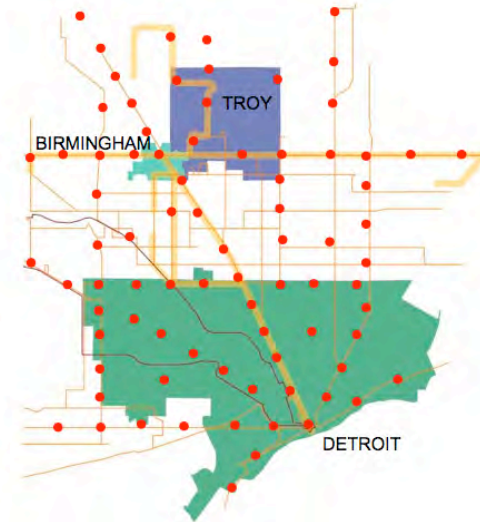


CONNECTING THE DOTS:

NEW MOBILITY HUB NETWORKS

Where shift happens in:

- ✓ Bremen
- ✓ Cape Town, Salvador
- ✓ Toronto, US Cities
- ✓ Other?
- ✓ Chennai?



Amenities

- Local Transit
- Regional Transit
- Private Transit
- Taxi Stand (Traditional)
- Taxi Stand (Niche – Seniors, Youth, etc.)

- Showers
- Free Bikes
- Bike Parking
- Bike Rental
- Car Share Parking
- Car Parking
- Planes

- Outdoor Recreation
- Green Space
- Information Kiosk
- Retail
- Music
- Café/Bar/Restaurant
- Wifi

- Integrated Fare Payment
- Electronic Traveler Information
- Day Care
- Satellite Office
- Social Services

HUB NETWORK BENEFITS:

- ✓ Feeds trunk system (first & last mile, “bundling”)
- ✓ Provides seamless, flexible DOOR TO DOOR trip (in density & sprawl)
- ✓ Provides integrated access for all (rich & poor)
- ✓ **SCALABLE** - by time, budget, land use (“yeses”)
- ✓ Comprehensive vision, short term opportunity, induces demand
- ✓ Increases safety
- ✓ Makes ST sexy - confers status / freedom
- ✓ Provides ROBUST backup system
- ✓ Increases competitiveness (Newman)
- ✓ Provides new forms of employment
- ✓ Provides innovation / business opportunities

Economic Opportunities

Productivity and Competitiveness (Newman)

- Reduce congestion = improve productivity
- Save money
- Create new good jobs
- Revitalize local economies
- Attract people & businesses

(Conscience, CSR,
social equity)

Business Opportunities ←
Local Innovations = New Regional &



**NEW MOBILITY
INDUSTRY**

CLEAN ENERGY

**TELECOMMUNICATIONS
& WIRELESS**

**E- BUSINESS
& NEW MEDIA**

**TRANSPORTATION
EQUIPMENT**

**INFORMATION
TECHNOLOGY**

**FINANCIAL SERVICES,
BAN KING &
INVESTMENT**

**TOURISM
& RETAIL**

GEOMATICS

**TRANSPORTATION
OPERATIONS
& SERVICES**

**REAL ESTATE
CONSTRUCTION,
PLANNING &
OPERATIONS**

**INTELLIGENT
TRANSPORTATION
SYSTEMS**

**GOODS MOVEMENT
& SUPPLY CHAIN
MANAGEMENT**



WHAT'S IN STORE

Practical examples - Around the World

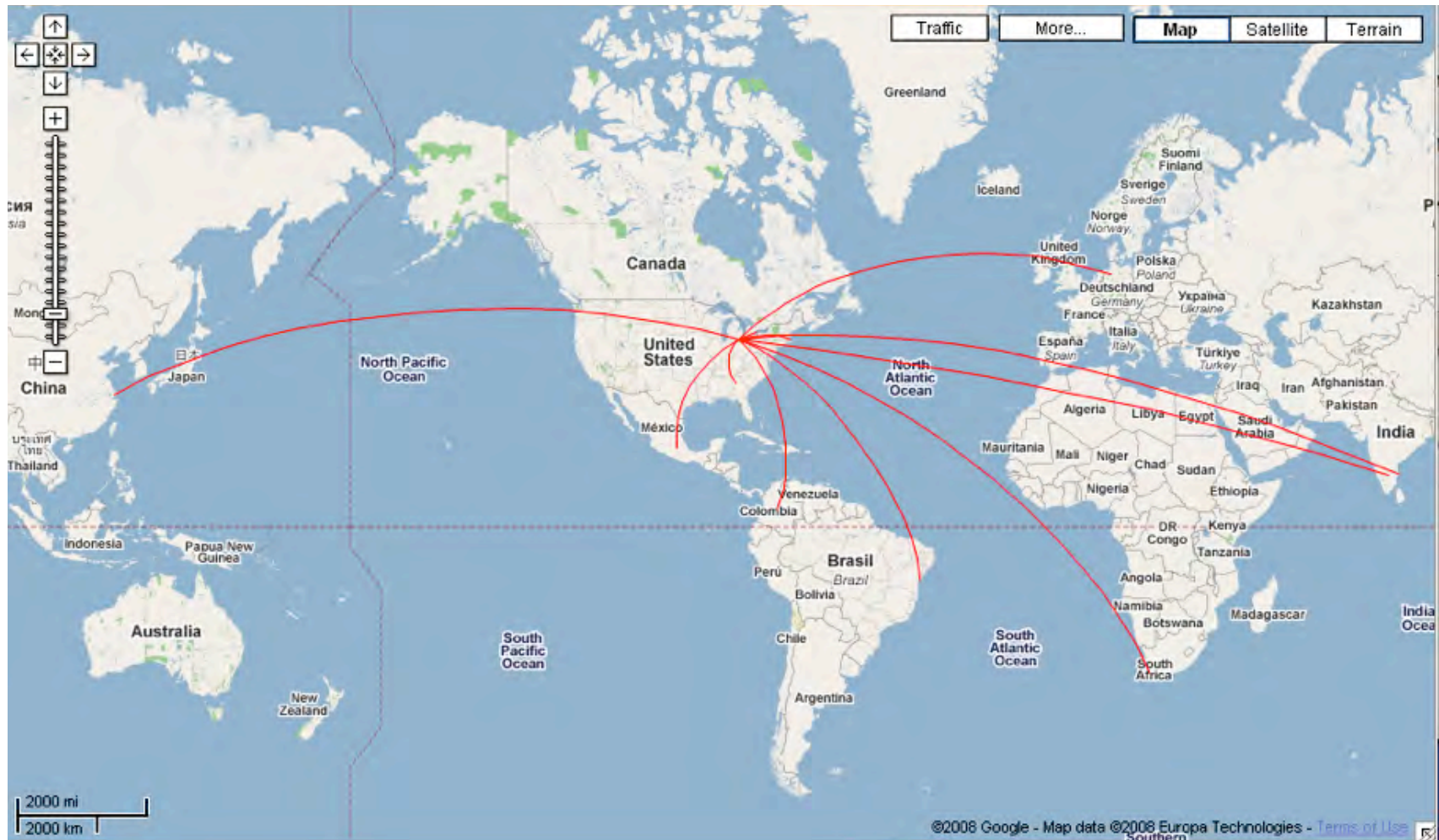
- Explore emerging markets & business opportunities (panel tonight)
 - Conceptual Foundations (tomorrow morning)
 - Roll up our sleeves (tomorrow afternoon)
 - blue cards
 - Working sessions tomorrow - collaborations / supports
- Interact all two days (pebbles, Café Habana, New Mobs, and more)
 - Next Steps:
 - for your project, for the New Mobility Agenda, for SMART

SMART

Sustainable Mobility & Accessibility
Research & Transformation

- Collaborative Inter-disciplinary research
 - On the Ground projects
 - Education
 - Learning Community

AROUND THE WORLD IN 180 MINUTES





BLUE CARDS:

What ideas were sparked by this presentation
that you want to pursue with the people in this room?