BETTER BUS BLUEPRINT

IMPROVING TWIN PORTS TRANSIT

Comprehensive Operations Analysis

New Bus Network

Individual Route Summaries

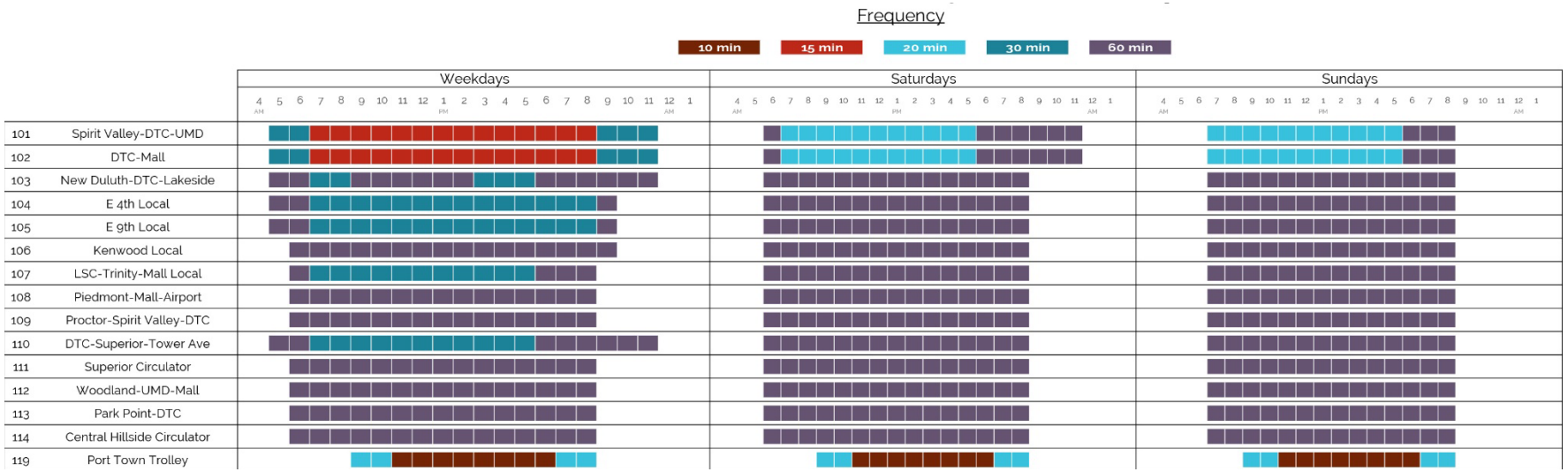
October 2021

Duluth Transit Authority

Prepared by Connetics Transportation Group

Connetics Transportation Group

New Bus Network Route Frequency and Span Summary



Note: Minor route alignments and route numbering may be subject to change in preparation for implementation of the new bus network.

Route Replacement Overview Table

Previous Route	Recommended Draft Network Replacement
Route 1	**101**
Route 2	**101**, 103
Route 2F	*Service to Fon du Lac discontinued*
Route 2X*	103
Route 3	**101**, 103, 109
Route 3X*	109
Route 4+	109
Route 5	**101**, 103, 107, 108
Route 6	**101**, 103
Route 7	**101**, 103
Route 7A	**101**, 103
Route 7X*	103
Route 8	107, 108
Route 9M	108
Route 9MT	107, 108
Route 10	**102**, 104, 108, 114
Route 10E+	**102**, 104, 114
Route 10H	**102**
Route 11	**102**, 105
Route 11K	**102**, 105, 106, 112
Route 11M+	105, 112
Route 12	106
Route 13	104, 112
Route 14W	114
Route 15	113
Route 16	110, 111
Route 16X*	110, 111
Route 17+	110
Route 17B+	*Service to Billings Park discontinued*
Route 17S+	110
Route 18	112
Route 19	119
Route 23	104, 105
Route S1	**101**, 109

**Peak Period Express services were reallocated into frequency on local services*

+Sections of this route discontinued. Check specific route changes for more details

Routes 101 & 102 *are high frequency (pre-BRT) service*

Note: Minor route alignments and route numbering may be subject to change in preparation for implementation of the new bus network.

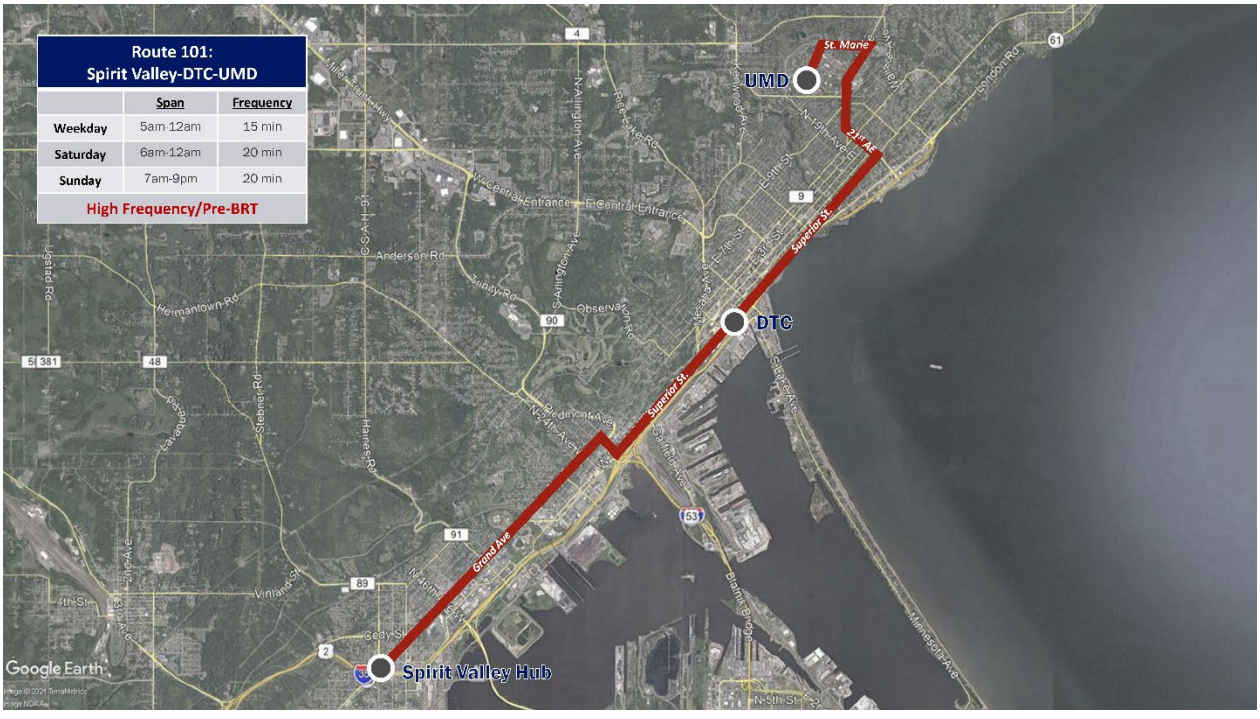
Route 101: Spirit Valley-DTC-UMD

Route 101 is one of two, pre-BRT routes that make up the high frequency spine of the Better Bus Blueprint Bus Network. It operates via Superior Street and Grand Avenue between Kirby Plaza at the University of Minnesota-Duluth (UMD), the Downtown Transit Center (DTC), and the proposed Spirit Valley Hub located near Grand Avenue and N 59th Avenue W. The route is a consolidation of the existing west mainline (routes 1, 2, and 3) and east mainline (routes 6 and 7) services between Grand Avenue / 59th Avenue W and Superior Street / S 21st Avenue E. The new service creates a consistent frequency and improves connections throughout the corridor. It operates every 15-minutes on weekdays and every 20-minutes on weekends throughout most of the day.

Major Changes:

- On the "west mainline" portion, higher frequency services now terminate near 59th Avenue W instead of Lake Superior Zoo. Local service to Gary and New Duluth continues past 59th Avenue W on Route 103.
- On the "east mainline" portion, the route stays on Superior Street between N 3 Avenue E and N 10 Avenue E instead of deviating up to E 1st and E 2nd streets like the existing routes 6 and 7.
- Also, on the "east mainline" portion, higher frequency services now terminate at 21st Avenue E, instead of 24th Avenue E.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	5 am - 12 am	15 min	15 min	30 min
Saturday	6 am - 12 am	20 min	20 min	60 min
Sunday	7 am - 9 pm	20 min	20 min	60 min



Route 102: DTC-Mall

Route 102 is the second of two, pre-BRT routes that make up the high frequency spine of the Better Bus Blueprint Bus Network. It operates via N 6th Avenue E and Central Entrance between the DTC and the Hermantown Menards. It provides service to the Hermantown Walmart and the proposed Miller Hill Area Hub which will be temporarily located on the western side of JCPenney until a more permanent facility can be constructed. The route consolidates portions of existing routes 10, 10E, 10H, 11, and 11K. It operates every 15-minutes on weekdays and every 20-minutes on weekends throughout most of the day.

Major Changes:

- The circulation pattern around the Miller Hill Mall area east of Mall Drive is more consistent and streamlined than the existing 10, 10E, and 10H.
- Service is extended to the Hermantown Walmart, providing a high frequency service to this key destination.
- Service is extended to the Hermantown Menards and McDonalds. While this is primarily to facilitate bidirectional service to Walmart, change allows for service deeper into Hermantown.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	5 am - 12 am	10 min	15 min	60 min
Saturday	6 am - 12 am	20 min	20 min	60 min
Sunday	7 am - 9 pm	20 min	20 min	60 min

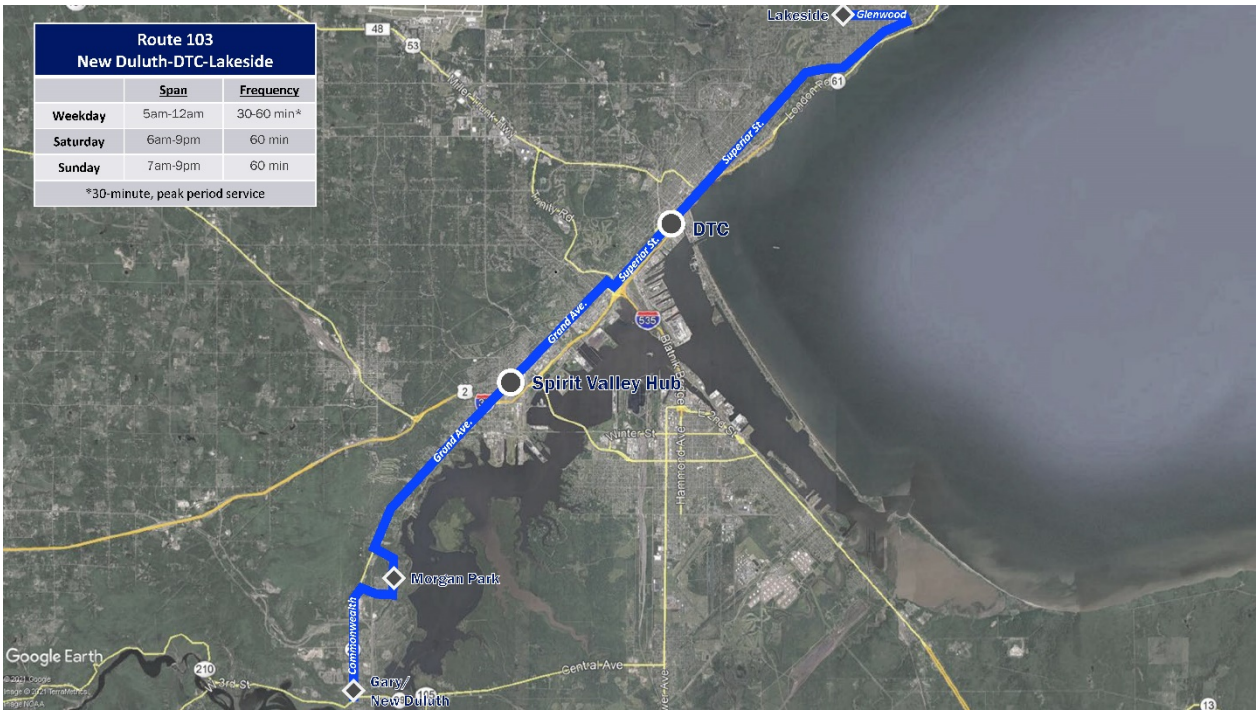
Route 103: New Duluth-DTC-Lakeside

Route 103 is a local fixed route that will operate via Commonwealth Avenue, Grand Avenue, Superior Street, and Glenwood Street between New Duluth and Lakeside. It also serves the DTC and the proposed Spirit Valley Hub located at Grand Avenue and N 59th Avenue W. The route consolidates portions of existing routes 2, 2X, 5, 7, and 7X and operates every 30 to 60-minutes on weekdays and every 60-minutes on weekends.

Major Changes:

- Route continues to cover all of existing Route 2 alignment.
- Service is no longer provided to Fond Du Lac
- The one-way loop at the eastern end of existing Route 7 is removed and replaced with bi-directional service along Superior Street and Glenwood Street.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	5 am – 12 am	30 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



Route 104: E 4th Local

Route 104 is a local fixed route that will operate via E 4th Street, Woodland Avenue, and St. Marie Street between DTC and the Kirby Plaza at UMD. The route also serves the Central and East Hillside neighborhoods. It consolidates portions of existing routes 10, 10E, 13, and 23 and operates every 30-minutes on weekdays and every 60-minutes on weekends.

Major Changes:

- Circulation pattern around UMD is changed to match the Route 101 and provide access to the commercial development along Woodland Avenue east of UMD.
- Woodland Avenue is utilized between 19th Avenue E & 24th Avenue E, instead of E 4th and Kent Rd.
- Service to Woodland Avenue north of UMD is removed and covered by Route 113.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	5 am – 10 pm	30 min	30 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min

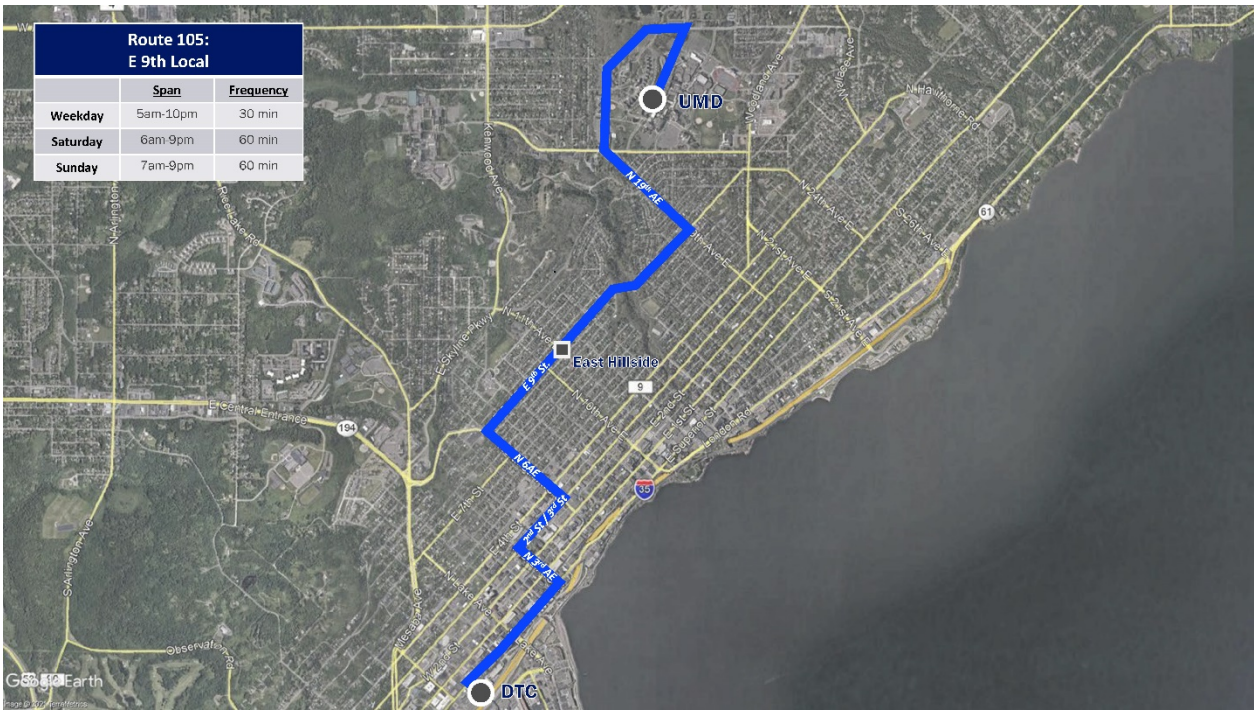
Route 105: E 9th Local

Route 105 is a local fixed route that will operate via N 6th Avenue E, E 9th Street, and N 19th Avenue E between DTC and Kirby Plaza at UMD. The route also serves the Central and East Hillside neighborhoods. It consolidates portions of existing routes 11, 11K, 11M, and 23 and operates every 30-minutes frequencies on weekdays and every 60-minutes on weekends.

Major Changes:

- Route turns around at Kirby Plaza and leaves UMD the same way it came, replacing the one-way loop through campus.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	5 am – 10 pm	30 min	30 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



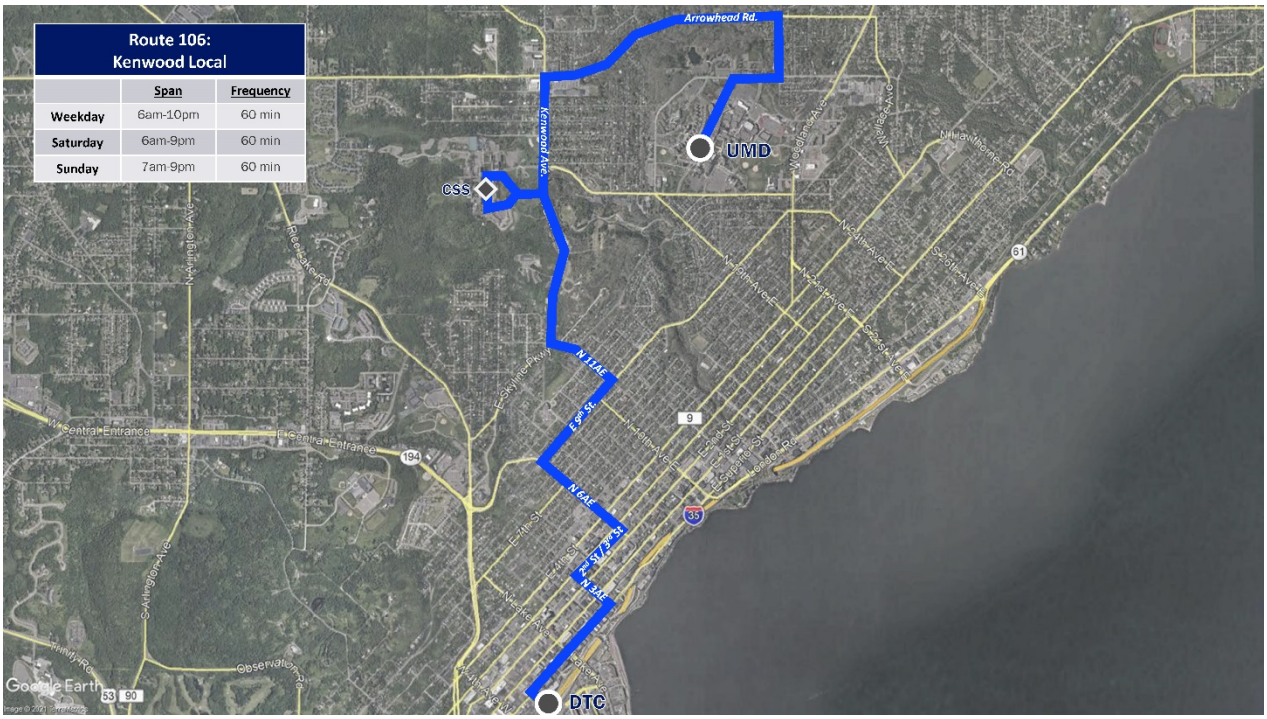
Route 106: Kenwood Local

Route 106 is a local fixed route that will operate via N 6th Avenue E, E 9th Street, N 11th Avenue E, Kenwood Avenue, and Arrowhead Road between DTC and Kirby Plaza at UMD. The route also serves the College of St. Scholastica (CSS). It consolidates portions of existing routes 11K and 12 and operates every 60-minutes on both weekdays and weekends.

Major Changes:

- Service to E 13th Street was rerouted via E 9th Street and N 11th Avenue E to keep service along more major road corridors.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 10 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



Route 107: LSC-Trinity-Mall Local

Route 107 is a local fixed route that will operate via Superior Street, N 24th Avenue E, and Trinity Road between DTC and the proposed Miller Hill Area Hub which will be temporarily located on the western side of JCPenney until a more permanent facility can be constructed. The route also serves Lincoln Park and Lake Superior College (LSC). It consolidates portions of routes 5, 8, and 9MT and operates every 30-minutes on weekdays and every 60-minutes on weekends.

Major Changes:

- Existing Route 8 service between the Miller Hill Mall and the Airport is removed and covered by Route 108.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	30 min	30 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min

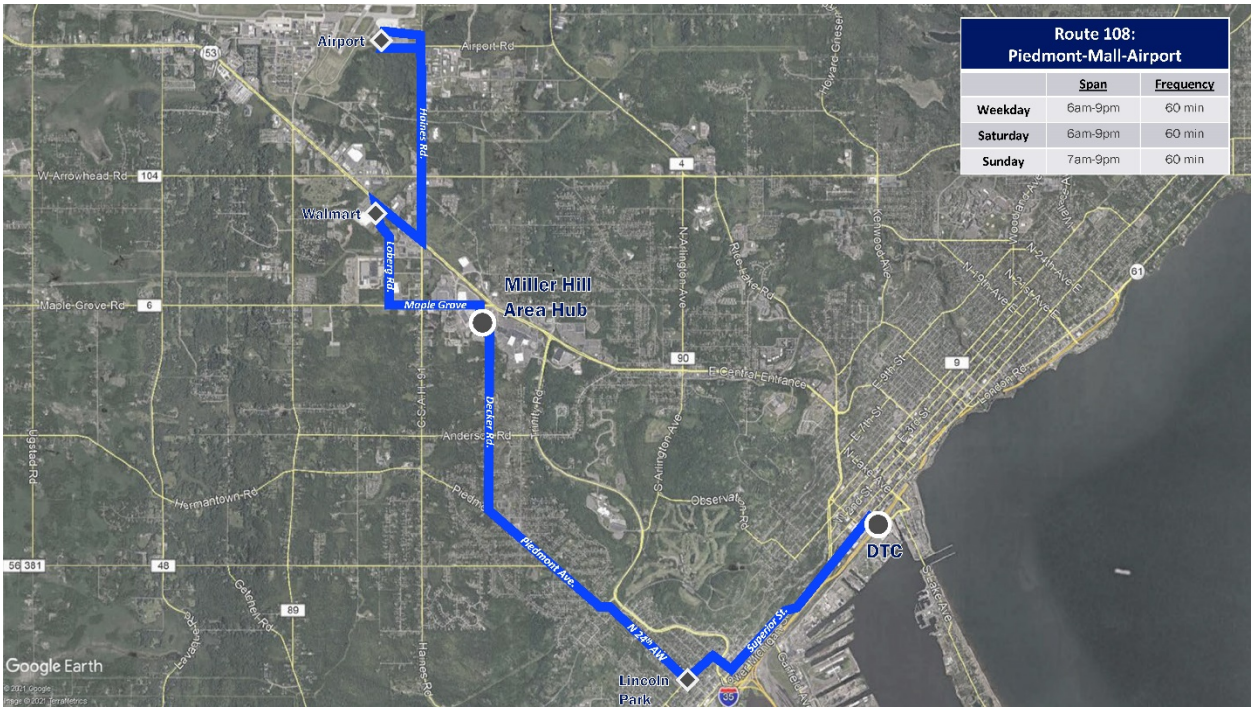
Route 108: Piedmont-Mall-Airport

Route 108 is a local fixed route that will operate via Superior Street, N 24th Avenue W, Decker Road, Maple Grove Road, Loberg Road, and Haines Road between the DTC and Duluth International Airport with service to the proposed Miller Hill Area Hub which will be temporarily located on the western side of JCPenney until a more permanent facility can be constructed. The route also serves the Lincoln Park neighborhood and the Hermantown Walmart. It consolidates portions of existing routes 5, 8, 9M, 9MT, and 10 and operates every 60-minutes on both weekdays and weekends.

Major Changes:

- Routing on Decker Road was preferred over Haines Road due higher ridership potential and a more direct connection to the Miller Hill Mall area.
- Service is extended to serve the Duluth Airport.
- The one-way loop via Morris Thomas Road, Haines Road, and Piedmont Avenue (existing Route 9MT) is removed due to low ridership.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



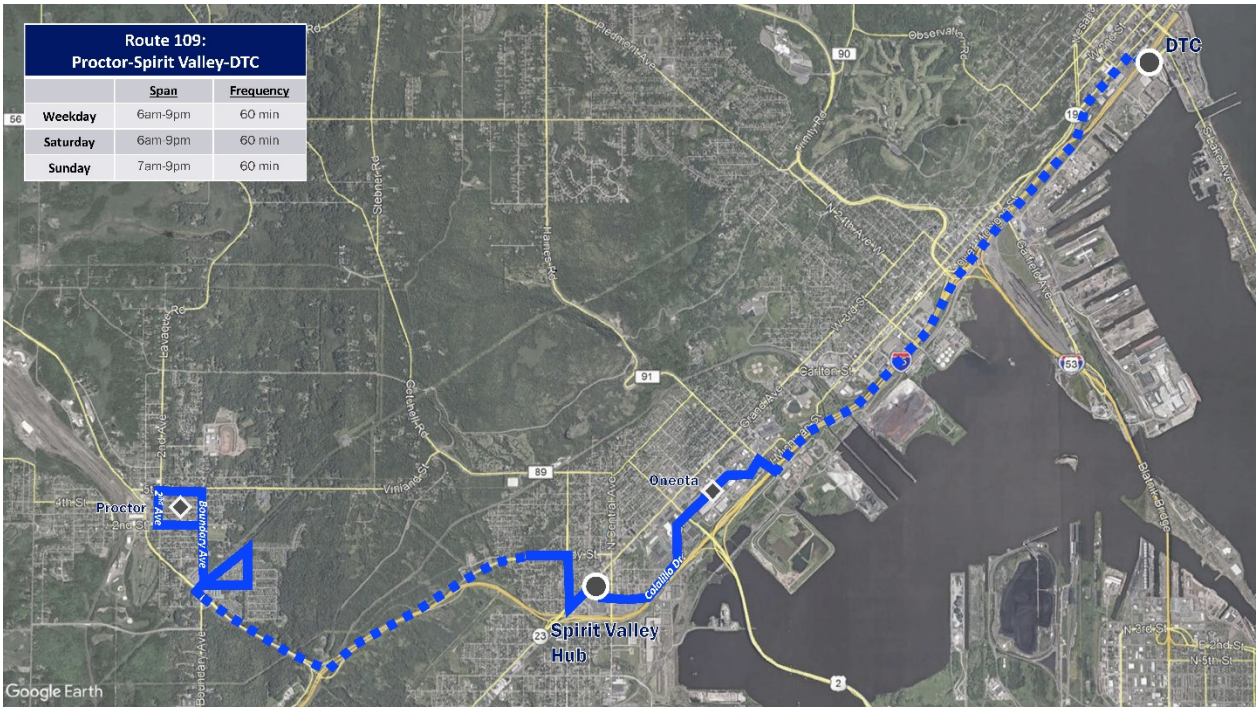
Route 109: Proctor-Spirit Valley-DTC

Route 109 is a limited stop fixed-route that will operate via Superior Street, I-35, Mike Colalillo Drive, Grand Avenue, 59th Avenue W, Cody Street, and Boundary Avenue between DTC and Proctor. The route also serves the proposed Spirit Valley Hub which is anticipated to be in the vicinity of the Grand Avenue and N 59th Avenue W intersection. It provides non-stop service via I-35 between DTC and 40th Avenue W and between Proctor and the Spirit Valley Hub. The route consolidates portions of existing routes 3, 3X, 4, and S1 and operates every 60-minutes on both weekdays and weekends.

Major Changes:

- Operates non-stop via I-35 between DTC and 40th Avenue W instead of using Superior Street and Grand Avenue.
- Operates non-stop via I-35 between Spirit Valley and Proctor, instead of utilizing Highland and Vinland streets.
- Service in Proctor does not travel west of 3rd Ave due to low ridership and to avoid delays associated with the railroad crossing.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



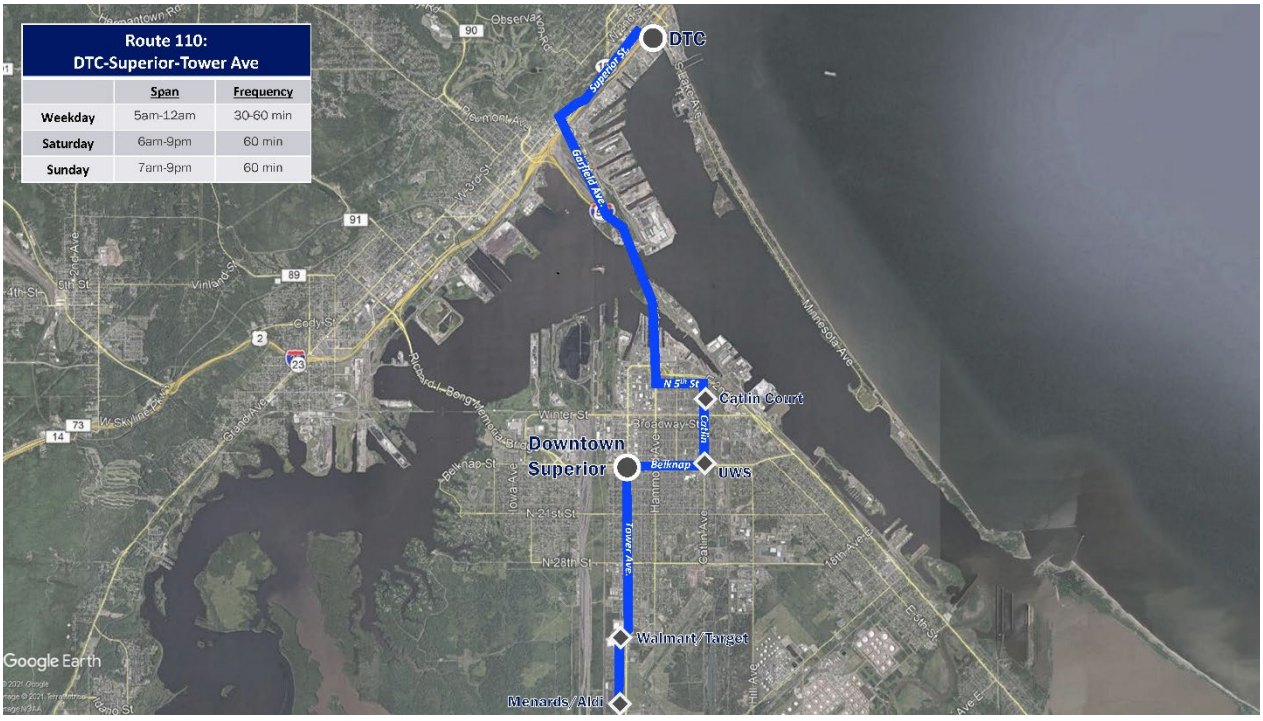
Route 110: DTC-Superior-Tower Ave

Route 110 is one of the two routes providing service in Superior, Wisconsin. It will operate via Superior Street, Garfield Avenue, 5th Street, Catlin Avenue, Belknap Street, and Tower Avenue between DTC and the Superior Aldi (Tower Avenue and N 46th Street). The route also serves the University of Wisconsin-Superior (UWS), Downtown Superior, and the Superior Walmart. It consolidates portions of existing routes 16, 16X, 17, and 17S and operates every 30-minutes on weekdays and every 60-minutes on weekends.

Major Changes:

- Weekday service is increased to every 30-minutes throughout most of the day and extended to midnight to provide better regional connections between Superior and Duluth.
- Alignment is modified to access Downtown Superior via N 5th Street, Catlin Avenue, and Belknap Street.
- Service to Billings Park and South Superior were removed due to low ridership and limited resources.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	5 am – 12 am	30 min	30 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



Route 111 – Superior Circulator

Route 111 is one of the two routes providing service in Superior, Wisconsin. It will operate via Tower Avenue, Belknap Street, Catlin Avenue, N 28th Street, Hill Ave, N 21st Street, E 5th Street and US-2 between Downtown Superior and Itasca. The route also serves UWS, Superior High School, Mariner Mall, the East End commercial area (Super One), and Allouez. It consolidates portions of existing routes 16 and 16X and operates every 60-minutes on both weekdays and weekends.

Major Changes:

- Terminates at Tower Avenue and Broadway Street in Downton Superior instead of continuing to the DTC.
- No longer provides service along Hill Ave or E 5th Street north of N 21st St.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min

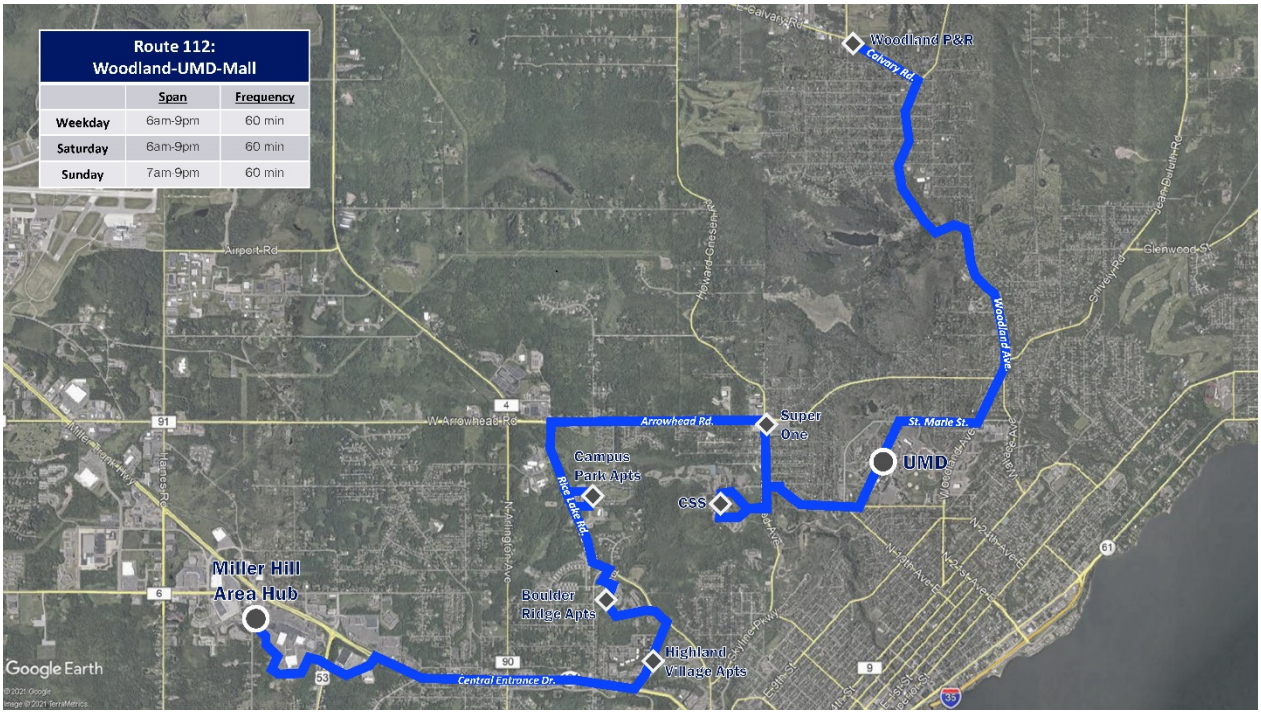
Route 112: Woodland-UMD-Mall

Route 112 is a local fixed route that will operate via Woodland Avenue, St. Marie Street, Kirby Drive, Arrowhead Road, Rice Lake Road, and Central Entrance with service to the proposed Miller Hill Area Hub which will be temporarily located on the western side of JCPenney until a more permanent facility can be constructed. The route also serves UMD, CSS, and apartment complexes along and near Rice Lake Road. It consolidates portions of existing routes 11K, 11M, 13, and 18 and operates every 60-minutes on both weekdays and weekends.

Major Changes:

- Extended west to serve the proposed Miller Hill Area Hub.
- Extended north to cover portion of Woodland Avenue north of UMD currently covered by existing Route 13.
- Direct service between the Woodland neighborhood and Downtown Duluth no longer exists. Passengers coming from Woodland must transfer to the high frequency Route 101 or another local route destined for downtown.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



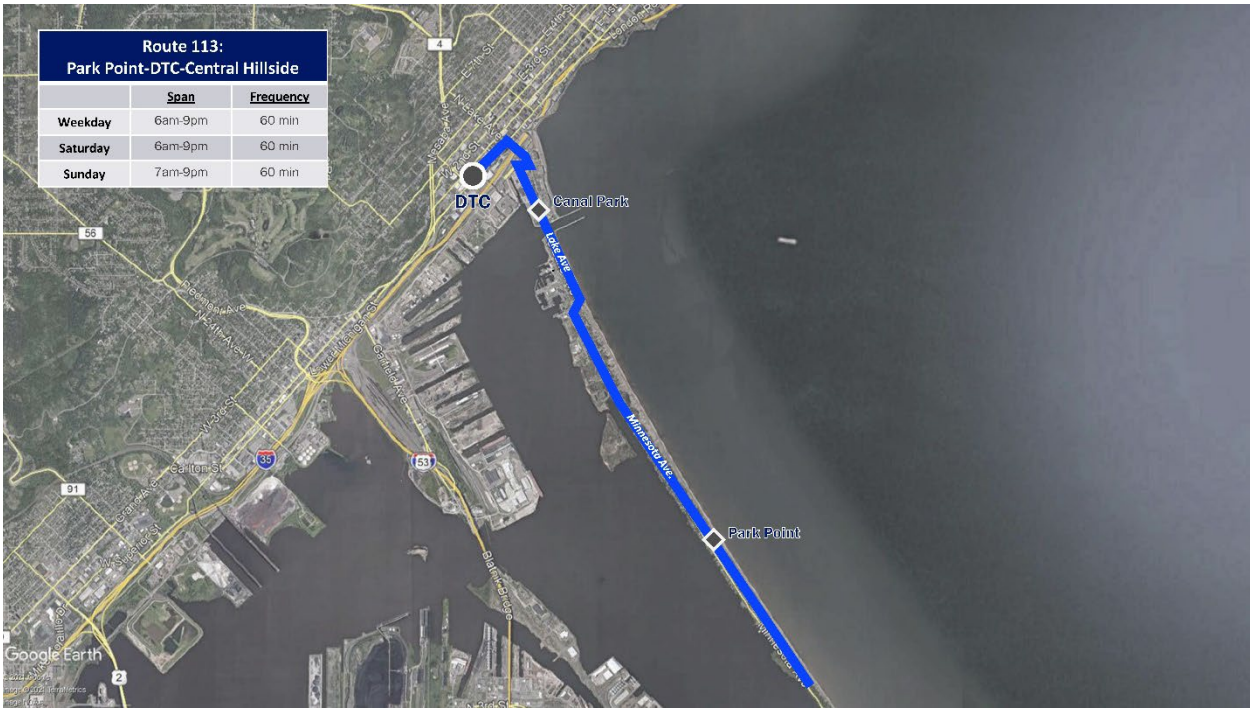
Route 113: Park Point-DTC

Route 113 is a partially enhanced version of the existing Route 15: Park Point. Although much of the alignment remains the same, service is extended later and will also include weekend service. It operates via Minnesota Avenue, Lake Avenue, and Superior Street, between Park Point and DTC and operates every 60-minutes on both weekdays and weekends.

Major Changes:

- Service extended to 9 pm and will be provided on Saturday and Sunday

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



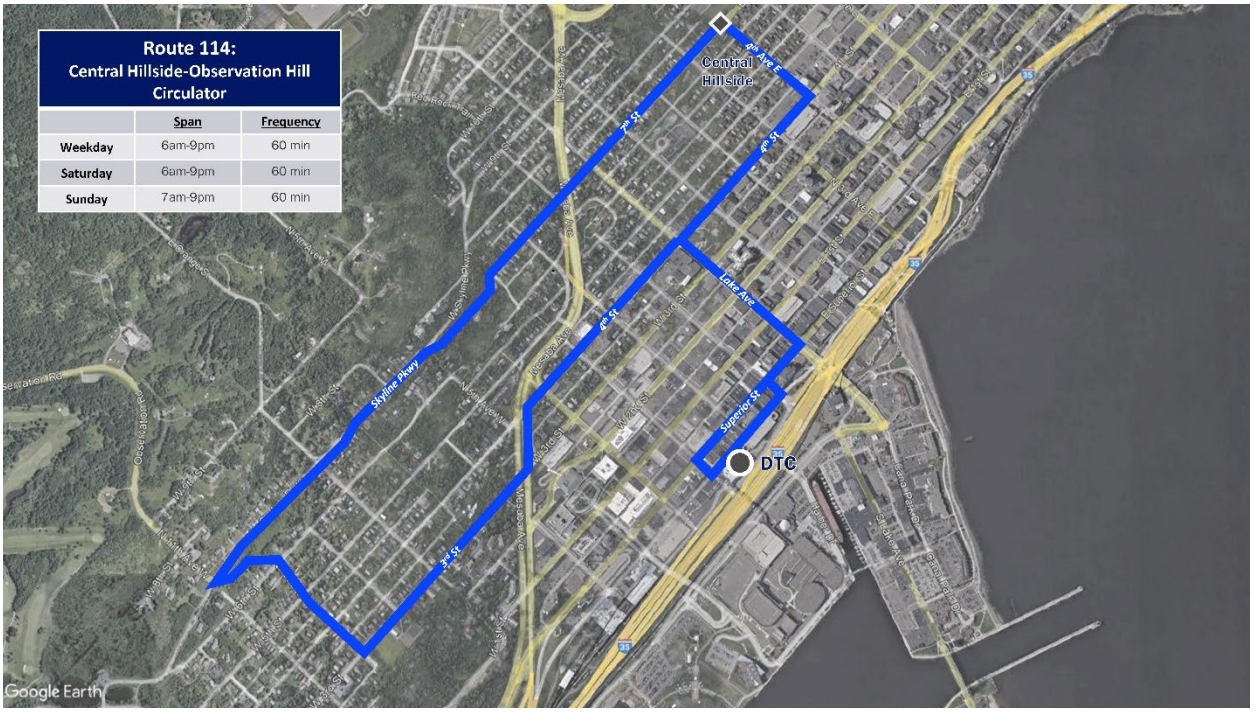
Route 114: Central Hillside Circulator

Route 114 is a local fixed route that will operate via Superior Street, Lake Avenue, E 4th Street, E 7th Street/Skyline Pkwy, and 3rd Street between DTC, Central Hillside, and Observation Hill. The route provides a counterclockwise looping service that connects the Central Hillside and Observation Hill neighborhoods to DTC and provides additional circulation to various social services and assists with navigating steep grades in those areas. It consolidates portions of existing routes 10, 10E, and 14W and operates every 60 minutes on both weekdays and weekends.

Major Changes:

- Service to the Central Hillside and Observation Hill neighborhoods is offered on this route to provide additional circulation to various social services and assist with navigating steep grades in the area.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	6 am – 9 pm	60 min	60 min	60 min
Saturday	6 am – 9 pm	60 min	60 min	60 min
Sunday	7 am – 9 pm	60 min	60 min	60 min



Route 119: Port Town Trolley

Route 119 is the renumbering of the existing Route 19: Port Town Trolley. There are no proposed service changes to this route. The route provides circulating service between DTC, Canal Park, and the Duluth Entertainment Convention Center. It operates seasonally, every 10 to 20 minutes on both weekdays and weekends.

	Span	Peak Frequency	Midday Frequency	Early/Late Frequency
Weekday	9 am – 9 pm	10 min	10 min	20 min
Saturday	9 am – 9 pm	10 min	10 min	20 min
Sunday	9 am – 9 pm	10 min	10 min	20 min