

## Proposed Metro Service Changes Slated for August 2013

*Last updated 03/11/2013*

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.

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.

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**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

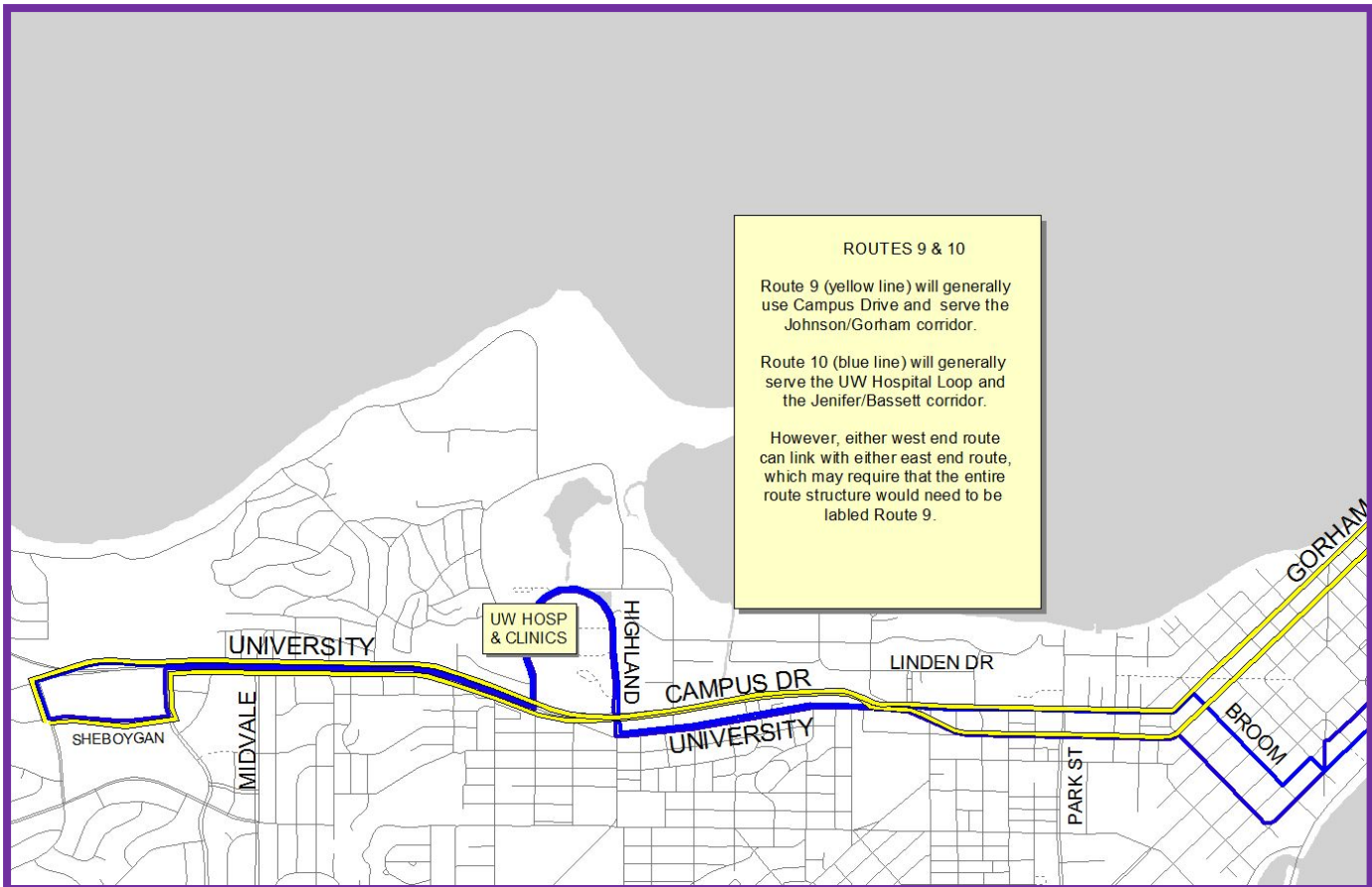
of resources. Lastly, Route 9's visits to the ETP (and connection to Route 33) are underused and are proposed to be abandoned in the face of climbing ridership west of University Bay Drive.

**The new route designs respond to these problems as follows:**

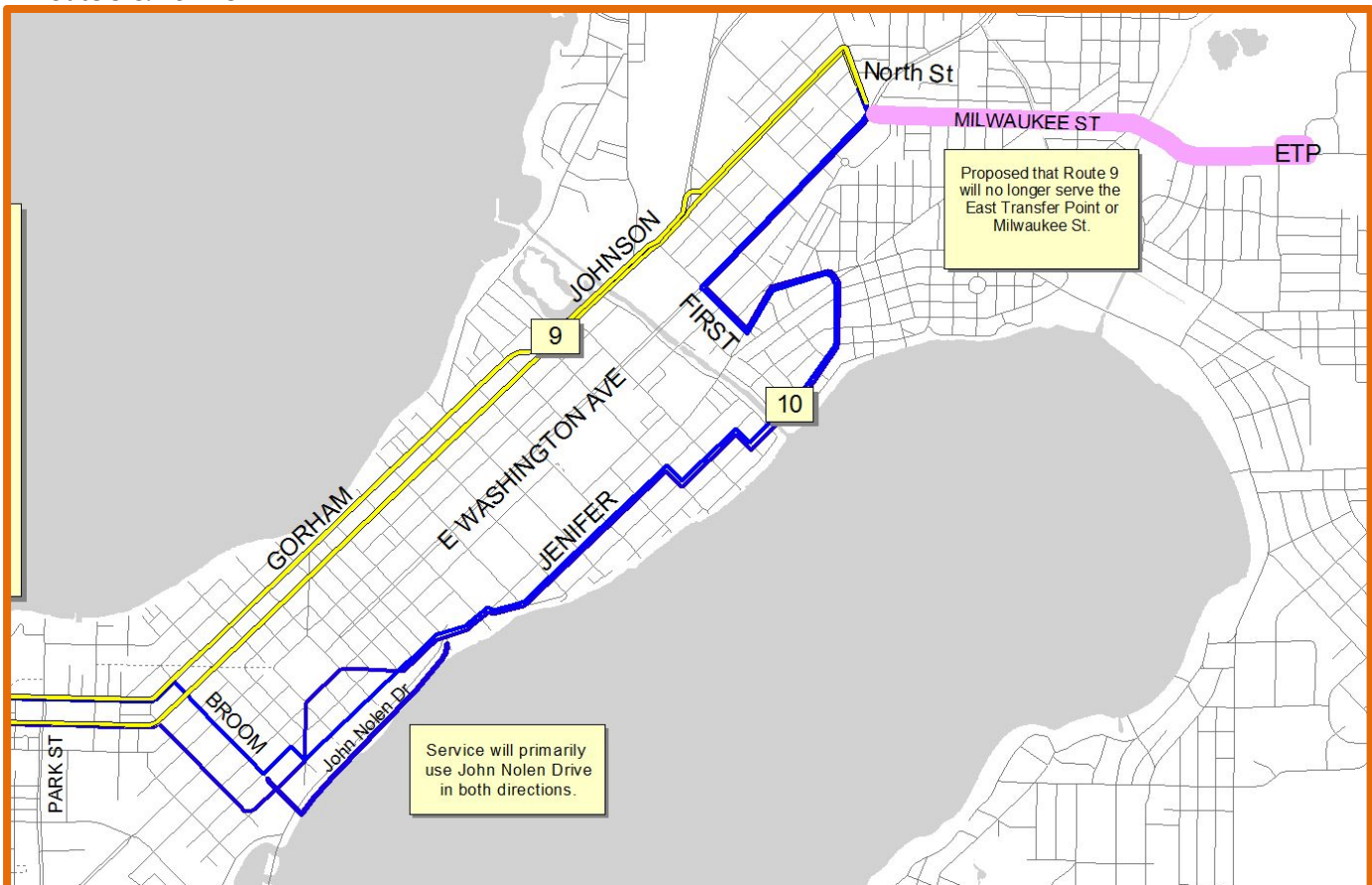
- The entire service structure is shifted west, vacating Route 9's service to the ETP and Route 33. While this may generate negative feedback, it's simply not worth the investment in service hours to duplicate service that is otherwise available on Route 3 and to a lesser extent on Route 5. These service 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



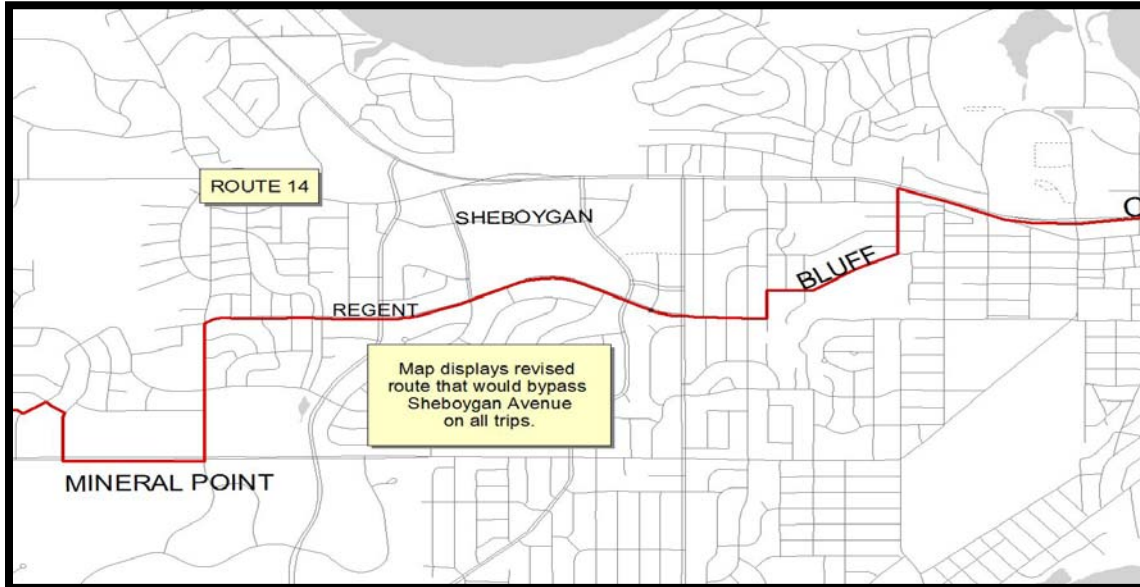
Route 9 & 10 EAST END MAP



### 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.

#### 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

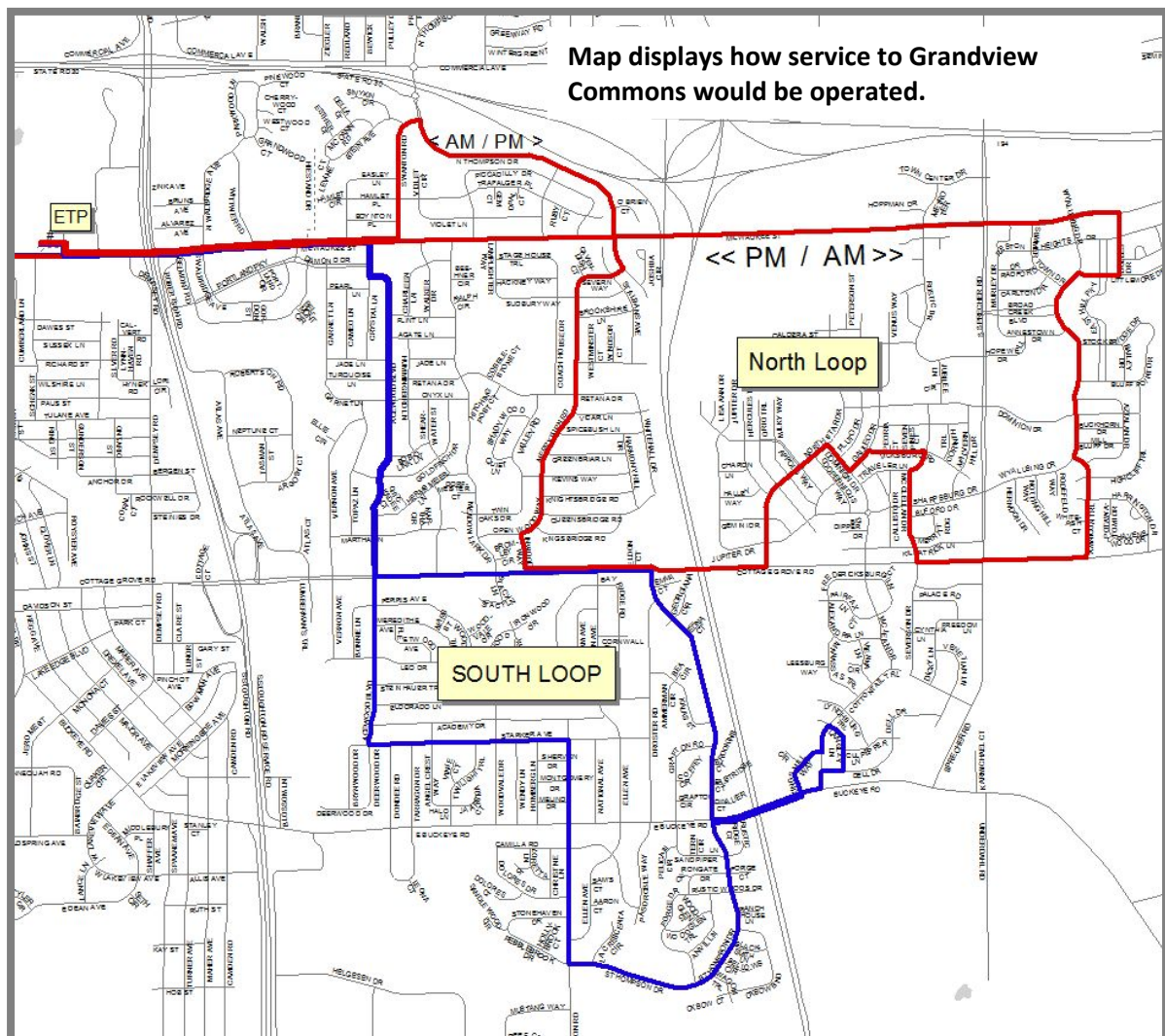
Currently, neither Route 14 nor 15 effectively serve the East Transfer Point. With the new schedule structure, Routes 14 & 15 would continue to “loop through” the ETP (minimizing the delay) as buses will discharge, load and go. At the ETP, Route 14 buses traveling westbound during the morning rush hour 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, but these adjustments need 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).

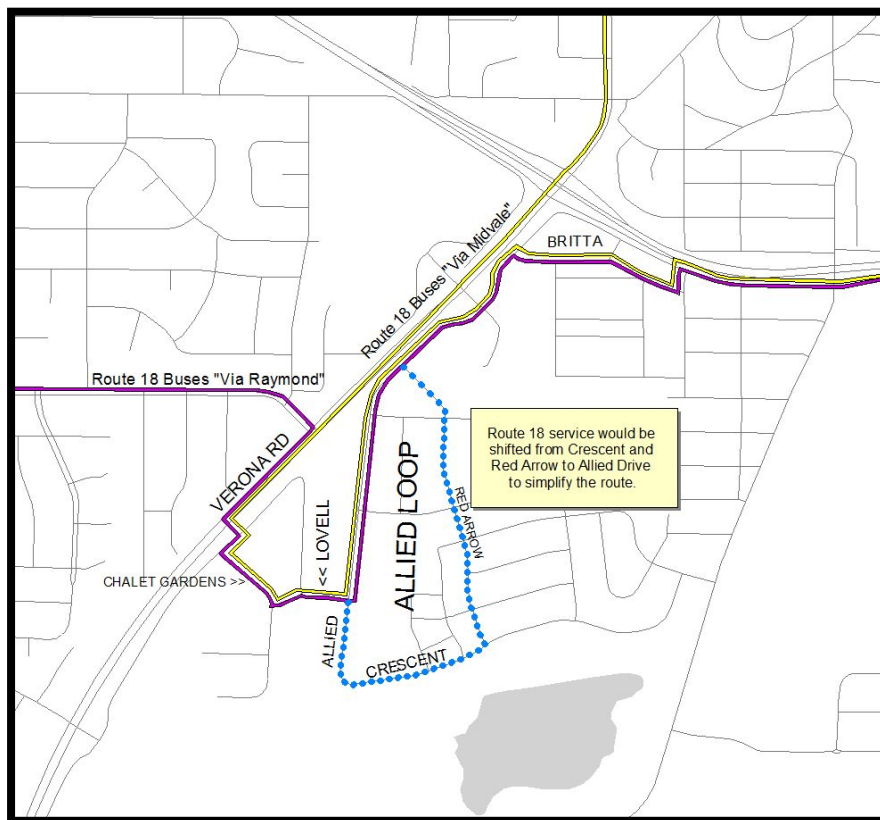
The map below shows how the east ends of the routes would be configured (depending on comments at the public hearing). To eliminate confusion as the ETP, they will probably be named differently. This change would make the ETP the end of the line for Routes 14 and 15, so those two routes will *always* 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.



### 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 from 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

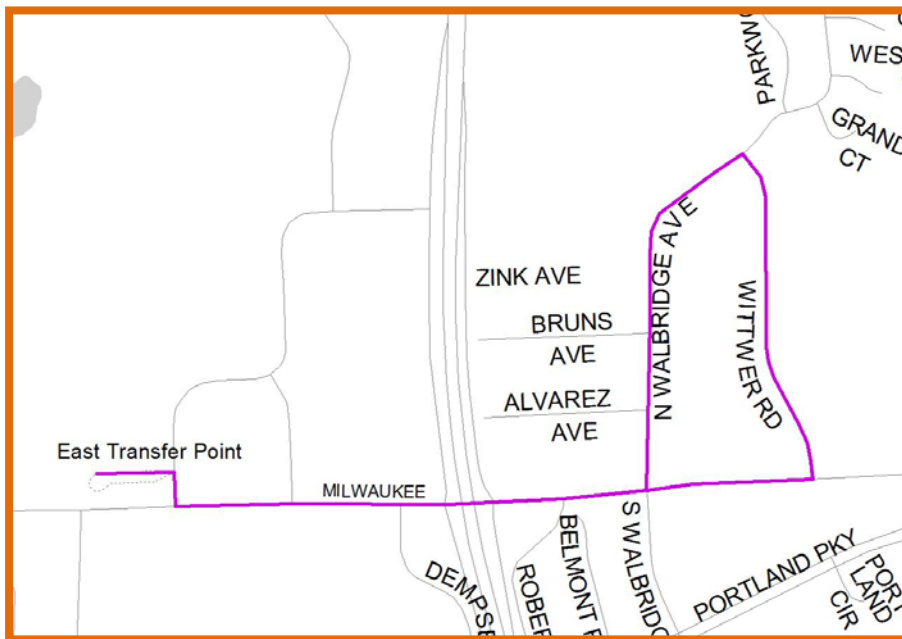
Condominiums have long been supporters of Metro Transit. This change can be dropped, but we think the corridor is better served as bus timing will be more consistent and service much less confusing, particularly in the afternoon.

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

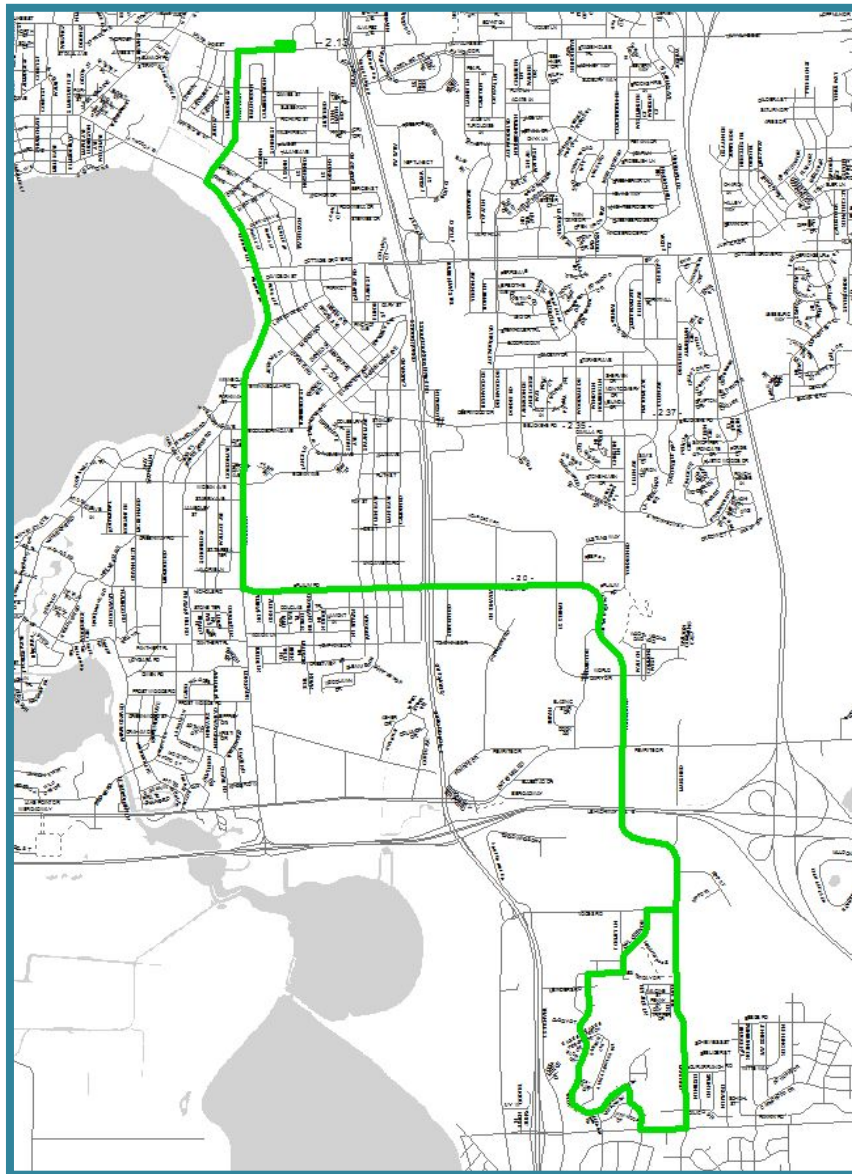
### **Route 33 - Proposed for elimination**

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

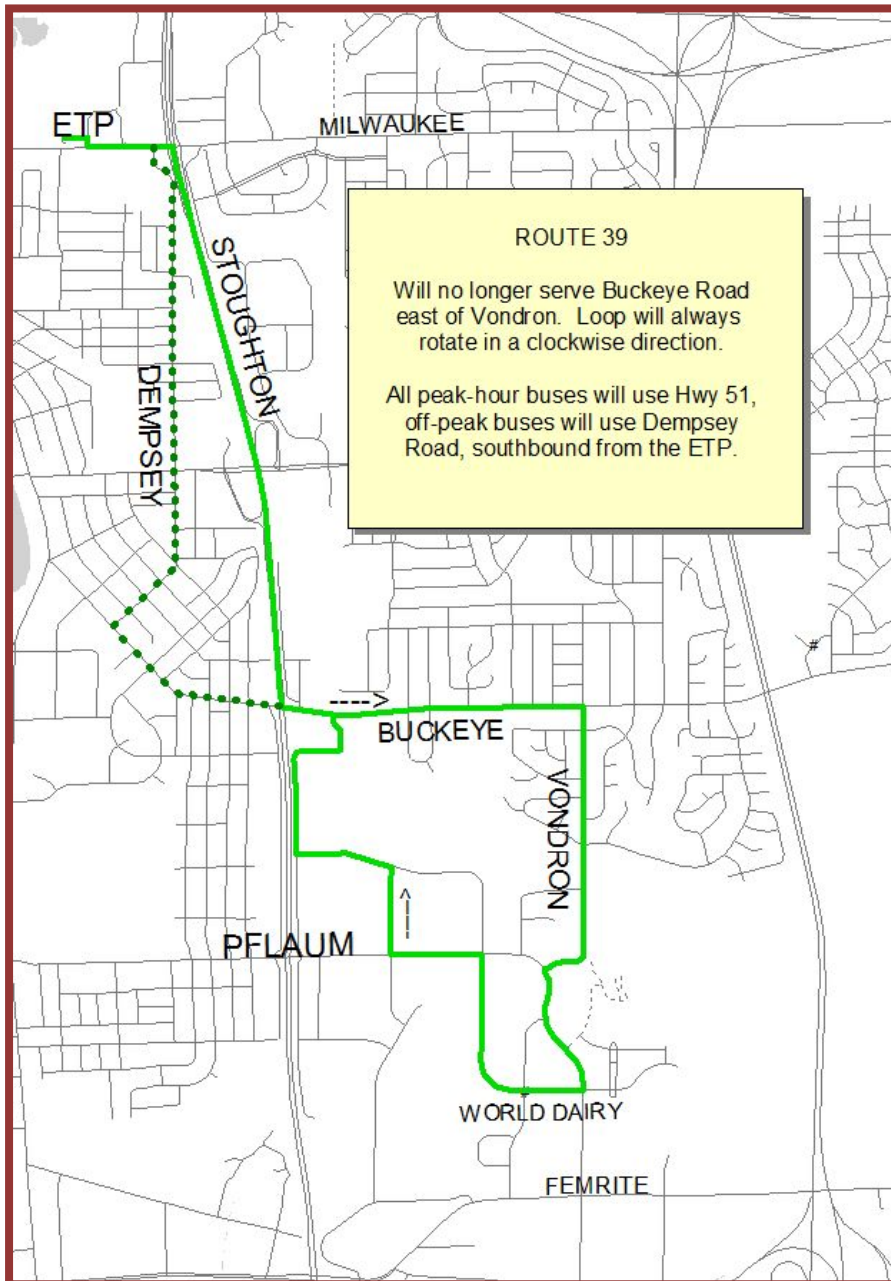
**Route 38 – Improve Gray Bar Service** For years, we’ve been able to add extra buses into the schedule starting at Baldwin Street (morning rush hour) as that was the point at which buses on Route 38 began to overload. Several years ago, some extra buses were converted into “gray-bar trips.” Since ridership 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



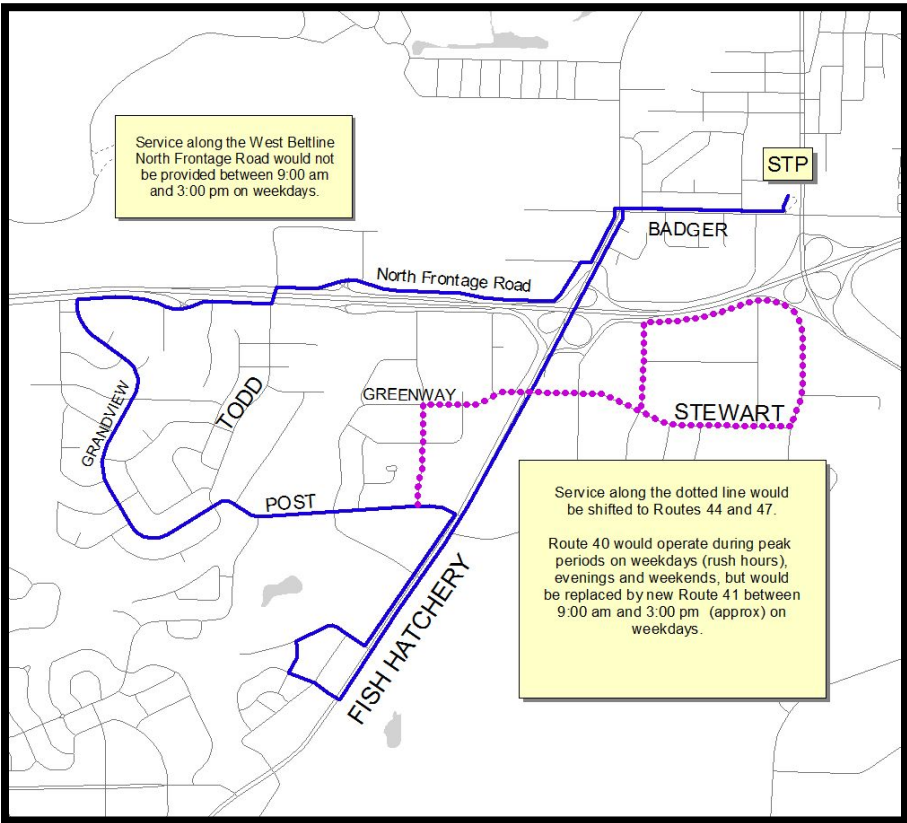
through the use of John Nolen Drive is not significant (AM service only), and can actually take longer on certain trips when traffic stacks on John Nolen at Broom Street delay the right turn.

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

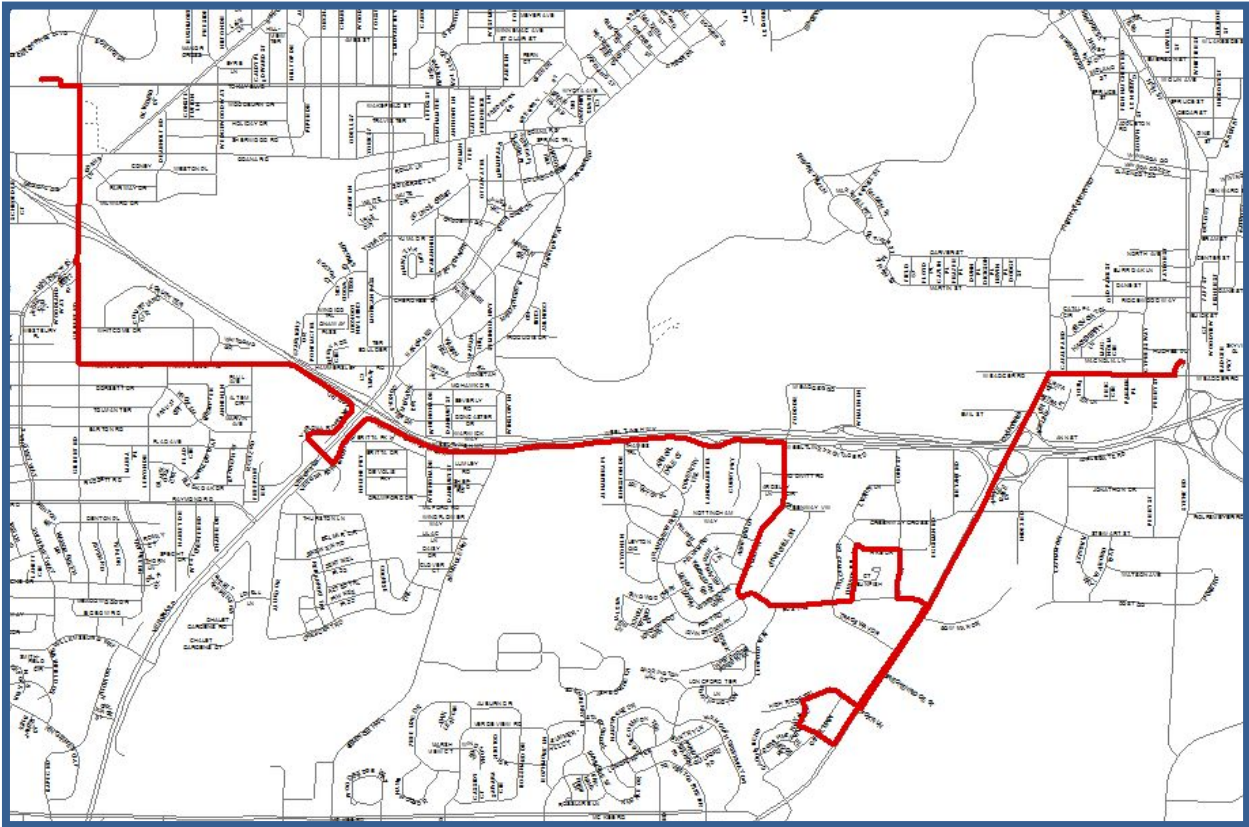
**Route 39** serves the commercial district south of Buckeye Road and east of Hwy 51 from the East Transfer Point. Because new **Route 31** duplicates much of the service area, schedules on Route 39 will be trimmed and phased with that route's service. Additionally, **Route 37** will continue to serve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