



# Re-inventing Transit:

## Strategies for Implementing Public Transit in New Braunfels

Presentation to the Alamo Area MPO  
KFH Group Inc.

May 24, 2021



# The Analysis

This presentation is based on the previous five technical memoranda. All of the detailed analysis is in these memoranda:



## Technical Memorandum No. 1:

Study Goals and Objectives



## Technical Memorandum No. 2:

Detailed Findings of the Outreach Efforts



## Technical Memorandum No. 3:

Review of Existing Services



## Technical Memorandum No. 4:

Demographics, Land Uses and Travel Patterns



## Technical Memorandum No. 5:

Unmet Needs and Potential Transit Demand

# Existing Transit Service: Demand Response

Passengers schedule 24 hour in advanced for door-to-door service. Transit vehicle pick them up at their trip origin and drops off at their destination.

Ridership is very low. The service is focused on seniors and medical trips in Comal County.

The service is very expensive on a per trip basis. It also uses an outdated model of demand response service that is not productive.



# Local Fixed Route Bus

Fixed Route - The traditional form of public transit where buses travel a prescribed route according to a schedule, like San Marcos. Americans with Disabilities Act (ADA) paratransit is required.

Routes should be in the most dense (population and/or destinations) areas. These will generate the highest productivity and lowest cost per trip.



# Introducing Microtransit

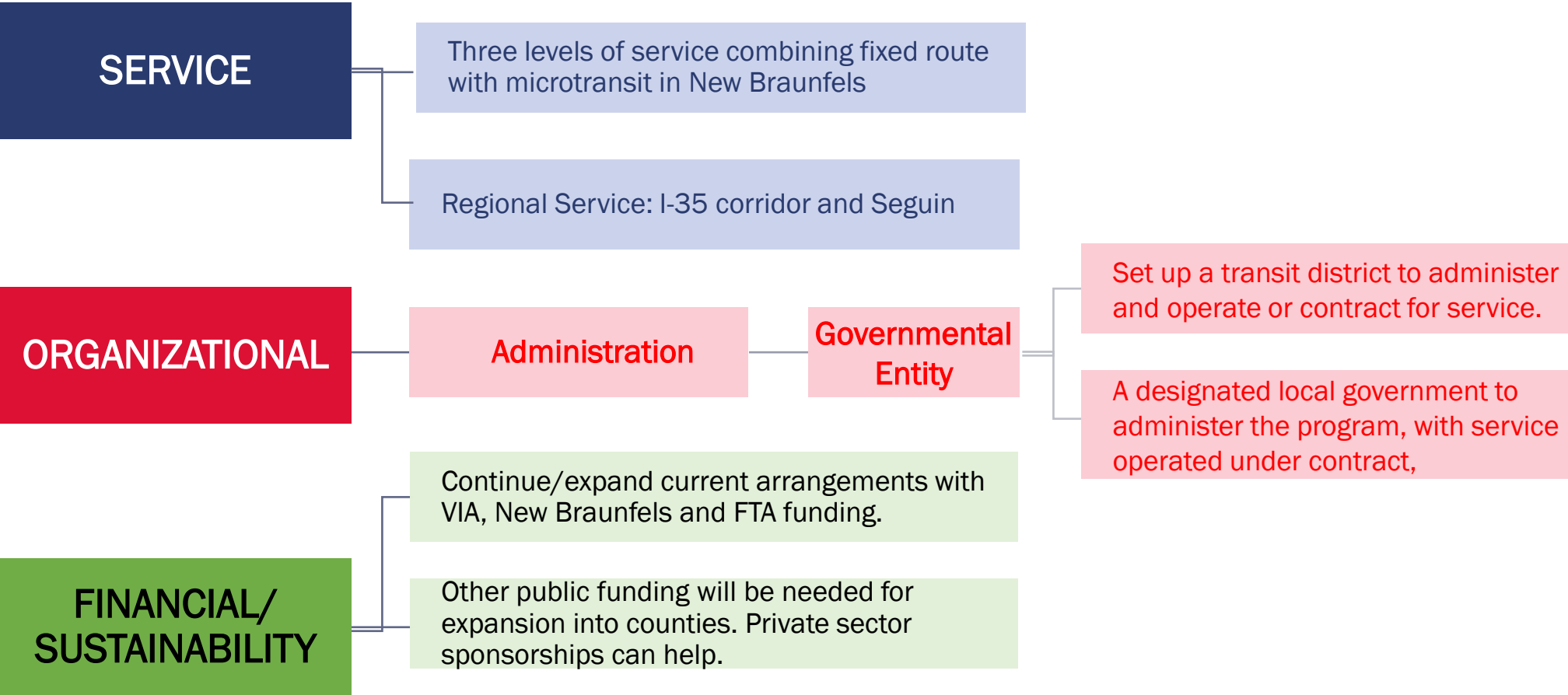
Paratransit is a family of curb to curb transit services, such as: Taxi, Uber/Lyft, dial a ride and day in advance services such as ADA paratransit and the current service operated by ART.

Passengers use the app or call and within 15 – 60 minutes the vehicle will pick up the passenger at or near their origin.

Microtransit service will be available in all areas of the city beyond fixed route. Serves a zone and connects to the nearest fixed route for citywide access.



# Development of Strategies



# Developing Strategies for New Braunfels

A combination of fixed route and microtransit (zone service) will be used

All parts of the city will be covered by either fixed route or microtransit

The fixed route buses will meet at the top or bottom of the hour for ease of transferring

All buses will be accessible and will have bike racks

Continued pathway access improvements

This plan looks to a future when the pandemic has stabilized and confidence in transit is relatively back to pre-COVID levels.

# New Braunfels Service Levels

## Low Level (Status Quo Funding)

- This is a low level of service that matches the cost of the existing service. Two fixed route buses for three fixed routes and three microtransit/ADA vehicles (one hour response time) operating Monday through Friday in parts of New Braunfels not served by fixed route..

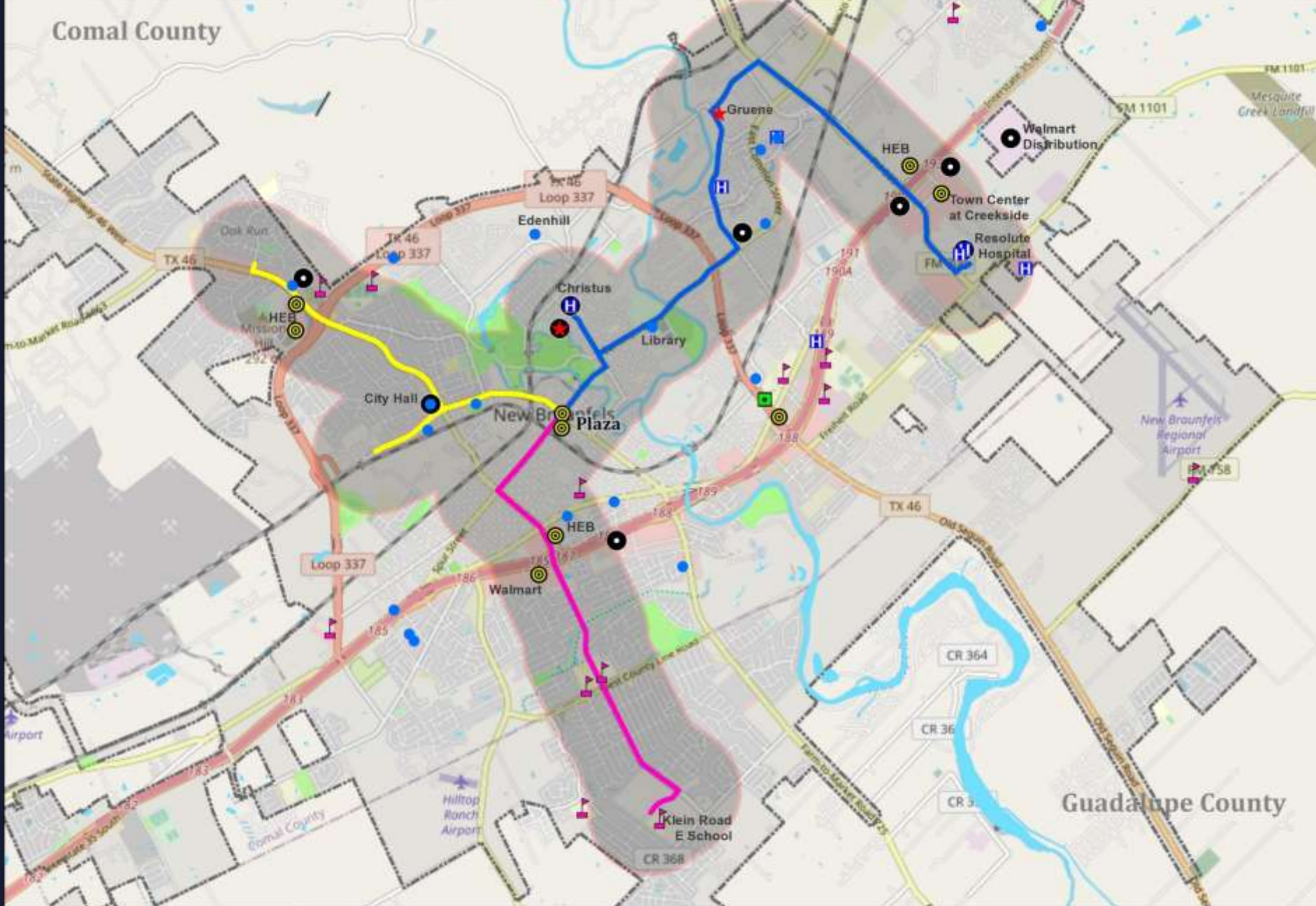
## Mid-Level Service

- This includes three fixed route vehicles for six fixed routes and three microtransit/ADA vehicles (45 minutes to one hour response time).

## Full Service Level

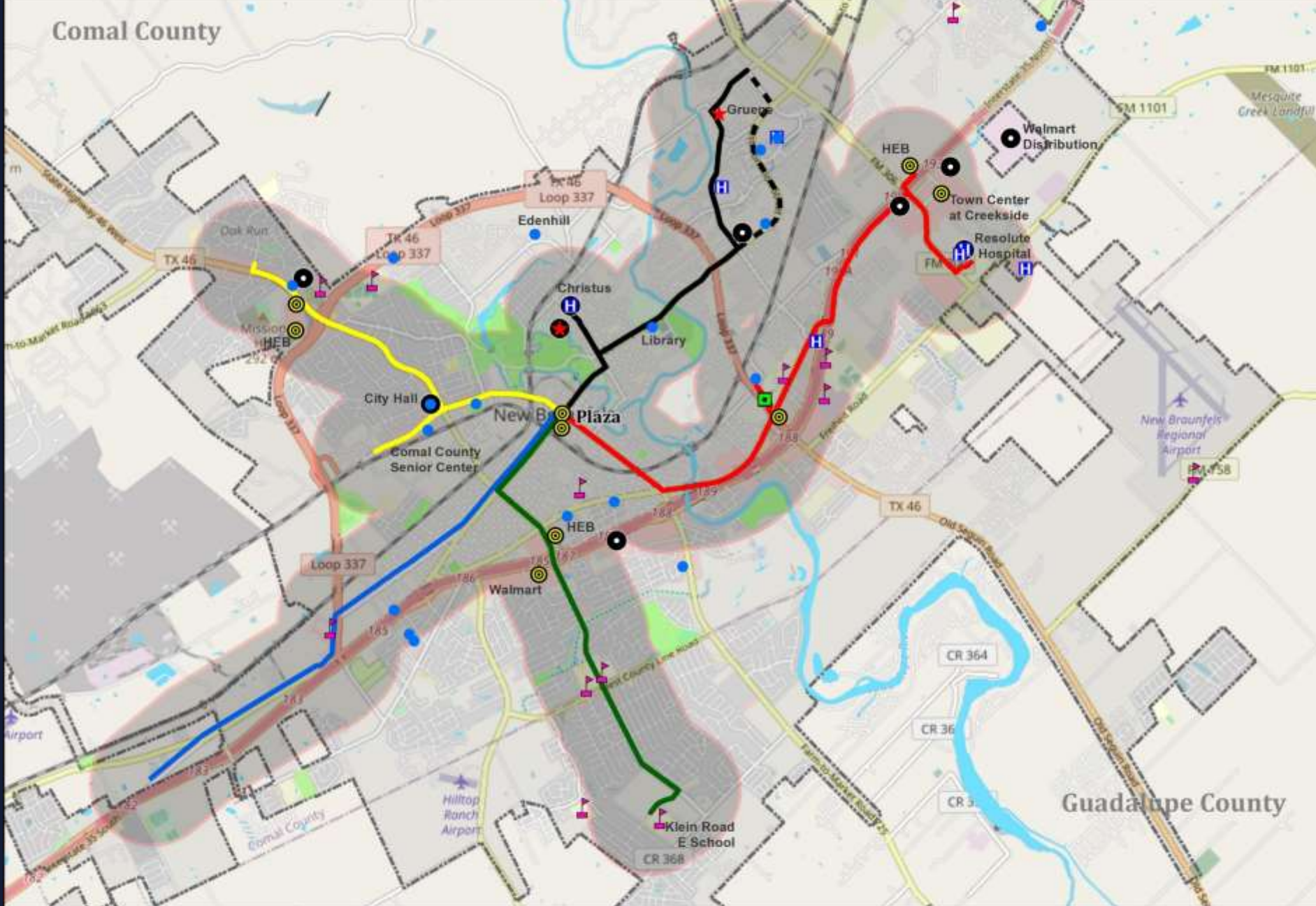
- This includes four fixed route buses for seven fixed routes and three microtransit/ADA buses (15 - 30 minute response for microtransit).





# Status Quo Funding: An Example

<p><b>New Braunfels Proposed Corridors Low Level Service</b></p>	<p>N</p>	<b>Low Level Service Corridors</b>		Half Mile Buffer	Attraction	Health Care
		1-Walnut Southeast	2-Walnut Northwest	5-Gruene/Northeast	Employers	Education
				Park and Ride	Human Services	
				Microtransit Zone		



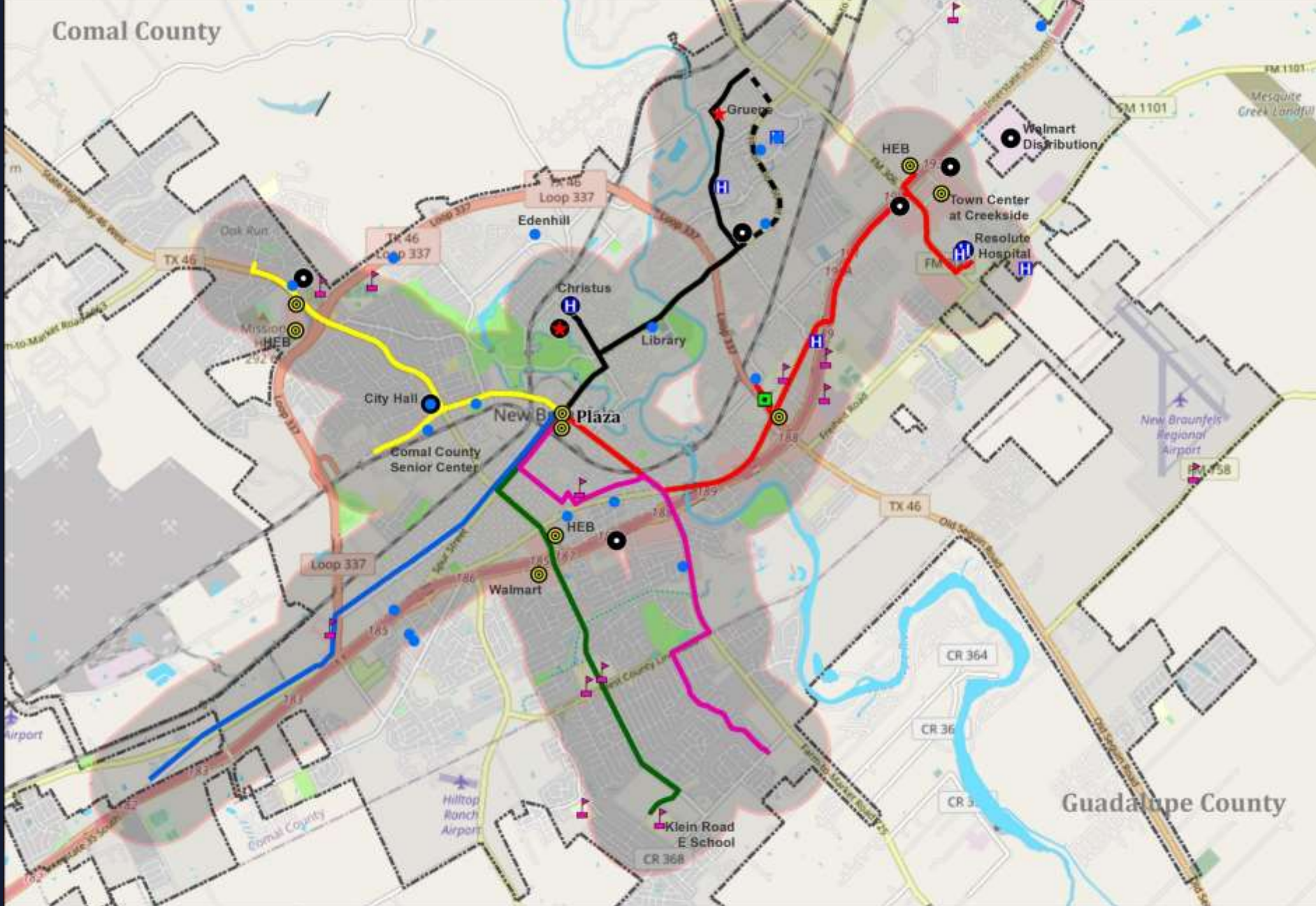
**New Braunfels  
Proposed Corridors  
Mid Level Service**



- Mid Level Service Corridors**
- 1-Walnut Southeast
  - 2-Walnut Northwest
  - 3-Gruene
  - - - 3-Gruene
  - 4-Northeast
  - 6-Southwest

- Half Mile Buffer
- Employers
- Park and Ride
- Microtransit Zone
- ★ Attraction
- Education
- Human Services
- Health Care
- Shopping

# Mid Level Service: An Example



Full  
Service:  
All  
Potential  
Routes

<p><b>New Braunfels Proposed Corridors Full Service</b></p>	<p><b>Microtransit Zone</b></p> <p>0 0.25 0.5 1 Miles</p>	<p><b>Full Service Corridors</b></p> <ul style="list-style-type: none"> <li>1-Walnut Southeast</li> <li>2-Walnut Northwest</li> <li>3-Gruene</li> <li>4-Northeast</li> <li>6-Southwest</li> <li>7-Southeast</li> </ul>	<ul style="list-style-type: none"> <li>Half Mile Buffer</li> <li>Employers</li> <li>Park and Ride</li> <li>Attraction</li> <li>Education</li> <li>Human Services</li> <li>Health Care</li> <li>Shopping</li> </ul>
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# Potential Ridership and Costs

Service Duration	Service Level	Vehicles		Total Estimated Ridership		Total Cost	Total Cost	
		Fixed Route	Para/ Micro- transit	Daily	Annual	Total Cost per One-way trip	Low	High
<i>Monday through Friday - 250 days *12 hours</i>								
Fixed Route and Paratransit/ Microtransit	Low	2	3	264	66,000	\$12.27	\$810,000	\$990,000
	Midlevel	3	3	432	108,000	\$9.17	\$990,000	\$1,215,000
	Full	4	4	720	180,000	\$7.33	\$1,320,000	\$1,620,000
<i>Monday through Saturday - 300 days *12 hours</i>								
Fixed Route and Paratransit/ Microtransit	Low	2	3	257	77,040	\$12.62	\$972,000	\$1,188,000
	Midlevel	3	3	421	126,360	\$9.40	\$1,188,000	\$1,458,000
	Full	4	4	696	208,800	\$7.59	\$1,584,000	\$1,944,000

# Capital Costs: Explanation

All vehicles will need to be ADA accessible and have on-board technology

Certain stops, such as transfer points, will need amenities such as shelters and benches

The cost for capital projects and equipment are generally covered 80% through federal grants and 20% locally. Some grants may cover more if the equipment is innovative such as alternative fuel vehicles.

Some stops will need improved pedestrian access

Private partnerships can also help support capital needs

# Vehicle and Other Capital Costs

Capital Need	Number	Estimated Total Cost	20% Local Match
On-Board Technology	7	\$70,000	\$14,000
Buses	7	\$1,300,000	\$260,000*
Shelters	6	\$60,000	\$12,000
Benches and Pads	10	\$ 20,000	\$4,000
Office equipment/software		\$150,000	\$30,000
<b>Totals</b>		<b>\$1,600,000</b>	<b>\$320,000</b>

*Fixed Route Vehicle Cost @ \$300,000 each*

*Microtransit Vehicle Cost @ \$100,000 each*

*Includes spare vehicles*

*\*The local match may be lower or eliminated if alternative fuels are used*

# Regional Service

## Commuter Bus Service along the I-35 corridor

- Combining San Marcos – New Braunfels – San Antonio service with existing Austin to San Marcos service can generate the most riders.
- Share the costs between jurisdictions.

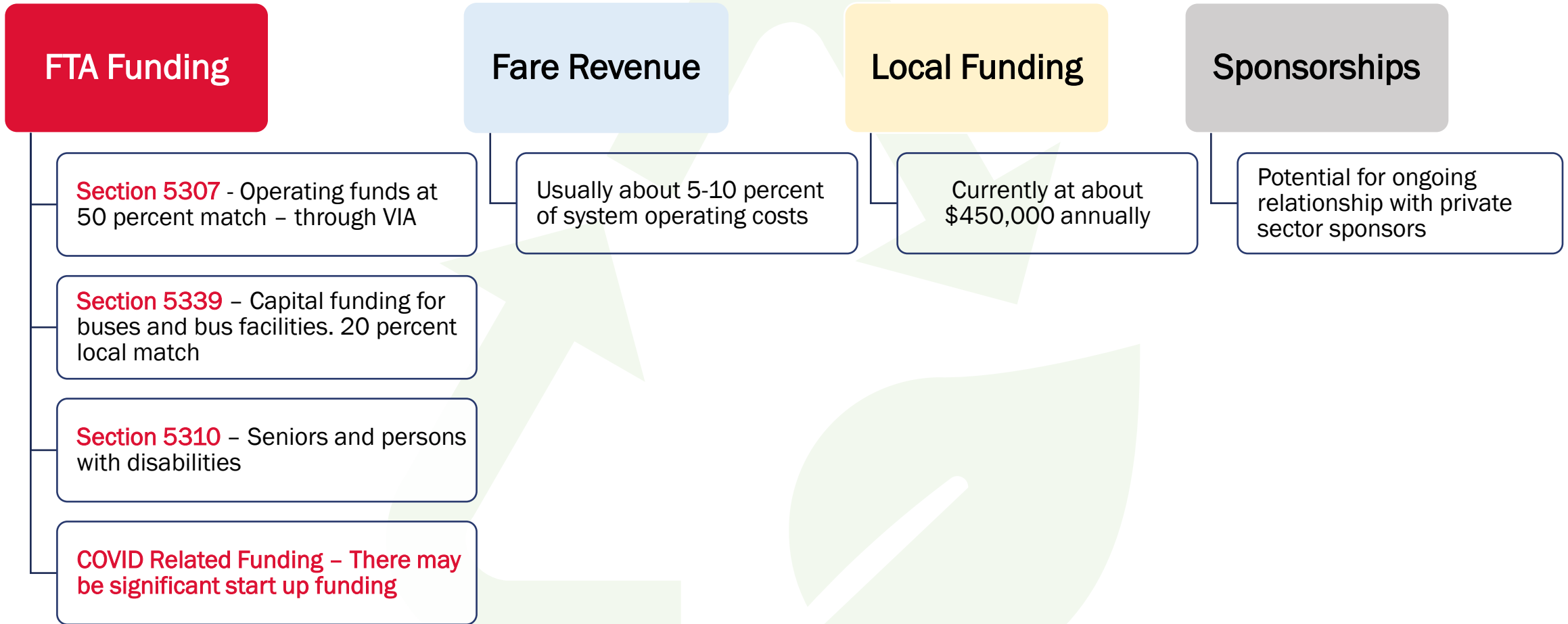
## Potential for a Future Route New Braunfels - Seguin

- Start as a van or bus pool
- As it builds ridership develop a scheduled service

## Vanpools and Bus Pools

- New Braunfels centric – existing options are Austin or San Antonio centric
- Managed by the transit system

# Funding and Sustainability: New Braunfels





# Summary – Re-Inventing Transit

There is a high cost to doing nothing

New Braunfels and VIA are already spending in excess of \$800,000

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Re-Invent Transit in New Braunfels:

**Implementing a new strategy will re-invent transit in New Braunfels and significantly increase ridership over the current level.**





## For More Information

See the Website:

<http://www.nbtexas.org/transit>

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