Final Plan
August 2018

Presented to
TULSA TRANSIT

Submitted by
CTG

INCOG
Chapter 1 Executive Summary

The Metropolitan Tulsa Transit Authority\(^1\) will soon begin construction of its first AERO Bus Rapid Transit (BRT) service along Peoria Avenue, while a second AERO BRT line is proposed to serve 11\(^{th}\) and 21\(^{st}\) streets. The Connecting Progress Plan was undertaken by Tulsa Transit to support the successful launch of AERO BRT, while simultaneously reviewing and improving the rest of the local bus network. The overarching theme of the Connecting Progress Plan is to determine the best way to deploy and reorganize resources to best serve existing and future transit customers. Improvements to trip speed, frequency, connections, and access are all expected outcomes when the proposed network is implemented.

1.1 Study Goals

Five goals were identified for the Connecting Progress Plan, including:

- Goal 1: Help Tulsa Transit determine how to improve service frequencies and reduce rider travel time without additional operating costs.
- Goal 2: Build network off the AERO Peoria BRT in the short term and AERO Route 66 BRT in the intermediate term
- Goal 3: Improve Tulsa Transit’s presence in the community through a robust and meaningful public outreach process as well as aligning services with stakeholder goals.
- Goal 4: Make recommendations related to Tulsa Transit’s “hub and spoke” design while also addressing schedule adherence issues.
- Goal 5: Recommend other non-traditional service delivery approaches like private providers, TNCs, and demand response zones, as appropriate.

These goals provided guidance throughout the study. They were also used to review the recommended plan to ensure the final recommendations fulfil the desired outcome of the Connecting Progress Plan. The goal review is discussed in Section 5.4 of Chapter 5.

\(^1\) Referred throughout this document as Tulsa Transit or MTTA
1.2 Recommended Plan

The Connecting Progress Plan included extensive data collection and analysis. All work was vetted through a robust outreach process that included:

- A Tulsa Transit working group consisting of drivers, customer service representatives, planning and administrative staff, a member of the Tulsa Transit Board of Trustees, and INCOG staff;
- An advisory committee consisting of regional stakeholders, social service representatives, and staff from Cities of Tulsa, Broken Arrow, Jenks, and Sand Springs.
- Public open houses held in multiple locations in downtown Tulsa, West Tulsa, East Tulsa, and North Tulsa
- An on-line community survey on desired improvements.

This work led to two main recommendations for the plan: a cost-neutral short-term plan to restructure the route network to be implemented in 2019, and a mid-term service expansion plan to be implemented in 3 to 5 years as funding becomes available.

Short-Term Plan

The short-term plan recommends a major restructuring of the Tulsa Transit network. Among the highlights of this plan:

- A series of hubs established throughout Tulsa to facilitate timed connections at locations other than Denver Avenue Station (DAS) and Midtown Memorial Station (MMS).
- Establishment of Peoria AERO BRT, the region’s first BRT line. Peoria AERO BRT will operate at a high frequency, providing excellent north-south mobility in the revised network.
- Establishment of five daytime corridors operating every 30 minutes:
  - Route 1 - MLK
  - Route 2 - Southwest Boulevard
  - Route 10 - 3rd/Admiral
  - Route 11 - 11th/21st (the future Route 66 BRT alignment)
  - Route 13 - 31st Street
- Establishment of new (or longer) corridor-based service on Harvard, Yale, Sheridan, and 31st Street corridors.
- Improvement in Saturday network headways, with all routes to operate every 60 minutes except for Peoria AERO BRT, which is to operate every 20 minutes.
- Revising the night and Sunday network so that it is a subset of Daytime routes operating at a consistent 60-minute headway.
- Introduction of three policy changes:
  - Establishment of performance standards for monitoring the new network
  - Elimination of flag stops throughout the system
  - A stop amenity policy for the provision of shelters at local stops.

Figures 1-1 through 1-3 show the recommended weekday daytime, Saturday daytime, and night/Sunday networks.
Table 1-1. Daytime Network Summary

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Description</th>
<th>Weekday Peak</th>
<th>Weekday Offpeak</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MLK</td>
<td>From 61st Street N to DAS</td>
<td>Headway 30 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>2</td>
<td>Southwest Blvd</td>
<td>From DAS to Tulsa Hills</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>3</td>
<td>Peoria AERO BRT</td>
<td>From 58th Street N to 81st Walmart</td>
<td>Headway 15 min</td>
<td>Span 6 hrs</td>
<td>Headway 20 min</td>
</tr>
<tr>
<td>4</td>
<td>Lewis</td>
<td>From 36th Street N/Hartford to 81st Street Walmart</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>5</td>
<td>Harvard/61st</td>
<td>From Harvard/Admiral to Woodland Hills Mall</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>6</td>
<td>Yale/51st</td>
<td>From Harvard/Admiral to Woodland Hills Mall</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>7</td>
<td>Sheridan</td>
<td>From TCC NE to Woodland Hills Mall</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>8</td>
<td>Garnett</td>
<td>From Admiral/Memorial to Woodland Hills Mall</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>9</td>
<td>Pine/Memorial</td>
<td>From DAS to MMS</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>10</td>
<td>3rd/Admirial</td>
<td>From DAS to Admiral Walmart</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>11</td>
<td>11th/21st Streets (future BRT)</td>
<td>From DAS to Eastgate</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>12</td>
<td>21st/11th Streets</td>
<td>From DAS to Eastgate</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>13</td>
<td>31st</td>
<td>From 41st/Peoria to Eastgate</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
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<tr>
<td>14</td>
<td>61st/41st</td>
<td>From 61st/Peoria to The Promenade Mall</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>15</td>
<td>West Tulsa/71st Street</td>
<td>From 49th/jackson to Woodland Hills Mall</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
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<tr>
<td>16</td>
<td>Southeast Tulsa</td>
<td>From Woodland Hills Mall to St Francis Hosp. South</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
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<tr>
<td>17</td>
<td>Jenks Circulator</td>
<td>TBD</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>18</td>
<td>Sand Springs</td>
<td>From DAS to Sand Springs Walmart</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>19</td>
<td>North Tulsa Circulator</td>
<td>From Dream Center (46th Street N) to TCC NE</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>20</td>
<td>BA Circulator</td>
<td>TBD</td>
<td>Headway 60 min</td>
<td>Span 6 hrs</td>
<td>Headway 60 min</td>
</tr>
<tr>
<td>902</td>
<td>BA Express</td>
<td>From B.A. to Downtown Tulsa</td>
<td>4 Trips</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>909</td>
<td>Union Express</td>
<td>From Union HS to Downtown Tulsa</td>
<td>2 Trips</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The mid-term plan is a list of potential service expansion projects that Tulsa Transit would implement as soon as additional funding is available. The expectation is that these projects would take three to five years to implement.

This expansion list is based on demographics and data analysis along with feedback from the Tulsa Transit working group and Connecting Progress advisory committee. The list of projects is also consistent with public feedback from the community survey.

Potential projects include:

**Weekday Daytime**
- Improve Route 5 - Harvard to operate with 30-minute headways

**Saturday Daytime**
- Improve Route 1 - MLK to operate with 30-minute headways
- Improve Route 2 - Southwest Boulevard to operate with 30-minute headways
- Improve Route 10 - Admiral to operate with 30-minute headways

**Weekday Night**
- Add 2 more hours of service to weekday night network (for routes 1, 3, 5, 9, 10, 11, 13, 15)
- Add routes 6, 7, 12, and 19 to the weekday night network (operating three hours each)

**Sunday**
- Add routes 6, 7, 12, and 19 to the Sunday network (operating ten hours each)

Each project is projected to cost between $100,000 and $300,000 (in FY17 dollars). These identified projects are all designed to be scalable – meaning they could be implemented individually or in combination, depending on available dollars.

**Evaluation of the Recommended Plan**

The recommended Connecting Progress Plan is a major change to the network, but one that will result in significant improvement to existing riders, while at the same time attracting new riders to use the system. Improvements include:

- Establishes a set of strategically-located transit subhubs on the periphery of Tulsa Transit’s service area to facilitate transfers at locations away from Denver Avenue Station (DAS) and Midtown Memorial Station (MMS). While exact locations and amenities are to be determined, each subhub is presumed to include an off-street waiting area, one or two shelters and benches,
and other amenities like lighting, trash receptacle, bicycle parking, and schedule and route information.

- The establishment of subhubs will improve rider travel times by timing transfers in locations other than DAS and MMS and by reducing out of the way travel. The implementation of subhubs is expected to result in an average savings of 16 minutes per one-way trip and removes the need to travel downtown to transfer.

- Provide more continuous corridor-based service on major thoroughfares, including Harvard, Yale, Sheridan, and 31st Street.

- Improves the Saturday network, with all routes proposed to operate every 60 minutes except for Peoria AERO BRT, which is to operate every 20 minutes.

- Adds frequency improvement for weekday service on routes 11 (11th/21st Street) and 13 (31st Street).

- Improves the night network so that routes are same as daytime routes, operating at a consistent 60-minute headway.

- Improves transfers to Peoria AERO BRT, with eleven routes connecting to the Peoria corridor; three of the connecting routes (1, 11, 13) have proposed 30-minute frequency service.

- Establishes Route 11 on alignment of future Route 66 AERO BRT route. This route is proposed to have 30-minute frequency service which can be scaled up with the introduction of BRT service.

- Route-to-route connections outside of subhub locations are spread more evenly throughout the metropolitan area, which substantially cuts down on out-of-direction travel for riders.

- The flag stop policy is recommended to be eliminated, which will give routes greater ability to adhere to their schedules.

- This study considered a variety of non-traditional service delivery approaches, particularly in low-productivity areas of the Tulsa Transit service delivery area.

- This study recommends the use of alternative services in Broken Arrow and Jenks, subject to discussion with each city.
Figure 4-18. Service Coverage Change for Weekday Daytime

Figure 4-19. Service Coverage Change for Night/Sunday