

Proposed Metro Service Changes Slated for August 2013

Last updated 03/13/2013

Metro's current route structure is facing several pressing issues. First, we are struggling to manage an additional 900+ thousand riders that came to the system in a little over a year. Even though ridership is dropping on UW campus routes due to a reduction in service levels, ridership on the rest of the system continues to increase. Second, peak demand has climbed to the point that we are simply out of buses during peak periods. Not only are we out of buses, we are out of space to park buses. As a result, Metro needs to reallocate some peak and even off-peak buses to where they are most needed. We have to look at every trip in the system and decide whether a lightly ridden trip on some route is really necessary—because we could use that bus somewhere else. Routes 2, 9, 14, 15, 28 and 38 are bursting at the seams, and dozens of trips on other routes are very heavily loaded. These larger loads throw schedules off, angering passengers and deterring new customers.

We schedule extra buses to help trips that are overloaded. While this extra bus service is very efficient, targeting just the most problematic parts of problematic trips, their provision does not improve the base schedule; they just enable the existing schedule to work. At some point, Metro has to revisit routes and schedules to try and incorporate "unscheduled" extra trips (to the extent possible) into the base schedule in order to create a more attractive service.

Commonly Used Abbreviations in this Document

STP = South Transfer Point; **WTP** = West Transfer Point; **NTP** = North Transfer Point and **ETP** = East Transfer Point
UHos = UW Hospital & Clinics; **OTH** = On The Hour, such as "Buses will pass this intersection at :20/:50 on-the-hour, meaning 7:20, 7:50, 8:20 and so on. **JenCo** = Jenifer St Corridor, **JoCo** = Johnson/Gorham Corridor.

Route 2 represents the absolute core of Metro's transit system, running from the West to the North Transfer Points, every 30 minutes, 7 days a week. There are several major issues facing the route. First, loads have become so large that the schedule must be supplemented with extra buses 16 times per day—a statement that ignores trips that should be supplemented, or "doubled," but are not because we do not have enough buses to do so. Another problem is that the current schedule has buses passing the UW Hospital and Clinics (**UHos**) at ideal shift times at (roughly) 15/:45 on-the-hour (**OTH**) from both sides of town, which gives employees sufficient time to get to and from buses if their shifts start or end at :00/:30 OTH. It's easy to argue that the route should have 15 minute service on weekdays, but even if we did so, we might still have overloaded buses because of the shift times at the UHos. The 15 minute service option was considered (even if just west of the Capitol Square), but it was simply too expensive given the system's other needs. *[Running buses on the route every 10 minutes, from 7 until 7, from north to west, would actually be an ideal service level when UW classes are in session—but that luxurious service level requires 12 buses in rotation—not the 4 we are using now (supplemented as they are with extra buses assigned to 16 trips).]*

Cheaper options had to be considered, and while there will be 15 minute frequency during rush hours west of the Capitol Square, the route will see other improvements through the use of parallel routes that can be timed to make Route 2 function better, without the large expense.

Redefine the Role of Routes 9 and 10

Currently, Routes 9 and 10 provide off-peak or "midday" services that are designed to provide circulation in the isthmus between the UW Campus and near east side, replacing more costly peak-hour service provided by Routes 28 and 38. Route 9 serves the north side of the isthmus from the East Transfer Point (**ETP**) through the Johnson/Gorham corridor (**JoCo**), to the UW Hospital and Waisman Center. Route 10 serves both sides of the isthmus and provides cross-isthmus circulation.

There are several significant problems with the current service design. First, Route 10 only travels as far west as Randall Avenue. That fact diminishes the route's value and forces transfers for very common trips between the **UHos** and the Jenifer Street corridor (**JenCo**). One seat rides are otherwise available during peak periods on Route 38, so this is a significant issue—at some level, we should be providing that link peak and off-peak until 7:00 pm. Additionally, Route 10 is virtually ignored by passengers in the JoCo because of Route 9's and longer reach, which creates a significant waste

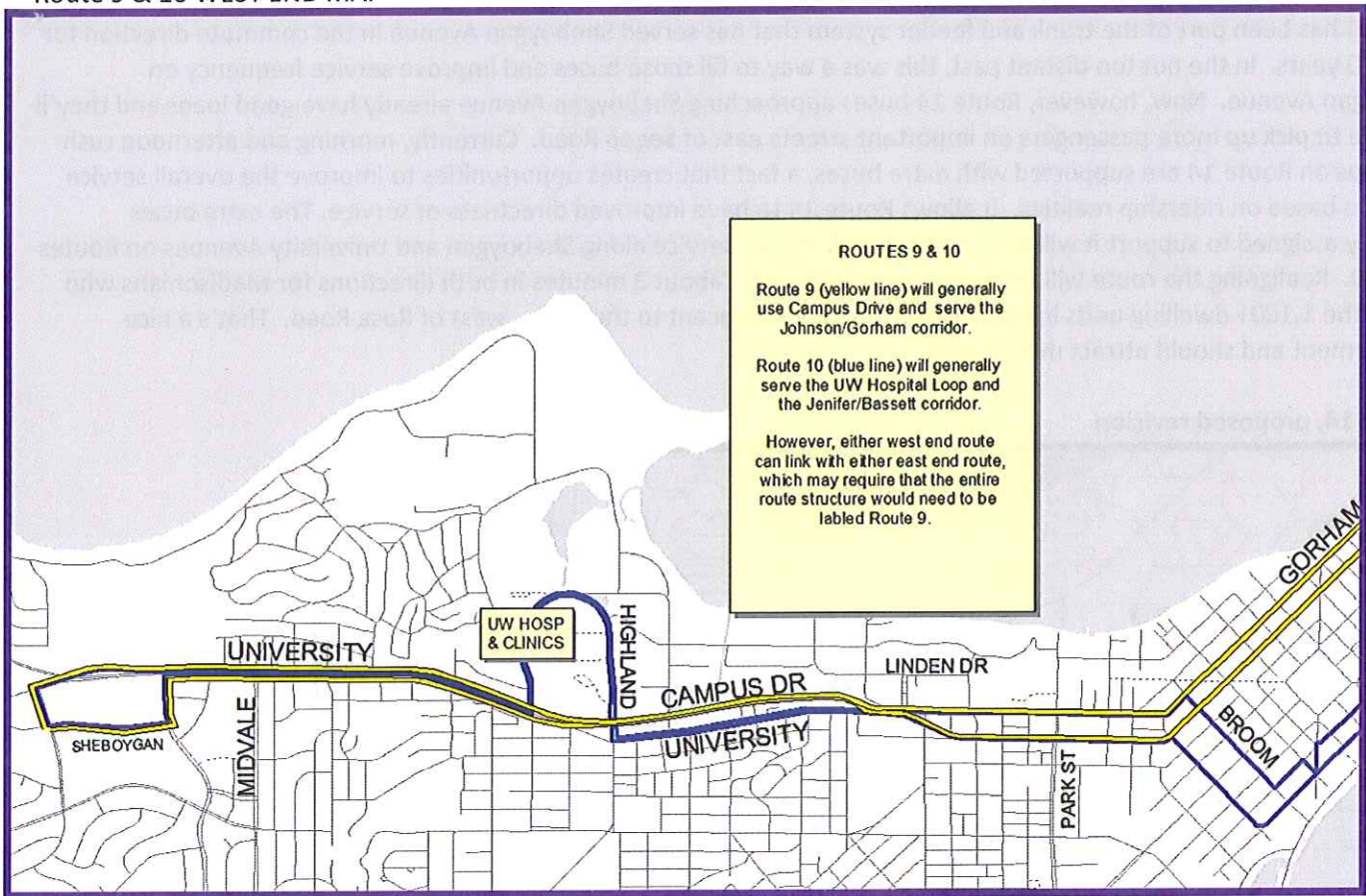
of resources. Lastly, Route 9's visits to the ETP (and connection to Route 33) are underused and are proposed to be abandoned in the face of climbing ridership west of University Bay Drive.

The new route designs respond to these problems as follows:

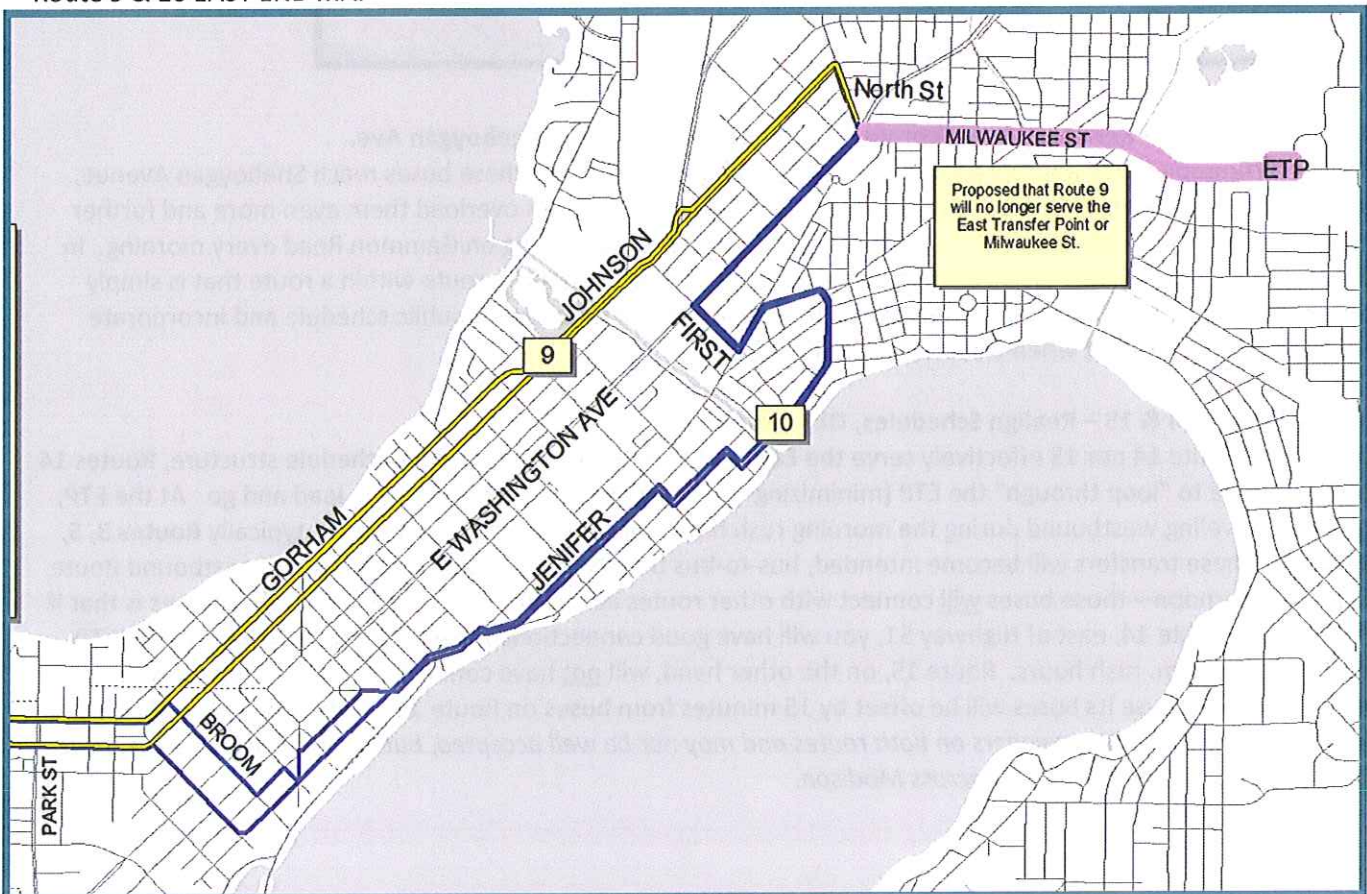
- The entire service structure is shifted west, vacating Route 9's service to the ETP and Route 33. While this may generate negative feedback, it's simply not worth the investment in service hours to duplicate service that is otherwise available on Route 3 and to a lesser extent on Route 5. These service hours are more usefully applied along University and Sheboygan Avenues where heavy loads are common and problematic throughout the day.
- Service duplication between Routes 9 and 10 in the JoCo would be eliminated.
- The one seat peak hour ride on Route 38 from the JenCo to the UHos will be maintained during off-peak periods as the JenCo link will typically serve the UHos using a Route 2 style loop. For the first time, the JenCo side will also see one-seat, midday service to University Avenue, west of Breese Terrace.
- Both sides of the isthmus will see buses reaching Sheboygan Avenue on these routes. While this service is already provided from the JoCo by Route 2, this route will provide a faster alternative, bypassing the square and using Campus Drive. With bus schedules, faster is always cheaper and generally preferred by passengers. The new route and schedule configuration can be tailored to respond to heavy demand in the Highland Avenue loop around the UHos as served by Route 2.
- Lastly, Metro faces significant ridership issues between Bassett and Broom Streets and the UW campus during peak periods. The design of this route will enable trips going east from Sheboygan Avenue to short turn at Broom Street to immediately start loading westbound campus passengers. This becomes a very precise, focused and efficient service design that will be available for use during peak periods as well as off peak periods.

Maps on the following page show the east and west sides of the routes.

Route 9 & 10 WEST END MAP



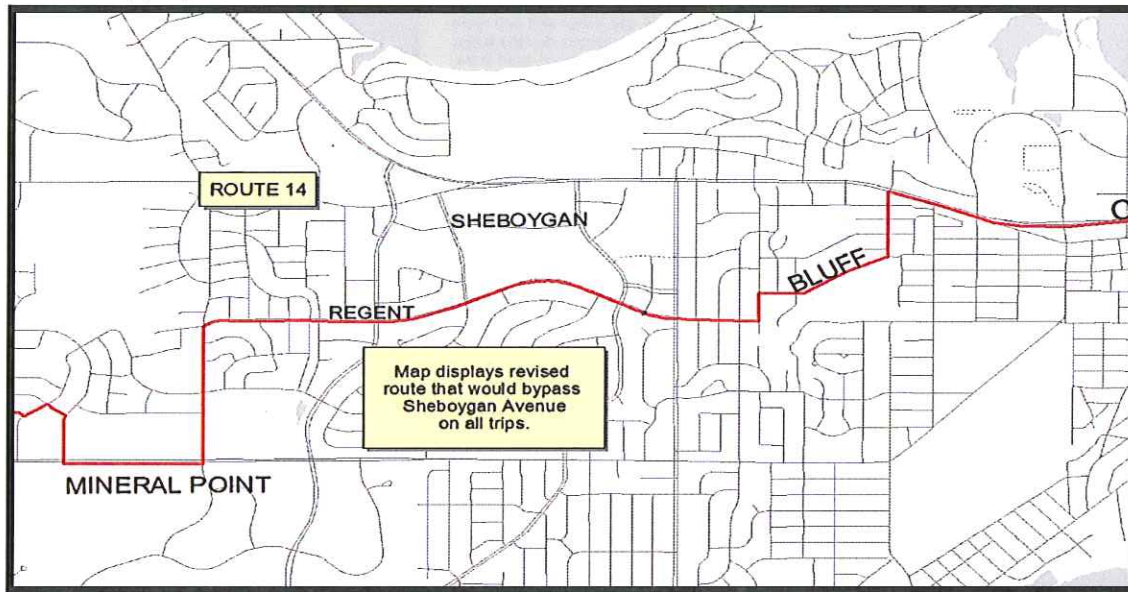
Route 9 & 10 EAST END MAP



West Madison Route 14 -- Realign service off of Sheboygan Avenue

Route 14 has been part of the trunk and feeder system that has served Sheboygan Avenue in the commute direction for about 20 years. In the not too distant past, this was a way to fill those buses and improve service frequency on Sheboygan Avenue. Now, however, Route 14 buses approaching Sheboygan Avenue already have good loads and they'll continue to pick up more passengers on important streets east of Segoe Road. Currently, morning and afternoon rush hour trips on Route 14 are supported with extra buses, a fact that creates opportunities to improve the overall service structure based on ridership realities. It allows Route 14 to have improved directness of service. The extra buses currently assigned to support it will then be used to improve service along Sheboygan and University Avenues on Routes 9 and 10. Realigning the route will reduce commute times by about 3 minutes in both directions for Madisonians who occupy the 1,100+ dwelling units in multi-family buildings adjacent to the route, west of Rosa Road. That's a nice improvement and should attract more riders.

Route 14, proposed revision



West Madison Route 15 -- Realign primary commute direction service off of Sheboygan Ave.

This change is a common sense approach to an overload problem. By the time these buses reach Sheboygan Avenue, the majority of them are already loaded with standees, so it seems pointless to overload them even more and further delay the service. We currently have two extra buses that "double" trips starting on Gammon Road every morning. In the afternoon, there are 5 "extra" bus trips that travel all the way west, creating a route within a route that is simply responding to loading conditions. The current goal is to establish those trips on the public schedule and incorporate them into basic service, at least when UW classes are in session.

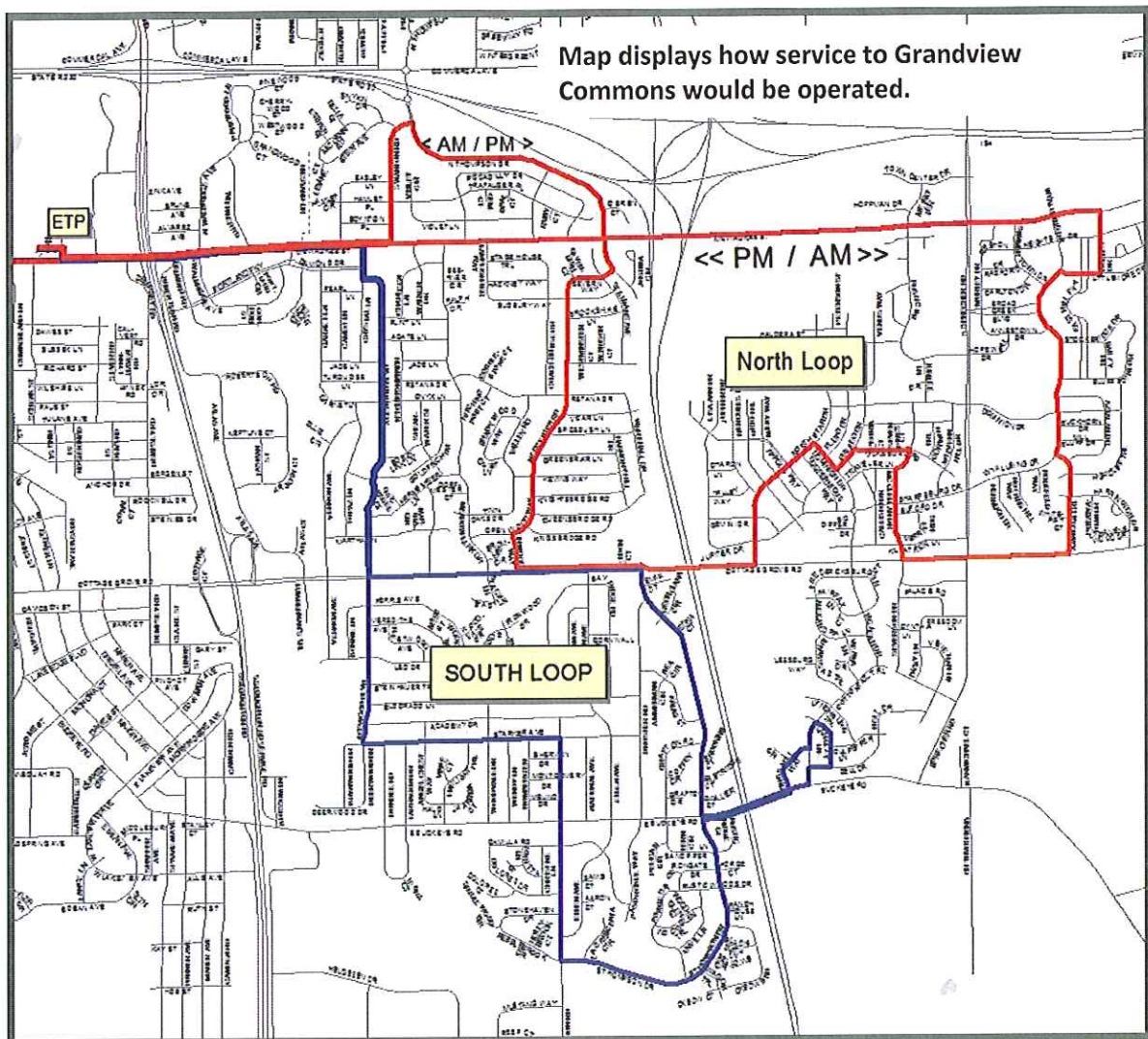
East Madison Routes 14 & 15 – Realign Schedules, Objectives

Currently, neither Route 14 nor 15 effectively serve the East Transfer Point. With the new schedule structure, Routes 14 & 15 would continue to "loop through" the ETP (minimizing the delay) as buses will discharge, load and go. At the ETP, Route 14 buses traveling westbound during the morning rush hour will connect with other buses, typically **Routes 3, 5, 16, 30, 34 & 39**. These transfers will become intended, bus-to-bus transfers. The same will be true of eastbound Route 14 buses in the afternoon—those buses will connect with other routes at the ETP. Essentially, what this means is that if you live on current Route 14, east of Highway 51, you will have good connections to and from other routes at the ETP during both a.m. and p.m. rush hours. Route 15, on the other hand, will not have connections in the primary commute direction at the ETP because its buses will be offset by 15 minutes from buses on Route 14. *This represents a significant schedule change, it will affect passengers on both routes and may not be well accepted, but these adjustments needs to be made as it affects service all the way across Madison.*

Since routes 14 and 15 provide the fastest service to the Capitol Square from the ETP (about 18 minutes), the new schedule alignment will have them leaving the ETP every 15 minutes from 5:27 until 9:12 am (minor exceptions), with a similar span returning in the afternoon. It's a nice, practical service for park and riders.

Setting Route 14's buses to "hit," or actually "split" ETP pulses at :15/:45 OTH will require a slight realignment of trip times for the route in the morning and, unfortunately, a significant realignment in the afternoon. The service will function similarly to that of Routes 56 and 57, where two routes are paired up to create 15 minute service on shared streets. It's a good service design for any sister routes that pass through a transfer point when they're full of commuters, particularly a transfer point with a park and ride lot. It should be noted that these two routes provide the fastest, most direct, east-to-west service across Madison. These two routes *need* to have 15 minute separation of trips whenever they're on shared streets. The phasing of routes also enables a cost neutral service expansion into Grandview Commons, which, without this schedule realignment, would be prohibitively expensive. Currently, during peak periods, three buses serve neighborhoods east of Hwy 51 and west of the interstate on Routes 14 and 15. The new service design would use the same three buses, just allocate the service differently. Besides the realignment of schedules on Routes 14 and 15, the change *also* requires schedule changes to **Routes 34 and 39** (see below), but it could be a very nice change for virtually no additional cost.

The map below shows how the east ends of the routes would be configured (depending on comments at the public hearing). To eliminate confusion as the ETP, they will probably be named differently. This change would make the ETP the end of the line for Routes 14 and 15, so those two routes will *always* be inbound buses at the transfer point. The new loops, labeled North and South below, will be "interlined" with 14 and 15 at the ETP. The term "interline" means buses will arrive at a transfer point as one route and leave as another. While *that* can create some confusion, use of the practice is common on other routes and eliminates transfers. **Route 32** will remain the "off-peak" route in those neighborhoods, with no changes to the route or schedule anticipated.

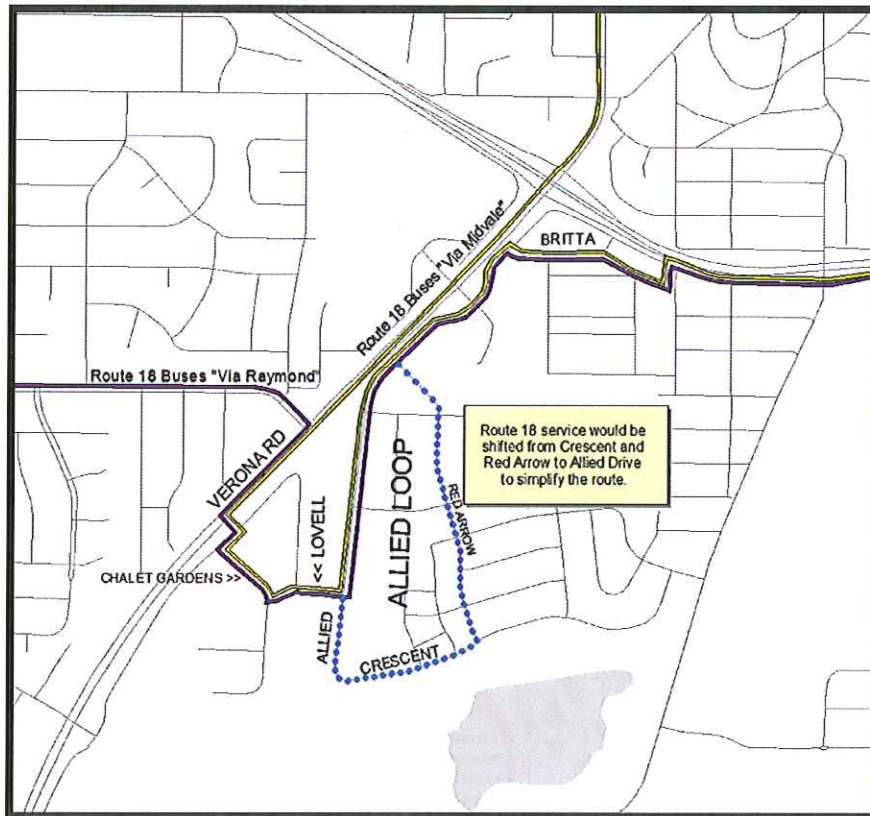


Map displays how service to Grandview Commons would be operated.

Route 18

This route has suffered from chronic schedule issues since its creation in 1997. The basic problem is twofold: First, the South and West Transfer Points are too far apart geographically for buses to travel the distance in the allotted 25 minutes. Second, loads have increased and customers with varying degrees of disability use the service, which delays boarding and alighting, further slowing the service. A review of on-time performance revealed that 22% of the trips on the route cannot maintain schedule; mainly between 7:00 a.m. and 7:00 p.m. One fact lost in that number is the temptation for drivers to speed in residential areas in order to stay on time. This decades-old problem simply had to be fixed, and fixed effectively. Staff decided to pull Route 18 buses off of all local streets east of Seminole Highway by shifting those buses to the West Beltline until 7:00 p.m. This change should significantly improve the route's on-time performance. Service on the West Beltline's south frontage road and on Coho and Greenway streets would be replaced on weekdays with a new **Route 41** that will be allotted more time.

Also under consideration is a proposal to have all **Route 18 buses circulate through the Allied Drive loop in the same manner**, using Chalet Gardens Drive to Lovell Lane, then left on Allied to the frontage road at Red Arrow Trail. This is a significant change to the route as it would essentially abandon service on Crescent and Red Arrow Trail, which would continue to be served by Routes 19 and 59.



Route 25 Flagging ridership on two of the route's four trips lead staff to propose elimination of those trips. These would include the 7:55 a.m. trip from Main and Carroll and the 5:07 p.m. trip from the American Family Office Park. Both trips average just 4 passengers—which is simply not sufficient to justify the bus while other routes are passing up passengers during peak periods.

Route 28 – Eliminate the Sherman Via

To simplify the route and align the service with the greatest number of dwelling units, Metro planning staff proposes to eliminate the route's bifurcation and have all trips operate via Fordem Avenue. Route 2 buses would remain scheduled

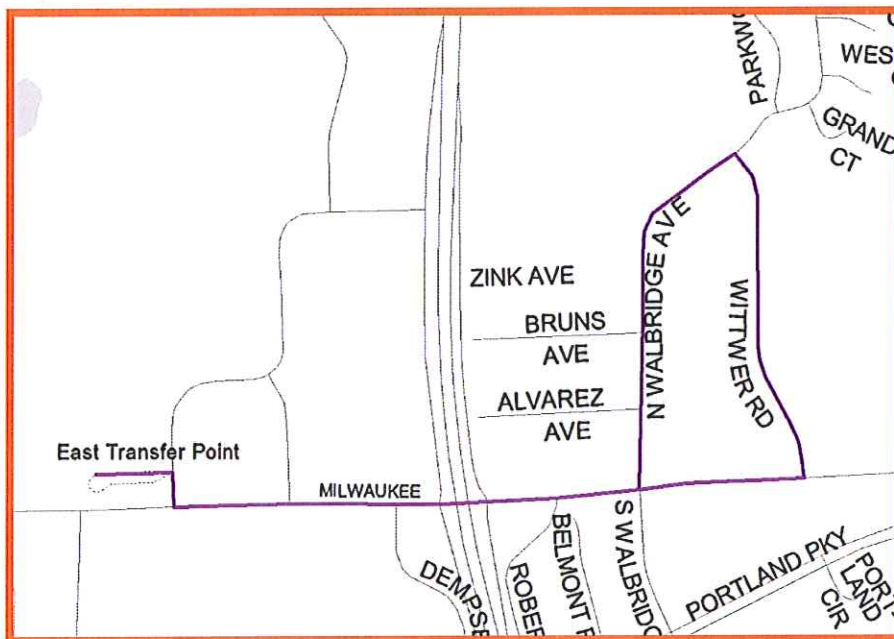
as they are now, primarily serving Sherman Avenue during peak periods. In excess of 700 dwelling units front, or are within easy walking distance to bus stops on Fordem Avenue, with about a third of that number on the Sherman Ave side. Staff feels the service realignment is appropriate, but the idea may not be popular as residents of Sherman Terrace Condominiums have long been supporters of Metro Transit. This change can be dropped, but we think the corridor is better served as bus timing will be more consistent and service much less confusing, particularly in the afternoon.

It's interesting to note that demand on Route 28 has reached well beyond saturation. We could justify running buses every five minutes along this route at the peak of morning and afternoon service. Currently some trips on this route either already have, or could use two extra buses. The new schedules allow slightly more time along the route and increase recovery time west of the UHos and on the north side as well. Route 28 will also no longer interline with Route 22 at the NTP. Both routes have on-time performance issues, but delays to Route 28 in the afternoon ripple through to delays on Route 22, affecting that schedule as well, and Route 22 buses absolutely need to run on time so subsequent connections are not lost.

Route 31 See following page

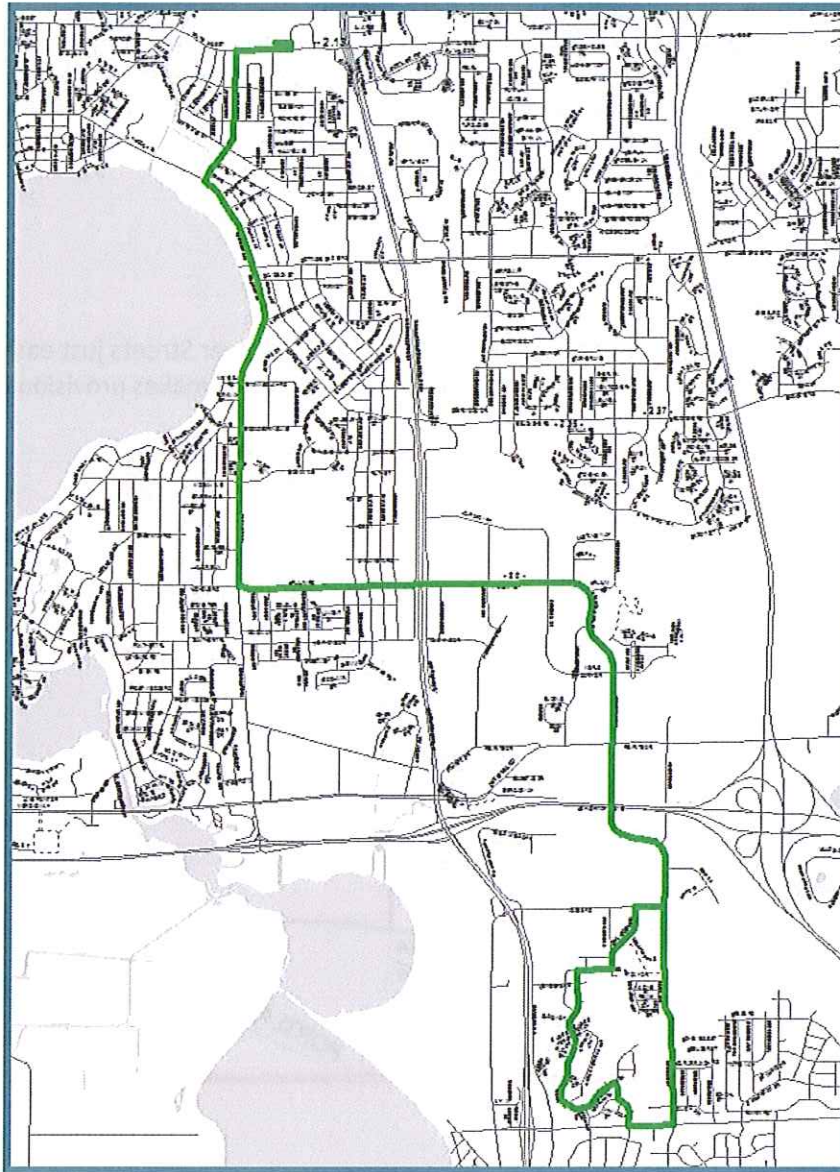
Route 33 - Proposed for elimination

Route 33 is a lightly used route that circulates from the ETP to Walbridge and Wittwer Streets just east of Hwy 51. The lack of a traffic control signals at either Walbridge or Wittwer and Milwaukee streets makes provision of service in the loop essentially impossible to attach to another route.



Route 31 is being proposed as start-up service between the ETP and the Owl Creek neighborhood on the far southeast side. Service will be hourly, and during peak periods only on weekdays, and hourly on weekends as well. Service is designed to effectively serve Sennett Middle and LaFollette High School in both directions. The route will replace service on some trips currently scheduled as trips on Route 39.

Route 31



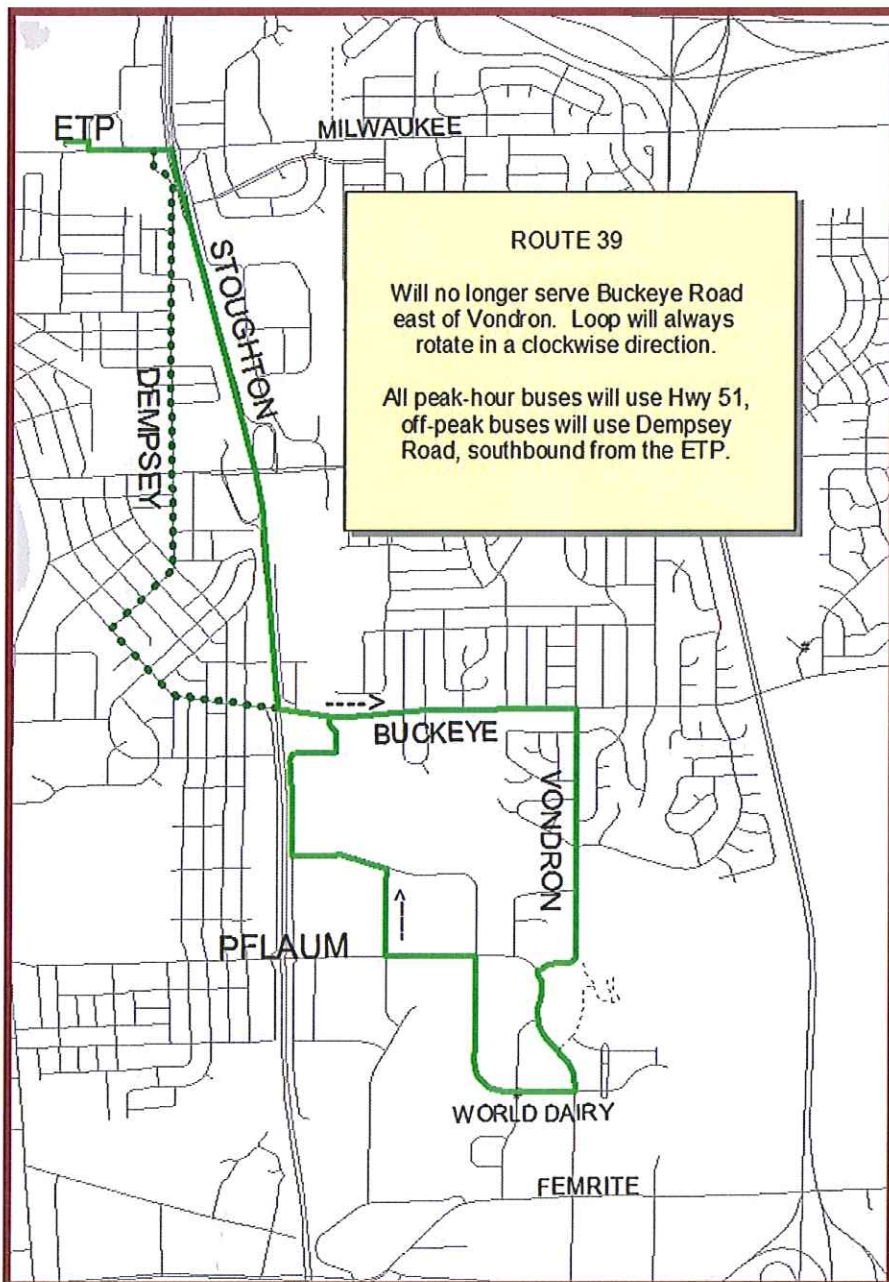
Route 34 provides a link between the ETP and Madison College's east campus on Wright Street north of East Washington Avenue. The route is proposed to have a reduction in the number of trips during peak periods—basically, any trip leaving the ETP at :45 OTH. Trips leaving the ETP at :15 OTH will remain as they are coordinated with the class schedule at Madison College and Route 16. The route was originally designed for this type of hourly service

Route 38 – Improve Gray Bar Service For years, we've been able to add extra buses into the schedule starting at Baldwin Street (morning rush hour) as that was the point at which buses on Route 38 began to overload. Several years ago, some extra buses were converted into "gray-bar trips.*" Since ridership demand dictated the need for an additional bus, it was decided that they should be displayed in the public schedule, making the service more attractive to users. It has become apparent that we need these trips to start further east, so the new schedule will have all grey-bar trips starting at the corner of Division and Oakridge streets, where a time point has been added to the schedule to facilitate the change. Additionally, ALL AM buses will serve Wilson Street to simplify the service. The amount of time saved

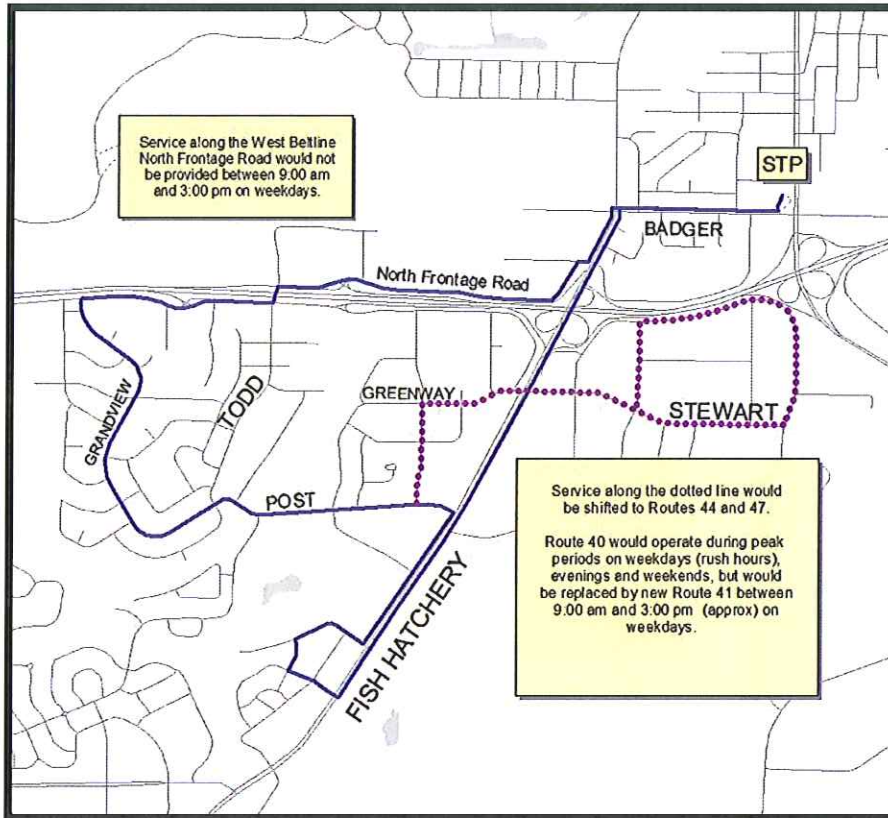
through the use of John Nolen Drive is not significant (AM service only), and can actually take longer on certain trips when traffic stacks on John Nolen at Broom Street delay the right turn.

**Gray-bar trips are shaded gray in the public schedule because they typically do not operate when UW Classes are not in session.*

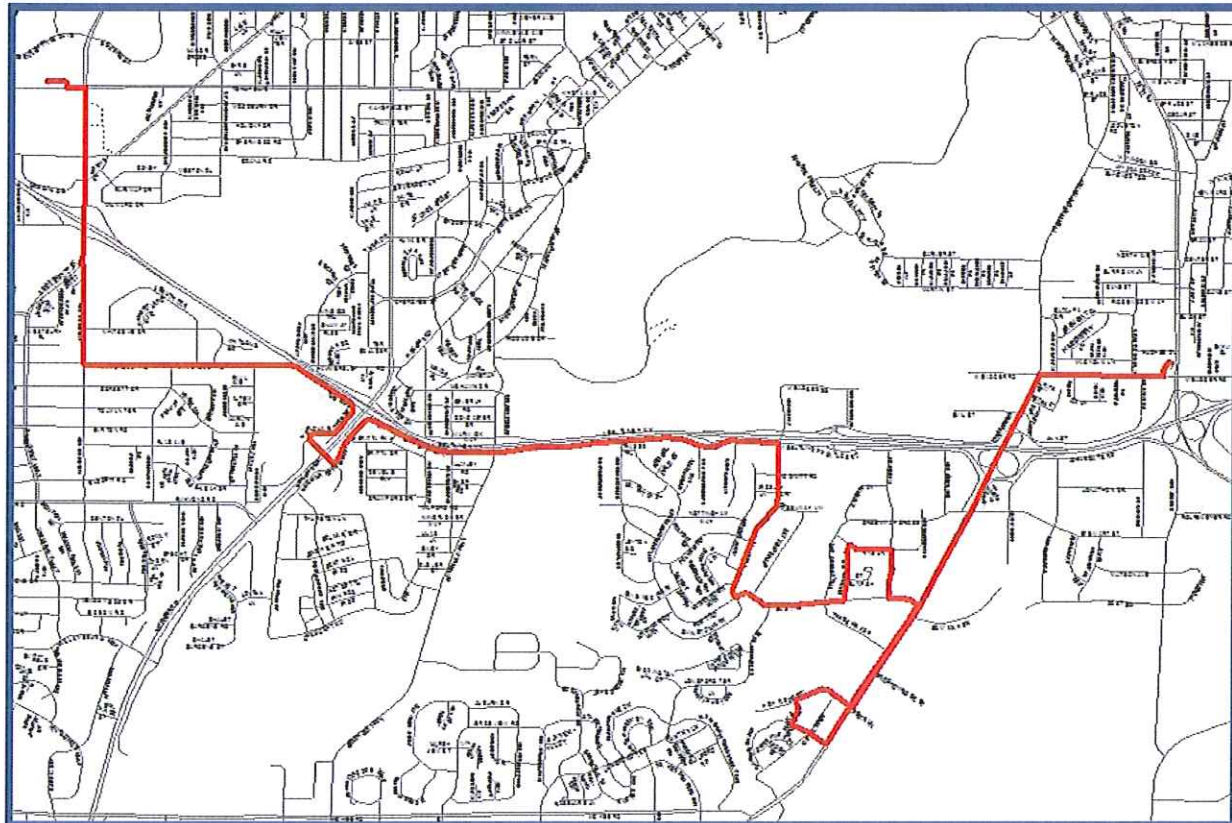
Route 39 serves the commercial district south of Buckeye Road and east of Hwy 51 from the East Transfer Point. Because new **Route 31** duplicates much of the service area, schedules on Route 39 will be trimmed and phased with that route's service. Additionally, **Route 37** will continue to serve this commercial area.



Route 40 is a peripheral loop route that departs the South Transfer Point every 30 minutes until 6:00 p.m., after which it runs hourly. Under a new service design, Route 40 would be replaced by hourly service on new **Route 41** during off-peak periods. Route 40 would still operate 30 minute service during peak periods and hourly service on weekends, but weekdays, midday service on Route 40 would be replaced by Route 41. It is proposed that Route 40 would no longer serve the "Stewart Street Loop". This service would be replaced with service on Route 44.



Route 41 New midday, weekday service – Replaces Route 40 during those hours.



Route 41 is intended to make good connections at the WTP. Buses will arrive and depart the STP at :15/:45 OTH, and arrive the WTP at :00/:30 OTH, where it will usually interline with Route 52. This route was necessitated by chronic schedule issues faced by drivers on Route 18, and Metro is proposing to have all Route 18 buses bypass local streets between the STP and Seminole Highway. This new Route 41, would fill the gaps and allow quicker travel time to the WTP for passengers in Arbor Hills, as their travel time from Post Road to the West Transfer Point would be cut (roughly) in half, and would no longer require a transfer at the STP to complete the trip. It's a nice service improvement for the Arbor Hills area, but there are some down-sides to the new route:

- The route will miss connections at the South Transfer Point by 15 minutes. Passengers might need to wait 15 to 45 minutes for connections on other routes.
- The route uses **new streets, including Pike, Turbot and Todd Drives**. Use of these streets may generate negative feedback, but they are absolutely critical to the design of the route, particularly Todd Drive, as its use enables service along the West Beltline's south frontage road west of Todd Drive in both directions. Obviated in the photograph below, Pike and Turbot streets significantly improve access to the route from the many hundreds of dwelling units adjacent to Pike Drive.

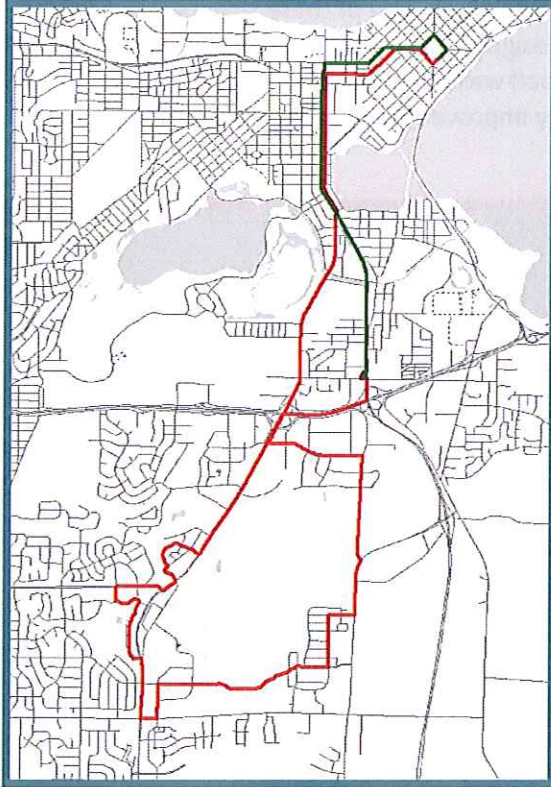


- Lastly, the route would replace Route 40 during off-peak periods.
 - This would remove service from Grandview Blvd during off peak periods, and the West Beltline's north frontage road between Fish Hatchery Road and Todd Drive. Stops on the north frontage road are about 600+/- yards from stops on Fish Hatchery Road and Todd Drive, which would be served by Route 41.

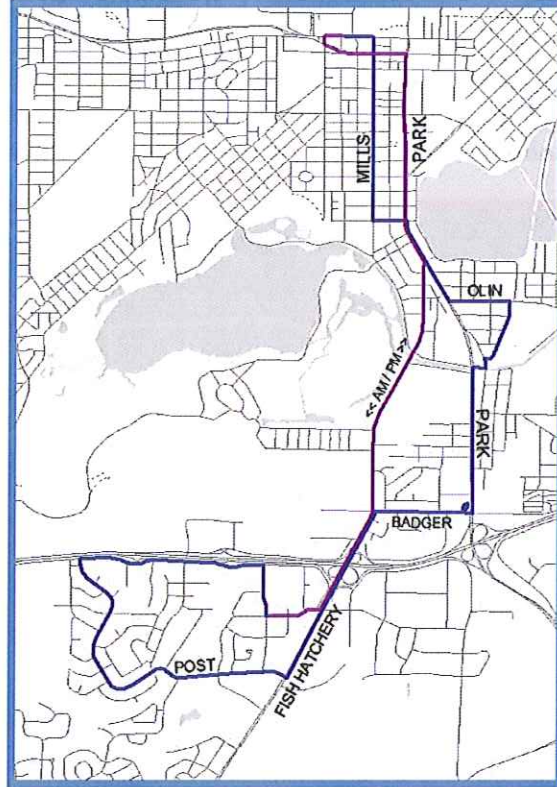
The route would also “interline” with Route 52 at the WTP, allowing us to continue provision of hourly service on both routes at only a marginal increase in cost.

Routes 44 and 48 would see some significant changes depending of decisions made by The City of Fitchburg's Transportation Commission. In Fitchburg, the route would be redirected to serve the Stewart Street business park (replacing service on Route 40) and the Swan Creek neighborhood, operating as a large loop that would reverse direction in the afternoon. The route would no longer be pulled off-line into the STP but rather continue northbound on Fish Hatchery Road and Park Streets to serve the UW Campus from the corner of Johnson and Park Streets (AM) and the Capitol Square, similar to how the 47 operates. Service south of Lacy Road would be abandoned as unproductive, roughly in exchange for service in Swan Creek, a subdivision with a transit friendly street structure and a large degree of multi-family buildings. Route 48's current service would be absorbed by Route 44.

Route 44 – Reverse commute in green



Route 47 – Reverse commute in pink



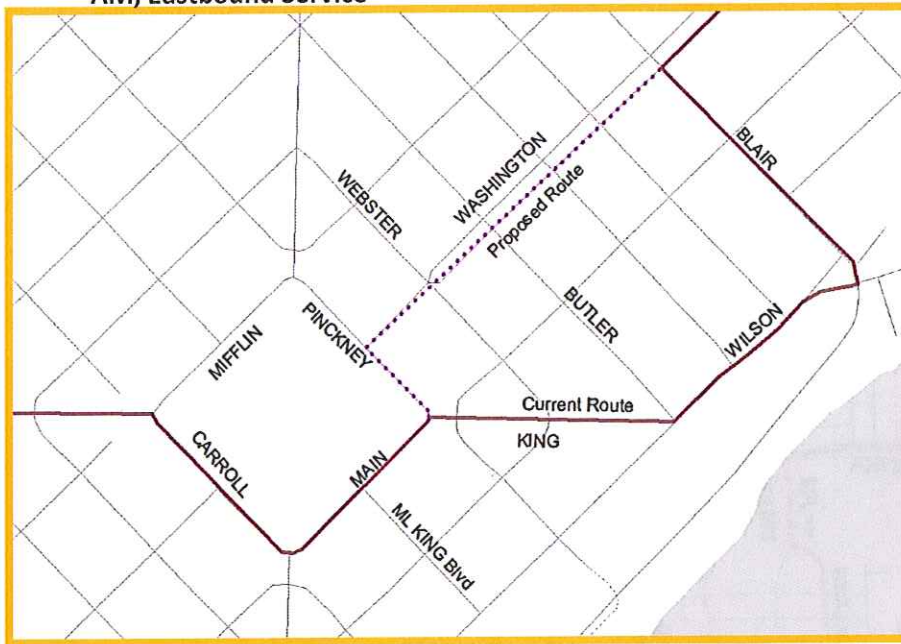
Route 47 is an Arbor Hills oriented commuter service that would begin serving the STP, arriving and departing between primary pulses, picking up the current routing of Route 44 north of the South Transfer Point—but with significant changes to the route north and west of Charter Street, as service through the UW Campus to the UHos would be left to other buses. The route would also no longer serve the Caddis Bend Loop, as that would be left to routes 40 and 44. In essence, these changes are intended to create a more attractive service on Route 44, and more practical service on Route 47, which splits service in Arbor Hills with Route 40. This revised design creates more transportation options in areas with greater housing densities along Fitchburg's north border with Madison.

Route 52 Service on Route 52 is dependent on the final design of Routes 18, 40 and 41, and subsequent actions by Fitchburg's Transportation Commission and the Madison Parking and Transit Commission following a public hearing in April. Service in Jamestown will not be abandoned; it's a matter of how it's installed, so as to maintain efficient use of equipment and service hours.

Routes 56 and 57 will see adjustments to running times south of the West Transfer Point and changes to bus circulation around the Capitol Square.

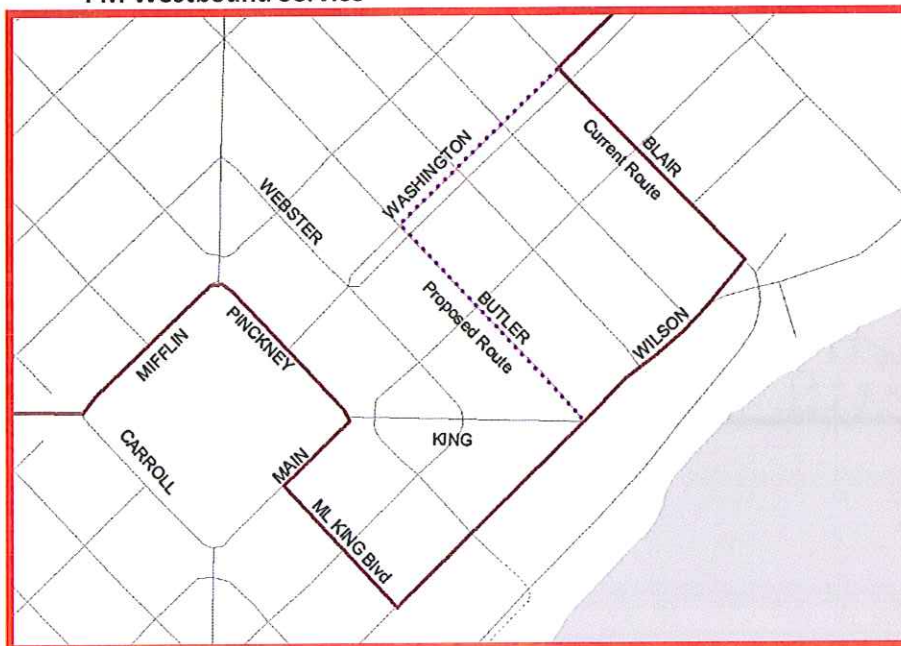
- During the morning rush hour, eastbound buses will no longer use King, Wilson and Blair Streets to East Washington Avenue after leaving the time point at Main and Carroll. Buses will instead use Main and Pinckney streets to East Washington Avenue. This will shave several minutes off cross town commute times, with the time saved reallocated to recovery time. Passengers needing service to Wilson and Blair streets will need to transfer to buses on Routes 3 and 4.
- During the afternoon rush hour, westbound buses will no longer use East Washington Avenue to Blair and Wilson streets to reach Martin Luther King Blvd. They will instead use East Washington Avenue to left-Butler to right-Wilson to Martin Luther King Blvd. This change will pull buses out of the congested left turn queue on East Washington Avenue at Blair Street and out of congestion on Blair St as well. This will keep eastbound and westbound service (AM and PM) on parallel streets just 2 blocks apart.

AM, Eastbound Service



Dotted lines display proposed route change, replacing service along solid lines between connecting points.

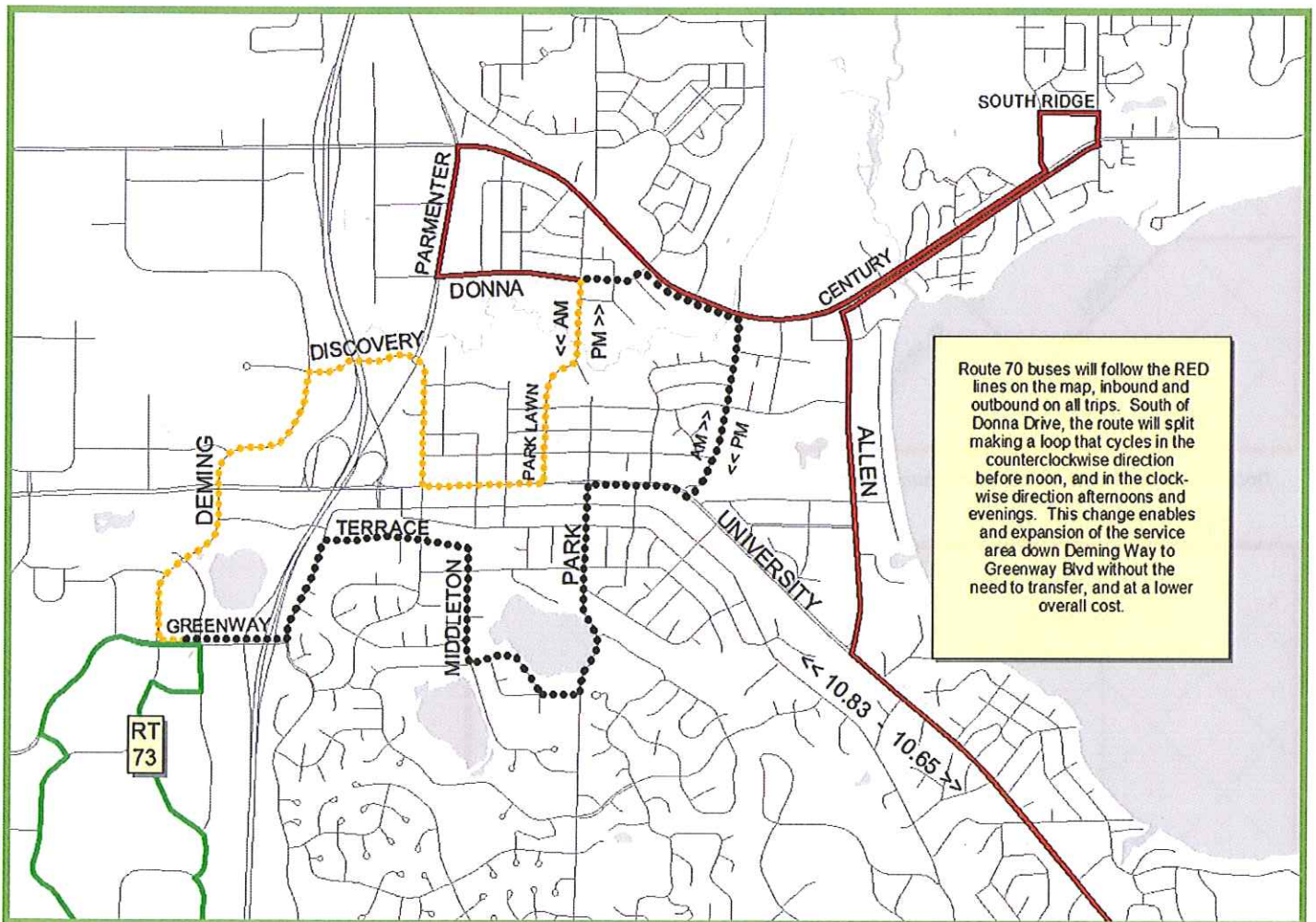
PM Westbound Service



Route 70 is the base service in Middleton, and fills service needs during off-peak periods on weekdays. The route (along with commuter routes 71, 72 and 74), is proposed to have modifications that will reduce Middleton's cost, improve the route's on-time performance and create a schedule that's more consistent throughout the day to and from Madison's Capitol Square.

Metro staff proposes a change to the route's design that would reduce the number of miles operated in the City of Middleton, which would create a reduction in the amount of time it takes to operate the route, while enabling an expansion of the service area down to Greenway Station on the city's southwest side. This change requires that buses would traverse Park Lawn Place once an hour, southbound before noon, and northbound in the afternoon, from roughly 9:00 am and 3:00 pm, and evenings after 6:00 pm. This represents a significant redesign of the route that would create a one-seat ride from the north and east sides of Middleton to Greenway Station. It also moves the route's schedule recovery point from UW Health Court (near Costco) to Greenway Blvd, which would eliminate the potential for passengers having to wait on the bus during driver breaks.

A planned transfer between Routes 70 and 73 would take place near the intersection of Greenway Blvd and Deming Way. This would allow some Middleton passengers to gain access to a route that serves the West Towne Mall area along with the West Transfer Point—and maintain Madison's access to Middleton service.

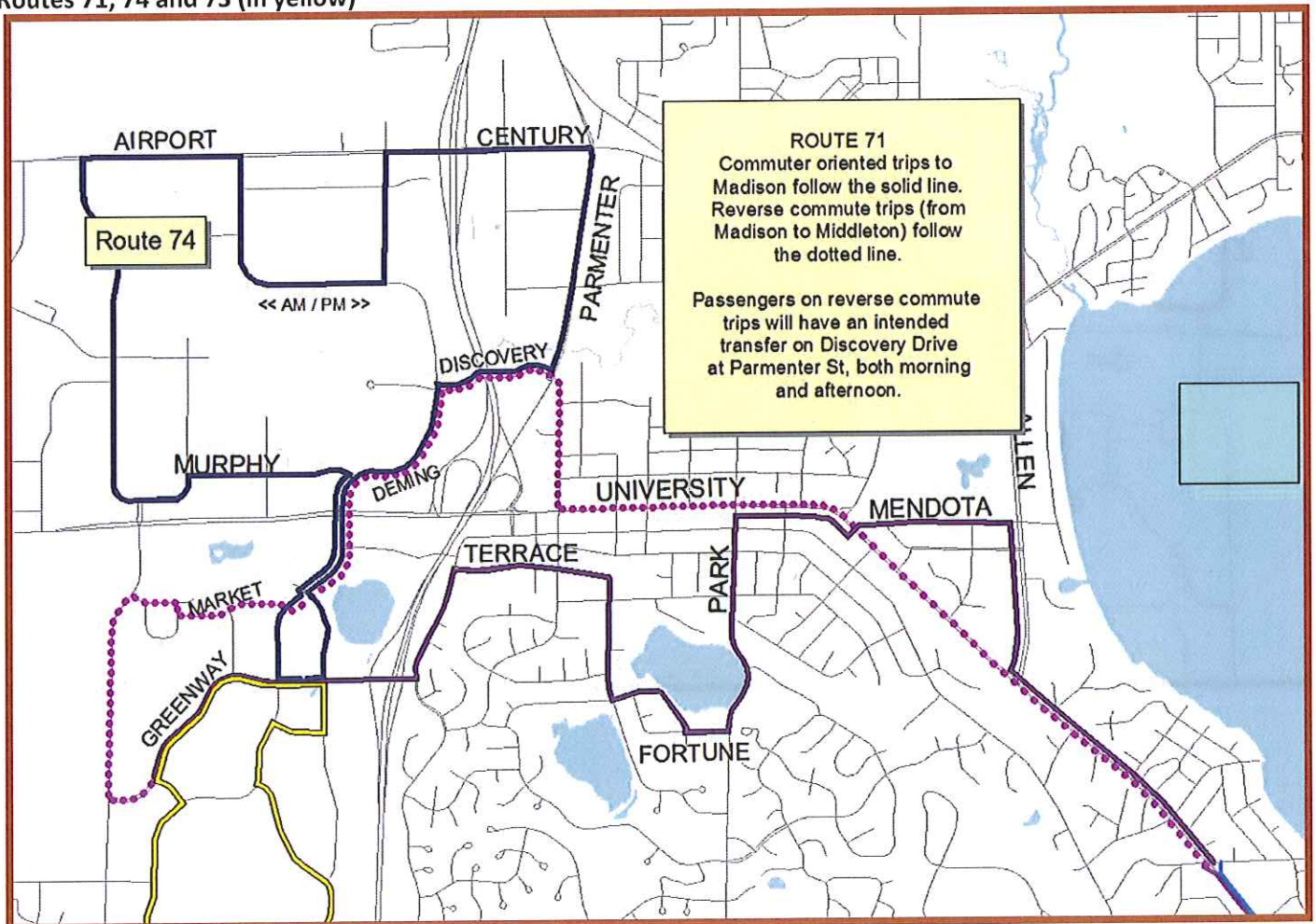


Route 71 is a commuter route that's proposed to be modified to improve the route's directness of service between Greenway Blvd and the Capitol Square, by eliminating the loop up Deming Way to the UW Health Court near Costco and then back south to Terrace Ave and Middleton St. This will reduce inbound and outbound travel times for residents who live adjacent to Greenway Blvd, which should encourage ridership.

"Reverse commute service" (dotted line) runs westbound to Middleton during the morning rush hour and eastbound back to Madison in the afternoon. These trips on Route 71 will replace trips currently provided by Route 74. See Route 74 for a more complete explanation.

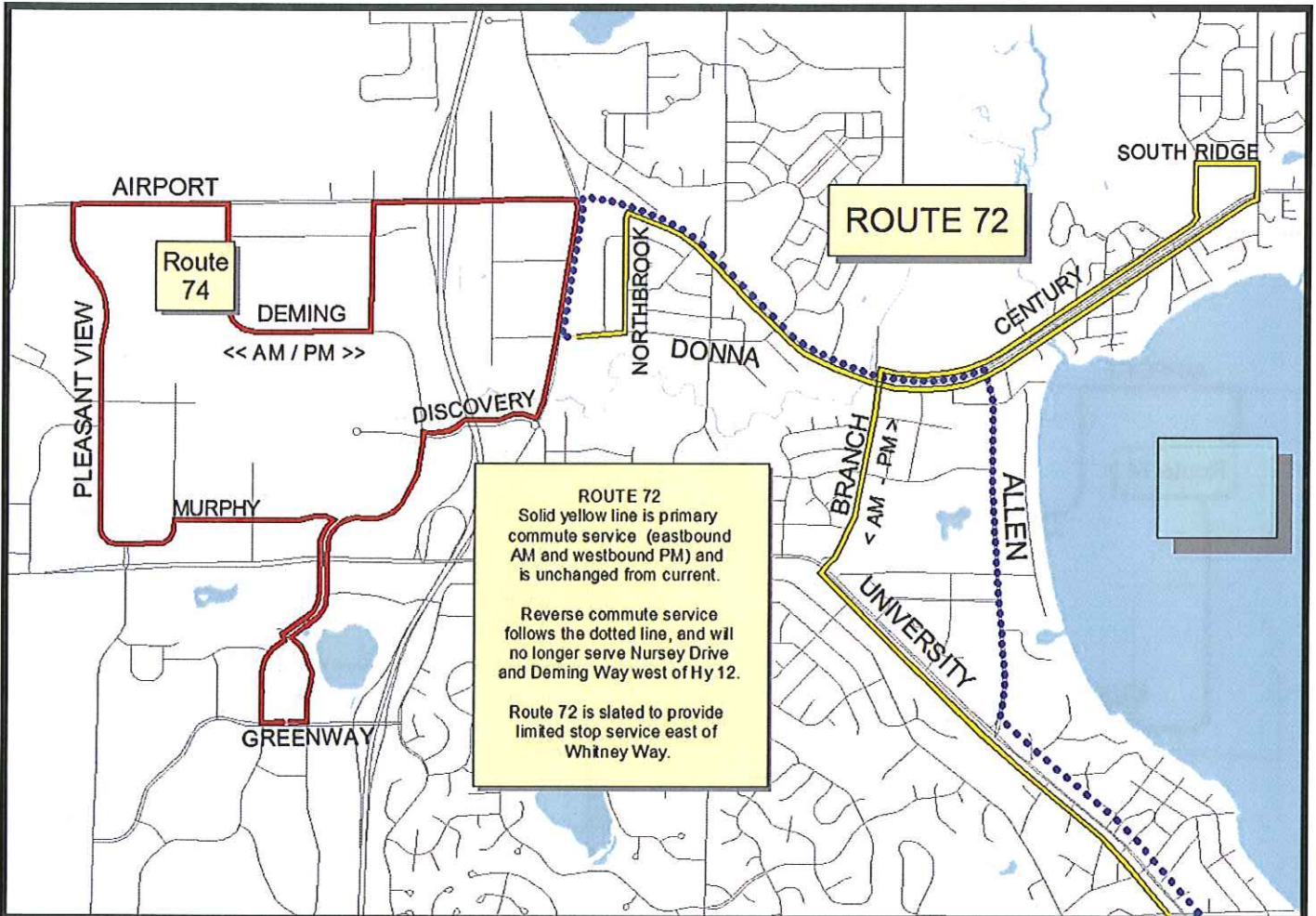
Because most of the commuter oriented trips on this route are heavily loaded with Middleton passengers, it is slated to provide limited stop service east of Whitney Way, which should improve the route's on-time performance and help control loading, particularly in the afternoon.

Routes 71, 74 and 73 (in yellow)

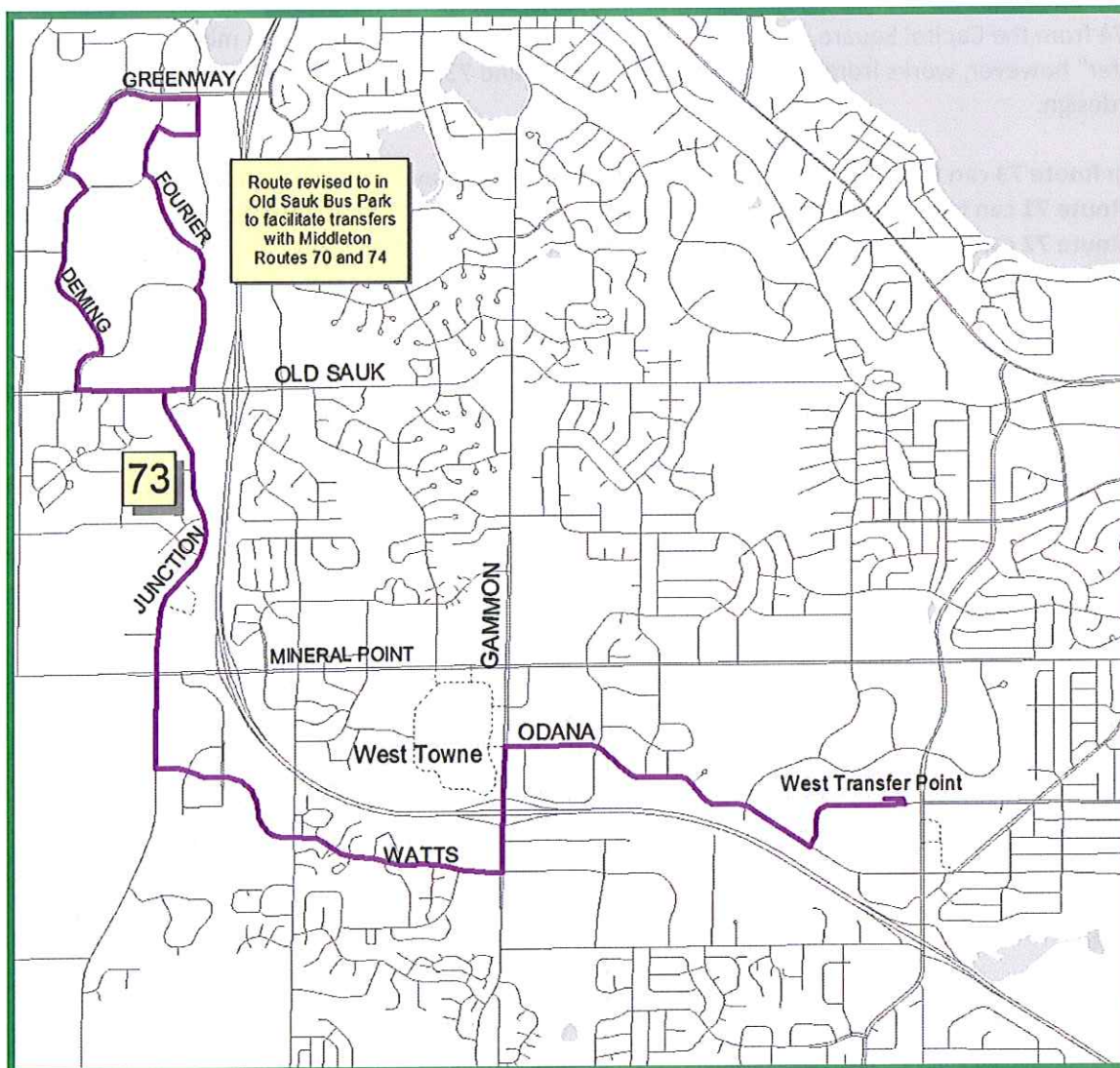


Route 72 is a commuter route that's being modified to improve on-time performance.

Because most of the trips on this route are loaded with Middleton passengers, it is slated to provide limited stop service east of Whitney Way, which should improve the route's on-time performance and help control loading, particularly in the afternoon. Reverse commute trips (dotted line) are scheduled to transfer to and from Route 74 during peak periods at Parmenter and Donna drives.



Route 73 is an important utility route designed to serve Odana, Watts and Junction roads along with the Old Sauk Trails Office Park north of Old Sauk Road. Service in the office park has been redesigned to facilitate transfers, to and from Middleton Route 74 during peak periods, and Middleton Route 70 during off-peak periods. The route will retain its 30 minute peak hour and 60 minute off-peak service on weekdays. Off-peak trips will arrive and depart the West Transfer Point on the hour.



Route 74 is proposed to provide peak hour service to Middleton’s northwest business sector, a reduction in current service levels that include the elimination of little used trips in the middle of the day. The loop has buses moving through the route in a counterclockwise direction during the morning rush hour and clockwise in the afternoon. Since “reverse commute*” buses on **Route 71** move in the opposite direction of buses on Route 74 on Discovery Drive and Deming Way, service to the commercial district near Greenway Blvd is somewhat faster as Route 71 will bypass UW Health Court and retain the one-seat ride from Madison. The revised design of the service eliminates reverse commute trips on Route 74 from the Capitol Square, and will now require a transfer from **Route 71** to mimic current service. This “required transfer” however, works from 3 routes, including 71, 72 and 73. This is a significant improvement over the route’s current design.

Passengers from **Route 73** can transfer to and from the route near Greenway Blvd and Deming Way. Reverse commute passengers on **Route 71** can transfer to and from the route Discovery Drive and Parmenter St. Reverse commute passengers on **Route 72** can transfer to and from the route near Donna Drive and Parmenter St. These locations are marked with a **T** on the map below. These intended transfers generally require a 6-7 minute wait, mornings and afternoons.

**Reverse Commute trips are those that run opposite the primary commute direction—from Middleton, the primary commute direction is toward Madison during the morning rush hour, reverse commute trips would come from Madison. The reverse applies in the afternoon.*

Map shows how routes 71, 72 and 73 align with Route 74. *Route 73 (in yellow) is improperly drawn on this map. Route 74 may be redrawn to serve Parview Drive.*

