Building Community
Partnerships for Mobility:

Presented by:
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Building Livable Communities with Transit

Background - The Heartland

Champaign-Urbana, IL - Typical Midwestern Community

- Located in the center of Illinois amid soybean and corn fields
- Home to the University of Illinois
- Urbanized area has approximately 120,000 residents: two cities and one village.
- University has over 42,000 students and 12,000 faculty and staff
- U of I geographically located in the middle of the two cities.
- U of I is split down the middle.
Community Characteristics

- Intensely urban campus
- Urbana: 35% of work trips are non-SOV
- Community: non-SOV commute to work rate - 23%
- Average commute to work time is 15 minutes
- Excellent transit system
- Quality neighborhoods next to campus many faculty/staff walk, bike, or take the bus to work
- U of I Students/staff have universal access to the transit system
Fundamentals: Community Plans/Partners

- **Long Range Transportation Plan 2025 (LRTP 2025)** adopted in 2004 by Champaign-Urbana Urbanized Area Transportation Study (CUUATS)

- **big.small.all** countywide visioning process called for more housing and mobility choices, less sprawl

- **miPLAN** – Mobility Implementation Plan meant to implement LRTP 2025
Foundation: LRTP 2025 Preferred Scenario calls for:

- Express bus service between core and fringe areas of the community
- An enhanced arterial fringe road system that provides improved mobility around the community
- Transit intensive corridors
- High capacity transit system in the University District
- Mixed use, denser development and redevelopment
If implemented LRTP 2025 will:

• Create higher population density, less sprawl
• Promote alternative transportation modes
• Save money on infrastructure
• Create walkable activity centers and reduce reliance on automobiles
• Make travel safer for pedestrians and bicyclists
• Increase mobility for motorists
• Educate residents about alternative transportation modes, safety, and new transportation concepts
What is miPLAN?

miPLAN's Purpose - What mobility options does the community want, both now and in the future?

To implement the LRTP 2025. LRTP found:

- Cities do not have the $ to build and/or maintain new arterial roads serving fringe development. (*Champaign has $50 million deficit in funding for arterial construction.*)

- If we continue with our current growth design, e.g. travel by auto, our community will face serious roadway congestion problems in less than 20 years.
miPLAN - Creative Public Input

Questions asked of residents:

✓ Do you know what mobility options are currently available?

✓ What kinds of transportation services do we want in our community right now?

✓ How will we want to move around in the future?
miPLAN Committee Members/Partners

Champaign County Board
Champaign County Farm Bureau
Champaign County Regional Planning Commission
Champaign-Urbana Mass Transit District
City of Champaign
City of Urbana
Illinois Department of Transportation
PACE (Community organization representing disabled)
University of Illinois/ Urbana-Champaign
Urbana Public School District
Village of Savoy
Participants Prioritize Improvements

Safety Improvements, Physically Active Travel

This package is designed to encourage physical activity through walking and bicycle use. The prominence of safety features and pedestrian/cyclist amenities discourages high speed travel.

- Bike lane (striped on street)
- Countdown timers
- Crosswalk - embossed
- ADA curb ramping
- Safety island with landscaping
- Bus shelters w/advertising
- Decorative street lighting
- Bump out corners to calm traffic

**Approximate Total**  $600,000

<table>
<thead>
<tr>
<th>Potential add-ons**</th>
<th>Cost</th>
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<tbody>
<tr>
<td>2. Bike racks</td>
<td>$2,500</td>
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<tr>
<td>7. Audible signals</td>
<td>$3,000</td>
</tr>
<tr>
<td>13. Benches</td>
<td>$4,000</td>
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<tr>
<td>14. Drinking fountains</td>
<td>$45,000</td>
</tr>
<tr>
<td>15. Sidewalk repair</td>
<td>$70,000</td>
</tr>
<tr>
<td>18. Sidewalk replacement</td>
<td>$200,000</td>
</tr>
<tr>
<td>24. Bus shelters w/out advertising</td>
<td>$16,000</td>
</tr>
<tr>
<td>33. Trash &amp; recyclables receptacles</td>
<td>$20,000</td>
</tr>
<tr>
<td>35. Trees</td>
<td>$65,000</td>
</tr>
<tr>
<td>36. Small planters</td>
<td>$200,000</td>
</tr>
<tr>
<td>51. Parallel on-street parking</td>
<td>$4,000</td>
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**Congestion Relief**

This package uses elements that encourage transit use. Option A is suitable for a compact community, usually one built before 1960. Option B is appropriate for subdivision layouts bordering an arterial street.

**Option A - Grid street pattern**
- Bike racks
- Bike lane (striped on street)
- Crosswalk - embossed
- ADA curb ramping
- Benches
- Bus shelters w/advertising
- Wayfinding signs to transit
- Pavement re-stripping

**Approximate Total** $200,000

**Option B - Without grid streets**
- All of the items above, plus:
  - Crosswalk push buttons
  - Safety island with landscaping

**Approximate Total** $550,000

<table>
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<th>Potential add-ons**</th>
<th>Cost</th>
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<tr>
<td>19. Sidewalk, new or substantially widened</td>
<td>$200,000</td>
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<tr>
<td>24. Bus shelters w/out advertising</td>
<td>$16,000</td>
</tr>
<tr>
<td>25. Lighting at transit stop/station</td>
<td>$20,000</td>
</tr>
<tr>
<td>26. Car-share car</td>
<td>$20,000</td>
</tr>
<tr>
<td>27. Trolley or shuttle bus (rubber wheels)</td>
<td>$500,000</td>
</tr>
<tr>
<td>28. Increase existing bus or rail service</td>
<td>$1,000,000</td>
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<tr>
<td>30. Station/transportation center (no elevation/excavation)</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>33. Trash &amp; recyclables receptacles</td>
<td>$20,000</td>
</tr>
<tr>
<td>54. Park ’n Ride lot parking</td>
<td>$250,000</td>
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<tr>
<td>56. Structured parking garage (200 spaces)</td>
<td>$4,000,000</td>
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**See pages 11-12 for full list of potential add-ons**
Neighborhood Transopoly Input

Priority Recommendations:

- Direct bus service along major arteries
- Bicycle routes
- Street lighting
- Sidewalk contiguity
E-Survey Results*

- In April 2007, e-surveys went out to employees (communitywide) and students (U of I only).
- 3,262 responses from 22,384 employees, 14.5% response rate.
- 3,319 responses from 41,342 students, 8% response rate.

*Note: Employees without web access not included.
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U of I Student Mode Choice

Figure 2 - Student Mode Choice

- **SOV**: 43%
- **Vehicle w/driver and 1 passenger**: 11%
- **Carpooled**: 3%
- **Bus**: 2%
- **Bicycled**: 9%
- **Walked**: 34%
Employee Mode Choice*
(Champaign, Urbana, Savoy)

*Note: Employees without web access not included.
Summary of E-Survey Results

- Non-SOV modes are the primary mode of transportation for students (87%) even if they own a vehicle.
- U of I students utilize transit at about twice the rate of peer institutions.
- SOV is the primary mode for employees at 73%.
- Users are satisfied with level of transit service overall-80% were satisfied or better.
- Market segmentation was done to assess potential to increase use of non-SOV mode choices. We asked what would encourage them to switch modes.
**Mobility Enhanced Development Report**

Identified opportunities for mobility enhanced development, e.g. development with all mobility choices.

Analyzes costs of housing and transportation to households.

**Affordability Index Formula**

\[
\text{Affordability Index} = \frac{\text{Housing Costs} + \text{Transportation Costs}^*}{\text{Income}}
\]

*Transportation Costs include the modeled cost of Auto Ownership, Auto Use, and Transit Use*
MED FINDINGS:

✓ Transportation costs in core significantly less than fringe. Average $/month spent on transportation: Core=$832 or less Fringe=$1372 or less.

MED Recommendations:

✓ Build on current density and urban form.
✓ Maximize options and choices in alternative forms of mobility.
✓ Provide tools to create mixed-use, mixed-income market-rate developments through infill and redevelopment.
✓ Maintain affordability through community development programs and by factoring in both household housing and transportation costs.
Summary of Input to Date:

Strong consistency found for the following top priority mobility improvements:

- Improved bicycle infrastructure and routing
- Better street lights
- Additional sidewalks
- Later evening MTD service
- Additional direct MTD routes along major arterials
Phase II (in process)

1. Develop and Refine Overall Development and Mobility Scenario Framework
2. Public Participation
3. Develop an Econometric Model
4. Enhance the CUUATS Mode Choice Model (include all modes)
5. Develop and run LEAM (Land Evaluation and Assessment Model) for Four Scenarios
6. Develop Interface Between the LEAM and CUUATS models
7. Run CUUATS model for four scenarios
8. Corridor Analysis
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Corridor Analysis

White-Springfield Corridors

Land use & economic analysis:
- Land use and building conditions survey
- Potential for mixed-use development
- Opportunities for pedestrian oriented community development
- Market & business analysis
- Market demographic characteristics

Transportation Extension

Transportation analysis:
- Existing & potential transit connections
- Bicycle & other pedestrian amenities
Phase III

- Benefit-Cost Analysis
- Preferred Investment
- Plan Development
- 5-10 Year Plan
- Final Report (2009)
Conclusion

A seamless multimodal transportation system is one of the goals for the miPLAN project. “How do we make mobility easy and as inexpensive as possible?”

miPLAN is providing some answers.
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