XXIVth World Road Congress Mexico 2011
Mexico City 2011.

LOOKING BACK AND MOVING FORWARD: HOW TO CREATE A LEGACY OF SUSTAINABLE TRANSPORTATION IN AN EVOLVING FIELD

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ARUP

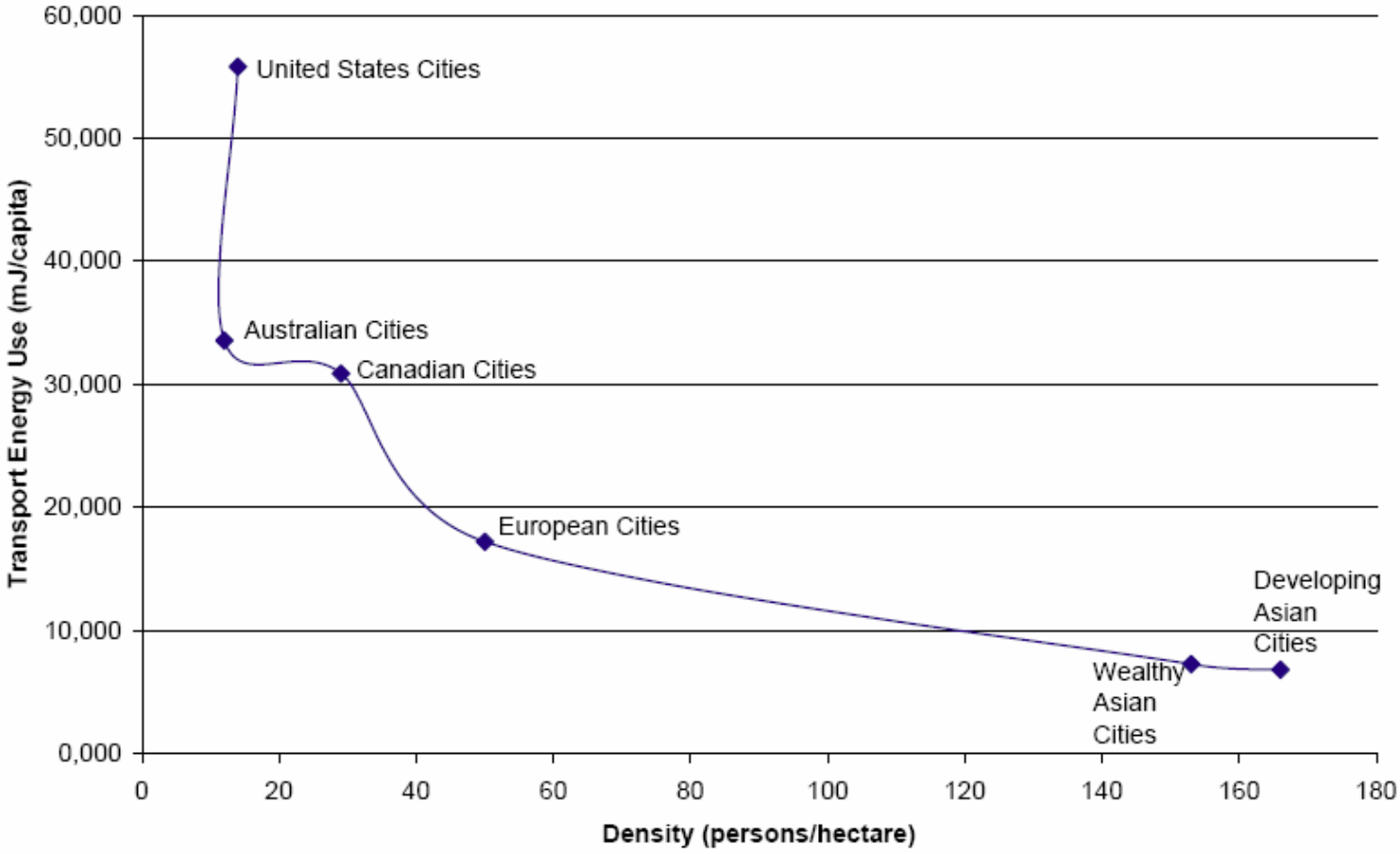
PRESENTATION OUTLINE

- History of transportation funding in the US
- Attributes of leading cities
- Purpose of Study
- Methodology
- Themes
- Conclusions and recommendations

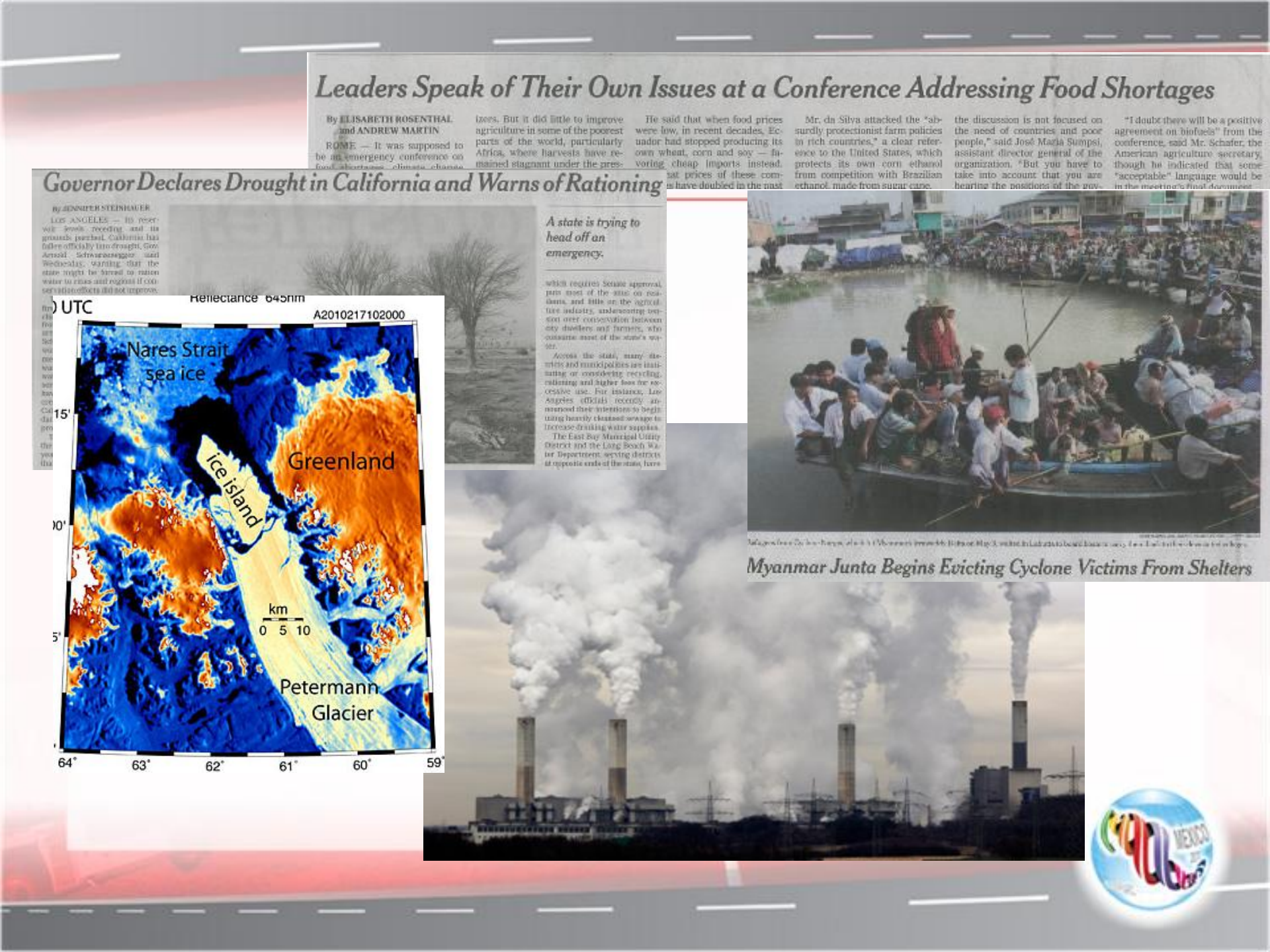
EMERGENCE OF US INTERSTATE SYSTEM

- Federal Interstate Highway Act
- GI Bill
- State and Federal Gas Taxes
- Elimination of transit operating funds
- Little support for bike and ped programs
- Suburban Priority

TRANSPORTATION USE PER CAPITA



Kenworthy and Laubre, Transportation Quarterly, Vol. 53, No. 4, Fall 1999


Leaders Speak of Their Own Issues at a Conference Addressing Food Shortages
By ELISABETH ROSENTHAL and ANDREW MARTIN
ROME — It was supposed to be an emergency conference on food shortages, climate change
izers. But it did little to improve agriculture in some of the poorest parts of the world, particularly Africa, where harvests have remained stagnant under the pres-
He said that when food prices were low, in recent decades, Ecuador had stopped producing its own wheat, corn and soy — favoring cheap imports instead.
Mr. da Silva attacked the "absurdly protectionist farm policies in rich countries," a clear reference to the United States, which protects its own corn ethanol from competition with Brazilian ethanol, made from sugar cane.
the discussion is not focused on the need of countries and poor people," said José Maria Sumpsi, assistant director general of the organization. "But you have to take into account that you are hearing the positions of the gov-
"I doubt there will be a positive agreement on biofuels" from the conference, said Mr. Schafer, the American agriculture secretary, though he indicated that some "acceptable" language would be in the meeting's final document.
Governor Declares Drought in California and Warns of Rationing
By JENNIFER STEINHAUER
LOS ANGELES — Its reservoir levels receding and its grounds parched, California has fallen officially into drought, Gov. Arnold Schwarzenegger said Wednesday, warning that the state might be forced to ration water to cities and regions if conservation efforts did not improve.
A state is trying to head off an emergency.
which requires Senate approval, puts most of the onus on residents, and little on the agriculture industry, underscoring tension over conservation between city dwellers and farmers, who consume most of the state's water.
Across the state, many districts and municipalities are instituting or considering recycling, rationing and higher fees for excessive use. For instance, Los Angeles officials recently announced their intentions to begin using heavily cleansed sewage to increase drinking water supplies.
The East Bay Municipal Utility District and the Long Beach Water Department, serving districts at opposite ends of the state, have
Reflectance 645nm
UTC
A2010217102000
Nares Strait sea ice
Greenland
ice island
Petermann Glacier
km
0 5 10
15'
64°
63°
62°
61°
60°
59°
Myanmar Junta Begins Evicting Cyclone Victims From Shelters

Iowa flooding a toxic threat, officials say

River towns bracing for next round

June 17, 2008 | Allen G. Breed, Associated Press

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OAKVILLE, Iowa - The flood waters that deluged much of Iowa have done more than knock out drinking water and destroy homes. They have also spread a noxious brew of sewage, farm chemicals, and fuel that could sicken anyone who wades in.

Bob Lanz used a 22-foot aluminum flatboat yesterday to navigate through downtown Oakville, where water reeked of pig feces and diesel fuel.

"You can hardly stand it," Lanz said as he surveyed what remained of his family's hog farm. "It's strong."

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Cedar Rapids struggling 9 months after flood

Updated 3/23/2009 2:42 PM | Comments 71 | Recommend 24 E-mail | Save | Print | Reprints & Permissions | RSS

By Judy Keen, USA TODAY

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Enlarge By Jeremy Portje for USA TODAY

Several gutted homes line the streets in Cedar Rapids, Iowa. Major flooding crippled the city in June, and many businesses and residents have yet to return.

CEDAR RAPIDS, Iowa — The record floodwaters that engulfed this city last June receded long ago. Parts of the city buzz with activity again. Workers are rebuilding the railroad bridge that collapsed into the Cedar River.

For thousands of people, though, the disaster continues. "It amazes me that people think the flood is over," says Amy Wilkinson, whose home was flooded. "It's still very much here."

PHOTO GALLERY: Cedar Rapids rebuilds despite chance of flood

STORM CENTER: The latest weather news

Eight months after flooding devastated swaths of the Midwest, the city that suffered the most harm — 5,390 houses and 700 businesses were damaged or destroyed — is struggling.

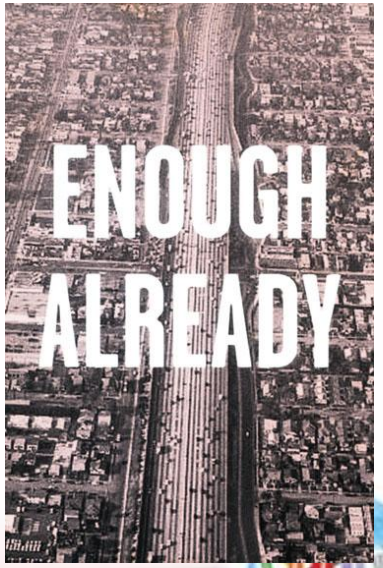
Entire neighborhoods are empty. About 1,300 homes in this city of 126,396 will be razed because they're in flood plains or unsafe. There are "for sale" signs on others whose interiors are gutted.

There are still overnight curfews in some areas. City Hall is still located in an office park. Some residents are still living in FEMA trailers.

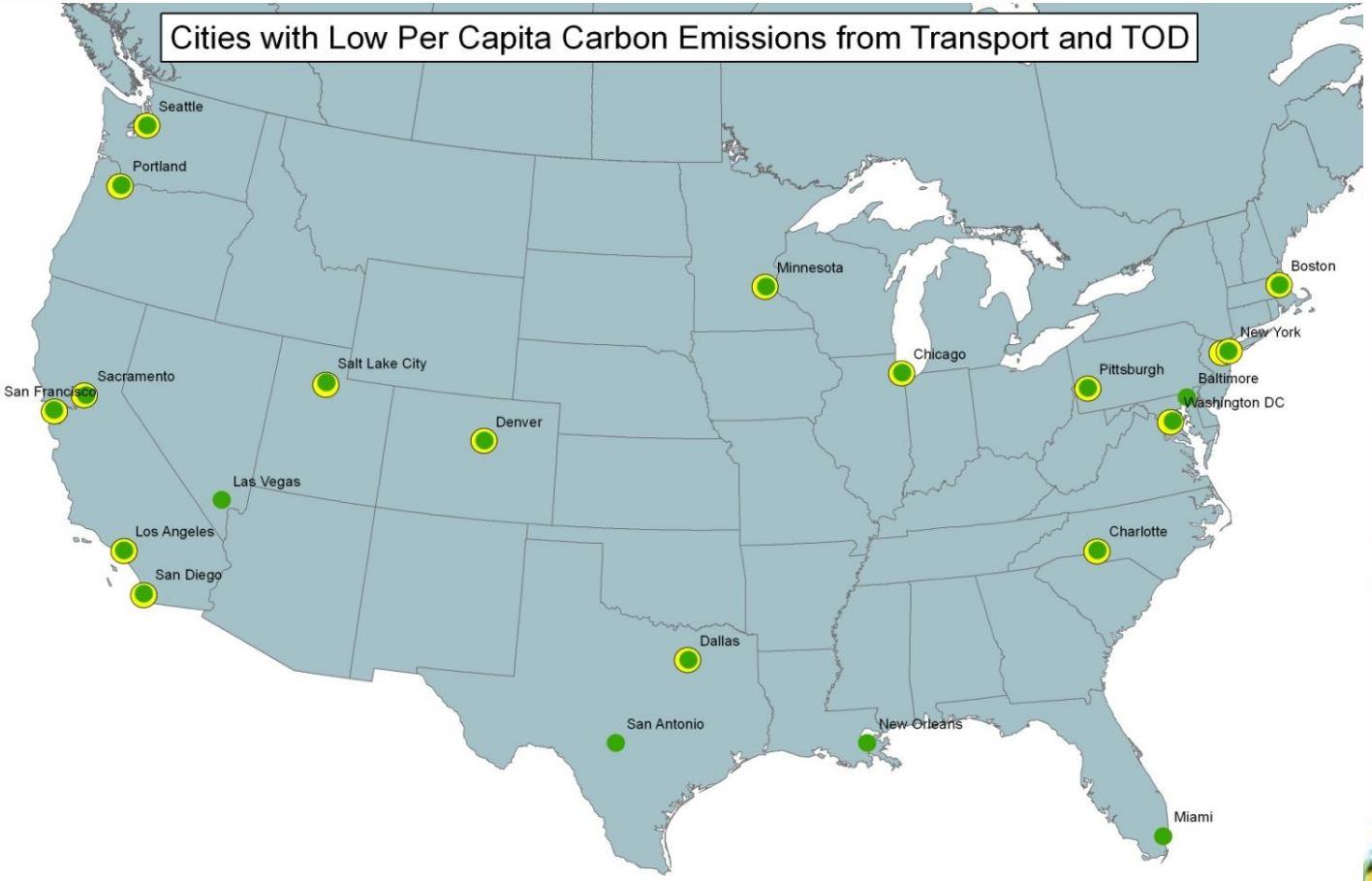
"Nobody is satisfied" with the pace of recovery, Mayor Kay Halloran says. "We've done a whole lot ... but people are out of their homes. They're not happy, and if they're not happy, I'm not happy."

1991: A CHANGE IN DIRECTION

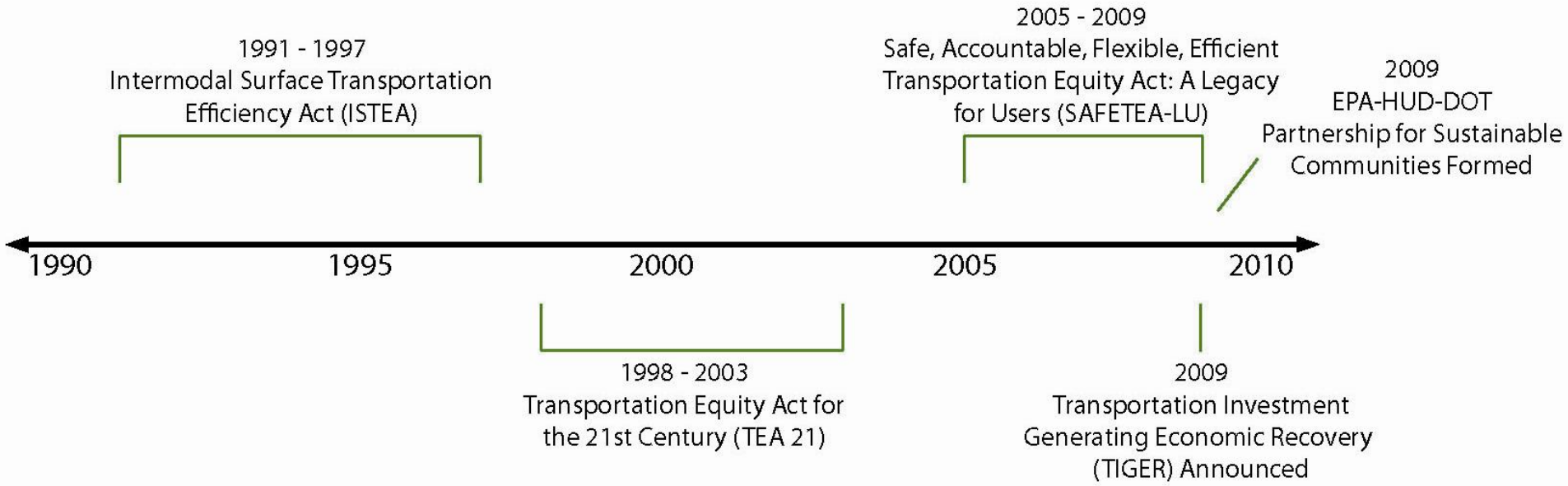
- Integrated Surface Transportation Efficiency Act for the 21st Century
- 20 years of progress



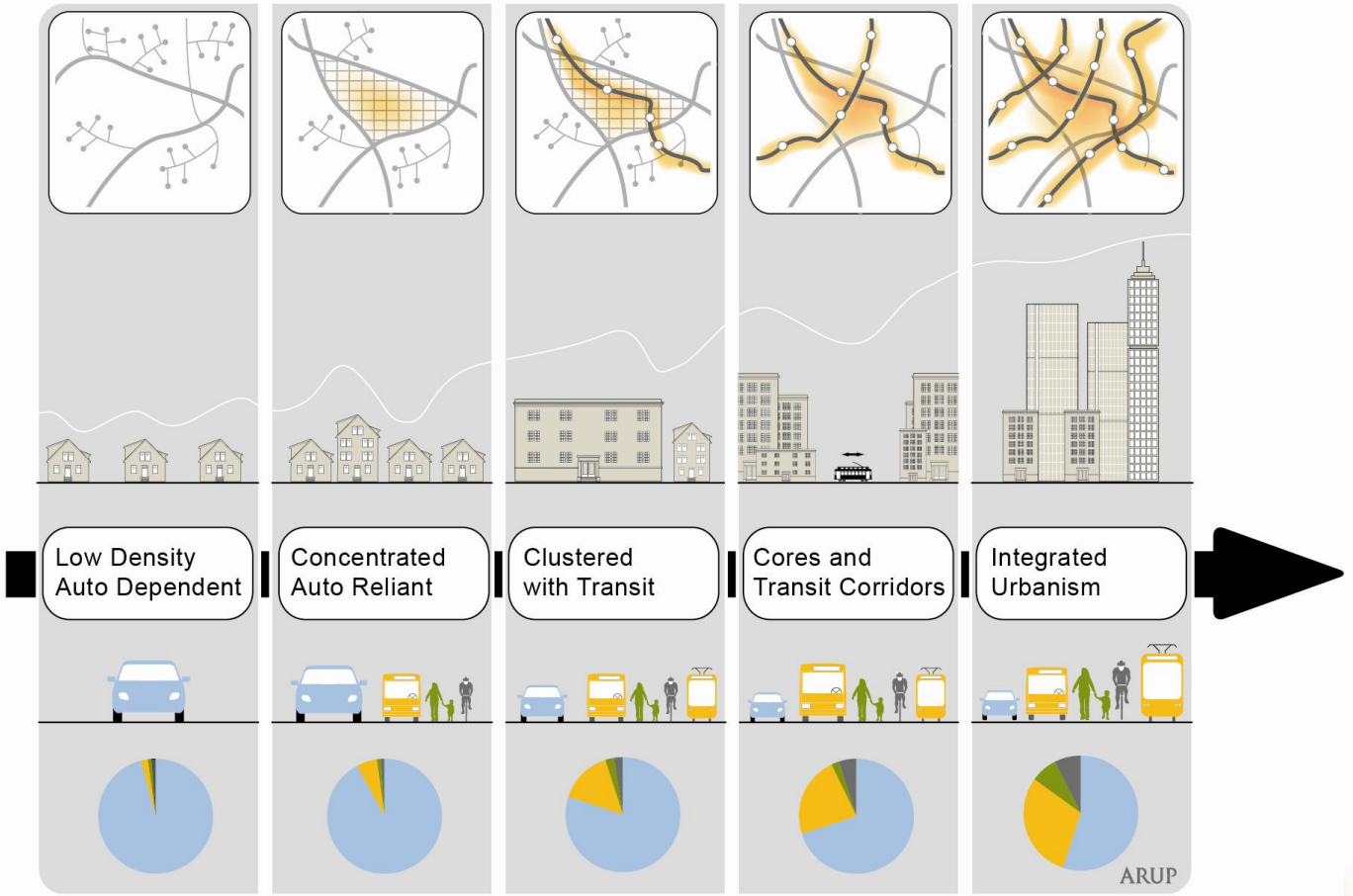
SIGNS OF HOPE

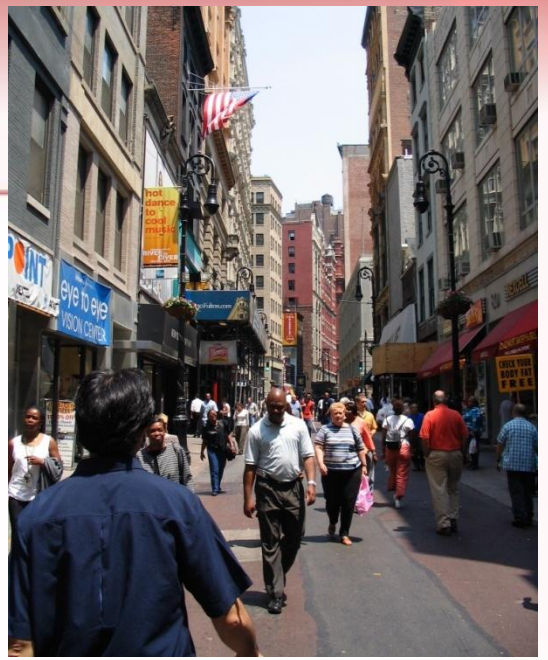


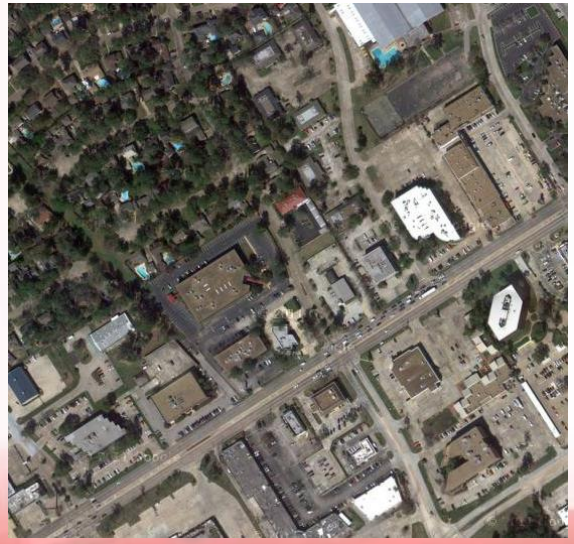
FEDERAL FUNDING FOR SUSTAINABLE TRANSPORT

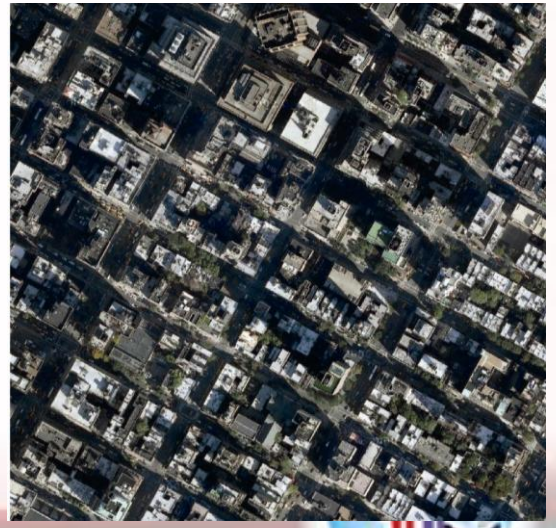


LINKING LAND USE & TRANSPORTATION









Houston

Portland

New York

CARS IN CITIES

Source:LivingBrazilPhone.blogspot.com

São Paulo

Source: http://chinadigitaltimes.net

Shanghai

RECENT CITY RANKING SURVEYS

pwc

Cities of Opportunity

Liveability Ranking

Economist Intelligence Unit | The Economist

FP Foreign Policy

THE GLOBAL CITIES INDEX

Worldwide Centers of Commerce Index™

MasterCard Worldwide

fDi Intelligence

GLOBAL INSIGHT FROM THE FINANCIAL TIMES LTD

American Cities of the Future 2011/12

KEY FACTORS MEASURED

TYPES OF CAPITAL

Physical Capital	Civic Capital	Financial Capital	Human Capital	Social Capital
• Roads and highways • Historic buildings • Hotels • Libraries • Sewer, water and power systems • Civic centers • Public transportation • Bridges • Airports • Parking facilities • Affordable housing • Schools	• Museums • Parks • Theaters • Festivals • Community meeting facilities • Parades • Sports teams • Art programs • Concerts • Cultural centers • Sidewalks	• Venture capital • Ease of obtaining loads • Presence of investors • Equity capital • Debt Capital	• Public education • Literacy programs • Pre-K education • Job training • Alternative schools • Leadership training • Health screening • ESL programs • Child care • Job fairs	• Athletic leagues • Volunteer centers • Community gardens • Block clubs • Neighborhood associations • Civic clubs • Book clubs • School organizations • Religious affiliations • Farmers markets • Dance groups

Source: Suzanne W Morse, *Smart Communities*, The Pew Partnership for Civic Change, 2004

CREATIVE CLASS & STREETS

"More than anything, the creative class craves…a teeming blend of cafes, sidewalk musicians, and small galleries and bistros, where it is hard to draw the line between performers and spectators." **– Richard Florida**

Before and After a Pop-Up Café
Pearl Street, Manhattan, New York

RESEARCH QUESTION

Given 20 years of federal funding, why have only some cities **succeeded in implementing sustainable transportation** practices? What can other cities learn from their experience to become more **walkable, livable and offer multi-modal choices?**

METHODOLOGY

Study Purpose: Identify means and methods to rethink cities and transportation infrastructure

- Interview directors and key leaders of Departments of Transportation and Planning
- Identify key factors in spurring change in transportation
- Assess challenges in creating sustainable transportation networks

SEVEN CITIES

Cities selected to provide range of:

- City size
- Regional location
- State of the development of the city
- Development of transit system
- Type of leadership approach
- Culture and public perception

INTERVIEW RESULTS

Themes

1. Transportation Planning is an Evolving Field
2. Catalysts for Change
3. Collaborative Approach
4. Innovative Implementation Programs
5. Learning from Peer Cities

THEME 1: CHANGING APPROACH TO TRANSPORTATION PLANNING & PROJECT DEVELOPMENT

TRADITIONAL PLANNING PARADIGMS

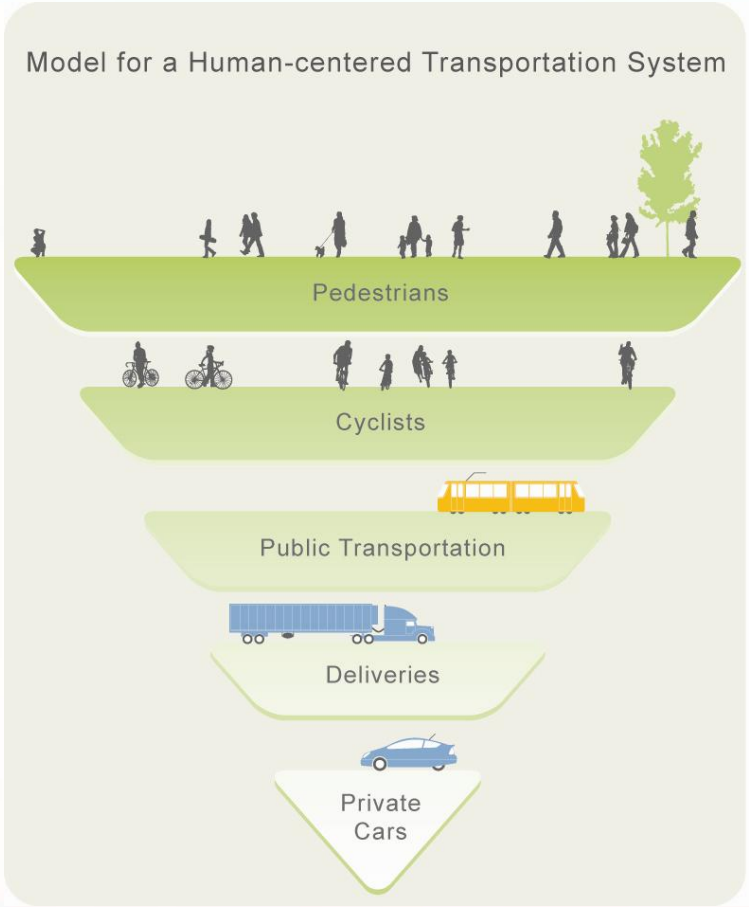
Source: Wikipedia.com

Robert Moses

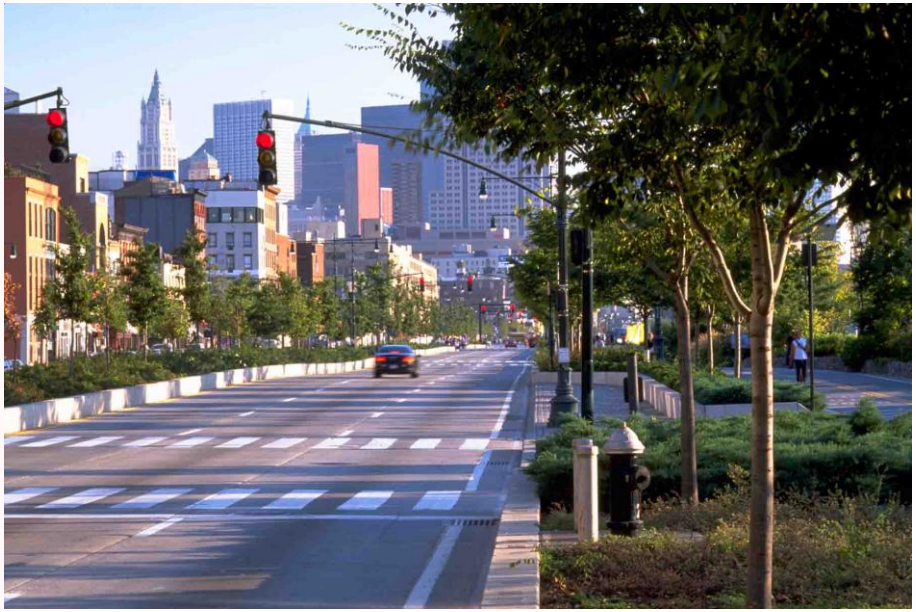
Source: Inspiring Cities.org

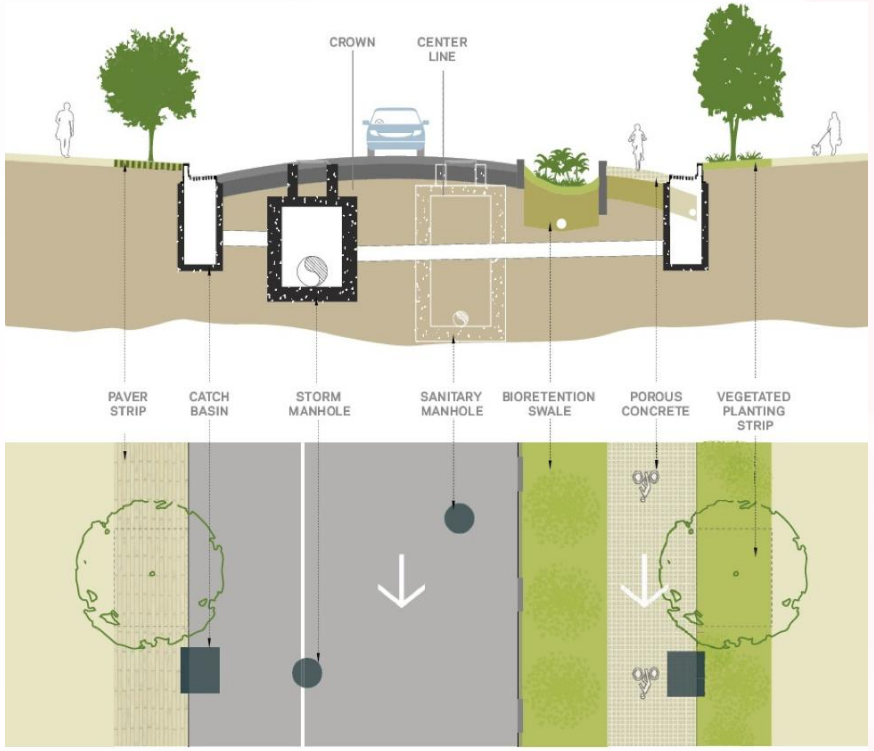
Jane Jacobs

HUMAN CENTERED DESIGN

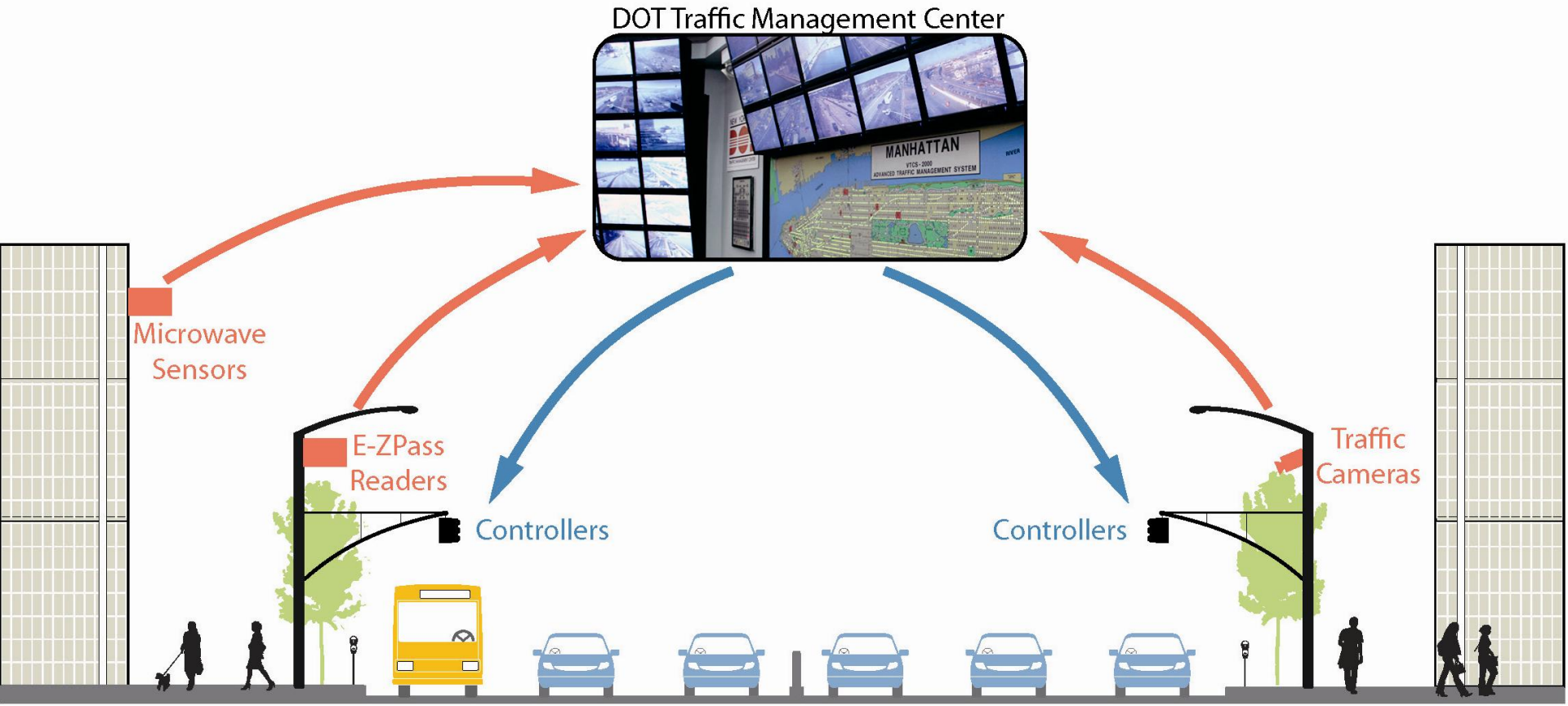


THOUGHTFUL, INTEGRATED STREET DESIGN



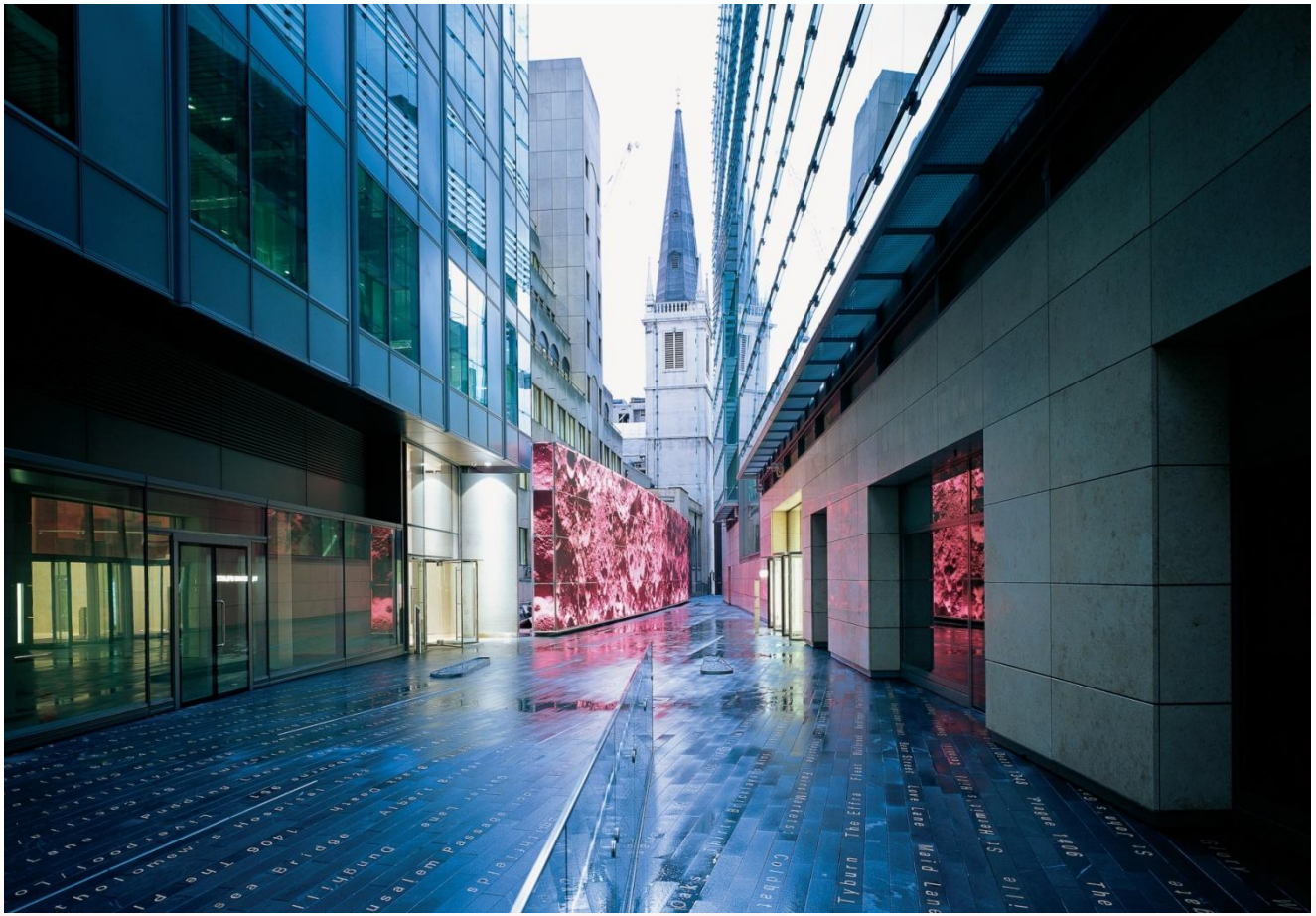


TRAFFIC MANAGEMENT

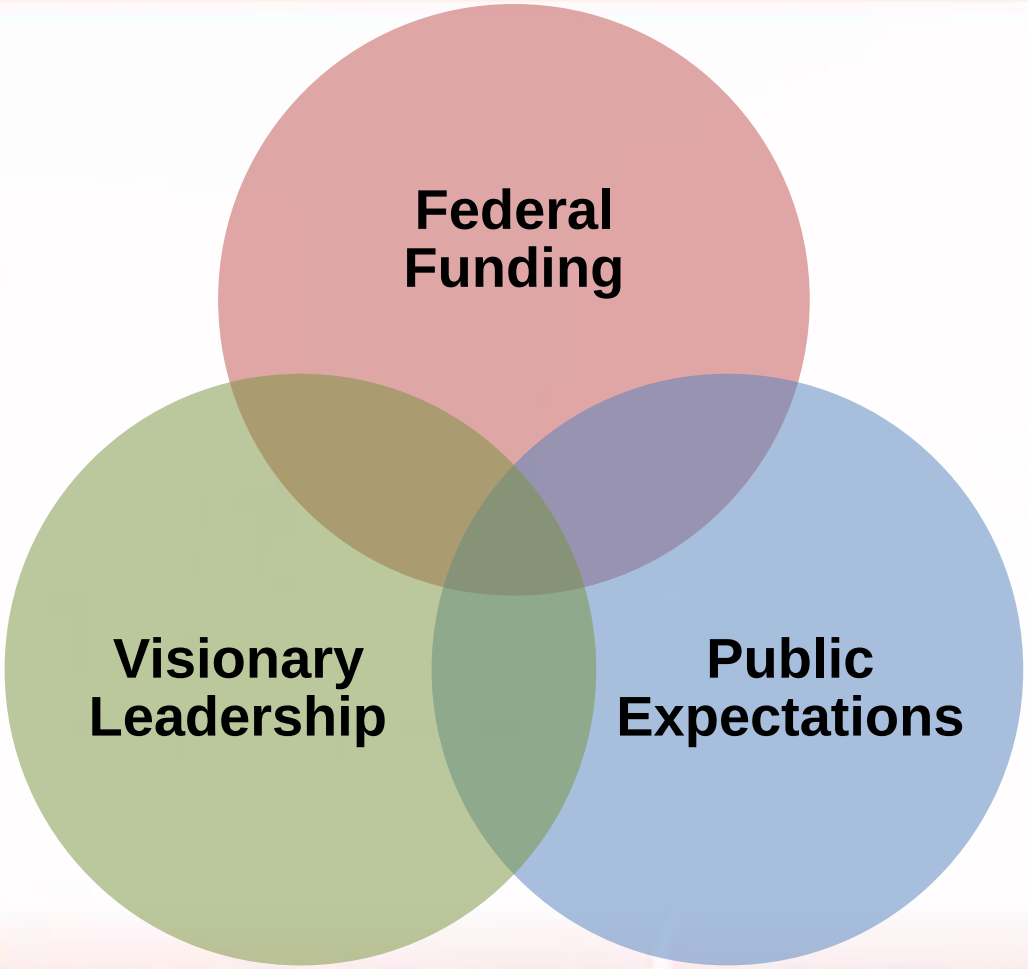


RECLAMATION & POCKET PARKS

CREATING PLACES OF INTEREST



THEME 2: CATALYSTS FOR CHANGE



THEME 3: COLLABORATIVE APPROACH

- Interagency & interdisciplinary collaboration
  - Coordination between departments of transportation, planning and public works
- Industry & governance partnerships
- Public involvement
  - Open and transparent communication

THEME 4: INNOVATIVE IMPLEMENTATION PROGRAMS

Source: CDOT

THEME 5: LEARNING FROM PEER CITIES

Portland, Oregon, USA

Bogotá, Colombia

New York, New York, USA

CONCLUSIONS AND RECOMMENDATIONS

1. Take a holistic approach: Beyond mobility, transportation also affects livability and economic vitality as well as social and environmental factors
2. Harness visionary leadership: Mayoral support and strong leadership within city agencies often serve as driving forces of transformational projects
3. Connect policies to best practices: Strive to integrate the policies with their day-to-day practices
4. Develop the right tools: Examine the efficacy of current business practices and organizational structure to enable them to achieve their development goals

CONCLUSIONS AND RECOMMENDATIONS

5. Collaborate: The regional nature of federal funding policies and transportation projects require interagency and multijurisdictional collaboration
6. Speak the same language: All participating agencies and stakeholders need to share a common language when discussing the future vision for their city
7. Know your audience: Understand your audience in order to determine the best approach for implementing change