

Sustainable Public Rights of Way (SPROW) Subcommittee Meeting

November 13, 2024



North Central Texas
Council of Governments
Environment & Development

Agenda

1. Welcome and Introductions

Discussion Items

2. Overview of Complete Streets Policies and Programs in North Texas

3. Legal Parameters for Local Public Rights-of-Way

4. Format of Guidebook

5. Sources of Information for Guidebook

6. Chapter: Green Infrastructure and Low Impact Development

7. Chapter: ROW Planning, Administration, and Policy

8. Chapter: Complete Streets

9. Relevant Construction Standards Drawings

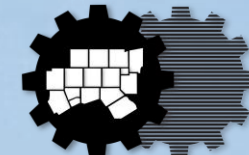
Other Business and Roundtable Discussion

10. Public Works Program Updates

11. Roundtable

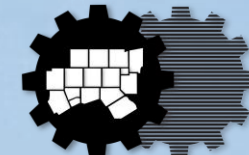
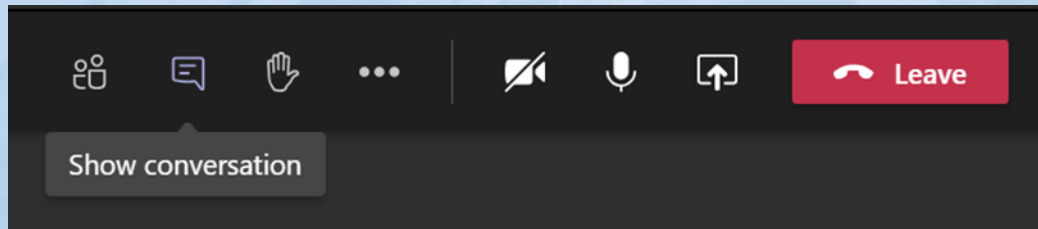
12. Schedule for the Next Meeting.

12. Adjournment

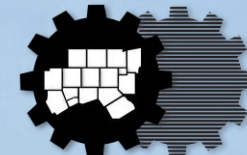


1. Welcome and Introductions

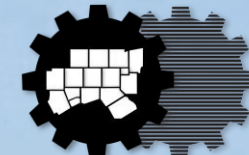
- The meeting agenda, presentation and handouts are located on the [SPROW subcommittee webpage](#)
- Please use the chat function to add your name and organization for attendance



DISCUSSION ITEMS



2. Overview of Complete Streets Policies and Programs in North Texas





Complete Streets

SPROW/ 11.13.2024

Shawn Conrad, Program Manager

NCTCOG Transportation Department – Sustainable Development



Multimodal Complete Street

Complete Streets

Standards or policies that ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, personal conveyance and micromobility users, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.

Source:
FHWA's "Moving to a Complete Streets Design Model:
A Report to Congress on Opportunities and Challenges"
March 2022

Other possible considerations for the North Texas Region



The purpose of Complete Streets policies and resolutions

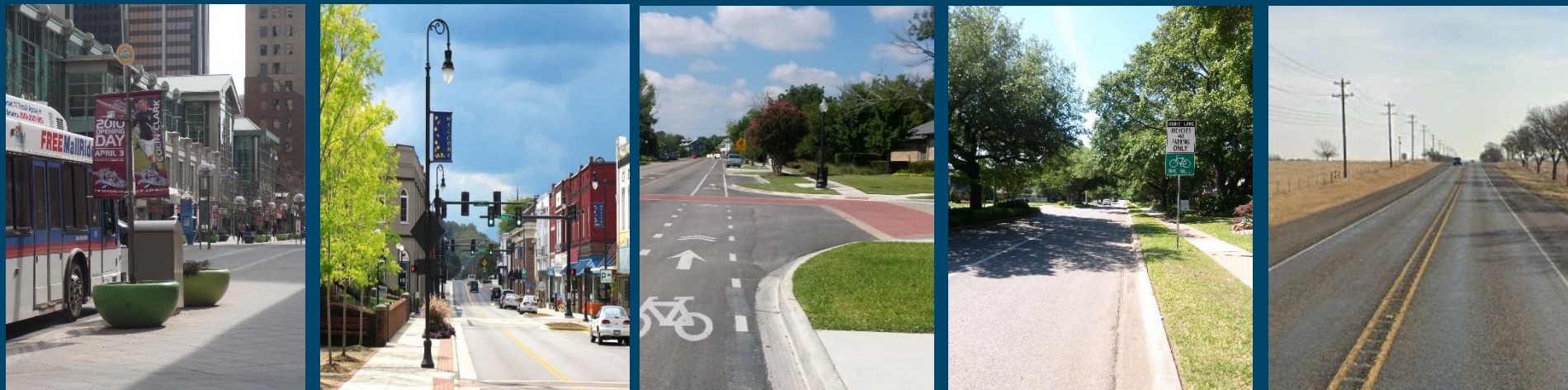
- ☐ Provides strategic direction for transportation planning
- ☐ Encourages collaboration regarding transportation functions
- ☐ Incorporates local and regional priorities for mobility

A Policy/Resolution does NOT:

- ☐ Force the same solution on every street
- ☐ Prescribe solutions for specific streets
- ☐ Mandate immediate retrofits
- ☐ Treat rural areas the same as urban areas

Urbanized Context (Urban Core / Urban / Suburban / Small Town)

Rural Context



Complete Streets History in North Texas



2011: City of McKinney is part of an EPA Sustainable Community Building Blocks Complete Streets Workshop. Invited NCTCOG and other BPAC members to participate. Future BPAC discussions and presentations led to the request of a Regional Policy.

- The City of McKinney did not adopt a Complete Streets Policy.

2011-2012: NCTCOG's first attempt at a Complete Streets Policy failed in Committee and ended in tears (literally) at a Surface Transportation Technical Committee (STTC) meeting.

2012-2013: Dallas Complete Streets Design Manual Developed (**adopted 2016**)

Regional rebrand and focus on Context Sensitive Solutions and Context Sensitive Design

Complete Streets History in North Texas

2014-2018: Regional Training sessions about Complete Streets Design and Context Sensitive Solutions partnering with FHWA, AARP, EPA, APBP, and others.

Additional Local Policies Adopted:

- 2016 Fort Worth;
- 2017 Weatherford;
- 2020 Terrell;
- 2022 Lewisville;
- 2024 Richardson



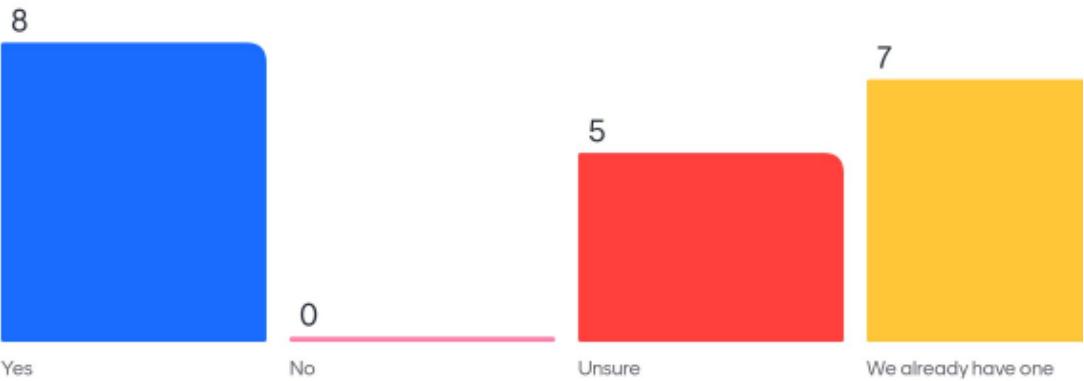
2022: NCTCOG staff brought back adoption of a regional policy and presents a five-part policy that was modified and adopted by the Regional Transportation Council as two parts.

1. Directed staff to develop a checklist and/or guide to be used for future transportation planning and project implementation.
2. Directed staff to provide technical support for development of local policies, methodologies,/applications, and performance management.

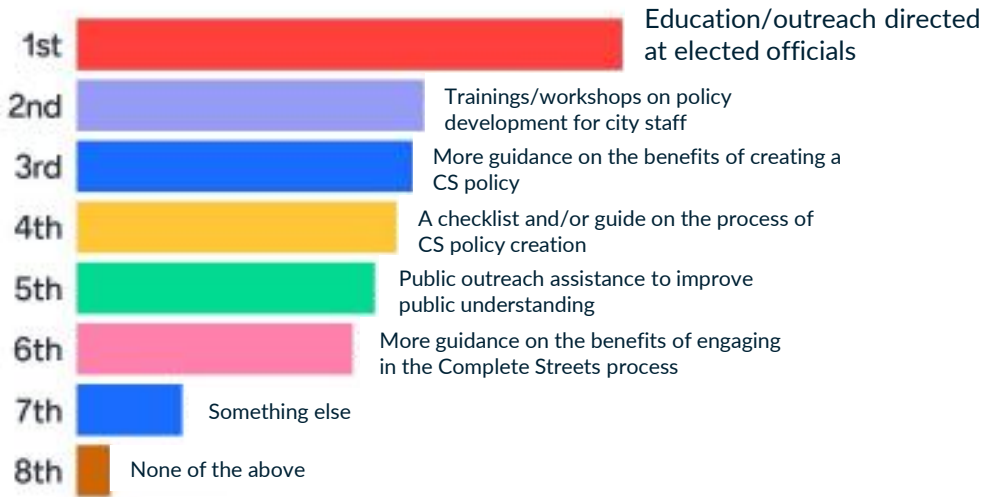
Complete Streets BPAC Workshop

8/21/2024: BPAC workshop/roundtable with city transportation officials

Is there interest in adopting a Complete Streets policy?



Rank what would be most helpful for developing a Complete Streets policy.



Next Steps for Complete Streets

- Researching the benefits of a local Complete Streets policy
- Developing an RTC workshop to educate elected officials
 - They can present this information to their city councils



Contact Us with Questions



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3. Legal Parameters for Local Public Rights-of-Way

Funding sources for the roads we are talking about?

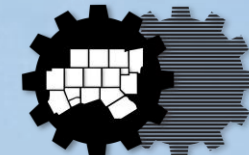
Off system?

Texas Code application to these roads.

CFR application to these roads.

<https://www.txdot.gov/business/resources/traffic-design-standards/tmutcd.html> → has one reference to bike lanes (outside of signs)
→ may not occur in roundabout and where they must terminate in relation to roundabout

Local governments adopting higher standards?



4. Format of Guidebook


Seeking more discussion on preference and capacity to produce:

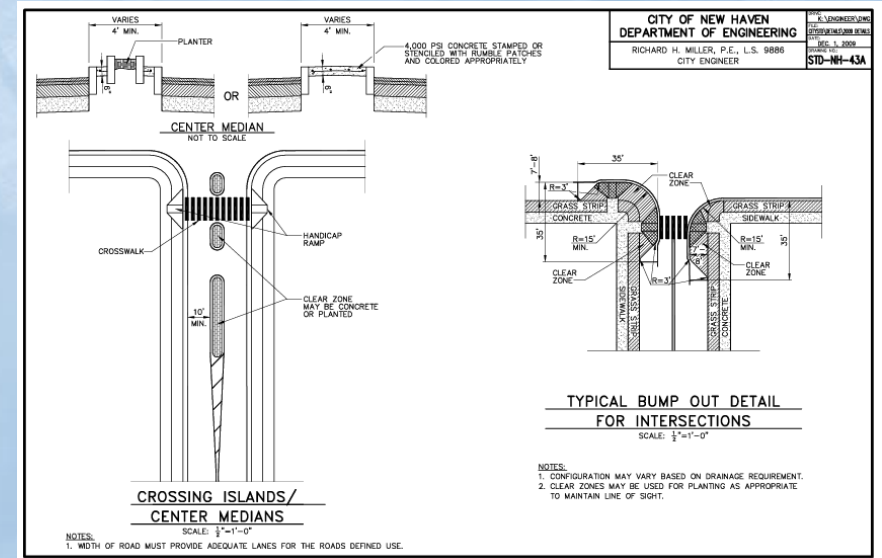
- Current form – design guide
- Spec book with link to drawing or images
- Construction Standards with detailed sheets



Center Islands

Center islands create pinch points for traffic by narrowing the width of the travel lanes and reducing pedestrian crossing distances. A center island causes a small amount of deflection without blocking driveway access. Center islands impede high-speed left turns and keep drivers in the correct receiving lane.

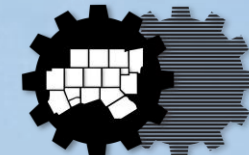
Item 531 Sidewalks	
	
1.	DESCRIPTION Construct hydraulic cement concrete sidewalks.
2.	MATERIALS Furnish materials conforming to the following: <ul style="list-style-type: none">■ Item 300, "Concrete Pavement"■ Item 420, "Concrete Substructures"■ Item 421, "Hydraulic Cement Concrete"■ Item 440, "Reinforcement for Concrete" Use Class A concrete unless otherwise shown on the plans. Use Grade 8 course aggregate for extruded Class A concrete. Use other grades if approved.
3.	CONSTRUCTION Shape and compact subgrade, foundation, or pavement surface to the line, grade, and cross-section shown on the plans. Lightly sprinkle subgrade or foundation material immediately before concrete placement. Hand-tamp and sprinkle foundation when placement is directly on subgrade or foundation materials. Remove and dispose of existing concrete in accordance with Item 104, "Removing Concrete." Provide a clean surface for concrete placement directly on the surface material or pavement. Mix and place concrete in accordance with the pertinent items. Hand-finishing is allowed for any method of construction. Finish exposed surfaces to a uniform transverse broom finish surface. Curb ramps must include a detectable warning surface and conform to details shown on the plans. Install joints as shown on the plans. Ensure that abrupt changes in sidewalk elevation do not exceed 1/4 in., sidewalk cross slope does not exceed 2%, curb ramp grade does not exceed 8.3%, and flares adjacent to the ramp do not exceed 10% slope. Ensure that the sidewalk depth and reinforcement are not less than the driveway cross-sectional details shown on the plans where a sidewalk crosses a concrete driveway. Provide finished work with a well-compacted mass, a surface free from voids and honeycomb, and the required true-to-line shape and grade. Cure for at least 72 hr. in accordance with Item 420, "Concrete Substructures." 3.1. Conventionally Formed Concrete. Provide pre-molded or board expansion joints of the thickness shown on the plans for sidewalk section lengths greater than 8 ft. but less than 40 ft., unless otherwise directed. Terminate workday production at an expansion joint. 3.2. Extruded or Slipformed Concrete. Provide any additional surface finishing immediately after extrusion or slipforming as required on the plans. Construct joints at locations as shown on the plans or as directed.



City of New Haven Complete Streets Design Manual

New Jersey Complete Streets Design Guide

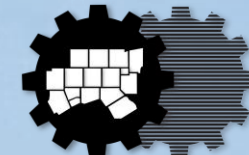
TxDOT Standard Specifications



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5. Sources of Information for Guidebook

- American Association of State Highway and Transportation Officials (AASHTO)
- Federal Highway Administration (FHWA)
- Texas Department of Transportation (TxDOT)
- National Cooperative Highway Research Program (NCHRP)
- Institute of Transportation Engineers (ITE)
- National Association of City Transportation Officials (NACTO)
- US Access Board – Public Right-of-Way Accessibility Guidelines (PROWAG)
- Manual on Uniform Traffic Control Devices (MUTCD)
- Individual city design guides and manuals
- Others?



6. Green Infrastructure and Low Impact Development

“Greenscape has drainage elements that would be beneficial for reducing runoff and water quality”

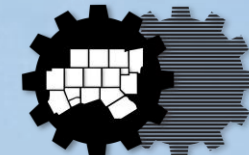
Is this a reference to green stormwater infrastructure such as rain gardens, bioswales, etc.? Or is it a more specific reference?

Content? Specific references?



A bioretention area at the Texas A&M AgriLife Research and Extension Center in Dallas. (Texas A&M AgriLife photo by Fouad Jaber)

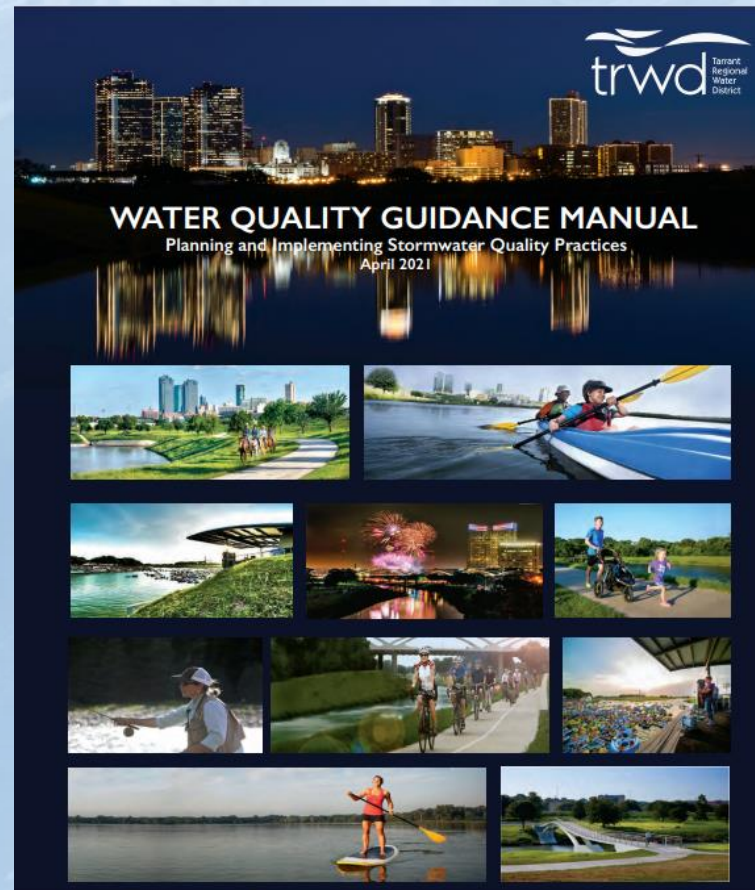
<https://agrilitoday.tamu.edu/2022/10/25/new-project-seeks-equitable-adaptation-of-urban-stormwater-infrastructure-management/>



6. Green Infrastructure and Low Impact Development - Examples

Tarrant Regional Water District

- Water Quality Guidance Manual
- Example: Permeable pavers allow the flow of water through joints between paving units; porous pavers are grids filled with porous material that can be infiltrated by stormwater
- Includes typical details drawings



San Antonio River Authority

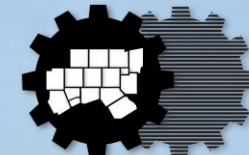
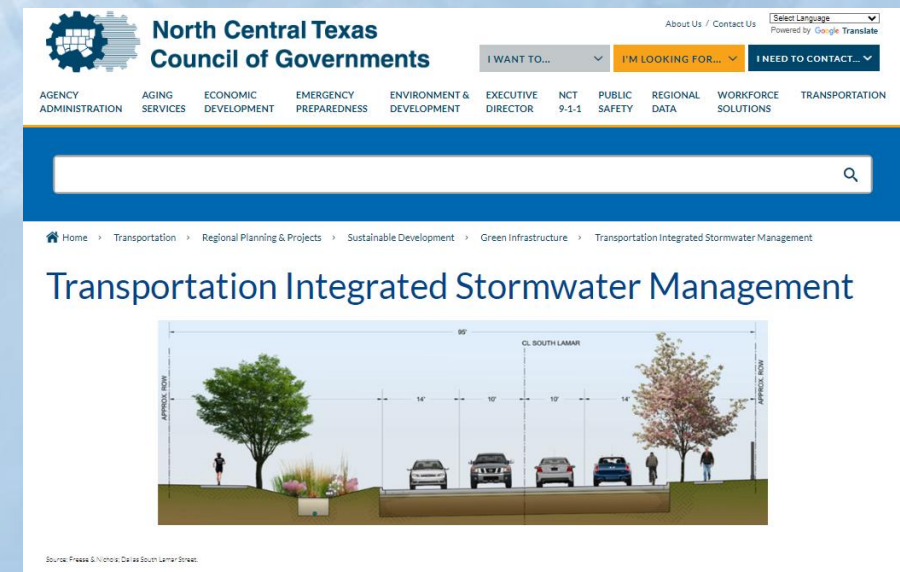
- Low Impact Development Technical Manual
- Example: Streetside bioretention areas collect and treat stormwater from small pavement areas.



6. Green Infrastructure and Low Impact Development - Examples

NCTCOG

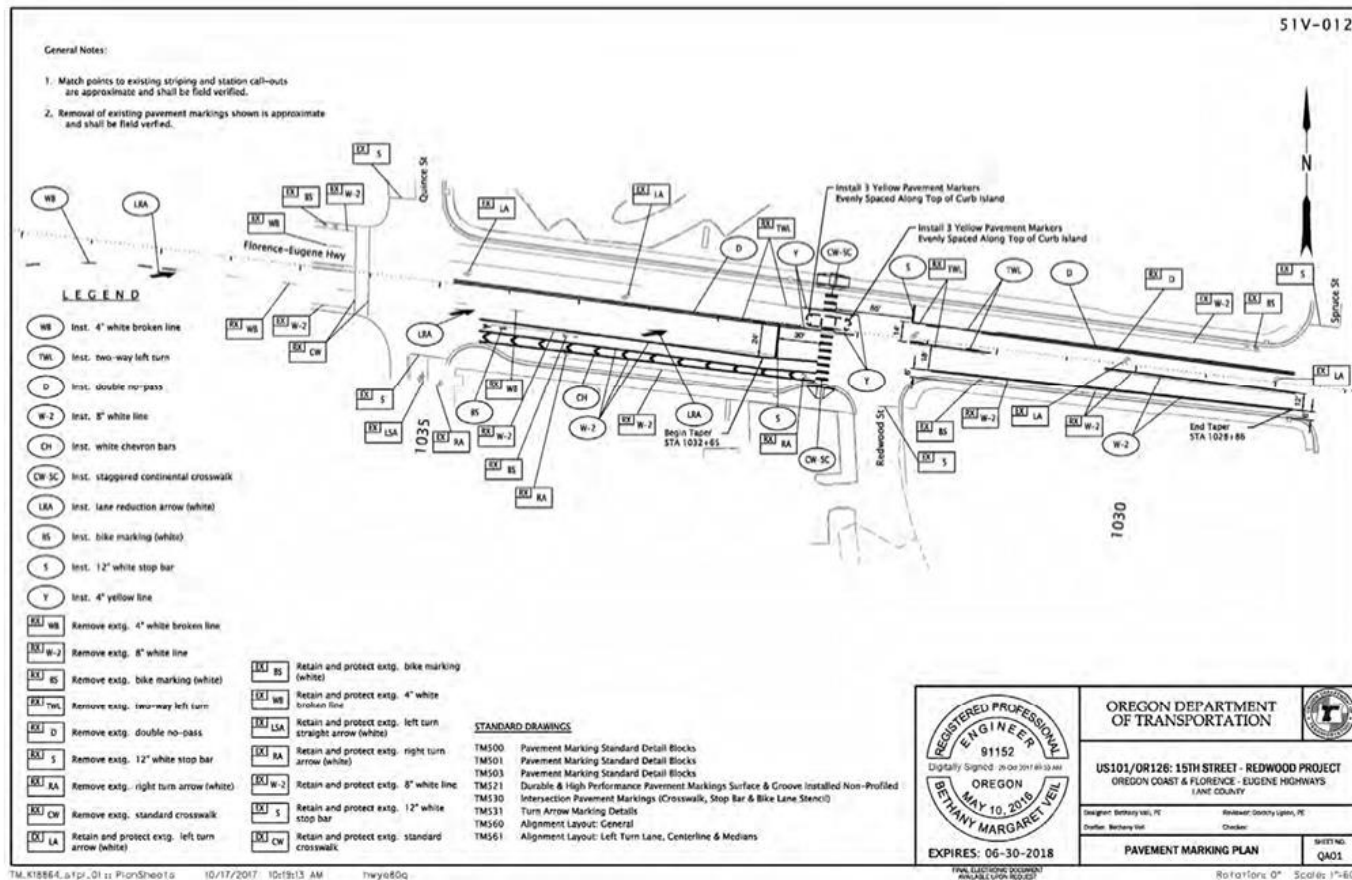
- Transportation *integrated* Stormwater Management Appendix (TriSWM)
- Goals of TriSWM:
 - Control runoff within and from the site to minimize flood risk to people and properties
 - Assess discharges from the site to minimize downstream bank and channel erosion
 - Reduce pollutants in stormwater runoff to protect water quality and assist communities in meeting regulatory requirements



7. ROW Planning, Administration, and Policy

Appendix E – Examples of Pavement Marking Plans

Figure E-1: Example Striping Plan Sheet when a Striping Details Sheet is Not Used



Seeking reference recommendations:

- Striping
- Single light timing
- Mixing modes of transportation



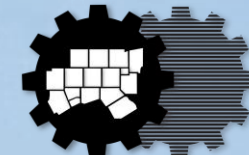
7. ROW Planning, Administration, and Policy, cont.

Seeking reference recommendations:

- Regional, proactive coordination with utilities / joint use coordination
 - Addressing capital improvement projects and new development not part of CIP
- Typical cross section for franchise utilities
 - Phone lines
 - Fiber optic
 - Atmos
 - Electrical
- Duct banks
- Consolidation of communications lines
- Joint trenching
- Minimum depths
- Minimum spacing between other utilities
- 22. Minimum capacity



<https://earthmoversinc.net/services/underground-utility-constructions/>

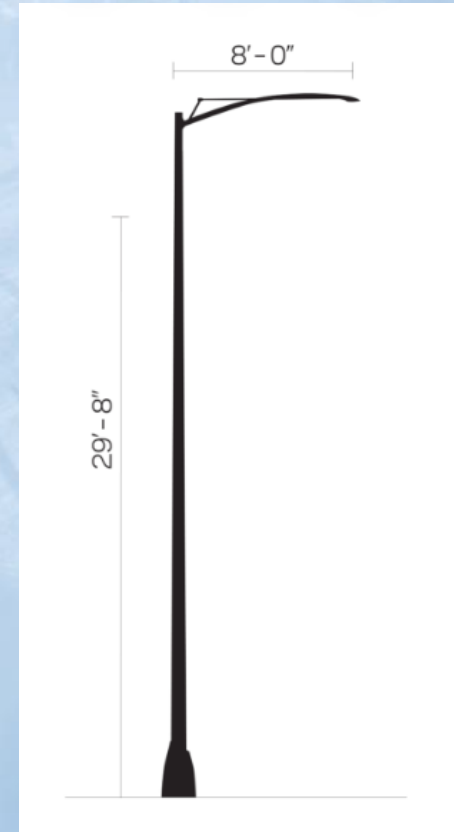


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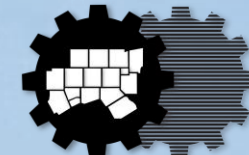
7. ROW Planning, Administration, and Policy, cont.

Seeking reference recommendations:

- Pole placement
- Pole transfer
- Pole sharing agreements/timely pole replacement
- Mapping and GIS requirements
- Plan requirements
 - Engineered
 - Sealed
 - As-builts



<https://www.nycstreetdesign.info/lighting/city-light-pole>



7. ROW Planning, Administration, and Policy, cont. - Examples

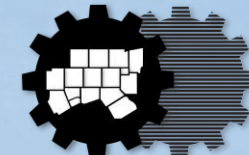
City of Atlantic Beach, FL

- Main Street Complete Streets Phase 1 Pavement Markings
- Emphasizes importance of keeping advisory lanes through intersections (do not stop at intersection)



Texas Department of Transportation

- Overview of the TxDOT-Utility Cooperative Management Process
- Regional, proactive coordination with utilities / joint use coordination - within CIP, outside CIP
- This overview discusses the importance of identifying authorities and responsibilities regarding utility adjustments across the functional areas of planning, design, and right of way.



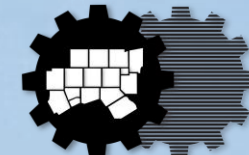
7. ROW Planning, Administration, and Policy, cont. - Examples

City of Auburn, Maine

- Coordinated signal timing manages traffic movement and speeds where uninterrupted flow is desired
- Typically applied on corridors with closely-spaced intersections (1/4 mile or less)

TxDOT – Abilene District

- Busy roadway with frequent turns and speed variations, intersections with side streets and driveways
- Cost-effective striping and signage to encourage through traffic to use the two left lanes
- Leaves right lane for entering / exiting traffic



8. Complete Streets

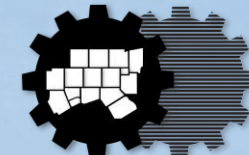
Seeking reference recommendations:

- Underground power lines when feasible
 - Location of transformers
 - Service connections to each building
 - Other challenges
 - Intersections with TxDOT facilities
 - Misaligned ROW
- When is it worth it



Santa Fe preserves its historic character with its utilities buried. Ken Lund, Wikimedia Commons

<https://www.scenic.org/why-scenic-conservation/energy-infrastructure-and-equity/undergrounding-utility-infrastructure/>



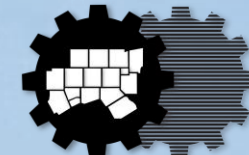
8. Complete Streets

Seeking reference recommendations:

- Roundabouts
 - Design
 - ROW needs
 - Safety benefits
 - Training for roundabout users
 - Air quality improvement
 - Cost/savings
 - Challenges with retrofitting existing intersections



Public domain image



8. Complete Streets - Examples

Federal Highway Administration

- Highway / Utility Guide
- Table / chart of typical dimensions, materials, and locations of transformers

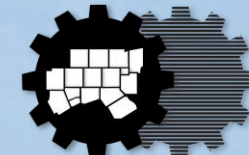
Federal Highway Administration

- Roundabout informational guide
- Three performance measures that are typically used to estimate performance of a given roundabout design

Texas Department of Transportation

- Innovative Intersections website - roundabouts
- Decision matrix for conditions when roundabouts are / are not recommended

Public domain image



8. Complete Streets - Examples

Federal Highway Administration

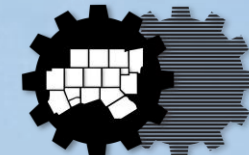
- Multi-modal roundabout brochure
- Incorporating bicyclists and pedestrians into roundabouts
- Design considerations

National Cooperative Highway Research Program

- Report 672
- Comprehensive look at planning, operational analysis, safety, geometric design, traffic control devices, illumination, landscaping, construction and maintenance

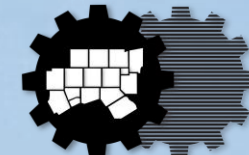
Federal Highway Administration

- Public education document about “rules of the roundabout”
- Three steps to help drivers navigate roundabouts

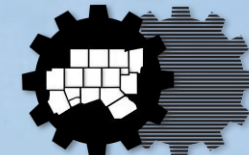


9. Relevant Drawings in Construction Standards – Standard Drawings Fifth Edition Amended August 2023

- Division 2000 Pavement Systems
 - 2010 A/B Six-Lane Divided Thoroughfare With Bike Lane
 - 2020 A/B Four-Lane Divided Thoroughfare With Bike Lane
 - 2030 2- & 4-Lane Undivided Thoroughfare With Bike Lane
 - 2110 Pavement Systems General Notes (refers to AASHTO Guide for the Development of Bicycle Facilities and TMUTCD)
- Others?



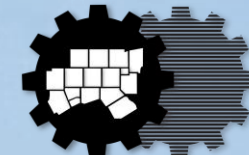
OTHER BUSINESS AND ROUNDTABLE DISCUSSION



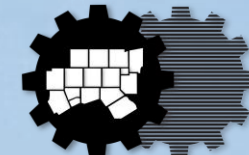
10. Public Works Program Updates

- Public Works Council (PWC), November 21, 9:30-11:30 a.m. via Microsoft Teams
- *integrated* Stormwater Management (iSWM) Subcommittee, January 29, 1:30-3:30 p.m. via Microsoft Teams

For more information on the Public Works program please contact Carl Singleton at csingleton@nctcog.org or (817) 458-4768

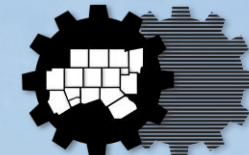


11. Roundtable Discussion



12. Scheduling Next SPR0W Meeting

Sustainable Public Rights of Way (SPR0W) Subcommittee, likely to be scheduled week of February 3 via Microsoft Teams



Contact & Connect

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