

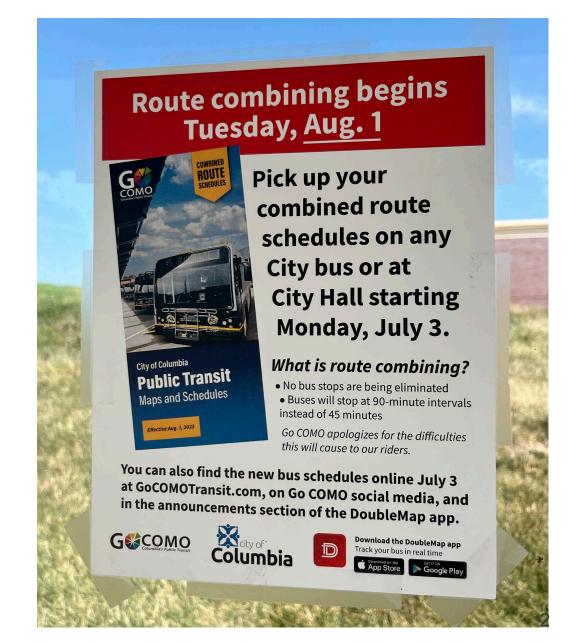






### **Plan Purpose**

- Are current services meeting local and regional needs?
- What is the community's vision for transit?
- Review shifting needs
- Evaluate new markets
- Community engagement
- Actionable plan
  - Staffing needs
  - System integration
  - Implementation steps









#### **Plan Process**

- Market Analysis: demographic and transportation data, planning background, peer agency review.
- Operations Analysis: evaluate the existing conditions and performance of existing services.
- Goal Setting & Strategies: create a vision for transit, review service concepts, and identify key strategies.
- Service Recommendations: outline multiple phases of specific service improvements.
- Implementation: plan to guide action steps, funding decisions.







# Market Analysis









## Market Analysis – Planning Background

- Past Transit Plans
- Comprehensive Plan
- Regional Transportation Plans

Figure 1.2: Campus Mass Transit Study (2012)

Education Research

Columbia

Columbia

Control

Commetery

Columbia

Commetery

Control

Con

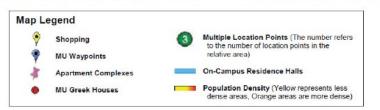
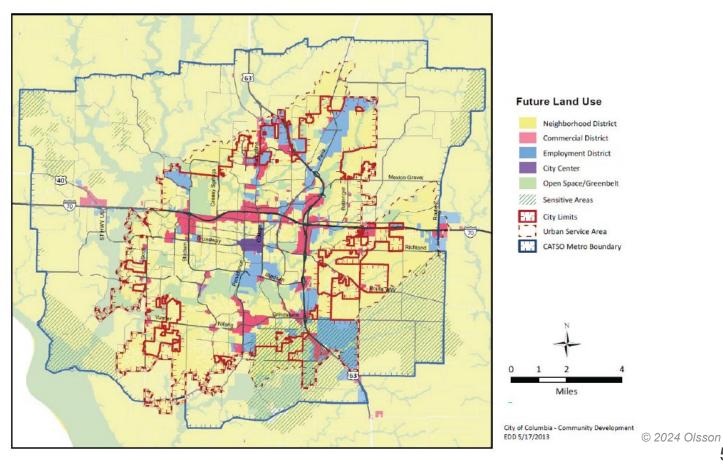


Figure 1.4: Future Land Use Map from Columbia Imagined (2013)









## **Market Analysis – Population & Employment Profile**

Figure 1.6: Population Trends

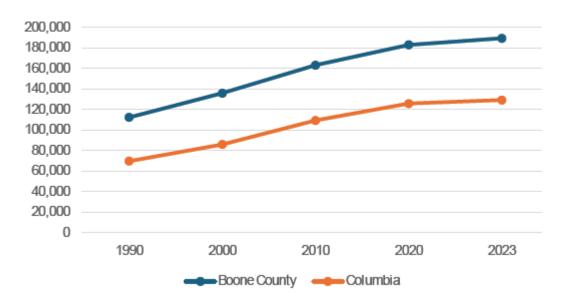
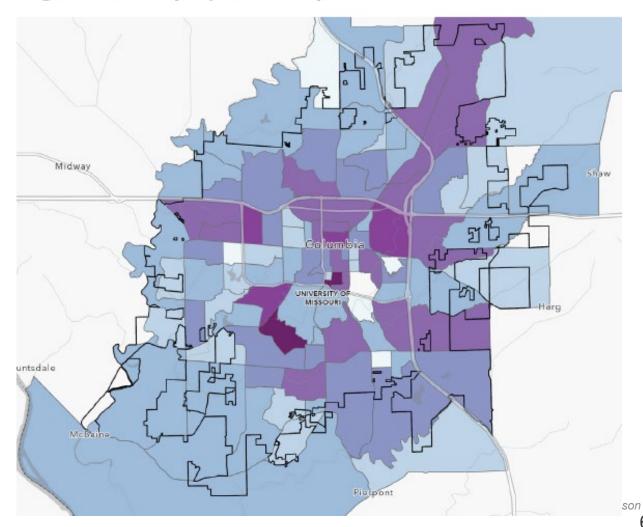


Figure 1.8: Employment Map









## **Market Analysis – Transit Propensity**

Table 1.3: Poverty Status & Median Household Income

Jurisdiction	Population*	Below Poverty Level	Percent	Below 200% Poverty Level	Percent
City of Columbia	119,315	26,845	22.5%	41,732	35.0%
Boone County	178,029	31,181	17.5%	52,547	29.5%
Missouri	6,005,542	791,030	13.2%	1,798,198	29.9%
United States	325,521,470	40,951,625	12.6%	92,319,944	28.4%

Median Household		
Income		
\$58,067	,	
\$62,567	,	
\$64,811		
\$74,755	,	

Table 1.4: Zero and One-Car Households

Jurisdiction	Total Households	No vehicles	One vehicle	No or One vehicle	Percent
City of Columbia	63,414	1,204	15,552	16,756	26.4%
Boone County	93,359	1,762	19,794	21,556	23.1%
Missouri	2,935,789	86,723	587,557	674,280	23.0%
United States	158,971,826	6,985,802	33,406,659	40,392,461	25.4%

Table 1.5: Population Age 65 and Older

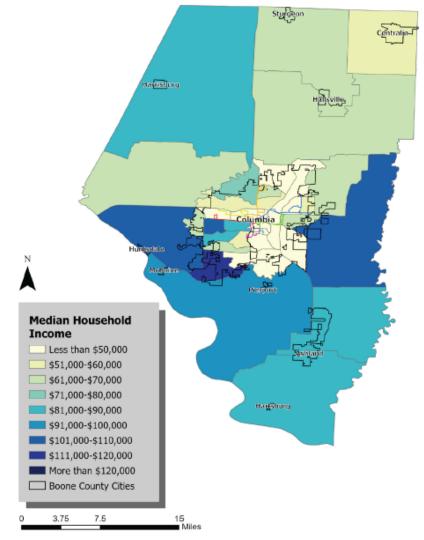
Jurisdiction	<b>Total Population</b>	65 years & older	Percent	Median Age
City of Columbia	128,545	13,628	10.6%	28.6
Boone County	187,690	25,564	13.6%	32.4
Missouri	6,177,957	1,113,136	18.0%	39.1
United States	333,287,562	57,822,315	17.3%	39.0

Table 1.6: Disabled Population

Jurisdiction	Population*	With a disability	Percent
City of Columbia	126,887	14,632	11.5%
Boone County	185,901	23,379	12.6%
Missouri	6,071,333	913,707	15.0%
United States	328,309,810	44,146,764	13.4%

Source (all tables): U.S. Census Bureau, 2022 American Community Survey 1-Year Estimates.

Figure 1.11: Median Household Income Map



Source: U.S. Census Bureau, 2022 American Community Survey 1-Year Estimates.

<sup>\*</sup> Population for whom poverty status is determined.

<sup>\*</sup> Total civilian non-institutionalized population



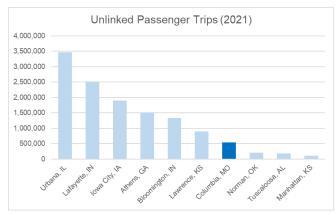


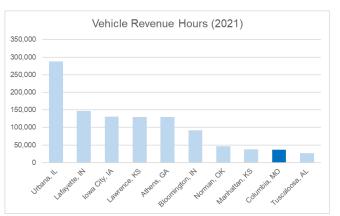


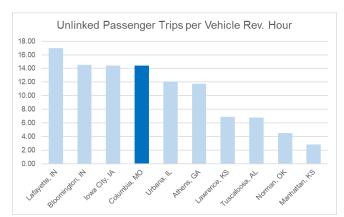
## Market Analysis – Peer Agency Review

#### Figure 1.16: Peer Agencies Map















# **Operations Analysis**





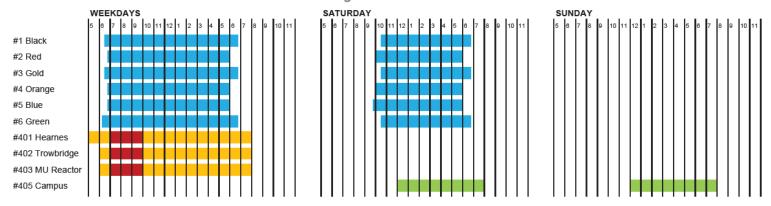




### **COA – Existing Services**

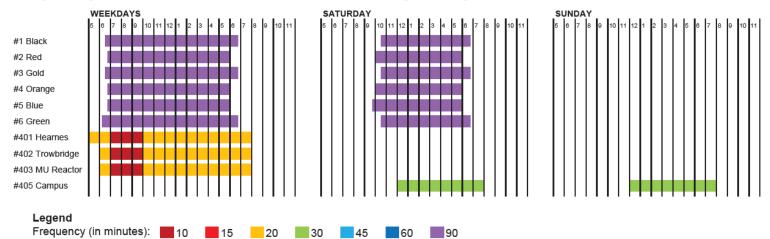
#### **Baseline Service**

Planned & Funded service levels with full staffing.



#### **Existing Service (since August 2023)**

Temporarily reduced from Baseline levels due to staffing shortage.









#### **COA – Fleet & Facilities**







Amenity	# of	% of
	stops	stops
Streetlamp	152	66.7%
Sidewalk	186	81.6%
Wheelchair Access	156	68.4%
Freestanding Pole	163	71.5%
Shelter	37	16.2%
Trash Can	48	21.1%
Total Stops	228	







## **COA** – Ridership

Figure 2.3: Annual Ridership by Service Type

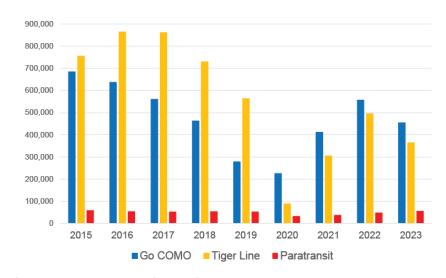
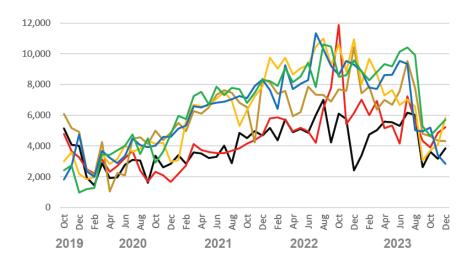
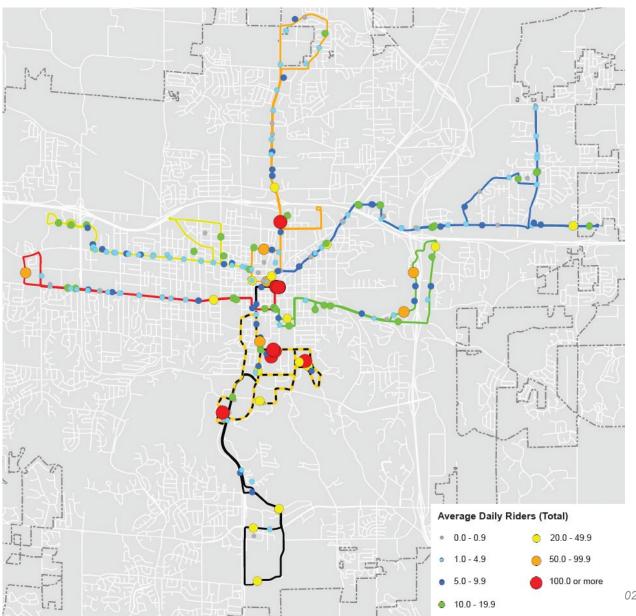


Figure 2.4: Monthly Ridership by Route (2019–2023)











# 3

# Goal-Setting & Strategies









## Goal Setting & Strategies: Public Engagement Process

- City Council Interviews
- Stakeholder Interviews
- **Public Transit Advisory Commission**
- "Be Heard" Webpage
- On-Board Rider Survey
- Public Open House Meetings
  - November 2023: Discovery
  - April 2024: Evaluation
  - August 2024: Affirmation

Figure 3.1: Comprehensive Transit Study "Be Heard" Webpage









### Goal Setting & Strategies: Planning Priorities

#### **Planning Priorities: Public Input**

1 A: Run buses more frequently on existing routes.



Strong Preference

B: Add or extend routes to new destinations, but with less frequency.

2 A: Serve as much of Columbia as possible.

OI

**B**: Concentrate service in high ridership areas.

Roughly Equal Preference

or

A: Add more service during peak periods (weekdays, rush hours, etc.)

or

B: Add more service during off-peak periods (nights, weekends, etc.)



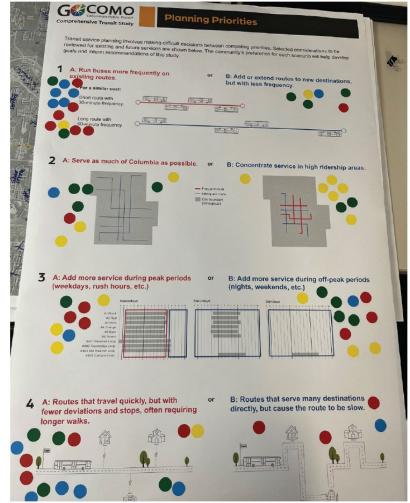
Strong Preference

4 A: Routes that travel quickly, but with fewer deviations and stops, often requiring longer walks.



Strong Preference

B: Routes that serve many destinations directly, but cause the route to be slow.







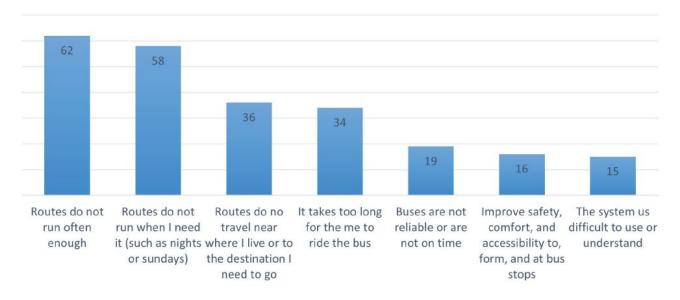


### Goal Setting & Strategies: What Did We Learn?

#### Key Takeaways

- General agreement that services are more limited than they should be, given the city's size and transportation needs.
- Accordingly, recruitment and retention of staff is a high priority, to enable service restoration and growth.
- Current routes, while limited in quantity of service, structurally make sense given existing resources, and serve many key destinations that riders need to go.

# What is currently the buggest issue with Go COMO bus routes?









## **Goal Setting & Strategies: Vision Statements**

- 1. Focus on recruitment and retention of transit staff needed to operate, maintain, and manage transit services.
- 2. Meet the needs of riders who need transit services the most.
- 3. Prioritize near-term actions on improving existing services, through route frequency and service hours.
- 4. Align long-term transit visioning with community growth and development.
- 5. Take advantage of opportunities to add county-level and regional services.











### Goal Setting & Strategies: Service Concepts

- Meant to communicate ideas and challenges
- Not recommendations
- "What would it look like if..."
- Initial reactions and observations

#### Process: Concepts → Alternatives → Recommendations

- Input helped refine concepts into more specific <u>alternatives</u>
- Alternatives go through <u>evaluation</u> process
- Evaluation led to <u>recommendations</u> for multiple phases of implementation

**Near-Term Concepts**: budget-neutral scenarios

Long-Term Concepts: alignment with peer service levels (10-year horizon)

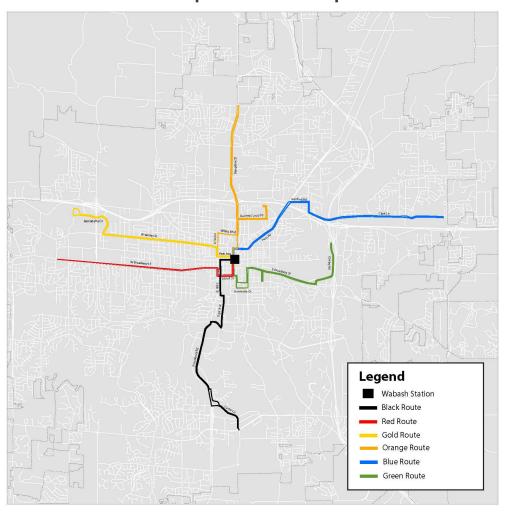




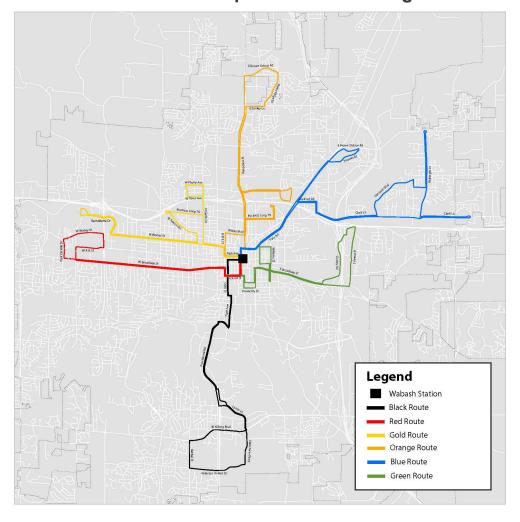


## Goal Setting & Strategies: Service Concepts Example

**Near-Term Concept #1: More Frequent Service** 



**Near-Term Concept #2: More Coverage** 









# **Service Recommendations**









#### **Recommendations: Overview**

Implementation will take time, due primarily to funding limitations, which impact Go COMO's ability to:

- Operate and maintain services and infrastructure on an ongoing basis, with annual appropriations that can be relied on for continued service.
- Purchase capital resources such as buses, new or expanded facilities, and a variety of supplies needed for maintenance of fleet and facilities.
- Hire and retain high-performing employees that provide and administer safe, reliable, and customer-friendly transportation services.







- Routes & Alignments: No changes.
- Weekday: Begin service at 6:00 a.m. (full first trip starting at Wabash).
- Weekday: Add evening service using "combined" 90-minute routes, until 10:25 p.m.
- **Saturday:** Expand hours to 6 a.m. to 10:25 p.m., same routes and frequency (90 minutes).
- Paratransit Impact: Major increase to paratransit service hours.

	Park De VIIIe	Bernadette Columbia Mail  Broadwa	Business Loop 70 North  Worley  Wallmark  Stephens  College  Golfsee  Golfs
(Day/	Eve)	Annual VRH	Note: Tier 1
Sat	Sun		recommendations do not
3/0	0/0	20,126	change the route map; all
3/3	0/0	24,124	routes will maintain existing alignments and stop locations.
**	1001	U +12	

Phase	
Baseline*	
Tier 1	

Service Hours				
Wkd	Sat	Sun		
6:20am to 6:40pm	9:51am to 6:40pm			
6:00am to 10:25pm	6:00am to 10:25pm			

Frequency (Day/Eve)						
Wkd	Sat	Sun				
45/	90/	/				
45/90	90/90	/				

Dust	VRH		
Wkd	Sat	Sun	
6/0	3/0	0/0	20,126
6/3	3/3	0/0	24,124





Wkd

6/0

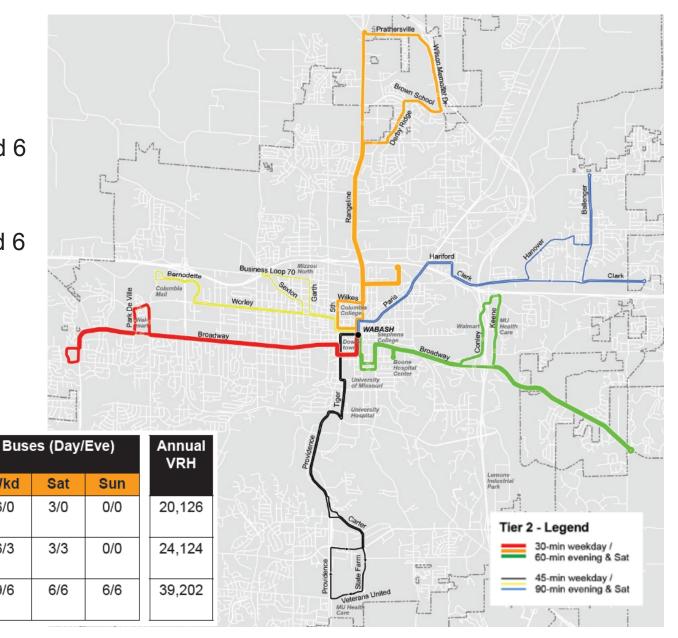
6/3

9/6



- Routes & Alignments: 2 Red, 4 Orange, and 6 Green extended to new areas.
- Weekday: Convert routes 2 Red, 4 Orange, and 6 Green to 30-minute frequency daytime and 60minute frequency in evenings.
- Saturday: Convert routes 2 Red, 4 Orange, and 6 Green to 60-minute frequency on Saturdays.
- Paratransit Impact: Moderate increase to federally-required paratransit service area.
- **Negative Impacts:** Not every route will be at Wabash at the same time on every trip.

	S	Freque	ency (Da	y/Eve)		
Phase	Wkd	Sat	Sun	Wkd	Sat	Sun
Baseline*	6:20am to 6:40pm	9:51am to 6:40pm		45/	90/	/
Tier 1	6:00am to 10:25pm	6:00am to 10:25pm		45/90	90/90	/
Tier 2	5:30am to 10:25pm	6:30am to 10:25pm		30/60 45/90	60/60 90/90	/



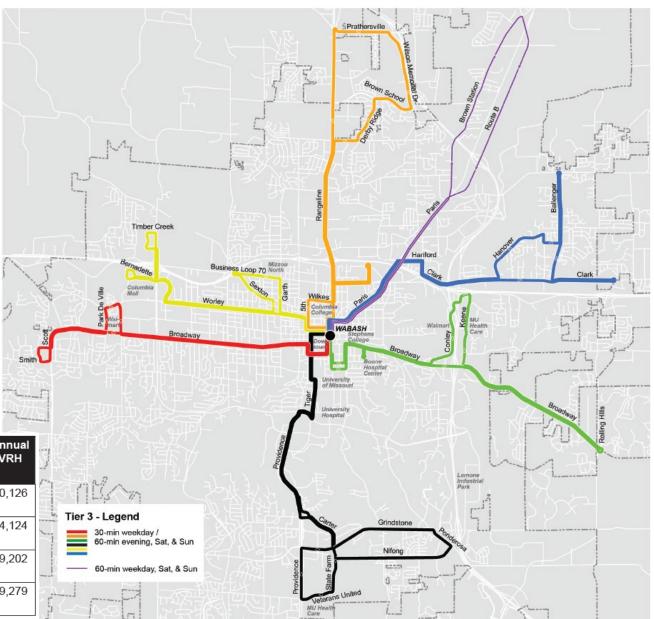






- Routes & Alignments: Add Paris Rd/Route B route. Extend 1 Black, 3 Gold, and 5 Blue.
- Weekday: Increase frequency to 30 minutes daytime and 60 minutes evening. Minor extension of service hours.
- **Saturday:** Increase frequency to 60 minutes on all routes. Minor extension of service hours.
- **Sunday:** Add new service from 7:30 a.m. to 6:25 p.m., with all routes at 60-minute headways.

	transit red se	•		•			n of	fede	erally	
	S	Service Hours Frequency (Day/Eve)				ıy/Eve)	Bus	es (Day/	Eve)	Annual VRH
Phase	Wkd	Sat	Sun	Wkd	Sat	Sun	Wkd	Sat	Sun	
Baseline*	6:20am to 6:40pm	9:51am to 6:40pm		45/	90/	/	6/0	3/0	0/0	20,126
Tier 1	6:00am to 10:25pm	6:00am to 10:25pm		45/90	90/90	/	6/3	3/3	0/0	24,124
Tier 2	5:30am to 10:25pm	6:30am to 10:25pm	7:30am to 6:25pm	30/60 45/90	60/60 90/90	/	9/6	6/6	6/6	39,202
Tier 3	5:30am to 11:25pm	6:30am to 11:25pm	7:30am to 6:25pm	30/60	60/60	60/	13/6	7/7	7/7	59,279
<u>.</u>				•						



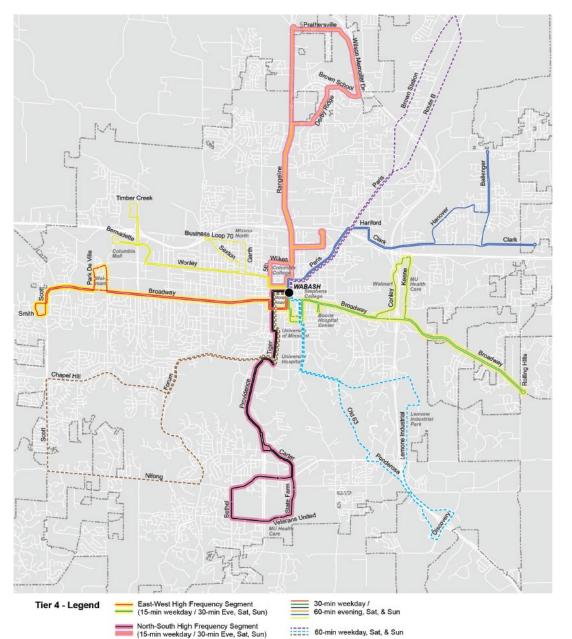






- Routes & Alignments: Add new routes in SW Columbia and SE Columbia. Minor alignment adjustments.
- Weekday: Increase frequency on highest-ridership routes to 15 minutes daytime and 30 minutes evening. Minor extension of service hours.
- Saturday: Increase frequency on some routes to 30 min.
- Sunday: Minor extension of service hours.
- Paratransit Impact: Major expansion of federally-required service area. Minor increase to service hours.

	S	ervice Hour	'S	Freque	ency (Da	ay/Eve)	Bus	Annual VRH		
Phase	Wkd	Sat	Sun	Wkd	Sat	Sun	Wkd	Sat	Sun	
Baseline*	6:20am to 6:40pm	9:51am to 6:40pm		45/	90/	/	6/0	3/0	0/0	20,126
Tier 1	6:00am to 10:25pm	6:00am to 10:25pm		45/90	90/90	/	6/3	3/3	0/0	24,124
Tier 2	5:30am to 10:25pm	6:30am to 10:25pm	7:30am to 6:25pm	30/60 45/90	60/60 90/90	/	9/6	6/6	6/6	39,202
Tier 3	5:30am to 11:25pm	6:30am to 11:25pm	7:30am to 6:25pm	30/60	60/60	60/	13/6	7/7	7/7	59,279
Tier 4	5:00am to 11:55pm	6:00am to 11:55pm	7:00am to 9:55pm	15/30 30/60	30/30 60/60	60/60	23/13	13/9		107,208









### Recommendations: Tier 4 (Micro Transit alternative)

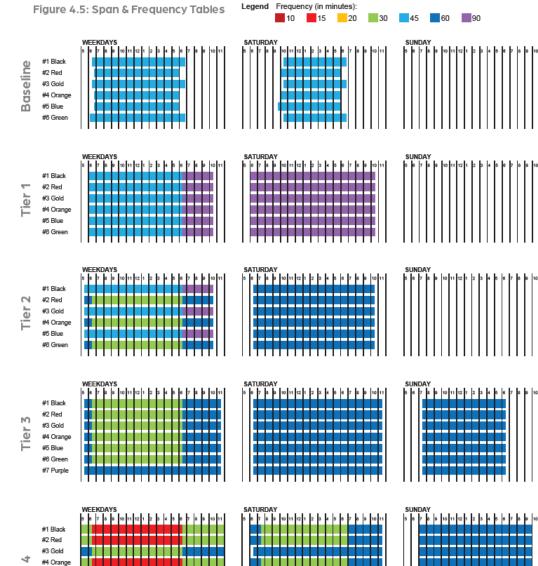
- Definition: On-demand curb-to-curb service with real-time booking.
- Micro Transit as a growth component, not as replacement. Due to:
  - Coverage not the highest goal
  - Performance of existing service (e.g. riders per hour)
- In Tier 4, new SW and SE routes could be implemented as micro transit zones.
- Similar cost to fixed route, due to fixed labor costs.
- Option: Turn-key solution with private vendor.
- Pros: Flexibility, Coverage.
- Cons: Much less capacity than fixed route.







#5 Blue #6 Green #7 Purple



# Recommendations: Summary

	S	ervice Hour	rs	Frequ	ency (Da	ay/Eve)	Bus	Annual VRH		
Phase	Wkd	Sat	Sun	Wkd	Sat	Sun	Wkd	Sat	Sun	
Baseline*	6:20am to 6:40pm	9:51am to 6:40pm		45/	90/	/	6/0	3/0	0/0	20,126
Tier 1	6:00am to 10:25pm	6:00am to 10:25pm		45/90	90/90	/	6/3	3/3	0/0	24,124
Tier 2	5:30am to 10:25pm	6:30am to 10:25pm	7:30am to 6:25pm	30/60 45/90	60/60 90/90	/	9/6	6/6	6/6	39,202
Tier 3	5:30am to 11:25pm	6:30am to 11:25pm	7:30am to 6:25pm	30/60	60/60	60/	13/6	7/7	7/7	59,279
Tier 4	5:00am to 11:55pm	6:00am to 11:55pm	7:00am to 9:55pm	15/30 30/60	30/30 60/60	60/60	23/13	13/9		107,208







## Recommendations: Regional Service Option

- Columbia to Jefferson City; stops at airport and in Ashland
- Not included in recommendation tiers.
- Annual operating cost estimate: \$616,356 for six daily round trips on weekdays.
- Section 5311(f) funding assistance.

**Table 4.6: Potential Route Schedule** 

Southbound – morning and mid-day									
Wabash Station	5:30 A.M.	6:00 A.M.	1:30 P.M.						
Columbia Airport	6:00 A.M.	6:30 A.M.	2:00 P.M.						
Ashland, MO	6:15 A.M.	6:45 A.M.	2:15 P.M.						
Jefferson City Airport	6:40 A.M.	7:10 A.M.	2:40 P.M.						
Harry S. Truman Bldg.	6:50 A.M.	7:20 A.M.	2:50 P.M.						
Miller St. Station	7:00 A.M.	7:30 A.M.	3:00 P.M.						
Greyhound – Jeff. City	7:10 A.M.	7:40 A.M.	3:10 P.M.*						
Soutl	nbound – ev	ening							
Wabash Station	4:00 P.M.	4:30 P.M.	5:00 P.M.						
Columbia Airport	4:30 P.M.	5:00 P.M.	5:30 P.M.						
Ashland, MO	4:45 P.M.	5:15 P.M.	5:45 P.M.						
Jefferson City Airport	5:10 P.M.	5:40 P.M.	6:10 P.M.						
Harry S. Truman Bldg.	5:20 P.M.	5:50 P.M.	6:20 P.M.						
Miller St. Station	5:30 P.M.	6:00 P.M.	6:30 P.M.						
Greyhound – Jeff. City	5:40 P.M.	6:10 P.M.	6:40 P.M.						

Northbour	ıd – morning	& mid-day	
Greyhound – Jeff. City			
Miller St. Station	5:30 A.M.	6:00 A.M.	1:00 P.M.
Harry S. Truman Bldg.	5:40 A.M.	6:10 A.M.	1:30 P.M.
Jefferson City Airport	5:50 A.M.	6:20 A.M.	1:45 P.M.
Ashland, MO	6:15 A.M.	6:45 A.M.	2:10 P.M.
Columbia Airport	6:30 A.M.	7:00 A.M.	2:20 P.M.
Wabash Station	7:00 A.M.	7:30 A.M.	2:30 P.M. *
Norti	nbound – ev	ening	
Greyhound – Jeff. City	4:10 P.M.		
Miller St. Station	4:20 P.M.	4:30 P.M.	5:00 P.M.
Harry S. Truman Bldg.	4:30 P.M.	4:40 P.M.	5:10 P.M.
Jefferson City Airport	4:40 P.M.	4:50 P.M.	5:20 P.M.
Ashland, MO	5:05 P.M.	5:15 P.M.	5:45 P.M.
Columbia Airport	5:20 P.M.	5:30 P.M.	6:00 P.M.
Wabash Station	5:50 P.M.	6:00 P.M.	6:30 P.M.

<sup>\*</sup> Intercity bus aligns with Greyhound stop at Wabash station at 2:40 PM

**Table 4.6: Potential Route Map** 









# 5 Implementation









### Implementation: Cost Estimates (Operating)

Table 5.1: Vehicle Revenue Hours & Operating Cost Estimates by Tier (Does not include Tiger Line)

	Veh. Re	ev. Hrs.		
Phase	Year	% Chg.		
Baseline*	20,126			
Tier 1	24,124	19.9%		
Tier 2	39,202	94.8%		
Tier 3	59,279	145.7%		
Tier 4	107,208	80.9%		

Ann	Annual Operating Cost									
Fixed Route	Paratransit	Total								
\$2,548,075	\$1,938,950	\$4,487,025								
\$3,054,154	\$2,791,119	\$5,845,273								
\$4,963,143	\$3,488,341	\$8,451,483								
\$7,504,880	\$4,197,869	\$11,702,749								
\$13,572,865	\$5,671,741	\$19,244,606								

#### Notes:

- Costs are in 2024 dollars.







### Implementation: Cost Estimates (Capital)

Table 5.2: Peak Vehicles & Capital Cost Estimates by Tier

(Does not include Tiger Line)

	Pe	ak Vehic	les	Estimated Capital Cost (for entire phase)								
Phase	Fixed	Para	Total	Bus Replace	Addl. Buses	Addl. Buses   Bus Stops   Fa		Total				
Baseline*	6	12	18									
Tier 1	6	13	19	\$0	\$100,000	\$0	\$0	\$100,000				
Tier 2	9	14	23	\$4,200,000	\$3,800,000	\$297,000	\$180,000	\$8,477,000				
Tier 3	13	17	30	\$4,300,000	\$4,650,000	\$693,000	\$420,000	\$10,063,000				
Tier 4	23	22	45	\$8,500,000	\$11,650,000	\$1,692,000	\$780,000	\$22,622,000				

#### Notes:

- Costs are in 2024 dollars.
- Grissum Building RAISE project is assumed to meet the vehicle maintenance and storage facility needs of each tier. Facilities costs estimate Administrative facility upgrades to accommodate additional staff.
- Bus Stops category in Tier 4 includes Wabash passenger facility upgrades to accommodate more routes and buses per day.







## Implementation: Funding Options

#### **Federal**

- Urbanized Area Program Funds (5307)
- Seniors and Individuals with Disabilities Formula Program (5310)
- Formula Grants for Rural Areas (5311) (Outside of urbanized area)
- Grants for Buses and Bus Facilities Formula Program
- Competitive Grants:
  - Grants for Buses and Bus Facilities Program
  - Low or No Emission Vehicle Program (5339(c))
  - Areas of Persistent Poverty Program
  - Rebuilding American Infrastructure with Sustainability and Equity (RAISE)

#### **State**

- State Transportation Fund and General Revenue
- Recent increases in 2022 and 2023. 580 percent increase in the past two years.

#### Local

- Existing ½-cent transportation sales tax
- Increased, or new, dedicated tax to support transit services
- Transportation Development Districts (TDD)
- Private funding: and Transportation Management Associations (TMA)
- Enhanced MU partnerships







### Implementation: Staffing Plan

- Additional staffing needed to maintain and grow services.
- Department restructuring to manage growth while maintaining efficiency.

Figure 5.1: Existing Go COMO Organizational Chart

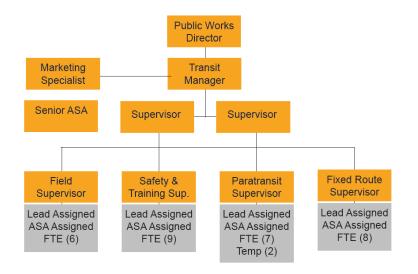
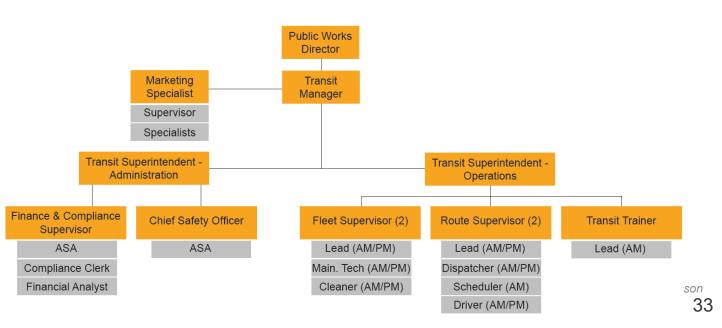


Table 5.4: Future Staffing Plan

Positions	Baseline	Tier 1	Tier 2	Tier 3	Tier 4
PW Director	1	1	1	1	1
Management/Superintendent	4	4	4	4	7
Supervisors/Finance/Safety/Trainer	5	5	5	6	10
Staff/Dispatch/Drivers	52	55	80	95	165
Total Management	62	65	90	106	183

**Figure 5.1: Future Organizational Chart** 









# Implementation: System Integration & Development

- Critical need to align development policy with transit system improvements.
- Low-density horizontal growth makes transit less effective and more costly.
- Transit-oriented development: maximize access to frequent transit corridors.

Figure 5.2: Growth Priority Areas
From Columbia Imagined: the Plan for How We Live and Grow (2013)

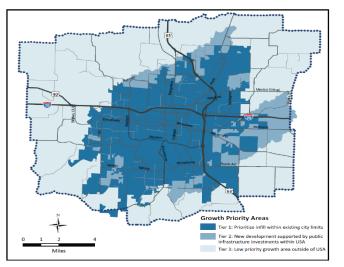


Table 5.5: Transit and Transit–Supportive Policies, Strategies, and Actions Based on Columbia Imagined: the Plan for How We Live and Grow (2013)

Policy	Strategy	Actions
Support diverse and inclusive housing options	Promote construction of affordable housing	Require a mix of housing types and price ranges within new subdivisions to provide options for integration of affordable housing and non-traditional family units.
Support mixed-use	Identify service gaps and support zoning and development decisions to provide walkable local commercial service and employment nodes	Incentivize mixed and desired/needed uses in key locations (zones and nodes).
Prioritize infill	Incentivize infill	Explore opportunities to make infill projects more attractive to developers, including regulatory and financial incentives.
development	Remove incentives that favor suburban sprawl	Stop spending taxpayer dollars to fund infrastructure extensions that serve only new suburban residential development.
Accommodate non-motorized transportation	Encourage interconnectivity between neighborhoods, commercial districts, and employment centers using non- motorized networks	Enforce the ordinance that requires landowners to maintain public sidewalks adjacent to their properties.
	Support and promote the public transit system	Connect bus routes with trails and greenways  Pursue new technologies and efficiencies to enhance the system  Encourage compact development near transit corridors and commercial hubs to support transit feasibility
Improve transit service	Expand the existing transit system to meet ridership needs	Evaluate the existing transit system and opportunities for system improvements based upon ridership surveys  Evaluate different route designs and models  Explore diversification of funding sources
Promote	Promote public transportation system expansion with regional considerations	Focus on developing a transit system between Columbia, the Columbia Regional Airport, Jefferson City, and the Jefferson City Amtrak Station
a mobility management public transportation system	Identify funding to support regional transit development and create partnerships between regional stakeholders to produce an integrated transportation system	Coordinate with MU, Columbia College, Stephens College, social service agencies, major employment centers, and Boone County







## Implementation: Implementation Matrix

Table 5.6: Implementation Matrix

	'24	2025			2026				Tier 2	Tier 3	Tier 4	
Steps	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	3-5yrs	5-10yrs	10-20yrs
Finalize/adopt study												
Pursue local funding commitments												
3. Vehicle procurement												
4. Draft scheduling												
5. Community engagement												
Staff restructuring												
7. Title VI analysis												
Scheduling, runcut, rostering												
Driver picks & training												
10. Marketing and outreach												
11. Service testing (mock Go-Live)												
12. Update passenger information												
13. Effective Date / Go-Live												
14. Service monitoring & adjustment												



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