Agenda

- Team and Study Background Review (Scott Boone, CS)
- Scenario Development (Jim Baker, CTG)
  - Baseline Assumptions
  - Service Components
  - Scenarios
  - Discussion
- Funding Strategies (Brad Lonberger, KHA)
  - Municipal Typologies
  - Funding Mechanisms
  - Discussion
- Next Steps (Scott Boone, CS)
Team Introductions

Cambridge Systematics
Scott Boone & Hannah Santiago

Kimley-Horn
Brad Lonberger

CTG
Jim Baker

Marlene Connor Associates
Marlene Connor
Study Purpose

Identify, analyze, prioritize and develop a comprehensive approach to planning and implementing transit services outside of transit authority services areas.

- Implement Strategic and Near-Term Strategies
- Review Transportation Options
- Identify Funding Options
Advisory Board

Helps guides the study by developing the project goals, objectives, defines the project outcomes and provides technical advice; while supporting and encouraging participation in the community.
Study Background

The Tarrant County Transit Study will be built from previous studies conducted over the last several years.
## Study Background

<table>
<thead>
<tr>
<th>Geographic Focus</th>
<th>NCTCOG Region</th>
<th>NCTCOG Region</th>
<th>Tarrant County (outside Trinity Metro service Area)</th>
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<tr>
<td>User Focus</td>
<td>All Users</td>
<td>Vulnerable Users</td>
<td>All Users</td>
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<td>Travel Types</td>
<td>Car, High Intensity Bus, Commuter Rail</td>
<td>Bus, Demand Response, and Paratransit</td>
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<td>Vision</td>
<td>Long Range</td>
<td>Short-Medium Range</td>
<td>Short-Medium Range</td>
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7
SCENARIO ASSUMPTIONS
Area of Focus:
• Non-Trinity Metro Service Area
Baseline Budget Target

| Upper Bound | Trinity Metro O&M Cost per Capita | $25.59 |
| Lower Bound | Arlington Via O&M Cost per Capita  | $5.48  |


Total Tarrant County Unserved Population & Employment: 1,200,000

Target Annual Budget: $18.5 M

Annual per Pop+Emp: $15.54

Scenario Development

**Local Priorities** (served by local fixed-route, circulators, on-demand modes)
- Population / Employment Density
- Transportation Disadvantaged Communities

**Regional Priorities** (served by regional & commuter express modes)
- Employment Density
- Key Activity Centers
- Regional Trip Flows
LOCAL SERVICE
Categorize transit service needs potential based on:

- Population and employment densities
- Equity population (minority population and low-income household) densities
## Local Services Needs Approach

### Density Indicators (per acre)

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Med</th>
<th>High</th>
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<tbody>
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<tr>
<td>Employment</td>
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<td>8</td>
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- Trinity Metro ZipZone population densities range from 3.5 to 4.3 per acre
- Trinity Metro ZipZone employment densities range from 1.0 to 18.2 (New Southside) per acre
- 2020 Arlington Via population density = 7.2 and employment density = 4.4 per acre
Local Services Needs Approach

Equity Population Indicators (per acre)

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Med</th>
<th>High</th>
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<tr>
<td>Minority</td>
<td>1.12</td>
<td>1.68</td>
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<td>Low Income</td>
<td>0.14</td>
<td>0.21</td>
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</table>

- Low thresholds identified in table are average minority and low-income densities for Tarrant County
- High threshold assumed to be double Tarrant County average
High Service Needs

- Bedford
- Burleson
- Euless
- Everman
- Forest Hill
- Grand Prairie
- Haltom City
- Hurst
- Mansfield
- Richland Hills
- River Oaks
- Sansom Park
- Watauga
- White Settlement

Existing MOD Zones

Existing Svc. Area

Does Not Meet Threshold
High + Medium Service Needs

**HIGH NEEDS**
- Bedford
- Burleson
- Euless
- Everman
- Forest Hill
- Grand Prairie
- Haltom City
- Hurst
- Mansfield
- Richland Hills
- River Oaks
- Sansom Park
- Watauga
- White Settlement

**MEDIUM NEEDS**
- Azle
- Benbrook
- Pantego
- Saginaw

**Existing MOD Zones**

**Existing Svc. Area**

**Does Not Meet Threshold**
High + Medium + Low Service Needs

**HIGH NEEDS**
- Bedford
- Burleson
- Euless
- Everman
- Forest Hill
- Grand Prairie
- Haltom City
- Hurst
- Mansfield
- Richland Hills
- River Oaks
- Sansom Park
- Watauga
- White Settlement

**MEDIUM NEEDS**
- Azle
- Benbrook
- Pantego
- Saginaw

**LOW NEEDS**
- Colleyville
- Keller
- Lake Worth
- Southlake
REGIONAL SERVICE
Regional Service Needs

- Mobility 2045 Rail Corridors
  - Mansfield to Fort Worth
  - Southwest TexRail
  - Cleburne Line to Fort Worth
- Mobility 2045 High Intensity Bus Corridors
  - IH30 from Fort Worth to Dallas
  - IH35W from Fort Worth to Denton
Regional Service Needs

- Downtown Fort Worth – 46,800 jobs
- Centreport – 48,900 jobs
- Central Arlington – 36,900 jobs
- DFW Airport – 55,000 jobs
- Grapevine – 30,000 jobs

Jobs estimates from Remix
Trip Flows to Downtown Fort Worth

- 46,800 jobs
- 47,000 commute trips (LEHD)
- 144,800 total trips (Locus)
- 123,700 external trips (Locus)
- About 82,600 from Tarrant County (67%)
Trip Flows to Centerport

- 48,900 jobs
- 43,800 commute trips (LEHD)
- 84,100 total trips (Locus)
- 71,700 external trips (Locus)
- About 40,800 from Tarrant County (57%)
Trip Flows to Arlington

- 36,900 jobs (LEHD)
- 35,900 commute trips (LEHD)
- 103,700 total trips (Locus)
- 78,800 external trips (Locus)
- About 49,300 from Tarrant County (63%)
Trip Flows to DFW Airport

- 55,000 jobs
- 49,600 commute trips (LEHD)
- 288,400 total trips (Locus)
- 192,000 external trips (Locus)
- About 37,000 from Tarrant County (19%)
Trip Flows to Grapevine

- 30,000 jobs
- 27,000 commute trips (LEHD)
- 107,100 total trips (Locus)
- 86,000 external trips (Locus)
- About 47,900 from Tarrant County (56%)
High Service Needs Regional Service Expansion

- Mansfield-Fort Worth
- SW Tarrant-Fort Worth
- West Tarrant-Fort Worth
- Arlington-Fort Worth
High + Medium Service Needs Regional Service Expansion

- Mansfield-Fort Worth
- SW Tarrant-Fort Worth
- West Tarrant-Fort Worth
- Arlington-Fort Worth
- North Tarrant-Keller-Grapevine
High + Medium + Low Service Needs
Regional Service Expansion

- Mansfield-Fort Worth
- SW Tarrant-Fort Worth
- West Tarrant-Fort Worth
- Arlington-Fort Worth
- North Tarrant-Keller-Grapevine
- Mansfield-Arlington-Centreport
Scenario Definition

• **Scenario 1**
  • Local: High Service Needs
  • Regional: High + Medium + Low Service Needs

• **Scenario 2**
  • Local: High + Medium Service Needs
  • Regional: High + Medium Service Needs

• **Scenario 3**
  • Local: High + Medium + Low Service Needs
  • Regional: High Service Needs
### Estimated Service Hours & Annual Costs

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<th>Scenario 1</th>
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<th>Scenario 3</th>
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<td>Hours</td>
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<tr>
<td>On Demand</td>
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<td>245,000</td>
<td>798</td>
<td>$14,485,000</td>
<td>263,700</td>
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<td>Fixed Route</td>
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<td>$617,000</td>
<td>7,400</td>
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<tr>
<td>Local Subtotal</td>
<td>$13,465,000</td>
<td>245,000</td>
<td>798</td>
<td>$15,102,000</td>
<td>271,100</td>
<td>883</td>
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<tr>
<td>Regional Subtotal</td>
<td>$4,641,000</td>
<td>34,328</td>
<td>135</td>
<td>$3,253,000</td>
<td>24,062</td>
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<td>Total</td>
<td>$18,106,000</td>
<td>279,328</td>
<td>933</td>
<td>$18,355,000</td>
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<td>Local %</td>
<td>74%</td>
<td>88%</td>
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<td>82%</td>
<td>92%</td>
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<td>Regional %</td>
<td>26%</td>
<td>12%</td>
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<td>18%</td>
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</table>

- **Local service hour estimates based on:**
  - Calculating appropriate expenditure in each area based on population & employment
  - Estimating potential on-demand service hours by using a cost of $55 per service hour (estimated average cost for on-demand services)
  - Estimating potential cost for areas served by a mix of fixed route and on-demand services by using a cost of $82.84 per service hour (estimated average cost for Trinity Metro fixed route service and on-demand services)

- **Commuter service hour estimates based on:**
  - Estimating service hours based on appropriate service plan
  - Applying a rate of $135.24 per revenue hour (Trinity Metro fixed route cost/hour, factored by 25% to reflect higher deadhead hours)
FINAL DRAFT SCENARIOS
Scenario 1

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<th>Service Type</th>
<th>Hours</th>
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<tr>
<td>Local</td>
<td>245,000</td>
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<td>Regional</td>
<td>34,300</td>
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<td>Total</td>
<td>279,300</td>
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Approx. Cost = $18.1 million  
(74% local/26% regional)
Scenario 2

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<tr>
<th>Service Type</th>
<th>Hours</th>
<th>% of Total</th>
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<tr>
<td>Local</td>
<td>271,100</td>
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<tr>
<td>Regional</td>
<td>24,100</td>
<td>8%</td>
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<tr>
<td>Total</td>
<td>295,200</td>
<td>100%</td>
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</tbody>
</table>

Approx. Cost = $18.4 million (82% local/18% regional)
Scenario 3

Service Type | Hours | % of Total
--- | --- | ---
Local | 276,100 | 94%
Regional | 16,100 | 6%
Total | 292,200 | 100%

Approx. Cost = $18.3 million
(88% local/12% regional)
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<th>City</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
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<td>Colleyville</td>
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<td>Euless</td>
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<td>Fixed Route</td>
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<td>Fort Worth</td>
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<td>Lake Worth</td>
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<td>On-Demand</td>
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<td>Watauga</td>
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<td>Fixed Route</td>
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<td>White Settlement</td>
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<tr>
<td></td>
<td>Fixed Route</td>
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**Service Recommendations by Scenario**

- **On-Demand**
- **Fixed Route**
- **Regional**
FUNDING STRATEGIES
Municipal Typology

Purpose for Typology
- Align similar municipalities
- Determine coordinated funding mechanisms and programs
- Determine potential cost share by municipal type
Rural Community

A municipality that is currently not served by public transportation. Typically, not adjacent to current transit-served areas.

Municipalities:
- Azle
- Everman
- Haslet
- Lakeside
- Newark
- Pelican Bay
- Reno
- Trophy Club
Self-Sufficient Community

A municipality that has self-managed public transportation within the municipal boundaries. Municipality is not a member of a transit authority.

Municipalities:

• Arlington
A municipality served by transit provided by Trinity Metro. Maybe a member city or utilizing a subscription of services through Trinity Metro.

**Municipalities:**
- Fort Worth
- Blue Mound
- North Richland Hills
- Grapevine
- Forest Hill
- Crowley
A municipality that borders a central city where public transportation is easily extended due to close proximity to the system.

**Municipalities:**

- Bedford
- Benbrook
- Dalworthington Garden
- Edgecliff Village
- Euless
- Haltom City
- Hurst
- Kennedale
- Lake Worth
- Pantego
- Richland Hills
- River Oaks
- Saginaw
- Sansom Park
- Watauga
- Westworth Village
- White Settlement
- Grand Prairie
- Keller
- Westlake
- Southlake
- Flower Mound
- Colleyville
Future Extension

A municipality that contains a walkable urban place, which will be a priority link in the transit system. Currently undergoing a rail or bus transit planning process.

Municipalities:

- Burleson
- Mansfield
1. **Level of Appropriateness** (based on current financial standing)
   - Local option sales tax available
   - Fiscal constraints

2. **Level of Partnership** (in order to realize transit funding)
   - Transit-specific special development needs
   - Potential for transit-oriented development

3. **Qualitative Assessment** (special circumstances)
   - Political constraints
   - Development potential constraints
### Potential Funding Mechanism by Type

<table>
<thead>
<tr>
<th>Name</th>
<th>Rural Community</th>
<th>Self-Sufficient Community</th>
<th>Central City</th>
<th>Fringe System</th>
<th>Future Extension</th>
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<td>County-wide initiative in coordination with State and Regional entities</td>
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<td>Fee for Service  (VIA, ZipZone, etc.)</td>
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## Potential Funding Mechanism by Type

<table>
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<th>Name</th>
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GUIDED DISCUSSION
Do the funding assumptions make sense for determining a baseline level of service?

- Spend less per capita
- About the same
- Spend more per capita
What performance metrics would be most helpful in communicating these scenarios to communities?
Questions

- Do the municipality types and descriptions in this presentation fit with your knowledge of the region?

- How can we adjust our approach to best provide tools and information to the communities of Tarrant County?
Next Steps

- Public Engagement Meeting (Tentative date: March 25th)
  - Social Media Engagement Calendar
- Scenario Development Report
- Funding Report
- Implementation Report
- Final SAG Meeting (Tentative)
- Final Report (to be available on website)
THANK YOU!