

ALIGHTING

FROM
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TPC 04.10.13

Proposed Metro Service Changes Proposed for August 2013

Updated 03/25/2013: Route 5 schedule adjusted to better coordinate service at the South Transfer Point. Possible trip reductions on routes 44 & 47 noted.

Updated 03/21/2013: Slight redesign of Route 18, changes in Arbor Hills/Route 40, repeal of the Route 41 service design concept. Repeal of proposed changes to Routes 44, 47 and 48. Repeal of service changes to Routes 70, 71, 72, 73 & 74 except that Routes 71 and 72 are still proposed to provide limited stop service along University Avenue without significant change in schedule.

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. **ST**.

On The Hour = min. head of 12'

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 this 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).]*

buses every 15 minutes ~~Head of 15/45~~

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.

Route 5 Schedule Realignment to Better Coordinate Service at the South Transfer Point

Under current schedules, routes 4 and 5 both depart the South Transfer Point (**STP**) at the same time on weeknights and weekends. This leaves an hour gap in service from the STP to the **Capitol Square**. In addition, route 16 arrives at the half hour between the departures of these routes, so transfers to the Capitol Square require a half-hour wait. The proposal is to shift route 5's schedule on weeknights and weekends by 30-

minutes so that buses depart the STP towards the Capitol Square at half-hour intervals, and direct transfers can be made from route 16 to route 5.

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 not heavily utilized in the JoCo because of Route 9's 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 eliminated in the face of climbing ridership west of University Bay Dr.

The new route designs respond to these problems as follows:

- The entire service structure is shifted west, eliminating Route 9's service to the ETP and Route 33. This is due to duplication of 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 (*note that the UHos loop would now be served by route 10, rather than route 9 as is done currently*). For the first time, the JenCo side will also see one-seat, midday service to University Ave., west of Breese Terrace.
- Both sides of the isthmus will see buses reaching Sheboygan Ave. 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 Dr. 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 Ave. 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.

NOT-RUSH-HOUR
BUS A
? NON-TRANSFER OR ONE BUS
ON UNIV

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 affecting passengers on both routes. 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.

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 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 on the next page 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. The loop south of Cottage Grove will see a reduction in frequency during the peaks, because it would no longer be served by buses interlining between routes 14 & 15 at the end of the routes. However, the existing frequency would be maintained in the commute direction. **Route 32** will remain the “off-peak” route in those neighborhoods, with no changes to the route or schedule anticipated.

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  SPLIT IN TWO

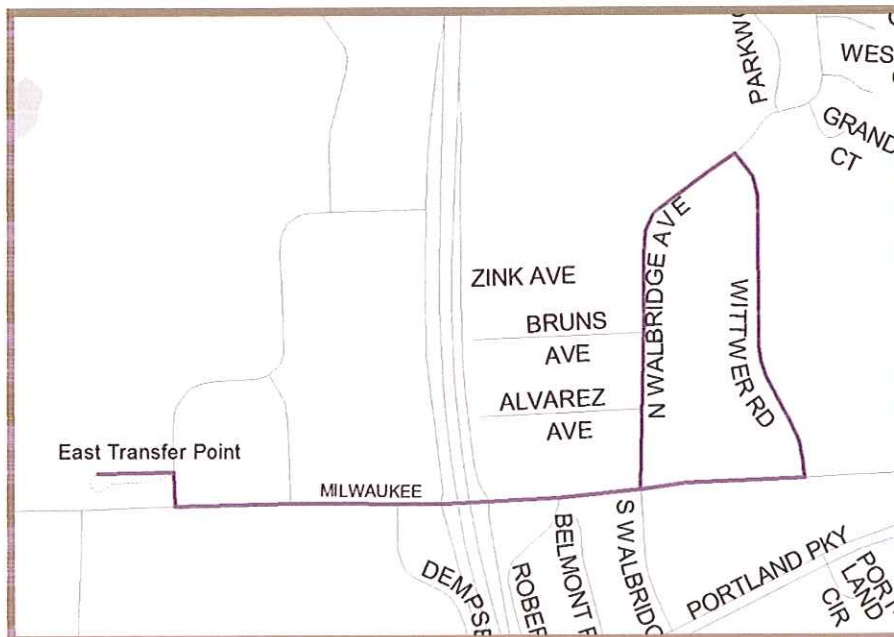
To simplify the route and align the service with the greatest number of dwelling units, Metro planning staff proposes to eliminate the route's bifurcation and have all trips operate via Fordem Avenue. Route 2 buses would remain scheduled as they are now, primarily serving Sherman Avenue during peak periods. 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.

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

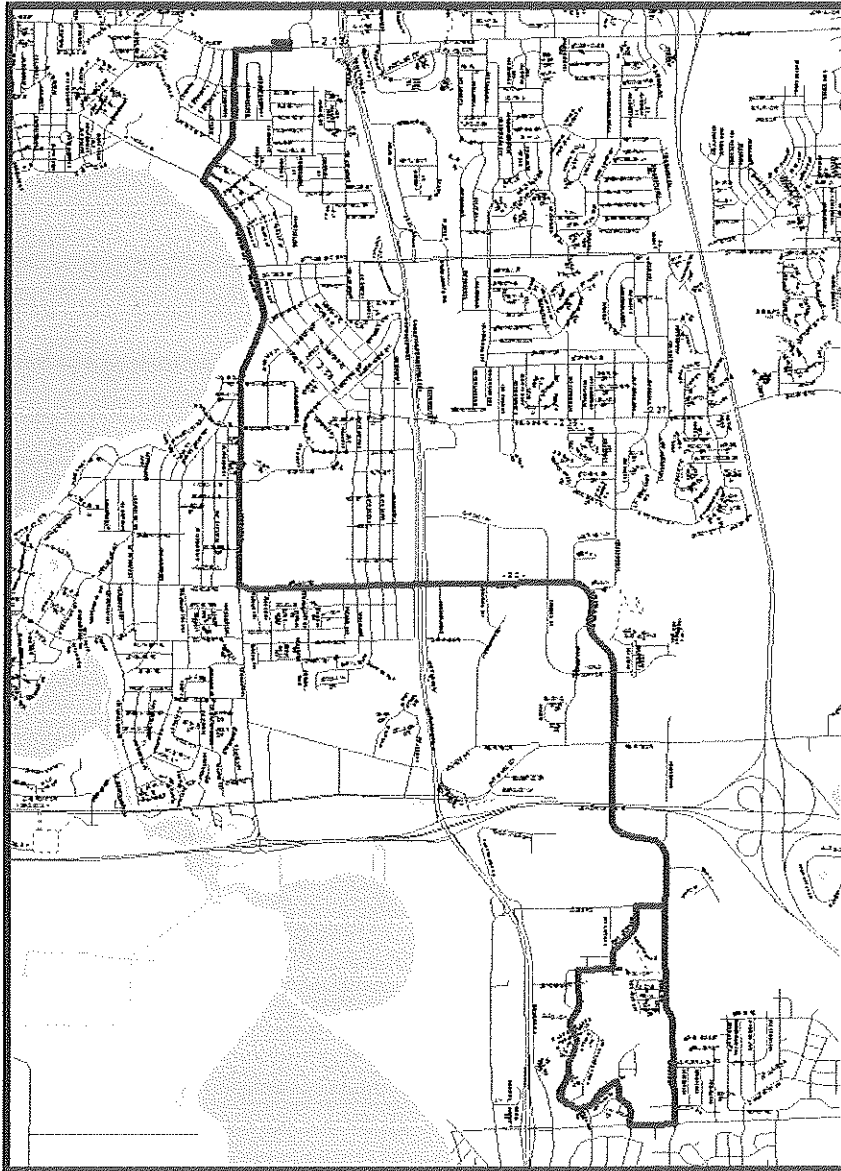
Route 33 - Proposed for elimination

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, operating only during peak periods on weekdays, and hourly on weekends as well. Service is designed to effectively serve Sennett Middle and LaFollette High Schools 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.

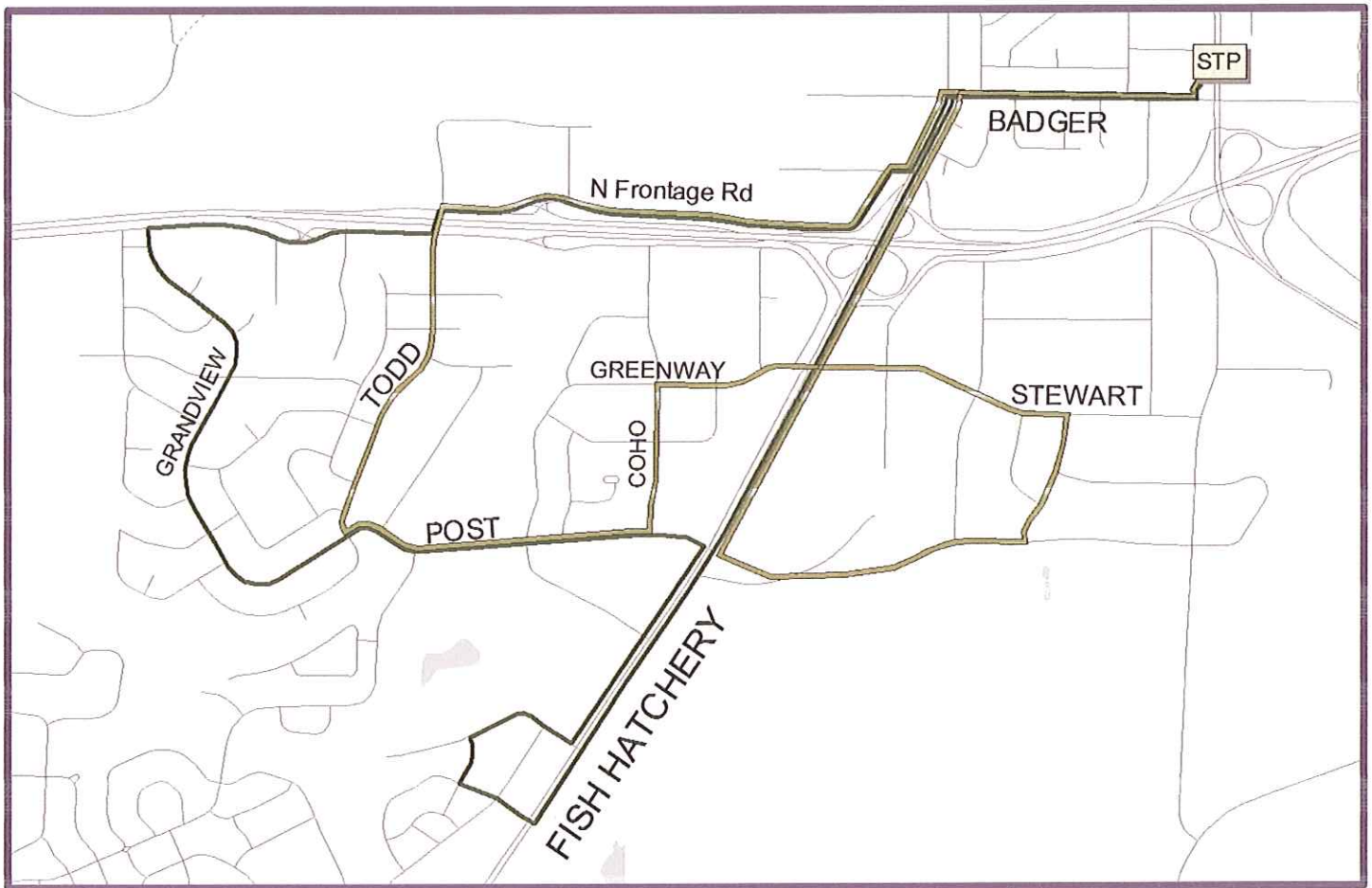
Route 38 – Improve Gray Bar Service For years, we've been able to add extra buses into the schedule starting at Baldwin Street (morning rush hour) as that was the point at which buses on Route 38 began to overload. Several years ago, some extra buses were converted into "gray-bar trips.*" Since ridership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

FARTHER

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.

It is proposed that Route 40 will return to a bifurcated design used prior to 2005. Trips will generally alternate throughout the day until 7:00 pm, with buses travelling via Todd and Coho (yellow line) leaving the STP on the hour, and buses following the green line leaving the STP on the half hour.

It is also proposed that weeknight trips on route 40 would be shifted one-half hour to match the pattern operated on weekends.



Route 44

No change in routing, but the 5:56 a.m. trip is proposed to be eliminated from Nobel and Fish Hatchery Road to the South Transfer Point. Trip will instead start at the South Transfer Point, departing at 6:15 a.m.

Route 47

No change in routing, but the 5:51 a.m. trip is proposed to be eliminated.