



Linking Transportation Planning with Environmental Resources Webinar Series



Collaboration . Education . Innovation





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QUESTIONS?



Collaboration . Education . Innovation



FHWA Livability Overview

Gabe Rousseau
FHWA Office of Human
Environment

Overview

- History & Defining Livability
- Current FHWA Activities
- Future



History

- Livability has been a national initiative before...
 - Carter Administration's *Livable Cities Program*
 - Clinton-Gore Administration's *Building Livable Communities Program*
- Now...
 - Obama Administration's *Livability Initiative and the Interagency Partnership for Sustainable Communities*

What are Livable Communities?

A livable community is one in which people have multiple, convenient transportation and housing options as well as destinations easily accessible to people traveling in and out of cars.

Livable Communities are where people have access to many different forms of transportation and affordable housing.....”

U.S. DOT Secretary, Ray

LaHood

See www.dot.gov/livability for more on DOT's perspective.



History

- Livability builds off existing resources, policies, and programs:
 - Context Sensitive Solutions
 - Scenario Planning
 - Planning and Environment Linkages
 - AASHTO Bike and Pedestrian Guides
 - New funding programs from ISTEA and SAFETEA-LU (e.g., Safe Routes to School)
 - Increased options for project eligibility

Transportation Planning

- State and MPO Planning
- 23 CFR 450.200 and 450.300
 - ...to carry out a continuing, cooperative, and comprehensive multimodal transportation planning process...that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and foster economic growth and development, while minimizing transportation-related fuel consumption and air pollution...

HUD-DOT-EPA Interagency Partnership for Sustainable Communities—Guiding Principles



**Provide More
Transportation
Choices**



**Coordinate Policies
and Leverage
Investment**



**Promote Equitable,
Affordable Housing**



**Enhance Economic
Competitiveness**



**Support Existing
Communities**



**Value Communities and
Neighborhoods**

Livability— Facilities



Livability Helps Rural Communities

- Challenges to address:
 - Roadway safety on rural roads is a major concern
 - Emergency response times
 - Connectivity of rural roads
 - Ensuring that senior citizens can get to services and destinations
 - Keeping young families in the community



FHWA Activities— Livability Web Site

- Existing funding sources to support livability
- Division contacts
- Case studies

U.S. Department of Transportation
Federal Highway Administration

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Livability Initiative

Livability Home | Contacts Map | FAQs | Related Links

Livability Activities
Case Studies
Partnership
Programs
Resources

Livability Initiative

A Few Words from Victor Mendez, Federal Highway Administrator

Welcome to the Federal Highway Administration's (FHWA) Livable Communities webpage. This webpage is intended to provide information on the FHWA Livability Initiative as well as provide updates on the DOT/HUD/EPA Partnership for Sustainable Communities.

I am honored to be a part of the most exciting time in the history of American highways. I will work to continue improving the relationship between infrastructure and community needs, specifically to improve a community's 'livability,' to enhance the environmental sensitivity of roads and bridges and to help states explore multi-modal transportation options. There is much work ahead of us, but I look forward to it. Our mission is to bring you the highway system you deserve, and I welcome the challenge.

Victor Mendez, Federal Highway Administrator

What is Livability?

- Livability is defined as providing transportation choices that promote place-based transportation policies that are centered on people. A livable community is one in which people have multiple, convenient transportation and housing options as well as destinations easily accessible to people traveling in and out of cars. Livable communities also encourage mixed-use, multi modal neighborhoods with highly-connected streets promoting mobility for all users. Livability is about planning and designing transportation projects that preserve and enrich the unique character of rural, urban, and suburban communities.

Highlights

HUD/DOT/EPA [Interagency Partnership](#) for Sustainable Communities

The Partnership will focus on the following areas for this year:

- Respond to recommendations made by Stakeholders
- Align funding in regards to HUD's NOFA and DOT's NOFA
- Build regional capacity and collaboration between agency field offices
- Make visible progress coordinating federal planning requirements for housing, transportation, air quality, and water infrastructure.
- EPA's [Smart Growth Implementation Assistance Projects](#).

[More...](#)

Contacts

FHWA Office of Planning
Contacts

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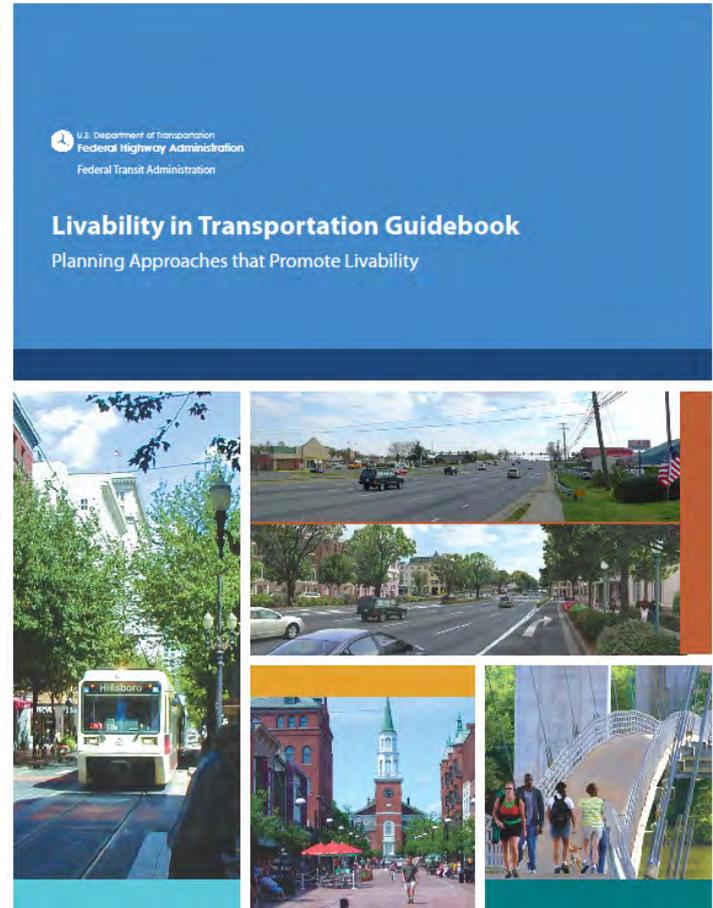
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FHWA

United States Department of Transportation - Federal Highway Administration

FHWA Activities— Livability Guidebook

- Designed as a practitioners resource and guide
- For MPOs, State DOTs and others in the advancement Of livable community developments
- Developed with FTA



FHWA Activities— Livability Guidebook

- Demonstrates the importance of linking land use and transportation planning
- Ties together a wide range of overlapping objectives:
 - Walkable Communities
 - Transit Oriented Development
 - Complete Streets
 - Context Sensitive Solutions
 - Healthy Neighborhoods
 - Smart Growth
 - Sustainability

FHWA Activities— Strategies for Livable Communities

- Developing resources to support practitioners:
 - Research Paper
 - Differentiate between livability and sustainability
 - *Sustainability*: Improving energy efficiency, reducing dependence on oil, reducing greenhouse gas emissions and benefitting the environment.
 - Livability Workshops
 - Toolbox of Training Materials
 - Model Regional Comprehensive Livability Plan

FHWA /DOT Activities— Bicycle/Pedestrian Policy Statement

- US DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations (March 2010)
 - “Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems.”



FHWA Activities—SEP-14

- Problem
 - Conflicting contract requirements for HUD and FHWA funds.
- Solution
 - Special Experimental Project No. 14 (SEP-14) to permit, on a case-by-case basis, the application of HUD requirements on Federal-aid highway projects.

FHWA Activities—TIGER II

- Joint Planning Grants with HUD
 - \$40 million in HUD grants; up to \$35 million in DOT planning grants
- TIGER II
 - \$600 million available
 - Grant criteria include:
 - *Livability: Fostering livable communities through place-based policies and investments that increase transportation choices and access to transportation services for people in communities across the United States.*

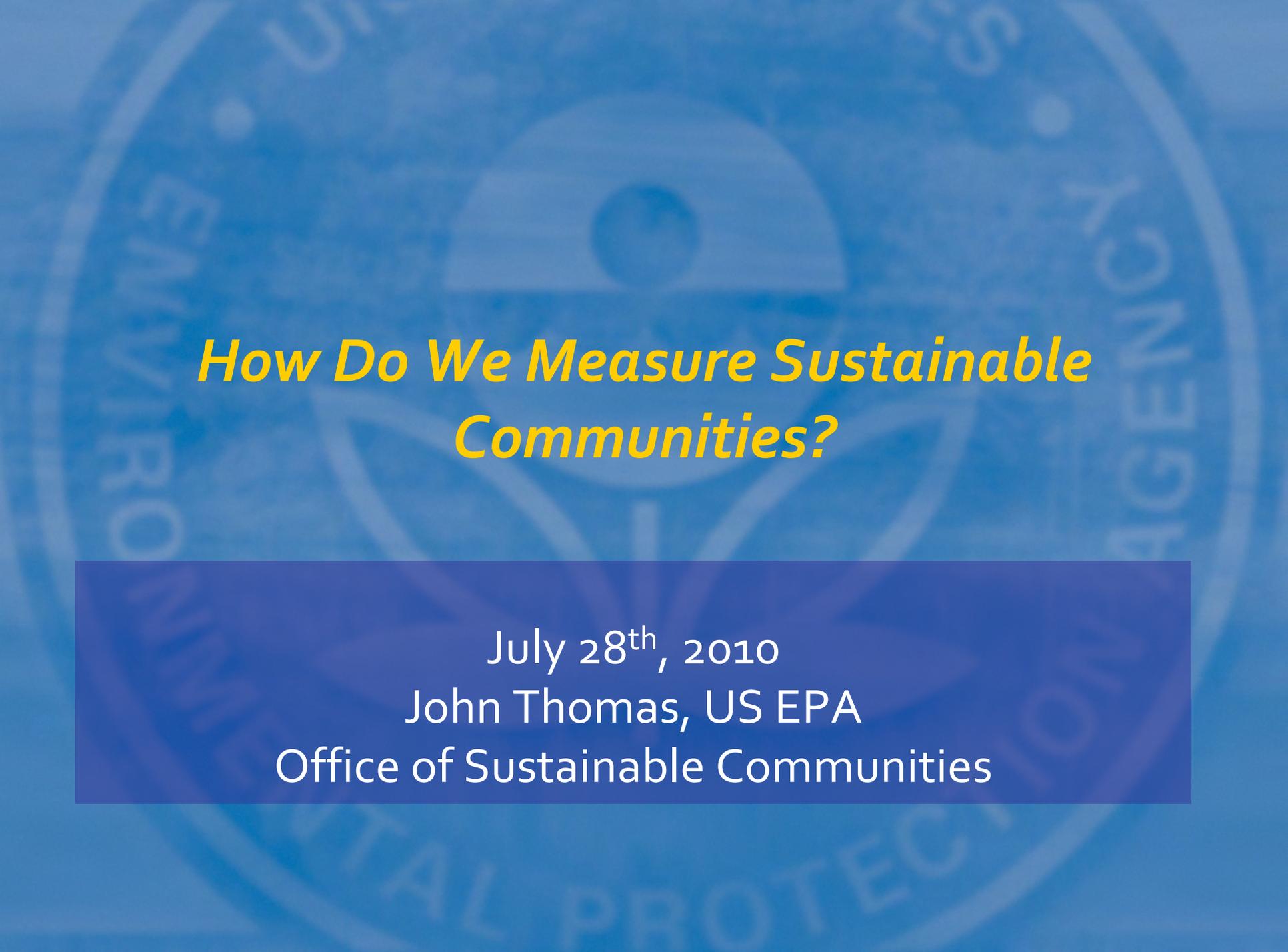
The Future of Livability for FHWA?

- Funding program?
 - FY 2011 Budget Request from DOT:
 - “\$200 million in highway funding for a competitive livability grant program to assist ...in integrating project and development planning processes within transportation, land use, and natural resource conservation in both urban and rural communities.”
- Performance measures?
- Livability plans?



FHWA Contacts

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 - Sharlene.Reed@dot.gov

The background of the slide features a large, faded, circular seal of the United States Environmental Protection Agency (EPA). The seal contains a central emblem with a sun, a tree, and a water drop, surrounded by the text "ENVIRONMENTAL PROTECTION AGENCY" and "UNITED STATES OF AMERICA".

How Do We Measure Sustainable Communities?

July 28th, 2010

John Thomas, US EPA

Office of Sustainable Communities

How the HUD DOT EPA Partnership is thinking about performance measures...

- Core set of measures with varied applications
 - Planning and capital program measures
 - Baselines for measuring progress
 - Consistent **sustainable community criteria** for Federal programs
- Compliment to existing measures
- Varied approaches for rural and urban regions

Different Types of Measures...

- Broad Outcomes
 - Lower Household Transportation Costs
 - Lower Transportation Related Emissions
 - Improved Mobility
- Indicators of Progress
 - Shorter car trips
 - More walking, biking and transit use
 - Improved safety
- Key Strategies
 - Range of housing opportunities in major activity centers
 - More walkable neighborhoods
 - Redevelopment in more accessible places

Principle #1 – More Transportation Choices

Develop more convenient reliable, safe and economical transportation alternatives

Broad goals...

Lower HH
Transportation
Costs

Improved Public
Health

Reduced Oil
Dependence

Improved Air
Quality

Reduced GHG
Emissions

Indicators of
Progress...

More trips made
on foot or by bike

Increased transit
ridership

Shorter car trips

Unique to this Principle

Shared by another principle

Key strategies...

Expanded Transit
Services

Improved Transit
Performance

More Homes and Jobs
Near Transit

More Housing
Opportunities Near
Major Activity Centers

More Homes and Jobs
in Walkable Places

Principle #2 –Equitable Affordable Housing

Expand access to location and energy efficient housing choices

Broad goals...

Lower Combined
Cost of Housing &
Transportation

Improved Public
Health

Reduced Oil
Dependence

Improved Air
Quality

Reduced GHG
Emissions

Indicators of
Progress...

More trips made
on foot or by bike

Increased transit
ridership

Shorter car trips

Unique to this Principle

Shared by another principle

Key strategies...

More Homes in
Walkable
Neighborhoods

More Housing
Opportunities
Near Major
Activity Centers

More Affordable
Housing in Major
Employment
Centers

Broad Outcome Measures

- Often forecast differences among scenarios
 - Business as usual vs. Preferred Alternative
- Can also be based on monitoring data
 - However... when outcome measures are broad they are shaped by many factors

Indicator and Strategy Based Measures

- Can play an important role in long range / comprehensive plans
- But are of critical importance for capital plans and project / corridor scale initiatives

Sacramento Regional Blueprint Example

Design for Quality:

The design details of any land use development—such as the relationship to the street, setbacks, placement of garages, sidewalks, landscaping, the aesthetics of building design, and the design of the public right-of-way (the sidewalks, connected streets and paths, bike lanes, the width of streets)—are all factors that can influence the attractiveness of living in a compact development and facilitate the ease of walking and biking to work or neighborhood services. Good site and architectural design is an important factor in creating a sense of community and a sense of place.



PEOPLE LIVING IN AREAS WITH GOOD OR EXCELLENT PEDESTRIAN FEATURES

(in percent, 2050)

Base Case Scenario



34%

Preferred Blueprint Scenario



69%

0 10 20 30 40 50 60 70 80 90 100

In the Base Case, 34 percent of people would live in pedestrian-friendly neighborhoods. In the Blueprint Scenario, in 2050 that number would rise to 69 percent.

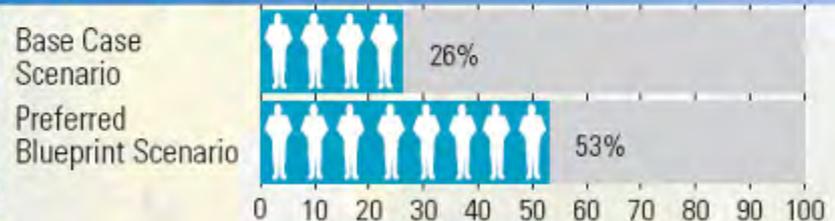
Sacramento Regional Blueprint Example

Mixed Use Developments:

Well planned and designed mixed use developments encompass all of the elements of the other growth principles. Buildings homes and shops, entertainment, office and even light industrial uses near each other create active, vital neighborhoods, or villages. This mixture of uses can be either in a vertical arrangement (mixed in one building) or horizontal (with a combination of uses in close proximity). These types of projects function as local activity centers, contributing to a sense of community, where people tend to walk or bike to destinations and interact more with each other. Separated land uses, on the other hand, lead to more, and longer, automobile trips because of the distance between uses. Mixed land uses can occur at many scales. Examples include: a housing project located near an employment center, a small shopping center located within a residential neighborhood, and a building with ground floor retail and apartments or condominiums on the upper floor(s).

PEOPLE LIVING IN AREAS WITH GOOD MIX OF JOBS AND HOUSING

(in percent, 2050)



Under the Base Case scenario, 26 percent of people would live in communities with a good, or balanced, mix of land uses by 2050. In the Blueprint Scenario, 53 percent would live in balanced communities.

Sacramento Regional Blueprint Example



TYPE OF TRIPS

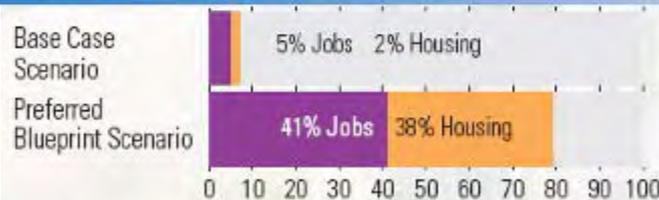
(in percent)



The Blueprint Scenario reduces the number of trips taken by car by about 10 percent. These trips are shifted to transit, walking or biking.

GROWTH NEAR TRANSIT

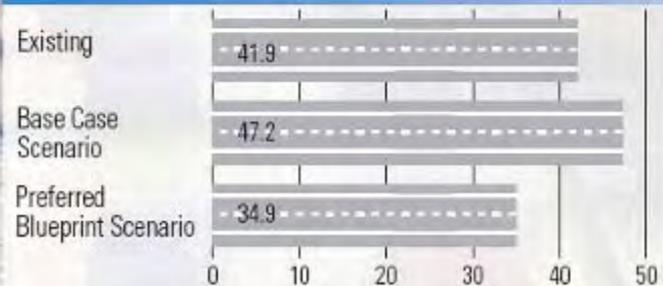
Within walking distance of 15-minute or better transit service



In the Base Case, 2 percent of new housing and 5 percent of new jobs are located within walking distance of 15-minute bus or train service. In the Blueprint Scenario, those figures rise to 38 percent of new houses and 41 percent of new jobs.

VEHICLE MILES TRAVELED

(per household per day)

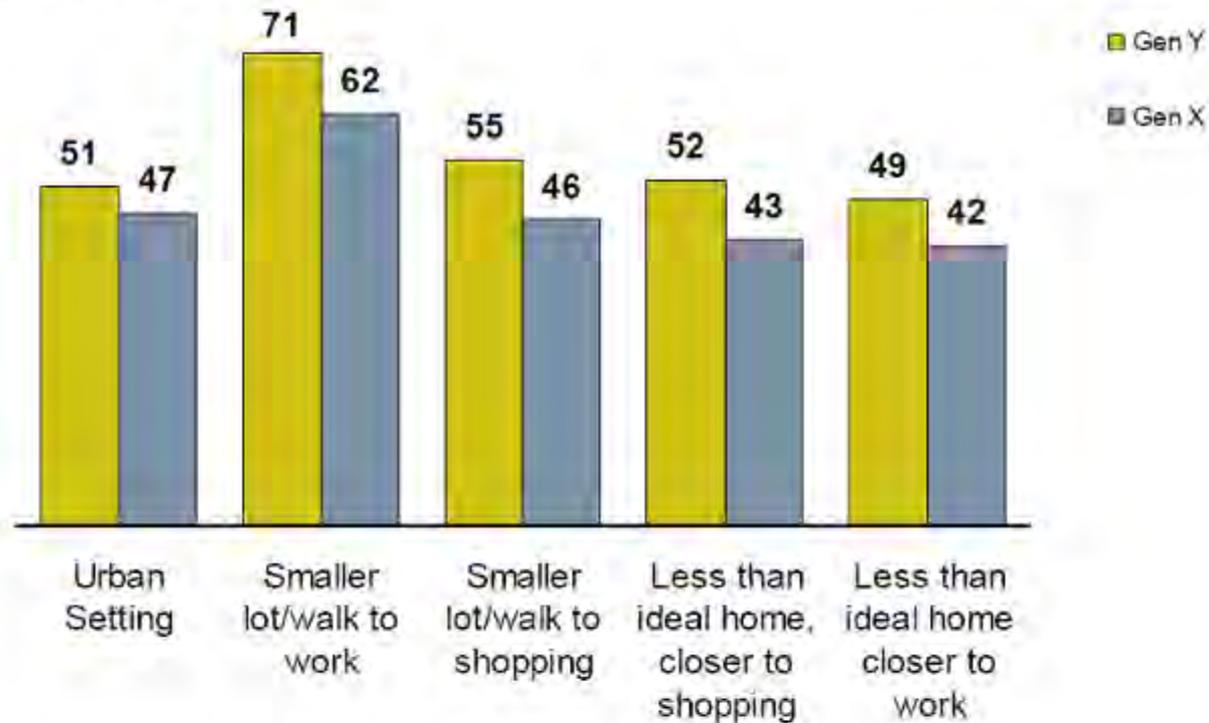


The number of vehicle miles traveled per day per household declines from 47.2 miles to 34.9 miles.

An unmet market demand...

GENERATIONAL TRADE-OFFS INCLUDE MORE FOCUS ON COMMUNITY RATHER THAN HOME

Generational Tradeoffs (%)

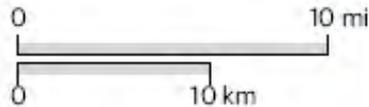


Twin Cities Example

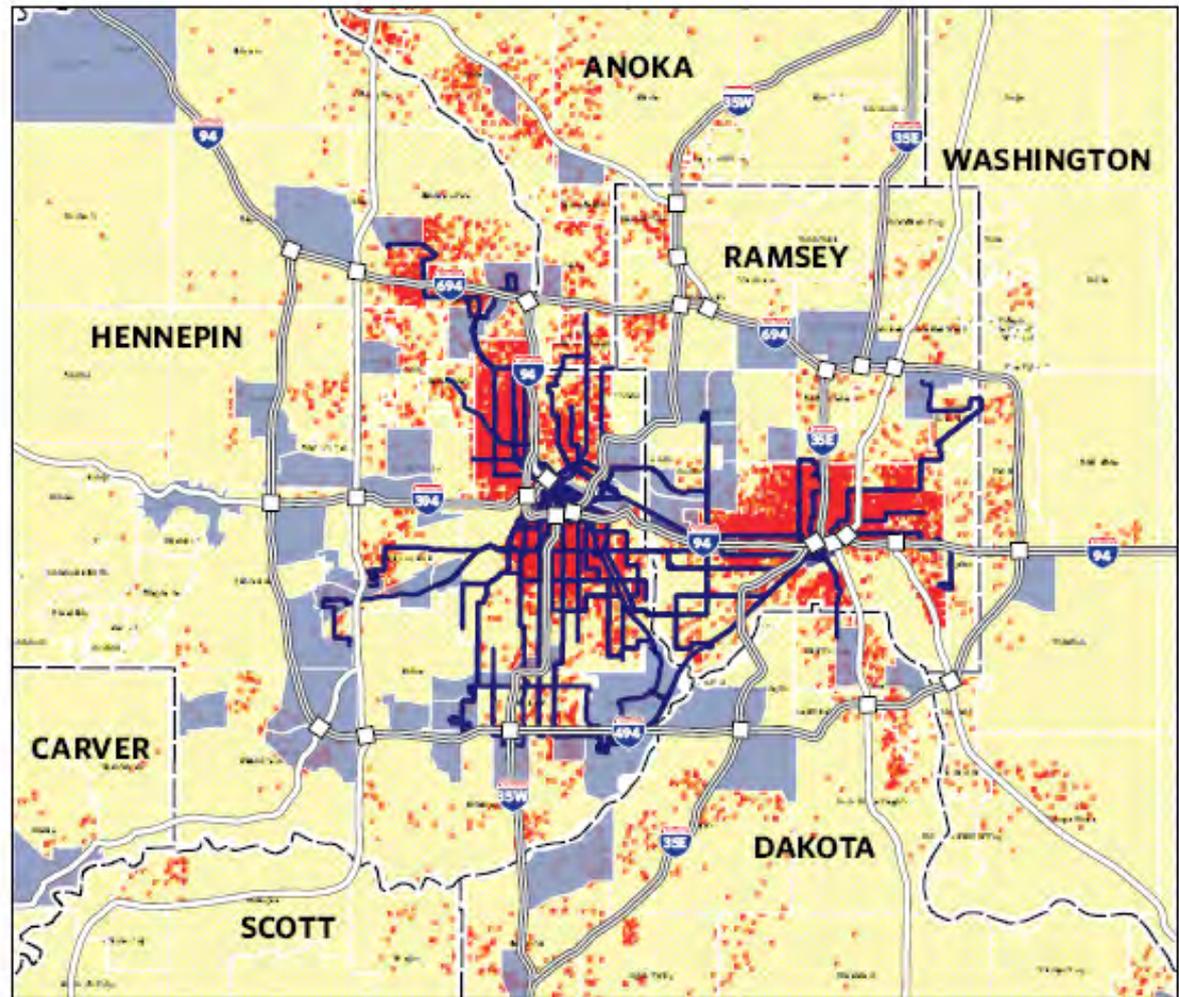
LOW WAGE JOB CONCENTRATION AND FREQUENT TRANSIT SERVICE ROUTES

Low Wage Jobs
by Travel Analysis Zone

- 0 - 1,200 Jobs
- 1,201+ Jobs
- Concentrations of
Low Income Workers
- Interstate
- U.S. Highway
- Moderate Frequency
Transit Route



DATA SOURCE
2004 Census Longitudinal Employment and Household
Dynamics (LEHD) at Travel Analysis Zone (TAZ) level
and Metropolitan Council Data



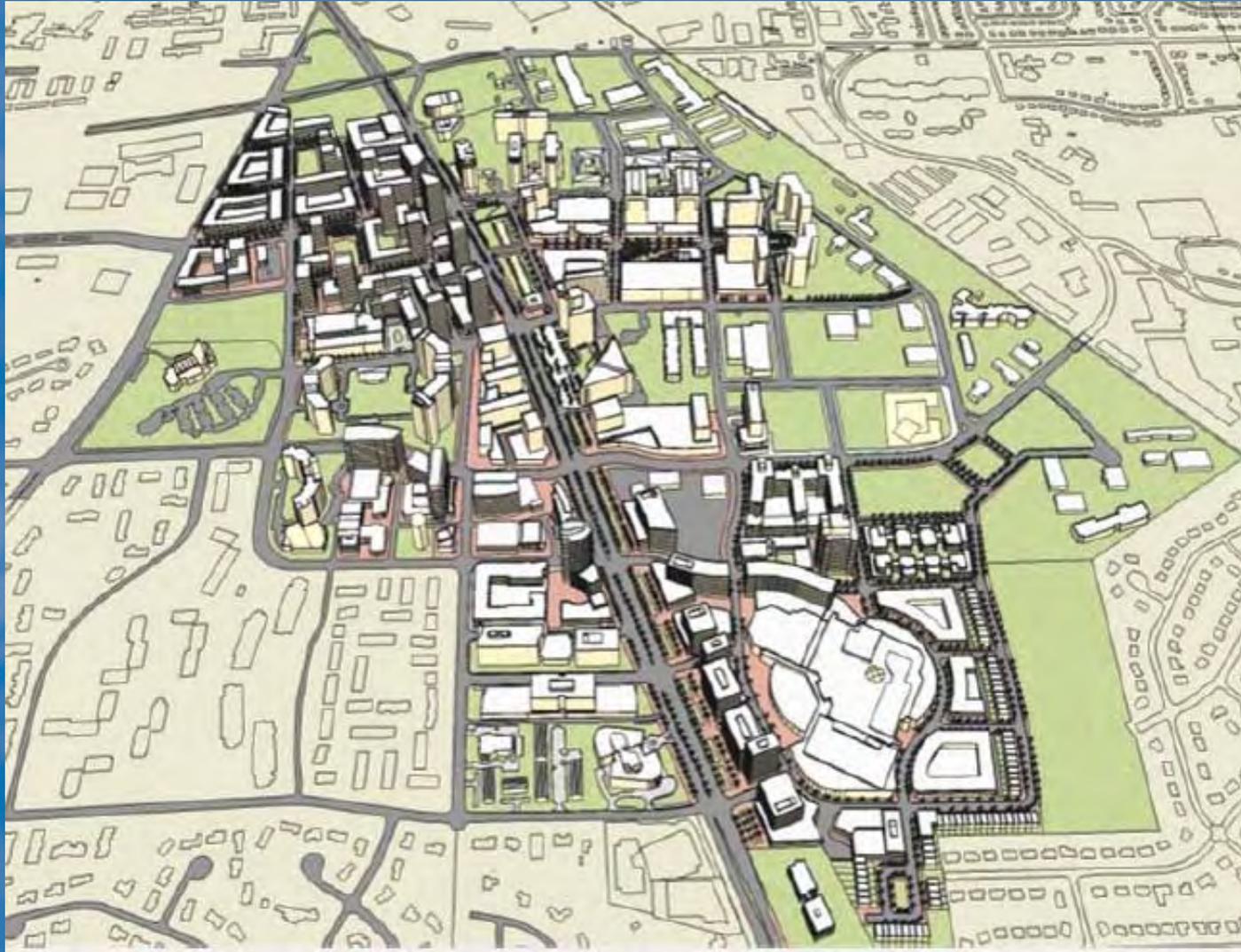
Examples that Illustrate Sustainable Community Performance

- White Flint (Montgomery County, MD)
- Tysons Corner (Fairfax County, VA)
- Atlantic Station (Atlanta, GA)
- Envision Lancaster (Lancaster County, PA)

White Flint Current Development



Proposed Redevelopment



Source: Montgomery County, White Flint Sector Plan

White Flint Current Street Conditions



Proposed Boulevard Redesign



Source: Glatting Jackson, White Flint Partnership

Images of Proposed Public Spaces



Tysons Corner / Dulles Metro Extension



Legend:

- Proposed Transit Line
- Tysons Corner Urban Center Boundary

* Fairfax County 2003 Aerial Imagery

0 0.5 1 Miles



Prepared by Fairfax County
Dept. of Planning and Zoning



How do you transition from an auto oriented "edge city" ...



Where this is the pedestrian experience...



Source: Washington Post

To a different kind of "edge city"...



Source: PB PlaceMaking "Tysons Corner: Path to the 21st Century: Draft Summary of Findings" Prepared for Tysons Land Use Task Force 27 February 2008

Built Example – Atlantic Station



Atlantic Station – Atlanta, GA



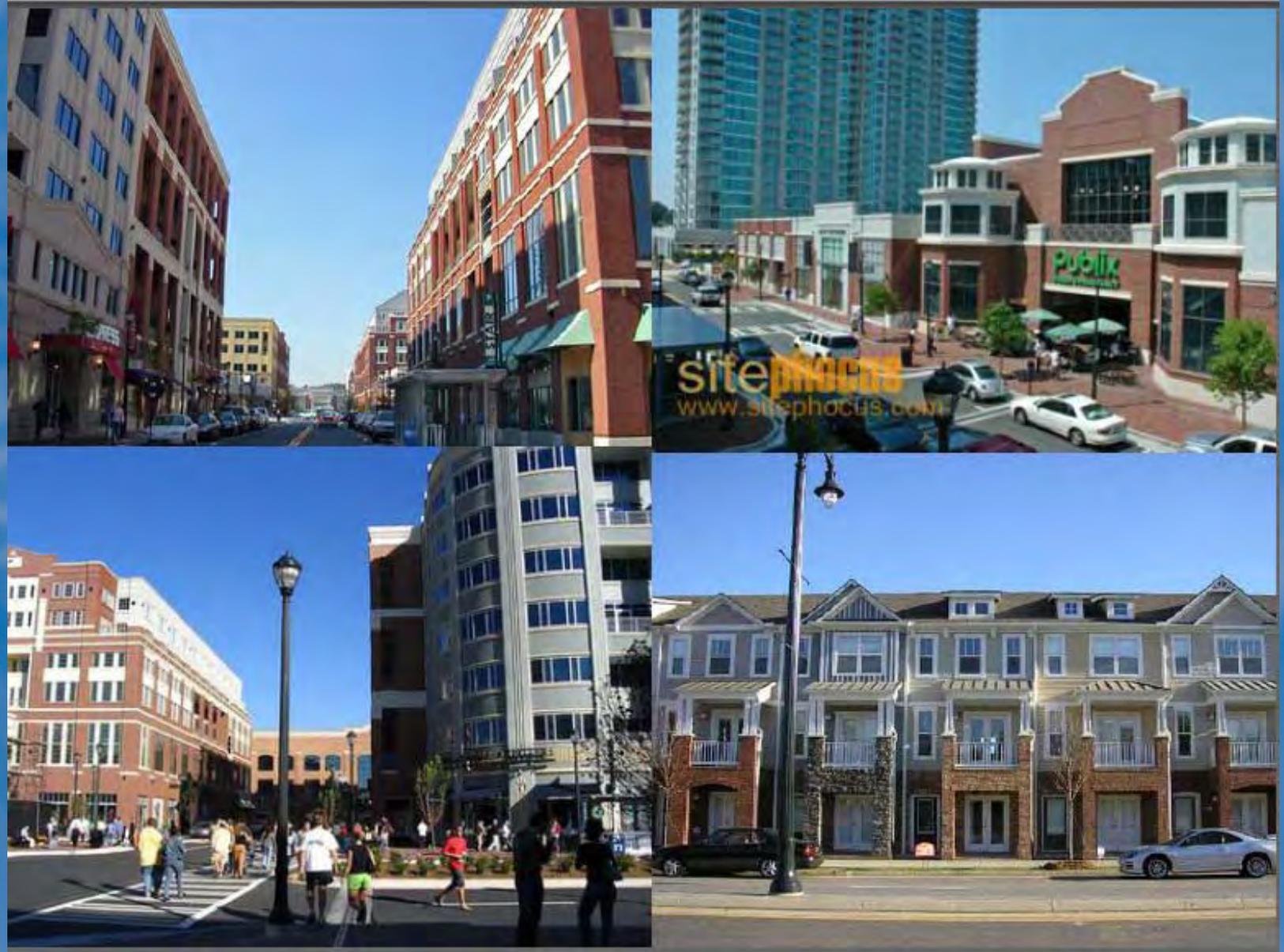
Atlantic Station – Atlanta, GA



Atlantic Station – Atlanta, GA



Atlantic Station – Atlanta, GA



Atlantic Station – Atlanta, GA



Atlantic Station - Outcomes

- Original EPA estimate = VMT 50% less than comparable greenfield sites
- Monitoring report surveys
 - *Regional Average* =
 - 32.4 miles/day per household
 - *Atlantic Station* =
 - 8.6 miles/day per households
 - 19% of trips made to/from Atlantic Station are by transit, and (ARC 2008)
 - Roughly 40% of all trips stay on site 80% of those are walk trips

*Transforming cities is not necessarily about
high rise apartment and office buildings*

Status Quo



More Compact



Source: EPA White Paper: The Placemaking Premium. Victor Dover. 2007. Illustrations courtesy of Dover Kohl and Partners.

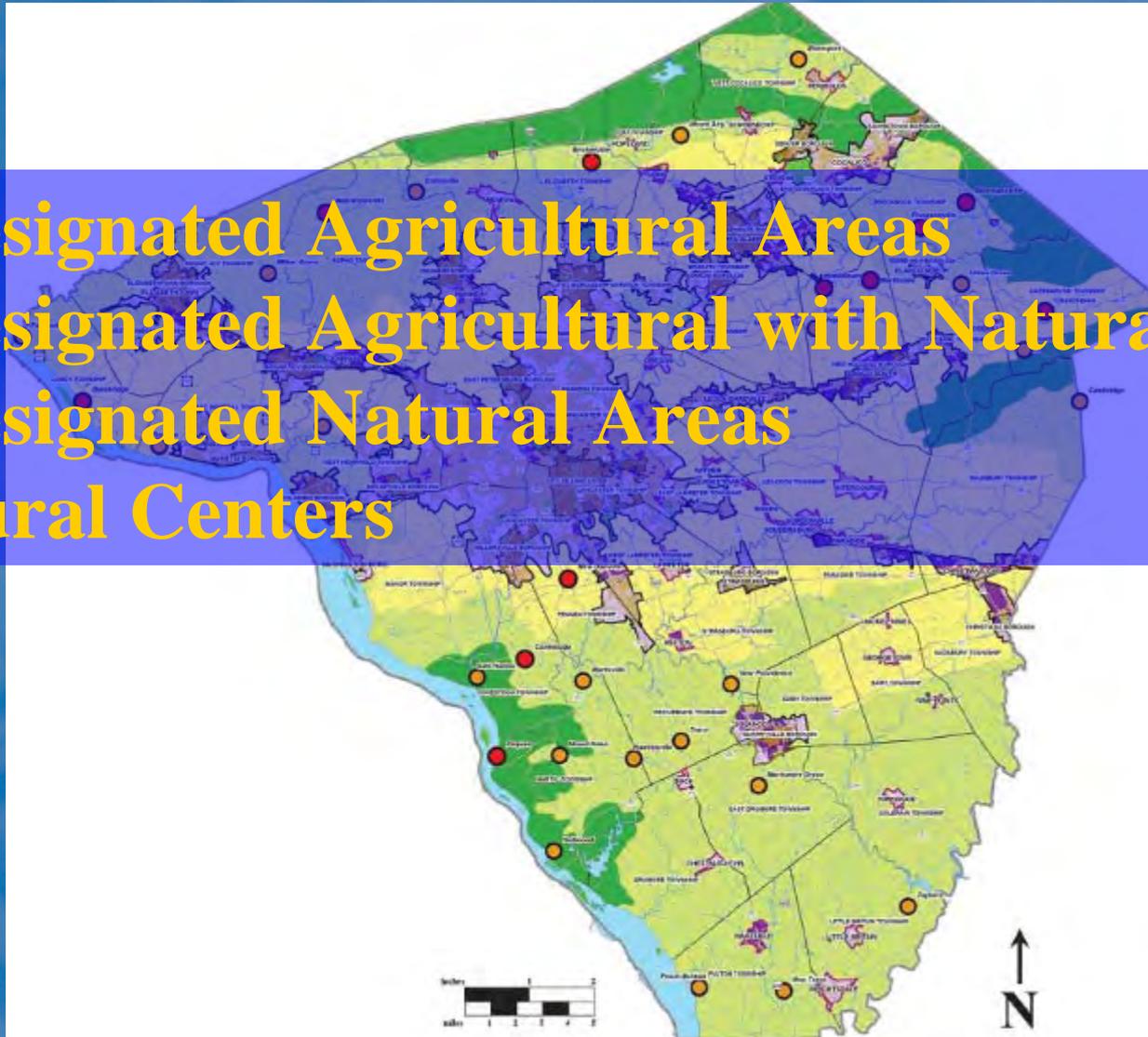
Rural Town Centers can also be compact and walkable



Source: EPA White Paper: The Placemaking Premium. Victor Dover. 2007. Illustrations courtesy of Dover Kohl and Partners.

Rural Planning Example - Lancaster County, PA

1. Designated Agricultural Areas
2. Designated Agricultural with Natural Areas
3. Designated Natural Areas
4. Rural Centers



Land Consumption Outcomes

ADDITIONAL URBANIZED LAND

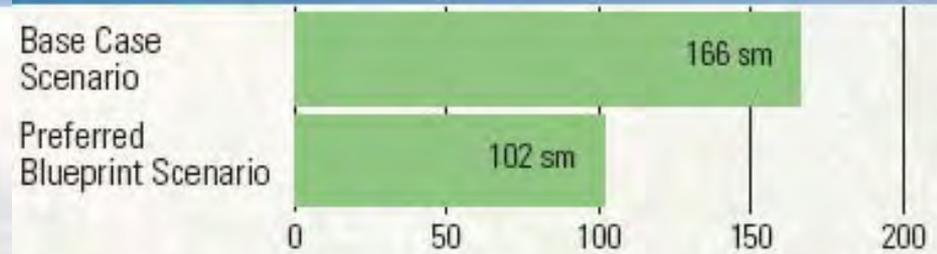
Through 2050
(in square miles)



Under the Base Case, new development would need an additional 661 square miles of land by 2050. In the Blueprint Scenario, 304 square miles of new land would be needed for urban uses.

AGRICULTURAL LAND CONVERTED TO URBAN USES

(in square miles)



The Base Case would convert 166 square miles of agricultural land into urban uses. With the Blueprint Scenario, 102 square miles would be converted from agricultural to urban uses.

Context Drives the Measures...

- Long term planning / regional scale
 - Most amenable to broad outcome measures
- Capital Investments Programs
 - Indicator measures can benchmark progress
- Project / Community / Corridor Scale Initiatives
 - Measuring key strategies may be a more effective approach

LIVABILITY

REGIONAL, STATE, AND LOCAL APPLICATIONS



Jon Crum

Environmental Specialist

FHWA- PA Division

Overview of...

- Livability
- Funding Programs
- Mid-Atlantic Sustainable Communities Initiative
- PennDOT's Smart Transportation
- Local Applications
 - MOVEPGH
 - Juniata River Bridge



Livability...

- Advances transportation policy
- Includes multi-modal transportation options
- Includes mixed-use neighborhoods
- Accommodates all users
- Is about the unique character of both urban AND rural communities

Secondary Benefits

- Reduced emissions
- Improved energy efficiency
- Reduced impacts on ecosystems
- Reduced congestion
- Increased use of sustainable practices

Determined by the public

Livability is dependent upon the vision articulated by the residents and other stakeholders of the community



**REMEMBER:
ONE SIZE DOES
NOT FIT ALL!**



Advocacy Groups



Federal Highway Administration

Livability Initiative

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Livability Activities
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Livability Initiative

A Few Words from Victor Mendez, Federal Highway Administrator

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Highlights
 HUD-EPA (Smart Growth) Partnership for Sustainable Communities
 The Partnership will focus on the following areas for the year:

- Respond to recommendations made by stakeholders.
- Sign funding in regards to HUD's IOFA and DOT's IOFA.
- Build regional capacity and collaboration between agency field offices.
- Take on-site progress coordinating federal planning requirements for housing, transportation, air quality and water infrastructure.
- EPA's Smart Growth Implementation Assistance Project.

[More...](#)

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 FHWA

BICYCLING AND WALKING IN THE UNITED STATES

2010

BENCHMARKING REPORT



STAFFED BY
 Alliance for Biking & Walking

PA COMMUTES™
 ALTERNATIVE TRANSPORTATION IN PENNSYLVANIA

Find an option that works for you: [Carpool](#) [Bike](#) [Ride](#) [Transit](#) [Walk](#) [Bike](#) [Ride](#) [Walk](#)

Riding a bus is... smart.
 The green way to get around town.

START A CAR POOL
 Sharing a ride with at least one other person reduces your commuting expenses by almost half. (Time saved by carpooling):

- saves 20-30% per year
- saves 100-150 gallons of gas
- saves 100-150 lbs of CO2 per year

25% OFF
 All PA Commutes's toll payments are covered by transportation discounts.

HOW MUCH COULD YOU BE SAVING?
 Many users saving up to \$1,000 or more per year. How much more could you save?

DISCOUNTS
 All across Pennsylvania, transit agencies offer fare reductions and promotions. Search for discounts in your area.

Funding Programs

- TIGER and TIGER II
- Congestion Mitigation and Air Quality (CMAQ)
- Transportation Enhancements
- Surface Transportation Program (STP)

Livability Applications

Mid-Atlantic Sustainable Communities Initiative



EPA Region 3

Delaware, DC, Virginia, West Virginia,
Maryland, and Pennsylvania

Mid-Atlantic Sustainable Communities Initiative: Purpose

- Advance the Sustainable Communities Initiative by...

Promoting the principles of Livability and Sustainable Communities

Removing policy and other barriers

Soliciting feedback and recommendations from stakeholders

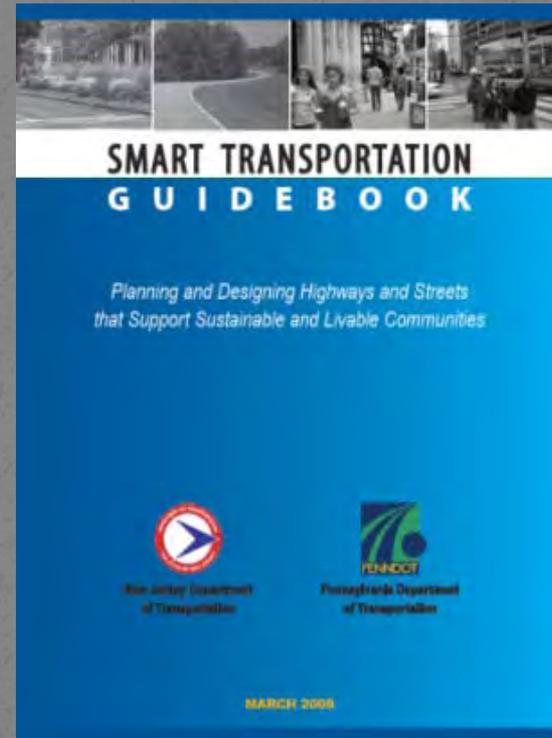
Mid-Atlantic Sustainable Communities Initiative: Forums and Stakeholder Feedback

Common Themes:

- Define 'Sustainability'
- Regional Concept
- Flexibility
- Land Use
- Additional Agencies
- More Programs

Smart Transportation

Pennsylvania
Department of
Transportation



Purpose

- Project Needs Vs. Available Funding
- Land Use Ties to Transportation Planning and Project Development

Smart Transportation is about...

- Partnership with Communities
- Linking Land Use and Transportation Decisions / Investments

Smart Transportation means...

More

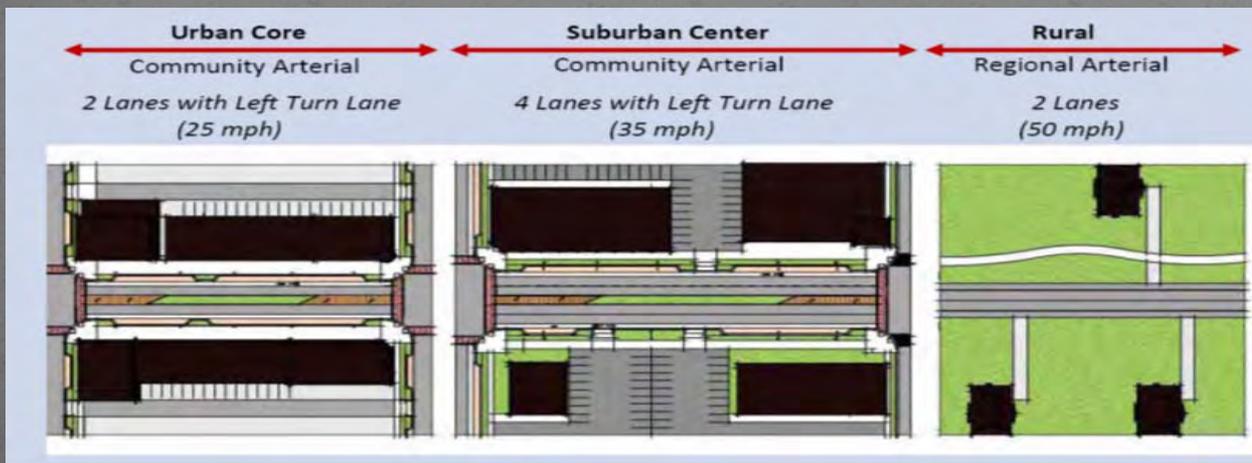
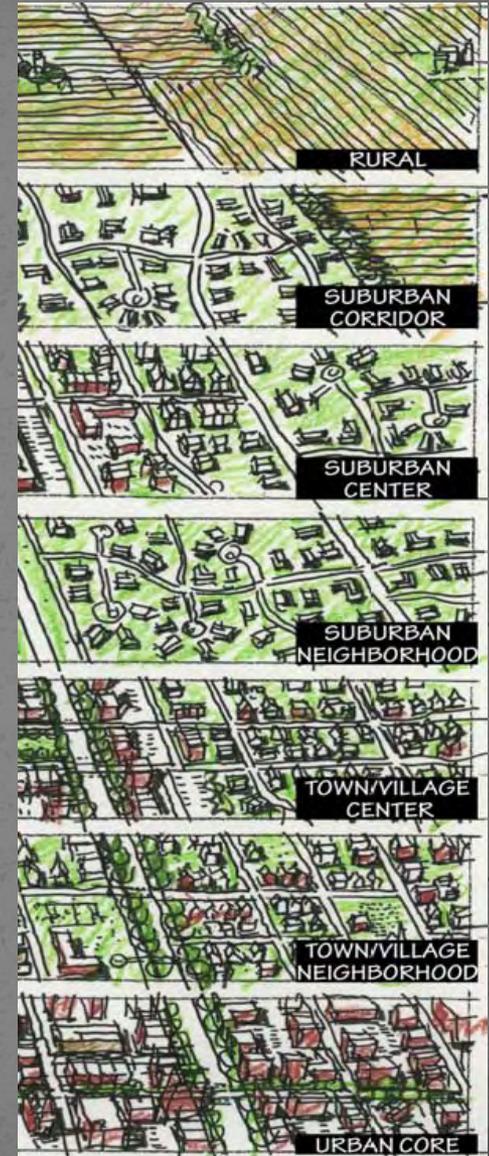
Creativity
Flexibility
Listening
Efficiency
Choices
Solutions
Community

Less

Costs
Constraints
Conflicts
Confusion
Limitations
Do-Overs
Sprawl

From the Guidebook...

- Flexible design
- Coordination
- Land use and roadway design
- Operating speed



Pennsylvania Community Transportation Initiative

- Applications Received:
403 totaling \$600 million
- Applications Selected:
50 totaling \$59.3 million

Type of Project	# of Selections	% of Total Selections	Total Funding for Selected Projects	% of Total Funding
Bicycle/Pedestrian	9	18%	\$ 9,230,405	16%
Roads/Intersections/Local Network	6	12%	\$ 9,937,000	17%
Intermodal/Transit-oriented Development	13	26%	\$ 14,007,200	24%
Land Use & Transportation Planning/Redevelopment	13	26%	\$ 7,666,500	13%
Streetscape/Traffic Calming	8	16%	\$ 18,158,887	31%
Regional Planning	1	2%	\$ 285,000	0%
TOTAL	50	100%	\$ 59,284,992	100%

www.smart-transportation.com



Smart Transportation
it starts with me

[about](#)

[get involved](#)

[news](#)

[resources](#)

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[Click here for the latest information on the Pennsylvania Communities Transportation Initiative \(PCTI\) and Highway Occupancy Permits.](#)

We all know the world is changing rapidly around us. Every day, we see the prices increase at our local gas station, we read in the newspaper about global warming, we talk to our neighbors about traffic congestion or the slowing economy.

All of these trends are changing the needs and demands of our transportation system. To adapt to this changing world, the Pennsylvania Department of Transportation (PennDOT) is integrating a concept called "Smart Transportation" into the way we do business.

Smart Transportation simply asks us to understand and embrace our evolving financial, environmental, technological, and social contexts as we approach our transportation challenges. It is about consistently applying the most innovative tools and ideas to solve our new transportation challenges, while also helping to build great communities across Pennsylvania.

On this website, you will find a number of resources that will help you understand what we are trying to achieve, and how you can get involved with this effort. We are still constructing this website, and it will be continually updated as the Smart Transportation effort goes forward. Please email us at smarttransportation@state.pa.us with any comments or suggestions.

We look forward to everyone's help as we seek to build a more efficient, affordable, and sustainable transportation system. Together, we can ensure that our communities remain great places for future generations of Pennsylvanians.

MOVEPGH

Pittsburgh, PA



MOVEPGH

“Retrofit / Design a **Multimodal** Transportation System to Catalyze **Economic Development**, Provide Increased **Equity** and Freedom of **Choice** Between Modes, Improve **Accessibility** For All Citizens, and Further our Culture of **Sustainability**”

MOVEPGH Focus Areas

- Complete Streets and Systems
- System Efficiency and operations
- Contextual Design
- Energy and Environment
- Sustainability and Livability
- Funding Strategies

MOVEPGH

- The City of Pittsburgh's effort to...
 1. Integrate transportation and land use
 2. Develop a truly complete multi-modal transportation system

... through a Complete Streets policy approach

MOVEPGH

- Will result in...
 - Multi-modal Transportation Plan
 - Bicycle / Pedestrian Plan Update
 - Street Design Manual

Juniata River Bridge Replacement

Juniata County, PA



The Project

- Needs:
 - Structurally Deficient
 - Functionally Obsolete
 - Difficult Roadway Geometrics
- Purpose:
 - Replacement

The Project

- Project Goals:
 - Accommodate cars and heavy trucks
 - Accommodate pedestrians and bicycles
 - Maintain community cohesion

Project Area

- Natural Resources
- Cultural Resources
- Recreational Areas
- EJ Populations
- Schools

Links to Livability

- Unique character of the community
- Public Involvement
- Accommodation of all users

THANK YOU

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