ATTACHMENT TO SUDBURY, MA, APPLICATION TO AARP DEMONSTRATION GRANT/TRANSPORTATION

FIGURE 1. Proposed transit zone for demonstration







Made with Google My Maps



Transit Deserts (MAPC Data)





FIGURE 3. CTPS analysis of Uber data, average trips

This chart shows the average number of Uber trips in the GoSudbury program by time of day and day of the week. Across all days the average number of trips per day is about 6.4, with more trips per hour occurring on weekdays followed by Saturdays (4.6 per day) then Sundays (2.8 per day). The period with most trips is on Weekdays between 12pm and 5pm. Following the recommendation by MWRTA that 3 to 4 passengers per hour is the ideal maximum for each vehicle, the data shows that one CatchConnect van is likely sufficient to support on-demand service in Sudbury.

FIGURE 4. CTPS analysis of Uber data, Sudbury origins and destinations



This chart illustrates travel within and immediately around Sudbury. Thicker lines represent more travel between both ends of the line and thinner lines represent fewer trips. Much of the travel within and around Sudbury is highly concentrated along the Route 20 corridor. In fact, about 48% of all trips originate within a quarter of a mile of Route 20. Top destinations along the Route 20 corridor include the Post Road Plaza in Marlborough (7% of trips) and the Sudbury Plaza shopping center (4% of trips), which represent about 13% and 6% of travel along the corridor, respectively. Other top regional destinations include shopping along Route 20 in Marlborough and downtown Framingham.

It is likely that a demonstration of on-demand transit service in Sudbury will be limited to Sudbury and its neighboring cities and towns. If Sudbury wishes to allow trips to travel to nearby towns, CTPS recommends limiting destinations to Framingham, Marlborough, and Wayland as the most cost efficient option. While Wayland only represents about 2% of travel demand, all trips into Wayland are concentrated along the Route 20 corridor within 2 miles of the Sudbury border, so including Wayland should not significantly increase costs or delay. Sudbury may also consider allowing trips into Maynard, as most trips into this town are to the Market Basket which is less than a mile from the Sudbury border on Route 27.

FIGURE 5. Letter of support from MA Representative Gentile



CARMINE L. GENTILE STATE REPRESENTATIVE 13TH MIDDLESEX DISTRICT SUDBURY • MARLBOROUGH WAYLAND • FRAMINGHAM The Commonwealth of Massachusetts House of Representatives State House, Boston 02133-1054

Committees: Joint Committee on Ways and Means Joint Committee on Health Care Financing Joint Committee on Housing Joint Committee on Elder Affairs

March 13, 2023

STATE HOUSE, ROOM 167 TEL. (617) 722-2810 Carmine.Gentile@MAhouse.gov

RE: Sudbury/ MetroWest Regional Transit Authority (MWRTA) application for AARP/Toyota North America Demonstration Grant

To whom it may concern,

I am writing to express my strong support for the Town of Sudbury and MetroWest Regional Transit Authority's (MWRTA) application for the AARP Transportation Demonstration Grant. Sudbury, like many communities, faces a transportation problem for many of its citizens, most of all seniors, people with disabilities, veterans, and other populations that may not be able to drive. The proposed \$50,000 grant would provide a temporary on-demand, accessible transportation service for the above-mentioned groups and demonstrate the potential for long-term solutions.

Since joining the AARP Livable Network in 2018, Sudbury has identified transportation as a major challenge in our Livable Sudbury needs assessment. The Sudbury Transportation Committee was formed in 2018 to seek grants and mitigation funds to support transportation pilots for seniors (50+), people with disabilities, veterans, and financially vulnerable groups.

As a member of the Massachusetts' Legislature's Joint Committee on Elder Affairs, the Sudbury Council on Aging, and the State Representative for Sudbury, I am familiar with the significant transportation challenges faced by many residents. I am also aware of the Town of Sudbury's strong commitment to addressing these issues. This grant would allow more people to make doctor's appointments, get groceries, or simply make it to recreational activities that are otherwise inaccessible for people without a car.

Please feel free to contact me if you have any questions or need further information on this project.

Sincerely,

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Carmine L. Gentile

FIGURE 6. Survey response of Uber riders



NOTE: Survey usable response rate = 48%. Forced choice response satisfaction scores for *very/extremely satisfied* were: (1) ease of scheduling (88%), driver (91%), compliance with safety regulations (94%), punctuality (90%), overall satisfaction (88%).

100% of usable responses also included verbatim comments; of these, 57%% were positive (see above Word Cloud). Negative comments include need for more drivers; one-third negative comments referred to copay and/or cap on rides.

FIGURE 7. Budget calculations for cost of CatchConnect service provided by the MetroWest Regional Transit Authority (MWRTA)

Based on CTPS analyses and discussions with the MWRTA, the demonstration will consist of CatchConnect service on Monday, Wednesday, Friday, and Sunday from noon to 6 PM The weekdays reflect peak times of Uber and CoA van usage (see Figure 3); the weekend time is exploratory and may be changed as data become available. Target riders and destinations initially will be within a heavily travelled zone surrounding the 6-mile corridor of U.S. Route 20 between Sudbury borders with Marlborough and Wayland. Depending on experienced demand levels, additional locations can be included, such as transfer points to other MWRTA and commuter rail stops.

MWRTA cost for CatchConnect (on-demand) service, including driver and vehicle, is \$70 per hour plus 15% for prepping and bringing the van to Sudbury from the Framingham hub (Blandin Ave.). The \$70 per hour cost is for approximate operating expenses per hour provided (not including capital). The 15% accounts for essentially the time required to operate a bus that is not in service, or *deadhead*. This includes the driver getting their vehicle, pre-tripping the vehicle, driving to the starting point of the service, and then returning from the service area at the end of the shift. This time needs to be accounted for in the hourly cost. Distance from the vehicle storage location to the service area plays a large role in determining *deadhead*.

The simplest calculation for estimating CatchConnect cost would be:

- \$70 X hours of service X 1.15 = daily cost
- daily cost X # of days of service offered = program cost.

For Sudbury, the cost would be:

- \$70 X (5 hours of CatchConnect/day) X 1.15 = \$403 daily cost
- \$403 (daily cost) X 124 days of service (i.e., 4 days per week for 6 months) offered = \$49,972 Sudbury approximate program cost, assuming \$50,000 for about 6 months of funding.