

# Transportation, Growth, and Planning

**Isaac Gonzalez, Transportation Consultant**



**Water Wonks | 6/26/2024**



# Agenda

**Growth in the Region**

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**Regional Planning**

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**Tying in Water Conservation**

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**Discussion**

**30**

**Save the World???**

**?**

The image features a light cream background with several abstract, thick, rounded lines. A green line starts from the left edge, curves down, then right, and then up. A blue line starts from the bottom edge, curves up, then left, and then down. A red line starts from the top edge, curves left, then down, and then left. An orange circle is positioned on the left side. Two small black dots are placed on the green line: one at its upper curve and one at its rightward extension. The text 'Regional Growth' is centered in the middle of the image.

# Regional Growth



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# Population Be Growing

## Population Growth of Texas Counties (%) <sup>1</sup>

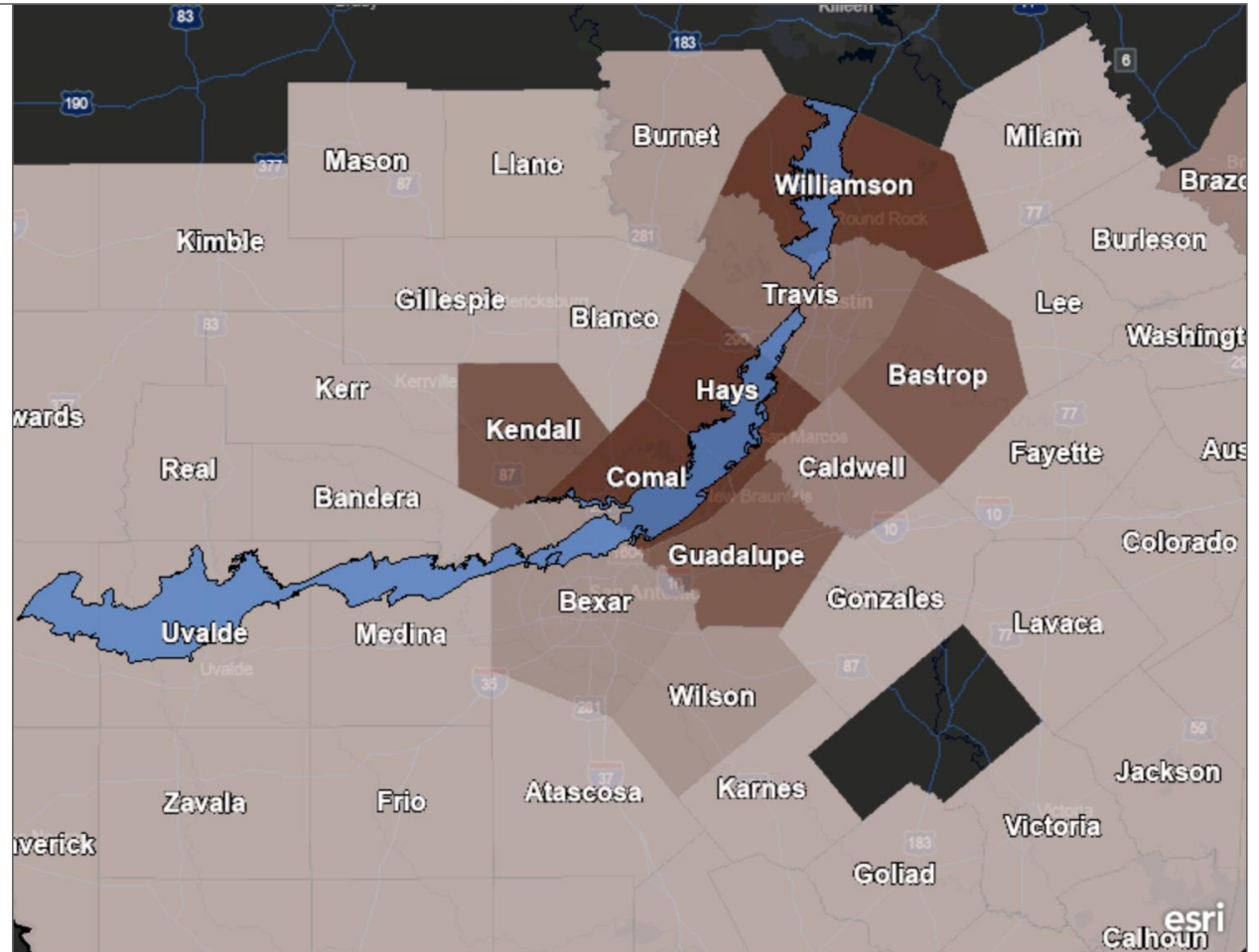
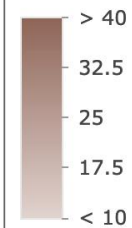
Edwards Aquifer Recharge Zone



Texas Counties



Population Growth as a Percentage (2010 - 2020)



Source: 2020 and 2010 U.S. Census

Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

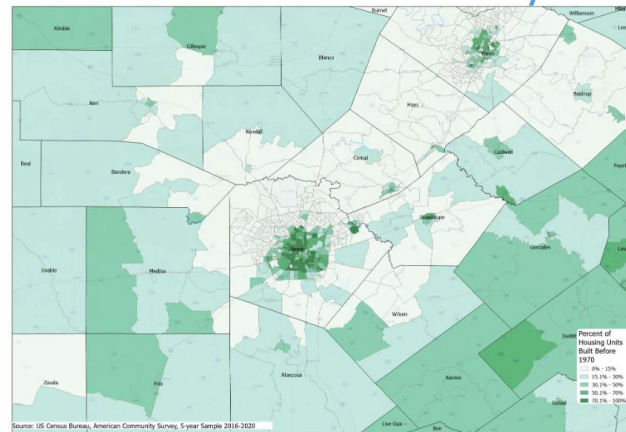


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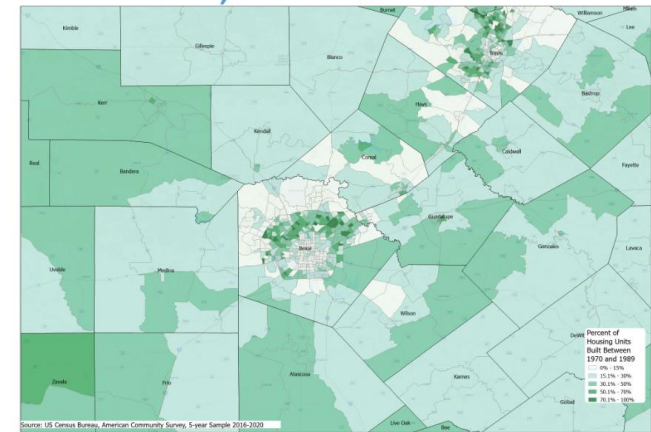
# Housing Too

## Estimated Percent of Housing Built by Time Period <sup>1</sup>

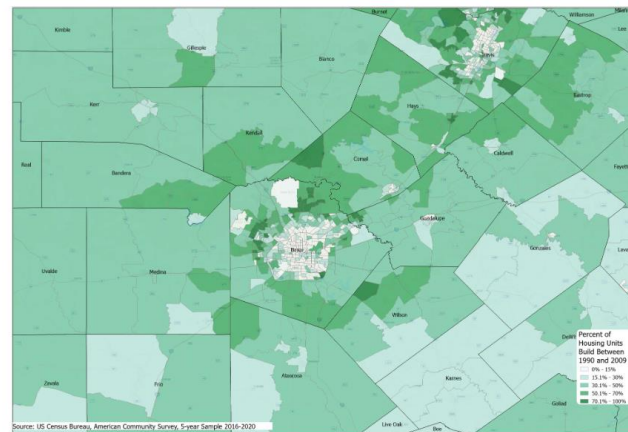
Before 1970



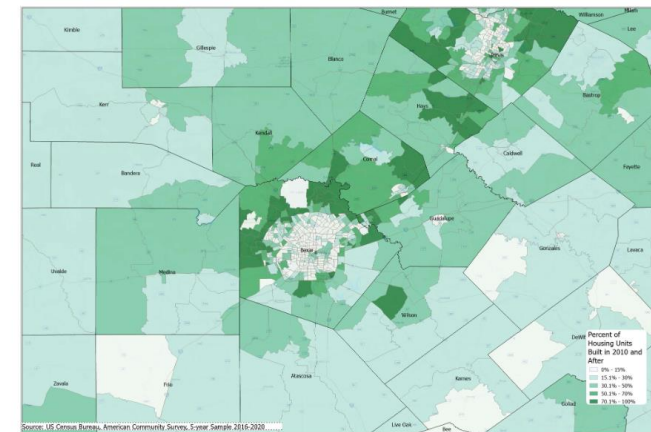
1970-1989



1990-2009



2010 and after



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Source: Dr. Helen Yu Presentation to Joint CAMPO-AAMPO Meeting, June 2023

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# Population Will Continue Growing <sup>1</sup>

County	2020	2040	2020-2040 (%)	2060	2020-2060 (%)
Bexar	2,009,324	2,599,727	29%	3,102,720	54%
Comal	161,501	315,640	95%	584,380	262%
Guadalupe	172,706	268,305	55%	387,211	124%
Kendall	44,279	70,896	60%	111,448	152%
Bastrop	97,216	150,018	54%	223,711	130%
Caldwell	45,883	61,689	34%	76,291	66%
Guadalupe	172,706	268,305	55%	387,211	124%
Hays	241,067	513,812	113%	1,003,130	316%
Travis	1,290,188	1,820,417	41%	2,252,137	75%
Williamson	609,017	1,065,394	75%	1,682,556	176%

Source: Texas Demographics Center, 2022 Population Projections

The image features a light cream background with several abstract graphic elements. A thick green line enters from the left, curves downwards, and then continues horizontally across the bottom. A thick blue line enters from the bottom, curves upwards, and then continues horizontally across the top. A thick red line enters from the top right and curves downwards. A solid orange circle is positioned on the left side. Two small black dots are placed on the green line: one at its upper curve and one at its right end. The text 'Regional Planning' is centered in a bold, black, sans-serif font.

# Regional Planning



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## **State and Local Agencies Plan**

- **Long-Range Transportation Plans (LRTP) have projects that TxDOT/Local Governments want to do between five and 20 years from now.**
- **Short-Range Transportation Implementation Program (STIP) have TxDOT/Local Government projects that will be ready for construction within four (4) years.**





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## **Locals Have to Have a Voice**

- **Federal law mandates all urbanized areas with over 50,000 people to have a Metropolitan Planning Organization (MPO).<sup>2</sup> We've got the Alamo Area and Capital Area MPOs (AAMPO and CAMPO).**
- **The MPOs are tasked with developing the regional LRTP and STIP and approving all projects that take place in the region *if federal dollars are involved.***

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# Federal Dollars Are Everywhere <sup>3</sup>

<b>TxDOT Funding Category</b>	<b>State Dollars?</b>	<b>Federal Dollars?</b>
<b>1. Preventative Maintenance and Rehabilitation</b>	<b>Yes</b>	<b>Yes</b>
<b>2. Metro and Urban Area Corridors</b>	<b>Yes</b>	<b>Yes</b>
<b>3. Non-Traditionally Funded Projects</b>	<b>Yes</b>	<b>No</b>
<b>4. Statewide Connectivity Corridors</b>	<b>Yes</b>	<b>Yes</b>
<b>5. Congestion Mitigation and Air Quality (CMAQ)</b>	<b>No</b>	<b>Yes</b>
<b>6. Structure Replacement (Bridges)</b>	<b>Yes</b>	<b>Yes</b>
<b>7. Metro Mobility and Rehabilitation</b>	<b>No</b>	<b>Yes</b>
<b>8. Safety</b>	<b>Yes</b>	<b>Yes</b>
<b>9. Transportation Alternatives (TA)</b>	<b>No</b>	<b>Yes</b>
<b>10. Supplemental Transportation Projects</b>	<b>Yes</b>	<b>Yes</b>
<b>11. District Discretionary</b>	<b>Yes</b>	<b>Yes</b>
<b>12. Strategic Priority</b>	<b>Yes</b>	<b>Yes</b>



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## **How Dollars are Distributed**

- **Amount of available funds is known 10 years in advance**
- **Yearly breakdown by funding category can be found in TxDOT's yearly Unified Transportation Program (UTP)**
- **Dollars are further distributed *by MPO***



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# Funding Example (Category 5) <sup>4</sup>

**TABLE 23**  
**CATEGORY 5: CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ)**

DISTRICT/MPO/DIVISION	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	TOTAL
AMA - Amarillo MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ATL - Texarkana MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AUS - CAMPO MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BMT - SETRPC MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BRY - Bryan-College Station MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CRP - Corpus Christi MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DAL/FTW/PAR - NCTCOG MPO	\$ 102,188,978	\$ 104,232,890	\$ 106,317,681	\$ 102,229,058	\$ 102,229,058	\$ 102,229,058	\$ 102,229,058	\$ 102,229,058	\$ 102,229,058	\$ 102,229,058	\$ 1,028,342,951
ELP - El Paso MPO	\$ 9,780,145	\$ 9,975,761	\$ 10,175,289	\$ 9,783,981	\$ 9,783,981	\$ 9,783,981	\$ 9,783,981	\$ 9,783,981	\$ 9,783,981	\$ 9,783,981	\$ 98,419,063
HOU/BMT - HGAC MPO	\$ 96,151,021	\$ 98,074,167	\$ 100,035,775	\$ 96,188,733	\$ 96,188,733	\$ 96,188,733	\$ 96,188,733	\$ 96,188,733	\$ 96,188,733	\$ 96,188,733	\$ 967,582,095
LBB - Lubbock MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
LRD - Laredo Webb County Area MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ODA - Permian Basin MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PAR - Grayson County MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PHR - Rio Grande Valley MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SAT - AAMPO	\$ 22,701,232	\$ 23,155,286	\$ 23,618,422	\$ 22,710,136	\$ 22,710,136	\$ 22,710,136	\$ 22,710,136	\$ 22,710,136	\$ 22,710,136	\$ 22,710,136	\$ 228,445,891
SJT - San Angelo MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TYL - Longview MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TYL - Tyler MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WAC - Killeen-Temple MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WAC - Waco MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WFS - Wichita Falls MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YKM - Victoria MPO	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 230,821,377</b>	<b>\$ 235,438,104</b>	<b>\$ 240,147,166</b>	<b>\$ 230,911,908</b>	<b>\$ 230,911,908</b>	<b>\$ 230,911,908</b>	<b>\$ 230,911,908</b>	<b>\$ 230,911,908</b>	<b>\$ 230,911,908</b>	<b>\$ 230,911,908</b>	<b>\$ 2,322,790,000</b>

Notes:  
- CMAQ is distributed by population weighted by air quality severity to non-attainment areas. Non attainment areas are designated by EPA. Project selection in non-attainment areas will be coordinated between TxDOT districts and MPOs.  
- These amounts do not include carryover balances or other adjustments made through cashflow, lettings, and program accelerations. To view the program adjustments, please go to <https://www.txdot.gov/business/road-bridge-maintenance/contract-letting/project-letting-dashboards.html> and find the reports under Category Analysis Dashboard.



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# It's A Lot of Monies <sup>4</sup>

<b>Fiscal Year</b>	<b>Amount</b>
<b>2024</b>	<b>\$22,701,232</b>
<b>2025</b>	<b>\$23,155,286</b>
<b>2026</b>	<b>\$23,618,422</b>
<b>2027</b>	<b>\$22,710,136</b>
<b>2028</b>	<b>\$22,710,136</b>
<b>2029</b>	<b>\$22,710,136</b>
<b>2030</b>	<b>\$22,710,136</b>
<b>2031</b>	<b>\$22,710,136</b>
<b>2032</b>	<b>\$22,710,136</b>
<b>2033</b>	<b>\$22,710,136</b>



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## **Here's the Kicker**

**Hundreds of millions of dollars are not claimed by any projects yet.**

The background features several thick, rounded lines in green, blue, and red. A green line starts from the left, curves down, and then continues horizontally. A blue line starts from the bottom, curves up, and then continues horizontally. A red line starts from the top right and curves down. There are two black dots: one on the green line and one on the blue line. An orange circle is positioned on the left side of the image.

# Tying in Water Conservation



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## **Four Key Funding Categories**

- **Category 5 (CMAQ)**
- **Category 7 (Surface Transportation Block Grants (STBG))**
- **Category 9 (Transportation Alternatives (TA))**
- **Category 10 (Carbon Reduction Program (CRP))**





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## **CMAQ Has to Reduce Ozone <sup>5</sup>**

- **Eligible Projects include:**
  - **Bicycle and Pedestrian Facilities**
  - **Engine Retrofits**
  - **Traffic Management Programs**
- **Can only be used in Bexar County**



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## **Lots of Flexibility**

- **VIA's Electric Buses and Diesel Engine Retrofits**
- **TxDOT Adding Turnaround Lanes**
- **CoSA Traffic Signal Optimization**





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## **What Else Could I Use It On?**

- **Travel Demand Management Programs (Reducing Trip Generation and Parking Needs)**
- **Public Education and Outreach Programs**
- **Inspections and Maintenance Programs**



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## **STBG Can Be Used on Anything\*<sup>6</sup>**

- **Eligible Projects include:**
  - **Anything that happens on a road or trail.**



**\*That happens on a road or trail.**



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## The Most Flexibility

- **TxDOT's Drainage Tunnel and Pump System in Austin**
- **Hays County relocating a Union Pacific Rail Siding**
- **Converse Expanding Lanes on Toepperwein Road**





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## **What Else Could I Use It On?**

- **Stormwater Mitigation**
- **Rail of Any Sort**
- **Surface Transportation Planning (Land Use Plans, Complete Streets Guidelines, Resiliency Studies)**
- **Nonmotorized-Transportation Activities, including Recreational Trails**



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## **TA Can Only Be Used on Alternatives <sup>7</sup>**

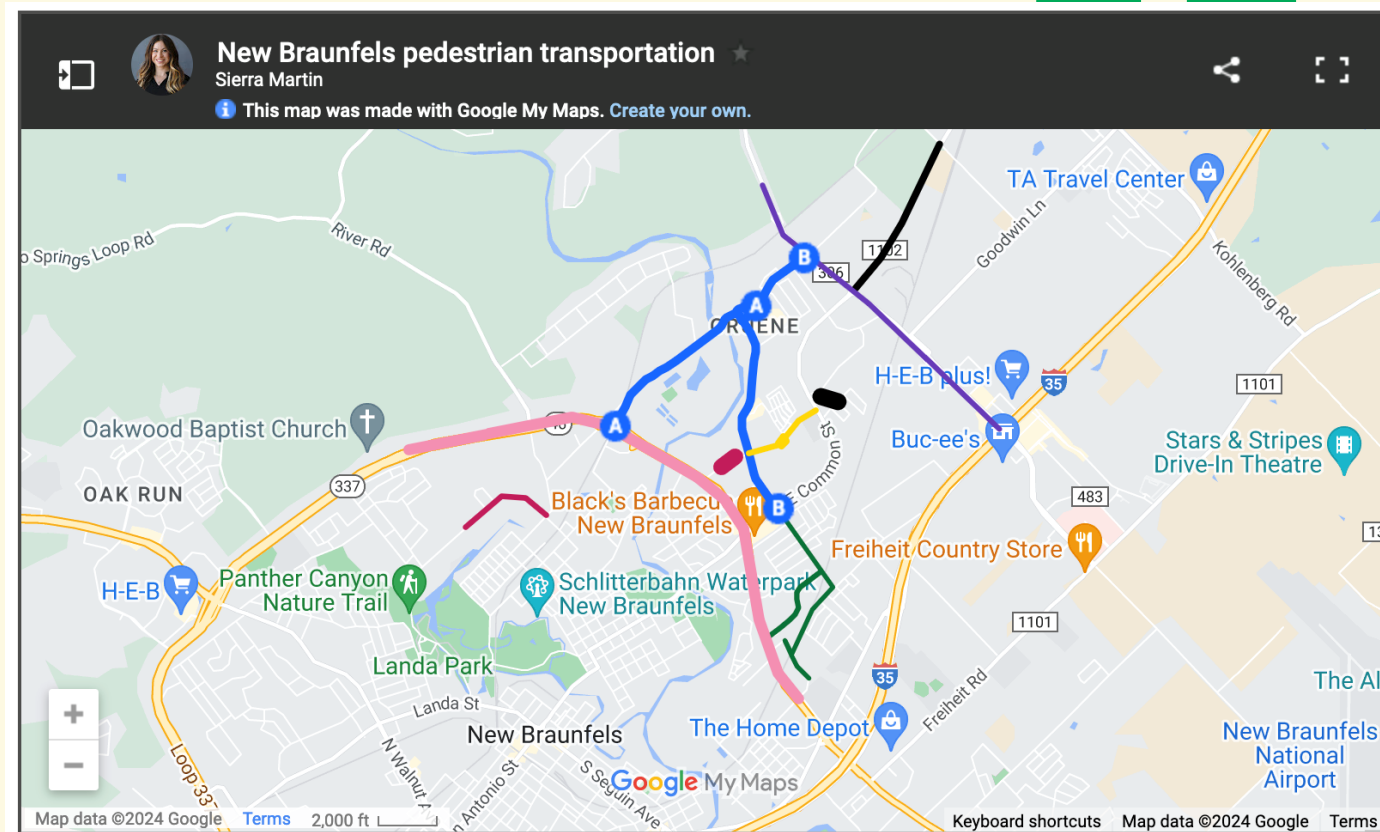
- **Eligible Projects include:**
  - **Bicycle and Pedestrian Facilities**
  - **Recreational Trails**
  - **Safe Routes to School**
- **Nothing Car Related**



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## Also Has Lots of Flexibility

- **New Braunfels Complete Streets in Gruene Historic District**
- **Brooks 7.5 Mile Green Loop Trail**
- **UTSA Shared-Use Paths Around 1604**



Source: Sierra Martin, *Community Impact*<sup>8</sup>





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## **What Else Could I Use It On?**

- **Stormwater Mitigation**
- **Rails to Trails**
- **Historic Preservation and Rehabilitation of Historic Transportation Facilities**
- **Wildlife/Vegetation Management**
- **Safe Routes for Non-Drivers**



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## **CRP Have to Reduce Carbon <sup>9</sup>**

- **Eligible Projects include:**
  - **Anything that reduces transportation emissions.**

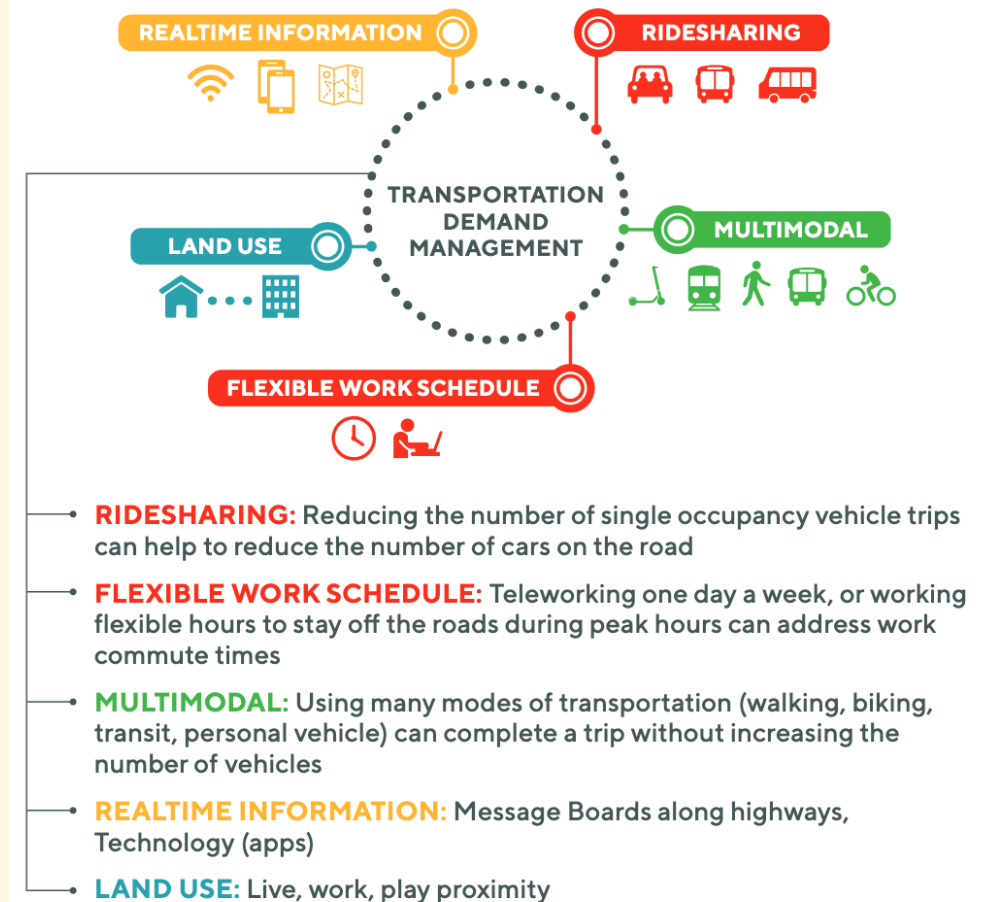




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## Has Tons of Flexibility

- **CAMPO's Travel Demand Management Plan**
- **TxDOT "Green-T" Intersection at SH 46**
- **New Braunfels Pedestrian and Drainage Improvements on Solms Road**



Source: CAMPO TDM Plan <sup>10</sup>



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## **What Else Could I Use It On?**

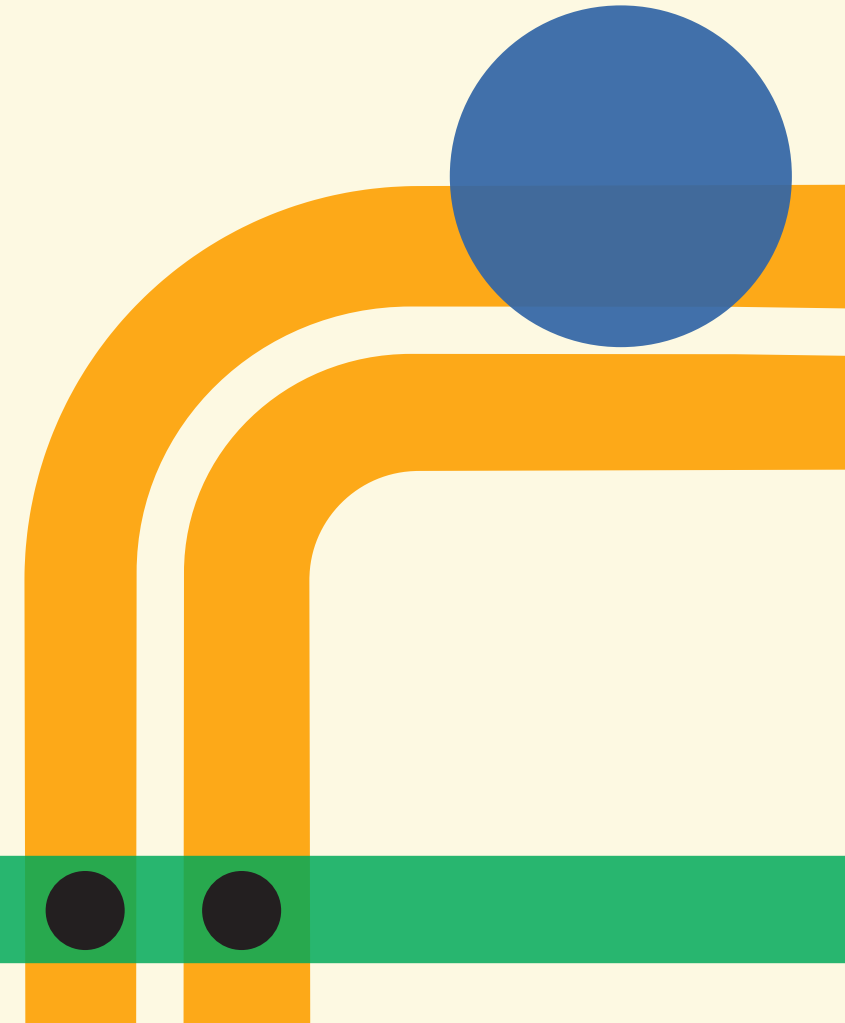
- **Congestion Pricing Program**
- **Project that Supports Alternative Fuels (EV, Hydrogen)**
- **Construction, Planning, and Design of Off-Road Pedestrian Facilities**
- **Public Transportation Project**



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## **Non-Profits Can Get In On The Action**

- **Non-Profits and Public Entities can partner with local governments on projects**
  - **Brooks Development Authority**
  - **UTSA**
  - **Great Springs Project**



The background features abstract, thick, rounded lines in red and orange. A vertical orange line runs down the left side, intersecting two horizontal red lines. To the right, a vertical red line runs down, with a small black dot on it. At the bottom right, there is a large green circle. The overall style is modern and minimalist.

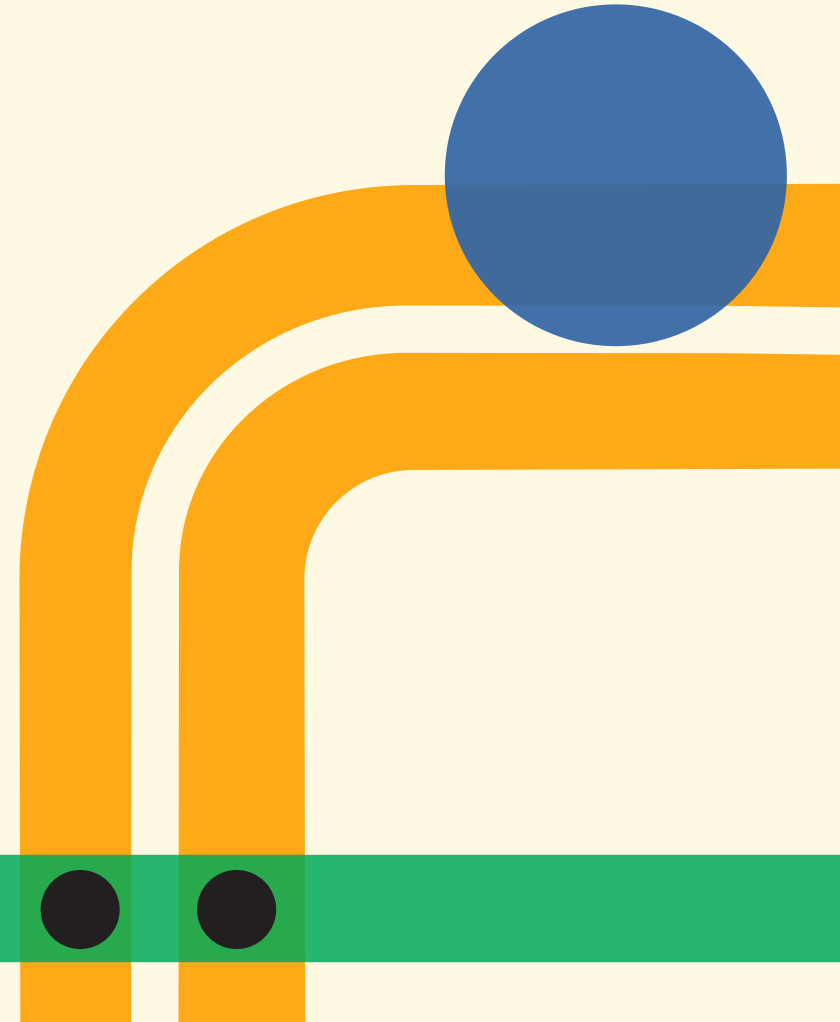
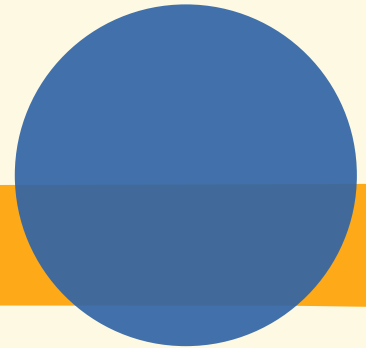
# Thank You!

**Isaac Gonzalez**

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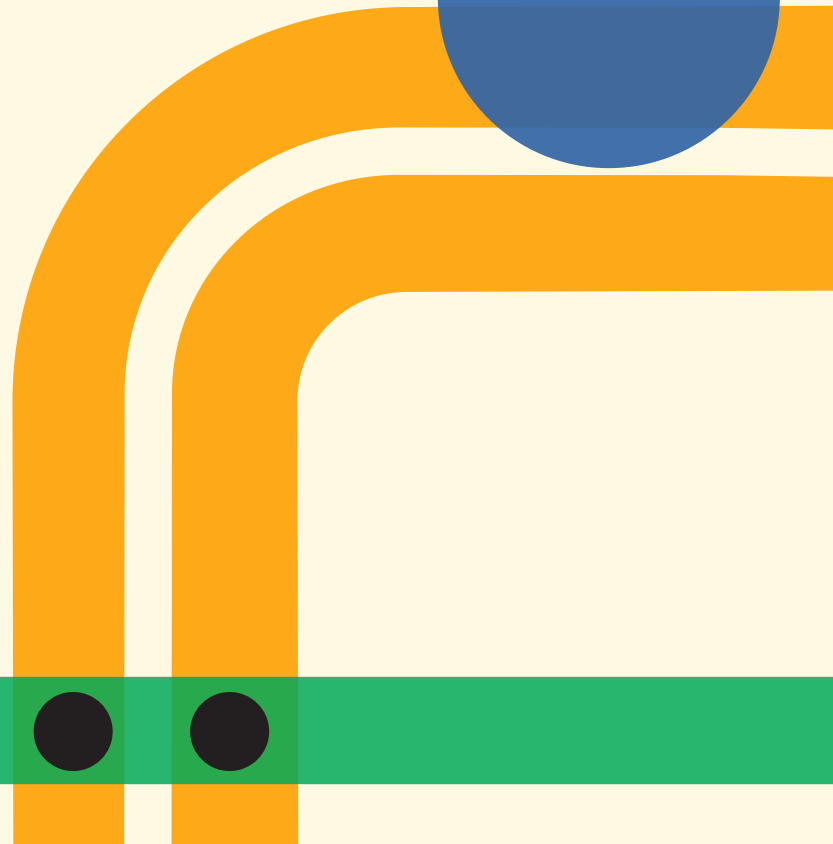
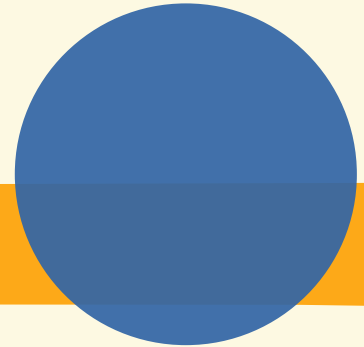


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3. **TxDOT. *Funding Categories Description.* 10 June 2024,**  
<https://ftp.txdot.gov/pub/txdot/get-involved/tpp/utp/061024-utp-funding-categories-descriptions.pdf>.





4. **TxDOT. *2024 Unified Transportation Program, Page 201.* 7 July 2023, <https://ftp.txdot.gov/pub/txdot/get-involved/tpp/utp/070723-draft-2024utp.pdf>.**
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10. **CAMPO.** *Regional Transportation Demand Plan.* Aug. 2019, <https://www.campotexas.org/wp-content/uploads/2019/09/FINAL-Regional-TDM-Plan.pdf>.

