Design Guidelines for Transit Supportive Communities

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Get onboard with Pace's Transit Supportive Guidelines.
Transit Supportive Guidelines
For the Chicagoland Region
Basics

- A how-to guide for transit and land use planning
- Help eliminate barriers to transit usage
- Define the role land use and development have on transit access
- Help developers, planners, elected officials, and transportation professionals work together to create transit supportive development
Main Goals:

1. Aid municipalities and developers in design work
2. Encourage pedestrian-friendly land use with the reinvention of the DRAFT program
3. Work with communities from the very beginning /avoid hassle and expense of retrofitting
4. Plan smart infrastructure (which has a 20-50 yr lifespan) to include transit in the future
5. Encourage intelligent land use choices now will reduce congestion, emissions and delay in the future
Guidelines Process

• Two Steering Committees Formed
• Advisory consisting of Developers, Community Officials, CMAP, ATA, ComEd and COG’s
• Technical consisting of Service Boards, RTA, CTA, Metra, IDOT and Tollway
• Meetings held throughout the process to help guide the study
Defining Each Component of the Transit Trip

- The Rider
- The Development Lot
- The Public Walk
- The Transit Stop
- The Transit Vehicle and Infrastructure
The Rider

Customer feedback drawn from:

• Pace CSI Survey
• White Papers
• Industry Best Practice
• Pace Focus Groups

Customer needs include:

• Safe, protected waiting area
• Comfortable seating
• Information
The Development Lot

Transit Friendly
- Ease of access for pedestrians
- Set near roadway
- Well maintained walkways (including snow removal)
- ADA accessibility
- Textured surfaces
- Provisions for shelters and pads

Transit Prohibitive
- No walkways
- Set back from road
- No maintenance
- No ramps or curb cuts
- No pathway to bus loading area
- No space for bus stop
The Public Walk

Transit Friendly

- Sidewalks
- Crosswalks w/ pedestrian countdown signals
- Bike paths / racks
- Even surfaces
- Wayfinding signage
- ADA accessible curb ramps
- Well maintained pathways
- Protected from traffic
The Transit Stop

Transit Prohibitive

- Dimly lit or no lighting
- No shelter
- No signage or schedule

Transit Friendly

- Safe
- Comfortable
- Information available
The Transit Vehicle and Infrastructure

Transit Friendly

- Wi-Fi
- Vehicle lifts
- Mobility securements
- Comfortable seating
- Stop announcements
Technical Approach

- Infrastructure needs
- Land Use and density considerations
- Site design
- On-Site Transit Facilities
Technical Approach – Service

- Vehicle and Service Characteristics
- Infrastructure Needs
- Facility Types
Technical Approach – Public Realm

- Street Network
- Pedestrian Network
- Traffic Calming
- Signage Information
Technical Approach – Private Realm

- Land Use Density
- Site Designs
- Access Management
- Building Designs
- On-site Transit Facility
Guideline Products

- Visual and engaging document
- Technical appendix including templates and examples
- Describes the Design Review Assistance For Transit (D.R.A.F.T.) program
- Microsite
D.R.A.F.T. Review process

- Complimentary in-house technical review for development plans or public/municipal upgrades
- Relies on information typically submitted for municipal design review
- Application is available through guidelines website
BUS TURNOUTS

Bus turnouts consist of an entrance taper, a deceleration zone, a stopping zone, an acceleration zone, and an exit taper. They require the curb to be setback to bring the bus vehicle out of the flow of traffic, and can be used only at mid-block.

Bus turnouts do not block a travel lane during passenger loading and unloading and reduce the potential for rear-end collisions by allowing buses to turn out of the travel lane before decelerating ahead of the bus stop. Acceleration distance is provided ahead of the taper to allow the vehicle to merge back into traffic at higher speeds. Curb delineation also helps to guide the bus operator into the bus stop.

Bus turnouts typically have higher construction costs. They rely on otherwise unutilized pavement space for deceleration and acceleration. Bus turnouts remove more potential on-street parking space than bus bulbs, and create potential conflicts with cyclists if on-street bicycle lanes are provided.

According to IDOT’s Bureau of Local Roads and Streets Manual, turnouts are most effective when:
- Street provides arterial service with high speeds
- Bus volume is 10 or more during the peak hour
- Passenger volume exceeds 20 to 40 boardings per hour
- Average bus dwell time exceeds 30 seconds
- During peak hour traffic, there are at least 250 vehicles per hour in the curb lane

Buses expect to layover at the end of the trip.
Potential vehicular/bus conflicts warrant the separation of transit and other vehicles.
There is a history of traffic crashes and/or crashes involving pedestrians.
Right-of-way width is sufficient to prevent adverse impacts on pedestrian movements.
Curb parking is prohibited.
Sight distances prevent traffic from stopping safely behind the bus.
Appropriate bus signal priority treatment exists at the intersection.

<table>
<thead>
<tr>
<th>Design Speed</th>
<th>Entering Speed</th>
<th>A - Suggested Minimum taper Length</th>
<th>B - Minimum deceleration Length</th>
<th>C - Minimum Acceleration Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mph</td>
<td>20 mph</td>
<td>180’</td>
<td>120’</td>
<td>50’</td>
</tr>
<tr>
<td>35 mph</td>
<td>25 mph</td>
<td>170’</td>
<td>118’</td>
<td>45’</td>
</tr>
<tr>
<td>40 mph</td>
<td>30 mph</td>
<td>160’</td>
<td>115’</td>
<td>40’</td>
</tr>
<tr>
<td>45 mph</td>
<td>35 mph</td>
<td>210’</td>
<td>180’</td>
<td>70’</td>
</tr>
<tr>
<td>50 mph</td>
<td>40 mph</td>
<td>250’</td>
<td>230’</td>
<td>90’</td>
</tr>
</tbody>
</table>

Note: L=40’ for each bus that needs to queue in the turnout. (See Section 4.4a for vehicle characteristics. Source: Bureau of Local Roads and Streets Manual, Special Design Elements, IDOT, pg. 4-7(40), 2008.

See the Technical Appendix  See references (page iii)
Guidelines Website

- View guidelines by section or download complete file
- Explains how different audiences can use the guidelines
- Introduces the D.R.A.F.T. program
Marketing & Communications

- Create awareness and encourage trial
  - Download guidelines and submit to DRAFT program
- Targets include elected officials, planners, developers, engineers, municipal professionals, economic development directors, and architects.
Marketing & Communications

- Print ads
  - APA Magazine
  - Sustainable City Network Magazine
- Digital media
  - Banner ads on Crain’s Chicago
  - This webinar
  - Other behaviorally and geographically targeted display banners
Marketing & Communications

- Pace print and digital newsletters, social media
- 4800 Direct mail pieces
  - Targeting elected officials, engineers, planners, transportation directors, public works managers, etc.
- Still finalizing
  - Regional presentations
  - Giveaways
  - Event sponsorships
  - Other promotions
We wrote the book on land use planning for transit.

Get onboard with the Pace Transit Supportive Guidelines before your next project.

Great transit planning starts with the very first blueprint. That's why Pace has created the Transit Supportive Guidelines, to help you incorporate a transit-friendly future into your development plan right from the start. Pace also offers a Design Review Assistance for Transit (DRAFT) Program, which provides complimentary consultation from Pace transportation engineers. Be sure to take advantage of both of these resources for valuable planning advice and to ensure your private development or public infrastructure project meets industry standards.

Download your free copy of the Transit Guidelines today at PaceBus.com/guidelines.

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