NACTO Designing Cities Conference

Joe Iacobucci – Chicago Transit Authority
Major Planning Initiatives

- CDOT Complete Streets Policy to ensure our streets are safe and designed for all users
- CDOT Streets for Cycling Plan
- Chicago Bike Share
- Placemaking
- Economic Development
23% of the land in the City of Chicago, such as streets and alleys is found in the public right of way.

- 1/8 mile grid
- ½ mile arterials
- Multiple options for non-fixed modes
- Some modes are more agile than others
The Opportunity for BRT
The Opportunity for BRT

One Million Bus Passenger Trips per Day
The Opportunity for BRT

System Demand

One Million Bus Passenger Trips per Day

Issue

Local Buses are Slow and Unreliable
One Million Bus Passenger Trips per Day

Local Buses are Slow and Unreliable

Customers prefer to Faster, More Reliable Transit

The Opportunity for BRT
The Opportunity for BRT

I don’t always take transit. But when I do, I prefer BRT.
Vision for BRT in Chicago

Buses that run like trains

- Faster
- More Reliable
- More Efficient
## Vision for BRT in Chicago

Buses that run like trains

<table>
<thead>
<tr>
<th>Average Speed</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed BRT, Western</td>
<td><img src="image1" alt="Bus" /></td>
<td><img src="image2" alt="Bus" /></td>
<td><img src="image3" alt="Bus" /></td>
<td><img src="image4" alt="Bus" /></td>
<td><img src="image5" alt="Bus" /></td>
</tr>
<tr>
<td>Current bus, Western</td>
<td><img src="image6" alt="Bus" /></td>
<td><img src="image7" alt="Bus" /></td>
<td><img src="image8" alt="Bus" /></td>
<td><img src="image9" alt="Bus" /></td>
<td><img src="image10" alt="Bus" /></td>
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<tr>
<td>Proposed BRT, Ashland</td>
<td><img src="image11" alt="Bus" /></td>
<td><img src="image12" alt="Bus" /></td>
<td><img src="image13" alt="Bus" /></td>
<td><img src="image14" alt="Bus" /></td>
<td><img src="image15" alt="Bus" /></td>
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<tr>
<td>Current bus, Ashland</td>
<td><img src="image16" alt="Bus" /></td>
<td><img src="image17" alt="Bus" /></td>
<td><img src="image18" alt="Bus" /></td>
<td><img src="image19" alt="Bus" /></td>
<td><img src="image20" alt="Bus" /></td>
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<tr>
<td>'Y' train</td>
<td><img src="image21" alt="Train" /></td>
<td><img src="image22" alt="Train" /></td>
<td><img src="image23" alt="Train" /></td>
<td><img src="image24" alt="Train" /></td>
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</tbody>
</table>
Vision for BRT in Chicago

Short-Term Improvements
Long-Term Vision

Forward Compatible Investments
Vision for BRT in Chicago

Short-Term Improvements
Long-Term Vision

Forward Compatible Investments

JUST DO IT.
Vision for BRT in Chicago

Make the bus run like a train

- Faster
- More Reliable
- More Efficient

Short-Term Improvements
Long-Term Vision

Forward Compatible Investments
The J14 Jeffery Jump will introduce a number of new features on the bus and throughout the Jeffery Corridor.

**67th to 83rd**
- **Dedicated Bus Lanes:** The Jump corridor will be striped and signed for dedicated bus lanes during congested periods (northbound from 7-9am and southbound from 4-6pm).

**Jeffery/Anthony**
- **Queue Jump:** A unique traffic signal and bypass lanes will allow buses to advance through an intersection ahead of general traffic.

**Other Jump Features**
- **Vehicle Enhancements:** Jump buses will have unique graphics for easy identification and will be equipped with on-board Bus Tracker displays to show arrival and transfer times at key destinations.
- **Fewer Stops:** Average ½-mile Jump station spacing will increase travel speeds. The 15 Jeffery Local will continue to serve all local stops, including shared stops at all Jump stations.

For more information:
1-888-YOUR-CTA
transitchicago.com/jump

**Jeffery/71st**
- **Commercial Area Showcase Station:** Upgraded station area to include unique sidewalk and crosswalk surfaces, and a larger shelter for expanded weather protection.

**73rd to 84th**
- **Transit Signal Priority:** Traffic signals will be upgraded to trigger an early or extended green light, so buses can get through the intersection more quickly.

**100th/Paxton**
- **Residential Area Showcase Station:** Upgraded station area to include unique sidewalk and crosswalk surfaces that are wider and designed to extend closer towards the bus.
Jump and Bike Network complement each mode, creating a complete corridor.
Jeffery Boulevard and 67th Street
New rush hour bus lanes provide fast peak service for buses and traffic calming at all hours.
Jeffery Boulevard and 71st Street

New ADA ramps, shelters, bus pads, bike parking, and trees.
Jeffery Boulevard and 71st Street

New Kiosks and Visual Identification for bus boarding areas.
Key Elements
- Bike Improvements in original grant
- Protected bike lanes on Washington and Randolph
- Dedicated bus lanes
- Boarding Platforms
- New off-street bus terminal at Union Station
- Used by 6 different bus lines

Central Loop BRT
Union Station to Navy Pier
• Bike Lane on Left
• Bus Lane on Right Curb
• Left turns share Bike Lane (Box on Wash)
• Right turns enter Bus Lane
East West Option 2

On Washington:
- 6’ Bike Lane on right curb
- Bus Lane adjacent to Bike
- 9’ Island Boarding Platforms
- 1’ buffer from Auto Lanes
- 2-Thru Auto Lanes with Turn Lane Pockets

On Madison:
- Similar Bus and Auto Lanes
- 9’ Curb Extension Boarding Platforms
- No bike lane, Protected Bike Lane on Randolph instead.
Western and Ashland Corridors
2010 -
Western/Ashland Corridors BRT

Why Build BRT on Western and Ashland?

**ENHANCING THESE CORRIDORS WITH BRT CAN BENEFIT MANY PEOPLE**

1 in 4 Chicagoans live within walking distance (½ mile) of the Western or Ashland corridors.

**ASHLAND and WESTERN**
- 2nd & 3rd highest annual CTA bus ridership.
- ASHLAND 10 MILLION
- WESTERN 9 MILLION

**THESE CORRIDORS ARE WELL-SUITED FOR BRT**

On WESTERN, lanes make up less than 4% of vehicle traffic during the morning rush hour, but carry 18% of the people travelling.

On ASHLAND, lanes make up less than 4% of the vehicle traffic daily, but carry 14% of the people travelling.

Western and Ashland are wide enough to construct BRT.

70 FT Curb-to-Curb

Constructing BRT will make a more complete street that works better for all users.
BRT and Bike Network complement each mode, creating a complete corridor.
New Modal Hierarchy prioritizes transit.
### Western Avenue Center Running BRT

<table>
<thead>
<tr>
<th>Transportation Changes</th>
<th>18.4 mph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average bus speed</td>
<td>(82% increase over local bus)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>7.8 minutes</th>
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<tr>
<td>Average time savings per trip compared to local bus</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>31% transit use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of daily trips on transit within corridor</td>
</tr>
<tr>
<td>(107% increase over existing)</td>
</tr>
</tbody>
</table>

| 50% |
| Improvement in bus reliability compared to existing (based on performance indicators from similar BRT projects) |

| 16.3 mph |
| Average vehicle speed |
| (8.9% decrease compared to existing) |
**Western Avenue Center Running BRT**

### Costs

- **$9.8 million**
  - Average cost per mile
  - ($155 Million Total)

### Infrastructure Costs

- **43%**
  - Annual cost efficiency of operating BRT service compared to local bus service

### Operating Costs

**48 feet**
- 15 to 21 ft sidewalk on each side
- 12 ft station median

#### Pedestrian Space

- **95%**
  - 2,895 of 3,063 parking spaces retained
  - 237 of 279 paid parking retained
  - 74 of 78 loading zones retained

#### Parking

- **0%**
  - 0 of 237 left turns retained at intersections
  - (0 of 206 left turn lanes retained)

#### Left Turns

- **100% retained and 59,092 feet added**
  - 6,048 of 6,048 linear feet of raised medians retained
  - 59,092 linear feet of additional raised medians
Summary

• Each project/corridor is different
• Identify clear project goals
• Ensure project goals align with overall initiatives
• Coordinate early and often
• Understand everyone’s roles
• Create Consensus and move forward
  ❖ Ensure decisions are communicated to agency leadership.
• Quantify Results
• Remember the customer