

# **SAN ANTONIO BIKES**



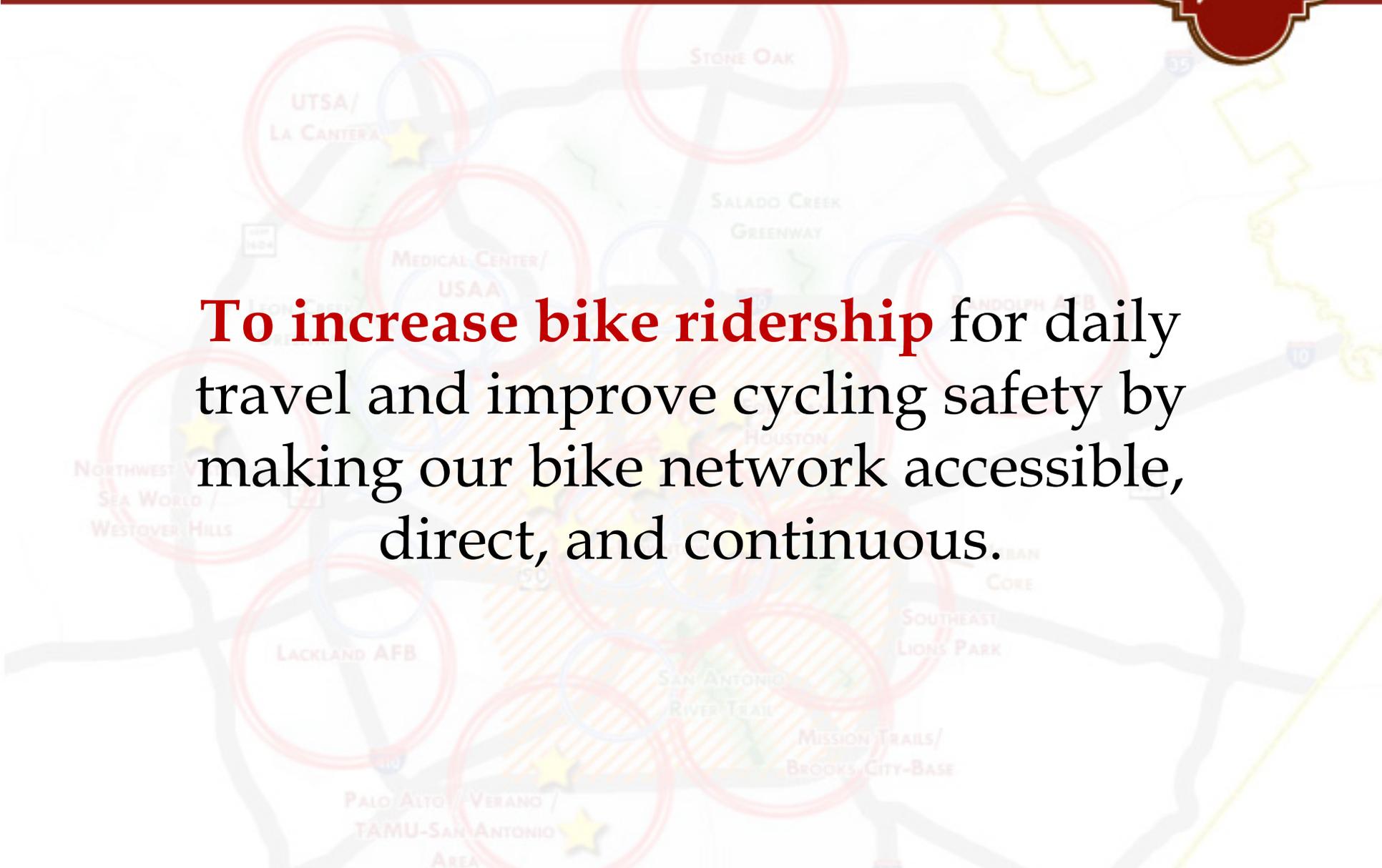
**Office of Sustainability**



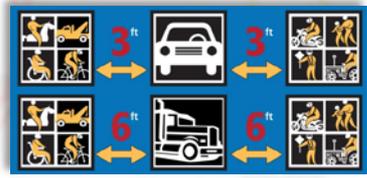
# Our Goal



**To increase bike ridership** for daily travel and improve cycling safety by making our bike network accessible, direct, and continuous.



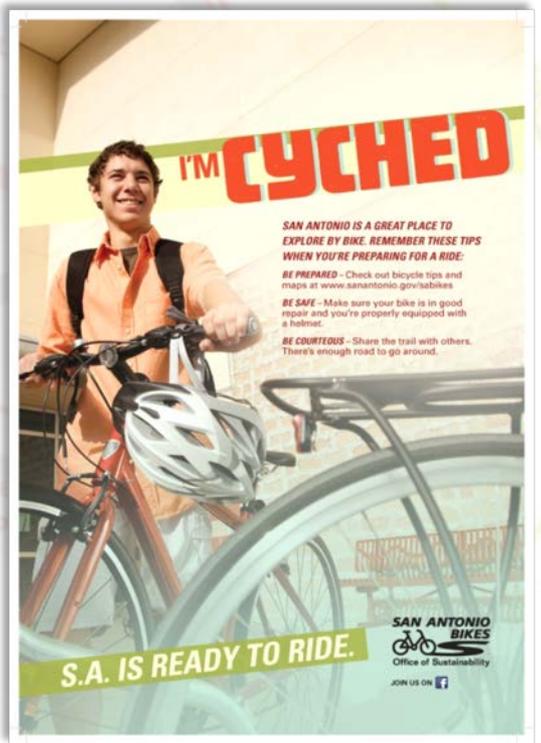
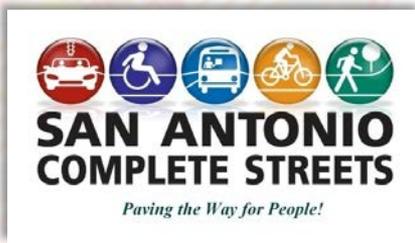
# Progress



## New Policies



## New Plans

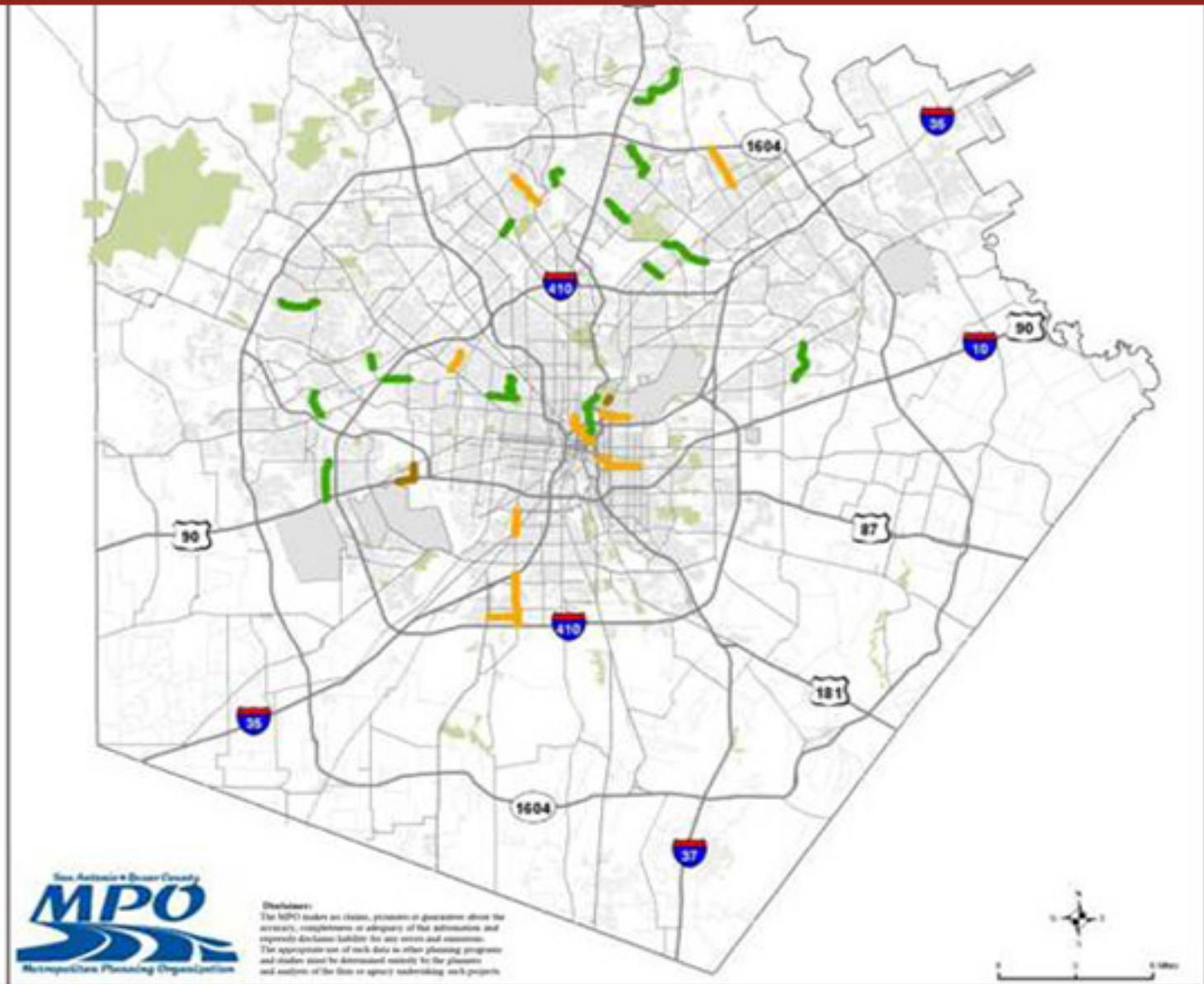


## New Features



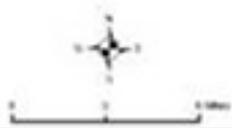
## New Attitude

# The Ugly: 2000

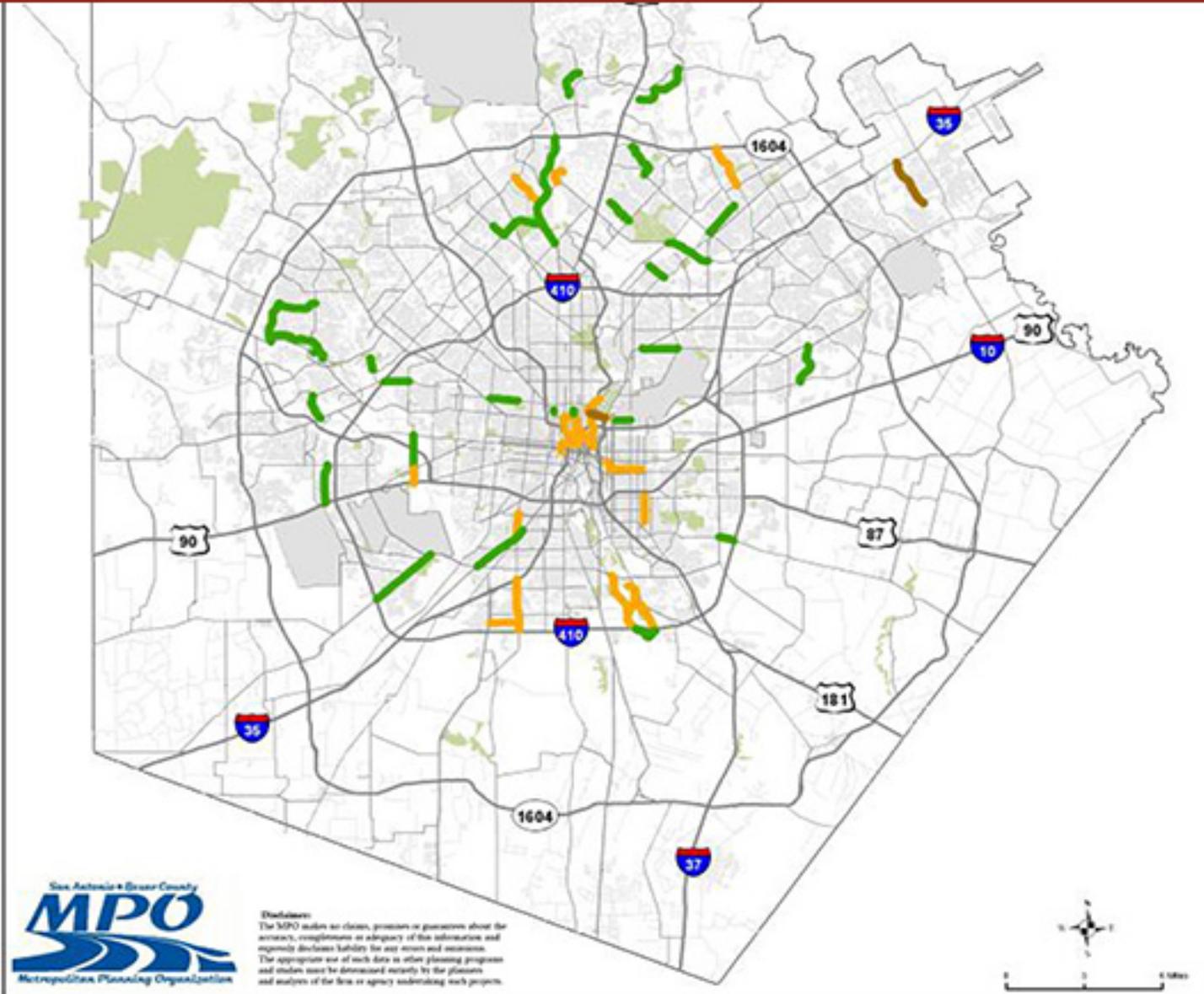


- Lane
- Route
- Path

**~34 miles  
of bicycle facilities**



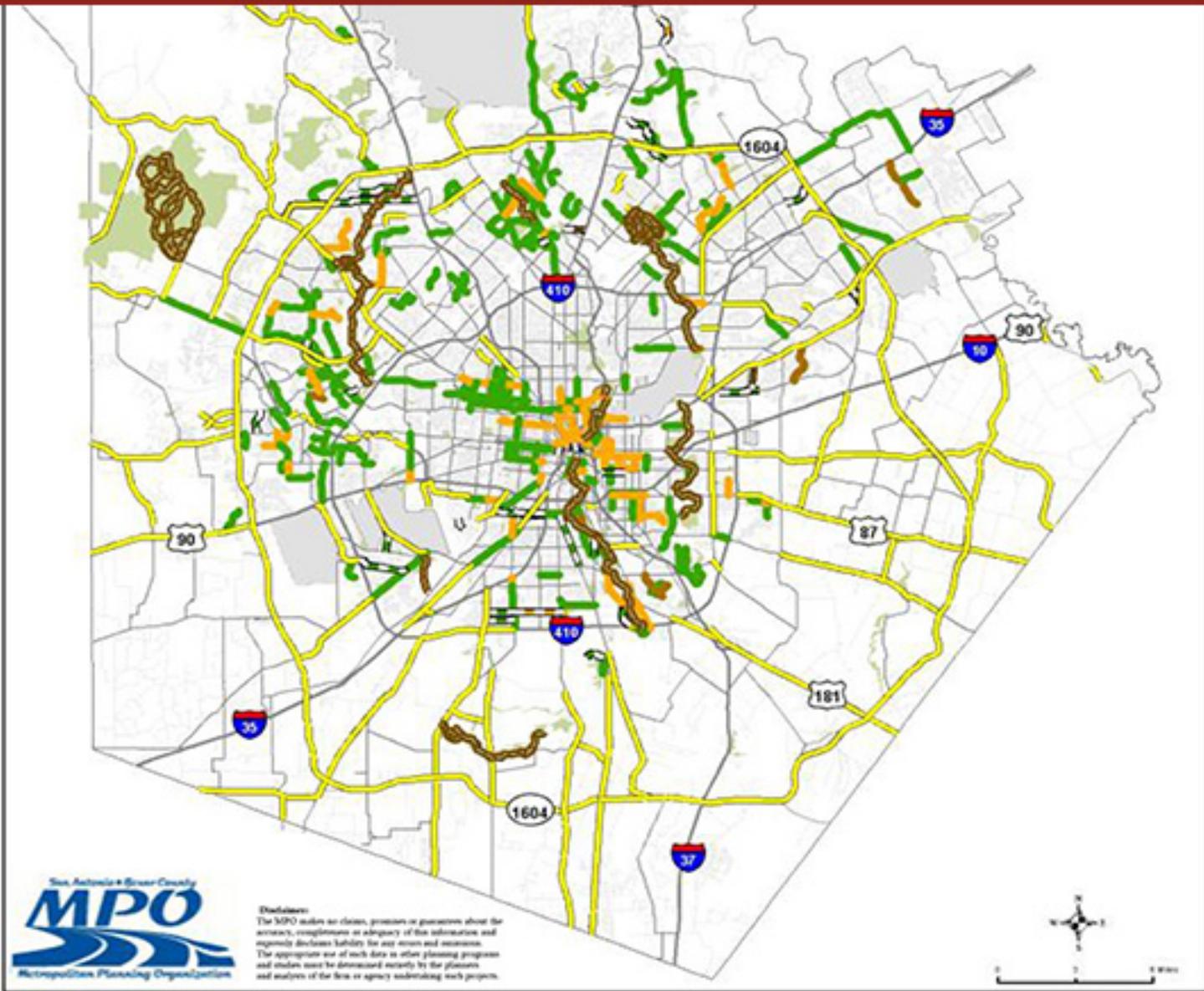
# The Bad: 2004



-  Lane
-  Route
-  Path

**~66 miles  
of bicycle facilities**

# The Good: 2012



- Lane
- Route
- Path
- Trails
- Shoulders

**~242 miles  
of bicycle facilities**

**~100 miles  
of trails**

**~82 miles  
of proposed  
bicycle facilities**

**~394 miles  
of shoulders**

# Recognition



**Bicycle Friendly Community**  
League of American Bicyclists

25<sup>th</sup> **Fittest** City  
March 2012 Men's Fitness



47<sup>th</sup> **Best Cycling** City



2012 Award Winner  
Innovation in **Energy** and  
**Sustainable** Development



# What's Next



## How Many **Cyclists** Have We Benefited?

We have shown the **output**

Now we have an opportunity to measure the **outcome**

New resource for better **evaluation** and **decision making**

# Why Count Bicyclists?



**Increase Our  
Understanding**

**Improve Our  
Justification**

**Leads to Intelligent  
Decision Making**



Bike Barometer:  
San Francisco

*Because Other Cities are **Counting!***

# Applications

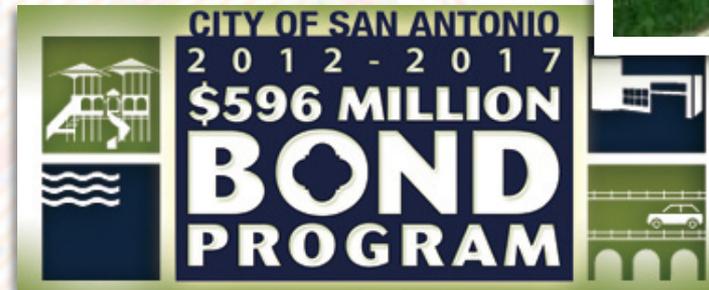


## Before and after Studies

Compare stretches of cycling **infrastructure**

Compare volumes along different facilities  
(cycle **track** vs. bike **lane**)

Seasonal comparisons  
\*however, this is better utilized with permanent counters\*



# Best Practices Example



\*New Bicycle Facility Project\*

## Plan

1. Bicyclists
2. Ridership
3. Portable Tube Counters
4. 3 Week Before /After Studies

## Do

5. Field Work, Maintenance, Equipment Testing

## Check

6. Behavioral / Spatial Analysis
7. Reports and Studies, Present Findings

## Act

8. Integrate Data into Decision Making
9. Communicate Results

## Monitoring Cycle



# The Future Is Now!



**Bicycle Counters Are Here and in Use**

**Theo & Malone, Hausman, Roadrunner, Flores, Cincinnati and **Leon Creek** Counted!**



**New Counting Studies Coming Soon**

# Eco Counters



Records **counts**, **time** of day (15 minute intervals), and **direction** of cyclist

Counters are **portable**, allowing **easy** deployment and wide geographic **coverage**



# Logistics



## Sensor

- Read signal
- Make decision on counts



## Logger

- Stores Data
- Transmits Data
- Provide power to sensor



## Software

- Analyze
- Communicate



# Ecovisio



- Software Allows Data **Sharing** Between Agencies
- Instant** and Customizable **Reports**
- One Stop Location for All Counting **Data** and **Analysis**



My Counters   Analysis & Reports   Administrator

Create a Group

Create a Counting Site

Manual Upload

Virtual Counter

User Type

Murphy Julia

Counting Sites (9)

- Theo and Malone 1 - T
- Theo and Malone 2 - TI
- Theo and Malone 3 - TI
- Theo and Malone 4 - TI
- Theo and Malone 5 - M
- Theo and Malone 6 - M
- Theo and Malone 7 - M
- Theo and Malone 8 - M
- Theo and Malone 9 - TI

Counters (9)

Update

### Theo and Malone 4 - Theo and Zarzamora

2 User Type(s)

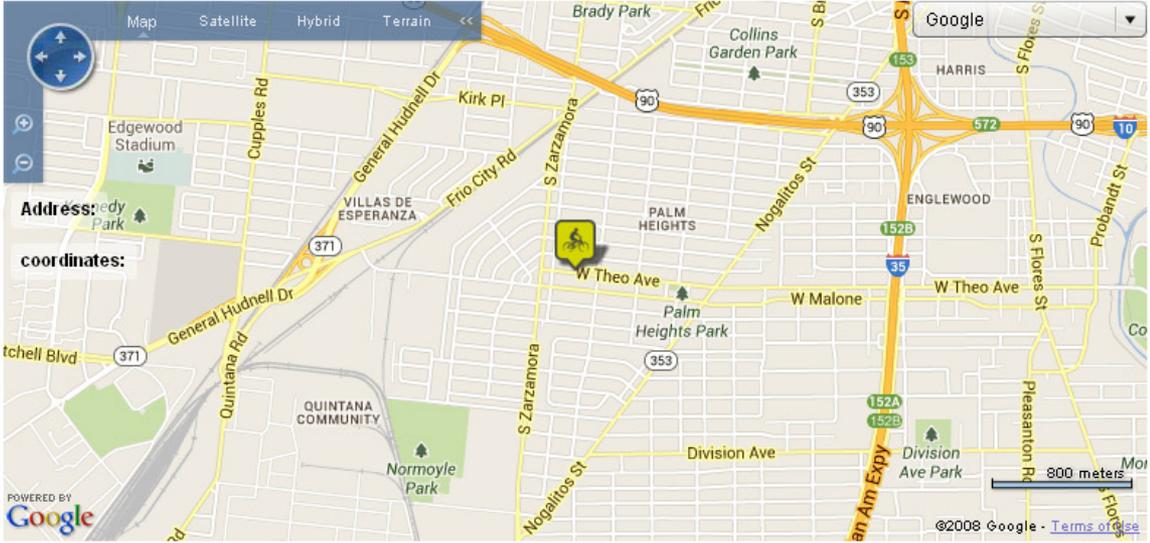


Months  Last Data : 07/16/2013

Map Satellite Hybrid Terrain

Address:  eddy Park

coordinates:



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# Installations



Theo at Mission Reach

Malone



# Count Validation



Raw data will identify counting **errors** (occurs when a tube comes loose)

Placement of counters assists in identifying **anomalies**

Future studies should include manual count **comparisons** and daily logging

Date	Malone 5	Malone 6	Malone 7
Wed, Jun 26, 2013 06:00 AM	0	0	1
Wed, Jun 26, 2013 07:00 AM	3	1	1
Wed, Jun 26, 2013 08:00 AM	2	5	3
Wed, Jun 26, 2013 09:00 AM	1	0	2
Wed, Jun 26, 2013 10:00 AM	0	1	2
Wed, Jun 26, 2013 11:00 AM	1	4	5
Wed, Jun 26, 2013 12:00 PM	1	1	0
Wed, Jun 26, 2013 01:00 PM	0	0	1
Wed, Jun 26, 2013 02:00 PM	0	65	0
Wed, Jun 26, 2013 03:00 PM	0	95	2
Wed, Jun 26, 2013 04:00 PM	0	114	3
Wed, Jun 26, 2013 05:00 PM	2	123	0
Wed, Jun 26, 2013 06:00 PM	2	93	4
Wed, Jun 26, 2013 07:00 PM	1	79	1
Wed, Jun 26, 2013 08:00 PM	0	69	0
Wed, Jun 26, 2013 09:00 PM	0	66	0
Wed, Jun 26, 2013 10:00 PM	0	50	0

# Leon Creek Results



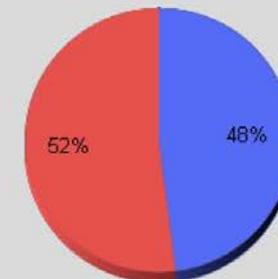
## Leon Creek at Hausman

Period Analyzed: Friday 04 October 2013 to Friday 11 October 2013



### Key Figures

- Total Traffic for the Period Analyzed: 3,857
- Daily Average : 482
- Busiest Day of the Week : Sunday
- Busiest Days of the Period Analyzed:
  1. Sunday 06 October 2013 (914)
  2. Saturday 05 October 2013 (853)
  3. Tuesday 08 October 2013 (585)
- Distribution by Direction:
  - north : 52%
  - south : 48%



# Leon Creek Results

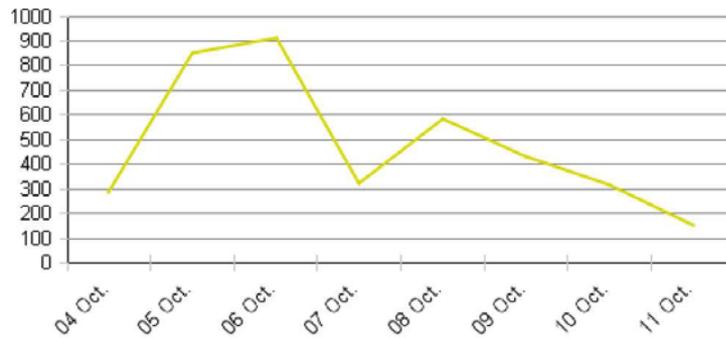


## Leon Creek at Hausman

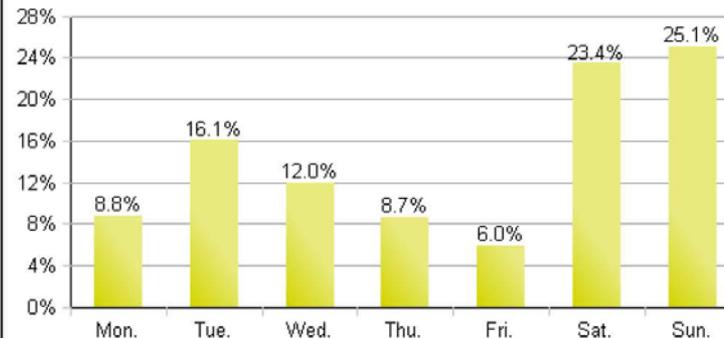
Period Analyzed: Friday 04 October 2013 to Friday 11 October 2013



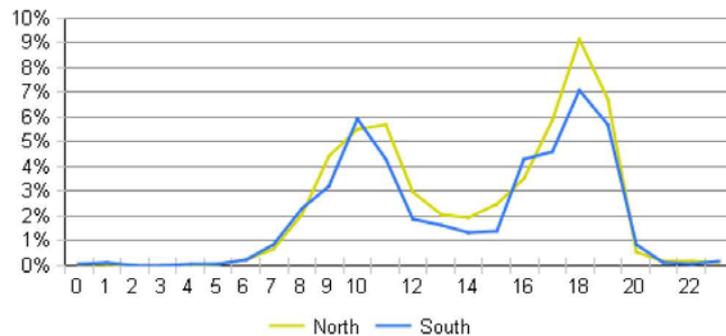
### Daily Data



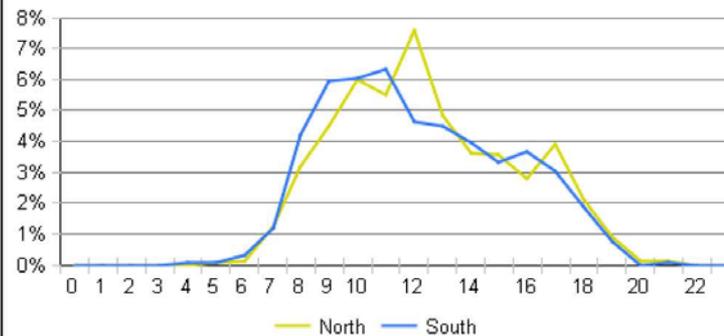
### Weekly Profile



### Hourly Profile during Weekdays



### Hourly Profile during the Weekend

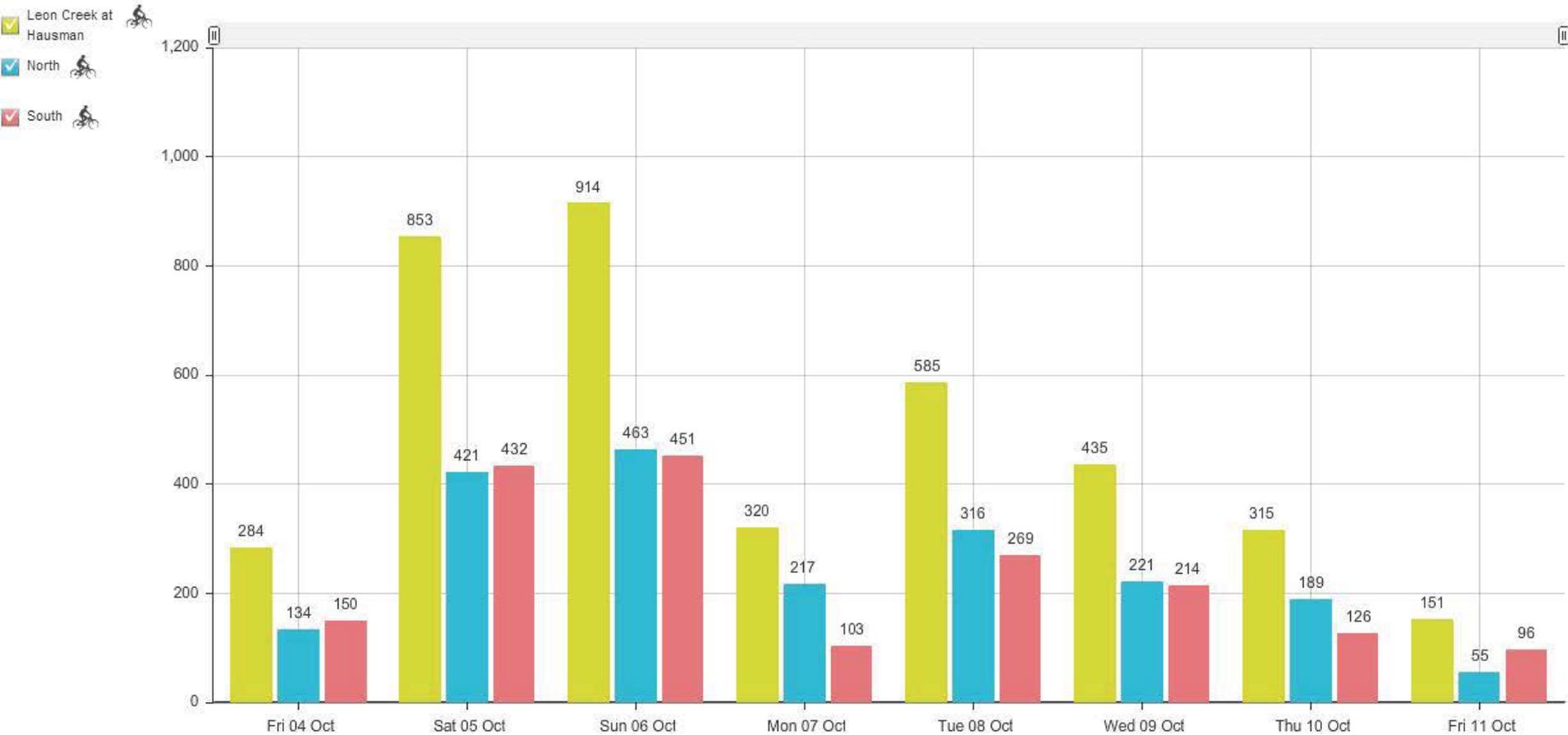


# Leon Creek Results



## Total Counts

10/04/2013 - 10/11/2013

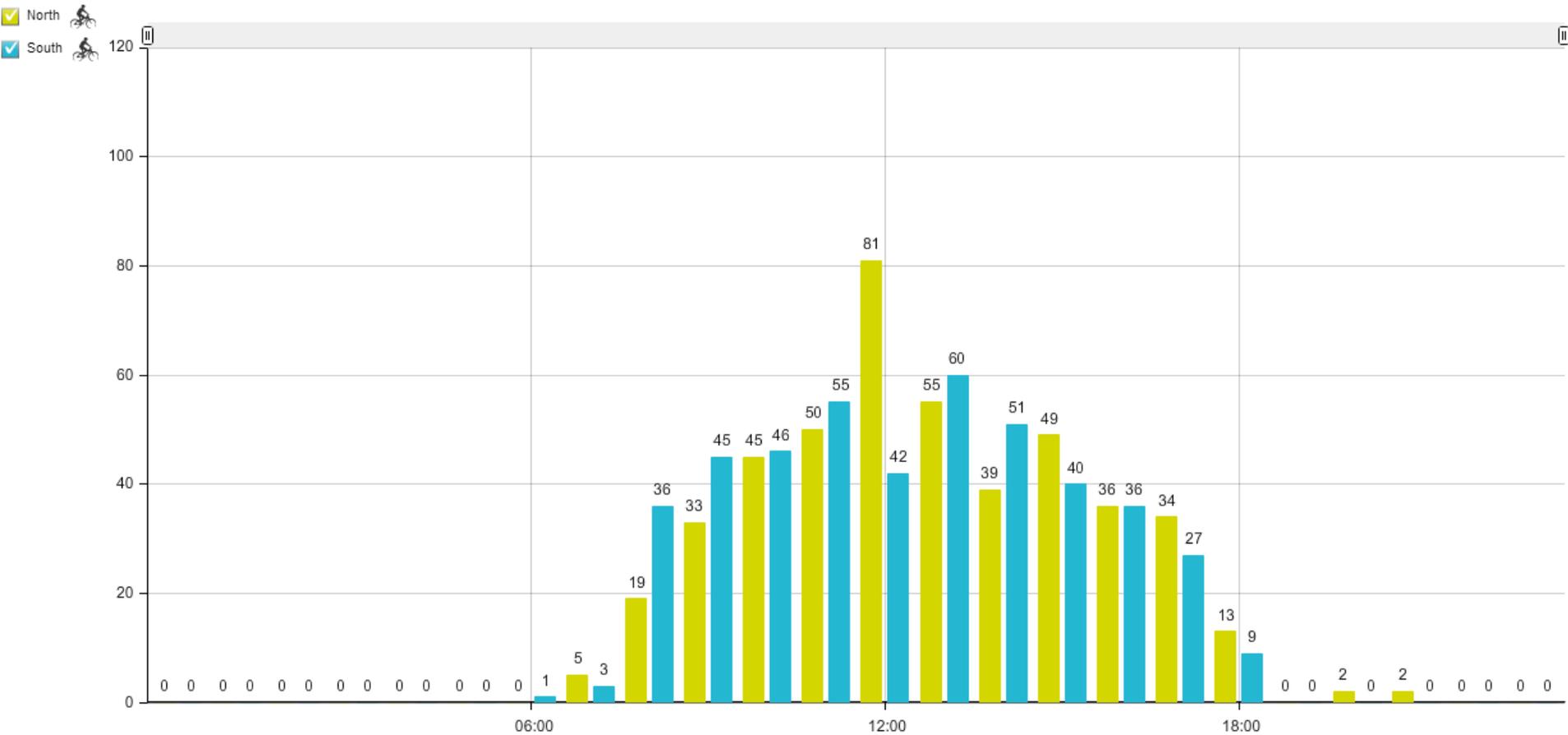


# Leon Creek Results

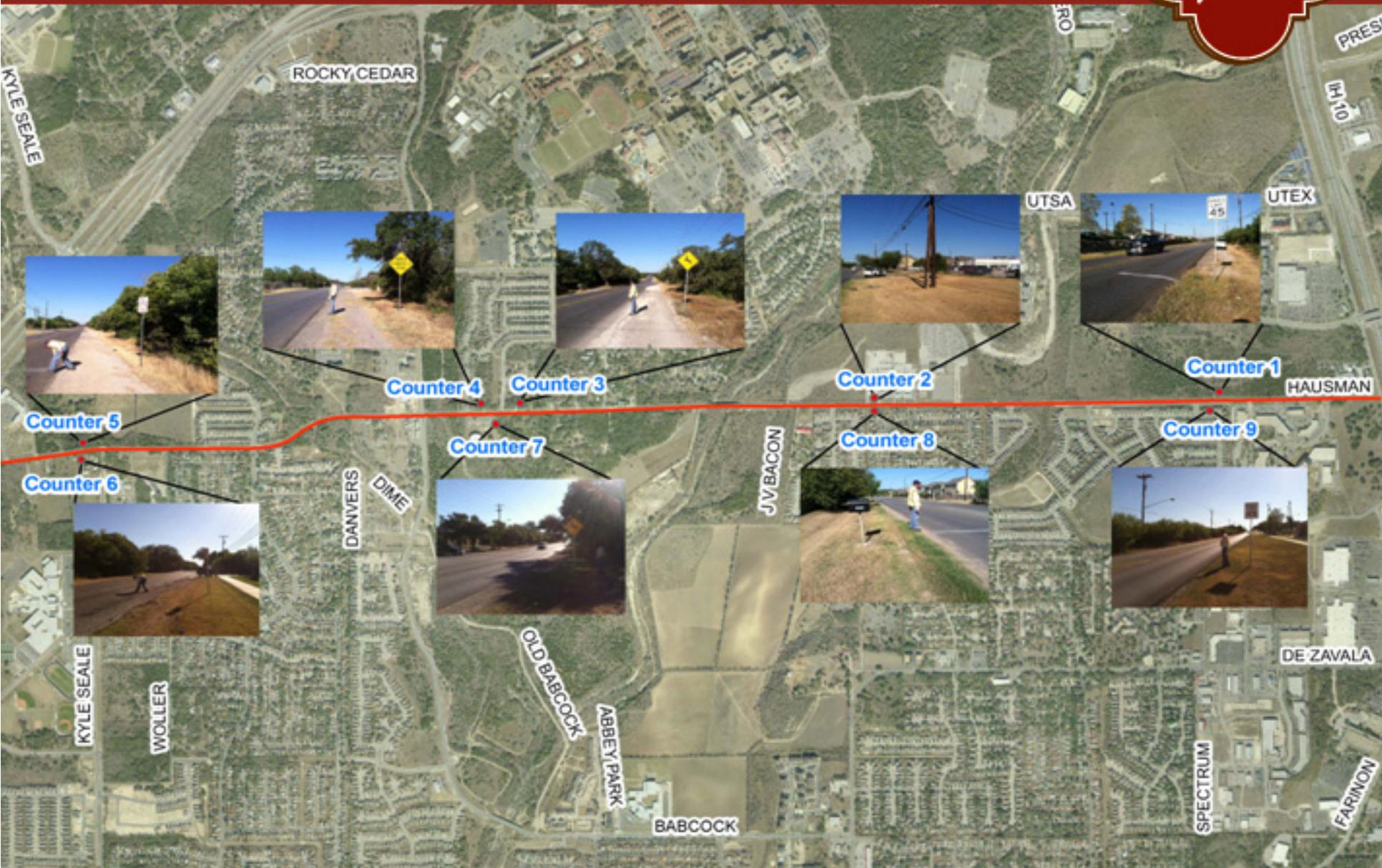


## Sunday Counts

10/06/2013 - 10/06/2013



# Hausman



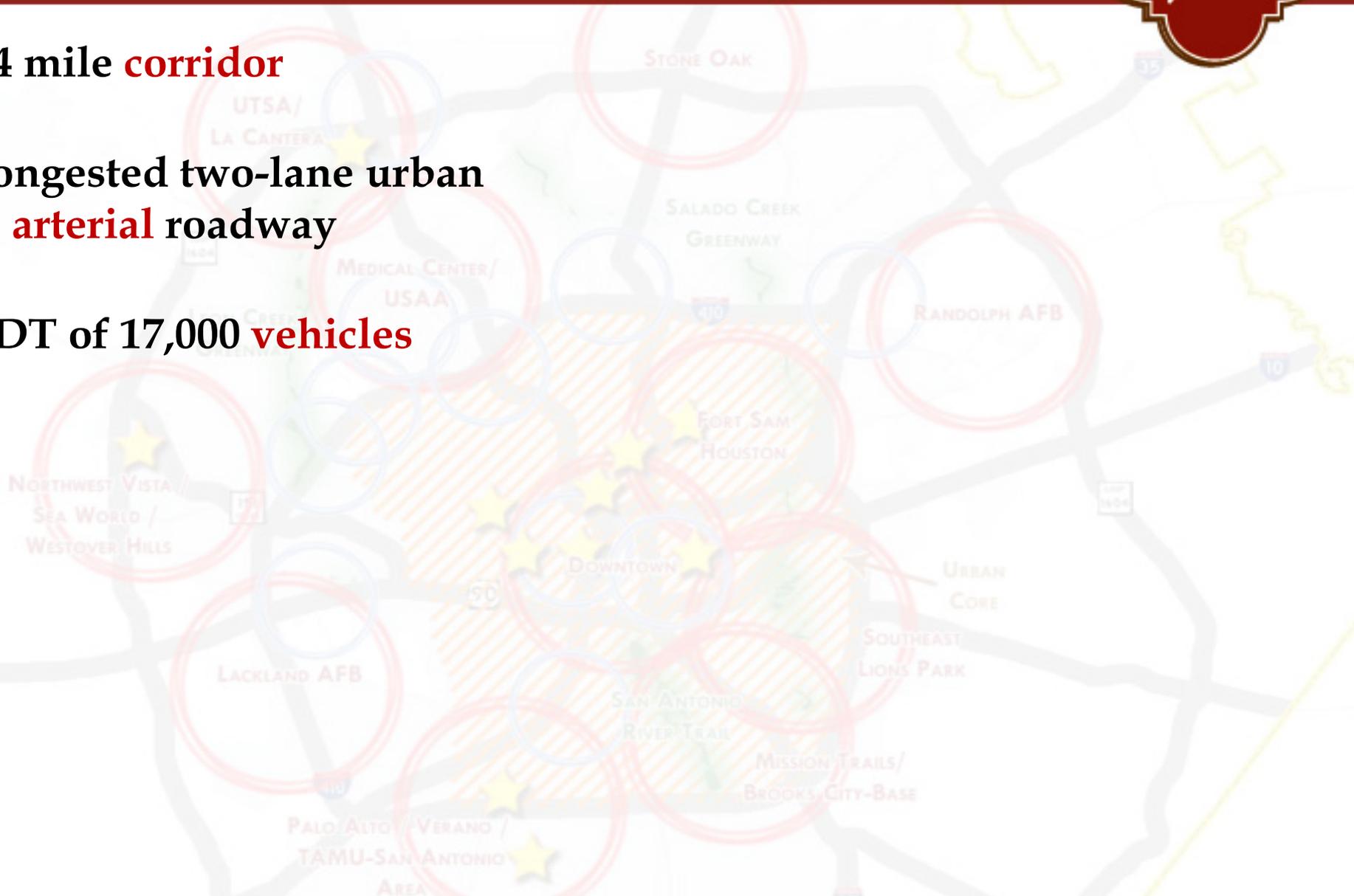
# Hausman



3.4 mile **corridor**

Congested two-lane urban  
**arterial** roadway

ADT of 17,000 **vehicles**





# Hausman



3.4 mile **corridor**

Congested two-lane urban **arterial** roadway

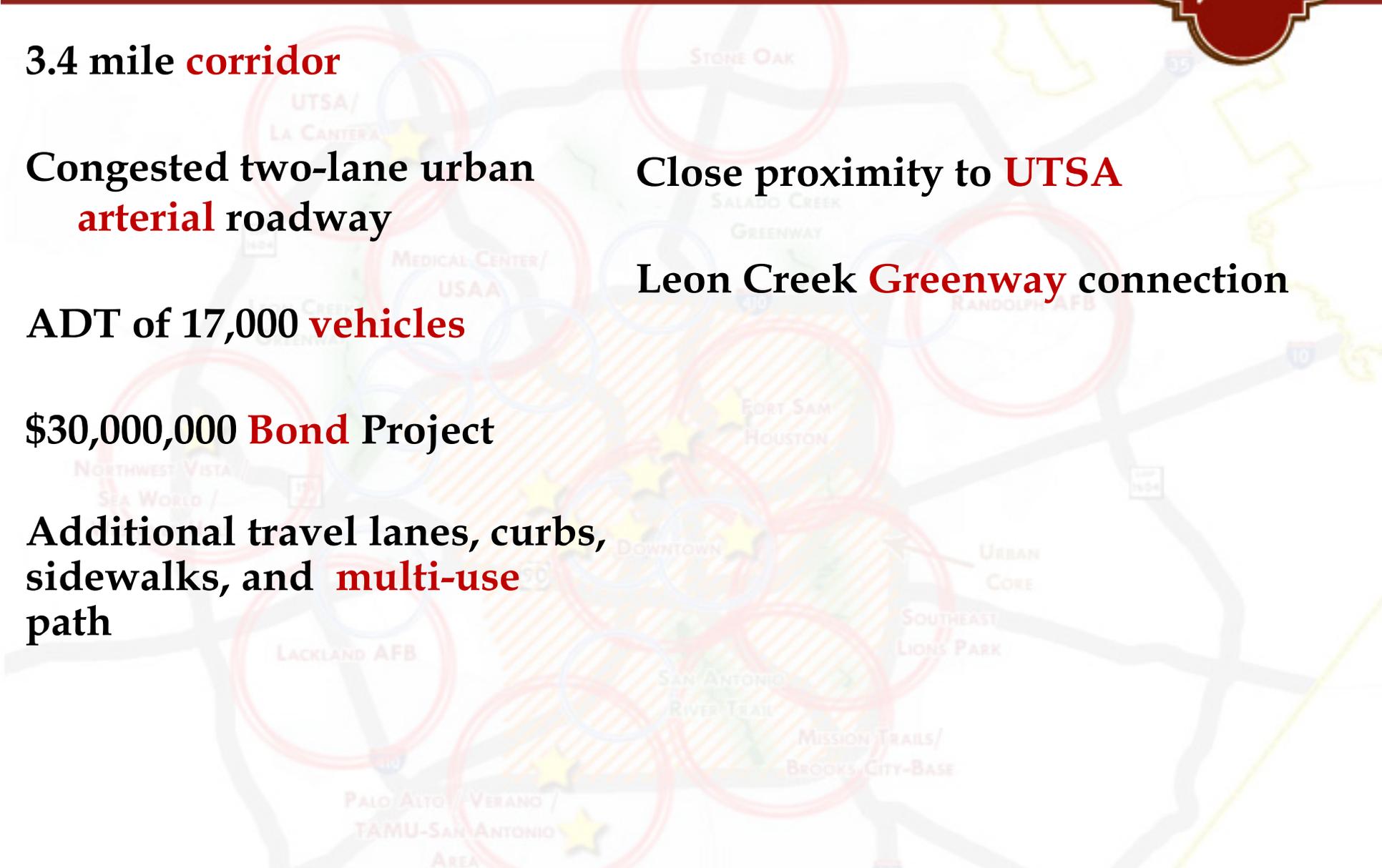
ADT of 17,000 **vehicles**

\$30,000,000 **Bond** Project

Additional travel lanes, curbs, sidewalks, and **multi-use** path

Close proximity to **UTSA**

Leon Creek **Greenway** connection



# Hausman



3.4 mile **corridor**

Congested two-lane urban **arterial** roadway

ADT of 17,000 **vehicles**

\$30,000,000 **Bond** Project

Additional travel lanes, curbs, sidewalks, and **multi-use** path

Close proximity to **UTSA**

Leon Creek **Greenway** connection

“There’s no way I would get on a **bicycle** on Hausman Road today.”

Jacob Dell, resident along Hausman subdivision and UTSA professor (quoted in SA-Express News)

# Current Facilities



# Hausman Results



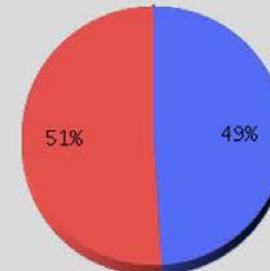
## Hausman 9

Period Analyzed: Monday 23 September 2013 to Monday 30 September 2013



### Key Figures

- Total Traffic for the Period Analyzed: 76
- Daily Average : 10
- Busiest Day of the Week : Monday
- Busiest Days of the Period Analyzed:
  1. Monday 30 September 2013 (12)
  2. Monday 23 September 2013 (11)
  3. Thursday 26 September 2013 (11)
- Distribution by Direction:
  - hausman 9 \_east : 51%
  - hausman 9 \_west : 49%



# Hausman Results

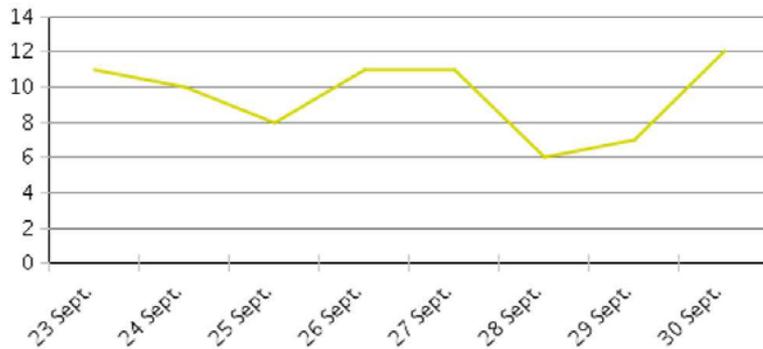


## Hausman 9

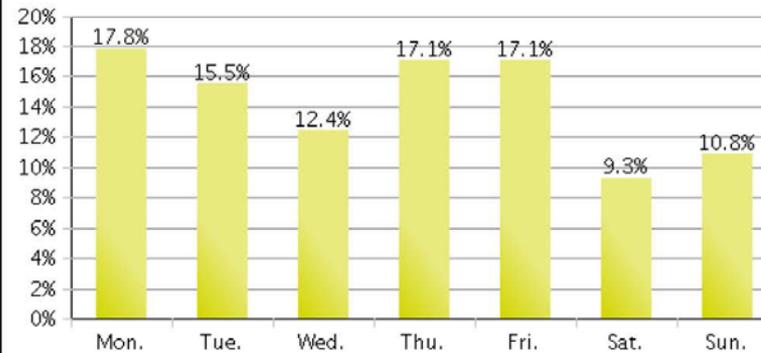
Period Analyzed: Monday 23 September 2013 to Monday 30 September 2013



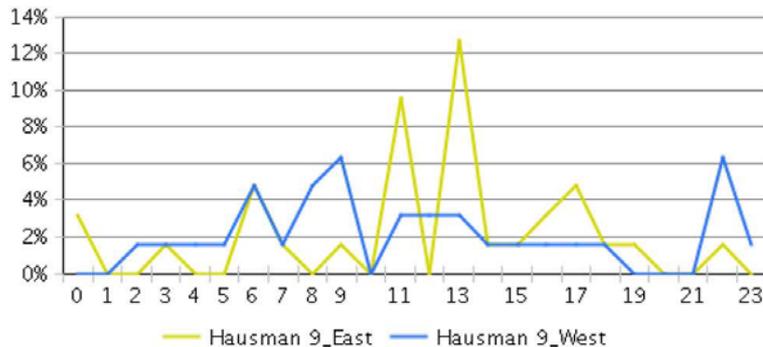
### Daily Data



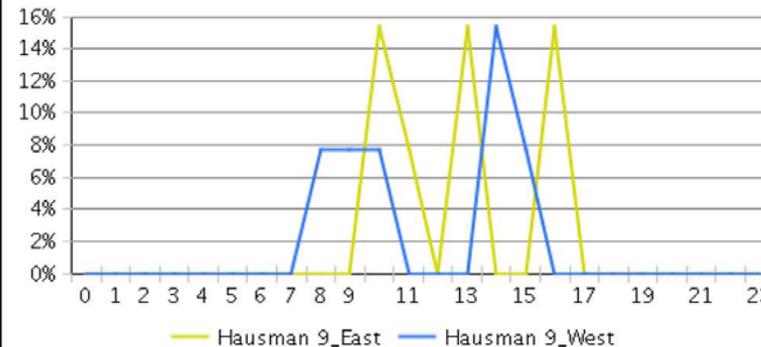
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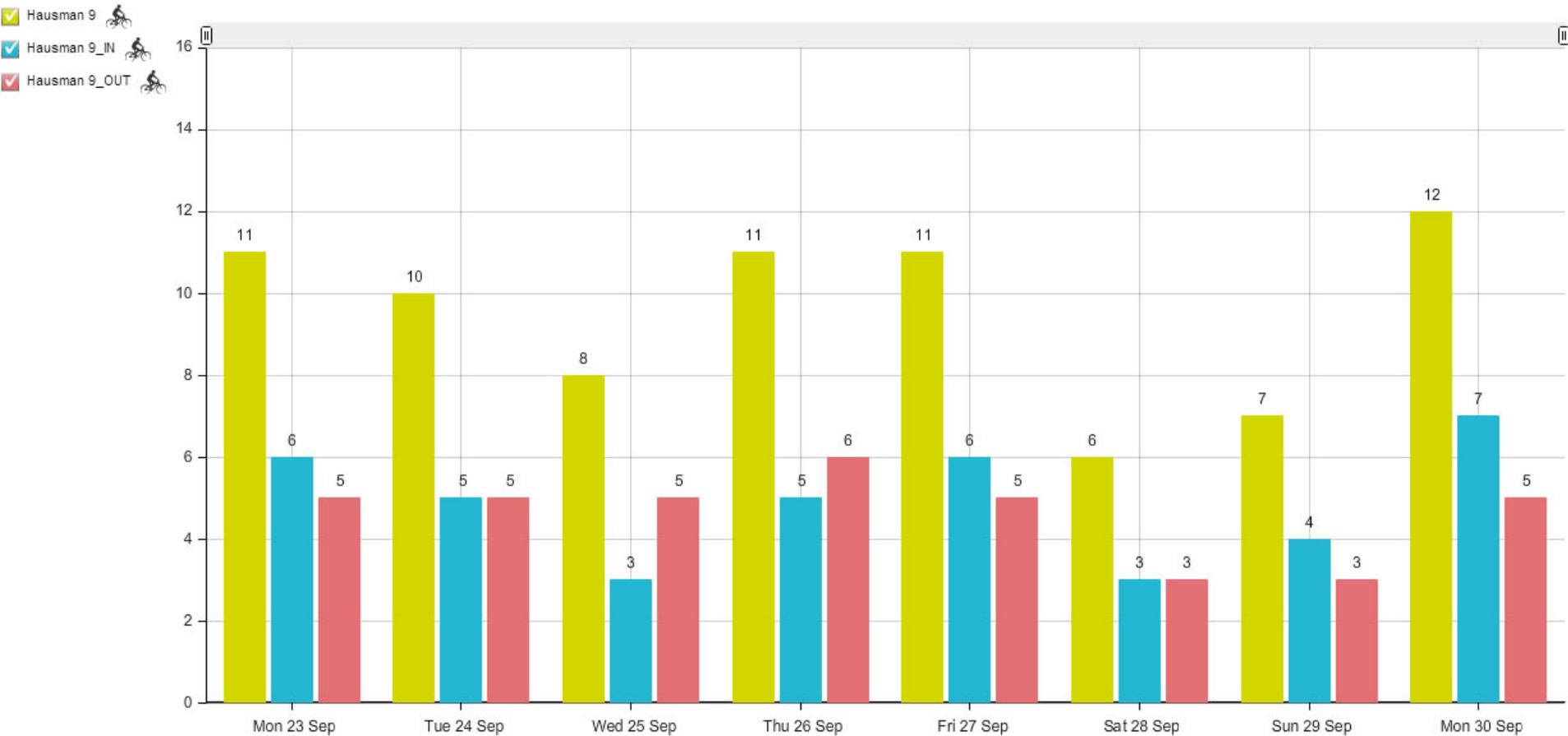


# Hausman Results



## Count Totals

09/23/2013 - 09/30/2013

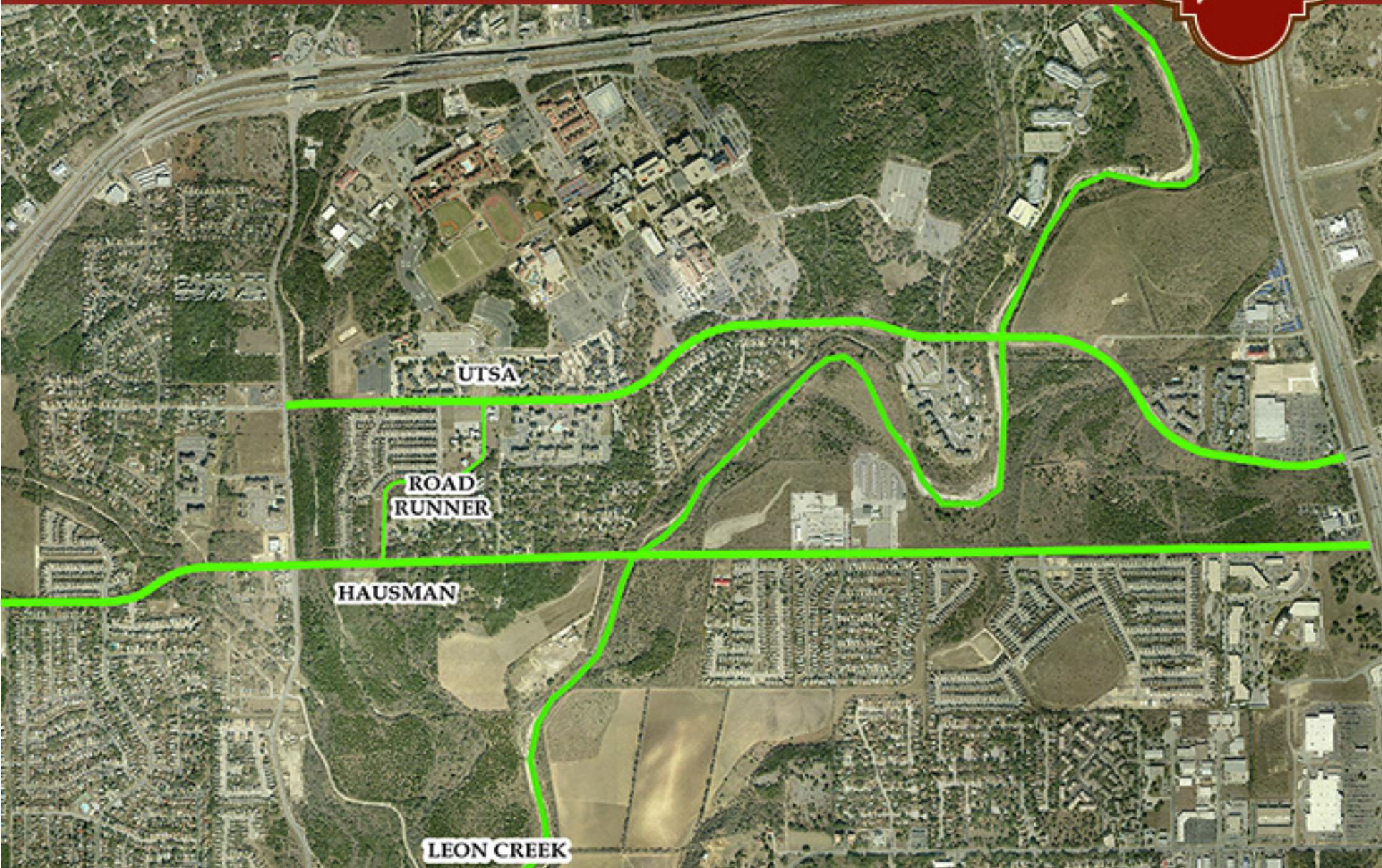


# Hausman





# Hausman



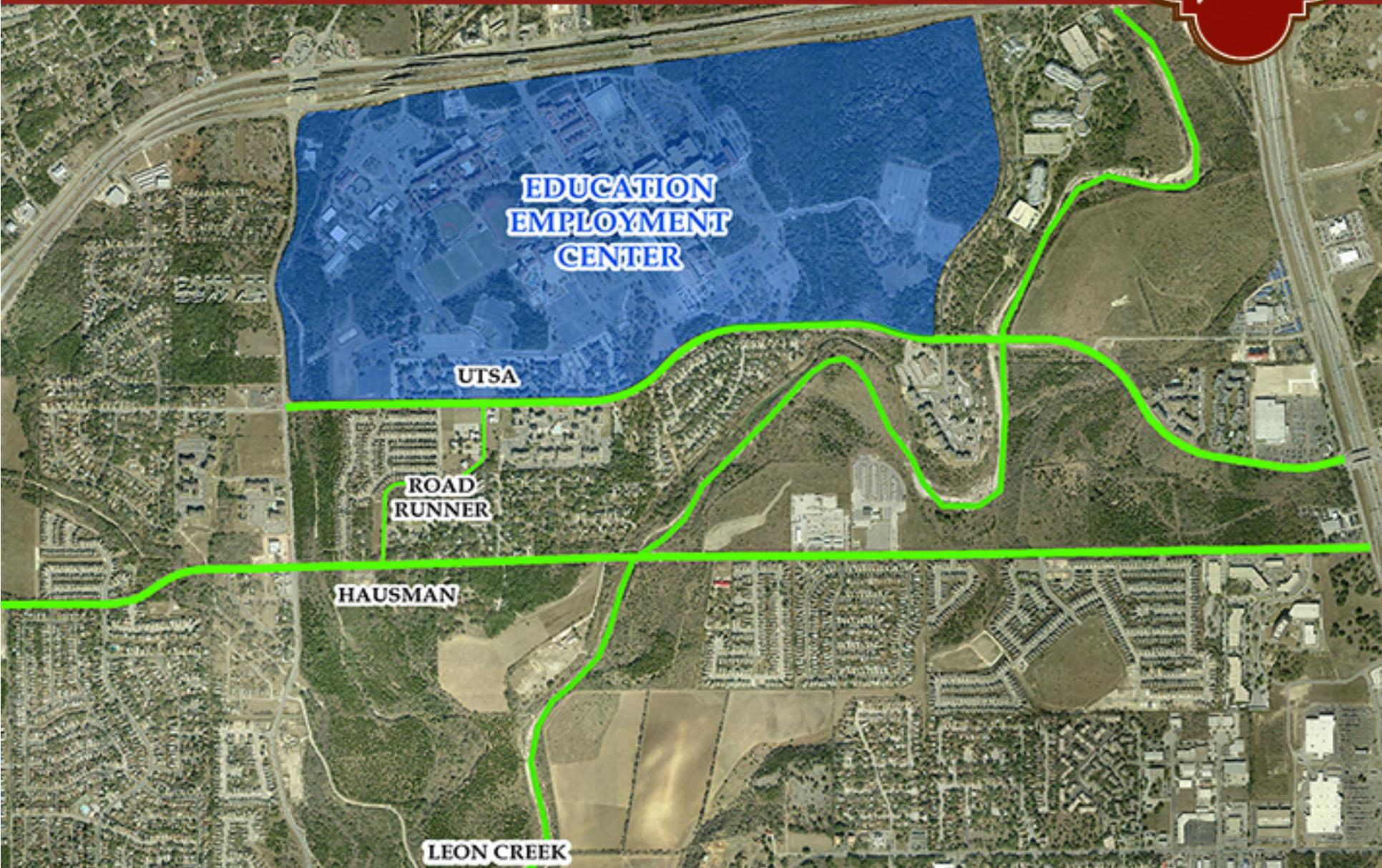
UTSA

ROAD  
RUNNER

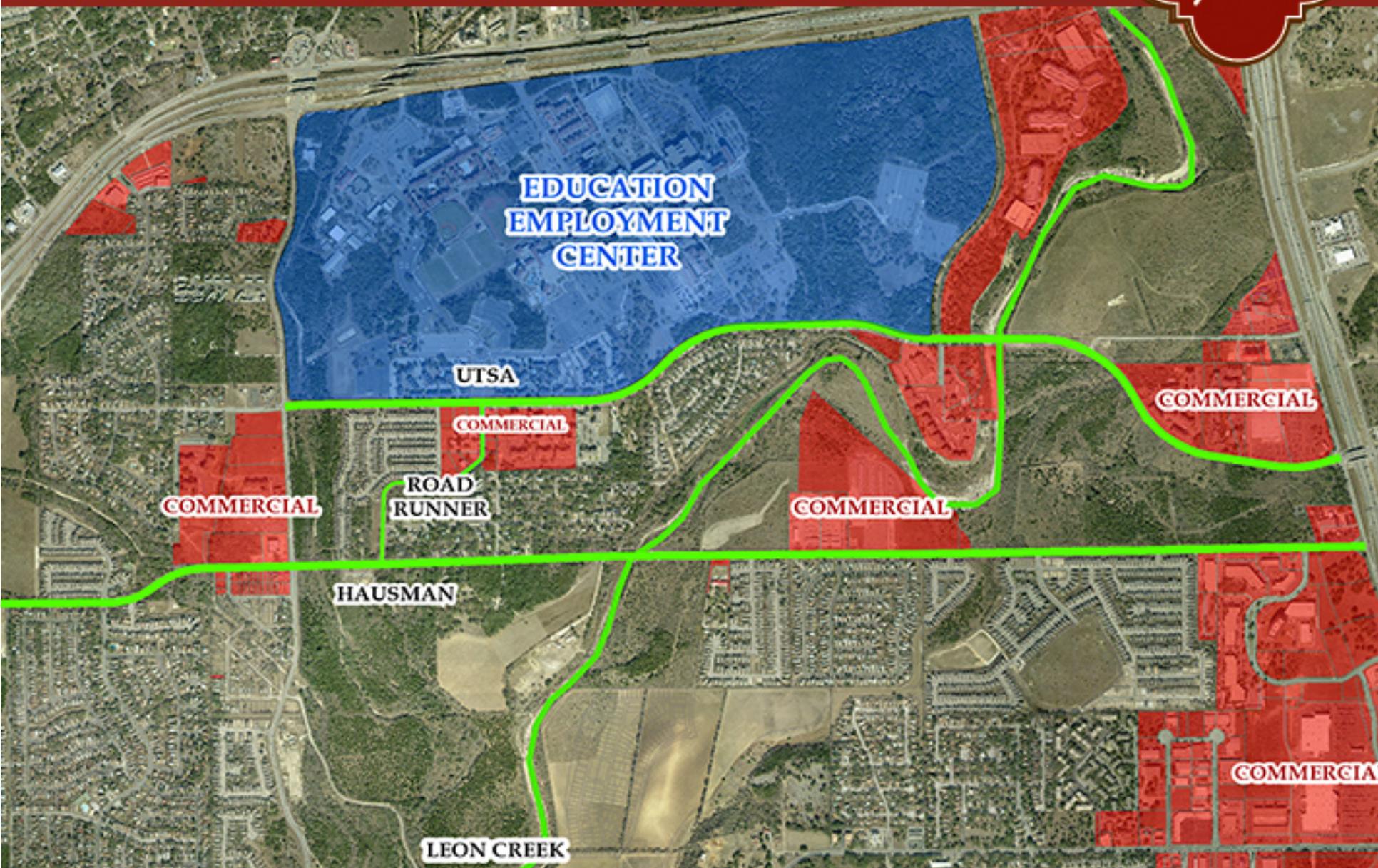
HAUSMAN

LEON CREEK

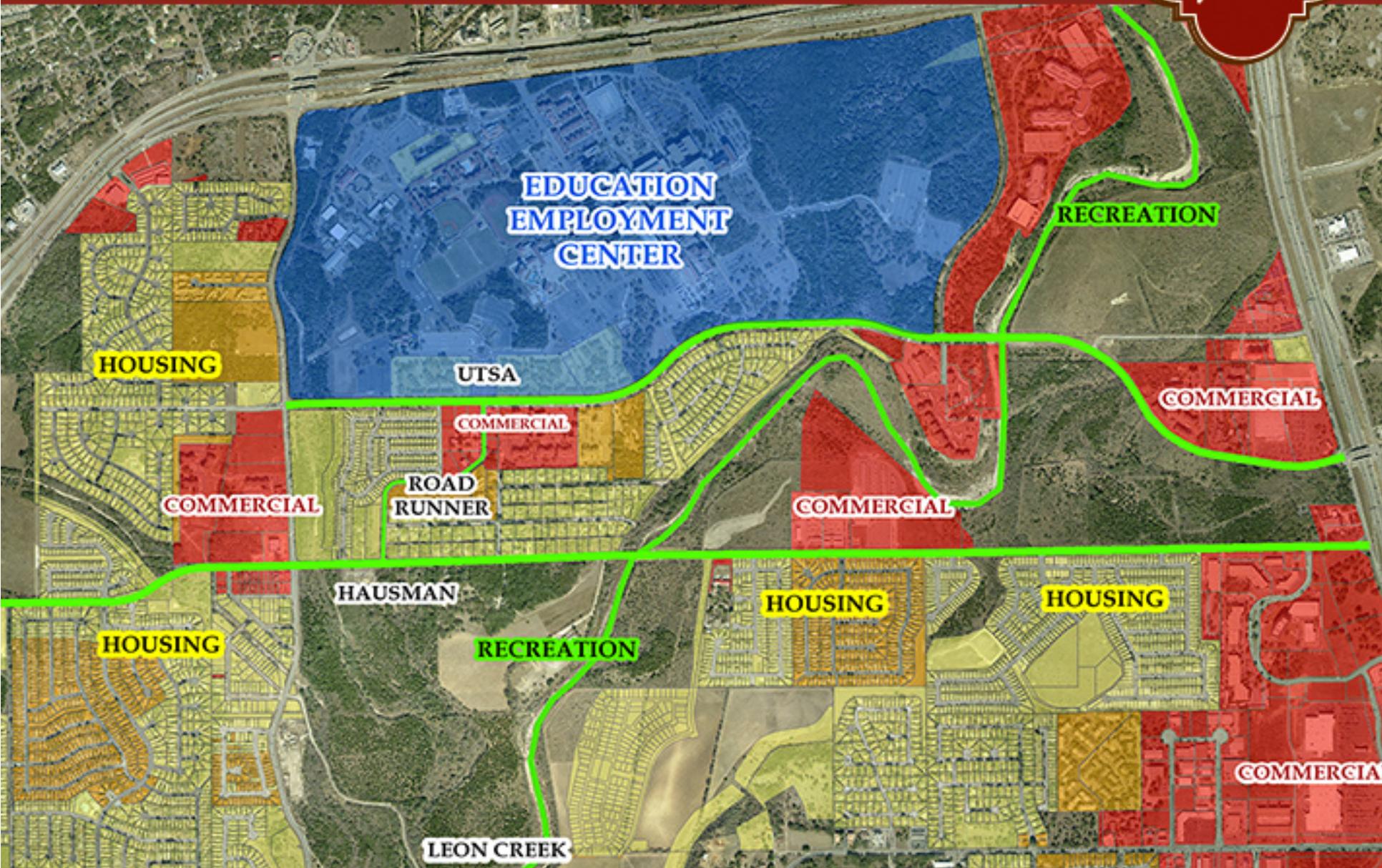
# Hausman



# Hausman



# Hausman



**EDUCATION  
EMPLOYMENT  
CENTER**

**RECREATION**

**HOUSING**

**UTSA**

**COMMERCIAL**

**COMMERCIAL**

**ROAD  
RUNNER**

**COMMERCIAL**

**HAUSMAN**

**HOUSING**

**HOUSING**

**HOUSING**

**RECREATION**

**COMMERCIAL**

**LEON CREEK**

# Next Steps



**Coordinating** Between Agencies and Departments

Establishing **Priority** Projects and Schedules

Implementing Data Into **Decision Making** Process

Communicating Information to the **Public**



# QUESTIONS?

