● Study on neighborhood change impacts of new transit investment
● Development of metrics for sustainable transportation for greater Boston
  ● Including equity metrics
● Development, working with the Center for Transit-Oriented Development, of a “rating system” for equitable TOD
● Community-driven survey/focus group research on transportation needs of low-income, particularly Latino, families in Massachusetts
The ABCs of Equitable TOD: Key Concepts
Key concepts for understanding equitable TOD

- Gentrification and Displacement
- Equity
  - Transportation (and/or Transit) Equity
  - Equitable Transit-Oriented Development (TOD)
- Opportunity
- Accessibility
Gentrification and displacement are not the same thing

- Both are patterns of neighborhood change
  - Gentrification is characterized by increasing property values and incomes
  - Displacement occurs when current residents are involuntarily forced to move out because they cannot afford the gentrified neighborhood
- There is a fine line between BAD “gentrification” and GOOD “economic development”
- What we want is development without displacement
Gentrification consequences of concern

- Displacement of residents who are priced out of their neighborhood
- Higher housing cost burdens for those who remain behind (renters and potentially owners)
- Increase in automobile-ownership and residents less likely to use transit for commuting
What do we mean by “equity”?

- Equity refers to an ideal state in which everyone has full and equal access to opportunities and amenities, regardless of their race or ethnicity, gender, age or wealth.
- To be taken seriously, equity must be measurable.
- One type of metrics measures disparity or “inequity”.
  - Health disparities
  - Educational outcomes
What do we mean by equitable transit-oriented development?

- Affordability
- Inclusiveness
- Density
- Block size
- Lower VMT/HIGHER RIDERSHIP
- Greater Equity
- Outcomes

Equitable Transit-Oriented Development

Places

Density Block size

Affordability Inclusiveness

Equitable Transit-Oriented Development

People
What do we mean by “opportunity”?

“Opening up” higher opportunity communities

Connecting lower opportunity communities to opportunity elsewhere in the region through better transportation connections

Improving lower opportunity communities ("development without displacement")
How do equity concerns vary for pieces of this framework?

- TOD in areas of lower opportunity
  - How can we ensure that TOD respects the vibrancy of existing communities and adds value to what is already in place?
  - Can we measure risk factors for gentrification/displacement and address those in TOD planning?
- TOD in areas of higher opportunity
  - How can we maximize region-wide access to new amenities and opportunities in such TOD projects?
  - How can we keep combined Housing + Transportation costs affordable for lower income residents of higher opportunity communities?
- Transportation connections
  - How can we prioritize transportation investments that create access to opportunity?
  - How can we keep transit affordable for all?
What do we mean by accessibility?

- Roadway management /IVS
- Travel Demand Management (TDM)
- Capacity expansion
- Land use planning

Congestion Relief

Mobility
Mobility is the “means” to the “end”, which is accessibility.
Measuring accessibility

● To understand accessibility you need to ask
  ● Access to WHAT?
  ● For WHO?
  ● By what MODE OF TRANSPORTATION?

● The Denver-area “Equity Atlas” is also an atlas of accessibility
Using Data to Shape Equitable Transit Oriented Development
Data toolkit

- Open access to all available data
- Performance metrics
- Tools for analyzing data
  - To help both individuals and communities understand and shape equitable development
- Tools for “visualizing” data
- Digital storytelling
Metrics developed by Dukakis Center: Measuring equity

- How can we measure “equity” in regional transportation patterns?
- A performance measure for regional transportation equity should capture both
  - Differences in modes used to commute
  - Residential segregation patterns and “spatial mismatch”
Metric: Transportation (in)equity

**Travel Time Penalty**

Annual Hours of “Excess” Commute Time

- Black vs. white auto commuter
- Black vs. white bus rider
- Black bus rider vs. white auto commuter
Metrics developed by Brookings: Transit Coverage

The share of jobs in an area that are in neighborhoods with public transit service.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Metro Area</th>
<th>Percent Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Denver</td>
<td>86.6%</td>
</tr>
<tr>
<td>14</td>
<td>San Francisco</td>
<td>54.4%</td>
</tr>
<tr>
<td>26</td>
<td>Baltimore</td>
<td>78.8%</td>
</tr>
<tr>
<td>29</td>
<td>Minneapolis</td>
<td>78.2%</td>
</tr>
<tr>
<td>63</td>
<td>Detroit</td>
<td>64.9%</td>
</tr>
</tbody>
</table>

**Metric: Labor Access Rate**

The share of the metro population that the typical job can reach in 90 minutes via transit.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Metro Area</th>
<th>Percent Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Denver</td>
<td>45.6%</td>
</tr>
<tr>
<td>18</td>
<td>San Francisco</td>
<td>35.0%</td>
</tr>
<tr>
<td>41</td>
<td>Minneapolis</td>
<td>25.5%</td>
</tr>
<tr>
<td>43</td>
<td>Baltimore</td>
<td>25.4%</td>
</tr>
<tr>
<td>71</td>
<td>Detroit</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

*Source: Where the Jobs Are: Employer Access to Labor by Transit (Brookings, July 2012)*
Critical data analysis:
Know Thy Riders

- On-board surveys of transit riders
- Travel (diary) surveys
- American Community Survey (Census) data
- Surveys/focus groups

Source: Chu, Xuehao. March 2012. An Assessment of Public Transportation Markets Using NHTS Data (National Center for Transit Research at University of South Florida)
Data source: On-board surveys of transit passengers

- Commuter Rail:
  - Work-related: 91%
  - School: 3%
  - Shopping: 3%

- Subway:
  - Work-related: 76.2%
  - School: 7.3%
  - Shopping: 4.5%
  - Social: 2.5%
  - Personal: 7.5%

- Bus:
  - Work-related: 64%
  - School: 13%
  - Shopping: 6%
  - Personal: 11%
Source: Chu, Xuehao. March 2012. *An Assessment of Public Transportation Markets Using NHTS Data* (National Center for Transit Research at University of South Florida)
Data source: American Community Survey

- Table S0802 provides a breakdown of demographic and economic data about workers aged 16 and over based on their means of transportation to work.
- Very helpful in understanding the demographics of current transit commuters.
- Always use 5 year data sets.

But remember: Not everyone works . . .

Source: American Public Transportation Association, A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys (May 2007)
Median Annual Incomes

<table>
<thead>
<tr>
<th>City</th>
<th>MSA Average</th>
<th>Public Transportation Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>32,562</td>
<td>30,768</td>
</tr>
<tr>
<td>Baltimore</td>
<td>41,667</td>
<td>28,011</td>
</tr>
<tr>
<td>Denver</td>
<td>37,630</td>
<td>27,434</td>
</tr>
<tr>
<td>Detroit</td>
<td>35,723</td>
<td>15,001</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>39,424</td>
<td>31,540</td>
</tr>
<tr>
<td>SF/Oakland</td>
<td>45,033</td>
<td>42,954</td>
</tr>
</tbody>
</table>
Lessons learned from the data:
The “sweet spot” for equitable TOD

Lower VMT/
Higher Ridership

Greater Equity
Outcomes

Places

CORE
TRANSIT
RIDERS

People
The importance of “core” transit riders

- Core transit riders are
  - People of color
  - Low and Lower Middle Income Households
  - Immigrants
  - Renters
  - Zero Vehicle households and those with “inadequate vehicles”

- Getting TOD “right” ensures that transit investments pay off by ensuring transit-oriented neighbors who will be regular riders
Why should we care about equity in TOD?

- Of course we should care about equity for reasons of social equity.
- In addition, failure to address equity undermines the effectiveness of transit investment and TOD.
- Equity affects:
  - Transit ridership
  - Neighborhood development patterns and neighborhood change
  - Success of transit-oriented development
  - Location efficiency
A best practices toolkit for equitable TOD
Equitable TOD toolkit

- Data tools
- Planning tools
- Affordable housing policy tools
- Financing tools
  - Funding for affordable/mixed-income housing and mixed-use TOD
  - Funding for TOD-supportive infrastructure
- Transportation management tools
- Jobs/economic development tools
Planning tools

Equity Objective:

Everyone with a stake in a community’s future has the opportunity to participate in planning and the ability to hold government officials and developers accountable for ensuring equitable development.
Planning tools: Examples of best practices

- Great Communities Collaborative/San Leandro Downtown TOD Strategy (Bay Area)
- Midtown Detroit “Transit Oriented Development and You” (Detroit)
- Community Benefits Agreements negotiated by FRESC (Denver)

“TOD is a process that can be implemented before or after a new rail line or other transit system is up and running. There are already many places in and around Detroit that are mixed use, walkable, and compact destinations. Even if, in the worst case scenario, new transit takes years to start in the region TOD style places will help revitalize our cities.”

Transportation Riders United
Planning spotlight: Corridors of Opportunity community engagement grants

Community Engagement Team First Round Grantees

Making Transit
Meaningful
Transit Equity
Partnership
Outreach Ambassadors
Empowerment
Equitable TOD
Don’t Pass Us By
Neighborhood Discussion
Circles
Immigrant Opportunity

Connecting Communities around Transitway Development
Affordable housing policy tools

Equity Objective:

Lower income households have access to homes in neighborhoods that allow them to keep their combined housing and transportation costs affordable.
Affordable housing policy tools: Examples of best practices

- Inclusionary zoning (Montgomery County MD, Carlsbad CA)
- Transit agency joint development policy (Denver)
- Land banking authority (Atlanta)
- Preservation strategies for affordable housing near transit (Denver)
- Community land trusts (Sawmill Community Land Trust, Albuquerque NM)
Affordable housing spotlight: Tri-Met Joint Development

● Joint development policy specifically addresses affordable housing
● Able to “write down” land acquisition cost of properties acquired for transit construction by accounting for future transit fare revenues

● Examples
  ● Collins Circle
  ● West Gresham apartments
Financing tools

Equity Objective:

Investment is provided for equitable transit-oriented development and for TOD-supportive infrastructure without exacerbating inequitable patterns of neighborhood change.
Financing TOD: Examples of best practices

- Denver and Bay Area TOD Funds
- Corridors of Opportunity Housing/TOD Lending Team (Twin Cities)
- Tax credits for development in designated TOD areas (Maryland DOT)
- Housing trust funds funded by tax increment financing (Atlanta BeltLine)

The mission of the Bay Area Transit-Oriented Affordable Housing (TOAH) Fund “is to promote equitable transit-oriented development (TOD) across the nine-county Bay Area by catalyzing the development of affordable housing, community services, fresh foods markets and other neighborhood assets.”
Financing spotlight: Dallas TOD TIF District

- TIF district along a corridor instead of for individual stations
- Allows for revenue sharing from higher value to lower value station areas
- For example, for Mockingbird station
  - 40% stays in station area
  - 40% goes to lower value area
  - 20% goes to affordable housing anywhere in the corridor
A note on financing strategies for TOD-supportive infrastructure

Source: Dena Belzer, Strategic Economics
Transportation management tools

Equity Objective:

Combined housing and transportation costs are reduced, and car ownership is discouraged, for residents of transit-rich neighborhoods.
Transportation management tools: Examples of best practices

- Car sharing (SF City Car Share, Hoboken Corner Cars)
- Elimination of parking minimums (Seattle)
- “Unbundling” cost of parking (San Francisco)
Transportation management spotlight: Residential ECO Pass Program

- Santa Clara Valley Transportation Authority offers the program to developer/owner of a residential community
- Community buys passes for all residents at a deeply discounted price
- Affordable housing developers have used the program to reduce required parking

“An urban structured parking space can cost from $22,000 to $40,000 per space. Saving the cost of construction of two parking spaces pays for our entire Eco Pass program.”

Jeff Oberdorfer
Executive Director
First Community Housing
Jobs/economic development tools

Equity Objective:

Workers of all incomes and educational levels can find jobs located near public transportation
Jobs/economic development tools: Examples of best practices

- Small business assistance (Twin Cities)
- Planning to link workers to jobs (Denver, Twin Cities, Baltimore)
- Employer “Live Near Your Work” programs (Maryland Smart Keys 4 Employees)
- Geographically-targeted economic development incentives (Illinois, NJ)
Jobs/econ. development spotlight: NJ Urban Hub Tax Credit

- Rewards businesses that create specific numbers of jobs within one-half mile of a transit hub
- Initial investment of $352 million for 9 projects is credited with attracting $910 million in private capital and creating more than 1,400 new jobs

Teachers Village TOD in Newark