02: Transportation Planning and Funding for Economic Competitiveness

Trainer(s):

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TRANSPORTATION PLANNING AND FUNDING FOR ECONOMIC COMPETITIVENESS

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Source: tristanford.org
AGENDA

- 9:00 am  Introductions
- 9:20 am  America’s Transportation Transformation and What it Means for Cities; Transportation Planning 101
  - Mariia Zimmerman, MZ Strategies, LLC
- 10:00 am  Planning for Economic and Fiscal Health
  - Roger Millar, Smart Growth America
- 11:00 am  Transportation Funding for Economic Competitiveness
  - Mariia Zimmerman, MZ Strategies, LLC
- 11:45 am  Additional Resources and Key Take-Aways
- 12:00 pm  Adjourn
ABOUT MZ STRATEGIES, LLC

- Mariia Zimmerman, Principal and Founder
- Hogs, TOD, Politics and Family
- Regional and Transportation Planning + Sustainability + Equitable Development + Strategic Planning
ABOUT SMART GROWTH AMERICA

- Smart Growth America
  - National organization
  - Dedicated to researching, advocating for and leading smart growth coalitions
  - Bringing smart growth practices to more communities nationwide.

- Roger Millar, PE, AICP
  - Vice President
  - Director, Leadership Institute
  - Director, National Complete Streets Coalition
WHO IS WITH US IN THE ROOM?

- Your Name, City, and Position
- Your Transportation Goal for Today
AMERICA’S TRANSPORTATION TRANSFORMATION & WHAT IT MEANS FOR CITIES

- More than Mobility
- Innovation
- Citizens leading
- Planning 101
WHAT IS TRANSPORTATION?

Transportation is different modes, working as a system, for the safe, efficient movement of people and goods.
THE TRANSPORTATION CONUNDRUM

• Everywhere and No Where
• Everyone is an Expert yet No One Understands
• Demand Exceeds Supply
• Love the New but Need the Old
WHY DOES TRANSPORTATION MATTER?

Transportation policy and proper investments are cross-cutting and support a range of broad national goals:

- Advances **economic** prosperity and competitiveness
- Achieves **environmental** sustainability
- Promotes **equity** and social inclusion
Yet transportation can also *hinder* these broad national goals when done incorrectly:

- Lack of investments (or the wrong kind of investments) can be an economic drag; can work against, rather than support, sustainability goals; and can exacerbate inequities
LEARNING OBJECTIVES

- Mega Trends
- Transforming Transportation
- New Normal
- Regionalism
- Transportation Planning 101
TO EVERYTHING: CHANGE, CHANGE, CHANGE

U.S. Dept of Transportation Forcasts of Future Driving vs. Reality

Source: USPIRG 2015:
Population Growth Means Minority Growth
- Between 2000-2010; US Population + 27.3 million.
  - Hispanic 55.5%; Asian 15.9%; Black 13.7%, White 8.3%; 2+ race 5%; American Indian 0.7%; Hawaiian (0.5%); Other race (0.5%)
  - Minority populations accounted for all or most of the growth in 33 states

Not such a Young Country anymore
- Between 2000-2010, the number of people 45+ grew 18 times faster than the under 45 cohort
- 23 states registered absolute declines in child residents; 27 gained children through migration and immigration

The Great Divide
- Nearly half of the nation’s infants are now children of minority parents, and a quarter are Hispanic; Of the 85+ population, 85% is white

Modern Families
- Less than half of all households are headed by married couples; just 1/5th of all households are “nuclear”

These Aren’t Your Grandparents’ Suburbs
- Half of all Americans Now live in the Suburbs - including large %s of minorities;
Despite recent gas price drop:
- Transportation accounts for 19% of household expenses.
- Housing and transportation costs rose faster than income during the 2000s.
- For households earning 50 to 100 percent of the median income of their metropolitan area, nearly 60% of income goes to housing and transportation costs.

Source: Losing Ground: Housing and transportation costs outpacing incomes, Center for Neighborhood Technology and National Housing Conference, 2012
CHANGING DEMOGRAPHICS = CHANGING PREFERENCES

Transport as means to an end; not the end itself
Americans of all ages want mixed-use neighborhoods

58% of respondents say ideal neighborhood is mixed-use; just 39% live in one now
TRANSIT NOW SEEN AS VALUABLE

“A sound transportation system not only benefits individual property owners, but also creates the foundation for a community’s long term economic well-being.”

- National Association of Realtors Chief Economist, Lawrence Yun

FIGHTING TRAFFIC WITH RAPID TRANSIT

Everyone benefits from transit investment:

We all save money

- The Big Move will put more than $2,000 back in the pocket of the average driver per year
- Save $700 on gas by spending less time idling in traffic
- Save $1,400 by moving around the region faster — that’s the cost of wasted time*
- The average transit rider will save more than $1,000 by cutting the cost of wasted time*
- Households can save $9,500 per year by giving up one car and taking transit

We all benefit

- Building The Big Move will employ more than 50,000 Ontarians each year
- One million more people will be within walking distance of rapid transit thanks to The Big Move
- 272,000 new citizens
- 250,000 low-income Ontarians
- Cut carbon pollution by 700 kilograms for each person in the region

*The cost of wasted time was calculated using a methodology developed by the Victoria Transport Policy Institute and also from Statistics Canada
Walking to Work by Region and City Size: 2008–2012

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)


Source: http://www.custommade.com/blog/walkable-urbanism/
THE “NEW NORMAL”
Several Factors Driving Transformation

A collective "infrastructure epiphany" has arisen about the need to reinvest in America's infrastructure

- Road and bridges are in poor condition
- Transit systems are aging
- Deployment of new technologies has been sluggish

There is a real question whether the U.S. has the right kind of infrastructure to position it to compete in the 21st century

- Truck traffic from containers is increasing
- Freight rail trackage is declining
- Most Americans don’t have transit available
- Inter-metro rail is woefully inadequate

Source: Brookings Institution
Several Factors Driving Transformation

America's major metros are still stuck in traffic

- Congestion is hyper-concentrated in the largest metros
- Landside access to ports (air and water) is jammed
- All this while vehicle travel is leveling off, or declining

Climate change and energy independence have emerged as major national problems

- Transportation accounts for $\frac{1}{3}$ of all CO2 emissions
- The U.S. consumes more oil per capita than any other nation

Source: Brookings Institution
Transportation Finance Remains Dominant Worry For Lawmakers

- Federal government does not even have the revenues to cover its existing obligations
- Federal gas tax is 18.3 cents/gallon and hasn’t increased since 1996
- States starting to step up

Source: Brookings Institution
RISE OF REGIONALISM
Regionalism means planning for shared space.

Regional governance is really about how autonomous actors organize and act for shared purposes.
A METROPOLITAN PLANNING ORGANIZATION

- Has the authority of Federal law
- Is a representative group of local stakeholders
- Leads the transportation planning process for the metropolitan area
- Is the region’s policymaking organization responsible for prioritizing transportation initiatives
- Carries out the metro transportation planning process in cooperation with the State DOT(s) and transit operators

Source: FHWA/FTA Transportation Planning Capacity Building Program
All “urbanized areas” are required to have an MPO or be part of an MPO.
An MPO is required to have a decisionmaking “policy body”

Beyond this, there is no required structure for an MPO, but most are made up of

- A Policy or Executive Board
- Technical and Citizen Advisory Committees
- A director and staff

Elected Officials and Local Staff Directly Involved in MPOs!
THE MPO BOARD

- Takes approval actions
- Sets regional long-term transportation policy and approves plans
- Prioritizes and programs specific transportation initiatives for funding

The MPO MUST work with others
- Actively seek the participation of all relevant agencies
- Actively seek input from the general public
- Cooperate with the State and public transit providers and coordinate with other transportation providers
WHO SITS ON THE BOARD?

- Required in TMAs/encouraged everywhere:
  - Local elected officials
  - Transportation operators
  - Appropriate State officials

- Other possible members:
  - Representatives from private and not-for-profit sectors
  - General public

Membership should be as diverse as the region
Transportation planning provides the information, tools, and public involvement needed for improving transportation system performance.

Transportation planning is a continuous process that requires monitoring of the system’s performance and condition.
REGIONAL PLANNING INVOLVES MANY CONTRIBUTORS

- Regional Agencies
- States
- Local Government
- User & Other Groups
- Tribal Governments
- Federal Government
- Private Sector
- Legal System
- The Public

Source: FHWA/ FTA Transportation Planning Capacity Building Program
TRANSPORTATION PLANNING AND PROGRAMMING

**Planning:**
- Developing a vision
- Creating policies and strategies to support the vision
- Long-term horizon

**Programming:**
- Prioritizing proposed initiatives
- Matching initiatives with available funds
- Short-term horizon

The public must be involved in both

Source: FHWA/FTA Transportation Planning Capacity Building Program
The MPO planning process involves:

- **Metro LRTP**
- **TIP**
- **Metro initiatives selected, funded, implemented**

Source: FHWA/FTA Transportation Planning Capacity Building Program
THE STATEWIDE PLANNING PROCESS

STATE LRTP

STIP

METRO LRTP

TIP

FHWA/FTA REVIEW AND APPROVAL

RELEASE OF FEDERAL FUNDS

STATE INITIATIVES SELECTED, FUNDED, & IMPLEMENTED

METRO INITIATIVES SELECTED, FUNDED, & IMPLEMENTED

Source: FHWA/ FTA Transportation Planning Capacity Building Program
BASIC FEDERAL REQUIREMENTS

- Reflect
  - The “3C” planning process
  - The seven TEA-21 planning factors

- Develop
  - A Unified Planning Work Program (UPWP) or simplified statement of work
  - Public involvement process/plan (PIP)
  - Financial Plan

- Produce and maintain
  - Long-Range Transportation Plan – update every 4-5 years
  - Transportation Improvement Program (TIP) – at least every 4 years (Metro); 5 years (State)
  - Unified Planning Work Program – Annually
  - State Implementation Plan – Oversight compliance every 3 years

A Comprehensive, Cooperative, and Continuing process is required for initiatives to be eligible for Federal transportation funding.
8 FEDERAL PLANNING FACTORS

- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes.
- Emphasize the preservation of the existing transportation system.
- Support the economic vitality of the area (US, state, metro, non-metro).
- Increase the safety of the transportation system.
- Increase the security of the transportation system.
- Increase the accessibility and mobility of people and for freight.
- Promote efficient system management and operations.

Source: FHWA/FTA Transportation Planning Capacity Building Program
PLANNING REQUIRES LEADERSHIP

- Local Solutions and/or Regional Approaches
  - Urban vs. Rural; Large vs. Midsize Areas
- Evolution of Public Engagement: Data + Technology
- The Funding Conundrum – Leverage & Align
- Implementation is Largely Local

Don’t leave planning to the planners!
GETTING IN THE GAME: PUBLIC PARTICIPATION OPPORTUNITIES

- Public Participation Plan
- Long-range plans
- Transportation Improvement Programs
- State bike & pedestrian plan
- Transit & Human Service Coordination Plan
- Freight Master Plan
- Strategic Highway Safety Plan Transit Service Plans
- Area & Corridor Studies
- Environmental Studies (Purpose & Need, Range of Alternatives, Draft Impact Statement)
NashvilleMPO.org/Stay_Involved

- Direct sign-up form for EMMA e-newsletter
- Links to Social Media channels
- Complete a survey, share your photos or videos
- Come to one of regular meetings or special regional event/symposium

Public Participation Plan, Web 2.0 Policy, Upcoming Meetings Calendar, Current Work Program

Twitter feed window: @NashvilleMPO & its most relevant partner orgs (Walk/Bike Nashville, Clean Air Partnership of Mid TN, Transit Now Nashville, Smart Growth America)

Involvement options, Web 2.0 channel thumbnails appear on every page throughout site
City Councilman Unearths Magical Zoning Amulet

ROCHESTER, NY—After years spent poring over mysterious and arcane plat sheets and deciphering long-forgotten building codes, city councilmember Mike LaMere unearthed the mysterious City Zoning Amulet Friday.

Source: The Onion, ISSUE 41 • 34 • Aug 24, 2005
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Presentation objectives

- Discuss the context within which communities plan
- Frame our work in the context of economic and fiscal health
- Discuss the relationship between transportation and land use
- Share the state of the Complete Streets movement
The value of planning
Smart Growth

Smart growth means building urban, suburban and rural communities with housing and transportation choices near jobs, shops and schools.

These strategies support thriving local economies and protect the environment.
What I hear about smart growth

Wengen
Smart growth is ugly.
We have no history with it.
Nobody would want to live there.
It just doesn’t work here.
Shut up and drive!
“Trend is not destiny.”
-Lewis Mumford
“Have a plan. Follow the plan and you’ll be surprised how successful you can be. Most people don’t have a plan. That’s why it is easy to beat most folks.”
- Paul “Bear” Bryant
Planning for Economic and Fiscal Health

The pattern of development – how we choose to grow – affects our region’s ability to compete economically, to be fiscally sustainable, and to provide efficient and effective public services –

*to maintain our high quality of life.*
The way we **design** and **build** our communities has enormous consequences.
We must be aware of 3 important factors affecting the future of our communities

1. The *market* is changing, especially for housing

2. The recipe for *economic growth* is changing

3. We can no longer afford to use tax money to *subsidize inefficiency*
THE CHANGING MARKET
Your community is changing and preferences and the market are following.
Your community is changing

• There are two demographic changes that are driving the market and must drive your decision making.
  – The rise of the Millennials.
  – The aging of the Baby Boomers.
Demographic change and the labor force

- Greatest Generation
- Baby Boomers
- Gen X
- Millennials

POPULATION and LABOR FORCE
American households are changing

In the 1950s roughly half of all households were families with kids.

“Between 1970 and 2012, the share of households that were married couples with children under 18 halved from 40 percent to 20 percent.”

US Census Bureau, *America’s Families and Living Arrangements: 2012*
By Jonathan Vespa, Jamie M. Lewis, and Rose M. Kreider
August 2013
Preferences: Housing

Millennials especially are trending away from traditional suburbs
  – 47% would prefer to live in a city or a suburb with a mix of houses, shops, and businesses
  – 40% would prefer a rural or a small town
  – 12% say they would prefer a suburban neighborhood with houses only

Boomers want to age in their community
Americans Want More Walkable, Sustainable Neighborhoods

Americans’ ideal communities have a mix of houses, places to walk, and amenities within an easy walk or close drive.

– 77% of Americans want pedestrian-friendly features.
– 88% place more value on the quality of the neighborhood than the size of the home.

Source: Consumer survey conducted for the National Association of Realtors
The market: Housing
How will your community meet the needs of millennials and aging boomers in order to improve your competitiveness?
PROSPERITY
The rise of the millennials and the globalization are driving the economy.
Millennials

They follow lifestyle, not jobs.

Millennials choose where to live before finding a job.
The labor force

• Millenials choose where to live before finding a job.
  – 64% looked for a job after they chose the city where to live. (Source: U.S. Census)

• How people want to work is changing and where they want to work is changing.
The labor force

From office space....
The labor force

...to office settings.

Research Triangle Park, Raleigh, NC

Kendall Square, Cambridge, MA
Businesses respond to changing preferences

• Across the country corporations are responding to employee preferences and moving to the talent.
• They are choosing to relocate from suburban offices to downtown locations.
Businesses respond to changing preferences

Zappos, Las Vegas, NV

Hillshire, Chicago, IL
There is a price/value premium for walkable places
There is a price/value premium for walkable places (commercial)

“We find that, all else being equal, the benefits of walkability are capitalized into office, retail and industrial property values with more walkable sites commanding higher property values. On a 100 point scale, a 10 point increase in walkability increases property values by 1 to 9 percent, depending on property type.”

There is a price/value premium for walkable places (residential)

“More than just a pleasant amenity, the walkability of cities translates directly into increases in home values. Homes located in more walkable neighborhoods—those with a mix of common daily shopping and social destinations within a short distance—command a price premium over otherwise similar homes in less walkable areas. Houses with the above-average levels of walkability command a premium of about $4,000 to $34,000 over houses with just average levels of walkability in the typical metropolitan areas studied.”

Walkable Urban Places

“. . . walkable urban places and projects will drive tomorrow’s real estate industry and the economy”

- Christopher B. Leinberger
Walkable Urban Places

“... walkable urban places and projects will drive tomorrow’s real estate industry and the economy”
Walkable Urban Places - Atlanta

“Metro Atlanta, the ‘poster child of sprawl,’ is now experiencing the end of sprawl”

- Leinberger
Walkable Urban Places - Atlanta

Report finding:

From 1992-2000, roughly 13 percent of real estate investment in the region went into Current and Emerging ‘WalkUPs.’

From 2001-2008, that number doubled to 26 percent.

Since 2009, it more than doubled again, reaching 60 percent.
There is a price/value premium for walkable places

New study ranks the top 30 US metropolitan areas in walkability

Major findings:

• The top ranking metros have an average of 38% higher GDP per capita as compared to the low ranking metros.

• Office rent in urban WalkUPs rent at a 74% higher premium per square foot over drivable sub-urban areas.
Smart growth is part of an economic development strategy

• Economic development is increasingly a competition over *placemaking*.

• Building a great place to live, work, and play *IS* an economic development strategy.
How can your community take advantage of the changing nature of the economy in order to create jobs and wealth?
FISCAL HEALTH
How communities develop affects costs and revenue.
Development affects costs
Development affects costs

When it comes to costs:

– Compact development is the best deal.

– Low-density suburban development rarely pays for itself.

– It makes sense to reuse existing infrastructure.
FIGURE 1
Portion of local budgets influenced by land use choices, nationwide

- Capital
- Operations
- Not Geographically Sensitive

$525 Billion

$175 Billion

$350 Billion
Building infrastructure to serve new development on the fringe can cost the city **up to three times more per acre** than urban infill development.
Development affects costs

- Compact development offers efficiencies in regards to services as well.
  - Police and fire departments have less area to cover.
  - Fewer miles of road to cover for snow removal and trash pickup.
Development affects costs
Development affects costs

Annualized Per-Capita Life Cycle Costs
(based on 2-apparatus station)

Greater Connectivity ↔ Less Connectivity

Households per Fire Station

Greater Connectivity ↔ Less Connectivity
Development affects revenue

• When it comes to revenue…
  – Compact development is the best deal.
  – Low-density suburban development generates much less per acre revenue.
  – You can increase your property tax base significantly simply by bringing back areas that already exist
Development affects revenue

Multifamily housing in near an area’s center can generate nine times more revenue per acre than traditional large-lot, single-family housing on the fringe.
Development affects costs

Building infrastructure to serve new development on the fringe can cost the city up to three times more per acre than urban infill development.
Development affects revenue

Municipal property tax yield (per acre) 2011 Raleigh, NC

- Wal-Mart
- Single-Family Residential
- Crabtree Valley Mall
- 3-4 Story Residential
- 3 Story Office
- 6-Story Mixed Use
Development affects revenue

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<th>Asheville Wal-Mart</th>
<th>Downtown</th>
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<tr>
<td>Land Consumed (Acres):</td>
<td>34.0</td>
<td>00.2</td>
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<tr>
<td>Total Property Taxes/Acre:</td>
<td>$ 6,500</td>
<td>$634,000</td>
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<tr>
<td>City Retail Taxes/Acre:</td>
<td>$ 47,500</td>
<td>$ 83,600</td>
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<tr>
<td>Residents per Acre:</td>
<td>0.0</td>
<td>90.0</td>
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<tr>
<td>Jobs per Acre:</td>
<td>5.9</td>
<td>73.7</td>
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Joe Minicozzi, AICP - Public Interest Projects : Asheville NC
Development affects revenue

Denser development can carry an entire city financially
Nashville Case Study

- 3 development projects
  - Bradford Hills (conventional suburban)
  - Lenox Village (“New Urban suburban”)
  - The Gulch (smart growth)
- Operating Costs only
  - No infrastructure cost analysis
- General Fund only
Bradford Hills (conventional suburban)
Lennox Village ("New Urban suburban")
The Gulch (smart growth)
Project Acreage

Bradford Hills | Lenox Village | The Gulch
---|---|---
180 | 200 | 60
Housing Units

Bradford Hills
Lennox Village
The Gulch
Gross Revenue

Bradford Hills

Lennox Village

The Gulch
Revenue and Cost

Bradford Hills
Lennox Village
The Gulch
Net Revenue Without The Gulch

<table>
<thead>
<tr>
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<th>Value</th>
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<tbody>
<tr>
<td>Bradford Hills</td>
<td>$0</td>
</tr>
<tr>
<td>Lennox Village</td>
<td>$100,000</td>
</tr>
</tbody>
</table>
Net Revenue Per Housing Unit

Bradford Hills
Lennox Village
The Gulch
Net Revenue Per Acre

Bradford Hills  Lennox Village  The Gulch

- $0
- $20,000
- $40,000
- $60,000
- $80,000
- $100,000
- $120,000
Bottom Line

• Downtown and close-in neighborhoods will yield a much higher return
• Village-style suburban development will yield a higher return
• These surpluses can be used to offset costs of existing neighborhoods
• When infrastructure is added to the mix, these trends probably become stronger
• As Nashville-Davidson County runs low on developable land, these considerations become vastly more important.
Land Use and Transportation
Traditional approach

• Transportation systems prioritize high speed mobility
• Auto oriented development follows
• All other modes at disadvantage

From Integrating Land Use and Transportation Planning Through Placemaking by Gary Toth
Traditional approach

• Spread out development increases transportation demand
• Cycle repeats

From Integrating Land Use and Transportation Planning Through Placemaking by Gary Toth
Something happened

Actually, everyone’s driving less . . .
Placemaking

• Access rather than mobility
• Urban streets as places of social and economic exchange
• Non-motorized transportation is key to urban cores
• Neighborhood streets safe for play
• Commercial streets safe for walking and cycling while moving through and local traffic
• Plan for people and places, not cars and traffic

From Integrating Land Use and Transportation Planning Through Placemaking by Gary Toth
Best Development Practices

• Keep vehicle miles of travel (VMT) below the area average.
• Contribute to the area’s jobs-housing balance.
• Mix land uses at the finest grain the market will bear and include civic uses in the mix.
• Develop in clusters and keep the clusters small.
• Place higher density housing near commercial centers, transit lines, and parks.
• Phase convenience shopping and recreational opportunities to keep pace with housing.
• Make subdivisions into neighborhoods with well-defined centers and edges.
• Reserve school sites and donate them if necessary to attract new schools.
• Concentrate commercial development in compact centers or districts.
• Make shopping centers and business parks into all-purpose activity centers.
• Tame auto-oriented land uses, or at least separate them from pedestrian-oriented uses.

From Best Development Practices: A Primer for Smart Growth by Reid Ewing with Robert Hodder
Site Plan Development

- Legal and physical access
- Lot size conforms to zoning or sanitation
- Limited driveways on arterials, some collectors
- Useable lots that meet setbacks
Site Plan Development

- Topography
- Road grades not over 8%
- Buildable area
- Amount of cut & fill
- Consider existing features

Figure 2-12. Rural subdivision patterns are typically unrelated to natural or cultural features in the landscape, as dramatically illustrated by these plats from the Catskill region of New York. Source: Lamb, 1989.
Site Plan Development
Site Plan Development

Figure 2-13. Conventional two-acre lot subdivision with homes located on sensitive but buildable land, compared with improved layouts protecting those resource areas, as encouraged by new regulations adopted by the Maine Department of Environmental Protection.
Site Plan Development

Figure A (rated by 25% as “rural”)
- 44 acre parcel
- 20 lots (2 acres each)
- No open space
- No pond access except from four lots

Figure B (rated by 75% as “rural”)
- 44 acre parcel
- 20 lots (3/4 acre each)
- 25 acres of open space
- Pond access for all residents
Impact Assessment

Usually Considered

- Financial cost to governments
- Travel speed
- Vehicle operating costs
- Per-mile crash risk
- Construction environmental impacts

From Comprehensive Transport Planning, Victoria Transport Policy Institute
Impact Assessment

Often Overlooked

- Downstream congestion impacts
- Traffic impacts on non-motorized travel
- Parking costs
- Vehicle ownership and mileage-based depreciation
- Indirect environmental impacts
- Strategic land use impacts
- Mobility for non-drivers
- Equity impacts
- Impacts on physical activity and public health

From Comprehensive Transport Planning, Victoria Transport Policy Institute
Access Management

- Limit direct access to major roadways
- Promote intersection hierarchy
- Locate signals to favor through movements
- Preserve the functional area of intersections and interchanges
- Limit the number of conflict points
- Separate conflict areas
- Remove turning vehicles from through traffic lanes
- Use non-traversable medians to manage left-turn movements
- Provide a supporting street and circulation system.

From Oregon Department of Transportation Access Management Best Practices Manual
Access Management

- Interchange spacing
- Median treatments
- Auxiliary lanes
- Intersection design
  - Signalized
  - Unsignalized
  - Roundabouts
- Driveway spacing
- Sight lines
Parking Management

• Reduced minimum parking requirements
• Parking maximums and areawide parking caps
• Shared parking
• Parking management districts
• Controlling parking demand
  – Transit investment
  – TOD
  – Unbundled parking
  – Pricing

From Driving Urban Environments: Smart Growth Parking Best Practices by Maryland Governor’s Office of Smart Growth
Parking Management

• Location
• Screening and landscaping
• On-street parking
• Structures
• Low impact development techniques
• Cross access easements
• Preferred parking
  – ADA
  – HOV
  – Electric vehicles

From Driving Urban Environments: Smart Growth Parking Best Practices by Maryland Governor’s Office of Smart Growth
Street Connectivity

Well-Connected Street Network

Typical Subdivision Cul-de-Sacs
Right-of-Way Preservation

- Varies by state
- Corridor preservation in the comprehensive plan
- Corridor management ordinances
- Right-of-way acquisition
- Preserving transit corridors

From Corridor Preservation Best Practices by Center for Urban Transportation Research
Why Complete Streets?
Not complete.
Not complete.
Not complete.
The National Complete Streets Coalition

- AARP
- Alliance for Biking & Walking
- America Walks
- American Planning Association
- APTA
- American Society of Landscape Architects
- Association of Pedestrian and Bicycle Professionals
- Institute of Transportation Engineers
- National Association of City Transportation Officials
- National Association of Realtors
- Nelson\Nygaard
- Smart Growth America
- SRAM
- Stantec
- SvR Design Company
Promote policies & practices that:

• Ensure safety
• Encourage “balance”
• Are aware of the larger context
• Consider networks
• Respect people
Our work

- Establish “standard” practice
- Provide training & direct assistance
- Develop leadership
Policy adoption & issue awareness

Number of Complete Streets policies nationwide, 2005–2013
“Change requires intent and effort.”
Complete Streets success

1. Political will
2. Clear path forward
3. Ownership within agency
Activities:

• Plan & be accountable
• Change the way you make decisions
• Allow (encourage!) critical thinking in design choices
• Share Complete Streets knowledge
• Measure your efforts
Proliferation of tools & guidance
How we develop is connected to our health, our household costs, our transportation choices and our ability to move up the economic ladder.

- Some development costs more, for taxpayers and consumers.

  Some costs less.
Can your community continue to subsidize inefficiencies of development patterns, while not reaping the potential reward?
We have the freedom to make informed, humane, and intelligent choices about the kind of world we want to leave for our children and grandchildren. We also have the freedom to make uninformed, selfish, and stupid choices. Which will it be?

- Greg Pahl
Thank you!

rmillar@smartgrowthamerica.org

www.smartgrowthamerica.org
02: Transportation Planning and Funding for Economic Competitiveness

Trainer(s):

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TRANSPORTATION FUNDING FOR ECONOMIC COMPETITIVENESS
LEARNING OBJECTIVES

1. Introduce different federal funding categories and flexibility
2. Understand opportunities to leverage resources through aligning funds, criteria and goals
3. Connect infrastructure type to funding needs
4. Highlight the importance of Leadership, Communication and Engagement as funding tools
5. Consider opportunities for public-private partnerships
TO EVERYTHING: CHANGE, CHANGE, CHANGE

U.S. Dept of Transportation Forcasts of Future Driving vs. Reality

- May 2014
- 2014 C&P high scenario
- 2014 C&P low scenario
- 2010 C&P
- 2008 C&P linear growth
- 2006 C&P linear growth
- 2004 C&P cost to maintain*
- 2002 C&P cost to maintain*
- 1999 C&P cost to maintain*
- Actual**

C&P scenarios depicted based on linear growth; FHWA May 2014 forecast on compound growth.
* Based on "Cost to Maintain" scenario.
** Data through 2012 from FHWA Highway Statistics; 2013 data from FHWA Traffic Volume Trends
FHWA: Federal Highway Administration; C&P: Conditions & Performance report.

Source: USPIRG 2015:
WHAT IS IT WE ARE TRYING TO FUND?

- Please take a few minutes to think about funding victories and challenges in your own community

The only way to make sense of change is to plunge into it, move with it, and join the dance.

– Alan Watts
WHAT IS IT WE ARE TRYING TO FUND?

1. What are some of the key transportation issues in your community?
2. List the top two or three hat revenue sources city uses most frequently to fund transportation projects, and are these local, state, federal or other?
3. What kind of projects are easiest to fund?
4. What kind of projects are most challenging?
5. Is there a project now for which you are trying to fund but do not have an obvious source, or there is a funding gap? If so, please describe.
6. Has your community or region or state recently had a ballot measure or other type of initiative to increase transportation funding? If so, please briefly describe including if it succeeded.
WHO FUNDS TRANSPORTATION INITIATIVES?

- Federal Government (FHWA, FTA)
  - Federal Gas Tax for Formula Funds, General Funds for transit New Starts and Small Starts, TIGER
- State Government
  - State Gas Tax, General funds, bonds, etc.
- Local and Regional Governments: general funds, TIF, property taxes and sales taxes, etc.
- Transportation agencies: transit riders, fees, etc.
- Public-private partnerships: developer agreements, tolling, value capture
FEDERAL TRANSPORTATION FUNDING

- Sources
- Flexibility
**FEDERAL PURSE COMES WITH STRINGS**

- Many types of funding, including:
  - Special programs (e.g., Congestion Mitigation and Air Quality [CMAQ] and Transportation Alternatives Program)
  - Formula-based funding (Surface Transportation Program, Transit Urbanized or Rural Formula)
- Most pass to implementers through the State DOT or transit agency, based on MPO priorities
- Nearly all Federal funding programs require matching funds from State or local sources
- Use of Federal funds triggers Federal requirements (environmental, ADA, labor, public participation, etc)

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### Restructuring of Core Highway Programs Under the Final 2012 Transportation Bill (MAP-21)

<table>
<thead>
<tr>
<th>Former Formula Programs</th>
<th>MAP-21 Core Program Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate Maintenance</td>
<td>National Highway Performance Program (NHPP - New)</td>
</tr>
<tr>
<td></td>
<td>~$21.8 billion</td>
</tr>
<tr>
<td>National Highway System</td>
<td>Surface Transportation Program</td>
</tr>
<tr>
<td></td>
<td>~$10 billion</td>
</tr>
<tr>
<td>Highway Bridge Program</td>
<td>Transportation Alternatives</td>
</tr>
<tr>
<td></td>
<td>~$800 million</td>
</tr>
<tr>
<td>Equity Bonus</td>
<td>Congestion Mitigation and Air Quality (CMAQ)</td>
</tr>
<tr>
<td></td>
<td>~$2.2 billion</td>
</tr>
<tr>
<td>Appalachian Highway Development System</td>
<td>Highway Safety Improvement Program (HSIP)</td>
</tr>
<tr>
<td></td>
<td>~$2.4 billion</td>
</tr>
<tr>
<td>Border Infrastructure Program</td>
<td>TIFIA Loan Program</td>
</tr>
<tr>
<td></td>
<td>~$1 billion</td>
</tr>
<tr>
<td>Surface Transportation Program (STP)</td>
<td></td>
</tr>
<tr>
<td>Transportation Enhancements (10% of STP)</td>
<td></td>
</tr>
</tbody>
</table>
Need to know the “color” of money
- Eligibility

Prioritize what matters
- Set-asides
- Selection criteria
- Local planning assistance
- Livable Communities programs

Blend funding programs

Transfer funds
- Nationally, about $523 million of STP funds and $629 million of CMAQ funds are flexed to transit in 2013.
HOW FUNDING FOR PUBLIC TRANSPORTATION WORKS

- Federal (formula and discretionary)
- States (can gas tax money be used? Flex federal funds)
- MPOs (major investments)
- Transit Agencies (institutional structure varies)
- Cities (taxes, bonding, etc)

System Revenue 32%

Local 33%

State 18%

Federal 17%

Restructuring of Core Transit Programs Under The Final 2012 Transportation Bill (MAP-21)

Former Core Programs
- Urbanized Area & Growing States
- Job Access and Reverse Commute
- Rural Area Grants
- Elderly and Disabled
- New Freedom
- Bus and Bus Facilities
- Fixed Guideway Modernization
- New Starts
- Alternatives Analysis

MAP-21 Core Program Structure

- Urbanized Areas ~$4.758 billion
- Rural Area Grants ~$609 million
- Elderly and Disabled ~$255 million
- Bus and Bus Facilities ~$422 million
- State of Good Repair ~$2.136 billion
- New Starts ~$1.907 billion
- TOD Planning Grants ~$10 million
THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

- MPO and DOT MUST develop and approve a TIP/STIP
- A staged, multi-year, intermodal program of prioritized transportation initiatives consistent with Long Range Plan
- Shows annual activity for a 3-year period
- Contains a financial plan and is fiscally constrained
- An initiative not listed in the TIP cannot receive FHWA or FTA funds
- Reflects public involvement
- Must be updated at least every 2 years
- Financially constrained by year
BEYOND THE MONEY
MONEY ONLY ONE PART OF FUNDING

1. Cities need to be strategic – think like a “master developer”
2. There is no one tool that gets the job done
3. Partnerships and collaboration are key

You Still Need:

People, partnerships, and strategy
Elected officials play a critical and unique role in connecting the value, the need, and the opportunity with public willingness to pay.
INFRASTRUCTURE FINANCING
DEFINING “INFRASTRUCTURE”

- **Grey** Infrastructure – streets, sidewalks, bike lanes, wet and dry utilities, storm water, structured parking
- **Green** Infrastructure – street trees, parks, open space
- **Gold** – affordable housing, community center, health clinics, day care center, etc.

Source: D. Belzer, Strategic Economics, 2013
## SOME, BUT NOT ALL, INFRASTRUCTURE GENERATES REVENUE

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
<th>Revenue Generating?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gray</strong></td>
<td></td>
</tr>
<tr>
<td>Local streets</td>
<td>No</td>
</tr>
<tr>
<td>Sidewalks, bike lanes</td>
<td>No</td>
</tr>
<tr>
<td>Wet &amp; dry utilities</td>
<td>Yes</td>
</tr>
<tr>
<td>Parking</td>
<td>Maybe</td>
</tr>
<tr>
<td><strong>Green</strong></td>
<td></td>
</tr>
<tr>
<td>Streetscaping, street trees</td>
<td>No</td>
</tr>
<tr>
<td>Parks &amp; open space</td>
<td>No</td>
</tr>
<tr>
<td><strong>Gold</strong></td>
<td></td>
</tr>
<tr>
<td>Affordable housing</td>
<td>Yes</td>
</tr>
<tr>
<td>Community center, day care, etc.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Source: D. Belzer, Strategic Economics, 2013*
VALUE CAPTURE TOOLS RELY MOSTLY ON NEW DEVELOPMENT

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Source of Value</th>
<th>Reliance on Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIF</td>
<td>Property Value Increase/Development</td>
<td>Yes</td>
</tr>
<tr>
<td>Developer Fees/Exactions</td>
<td>Development</td>
<td>Yes</td>
</tr>
<tr>
<td>Joint Development</td>
<td>Development</td>
<td>Yes</td>
</tr>
<tr>
<td>Assessment District</td>
<td>Estimated Property Benefit</td>
<td>Not in theory, but often in practice</td>
</tr>
<tr>
<td>Utility Fees</td>
<td>Fee Based on Property Characteristics</td>
<td>No</td>
</tr>
<tr>
<td>Land Tax/ Split-Rate Tax</td>
<td>Property Value</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: D. Belzer, Strategic Economics, 2013
MANY CHALLENGES TO FUNDING & FINANCING INFILL INFRASTRUCTURE

- Doesn’t always pay for itself because many benefits accrue to the general public
- Infrastructure improvements need to be “front loaded” before development occurs
- Structured parking is expensive and difficult to finance in suburban locations
- Existing real estate market conditions do not always support community vision for higher density development
# Potential Methods of Financing Infrastructure – All Require Revenue

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pay-As-You-Go</strong></td>
<td>Pay (or save up) over time as revenues are generated</td>
</tr>
<tr>
<td></td>
<td>• Requires patience</td>
</tr>
<tr>
<td></td>
<td>• Challenging to use where up-front investments are needed</td>
</tr>
<tr>
<td><strong>Debt</strong></td>
<td>Borrow money up front, pay back using future revenues</td>
</tr>
<tr>
<td></td>
<td>• Bonds can be general obligation or revenue bonds</td>
</tr>
<tr>
<td></td>
<td>• Requires predictable revenue stream</td>
</tr>
<tr>
<td></td>
<td>• Many factors can impact ability to issue debt</td>
</tr>
<tr>
<td><strong>Public-Private Partnerships</strong></td>
<td>Shift financing risk to the private sector</td>
</tr>
<tr>
<td></td>
<td>• Requires revenue stream</td>
</tr>
<tr>
<td></td>
<td>• Costs and benefits are shared</td>
</tr>
<tr>
<td></td>
<td>• Requires collaboration and cooperation</td>
</tr>
</tbody>
</table>

Source: D. Belzer, Strategic Economics, 2013
FHWA defines P3s: Contractual agreements formed between public agency and a private sector entity that allow for greater private sector participation in delivery and financing of transportation projects.

- Many forms: design/build/maintain; lease; finance; Uber/Lyft

**Resources:**
- FHWA Office of Innovative Program Delivery
- USDOT Build America Transportation Investment Center
- Eno Foundation
- Brookings Institution
DEVELOPING A FINANCING STRATEGY

- Four Fundamental Steps:
  - Understand existing conditions, including market strengths and have a clear plan
  - Identify all infrastructure components necessary to achieve the plan, but be prepared to make small incremental improvements
  - Look for the money
  - Look for short-term strategies to build long-term value

Source: D. Belzer, Strategic Economics, 2013
**BUILDING THE FINANCE STRATEGY**

- Successful financing and implementation is about having a strong strategy, not just finding money.
- The public sector has to be proactive and manage infrastructure financing the way a “master developer” would: incrementally.
- Set implementation priorities based on existing assets, funding availability, and market strengths, not just on solving the “biggest” problems.
- Look for long term opportunities to shift and align regional, state and federal funding priorities for funding:
  - Discretionary, Criteria, Timing
WRAPPING IT ALL UP
KEY RESOURCES
It has been a privilege to share this time with you today!

-- Albert Einstein

The intellect has little to do on the road to discovery. There comes a leap in consciousness, call it intuition or what you will, and the solution comes to you and you don't know how or why...