

NCTCOG Contact Information:

Transportation and Stormwater Infrastructure (TSI) study

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**North Central Texas
Council of Governments**

Waterfront Property No One Wants: How Counties Can Reduce Flood Risk Through Sustainable Growth

❖ **Purpose**

- *Inform counties about regulatory authorities afforded them that allow sustainable development.*
- *The TSI planning study resources can serve as the foundation for future development while meeting infrastructure and environmental needs and reducing future flood risks.*
- *Counties can take a proactive approach to flood mitigation by using their legislative authorities to facilitate, organize, create, and enforce policies and regulations related to regional stormwater management, urban development, transportation, and environmental planning.*
- *This handout includes codes and laws that provide counties with legislative authority over transportation, stormwater and environmental sectors and developments.*

❖ **Need for Infrastructure Regulation in Counties**

- **Historical and Projected Populations**
 - *In 2000, the Decennial Census reported a population of 5,197,317 for North Central Texas counties.*
 - *In 2010, the Decennial Census reported a population of 6,417,724 for North Central Texas counties.*
 - *In 2020, the Decennial Census reported a population of 7,698,985 for North Central Texas counties.*
 - *For 2026, the NCTCOG projected a population of 8,595,345 for North Central Texas counties.*
 - *For 2050, the NCTCOG projected a population of 12,297,157 for North Central Texas counties.*
- **Current/Recent Flooding Events**
 - **May-June 2015 Flooding Events**
 - *Many counties in North Central Texas experienced flooding that resulted in damage to infrastructure and property. State and federal disaster declarations were issued.*
 - **August 2022 Flooding Event**
 - *North Central Texas received extreme amounts of rainfall upwards of about 10 inches.*
 - *Flash flooding led to numerous rescues.*
 - **Spring 2025 Flooding Events**
 - *Heavy storms from this year in April, May, and June 2025 led to multiple road closures and flood damage in North Central Texas.*



❖ **County Legal Authority Over Infrastructure**

○ **County Government Structure**

- *The County Commissioner's Court is the governing body of a county government and is comprised of a county judge and four commissioners elected by constituents.*
- *The County Commissioner's Court is governed by Local Government Code.*

○ **Legal documents that provide authority to counties**

▪ **Texas Constitution and Revised Civil Statutes**

- *The following legal documents describe actions or responsibilities a County Commissioners Court may take:*
 - *Texas Constitution*
 - *Texas Revised Civil Statutes Annotated*
 - *Local Government Code (LGC)*
 - *Agriculture Code (AC)*
 - *Election Code (EC)*
 - *Government Code (GC)*
 - *Natural Resources Code (NRC)*
 - *Family Code (FC)*
 - *Tax Code (Tax)*
 - *Parks and Wildlife Code (PWC)*
 - *Water Code (WC)*
 - *Transportation Code (TC)*
 - *Business and Commerce Code (BCC)*

▪ **The 2023 Guide to Texas Laws for County Officials**

The 2023 Guide to Texas Laws for County Officials prepared by the Texas Association of Counties is a great summary of county legislative authority.

Link: <https://www.county.org/resources/resource-library/legal-services/legal-legal-publications/guide-to-texas-laws-for-county-officials>

○ **County legislative authority over Transportation Infrastructure**

- *Appoint a county road engineer (TC Ch. 252) (Voter approval required)*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.252.htm#252.301>
- *Legal authority of counties over transportation infrastructure:*
 - *Counties must require plats before land subdivision (LGC Sec. 232.001), approve or deny plats (LGC 232.002), and may enforce subdivision rules (LGC 232.005).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.232.htm>
 - *Counties can adopt systems for laying out, draining, and repairing roads (TC 252.005), and make rules for road construction and maintenance (TC 251.003).*
Links: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.252.htm>
<https://statutes.capitol.texas.gov/Docs/TN/htm/TN.251.htm>
 - *Purchase/hire road machinery, tools, implements, or teams for road work (TC Ch. 251).*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.251.htm>
 - *May make agreements with local, state, and federal agencies for planning, constructing, maintaining, and operating recreational facilities and necessary access roads (PWC 13.304).*
Link: <https://statutes.capitol.texas.gov/Docs/PW/htm/PW.13.htm>

- *Regulate road work (TC 251.003) and refuse or junk near highways (HSC 365.034).*
Links: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.251.htm>
<https://statutes.capitol.texas.gov/docs/hs/htm/hs.365.htm>
- *Counties may construct and maintain road drainage (TC 254.001 et seq.) and authorize private drainage along public roads.*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.254.htm>
- *Counties may cause all necessary bridges to be built and kept in repair (TC 251.081).*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.251.htm>
- *Erect bridges in city limits or cooperate with city in erecting bridge (TC 251.083).*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.251.htm>
- *Counties may contribute to TxDOT for proper development and construction of public roads (TC Sec. 222.052).*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.222.htm>
- **Funding for Transportation Plans**
 - *Ways counties can fund or provide oversight for transportation:*
 - *Form road districts, issue road district bonds for road construction, maintenance, and operation (TC 257.112). Counties may also levy taxes to pay road district bonds and oversee road fund expenditures (TC 252.108).*
Links: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.257.htm>
<https://statutes.capitol.texas.gov/Docs/TN/htm/TN.252.htm>
 - *Issue bonds for construction of bridges and improving and maintaining roads (GC 1301.001(a)), and levy taxes to repay them (GC 1301.004).*
Link: <https://statutes.capitol.texas.gov/Docs/GV/htm/GV.1301.htm>
 - *Issue bonds for certain purposes such as purchasing, constructing, improving, and maintaining public bridges and roads (GC 1301.001).*
Link: <https://statutes.capitol.texas.gov/Docs/GV/htm/GV.1301.htm>
 - *May authorize bonds for bridges, tunnels, turnpikes, or highways (TC 284).*
Link: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.284.htm>
 - *A county may impose ad valorem taxes as provided by Section 1-a, Article VIII, Texas Constitution, for the construction and maintenance of farm-to-market and lateral roads or for flood control (256.054).*
Link: <https://statutes.capitol.texas.gov/Docs/CN/htm/CN.8.htm>
 - *Grants*
- **County legislative authority over Environmental Protection**
 - *Establish zoning and building construction ordinances near certain lakes (LGC 231.075) (Voter approval required) (Example – Denton County at Lake Ray Roberts)*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.231.htm>
 - *Legal authority of counties over environmental-related infrastructure:*
 - *Counties over 5,000 population may establish a Board of Park Commissioners (LGC 320.001 et seq.).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.320.htm>
 - *Zoning authority over certain lakes, military zones, Padre Island, etc. (LGC Ch. 231).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.231.htm>
 - *May lease land for parks (LGC 331.008), operate and maintain parks (LGC 331.001), and acquire land for parks (LGC 331.001).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.331.htm>

- *Adopt and enforce subdivision rules (LGC 232.001, 242.001), provide timely plat approval (LGC 232.0025), and call for an election, upon petition by voters, to grant authority to the county over zoning and building ordinances near lakes (LGC 231.071–241.083).*
Links: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.232.htm>
<https://statutes.capitol.texas.gov/Docs/LG/htm/LG.231.htm>
- *May exercise eminent domain for public purposes (LGC 261-001-261.003)*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.261.htm>
- *Operate parks and museums (LGC 331.001) and cooperate with cities in acquisition and management of parks (LGC 331.008).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.331.htm>
- *Make agreements with local, state, and federal agencies for planning, constructing, maintaining, and operating recreational facilities and necessary access roads (PWC 13.304).*
Link: <https://statutes.capitol.texas.gov/Docs/PW/htm/PW.13.htm>
- *Regulate road work (TC 251.003) and refuse or junk near highways (HSC 365.034).*
Links: <https://statutes.capitol.texas.gov/Docs/TN/htm/TN.251.htm>
<https://statutes.capitol.texas.gov/docs/hs/htm/hs.365.htm>
- *Protect water quality (WC Ch. 26).*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm>
- *Enforce water quality controls (WC 26.171) and inspect public waters for certain purposes (26.171 et seq).*
Links: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm>
- *Use equipment for erosion control (AC 201.151).*
Link: <https://statutes.capitol.texas.gov/Docs/AG/htm/AG.201.htm>
- *Grants*
- *Other examples: Collin County regulates against salvage yards in the floodplain; Rockwall County has special zoning around Lake Ray Hubbard*
- **Funding for Environmental Plans**
 - *Ways counties can fund environmental policies:*
 - *Charge admission to parks and museums with voter approval (LGC 316.001)*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.316.htm>
 - *Issue revenue bonds for parks (LGC 320.071, LGC 331.004).*
Links: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.320.htm>
<https://statutes.capitol.texas.gov/Docs/LG/htm/LG.331.htm>
 - *Grants*
- **County legislative authority over Water Resources**
 - *Set spending limits for water surveys (LGC 562.013) (Voter approval required)*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.562.htm>
 - *Legal authority of counties over water resources:*
 - *Zoning authority over certain lakes, military zones, Padre Island, etc. (LGC Ch. 231).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.231.htm>
 - *Contract with political subdivisions for joint construction and maintenance of flood control projects (LGC 561.002–561.003).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.561.htm>

- *May acquire real property, easements, and right-of-way in connection with flood control activities. Own and construct reservoirs, dams, levees, wells, canals, and other improvements (LGC 561.001, TxC 1474.151).*
Links: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.561.htm>
<https://statutes.capitol.texas.gov/Docs/CN/htm/CN.3/CN.3.52.htm>
- *Hold hearings to create a single county water control and improvement, fresh water supply, levee improvement, and navigation district (WC Chs. 51, 53, 57, 61–63).*
Links: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.51.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.53.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.57.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.61.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.62.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.63.htm>
- *Create water and levee improvement districts (WC Chs. 51, 57).*
Links: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.51.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.57.htm>
- *Conduct hearings to create drainage districts (WC Chapter 56).*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.56.htm>
- *Own and construct reservoirs, dams, levees, wells and canals, and other improvements (TxC 1474.151).*
Link: <https://statutes.capitol.texas.gov/Docs/CN/htm/CN.3/CN.3.52.htm>
- *Maintain emergency programs (GC 418.102), participate in regional systems (HS Ch. 771), and participate in the National Flood Insurance Program (WC 16.315).*
Links: <https://statutes.capitol.texas.gov/Docs/GV/htm/GV.418.htm>
<https://statutes.capitol.texas.gov/Docs/HS/htm/HS.771.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>
- *Guide the development of proposed future construction, where practicable, away from a location which is threatened by flood hazards. (WC 16.315)*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>
- *Take steps, using regional, watershed, and multi-objective approaches, to improve the long-range management and use of flood-prone areas. (WC 16.315)*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>
- *Adopt permanent land use and control measures with enforcement provisions that are not less stringent than the criteria for land management and use adopted by the director. (WC 16.315)*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>
- *Adopt more comprehensive floodplain management rules that the political subdivision determines are necessary for planning and appropriate to protect public health and safety. (WC 16.315)*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>
- *Establish standards regarding construction in floodplains (WC 16.311 et seq).*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>
- *Contract with certain agencies or other political subdivisions for the purpose of flood control (LGC 561.002, 561.003).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.561.htm>
- *Regulate water rates (WC Ch. 13) and develop local and regional water plans (WC 16.051 et seq)*
Links: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.13.htm>
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm>

- *Use equipment for erosion control (AG 201.151).*
Link: <https://statutes.capitol.texas.gov/Docs/AG/htm/AG.201.htm>
- *Enforce water quality controls (WC 26.171) and inspect public waters for certain purposes (WC 26.171 et seq).*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm>
- *Protect water quality (WC Ch. 26).*
Link: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm>
- *Issue water safety regulations for lakes within the county but outside city authority (PW 31.092).*
Link: <https://statutes.capitol.texas.gov/Docs/PW/htm/PW.31.htm>
- **Funding for Water Resources Plans**
 - *Issue bonds for drainage purposes such as improvements of rivers, creeks, and streams (Texas Code Sec. 1474.004).*
Link: <https://statutes.capitol.texas.gov/Docs/CN/htm/CN.3/CN.3.52.htm>
 - *Issue bonds by election and levy and collect taxes for the purpose of purchasing, constructing, or maintaining lakes, reservoirs, waterways, dams, and canals for irrigation (Texas Constitution Sec. 1474.001).*
Link: <https://statutes.capitol.texas.gov/Docs/CN/htm/CN.3/CN.3.52.htm>
 - *Grants*
- **Other legal authorities regarding infrastructure**
 - *Develop infrastructure through public-private partnerships (GC Ch. 2267).*
Link: <https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2267.htm>
 - *Cooperate with other governments (GC Ch. 791).*
Link: <https://statutes.capitol.texas.gov/Docs/GV/htm/GV.791.htm>
 - *Use eminent domain for public purposes (LGC 261.001–261.003).*
Link: <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.261.htm>
 - *Must follow procedures for eminent domain (GC Ch. 2206).*
Link: <https://statutes.capitol.texas.gov/Docs/GV/htm/GV.2206.htm>
- ❖ **Recommendations for Future Actions**
 - *Participate in the TSI project.*
 - *Establish regulations acceptable to community.*
 - *Develop a regional flood plan (if one is needed).*
 - *Implement actions from flood plan.*
 - *Participate in the Regional and State Flood Plans.*
 - *Confirm that hazard mitigation plan aligns with other studies and recommendations.*
- ❖ **Contact Information**
 - **Stephanie Griffin, PE, CFM** | *Water Resources Director at Halff*
 - Work: 817.813.5704
 - **Sam Sarker, PE** | *Project Advisor at Halff*
 - Work: 214.346.6368
- ❖ **References**
 - <https://countyorgprodblob2023.blob.core.usgovcloudapi.net/cms/tac/media/default/member-services/legal/legal-publications/guide-to-laws-for-county-officials.pdf>

- <https://www.nctcog.org/getmedia/7c1802ca-464e-4d3f-95ab-cdf25e9d1be7/3-0-Social-Considerations.pdf>
- <https://www.wfaa.com/article/news/local/eagle-mountain-lake-ups-discharge-to-quell-flooding/287-148863384>
- <https://www.wfaa.com/article/weather/dallas-fort-worth-flood-map-weather-rainfall-totals-august-22-2022/287-bbe096d5-de12-4ef9-a106-cce11fb0f763> Flood and Coastal Storm Risk Management
- <https://www.usace.army.mil/Missions/Civil-Works/Flood-and-Coastal-Storm-Risk-Management/>
- <https://www.floods.org/about/>
- <https://www.tfma.org/page/about-tfma>
- <https://www.wfaa.com/article/weather/north-texas-storm-flooding-where-to-avoid-dallas-fort-worth/287-6470b4e5-15f4-41ea-92cc-b78c51ec6768#:~:text=In%20Rowlett%2C%20several%20roads%20were%20closed%20due%20to%20heavy%20rain%20and%20Springfield%20Park%20officials%20said.>
- <https://www.roadsbridges.com/bridge-construction/news/55038232/texas-flooding-leads-to-damaged-roads>

Additional Tools and Resources

- ❖ 2023 Guide to Texas Laws for County Officials
 - <https://www.county.org/resources/resource-library/legal-services/legal-legal-publications/guide-to-texas-laws-for-county-officials>
- ❖ FEMA BFE Viewer
 - <https://webapps.usgs.gov/infrm/estbfe/>
- ❖ Flood Infrastructure Fund (FIF) for implementation of flood-related studies and projects
 - <https://www.twdb.texas.gov/financial/programs/FIF/index.asp>
- ❖ Groundwater Availability Studies (in concert with groundwater districts)
 - https://www.twdb.texas.gov/groundwater/management_areas/index.asp
- ❖ Hazard Mitigation Plans
 - Collin County: <https://www.collincountytx.gov/Services/Engineering/Fire-Marshall/Emergency-Management>
 - Dallas County: <https://www.dallascounty.org/departments/hsem/hazard-mitigation-plan.php>
 - Denton County: <https://www.dentoncounty.gov/1710/Hazard-Mitigation-Plan>
 - Kaufman County: <https://www.kaufmancounty.net/281/Office-of-Emergency-Management>
 - Rockwall County: <https://www.rockwallcountytexas.com/925/Hazard-Mitigation-Action-Plan>
 - Ellis, Erath, Hood, Hunt, Johnson, Navarro, Palo Pinto, Parker, Somervell, Tarrant, and Wise County: <https://www.nctcog.org/ep/mitigation>
- ❖ NCTCOG integrated Stormwater Management (iSWM) Program
 - <https://iswm.nctcog.org/technical-manual.html>

- https://iswm.nctcog.org/Documents/iSWM_Criteria_Manual_01142015.pdf
- ❖ NCTCOG Mobility 2050 Metropolitan Transportation Plan
 - <https://www.nctcog.org/trans/plan/mtp/mobility-2050>
- ❖ NCTCOG Traffic Counts Interactive Map
 - <https://trafficcounts.nctcog.org/>
- ❖ NCTCOG integrating Transportation and Stormwater Infrastructure (TSI)
 - <https://www.nctcog.org/envir/watershed-management/upper-trinity-river-transportation-and-stormwater>
- ❖ Ongoing TSI planning study
 - <https://www.nctcog.org/envir/watershed-management/upper-trinity-river-transportation-and-stormwater>
- ❖ Region 3 Trinity Regional Flood Plan
 - <https://trinityrfpg.org/>
- ❖ Texas Constitution and Statutes
 - <https://statutes.capitol.texas.gov/>
- ❖ Texas Water Development Board (TWDB) Model Subdivision Rules
 - <https://www.twdb.texas.gov/financial/programs/EDAP/MSR/>
- ❖ TWDB BLE Viewer
 - <https://www.arcgis.com/apps/dashboards/45d3284db7e64694bdcece58c6de39fc>
- ❖ TWDB Flood Mapping Resources
 - <https://www.twdb.texas.gov/flood/science/resources.asp>
- ❖ TWDB State Flood Plan
 - <https://www.twdb.texas.gov/flood/planning/sfp/index.asp>
- ❖ TxDOT Hydraulic Manual
 - https://onlinemanuals.txdot.gov/TxDOTOnlineManuals/txdotmanuals/hyd/manual_notice.htm
- ❖ TxDOT Project Tracker
 - <https://www.txdot.gov/projects/project-tracker.html>
- ❖ Participate in and adopt by resolution Watershed Protection Plans (WPP)
- ❖ Work with SWCDs to implement soil, stream, and flood protection measures

Funding for the integrating Transportation and Stormwater Infrastructure (TSI) study is provided by the Texas General Land Office (GLO), the Texas Water Development Board (TWDB), Texas Department of Transportation (TxDOT), Federal Emergency Management Agency (FEMA), and U.S. Army Corps of Engineers.

