

METRO RTA

Driving METRO Forward

Phase II

DrivingForward@akronmetro.org



METRO's Mission

METRO Regional Transit Authority enhances the quality of life for our community by providing innovative transportation solutions that are safe, dependable, cost-effective and customer-focused
...now and into the future.



Phase I Feedback

In April we got volumes of feedback from 13 public meetings and many online comments.

Three themes emerged as the most requested changes from our customers and bus operators:

- **Increase service frequency**
- **Simplify schedules with Clockface Headways**
- **Increase service span (evening and weekend)**



Method

In order to add service without substantially increasing our Operating Costs, we re-allocated service hours from three places:

- **Duplicated Service**
- **Unproductive Trips and Segments**
- **Schedule Efficiency**



Guiding Principles



Match Service to Modern Travel Patterns



Strengthen Network Structure



Simplify the Routes



Foster a Transit-First Lifestyle



Build Financial Stability



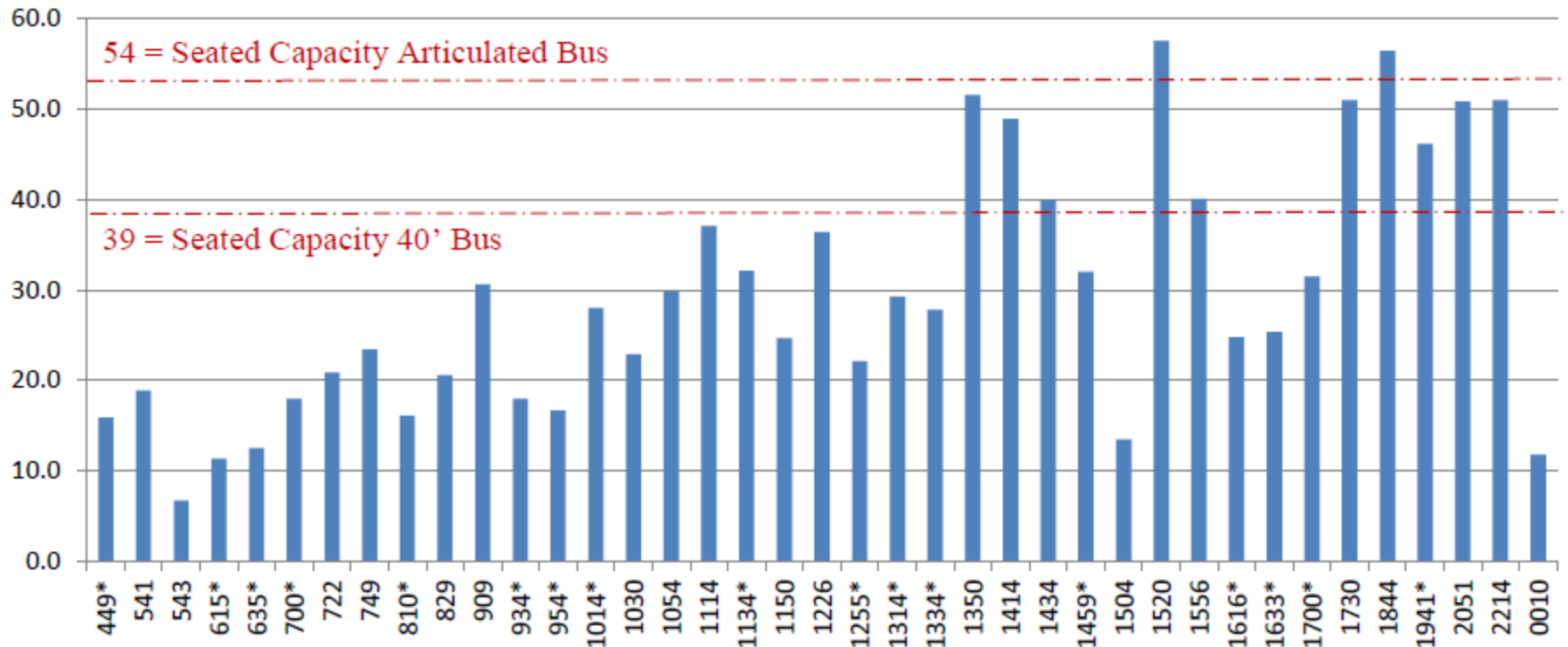


Match Service to Modern Travel Patterns

As shown in the example below, ridership on our urban system does not have a strong commute peak.

The proposed system provides consistent service from 6AM – 6PM with reduced service from 6PM to 11PM

#1 West Market - Inbound - Boardings per Trip





Match Service to Modern Travel Patterns

- Because of the length of the trip, suburban service is very expensive to operate. It costs approximately \$130 to run a one-way suburban trip. (Fully Allocated Cost)
- As you can see below, for trips with only two or three people on board, the cost per passenger can be staggering.
- Suburban service is most productive during commute hours.
- Proposed system preserves the most productive suburban trips, while reducing the total number of suburban revenue hours from 116 to 54. These hours are used to provide more frequent service on productive routes.

#102 - Northfield											
	Boardings in April	Boardings per Day	Cost per Px			Boardings in April	Boardings per Day	Cost per Px		Round Trip Px	Cost per Px
530-O	199	9.48	\$12.54		630-I	67	3.19	\$37.24		12.67	\$18.76
615-O	184	8.76	\$13.56		720-I	53	2.52	\$47.08		11.29	\$21.06
720-O	79	3.76	\$31.58		820-I	16	0.76	\$155.94		4.52	\$52.53
810-O	61	2.90	\$40.90		905-I	34	1.62	\$73.39		4.52	\$52.53
910-O	46	2.19	\$54.24		1005-I	31	1.48	\$80.49		3.67	\$64.81
1000-O	25	1.19	\$99.80		1050-I	13	0.62	\$191.93		1.81	\$131.32
1050-O	59	2.81	\$42.29		1145-I	28	1.33	\$89.11		4.14	\$57.36
1140-O	57	2.71	\$43.77		1235-I	31	1.48	\$80.49		4.19	\$56.71
1230-O	70	3.33	\$35.64		1335-I	83	3.95	\$30.06		7.29	\$32.62
1320-O	81	3.86	\$30.80		1415-I	41	1.95	\$60.86		5.81	\$40.90
1420-O	103	4.90	\$24.22		1520-I	250	11.90	\$9.98		16.81	\$14.14
1500-O	98	4.67	\$25.46		1600-I	178	8.48	\$14.02		13.14	\$18.08
1620-O	122	5.81	\$20.45		1725-I	172	8.19	\$14.51		14.00	\$16.97
1750-O	81	3.86	\$30.80		1845-I	75	3.57	\$33.27		7.43	\$31.99
1820-O	43	2.05	\$58.03		1940-I	81	3.86	\$30.80		5.90	\$40.24
1930-O	32	1.52	\$77.97		2040-I	29	1.38	\$86.04		2.90	\$81.81
2040-O	76	3.62	\$32.83		2130-I	19	0.90	\$131.32		4.52	\$52.53
2150-O	53	2.52	\$47.08		2300-I	93	4.43	\$26.83		6.95	\$34.18
2250-O	53	2.52	\$47.08							2.52	\$94.15
(X) 2300-C	148	7.05	\$16.86							7.05	\$33.72



Match Service to Modern Travel Patterns

Similarly, Circulator service is expensive to provide relative to the number of people who ride.

Circulator Service is most productive during mid-day hours. In the evening there are trips which average less than a person per day, meaning that there are days when this trip runs completely empty.

Proposed system allocates circulator hours to the mid-day hours, supporting retail jobs, shopping trips, and medical trips in Montrose and Chapel Hill. In the proposal #51 and #53 are combined for part of their routing, with other segments covered by other proposed routes.

#50 - Montrose Circulator			
	Boards in April	Boards per Day	Cost per Px
615-O	2	0.10	\$782.30
702-O	53	2.52	\$29.52
734-O	126	6.00	\$12.42
750-O	75	3.57	\$20.86
813-O	111	5.29	\$14.10
838-O	128	6.10	\$12.22
900-O	47	2.24	\$33.29
928-O	36	1.71	\$43.46
1005-O	32	1.52	\$48.89
1050-O	53	2.52	\$29.52
1142-O	42	2.00	\$37.25
1230-O	70	3.33	\$22.35
1310-O	51	2.43	\$30.68
1345-O	28	1.33	\$55.88
1420-O	28	1.33	\$55.88
1433-O	28	1.33	\$55.88
1512-O	59	2.81	\$26.52
1550-O	73	3.48	\$21.43
1620-O	54	2.57	\$28.97
1658-O	175	8.33	\$8.94
1733-O	22	1.05	\$71.12
1750-O	43	2.05	\$36.39
1809-O	62	2.95	\$25.24
1845-O	10	0.48	\$156.46
1910-O	3	0.14	\$521.53
1945-O	7	0.33	\$223.51
2020-O	34	1.62	\$46.02
2051-O	4	0.19	\$391.15
2120-O	33	1.57	\$47.41
2230-O	0	0.00	#DIV/0!
2337-O	29	1.38	\$53.95



Strengthen Network Structure

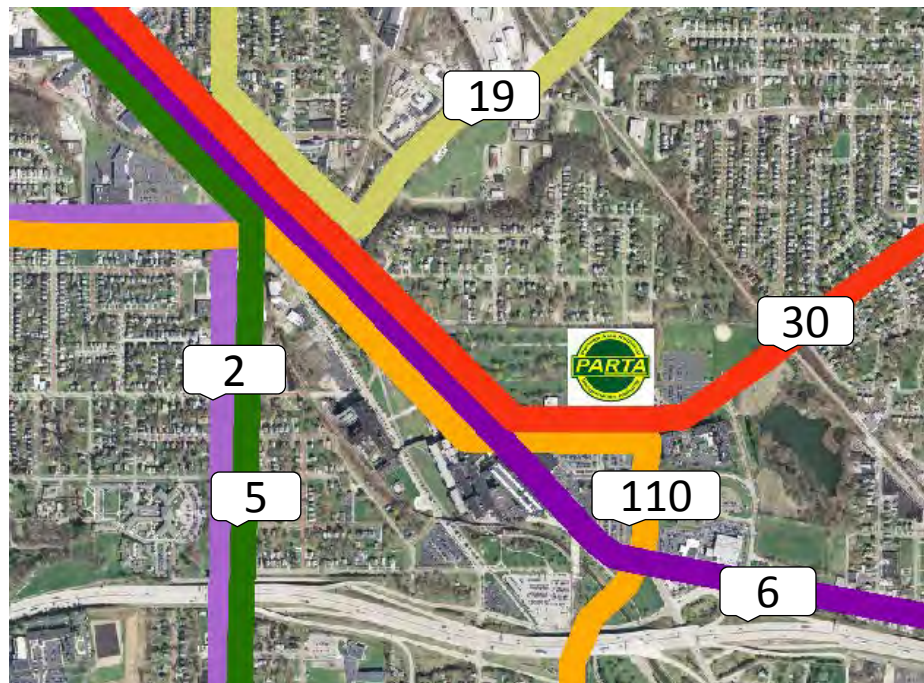
This proposal trades service frequency for more transfers. Service duplication, such as on East Market Street, allows for one-seat rides into Downtown Akron, but requires multiple buses to cover the same area.

In this proposal, there is less duplication, but buses will serve a given location more frequently.

Transfers will take place either at existing hubs, or at locations where we will aggressively pursue shelters and layover accommodations.

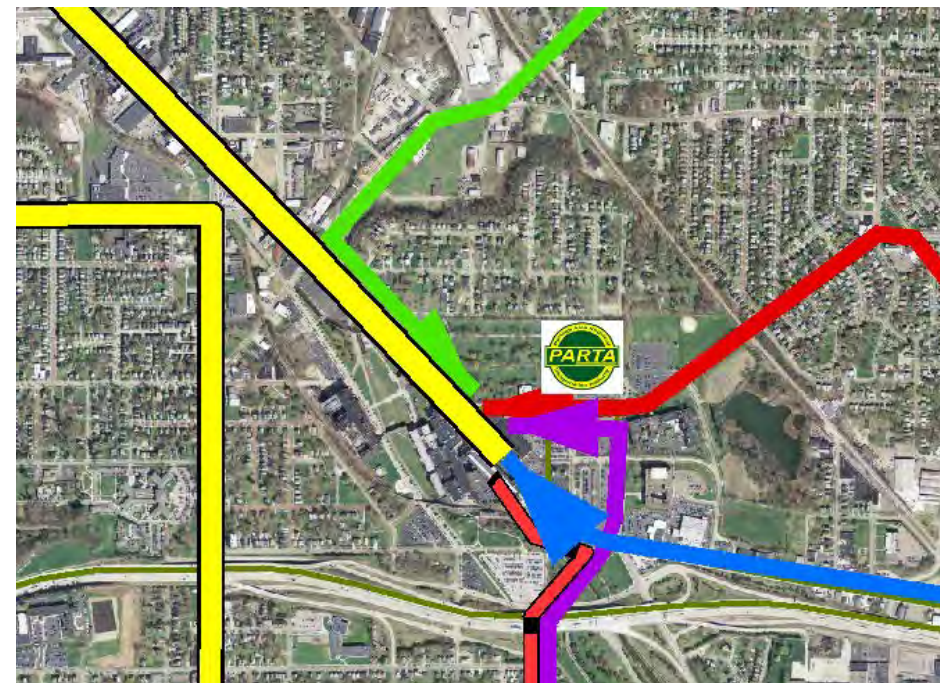
Current System

All six routes pictured continue into downtown



Proposed System

Neighborhood routes feed into frequent trunk routes





Strengthen Network Structure

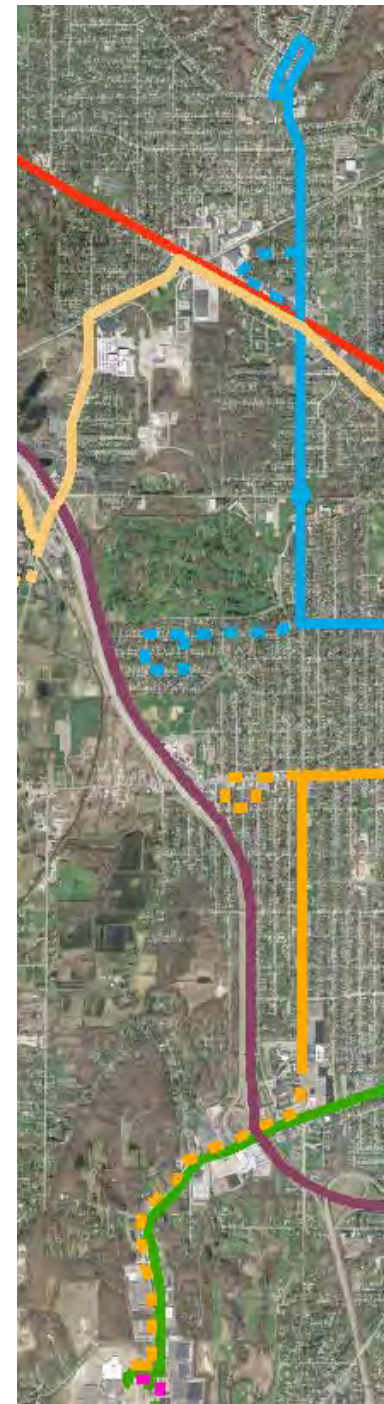
Lower productivity route segments have been combined to form cross-town routes. This preserves access to existing users, increases connection possibilities, and frees up hours for more frequent service.

← Current System

No north-south link from Rolling Acres to Market Street without going into Downtown Akron

Proposed System →

Portions of current #3 and #4 would be combined to establish a route between 7 Stories Apartments and Rolling Acres Transit Center which does not go downtown. This route would provide links to six other routes in the network.





Simplify the Routes

Proposed routes have been analyzed to establish a “cycle time” which can be operated effectively throughout the daytime hours. “Cycle time” is round-trip travel time, plus time for Operator relief and recovery at each end of the line.

Example Pulses from RKP Transit Center – Daytime Schedule

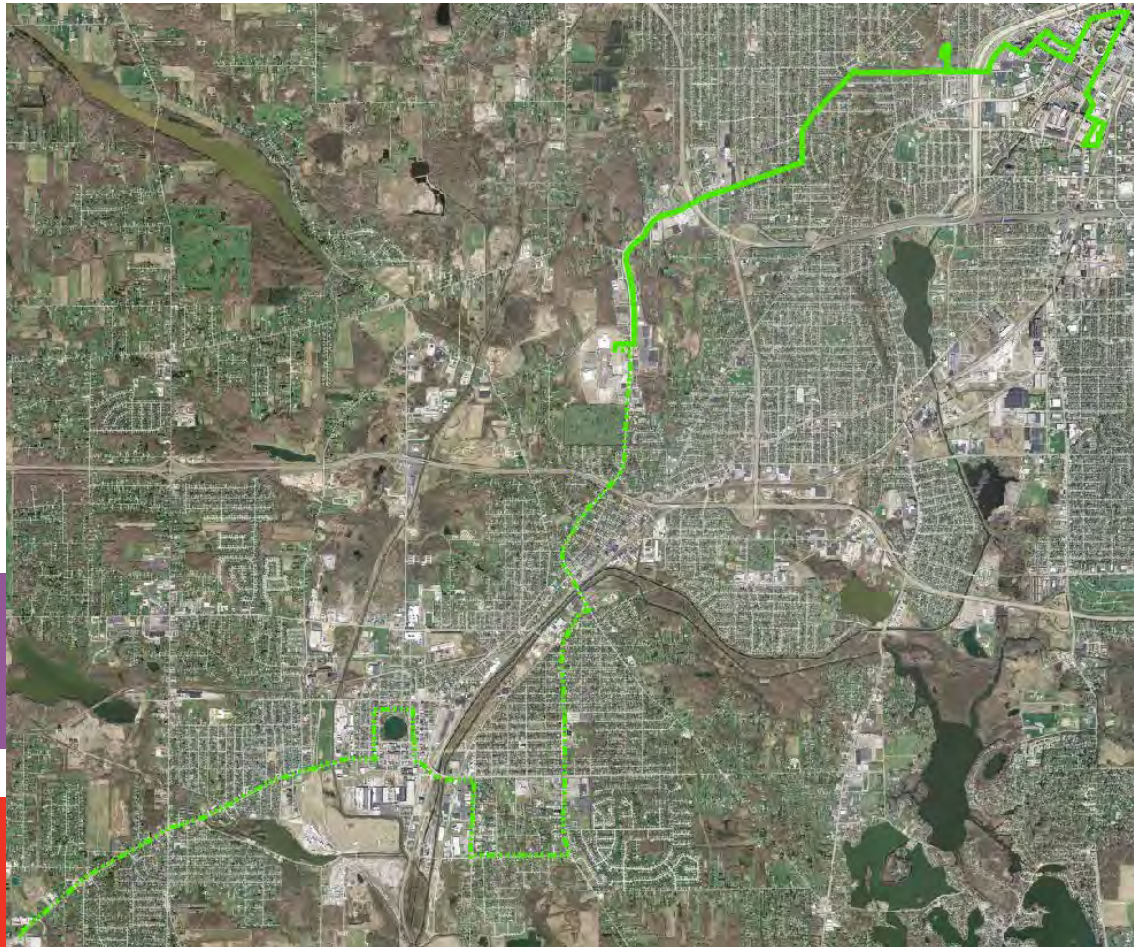
Time	20 Minute - High Frequency Corridors						30 Minute Corridors					40 Minute		60 Minute
6:00	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main	Chapel Hill	Grant	S. Main	East Ave.	Euclid	Inman	Delia	Manchester
10														
20	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main								
30							Chapel Hill	Grant	S. Main	East Ave.	Euclid			
40	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main						Inman	Delia	
50														
7:00	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main	Chapel Hill	Grant	S. Main	East Ave.	Euclid			Manchester
10														
20	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main						Inman	Delia	
30							Chapel Hill	Grant	S. Main	East Ave.	Euclid			
40	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main								
50														
8:00	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main	Chapel Hill	Grant	S. Main	East Ave.	Euclid	Inman	Delia	Manchester
10														
20	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main								
30							Chapel Hill	Grant	S. Main	East Ave.	Euclid			
40	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main						Inman	Delia	
50														
9:00	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main	Chapel Hill	Grant	S. Main	East Ave.	Euclid			Manchester
10														
20	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main						Inman	Delia	
30							Chapel Hill	Grant	S. Main	East Ave.	Euclid			
40	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main								
50														
10:00	W. Market	Arlington	Copley	E. Market	Kenmore	N. Main	Chapel Hill	Grant	S. Main	East Ave.	Euclid	Inman	Delia	Manchester



Simplify the Routes

“If it is worth going there, it is worth going *all day*”

Pattern complexity (bus taking different paths on different trips) was a common complaint from both customers and operators.



Proposed routes were all modeled as a *single pattern*. In some cases, Current routes were broken into several pieces so that each piece could be matched to an appropriate service span and frequency.

The #14 currently has 10 different patterns that vary from 5.7 to 15 miles in length





Simplify the Routes

“If it is worth going there, it is worth going *all day*”

Pattern complexity (bus taking different paths on different trips) was a common complaint from both customers and operators.

The proposed system breaks the #14 into three distinct pieces which can be independently adjusted based on demand.

Limiting route length to approximately 5 miles has benefits for schedule reliability because traffic impacts another other factors are more predictable with a shorter route.



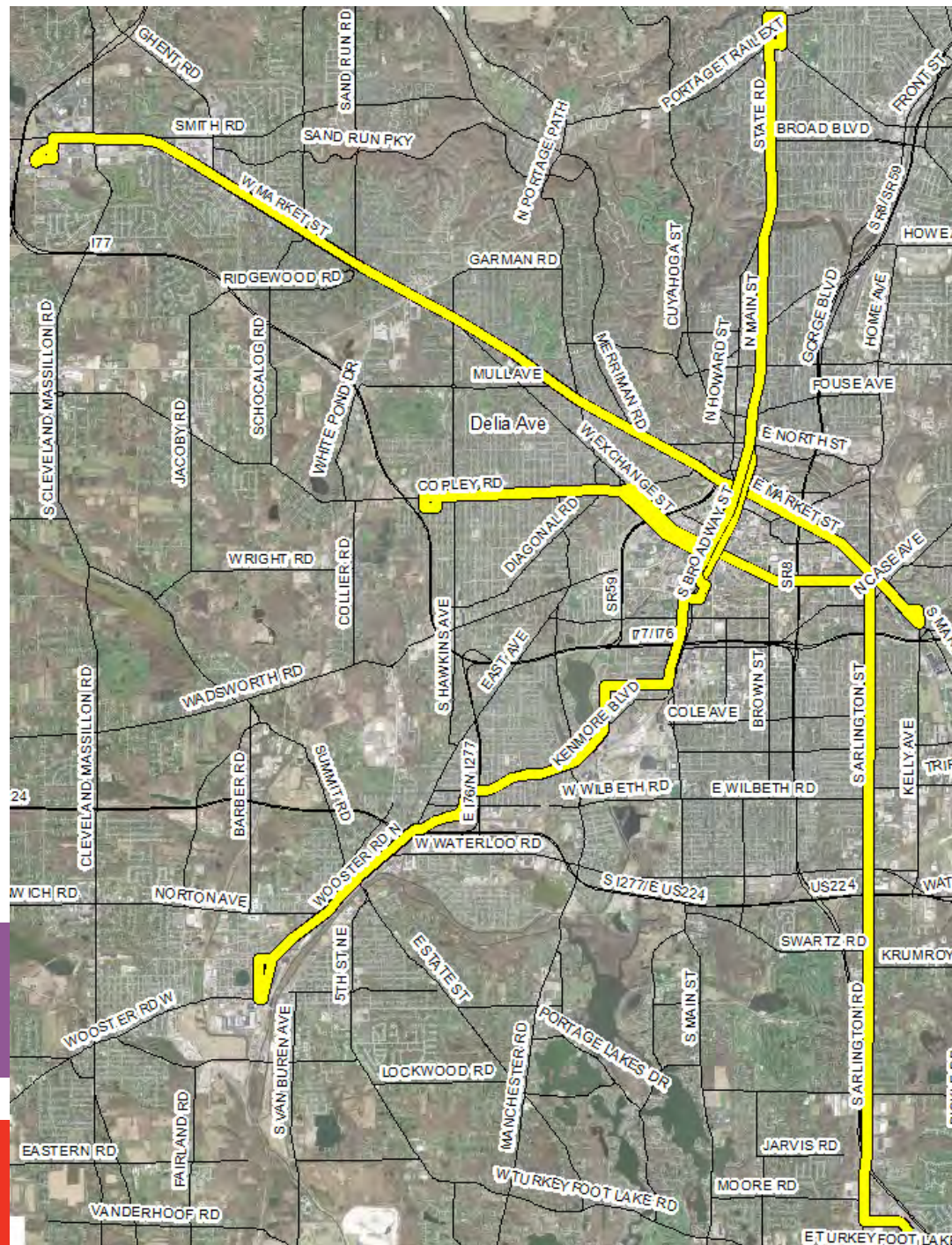


Enable a Transit First Lifestyle

The proposed system contains six high-frequency corridors where a bus would arrive every 20 minutes between 6AM and 6PM and every 30 minutes from 6PM – 11PM:

- West Market to Montrose
- S. Arlington to Interstate Parkway
- Copley Road to Cordova
- East Market to Goodyear
- Kenmore Boulevard to Barberton
- N. Main Street to Portage Crossing

In April 2016, 68% of our boardings occurred within ¼ mile of these lines.





Enable a Transit First Lifestyle → For our Existing Riders

In April 2016, 68% of our boardings occurred within ¼ mile of the 20–minute corridors. (Yellow on Map)

In April 2016, 63% of our boardings occurred within 200 feet of these corridors.

If we add in the proposed routes with 30-minute frequency, 87% of the April boardings were within ¼ mile of the network. (Yellow and Green)

This represents dramatic improvement in service for most of our existing riders.

Approximately 5% of our ridership will be affected by loss of service or a major reduction in the hours the bus operates.





Enable a Transit First Lifestyle → For Employees

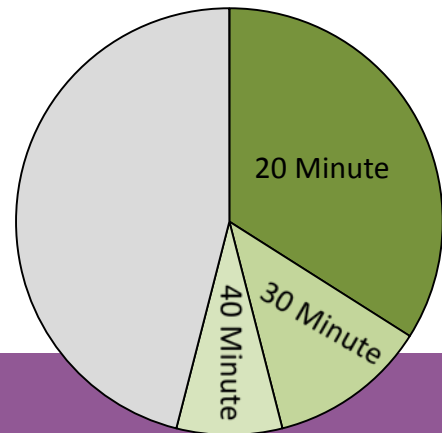
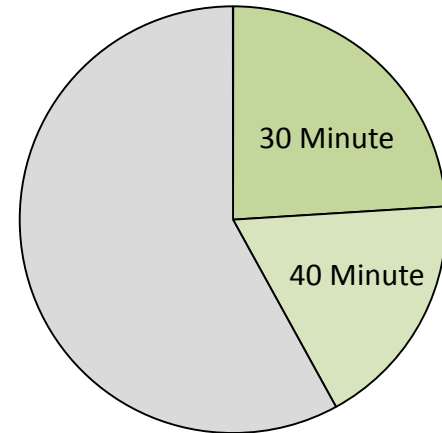
In 2015, there were 2,414 job sites in Summit County with at least 20 employees.
These employment sites account for 190,000 jobs.

Our current system provides:

No 20-minute all-day service

30 minute or better frequency to 470 of these sites (19%) and **46,300 jobs (24%)**

40 minute or better frequency to 976 of these sites (40%) and **88,400 jobs (46%)**



The proposed system would provide:

20-minute frequency to 669 of these job sites (27%) and **65,800 jobs (34%)**

30 minute or better frequency to 973 of these job sites (40%) and **88,700 jobs (46%)**

40 minute or better frequency to 1,126 of these job sites (46%) and **102,156 jobs (54%)**





Enable a Transit First Lifestyle → For All Summit County Residents

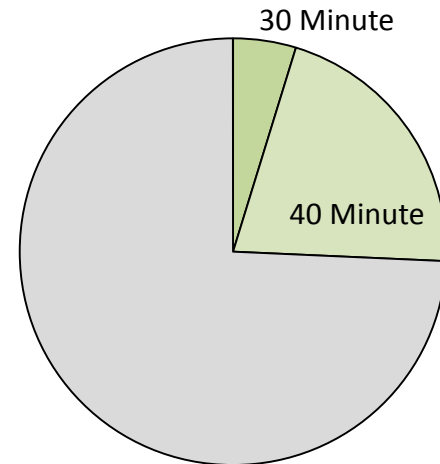
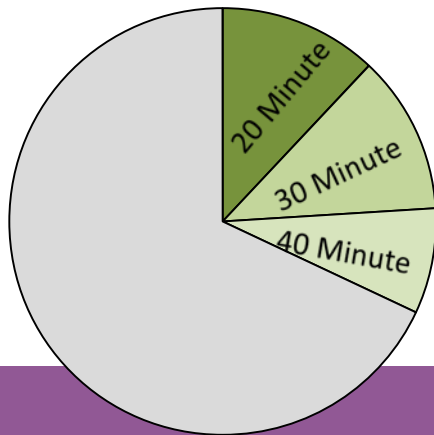
As of the 2010 Census, there were 541,781 Summit County residents
Based on analysis of the 2010 Census Blocks,

Our current system provides:

No 20-minute all-day service

30 minute or better frequency to 28,774 people, or 5.3% of the County

40 minute or better frequency to 146,442 people or 27% of the County



The proposed system would provide:

20-minute frequency to 63,995 people, or 11.8% of the County

30 minute or better frequency to 132,255 people, or 24.4% of the County

40 minute or better frequency to 175,691 people, or 32.4% of the County





Enable a Transit First Lifestyle → For Protected Populations

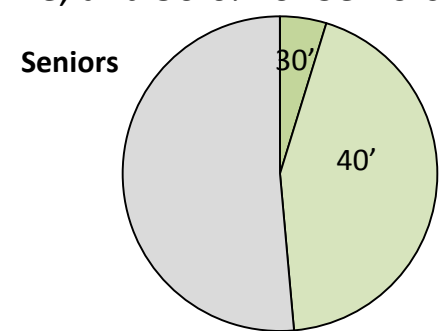
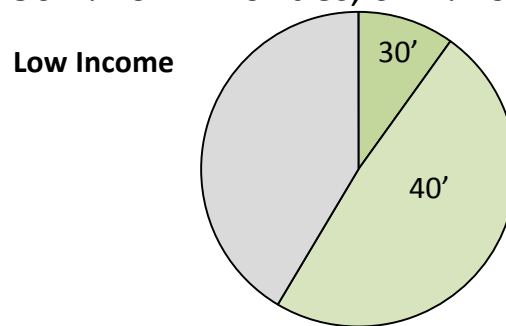
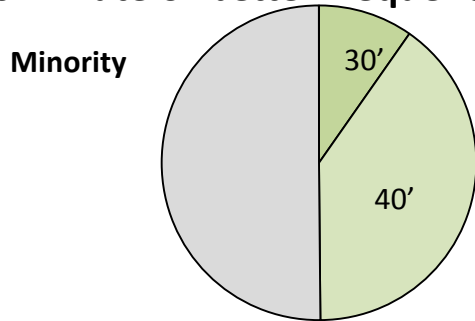
Based on analysis of the 2010 Census Blocks,

Our current system provides:

No 20-minute all-day service

30 minute or better frequency to 9.7% of Minorities, 11.1% of Low Income, and 4.6% of Seniors

40 minute or better frequency to 50.2% of Minorities, 64.7% of Low Income, and 50.6% of Seniors

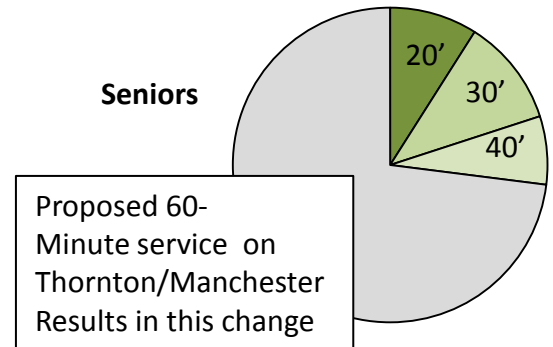
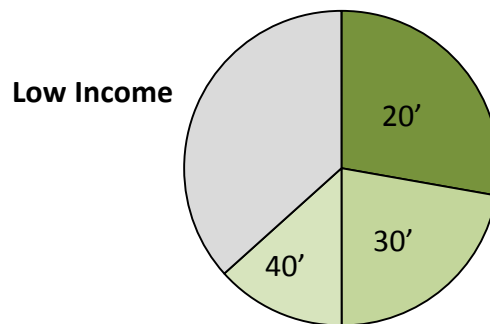
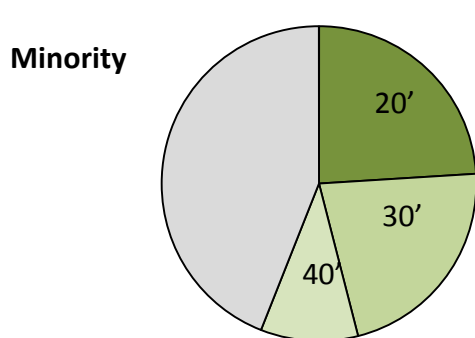


The proposed system would provide:

20-minute frequency to 24% of Minorities, 24.8% of Low Income, and 9.4% of Seniors

30 minute or better frequency to 45.6% of Minorities, 44.6% of Low Income, and 20.6% of Seniors

40 minute or better frequency to 56.4% of Minorities, 57.2% of Low Income, and 27.3% of Seniors



Proposed 60-Minute service on Thornton/Manchester Results in this change



Build Financial Stability

METRO's service hours are not aligned with the productivity of the different service categories.

In particular, Suburban and Circulator services receive much more resources than the ridership warrants.

Service	Current Hours	%	Current Boards	%	Proposed Hours	%	Change
Urban	774	77%	368014	93%	885	86%	14%
Suburban	116	12%	7476	2%	54	5%	-53%
Circulator	74	7%	8272	2%	47	5%	-36%
NCX	43	4%	11599	3%	40	4%	-7%
Total	1007		395361		1026		2%





Build Financial Stability

In order to make the proposed improvements in service span and greater frequency, some areas would unfortunately lose some or all of their service.

In April 2016, automatic passenger counters recorded an average of 18,829 boardings per weekday.

In the current proposal:

- 120 bus stops would close with no walking-distance alternative. 119 boardings per day (0.6% of total boardings) occur at these stops
- 177 bus stops would close, but would have *more frequent* service available within a ¼ mile walk. 366 boardings per day (1.9%) occur at these stops.
- 273 stops would remain in place, but have major reductions in service span (hours). 492 boardings per day (2.6%) occur at these stops.

Overall, approximately 5% of our current customers will be negatively impacted by this proposal.





Build Financial Stability

	Daytime Headway	Proposed	Evening Headway	Proposed	Trips per Day	Proposed
			*limited		(Outbou	
West Market (#1)	24	20	70	30	38	52
Arlington (#2)	23	20	70	30	40	52
Copley Road (#3)	34	20	70	30	29	52
East Market (#6)	36	20	70	20	30	52
Kenmore Blvd (#8)	40	20	70	30	25	52
North Main (#10)	38	20	70	30	25	52
Delia (#4)	43	40	None	None	18	18
Ellet (#5)	56	40	None	80	14	22
Tri-County (#6)	36.1	40	70	40	30	27
C. Falls Ave. (#7)	36	30	70*	80	25	28
East Ave (#9)	40	30	70*	60	22	30
Portage Trail (#10)	38	30	70	30	25	36
Tallmadge Ave (#12)	35	30	70*	60	25	30
Grant Ave. (#13)	40	30	70*	60	23	30
Euclid Ave. (#14)	35	30	70	60	29	30
Brown / Inman (#17)	38	40	70	80	25	22
Manchester (#18)	36	60	70	60	26	18
Eastland (#19)	44	30	70*	60	21	30
S. Main (#21)	40	30	None	None	14	24
#26 / #28 / #53 Crosstown	57	60	None	None	13	12
Goodyear Heights (#30)	40	40	70	None	19	18
State / Steels (#33)	142	40	70	None	10	18
Cascade / Uhler (#34)	36	30	70*	60	24	30
Hawkins Ave	n/a	30	n/a	30	n/a	37

By shifting additional resources to the Urban service category, we hope to increase overall ridership. Our customers in dense, walkable, transit-supportive neighborhoods will have more choices for when to ride and how to complete their trip. *'Frequency is freedom'*



Phase II Public Meetings

June 22 nd - 12:30 PM - 4:00 PM	- Cuyahoga Falls Library - Highland Square Library	Route #10, #53 Route #1, #28
June 23 rd - 11:00 AM	- Main Library	Downtown
June 27 th - 10:00 AM - 4:00 PM	- RKP Transit Center - RKP Transit Center	Downtown Downtown
June 28 th - 1:00 PM	- Ellet Library	Route #5, #6

After these meetings, we will develop a “preferred alternative” consisting of a complete Map and detailed schedule.

Overall Goal: Implementation of preferred alternative Fall 2017

