

CONNECT ARLINGTON

A Transportation Vision Connecting People and Places



TRANSPORTATION
ADVISORY
COMMITTEE REPORT
September 2017

INTRODUCTION

On September 6, 2016, Arlington's Mayor and City Council formed the Transportation Advisory Committee (TAC), composed of 31 residents and community stakeholders. The Committee was tasked with developing a vision to help shape the future of transportation in the City of Arlington.

Over the course of 12 months, the TAC went through an extensive process to articulate community needs, gather information from a variety of sources, analyze data, and consider potential solutions to Arlington's transportation challenges. This report is the culmination of that effort.

The following recommendations were formally adopted by the Transportation Advisory Committee and comprise the Committee's transportation vision for the City of Arlington. The recommendations should serve as guidance for the City Council, as they craft a specific service plan which takes into account funding options, operational constraints and other details that will ultimately impact the service plan. While the Committee discussed various policy issues and developed some guidance on those issues, the long-term vision was the primary focus of the Committee.

GUIDING PRINCIPLES

The recommendations in this report are based on several guiding principles which helped direct the Committee process and the resulting recommendations. The TAC agrees that a visionary transportation system for Arlington:

- » Provides a long-term transportation vision for the next 20 to 30 years;
- » Offers flexible, adaptable solutions;
- » Enhances and attracts economic growth, factoring in population growth and emerging technologies;
- » Is phaseable, to include both mid-term and long-term solutions;
- » Strives to be cost-effective, maximizing potential funding opportunities for both capital and operating costs;
- » Connects into any current or future regional system and potentially replaces existing transportation services within the City and the University of Texas at Arlington;
- » Encourages partnerships with regional entities, the private sector and neighboring cities;
- » Minimizes impacts to existing traffic;
- » Is environmentally-friendly, minimizing carbon emissions;
- » Supports a high quality of life for the citizens of Arlington;
- » Minimizes trip times and transfer between modes through the City and the region;
- » Considers the opportunity cost of traffic delays.



TARGET POPULATIONS

From the beginning of the process, the TAC worked to identify the various categories of users who should be served by a transportation system in Arlington. Committee members agreed that the following groups should be served through one or more of the suggested modes described in this report.

- » Employment-Based Commuters
- » Senior Citizens
- » Students
- » Healthcare Access
- » Individuals with Lower Incomes
- » Individuals with Disabilities
- » Tourists
- » Special Event Attendees
- » Regional Commuters
- » Local Shoppers and Diners
- » Travelers to and from the Dallas-Fort Worth International Airport

MODE OPTIONS

Throughout the process, the Committee received information on transportation services currently available in the City as well as new opportunities they may want to consider. Existing services discussed included Handitran, the Metro ArlingtonXpress (MAX), Mission Arlington transportation services, Ride2Work, the Trinity Railway Express (TRE), the University of Texas at Arlington shuttle, and the Entertainment District Trolley. While the TAC’s recommendations do not directly speak to existing services, the Committee did discuss how some of these services may evolve based on the City Council’s implementation of the TAC recommendations.

New transportation modes considered by the Committee throughout the process included not less than 16 modes. As the Committee analyzed options throughout the process, mode choices were narrowed down. The recommended modes included in this report were considered the best fit for the needs of the City.

COMMITTEE RECOMMENDATIONS

The Committee identified populations to be served, key destinations that require service – designated as major and minor hubs, and six priority corridors to fully serve the transportation needs of the City. The TAC then identified those modes which would best connect citizens to and from destination points within the six corridors.

RECOMMENDED MODES

Examples of the modes included in the TAC recommendations are detailed below.

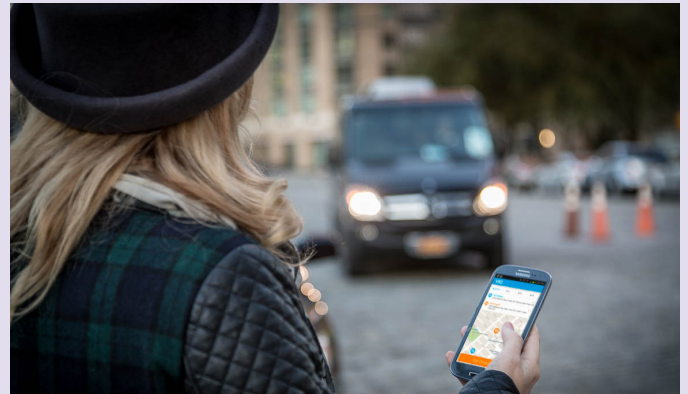
Demand-Response Rideshare

Demand-Response Rideshare has the ability to address mobility needs through a dynamic micro-transportation system with an infinite number of on-demand stops. This type of service is a technology-based solution that is a flexible,

efficient and cost-effective option for riders traveling for work, pleasure or day-to-day needs. Users can reserve a seat, pay for their trip and track their ride through a smartphone application, although dial-in and web-based options are also available.



An example of a rideshare vehicle.



Demand-Response Rideshare riders can book a ride through a smartphone application.

Bus Rapid Transit or High-Intensity Bus

Bus Rapid Transit and High-Intensity Bus are both high-quality, rubber-tired transportation options that are designed to deliver fast, reliable and comfortable service. They typically run in their own dedicated lane and can be given traffic signal priority to improve speed of service. The systems also allow for off-board fare payment, platform-

level boarding and are able to carry a high volume of passengers. They often provide amenities such as free Wi-Fi, high-backed seats and charging stations. Bus Rapid Transit is a localized service, while High-Intensity Bus typically runs longer distances between cities in a managed highway lane.



The Fort Worth Transportation Authority operates a BRT line named the "Spur" in Fort Worth.



An example of a BRT station where passengers can purchase tickets before boarding the vehicle.

RECOMMENDED MODES

Rubber-Tired Shuttle

Rubber-Tired Shuttles offer the flexibility to travel at-grade or on an elevated guideway. Due to their small size, it may be possible to design, simple, lower-cost elevated paths that reduce the overall



EasyMile, a leader in low-speed, rubber-tired autonomous shuttle technology, currently operates in Arlington's Entertainment District.

cost of the system. Autonomous technology is in its infancy, but future versions of such vehicles are expected to carry passengers and/or freight quickly, safely and cost effectively.



Navya is another low-speed, autonomous shuttle provider.

Personal Rapid Transit

Personal Rapid Transit features fully-automated vehicles operating as part of a system on an elevated guideway system. The systems are typically higher-speed and vehicles carry one to six passengers. Simple guideways may reduce



Rendering of SkyTran, an example of a PRT System that uses magnetic levitation instead of wheels.

costs and visual impact on the built environment. Stations are located on sidings, allowing for non-stop, point to point travel that bypasses intermediate stations.



Ultra Pod PRT is a battery-powered system that operates at London Heathrow Airport.









Rendering of a proposed PRT system for Austin, Texas.

CORRIDORS AND HUBS

Legend

Corridor

-  1 - CentrePort TRE to Entertainment District
-  2 - Entertainment District to South Arlington
-  3 - Entertainment District to TCC
-  4 - IH 30
-  5 - IH 20
-  6 - Spur 303 (Pioneer Parkway)



Major Hub

- A - CentrePort TRE Station
- B - Entertainment District
- C - Downtown / UTA
- D - Parks Mall / Highlands



Minor Hub

- a - Viridian
- b - Arlington Memorial Hospital
- c - General Motors
- d - Senior Center
- e - Medical District
- f - US 287 / IH 20
- g - IH 20 / SH 360 Industrial Area
- h - Tarrant County College
- i - Mansfield Hub

 TRE Railway

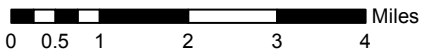
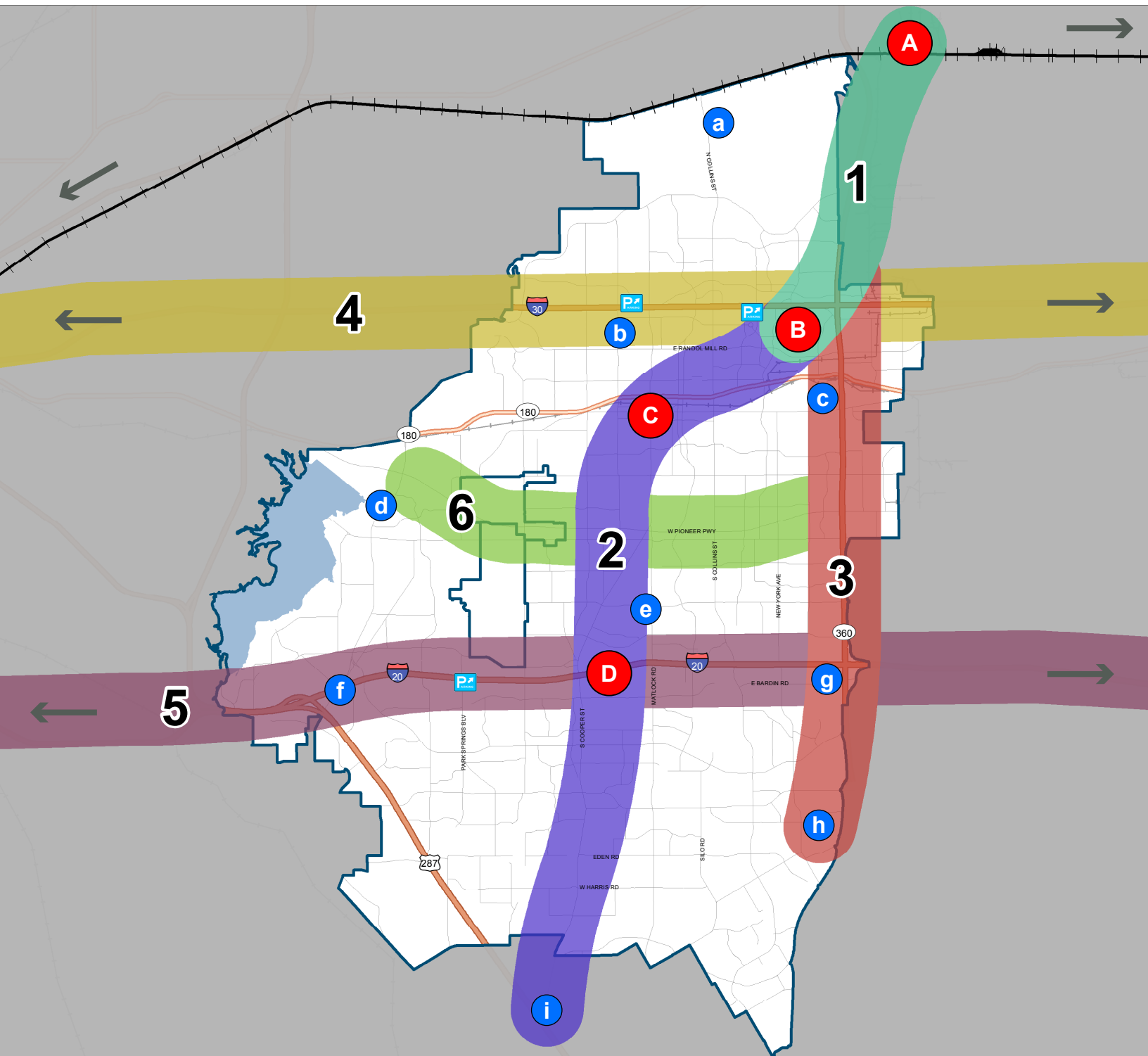
 Park and Ride

 Connection to Fort Worth

 Connection to Dallas

Sources:
Tarrant County TAD data (2017),
Data & Maps for ArcGIS 2012 - World, Europe,
and United States, City of Arlington - CDP GIS
data structure.
Current to: 8/10/2017

Disclaimer: This data has been compiled by
The City of Arlington using various official and
unofficial sources. Although every effort was
made to ensure the accuracy of this data, no
such guarantee is given or implied.



CORRIDOR RECOMMENDATIONS

CORRIDOR 1

CentrePort (TRE Station) to Entertainment District

Desired Service Characteristics

- » Gateway to the City
- » “Signature” type of service
- » Fixed-route service
- » High frequency
- » Elevated to avoid traffic impacts
- » Serves visitors, employees, businesses, and residents

Mid-term Recommendations

- » Provide Demand-Response Rideshare service within Corridor 1.

Long-term Recommendations

- » Corridor 1 will be best served by fixed-route service, such as autonomous, rubber-tired shuttles, or Personal Rapid Transit. Any service along this corridor could be elevated to prevent traffic congestion.

CORRIDOR 2

Entertainment District to South Arlington
(along Cooper Street)

Desired Service Characteristics

- » Fixed-route service
- » Express or local service based on demand
- » Serves residents, businesses, and shoppers

Mid-term Recommendations

- » Provide Demand-Response Rideshare service within Corridor 2.

Long-term Recommendations

- » Corridor 2 will be best served by fixed-route service such as autonomous, rubber-tired shuttles, or Personal Rapid Transit. Any service along this corridor could be elevated to prevent traffic congestion.

CORRIDOR 3

Entertainment District to Tarrant County College (along 360)

Desired Service Characteristics

- » A commuter transportation “spine” connecting northern and southern Arlington
- » Minimal traffic impacts using an elevated or separate guideway
- » Serves internal and external travel focused on work commuters and education-based transportation needs

Mid-term Recommendations

- » Provide Demand-Response Rideshare service within Corridor 3.

Long-term Recommendations

- » Corridor 3 will be best served by fixed-route service, such as autonomous, rubber-tired shuttles or Personal Rapid Transit. Any service along this corridor could be elevated to prevent traffic congestion.

CORRIDOR RECOMMENDATIONS

CORRIDOR 4

I-30 Corridor

Desired Service Characteristics

- » Regional connections
- » Express service
- » Commuter service
- » Comfort
- » Amenities
- » Serves commuters to Fort Worth and Dallas, as well as visitors

Mid-term Recommendations

- » To better move citizens and visitors along Interstate 30, the Committee recommends the implementation of a Bus Rapid Transit or High-Intensity Bus Service.

Long-term Recommendations

- » The Committee supports High Speed Rail in this Corridor as a long-term solution, if the region is able to complete such a project. If High Speed Rail is not constructed in the Corridor, the Committee recommends Bus Rapid Transit or High Intensity Bus service.

CORRIDOR 5

IH 20 Corridor

Desired Service Characteristics

- » Regional Connections
- » Express Service
- » Commuter Service
- » Comfort
- » Amenities
- » Serves commuters and residents

Mid-term and Long-term Recommendations

- » To better move citizens and visitors along Interstate 20, the Committee recommends the implementation of a Bus Rapid Transit or High-Intensity Bus Service in this Corridor, as both a mid-term and long-term recommendation.

CORRIDOR 6

Pioneer Parkway – Highway 303

Desired Service Characteristics

- » Fixed-route Service
- » Provides link to neighboring cities
- » Serves as a reliever for I-30 and I-20
- » Serves residents, businesses, seniors, tourists, and shoppers

Mid-term Recommendations

- » Provide Demand-Response Rideshare service within Corridor 6.

Long-term Recommendations

- » Corridor 6 will be best served by fixed-route service, such as autonomous, rubber-tired shuttles, or Personal Rapid Transit. Any service along this Corridor should be elevated to prevent increased traffic congestion.

ADDITIONAL RECOMMENDATIONS

In addition to the Corridor-specific recommendations, the Committee further recommends the following to amplify the overall transportation vision for the city:

Demand-Response Rideshare

The Committee recommends citywide Demand-Response Rideshare to allow for connections between the six identified corridors.

Circulators

The Committee recommends including circulator routes as part of a complete transportation system. These circulators would operate in three key, higher activity locations to facilitate movement within the area, such as from parking lots to destinations. Recommended locations include the Entertainment District, Downtown/UTA and the Parks Mall/Arlington Highlands. Desired service characteristics include a flexible, technologically-advanced service based on demand.

Multi-Modal Centers

The Committee recommends the incorporation of a Multi-Modal Center as part of a comprehensive transportation system in Arlington. A Multi-Modal Center is a place where passengers can transfer between a variety of modes, such as trains, shuttles, circulators, taxis and more. These Centers can also create economic development opportunities for the surrounding area. The Committee recommends a Multi-Modal Center in the Entertainment District, co-located with the proposed high speed rail station, as well as other locations where operationally efficient.

An artist's rendering of the Transbay Transit Center in San Francisco.



OTHER POLICY CONSIDERATIONS

The Committee recommends the following policy initiatives be considered by the Mayor and Council in implementing the overall transportation vision.

- » Take a citizen-centric approach when developing the detailed transportation plan based upon these recommendations
- » Incorporate innovative emerging technology
- » Support proposed High Speed Rail and develop a transportation system that accommodates a future station
- » Maximize use of existing park and ride lots
- » Invest in infrastructure improvements to maximize success of system, such as sidewalks and other infrastructure improvements that will increase use of service
- » Plan a future direct connection to DFW International Airport
- » Develop an integrated, seamless payment system for citizens
- » Evaluate the operational efficiency of connecting Corridors 1, 2, and 3 as a continuous loop

TAC MEMBERS

Tim Beary	Kate McGee
Esteban Blanco	Jim Monroe
Bill Coppola	Nesha Morey
Raul Gonzalez	Jan Porter
Syed Hassan	Willie Rankin
Michael Hill	Bryan Roberts
Greg Hladik	Russell Schaffner
Michael Jacobson	Deborah Spell
Cynthia Jensen	David Tesmer
Tom Lehrman	Bethany Tinderholt
Lorie Lisius	Paul Turner
Chad Martindale	Greg Vaquera
Steve Martindale	Bill Verkest, Chair
Peggy Masters	Susan Wright
Rob Matwick	Steve Wurm
Steve McCollum	

