

# PREFERRED ALTERNATIVE

The results of Phase II outreach show that the community was supportive of transitioning to a grid system with high frequency corridors, later evening service, and expanded weekend service. Additionally, making improvements to address on-time performance issues, improve service reliability, and provide better connections to northeast Oklahoma City emerged as priorities.

Fully transitioning to a grid system would require a significant expansion of service over existing levels of investment and is best implemented in a phased approach. As such, this Preferred Alternative is divided into two sections:

- **Short-Term Recommendations** – Include service changes that integrate the Northwest Bus Rapid Transit line with local service, address on-time performance, and extends service to new destinations. These improvements may be implemented in the next several years.
- **Long-Term Recommendations** – Include a series of cost-unconstrained improvements that would require additional funding and may be implemented over approximately 10 years. Individual improvements in the Long-Term Recommendations are costed separately so that specific priorities may be implemented and phased independently.

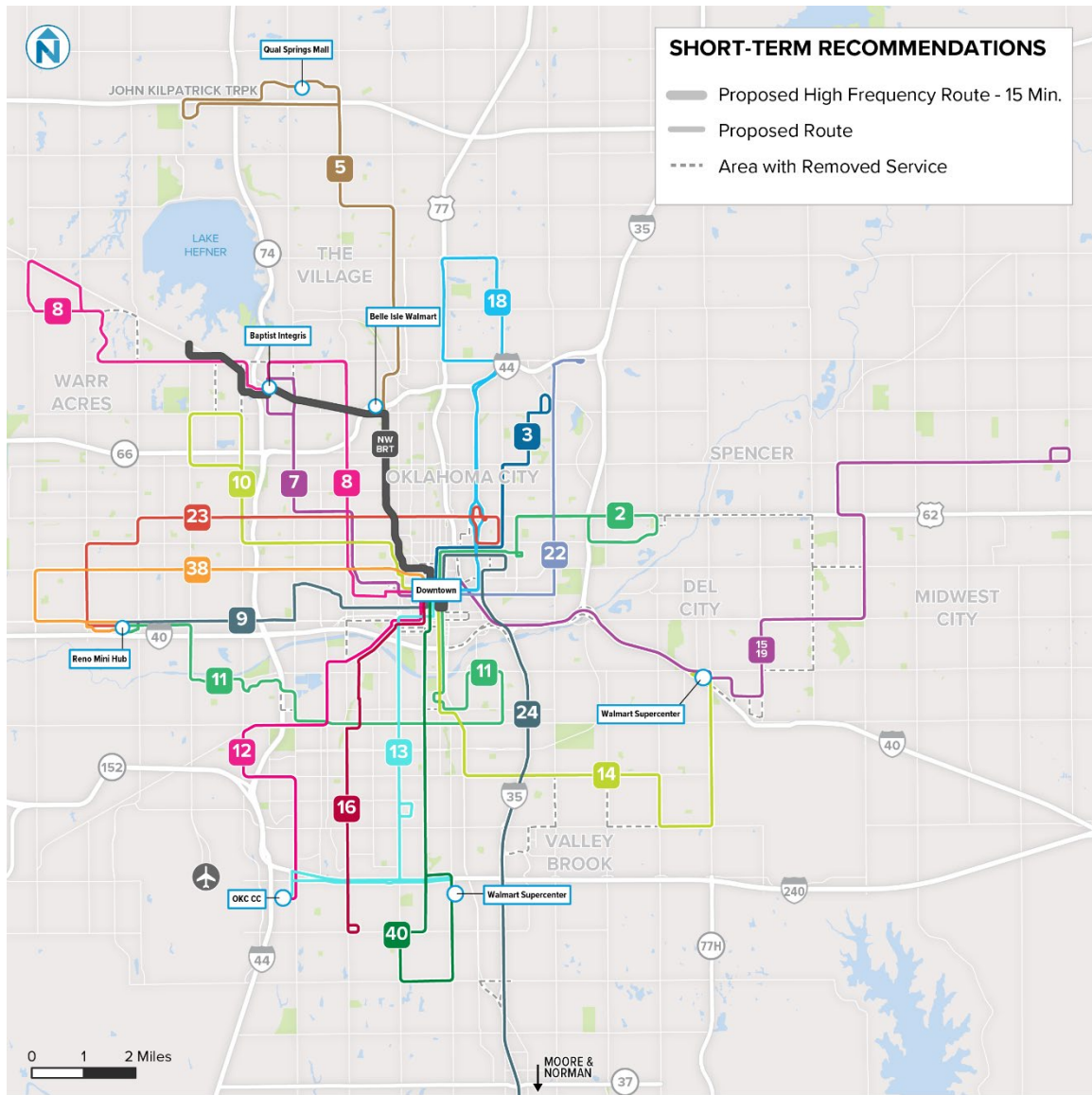
## SHORT-TERM RECOMMENDATIONS

The improvements included in the Short-Term Recommendations are intended to accomplish several key goals, including:

- Integrate the NW BRT into the existing fixed-route network
- Extend service to new destinations
- Address on-time performance issues
- Better connect northeast Oklahoma City to jobs and services
- Standardize frequency on routes to improve daily transfers

A system map displaying the Short-Term Recommendations is shown in Figure 1. In the Short-Term Recommendations, the service span of all routes would be unchanged and service frequency would be changed for a few routes. Routes 14 would operate hourly seven days per week, Route 15/19 would operate hourly on weekdays only, Route 038 would operate hourly on weekends, and Route 024 would operate more consistently every two hours on weekdays only. Specific details on frequency and alignment changes at the route level are discussed below.

Figure 1 Short-Term Recommendations System Map



## Route Level Changes

This section includes specific changes for each route that are included in the Short-Term Recommendations. Detailed maps showing these route level changes are included in Appendix D. Only routes with proposed changes are included here, all other routes would be unchanged.

### Route 002

Route 002 has among the worst on-time performance of any EMBARK route. In order to address this, Route 002 should be shortened to keep service on-time.

Outbound Route 002 should skip the McGuire Plaza deviation and instead use the stop at Lottie Ave & NE 13<sup>th</sup> St. Front door service to McGuire Plaza would continue to be provided by inbound Route 002 trips.

All areas currently served by Route 002 would continue to have service, this change would provide more direct service over a shorter alignment to alleviate on-time performance issues.

### **Route 005**

Route 005 currently serves Classen Blvd between downtown and NW Expressway. Most of this segment will be served by the NW BRT starting in October 2023. In order to reduce duplication with the NW BRT, Route 005 should be shortened to serve only the segment between Belle Isle and Mercy Hospital. Transfers between Route 005 and NW BRT would take place at the Blackwelder Station. Route 005 would continue to operate with the same span and frequency as today.

### **Route 008**

Route 008's alignment should be changed to simplify the alignment, extend to new destinations, and integrate with the NW BRT. Route 008 should operate on a consistent bi-directional alignment using NW 63<sup>rd</sup> St, Independence Ave, NW 56<sup>th</sup> St, and Portland Ave to serve Baptist Integris directly as well as to serve the NW BRT station on NW 56<sup>th</sup> St. The one-way deviations on NW 59<sup>th</sup> St and Tulsa Ave would be discontinued.

Route 008 would also be extended further west to Silver Springs Pointe Shopping Center and Walmart, including bi-directional service along NW 63<sup>rd</sup> St and Lyrewood Lane, and a clockwise terminal loop along Wilshire Blvd, Council Rd, NW Expressway, and Rockwell Ave. The segments of Wilshire Blvd east of Lyrewood Lane, NW Expressway between Wilshire Blvd and MacArthur Blvd, and MacArthur Blvd between NW Expressway and NW 63<sup>rd</sup> St would no longer be served. This extension serves an identified regional employment hub, improving accessibility to employment and shopping opportunities.

### **Route 012**

The alignment of Route 012 would be realigned to focus service on larger, faster arterials to reduce delays and improve on-time performance. The route would no longer operate on a one-way pair through downtown Oklahoma City on Western Ave, Main St, Hudson St, and Reno Ave. Instead, the route would operate bi-directionally along Walker Ave and Reno Ave to enter and exit downtown Oklahoma City. Route 012 would also no longer operate along Pennsylvania Ave or Reno Ave west of Klein Ave. Instead, the route would operate along Reno Ave, Klein Ave, and Exchange Ave.

### **Route 013**

Route 013 is among the lowest on-time performance routes in the EMBARK system and would be improved to make service easier to understand and faster by operating on a

larger arterial corridor through downtown to reduce on-time performance issues. Most of the Route 013 alignment would be unchanged. Service operating into and out of downtown Oklahoma City would operate bi-directionally along Reno Ave and Hudson Ave, rather than on two one-way couplets along SW 3<sup>rd</sup> St, Walker Ave, Hudson Ave, and SW 4<sup>th</sup> St.

## **Route 014**

Several changes are proposed for Route 014 to make service faster and more direct, while extending the route to serve new destinations. Route 14 would no longer operate the deviation to Crossroads Mall along I-35, SE 66<sup>th</sup> St, Crossroads Blvd, SE 59<sup>th</sup> St, and Eastern Ave. Crossroads Mall is no longer a destination and has few, if any riders. Instead, the route would provide more direct service along SE 44<sup>th</sup> St between Shields Blvd and Sunnyslane Rd. The route would also no longer operate the counterclockwise terminal loop around Bryant Ave, SE 59<sup>th</sup> St, Sunnyslane Rd, and SE 44<sup>th</sup>. Instead, Route 014 would operate bi-directionally along SE 44<sup>th</sup> St, Sunnyslane Rd, SE 59<sup>th</sup> St, and Sooner Rd. Route 014 would be extended further north, terminating at the Del City Walmart near Tinker Diagonal, SE 15<sup>th</sup> St, and Sooner Rd. This would also serve the Walmart neighborhood market on Sooner Road.

Route 014 would operate hourly instead of every 45 minutes to accommodate the longer route alignment. This will make transfer patterns consistent at the downtown Transit Center and ensure that the schedule is easy to remember, every hour.

## **Route 015**

Routes 015 and 019 would be combined into one route that provides faster, more frequent service for residents of the Mid-Del area and that would provide a one-seat ride into downtown Oklahoma City for residents of Spencer. These changes would simplify service and make it easier to understand for passengers by providing bi-directional service along the length of the route's alignment, rather than operating two one-way loops in Midwest City.

The route would operate bi-directionally along I-235 and I-40 to Del City and would then operate along SE 15<sup>th</sup> St, Sooner Rd, Will Rogers Rd, Hudiburg Dr, Adair Blvd, Air Depot Blvd, Reno Ave, Douglas Blvd, NE 23<sup>rd</sup> St, Spencer Rd, NE 36<sup>th</sup> St, and operate a terminal loop along NE 36<sup>th</sup> St, Hiwassee Rd, NE 39<sup>th</sup> St, and Adair St.

In Oklahoma City, service would no longer be provided on I-40 west of I-235 or along Robinson Ave, though Robinson Ave would continue to be served by other routes in the system. In Midwest City, service would no longer operate on Harr Dr, Boeing Dr, Air Depot Blvd south of Adair Blvd, SE 15<sup>th</sup> east of Air Depot Blvd, Midwest Blvd, or NE 10<sup>th</sup> St.

Service frequency on the route would be improved to operate hourly, which would better facilitate transfers and improve the usefulness of the route for residents of Del City, Midwest City, and Spencer. This is an improvement for all existing Route 015 riders.

This change would require concurrence of the County, Midwest City, and Spencer before being implemented.

### **Route 016**

Route 016 would be simplified to reduce travel times and improve on-time performance. The route would no longer operate on one-way couplets into and out of downtown Oklahoma City and would instead provide bi-directional service on Reno Ave and Walker Ave. Route 016 would no longer serve SW 3<sup>rd</sup> St or Hudson Ave.

### **Route 019**

Routes 015 and 019 would be combined into one route that provides faster, more frequent service for residents of the Mid-Del area and that would provide a one-seat ride into downtown Oklahoma City for residents of Spencer. These changes would simplify service and make it easier to understand for passengers by providing bi-directional service along the length of the route's alignment, rather than operating two one-way loops in Midwest City.

This combined Route 015/019 would operate bi-directionally along I-235 and I-40 to Del City and would then operate along SE 15<sup>th</sup> St, Sooner Rd, Will Rogers Rd, Hudiburg Dr, Adair Blvd, Air Depot Blvd, Reno Ave, Douglas Blvd, NE 23<sup>rd</sup> St, Spencer Rd, NE 36<sup>th</sup> St, and operate a terminal loop along NE 36<sup>th</sup> St, Hiwassee Rd, NE 39<sup>th</sup> St, and Adair St.

The new combined Route 015/019 would no longer provide a connection with Route 002, instead it would provide a direct ride into downtown Oklahoma City and provide connections with Route 014 in Del City. The existing alignment east of Spencer Rd would be unchanged. However, there would no longer be service on Midwest Blvd or on NE 23<sup>rd</sup> St west of Spencer Rd.

Service frequency on the route would be improved to operate hourly, which would better facilitate transfers and improve the usefulness of the route for residents of Del City, Midwest City, and Spencer.

This change would require concurrence of the County, Midwest City, and Spencer before being implemented.

### **Route 023**

Route 023 is among the lowest on-time performance routes in the EMBARK system. These improvements would shorten the route to improve on-time performance for the Route. Route 023 would no longer serve the two stops on NE 24<sup>th</sup>, south of the Oklahoma State Department of Education. The stop to the north of the Oklahoma State Department of Education on Capitol Service Road would continue to be served, which is 800 feet away. This recommendation continues to provide access to the State Capitol area but frees up additional time in the schedule to improve reliability across the entire alignment. All areas currently served by Route 023 would continue to be served.

## **Route 024**

The alignment of Route 024 would be simplified within Oklahoma City to provide simpler, more direct service to the highest ridership destinations along the route. It would also allow for a two-hour cycle time, which can facilitate transfers in both Norman and in Oklahoma City.

The recommended route would exit I-235 onto Lincoln Blvd and serve the OU Health Center and the Downtown Transit Center along NE 10<sup>th</sup> St, Stonewall Ave, NE 13<sup>th</sup> St, Robinson Ave, and NW 4<sup>th</sup> St. This simplified alignment would remove the out of direction deviations to the State Capitol and other areas of downtown, instead focusing service on the OU Health Center and Downtown Transit Center.

Frequency on Route 024 would also be improved to operate consistently every 2 hours, rather than at irregular intervals throughout the day.

## **Route 038**

The alignment for Route 038 would be unchanged. However, the frequency would be changed to operate consistently every 60 minutes on weekends instead of the irregular frequency every 45-50 minutes that the route currently operates. On weekends, Route 038 would be interlined with Route 008. This service change makes the route schedule easier to understand and better facilitates transfers at the Downtown Transit Center and the Reno Mini Hub.

**Figure 2 Cost-Constrained Short-Term Recommendations Span and Frequency Summary**

Short-Term Recommendations	Weekday	Saturday & Sunday	Weekday	Saturday & Sunday
	Frequency (day/night)		Span	
Route 002	30	60	5:30 am – 7:30 pm	6:30 pm – 6:30 pm
Route 003	30	60	6:00 am – 7:30 pm	6:30 am – 6:30 pm
Route 005	30/60	60	6:00 am – 12:00 am	6:30 am – 6:30 pm
Route 007	30	60	6:00 am – 7:30 pm	6:30 am – 6:30 pm
Route 008	30	60	5:30 am – 7:30 pm	6:30 am – 6:30 pm
Route 009	30	60	6:00 am – 7:30 pm	6:00 am – 6:30 pm
Route 010	30	60	6:00 am – 7:00 pm	6:30 am – 6:30 pm
Route 011	30/60	60	5:30 am – 12:00 am	6:30 am – 6:30 pm
Route 012	30	60	6:00 am – 7:00 pm	6:30 am – 6:30 pm
Route 013	30/60	60	5:30 am – 12:00 am	6:30 am – 6:30 pm
Route 014	60	60	5:30 am – 7:30 pm	6:30 am – 6:30 pm
Route 015/019	60	--	5:30 am – 8:00 pm	--
Route 016	30	60	6:30 am – 7:00 pm	6:30 am – 6:00 pm
Route 018	30	60	5:30 am – 6:30 pm	6:30 am – 6:30 pm
Route 022	30/60	60	5:30 am – 12:00 am	6:30 am – 6:00 pm
Route 023	30/60	60	5:00 am – 12:00 am	6:00 am – 7:00 pm
Route 024	120	--	5:30 am – 7:00 pm	--
Route 038	30	60	5:30 am – 7:30 pm	6:30 am – 6:30 pm
Route 040	30	60	6:00 am – 7:00 pm	6:30 am – 6:00 pm



## Reliability Improvements

Due to alignment changes, primarily strategic route shortening, six routes have reduced operating speed requirements. Only one route, Route 024, which operates primarily on I-35, has a slightly longer alignment. Shorter routes increase the ability for operators to keep their trips within the existing schedule and stay on time. Reliability should improve as a result.

**Figure 3 Cost-Constrained Short-Term Recommendations Route Length and Speeds**

Route	Round Trip Route Length (miles)		Round Trip Speed (mph)	
	Existing	Recommended	Existing	Recommended
Route 002	13.2	12.9	13.2	12.9
Route 005	29.7	22.3	14.9	14.9
Route 008	26.3	30.9	13.2	12.4
Route 012	21	20.2	14.0	13.5
Route 013	20.3	20.3	13.5	13.5
Route 014	24.8	27.4	16.5	13.7
Route 015	26.8	38.6	20.1	19.3
Route 016	16.8	16.8	16.8	16.8
Route 019	26.4	-	26.4	-
Route 023	24.7	24.1	12.4	12.1
Route 024	53	51.2	24.8	25.6

## Bus Stop Changes

The proposed route changes will require EMBARK to remove some existing stops and to add new stops. Approximately 40 existing stops would need to be removed and approximately 91 new stops would be installed.

New stops must be ADA compliant. Every new stop must have a pad as well as a bus stop. If no sidewalk is available, then new sidewalk may need to be constructed. This will be an issue on N Council Road, N Rockwell Ave, Wilshire Blvd, Sooner Road, SE 59<sup>th</sup> Street, and others.



## Phase II Short-Term Recommendations

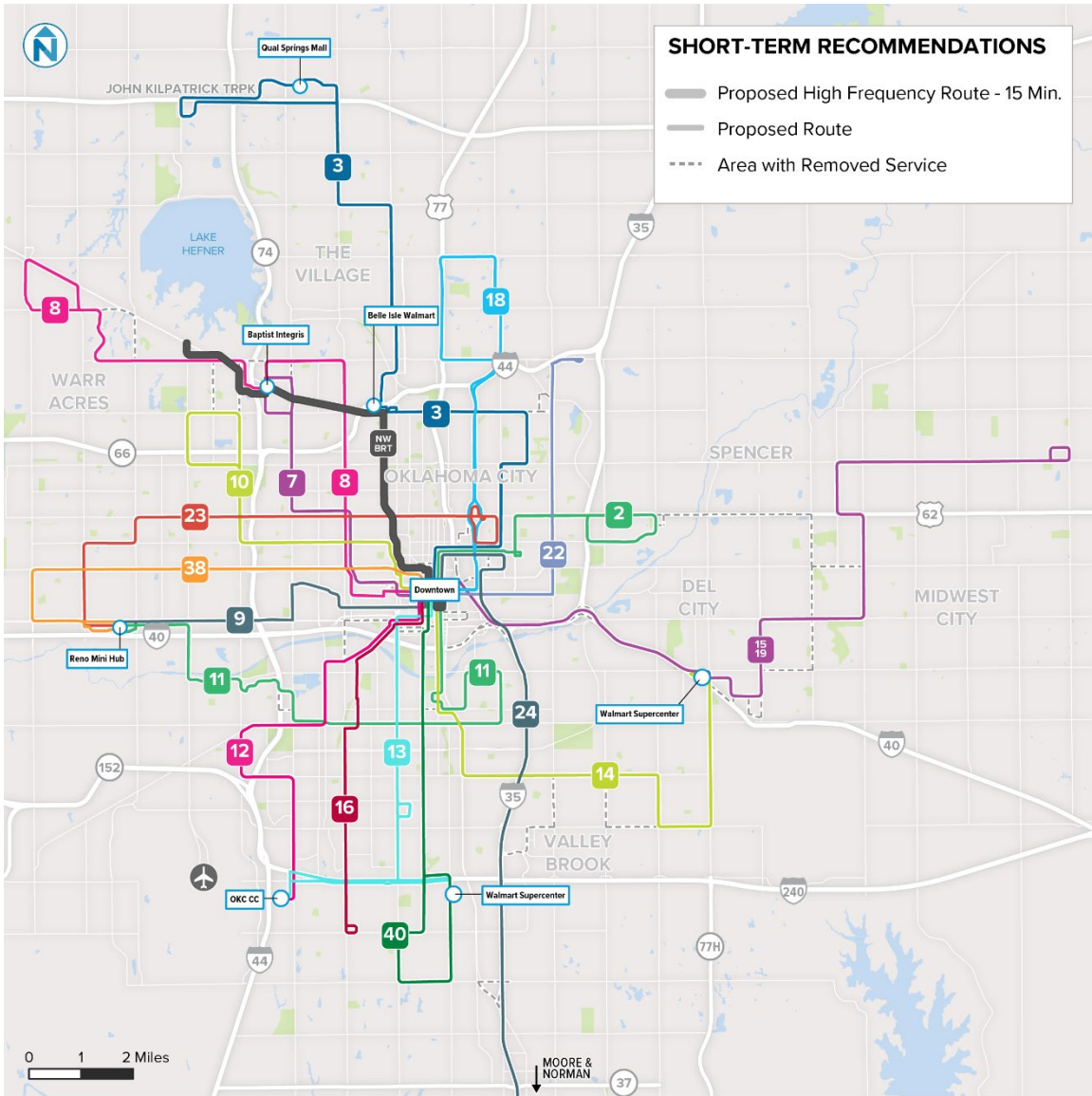
There is an additional improvement opportunity for Route 003 that would better integrate the local network with the NW BRT route and improve access to northeast Oklahoma City. This improvement would require additional operating costs to implement and is discussed below and shown in Figure 4.

### Route 003

The alignment of Route 003 would be revised to operate further west and north to expand job and shopping access for Northeast Oklahoma City residents. The route would no longer serve the Adventure District or on NE 50<sup>th</sup> St east of Prospect Ave. Instead, Route 003 would be extended west on NE 50<sup>th</sup> St to the Belle Isle Walmart, Penn Square Mall, and Classen Curve area along NE 50<sup>th</sup> St, NW Expressway, Belle Isle Blvd, and would also operate a deviation onto Western Ave, NW 51<sup>st</sup> St, and Classen Circle in the northbound direction only. Route 003 would continue operating further north along Classen Blvd, Western Ave, Hefner Rd, and Pennsylvania Ave, to Quail Springs Mall. The route would operate a counterclockwise terminal loop along NW 140<sup>th</sup> St, Quail Springs Pkwy, W Memorial Rd, N Meridian Ave, McAuley Blvd, and W Memorial Rd, replacing service currently provided by Route 005.

This recommendation will require an additional peak bus and approximately 3,400 annual hours to operate.

Figure 4 Short-Term Recommendations Phase II System Map



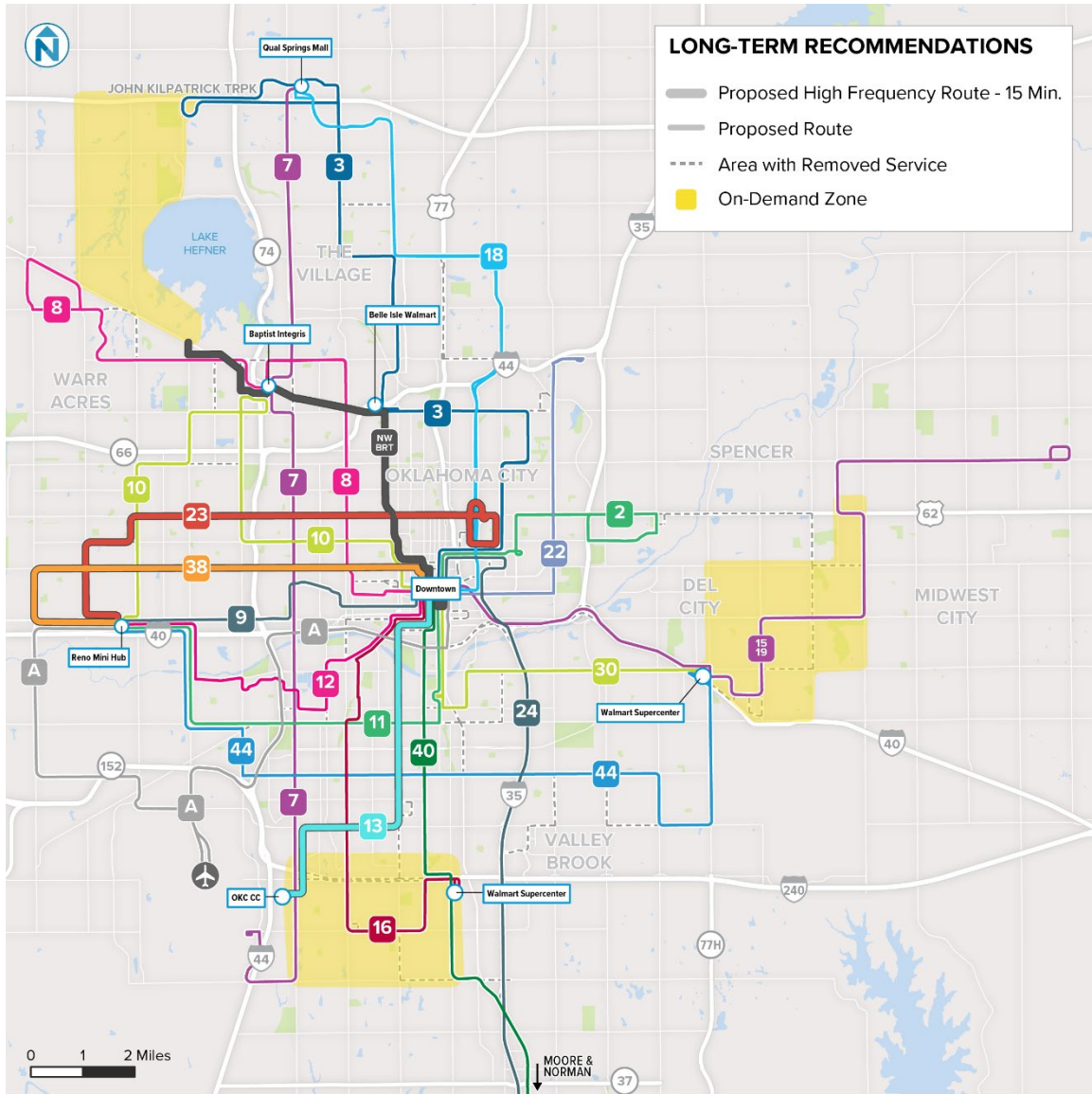
## LONG-TERM RECOMMENDATIONS

The Long-Term Recommendations outline a 10-year vision that addresses regional growth, supports economic development, and responds to public priorities. The improvements included in the Long-Term Recommendations are not cost constrained and will require additional resources and capital investments to implement and operate. Key goals and improvements contained within the Long-Term Recommendations include:







- Addressing additional on-time performance challenges
- Re-focusing service away from downtown Oklahoma City
- Improving service frequency on key corridors
- Operating later evening service
- Better weekend service
- Focusing on improving access to employment opportunities
- Expanding regional access to transit
- Developing new service delivery alternatives to expand service coverage

A system map displaying the Long-Term Recommendations is shown in Figure 5. The recommendations and planning level annual hours estimates and the number of additional vehicles required is show in Figure 8-6. Detailed recommendations follow.

Figure 5 Long-Term Recommendations System Map



**Figure 6 Long-Term Recommendations Summary**

Service Improvement	Recommendations	Est. Additional Annual Operating Hours	Estimated New Buses (with spares)
 <b>Improved Frequency of Service</b>	<ul style="list-style-type: none"> <li>▪ Create four route frequent transit network that operates 7 days a week</li> <li>▪ Provide 30-minute on almost all Saturday routes</li> </ul>	81,000	17
 <b>Improved Span of Service</b>	<ul style="list-style-type: none"> <li>▪ Provide service until midnight weekdays and Saturdays</li> <li>▪ Provide service until 10 p.m. on Sundays</li> </ul>	39,000	0
 <b>Keep Buses On Time</b>	<ul style="list-style-type: none"> <li>▪ Budget for schedule maintenance for four routes</li> </ul>	22,000	5
 <b>Service to New Areas</b>	<ul style="list-style-type: none"> <li>▪ Downtown to Airport &amp; 44<sup>th</sup>/Council</li> <li>▪ 44<sup>th</sup> Street Crosstown</li> <li>▪ SE 15<sup>th</sup> Street Route</li> <li>▪ May Avenue Crosstown</li> <li>▪ NE OKC to Quail Springs</li> <li>▪ Baptist Integris to Reno Hub</li> <li>▪ Service to Moore</li> <li>▪ Better south OKC service</li> </ul>	150,000	32
 <b>On-Demand Zones</b>	<ul style="list-style-type: none"> <li>▪ Improve coverage in growing areas three on-demand zones</li> </ul>	14,000	4
 <b>Secondary Transfer Hubs</b>	<ul style="list-style-type: none"> <li>▪ New secondary transfer hubs are recommended at Quail Springs Mall, Oklahoma City Community College, Reno Hub, Santa Fe Walmart, and at the Del City Walmart.</li> </ul>	None	Cost varies from \$500k to \$5M per facility

## Improve Frequency of Service



Improving frequency means providing EMBARK service that comes more often. More frequent service is more convenient, and therefore attracts and retains more riders. Currently, most EMBARK routes operate every 30-minutes on weekdays. But they operate with reduced frequency during evenings and weekends, reducing the attractiveness of the service.

### Long-Term Recommendations

Two improvements are recommended.

- **Develop a frequent transit network that operates 7 days a week.** Routes 013, 023, and 038 should operate every 15 minutes seven days a week. These routes will complement the NW BRT and Streetcar in having high-quality service all day, every day.
- **Provide 30-minute all-day service on Saturdays.** This is achieved by adding trips during Saturdays to create a more robust network.

Developing a high frequency network and providing 30-minute service on Saturdays results in an additional 81,000 estimated annual service hours. Note that frequency costs do not reflect proposed span improvements. An additional 17 new buses would be required for Routes 013, 023, and 038, which currently operate at 30-minute headways.

Proposed changes to weekday, Saturday, and Sunday frequency are indicated in bold in the tables below.

Figure 7 Proposed Long-Term Frequencies

Route	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
	Existing Frequency (daytime/night)			Proposed Frequency (daytime/night)		
Route 002	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 003	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 005	30/60	60	60	--	--	--
Route 007	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 008	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 009	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 010	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 011	30/60	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 012	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 013	30/60	60	60	<b>15/30</b>	<b>15/30</b>	<b>15/30</b>
Route 014	60	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>

Route	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
	Existing Frequency (daytime/night)			Proposed Frequency (daytime/night)		
Route 015/019	60	--	--	60	<b>60</b>	<b>60</b>
Route 016	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 018	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>
Route 022	30/60	60	60	30/60	<b>30/60</b>	<b>60/60</b>
Route 023	30/60	60	60	<b>15/30</b>	<b>15/30</b>	<b>15/30</b>
Route 024	120	--	--	120	--	--
Route 038	30	60	60	<b>15/30</b>	<b>15/30</b>	<b>15/30</b>
Route 040	30	60	60	<b>30/60</b>	<b>30/60</b>	<b>60/60</b>

## Improve Span of Service



Improving span of service means extending EMBARK’s operating hours during evenings and on weekends. An extended span of service will help EMBARK serve all employment types and tap into new markets. Later services will provide mobility for non-commute trips and people with different work schedules and provide customers the ability to utilize EMBARK for non-work evening purposes.

The current span of service provided by EMBARK is oriented to serve peak-hour commute trips and does not support all employment types and potential trip markets. There is strong public support for improving span of service. During the OKC Moves community outreach process, adding service during evenings, weekends, and mornings were among the top community priorities.

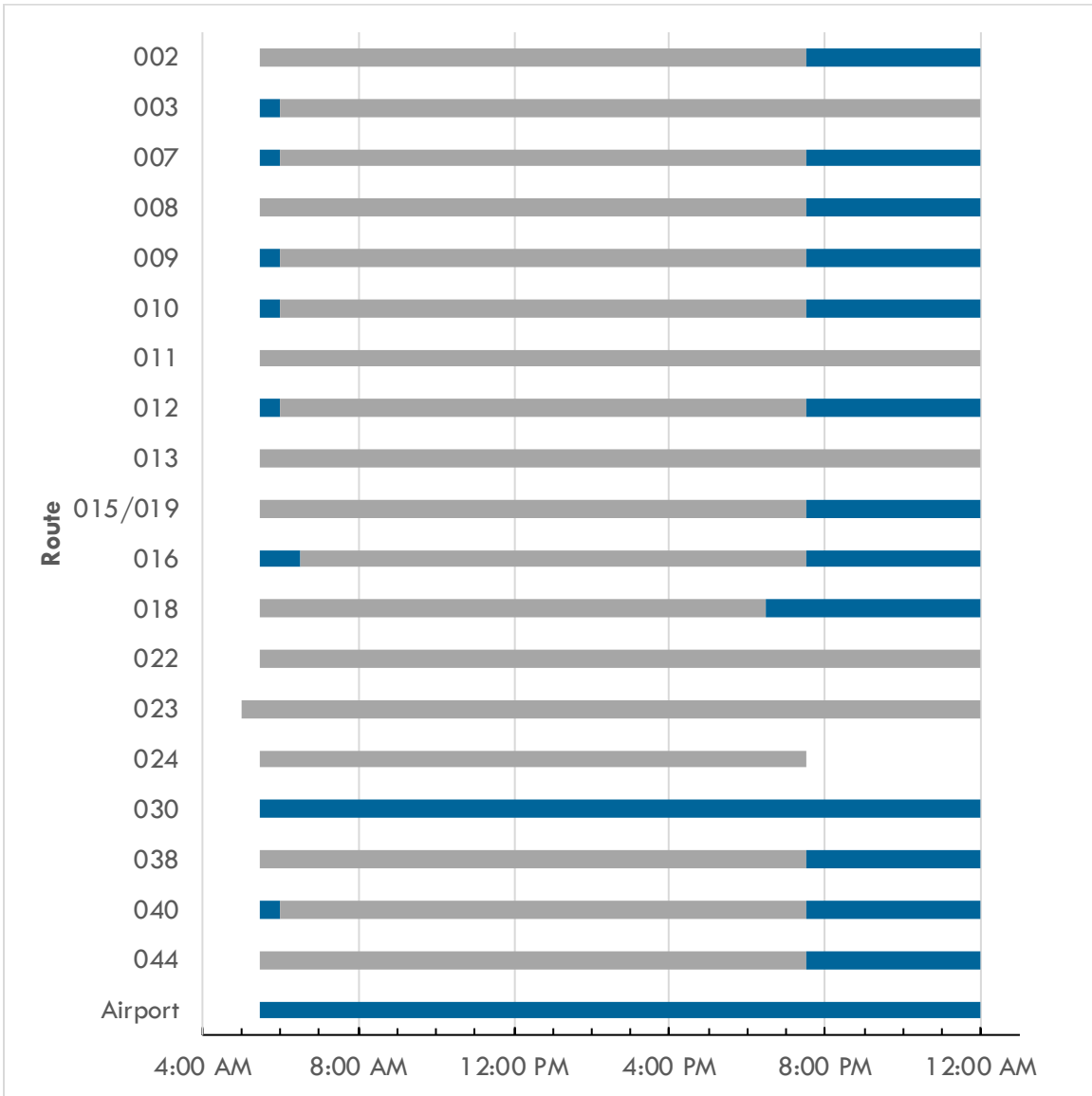
### Long-Term Recommendations

**The primary long-range recommendation is to operate all local routes until midnight weekdays and Saturdays and until 10 p.m. on Sundays.** Only five weekday routes currently operate until midnight – Routes 005, 011, 013, 022, and 023 – and most routes end by 7:00 p.m.

Increasing the span of service on weekdays, Saturdays, and Sundays results in an additional 39,000 estimated annual service hours. Figure 8, Figure 9, and Figure 10 show the proposed existing and proposed service spans for weekdays, Saturdays, and Sundays, respectively. Existing service spans are shown in gray while proposed new service spans are shown in blue.

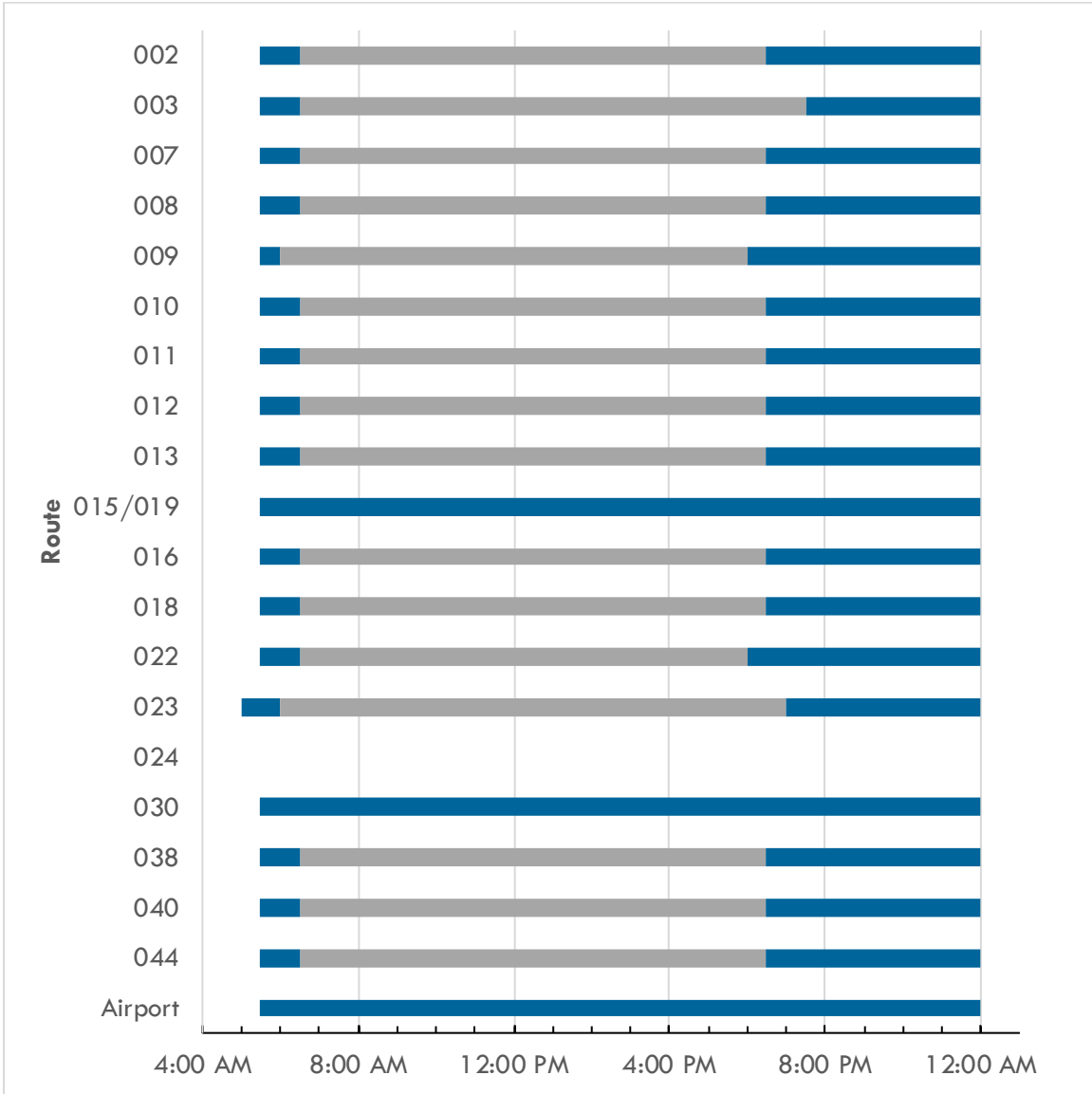


Figure 8 Proposed Weekday Span



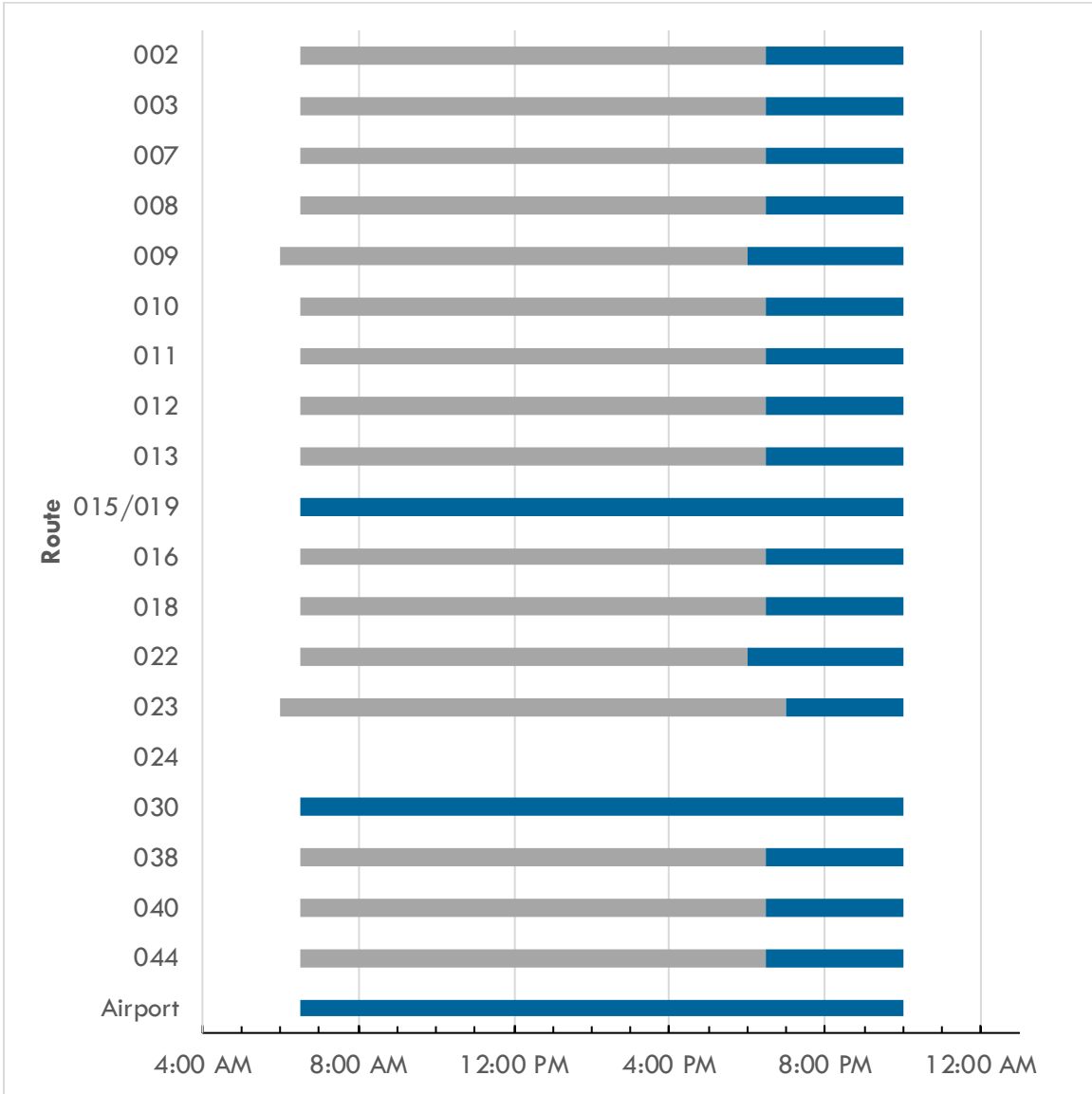
New operating hours are illustrated in blue and current hours are shown in gray.

Figure 9 Proposed Saturday Span



New operating hours are illustrated in blue and current hours are shown in gray.

Figure 10 Proposed Sunday Span



New operating hours are illustrated in blue and current hours are shown in gray.

## Keep Buses on Time



In an environment of worsening traffic congestion, agencies must actively plan for increases in travel times, as increased travel times can require additional resources. Multiple EMBARK routes are operating faster than what is normal, giving very little margin for error when traffic incidents occur. EMBARK on-time performance is not good as a result.

Increasing traffic congestion in the future will lead to increasing delays for transit vehicles. EMBARK can plan ahead for growing travel times by budgeting for schedule maintenance on routes that are operating fast and are regularly late.

### Long-Term Recommendations

**It is recommended that EMBARK reschedule Routes 008, 009, 012, and 015 to allow for more reasonable running times.** Planning ahead for schedule maintenance will encourage fiscal sustainability while ensuring that service remains reliable for customers. Approximately 22,000 annual hours should be allocated for schedule maintenance.

## Service to New Areas



Growth is adding new destinations that are unserved by the current transit network. Multiple areas have been identified for potential services in the long-range plan:

Employment and commercial clusters have occurred just outside the existing service area, including on Memorial Road, Northwest

Expressway, and in the municipalities of Moore, The Village, and Del City.

Job growth has been explosive in warehouse-distribution, yet EMBARK does not really serve these areas.

The airport was consistently identified as an unmet need by the public and stakeholders. EMBARK does not currently serve the airport.

In addition to regional growth, EMBARK's service structure is predominantly focused on downtown Oklahoma City. While that is a major destination, many if not most residents have origins and destinations outside of downtown Oklahoma City and could be more directly served by routes not going into downtown.

### Long-Term Recommendations

Recommendations are made for 14 routes. Detailed maps showing these route level changes are included in the attachments. Only routes with proposed changes are included here, all other routes would be unchanged. Implementing all route improvements listed would require an additional 160,000 annual hours.

## Route 003

The alignment of Route 003 would be revised slightly from the alignment shown in the Phase II Short-Term Recommendations to provide more direct service to The Village. Instead of providing east-west service on Hefner Rd, Route 003 would now operate on Britton Rd. The segment of Western Ave north of Britton Rd would continue to be served by a revised Route 018.

## Route 007

Route 007 would be extended to provide a north-south crosstown service along May Ave that facilitates new, more direct connections on the west side of Oklahoma City without requiring passengers to travel to downtown and make a transfer and would improve access to employment centers and retail opportunities at Quail Springs Mall, Integris Baptist, OCCC, Crest Foods, Walmart, and Amazon.

The route would now operate between Quail Springs Mall in north Oklahoma City, Integris Baptist, OCCC, and the Amazon Fulfillment Center on Portland Ave in south Oklahoma City. From Quail Springs Mall, the route would operate along NW 138<sup>th</sup> St, May Ave, deviate to serve Integris Baptist along NW 59<sup>th</sup> St, Independence Ave, and NW 50<sup>th</sup> St. Route 007 would continue south on May Ave, deviate to directly serve OCC, and continue to SW 104<sup>th</sup> St and Portland Ave, terminating at the Amazon Fulfillment Center.

Route 007 would no longer operate along May Ave between NW 50<sup>th</sup> St and NW 59<sup>th</sup> St. Route 007 would no longer serve downtown Oklahoma City, service would be removed from NW 23<sup>rd</sup> St, Pennsylvania Ave, Linwood Blvd, Western Ave, and NW 4<sup>th</sup> St. All of these areas except Linwood Blvd and Western Ave would continue to be served by other routes.

## Route 010

Route 010 would be extended to provide direct access to Integris Baptist, MacArthur Blvd, and the Reno Mini Hub. The alignment east of Portland Ave would be unchanged but the route would no longer operate a terminal loop between Portland Ave, NW 50<sup>th</sup> St, Meridian Ave, and NW 36<sup>th</sup> St. Instead, Route 010 would now provide bi-directional service along Portland Ave, NW 56<sup>th</sup> St, Independence Ave, NW 50<sup>th</sup> St, Meridian Ave, NW 36<sup>th</sup> St, and MacArthur Blvd, terminating at the Reno Mini Hub.

This alignment maintains coverage in high ridership areas in west Oklahoma City and extends the route to provide more direct access to employment hubs and facilitating additional transfers with NW BRT, Route 007, and Route 008 at Baptist Integris as well as with Routes 009, 011, 012, 023, 038, and the Airport Route at the Reno Mini Hub.

## Route 011

Route 011 would be simplified to provide faster, more direct service between downtown Oklahoma City and the Reno Mini Hub along the SW 29<sup>th</sup> St corridor. The route would no longer deviate onto SE 25<sup>th</sup> St, Central Ave, SE 15<sup>th</sup> St, and High Ave to serve the

Ambassador Courts apartment complex. Service would continue to be provided along SE 25<sup>th</sup> St, Central Ave, and SE 15<sup>th</sup> St by the new Route 030. High Ave and SE 25<sup>th</sup> St between Central Ave and High Ave would no longer be served.

Route 011 would also no longer operate the deviation onto May Ave, SW 25<sup>th</sup> St, Grand Blvd, SW 17<sup>th</sup> St, SW 20<sup>th</sup> St, and SW 15<sup>th</sup> St. This service would now be provided by a revised Route 012. Instead, Route 011 would now operate more direct service along the 29<sup>th</sup> St corridor between Robinson Ave and Meridian Ave. The route would continue operating along Meridian Ave and Reno Ave to the Reno Mini Hub.

## **Route 012**

Route 012 would be realigned to provide additional coverage service currently provided by Route 011. East of Agnew Ave, the route would operate the same as in the Short-Term Recommendations. However, west of Agnew Ave, the route would now operate along SW 25<sup>th</sup> St, May Ave, SW 20<sup>th</sup> St, Grand Blvd, SW 17<sup>th</sup> St, SW 20<sup>th</sup> St, Portland Ave, SW 15<sup>th</sup> St, Meridian Ave, and Reno Ave to the Reno Mini Hub.

Route 012 would no longer operate on SW 29<sup>th</sup> St, Portland Ave, SW 44<sup>th</sup> St, and May Ave to OCCC. These segments would now be served by a combination of the revised Routes 007, 011, 013 and the new Route 044. All areas served by Route 012 in the Short-Term Recommendations would continue to be served in the Long-Term Recommendations.

## **Route 013**

Route 013 would become a high-frequency corridor in the Long-Term Recommendations, operating every 15-minutes seven days a week, and directly addressing feedback received during public involvement for a high frequency corridor in south Oklahoma City. This high frequency service would improve the transfer experience for passengers by reducing the average wait times for the route.

The route would also be streamlined to provide faster, more direct service between downtown Oklahoma City and OCCC. The route would operate along Hudson Ave, Reno Ave, Western Ave, SW 59<sup>th</sup> St, and May Ave to OCCC. The route would no longer deviate to serve Shartel Towers but would continue to operate within approximately 1/3 of a mile from the existing stop.

Route 013 would also no longer operate on Western Ave south of SW 59<sup>th</sup> St or along the SW 74<sup>th</sup> St frontage roads along I-240. This area would continue to be served by a new on-demand service zone. Service to the Santa Fe Ave Walmart would continue to be provided by both Route 016 and Route 040.

## **Route 014 – Renamed as Route 044**

Route 014 would be removed and replaced with a new Route 044 that would provide more direct crosstown service along the 44<sup>th</sup> St corridor. This would provide faster, more direct access to employment and retail opportunities for residents in south Oklahoma City, Del City, and Midwest City.

Route 044 would operate along the same alignment as Route 014 in the Short-Term Recommendations east of Shields Blvd but would continue operating further west on 44<sup>th</sup> St, Portland Ave, SW 29<sup>th</sup> St, Meridian Ave, and Reno Ave to the Reno Mini Hub. Service on Shields Blvd that would be provided by Route 014 in the Short-Term Recommendations would no longer be served. All other areas would continue to have service in the Long-Term Recommendations.

## **Route 016**

This route would be extended further east to the Santa Fe Ave Walmart, serving a stronger destination at the southern terminus of the route and improving access to retail opportunities for residents in south Oklahoma City. The route extension would operate along Pennsylvania Ave, SW 89<sup>th</sup> St, Walker Ave, SW 74<sup>th</sup> St, and Santa Fe Ave. The existing terminal loop at SW 87<sup>th</sup> St and S Kentucky Ave would no longer be served with fixed-route service but would continue to be served by a new on-demand service zone. All other areas served by Route 016 in the Short-Term Recommendations would continue to be served.

## **Route 018**

Route 018 would be extended further north to improve access to retail and employment opportunities for northeast Oklahoma City and facilitate transfers with Routes 003 and 007 at Quail Springs Mall. The extension would operate along Britton Rd, Western Ave, and Highland Park Dr to serve St. Anthony Healthplex, the shopping center along Highland Park Dr, and Quail Springs Mall. Service currently provided by Route 018 on Santa Fe Ave and NE 63<sup>rd</sup> St would no longer be served.

## **Route 023**

Route 023 is the highest ridership route in the EMBARK system and would become a high-frequency corridor in the Long-Term Recommendations, operating every 15-minutes seven days a week. This improvement directly addresses feedback received in both phases of public involvement and would better facilitate additional transfers along the route alignment that would occur during a transition to a grid-oriented network. The route would serve as a key anchor route providing high frequency east-west service between several high ridership areas of the system.

The route would also be streamlined to provide faster, high frequency service between the OU Health Center, the State Capitol, and the Reno Mini Hub along the 23<sup>rd</sup> St corridor. The route would operate along the same alignment as shown in the Short-Term Recommendations.

## **Route 030**

Route 030 would be a new route providing direct service between downtown Oklahoma City and Del City along the SE 15<sup>th</sup> St corridor, providing more direct access to retail and employment opportunities in Del City and Midwest City. The route would operate along NE 4<sup>th</sup> St, Robinson Ave, deviate to serve Andrews Square, continue on SE 25<sup>th</sup> St,



Central Ave, and SE 15<sup>th</sup> St to the Sooner Rd Walmart. This route would cover some areas currently served by Route 011.

### **Route 038**

Route 038 would become another east-west high-frequency corridor, operating every 15-minutes seven days a week throughout the day on weekdays. In addition to NW BRT, Route 013, and Route 023, this route would complete the core high-frequency service grid for the EMBARK system in the long-term. This network of high-frequency routes enables transfers to be made outside of the downtown area without significant wait times due to the high frequency service.

The route would also be streamlined to provide faster, high frequency service between downtown Oklahoma City and the Reno Mini Hub along the 10<sup>th</sup> St corridor. The route would operate along the same alignment as shown in the Short-Term Recommendations.

### **Route 040**

Route 040 would be extended further south to serve the City of Moore, addressing a key goal identified in public outreach to expand service to other cities in the region. The route would operate further south along Santa Fe Ave, NW 27<sup>th</sup> St, Shields Blvd, Broadway St, SW 19<sup>th</sup> St, and Fritts Blvd, providing service to downtown Moore and the shopping centers along SW 19<sup>th</sup> St near I-35. This improvement expands access to transit in the region and serves additional employment hubs.

The segments of SW 89<sup>th</sup> St and Walker Ave currently served by Route 40 would continue to be served by Route 016 in the Long-Term Recommendations. However, the segments on Western Ave and SW 104<sup>th</sup> St would no longer be served.

### **Route A**

Route A would be a new route that provides a direct connection to several key unserved destinations identified in public outreach, including operating between downtown Oklahoma City, Bricktown, the Amtrak Station, and the Airport, operating along NW 4<sup>th</sup> St, Gaylord Blvd, Shields Blvd, I-40, I-44, Hwy 152, and Meridian Ave. The route would continue from the airport along SW 54<sup>th</sup> St, MacArthur Blvd, SW 44<sup>th</sup> St, Council Rd, and Reno Ave to serve the fulfillment center and warehouse employment hubs, including Amazon and Hobby Lobby, and terminate at the Reno Mini Hub.

Route A would operate hourly service, seven days per week and improve regional accessibility to the airport and additional employment hubs that are currently unserved.

## On-Demand Zones



On-Demand zones use online platforms to dynamically generate on-demand routes within a zone. They can be operated by the transit agency, third party operators, or private companies such as Lyft and Uber. The services can vary, and may include demand-response shuttles, seasonal or special event shuttles, or mobility software. Benefits of these innovative service zones include

- Maintain or enhance mobility in low-density areas
- Enhance travel options during hours when transit service is limited
- First/last mile supplement can extend the reach of fixed route transit service
- Can lower the cost per trip

## Long-Term Recommendations

**Three areas are recommended for implementing on-demand zones, in South Oklahoma City, Northwest Oklahoma City, and in Midwest City.**

EMBARC would be expanding coverage in areas that are growing and/or have high needs but low density. As these markets evolve, EMBARK could provide on-demand service to those areas until demand is large enough to warrant fixed-route services.

The cost to provide on-demand zones varies based on the number and size of zones and who is operating the service. Each zone is less than 9 square miles, which is the upper limit that one vehicle could provide service to with acceptable wait times.

Three on-demand are recommended, which will require approximately 14,000 annual hours to operate.

## Secondary Transfer Hubs



Currently, most EMBARK transfers are made either at the downtown Transit Center or to a lesser extent, at the Reno Hub. As service extents grow and more routes that are not focused on downtown are implemented, additional locations are necessary where transfers may be safely made. In addition, secondary transfer hubs may include off-street waiting areas such as pull-outs, which

allows buses to have recovery at the route ends, which improves route reliability. Secondary transfer hubs can range from enhanced shelters to a dedicated facility with restrooms. Transfer locations with amenities improves the customer experience and helps attract and retain riders.

## Long-Term Recommendations

To complement the anticipated transition to a more grid-like bus network, **five secondary transfer hubs are recommended** at Quail Springs Mall, Oklahoma City Community College, Reno Hub, Santa Fe Walmart, and at the Del City Walmart. Each of

these locations is the end of the line for multiple routes and a major customer destination.

Transfer hubs can range in costs from less than \$500,000 for an enhanced shelter and amenities to \$5,000,000 for a dedicated facility with off street bays, temperature controlled waiting areas, and operator rest rooms.