Retrofitting the Region for Economic Success

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St. Louis, September 23 2011

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http://abogo.cnt.org
http://toddata.cnt.org
Purposes

• Review how transportation and infrastructure costs affect the cost of living
• Demonstrate some new tools (Housing + Transportation Affordability Index, TOD Data Base, others) that can help keep score on current situation and alternatives
• Recommend some strategies to use this data to accelerate investment in transit to improve the region’s economy
Panoramic View of St. Louis in 1896—
Good urban form, small blocks, interconnected, served by good intercity passenger and freight services
What Is Infrastructure & Why Is It Important

- Shared area-wide assets that provide essential services to a common standard
- Involve tangible networked distribution to neighborhoods and communities
- Generally currently delivered through regional governments or utilities
- Starting to be delivered through distributed networks
- The cost of land + infrastructure == ½ the full cost of delivering the built environment

- Natural gas, electricity, water, sewerage, stormwater, local roads, highways, mass transit, telecommunications and fire/school/police
- $50-$100k/unit + land
Similar Choices Comprise a Vision:

- Bottling Rainstorms and “Treating” Them
- Streets to Maximize Traffic & Speed
- Bypass Communities with Long-Distance Highways & Aviation
- Expand Electric Utility Capacity
- Expand Car Ownership
- Invest to Promote Consumption

Catching Raindrops Where They Fall

Streets to Connect People and What They Do Routinely

Reconnect Communities with Inter-City Rail

Increase Buildings & Community Efficiency

Communities that Come with Local Amenities and Shared Vehicles

Invest to Increase Productivity and Reduce Cost of Living
Current Debates

- Who pays and how to pay
- Who owns
- Invest to what ends e.g. accommodate growth in throughput of traffic, resources OR a sustainable economy
- Crumbling infrastructure—e.g. ASCE hammering with award of Grade D minus
- Attack on regulations—see Aug. 3 review by CRS

Accelerating Highway and Transit Project Delivery: Issues and Options for Congress

William J. Mallett
Specialist in Transportation Policy

Linda Luther
Analyst in Environmental Policy

August 3, 2011
The Challenge Ahead—
National and Regional Readiness
• Inter-Agency Partnership for Sustainable Communities—Redefining Affordability
• HUD—New Office Of Sustainable Communities—both EE and Location Efficiency or LE
• USDOT—Likely New Program in Livable Communities
• Congress—Transportation authorization will include goals and performance measures, including affordability; five bills introduced to date to facilitate infrastructure finance
• New Funds Will Be Regionally Focused and Competitive
• October 2010—President Obama announced intent to pursue $50 Billion infrastructure investment, white paper includes affordability performance measure
• September 2011—American Jobs Act proposes National Infrastructure Bank, essentially the Kerry-Hutchison AIFIA

“Affordability, Value Creation + Capture, Job Creation + Support”
Why This is Important

• Normal hierarchy for screening transportation investments is different
• Usually leads by justifying using traffic flow and speed measures
• Economic benefits assumed to be function of congestion mitigation + increased connectivity

• Administration document leads with cost of living, value creation and value capture, direct and supply chain job creation
• Followed by economic benefits of health, safety, environment & state of good repair
• Followed by traffic flow
Profile of a Region of 1 Million Households—Is Money the Problem or…

- Direct spending by households of $13 B
- Direct spending by businesses of $4 B
- Additional $2 Billion spent by local, state and federal government
- $19 total annual outlays
- Over half a trillion dollars over 30 year period
- 12 percent by government, roughly one-third each federal-state local
- 88 percent by users
- Greatest potential leverage is on the 88 percent
- Current focus is on the 12 percent
Economic Pressures on the Region

External Pressures

- Energy costs
- Credit squeeze
- Regulatory ramp-up
- Taste for a greener economy
- Push for performance—competitiveness & asset management
- Demand for “urban”
- Perceived health and environmental risk
- Perceived flooding risk

Local Weaknesses

- Missing links to supply chains in St. Louis, Chicago, Ohio, Minnesota
- System supports decentralization not reinvestment
- Economy is growing off knowledge creation & technology – area institutions behind curve
- Reinvestment requires finance & development institutions
- Local planning capacity
- Real estate & community product out of synch with demographic trends
US Retail Fuel Price Trends
April 1990-June 2011

• Mostly increased since summer 2000
• Always shows a summer peak
• Prices double what general inflation accounts for
• This year’s large spike 6-8 weeks sooner than in 2008
Changes in Household Income vs. Cost of Living 2000-2008—Gas Costs
Rose 6 x Faster than Income & 3 x Faster than Housing
Metro St. Louis Changes in Income and Cost of Living 2000-2009

- Median HH income increased $7254 or $605 per month
- Housing increased by $292
- Transportation increased by $194
- H+T increased $486
- Left just $119/month to cover all other increases in the COL
- Food, medical, mortgage resets...
What a Nourishing Economy Does—Reduces Risk, Increases Gain

Connectedness

Poverty

Prosperity

Isolation
What a Nourishing Economy Does and Does Not Look Like

Poverty

Prosperity

Connectedness

Isolation
Demographic & Price Trends Promote Urbanism and Demand Reduction

- Continuous drop in household size since 1790
- Aging in place
- “ Married w/kids” only 23% of total
- Rising energy and gas prices
- Limited public funds to keep sprawling
Development Projected to Move Further Out
And to Develop More Intensely in Non-Urban and Newer Portions of the Region
St. Louis MSA Changes in Home Real Estate Value from FHFA All Transactions Repeat Sales Home Price Index 1975Q2 – 2011 Q1
Personal Bankruptcy Filings in St. Louis MSA 2006-2010 and Projected to 2016

Moody’s Analytics from US Bankruptcy Court February 2011
Foreclosures in Metro St. Louis August 2009 at Zip Code Level
Can Gas Price Spikes Help Provide Early Warning of Defaults and Foreclosures?
The lower the TCI, the greater the number of foreclosed properties by Census Block Group.

Foreclosures increase once the average annual VMT per Block Group exceeds 15,000.
Foreclosure Rates in Chicago 2000 and 2008

Highest in Areas of High T-Cost and Extensive Use of Variable Rate Financing
Count of Bankruptcies in Chicago Metro Area 2007 and 2007-2010

Source: PACER
Updated Metropolitan Population Projections for Missouri and Illinois

- 7-County Bi-State Region
- Projects 166,000 More Households 2000-2030,
- Where they will live affects the economy
25% of net new American HHs will demand housing near transit in 2030—

St. Louis MSA

Center for Transit-Oriented Development
Hidden in Plain Sight—
The Coming Demand for Housing Near Transit
CTOD for Federal Transit Administration, 2005 and Updated
Demand Estimate Feb. 2007
CTOD 2007 Projected 2000-2030 Increase of HH Demand Near Transit

- 2005 station count = 28
- Current station count = 37
- 2030 used current station count
- 2000 count of households within ½ mile of 2005 transit stations = 21,438
- 2030 estimate of households within ½ mile of 37 stations = 94,475
- Net growth per station = \((94475 - 21438)/37\) = 1974 households
How the Market Views St. Louis—PWC/ULI 2008
Commercial/MF Development Prospects Ratings

1 = Abysmal
5 = Fair
9 = Excellent

Chicago, Portland, San Antonio

Cinci, Cleveland, Columbus

St. Louis
Same Survey for 2011—Note St. Louis was 8/70 in 2008 and 5th of 50 in 2011, did not focus development around transit opportunities as much as other regions.
Your Region Needs Investment—How Can Better Commitments Attract It?
A Century Ago

• Home economics movement taught household budgeting and cost of living reduction
• “Keep your carfare at 3-5 percent of income”
• “Don’t ever go into debt for an automobile”

• Auto companies countered with installment loans and palm cards to help sell

• Home economics was squeezed out by Drivers Ed

• Kids today are taught exactly how to go into debt at age 15
Historical Precedent for Rapid Change—From 1885 to 1902

- America went from 1 electric street railway to 1 in every city of 10,000
- Rate of growth = to the Internet
- Demand boosted by important social movements—e.g. home economics
- 6 systems ran on 717 miles in metro St. Louis and in Madison & St. Clair Counties
- “Quiet and Smokeless Service”
- 412 passenger vehicles
- Eventually thousands of miles of streets + local and inter-urban statewide connecting in turn to the national inter-city rail networks
Hidden DNA of Street Railway Partnerships

- Franchise agreements covered designated special service districts
- Exclusive ROW granted to private operators
- Operators split cost of paving and maintenance with cities and adjacent property owners
- Standardized agreements, track gauge, regulatory provisions
- Often augmented by electric utility investment approved in rate base regulation by State PUCs
- Meant that all cities could and did implement entire networks
Columbus, Ohio Early Value-Capture
Broad & High, Peak-Value at Streetcar Intersection
Increased Over Time with Urban Intensity

Note

• Increasing Density,

• Mixed-Use Development,

and

• Human Traffic Control Umbrella
Transparency Drove the Market Through 1930, Note Peak-Value at Peachtree, Marietta & Decatur

- Transit-Oriented Atlanta
- Economically Legible Atlanta
Street Benefit Districts Helped Cities Pay the Tab: “A Machine to Mine the Land”—Early Value Capture

![Graph showing electric miles in paved streets and percentage of total municipal revenue. Los Angeles has 16.7% of the total revenue, Chicago has 13.6%, St. Louis has 3%, and New York also has 3%.]
There Was Competition for Public Space

Hey Bill! Take care of this traffic - will you?

Clang! Clang! Honk! Honk!

How can I keep all traffic moving when it gets here from all four directions at once!
City Plans 1930s Starting Proposing “Park and Shop” Block Plans
Most Places Abandoned Their Transit Systems
And Public Policy Favored a Different Vision

Opening of I-94 at Il-Wi Border
Sample Performance Measure: What Is Location Efficiency and How Can It Help Address the Perfect Storm of Climate Change and Economic Recession?
How is Location Efficiency Determined—Explain Using Regression?

(Memorize This…Or…..)

\[
\frac{Veh}{Hh} = 4.722 \left(22520 + \frac{H}{RA}\right)^{-0.3471} \left(1 - e^{-\left(0.000112 \frac{S}{P}\right)^{1.2386}}\right) \left(1 + 1.0519 \frac{P}{H}\right) \left(Tr + 60312\right)^{-0.2336}
\]

\[
\frac{VMT}{Veh} = 10386 \left(0.504 + \frac{H}{TA}\right)^{-0.0419} \left(1 + 0.02759 \frac{P}{H}\right) \left(1 - 0.0704 \sqrt{Ped}\right) - 0.01743 \left(\frac{P}{S} - 22136\right)
\]

Peer-reviewed by
Brookings and National Academy of Sciences 2008
Even Easier to See: Mapping the Benefit

- Good transit access yields one less car per household
- Lowers cost of living by $5-8,000
- Equivalent of increasing income 10-20 percent tax free

Driving vs Residential Density

<table>
<thead>
<tr>
<th>Households/Residential Acre</th>
<th>SF</th>
<th>LA</th>
<th>Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>35000</td>
<td>30000</td>
<td>25000</td>
</tr>
<tr>
<td>5000</td>
<td>30000</td>
<td>25000</td>
<td>20000</td>
</tr>
<tr>
<td>10000</td>
<td>25000</td>
<td>20000</td>
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</tr>
<tr>
<td>30000</td>
<td>5000</td>
<td>0</td>
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</tr>
<tr>
<td>35000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Monthly Transportation Savings for a Four-Person Household Making $40,000/Year
- $300 to $550
- $200 to $300
- $100 to $200
- Less than $100
- No Location Efficient Value

Annual VMT/Hh vs Households/Residential Acre Graph

- SF
- LA
- Chicago
Effect of ‘Drive ‘til You Qualify’: Transport Costs Can Exceed Housing Costs for HHs Earning $20-$50,000

- Transportation emissions can also equal or exceed emissions from residential energy
- Creates “driving to green buildings” challenge
How We Derive Transportation Costs

6 Neighborhood Variables
- Residential Density
- Gross Density
- Average Block Size in Acres
- Transit Connectivity Index
- Job Density
- Average Time Journey to Work

3 Household Variables
- Household Income
- Household Size
- Commuters per Household

Car Ownership + Car Usage + Public Transit Usage

TOTAL TRANSPORTATION COSTS
Housing + Transportation Costs Vary by Place Across the US

Percentages for working families with incomes between $20k - $50k
What Drives These Differences?

• Access to services
• Walkable destinations
• Availability and frequency of transit
• Access to jobs (1/5 of trips)
• Access to amenities
• Density

“Regardless of family size and income, households in location efficient neighborhoods own fewer vehicles and drive fewer miles, and therefore have lower transportation costs.”

(Location Efficiency Study. CNT, STPP, NRDC, 2000)
The Housing + Transportation Affordability Index is an innovative tool that measures the true affordability of housing based on its location.

Americans traditionally consider housing affordable if it costs 30 percent or less of their income. The Housing + Transportation Affordability Index, in contrast, offers the true cost of housing based on its location by measuring the transportation costs associated with place.
Metro St. Louis—1 to 161 HHs per residential acre versus matches 7323 to 29346 VMT/hh
Mirror images again—1-161 hh/res. Acre and 0.8 to 2.1 vehicles per household
Severe spatial mismatch—too many households and jobs are too far apart
If you build it, connect it and operate it frequently, people will ride it…
True Affordability—Map on the left is the “official” one, map on the right shows “shrinkage” of affordable areas when transportation costs count too.
811,000 HHs out of 1.01 million “affordable” on housing
Drops to 467 thousand when transportation included
43 percent of households deemed “affordable” at risk
Effect is even more severe for households earning 80 percent of Area Median Income.
2000-2008 Gas Price Spikes—increased COL 3.1% in location efficient but 8.3 in sprawled out areas

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Region</th>
<th>Viewable Area on Map Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Groups</td>
<td>1,957 (1,938 with data)</td>
<td>1,757 (1,738 with data)</td>
</tr>
<tr>
<td>Minimum</td>
<td>12.3 %</td>
<td>12.3 %</td>
</tr>
<tr>
<td>Average</td>
<td>23.1 %</td>
<td>22.7 %</td>
</tr>
<tr>
<td>Maximum</td>
<td>30.2 %</td>
<td>30.2 %</td>
</tr>
<tr>
<td>Households</td>
<td>1,012,410</td>
<td>920,375</td>
</tr>
</tbody>
</table>
Bonus—Location Efficiency also indicates reduced GHG emissions: ranges here from 1.5 to 15.8 MT/HH
Location Efficiency & the Transect Reveals Carbon Benefits of Good Urban Form

This Place Has the Disappearing Carbon Blues...♫
We Can Use This Knowledge To—

• Protect consumers against “hidden” costs by providing better information
• Analyze trends & compare across HH types
• Define housing needs for public policy purposes
• Encourage coordination of housing and transportation policies
• Inform sub-Federal planning efforts
• Predict the ability of a household to pay rent or mortgage
• Improve financial / housing counseling
• Help make the case for and package alternative financing for accelerated transit system build-out
Index is Being Adopted At Several Levels

- HUD and DOT are using to screen sustainable communities and TIGER grant applications
- MPOs in Bay Area, Chicago, DC and elsewhere using to re-screen, prioritize LRTP investments
- Chicago and other cities have used to calibrate goals and track outcomes for their climate action plans
- MTC in Bay Area used to justify helping capitalize TOD investment fund
- State of Il. new act requires five agencies to screen investments
- City of El Paso TX now uses to direct affordable housing to areas of low transportation costs
- Experiments conducted with location efficient mortgages and low-driving insurance rates
Getting the Goals Right

• Affordability and reducing the real cost of living
• Investing to create value and capture it locally
• Creating and sustaining jobs through economic networks
• Reducing economic risks
• Acting as a region
**TOD Is:**

- **Location efficiency** — Dense, transit-accessible, & pedestrian-friendly
- **Rich Mix of Choices** — Wide range of mobility, housing and shopping options
- **Value Capture** — Good service & connections, local amenities support place-making, scorekeeping & attention to financial returns
- **Place-Making** — Places for people, enriches existing qualities, provides new connections, works with landscape, builds reputation
- **Resolution of Tension between TODs as “Nodes” and “Places”** — Works to support travel networks and communities

New Transit Town, Island Press 2005
TOD is not

• **Just for commuters** — Work-related trips just 18 percent of total travel

• **Auto-oriented transit** — Way too much land in Chicago devoted to park-and-ride lots

• **Just a place to sleep at night** — People need to shop, eat, visit without getting in a car

• **Only the transit property** — All successful TODs are joint developments between cities, transit operators, private investor/owners, and communities

New Transit Town, Island Press 2005
http://toddata.cnt.org
### How Your Region’s Transit Zones Perform Compared to the Entire Metro Area

<table>
<thead>
<tr>
<th>Area</th>
<th>HHs</th>
<th>HH Size</th>
<th>Block Size</th>
<th>HH/R es. Acres</th>
<th>Jobs / Acre 2008</th>
<th>% Didn't Drive Alone</th>
<th>% HH w/ 0-1 Veh</th>
<th>Veh/ HH</th>
<th>VMT Per HH</th>
<th>% H Cost</th>
<th>% T Cost</th>
<th>% H+T Cost</th>
<th>CO2 /HH</th>
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</thead>
<tbody>
<tr>
<td><strong>Metro STL</strong></td>
<td>1 Million</td>
<td>2.6</td>
<td>70.4</td>
<td>3.08</td>
<td>0.32</td>
<td>7.53</td>
<td>43</td>
<td>1.71</td>
<td>18297</td>
<td>23.1</td>
<td>24.5</td>
<td>47.6</td>
<td>8.8</td>
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<tr>
<td><strong>Transit Zones</strong></td>
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<tr>
<td>Avg.</td>
<td>1184</td>
<td>2.3</td>
<td>10.7</td>
<td>13.4</td>
<td>18.43</td>
<td>21.7</td>
<td>64</td>
<td>1.27</td>
<td>14834</td>
<td>19.9</td>
<td>22</td>
<td>42</td>
<td>5.76</td>
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<td>Downtown</td>
<td>1033</td>
<td>1.6</td>
<td>4.57</td>
<td>37.6</td>
<td>21.28</td>
<td>23.4</td>
<td>66</td>
<td>1.22</td>
<td>9338</td>
<td>20.1</td>
<td>17.4</td>
<td>37.4</td>
<td>3.13</td>
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<td>Neighborhoods</td>
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<td>2.4</td>
<td>8.21</td>
<td>9.19</td>
<td>25.18</td>
<td>16.9</td>
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<td>1.5</td>
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<td>20.3</td>
<td>33.6</td>
<td>53.8</td>
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<td>STL Co Suburbs</td>
<td>1011</td>
<td>2.4</td>
<td>11.9</td>
<td>3.72</td>
<td>9.94</td>
<td>19.6</td>
<td>65</td>
<td>1.24</td>
<td>16345</td>
<td>19.3</td>
<td>20.4</td>
<td>39.7</td>
<td>6</td>
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<td>St. Clair Suburbs</td>
<td>423</td>
<td>2.8</td>
<td>18.1</td>
<td>2.95</td>
<td>17.34</td>
<td>26.8</td>
<td>72</td>
<td>1.13</td>
<td>20032</td>
<td>20.1</td>
<td>16.8</td>
<td>36.9</td>
<td>8.55</td>
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Taking This Risk Into Account—Location Efficient Mortgages, Idea Was Well Received, Seems to Have Outperformed Market

Skip the car, buy a house

There’s a lot of hand-wringing nowadays about suburban sprawl and the need for “smart growth.” But like the weather, nobody’s doing much about it. Much of the home-buying public still opts for wide-open spaces along the metropolitan fringe. And despite thoughtful warnings from civic and regional groups, political realities in Illinois militate against significant governmental action.

Now comes a modest but innovative pilot program that just might make a small difference. Maybe even a big difference—if it educates the public about the true cost of living “out there.”

It’s called the Location Efficient Mortgage, or LEM, and it has been developed by environmental groups such as Chicago’s Center for Neighborhood Technology, along with Fannie Mae, the government-chartered, stockholder-owned repurchaser of home mortgages.

It works like this: Participating lenders, in evaluating applicants, take into consideration how close the dwelling is located to public transportation. If it’s so close the applicant can live without a car, or a working couple can get by with just one, the estimate of disposable income is increased, and with it, the size of the mortgage for which they qualify.

A couple jointly earning $60,000 and buying into Chicago’s transit-rich Edgewater neighborhood, for instance, would qualify for a home selling for $212,218. Out in the boonies, under traditional guidelines, the limit would be $158,364.

And there are sweeteners. LEMs are not subject to income limits and they offer more flexibility, including lower down payments, than conventional mortgages. The City of Chicago, moreover, is offering vouchers worth $900 toward the purchase of energy-efficient appliances to the first 100 LEM borrowers.

Downsides? There’s mandatory counseling. And for now it’s limited to Chicago and three West Coast cities.

The ultimate value of LEM, however, may be to show, in ways people readily understand, that sprawl does impose costs. Some of that cost is paid, knowingly and gladly, by those who choose to live “out there.” Much of it, however, is hidden, and paid indirectly by those who live “back here.”

For more information about LEMs call 1-800-732-6643.
Value creation and value capture

- Assemble and zone for intense development
- Create economic structure to intercept value created
- Examples from regions large and small (Portland Maine, Meridien MS, Cleveland, Portland OR)
Not All Corridors Will Support Significant Increments of New Development

Corridors Serve Different Roles Based on Defining Characteristics

- **Congestion Relief**
  - Complements existing commute flows
  - Limited emphasis on development

- **Future Growth and Development**
  - Addresses future congestion
  - High development opportunities on corridor

- **Equity**
  - Connects low-income neighborhoods to job centers
  - Provides low-cost access relative to automobiles

- **Economic Development**
  - Placed along older arterial corridors
  - Transit investment intended to spur re-development

**Value Capture Corridor**
Cleveland Health Line / Euclid Avenue BRT—Significant Development Downtown & U. Circle But Very Little In Between

$3 Billion in New Investment Concentrated Near Public Square and University Circle

Good traffic mover Supports expansion Not an incentive for reinvestment
Filling In Missing Links by Adding Streetcar Circulation—Reduced Portland VMT & Transport Carbon 67%
Part of Portland Climate Plan (From Street Smart, CTOD 2006)

STREETCARS ARE DEVELOPMENT-ORIENTED TRANSIT

DEVELOPERS SAY THAT the permanence of the fixed guideway helps mitigate the risk, and the higher densities and lower parking ratios typically permitted in downtowns make projects more profitable. These densities would not be possible, however, if there was no streetcar. Before the alignment was selected for the Portland streetcar land in the Pearl only captured 19 percent of all development in the CBD; after it was chosen the land captured 55 percent.

<table>
<thead>
<tr>
<th></th>
<th>Start of Service</th>
<th>Initial Track Miles</th>
<th>Initial System Cost Per Mile</th>
<th>Initial System Cost</th>
<th>Development Investment</th>
<th>Return on Investment</th>
</tr>
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<tr>
<td>Kenosha</td>
<td>2000</td>
<td>2.0</td>
<td>3.10</td>
<td>6.20</td>
<td>150</td>
<td>2319.35%</td>
</tr>
<tr>
<td>Little Rock</td>
<td>2004</td>
<td>2.5</td>
<td>7.84</td>
<td>19.60</td>
<td>200</td>
<td>920.41%</td>
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<tr>
<td>Tampa</td>
<td>2003</td>
<td>2.4</td>
<td>20.13</td>
<td>48.30</td>
<td>1000</td>
<td>1970.39%</td>
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<tr>
<td>Portland (1)</td>
<td>2001</td>
<td>4.8</td>
<td>11.50</td>
<td>55.20</td>
<td>1046</td>
<td>1794.93%</td>
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<tr>
<td>Portland (Ext.)</td>
<td>2005</td>
<td>1.2</td>
<td>14.83</td>
<td>17.80</td>
<td>1353</td>
<td>7501.12%</td>
</tr>
</tbody>
</table>

Source: Reconnecting America

TABLE 1: Private Returns on the Public Investment
The Downeaster as a Model for Continued and Enhanced Regional Cooperation and Strategy
Boston – Portland CBSA

- 288 Stations in 2000
- 10 in Downeaster Corridor
- Expansion to Freeport, Brunswick
- 396,000 HHs in 2000, 16% of total
- Will grow to 752,000 or 24% in 2030
- Growth of 356,000 almost ½ of Projected Regional Growth
- Only NY, LA, Bay Area & Chicago Will See More TOD HHs
Downeaster Expansion Benefits Study in 2008
Projected by 2030-

- Cumulative construction of $7.2B
- Const/rehab of 42k hu + 6.8M sf commercial
- Over 17,000 jobs
- $244 million in annual transport cost savings
- $2.4 B in annual resident and visitor purchasing power
- $75 M in annual new state and local tax revenue

Study resulted in approval
Construction to be complete 2012
Car Sharing - Poised for Takeoff?

- 200 cars, 15000 members
- Pay as you go vehicle access
- Available in many Chicago communities plus Oak Park, Evanston
- Half of members sell a car
- Takes 17 cars off the road for each shared car in service
- Reduces car travel 5,000 VMT per user
- Users significantly increase walking, biking, riding
Back to the Future—Range of Energy Intensities for Local/Regional Transport Options

Most efficient options with highest capacities

Most prevalent today

Most prevalent today
Calgary CA—500 passengers, 5-25 miles, 15-40 minute trips, no oil, zero GHGs—1st 100 % Wind Powered Transit System

Image courtesy Anthony Perl
Electric Traction Corridors—Multi-modal transportation, electric reliability and economic development strategy—utilities re-establish role as investors in mass transportation

Image courtesy Anthony Perl
Electric Trolley Buses

- Can operate on trolley lines or independently
- Same cost as hybrid diesels
- More fuel efficient
- Quieter
- Operating in Seattle, Boston, Philly, SF, Vancouver & Dayton
- 10-15 % more revenue/bus
Dresden—Revived old US practice of using rail assets to solve local freight challenge
How Complete is your Street?

- Stormwater Management
- Energy Efficiency
- Water Efficiency
- Alternative Transportation
- Recycling
- Urban Heat Island
- Education
- Beauty and Community
- Site Selection
- Air Quality

cnt.org/natural-resources/sustainable-streets/

SUSTAINABLE STREETS for CHICAGOLAND

multi-modal, multi-functional and totally fabulous

The Chicago Department of Transportation and the Center for Neighborhood Technology invite you to learn about Chicago’s innovative integrated design practices from Green Alleys to photocatalytic cements. Expert practitioners will explore how transportation projects can incorporate sustainable lighting, stormwater, and material development, with numerous opportunities for questions and discussions.

When: Wednesday, June 17

U.S. Department of Transportation
Federal Highway Administration
Los Angeles—Moderate system, plan to create an extensive system, new local tax revenues in the bank AND
A Bold Plan That’s Raised $40 Billion Through a Local Tax, with a Challenge to the Federal Gov’t to Share the Risk and Accelerate Build-Out by 20 Years

30/10 MEANS...

BUILDING 12 NEW PROJECTS IN 10 YEARS INSTEAD OF 30

30/10 MEANS...

CREATING 160,000 NEW JOBS
Chicago Policies: Accelerated Green Permitting Needs to be Applied to At-scale Planned Development Near Transit + Scored Using H+T
Summary of Suggested Strategies to Enhance Revenue for America’s Transit Systems

Making Performance Count

• Cost of living reduction
• Value creation and value capture
• Linking investment to job creation and local economic development

Partnering to Acquire New Revenue

• City-county tax elections
• Structured partnerships with energy & water utilities + real estate investors
• Use tax code ETB to anchor local campaigns
• Design a new financial system that can make infrastructure banking work
One Path to New Operating Revenue—Market Employer Commuter Benefit

- Analogy is with Earned Income Tax Credits
- Qualified families earn if they file
- Failure to file costs both them and their communities
- Multi-year state and local campaigns increased cash flow by billions

- ARRA increased monthly allowed to $230/month
- Extension in 2010 continued
- EO 13150 mandates federal employees eligible
- All in national capital region receive this benefit
- SF requires employers to offer
- Similar law pending in Chicago
- Only 10 percent of those eligible receive benefit
- Local campaigns would have the same effect as for EITC
A Different Scenario for Supporting Transit Demand in the United States

• Create a tax credit for household and business vehicle ownership cash-out
• Tax credit is worth X dollars taken directly
• Credit is worth some multiple of X if taken as a pre-paid multi-year discounted transit pass

• Creates immediate incentive for ridership
• Creates tax expenditure pipeline back to transit agencies
• Revenue can then be used to secure financing via TIFIA and similar vehicles
Thank you!

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