Transit and the Environment in Central Texas

Texas Association of Environmental Professiona

July 8, 2009

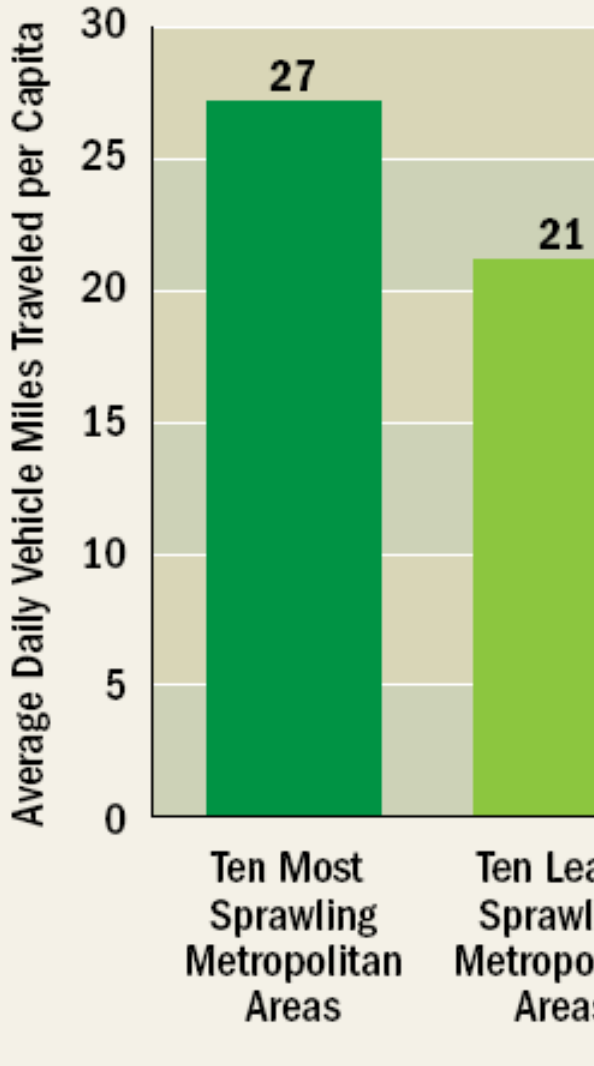
Presentation Overview

- Why Transit
- Transit and the Environment
- The Local Context
- Capital Metro Initiatives Update
- Questions / Discussion

What's the issue?

Vhat are the most important issues to ddress to ensure a positive future for entral Texas?

ransportation/Congestion	*66.6%*
and Use	*34.1%*
ost of Living	*30.9%*
Vater Availability	*28.2%*
ir Quality	*27.8%*

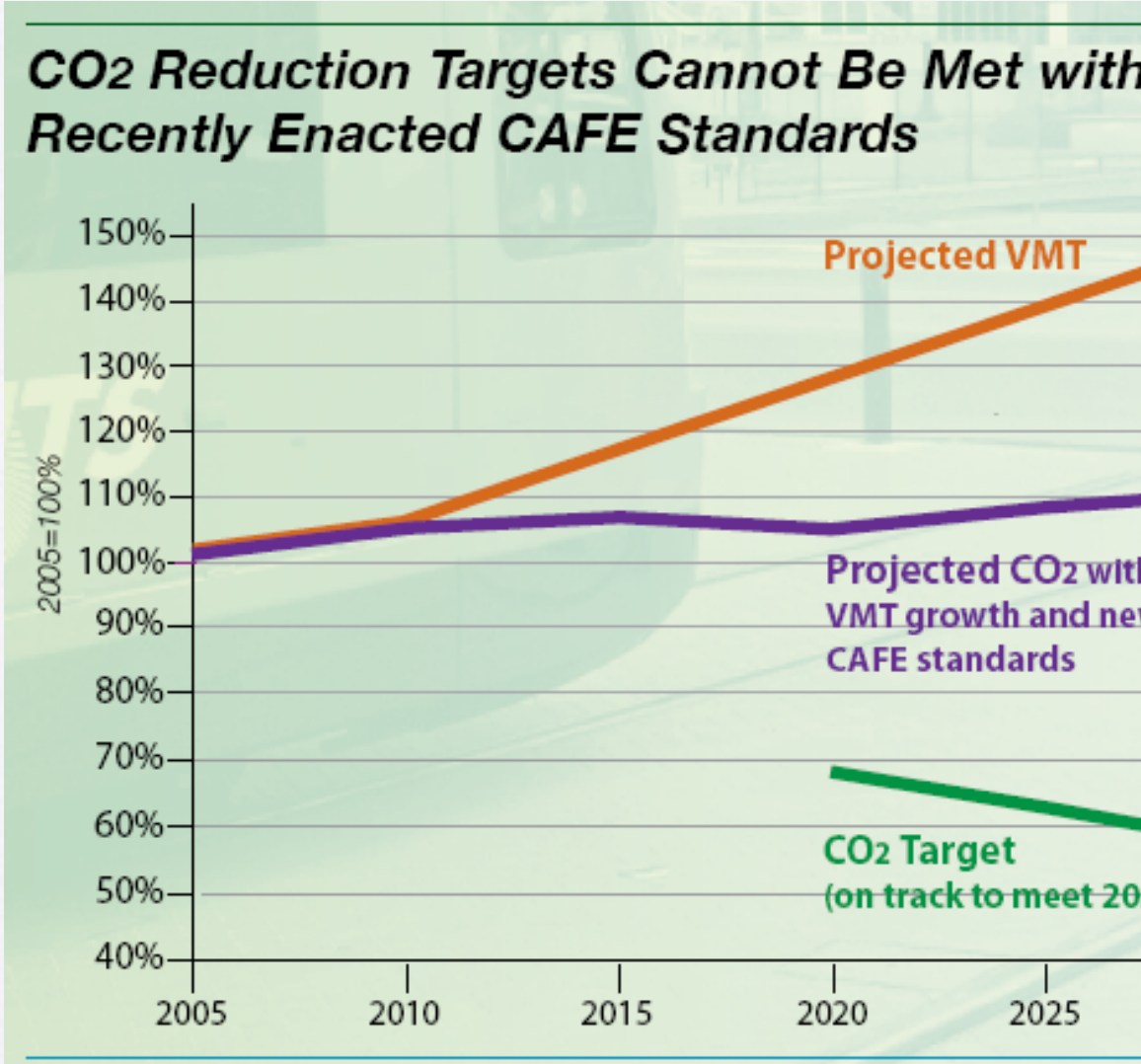


OURCE: ECT online survey of Central Texas residents, 2008

The Environmental Challenge

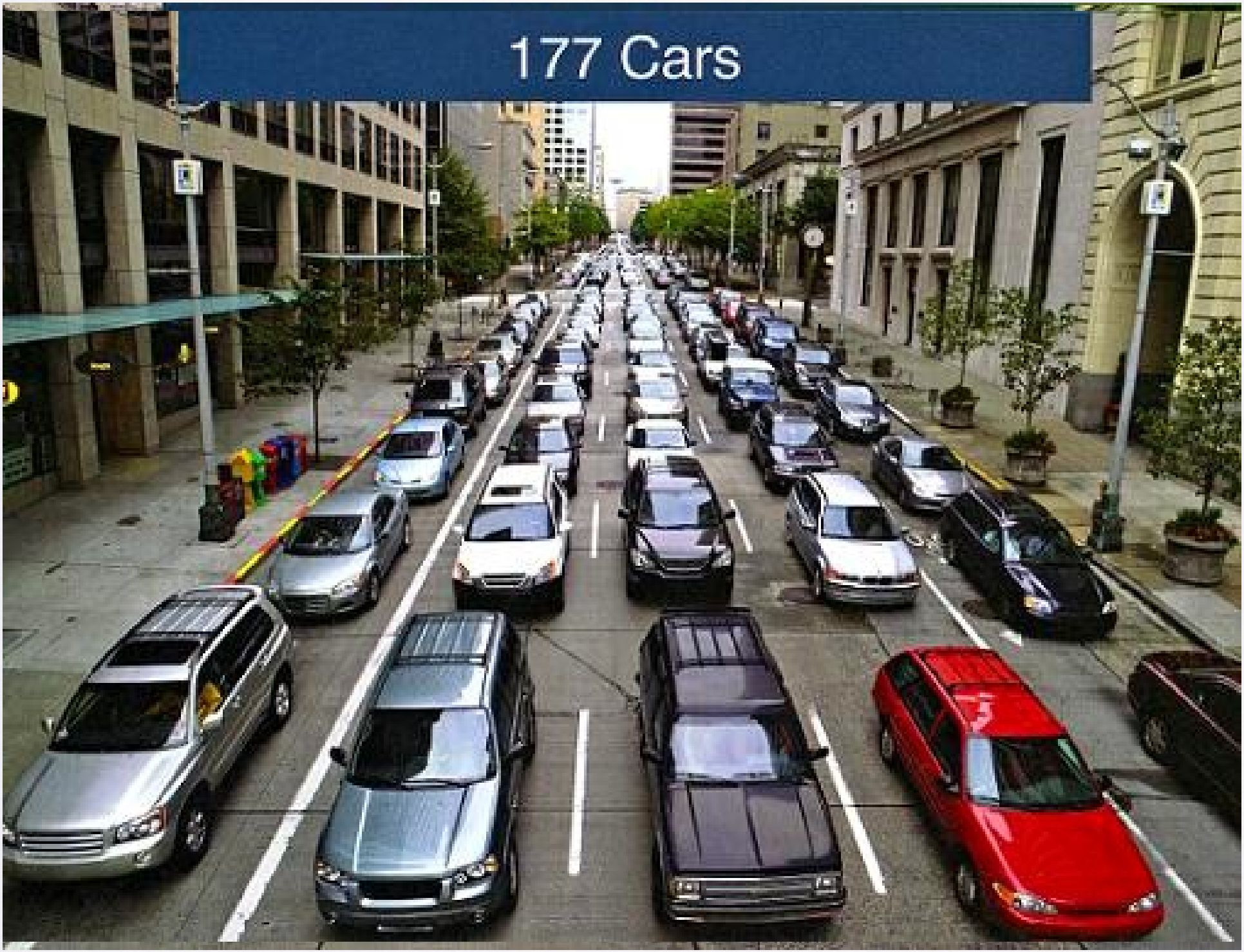
The transportation sector produces one-third of all greenhouse gas emissions in the U.S.

Transportation GHG emissions have increased more than 25% since 1990, representing almost half of the total increase over that period.



Projected emissions from cars and light trucks assuming newly a nationwide vehicle and fuel standards and current projected VM
Source: Growing Cooler Report [2]

Why Transit?



Auto Externalities

- On top of the cost of the actual road, drivers impose costs on other motorists, pedestrians, and society as a whole.
  - Carbon emissions from driving impose an annual cost of about $20 billion on society
  - Costs from congestion total nearly $80 billion per year in lost time and wasted fuel
  - The annual cost of automobile crashes (which claim nearly 40,000 lives per year) is around $220 billion

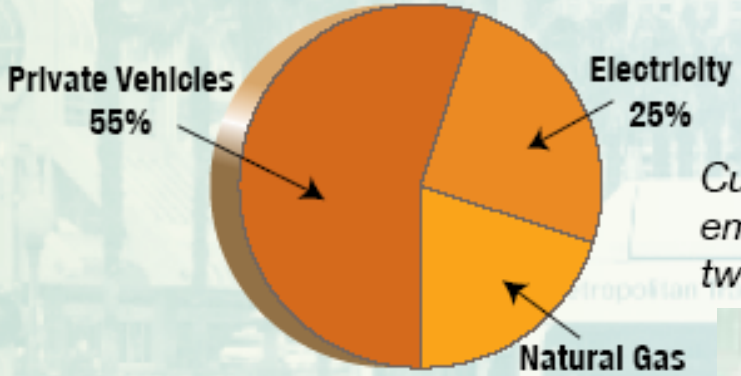
Roads Alone = No Solutio

- Federal Highway Administration Study: Federal gasoline tax revenues cover barely half of the annual agency budget

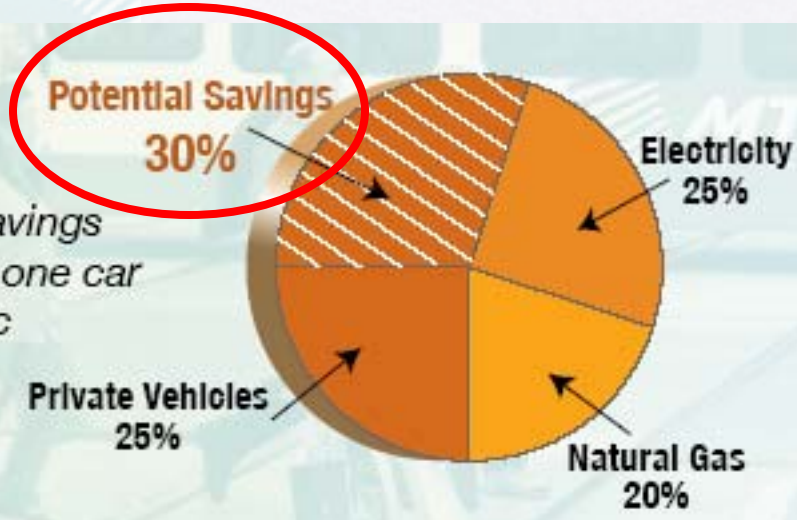
- Texas Department of Transportation Study: Most roads don't come close to paying for themselves. In one typical road analysis, it was determined that a real gas tax rate of $2.22 per gallon would be necessary simply to break even. **No stretch of road in the whole of the state covered its costs**.

Transit- A Green Solution

The Private Vehicle is the Largest Contributor to a Household's Carbon Footprint—Using Public Transportation Reduces Household Carbon Emissions



Current household emissions in typical two-car household



Potential 30% savings from eliminating one car and taking public transportation

Source: Public Transportation's Contribution to U.S. Greenhouse G

Public transportation *with its overarching*

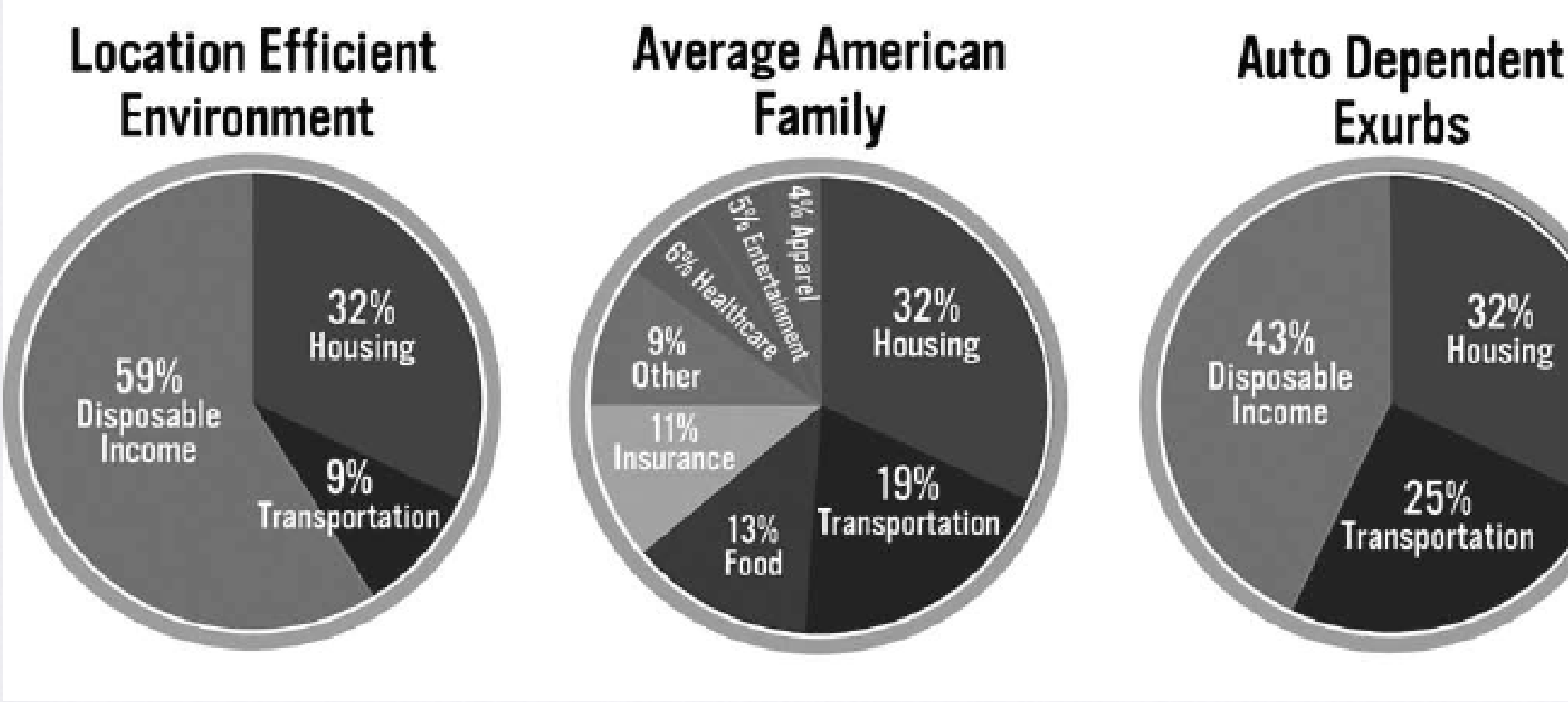
Transit and the Environment

- 4,400 fewer miles driven annually by households in transit-rich areas
- 4.2 billion gallons of gas saved due to "leverage effect" of public transportation
- **Public transportation is the single most effective way an individual can reduce his/her carbon footprint**

Think of trans as a 'climate protection service'

NYC Transit Sustainabil Officer

Transit Supports Sustainability

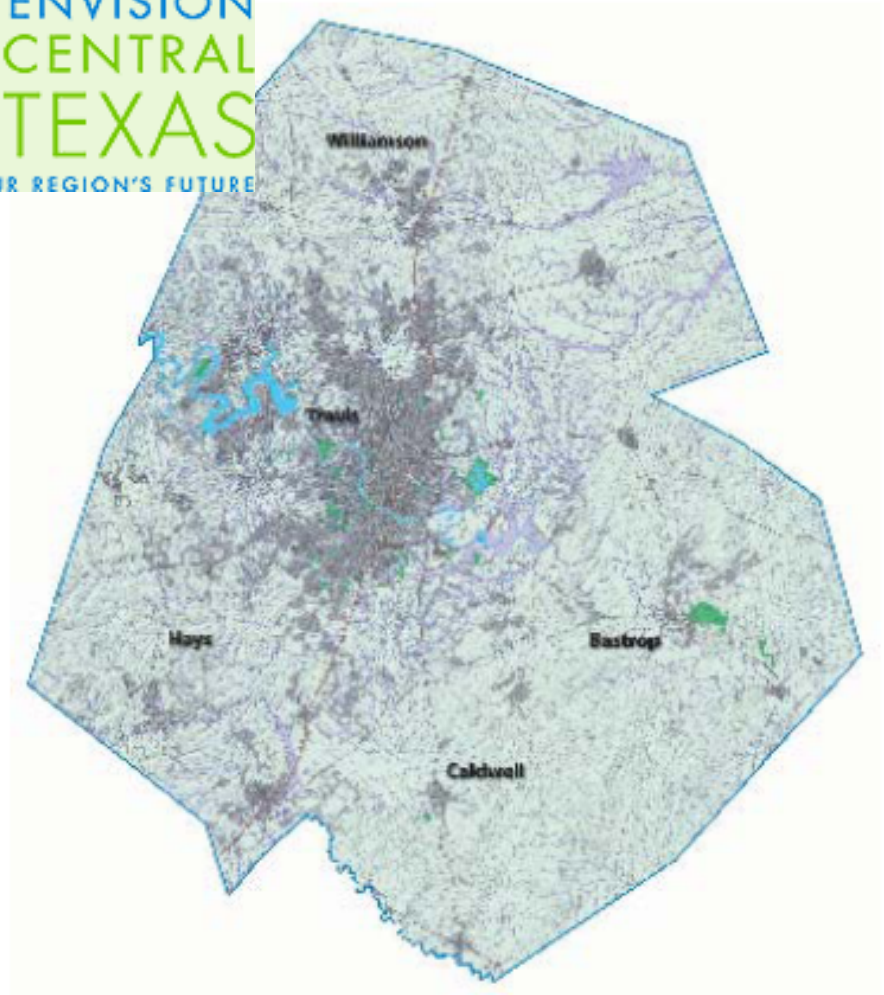


A household in a transit rich neighborhood can expect to spend 16 percent less on transportation costs than a family in an auto dependent suburb.

The Local Context

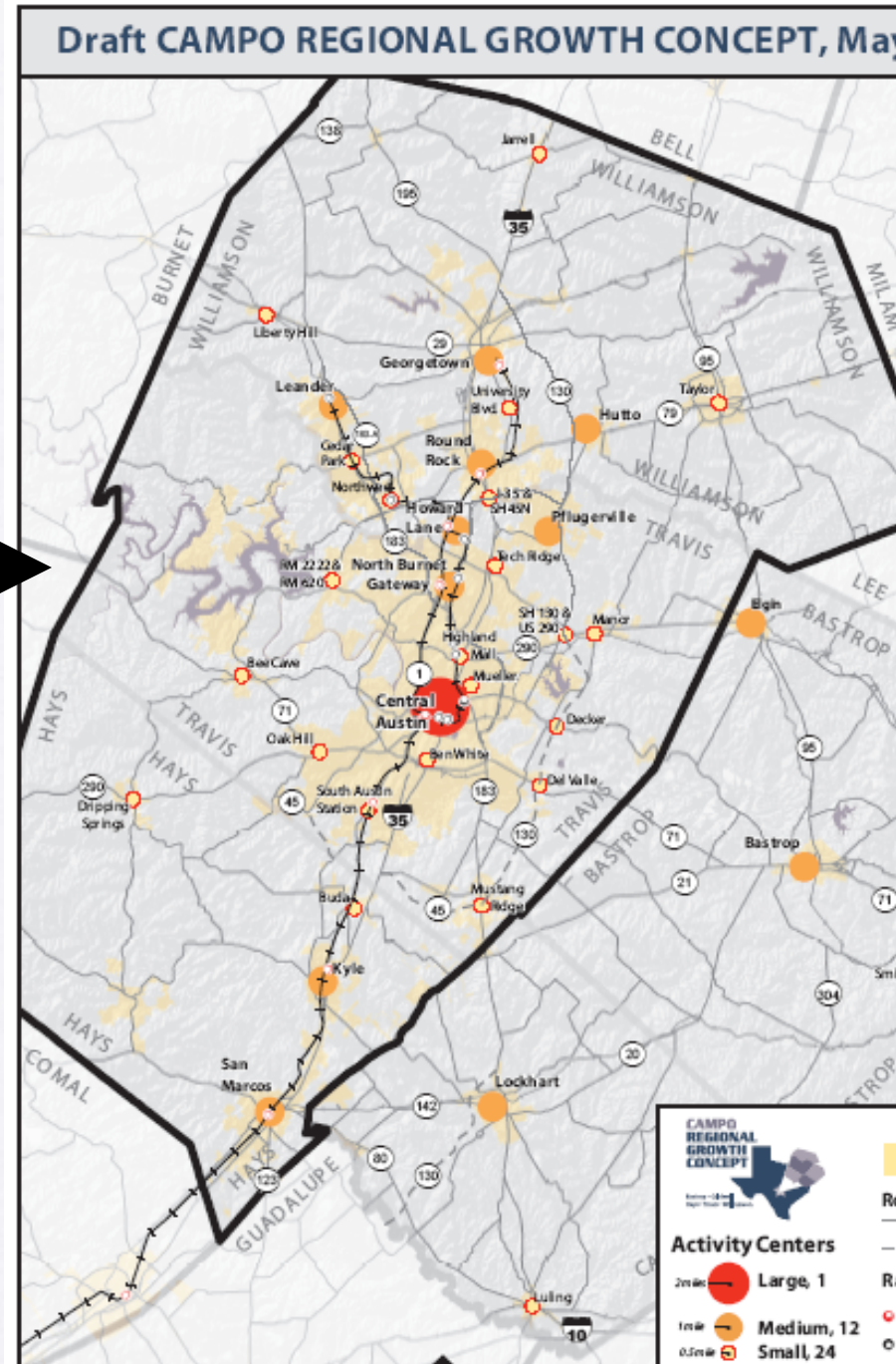
Five-County Central Texas Region

ENVISION CENTRAL TEXAS
OUR REGION'S FUTURE



Key Elements of the Vision

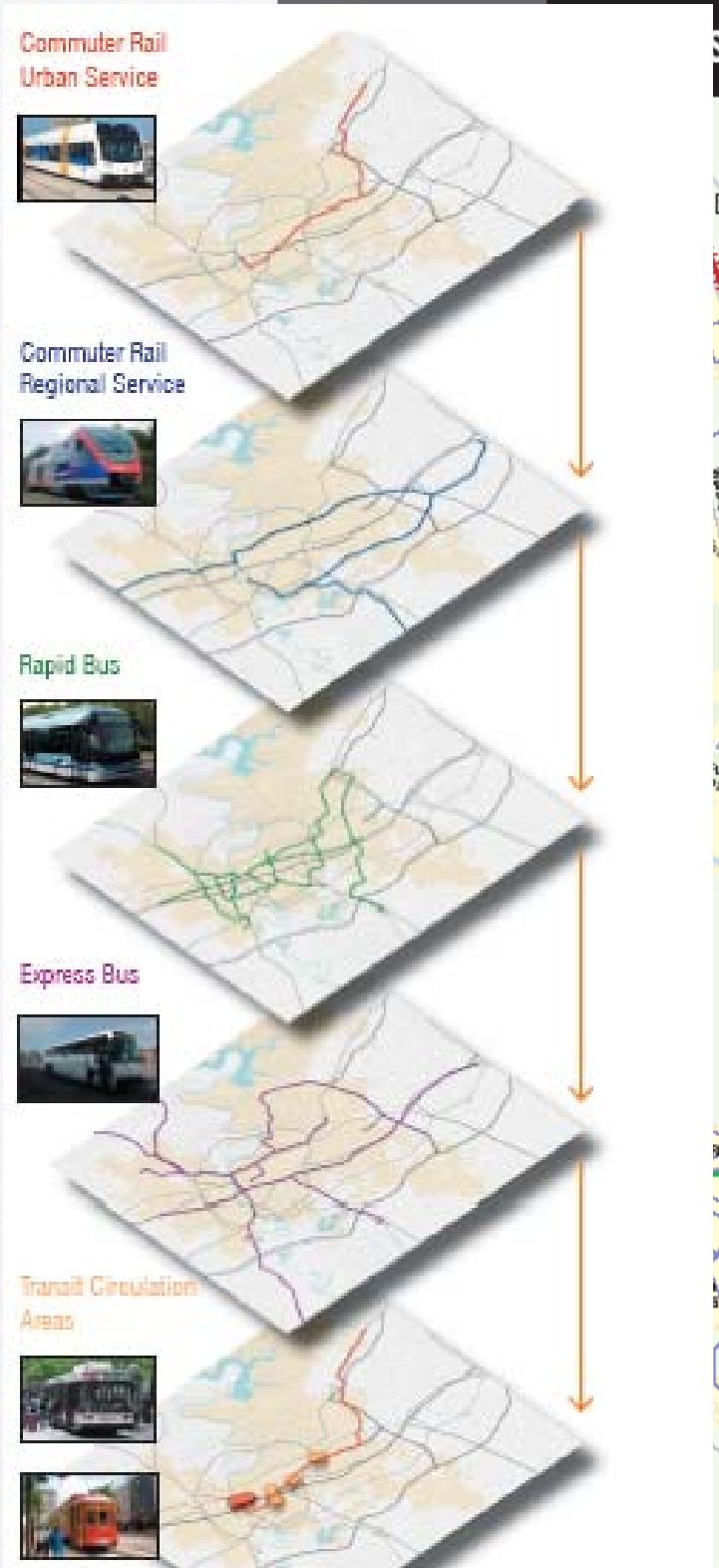
- An effective **transportation system** that improves mobility throughout the region, increases transportation choices, including roads, rail, trails and bikeways, and is



Capital Metro Initiatives

All Systems Go Plan

- Layers of Service
  - Regional Rail
  - Urban Rail
  - Rapid Bus / BRT
  - Express Bus
  - Activity Center Circulator
  - Local Bus
  - Rideshare



Capital Me
Red Line (A
Leander)

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Red Line (A
Manor-Elgi

Capital Me
Yellow Line
(MOKAN)

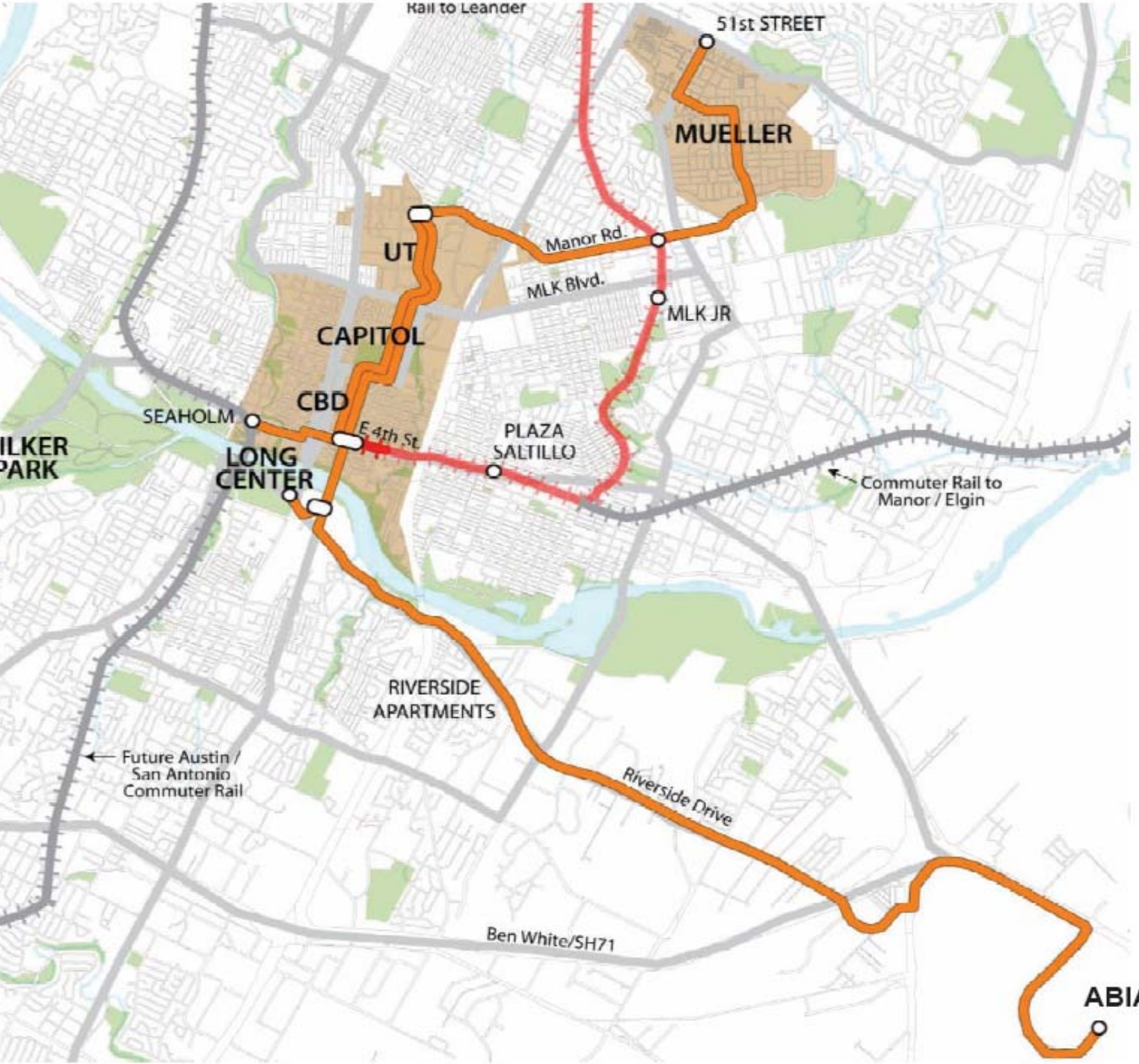
ASAICRD Li
(Austin-San
Antonio)

Potential Re
Extension to
Rock

Capital MetroRail Red Line

- 32 miles, 9 stations
- 6 trains with capacity for up to 200 passengers
- Weekday peak period service to start
- Coordinated Connector bus service at MLK and Downtown stations
- Service opening date later this year
- Service expansion expected

Urban R



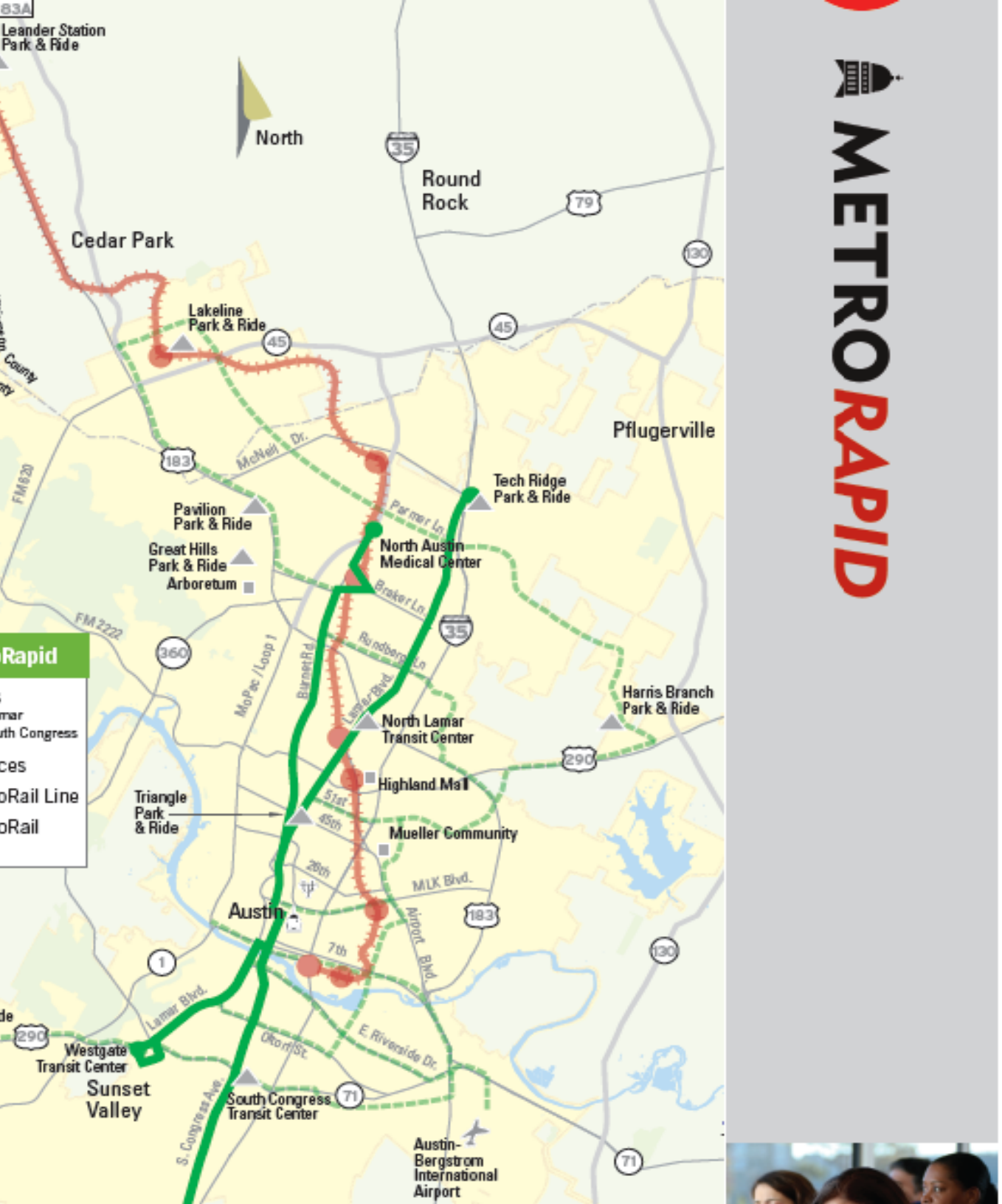
PROPOSED RAIL PROJEC

- 15.3-mile streetcar system
- mostly dedicated-running
- 700 foot extension of Re Line to Brazos

2 OVERLAPPING ROUTES

- Seaholm-Mueller: 6.7 m *(10 minute headways)*
- ABIA-UT: 9.9 miles *(10 minute headways)*

Cap MetroRa



- North Lamar – S Congress
- Burnet – South L

- 10 lines in All Sy Go Plan
- To be revisited of Comprehensi Operational An and All Systems update

Summary

- Environmental and sustainability issues are essential parts of success of Central Texas
- Transportation issues are a major determinant of environmen sustainability
- Transportation issues are inseparable from land use
- Public Transportation must be a major component of a viable and sustainable transportation and land use system

Thanks!

- Todd Hemingson, AICP
- VP Strategic Planning & Development
- Capital Metro

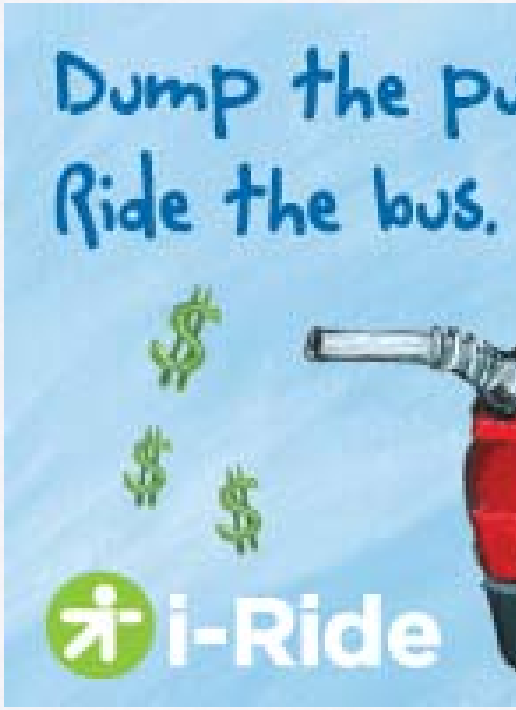
Where We Are

- Three hybrid buses
- Greenride Rideshare Program- 14 Toyota Prius hybrids in fleet
- Entire fleet on ULSD
- NOX-reducing fuel additive in use
- Re-powering almost 100 buses
- Diesel-electric DMUs for new Capital MetroRail service

Where We Are

- Lighting upgrades
- Closed loop systems- parts washing, solvents, coolants
- Recycling- oil, metal, others
- Efficient systems- HVAC, fueling, cleaning, etc.
- LEED standards for future facilities

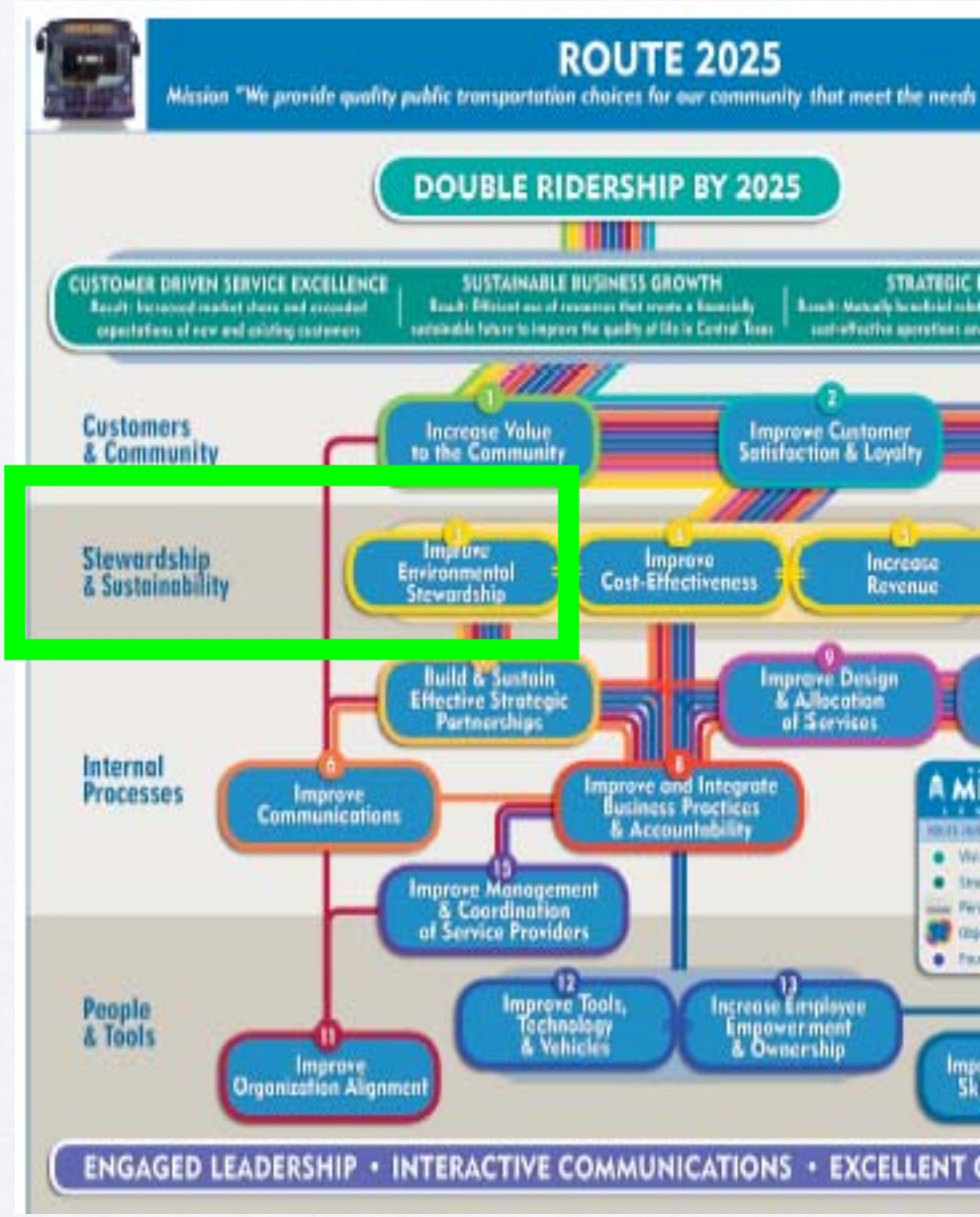
Where We Are



- Active partners with numerous environmental agencies & groups
- Creative green marketing efforts

Where We're Going

- Guiding Light: Balanced Scorecard – "Route 2025"
- Learn from others
- Engage local experts
- Develop the plan
- Promote our efforts
- Implement and



North Lamar – South Congress:

- Unique new station/stops at 21 locations per direction over 21 miles
- Up to 20% faster travel time
- Daily ridership potential of 4,000 - 5,000 in first year
- Service operational by 2012

Burnet – South Lamar:

- Improved station/stops at 18 locations per direction over 16.5 miles
- Up to 20% faster travel time
- Daily ridership potential of 2,000 -2,500 in first year
- Service operational by 2013