



# Work Zone Street & Sidewalk Closure Policies: Equitable and Safe Use of the Public Right-of-Way

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# Outline

- Best practices research across North American
- Setting the stage
- Prioritization policy
- Permit requirements
- Technical requirements
- Penalties
- ROW rent/fees



# Peer Research

Agency	Web Links (as of June 2021)
Austin TX	<i>Mobility Guidelines</i> <a href="https://www.austintexas.gov/page/mobility-guidelines">https://www.austintexas.gov/page/mobility-guidelines</a>
Calgary AB	<i>Temporary Traffic Control Manual</i> <a href="https://www.calgary.ca/Transportation/Roads/Documents/Contractors-and-Consultants/temporary-traffic-control-manual.pdf">https://www.calgary.ca/Transportation/Roads/Documents/Contractors-and-Consultants/temporary-traffic-control-manual.pdf</a>
Cambridge MA	<i>Bicycle Traffic</i> <a href="https://www.cambridgema.gov/~media/Files/publicworksdepartment/Engineering/Specifications/Traffic_Mgt_Cyclists.pdf">https://www.cambridgema.gov/~media/Files/publicworksdepartment/Engineering/Specifications/Traffic_Mgt_Cyclists.pdf</a>
Denver CO	<i>Issuance of Permits by the City Traffic Engineer</i> <a href="https://www.denvergov.org/files/assets/public/doti/documents/regulations/pwrr-022.2-issuance_of_permits_by_the_city_traffic_engineer.pdf">https://www.denvergov.org/files/assets/public/doti/documents/regulations/pwrr-022.2-issuance_of_permits_by_the_city_traffic_engineer.pdf</a>
Nashville TN	<i>Bicycle &amp; Pedestrian Work Zone Safety Regulations</i> <a href="https://www.nashville.gov/Portals/0/SiteContent/pw/docs/permits/BicyclePedestrianSafetyRegulations.pdf">https://www.nashville.gov/Portals/0/SiteContent/pw/docs/permits/BicyclePedestrianSafetyRegulations.pdf</a>
Oakland CA	<i>Accommodating Pedestrians, Bikes, and Buses in Work Zones</i> <a href="http://www2.oaklandnet.com/oakca1/groups/pwa/documents/memorandum/oak062315.pdf">http://www2.oaklandnet.com/oakca1/groups/pwa/documents/memorandum/oak062315.pdf</a>

# Peer Research

Agency	Web Links (as of June 2021)
Oregon DOT	<i>Temporary Pedestrian Accessible Routes</i> <a href="https://www.oregon.gov/ODOT/Engineering/Docs_TrafficEng/TPAR-Overview.pdf">https://www.oregon.gov/ODOT/Engineering/Docs_TrafficEng/TPAR-Overview.pdf</a> <i>Traffic Control Plan Design Manual</i> <a href="https://www.oregon.gov/ODOT/Engineering/Pages/TCP-Manual.aspx">https://www.oregon.gov/ODOT/Engineering/Pages/TCP-Manual.aspx</a>
Philadelphia PA	<i>Permitting Standards</i> <a href="https://philadelphiastreet.com/images/uploads/documents/R OWIS-Chapter 3 Permit Policy.pdf">https://philadelphiastreet.com/images/uploads/documents/R OWIS-Chapter 3 Permit Policy.pdf</a> <i>Permit Fee Schedule (and Public Hearing Testimony)</i> <a href="http://regulations.phila-records.com/pdfs/Dept%20of%20Streets%20Post%20Hearing%20Report.pdf">http://regulations.phila-records.com/pdfs/Dept%20of%20Streets%20Post%20Hearing%20Report.pdf</a>
Phoenix AZ	<i>Traffic Barricade Manual</i> <a href="https://www.phoenix.gov/streetssite/Documents/TBM%20-%20Revised%209th%20Edition_042021.pdf">https://www.phoenix.gov/streetssite/Documents/TBM%20-%20Revised%209th%20Edition_042021.pdf</a>
Pittsburgh PA	<i>Right-of-Way Procedures Manual</i> <a href="https://pittsburghpa.gov/domi/row-manual">https://pittsburghpa.gov/domi/row-manual</a>

# Peer Research

Agency	Web Links (as of June 2021)
Portland OR	<i>City Code</i> <a href="https://www.portlandoregon.gov/citycode/article/595633">https://www.portlandoregon.gov/citycode/article/595633</a> <i>Sidewalk Closure Guidelines</i> <a href="https://www.portlandoregon.gov/transportation/article/620812">https://www.portlandoregon.gov/transportation/article/620812</a> <i>Temporary Traffic Control Design Manual</i> <a href="https://www.portlandoregon.gov/transportation/article/648243">https://www.portlandoregon.gov/transportation/article/648243</a>
Raleigh NC	<i>Work Area Traffic Control Handbook</i> <a href="https://cityofraleigh0drupal.blob.core.usgovcloudapi.net/drupal-prod/COR15/AccommodatingPedestrians.pdf">https://cityofraleigh0drupal.blob.core.usgovcloudapi.net/drupal-prod/COR15/AccommodatingPedestrians.pdf</a>
San Francisco CA	<i>Construction Regulations (Sections 5 and 9)</i> <a href="https://www.sfmta.com/services/business-services/construction-regulations">https://www.sfmta.com/services/business-services/construction-regulations</a>
Seattle WA	<i>Director's Rule on Pedestrian Mobility in Work Zones</i> <a href="http://www.seattle.gov/Documents/Departments/SDOT/About/DocumentLibrary/DirectorsRules/SDOTDR%2010-2015Signed.pdf">http://www.seattle.gov/Documents/Departments/SDOT/About/DocumentLibrary/DirectorsRules/SDOTDR%2010-2015Signed.pdf</a> <i>How to Implement Pedestrian Mobility in Work Zones</i> <a href="https://www.seattle.gov/Documents/Departments/SDOT/CAMs/cam2110.pdf">https://www.seattle.gov/Documents/Departments/SDOT/CAMs/cam2110.pdf</a>

# Peer Research

Agency	Web Links (as of June 2021)
Toronto ON	<i>Guiding Principles for Cycling Safety in Work Zones</i> <a href="https://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-101366.pdf">https://www.toronto.ca/legdocs/mmis/2017/pw/bgrd/backgroundfile-101366.pdf</a>
Vancouver BC	<i>Construction on Vancouver's Bicycle Routes</i> <a href="https://vancouver.ca/files/cov/construction-on-bicycle-routes-guide.pdf">https://vancouver.ca/files/cov/construction-on-bicycle-routes-guide.pdf</a> <i>Traffic Management Manual for Work on Roadways</i> <a href="https://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/traffic-engineering-safety/trafficmanagementmanual">https://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/traffic-engineering-safety/trafficmanagementmanual</a>
Washington DC	<i>Municipal Regulations</i> <a href="https://www.dcregs.dc.gov/Common/DCMR/RuleDetail.aspx?RuleId=R0016442">https://www.dcregs.dc.gov/Common/DCMR/RuleDetail.aspx?RuleId=R0016442</a>

# Peer Research: Implementation

- Successes included:
  - Higher quality MOT plan submittals (Philadelphia)
  - Annual barricade training, certification (Phoenix)
  - Faster MOT plan review (Portland)
- Implementation challenges included:
  - Challenges in compliance staffing levels
  - Varying staff interpretation (Cambridge)
  - Applying municipal policies to state DOT (Pittsburgh)



# Peer Research: Closure & Notification

## Notification

- Notice period: varied from 2 to 14 days with different periods for *short-term* and *long-term* projects
- Notification methods include: mail, hand-flyer, on-site variable message signs or static permit notices
- Notice provided to the affected city council member's office for further distribution (Pittsburgh)

## Detours

- Out-of-direction bicycle/pedestrian travel limited to the lesser of 1,000 feet or 3 city blocks (Oregon DOT)
- Bicycle detours signed at all decision points (Vancouver)
- Vehicular detours *signed* (Austin and Oregon DOT) versus vehicular detours *unsigned* to avoid high traffic volumes concentrating on a single route (Vancouver)





## Our Objectives with DETOUR

- *Achieve more equitable impacts to all users;  
Create policy levers to encourage proper ROW  
rental use by contractors*
- Relocation of fees for more flexibility
- More definition of bicycle facilities
- Better definition of and requirements for high pedestrian use areas
- More complete permit applications and plans



# Denver Policy: Setting the Stage

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- Prioritization of ROW elements to be closed
- Justification processes for exceptions
- Permit application
- Closure notification

- Coordination across adjacent projects
- Technical requirements for ROW impacts:
  - *Maintain*
  - *Close*
  - *Detour*

- Special event closures
- Emergency or utility closures
- Costs to rent ROW for work zones
- Standard or typical layouts

# Denver Policy: Setting the Stage

- Our Approach & Considerations
  - Existing documents
  - How to split up high-level policy and priorities, technical requirements, fees
  - Ability to change in the future
  - Requirements for approval of different documents (PWPT vs PWRR)

## Key Takeaway:

Consider which policy elements may need to be adjusted on a more frequent basis such as fees, organizational references, etc.

# Denver Policy: Consultation

- Talked with stakeholders: advocacy groups, contractor groups, internal DOTI staff
- Meeting with traffic control contractors was surprisingly supportive of more clarity
- Meeting with inspectors reinforced the importance of their role



*Key Takeaway:*

Traffic management contractors also preferred more MOT details

# Denver Policy: Definitions



- Define all impacted facilities
- Separate premium and normal areas
- “Sidewalk Area”
- “Sensitive Non-motorized Facilities”

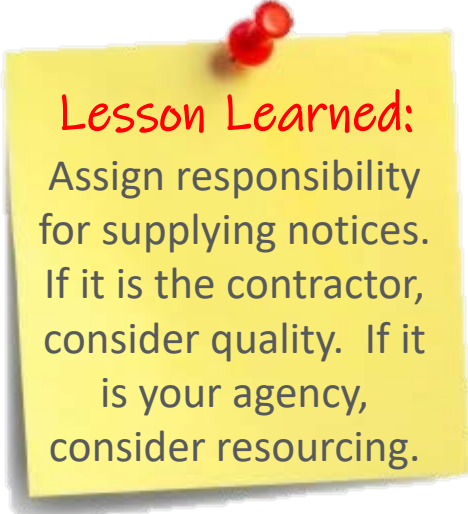
*Key Takeaway:*  
When possible, link definitions back to your municipal code or similar foundation legal documents.

# Denver Policy: High-Level Prioritization

1. Protect existing pedestrian route
2. Temporary pedestrian route in parking lane
3. Multi-use path in existing bike facility
4. Temporary pedestrian route in bike facility, merge bicycles with adjacent traffic
5. Temporary pedestrian route in traffic lane
6. Pedestrian detour route

# Denver Policy: Permit Requirements

- Construction impact notification
  - Different requirements for closures longer than 72 hours
  - 72 hour (long vs. short) definition came from inspectors
  - Hard to estimate cost of traffic control
    - Challenge of lump sum bidding



**Lesson Learned:**

Assign responsibility for supplying notices. If it is the contractor, consider quality. If it is your agency, consider resourcing.

# Denver Policy: Permit Requirements

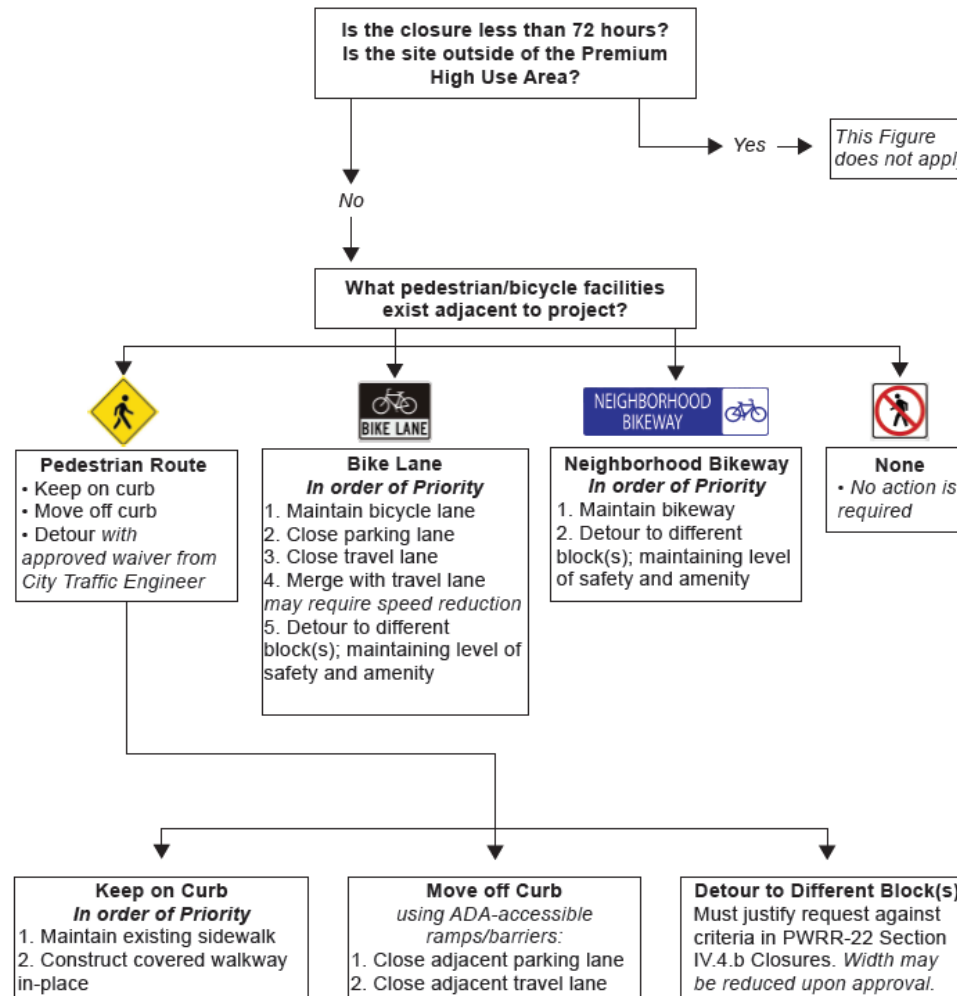
- Closures
  - Intent is to keep facilities open
  - Policy provides list of criteria city can use to evaluate exceptions (i.e., closure requests)
- Consider requirements for non-standard closures (e.g., mid-block on a sidewalk or for a short duration)

## Key Takeaway:

Look for policy elements that encourage keeping facility open. Example: no fee to close a traffic lane when shifting peds or bikes to that lane



# Figure 1: General Traffic Control Requirements for Pedestrians and Bicycles






# Denver Policy: Technical Requirements

- Technical requirements in PWPT 116, 203, 117 prepared with DOTIRR22.3:
  - How and when are pedestrian canopies required
  - Closure of parking (metered and unmetered)
  - Bike detour requirements
  - Signage, surfacing, illumination, barriers and fencing



# Denver Policy: Special Event Closures

- Defining special events
- Block parties, “Denver Days”
- Non-profit organizations
- Private events



*Lesson Learned:*

Coordinate with city film office or other teams that work with special events

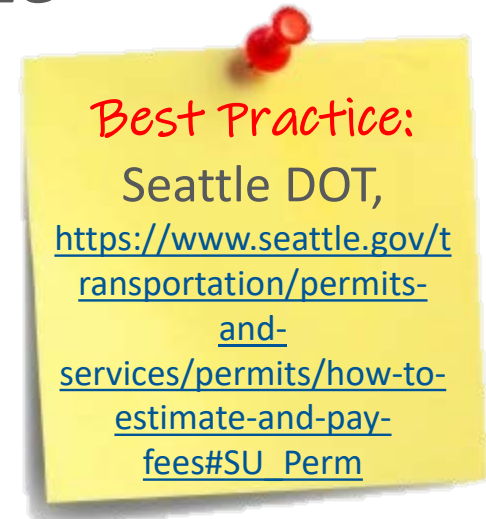


# Denver Policy: Penalties

- Process for formalizing existing practice into legal and documented process
- Non-compliance fee vs. administrative citation
- No currently known DRMC process for revoking contractor licenses; however, permits can be cancelled and future permit applications can be withheld

# Denver Policy: ROW Rent and Fees

- Separate fees to allow for easy adjustment
  - Inflation, cost of traffic control
- Use fees to encourage/prioritize
  - Keep ROW elements open
  - Limit closure durations
- “Standard block” fee exercise



# Denver Policy: ROW Rent and Fees

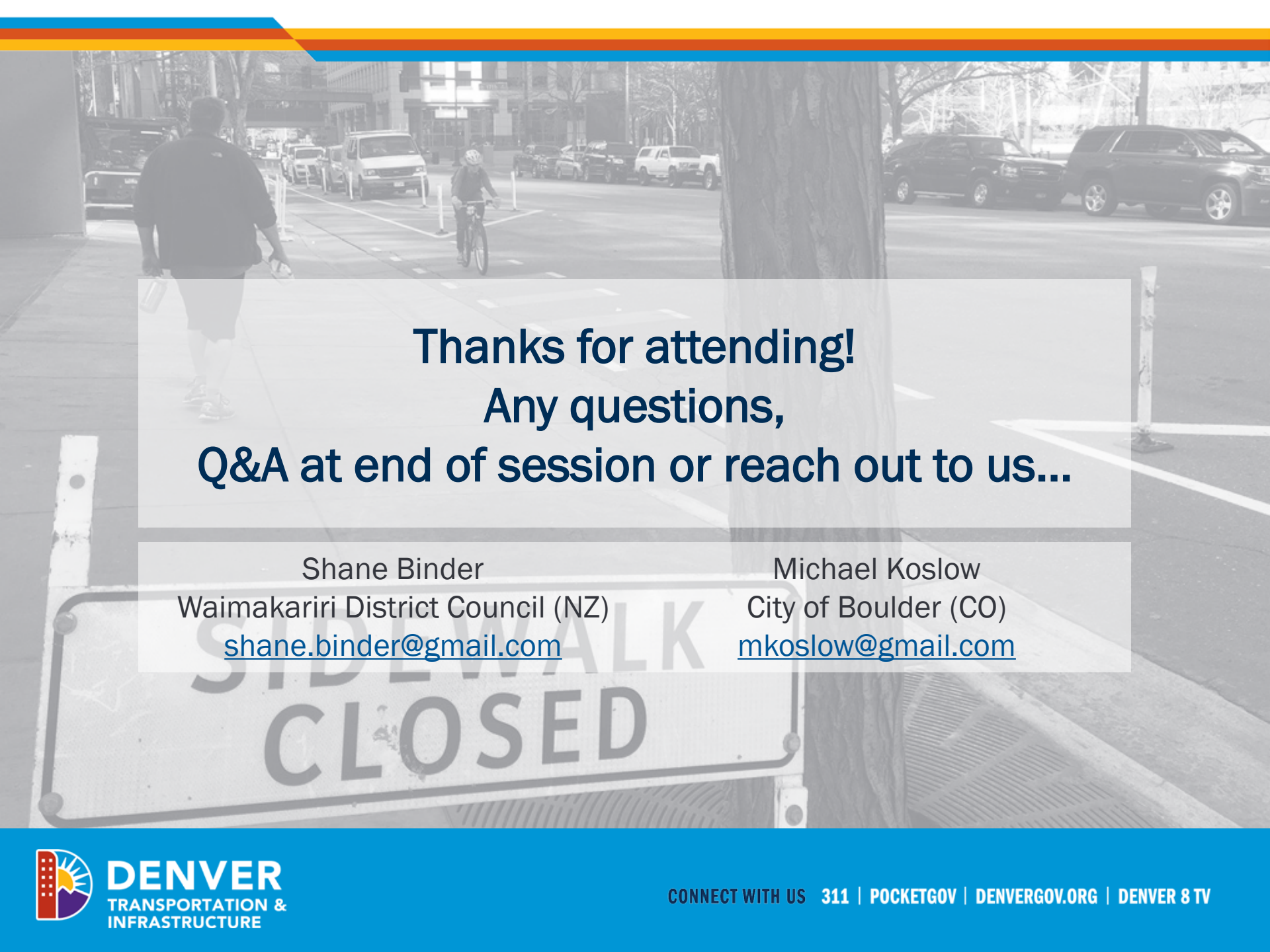
City	Sidewalk (Full Closure)	Sidewalk (Partial Closure)	Parking (Unmetered)	Parking (Metered)	Bicycle Lane	Travel Lane
Austin TX	1.0	1.0	2.0	5.2	6.2	15.0
Cambridge MA	1.0	1.0	0.02	0.04	0.02	0.02
Chicago IL	1.0	0.5	2.5	varies	1.0	5.0
Denver CO	1.0	1.0	1.8	5.0	1.8	1.8
Philadelphia PA	1.0	0.22 (0 if covered)	0.55	unkn	0.78	0.78
Portland OR	1.0	0.58	3.75	9.8	unkn	1.42
Seattle WA	1.0	0.47	1.32	1.32	0.62	1.32
Washington DC	1.0	0	0.92	0.92	0.83	1.67

# Future Work

What we would like to add:

- Typical drawings
- More enforcement tools
- More standardization
  - Documentation of exception justifications
- More responsibility on contractor





**Thanks for attending!**  
**Any questions,**  
**Q&A at end of session or reach out to us...**

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