Work Zone
Pedestrian & Cyclist Accommodation in Washington, DC

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In the early 2000s, it was typical for sidewalks to be closed for 18-24 months!

The MUTCD warns about what happens in these situations:
“It must be recognized that pedestrians are reluctant to retrace their steps to a prior intersection for a crossing or to add distance or out-of-the-way travel to a destination.” – Chapter 6D
Finding a Path Forward

- Change required maintaining pedestrians in their current path to the greatest extent possible AND allowing for the needs of construction crews
- DDOT convened biweekly meetings with all stakeholders: DDOT pedestrian program management, traffic control plan drafters, construction inspectors, and ADA experts along with developers, contractors, and subcontractors
- The meetings started with the hardest parts first
- Once an item was agreed to (drafted in one meeting and finalized at the beginning of the next) it was not reopened
- After finalizing the details, an implementation schedule was developed
- It did not require legislation or regulations. We used existing authority
A New Way: Pedestrian Safety & Work Zone Standards

- Spells Out Preferred Methods for Routing Pedestrians Safely Through Work Zones Occupying Public Space

- 4 Basic options to accommodate pedestrians:
  - Covered on the sidewalk
  - Covered in the roadway
  - Open on the sidewalk
  - Open in the roadway
## Pedestrian Protection by Phase of Construction

<table>
<thead>
<tr>
<th>Phase of Construction</th>
<th>Covered Walkway</th>
<th>Covered Walkway</th>
<th>Open Walkway</th>
<th>Open Walkway</th>
<th>Sidewalk Closure</th>
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<tbody>
<tr>
<td>Raze</td>
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<td>P</td>
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<tr>
<td>Facade Demolition</td>
<td>2†</td>
<td>2†</td>
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<td>P</td>
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<tr>
<td>Sheeting &amp; Shoring &amp; Excavation</td>
<td>P*</td>
<td>2*</td>
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<tr>
<td>Concrete or Steel Frame Construction</td>
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<td>Skin or Façade Construction</td>
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<td>Post Skin</td>
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<td>Sidewalk and Streetscape Work</td>
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<td>P**</td>
<td>2**</td>
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<tr>
<td>Utility Work or other Work in ROW</td>
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<td>P**</td>
<td>2**</td>
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</tbody>
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P = DDOT preferred method  
2 = Next alternative  
* For intermittent closures due to lifting overhead, a flagger should be used at both ends of the walkway  
** These closures are expected to last no longer than 4 to 8 weeks  
† When minimal overhead danger is present, covered walkways are the preferred method.
EXAMPLE: Safe Pedestrian Accommodation

- Pedestrians Conveniently Routed
- Protected from Traffic & Construction

- ADA Compliance
- Covered Route is Lighted
EXAMPLE: Pedestrian Access During Sheeting, Shoring & Excavation Phase

Sidewalk Remained Open...

...During Excavation
EXAMPLE: Covered Walkway
Bicycle infrastructure, access, and use has constantly grown

Separated bike lanes installed in major arteries

Multiple miles of bike lanes paved and more are planned

DDOT deployed Capital Bikeshare which has proven to be wildly popular and expanded into many surrounding jurisdictions

Private companies have deployed dockless bikeshare

Bike is becoming far more common for commuting, “last mile”, and general transportation uses
Treat pedestrians and cyclists the same as motorists: “The blockage of a sidewalk [or] bicycle lane...shall be treated in the same manner as the closure of a lane of motor vehicle traffic by applying similar temporary traffic control practices as would be applied to the closure of a lane of motor vehicle traffic...”

Keep it the same “…Equal to the safety of the route provided to pedestrians and bicyclists before the blockage of the sidewalk [or] bicycle lane”

Keep it clean “…Maintained free of obstructions and surface hazards, such as construction equipment, construction materials, debris, mud, loose gravel and uneven surfaces.”
Safe Accommodation: Bicyclists

Prioritized bike lane maintenance at work zones in the following order:

(1) Closing a parking lane and keeping the...bicycle lane open;

(2) Shifting the bicycle lane...and if necessary, shifting and narrowing the adjacent motor vehicle traffic lanes...;

(3) Closing the adjacent motor vehicle travel lane to provide space for a bicycle lane; provided that a minimum of one (1) motor vehicle travel lane shall remain in the same direction of travel;

(4) Merging the bicycle lane and the adjacent motor vehicle travel lane into a shared travel lane...provided the shared travel lane shall be...no less than thirteen feet (13 ft.) wide; and

(5) As a last resort (emphasis added), detouring bicyclists onto an adjacent roadway, in which case the detour route shall replicate, as closely as practicable, the level of safety found on the bicycle route being blocked.
Safe Accommodation: Pedestrians

• It codified the DDOT Pedestrian Safety and Work Zone Standards
  • “The safe accommodation for pedestrians shall meet or exceed the current DDOT standards, “Pedestrian Safety and Work Zone Standards – Covered and Open Walkways””

• It mandates that “closing a sidewalk...shall only be approved as a last resort (emphasis added) for the duration of time needed to assure pedestrian safety in the absence of other practicable routing options

• It anticipated that there could be conflicts between accommodating pedestrians and cyclists at the same work zone so it prohibited having cyclists use a covered or open walkway intended for pedestrian use.
We Passed a Law. Yay. We’re Done!

We’re the BEST!
Multiple violations...

One work zone...

All modes of transportation...
Inertia and the Status Quo

- Closing sidewalks, “merging” bike lanes, and focusing on the needs of the work crew are ingrained habits.
- They reflect the default thinking, customary practice, and universal experience for engineers, contractors, and crews.
- Some still think it is the safer way to work.
- The government can be as bad an actor as the private sector.
Finding a Path Forward, Again

- Developed 15 different draft guidance for bicycle infrastructure
- Vetted these internally with DDOT personnel first
- Shared with external stakeholders, including developers, utilities, contractors, and the bicycling community
- Edited to address and adapt to their suggestions
Bicyclist Accommodation Typical TCPs

DEVELOPMENT OF TYPICALS

- 15 typical work zone guides developed
- 10 stakeholder meetings held
- Intergovernmental, private sector, and cyclists community
- 40+ individuals and groups provided input
Bicyclists Accommodation in Field training

IN FIELD TRAINING

- 3 in field trainings held to date
- 133 individuals trained
- 17 different companies attended
- 4 different DDOT offices attended
15th Street Cycle Track & Sidewalk

BEFORE

AFTER
L Street Cycle Track & Sidewalk

- “You can’t always get what you want” – Mick Jagger
- A fully protected one-way cycle track replaced by a shared lane
- A case study in trade-offs and limitations.
Next Steps: Train, Train, and Train Again

• Rigorous Training Program

• Three components:
  • Knowledge of the laws, regulations, and policies
  • Application to actual plans in real world scenarios
  • Implementation in the field
    • Including emergency work (especially emergency work!)

• Train internal and external teams
Changing Minds, Changing Habits, Changing Cultures

• Recognize the truth: People are creatures of habit

• Engage from the beginning: Engagement = Ownership

• Value what others know: Everyone has a contribution to make

• Be open to change yourself: Practice what you preach

• Solicit feedback even after launching: Everything is a beta

• Never give up, never surrender!
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