



Nael Alsaleh, Mohsen Nazemi, and Bilal Farooq Laboratory of Innovations in Transportation (LiTrans) Toronto Metropolitan University April 21, 2022

Table 1: Overview of the available app-based travel diary collection tools.

Travel Survey Tool	Pros	Cons	License	Location
OpenPath	 Collects detailed activity and travel behaviour data with minimal user burden. Low battery consumption rate. 	 We are responsible for maintaining any customization (e.g., incorporating the SP part in the app). Data will be shared for long-term research if we opt to use their server. It might be necessary to store the data on our own server. No or little technical support. 	Open Source	California, USA.
Itinerum	 Collects detailed activity and travel behaviour data with minimal user burden. The possibility of integrating the sociodemographic questions into the app. We will not need to build our own server. 		Open Source	Quebec, Canada
Daynamica	 Collects detailed activity and travel behaviour data with minimal user burden. The possibility of integrating the sociodemographic questions into the app. The possibility of getting more information about each trip and activity, such as the number of riders and their satisfaction with the mode of transportation. Uses advanced self-learning algorithms to minimize the need for user corrections. Low battery consumption rate. Full technical support. 	It has a poor user interface and features are not very well developed. Costs USD 20,000 to USD 50,000 depending on how many respondents will be involved and for how long.	Commercial Tool	Minnesota, USA.
TravelVu	 Collects detailed activity and travel behaviour data with minimal user burden. Has a user-friendly interface. 	 The data will need to be stored on our own server. Moderate battery consumption rate. 	Commercial Tool	Sweden





	 The possibility of integrating the sociodemographic questions into the app. The possibility of getting more information about each trip and activity, such as the number of riders and their satisfaction with the mode of transportation. Uses advanced self-learning algorithms to minimize the need for user corrections. Full technical support. 	Cost involves server setup, base price, and then price based on time and respondents. We expect that it will be more expensive than Daynamica		
SenseDAT / Sesamo	 Collects detailed activity and travel behaviour data with minimal user burden. Has a user-friendly interface. Full technical support. 	 Only travel diaries are collected. The data will need to be stored on our own server. A separate web-based survey will be needed for the RP part (cannot be incorporated in the app). Moderate battery consumption rate. 	Commercial Tool	Netherlands
Smartmo	 Collects detailed activity and travel behaviour data with minimal user burden. Has a user-friendly interface. Full technical support. 	 Only travel diaries are collected. The data will need to be stored on our own server. A separate web-based survey will be needed for the RP part (cannot be incorporated in the app). 	Commercial Tool	Austria
REVIEW / MOTIONTAG	 Collects detailed activity and travel behaviour data with minimal user burden. The possibility of integrating the sociodemographic questions into the app. The possibility of getting more information about each trip and activity, such as the number of riders and their satisfaction with the mode of transportation. Uses advanced self-learning algorithms to minimize the need for user corrections. It has a user-friendly interface Full technical support. Low battery consumption rate High accuracy in automatically detecting mode, trip and section segmentation, as well as activities 	 The data will need to be stored on our own server, but will be under strict GDPR jurisdictions. Cost involves server setup, base price, and then price based on time and respondents. 	Commercial Tool	Germany
Ethica / Ethica Data	 Collects detailed activity and travel behaviour data with minimal user burden. Full technical support. 	The tool is designed mainly for health-related research.	Commercial Tool	Ontario, Canada