

Understanding post-COVID safety concerns towards the use of transit, shared mobility, and connected and automated vehicles in Greater Minnesota



UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

Greater Minnesota Shared Mobility Webinar

April 14, 2021

Research Team



Dr. Yingling Fan
Professor
Humphrey School of
Public Affairs



Dr. Xinyi Qian
Interim Director
UMN Tourism Center



Neil Linscheid
Extension Educator
Center for
Community Vitality



Galen Ryan
Research Fellow
Humphrey School of
Public Affairs

Research Objective

- ❖ Investigate the perceived COVID-19 safety risks and barriers that may prevent transit and shared mobility services to attract post-COVID riders in Greater Minnesota.
- ❖ Develop strategies for existing and future mobility providers in rural and small town areas to accelerate the return of transit and shared mobility ridership.



Public Transit Ridership Losses

250,000,000

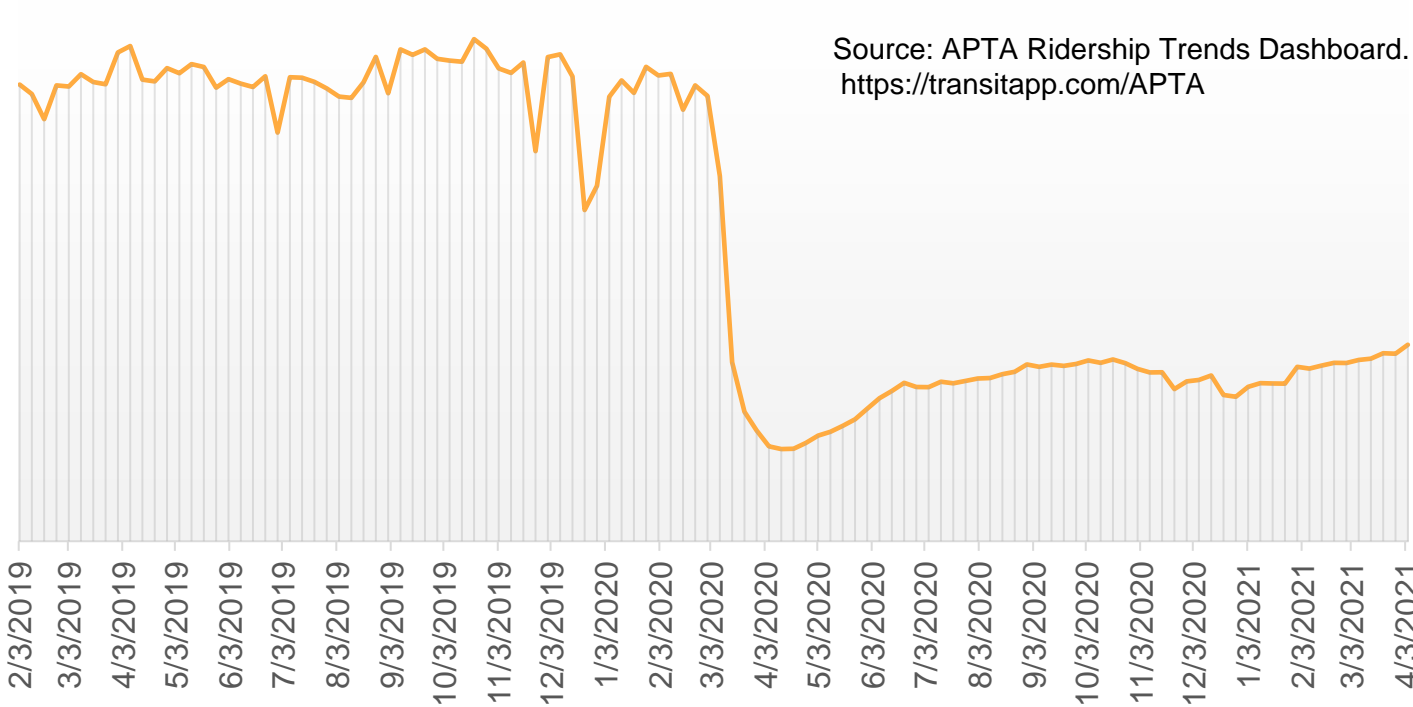
200,000,000

150,000,000

100,000,000

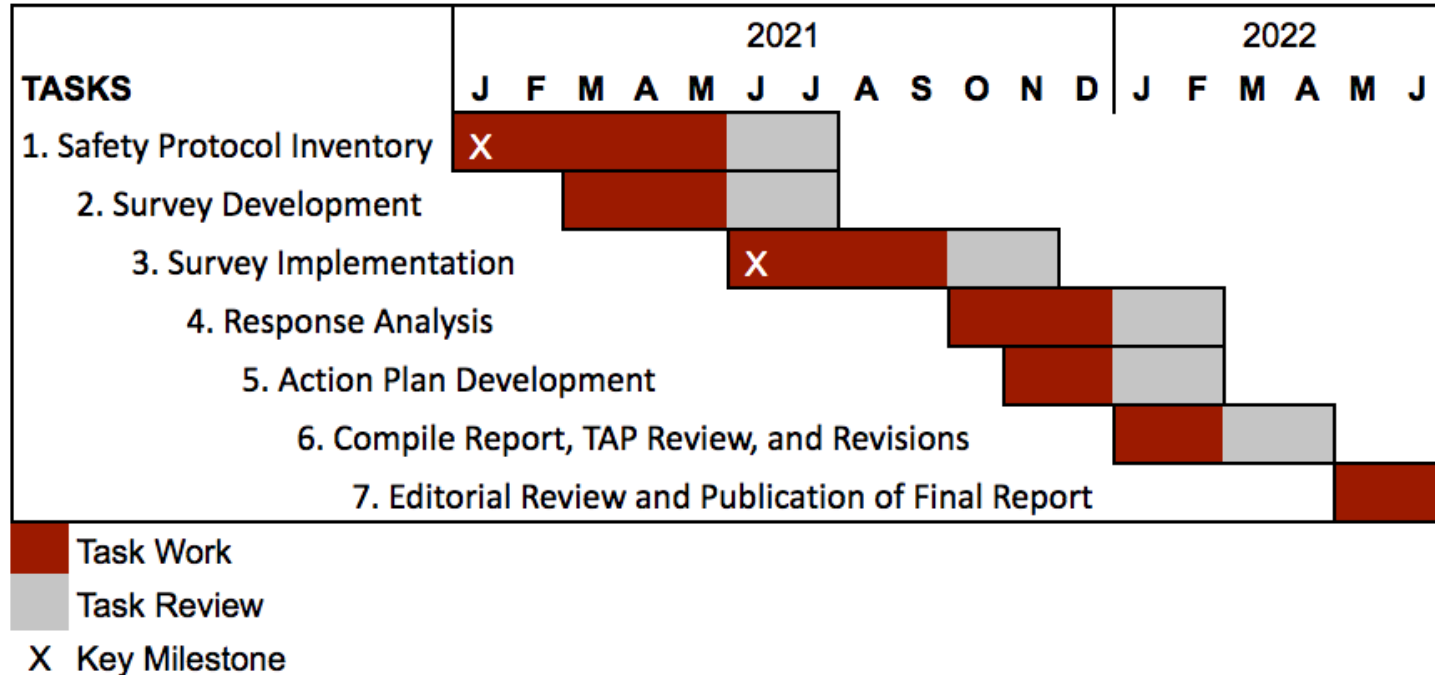
50,000,000

0



Source: APTA Ridership Trends Dashboard.
<https://transitapp.com/APTA>

Project Timeline



1. Project Kickoff Meeting; January 20, 2021
2. Launch Online Survey; June 1, 2021

Task 1: Inventory of Safety Protocols

Develop an inventory of safety protocols other agencies are implementing to protect riders from COVID-19.

Agencies include: Transit Agencies
State DOTs, Regional MPOs, Cities
Transportation Network Companies (TNCs)
Bike Sharing Organizations
Others as deemed relevant

Scope: Nationwide & Global

Methodology: Program Review
Practitioner Interviews

Deliverable: Report documenting safety protocols and best practices

Anticipated Start Date: January 1, 2021

Scheduled Date to Submit Draft Deliverable: May 31, 2021

Scheduled Date for Task Final Approval: July 31, 2021

Duration: 6 months

Public Transit COVID-19 Safety Protocol Survey

Introduction

This 10-minute survey will help to develop a public inventory of the COVID-19 safety protocols that transit agencies in the U.S. and beyond had implemented during the first quarter of this year, January through March 2021. Existing survey responses are publicly accessible via [this map-based inventory](#).

This survey includes questions related to various aspects of agency-level policies and protocols that your agency had implemented to keep transit employees and passengers safe from COVID-19 risks. The survey also asks about general information about your agency such as agency size, location, service coverage, and ridership levels.

In addition to filling out this survey, we would appreciate your sharing of [this survey](#) within your network to grow the number of responses in our [public inventory](#).

This research is sponsored by the Minnesota Department of Transportation, and is led by Dr. Yingling Fan, Professor of Urban and Regional Planning at the University of Minnesota. If you have questions about this research project, please contact the study manager, Galen Ryan (ctpi@umn.edu).

Next



Page 1 of 7

Task 2: Develop Online Survey of Potential Riders

Develop an online survey to understand safety concerns and the preferences and perceptions towards existing and potential safety protocols.

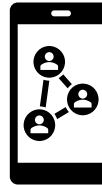
Target Population:	Greater Minnesota Diverse Socio-demographic backgrounds
Methodology:	Develop list of desired data Develop questions to obtain desired data
Resources:	Qualtrics Online Survey Software
Deliverable:	Memo detailing the questionnaire(s) and distribution methods

Anticipated Start Date:	March 1, 2021
Scheduled Date to Submit Draft Deliverable:	May 31, 2021
Scheduled Date for Task Final Approval:	July 31, 2021
Duration:	4 months



Qualtrics Online Sampling Details

- Majority of Sample comes from Double-Opt-In Market Research Panels
- Qualtrics ensures sample meets pre-determined demographic criteria
- Qualtrics assists in validating data



Social Media Sampling Details

- Ads will be targeted based on geographic location. Respondents will self-identify as they interact with the ad.
- Respondents can be screened based on exclusion criteria in the survey and demographic quotas.
- University is responsible for data validation

Task 3: Implement Online Survey

Conduct the online survey of Greater Minnesota residents

Target Sample Size:	1,000 Greater Minnesota Residents
Resources:	Social Media Outreach and Qualtrics Online Sampling Panels
Methodology:	Online Remote Survey with Qualtrics
Deliverable:	Memo documenting procedures, the response rate, and preliminary findings
*Key Milestone:	Launch Online Survey

Anticipated Start Date:	June 1, 2021
Scheduled Date to Submit Draft Deliverable:	September 31, 2021
Scheduled Date for Task Final Approval:	November 30, 2021
Duration:	4 months

Task 4: Survey Response Analysis

Analyze survey data to understand variation in safety concerns, perceptions and preferences.

Explanatory Variables:	Geographic location Demographic attributes Socio-economic status Mobility service type Trip characteristics
Deliverable:	Report detailing survey findings

Anticipated Start Date:	October 1, 2021
Scheduled Date to Submit Draft Deliverable:	December 31, 2021
Scheduled Date for Task Final Approval:	February 28, 2022
Duration:	4 months

Task 5: Project Action Plan

Compile recommendations on what safety and communications strategies will be the most effective in reducing fears and bringing back users.

Intended Audiences:	Transit Agencies Shared Mobility Providers Government Agencies CAV Organizations TDM Organizations
Methodology:	Online Remote Survey with Qualtrics
Deliverable:	Report documenting safety protocols and best practices.

Anticipated Start Date:	November 1, 2021
Scheduled Date to Submit Draft Deliverable:	December 31, 2021
Scheduled Date for Task Final Approval:	February 28, 2021
Duration:	3 months

Task 6: Compile Report, Review, and Revisions

The PI will prepare a draft final report, following MnDOT publication guidelines, to document project activities, findings and recommendations.

Review Process:	Report will first be reviewed by TAP Meeting may be scheduled to discuss draft PI will then incorporate technical comments TAP will then approve report if appropriate
Deliverable:	Draft final report for TAP review, and a revised report that is technically complete and approved by the TL for publication

Anticipated Start Date:	January 1, 2021
Scheduled Date to Submit Draft Deliverable:	February 28, 2021
Scheduled Date for Task Final Approval:	April 30, 2022
Duration:	4 months



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Thank you!
yingling@umn.edu