

## MEMORANDUM

To: Max Dillivan and Nick Monoyios, The Rapid  
From: Thomas Wittman and Cristina Barone, Nelson\Nygaard  
Date: February 14, 2020  
Subject: Preliminary Service Scenarios - Updated

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### PRELIMINARY SERVICE SCENARIOS

This document describes the proposed preliminary service scenarios for The Rapid *Mobility for All* Comprehensive Operational Analysis (COA). The proposed service changes in these three scenarios are informed by previous planning studies, priorities identified by the public, key stakeholders, and board members during Phase I outreach, an extensive data analysis of route by route performance, and an analysis of the potential market and demand for transit, both within and outside the existing service area.

The three preliminary service scenarios each address themes identified by the Board during the development of guiding principles. The preliminary service scenarios were developed to align with the guiding principles, address major themes from public, stakeholder, and board member feedback, and build upon findings from previous planning studies and operational data analysis.

None of the preliminary service scenarios represents a commitment to make changes on any given route or any given neighborhood. Public outreach will help define the extent of any changes.

### Guiding Principles

The guiding principles, shown below, were developed through multiple interactions with the Rapid's Board, including workshops and one on one follow-up meetings. The guiding principles provide the basis for the decision-making process throughout the COA.

- **Focus on increasing Ridership** – Create a system that moves more people by doing the basics well and putting the needs of our customers first.
- **Balance increasing ridership with geographic coverage** – Reaching areas with lower demand is essential to serving the community, maintaining support and developing new markets.
- **Serve the needs of employees and their employers** – Work trips are important, particularly those inside the service boundary. Fair partnerships and innovative services will allow The Rapid to serve hard-to-reach employers.
- **Emphasize convenience and system accessibility** – Create a system that's easier to use, less confusing and a low barrier to entry for existing customers and the broader community. The Rapid should be a system that works for everyone.
- **Create a reliable system that meets the expectations of customers** – Grand Rapids is experiencing unprecedented population growth, and with that growth comes

more vehicles, higher vehicle miles traveled (VMT) and congestion. On-time performance and improving the overall reliability of the system is essential to increasing ridership.

- **Evaluate opportunities for innovative or on-demand service and vehicles** – Transportation throughout the region should be seamless, and there is opportunity for The Rapid to function as a true coordinator of mobility options. In addition to innovative service and new vehicle types, technology can improve mobility.
- **Data-driven decision-making** – Recommendations and changes to the system should be informed by data and evaluated for their effectiveness.

## Scenario 1: Frequency

Scenario 1 is focused on improving all-day service frequency on key corridors in the service area throughout The Rapid system. Scenario 1 would reduce service on underperforming routes, simplify the system by removing peak period short turns, and reallocate resources to provide a network of high frequency, all day service on the most productive corridors in the service area.

The Rapid currently provides high frequency 15-minute or better service during peak periods on 12 routes. The only corridor in the existing system with 15-minute or better service all-day is the combined alignment of Routes 10 and 16 along Grandville Ave between Central Station and Burton St. Scenario 1 would provide 15-minute or better service all day on the Silver Line and Routes 2, 4, 6, 9, 11, 19, and the combined alignment of Routes 10 and 16. There would also be 15-minute service during part of the day on Route 28.

Detailed service span and frequency information is shown in Figure 1.

### Key Changes

This section identifies the major differences between the existing system and proposed system in Scenario 1, as well as the supporting data and alignment with guiding principles and public priorities.

#### Downtown Grand Rapids

In downtown Grand Rapids, service is spread across multiple corridors on one-way couplets. This approach increases conflicts with traffic, complicates service, and worsens on-time performance. In Scenario 1, routes are concentrated onto a few key corridors to enter and exit downtown, including Monroe Ave, Fulton St, and Cherry St. Concentrating service on a few corridors will improve system legibility, allow for enhanced capital facilities, leverage existing and potential bus lanes, and improve on-time performance in the most congested part of the service area.

#### Silver Line

The Silver Line's schedule is changing in May 2020 in an effort to improve midday frequency from 20-minute service to 15-minute service. In addition, running time is being added throughout the schedule to improve on-time performance. No additional changes are recommended.

#### Route 19

Route 19 has high ridership during peak times, but also suffers from poor on-time performance as well. Route 19 recommendations are designed to improve on-time performance and include:

- Remove deviation off Michigan St into Spectrum Health to provide faster service and improve on-time performance.

- Improving speeds is crucial, as speeds will get slower if fares are introduced on Route 19.
- Peak overlay service by Spectrum Health shuttles, or those short-turning at Spectrum Health, would continue to make the deviation.
- All existing customers would still be within ¼ mile of an existing Route 19 stop.

### **West Grand Rapids and Walker**

Service changes in the West Grand Rapids and Walker area consolidate routes to provide service more efficiently, removing underperforming coverage service, ensuring high ridership destinations are served with frequent fixed-route transit, and developing an innovative agency operated on-demand zone, in alignment with The Rapid board’s guiding principles.

#### Route 7

Route 7 has low ridership but operates with high frequency during peak periods. Route 7 recommendations are designed to better align frequency with demand and focus on serving the highest ridership destinations along the alignment, including:

- Reduce peak period service frequency to 30-minutes to more efficiently allocate agency resources.
- Replace high ridership service on College Ave currently provided by Route 15.
- Replace underperforming segment on Remembrance Rd to Walker City Hall with a new on-demand transit zone.

#### Route 12

In August 2020, a significant portion of Route 12’s alignment will be duplicated by the Laker Line. With the exception of the Collindale Avenue stop, high ridership Route 12 stops are within walking distance of the Laker Line, and customers will walk to more frequent service. Rather than continue providing an underperforming local service, Route 12 should be consolidated with the Laker Line. A restructured Route 18 would cover the higher ridership segments of Bridge Street.

#### Route 18

Route 18 provides coverage service on the west side of Grand Rapids and directly serves Union High School. With the exception of the high school stops, the western portion of the route underperforms. Recommendations would provide service to those areas most using Route 18 and cover parts of the restructured Route 12:

- Remove service north of Bridge St to provide faster, more direct service to Union High School, and cover portions of Route 12 that have ridership, including Collindale.

#### Walker On-Demand Zone

Job access in Walker was repeatedly identified as a priority. Given the large setbacks and dispersed employment sites, an on-demand service zone that covers both Three Mile Road and future employment growth areas north of I-96 was developed. The Walker On-Demand zone also replaces existing Route 7 service at Walker City Hall. One or two vehicles would provide this service, and connections would be made with Route 9 at Meijer on Alpine Avenue and potentially Route 7 and Laker Line at Meijer in Standale. Additional information and potential service options regarding the Walker On-Demand Zone may be found in the Sam Schwartz Emerging Mobility Evaluation memo.

## **North Grand Rapids**

### Route 9

Route 9 is among the highest ridership routes in the system. The route's alignment would be unchanged. Recommendations are designed to respond to market conditions indicating latent demand, improve all-day service frequency and make the service easier to understand for riders and include:

- Operate 15-minute service from 6 a.m. to 6 p.m. along the entire route length. There would no longer be short-turns.
- Latent demand analysis shows demand for more frequent all-day service on the entirety of Route 9. This recommendation presumes that Alpine Township will accommodate additional service on Route 9. If agreements with Alpine Township cannot be reached, then the more frequent 15-minute all-day service would operate from the Alpine Meijer to downtown only. Service north of the Meijer would continue at today's service levels.

### Route 11

Route 11 serves numerous high ridership stops on Plainfield Ave south of Knapp St and terminates just south of Plainfield Township. A common theme emerging from public outreach was a desire to extend Route 11 further north into Plainfield Township to reach the Meijer. Recommendations for Route 11 are designed to improve on-time performance, and extend service to desired passenger destinations:

- Realign from Lafayette Ave onto Monroe Ave to avoid the congestion on Michigan Ave and improve on-time performance.
- Operate 30-minute service on two branches, one to the Home for Veterans and one to the Plainfield Meijer.
- Provide all-day 15-minute frequency on the highest ridership segments of Plainfield Ave south of 3 Mile Rd.
- Route 11 would carry more riders if service is extended into Plainfield Township to the Meijer. This recommendation presumes that Plainfield Township will accommodate additional service on Route 11. If agreements with Plainfield Township cannot be reached, then service would continue to terminate at the existing location on Elmdale Street.

### Route 13

Route 13 is a relatively low ridership route, providing coverage service through north Grand Rapids and terminating at the Home for Veterans. Route 13 is recommended for elimination. Key high ridership stops would be served by other routes. The Home for Veterans would continue to be served by Route 11 and Fuller Ave south of Knapp St would be served by Route 14. Patrons on the low ridership segment of Fuller Ave between 3 Mile Rd and Knapp St would need to walk longer to access The Rapid.

### Route 14

The eastern portion of Route 14 has low ridership and is primarily a coverage route providing service to Oak Industrial Dr, Kent County Jail, and several large apartment complexes. Ridership to Oak Industrial Dr is highly dependent on the time of day. Route 14 would be restructured to serve a stronger route destination on the east route terminus.

- Service to Oak Industrial Dr and the Kent County Jail would be served with a new Oak Industrial On-Demand zone, which would operate with one vehicle during the morning and afternoon peak only. Passengers would need to take Route 19 to the Plymouth Park-and-Ride, where a connection to the on-demand service would take place.
- Realigning service to continue serving the segment on Fuller Ave currently served by Route 13.
- Extending service east on Knapp St to terminate at the Knapp St Meijer.

### Route 15

Route 15 is an average ridership route that operates with high frequencies during peak periods. Ridership on Route 15 is relatively dependent on time of day, with morning peak trips carrying fewer passengers than midday or afternoon peak trips. Keeping Route 15 on time, particularly during the afternoon, is challenging. Recommendations are designed to better align frequency with demand and include:

- Align service frequency with observed demand by reducing frequency to 30-minutes all day
- The schedules of the restructured Route 14 to Knapps Corner would be offset with the schedules of Route 15 to provide all-day 15-minute service between Central Station and Knapps Corner.
- Shorten Route 15 to allow it to remain on-time and maintain a 60-minute round-trip cycle.
  - Enter and exit downtown Grand Rapids on Lafayette Ave instead of College Ave to maintain coverage and allow a crosstown transfer on Leonard St between Route 15 and Route 7.
  - Remove service from Knapp St Aldi and Beltline Ave to improve travel times, reduce difficult turning movements, and improve on-time performance.

### **Southeast Grand Rapids/Kentwood**

Southeast Grand Rapids contains four of the six highest ridership routes in The Rapid system. This area would see some of the greatest increases in service frequency, providing all-day 15-minute or better service along the Division Ave, Eastern Ave, and Kalamazoo Ave corridors. In this scenario, there would be no east-west service across Wealthy St. While this segment would no longer have direct access to transit, the all-day quality of transit within ¼ mile of the existing service would be greatly improved.

### Route 1

Route 1 is among the highest ridership routes in the system but also has the worst on-time performance. Recommendations are intended to improve on-time performance, provide more complementary service with the Silver Line, and extend to serve new high demand destination. These recommendations include:

- Realign to operate on Madison Ave between Franklin St and Burton St. This would replace service on a high ridership segment currently served by Route 3 and improve on-time performance by no longer operating on a highly congested segment of Division Ave.
- Eliminate loop around 68<sup>th</sup> St to the Clyde Park Ave Meijer. All areas of this loop would continue to be served the Silver Line or Route 10.

- Extend service west along Gezon Pkwy to Metro Health Village. Gezon Pkwy has been identified as a key high growth area, and this change would add service to the area. It would also directly connect southeast Grand Rapids residents directly to more retail opportunities (Target, Walmart, and Meijer) and employment opportunities.
- Existing Route 1 riders north of Burton Street are within a short walk of Silver Line stops.

### Route 2

Multiple changes are suggested to address on-time performance, improve midday frequency, and improve service south of 28<sup>th</sup> St. Key changes include:

- Operating 15-minute service from 6 a.m. to 6 p.m. along the entire route length.
- Eliminating the deviation into the 28<sup>th</sup> St Meijer. While ridership is good at this stop, the impacts of this deviation on speed and reliability are significant.
- Kentwood City Hall would continue to be served by Route 44.
- Extending all trips to the Gaines Meijer via Kalamazoo Avenue.
  - This recommendation presumes that Gaines Township is willing to accommodate the costs of this extension. If an agreement cannot be reached, then Route 2 would terminate closer to 60<sup>th</sup> Street.

### Route 3

Route 3 service would be consolidated with a modified Route 1. Route 3 is among the bottom quarter of routes in terms of ridership, and most of the ridership is north of Burton Street. The restructured Route 1 would continue to serve the highest ridership stops on Madison Ave north of Burton St. Hope Network would be served by Route 4, which as stops less than a quarter mile away. All other stops affected by the consolidation of Route 3 would be within a ½ mile of another route.

### Route 4

Changes to Route 4 are recommended to simplify service, improve midday frequency, and improve reliability, including:

- Operating 15-minute service from 6 a.m. to 6 p.m. along the entire route length.
- Eliminate the directional loop to the Gaines Meijer and serve the Woodfield Apartments on every trip.

## **East Grand Rapids/Kentwood**

### Route 5

Route 5 is a below average ridership route that duplicates many other routes. Route 5 should be consolidated with Route 6 to provide one all-day frequent route connecting downtown Grand Rapids and the Woodland Mall. The highest ridership stops on Fuller Ave and Breton Rd would continue to be served by a restructured Route 2 and Route 6, which would both operate with all-day 15-minute service. Existing passengers on Wealthy Street would need to walk to one of several routes operating every 15-minutes. Direct service would be removed from Hall St, Plymouth Ave, and Boston St, but ridership is low on these segments.

### Route 6

Route's 5 and 6 serve much of the same market. Route 5 should be consolidated with Route 6 to provide frequent, consistent service between the Woodland Mall and downtown Grand Rapids. Key changes include:

- Operating 15-minute service from 6 a.m. to 6 p.m.
- Realigning service to enter Woodland Mall from Breton Ave and 28<sup>th</sup> St instead of Burton St and Beltline Ave. This replaces the segment on Breton Ave currently served by Route 5. Route 24 would continue to serve the Burton Street segment.

### Route 17

Route 17 is the lowest ridership route in the system and would be eliminated and replaced by an agency operated on-demand service zone. This on-demand zone would make hourly connections to Woodland Mall and enable transfers to Route 44 in Kentwood. This approach replaces an underperforming, low ridership fixed-route service and replaces it a more flexible service that is more appropriate to the long setbacks, limited pedestrian network, and variable shift times by the airport and industrial area.

### Route 28

Route 28 would be split into two separate routes, Route 28W and Route 28E, with both routes sharing the Woodland Mall Hub. Route 28W would operate to the west of the Woodland Mall and Route 28E would operate to the east. This split allows the two routes to operate with different frequencies based on difference in demand for transit along the two alignments and more importantly shortens the route, which improves reliability. Recommendations include:

- Route 28W
  - Extend service from the Grandville Library to the Visser Family YMCA.
- Route 28E
  - Remove service from Lake Eastbrook Blvd to provide faster, more direct service.
  - Reduce peak period service to 30-minute frequency, better aligning service with demand.

### Broadmoor/Airport On-Demand Zone

Job access in southeast Kentwood was repeatedly identified as a priority. Given the large setbacks and dispersed employment sites, an on-demand service zone that covers the growing employment cluster along Broadmoor Ave as well as employment near the airport was developed. One or two vehicles would provide this service, and connections would be made with the transfer hub at Woodland Mall and potentially Kentwood City Hall. Additional information and potential service options regarding the Broadmoor/Airport On-Demand Zone may be found in the Sam Schwartz Emerging Mobility Evaluation memo.

### Wyoming/GrandvilleRoute 8

Route 8 is an average ridership route. It currently has 15-minute peak service from the Goodwill to downtown Grand Rapids. The short-turn trips typically underperform. Recommendations include:

- Removing peak period short-turn service to provide all-day 30-minute frequencies along the entire route length.

- Eliminating the deviation into the Grandville Library to provide faster, more reliable service to Rivertown Crossing. This stop would still be within ¼ mile of service.

#### Route 10

Route 10 currently combines with Route 16 to provide all-day 15-minute service on Clyde Park Ave and Grandville Ave between Central Station and Burton St. Recommendations are designed to maintain coverage to several high ridership locations, including:

- Extend Route 10 to serve the 54<sup>th</sup> Street, Division, 68<sup>th</sup> Street, and Clyde Park Avenue loop currently operated by Route 1.

#### Route 16

Route 16 currently combines with Route 10 to provide all-day 15-minute service on Clyde Park Ave and Grandville Ave between Central Station and Burton St. Recommendations are designed to improve ridership potential of Route 16, including:

- Shortening the route to serve Rivertown Crossing, which the travel demand analysis identified as a major destination. A restructured Route 1 would continue to serve Metro Health.
- Passengers on Bryon Center Avenue between 44<sup>th</sup> Street and Gezon Parkway would no longer have service.

#### Route 24

Route 24 is one of the lower performing routes. Several recommendations are made to reduce route duplication and improve ridership potential by adding a major destination to the route. Key changes include:

- Shortening the route within Woodland Mall onto Mall Service Dr to provide faster, more reliable service.
- Extending the alignment in RiverTown Crossings to terminate at Meijer, creating a transfer hub with Routes 8 and 44. Service would be on Ivanrest Avenue between Chicago Drive RiverTown Crossings, which will serve some new apartment complexes

#### Route 44

Route 44 would be largely unchanged in Scenario 1, Recommendations are intended to improve reliability and include:

- Removing service from 44<sup>th</sup> St west of Canal Ave to improve speed and reliability. Traveling through three traffic lights on this segment can significantly travel times.
- Serve the Kenowa Ave Walmart via Canal Ave and Jacob St to reduce conflicts with traffic and delays associated with signalized intersections.

### **On-Demand Zones**

Scenario 1 includes three new on-demand service zones located along the 3 Mile Rd corridor and Walker City Hall, Oak Industrial Dr, and the airport and Broadmoor Ave corridor. These on-demand zones would replace portions of the existing Route 7, Route 14, and Route 17, respectively.

The on-demand microtransit zones are assumed to be agency operated, similar to services currently provided by Capital Metro, LA Metro, Pace Bus, and Denver RTD. The zones would use a single cutaway-style van that would serve same-day trip requests within an established service



boundary while also making scheduled connections with the fixed-route transit network. Passengers would either walk up at a designated transfer point or call for pickup or dropoff. Additional information regarding on-demand service is included in the Emerging Mobility Evaluation memo produced by Sam Schwartz.

**Figure 1 Scenario 1: Frequency Service Summary**

Route	Frequency: AM Peak	Frequency: Midday	Frequency: PM Peak	Frequency: Night	Frequency: Saturday	Frequency: Sunday	Service Span
Silver Line	15	15	15	15-30	30	30	5:00 am - 12:30 am (M-F) 5:30 am - 10:00 pm (Sat) 6:00 am - 7:00 pm (Sun)
Route 1	30	30	30	30-60	30-60	60	4:45 am - 12:45 am (M-F) 5:30 am - 10:30 pm (Sat) 6:30 am - 7:30 pm (Sun)
Route 2	15	15	15	30	30-60	60	4:45 am - 12:45 am (M-F) 5:30 am - 10:00 pm (Sat) 6:30 am - 7:30 pm (Sun)
Route 4	15	15	15	30-60	30-60	60	4:45 am - 1:00 am (M-F) 5:30 am - 10:00 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 6	15	15	15	30-60	30-60	60	4:30 am - 12:45 am (M-F) 5:30 am - 10:30 pm (Sat) 6:30 am - 6:30 pm (Sun)
Route 7	30	30	30	30-60	60	60	4:45 am - 12:15 pm (M-F) 5:30 am - 9:45 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 8	30	30	30	30-60	60	60	5:00 am - 12:00 am (M-F) 6:00 am - 10:00 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 9	15	15	15	30	30-60	60	4:30 am - 12:45 am (M-F) 5:00 am - 10:30 pm (Sat) 6:30 am - 7:15 pm (Sun)
Route 10	30	30	30	60	60	60	5:00 am - 11:30 pm (M-F) 5:30 am - 10:00 pm (Sat) 8:00 am - 7:00 pm (Sun)
Route 11	15	15	15	30	30	60	5:15 am - 12:30 am (M-F) 5:30 am - 10:00 pm (Sat) 6:45 am - 7:00 pm (Sun)
Route 14	30	30	30	60	60	-	5:15 am - 11:45 pm (M-F) 5:45 am - 10:00 pm (Sat)
Route 15	30	30	30	30-60	60	60	4:45 am - 11:45 pm (M-F) 6:00 am - 10:00 pm (Sat) 6:30 am - 7:15 pm (Sun)
Route 16	30	30	30	60	60	60	5:00 am - 11:30 pm (M-F) 5:30 am - 10:00 pm (Sat) 8:00 am - 7:00 pm (Sun)

Route	Frequency: AM Peak	Frequency: Midday	Frequency: PM Peak	Frequency: Night	Frequency: Saturday	Frequency: Sunday	Service Span
Route 18	30	30	30	60	30-60	-	5:00 am - 11:45 pm (M-F) 6:00 am - 10:00 pm (Sat)
Route 19	15	15	10	15-20	-	-	5:45 am - 10:15 pm (M-F)
Route 24	30	30	30	60	60	-	5:30 am - 12:00 am (M-F) 5:45 am - 10:45 pm (Sat)
Route 28W	30	15-30	15	30	30-60	60	5:30 am - 12:30 am (M-F) 6:45 am - 10:30 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 28E	30	30	30	30	30-60	60	5:30 am - 12:30 am (M-F) 6:45 am - 10:30 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 44	30	30	30	30-60	60	-	5:30 am - 12:30 am (M-F) 6:45 am - 10:15 pm (Sat)
Broadmoor / GRR On- Demand	On-Demand (One or Two Vehicles)				-	-	6:00 am - 12:00 am (M-F)
Walker On- Demand	On-Demand (One or Two Vehicles)				-	-	6:00 am - 10:00 am (M-F); 2:00pm - 6:00 pm (M-F)
Oak Industrial On- Demand	On-Demand (One Vehicle)				-	-	6:00 am - 9:00 am (M-F); 3:00pm - 6:00 pm (M-F)

## Scenario 2: Coverage

This scenario eliminates or reduces service on underperforming routes and reallocates resources to provide all day 15-minute service on key routes in the system and develop new crosstown services. A common theme emerging from staff interviews and Phase I outreach was a desire for more crosstown service that did not require transfers at Central Station. This scenario provides these new services establishes a core network of high frequency services. Scenario 2 aligns with priorities identified by stakeholders and The Rapid staff members, as well as, the guiding principles established by board members.

In Scenario 2, all-day 15-minute service would be provided on the Silver Line and Routes 2, 4, 6, 9, 10, 19, and 28. Detailed service span and frequency information is shown in Figure 2.

### Key Changes

#### Downtown Grand Rapids

In downtown Grand Rapids, service is spread across multiple corridors on one-way couplets. This approach increases conflicts with traffic, complicates service, and worsens on-time performance. In Scenario 2, routes are concentrated onto a few key corridors to enter and exit downtown, including Monroe Ave, Fulton St, and Cherry St. Concentrating service on a few corridors will improve system legibility, allow for enhanced capital facilities, leverage existing and potential bus lanes, and improve on-time performance in the most congested part of the service area.

#### *Silver Line*

The Silver Line's schedule is changing in May 2020 in an effort to improve midday frequency from 20-minute service to 15-minute service. In addition, running time is being added throughout the schedule to improve on-time performance. No further recommendations are made.

#### *Route 19*

Route 19 has high ridership during peak times, but also suffers from poor on-time performance as well. Route 19 recommendations are designed to improve on-time performance and include:

- Extend route further west across the Michigan St Bridge, terminating at Bridge St and Covell Ave. This new alignment would provide a high frequency connection between the Union High School, north downtown, and the Plymouth Park-and-Ride.
- Extend route further east on select trips during the morning and afternoon peak periods to provide service to the Oak Industrial Dr corridor.
- Remove deviation off Michigan St into Spectrum Health to provide faster service and improve on-time performance. Peak overlay service by Spectrum Health shuttles, or those short-turning at Spectrum Health, would continue to make the deviation.
- Add weekend service between 6 a.m. and 10 p.m. on Saturday and between 6 a.m. and 7 p.m. on Sunday.

## **West Grand Rapids and Walker**

### Route 7

Route 7 has low ridership along much of its alignment but operates with high frequency during peak periods. Route 7 recommendations are designed to better align frequency with demand and connect east and west Grand Rapids along Leonard Street. Major changes include:

- Reduce peak period service frequency to 30-minutes to more efficiently allocate agency resources.
- Revise route to combine much of the alignment of the existing Route 7 and Route 15. Route 7 would now connect the Standale Meijer, senior home and apartments on Remembrance Rd, Knapp St Meijer and Aldi, and Beltline Ave Priority Health.
- This crosstown route emerged as a theme during public outreach and operator interviews and directly connects multiple high ridership destinations across the service area.
- Patrons wishing to travel to downtown would need to do so via transfers to Route 9, DASH, Route 11/15, which all operate every 15 minutes throughout the day.

### Route 12

In August 2020, a significant portion of Route 12's alignment will be duplicated by the Laker Line. With the exception of the Collindale Avenue stop, high ridership Route 12 stops are within walking distance of the Laker Line, and customers will walk to more frequent service. Rather than continue providing an underperforming local service, Route 12 should be consolidated with the Laker Line. A restructured Route 18 would cover the higher ridership segments of Bridge Street and the Collindale Avenue stop.

### Route 18

Route 18 provides coverage service on the west side of Grand Rapids and directly serves Union High School. With the exception of the high school stops, the western portion of the route underperforms. Recommendations would provide service to those areas most using Route 18:

- Remove service north of Bridge St on Stocking Avenue to provide faster, more direct service to Union High School, and cover portions of Route 12 that have ridership.
- Extend Route 18 to serve Collindale Avenue

### Walker On-Demand Zone

Job access in Walker was repeatedly identified as a priority. Given the large setbacks and dispersed employment sites, an on-demand service zone that covers both Three Mile Road and future employment growth areas north of I-96 was developed. The Walker On-Demand zone also replaces existing Route 7 service at Walker City Hall. One or two vehicles would provide this service, and connections would be made with Route 9 at Meijer on Alpine Avenue and potentially with Route 7 and Laker Line at the Standale Meijer. Additional information and potential service options regarding the Walker On-Demand Zone may be found in the Sam Schwartz Emerging Mobility Evaluation memo.

## **North Grand Rapids**

### Route 9

Route 9 is among the highest ridership routes in the system. The route's alignment would be unchanged. Recommendations are designed to improve all-day service frequency and make the service easier to understand for riders and include:

- Operate 15-minute service from 6 a.m. to 6 p.m. along the entire route length. There would no longer be short-turns.
- Latent demand analysis shows demand for more frequent all-day service on the entirety of Route 9. This recommendation presumes that Alpine Township will accommodate additional service on Route 9. If agreements with Alpine Township cannot be reached, then the more frequent 15-minute all-day service would operate from the Alpine Meijer to downtown only. Service north of the Meijer would continue at today's service levels.

### Route 11

Route 11 serves numerous high ridership stops on Plainfield Ave south of Knapp St and terminates just south of Plainfield Township. A common theme emerging from public outreach was a desire to extend Route 11 further north to Plainfield Township to reach the Meijer. Recommendations for Route 11 are designed to improve on-time performance, and extend service to desired passenger destinations:

- Realign from Lafayette Ave onto Monroe Ave to avoid the congestion on Michigan Ave and improve on-time performance.
- Operate all-day service at a 30-minute frequency. A restructured Route 15 will operate on an identical alignment as Route 11 south of Knapp Street. Between Route 15 and Route 11, Plainfield Road will have all-day 15-minute service.
- Operate 30-minute service on a large loop along 3 Mile Rd, Monroe Ave, Park St, Coit Ave, 4 Mile Rd and Plainfield Ave, providing service to the Home for Veterans, North Town Shopping Center, Northlake Village Co-Op and Lake Forest Apartments. Route 11 would replace Route 13 service to the Home for Veterans. This loop does not extend into Plainfield township.

### Route 13

Route 13 is a relatively low ridership route, providing coverage service through north Grand Rapids and terminating at the Home for Veterans. Route 13 would be consolidated with a restructured Route 11, Route 14 and Route 6. Service removed from Fuller Ave, south of Knapp St, would continue to be within 1/2 mile of service.

### Route 14

Route 14 has low ridership and is primarily a coverage route on its eastern segments. Ridership to Oak Industrial Dr is highly dependent on the time of day. Route 14 is completely restructured to replace portions of Route 11 and Route 15 service:

- Replace Route 11 on between Leonard Street and Central Station via Lafayette.
- Replace Route 15 service on Leonard Street between College Ave and Plymouth Ave so patrons on this segment continue to have direct service to Central Station.
- Service on the highest ridership segments on Fulton St would be replaced by a restructured Route 6.

- The peak-only extensions on Route 19 to Oak Industrial Dr. will replace Route 14 to this employment area.

#### Route 15

Route 15 is an average ridership route that operates with high frequencies during peak periods. Route 15 would be restructured to complement changes made to Route 7 and Route 14. Recommendations include:

- Route 15 would be realigned to operate on the same alignment as Route 11 south of Knapp St, providing all-day 15-minute frequency on the highest ridership segments of Plainfield Ave in combination with the revised Route 11.
- Extend alignment on Knapp St to the Knapp St Meijer. This would serve some higher ridership stops on the restructured Route 13 and also continue to provide all-day service between Central Station and Knapps Corner.

### **Southeast Grand Rapids/Kentwood**

Several routes in Southeast Grand Rapids are consolidated so that four of the five routes serving the area operate at all-day frequencies of 15-minutes. Frequency improvements would occur along the Division Ave, Eastern Ave, and Kalamazoo Ave corridors. Most of southeast Grand Rapids would have access to very frequent, all-day service.

#### Route 1

Route 1 is among the highest ridership routes in the system but also has the worst on-time performance. Recommendations are intended to improve on-time performance and provide more complementary service with the Silver Line. These recommendations include:

- Realign to operate on Madison Ave between Franklin St and Burton St. This would replace service on a high ridership segment currently served by Route 3 and improve on-time performance by no longer operating on a highly congested segment of Division Ave.

#### Route 2

Multiple changes are suggested to address on-time performance, improve midday frequency, and improve service south of 28<sup>th</sup> St. Key changes include:

- Operating 15-minute service from 6 a.m. to 6 p.m. along the entire route length.
- Extending all trips to the Gaines Meijer via Kalamazoo Avenue.
  - This recommendation presumes that Gaines Township is willing to accommodate the costs of this extension. If an agreement cannot be reached, then Route 2 would terminate closer to 60<sup>th</sup> Street.
- Eliminating the deviation into the 28<sup>th</sup> St Meijer. While ridership is good at this stop, the impacts of this deviation on speed and reliability are significant.
- Kentwood City Hall would continue to be served by Route 44.

#### Route 3

Route 3 service would be consolidated with a modified Route 1. Route 3 is among the bottom quarter of routes in terms of ridership, and most of the ridership is north of Burton Street. The restructured Route 1 would continue to serve the highest ridership stops on Madison Ave north of Burton St. Hope Network would be served by Route 4, which as stops less than a quarter mile

away. All other stops affected by the consolidation of Route 3 would be within a ½ mile of another route.

#### Route 4

Changes to Route 4 are recommended to simplify service, improve midday frequency, and improve reliability, including:

- Operating 15-minute service from 6 a.m. to 6 p.m. along the entire route length.
- Eliminate the directional loop to the Gaines Meijer and end the route at the Woodfield Apartments

#### Broadmoor/Airport On-Demand Zone

Job access in southeast Kentwood was repeatedly identified as a priority. Given the large setbacks and dispersed employment sites, an on-demand service zone that covers the growing employment cluster along Broadmoor Ave as well as employment near the airport was developed. One or two vehicles would provide this service, and connections would be made with the transfer hub at Woodland Mall and potentially Kentwood City Hall. Additional information and potential service options regarding the Broadmoor/Airport On-Demand Zone may be found in the Sam Schwartz Emerging Mobility Evaluation memo.

### **East Grand Rapids**

#### Route 5

Route 5 is a below average ridership route that duplicates many other routes. Route 5 should be consolidated with Route 6 to provide one all-day frequent route connecting downtown Grand Rapids and the Woodland Mall. The highest ridership stops on Wealthy St, Fuller Ave, and Breton Rd would continue to be served by a restructured Route 2 and Route 6, which would both operate with all-day 15-minute service. Direct service would be removed from Hall St, Plymouth Ave, and Boston St, but ridership is low on these segments.

#### Route 6

Route's 5 and 6 serve much of the same market. Route 5 should be consolidated with Route 6 to provide frequent, consistent service between the Woodland Mall and downtown Grand Rapids. Key changes include:

- Operating 15-minute service from 6 a.m. to 6 p.m.
- Realigning the downtown service to Central Station to use Fulton Street instead of Lyon and Fountain Streets. This will improve speed and reliability for the service, while still maintaining access for the majority of patrons destined to downtown.
- Delete the deviation into Raybrook Avenue. Most riders would still be within walking distance of the stops on Burton and northbound buses would not need to make a multiple time-consuming turns from Beltline Avenue.

#### Route 17

Route 17 is the lowest ridership route in the system and would be eliminated and replaced by an agency operated on-demand service zone. This on-demand zone would make hourly connections to Woodland Mall and enable transfers to Route 44 in Kentwood. This approach replaces an underperforming, low ridership fixed-route service and replaces it a more flexible service that is more appropriate to the long setbacks, limited pedestrian network, and variable shift times by the airport and industrial area.



### Route 28

Route 28 would be split into two separate routes, Route 28W and Route 28E, with both routes sharing the Woodland Mall Hub. Route 28W would operate to the west of the Woodland Mall and Route 28E would operate to the east. This split allows the two routes to operate with different frequencies based on difference in demand for transit along the two alignments and more importantly shortens the route, which improves reliability. Recommendations include:

- Route 28E
  - Remove service from Lake Eastbrook Blvd to provide faster, more direct service.
  - Remove Acquest loop. Route 28E would Remain on 28<sup>th</sup> St and continue serving the Cascade Meijer
  - Reduce peak period service to 30-minute frequency, better aligning service with demand.

## **Wyoming/Grandville**

### Route 8

Route 8 is an average ridership route. It currently has 15-minute peak service from the Goodwill to downtown Grand Rapids. The short-turn trips typically underperform. Recommendations include:

- Removing peak period short-turn service to provide all-day 30-minute frequencies along the entire route length.
- Removing service from Grandville Library and realigning service to Ivanrest Ave to provide faster, more reliable service and serve a new high growth corridor.

### Route 10

Route 10 currently combines with Route 16 to provide all-day 15-minute service on Clyde Park Ave and Grandville Ave between Central Station and Burton St. Recommendations are designed to expand this high frequency service and extend the route to additional high ridership locations, including:

- Operating 15-minute service from 6 a.m. to 6 p.m. along the entire route length.
- Remove deviation into 54<sup>th</sup> St Meijer, improving travel times and reliability. The stop would still be within ¼ mile walking distance from Route 10 and be directly served by Route 1.
- Extend service west along Gezon Pkwy to Metro Health Village. Gezon Pkwy has been identified as a key high growth area, this change would add service to the area and improve the quality of service to Metro Health Village.

### Route 16

Route 16 would be removed from service and partially replaced by Route 10 and Route 24. The existing shared alignment of Route 16 and Route 10 would continue to operate with all-day 15-minute frequency provided by Route 10. The alignment of Route 16 between Burton St and 44<sup>th</sup> St would continue to be served by Route 24, operating every 30 minutes all-day. Only the segment of Byron Center Ave between 44<sup>th</sup> St and 56<sup>th</sup> St would no longer have service.

### Route 24

Route 24 is one of the lower performing routes. Several recommendations are made to reduce route duplication and improve ridership potential by adding a major destination to the route. Key changes include:

- Shortening the route within Woodland Mall onto Mall Service Dr to provide faster, more reliable service.
- Realigning the route between Cleveland Ave & Burton St and Byron Center Ave & 44<sup>th</sup> St to operate on the same alignment as the existing Route 16.
- Extending the alignment in RiverTown Crossings to terminate at Meijer, creating a transfer hub with Routes 8 and 44.
- Removing service from the low ridership industrial areas along Porter St and Chicago Dr.

### Route 28

Route 28 is the highest ridership crosstown route in the system. Multiple changes are suggested to expand service to new high ridership locations and provide greater flexibility for scheduling.

Route 28 would be split into two separate routes, Route 28W and Route 28E, with both routes sharing the Woodland Mall Hub. Route 28W would operate to the west of the Woodland Mall and Route 28E would operate to the east. This split allows the two routes to operate with different frequencies based on difference in demand for transit along the two alignments and more importantly shortens the route, which improves reliability. Other recommendations include:

- Route 28W: Operating 15-minute service from 6 a.m. to 6 p.m. along the entire route length.
- Route 28E: Extend service further west to the Visser Family YMCA

### Route 44

Route 44 would be largely unchanged in Scenario 2. Recommendations are intended to improve reliability and include:

- Removing the deviation onto Canal Ave to improve speed and reliability.
- Realigning service to Kentwood City Hall to provide faster, more reliable service. Route 44 would now provide north-south service on Shaffer Ave instead Breton Rd, allowing the route to serve the Kentwood City Hall deviation in both directions, instead of making an out of direction loop on 44<sup>th</sup> St.

## **On-Demand Zones**

Scenario 2 includes two new on-demand service zones located along the 3 Mile Rd corridor and Walker City Hall and the airport and Broadmoor Ave corridor. These on-demand zones would replace portions of the existing Route 7 and Route 17.

The on-demand microtransit zones are assumed to be agency operated, similar to services currently provided by Capital Metro, LA Metro, Pace Bus, and Denver RTD. The zones would use a single cutaway-style van that would serve same-day trip requests within an established service boundary while also making scheduled connections with the fixed-route transit network. Passengers would either walk up at a designated transfer point or call for pickup or dropoff.

Additional information regarding on-demand service is included in the Emerging Mobility Evaluation memo produced by Sam Schwartz.



**Figure 2 Scenario 2: Crosstown Service Summary**

Route	Frequency: AM Peak	Frequency: Midday	Frequency: PM Peak	Frequency: Night	Frequency: Saturday	Frequency: Sunday	Service Span
Silver Line	15	15	15	15 - 30	30	30	4:30 am - 12:30 am (M-F) 5:30 am - 10:00 pm (Sat) 6:00 am - 7:00 pm (Sun)
Route 1	30	30	30	30 - 60	30 – 60	30 - 60	4:30 am - 12:30 am (M-F) 5:30 am - 10:30 pm (Sat) 6:30 am - 7:30 pm (Sun)
Route 2	15	15	15	30	30 – 60	60	4:30 am - 12:30 am (M-F) 5:30 am - 10:00 pm (Sat) 6:00 am - 7:00 pm (Sun)
Route 4	15	15	15	30	30 – 60	60	4:30 am - 1:00 am (M-F) 5:30 am - 10:00 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 6	15	15	15	30 - 60	30 – 60	60	4:30 am - 12:30 am (M-F) 5:30 am - 10:30 pm (Sat) 6:30 am - 6:30 pm (Sun)
Route 7	30	30	30	30 - 60	60	60	5:00 am - 11:30 pm (M-F) 5:30 am - 9:30 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 8	30	30	30	30 - 60	60	60	5:00 am - 12:00 am (M-F) 6:00 am - 9:30 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 9	15	15	15	30	30 – 60	60	4:30 am - 12:30 am (M-F) 5:00 am - 10:30 pm (Sat) 6:30 am - 7:00 pm (Sun)
Route 10	15	15	15	30	30	60	5:00 am - 11:30 pm (M-F) 5:30 am - 10:00 pm (Sat) 8:00 am - 7:00 pm (Sun)
Route 11	30	30	30	60	60	60	5:00 am - 12:00 am (M-F) 5:30 am - 10:00 pm (Sat) 6:30 am - 7:30 pm (Sun)
Route 14	30	30	30	60	60	-	5:00 am - 11:30 pm (M-F) 6:00 am - 10:00 pm (Sat)
Route 15	30	30	30	60	60	60	5:30 am - 12:00 am (M-F) 6:00 am - 10:00 pm (Sat) 6:30 am - 7:30 pm (Sun)
Route 18	30	30	30	60	60	-	5:00 am - 11:30 pm (M-F) 6:00 am - 10:00 pm (Sat)

Route	Frequency: AM Peak	Frequency: Midday	Frequency: PM Peak	Frequency: Night	Frequency: Saturday	Frequency: Sunday	Service Span
Route 19	15	15	10	15	60	60	5:30 am - 10:00 pm (M-F) 6:00 am - 10:00 pm (Sat) 6:00 am - 7:00 pm (Sun)
Route 24	30	30	30	60	60	-	5:00 am - 12:00 am (M-F) 6:00 am - 11:00 pm (Sat)
Route 28W	15	15	15	30	30 - 60	60	5:30 am - 12:30 am (M-F) 6:30 am - 10:30 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 28E	30	30	30	30 - 60	60	60	5:30 am - 12:00 am (M-F) 6:30 am - 10:30 pm (Sat) 7:00 am - 7:00 pm (Sun)
Route 44	30	30	30	30 - 60	60	-	5:00 am - 12:30 am (M-F) 5:30 am - 10:00 pm (Sat)
Broadmoor / GRR On-Demand	On-Demand (One or Two Vehicles)				-	-	6:00 am - 12:00 am (M-F)
Walker On-Demand	On-Demand (One or Two Vehicles)				-	-	6:00 am - 10:00 am (M-F); 2:00pm - 6:00 pm (M-F)

## Scenario 3: Weekend

Scenario 3 maintains 15-minute service during the peak periods on high ridership corridors, reduces service on underperforming routes, and reallocates resources to improve frequency and service span on weekend service. Improving weekend frequency and service span emerged as the highest priorities from the Design Your Transit System survey in Phase I outreach. This scenario aligns with these public priorities and presents the tradeoffs that would be required to improve weekend service.

In Scenario 3, Saturday service would be provided on 90% of routes and Sunday service would be provided on 67% of routes, an increase from 57% in the existing system. Scenario 3 would also significantly extend Sunday service span, operating consistently between 6:00 am and 10:00 pm on 11 routes and between 6:00 am and 7:00 pm on three routes. Weekend frequency would also be improved on eight routes. Detailed information on proposed frequency and service span is shown in Figure 3.

### Key Changes

#### Downtown Grand Rapids

In downtown Grand Rapids, service is spread across multiple corridors on one-way couplets. This approach increases conflicts with traffic, complicates service, and worsens on-time performance. In Scenario 2, routes are concentrated onto a few key corridors to enter and exit downtown, including Monroe Ave, Fulton St, and Cherry St. Concentrating service on a few corridors will improve system legibility, allow for enhanced capital facilities, leverage existing and potential bus lanes, and improve on-time performance in the most congested part of the service area.

#### The Silver Line

The Silver Line's schedule is changing in May 2020 in an effort to improve midday frequency from 20-minute service to 15-minute service. In addition, running time is being added throughout the schedule to improve on-time performance. Additional recommendations to improve service include:

- Expand Sunday service span to operate between 6 a.m. and 10 p.m.

#### Route 19

Route 19 has high ridership during peak times, but also suffers from poor on-time performance as well. Route 19 recommendations are designed to improve on-time performance and include:

- Add running time into the schedule to more accurately reflect the operating environment and improve on-time performance.

#### West Grand Rapids and Walker

The proposed service changes in West Grand Rapids and Walker eliminate or reduce service on some of the most underperforming routes in the system. Service alignments are revised to maximize coverage in the highest ridership locations in the area, better align frequency with demand, fill a key accessibility gap in the Laker Line, and provide an alternative fixed-route option to serve Walker City Hall.

### Route 7

Route 7 has low ridership but operates with high frequency during peak periods. Route 7 recommendations are designed to better align frequency with demand and focus on serving the highest ridership destinations along the alignment, including:

- Reduce peak period service frequency to 30-minutes and midday frequency to 60-minutes to better align with demand and reallocate resources to provide weekend service.
- Realign to serve the Grand Valley State University (GVSU) Pew Campus park-and-ride lots currently served by Route 18. These are relatively high ridership locations which would continue to have direct transit access into downtown Grand Rapids.
- Provide north-south service on Seward Ave, east-west service on Leonard St, north-south service on Wilson Ave, and terminate at the Standale Meijer.

### Route 12

Following implementation of the Laker Line, a key gap in the Lake Michigan Dr corridor would continue to be filled by Route 12. The recommendations for Route 12 are designed to fill in the gaps of the Laker Line, maintain coverage in west Grand Rapids, and align frequency with demand. Specific recommendations include:

- Operating on Lake Michigan Dr instead of Fulton St to reduce unnecessary duplication with the Laker Line while continuing to provide direct service to Union High School.
- Providing a stop at Collindale Ave & Lake Michigan Dr to serve the Marsh Ridge Senior Community and extending the alignment north on Colindale Ave, Leonard St, and Remembrance Rd to continue providing fixed-route service to Walker City Hall.
- Reduce peak period service frequency to 30-minutes and midday frequency to 60-minutes to better align with demand and reallocate resources to provide weekend service.

### Route 18

In Scenario 3, Route 18 would be consolidated with the Laker Line and the revised alignment of Route 7 and Route 12. Route 18 was the second lowest ridership route in The Rapid system. This proposed change would continue to serve the higher ridership areas of Route 18 and reallocate the resources to improve weekend service throughout the system.

## **North Grand Rapids**

### Route 9

Route 9 is among the highest ridership routes in the system. The route's alignment would be unchanged. Recommendations are designed to improve weekend service and make the service easier to understand for riders and include:

- Remove short-turn service during peak periods to make the route easier to understand for passengers.
- Latent demand analysis shows demand for more frequent all-day service on the entirety of Route 9. This recommendation presumes that Alpine Township will accommodate additional service on Route 9. If agreements with Alpine Township cannot be reached, then the more frequent 15-minute all-day service would operate from the Alpine Meijer to downtown only. Service north of the Meijer would continue at today's service levels.

- Expand Sunday service span to operate from 6 a.m. to 10 p.m.
- Improve Saturday frequency to operate every 30 minutes during the midday period.

#### Route 11

Route 11 serves numerous high ridership stops on Plainfield Ave south of Knapp St and terminates just south of Plainfield Township. The alignment of Route 11 would be relatively unchanged in Scenario 3, entering and exiting downtown Grand Rapids on Monroe Ave but continuing to provide service on Lafayette Ave. Recommendations for Route 11 are designed to improve weekend service and include:

- Expand Sunday service span to operate from 6 a.m. to 10 p.m.
- Improve Saturday frequency to operate every 30 minutes during the midday period.

#### Route 13

The frequency, and service span of Route 13 would be unchanged in Scenario 3. Alignment would be adjusted to operate on Ottawa Ave, Fulton St, Monroe Ave, and Michigan St to consolidate routes onto select corridors downtown.

#### Route 14

Route 14 has low ridership and is primarily a coverage route providing service to Oak Industrial Dr, Kent County Jail, and several large apartment complexes. Recommendations include:

- Realigning service to continue serving the high ridership stop at Oak Industrial Dr and Maryland Ave, but no longer operate east-west service on Oak Industrial Dr. This would provide faster, more reliable service while still serving the highest ridership stops on the route.

#### Route 15

Route 15 is an average ridership route that operates with high frequencies during peak periods. Recommendations are designed to better align frequency with demand, provide faster, more reliable service, and improve weekend service. Recommendations include:

- Expand Sunday service span to operate from 6 a.m. to 10 p.m.
- Improve Saturday frequency to operate every 30 minutes during the midday period.
- Align service frequency with observed demand by reducing peak frequency to every 30-minutes.
- Remove service from Knapp St Aldi and Beltline Ave to improve travel times, reduce difficult turning movements, and improve on-time performance.

### **Southeast Grand Rapids/Kentwood**

The changes in Southeast Grand Rapids address underperforming service, maintain geographic coverage in high ridership areas and neighborhoods of focus, continue to provide high frequency service during the peak period, and improve weekend frequency and service span. These changes align with the results of extensive data analysis, public priorities identified in Phase I outreach, and the guiding principles established by The Rapid board members.



### Route 1

Route 1 is among the highest ridership routes in the system and its alignment would be unchanged. Recommendations are intended to expand and improve weekend service. These recommendations include:

- Expand Sunday service span to operate from 6 a.m. to 10 p.m.
- Continue operating service every 30-minutes all-day on Saturday and Sunday.

### Route 2

Multiple changes are suggested to address on-time performance, improve weekend service, and improve service south of 28<sup>th</sup> St. Key changes include:

- Remove short turns and operate 15-minute service along the entire route length during peak periods.
- Extending all trips to the Gaines Meijer via Kalamazoo Avenue.
  - This recommendation presumes that Gaines Township is willing to accommodate the costs of this extension. If an agreement cannot be reached, then Route 2 would terminate closer to 60<sup>th</sup> Street.
- Providing 30-minute service all-day on Saturday and Sunday.
- Kentwood City Hall would continue to be served by Route 44.
- Eliminating the deviation into the 28<sup>th</sup> St Meijer. While ridership is good at this stop, the impacts of this deviation on speed and reliability are significant.
- Realign to operate on Madison Ave between Franklin St and Burton St. This would replace service on a high ridership segment currently served by Route 3.
- A restructured Route 5 would serve Franklin Street

### Route 3

In Scenario 3, Route 3 would be consolidated with the revised Route 2. Route 3 is among the bottom quarter of routes in terms of ridership. The highest ridership stops served by Route 3, on Madison Ave north of Burton St, would continue to be served by Route 2. All stops removed from Route 3 would be within a ½ mile of service.

### Route 4

Changes to Route 4 are recommended to improve on-time performance and improve weekend frequency, including:

- Expand Sunday service span to operate from 6 a.m. to 10 p.m.
- Improve Saturday frequency to 30-minutes all day, and Sunday frequency to 30-minutes during the midday period.
- Eliminate the directional loop to the Gaines Meijer and serve the Woodfield Apartments on every trip.
- Remove short turns and operate 15-minute service along the entire route length during peak periods.

## **East Grand Rapids**

Service changes in and around East Grand Rapids are relatively small compared to other parts of the service area. These changes were made to provide more flexibility in scheduling, better match

service with demand and ensure adequate coverage in neighborhoods of focus. These changes align with priorities identified during stakeholder outreach.

#### Route 5

Route 5 is a below average ridership route that provides coverage through several neighborhoods of focus in Grand Rapids but is also underperforming. Recommendations are designed to improve weekend service and better align frequency with demand, including:

- Adding Sunday service between 8 a.m. and 7 p.m.
- Realign route to provide service on Franklin St, Kalamazoo Ave, and Fuller Ave, filling a gap left by the revised alignment of Route 2.
- Remove short turns and reduce peak period frequency to 30-minutes along the entire route length.
- Remove service to the industrial area east of Patterson Ave, which will continue to be served by a restructured Route 17.

#### Route 6

Route 6 would be mostly unchanged, with recommendations suggested to improve Sunday service and emphasize service on high ridership segments. Key changes include:

- Expand Sunday service span to 6 a.m. to 10 p.m.
- Realigned on Wealthy instead of Lake Dr, to continue serving the high ridership segment on Wealthy currently served by Route 5. All areas of Lake Dr currently served would be with a ¼ mile walk of another.
- Realigning service to enter Woodland Mall from Breton Ave and 28<sup>th</sup> St instead of Burton St and Beltline Ave. This replaces the segment on Breton Ave currently served by Route 5.

#### Route 17

Route 17 is the lowest ridership route in the system, but continues to serve a few key locations, including the airport and industrial areas adjacent to Broadmoor Ave. Recommendations are designed to align frequency with demand and provide adequate coverage in the area, including:

- Reduce service frequency to every 60-minutes to better align with demand.
- Realign the route to provide service on Patterson Ave, 33<sup>rd</sup> St, and 36<sup>th</sup> St to continue serving the moderately high ridership stops currently served by Route 5.

#### Route 28

In this scenario, Route 28 would be split into two separate routes, Route 28W and Route 28E. Route 28W would operate to the west of the Woodland Mall and Route 28E would operate to the east. This split allows the two routes to operate with different frequencies based on difference in demand for transit along the two alignments. Recommendations include:

- Route 28W: Remove service from Lake Eastbrook Blvd to provide faster, more direct service.
- Route 28E: Reduce peak period service to 30-minute frequency, better aligning service with demand and allocating additional resources to improve frequency on higher ridership routes.

## **Wyoming/Grandville**

Service changes in southwest Grand Rapids reduce underperforming and duplicative service, maintain geographic coverage and service to high ridership locations, and realign routes to terminate at high ridership destinations, including RiverTown Crossings and Metro Health Village. These changes align with numerous guiding principles and input received during Phase I outreach.

### Route 8

Route 8 is an average ridership route that operates with high frequency during peak periods. Recommendations include:

- Removing peak period short-turn service to provide all-day 30-minute frequencies along the entire route length.
- Removing service from Grandville Library and realigning service to Ivanrest Ave to provide faster, more reliable service and serve a new high growth corridor.
- Shortening the alignment in RiverTown Crossings to terminate at Meijer, creating a transfer hub with Routes 28 and 44.

### Route 10

Route 10 currently combines with Route 16 to provide high-frequency service on Clyde Park Ave and Grandville Ave between Central Station and Burton St. In Scenario 3, Route 16 would be removed and the resources reallocated to improve weekend service. Recommendations are designed improve weekend service on Route 10, including:

- Expand Sunday service span to operate from 6 a.m. to 10 p.m.
- Improve Saturday frequency to operate every 30 minutes during the midday period.

### Route 16

Route 16 would be consolidated by restructured Route 10 and Route 24 service. The alignment of Route 16 between south of Burton St would continue to be served by Route 24, operating every 30 minutes all-day.

### Route 24

Multiple changes are suggested to maintain geographic coverage, improve transfer opportunities, and provide a stronger anchor destination. Key changes include:

- Shortening the route within Woodland Mall onto Mall Service Dr to provide faster, more reliable service.
- Realigning the route to operate on the same alignment as the existing Route 16 south of Burton St, terminating at the high ridership stops in Metro Health Village.
- Removing service from the low ridership industrial areas along Porter St and Chicago Dr.

### Route 28

Route 28 is the highest ridership crosstown route in the system. Multiple changes are suggested to expand service to new high ridership locations, provide greater flexibility for scheduling, and improve Sunday service. Key changes include:

- Expand Sunday service span to operate between 6 a.m. and 10 p.m.
- Improve Sunday frequency to operate every 30-minutes during the midday period.

- Splitting the route into Route 28 and Route 28E to operate routes consistently and better align frequency with demand.
- Remove deviation into Grandville Library to improve speed and reliability.
- Extend service further west to the Visser Family YMCA and down Canal Ave to terminate at RiverTown Crossings.

#### Route 44

The alignment, frequency, and service span of Route 44 would be unchanged in this scenario.

#### **Late Night Service TNC Partnership**

Another key theme emerging from Phase I outreach was the desire for more late-night service, particularly for shift and service workers. In this scenario, a partnership with Transportation Network Companies (TNCs) like Uber and Lyft, and local taxi companies would be explored. This partnership would provide a subsidized ride from these services within ¼ mile of fixed-route services between 10:00 pm and 5:00 am, any day of the week. Providing a subsidy of up to \$6 per trip, the average subsidy for similar existing programs, would cost approximately \$216,000 per year. This scenario takes a conservative approach and assumes an annual cost of \$250,000 per year.

This late night on-demand service partnership takes an innovative approach, identified as a guiding principle by the board, to meet the needs of late-night shift and retail workers who rely on transit.

**Figure 3 Scenario 3: Weekend Service Summary**

Route	Frequency: AM Peak	Frequency: Midday	Frequency: PM Peak	Frequency: Night	Frequency: Saturday	Frequency: Sunday	Service Span
Silver Line	15	15	15	15-30	30	30	5:00 am - 12:30 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 1	30	30	30	30-60	30	30	4:45 am - 12:45 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 2	15	30	15	30	30	30	4:45 am - 12:45 am (M-F) 6:00 am - 10:00 pm (Sat) 6:00 am - 7:00 pm (Sun)
Route 4	15	30	15	30	30	30-60	4:45 am - 1:00 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 5	30	30	30	30-60	60	60	4:30 am - 12:00 am (M-F) 6:00 am - 10:00 pm (Sat) 8:00 am - 7:00 pm (Sun)
Route 6	15	30	15	30-60	30-60	60	4:30 am - 12:00 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 7	30	60	30	60	60	60	5:00 am - 11:00 pm (M-F) 6:00 am - 10:00 pm (Sat) 8:00 am - 7:00 pm (Sun)
Route 8	30	30	30	30	30-60	60	5:00 am - 11:00 pm (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 9	15	30	15	30	30	30-60	4:30 am - 12:30 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 10	30	30	30	60	30-60	60	5:00 am - 11:00 pm (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 11	15	30	15	30	30-60	60	5:00 am - 12:00 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 12	30	60	30	60	60	-	5:00 am - 11:00 pm (M-F) 6:00 am - 10:00 pm (Sat)
Route 13	30	30	30	60	60	-	6:00 am - 11:00 pm (M-F) 6:00 am - 10:00 pm (Sat)

Route	Frequency: AM Peak	Frequency: Midday	Frequency: PM Peak	Frequency: Night	Frequency: Saturday	Frequency: Sunday	Service Span
Route 14	30	30	30	60	60	-	5:30 am - 11:30 pm (M-F) 6:00 am - 10:00 pm (Sat)
Route 15	30	30	30	30-60	30-60	60	4:45 am - 11:45 pm (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 17	60	60	60	60	-	-	6:30 am - 10:30 pm (M-F)
Route 19	15	15	15	15	-	-	5:45 am - 10:15 pm (M-F)
Route 24	30	30	30	60	60	60	5:30 am - 11:00 am (M-F) 6:00 am - 10:00 pm (Sat) 8:00 am - 8:00 pm (Sun)
Route 28W	15	30	15	30	30-60	30-60	5:30 am - 12:30 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 28E	30	30	30	60	30-60	30-60	5:30 am - 12:30 am (M-F) 6:00 am - 10:00 pm (Sat-Sun)
Route 44	30	30	30	60	60	-	5:30 am - 11:30 am (M-F) 6:00 am - 10:00 pm (Sat)
Late Night TNC Subsidy	External Partnership - \$250,000 per year						10:00 pm - 5:00 am