A New Approach to Land Use and Transportation Planning

Peter Skosey
Vice President
Metropolitan Planning Council
Bolder Policies, Better Communities, Brighter Future

- **The set up:** Post-war U.S. economic boom masked poor infrastructure spending decisions
- **The problem:** $7.3 billion/year cost of congestion in Chicago. Nationally $105 b transportation shortfall. Major jobs housing mismatch.
- **The solution:** Rethink Investment, reduce demand, maximize use of existing infrastructure
- **The result:** Better communities
Since 1934, the Metropolitan Planning Council (MPC) has been dedicated to shaping a more sustainable and prosperous greater Chicago region. As an independent, nonprofit, nonpartisan organization, MPC serves communities and residents by developing, promoting and implementing solutions for sound regional growth.

**Policy research & development** is done through direct research and the use of models tested in communities around the region.

**Policy advocacy** is done through education and outreach to policymakers at all levels of government.

**Policy implementation** is done through the practical application of MPC-designed tools communities can use.
The Set Up

U.S. GDP Growth Rate

Source: data360.org
The Set Up

Economy masks poor investment decisions

• After World War II the federal government’s debt equaled 120 percent of GDP

• Economic growth of the 1950s and ’60s quickly whittled that debt away.

• No competition from Asia, India, etc.
• Fast growth masks problems

• Slow growth reveals them

SO

• What’s the strategy for the new American economy?
Figure 1.

Total Public Spending for Transportation and Water Infrastructure in Constant Dollars and as a Share of GDP, 1956 to 2007

(Billions of 2009 dollars)  (Percent)

Source: Congressional Budget Office.

Notes: Total public spending is the sum of expenditures by the federal government and by state and local governments.

For the purposes of this analysis, the phrase “transportation and water infrastructure” encompasses the facilities and systems that support transportation, provide water resources, supply drinking water, and treat wastewater.

Spending expressed in constant dollars has been adjusted to reflect the effects of inflation between the year the spending occurred and a base year, which in this study is 2009.

GDP = gross domestic product.
The Solution: Place Based Strategies to Build Smarter Communities!

Rethink Investment
• CMAP Major Projects
• Regional

Reduce demand
• Employer Assisted Housing
• State

Maximizing existing infrastructure
• Bus Rapid Transit
• Local
Rethink Investment

Performance Criteria
• key to place based strategies
• allows multiple goals

Federal Programs
• Surface Transportation Bill
• TIGER Grants

Public Private Partnerships & Infrastructure Banks

Regional Plans
• CMAP Major Projects

“This is all about return on investment — a smart business plan for communities. Are we reducing vehicle miles traveled? Are we producing jobs? Are more people being educated? … Are the balance of investments being made between highways, bridges, and mass transit?”

– Adolfo Carrion, Former Director, White House Office of Urban Affairs
CMAP Major Projects

<table>
<thead>
<tr>
<th>Evaluation measure</th>
<th>Specific calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long-term economic development</strong></td>
<td>Jobs in region</td>
</tr>
<tr>
<td></td>
<td>Total income in region</td>
</tr>
<tr>
<td></td>
<td>Gross Regional Product</td>
</tr>
<tr>
<td><strong>Congestion</strong></td>
<td>Hours of congestion systemwide</td>
</tr>
<tr>
<td><strong>Work Trip Commute Time</strong></td>
<td>Average travel time in minutes, auto</td>
</tr>
<tr>
<td></td>
<td>Average travel time in minutes, transit</td>
</tr>
<tr>
<td><strong>Mode share</strong></td>
<td>Total trips, auto</td>
</tr>
<tr>
<td></td>
<td>Total trips, transit</td>
</tr>
<tr>
<td><strong>Jobs-housing access</strong></td>
<td>Average number of jobs accessible within 45 minutes by auto</td>
</tr>
<tr>
<td></td>
<td>Average number of jobs accessible within 75 minutes by transit</td>
</tr>
<tr>
<td><strong>Air quality</strong></td>
<td>Daily emissions of VOC, tons</td>
</tr>
<tr>
<td><strong>Daily emissions of VOC, tons</strong></td>
<td>Daily emissions of NOX, tons</td>
</tr>
<tr>
<td></td>
<td>Annual emissions of direct PM, tons</td>
</tr>
<tr>
<td></td>
<td>Annual emissions of NOX, tons</td>
</tr>
<tr>
<td><strong>Energy use</strong></td>
<td>Annual emissions of CO2 equivalents, metric tons</td>
</tr>
<tr>
<td><strong>Natural resource preservation</strong></td>
<td>Number of impacted subzones in unprotected natural areas</td>
</tr>
<tr>
<td></td>
<td>...as % of total impacted subzones</td>
</tr>
<tr>
<td><strong>Infill and reinvestment</strong></td>
<td>Number of impacted subzones within municipal boundaries</td>
</tr>
<tr>
<td></td>
<td>...as % of total impacted subzones</td>
</tr>
</tbody>
</table>

CMAP Created 2004
- CATS
- NIPC

30 year plan: $385 b
$10.5 b 5 new facilities (<3%)

Broad measures for evaluation
Reduce Demand

Land Use
• Employer Assisted Housing
• Mixed Income Transit Oriented Development

Encourage Alternative Travel Modes
• Bike Sharing

Placemaking
• ALL public spaces

“Increased commitment to and investment in bicycle facilities and walking networks can help meet goals for cleaner, healthier air; less congested roadways; and more livable, safe, cost-efficient communities.”

Ray LaHood, Secretary of Transportation, March 15, 2010
Reduce Demand

Land Use
Employer Assisted Housing (EAH)

Place based criteria for tax Credits (Ill. Affordable Housing Tax Credit)
Maximizing Use of Existing Infrastructure

Pricing
• Parking
• Tolls

Highways and Tollways
• Managed Lanes
• Bus on shoulder service
• Congestion Pricing

Bus Rapid Transit
• Western Avenue

Metropolitan Planning Council
Livability Principles

- Provide more transportation choices
- Promote equitable, affordable housing
- Enhance economic competitiveness
- Support existing communities
- Coordinate policies and leverage investment
- Value communities and neighborhoods
## Livability Principles

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Rationale for Selection</th>
<th>Study Measure</th>
<th>Main Corresponding Livability Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Connectivity to Educational Institutions</td>
<td>BRT has the potential to help facilitate the movement of residents, students, tourist, and employees to educational institutions.</td>
<td>Number of educational institutions within a half-mile of street segments.</td>
<td>3) Enhance Economic Competiveness</td>
</tr>
<tr>
<td>9) Existing Transit Ridership</td>
<td>Current bus ridership demonstrates existing demand for transit along the study routes.</td>
<td>Average passenger flow by street segment (controlling for direction) during the a.m. peak period.</td>
<td>1) Provide more transportation choices</td>
</tr>
<tr>
<td>13) Population Not Served by Rail</td>
<td>Residents not currently well served by rail transit have a particular and pressing need for rapid transit service within walking distance of their homes.</td>
<td>Residential population within a half-mile of street segments that also live beyond a half-mile radius of fixed guideway transit (CTA and/or Metra).</td>
<td>1) Provide more transportation choices</td>
</tr>
</tbody>
</table>

Metropolitan Planning Council
Livability Principles

- Scoring results from three of the 14 livability criteria – access to education (left), ridership by stop (middle), and population not within walking distance of rail (right).
Livability Principles

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Connectivity to Community Services</td>
<td>3.59</td>
</tr>
<tr>
<td>2) Connectivity to Educational Institutions</td>
<td>3.59</td>
</tr>
<tr>
<td>3) Connectivity to Entertainment</td>
<td>3.59</td>
</tr>
<tr>
<td>4) Connectivity to Food Stores</td>
<td>3.59</td>
</tr>
<tr>
<td>5) Connectivity to Major Medical Care</td>
<td>3.59</td>
</tr>
<tr>
<td>6) Connectivity to Major Open Space</td>
<td>3.59</td>
</tr>
<tr>
<td>7) Connectivity to Retail</td>
<td>3.59</td>
</tr>
<tr>
<td>8) Employment/Job Access</td>
<td>3.59</td>
</tr>
<tr>
<td>9) Population</td>
<td>3.59</td>
</tr>
<tr>
<td>10) Existing Transit Travel Time</td>
<td>16.17</td>
</tr>
<tr>
<td>11) Existing Transit Ridership</td>
<td>16.17</td>
</tr>
<tr>
<td>12) Transportation Costs</td>
<td>16.17</td>
</tr>
<tr>
<td>13) Population not Served by Rail</td>
<td>16.17</td>
</tr>
<tr>
<td>14) Infill Development Potential</td>
<td>3.00</td>
</tr>
</tbody>
</table>
Transit integration and connectivity

- 21 CTA rail station connections
- 15 Metra station connections
- 12 BRT on BRT connections
Western Corridor

- Alternatives Analysis
- Community engagement
- Complementary public and private investment
- Innovative funding capital and operations
Thank You

Peter Skosey
Vice President
Metropolitan Planning Council
metroplanning.org
pskosey@metroplanning.org
312.863.6004