

Public Works Council Meeting

Crysta Guzman &
Madisson Dunn
November 20, 2025



AGENDA

01

Welcome and
Introductions

Bylaws

02

Action Items

Previous Meeting Summary
Dallas Fort Worth AQIP CAP

03

Discussion Items

FY26 Meeting Schedule Changes
TSI Workshop

04

Information Items

PWC Work Program Updates
Other Program Updates

05

Business & Roundtable
Discussion

Roundtable
Next Meeting
Adjournment

Welcome and Introductions

- The meeting agenda, presentation and handouts are located on the [Public Works Council webpage](#)
- Please use the Microsoft Form linked in the chat to add your name and organization for attendance.
- Please mute your line.



New Member Welcome

- NCTCOG's Executive Board approved the PWC nominations for FY26 at their September meeting
- The following slides list the new (highlighted in yellow) and/or returning members for FY26-FY27
- The full FY26 roster is available on the [Public Works Council webpage](#)



Standing Seat	Name	Title
City of Arlington	Scarlett Dinh	Project Engineer
City of Arlington	Sidney Kelley	Assistant Director of Operations
City of Carrollton	Jody Byerly	Director of Public Works
City of Dallas	Cameron Anderson	Engineering Program Administrator
City of Dallas	Raheel Khan	Senior Engineer
City of Denton	Michael Linder	Senior Engineer – Floodplain Administrator
City of Fort Worth	Teanna Thompson	Senior Capital Projects Officer

Standing Seat	Name	Title
City of Fort Worth	Michael Own	City Engineer
City of Frisco	Dane Stovall	Assistant Director of Public Works
City of Garland	Mike Rozelle	Senior Field Engineer
City of Grand Prairie	Lane Cheek	Utility Operations Manager
City of Irving	Walter Thomas	City Engineer
City of Lewisville	Aaron Russell	Director of Public Services
City of McKinney	Ryan Gillingham	Director of Public Works

Standing Seat	Name	Title
City of Mesquite	Victor Hou	Assistant City Engineer
City of Plano	Erik Ferner	Public Works Operations Manager – Streets and Traffic
City of Richardson	Eric Robison	Public Services Director
Collin County	Wayne Anderson	Road and Bridge Superintendent
Dallas County	Cecelia Rutherford	Assistant Director
Denton County	Stephen Belknap	Director of Development Services
Tarrant County	Joseph Jackson	County Engineer/Assistant Director

Subregion Seat	Name	Title	City/County	Communities
Denton/Lake Cities	Glenn Barker	Director of Public Works	City of Corinth	Corinth, DISH, Hickory Creek, Lake Dallas
DFW North	Brian Waltenburg	Director of Public Works	Town of Flower Mound	Flower Mound, Hebron, Highland Village, The Colony
East	Chris Harris	Director of Public Works	City of Greenville	Blue Ridge, Caddo Mills, Campbell, Celeste, Commerce, Cottonwood, Crandall, Farmersville, Fate, Forney, Grays Prairie, Greenville, Hunt County, Josephine, Kaufman, Kaufman County, Kemp, Lavon, Lone Oak, Mabank, McLendon-Chisholm, Nevada, Neylandville, Oak Grove, Oak Ridge, Post Oak Bend, Quinlan, Rosser, Royse City, Scurry, Talty, Terrell, West Tawakoni, Wolfe City

Subregion Seat	Name	Title	City/County	Communities
Mid-Cities	Boe Blankenship	Director of Public Works	City of North Richland Hills	Bedford, Euless, Haltom City, Hurst, North Richland Hills, Richland Hills, Watauga
Northeast	Andrew Figueroa	Director of Public Works	City of Celina	Allen, Anna, Celina, Fairview, Lowry Crossing, Lucas, Melissa, Murphy, New Hope, Parker, Princeton, Prosper, Saint Paul, Weston, Wylie
Northeast Dallas	Frank New	County Judge	Rockwall County	Heath, Mobile City, Rockwall, Rockwall County, Rowlett, Sachse, Sunnyvale
Northeast Tarrant	Keith Miertschin	Assistant Director of Operations	City of Grapevine	Colleyville, Grapevine, Haslet, Keller, Roanoke, Southlake, Trophy Club

Subregion Seat	Name	Title	City/County	Communities
Northwest	Dillon Luna	Management Analyst	Town of Northlake	Alvord, Argyle, Aubrey, Aurora, Bartonville, Boyd, Bridgeport, Chico, Copper Canyon, Cross Roads, Decatur, Double Oak, Hackberry, Justin, Krugerville, Krum, Lake Bridgeport, Lakewood Village, Lincoln Park, Little Elm, Newark, New Fairview, Northlake, Oak Point, Paradise, Pilot Point, Ponder, Rhome, Runaway Bay, Sanger, Shady Shores, Westlake, Wise County
Northwest Dallas	Eric Mueller	Stormwater Manager	City of Farmers Branch	Addison, Coppell, Farmers Branch, Highland Park, University Park
Northwest Tarrant	Rick White	Director of Public Works	City of Azle	Azle, Blue Mound, Lakeside, Lake Worth, Pelican Bay, River Oaks, Saginaw, Sanctuary, Sansom Park, Springtown, Westover Hills, Westworth Village, White Settlement

Subregion Seat	Name	Title	City/County	Communities
Southeast	James Gaertner	Executive Director of Public Works & Utilities	City of Waxahachie	Alma, Angus, Bardwell, Barry, Blooming Grove, Corsicana, Dawson, Ellis County, Emhouse, Ennis, Eureka, Frost, Garrett, Goodlow, Italy, Kerens, Maypearl, Mildred, Milford, Mustang, Navarro, Navarro County, Oak Valley, Palmer, Pecan Hill, Powell, Red Oak, Retreat, Rice, Richland, Waxahachie
Southeast Dallas	Brooks Williams	City Manager	City of Ferris	Balch Springs, Combine, Ferris, Hutchins, Lancaster, Seagoville, Wilmer
South Tarrant	Bennett Howell	Director of Public Works	City of Benbrook	Benbrook, Burleson, Crowley, Dalworthington Gardens, Edgecliff Village, Everman, Forest Hill, Kennedale, Mansfield, Pantego

Subregion Seat	Name	Title	City/County	Communities
Southwest	Colt Friedrich	County Engineer	Johnson County	Alvarado, Briar Oaks, Cleburne, Cresson, Cross Timber, Dublin, Erath County, Glen Rose, Godley, Granbury, Grandview, Hood County, Johnson County, Joshua, Keene, Lipan, Rio Vista, Somervell County, Stephenville, Tolar, Venus
Southwest Dallas	Robert Woodbury	City Engineer	City of Cedar Hill	Cedar Hill, Cockrell Hill, DeSoto, Duncanville, Glenn Heights, Midlothian, Oak Leaf, Ovilla
West	Matt Leppla	Assistant Director – Operations	City of Weatherford	Aledo, Annetta, Annetta North, Annetta South, Cool, Gordon, Graford, Hudson Oaks, Millsap, Mineral Wells, Mingus, Palo Pinto County, Parker County, Reno, Strawn, Weatherford, Willow Park

Private Seat	Name	Title
Associated General Contractors – Texas Asphalt Pavement Association	Sam Davis	North Texas Regional Director
Associated General Contractors - AmeriTex Pipe and Products	Chris Rowland	Sales and Marketing Director
Council of Engineering Companies – Halff	Ali Hatefi	Director, Public Works
Council of Engineering Companies – AtkinsRealis	Daphne King	Division Manager
Texas Council of Engineering Laboratories/GeoProfessionals Serving Texas – Braun Intertec	Reece Taylor	Director, Senior Engineer

Public Works Council Bylaws

- NCTCOG Mission: Facilitate the delivery of innovative, cost-effective public works services to jurisdictions in the region
- PWC Purpose: Provide a forum for exchanging ideas and resources that address specific common needs
- PWC Membership/Qualifications
 - 22 seats for standing members
 - 16 seats for 16 subregions
 - 5 seats for private sector entities
 - Support and documented authorization of the member organizations

Public Works Council Bylaws

PWC Bylaws (Continued)

- Appointment Process/Terms of Office
 - ~Half of the PWC members are appointed/re-appointed each year
 - Term of appointment runs October 1 to September 30 of the second fiscal year
- Officer Duties
 - Chair presides at meetings
 - Chair has the authority to break a tie
 - Vice-Chair performs Chair's duties in his/her absence
 - If both absent, PWC members present will elect a Chair Pro-Temp

Public Works Council Bylaws

PWC Bylaws (Continued)

- Meetings
 - Meet once every quarter
 - Appointed PWC members or designated alternate may vote on action items
 - Combination of 11 or more PWC member constitutes a quorum
- Attendance/Vacancies
 - Members expected to attend meetings/participate in assigned subcommittees/activities (may send designated alternatives, but must inform NCTCOG staff)
 - NCTCOG to contact inactive members requesting an active replacement
 - Attendance and participation evaluated during the reappointment process
 - NCTCOG will work with member communities to fill any vacancies

Public Works Council Bylaws

PWC Bylaws (Continued)

- Annual Work Program/Budget
 - Regional activities guided by an Annual Work Program and supported through voluntary cost shares
 - Cost share calculation reviewed by the PWC at least every 5 years
 - Sponsorships are allowed at the discretion of the PWC
- Bylaws Guidance
 - Changes only made with a positive vote of 2/3 of the PWC membership of NCTCOG Executive Board
 - Bylaws reviewed by the PWC once every 5 years

Action Items

1. Meeting Summary

- Public Works Council will vote to approve the August summary.
- August 21, 2025, meeting summary is available for review online.

2. Dallas-Fort Worth Air Quality Improvement Plan-Comprehensive Action Plan (DFW AQIP-CAP)

- NCTCOG staff will seek the PWC's approval on the Transportation Sector and Water/Wastewater Sector elements of DFW AQIP-CAP, a plan developed by NCTCOG to reduce carbon dioxide equivalent emissions by 2050. If approved, the plan will be brought to NCTCOG's Executive Board for endorsement.
- The Transportation Measures and Water & Wastewater Measures are available online for review.



Dallas-Fort Worth Air Quality Improvement Plan Comprehensive Action Plan

North Central Texas Council of Governments

11.20.2025



Comprehensive Air Quality Planning

Dallas-Fort Worth Air Quality Improvement Plan: Comprehensive Action Plan (CAP)*

Outlines through 2050:

- Comprehensive Emissions Inventory and Projections
- Targets and Measures to Improve Air Quality in All Sectors

Includes:

- Comprehensive Stakeholder Engagement
- Air Quality Planning for All Emissions of Local Concern
- Integrating NCTCOG Regional and Statewide Efforts**

Potential Impact of Regional Growth:



Nonattainment and
Conformity Lapse



Section 185 Fees (*Failure to
Attain Fees*)



Constrained Resources and
Lacking Infrastructure



Health Impacts

*The DFW AQIP development is supported by funding from Environmental Protection Agency's (EPA) Climate Pollution Reduction Grants (CPRG): Planning Grants

**TCEQ's Comprehensive Roadmap to Reduce Emissions <https://www.tceq.texas.gov/agency/climate-pollution-reduction-grants>



EPA CAP Guidelines and Requirement Overview

Emissions Inventory (EI) and Projections

- All Sectors (*to the extent possible*)
- All counties/region covered by CAP
- Short-term Projections (i.e. 2030 or 2035)
- Long-term projection (i.e. 2050)

Target

- Be actionable, ambitious, and achievable
- Take into consideration local conditions (**not previously adopted National targets**)
- Consider technical/economic feasibility

Measure Requirement(s)	Included Today?
Description, including clear responsible parties	
Quantified CO ₂ e Emissions Reduced in 2050 to support CAP Goals	
Cost	
Community Benefits	
Implementation Authority and Responsibilities	
Funding Opportunities	Revisions from Priority Plan Underway
Criteria Air Pollutant Reduced in 2030/2050	
Implementation Timelines and Milestones	
Metrics for Tracking Progress	
Workforce Analysis	Coming Soon



Key Data Sources For EI and Projections

When possible NCTCOG Used Sources Which:

- Are specific to NCTCOG region; or Texas specific;
- Had already been vetted/approved/included in other plans;
- Assumed no/minimal improvements to current emission rates (*to be conservative*)

Transportation

Population Growth

Vehicle Activity Data

Texas Transportation Institute (TTI)
Statewide Airport Emissions

Texas Non-Road Model and MOVES

Mobility 2050

Water/Wastewater

ICLEI ClearPath

Population Growth

EPA National Pollutant Discharge
Elimination System

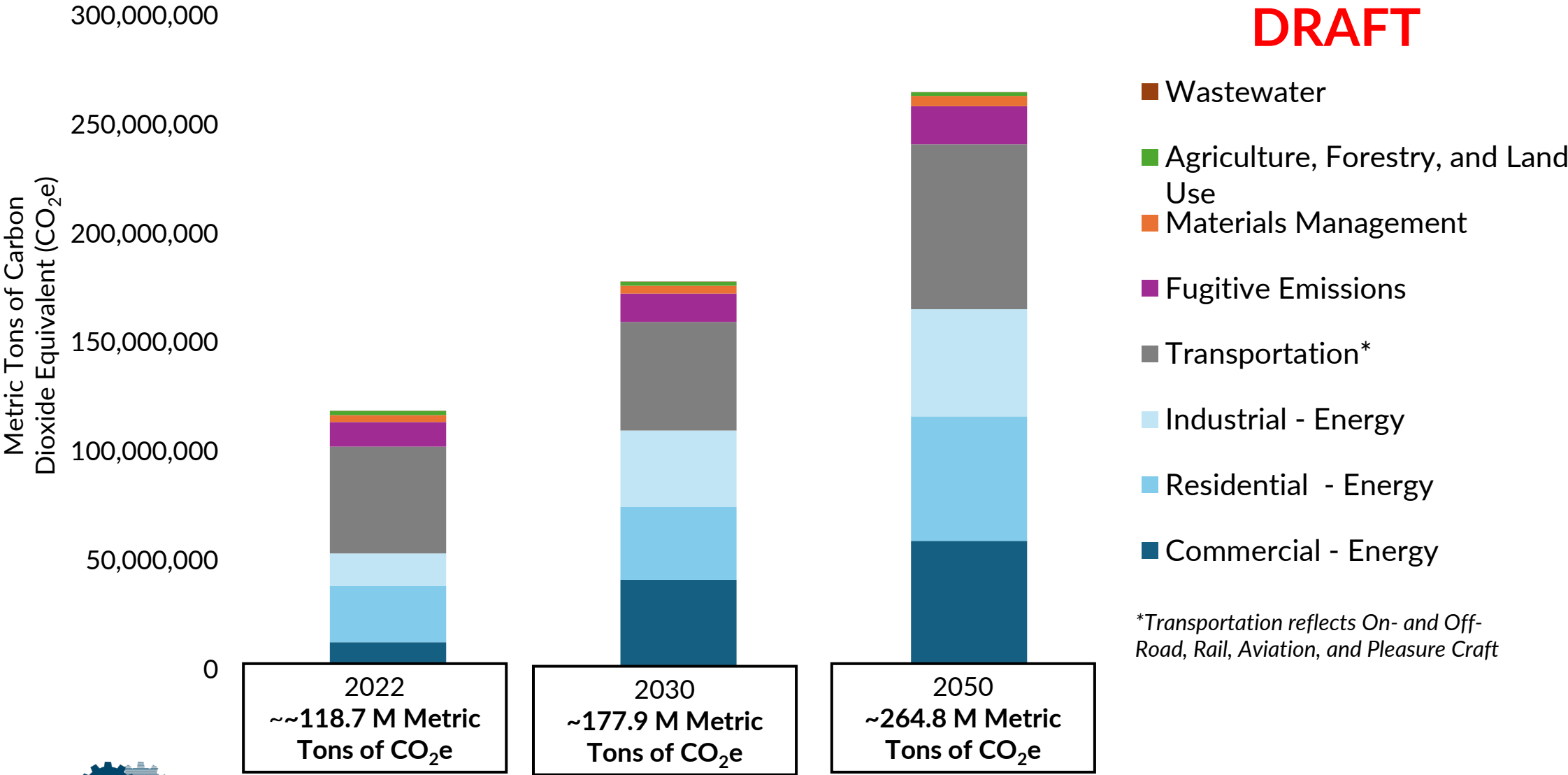
Texas Water Development Board
Municipal Water Use



Emissions Inventory and Projections Results

All sectors, Carbon Dioxide Equivalent (CO₂e), Metric Tons/Year NCTCOG 16-county area

DRAFT



Emissions Inventory and Projections

Percent Change In NCTCOG 16-County Carbon Dioxide Equivalent Emissions		
Sector	2022-2030	2022-2050
Commercial- Energy	229%	371%
Residential- Energy	29%	121%
Industrial – Energy	135%	229%
Transportation	2%	55%
Materials Management	13%	46%
Agriculture, Forestry, Land Use	-7%	-20%
Fugitive Emissions	16%	55%
Wastewater	15%	53%
Total	50%	123%

Forecasted Changes by 2050



¹Increase in Electricity Demand of 214%



²Increase in Vehicle Miles Traveled of 81%



³Increase in Water Demand of 97%

¹ERCOT 2025 Long-Term Load Forecast Reports,
www.ercot.com/gridinfo/load/forecast

²NCTCOG 2050 Demographic Forecast; www.nctcog.org/executive-director/nctcog-executive-board – November 2024 Item 15

³ 2026 Region C Water Plan;
https://www.twdb.texas.gov/waterplanning/rwp/plans/2026/C/RegionC_2026_RWP_Volumel.pdf



A blue semi-truck with a white trailer is driving on a multi-lane highway. The truck is positioned in the center of the frame, moving towards the right. Above the truck, a large concrete bridge structure spans the road. The sky is blue with scattered white clouds. An orange rectangular banner is superimposed over the middle of the image, containing the text "Transportation Measures and Targets" in white. The truck has a prominent chrome grille and multiple axles with tires. The overall scene suggests a focus on freight transportation infrastructure and metrics.

Transportation Measures and Targets

Methodology to Selecting Transportation Measures and Targets

Step 1: Review Priority Action Plan Measures Against EPA Requirements for Comprehensive Action Plan

Step 2: Compare Measures for Consistency with Mobility 2050 Policies and Program

Step 3: Update Measures and Collect Input from Stakeholders/Committees

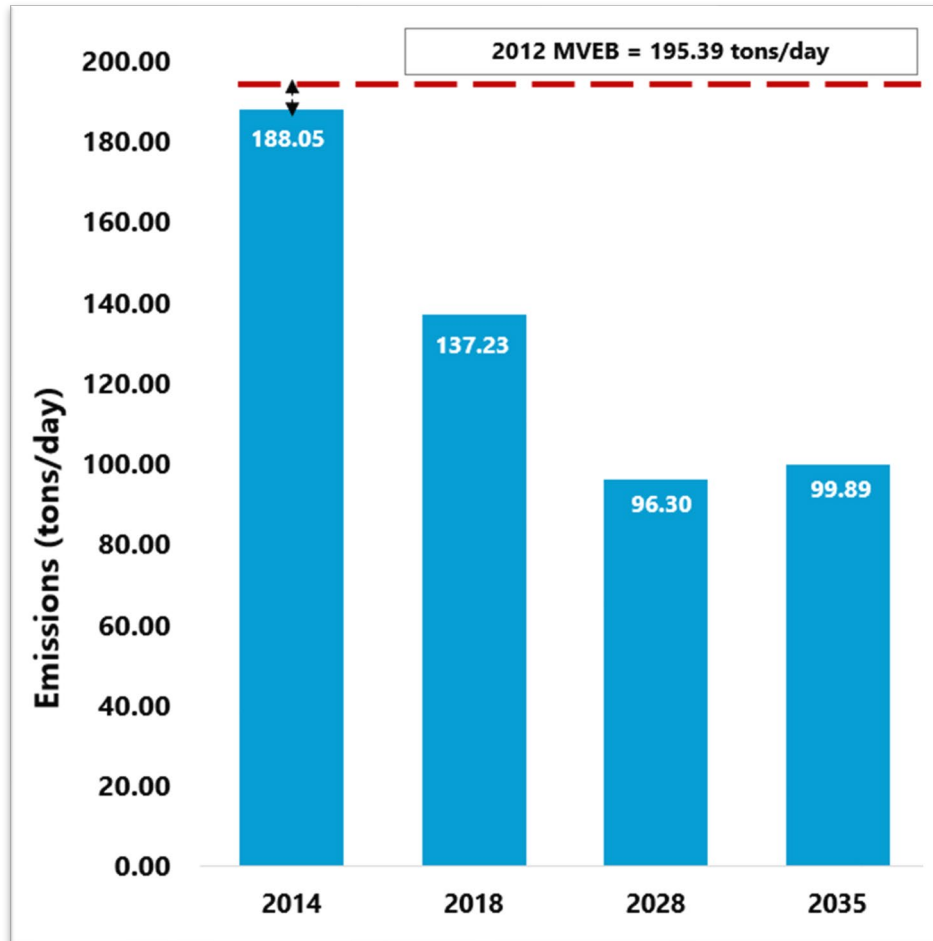
Step 4: Receive Subject Matter Committee Approval



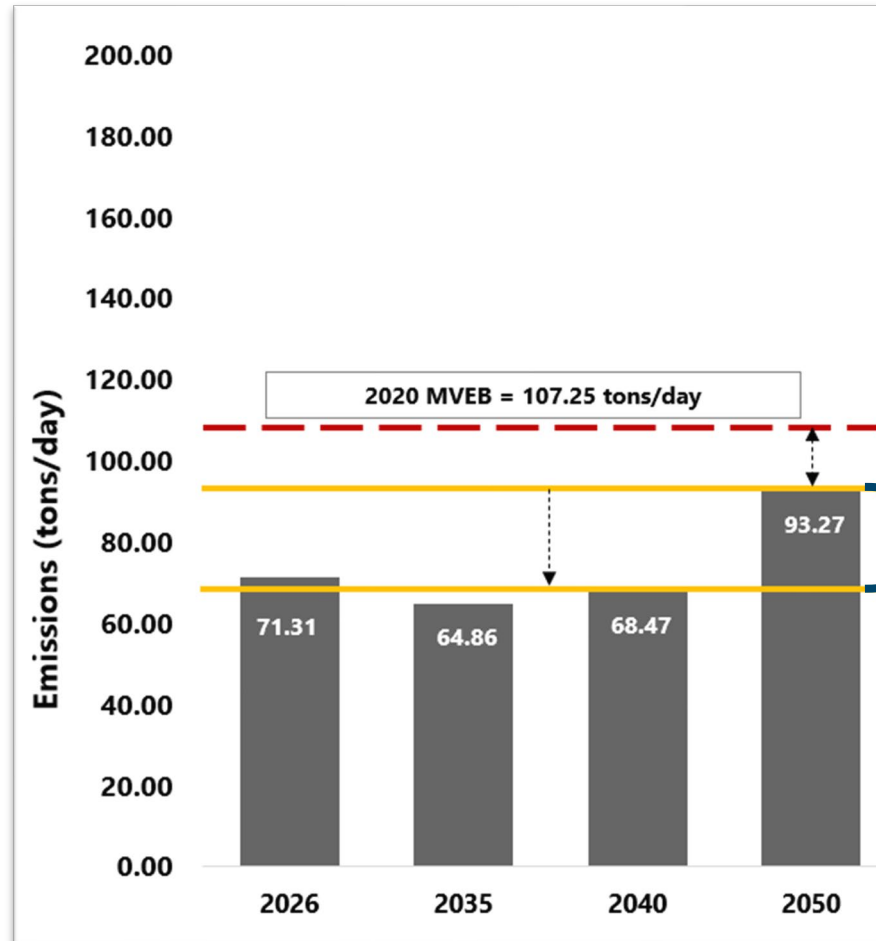
Development of Transportation Targets

Historical and Modeled On Road Transportation Nitrogen Oxides (NO_x) in Tons/Weekday,
NCTCOG 10 County Nonattainment Area

Old - Conformity Analysis



New - 2025 Conformity Analysis



Proposed NO_x Reduction Goal
~**Reduce 25% in 2050**
Align 2050 NO_x emissions with levels around current analysis year (2026)

PROPOSAL:
Use NO_x Reduction Goal As Basis For All Transportation Goals,



Transportation Measures

DRAFT: Transportation Sector Target:

25% Reduction of NO_x

25% Reduction of 2050 CO₂e

~23.17 Tons/Weekday of NO_x

~ 19 million metric tons of CO₂e in 2050

Vehicle/Equipment Technology Upgrades



- Adopt Alternative Fuel Vehicles/Equipment
- Expand Availability of Low Emitting Fuels
- Implement Emissions Compliance Program
- Reduce Emissions from Airports

Provides ~ 50% of Reduction Goal

System Operations



- Optimize Transportation System Efficiency
- Optimize Truck and Rail Flow
- Enhance Regional Traffic Signal Operations

Provides ~ 20% of Reduction Goal

Mode Shift and Land Use



- Expand Active Transportation Network
- Reduce Vehicle Miles Traveled
- Increase Access to Transit Service

Provides ~ 30% of Reduction Goal

For more information regarding these measures please see Transportation Handout.



A high-speed photograph of a water droplet falling into a pool of water, creating concentric ripples. The droplet is captured mid-fall, just above the surface, with a small splash visible below it. The background is a deep blue gradient.

Water, Wastewater, & Watershed Management Measures and Targets

Methodology to Selecting Water and Wastewater Measures

Step 1: Review Priority Action Plan Measures Against EPA Requirements for Comprehensive Action Plan

Step 2: Compare Measures for Consistency with the Region C Water Plans

Step 3: Update Measures and Collect Input from Stakeholders/Committees

Step 4: Receive Approval from Water Resources Council



Development of Water/Wastewater Targets

- Surveyed local governments, water and wastewater service providers, and MS4 permit holders
 - Survey was distributed from July 15, 2025, to August 22, 2025.
- Engaged with the NCTCOG Water Resources Council and the Water Efficiency Network of North Texas
- Consulted NCTCOG's annual Water Quality Management Plan Update and both the 2021 Region C Water Plan and the draft 2026 Region C Water Plan to determine expected demand and mitigation activities



Water/Wastewater Measure Overview

DRAFT: Water/Wastewater Sector Target:

25% Reduction of 2050 CO₂e emissions; ~ 220,000 metric tons of CO₂e in 2050

Watershed Management



- Provide Rebates for GSI Installations
- Increase Native Plants in Riparian Corridor Systems
- Construct Stormwater Detention Basins
- Update Stormwater/Wastewater Conveyance Infrastructure

Provides ~27% of CO₂e Reduction Goal

Wastewater Infrastructure



- Repair Aging/Failing On-Site Sewage Facility Systems
- Provide Sanitary Sewage Upgrades in Developing Areas
- Improve Bio-Solids Management
- Implement Methods for Non-Potable Water Reuse

Provides ~15% of CO₂e Reduction Goal

Water Resources



- Improve Local Water Conservation
- Implement Building-Scale Rainwater Harvesting

Provides ~16% of CO₂e Reduction Goal

Water & Wastewater Treatment Infrastructure



- Improve Water & Wastewater Treatment Process Efficiency

Provides ~40% of CO₂e Reduction Goal

For more information regarding these measures please see Wastewater, and Watershed Management Handout



DALLAS-FORT WORTH AIR QUALITY IMPROVEMENT PLAN

Funded through the Environmental Protection Agency's Climate Pollution Reduction Grants

Upcoming Meetings/Input Opportunities:

Go to www.publicinput.com/dfwAQIP for more information and for draft documents



Contact Us



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Discussion Items

3. FY26 Meeting Schedule Changes

- To accommodate the Public Works Roundup on August 20, 2026, NCTCOG would like to move the quarterly meeting to August 13, 2026.
- To help participants avoid traffic and better accommodate schedules, NCTCOG would like to adjust the regular meeting times to 10:00 a.m. to 12:00 p.m.

4. Development and Floodplain Regulations Model Code Workshop

- The integrating Transportation and Stormwater Infrastructure Project (TSI) seeks to reduce future flood risk through the integration of transportation, environmental, and stormwater planning based on continuation and expansion of the region's urbanization. Staff is seeking feedback on elements to include in a model development code and floodplain ordinance that is underway. A feedback workshop will be held on Thursday, January 29th, 10:00-12:00 at NCTCOG. Registration for the event is available [here](#).



North Central Texas
Council of Governments

Integrated Transportation and Stormwater Infrastructure (TSI) Study: Considering Model Codes for Development & Floodplain Regulations

Public Works Council – November 20, 2025

Presented by: Jeffrey C. Neal (NCTCOG – Transportation)



Funded by the Texas General Land Office,
Community Development Block Grant,
Disaster Recovery Program.



Also Funded by the Texas Water Development Board
and Texas Department of Transportation.

Historic events led to improvements in flood control infrastructure during the last century. New needs are developing in this century...



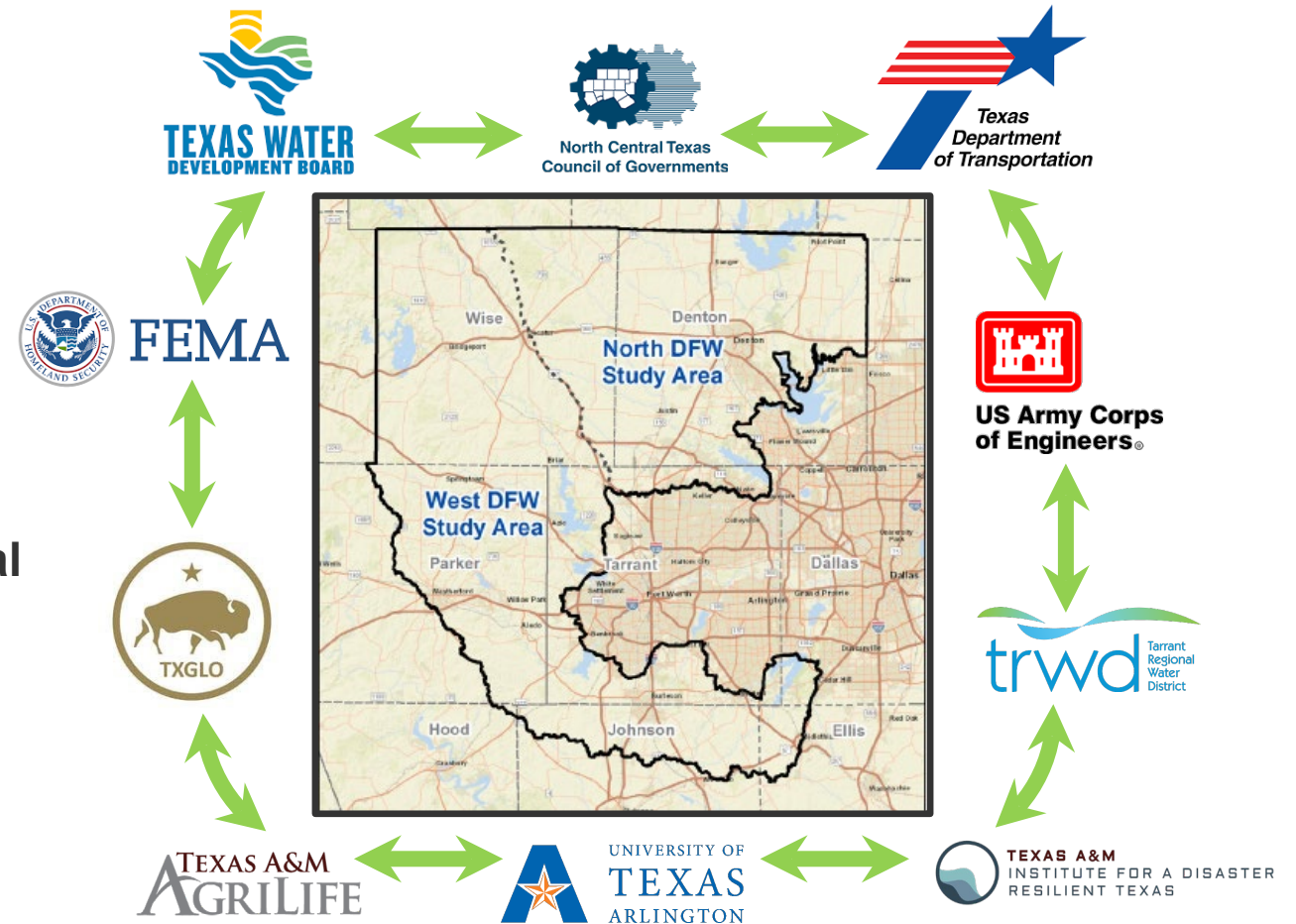
Fort Worth, May 1949

Rhome, May 2015
Courtesy Tarrant Regional Water District

WHAT: TSI Study Partners & Objectives

Working group of partners and stakeholders conducting a \$10 million comprehensive planning effort to address flood risk upstream of the Dallas/Fort Worth urban cores:

- Proactive planning (*planning-level designs*)
- Collaborative partnership between stormwater, environmental, & transportation infrastructure
- Keeping residents, property, & infrastructure safe, with opportunities to also improve regional water storage & water quality
- State-of-the-art flood hazard area models with defensible & quantifiable “what-if” scenarios
- Flood warning system framework
- Nature-based solutions (*e.g., green stormwater infrastructure, wetlands, urban forests/prairies*)
- Tools, literature, & data to aid with community engagement and floodplain administration



■ Consultant Partners:

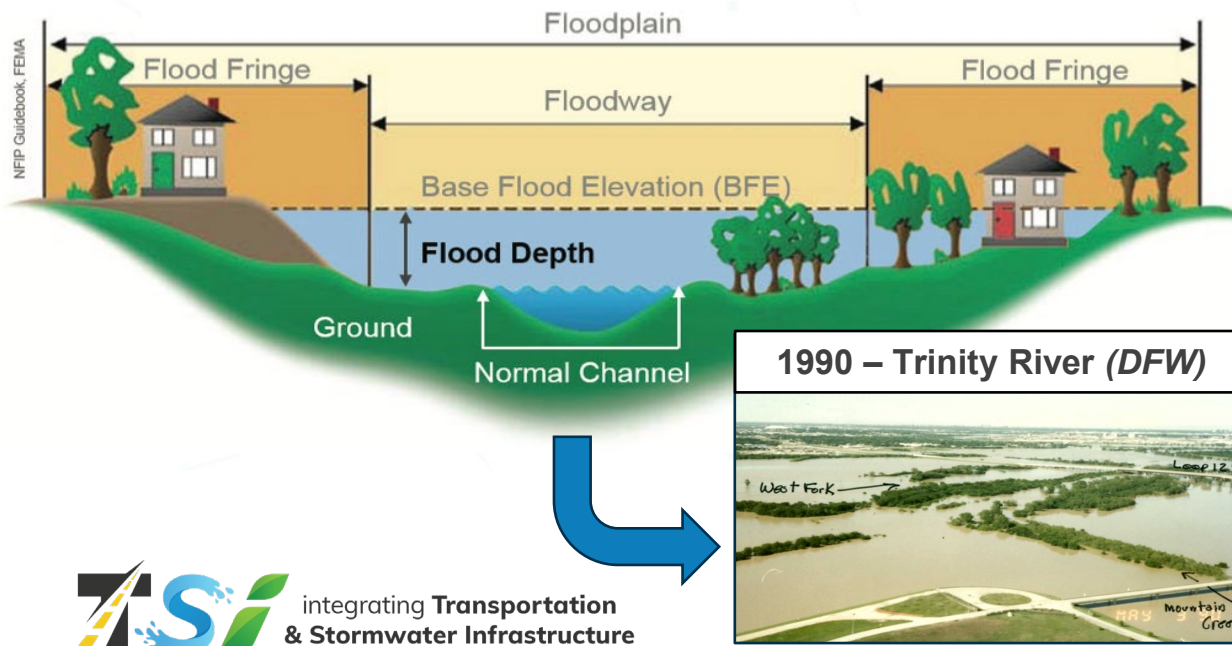
- Freeze & Nichols, Inc.
- Halff Associates, Inc.
- Highland Economics

■ Expected Completion:

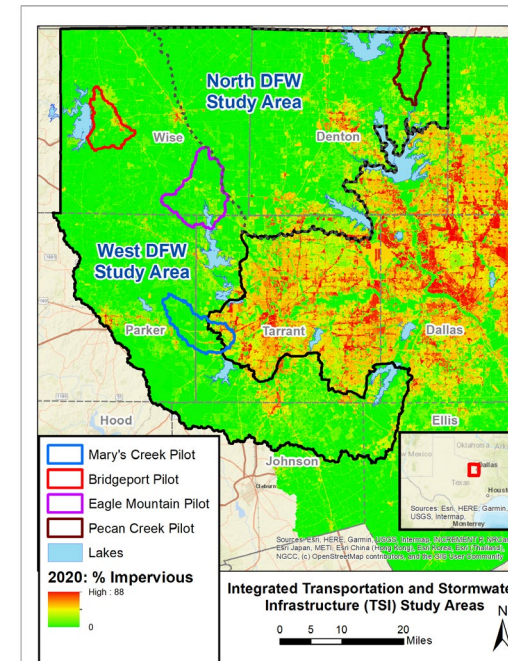
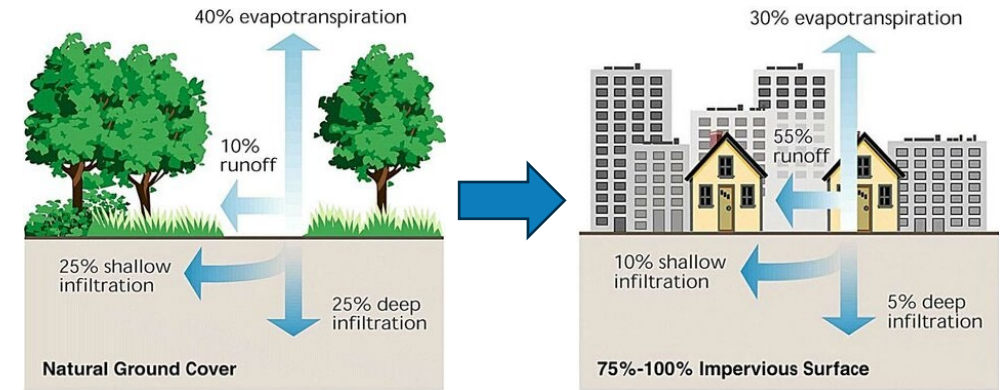
- Fall 2026

WHY: Urbanization Increases Flood Risk

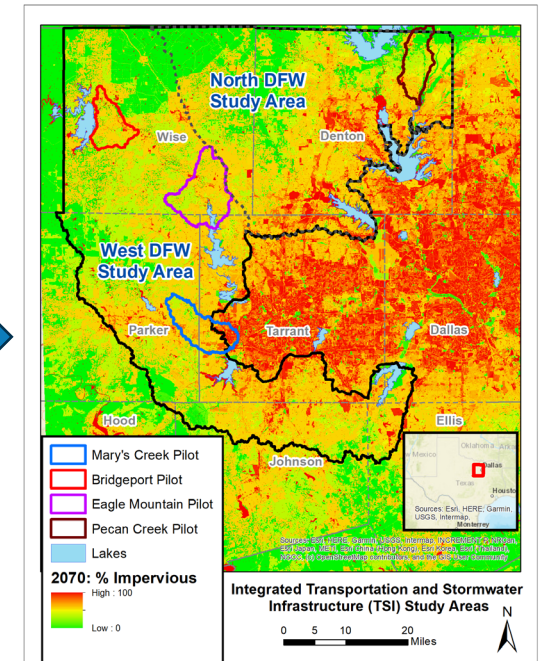
- Floodplains among Earth's most valuable ecosystems, plus among most threatened
- Effects of urbanization:
 - Adds impervious cover (**runoff $\leq$ 10% more**)
 - Depletes valley storage (**runoff $\leq$ 30% more**)
- Flooding increased with negative societal impacts
- Currently, no comprehensive plan addresses rapid urbanization effects upstream from DFW urban core



More Impervious Surface = More Runoff



6.4% Impervious (2020)



35.2% Impervious (2070)

WHY: *Criticality of Transportation/Stormwater Integration*

- **Transportation & stormwater infrastructure costs are some of the most substantial in flood events**
- **Transportation failures impact access & reliability:**
 - ▣ Affects emergency response performance & evacuation route efficiency during events
 - ▣ Affects connectivity to/from critical services, employment & education opportunities, & community cohesion after events
 - ▣ Degrades asset conditions & maintenance efficiencies
- **Stormwater failures affect system adaptability:**
 - ▣ Lacks consistent regional infrastructure data & modeling
 - ▣ Constrains evaluation of accumulated watershed impacts
- **Rebuilding costs/schedules can be excessive & difficult to accommodate with other needs**
- **Most flood fatalities occur at roadway drainage crossings & other water flow/storage bottlenecks**
- **Upstream development has rendered downstream road crossings & drainage systems inadequate**

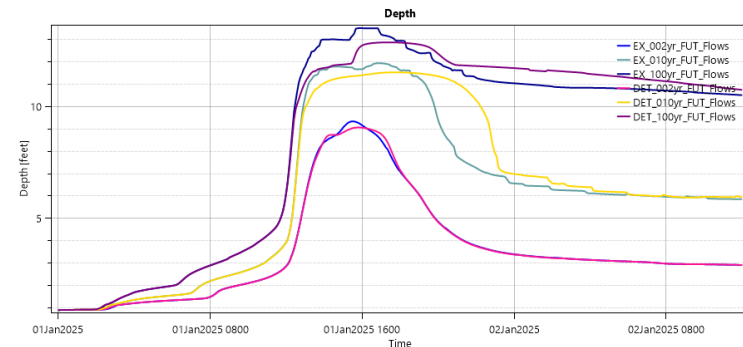
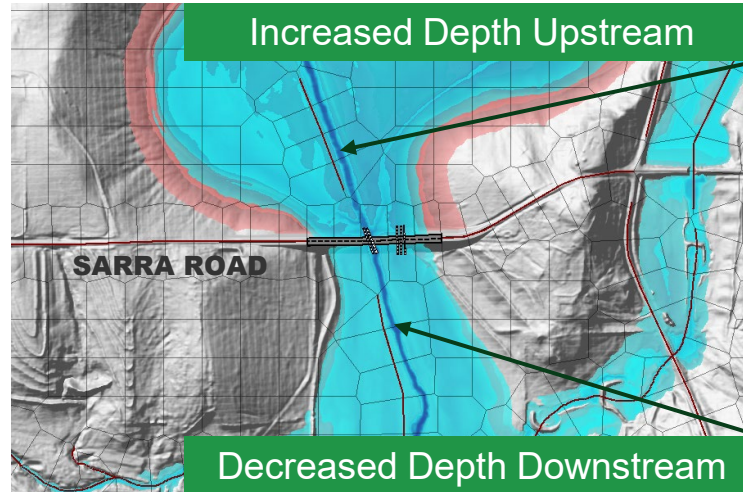
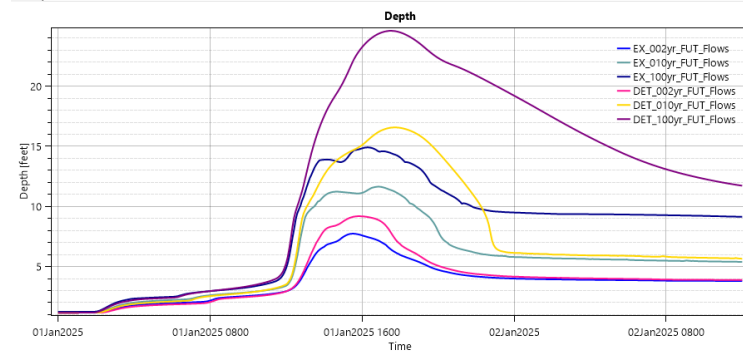
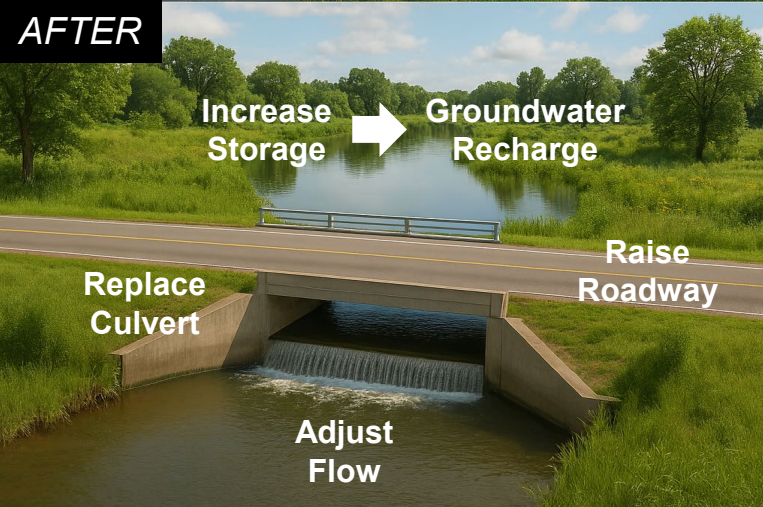


EXAMPLE: Sarra Road – Parker County

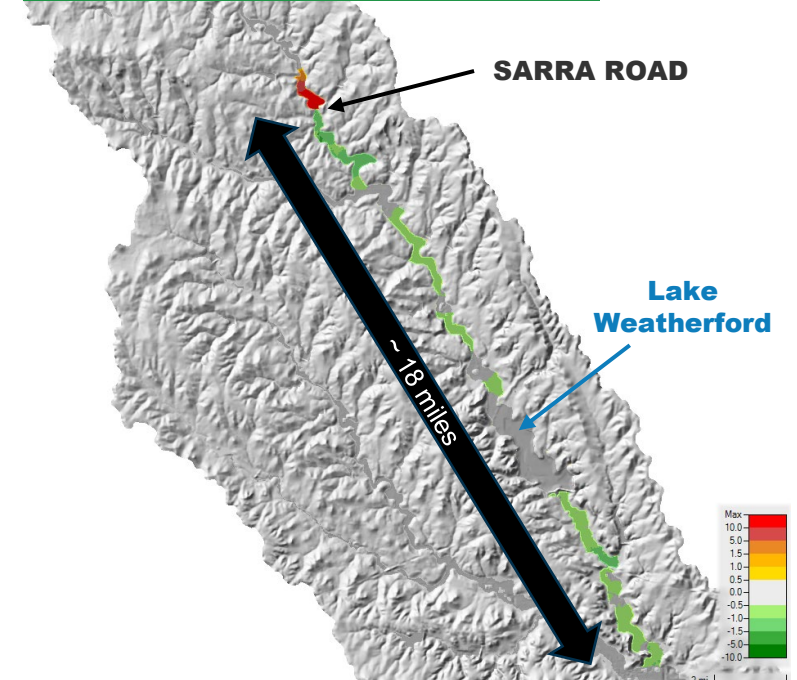
BEFORE



AFTER



Reduced Flow Downstream



Key Summary Statistics – 2070

- **100-year Conditions (upstream):**
 - Valley Storage: + 2,000 acre-ft
 - Flow Rate: - 3,000 ft³/sec
- **10-year Conditions (downstream):**
 - Flow Rate: - 1,000 ft³/sec
 - Elevation Reduction: 0.5-1.0 ft

Estimated Study Timeline

Fall 2025/Winter 2026

Continue training workshops and site visits to individual communities

Spring 2026

Conduct project update meeting series #5 to present findings and seek stakeholder feedback

Summer/Fall 2026

Submit deliverables to funding agencies

Winter/Spring 2026

Complete hydrology & hydraulics (H&H) modeling and identify transportation, environmental & other policy recommendations

Summer 2026

Conduct project update meeting series #6 to present final products incorporating stakeholder feedback

Model Codes Task Overview

- Develop model development codes that support TSI Study goals for reducing flood risk and integrating transportation, stormwater, & environmental planning.
- Identify enabling or supportive State code provisions.
- Receive input from stakeholders on draft code elements.
- Incorporate feedback to refine model codes.
- Local governments may choose to use the model codes as a resource for regulatory updates to improve flood prevention & mitigation.



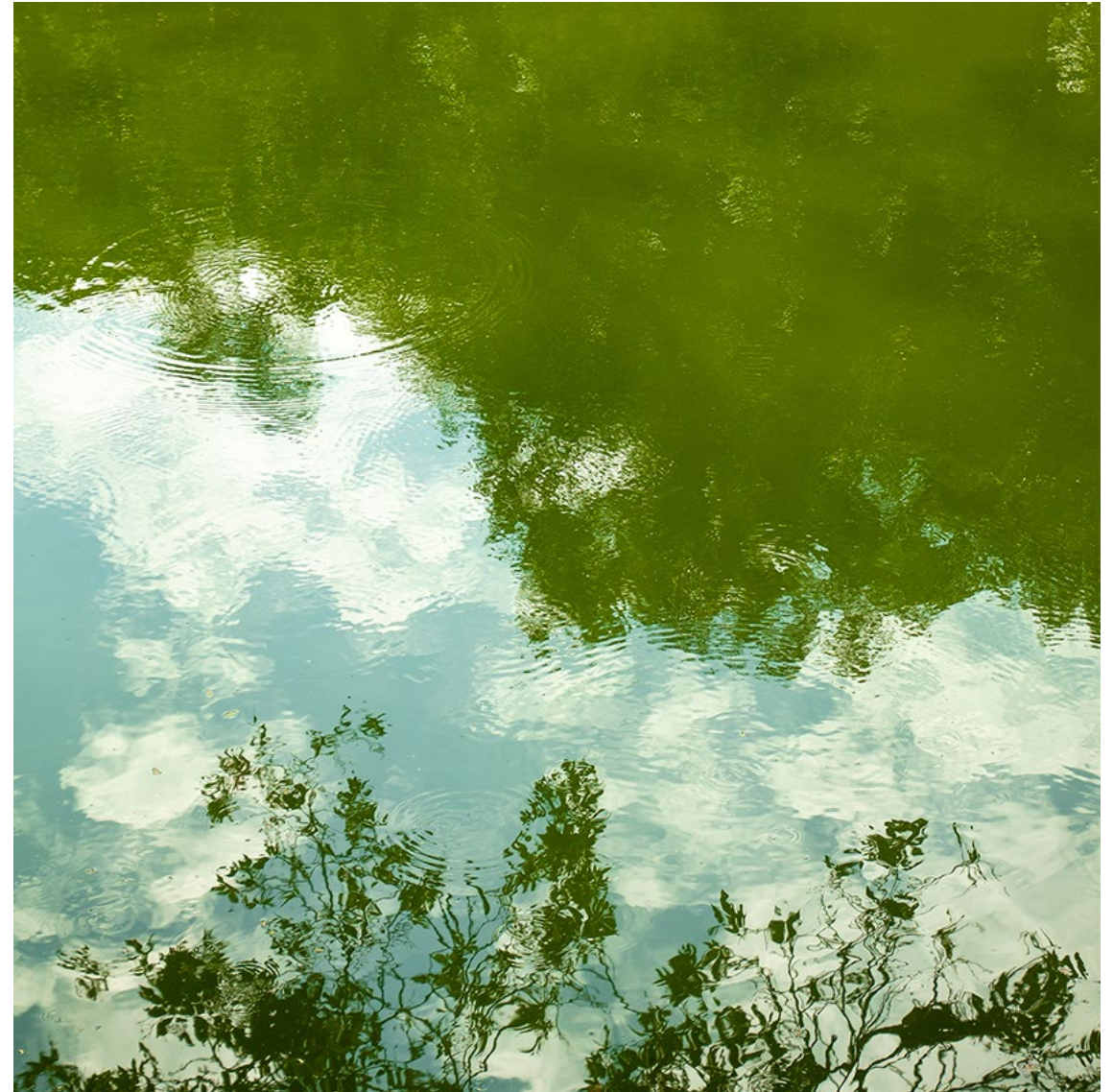
Development Regulations Model Code

- Identifying best practice strategies that can be incorporated into development (*land use/zoning/subdivision*) codes to help prevent and/or mitigate future flood events
- Model codes can address green stormwater infrastructure, nature-based solutions, low-impact development, & other strategies
- Examples:
 - ▣ Impervious cover limits
 - ▣ Clustered development
 - ▣ Creation/preservation & maintenance of open space
 - ▣ Green parking lot infrastructure
 - ▣ Incentive zoning



Floodplain Ordinance Model Code

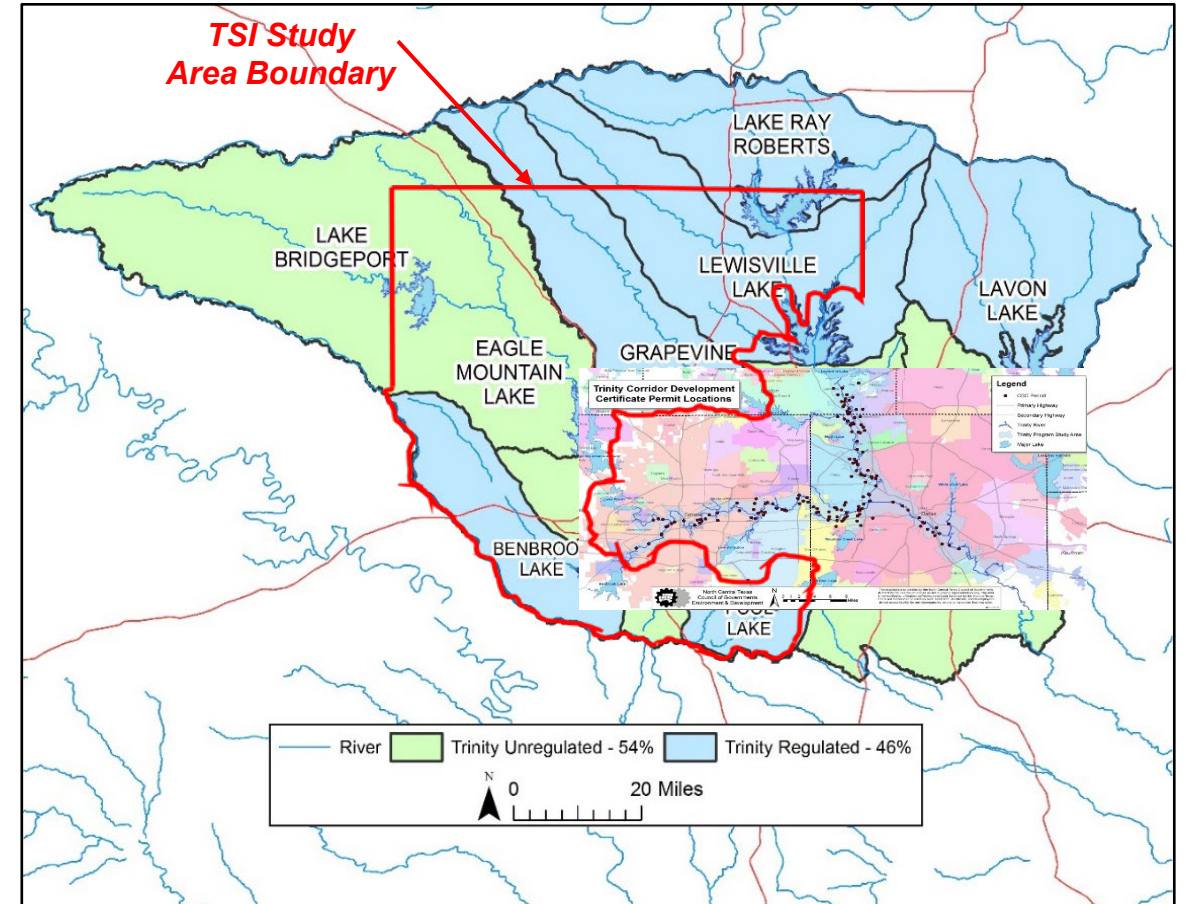
- Identifying higher standards for incorporating into flood damage prevention ordinances to help reduce economic losses, prevent future flood hazards, & protect public health/safety
- Model codes can address higher construction standards for development in flood-prone areas
- Examples:
 - ▣ Critical facilities
 - ▣ Freeboard
 - ▣ Manufactured homes
 - ▣ No rise in Special Flood Hazard Area (SFHA)
 - ▣ Setback in erosion-prone area
 - ▣ Preserving valley storage



Regional Governance/Regulation Considerations

Trinity River COMMON VISION – Corridor Development Certification (CDC) Program

- **Communities & counties along Trinity River:**
 - Consistent & transparent development criteria
 - Allows development, but not adverse impacts
 - Preserves storage & water surface elevations
- **Current/future H&H simulations are dynamic living models:**
 - Check-in, check-out
 - Fee structure
- **3rd party reviews (USACE)**
- **Could duplicate program within the TSI region**
- **Drive future collaboration across developers, infrastructure providers, & communities**



We Want to Hear from YOU!

- What development code elements (e.g., zoning, subdivision design, street design standards, etc.) has your jurisdiction adopted to prevent and/or mitigate flooding?
- Please complete this 3-question survey:

Preventing Flooding Through Local
Development Codes: City Survey



<https://tinyurl.com/TSICodes>



Integrating Transportation & Stormwater Infrastructure (TSI) *Model Development & Floodplain Ordinances Workshop*

Purpose: To receive feedback on enhanced stormwater infrastructure elements, including increased detention/retention areas and/or nature-based solutions (NBS), to incorporate into a model development code and model floodplain ordinance for flood prevention and mitigation.

Intended Audience: Anyone with technical expertise, experience, or interest in the areas of flood prevention or mitigation using development or floodplain regulatory tools.



Thursday, January 29, 2026, 10:00 am-12:00 pm



NCTCOG, 616 Six Flags Drive, Centerpoint II,
Arlington, Transportation Council Room



Hybrid meeting format



For more info, visit <http://www.nctcog.org/TSI>

Register Here:



<https://www.addevent.com/event/fcqv17r29868>

CONTACTS:



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(817) 704-2549
salvarez@nctcog.org



Erin Blackman

Senior Planner
Environment & Development
(817) 608-2360
eblackman@nctcog.org



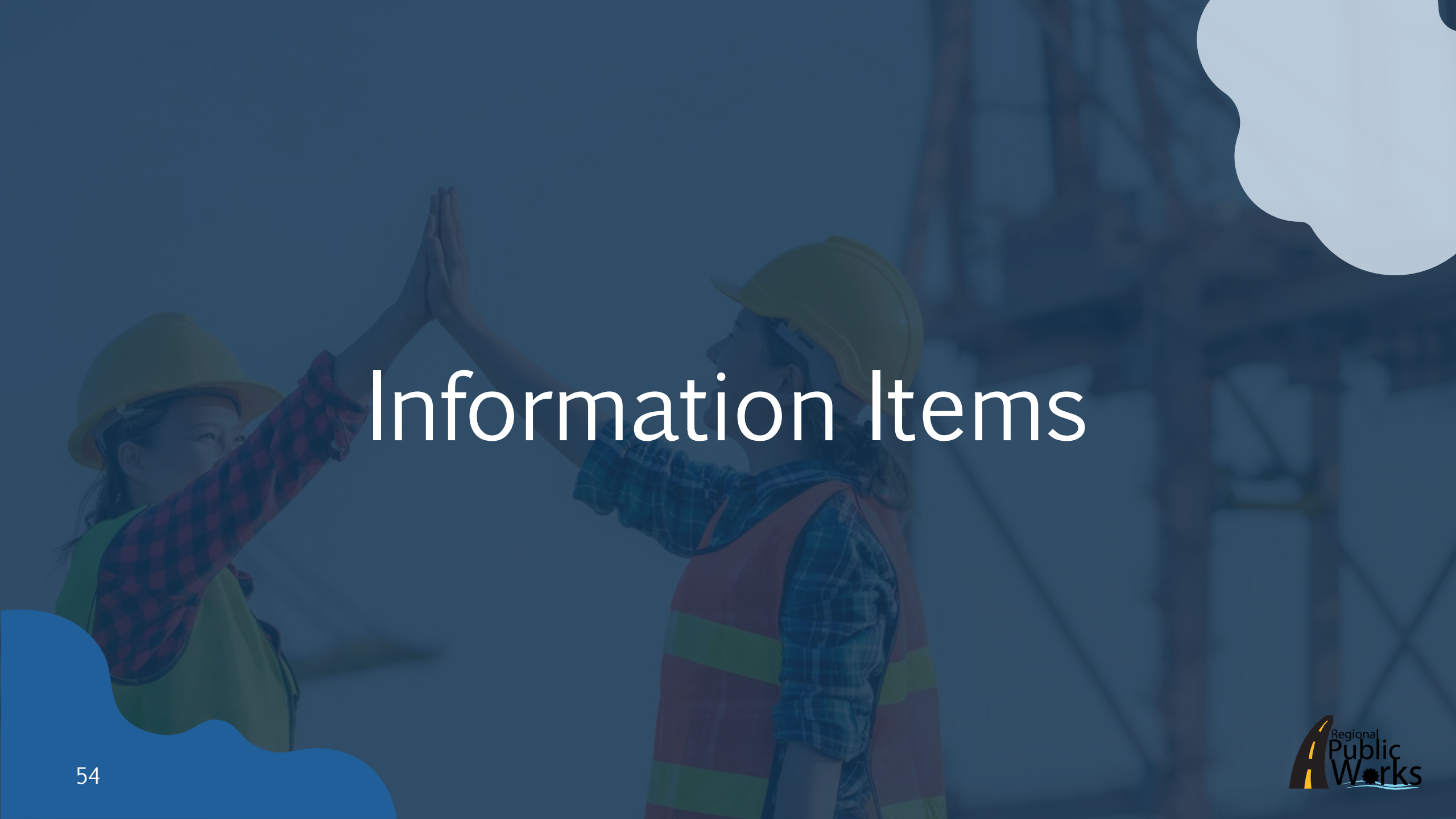
Shawn Conrad

Program Manager
Transportation
(817) 704-5695
sconrad@nctcog.org

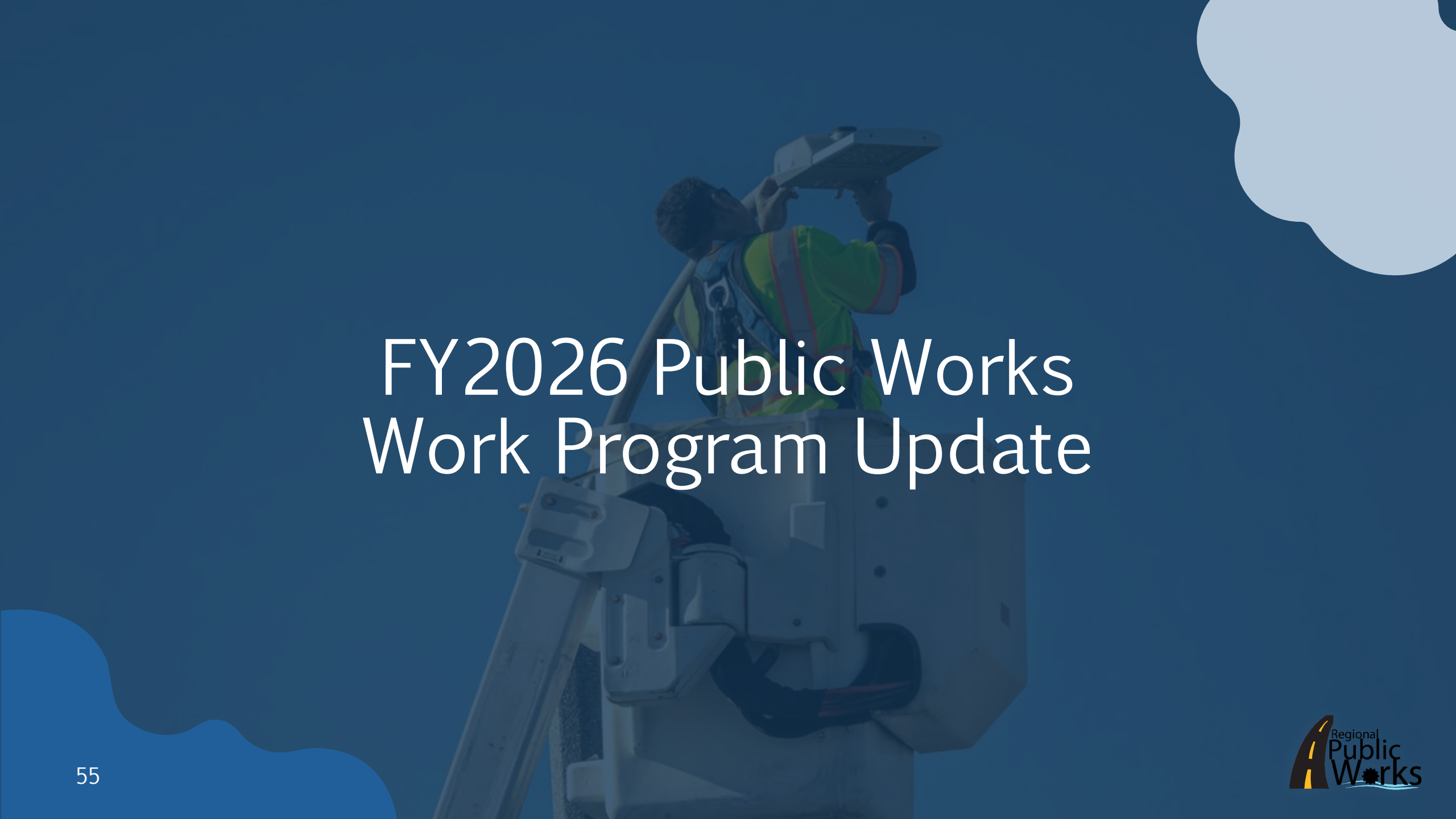


Jeffrey C. Neal

Senior Projects Manager
Transportation
(214) 223-0578
jneal@nctcog.org

A background image of two construction workers, a woman on the left and a man on the right, both wearing yellow hard hats and high-visibility safety vests. They are high-fiving each other. The woman is wearing a red and black plaid shirt, and the man is wearing a blue and white plaid shirt. The background is a blurred construction site with scaffolding. The image has a dark blue overlay.

Information Items



FY2026 Public Works Work Program Update

5. FY26 Public Works Program Update

- Cost shares to be distributed in late-November or early December via email
- Overall Program Budget Goal: \$360,000
 - \$80,000 dedicated to iSWM Subcommittee

5. FY26 Public Works Program Update

- Public Works [Council Video](#)
- Public Works [Careers Promotion Video](#)



5. FY26 Public Works Program Update

Trainings

- Partner with state/regional associations or local private sector entities to develop specific trainings for public works members
- Promote learning from other municipalities with different structures including opportunities for cross-training, cross-partnerships, and networking
- What are your training needs for FY26? What ideas do you have to promote learning and development from other municipalities?

5. FY26 Public Works Program Update

27th Annual Public Works Roundup

- August 20, 2026
- Hurst Conference Center
- Planning for presentation topics will begin at the February PWC meeting
- Any suggestions or ideas for next year?



Please contact Madisson Dunn at mdunn@nctcog.org or 817-704-5611 for more information.

Sustainable Public Rights of Way (SPROW) Subcommittee



- **Purpose:** Provide support and technical advice to the PWC on sustainability issues associated with public works infrastructure.
- **Background:**
 - Established in response to region's population growth and national infrastructure "D" rating in 2008.
 - Subcommittee began meeting in 2008.
 - Members included: PW Directors, City Engineers, Capital Projects Managers, Planners.
 - From 2013 until 2018, the subcommittee hosted annual SPROW Education Forums (some years the forum combined with the Roundup).

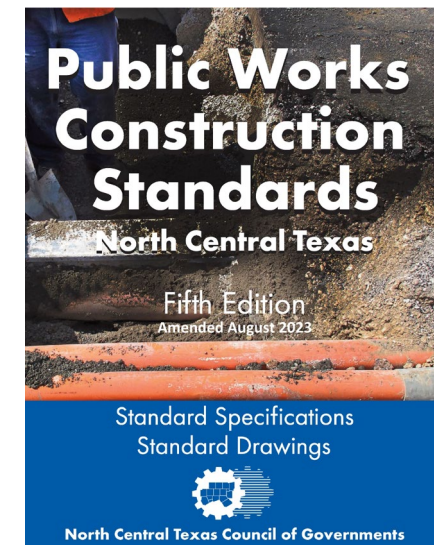
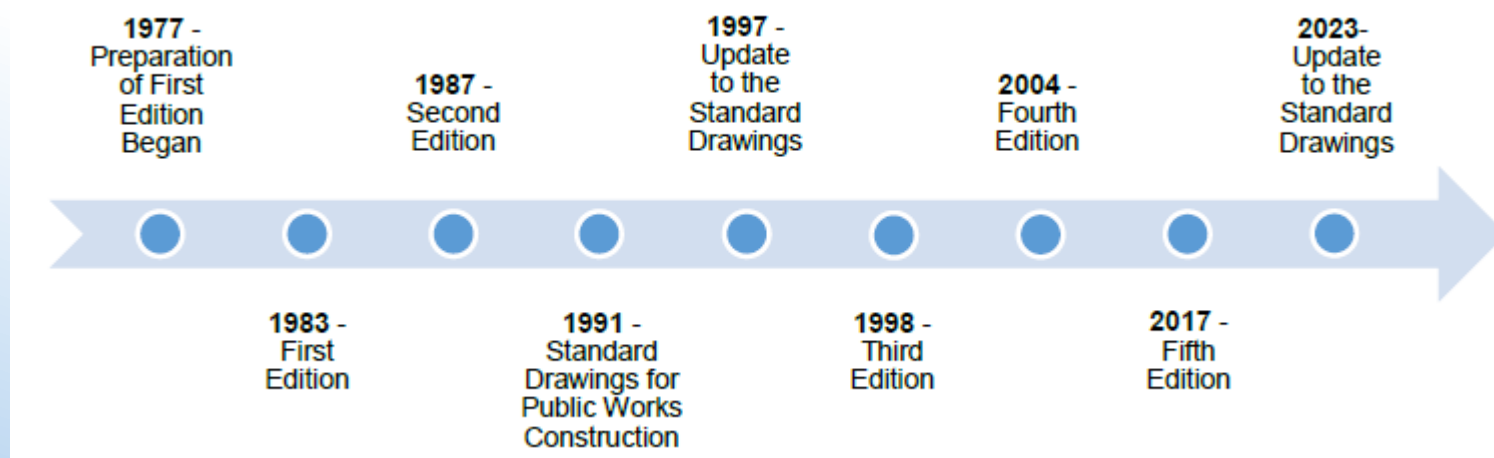
[Sustainable Public Rights of Way \(SPROW\) Program Webpage](#)

Sustainable Public Rights of Way (SPROW) Subcommittee

- Stay tuned for announcements and meetings in FY26

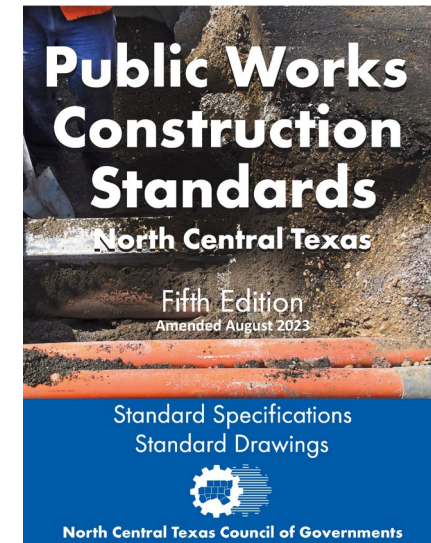
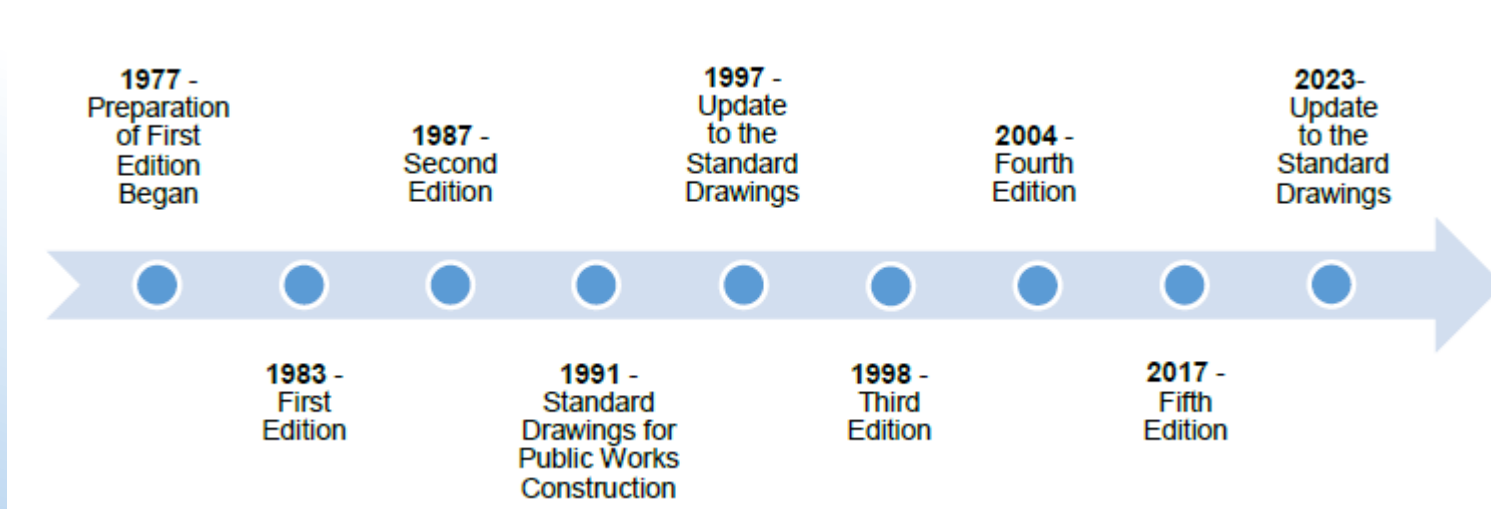
PW Construction Standards Subcommittee

- **Purpose:** Provide technical expertise to review, revise, and update the construction standards.
- **Background:**
 - Established to prevent challenges due to construction inconsistencies between different municipalities.
 - First edition of the standards published in 1977.
 - Subcommittee began meeting in 2012 to update standards.
 - Members included: Local governments and private industry public works professionals.
 - Standards and Drawings combined into one document in 2023.



Standard Drawings Subcommittee

- **Purpose:** Provide technical expertise to review, revise, and update the construction drawings.
- **Background:**
 - Established to prevent challenges due to construction inconsistencies between different municipalities.
 - First edition of the standards published in 1991.
 - Subcommittee began meeting in 2020 to update standards.
 - Members included: Local governments and private industry public works professionals.
 - Standards and Drawings combined into one document in 2023.



PW Construction Standards Subcommittee

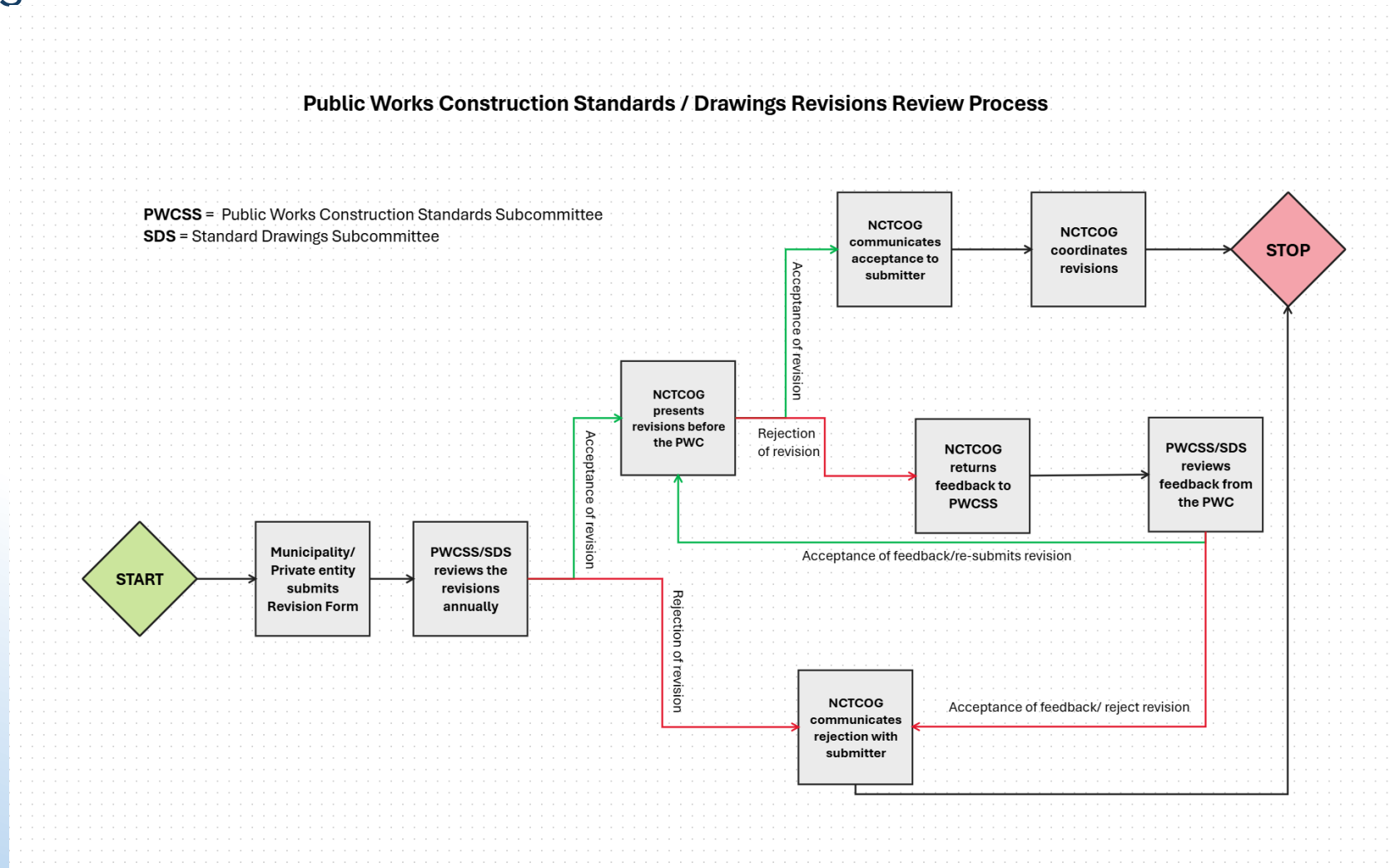
- Process for Receiving and Reviewing Construction Standards/Drawings Revisions
 - Based on feedback from previous meetings, a form was developed to collect recommendations and revisions
 - Submissions to be reviewed during Public Works Construction Standards Subcommittee meeting on March 11, 2026.
 - Subcommittee will receive submissions ahead of the meeting to review

Submission Form



PW Construction Standards Subcommittee

- Process for Receiving and Reviewing Construction Standards/Drawings Revisions

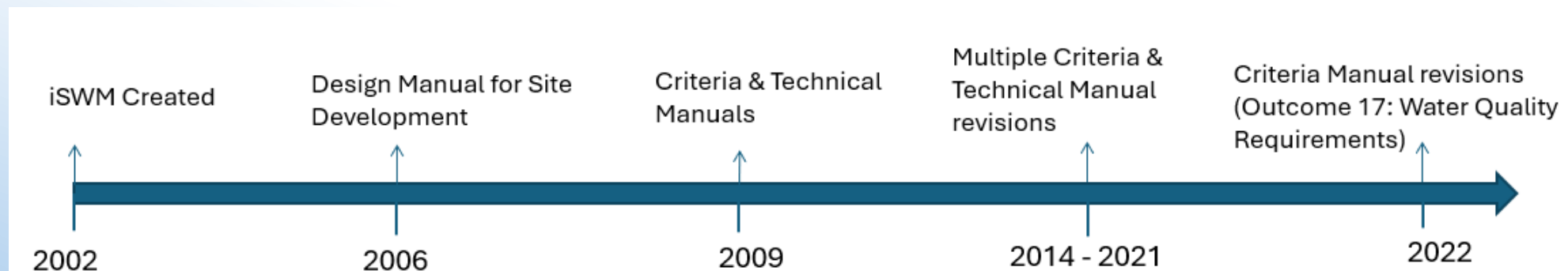


PW Construction Standards Subcommittee

- Next Meeting: March 11, 2026, at 10 a.m. at Metroplex Conference Room
- Subcommittee will review the submissions received for the Public Works Construction Standards.
- Submissions will be distributed to the subcommittee ahead of the meeting.

Integrated Stormwater Management (iSWM) Subcommittee

- **Purpose:** Provide technical advices to the PWC on integrated Stormwater Management Activities.
- **Background:**
 - Program created in 2002 through collaboration between 60–70 North Texas local governments, NCTCOG, Freese & Nichols (F&N), and other consultants.
 - Uses Low Impact Development (LID) and green infrastructure to reduce flooding, erosion, and water quality decline.
 - Supports sustainable growth in a rapidly growing region.
 - Helps local governments meet stormwater regulations.
 - Provides tools and guidance to help communities manage stormwater on a site-by-site basis.



Integrated Stormwater Management (iSWM) Subcommittee

- Subcommittee established ~2009; meets 4 times per year.
- Chair: Ranjan Muttiah, City of Fort Worth
- Co-Chair: Travis Attanasio, City of Burleson
- Members: Engineers, designers, and community stormwater professionals.
- Manages program activities and \$80,000/year contract (3-year +1+1).

Integrated Stormwater Management (iSWM) Subcommittee

Last Meeting: October 30, 2025

- Guest speaker: Mitch Heineman (CDM Smith) – EPA SWMM update, reviewed short-term iSWM goals.
- Discussed website improvements: navigation, accuracy, BMP content. Will send out survey.
- Discussed CRS credits & City Council outreach.

Next Meeting: January 13, 2026 @ 1:30 PM (Centerpoint II – Tejas Room)

Topics: iSWM goals scope, website modernization, survey results, City outreach.

Integrated Stormwater Management (iSWM) Subcommittee

- FY26 Deliverables



- Research “Cumulative Impacts” on Small Footprint Developments
- iSWM Promotional Presentation for Partnering Organizations
- Develop Technical Case Studies
- Stormwater Quality Monitoring Programs Development for Existing iSWM BMPs

Integrated Stormwater Management (iSWM) Subcommittee

- FY26 Deliverables



- Identify Short and Long Term iSWM Manual Updates; Implement Updates
- Identify Short and Long Term iSWM Website Updates; Implement Updates
- Identify Short and Long Term iSWM Areas of Modernization for the iSWM Program; Implement Updates
- Project Management

Please contact Katie Hunter at khunter@nctcog.org or 817-695-9102 for more information.

Subcommittee Membership and Involvement

- Council members are encouraged to volunteer for appointment to a subcommittee.
- Per PWC bylaws, the terms for iSWM and SPROW are ongoing. Terms for the Construction Standards and Drawings subcommittee are to be established to achieve the purpose for their work.
- If interested, please complete the survey form linked below.
- **Form:** <https://forms.office.com/r/TpGeH9DYrj>
- **Responses Due:** Thursday, December 11, 2025
- Council members will review all volunteer submissions and vote electronically on their approval ahead of the next Council meeting.

Other Program Activities

Public Works Emergency Response Team (PWERT)

- MetroX participation in the Regional Support Center on Tues, October 28
 - Well planned. TDEM worked hard to create a realistic scenario.
- Presentation on FY26 SHSP Grant Proposals on Wed, November 5
 - PWERT asked for \$231,330 for three Vehicle Interdiction Trailers (VIT).
 - VITs are a critical material need, identified in the MetroX exercise.
 - Still waiting on final word on FY25 SHSP Grant awards.
- Last meeting: October 9, 2025 (in-person); Next meeting: December 11, 2025 (virtual)
 - Review of lessons learned and discuss improvement opportunities from MetroX.

Please contact Justin Stoker at justin.stoker@waxahachie.com for more information.

Integrating Transportation and Stormwater Infrastructure (TSI)

- Stakeholder Subarea Meetings (Round 4)
 - September/October 2025
 - Resources available: www.nctcog.org/tsi
- Model Development and Floodplain Ordinances Workshop (Hybrid)
 - January 29, 2026, 10 a.m. – 12 p.m.
 - More information, RSVP, and add to your calendar: <https://www.addevent.com/event/fcqv17r29868>
- Flood Warning System Workshop (Hybrid)
 - February 17, 2026, 10 a.m. – 12 p.m.
 - More information, RSVP, and add to your calendar: <https://www.addevent.com/event/skb38xv9sqjc>



Please contact Katie Hunter at khunter@nctcog.org for more information.



Community Rating System Users Group

- Floodplain Seminar for Elected Officials
 - September 18, 2025
 - Resources available:
<https://www.nctcog.org/envir/watershed-management/floodplain-management/combined-floodplain-seminar-for-elected-officials-and-trinity-river-common-vision-steering-committee>
- Trinity River COMMON VISION Steering Committee approved the FY26 Work Program that may include supporting a multi-jurisdictional Program for Public Information



Please contact Erin Blackman at eblackman@nctcog.org for more information.

Texas Chapter of American Public Works Association (TX-APWA)

- Update provided by Cheryl Taylor, President of the North Central Texas Branch

Please contact Cheryl Taylor at ctaylor@westlaketx.gov for more information.

Wastewater and Treatment Education Roundtable (WATER)



- **Purpose:** Help reduce potential damage to the region's household plumbing systems and wastewater treatment systems as well as to decrease hazards to water quality through educational efforts.
- **Background:**
 - Originally established as the North Texas Grease Abatement Council in 2005 to target grease related issues and prevent SSOs.
 - Expanded and rebranded subcommittee to Wastewater and Treatment Education Roundtable in 2015.
 - Members include: Environmental and education coordinators, public health professionals, utility managers.

Annual Holiday Grease Roundup

- Scheduled for November 1, 2025 – January 31, 2026
- American BioSource will provide free containers and collect grease/cooking oil for entities without an established collection program
- Marketing materials available on [Wastewater Roundtable webpage](#) for use
- 48 partners confirmed as of 10/28 – view full list on [Defend Your Drains](#) website



Please contact Hannah Ordonez at hordonez@nctcog.org or 817-695-9210 for more information.

2025 Annual Holiday Grease Roundup Participants



North Texas Zero Emission Vehicle Call for Projects

\$58.6 million is available for fleets to replace existing vehicles with zero emission vehicles through the North Texas Zero Emission Vehicle (NTxZEV) Call for Projects

Eligible Applicants: Public or private fleets
*Must adopt a policy consistent with the **RTC Clean Fleet Policy** (www.nctcog.org/fleetpolicy)*

Eligible Projects: Replacement of existing Class 6 and 7 vehicles with zero emission vehicles and purchasing supporting infrastructure

Interested in Learning More?
Attend a NTxZEV CFP Workshop:
December 2, 2025 at 1:00pm CT
Website to Register and Learn More:
www.nctcog.org/NTxZEV

Eligible Vehicles: Vocational, including but not limited to:

Septic/Bucket Truck



Street Sweeper



Straight/Box Truck



Step Van



Refuse Hauler



Transit Bus



Funding Levels: 33% to 80% of new vehicle price; varies depending on fuel type (battery-electric or hydrogen fuel cell and vocation type)

Image Sources: NCTCOG, Getty Images, and Trinity Metro



NTxZEV CFP

Upcoming Events, Conferences, and Opportunities



Designing Smarter Roads: Permeable Pavements & Culverts

December 18, 2025 at 1 P.M.

Virtual via Zoom

U.S. DOT – Federal Highway Administration



Public Workshop & Equipment Rodeo

February 1 – 4, 2026

Dallas Fort Worth Marriott Hotel & Golf Club

American Public Works Association – Texas
Chapter

Upcoming PWC Agenda Topics

- PWC Council Members and NCTCOG may suggest future agenda items
- Next Meeting: February 19, 2026, at 9:30 a.m. (In-person at NCTCOG Offices)
 - Feedback on PW Roundup Topics

Roundtable Discussion





Validating OPCC's Using Statistical Methods

Monte Carlo Simulation with
Escalated Historical Costs



Statistical Validation of OPCCs

- • OPCC estimates can vary due to inflation, scope uncertainty, and market volatility.
 - • Using escalated historical cost data provides a realistic basis for risk-aware estimates.
 - • Monte Carlo simulation quantifies uncertainty by generating thousands of cost outcomes.



Monte Carlo Simulation | Use Case Example

Davis Blvd at Continental/Union Church – Intersection Improvement

Item Description	Quantity	Unit	Median (TxDOT estimated)	STD. Deviation (TxDOT)	Unit Price	SD Check	Item Cost	TxDOT Unit Price + 2 Std Deviations	TxDOT Item Cost	Higher of OPCC and TxDOT Item Cost
MOBILIZATION (5% MAX)	1	LS	\$ -	\$ -	\$ 150,000.00	\$ -	\$ 150,000	\$0.00	\$0	\$ 500,000
PROJECT SIGN	2	EA	\$ -	\$ -	\$ 500.00	\$ -	\$ 1,000	\$0.00	\$0	\$ 1,000
PREPARE ROW	19	STA	\$ 52,463.16	\$ 23,608.42	\$ 5,000.00	\$ 9,530.50	\$ 95,000	\$99,680.00	\$1,893,920	\$ 1,893,920
FULL DEPTH SAWCUT	699	LF	\$ -	\$ -	\$ 10.00	\$ -	\$ 6,990	\$0.00	\$0	\$ 6,990
REMOVE ASPHALT (PAV)	3,295	SY	\$ -	\$ -	\$ 15.00	\$ -	\$ 49,425	\$0.00	\$0	\$ 49,425
EXCAVATION (ROADWAY)	8,000	CY	\$ 116.42	\$ 52.39	\$ 30.00	\$ 52.39	\$ 240,000	\$221.20	\$1,769,600	\$ 1,769,600
EMBANKMENT (FINAL)(DENS CONT)(TY C)	350	CY	\$ 26.43	\$ 11.89	\$ 35.00	\$ 11.89	\$ 12,250	\$50.22	\$17,577	\$ 17,577
FL BS (CMP IN PLC)(TYA GR1-2)(FNAL POS) (5")	145	CY	\$ 238.69	\$ 107.41	\$ 90.00	\$ 107.41	\$ 13,038	\$453.52	\$65,697	\$ 65,697
CEMENT	191	TON	\$ 281.55	\$ 126.70	\$ 225.00	\$ 126.70	\$ 42,883	\$534.94	\$101,956	\$ 101,956
CEMENT TREAT (SUBGRADE) (8")	1,043	SY	\$ 7.77	\$ 3.50	\$ 20.00	\$ 3.50	\$ 20,860	\$14.76	\$15,395	\$ 20,860
CEMENT TREAT (SUBGRADE)(6")	6,016	SY	\$ 2.75	\$ 1.24	\$ 15.00	\$ 1.24	\$ 90,233	\$5.23	\$31,461	\$ 90,233
D-GR HMA(SQ) TY-B PG70-22 (7")	346	TON	\$ -	\$ -	\$ 225.00	\$ -	\$ 77,876	\$0.00	\$0	\$ 77,876
SUPERPAVE MIXTURES SP-C SAC-A PG70-28 (2")	99	TON	\$ -	\$ -	\$ 225.00	\$ -	\$ 22,250	\$0.00	\$0	\$ 22,250
CONC PYMT (CONT REINF - CRCP) (8") WITH MONOLITHIC CURB	5,451	SY	\$ 131.38	\$ 59.12	\$ 110.00	\$ 59.12	\$ 599,610	\$249.62	\$1,360,679	\$ 1,360,679
COLORLED TEXTURED CONC (8")	103	SY	\$ 108.53	\$ 48.84	\$ 220.00	\$ 48.84	\$ 22,611	\$206.20	\$21,193	\$ 22,611
BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$ 65,878.92	\$ 29,645.51	\$ 7,500.00	\$ 10,785.34	\$ 90,000	\$125,169.94	\$1,502,039	\$ 1,502,039
CONC CURB & GUTTER (TY II)	567	LF	\$ 74.56	\$ 33.55	\$ 15.00	\$ 33.55	\$ 8,505	\$141.66	\$80,321	\$ 80,321
CONC SIDEWALK (4")	777	SY	\$ 162.52	\$ 73.13	\$ 80.00	\$ 73.13	\$ 62,142	\$308.78	\$239,853	\$ 239,853
CURB RAMPS (TY 7)	8	EA	\$ 3,612.10	\$ 1,625.45	\$ 3,500.00	\$ 1,625.45	\$ 28,000	\$6,862.99	\$54,904	\$ 54,904
CURB RAMPS (TY 1)	4	EA	\$ 2,912.59	\$ 1,310.67	\$ 3,500.00	\$ 1,310.67	\$ 14,000	\$5,533.92	\$22,136	\$ 22,136
RAIL (TY C221)	334	LF	\$ 188.91	\$ 85.01	\$ 150.00	\$ 85.01	\$ 50,100	\$358.92	\$119,879	\$ 119,879
ADJUSTING MANHOLES (WATER VALVE BOX)	4	EA	\$ 1,900.04	\$ 855.02	\$ 1,000.00	\$ 2,216.02	\$ 4,000	\$3,610.08	\$14,440	\$ 14,440
ADJUSTING MANHOLES (SANITARY)	3	EA	\$ 5,439.71	\$ 2,447.87	\$ 3,000.00	\$ 5,224.74	\$ 9,000	\$10,335.44	\$31,006	\$ 31,006
ADJUST WATER VALVES TO PROP GRADE	9	EA	\$ -	\$ -	\$ 500.00	\$ -	\$ 4,500	\$0.00	\$0	\$ 4,500
RELOCATION OF WATER METERS	2	EA	\$ -	\$ -	\$ 500.00	\$ -	\$ 1,000	\$0.00	\$0	\$ 1,000
ADJUST OR RELOC EXIST FIRE HYDRANT	1	EA	\$ -	\$ -	\$ 500.00	\$ -	\$ 500	\$0.00	\$0	\$ 500
REMOVE AND RETURN EX STONE WALL TO OWNER	1	LS	\$ -	\$ -	\$ 10,000.00	\$ -	\$ 10,000	\$0.00	\$0	\$ 10,000
REMOVE AND REINSTALL MAILBOX	3	EA	\$ -	\$ -	\$ 1,500.00	\$ -	\$ 4,500	\$0.00	\$0	\$ 4,500





Benefits of Statistical OPCC Validation

- Improves accuracy and defensibility of CIP project estimates.
 - Demonstrates transparency and risk-awareness to leadership and public.
 - Helps allocate contingency based on probabilistic outcomes rather than intuition.



Conclusion & Next Steps

STD Dev	\$ 599,777.10		Mean =	\$ 4,731,047.61
Median	\$ 4,754,606.91		min =	\$ 2,994,912.86
Median + 1 STD	\$ 5,354,384.01		max =	\$ 6,621,022.70
Median + 2 STD	\$ 5,954,161.11			
Median + 3 STD	\$ 6,553,938.21			

	BIDDER 1	BIDDER 2	BIDDER 3	BIDDER 4	BIDDER 5
Task A - Bid TOTAL	\$4,645,569.71	\$4,403,413.29	\$5,610,531.20	\$5,692,463.72	\$6,334,168.26

James Tuttle

Financial CIP Program Manager | City of Southlake

1400 Main St., Ste. 420,

Southlake, TX 76092

(817) 748-8071





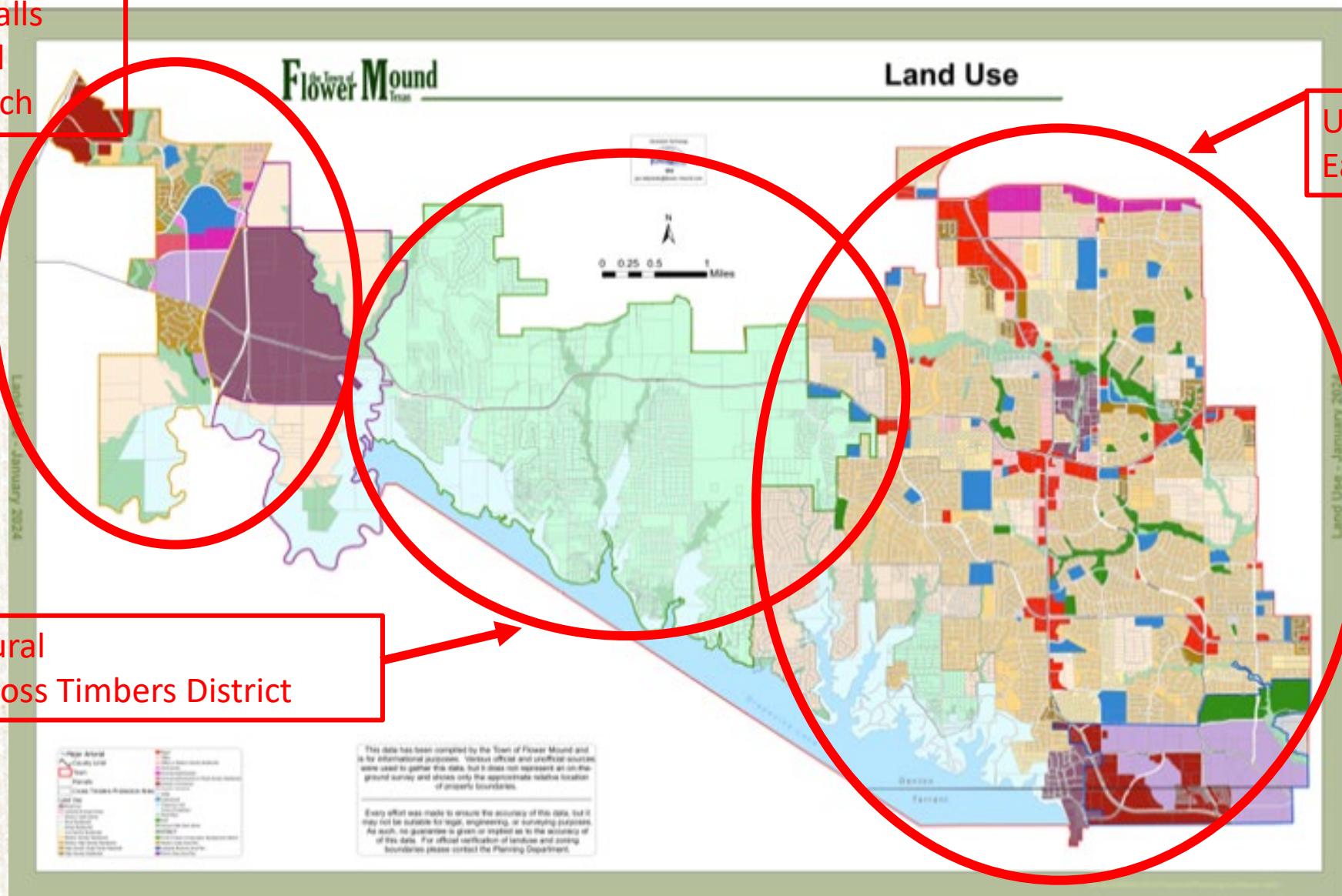
November 20, 2025

Town of Flower Mound Satellite Leak Detection

New
Development:
Canyon Falls
Trailwood
Furst Ranch

Urban
East Flower Mound

Rural
Cross Timbers District



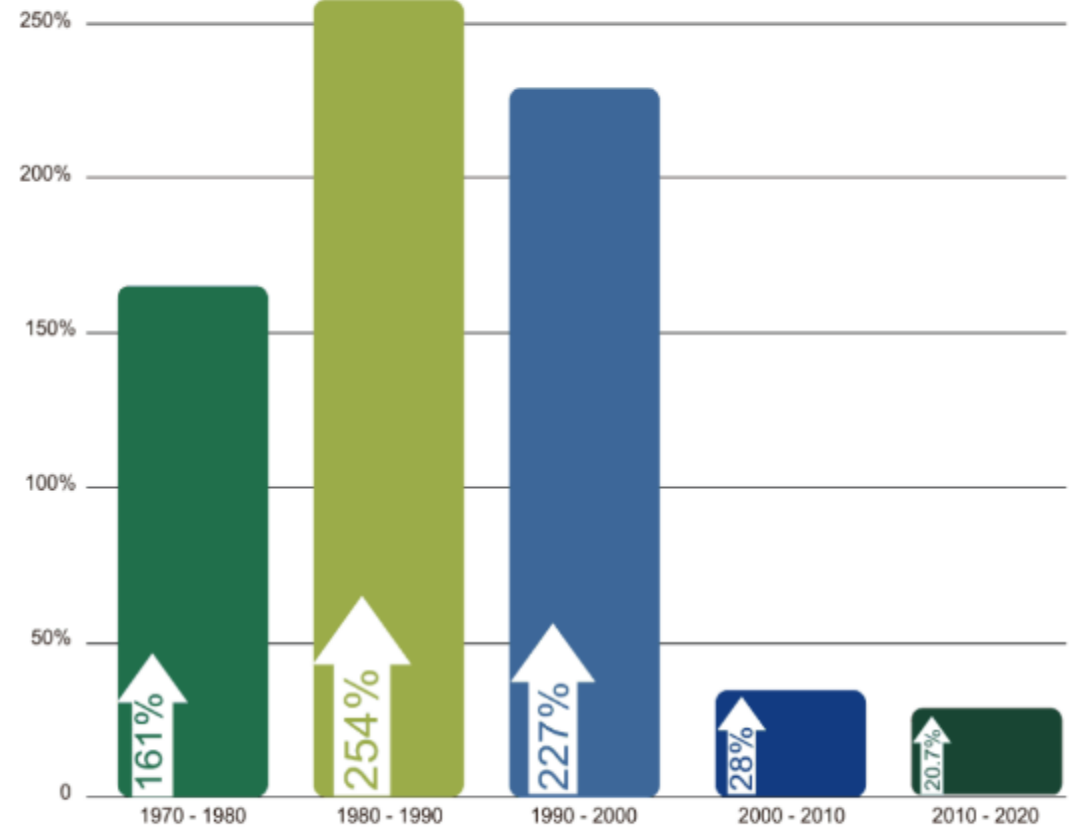
Population Counts

People	Year
1,685	1970
4,402	1980
15,527	1990
50,702	2000
64,669	2010
77,530	2019

470 Miles of Water Main

Population Growth by Decade

Source: NCTCOG Regional Data Center, 2022



- From 1970-1980, Flower Mound's population grew by 161 percent.
- From 1980-1990, Flower Mound's population grew by 254 percent.
- From 1990-2000, Flower Mound's population grew by 227 percent.
- From 2000-2010, Flower Mound's population grew by 28 percent.
- From 2010-2020, Flower Mound's population grew by 20.7 percent.



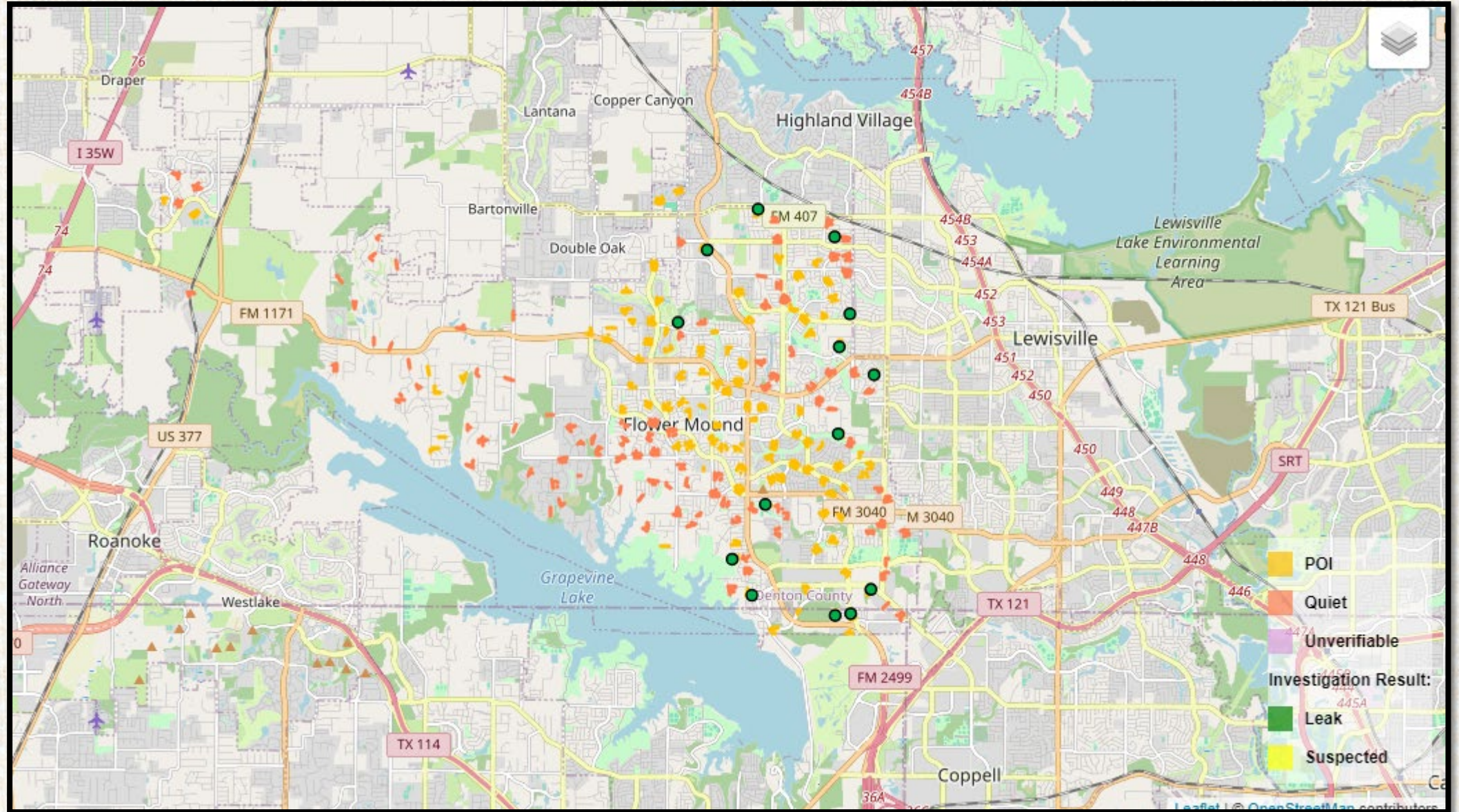
ASTERRA's Martian Roots

ASTERRA's core technology is based on the search for underground water on Mars and other planets. Lauren Guy, a geophysicist and entrepreneur who developed the approach, quickly recognized the application could be even more effective here on Earth. The water was closer, the need more immediate, and the technology had the potential to solve a number of critical problems. Mr. Guy founded Utilis (now known as ASTERRA) in 2013 to develop applications for the new technology. In 2016, leak detection in underground water systems became the first commercially used application. This product is now called Recover.

Satellite Leak Detection

- Irving
 - Garland
 - Plano
 - DWF Airport
 - Benbrook
-
- AWWA Award Winner

Satellite Leak Detection



Satellite Leak Detection

- Point of Interest (POI) - 200
- Boots on the ground
- Verified Leaks – 27
 - Town System
 - Private
 - Irrigation

October 2025

78 Leaks detected this go round

38 Leak cards

10182	Leak	Service	Meter	Yes	Bridgewater Avenue, Flower Mound, Tarrant County, Texas, 75067, United States	2023-12-28	+	Leak appears to be at meter connection
10191	Leak	Service	Connections- Fittings	Yes	999, Timber Valley Place, Flower Mound, Denton County, Texas, 75028, United States	2023-12-27	+	Leak appears at meter connection
10180	Leak	Service	Meter	No	Ocean Breeze Drive, Flower Mound, Tarrant County, Texas, 75067, United States	2023-12-27	+	Leak appears at meter connection
10162	Leak	Service	Meter	No	1476, Elmhurst Lane, Flower Mound, Denton County, Texas, 75028, United States	2023-12-27	+	Service meter
10135	Leak	Service	Connections- Fittings	No	1919, Blue Ridge Drive, Flower Mound, Denton County, Texas, 75028, United States	2023-12-27	+	Leak at meter connection
10125	Leak	Main	Fire hydrant	No	601, Sandy Lane, Flower Mound, Denton County, Texas, 75022, United States	2023-12-27	+	Leak appears to be at hydrant. Recommend flushing ... +
10188	Leak	Main	Fire hydrant	Yes	Lakeside Parkway, Flower Mound, Denton County, Texas, 75067, United States	2023-12-27	+	
10120	Leak	Service	Meter	No	2572, Buttonwood Drive, Flower Mound, Denton County, Texas, 75028, United	2023-12-12	+	Leak appears to be in meter box

Contact & Connect

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youtube.com/user/nctcoged



EandD@nctcog.org



<https://www.linkedin.com/in/nctcog-pwc>