

# 2015 – 2019 Transit Development Plan

September 26, 2014



*METRO Regional Transit Authority  
416 Kenmore Boulevard  
Akron, OH 44301*

# 2015 – 2019 Transit Development Plan

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## Executive Summary

### **Purpose and Need**

The five-year transportation development plan (TDP) is an integral element of the federally-mandated metropolitan planning process. It is used by METRO to guide budgeting for transit service, vehicle fleet and facility upgrades, human resources decision-making, and technology improvements. Importantly, the TDP is used by the Akron Metropolitan Area Transportation Study (AMATS) to inform its Transportation Improvement Program (TIP). Project programming in the TIP is a prerequisite for receipt of federal funding.

### **Plan Inputs**

#### **Previous Plans and Studies**

A foundation for this TDP was laid by a number of prior efforts, including the 2012 Transit Master Plan that provides recommendations for a 20-year horizon through 2032, the Market-Arlington Alternatives Analysis of 2010, and previous TDPs prepared by consultants for METRO in 2009 and 2004. Additionally, the plans of other organizations for the Akron area provided valuable input and context, including AMATS' Transportation Outlook 2035, Transit Plan 2012, and Downtown Akron Connectivity Study and Vibrant NEO 2040. Particulars of these plans are described in Chapter 2.

#### **Public Outreach**

Outreach to the general public, to community stakeholders, and especially to transit riders resulted in important feedback that contributed to the priorities described in this TDP. In addition to input obtained through the Previous Plans and Studies identified above, METRO performed an On-Board Survey of all regular bus routes in November 2013, a follow-up survey of bus riders on-line and by telephone, and conducted 17 public meetings to gain input to route and schedule changes that were under consideration during 2013 and 2014.

Important findings from the public outreach included:

- 90% of METRO bus riders do not have regular access to a private vehicle and have household incomes of less than \$20,000/year.
- Nearly 90% of riders walk to the bus stop. 85% of them walk three blocks or less to catch the bus. That is exceptionally high for an urban transit agency.
- Work is the most common trip purpose, but most trips occur for other reasons like shopping, medical appointments, and school.
- Over a third of survey respondents were 19 – 34 years old.
- Service improvements most desired by METRO riders are increased service frequency, earlier morning or later evening service, and more weekend service.
- The average trip length for METRO riders is 4.0 miles, not including trips to or from Cleveland.
- 36% of bus trips require a transfer, taking 10-15 minutes on average. Riders want more direct service to their destinations.

## **Work In Progress**

METRO has a number of transformational changes underway that will enable many of the subsequent recommendations for improvements during the 2015-2020 planning period. It is important to acknowledge them to provide context for what follows.

### **North County Demonstration/Call-A-Bus Service**

In Fall 2013 METRO initiated changes to line service routes 102 and 103, and created a new route 104 to serve the northern portion of Summit County. A dial-a-ride paratransit service dubbed Call-A-Bus was launched to serve the cities of Twinsburg and Macedonia, the villages of Northfield and Reminderville, and the townships of Northfield Center, Sagamore Hills and Twinsburg. The Call-A-Bus service is highly rated by households using it, and METRO is considering it for other suburban areas that need service.

### **University of Akron Transit Pass Demonstration**

The University of Akron and METRO rolled out a new Zip-Pass for University students, faculty and staff in August 2014. The agreement allows University identification cards to be used as a transit pass, and early results indicate a substantial increase in bus travel by these pass-holders. METRO would like to apply this model through similar agreements with other educational institutions.

### **Automated Vehicle Location (AVL) System**

METRO contracted with Avail Technologies, Inc. in 2013 to deploy an AVL system on all line service buses to enable customer service improvements including automated on-board bus stop announcements, on-board wi-fi, real-time schedule information, and automated passenger counting. The new technologies are scheduled to be operational in Spring 2015.

### **Passenger Amenity Improvements**

In order to upgrade its facilities at its 2,308 bus stops, METRO hired a full-time Bus Stop Technician in 2013, adopted new policies to guide the installation of benches and shelters, acquired 25 new bus shelters and trash cans, has upgraded the cleanliness of shelters, and is reviewing the safety and accessibility of all existing bus stop locations.

### **Facilities Improvement and Expansion**

There are several major facility improvements under construction in Fall 2014 in two locations. At METRO's Administrative Offices/Maintenance and Operations facility at 416 Kenmore Boulevard in Akron, projects underway include a CNG fueling station expansion for buses, bus wash facility, and expanded parking for buses and employees. A new 154-stall Park and Ride lot is being constructed adjacent to the Robert K. Pfaff Intermodal Transit Center south of Downtown Akron with space for a future public CNG-fueling station. Projects under design for construction in 2015 include upgrades to METRO's transit hub at Independence Turnaround near Chapel Hill Mall and a new layover on Rothrock Road in Montrose.

## **Priority Improvement Initiatives, 2015-2020**

The TDP recommendations for the next five year period offer continuity for initiatives already underway as described above. They also anticipate the availability of new data sources from the AVL-related

systems to guide planning and implementation; but most importantly, they include transit service expansions to address the mobility needs of existing and future METRO customers.

### **Ridership Growth – Targeted Programs**

Increasing ridership is the foremost goal of planning for the coming five years. The first part of the growth strategy is to hold onto existing customers by serving them well – and that will require ongoing steps to improve regular bus service to address their needs. The second part of the ridership growth strategy is to target two groups – “youth riders” and “choice riders”:

- Youth riders because their demographic is more likely to depend on transit for routine travel, and there is a good potential they will become long term METRO customers; and
- Choice riders because METRO needs to attract a broader segment of the population to supplement low income people. Choice riders will consider the bus as an alternative to driving their cars at least part of the time, for example to commute to work.

The University of Akron Zip-Pass and North Coast Expresses offer initial templates for programming the growth of these two respective markets.

### **Bus Stop Consolidation**

The optimal distance between bus stops within an urban area is 1,320 feet or one-quarter mile, which equates to three city blocks. This is widely acknowledged as providing excellent walk access to transit. However, a large number of METRO’s existing bus stops are much closer together than that. While this offers great pedestrian access, it significantly slows transit operations, especially at peak times. This increases travel time for all bus riders and disrupts schedule adherence. As a result, with this TDP, METRO is launching a multi-year effort to reduce the number of bus stops AND to locate them as optimally as possible for the greatest number of riders. This will require a review of all bus stop locations on all routes.

### **Regular Route Rationalization**

There are several existing bus services that METRO has identified for improvements during the TDP period. Each of them will require more detailed analysis and decision-making. The overall objective is to improve route coverage, and directness and frequency of service to provide the best possible product for bus riders with the available resources. This could also result in service frequency reductions in some cases to better match them with ridership productivity. The recommended program follows:

2015 – 1<sup>st</sup> Half of the year – Routes 50, 101, 110; 2<sup>nd</sup> Half of the year – Southside Routes 13, 17, 111 and reorganize late night zone service (possibly with flex-routes or regular time points)

2016 – 1<sup>st</sup> Half of the year - Weekend Service Improvements (reorganization & extension) and Green service review; 2<sup>nd</sup> Half of the year - Eastside service reorganization (Routes 5, 6, 19, 30) and route and schedule analysis of weekday service using AVL data to achieve more regular clock-face headways and improved run-cutting (more efficient use of scheduled revenue service hours)

2017 – 1<sup>st</sup> Half of the year - Study North County Routes 101, 102, 103, 104, and evaluate Call-A-Bus to consider upgrading to flex-route or crosstown routing

### **Service Expansion/Improvement**

METRO's regular bus routes do not currently cover all of Summit County. There has been an ongoing effort to close that coverage gap, and this effort will continue through 2020. In addition to providing basic transit service for unserved areas, METRO is proposing new crosstown routing to connect suburban origins and destinations without travel to Downtown Akron. Also, METRO is recommending a bus circulator within Downtown Akron:

2015 – 1<sup>st</sup> Half of the year - Green Call-A-Bus

2016 – 1<sup>st</sup> Half of the year - Downtown Akron Circulator

2017 – 1<sup>st</sup> Half of the year - Northside Crosstown Route; 2<sup>nd</sup> Half of the year - Southside Crosstown Route

### **Vehicle Fleet Expansion**

The above identified bus service expansions will require the acquisition of more buses. This typically necessitates lead time to determine size and type, complete a competitive selection process, and allow for manufacturing, testing and delivery. The number of new buses needed is shown below by year they are required:

2016 – 1<sup>st</sup> Half of the year - 8 new buses for Downtown Akron Circulator, 6 in peak service and 2 spares

2017 – 1<sup>st</sup> Half of the year - 2 peak buses for Northside Crosstown; 2<sup>nd</sup> Half of the year - 2 peak buses for Southside Crosstown

2018 – 1<sup>st</sup> Half of the year - 2 peak buses for Route 82 Crosstown; 2<sup>nd</sup> Half of the year - possible fleet expansion following effectiveness review of Downtown Akron Circulator

2019 – 1<sup>st</sup> Half of the year - Possible fleet expansion following review of Southside Crosstown; 2<sup>nd</sup> Half of the year – Possible fleet expansion following effectiveness review of Route 82 Crosstown

### **Facility Improvements**

As indicated above in Work In Progress, METRO has two projects under construction in 2014 to improve transit facilities including expanded CNG-fueling, bus washing and storage at 416 Kenmore Boulevard and a new Park and Ride lot at the RKP Transit Center. Design work is also underway for 2015 construction of a new bus layover on Rothrock Road in Montrose and for upgrades to the existing Chapel Hill Mall transit hub at Independence Turnaround. Planning work has also begun for creation of a new transit hub in the City of Stow as part of redevelopment of the Stow-Kent Gardens shopping center at Kent and Fishcreek Roads. That project will be a cooperative venture with the City and the Portage Area Regional Transit Authority (PARTA). Planning for transit improvements in the first half of 2015 in conjunction with the City of Green (see above) should also consider the creation of transit hubs to accommodate passenger transfers and bus operator layovers, and to improve visibility for routes 2 and 110. The Norton Plaza area at Norton Avenue and Cleveland-Massillon Roads was recommended for a future transit hub in the Transit Master Plan, and it should be considered when and if affordable opportunities present themselves. Lastly, METRO has embarked on a program to improve its bus stops, and this effort needs to be carefully integrated with the recommended consolidation of existing bus stops. The objective is to focus the installation of new bus shelters and benches at stops with the highest passenger boarding volumes, while improving bus stop amenities and passenger information throughout the system, and working cooperatively with local jurisdictions to upgrade pedestrian access.

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## 1.0 Introduction

### 1.1 Planning Context

This Transit Development Plan (or TDP) is intended to introduce, explain, and prioritize transit service changes and transit facility investments for METRO's Summit County service area over a five-year horizon from 2015 to 2019. The recommendations in this plan resulted from a variety of inputs including extensive public outreach, internal and external surveys, stakeholder interviews, previous planning efforts, and analysis of METRO's bus ridership and operating performance data.

### 1.2 Previous Plan Status

There were two recent TDPs that this plan is intended to update or replace. These include documents prepared in 2004 and 2009, which are explained in more detail below.

#### 1.2.1 2009 Transit Development Plan

The 2009 Transit Development Plan (TDP) was developed to restore service that had been cut as a result of funding constraints encountered in the mid-2000s. It followed local electoral support of a 0.25 cent sales tax that was approved in March 2008. The TDP-proposals were also intended to address changing demographics and land use patterns. The 2009 TDP introduced a number of route-by-route recommendations, summarized as follows.

##### Changes Implemented

Routes 1 and 2: The 2009 TDP recommended that peak hour service frequency on the #1 be improved to 15 minutes and that all trips be extended to Montrose rather than ending at Summit Mall. Subsequently, all trips now continue past Summit Mall to the Flight Memorial Drive layover in Montrose. In August 2013 Copley Township requested that METRO relocate that layover, and planning is currently underway in cooperation with the Town and Summit County to establish a permanent layover/hub site in Montrose. Fifteen minute headways were implemented in 2012-2013 during peak periods on the #1 and #2 (which are interlined) pursuant to the TDP recommendation. However, this change resulted in schedule adherence issues, especially "bus bunching" – characterized by an overcrowded bus being overtaken by a near empty one. In Summer 2013 METRO took delivery of six 60-foot articulated buses which were deployed on the #1 and #2 routes in Fall 2013 to reduce overcrowding. Given the increased seat capacity of the articulated buses, both routes were returned to 20-minute peak headways. Additional changes to the #1 and #2 are proposed in this TDP, including relocating the Montrose hub, bus stop consolidation (discussed in Section 5.1) and the introduction of limited stop express service (discussed in Section 4.2).

Route 2: A recommendation to extend the route on Arlington Road to Liberty, Fortuna Drive and Interstate Parkway was implemented, and then shortened due to low ridership. The extension from

Wal-Mart southward along Arlington Road to Interstate Parkway occurs on 66% of the trips (in Fall 2014).

Route 4: The #4 was split into two routes to provide more direct service to West Akron. The #26 was created (separate from the #4) to cover West Exchange Street and to serve recently-developed office parks near White Pond Drive and I-77.

Route 8: Service was extended four miles further west in Fall 2011 to Norton Plaza from the former terminus at 4<sup>th</sup> and Norton (only during business hours).

Route 14: Express service was extended to additional times.

Route 23: The route was modified to serve the Stow Courthouse and other activity centers near the Route-8 and Steels Corners interchange.

Route 31: The route was re-aligned to serve National College on Fishcreek Road in Stow, which had been recommended for creation of a new route. The route mileage on Fishcreek Road was subsequently shortened in January 2014 due to low ridership, and the Stow Circulator was created originating at Chapel Hill Mall (Independence Turnaround) rather than the RKP Transit Center.

New/Re-routes: A pilot regular route service for Twinsburg and Macedonia was proposed in the 2009 TDP. This recommendation was fulfilled with the North County Service Demonstration launched in 2013. Routes 102 and 103 were restructured, route 104 was created, and demand response Call-A-Bus service was introduced within a limited geographic area. The #102 was extended north to the Northfield Rocksino and the new #104 expanded service through Hudson to Twinsburg, ending at the Creekside Park and Ride. In Fall 2014 Call-A-Bus service hours were extended and the geographic area was expanded to the entire Nordonia Hills School District.

#### Changes Not Implemented

Route 3: The #3 was not extended west of I-77 toward Collier Road as described in the 2009 TDP. Portions of this area may be served by a future proposed Copley Crosstown route described in Section 4.4.1. Other potential service areas described in this recommendation have been addressed by extension of the #4, discussed above.

Routes 5 & 6: These routes were proposed to be combined into a BRT route. Although BRT is no longer under consideration, METRO's Service Planning Committee agreed that improved service to the southeast side should remain a priority.

Route 30: Extension of the route to Chapel Hill Mall via Darrow Road was proposed along with elimination of the Goodyear Boulevard/Tonawanda Avenue loop. In 2014, METRO's Service Planning Committee determined that the route extension was not warranted. The loop should be reevaluated when stop-specific boarding and alighting information is available.

Route 33: Extension of the #33 to the Stow Courthouse was not implemented since the need was fulfilled with extension of the #23.

Route 50: The 2009 TDP recommended elimination of low productivity midday bus trips on the route segment north of W. Market (Embassy Parkway/Crystal Clinic). Given future changes associated with the Montrose layover, revisions to the #50 will be delayed until after the Montrose Hub is settled and detailed boarding and alighting data can be collected.

Green Pilot: The recommended service expansion in the City of Green has not been implemented. In 2014 it was determined that resources were not available to support expansion of Call-A-Bus service for Green. METRO's Service Planning Committee postponed implementation of a local circulator, noting the need to integrate it with other proposed service improvements. Proposals for Green are included in Section 4.6.

### 1.2.2 2004 Transit Development Plan

The 2004 TDP recommended a "family" of seven transit services including:

- Rapid - limited stop express bus service on high volume corridors
- Express – limited stop commuter routes from the suburbs
- Rail – commuter rail service
- Bus – regular route line service; a Comprehensive Operational Analysis was recommended
- Crosstown – regular route line service without a transit center connection
- Neighbors – neighborhood circulators using smaller buses
- SCAT – advance reservation door-to-door paratransit service

The family of services was largely not implemented due to federal funding reductions and the economic downturn that occurred in 2008 and continued into 2012. In May 2014 the Service Planning Committee re-considered the un-implemented recommendations of the 2004 TDP. Several actions were identified as worthy of consideration for the 2014-2020 planning horizon, including:

- Limited-stop bus service on high-volume corridors
- Expanded express bus commuter service
- Adding crosstown bus routes which do not require downtown transfer
- Adding neighborhood circulators at an appropriate scale
- Performing a Comprehensive Operations Analysis (COA)

## 1.3 Purpose and Need

The five-year transportation development plan (TDP) is an integral element of the federally-mandated metropolitan planning process that is comprehensive, cooperative and continuing ("3-Cs"). It is used by METRO to guide our budgeting and planning for transit service, vehicle fleet and facility upgrades, human resources decision-making, and technology improvements. Importantly, the document is used by the Akron Metropolitan Area Transportation Study (AMATS, the designated metropolitan planning organization) to inform its Transportation Improvement Program (TIP) regarding transit-related capital investments. Project programming in the TIP is a prerequisite for receipt of federal funding.

## 2.0 Plan Inputs

### 2.1 2012 Transit Master Plan

After Summit County voters approved the county-wide 0.25% sales tax to support public transit in 2008, METRO initiated long range planning for a 20 year horizon. The result was the 2012 Master Plan which evaluated three different scenarios for growth and development in Summit County. The selected plan is a “Suburban Villages” model, assuming a balance of development occurring within the City of Akron and in urbanized areas near the center of outlying cities.

In the Suburban Villages scenario, the Master Plan identifies five primary transit corridors for concentrated investment in transit improvement:

- West Market Street to Montrose (Route 1)
- East Market and South Arlington to Wal-Mart (Route 2)
- Copley Road to I-77 (Route 3)
- Kenmore Boulevard/Wooster Road to Barberton (Route 8)
- Howard Street and State Road to Portage Crossing (Route 10)

The Master Plan recommends bus service frequency increases on routes #1, #2, #3, #8, #10 and on Route 82 (Aurora Road in Twinsburg and Macedonia) to 15-minute headways. These routes were selected based on their location along potential development/redevelopment corridors and high ridership, with the expectation that ridership growth can be achieved by increasing service frequencies. The identification and development of new transit hubs serving Norton, Copley and Stow is recommended if Transit Oriented Development (TOD) occurs along the corridors between central Akron and those locations. Additionally, new transit hubs in Twinsburg and Macedonia could serve as focal points for demand-responsive service (Call-A-Bus), linked by a new route (along Aurora Road) to improve east-west circulation across the north county area.

#### Changes Implemented

Following completion of the 2012 Master Plan, several recommendations were implemented, including 15-minute weekday peak frequencies on Routes 1 and 2 (which were returned to 20-minutes in 2013 following the introduction of articulated buses) and establishment of the Creekside Park and Ride in Twinsburg. The Creekside Park and Ride serves as a northern anchor for the new Route 104 and as a suburban hub for the X60 Cleveland Express. It may also provide a needed hub for future east-west service along State Route 82/Aurora Road serving the north county area.

#### Changes Not Implemented

The recommended fifteen minute headways were implemented only on the #1 and #2 as described above, and then rolled-back. The other identified routes for frequency increases have not been

improved, as current (2014) weekday peak headways on Routes 3 and 8 vary from 20 to 30 minutes and the weekday peak headway on Route 10 is 30 minutes or greater.

In May 2014, METRO's Service Planning Committee met to re-consider the remaining recommendations from past plans. The committee acknowledged that frequency increases for the five identified routes should be pursued, but operational measures need to be identified to overcome the schedule adherence and bus bunching issues encountered on the #1 and #2.

Many recommendations of the 2012 Master Plan depend on increased development densities in suburban communities and Transit Oriented Development along high frequency corridors to generate greater transit ridership. METRO does not have the ability to change zoning or development practices, making it necessary to coordinate with local jurisdictions to encourage land use changes and/or development projects that are transit-supportive.

The 2012 Master Plan recommended implementation of commuter rail service. However, federal funding for such projects (i.e. the Very Small Starts program) has been curtailed. As a result, it is unlikely that METRO will pursue commuter rail development during the Master Plan's 20-year horizon.

## **2.2 Market-Arlington Alternatives Analysis (AA Study)**

The Market-Arlington AA Study was initiated as a result of a successful 2010 Federal grant application to address the need for transit improvements to connect the northwest and southeast sides of Akron. The goals of the study were to address overcrowding and slow travel speeds on existing bus routes, to improve service quality to attract "choice" riders, and to promote new development and redevelopment within the Market and Arlington corridors and throughout the City of Akron. In 2013, the AA Study identified Bus Rapid Transit (BRT) as the locally preferred alternative (LPA) for the Market-Arlington Corridor. The LPA recommended an inter-lined BRT route operating over the current alignment of Routes 1 and 2, serving 39 pairs of reconfigured and upgraded bus stops (78 BRT stations for in- and out-bound trips).

Implementation of the recommended LPA was dependent on federal grants anticipated through the Very Small Starts (VSS) program for funding and construction. Subsequent changes that reduced the availability of federal funding through the VSS program halted implementation of BRT, which involves special buses and reconfigured bus stops, traffic signal priority, and other engineering improvements along the designated corridor. A summary of the Market-Arlington Corridor locally preferred BRT alternative is provided in Table 2.1.

**Table 2.1: Market-Arlington BRT Alternative**

Project Characteristic	Modified Market-Arlington BRT Alternative	Notes
BRT Service Route Length	17.0 miles	Arlington Wal-Mart to Montrose
Number of BRT Stations	78 BRT Stations	For in- and out-bound bus trips
One-Way Travel Time	69 minutes	
Travel Time Savings	7 minutes	Relative to regular routes 1 and 2
Total Capital Costs	\$35.3 million	In 2012 U.S. dollars
Infrastructure	\$15.14 million	Includes BRT Stations and signal priority
Vehicles	\$12.1 million	20 new signature articulated buses
Right-of-Way	\$0.29 million	0.3 Acres of Right-of-Way
Professional Services	\$6.09 million	Project planning, engineering, permitting
Capital Cost per Mile (Excluding Vehicles)	\$2.07 million/mile	2012 U.S. dollars
BRT Vehicles Required for Peak Services	16	Plus 4 spares for a total of 20 vehicles
Annual Operating & Maintenance Costs	\$1.8 Million	4.3% of METRO's O&M budget (in 2012 \$)
BRT Headway	10 Minute Peak/ 15 Minute Off-Peak	As Required by FTA
Service Span	14 Hours	Monday - Friday Only

The Market-Arlington corridor generates more than 20% of total rides in the METRO RTA System. However, Routes 1 and 2 continue to exhibit overcrowding and schedule adherence issues that suggest the need for upgraded service. In Chapter 4, limited-stop express bus service is shown to have the potential to increase service frequencies and bus travel speeds within the Corridor, and in Chapter 5, bus stop improvements are recommended to upgrade passenger amenities for a short-list of selected bus stops.

The Alternatives Analysis contains bus stop-level analysis of needed improvements, right-of-way status, and operational details which have been applied to inform TDP recommendations for BRT-like upgrades for the combined Market-Arlington Corridor.

### **2.3 2013 – 2014 Service Planning Public Engagement**

METRO's route and schedule changes for line service routes only occur four times a year, in Fall, Winter, Spring and Summer. Prior to each service change, if route or schedule modifications are proposed, METRO conducts public meetings and other public outreach. The purpose is to gather comments on the specific changes that are proposed, and to obtain comments and service planning ideas from patrons. During 2013-2014, METRO held 17 public meetings throughout the region. In October and November of 2013, METRO held eight meetings in advance of the winter schedule changes. In April and May 2014

METRO held nine public meetings regarding proposed route and schedule changes for the Fall 2014 period. Public meetings were held in locations and during hours to allow access via transit or in public housing towers affected by service changes. These meetings were advertised with flyers on buses, posters at the Robert K. Pfaff Transit Center, notices on METRO's website and on Facebook and Twitter, e-mails and mailed notices to METRO's lists, press releases to local media, and paid advertising in area newspapers.

A majority of the comments received from the outreach conducted during 2013 and 2014 were directly pertinent to specific proposals for route and schedule changes. However several broader themes were evident:

- METRO patrons often expressed a desire for earlier or later service. This was the most common category of comments, called "span of service". These comments often come from riders who work at jobs with non-traditional hours. Workers in low-wage jobs (often with variable hours) comprise a majority of METRO riders (see Section 2.6).
- While span of service is often the most important factor for transit-dependent riders, service frequency is the most important factor for "choice" riders. METRO is often asked to increase the number of bus trips, and/or to adjust running times for passenger's schedule convenience.
- METRO's riders desire one-seat rides whenever possible to avoid transfers that might take an extra 10-15 minutes or more. Part of the preference is attributable to convenience, but also to METRO's transfer policy. METRO no longer issues transfers, instead making the cost of a day pass equal to two one-way rides (presuming a two-way commute). During the public engagement process for the Fall 2014 schedule change, a strong rider preference for a one-seat ride became clear within the context of Route 1 service to Montrose. More specifically, METRO considered turning around the westbound #1 on Smith Road just west of Summit Mall as an option to eliminate the layover at Flight Memorial Drive. This would have forced a transfer to Route 50 for trips to Montrose. It became apparent that some METRO users (especially with infrequent and variable work hours) take the bus to work, but make other arrangements to get home when possible to save a second bus fare. Under the present transfer policy and fare structure, the proposed forced transfer for the #1 would have cost these riders twice as much for the same one-way trip.

## **2.4 Strategic Business Plan - METRO Leadership Input**

METRO launched a Strategic Business Plan process in 2014 to develop a new Mission, Vision and Values, and to identify agency priorities for improvement. METRO's Leadership Team led the effort with input from Board members, community stakeholders, and employees. Key service recommendations which surfaced during METRO's Leadership Team sessions include:

- Satellite Hub Locations – Identification and construction of additional satellite hub locations would allow for additional transfer opportunities. As a result, suburban routes could be shortened or made more direct, and crosstown routes would become more attractive as transfer waiting environments are improved. Waiting environments at existing hub locations such as Independence Turnaround and Montrose should be further developed and upgraded.



- Additional Park & Rides could be included at or in addition to satellite hubs. These Park & Ride facilities would enable new or additional commuter express service. Additional express service would require more coach-style buses, and trained operators.
- Revisit pulse scheduling, including aligning lineups with clockface headways. Better pulse scheduling from RKP Transit Center would facilitate smoother transfers and simplify public time tables.
- Weekend service expansion was identified as a priority, because weekend ridership is growing faster than weekday ridership.
- A circulator route for downtown Akron, potentially subsidized by the downtown business community.
- Conversion of late night zone service into scheduled late night service. Zone service is flexible to serve highly variable customer demand, but there are schedule adherence and safety issues which make it undesirable for both riders and operators.
- Increase the availability of suburban feeder service, especially in Norton, Barberton, Copley, Richfield, Green, and New Franklin. This item is likely tied to the development of suburban hubs, so that suburban feeders can join the urban line service system at a transfer point (such as the proposed terminus of the #101 at the Montrose Hub rather than the RKP Transit Center).
- Improve directness and travel speed for riders. This could include improving route alignment as well as implementing crosstown routes which facilitate travel across the county without a downtown transfer.
- Implement some form of Market-Arlington Express Service. The #1 and #2 represent METRO's most productive corridor and over 20% of METRO's ridership. These lines continue to experience overcrowding and schedule adherence issues.

## 2.5 Strategic Plan External Stakeholder Input

As part of the Strategic Planning process, METRO leadership met with a number of external stakeholders in the surrounding communities. The strategic plan team held interviews specific to the Strategic Plan with the mayors and key staff members in the cities of Akron, Barberton, Cuyahoga Falls, and Stow. Ongoing projects and planning efforts allowed METRO leadership to collect similar inputs from the mayors and key staff members from the cities of Green and Hudson as well as Copley and Bath townships.

A number of key themes were identified across these stakeholder meetings:

- METRO provides an important and essential service to all communities.
- METRO is perceived to be well run and responsive to community needs
- Although overall population growth in Summit County is expected to be stable, several suburban communities anticipate population growth including an increase in the number of senior citizens. These demographics will require METRO to increase service in several locations.
- All stakeholders would like to see faster, more direct service offerings within their communities.
- The student population- University of Akron, other colleges and middle/high schools are perceived to be opportunities for ridership growth.

- The paratransit service fills an essential need.
- There is growing interest in specialty services like Call-A-Bus and community circulator/loops (Downtown Akron, Green)
- All stakeholders were interested in including METRO in future community planning processes with several following up immediately with information and meetings.
- Medical provider growth is anticipated throughout Summit County and transit needs are expected – for both employees and patient.
- Interest in rail by several businesses is expected to provide an opportunity for revenue growth.
- All communities need to work more closely with METRO to ensure better accessibility to bus stops and to add bus shelters.
- Ensuring passenger safety is perceived as one of METRO’s strengths.
- There is a negative perception that some METRO customers demonstrate inappropriate behaviors.
- There is also an interest in seeing METRO increase rapid transit services to Cleveland locations: baseball games, casino, The Q, etc.
- Some Park and Ride Facilities need enhancements.
- Opportunities for hub enhancement are priorities for some communities (Montrose)
- Customer service is essential to increase ridership.

## 2.6 2013 On-Board Survey

In November 2013, METRO conducted a survey of nearly 3,400 bus patrons on all regular line service routes. The goal of the survey was to give METRO a statistically valid understanding of riders and trips both system-wide and on a route-specific level. The survey included both demographic and origin-destination questions. A follow-up telephone and on-line survey was also conducted to obtain more detailed information. Results from this survey were used to understand the characteristics and travel patterns of METRO customers, and to inform recommendations for this TDP. Among the important findings of the survey were:

- METRO riders have few other transportation options. 90% of respondents said they do not have regular access to a private vehicle. Roughly 90% of riders have a yearly income less than \$20,000. METRO plays a critical role in allowing Akron citizens to access jobs, healthcare, schools, and other day-to-day needs.
- METRO riders do not walk far to their stops. Nearly 90% of riders walk to the stop and 85% of them walk three blocks or less. The survey indicates that many are happy with how close the stops are to their destinations.
- METRO riders use the bus for more than work commuting. Work is the most common trip purpose, but most trips occur for other reasons like shopping, medical appointments, and school. Route coverage to access commercial corridors, hospitals, and schools is critical to METRO riders.

- Young adults are frequent METRO riders. Over a third of survey respondents were 19 – 34 years old. METRO should consider these riders an asset and keep them riding by listening to them and making improvements to address their needs.
- Increased service frequency, later evening service, and more weekend service are the service improvements most desired by METRO riders. Depending on budget, METRO should explore these service improvements but should also explore other options that boost satisfaction, e.g., real-time schedule information.
- The average trip length for METRO riders is 4.0 miles as the crow flies, not including trips to or from Cleveland. However, 36% of bus trips require a transfer, taking 10-15 minutes on average. So travel times are often long and crosstown trips (for example from suburb to suburb) are not well-served.

## 2.7 Regional Partner Plans

As indicated in Section 2.3 Purpose and Need, this TDP was prepared to fit within a federally-mandated ongoing metro-wide planning process led by the Akron Metropolitan Area Transportation Study, or AMATS. Therefore, the published AMATS plans that have particular relevance for METRO’s transit planning practice are summarized in this section as are plans for a number of METRO’s partners in the region.

### 2.7.1 AMATS – Transportation Outlook 2035

AMATS’ long-range plan *Transportation Outlook 2035* made a number of transit recommendations including:

- Service Enhancements – *Outlook* recommends that METRO add service coverage and frequency whenever feasible to attract new ridership.
- Cross-County Service – AMATS recognizes that due to locally-sourced funding structures, county-wide Regional Transit Authorities like METRO, Stark Area RTA and Portage Area RTA have little incentive to serve trips that cross county boundaries. However, given the overlapping nature of travel markets in northeast Ohio, AMATS recommends greater coordination between RTAs to serve these cross jurisdictional travel needs.
- Rail Portfolio Preservation – *Outlook* indicates that it is important to maintain public right-of-way on regional corridors such as those held by METRO, even though passenger rail may not be feasible at this time. AMATS is committed to funding rail preservation and rehabilitation projects to maintain rail rights of way for freight service and possible future passenger travel.

### 2.7.2 AMATS – Transit Plan 2012

AMAT’s *2012 Transit Plan* makes nine recommendations for transit improvements at the regional, municipal, and transit agency levels. These are identified below along with an identification of METRO’s related transit service planning actions.

*Recommendation 1 – Reduce/Eliminate Service on Low-Ridership Lines.* AMATS notes PARTA’s collaborative effort to cut service on the RAVEN line while maintaining basic service for a small but transit-dependent population.

- Over the course of the TDP period, METRO should critically evaluate routes or route segments that do not justify continued operation and work to find more cost-effective solutions for those that rely on public transit.

*Recommendation 2* – Discussion Regarding New Cross-County Transit Service. AMATS’ analysis of US Census data reveals demand for cross-county trips along several corridors, four of which connect through Summit County (METRO territory). AMATS recommends growing transit ridership by initiating cross-county trips through these corridors.

- METRO’s initiatives to further cross-county travel are detailed in Section 4.4.

*Recommendation 3* - On the municipal level, AMATS recommends that cities establish zoning and development codes which would allow and encourage Transit Oriented Development at key transportation nodes.

- This initiative is consistent with METRO’s *2012 Master Plan*, and METRO should strongly support the AMATS recommendation.

*Recommendation 4* – AMATS recommends increasing transit frequency and capacity in nine key corridors. Six of these corridors are located in METRO’s service area.

- Five of the six identified corridors have been METRO priorities since the *2012 Master Plan* (discussed in Section 2.1). The sixth corridor, State Route 91 (Canton/Darrow/North) is served at points by METRO, but not as a coherent corridor. Route 91 connects suburban communities across the eastern side of Summit County. In general, development density is not high enough to support frequent transit service.

*Recommendation 5* – Provide new fixed-route service to close transit gaps. The AMATS plan identifies six communities currently under-served by fixed route transit. Three of these communities are located in METRO’s service territory.

- METRO’s increased service recommendations for Copley Township, Twinsburg and the City of Green are discussed in Section 4.

*Recommendation 6* – Increase service frequency / extend service hours on existing Cross-County Service. AMATS notes that METRO provides cross-county service to Cleveland and Kent, but that both of these services are essentially limited to business hours. They encourage cross-county connectivity at other times for other users and purposes.

- METRO is recommending a Crosstown route in the SR 82 corridor which would provide additional connection to GCRTA’s Route 77F and, in turn, downtown Cleveland as discussed in Section 4.4.4.

*Recommendation 7* – Study providing new cross-county service.

- See comments on Recommendation 2 and Recommendation 6.

*Recommendation 8* – Increase hours of operation on existing services. AMATS recommends the expansion of service hours, beginning with the priority corridors identified in Recommendation 4 in order to improve the Level of Service for transit riders.

*Recommendation 9* – Form Partnerships with Large Regional Partners. AMATS suggests that transit agencies coordinate routes and schedules to accommodate shift start times and consider fare subsidies for large employers operating in the region.

### 2.7.3 Vibrant NEO 2040

The Northeast Ohio Sustainable Communities Consortium (NEOSCC), a group of 33 stakeholders across 12 counties, endorsed *Vibrant NEO 2040* as a framework to guide development priorities across Northeast Ohio. *Vibrant NEO 2040* analyzed a wide range of regional trends and made a number of recommendations for the future of the region. A number of the recommendations have important implications for METRO as the second-largest public transit property in the study area.

*Vibrant NEO 2040* developed a vision for the region centered on four themes: 1) Strengthen Established Communities, 2) Increase Transportation Choice, 3) Preserve and Protect Natural Resources, and 4) Promote Collaboration and Efficiency. These themes are described below:

1. *“Strengthen Established Communities”* emphasizes many of the same factors as the “Suburban Villages” scenario outlined in METRO’s *2012 Master Plan*. The plan supports investment in areas with existing infrastructure, a high density of community assets, especially ‘asset risk areas’ which face declining population and employment but have the potential for redevelopment. Additionally, the plan identifies “cost risk areas” which would require investment in additional infrastructure to enable development.
2. *“Increase Transportation Choice”* emphasizes the need to increase both the number of destinations that are easily accessible as well as the variety of means to get to them. The plan envisions a major transit connection from Akron to Cleveland through Akron. Although both METRO and SARTA provide commuter connections to and from Cleveland via express bus service, the plan envisions a higher-capacity and higher-frequency service such as Commuter Rail. One potential commuter rail alignment proposed by Vibrant NEO includes rail right-of-way owned by METRO, including the Akron Secondary rail line between Hudson and Cuyahoga Falls as well as the Sandyville rail line between Akron and Canton. An additional major transit connection is envisioned between Akron and Youngstown via express bus. No transit connection is currently available or under consideration for this corridor.
3. Greenways are an important component of the *“Preserve and Protect Natural Resources”* portion of the Vision. METRO’s continued efforts on rails-to-trails conversions, including the Freedom Secondary fit into the regional vision for interconnected greenways across Northeast Ohio.
4. *“Promote Collaboration and Efficiency”* highlights the need for cross-jurisdictional cooperation among Northeast Ohio’s many public entities. This element of the Vision can be applied to

METRO's planning process in day-to-day ways such as smoothing inter-jurisdiction transfers to wider goals such as promoting transit oriented development.

*Vibrant NEO 2040* also advanced a series of recommendations with accompanying initiatives. By providing high-quality transit service to areas of Summit County which have the density to support transit, METRO can support these initiatives in a broad way. Instances where METRO can be particularly effective in supporting particular recommendations are outlined below:

*Recommendation 1: Focus New Residential and Commercial Development on Sites Within Established Communities.*

- METRO can support Recommendation #1 by concentrating its investments in areas where public dollars spent on transit improvements may spur private redevelopment.

*Recommendation 2: Develop a Robust Network of Regional Job Centers Connected by Multimodal Transportation Corridors within and between Counties.*

- As a county RTA, METRO has the responsibility to provide high-quality transit services to our residents, but also to connect them to other transit modes in the region.

*Recommendation 3: Pursue the Remediation, Assembly, Marketing, and Redevelopment of Abandoned Properties at both the Local and Regional Levels.*

- Most importantly, METRO should provide support and service to redevelopment sites. Several of METRO's routes were originally designed to bring employees to large industrial facilities which are presently brownfields. As these properties are redeveloped, service should respond to the needs of new users.

*Recommendation 4: Encourage a Higher Frequency of Mixed-Use Development and a Range of Diverse, Affordable Housing Options.*

- METRO would be a beneficiary of resurgence in dense, mixed-use development. METRO should use its influence and position in the region to encourage zoning and development policy which allows—and encourages—dense, mixed use development such as that outlined in the “Suburban Villages” scenario in the 2012 Master Plan.

*Recommendation 5: Enhance and Coordinate the Region's Rail and Bus Services.* METRO's North Coast Express (NCX) service represents an important first step toward “bi-directional public transit connections between major job centers.” *Vibrant NEO 2040* envisions a system of regional express routes overlaid on the various County RTA's local service forming a regional transportation network.

- METRO is well-positioned to advise and assist other systems in the region regarding operation of inter-city express service. The plan also encourages transit properties to coordinate marketing, scheduling, and transfer policies. Overall, coordination is needed to encourage inter-jurisdiction ridership. Additionally, the plan calls for an inventory of all publicly-owned rail tracks to evaluate the potential for re-activation for freight or passenger

service. METRO is not considering any plans for passenger rail, though it continues to maintain its rail corridors for freight operations, to pursue rehabilitation of inactive lines for restoration of freight use, and to pursue recreational trail development where appropriate.

*Recommendation 6: Enhance Walking and Cycling as Transportation Options to Increase Regional Mobility and Improve Public Health.*

- METRO is positioned to improve pedestrian infrastructure for both recreation—through its trail program partnering with the Summit Metroparks on the Freedom Secondary—and for transportation as it advocates for sidewalk improvements. Transit agencies are often able to guide pedestrian improvements to corridors where they will be most beneficial. METRO must be active in this arena and engaged in dialogue with all municipalities, the Summit County Engineer, and ODOT.

*Recommendation 7: Preserve Our Natural Areas for Future Generations, Provide Outdoor Recreation Opportunities, and Develop a Regional Approach to Protecting Air, Water, and Soil Quality.*

- As a public transit authority, METRO has an important role in reducing vehicle miles travelled and reducing air pollution. METRO also has a history of being environmentally conscious when investing in capital projects. New capital projects should include environmental initiatives to maintain METRO's position as a regional leader in sustainability.

#### **2.7.4 Downtown Akron Connectivity Study**

AMATS' Downtown Akron Connectivity Study suggests that one or more downtown circulator routes operated by METRO could replace the Downtown Trolley, some of the University of Akron Roo Bus Routes, and potentially the private service operated by Summa Health Care. AMATS findings are considered and METRO's proposal for a downtown circulator is detailed in Section 4.5. The Connectivity Study also advances the idea that parking is overly abundant in downtown Akron. Inexpensive parking is available close to destinations, harming pedestrian and transit connectivity. The study recommends a Parking Management Study, which could result in an adjustment of the parking ratio for new development. Zoning and development codes often include minimum parking requirements which drive up the cost of development and reduce overall development density. The study suggests alternative parking strategies such as municipally-owned lots, shared parking arrangements, and park-and-walk facilities.

## 3.0 Existing Conditions

A snapshot of the present status of METRO RTA's operation in 2014 is presented below to establish a baseline against which to measure subsequent change over the 2015-2019 planning horizon.

### 3.1 Facts and Figures

#### Employees

Like other transit operating agencies, METRO is a people-intensive operation. There are 386 total employees presently, of which two-thirds are transit operators.

Operators:	255
Mechanics:	33
Technicians:	14
Administrative Staff:	84

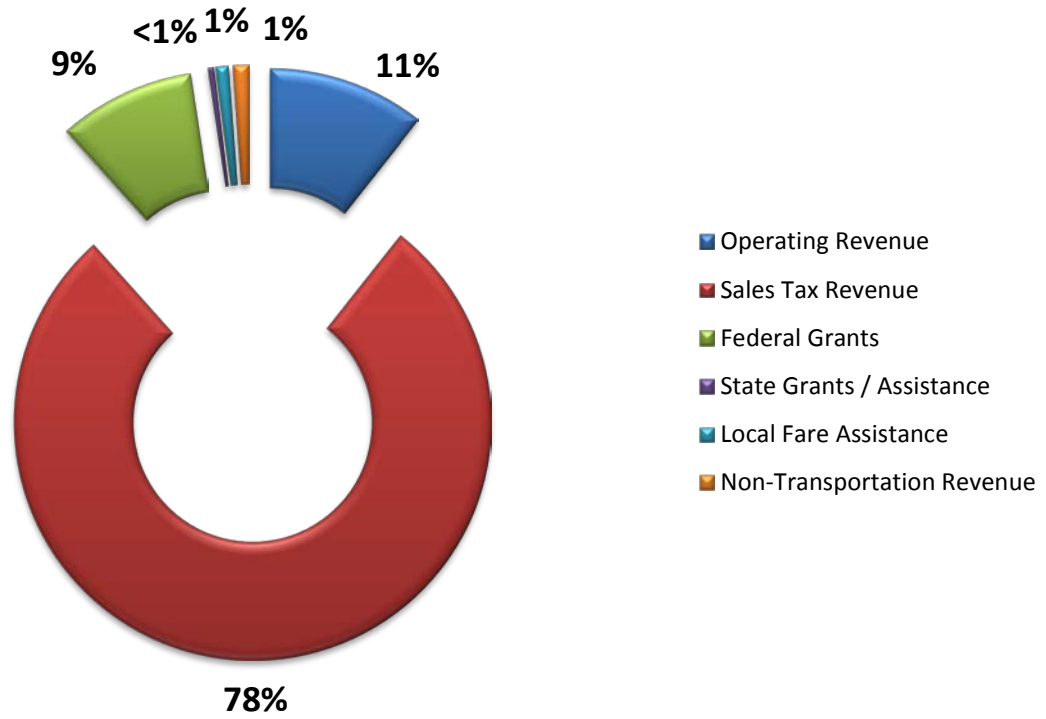
#### Budget

A summary of METRO's FY 2014 budget shows that operating expenses consume 76% of annual operating revenue. Local sales tax revenue comprises 78% of METRO's Total Operating Revenue, while non-local funding from state or federal sources makes up less than 10% of Total Operating Revenue. The capital budget typically includes new and replacement buses, facility improvement investments, and maintenance equipment. The agency in 2014 is in the midst of constructing several significant capital projects, including a new bus wash and CNG fueling facility at the 416 Kenmore Boulevard headquarters, a new Park and Ride lot south of the Robert K. Pfaff Transit Center, and upgrading Rosa Parks Drive to improve bus and pedestrian access to the Transit Center.

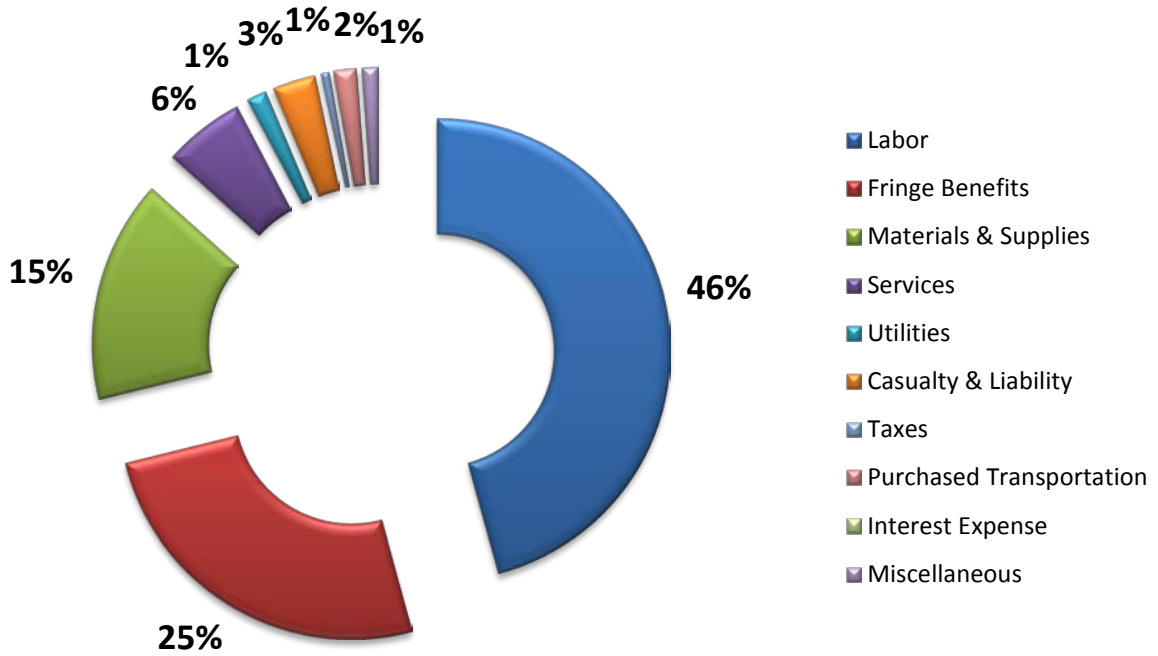
Total Operating Revenue:	\$51,251,840
Operating Revenue:	\$5,450,410
Sales Tax Revenue:	\$39,856,628
Federal Grants:	\$4,718,920
State Grants / Assistance:	\$218,943
Local Fare Assistance:	\$434,480
Non-Transportation Revenue:	\$572,459
Operating Expenses:	\$38,968,330
Capital Budget:	\$18,250,000



### 2013 Revenue Sources



### 2013 Operating Expenses



## Ridership

METRO reports passenger activity monthly in two main categories, regular route “line” service (34 fixed routes with published schedules, plus 5 different weekday Grocery Buses) and door-to-door demand responsive SCAT/ADA (paratransit) service. SCAT/ADA service is provided for people who are over 62 years of age, or disabled. The line service carries 95% of the average weekday ridership.

### Line Service

Average Weekday Boardings	17,735
Annual Boardings	5,189,095

### SCAT / ADA

Average Weekday Trips	923
Annual Trips	239,141

## Property/Capital Assets

METRO owns a fleet of 228 vehicles, 60% of which are used for regular route line service and the remainder for SCAT/ADA paratransit service. The entire fleet is equipped with wheel-chair lifts and bike racks. The average age of “big buses” for line service is 4.3 years, and the average age of small buses for paratransit service is 2.0 years. Seventy-nine percent of the buses used in regular line service are 40’ long. The six 60’ articulated, buses were acquired and introduced to service on Routes 1 and 2 In 2013. The 8 MCI Motor Coaches are utilized on the North Coast Express routes from Akron to Cleveland.

Transit Buses	137
60’ Articulated Buses	6
40’ Transit Buses	108
35’ Transit Buses	15
MCI Motor Coaches	8
SCAT / ADA Vehicles	91
TOTAL Vehicle Fleet	228

The 34 regular routes serve 2,308 designated bus stops, 100 of which include a bus shelter.

Unlike most similar small to midsize transit agencies, METRO owns 51 miles of railroad right-of-way. This ownership includes three separate corridors, the Sandyville (south to Canton), Freedom Secondary (northeast to Kent), and Akron Secondary (north to Stow and Hudson). There is active freight rail service on 24 miles of track. Several miles of the Freedom Secondary line have been used for construction of a recreational trail, and further trail construction is planned by MetroParks. A 3-mile section of the Akron Secondary line in Hudson and Stow is planned for restoration to active freight service in 2016 to support economic development initiatives by local jurisdictions.

## 3.2 Operating Characteristics

In March of 2008, Summit County passed a ¼ percent sales tax to support METRO. The stated goal of the 2009 TDP was to identify and prioritize service additions in response to the support of the voters. Implementation of the 2009 TDP drove increases in Revenue Miles of 18% in 2009 and another 13% in 2010 as shown below in *Table 3.1 – Line Service Operating Characteristics*. Unfortunately, the Great

Recession caused a 12% drop in ridership from 2008 to 2009, and ridership recovered very slowly over the last five years (by 8.3%) to near-2008 levels. METRO’s cost-effectiveness as measured by Cost per Passenger, and productivity as measured by Passengers Per Hour and Per Mile declined after 2008. Turning these trends around in the 2015-2019 planning period will depend on attracting more passengers and retaining them as repeat customers.

**TABLE 3.1 – Line Service Operating Characteristics**

	2008	2009	2010	2011	2012	2013	2014 (to June)
<b>Overall Operating Expenses</b>	\$30,826,587	\$33,856,287	\$35,940,111	\$38,443,911	\$38,596,913	\$38,968,330	
<b>Ridership</b>	5,443,458	4,790,095	4,798,745	5,044,830	5,230,118	5,189,095	2,563,029
<b>Rev. Miles</b>	2,556,734	3,029,589	3,414,960	3,478,287	3,543,277	3,720,543	1,903,332
<b>Rev. Hours</b>	251,453	294,106	263,035	276,028	289,912	293,818	159,469
<b>Peak Vehicles</b>	95	107	106	104	103	108	
<b>Cost per Passenger</b>	\$4.80	\$6.10	\$6.46	\$6.54	\$6.32	\$6.26	\$6.33
<b>Cost per Mile</b>	\$10.21	\$9.64	\$9.07	\$9.48	\$9.33	\$8.73	\$8.53
<b>Cost per Hour</b>	\$129.48	\$116.77	\$117.82	\$119.46	\$114.07	\$110.54	\$108.63
<b>Pass. Per Hour</b>	27	19.2	18.2	18.3	18	17.7	17.1
<b>Pass. Per Mile</b>	2.1	1.6	1.4	1.5	1.5	1.4	1.3
<b>On-Time Performance</b>	90%	91%	91%	91%	90%	88%	91%

There is an explanation for the fact that Revenue Miles increased while Revenue Hours remained essentially flat. This likely reflects the addition of longer suburban routes, operated at higher speeds (more distance covered in the same operating time), including the #31 Stow Express (changed to the #51 Stow Circulator in Fall 2014) and the #104 to Twinsburg. As *Table 3.2 – Route Performance (System-wide)* shows, the 100-series suburban routes among METRO’s poorest performers, therefore it is not surprising that the expansion of suburban routes drives down the Passengers Per Revenue Mile statistic.

Below, *Table 3.2 – Route Performance (System-wide)* evaluates each of METRO’s fixed routes by three performance measures: monthly ridership, passengers per revenue hour, and passengers per revenue mile. For each measure, the route’s rank among all 34 routes is listed. Additionally a colored icon next to the value indicates that route’s value relative to the system average. Routes with a green icon perform at 80% or greater of the system average. Values with a yellow icon perform at 50%-80% of the system average. Red icons indicate that the route performs at less than 50% of the system average for that measure.

METRO’s twenty-two urban line service routes are generally the star performers of the system (1-19, 24-30, 33 and 34). These routes serve the most dense residential areas and employment destinations with connections to the Robert K. Pfaff Transit Center. The lowest performing routes in METRO’s system are specialty routes: circulators, express commuter routes, and suburban town center routes. While it is useful to compare these routes as ranked by their performance statistics, they exist for a special

purpose and the nature of the route can skew the statistics. For example, the 60-series North Coast Express routes operate with full or near-full buses, but the long travel distance means that productivity in Passengers Per Revenue Mile is very low in comparison to other routes.

**Table 3.2 – Route Performance (System-Wide)**

Route	Description	Passengers	Rank	per Hour	Rank	per Mile	Rank
1	West Market	● 47,530	1	● 27.6	2	● 2.49	4
2	Arlington	● 43,345	2	● 27.6	1	● 2.53	3
3	Copley/Hawkins	● 26,359	3	● 23.4	4	● 2.35	5
4	Delia/N Hawkins	● 8,978	17	● 17.1	17	● 1.35	16
5	East Market/Elet	● 7,203	19	● 12.6	21	● 0.72	22
6	E. Market/Lakemore	● 17,422	11	● 17.7	15	● 1.23	20
7	Cuyahoga Falls Ave	● 16,798	13	● 21.1	10	● 2.12	8
8	Kenmore/Barberton	● 21,559	6	● 21.7	7	● 1.76	11
9	Wooster/East Ave	● 13,090	15	● 19.6	13	● 1.74	12
10	Howard/Portage Tr	● 22,201	5	● 21.4	8	● 1.77	10
12	Tallmadge Hill	● 18,420	9	● 20.6	12	● 2.09	9
13	Grant/Firestone	● 17,470	10	● 23.3	5	● 2.29	6
14	Euclid/Barberton XP	● 23,934	4	● 15.2	18	● 1.35	17
17	Brown/Inman	● 18,452	8	● 20.9	11	● 2.17	7
18	Thornton/Manchester	● 15,682	14	● 21.2	9	● 1.56	14
19	Eastland	● 20,883	7	● 25.5	3	● 2.60	2
23	Portage/Graham	● 2,200	29	● 5.2	29	● 0.38	28
24	Lakeshore	● 5,936	21	● 22.1	6	● 2.74	1
26	Exchange/Whitepond	● 7,573	18	● 14.9	19	● 1.31	18
28	Merriman Valley	● 3,409	23	● 9.4	24	● 0.80	21
30	Goodyear/Darrow	● 10,501	16	● 14.8	20	● 1.25	19
31	Stow Circulator	● 2,245	28	● 4.2	32	● 0.25	30
33	State Rd/Wyoga Lake	● 5,025	22	● 17.6	16	● 1.36	15
34	Cascade Village/Uhler	● 17,313	12	● 18.0	14	● 1.69	13
50	Montrose Circulator	● 2,153	30	● 4.2	31	● 0.36	29
59	Chapel Hill Circulator	● 2,023	31	● 6.2	27	● 0.60	24
X-60	NC Express Chapel Hill	● 1,808	32	● 11.5	22	● 0.41	25
X-61	NC Express Montrose	● 7,061	20	● 10.0	23	● 0.41	26
101	Richfield/Bath	● 1,181	34	● 4.0	33	● 0.17	32
102	Northfield Express	● 3,203	24	● 4.5	30	● 0.16	33
103	Stow/Hudson	● 1,598	33	● 3.6	34	● 0.15	34
104	Twinsburg Creekside	● 2,561	26	● 5.7	28	● 0.21	31
110	Green/Springfield	● 2,358	27	● 6.6	26	● 0.39	27
111	South Main/Waterloo	● 2,767	25	● 8.5	25	● 0.68	23
Average -		12,360		14.9		1.28	

A closer look at the performance of routes in METRO’s urban route category is provided below in *Table 3.3 – Route Performance (Urban Route Category)*. Some valuable observations can be drawn from this dataset. In particular, routes that perform poorly in raw number of passengers but perform well when normalized by hours (#9, #33) may be candidates for expanded service hours. Routes which perform poorly in passengers per mile (#5, #28, etc.) should be studied for opportunities to adjust route length (cut unproductive mileage) and improve the directness of service.

**Table 3.3 – Route Performance (Urban Route Category)**

Route	Description	Passengers	Rank	per Hour	Rank	per Mile	Rank
1	West Market	47,530	1	27.6	2	2.49	4
2	Arlington	43,345	2	27.6	1	2.53	3
3	Copley/Hawkins	26,359	3	23.4	4	2.35	5
4	Delia/N Hawkins	8,978	17	17.1	17	1.35	16
5	East Market/Elet	7,203	19	12.6	21	0.72	22
6	E Market/Lakemore	17,422	11	17.7	15	1.23	20
7	Cuyahoga Falls Ave	16,798	13	21.1	10	2.12	8
8	Kenmore/Barberton	21,559	6	21.7	7	1.76	11
9	Wooster/East Ave	13,090	15	19.6	13	1.74	12
10	Howard/Portage Tr	22,201	5	21.4	8	1.77	10
12	Tallmadge Hill	18,420	9	20.6	12	2.09	9
13	Grant/Firestone	17,470	10	23.3	5	2.29	6
14	Euclid/Barberton XP	23,934	4	15.2	18	1.35	17
17	Brown/Inman	18,452	8	20.9	11	2.17	7
18	Thornton/Manchester	15,682	14	21.2	9	1.56	14
19	Eastland	20,883	7	25.5	3	2.60	2
24	Lakeshore	5,936	20	22.1	6	2.74	1
26	Exchange/Whitepond	7,573	18	14.9	19	1.31	18
28	Merriman Valley	3,409	22	9.4	22	0.80	21
30	Goodyear/Darrow	10,501	16	14.8	20	1.25	19
33	State Rd/Wyoga Lake	5,025	21	17.6	16	1.36	15
34	Cascade Village/Uhler	17,313	12	18.0	14	1.69	13
Average		17,686		19.7		1.79	

METRO operates six suburban town center routes to connect outlying communities with downtown Akron. *Table 3.4 – Route Performance (Suburban Route Category)* shows comparative performance. These routes run on weekdays only, with trips concentrated at peak commuting periods. Ridership statistics for May 2014 show that the south county routes (#110 and #111) outperform the north county routes (#101, #102, #103, #104) by a wide margin.

**Table 3.4 – Route Performance (Suburban Town Center Category)**

ROUTE #	DESCRIPTION	Ridership	Passengers per Rev. Hour	Rank	Pass per Rev. Mile	Rank
101	Richfield/Bath	1177	3.96	5	0.17	4
102	Northfield Express	2944	4.13	4	0.14	6
103	Stow/Hudson	1642	3.68	6	0.16	5
104	Twinsburg Creekside	2416	5.29	3	0.20	3
110	Green/Springfield	2383	6.67	2	0.40	2
111	South Main/Waterloo	3580	11.03	1	0.87	1
	<i>Average</i>	2357	5.79		0.32	

It should be noted that the #110 and #111 have segments which pass through more densely urbanized areas, making stops on surface streets. The north county routes generally enter downtown Akron via freeways with no stops. Greater ridership on the south county routes may be concentrated in the urbanized portion of the routes. During the 2012 ridership survey, only 1.5% of the recorded boardings and 3.1% of the recorded alightings occurred south of Waterloo Road on the suburban portion of the #111. Similarly, only 8.6% of the boardings and 5.8% of the alightings on the #110 occur south of Akron-Fulton Airport in the suburban portion of the route. (Calculations exclude boardings/alightings at the RKP Transit Center, since stop level data is not separated by route).

After the planned system-wide implementation of Automatic Passenger Counters in 2015, much more stop-level data will be available for evaluation and refinement of the 100-series routes.

In *Table 3.5 – SCAT Operating Characteristics*, performance information is presented for METRO’s paratransit services. As shown, the system’s operating expenses and cost per hour have increased through the past five years while ridership has fluctuated. A favorable trend in Passengers Per Hour is attributable to the introduction of computerized software for trip planning/dispatching.

**TABLE 3.5 - SCAT Operating Characteristics**

	2008	2009	2010	2011	2012	2013	2014 (to June)
<b>Total Operating Expenses</b>	\$30,826,587	\$33,856,287	\$35,940,111	\$38,443,911	\$38,596,913	\$38,968,330	
<b>Ridership</b>	240,216	237,770	233,406	243,159	247,476	238,914	123,798
<b>Rev. Miles</b>	1,314,410	1,235,645	1,217,016	1,301,259	1,723,061	1,753,504	115,553
<b>Rev. Hours</b>	118,643	103,476	104,788	112,593	115,628	104,755	59,242
<b>Peak Vehicles</b>	55	55	78	78	78	76	
<b>Cost per Passenger</b>	\$20.53	\$20.80	\$22.74	\$23.94	\$22.09	\$28.65	\$29.42
<b>Cost per Mile</b>	\$4.01	\$4.05	\$4.49	\$4.63	\$3.15	\$3.80	\$3.98
<b>Cost per Hour</b>	\$36.40	\$36.82	\$37.08	\$38.25	\$41.63	\$53.81	\$50.83
<b>Pass. Per Hour</b>	2	2.3	2.2	2.2	2.4	2.5	2.3
<b>Pass. Per Mile</b>	0.2	0.2	0.2	0.2	0.2	0.1	0.152
<b>On-Time Performance</b>	97%	97%	97%	97%	99%	93%	91%

## 3.2 Emerging Conditions

### 3.2.1 University of Akron

An agreement was established in 2014 between METRO and the University of Akron to encourage greater use of transit by students, faculty and staff during the 2014-2015 academic year. Beginning in August 2014, University of Akron Zip Cards can be used as METRO passes on all regular line service routes. The passes cannot be used for travel on SCAT, and represent a \$1 credit on the NCX buses to Cleveland. This is a demonstration program, so continuation for the 2015-2016 academic year and beyond is dependent on its popularity.

A number of on- and off-campus student housing projects are coming to fruition in 2014-2015. In order to better serve the University market, routing through the University district, transfers to buses serving the University, and service changes which would be beneficial for growing the student market (e.g. late-night or weekend service) should be evaluated for implementation during the 2015-2019 TDP period.

METRO's initial Downtown Circulator proposal (see Section 4.5) includes new service to the western end of the University. Additional routing closer to, and through the campus should be considered, given the availability of IDs/passes for free travel by all students, faculty and staff.

### **3.2.2 Goodyear Redevelopment**

Ongoing redevelopment of the Goodyear Headquarters along East Market and River Streets is likely to generate substantial work trips and commercial activity on the east side of downtown Akron. As this project progresses toward occupancy, METRO should evaluate existing route structures (#5, #6, #30, #110) to ensure that routes and schedules offer good service for new site users, while preserving the functionality of the route. Reorganization of service on the east side of Akron, including the Goodyear area, is discussed in Section 4.7.

### **3.2.3 AVL / APC Implementation**

In Fall of 2014, METRO began installation of Automatic Vehicle Location (AVL) and Automatic Passenger Counter (APC) equipment on its entire fleet of line service buses. These systems will provide a number of new features that will support improved customer service and system performance. The AVL system will provide automated bus stop announcements on the bus, advance information for riders on arrival time of the next bus, and improved schedule oversight of individual buses by METRO's dispatchers. The APCs will provide detailed counts of passengers getting on- and off- the bus at an individual bus stop level, and allow productivity analysis of routes on a segment or trip-level. The end result should be improved schedule adherence for line service routes, better schedule information in "real time" for passengers, and more focused data available to METRO staff for planning service changes.

## 4.0 Service Improvement Proposal Evaluation

The following representative projects were evaluated by METRO's Service Planning Committee for their feasibility and potential effect on METRO's future operations. Proposals accepted and prioritized by the Committee are included in Section 6 - Implementation.

### 4.1 - South Akron Service Reorganization

The area roughly bordered by I-76/77, Main Street, Waterloo Road, and South Arlington Road is currently served by four METRO line service routes. The #2 is one of METRO's best performing routes by nearly all metrics. It connects trip generators with a direct and understandable route north and south on Arlington Street connecting to downtown Akron using East Market Street.

The other three routes #13, #17, and #111 provide important service coverage to the neighborhood, but generally follow indirect paths with many diversions and inconsistencies in their routes. A goal of this TDP is to prioritize investments that generate additional service through efficiency. We propose a reorganization of the South Akron routes to make them more understandable to the rider, more efficient to operate, and more direct in connecting to downtown Akron and to each other.

*Figure 1 – Existing Southside Routes* depicts the current alignment of the South Akron routes. In Fall 2014, the #111 was shortened due to low ridership on the southernmost portion of the route. It now ends at the Interval Brotherhood Home on South Main Street. Additionally, the Summit County Department of Job and Family Services has announced it will be relocating in 2015 to the former Firestone Headquarters campus on South Main Street, and has requested additional scheduled regular route service to that location. The #111 services this site, but only on select (and infrequent) trips which bypass various neighborhood loops.

*Figure 2 – Reorganized Southside Routes* shows the proposed route alignment. In this proposal, service is provided by five routes, which would run more directly north-south through the neighborhood, spaced roughly ½ mile apart using Main, Grant, Brown, Inman, and Arlington Streets (providing ¼ walk distances from nearly anywhere in the neighborhood to a route). This proposal straightens all four of the existing routes, which should improve running time and schedule reliability. It essentially splits the #17 Brown/Inman into two routes, one running on Brown and one on Inman. This will allow METRO to effectively serve the neighborhoods on both sides of I-77 without the present east-west diversions. The proposal would serve the AMHA housing along Virginia Avenue during all operating hours.

The #2 would maintain its current route alignment and terminus south of I-77 at Interstate Parkway. The #111 would travel directly up South Main Street from the Interval Brotherhood Home. The #13, #17, and the new route are proposed to meet in the vicinity of the Waterloo Road Giant Eagle or Goodwill Industries. Once an appropriate turnaround location is identified, the stop should be improved with a shelter and schedule information, as it should become an important transfer point between these routes. Some east-west connectivity will be lost as a result of this proposal. However, the ability to transfer either on the north end of the route at the RKP Transit Center or at the southern transfer hub (at Goodwill/Giant Eagle) should alleviate this concern.

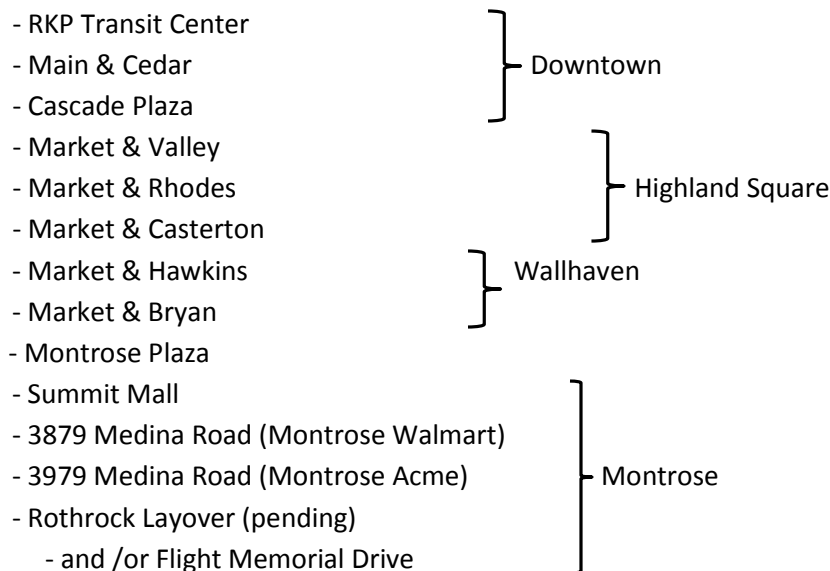


## 4.2 Limited-Stop Service Overlay

### 4.2.1 West Market Street

**Proposal:** This proposal addresses the long-standing recommendation to upgrade service quality on the already high-performing Market-Arlington Corridor. It would overlay limited-stop service on the #1 West Market and #2 Arlington Street corridors. The goals for this proposal are to improve frequency without causing bunching (as experienced in the 2012 15-minute peak frequency change), relieve overcrowding during peak periods, test a forced transfer (between the 1 and 2) at the RKP Transit Center, and provide proof-of-concept for BRT-like limited-stop service in this corridor. The proposal would eliminate interlining of the two routes so they would operate independently.

Stop-level boarding/alighting data from 2012 showed that passenger activity on the #1 is concentrated in four distinct clusters: Downtown, Highland Square, Wallhaven, and Montrose. Using GIS, it is possible to identify boarding and alighting data based on geography. Drawing a ¼ mile buffer around 12 of the busiest existing bus stops along the #1 reveals that 86.8% of the passenger boardings and alightings occur within ¼ mile of these 12 stops. The proposed #1 Limited bus stops are:



The existing and proposed bus stop locations are shown in *Figure 3 – #1 W. Market Limited Service*. Limited and #2 Limited would run only during weekday morning and afternoon peaks (18.5 revenue hours per day each route). Route 1 covers 18.1 revenue miles per round-trip. Route 2 covers 17.6 miles per round trip. The proposed scenario uses two buses for each limited stop route (and potentially a tripper for an initial inbound trip depending on final scheduling).

Though the proposal addresses previous recommendations, it would likely require the largest investment (in both capital and operating costs) of any proposal in this plan. It would require investing in more buses (possibly specially branded), more operators, and engineering and constructing improved

bus stops to differentiate the limited stops from regular route service. This proposal is also partially dependent on the construction of a new Montrose Hub.

#### 4.2.2 South Arlington Street

Boarding and alighting activity on the #2 is not quite as clustered as on the #1, but a pattern of eleven stops would capture 85.6% of passenger boardings and alightings within a ¼ mile buffer. The proposed #2 Limited stops are:

- RKP Transit Center
- Main & Exchange
- Exchange and Brown (University of Akron)
- Exchange and Arlington (Dave's Supermarket)
- Arlington and Johnson (Goodyear)
- Arlington & 7<sup>th</sup>
- Arlington & Archwood
- Arlington & Lindsey
- Arlington Plaza
- Arlington & Derbydale
- WalMart

Existing and proposed bus stops are shown on *Figure 4 - #2 Arlington Road Limited Stop Service*.

**Scenario:** From January to May 2014, incremental costs for line service routes averaged \$52.66 per revenue hour, \$2.05 per revenue mile, and \$4,674.56 per additional peak vehicle.

Utilizing the above cost averages, the addition of the #2 Limited service would cost approximately \$10,702 per day, or \$224,745 for the average month (operating weekdays only). This would represent approximately a 23% increase in expenditure for the #1 and #2, assuming no adjustment to the frequency or span of service on the regular routes. Given that the #1 and #2 generate 21% of METRO's line service passengers, this service expansion could be consistent with the importance of these routes in the overall system.

The #2 Limited service would use existing stops with high ridership (and many with existing transfers to other lines). Stops which the L-series routes serve should be upgraded with shelters and other amenities. Ideally, Limited stops would receive special visual treatment to attract choice riders and to differentiate them from regular line service, but this would not be necessary for initial implementation.

Transit Cooperative Research Board elasticity studies have found that increasing service frequency is one of the most effective means of increasing ridership. TCRP #95 cites elasticity values averaging +0.3 for increased service frequency (meaning a 100% increase in frequency would result in a 30% increase in ridership). While improving service frequency is expensive due to increased operational and capital costs, it is one of the most effective ways of increasing ridership.

This proposal addresses a long-standing recommendation to upgrade service on the Market-Arlington Corridor. However, it would likely require the largest investment (both capital and operating costs) of any proposal in this plan. This proposal would require investment in more buses (possibly specially branded), more operators, and engineering and construction of improved stops. This proposal is also partially dependent on the construction of a new Montrose Hub, and like the #1 W. Market Limited proposal, it would eliminate interlining of the two routes so they would operate independently.

## 4.3 Weekend Service Additions

### 4.3.1 – Sunday Morning Pilot

One of the most common customer service requests METRO receives is for earlier service on Sundays. An analysis of event logs from METRO fareboxes reveals that the 9:00 or 9:30 AM event ranges are among the busiest ranges of the day. This suggests that there may be enough demand to support earlier service on Sundays. We propose adding one trip in both the inbound and outbound direction on Sunday morning to Routes #1, #2, #7, #9, and #12. This would be accomplished by beginning those schedule blocks one round-trip earlier with the affected drivers receiving earlier relief. (Sunday morning service is provided largely by straight 8-hour blocks, while the afternoon shifts are shorter.)

This service addition would require an addition of 7 revenue hours and approximately 79 revenue miles. Using the most recent cost allocation estimates (\$52.66 per additional revenue hour and \$2.05 per additional revenue mile), this would result in an added expense of approximately \$556.92 per Sunday.

The cost of running this service appears low from a cost allocation perspective. However, an earlier Sunday start would have wide implications (and potential costs) for weekend operations. Mechanics, dispatchers, and customer service representatives would all have to be scheduled for an earlier start. The Transit Center would have to be opened and staffed earlier, as well. From a scheduling and run-cutting perspective, care must be taken to preserve existing lineups and eight-hour shifts should be maintained wherever possible.

While this proposal would likely not require any capital investment, as weekend bus demands are well below weekday peak vehicles at this point, it may require hiring more operators to cover the expanded weekend hours.

The implementation of the Automatic Passenger Counting (APC) system in 2015 will make much more detailed information available for evaluating service changes. Careful tracking of boarding and alighting information from Sunday mornings on the routes with and without this pilot service extension should reveal additional opportunities to invest in expanded Sunday service.

### 4.3.2 – Saturday Evening #1 & #2

METRO often gets requests for later service on weekend nights. Event log data from fareboxes reveals a lot of activity on the #1 and #2 after 9:00 PM on Saturdays, while ridership on other routes tapers off earlier in the evening.

With the greater emphasis on special events and the related parking constraints downtown, METRO should consider facilitating bus travel later into the evening on Saturdays, especially on its most productive line service buses. After 5:30 PM, the headway on the #1 and #2 is greater than one hour and the last departure from the Transit Center is at 9:50 PM. This service time is not late enough to serve special events, nor is it frequent enough to attract choice riders. In Spring 2014, the #1 and #2 ran a combined 73.6 revenue hours and 822.3 revenue miles on a Saturday.

In order to test the feasibility and effectiveness of expanding service on Saturday evening, we propose extending 40-minute headway service on both the #1 and #2. Since the #1 and #2 are inter-lined, this would require running five buses on the combined route.

**2:00 AM Scenario** - The service could be extended such that the final outbound departures from the Transit Center are at 12:20AM on the #1 and 12:40 AM on the #2. Final inbound arrivals at the Transit Center would be at 1:55 AM and 2:05 AM, respectively. In this case, Saturday service would amount to 100.5 revenue hours and 1122.8 revenue miles. This service extension would require a 36% increase in the cost of Saturday service on the #1 and #2 (\$7,594 per Saturday as opposed to \$5,561 per Saturday in May 2014).

**12:30 AM Scenario** – The service could be extended such that the final outbound departures from the Transit Center would be at 11:00 PM and 11:20 PM, with final inbound arrivals at 12:35 AM and 12:45 AM respectively. In this case, service would amount to 93.25 revenue hours and 1,041 revenue miles. This service extension would require a 27% increase in the cost of Saturday service on the #1 and #2 (\$7,046 per Saturday as opposed to \$5,561 per Saturday in May 2014).

This proposal would likely not require any capital investment, as weekend bus demands are well below weekday peak vehicles at this point. However, it may require hiring additional operators to cover the expanded weekend hours.

#### 4.3.3 Complete 9:50 PM Lineup

Nine routes which serve the Transit Center provide Saturday service, but do not participate in the 9:50 PM lineup. In order to extend service into the evening (as repeatedly requested by METRO riders) and to rationalize Saturday service, we propose extending eight of the nine routes to include an outbound trip originating at the Transit Center at the 9:50 PM lineup.

Creating a complete 9:50 PM lineup as proposed would require adding 19 hours of revenue service and approximately 332 revenue miles. Using the most recent cost allocation averages (\$52.66 per additional revenue hour, \$2.05 per additional revenue mile), this change would cost \$1,682 (in variable costs). This represents a 4.8% increase in the cost of Saturday service. Given the relatively low cost of adding a trip to select routes, the implementation challenge would largely be in scheduling and run cutting.

This proposal would likely not require any capital investment, as weekend bus demands are well below weekday peak vehicles at this point. However, this proposal may require hiring additional operators to cover the expanded weekend hours.

#### 4.3.4 Route 26 Saturday

Ridership on the #26 is extremely low on the weekends, according to farebox event logs. The #26 was created by splitting the #4. As a result, the #26 provides a more direct route to trip generators near I-77 and White Pond Drive. It appears that the office buildings on the western end of the #26 do not generate significant ridership on the weekend. Coverage to this area could be provided by extending the #4 (possibly using the historic alignment) for weekend service only. Saturday service on the #26 costs

approximately \$523 per Saturday. These savings could be applied to improve frequency or span on the #4 or elsewhere in the system on Saturday.

## 4.4 Crosstown Service Proposals

### 4.4.1 Copley Crosstown

#### Montrose Hub to Rolling Acres Transit Center

→ Potential Transfers to: #1 #50, #101 at Montrose TC  
#3, #9, #14 at Rolling Acres TC

This 9.2 mile route from Montrose to Rolling Acres would provide service to Copley Township, which is currently under-served by METRO. See *Figure 5 – Copley Crosstown Route*. The route would capture riders from a number of trip generators including: Montrose commercial district, Arbors at Fairlawn nursing home, Veyance Technologies, BH Solutions Group, Copley Medical Group, future trail connection to Pigeon Creek Trail, Copley Center commercial district, Copley High School, Babcock & Wilcox, PVS Chemical, and Rolling Acres Commercial District.

If service is provided at a similar level to the #51 Stow Circulator (6AM – 11PM, ~45 minute headway), this service would require two additional peak time buses. These buses would make eleven round-trips, resulting in 404.8 revenue miles over 33 revenue hours per day. Using the current cost allocation model, the variable cost for this service is estimated at \$2,550 per day or \$666,000 per year. The fully allocated cost for this service is estimated at \$11,900 per day or \$3.1 Million per year.

### 4.4.2 Northside Crosstown

#### Wallhaven Circle to Independence Turnaround

→ Potential Transfers to: #1, #4, #26, #61 at Wallhaven  
#28 at Twin Oaks  
#34 at Paulding Street  
#10 at Howard Street  
#7 and #33 at Main Street (North Hill)  
#34 at Home Avenue  
#7, #10, #12, #19, #23, #51 #34, #59 at Independence Turnaround

This 6.2 mile route from Wallhaven (Market and Hawkins) to Chapel Hill (Independence Turnaround) would address an origin-destination need identified in the 2012 Master Plan. See *Figure 6 – Northside Crosstown Route*. This route would capture riders from a number of trip generators including: Wallhaven commercial district, Highland Square, dense residential along Portage Path, Cascade Valley Park, North Hill neighborhood, North High School, employers along Tallmadge and Home Avenues, and Chapel Hill Mall (with high-frequency transfers on the #1 to Summit Mall / Montrose).

If service is provided at a similar level to the #51 Stow Circulator (6AM – 11PM, ~45 minute headway), this service would require two additional peak time buses. These buses would make 21 round trips and 1 one-way run resulting in 266.6 revenue miles over 32 revenue hours. Using the current cost allocation model, the variable cost for this service is estimated at \$2,550 per day or \$666,000 per year. The fully allocated cost for this service is estimated at \$11,900 per day or \$3.1 Million per year.

#### 4.4.3 Southside Crosstown

##### **Rolling Acres Transit Center to Tri-County Plaza**

→ Potential Transfers to:       #3, #9, #14 at Rolling Acres TC  
  #8 at Wooster Road  
  #18 and #111 at Waterloo and Manchester Roads  
  #13, #17, and #111 at the VA Clinic on Waterloo Road  
  #2 on South Arlington  
  #5 and #110 on Triplett Boulevard  
  #6 at Canton Road and Tri-County Plaza

This 12.4 mile route from Rolling Acres to Tri-County Plaza would provide a connection across the southern portion of the city without going downtown. See *Figure 7 – Southside Crosstown Route*. This addresses an origin-destination pair identified in the 2012 Master Plan and provides ample transfer opportunities to 12 other line service routes. This route would capture riders from a number of trip generators including the Rolling Acres commercial district, northern residential neighborhoods of Barberton, Firestone Park neighborhood, Arlington Road commercial corridor, Derby Downs, Ellet residential neighborhood, Canton Road commercial corridor, and Tri-County Plaza.

If service is provided at a similar level to the #51 Stow Circulator (6AM – 11PM, ~1 hour headway), this service would require two additional peak time buses. These buses would make 19 round-trips and 1 one-way run, resulting in 483 revenue miles over 33.5 revenue hours. Using the current cost allocation model, the variable cost for this service is estimated at \$2,750 per day or \$718,000 per year. The fully allocated cost for this service is estimated at \$12,100 per day or \$3.2 Million per year.

#### 4.4.4 Route 82 Crosstown

**Brecksville Park & Ride to Creekside Park & Ride:** See *Figure 8 – Route 82 Crosstown*

→ Potential Transfers to:       #102 at Macedonia Commons  
  #104 at Creekside P&R  
  GCRTA #77F at Brecksville P&R

This 10.9 mile route from the Brecksville Park & Ride in Brecksville to Creekside Park & Ride in Twinsburg would provide a connection across the north county communities, serving Sagamore Hills, Northfield, Macedonia, Twinsburg, and Twinsburg Township. This route would provide an important east-west connection along a heavily commercialized corridor, link several relatively high-density residential developments, and provide reliable all-day connection to the GCRTA system. By traveling only 2.5 miles into Cuyahoga County, the proposed route could use the Brecksville Park and Ride as its western terminus where transfer would be available to the 77F which provides express service to downtown Cleveland 5:30AM -11:30PM weekdays, 6:30AM to 9:30AM Saturdays, and 6:30AM to 8:30PM Sundays. The north county communities display a strong commuting pattern toward Cleveland. The proposed crosstown route, along with the 77F would provide a two-seat ride to downtown Cleveland throughout the day. Currently the only service to Cleveland available from this area is on the X60 from Creekside P&R during the commuting peak.

If this service were operated on weekdays with a similar schedule to the Route 102 (which would connect it with Akron) and the 77F (which would connect it with Cleveland), it would require approximately 37.5 revenue hours per day (2 buses, 6:00AM to 11:30PM). Over this time, two buses could make 11 round-trips from Brecksville to Creekside and back. This would amount to approximately 480 revenue miles. Using the current cost-allocation figures variable costs for this service total approximately \$2,950 per day or \$772,000 per year. The fully-allocated cost of the service would amount to approximately \$21,650 per day or \$5.65 Million per year. Given the distance from the 416 Kenmore facility, this route would have significant deadhead miles which would increase its cost over the average cost allocation model. Further costing study is required prior to a final recommendation.



## 4.5 Downtown Circulator

In January 2012 METRO submitted an application for \$1.24 Million in grant funding through AMATS for the Ohio Transit Preservation Partnership Program (OTPPP) to implement three proposed Downtown Circulator routes; red, blue and green. The proposal was prepared to support initiatives by the City of Akron, the Downtown Akron Partnership (DAP), the University Park Alliance (UPA) and other constituent organizations to improve the livability and connectivity of Akron's Central Business District (CBD) by establishing safe, frequent, and convenient bus routes. The application was not funded, but the interest in the project has remained in order to better link the major trip generators in the greater downtown area. Consistent with the earlier proposal, the latest version of a Downtown Circulator would operate frequently (every 10 minutes during peak times) on short loops through the central business and entertainment districts. Two routes are suggested for implementation as Phase I of the Downtown Circulator (see *Figure 9 – Akron Downtown Circulator*).

The two proposed Circulator loops are 3.7 and 4.0 miles in length, respectively and could be operated on 10-minute headways with three buses each. The 3.7 mile loop would connect METRO's RKP Transit Center with the main commercial core and government offices along Broadway and High Streets. The 4 mile loop would connect METRO's RKP Transit Center with North Side Station via Main Street, providing access to many of Akron's busiest entertainment destinations.

This recommendation assumes a financial partnership with outside entities to assist in subsidizing operating costs, likely from the City of Akron, Downtown Akron Partnership and local businesses. This would permit free or very low cost fares, which are important to attract ridership.

The service would provide frequent transfer opportunities at RKP Transit Center. This would provide a more convenient trip for downtown commuters whose initial route does not pass through the CBD on the way to the Transit Center.

Given that the circulator is intended for very short trips, the vehicle would likely be different than other line-service buses. Shorter buses (30 or 35 feet) would likely provide sufficient capacity, especially if they were configured with perimeter-only seating (more room for standees on short trips). Using dedicated buses for this service would allow for distinctive branding, which would differentiate the free circulator service from METRO's regular line service.

The two circulator routes would initially operate from 7AM to 11PM on weekdays. Using the current cost allocation model, the variable cost for this service would be approximately \$6,500 per day. If this service addition is considered using the fully allocated cost model (variable and fixed costs) it would require approximately \$34,600 per day or \$1.7 Million per year.

## 4.6 Green Service

The City of Green in southern Summit County is currently served by the #2 route end at Interstate Parkway in the Arlington Ridge district within the northern edge of the City and the #110 suburban town center service. Green has been growing rapidly, particularly around the I-77 interchange at Massillon Road. The City of Green has requested additional METRO service, particularly focused on linking residential areas in Green via transit to destinations *within* Green. City officials forwarded a proposed circulator route to METRO staff in December 2013 (see *Figure 10 – Green Circulator*).

In 2014, METRO proposed adding Call-A-Bus service for Green. After public comment and internal review, there were concerns that Call-A-Bus volume could overwhelm paratransit service in the southern portion of the county. As a result, Call-A-Bus was not implemented in Green. After gaining additional data and experience operating Call-A-Bus in the northern portion of Summit County, METRO can proceed with the introduction of Call-A-Bus to Green more confidently.

We propose adding unrestricted (for age or disability) demand response service to the City of Green. All trips must have their origin and destination in the City of Green with one exception: Call-A-Bus customers wishing to access downtown Akron and the wider METRO system could request Interstate Parkway –the southernmost stop on the #2 route as a destination.

## 5.0 Facility Proposals

### 5.1 Montrose Hub

<b>Key METRO Departments:</b>	Finance, Operations, Maintenance, Planning
<b>Key Partners:</b>	Design and Construction Contractors, Copley Township, County Engineer, AMATS
<b>Key Outcomes:</b>	Improved Customer Amenities, Improved Transfer Opportunity

In 2013, Copley Township requested that METRO move its layover location for the #1 and #50 from Flight Memorial Drive, citing safety concerns related to parked buses creating an obstruction for motorist's sight lines. METRO has identified several locations for a layover in the Montrose area, however the layover has not yet been relocated.

Given the high number of passengers already using the Flight Memorial Drive site, and the attractiveness of the Montrose area as a shopping and employment center, it would be desirable to have a permanent layover site that could be improved with amenities for METRO passengers and employees. A layover site within the public right-of-way is preferred in order to avoid the high costs of ongoing commercial property rent or purchase, and METRO has identified a potential site on Rothrock Road that is under review by the Town of Copley and the Summit County Engineer. Two potential off-street layover sites have been identified which would require lease or purchase. These sites could be improved as a suburban transit hub similar to METRO's facility at Rolling Acres.

### 5.2 Independence Turnaround Upgrade

<b>Key METRO Departments:</b>	Finance, Maintenance, Planning
<b>Key Partners:</b>	Contractors (Design, Security)
<b>Key Outcomes:</b>	Improved Customer Amenities, Improved Transfer Opportunity

In 2012, METRO moved its Chapel Hill-area service from mall property to the Independence Turnaround (ITA), located on Independence Avenue at Brittain Road. ITA serves as an important transfer point for seven METRO routes. METRO owns the ITA property, including the former Baker's Square restaurant. The building is currently used for storage and is not open to the public.

In order to make ITA into a true transit hub, the building should be open to the public during the hours it is served by METRO buses. Necessary upgrades include creating a waiting area, upgrading public restrooms, installing system maps and other information, and providing security and janitorial service.

### 5.3 Green Hub

<b>Key METRO Departments:</b>	Planning, Finance, Operations
<b>Key Partners:</b>	Design and Construction Contractors, City of Green, AMATS
<b>Key Outcomes:</b>	Improved Customer Amenities, Improved Transfer Opportunity

The expansion of transit service to the City of Green would be aided by establishing one or more new transit hubs to accommodate convenient transfers for passengers and to provide layovers for bus operators. The two existing radial routes that serve parts of Green with connections to the RKP Transit Center are the #2 (ending variably at Wal-Mart on Arlington Street, or at Interstate Parkway adjacent to the cinema) and the #110 (ending variably at Portage Lakes Career Center or Akron-Canton International Airport). While the Wal-Mart end point has a bus shelter, the other route ends are entirely lacking in amenities for either passengers or bus operators.

As an integral part of the service planning for the City of Green, METRO and the City should jointly consider how to better serve the typical transit hub functions, while improving the visibility of transit in the community. In previous collaborations, the City has indicated potential availability of properties off Arlington Street in front of Target Plaza for the #2, and for the #110 adjacent to Green Fire Station #1 off Massillon Road or near Green City Hall off Town Park Boulevard. In addition to those three candidate sites, METRO should consider creating a joint use park and ride lot at the Route 2 Interstate Parkway layover through a lease with the cinema.

## 5.4 Stow Hub

**Key METRO Departments:** Planning, Finance, Operations  
**Key Partners:** City of Stow, PARTA, AMATS  
**Key Outcomes:** Improved Customer Amenities, Improved Transfer Opportunity

In 2013 the City of Stow proposed creation of a transit hub as part of the redevelopment of the Stow-Kent Gardens Shopping Center at the northwest corner of Kent and Fishcreek Roads. METRO and PARTA have agreed to serve the site with regular route service upon its expected completion in 2015.

## 5.5 Norton Hub

**Key METRO Departments:** Planning, Finance, Operations  
**Key Partners:** City of Norton, AMATS  
**Key Outcomes:** Improved Customer Amenities, Improved Transfer Opportunity

The 2012 Transit Master Plan identified Norton Plaza at Norton Avenue and Cleveland-Massillon Road as a future transit hub location. This hub would support improved service to the west side of Summit County. Further work is necessary to identify appropriate sites tied to service changes.

## 5.6 Limited-Stop Upgrades

In order to differentiate the limited-stop service proposed in Sections 4.1.2 and 4.1.3 from METRO's regular line service, stops on the limited service would need to be upgraded to the degree possible. This would require substantial and costly design and construction over a several-year period. All of the stop pairs proposed for the limited service were analyzed in the Market-Arlington Alternatives Analysis. The Alternatives Analysis listed the available right-of-way at each stop location and assigned a particular

type of BRT station which would fit at each. While the Limited-Stop scenario proposed in this plan does not include the construction of BRT stations, stop upgrades would likely be warranted at these locations due to the anticipated higher volume of riders at the limited stops.

**Table 5.1 - West Market Limited-Stop**

Outbound		Inbound	
Stop	Space Available	Stop	Space Available
Montrose Hub (Proposed)	N/A	Montrose Hub	N/A
3737 West Market	16'	3750 West Market	14'
Summit Mall	N/A	Summit Mall	N/A
Giant Eagle	25'	2760 West Market	20'
Market & Hawkins	9'	Market & Hawkins	10 (take parking)
Market & Casterton	12'	Market & Casterton	7.5' (easement)
Market & Rhodes	8'	Market & Rhodes	9'
Market & Valley	9'	Market & Valley	8'
Cascade Plaza	Upgrade Signs	Cascade Plaza	Upgrade Signs
Main & University	Upgrade Signs	Main & State	Upgrade Signs
Main & Selle	Upgrade Signs	Main & Cedar	Upgrade Signs
RKP Transit Center	N/A	RKP Transit Center	N/A

**Table 5.2 - South Arlington Limited-Stop**

Outbound		Inbound	
Stop	Space Available	Stop	Space Available
Wal-Mart	11'	Wal-Mart	18'
Arlington & Derbydale	10'	Arlington & Derbydale	9'
S. Arlington Plaza	8'	S. Arlington Plaza	18'
Arlington & Triplett	8'	Arlington & Triplett	13'
Arlington & Archwood	11'	Arlington & Archwood	11'
Arlington & 7 <sup>th</sup>	8'	Arlington & Johnson	8'
UA (Brown Street)	11'	UA (Brown Street)	12'
Create a Downtown Stop	N/A	Downtown (22 E Exchange)	Upgrade Signs
RKP Transit Center	N/A	RKP Transit Center	N/A

## 5.7 Stop Improvement Plan

**Key METRO Departments:** Planning, Maintenance, Finance  
**Key Partners:** Municipalities, Design Contractors, Utilities, Existing Riders  
**Key Outcomes:** Improved Customer Amenities, Improved Transfer Opportunities

In September 2013, METRO updated its standards for bus stop amenities. These standards are intended to guide the placement of shelters, benches, and other stop amenities. Customer service requests for stop improvements are evaluated with respect to the number of daily boardings and alightings as well as qualitative measures such as proximity to schools and other sensitive populations.

METRO's standard for the placement of a shelter is 30 boardings per average day. The standard for the placement of a bench is 15 boardings per average day. The standard for the placement of a trash can is 25 boardings per day. Based on the 2012 ride check dataset, there are 134 stops with more than 25 boardings per day. There are 52 stops which currently warrant a trash can and do not have one, 128 stops which warrant a bench and do not have one, and 98 stops which warrant a shelter and do not currently have one.

In 2014, METRO purchased 20 shelters and is aggressively pursuing the installation of these at priority locations (see Figure 11). In order to successfully implement this improvement, METRO must foster greater cooperation with municipalities and private property owners. METRO's line service routes often operate on roadways which have been widened, leaving minimal public right-of-way for the installation of utilities and street furniture. Greater cooperation between METRO and its municipal partners is necessary to place shelters and other amenities in appropriate locations.

Another challenge METRO riders face—especially those with mobility issues—is finding a safe and accessible path to some METRO stops. 78.1 % of all METRO stops, including 88% of stops with greater than 25 boardings connect to the sidewalk network. METRO should pursue pedestrian infrastructure upgrades as part of all road improvement projects. However, stops without sidewalk connections present a major barrier to accessibility across the system. In order to ensure last-mile accessibility for all of its riders, METRO should be a strong advocate for pedestrian infrastructure improvements in the region.

## 6.0 Implementation

This implementation plan was developed by METRO's Service Planning Committee and Leadership Team based on an evaluation of the service expansion proposals advanced in Section 4, integration with the 2014 Strategic Business Plan, and other agency priorities.

### 6.1 Stop Consolidation, 2015 – 2018

<b>Key METRO Departments:</b>	Planning, Marketing, Operations, Maintenance
<b>Key Partners:</b>	Municipalities, Social Service Providers, Schools
<b>Key Outcomes:</b>	Reduced Travel Time, Reduced Schedule Variability

During development of the 2012 Master Plan, METRO adopted a number of service quality standards, including a standard for distance between stops. These standards indicate that stops should be 1/8<sup>th</sup> of a mile (660 feet) apart in the central business district, ¼ mile (1320 feet) apart in the metropolitan core, and ½ mile (2640 feet) apart in the outer suburbs.

The distance between each stop was calculated using METRO's GIS database. There are 1976 segments between stops in the metropolitan core service area. For service in the metropolitan core (line service routes 1-34), the average distance between stops is 789 feet (0.15 miles). 910 of the 1976 stop segments (46%) are less than 1/8<sup>th</sup> of a mile apart. This would suggest that there are a large number of stops which could be consolidated while maintaining a high level of service and would bring METRO more in line with its adopted standards.

The 2013 On-Board Survey indicated that nearly 45% of METRO riders walk one block or less from their origin to their bus stop. Less than 4% walked more than six blocks to their stop (block lengths in metropolitan Akron vary, but are generally between 300 and 350 feet). Passengers indicated that they were happy with this feature of METRO's system.

However, when stop spacing is too close, it often results in increased variability in trip time. On some trips, the bus may arrive at the end of the line early if there are passengers waiting at relatively few stops. On trips where there are passengers waiting at many different stops, the bus may arrive late because of the increased time decelerating, loading passengers, merging back into traffic, and accelerating. If passengers can be concentrated at fewer stop locations without significantly degrading their experience or accessibility, all passengers experience faster trips and greater reliability.

While stop consolidation often meets with significant customer and political pushback, other transit agencies achieved successful outcomes when the effort is paired with significant public outreach and education.

METRO expects stop consolidation across the entire line service system to take place across approximately three and one half years from Fall 2015 through the end of 2018. METRO currently maintains 2,351 stops. Based on the stop segment length, 20 – 30% have the potential for consolidation depending on route characteristics. METRO's current travel time model allows a minimum of 26 seconds for each stop (with additional time added for average boardings / alightings per trip). Successful stop

consolidation could result in at least 10% time savings per trip. For example, Route #3 currently has 98 stops on its longest pattern. If stop consolidation resulted in a 75 stop pattern, this would result in approximately 10 minutes saved on a congested trip where all stops are made. Route #3 currently has an average weekday cycle time (round trip) of 83 minutes. Stop consolidation could result in 12% time savings in this case.

Line service routes have been programmed for action into roughly comparable geographic groups. By concentrating on these geographic groupings, we anticipate that METRO will be able to focus on informing and educating riders in particular communities, taking input from customers and bus operators on the particular routes, analyzing boarding and alighting data at the stop level, and working with sensitive populations to address their particular needs. Additionally, the geographic approach will allow METRO to tie stop consolidation to service improvements in most cases. Linking service improvements to the stop consolidation program may help bolster public and political support.

The Limited Stop Service proposed in Section 4.2 is intended to reduce travel time over METRO's longest and busiest routes. However, without infrastructure improvements such as queue jumps or signal priority, the time savings achieved by a Limited Stop service operating in mixed traffic would be only marginal over what could be achieved through stop consolidation. Given the capital investment required to implement limited stop service, the limited stop proposal should be re-evaluated after stop consolidation is completed on the #1 and #2. If additional trip time savings are desirable, additional engineering solutions should be proposed to municipal partners and ODOT.

## 6.2 City of Green – Service Improvements, 2015

<b>Key METRO Departments:</b>	Planning, Customer Service
<b>Key Partners:</b>	City of Green, Akron-Canton Airport, SARTA, City of Akron
<b>Key Outcomes:</b>	Improved Access to Transit, Improved Transfer Opportunities

Implementation of expanded service coverage of the City of Green will be a cooperative effort between the Planning, Customer Service, and Operations departments. The largest change will be implementation of Call-A-Bus service within the City of Green. For a \$4 one-way fare, this demand-response service will take passengers from origin to destination within the City of Green (or to Interstate Parkway at the terminus of the #2) with a prior reservation set on the previous business day. METRO will collaborate between departments, as well as with the City of Green to set service hours and availability.

In addition to the implementation of Call-A-Bus, METRO will study and recommend improvements to the #110 for implementation in conjunction with the Call-A-Bus rollout. The #110 currently serves as a commuter service from Green through a portion of Springfield Township and southeast Akron. It provides METRO's only connection to Akron-Canton Airport and one of the few connections to the SARTA system serving Canton and Stark County. However, the #110 runs an indirect pattern with relatively poor frequency on weekdays and no service on weekends. More direct routing combined with the additional coverage provided by Call-A-Bus may allow for route adjustments which improve overall service attractiveness of the #110 for commuters along the route.



METRO should continue to partner with the City of Green to identify potential layover locations to better serve transfers from the Call-A-Bus service to the #2 or #110. The City of Green has suggested three locations which could be mutually beneficial and could become more important as transfer locations if the Call-A-Bus service eventually warrants expansion to regular route service.

In the first half of 2016, this service should be evaluated for effectiveness and growth potential. After a year of operation and data collection, travel patterns within Green should be evident. The potential for fixed route service, flexible service, or changes to the demand response service should be studied at this time.

### 6.3 Late Night Zone Reorganization, 2015

**Key METRO Departments:** Operations, Planning  
**Key Partners:** Late Night Riders  
**Key Outcomes:** Operator Safety, Passenger Safety, Ridership Growth

METRO currently offers zone bus service after midnight on weekdays. Buses depart from the RKP Transit Center outbound at Midnight, 12:30 AM, and 1:00 AM. Riders are directed to zone buses based on the line service route they normally use. For example, the North Zone bus serves riders who would be on the #7, #10, #28, #33, #102, and #104 during the day. Riders board the appropriate zone bus and inform the driver of their destination. Riders can request any stop normally served by the routes in that zone. The operator forms an itinerary and creates a pattern which allows passengers to get as close to their requested stop as possible within the allotted time. Without a regular pattern or schedule, passengers are not able to use zone buses for inbound trips.

The fluid and somewhat informal nature of the late night zone service presents challenges for both bus operators and passengers. Passengers can count on a timely departure, but arrival times can vary widely depending on the number of riders on a particular zone bus and their destinations. Operators must be extremely knowledgeable in regard to the street network and where METRO buses may safely operate, since they create a unique trip pattern every night.

Beyond the challenge of constructing a new pattern on the fly every night, operators often express safety concerns, given the late hour that the zones operate and the lack of a defined stop pattern. Although supervisors and dispatchers are on duty until zone service ends, support for operators is very limited compared to earlier in the day.

A final drawback of the late-night zone system is the difficulty of integrating it into the Avail AVL/APC system which METRO will implement in early 2015. Without an established pattern, stops, or time points, zone buses will not have automated stop announcements and will not be able to provide ridership statistics except at the trip level.

In 2015, METRO will study and reorganize the late night zone service using input from passenger count sheets, operator interviews, farebox statistics, AVL/APC data, and customer input. It is not clear exactly

how METRO's late-night service will be reorganized, but options to consider will be point-deviation services, late-night loops (similar to SARTA's program), or later service focused on priority corridor routes.

## 6.4 Shorten #101 & Study #50, 2015

**Key METRO Departments:** Planning, Operations, Marketing  
**Key Partners:** Summit County Engineer, Copley Township, #101 Riders  
**Key Outcomes:** Increased Efficiency and Cost Effectiveness

In early 2015 a new Montrose Layover will be completed. The #101 presently runs from Brecksville through Richfield and Bath, enters I-77 at Miller Road and expresses to the RKP Transit Center. The #101 is among the lowest performing routes in the METRO system in riders-per-mile and riders-per-revenue hour. Given its low frequency and long headway gaps, the #101 essentially provides base coverage to the northwest portion of Summit County.

The 2013 On-Board Survey revealed strong rider preference against transfers. However, an improved waiting environment at the Montrose Layover would facilitate transfer to routes #1 and #50. The time and miles spent on the express portion of the #101 trip could be reallocated to improve frequency on the portion of the route north of Montrose. This proposal originated with the Operations Department and was advanced during public meetings in 2014 (with the proposed transfer location at Summit Mall).

The #50 Montrose Circulator is one of METRO's poorest performing routes in riders per hour and riders per mile. The opening of the Montrose Layover will require changes to the #50. This presents an opportunity to evaluate the overall routing, operating hours, and schedule for the #50 to ensure that investment in the route is in line with its ridership. Similar evaluation was recommended in the 2009 TDP, but was delayed until the opening of the Montrose Layover.

## 6.5 South Side Reorganization, 2015

**Key METRO Departments:** Planning, Operations, Marketing, Customer Service  
**Key Partners:** ODJFS, Giant Eagle, Goodwill Industries, Veterans Administration, Interval Brotherhood Home, Summit County Engineer, Firestone Park Community Groups  
**Key Outcomes:** Improved Travel Time, Increased Efficiency, Better Service to ODJFS

METRO's line service provides excellent coverage to the south side of Akron. However, route directness and frequency could be improved. Routes #2, #13, #17, and #111 will be studied and improved during the second half of 2016. While the #2 provides direct service north and south along Arlington Street, the #13, #17, and #111 take indirect paths through the southside, crossing and overlapping coverage areas. Main Street, Grant Street, Brown Street, Inman Street, and Arlington Street are evenly spaced nearly ½ mile apart through this neighborhood. Half-mile spacing is considered the industry standard for bus service in urban areas. Therefore, a pattern running as directly as possible north and south on these streets would maintain near-total coverage while improving travel time and directness.

Additionally, the Ohio Department of Jobs and Family Services (ODJFS) is moving from its current location in downtown Akron to the former Firestone complex on South Main Street. METRO's service to this site is fair, but indirect. It is less than ¼ mile from the #13 stop at Cole and Main Streets. However, this stop is served infrequently compared to the current ODJFS site in downtown Akron. In 2014, ODJFS surveyed its clients and shared the results with METRO. ODJFS clients rely on METRO to obtain important social services. Therefore, METRO's objective is to serve this facility directly by straightening the #111 along South Main Street.

By making routes shorter and more direct, we anticipate that this part of METRO's system will have additional capacity. The re-organized routes will be able to run with the same number of peak buses or buses could be moved from other low-performing portions of the system. However, additional operator hours will likely be necessary to implement this service change.

To ensure transfer opportunities on the south end of the service area as well as at RKP Transit Center, a layover location is needed which can serve the #13, #17, and the potential new route split from the #17. These routes currently use various commercial properties on Waterloo Road as their turnaround and layover location. Early in the planning process, a layover location should be identified and bus stop amenities constructed as early as possible. Possible layover locations include: VA Clinic, Giant Eagle, Goodwill Industries, Marc's Plaza, and the Ohio ECheck site at the south end of Brown Street near the Post Office.

The first round of stop consolidation will be programmed to coincide with the changes to the south-side routes. The stop consolidation study will focus on the 353 stops which currently make up the #2, #13, #17, and #111. The consolidation or elimination of 70 stops across these routes would amount to a 20% reduction in stops and could achieve considerable benefits for efficiency and schedule adherence. Public outreach in regard to stop consolidation in this area will be advertised and promoted in all affected neighborhoods as well as at the RKP Transit Center. Public partners involved include: City of Akron, Springfield Township, and Coventry Township. Important stakeholders and social service providers which should be involved to help identify sensitive populations include: University of Akron, Summit County Children's Services, East Akron Neighborhood Development, AMHA (especially Wilbeth-Arlington, Mohawk Apartments, and Jenkins Annex properties), VA Clinic, ODJFS, Summit County Jail, Salvation Army Rehabilitation Center, Garfield High School, and various civic organizations in the Firestone Park neighborhood.

## 6.6 Downtown Circulator, 2016

<b>Key METRO Departments:</b>	Planning, Marketing, Finance, Operations, Maintenance
<b>Key Partners:</b>	University of Akron, Downtown Akron Partnership, Major Downtown Employers
<b>Key Outcomes:</b>	Grow Choice Ridership, Support Economic Development Downtown

The City of Akron, Downtown Akron Partnership (DAP), and the downtown business community have discussed and planned for a high-frequency, free downtown circulator. METRO has proposed two circulator loops which would run from the RKP Transit Center through the central business district.

Implementation of this service improvement will require the cooperation of several internal and external groups. If the downtown circulator uses a special type of vehicle (shorter, perimeter seating, etc.) as proposed, this would introduce a separate class of vehicle to METRO's fleet. Downtown circulator vehicles would have to be maintained, stored, and deployed as a separate group. Although a downtown circulator bus could certainly be replaced by a vehicle from METRO's standard fleet if a circulator vehicle is not available, this could cause confusion and uncertainty for customers who are not regular transit riders. Serving casual and first-time riders is a stated goal of the downtown circulator, so any interruption to service with the specialized vehicle should be minimized.

Downtown circulators in other major cities have been subsidized by the downtown business community, by outside grants, or by tax increment financing (TIF). Prior to purchase of these specialized vehicles, METRO should arrange long-term commitments from all available partners. Buses purchased with federal funds must be operated and maintained for twelve years, in most cases, so long-term commitments are essential to underwriting the operating expenses associated with the downtown circulator if the desired free-fare structure is implemented.

In order to increase ridership and utilization of transit generally, including the downtown circulator, METRO should partner with the City of Akron and major employers in the CBD to better manage the supply of parking in the urban core. Plentiful and inexpensive parking in the CBD hurts the viability of transit throughout the METRO area, including the downtown circulator. Implementation of the downtown circulator should be accompanied by actions to reduce parking minimums in the zoning code and increase long-term parking rates within downtown Akron.

## 6.7 Weekend Service Extensions, 2016

**Key METRO Departments:** Planning, Operations, Maintenance  
**Key Outcomes:** Increased Operating Hours, Increased Frequency, Clockface Headways

In 2014, weekend service was METRO's fastest-growing service category. Customers frequently request more weekend service in public meetings and surveys. METRO recognizes that the work week is changing, especially for lower-wage workers which make up the core of METRO's ridership. Retail, services, and even manufacturing require Saturday work. Several incremental changes to weekend service were evaluated in Section 4.3. Any or all of these recommendations may be implemented; however, the preferred alternative is to conduct a comprehensive analysis and rebuilding of weekend service with improved service hours and frequency.

METRO currently operates from approximately 5:15 AM to 10:30 PM on Saturdays on priority routes. However, many routes run very limited schedules with long headway gaps on Saturday. Other routes, including the 100-series suburban routes are not operated on Saturday. METRO currently operates from approximately 9:00 AM to 7:30 PM on Sundays. Even fewer core routes have Sunday service, and there is no suburban service on Sunday.

Expanding Weekend service will require a number of inter-departmental changes at METRO. In addition to putting more operators on route on Saturdays, road supervisors, dispatchers, and maintenance would be required over a longer service day. As of Fall 2014, METRO only operates diesel vehicles on weekends. Adding vehicles to weekend service would likely require operating CNG fueled buses, resulting in changes to maintenance and yard management procedures. As of Fall 2014, articulated buses are not run on the weekend. Operators on the #1 / #2 interlined route have repeatedly requested the larger-capacity articulated buses to relieve Saturday overcrowding. METRO anticipates adding articulated buses to Saturday service in Spring 2015, which will require additional scheduling in coordination with the Maintenance, and Operations Departments.

A comprehensive study of weekend routes and schedules is programmed for the first half of 2016. At that point, approximately one year of AVL / APC data will be available to support the analysis and optimization of the weekend schedule. Additional blocking and run-cutting software may also be available at this time, which should assist in the development of an improved weekend schedule. If fleet and personnel capacity is sufficient, this may be an opportunity to implement clockface headways on a segment of METRO service. In this way the weekend service may serve as a proof-of-concept for implementing a more easily-followed clockface system throughout METRO's line service. If this effort is successful for weekend service, the additional complexity of the weekday schedule can be approached for comprehensive review later in the TDP period.

## 6.8 Northwest Stop Consolidation, 2016

**Key METRO Departments:** Planning, Marketing, Operations, Maintenance  
**Key Partners:** Municipalities, Social Service Providers, Schools  
**Key Outcomes:** Reduced Travel Time, Reduced Schedule Variability

Stop consolidation for the northwest portion of METRO's service area including the #1, #3, #4, #26, #28, and #50 is programmed for the first half of 2016. The stop consolidation study will focus on the 390 stops which currently make up the #1, #3, #4, #26, and #28. The consolidation or elimination of 80 stops across these routes would amount to a 20% reduction in stops and could achieve considerable benefits for efficiency and schedule adherence. Public partners involved in Northwest stop consolidation include: City of Akron, City of Fairlawn, Bath Township, and Copley Township. Important stakeholders and social service providers which should be involved to help identify sensitive populations include: Buchtel High School, AMHA (especially William Fowler Apartments, Saferstein Towers, and AMHA headquarters), Brown Mackie College, Summit County Public Health, Summit County MRDD, St. Joseph's Family Center, Akron General Hospital, and Akron Children's Hospital.

## 6.9 East Side Study & Reorganization, 2016

**Key METRO Departments:** Planning, Operations, Marketing  
**Key Partners:** Goodyear, East Side Community Groups  
**Key Outcomes:** Reduced Travel Time, More Direct Service

METRO serves the east side of Akron primarily with the #5, #6, #19, and #30 routes. All four of these routes pass through the intersection of East Market and East Exchange Street in the heart of the

Goodyear complex. When rubber production was underway at Goodyear, this area contained a concentration of thousands of shift-based factory jobs which were largely staffed by East Akron residents. Only corporate and research functions remain at the Goodyear site while other former Goodyear buildings are in the process of renovation and redevelopment. As these redevelopment activities proceed, METRO should respond to changes in land use and employment patterns. While this area remains an important employment center, the duplication of services that currently exists in this area is out of proportion with rider demand.

In 2014, the #5 was METRO's worst-performing urban core route in passengers per mile, suggesting that the route is ineffectively serving the area. The east side study should, at a minimum, identify a place where #5 riders can transfer to other east-side service before expressing to the RKP Transit Center.

By 2016, approximately eighteen months of AVL / APC data will be available for analysis and optimization of the Eastside routes. Additional blocking and run-cutting software may also be available to assist in the development of improved east side service.

Stop consolidation for the #5, #6, #19, #30, and #110 (all the Routes which pass through the Goodyear campus area) will be programmed to coincide with the changes the East Side Service. These routes are made of up 474 stops. Consolidation or removal of 95 stops would result in a 20% reduction in total stops and could achieve considerable benefits for efficiency and schedule adherence. Public outreach in regard to stop consolidation in this area will be advertised and promoted in all affected neighborhoods as well as at the RKP Transit Center. Public partners involved include: City of Akron, Springfield Township, Village of Lakemore and City of Green. Important stakeholders and social service providers which should be involved to help identify sensitive populations include: University of Akron, East Akron Neighborhood Development, AMHA (especially Cotter House, Buchtel Apartments, and Joy Park Homes), Akron City Hospital, Springfield High School, Ellet High School, and East High School.

## 6.10 North County Study, 2017

<b>Key METRO Departments:</b>	Planning, Operations, Customer Service
<b>Key Partners:</b>	Municipalities, Major Employers, AMHA, Northfield Park Casino, GCRTA
<b>Key Outcomes:</b>	Appropriate Level of Service, Transfer Opportunities

In early 2014, METRO re-organized suburban bus service to the north county area by changing routing and timetables for the #102 and #103, adding the #104, and implementing Call-A-Bus demand response service for a portion of northern Summit County. After approximately three years of operation and small adjustments, the North County service will be studied and reevaluated in 2017.

Call-A-Bus travel patterns should be evaluated to determine if the east-west travel pattern in north county could support a crosstown circulator, flexible bus service, or an expanded demand-response service. Depending on the outcome of this evaluation, the 100-series routes may need to be altered to provide transfer opportunities to any new or expanded east-west service.

Over the course of 2014, ridership on the #104 has grown rapidly while the #102 and #103 have declined. This indicates that ridership may be migrating from the #102 and #103 to the #104. AVL / APC data will likely reveal travel pattern data that can be used to improve routing and timetables for the north county routes. METRO's suburban service often uses pattern variations and trip diversions to reach far-flung employment centers. In addition to the standard timetable, these diversions should be evaluated for potential inclusion in the standard route.

## 6.10 North Side Crosstown, 2017

**Key METRO Departments:** Finance, Operations, Planning, Maintenance  
**Key Partners:** Existing Riders, North-Side Community Groups  
**Key Outcomes:** Reduced Travel Time, More Direct Service, Timed Transfers

An important recommendation which has surfaced both from METRO passengers and staff is the need for cross-town connections which provide the ability to transfer between existing METRO routes without going to RKP Transit Center. The North Side Crosstown route is proposed as the first Crosstown to be implemented in 2017. This 6.2 mile route would link fourteen line service routes across the north side of the urban core on its route from Wallhaven Circle to Independence Turnaround at Chapel Hill. This travel pattern was identified as under-served in the 2012 Master Plan.

The North Side Crosstown would be operated using 35 or 40 foot buses and would be fully interchangeable with the rest of the METRO's line service fleet. Buses would likely be purchased prior to this service addition, because it will increase the peak bus fleet requirement. This purchase should be planned and budgeted by early 2015.

Stop consolidation for the #7, #10, #12, #23, #34, and #59 will be programmed along with the North Side Crosstown. These routes are made of up 480 stops. Consolidation or removal of 96 stops would result in a 20% reduction in total stops and could achieve considerable benefits for efficiency and schedule adherence. Public outreach in regard to stop consolidation in this area will be advertised and promoted in all affected neighborhoods as well as at the RKP Transit Center. Public partners involved include: the cities of Akron and Cuyahoga Falls. Important stakeholders and social service providers which should be involved to help identify sensitive populations include: Summit County Public Health, AMHA (Valley View, Martin P. Lauer Apartments, Colonial Hills Apartments, Sutliff Towers, and Fowler Apartments properties), Summit County Community Action, and North High School.

## 6.10 South Side Crosstown, 2017

**Key METRO Departments:** Finance, Operations, Planning, Maintenance  
**Key Partners:** Existing Riders, South-Side Community Groups  
**Key Outcomes:** Reduced Travel Time, More Direct Service, Timed Transfers

The South Side Crosstown route is proposed as a counterpart to the North Side Crosstown implemented earlier in 2017. This twelve mile pattern would connect twelve existing line service routes as it skirts the

southern edge of the urban core, running from Rolling Acres Transit Center to Tri-County Plaza in Lakemore.

The South Side Crosstown would be operated using 35 or 40 foot buses and would be fully interchangeable with the rest of METRO's line service fleet. This service change will increase the peak fleet requirement, and will therefore require the purchase of additional buses. This purchase should be planned and budgeted by early 2015.

Stop consolidation for the #8, #9, #14, #18, and #24, which contain 389 stops, will be programmed along with the South Side Crosstown study. Consolidation or removal of 78 stops would result in a 20% reduction in total stops and could achieve considerable benefits for efficiency and schedule adherence. Public outreach in regard to stop consolidation in this area will be advertised and promoted in all affected neighborhoods as well as at the RKP Transit Center. Public partners involved include: the cities of Akron and Barberton, Springfield and Coventry Townships, and the Village of Lakemore. Important stakeholders and social service providers which should be involved to help identify sensitive populations include: AMHA (Summit Lake, Jenkins Annex and Wilbeth-Arlington properties), Goodwill Industries, and Springfield High School.

## 6.11 Stop Consolidation Far North, 2018

**Key METRO Departments:** Planning, Marketing, Operations, Maintenance, Customer Service  
**Key Partners:** Municipalities, Social Service Providers, Schools  
**Key Outcomes:** Reduced Travel Time, Reduced Schedule Variability

Stop consolidation for the #33, #51, #101, #102, #103, and #104, which contain 321 stops, will be programmed for early 2018. Consolidation or removal of 64 stops would result in a 20% reduction in total stops and could achieve considerable benefits for efficiency and schedule adherence. Public outreach in regard to stop consolidation in this area will be advertised and promoted in all affected neighborhoods as well as at the RKP Transit Center. Public partners involved include: Cuyahoga Falls, Richfield Village, Bath Township, Sagamore Hills Township, Northfield Township, Northfield Center Village, Macedonia, Twinsburg and Twinsburg Township. The City of Brecksville in Cuyahoga County is also an important partner and facilitates layover and transfer locations between METRO and GCRTA's 77F. Important stakeholders and social service providers which should be involved to help identify sensitive populations include: AMHA (Pinewood Gardens, Maplewood Gardens, and Lobello Lane properties) Stauzenberger College, Nordonia Hills High School, Walsh Jesuit High School, Cuyahoga Valley Christian Academy, and Saint Thomas Hospital.

Stop consolidation at this point also presents another opportunity to adjust north county service for efficiency and ease of transfers. If ridership on North County Call-A-Bus is found to warrant additional service such as an Crosstown Route or Flex Route, it will be implemented at this time, after buses are purchased and the peak fleet requirement met.



## 6.12 Evaluate Downtown Circulator, 2018

<b>Key METRO Departments:</b>	Planning, Finance, Operations, Maintenance, Marketing
<b>Key Partners:</b>	Downtown Akron Partnership, University of Akron, Major Employers
<b>Key Outcomes:</b>	Grow Choice Ridership, Support Economic Development Downtown

After operating the Downtown Circulator for approximately two years, its routing and timetable should be evaluated for potential improvements. If the Downtown Circulator meets or exceeds ridership projections, expansion of the downtown circulator may be appropriate at that time.

As of 2014, the University of Akron has a campus circulator bus operated by a subcontractor. The “Roo Bus” provides circulation around campus as well as connections to downtown Akron and the RKP Transit Center. If both the Downtown Circulator and the Zip Pass programs are successful, METRO may pursue a further partnership with the University to operate a second downtown circulator with an east-west orientation that might incorporate or replace the Roo Bus routing. Any changes resulting in fleet expansion would take approximately two years to implement because of the need to procure specialty vehicles.

## 6.13 Evaluate Crosstown Services, 2019

<b>Key METRO Departments:</b>	Planning, Operations
<b>Key Partners:</b>	Existing Riders, Community Groups
<b>Key Outcomes:</b>	Reduced Travel Time, More Direct Service, Timed Transfers

After operating the South Side Crosstown for approximately eighteen months and the North Side Crosstown for approximately two years, a comprehensive study of the effectiveness and efficiency of these services should be performed. If these services are unproductive, they should be adjusted or discontinued. If they are successful, METRO should consider planning other Crosstown service similar to the Copley Crosstown described in Section 4.4.1.