



# Advancing Rural Mobility Michigan

June 25 – June 28, 2024

## Agency Site Visits

# Team Introductions

- MDOT
- HNTB
- Agency Partners



# Agenda

1. Program Education - 9:30 a.m.
2. Agency Processes Discovery – 10:15 a.m.
3. Passenger Experience – 1:00 p.m.



# Program Education



# Project History

- MDOT OPT developed the Advancing Rural Mobility Project (pilot project) to implement **GTFS-Flex** at four rural transit agencies
- The project is funded by the Bipartisan Infrastructure Law's (BIL) Strengthening Mobility and Revolutionizing Transportation (SMART) discretionary grant program



# Project History

- SMART is a two-stage program
  - Stage 1 pilots GTFS-Flex at four rural transit agencies
  - Stage 2 will refine technologies and guide implementation statewide
- Pilot agencies were selected based on their technological readiness
- The performance period for evaluating the project's initial stage is from January 2024 to December 2024



# MDOT Statewide MaaS

- MDOT's Statewide MaaS system aims to provide a single interface to access transit information across Michigan
- The Advancing Rural Mobility project will contribute to MaaS functionality by laying the groundwork for standardized data specifications for demand-response



# Project Stages

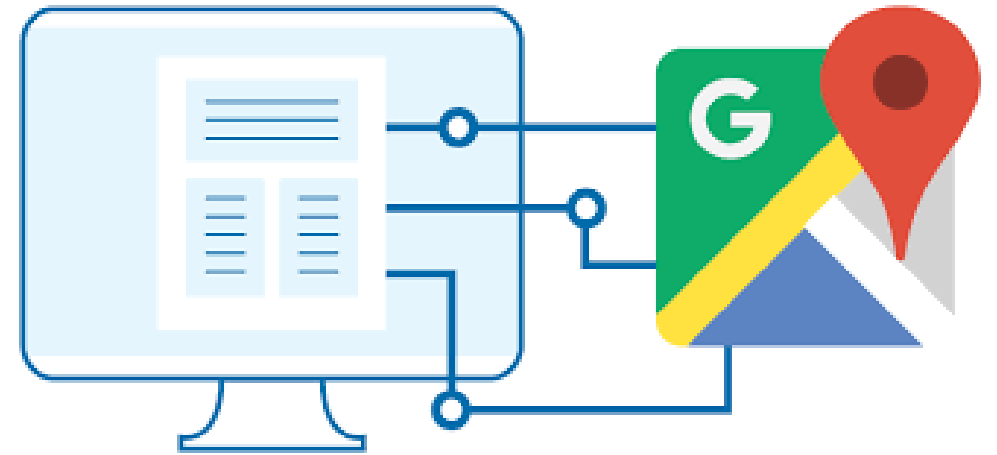
- Stage 1 will assist four rural transit providers in developing data specifications and infrastructure that will help reduce barriers to mobility for the residents they serve
- Stage 2 of the pilot project aims to expand these technologies to the rest of the State and connect with urban agencies. Site visits will help the project team refine strategies in Stage 2



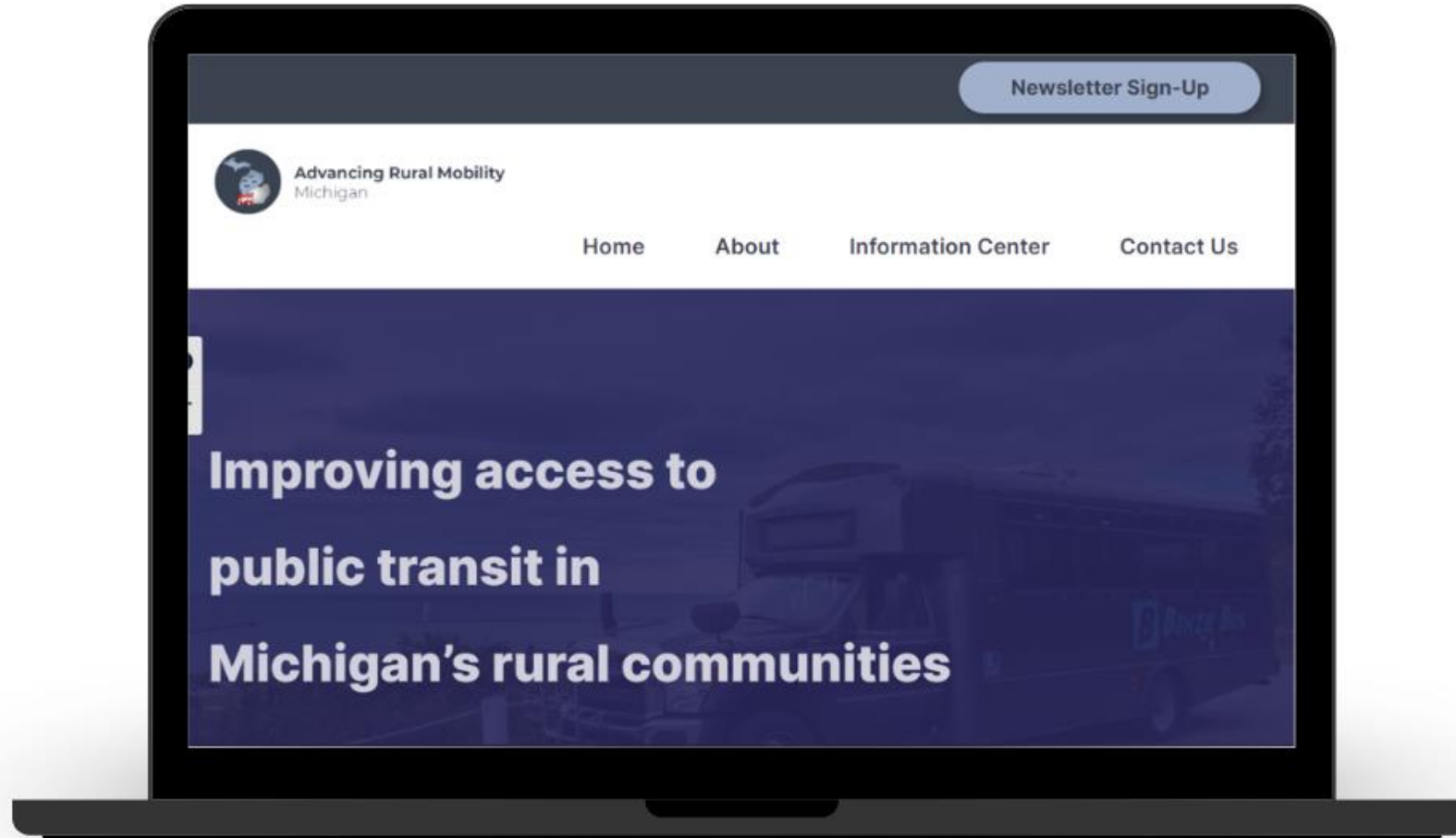


# GTFS in Michigan

- Open-standard GTFS data is common at urban transit agencies in Michigan
- GTFS data has not supported most rural services
  - With the adoption of GTFS-Flex, there is an opportunity to provide riders with information



# Project Website

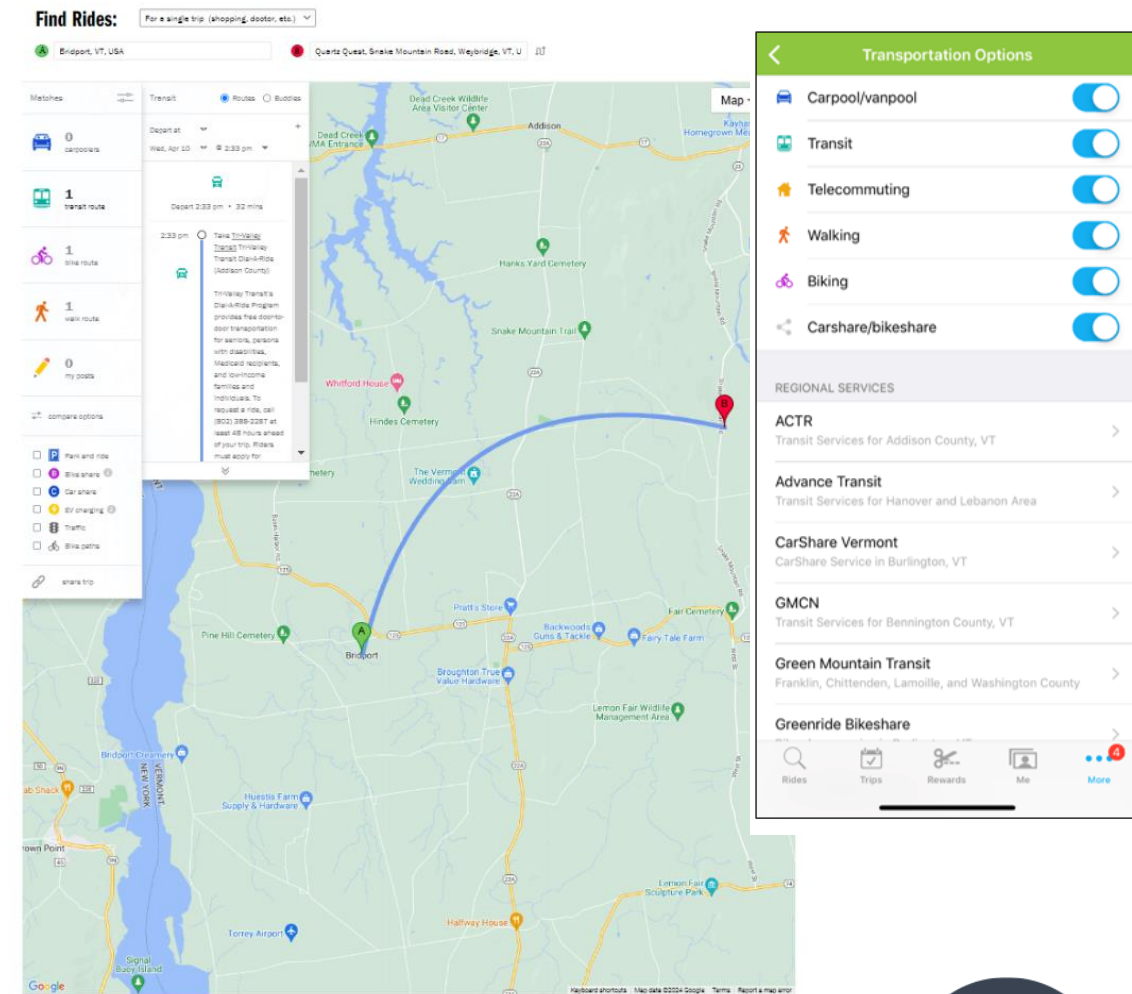


# State of the Practice Case Studies and Findings



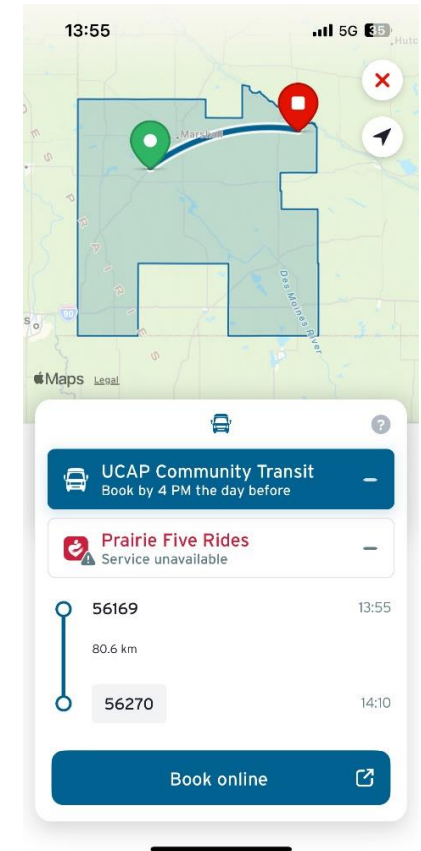
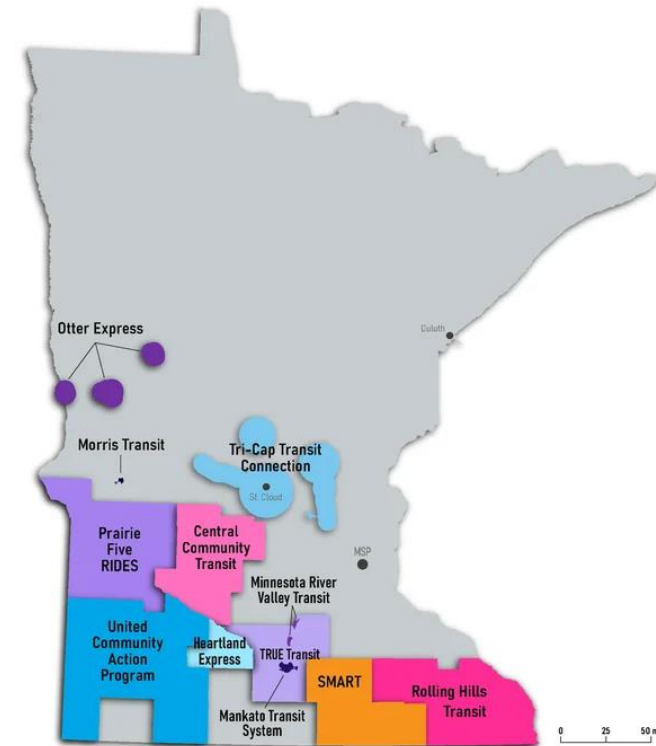
# Case Study: VTrans

- Pioneered the use of GTFS-Flex in a trip planner in 2017
- Discovery of demand-response services (shown as an arc)
- Encompasses all seven transit agencies in the state of Vermont
- Instrumental in establishing GTFS-Flex v1 as a stable, operable data specification to be used for trip-planning apps



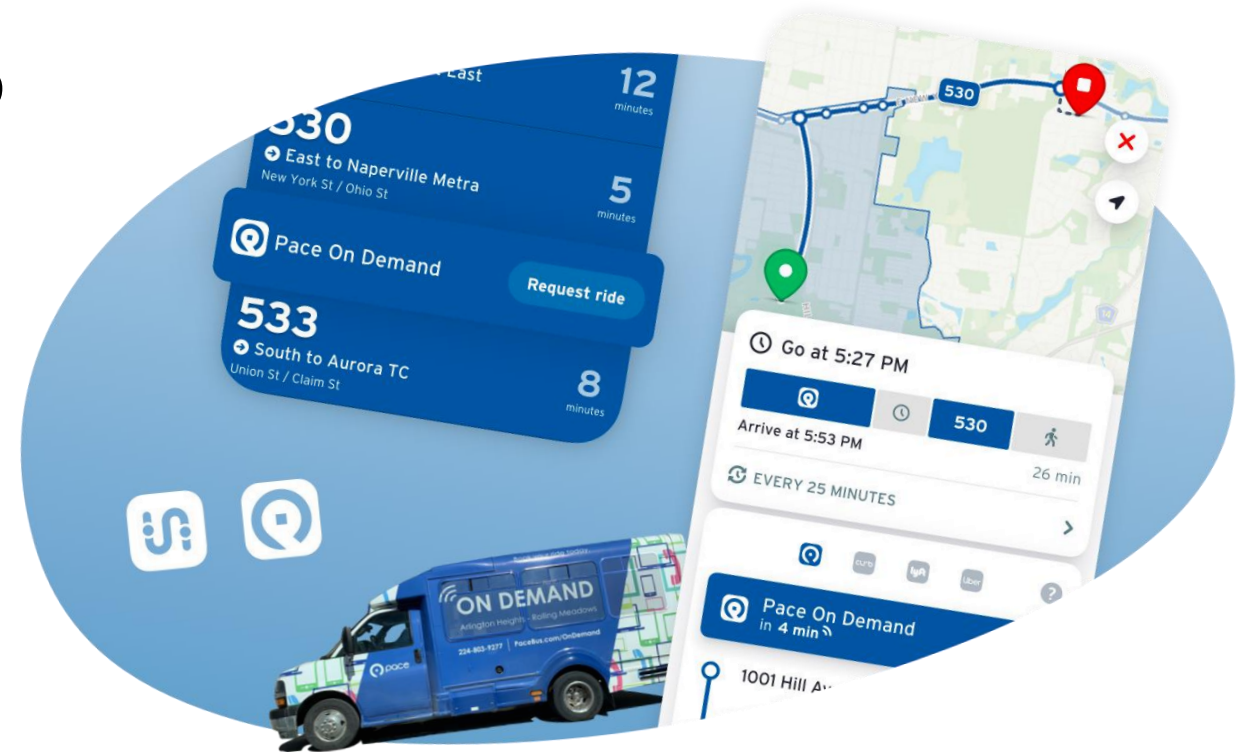
# Case Study: MnDOT

- MnDOT MaaS pilot helped further standardize GTFS-Flex to become part of the official specification
- Represents the first deployment of the extension into a prominent, commercial trip-planning app (Transit app)
- Currently service covers more than 25% of state, plans to expand to the whole state



# Case Study: PACE

- In early 2024, the Pace On Demand app was integrated into the Transit app, allowing riders to discover and reserve On Demand shared rides
- The integration represents the first commercial deployment of an on-demand transit service using GOFS-lite
- Transit app software developers contributed significantly to GOFS-lite open data standard development and app integration



# Initial Ridership Survey Findings



## Rider Survey: Booking and Transit Usage

Please complete this brief voluntary survey to help us understand current public transit usage and current booking processes for the Advancing Rural Mobility Program.

How do you currently book trips? Please check all that apply.\*

☐ Phone call

☐ Email

☐ Text

☐ Mobile app

☐ Third-party caretaker books for me

☐ Agency website (accessed via phone or computer)

☐ Other (please specify):

What pain points do you experience with booking trips? Please check all that apply.\*

☐ Difficulty understanding where I can travel.

☐ Unclear what services are available.

☐ Unclear wait times.

☐ Lack of real-time arrival notifications.

☐ Hard to keep track of scheduled trips.

☐ Other (please describe):



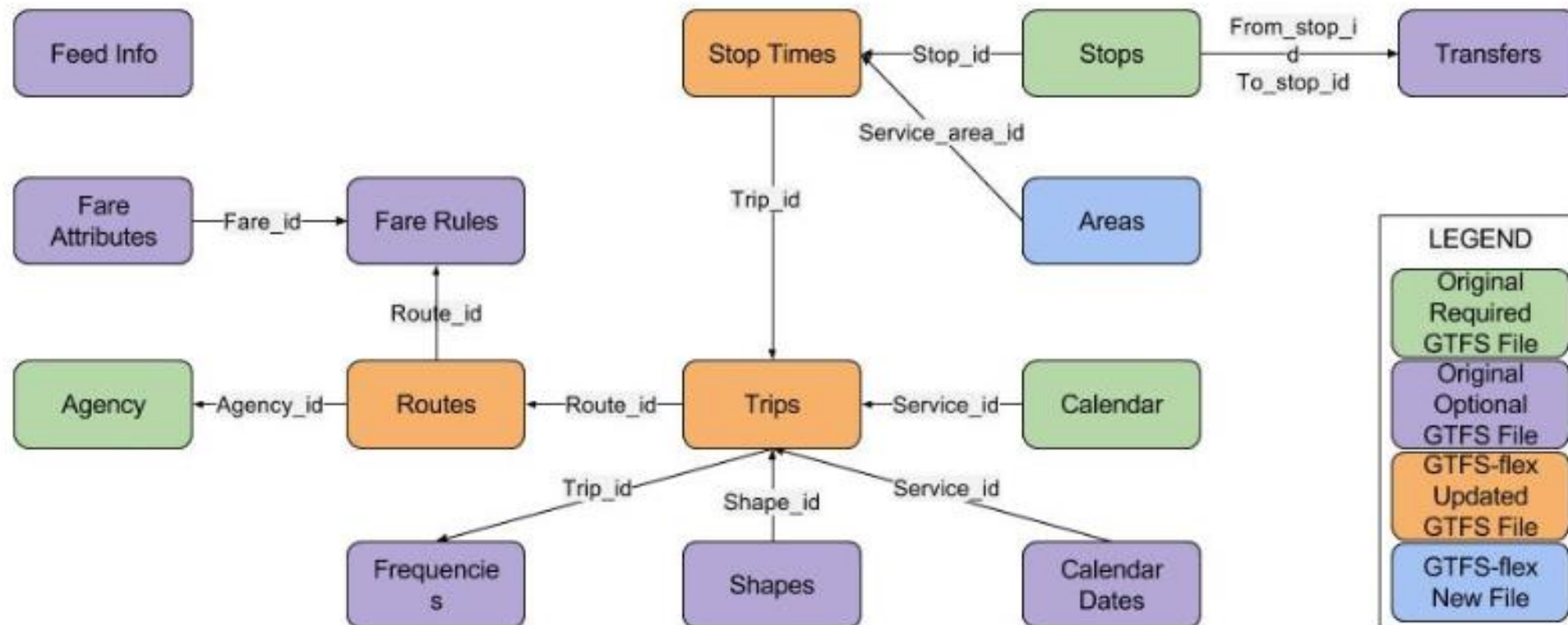


# Trip Planner Demonstration



# GTFS-Flex Model

GTFS-flex Model



# Example of a GTFS file

agency.txt - Notepad

File Edit Format View Help

```

"agency_id","agency_url","agency_lang","agency_name","agency_phone","agency_timezone","agency_fare_url","tts_agency_name"
"BB","https://www.benziebus.com/","en","Benzie Transportation Authority","(231)-325-3000","America/Detroit","",""
"CC","https://www.charlevoixcounty.org/county_transit/","en","Charlevoix County Transit","(231)582-6900","America/Detroit","https://cctt
"RC","https://www.roscota.net/","en","Roscommon County Transportation Authority","(989)366-5309","America/Detroit","",""
"WC","https://www.wexexpress.us/","en","Cadillac / Wexford Transportation Authority","(231)582-6900","America/Detroit","",""

```

stop\_times.txt - Notepad













File Edit Format View Help

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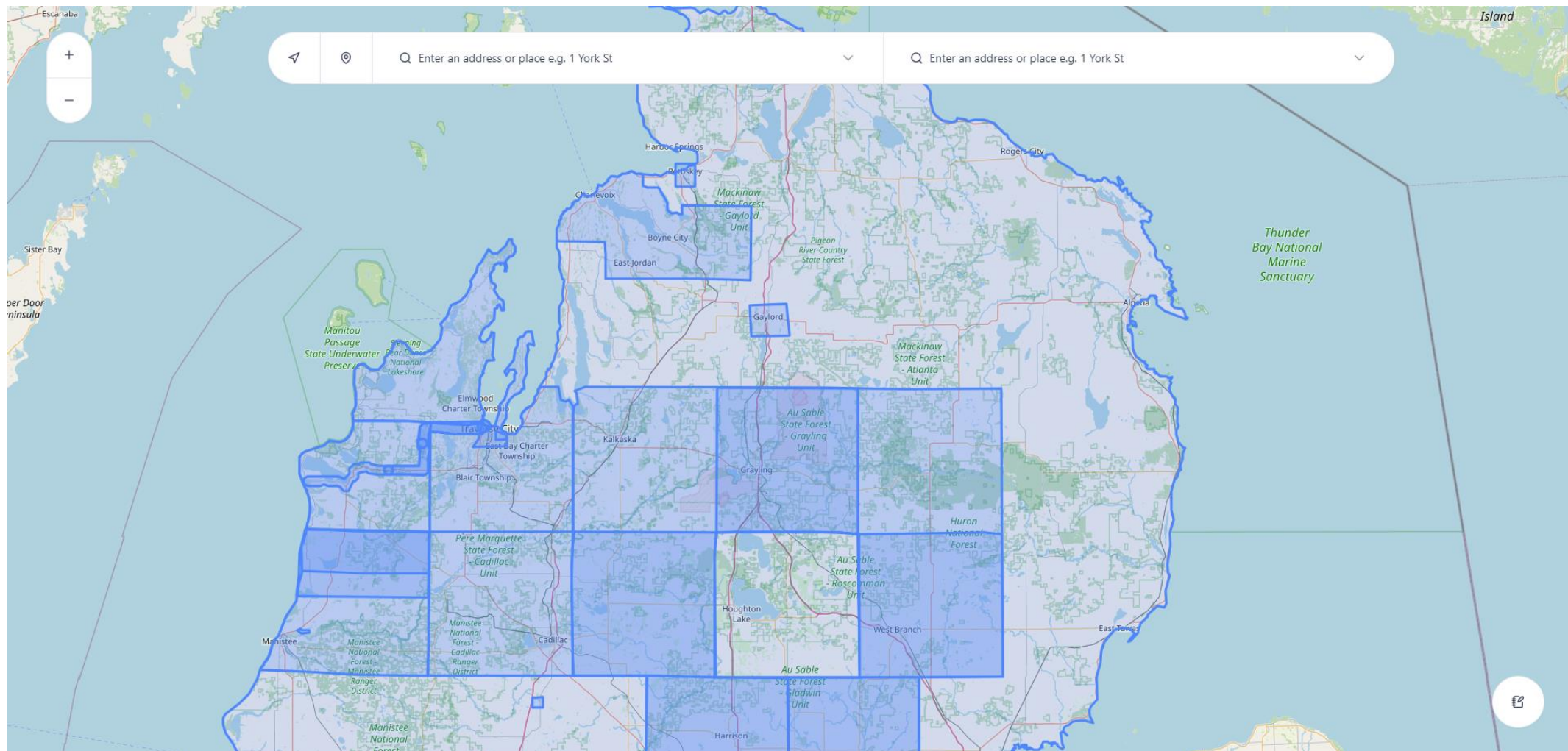
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Type	Compressed size	Password ...	Size	Ratio	Date modified
Text Document	1 KB	No	1 KB	38%	1/26/2024 1:06 PM
Text Document	1 KB	No	1 KB	44%	1/26/2024 1:06 PM
Text Document	1 KB	No	1 KB	45%	1/26/2024 1:06 PM
Text Document	1 KB	No	1 KB	33%	1/26/2024 1:06 PM
Text Document	1 KB	No	1 KB	50%	1/26/2024 1:06 PM
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Text Document	1 KB	No	1 KB	45%	1/26/2024 1:06 PM

Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
 agency.txt	Text Document	1 KB	No	1 KB	38%	1/26/2024 1:06 PM
 booking_rules.txt	Text Document	1 KB	No	1 KB	44%	1/26/2024 1:06 PM
 calendar.txt	Text Document	1 KB	No	1 KB	45%	1/26/2024 1:06 PM
 calendar_attributes.txt	Text Document	1 KB	No	1 KB	33%	1/26/2024 1:06 PM
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 trips.txt	Text Document	1 KB	No	1 KB	49%	5/8/2024 2:48 PM







Available routes

○ 49733, Frederic, MI, USA

📍 602 S Otsego Ave, Gaylord, MI, 49735, USA

Now

Plan

via New Freedom @ Mon Jun 10 2024

24 min

Best route

25.9 km

Details

via Non-Emergency Medical Transportation (NEMT) @ Mon Jun 10 2024

24 min

25.9 km

📍 49733, Frederic, MI, USA

📍 602 S Otsego Ave, Gaylord, MI, 49735, USA

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# Agency Processes Discovery



# Thank you!

