

MIT Rideshare Research – Database Field Descriptions

Definitions & Notes:

“Users” or “Database Users” refers to those individuals accessing information from the database, on the MIT Rideshare website.

“Participants” refers to individuals using the services of any given rideshare provider.

Note: This document is a working draft of the database requirements; major characteristics and their associated definitions may change in future drafts.

Background:

As part of the MIT rideshare research, a website summarizing and categorizing our findings is to be created. For the large number of rideshare/carpool service providers identified, a common framework for comparison will be developed in the form of a simple database. This document outlines the initial design ideas and key features on which service providers will be compared. All information displayed will have been identified through publicly available sources and/or released with the acknowledgement of the service provider.

Overall Design:

The design of the “database” is very basic (a single data table). A relational database design may be needed, based on service provider characteristics. The hope is that functionality will exist that allows users to perform simple queries against various rideshare provider characteristics and/or will allow for the sorting of the table by characteristics of interest. A download feature will be incorporated allowing a user to view the entire table of providers and their associated characteristics, likely in Excel format. Each provider will have a one-page summary available for viewing; a hyperlink to the document will be provided within the table.

Service Provider Features:

1. Name: Name of the Service Provider
2. Contact Information: This will include the address, e-mail & phone number of the provider. If there is a key contact person, their information will also be included.
3. Web Link: URL for the providers website, if applicable.
4. Summary Sheet: A one to two page summary of each rideshare provider in the database will reside on the web server. A hyperlink will be provided to the document in the event users want to review more specific information about a particular provider.
5. Type of Organization: This will identify the type of entity providing the rideshare service. We currently envision four categories:
 - *State Agency*: These are programs organized and generally operated by state DOT’s or state EPA’s.
 - *Local/Regional Agency*: These are programs organized and generally operated by regional public organizations or regional transit agencies.
 - *Not-for-Profit / Non-Profit Organization*: These are services offered by organizations that willingly operate without a revenue model.

- *Private Organization*: These are services offered by private organizations that operate with the intention of increasing ridesharing while potentially aiming to generate revenue.

6. Geographic Market: This identifies the geographic focus of the provider. Providers may operate in multiple geographic markets. For this research, the primary focus is on US rideshare providers however when non-US providers have been identified they have been included in the database. Three broad categories have been identified. In contrast to a number of the other characteristics outlined in the database, each of the geographic categories described below will exist in a separate column of the database to allow for more customized geographic searches.

- A) *Coverage*: This is a general category identifying the provider's primary geographic area of focus (local/regional, state, national or international)
- B) *City*: Providers offering services in specific cities or metropolitan regions have those cities/regions identified here.
- C) *State*: Services focused on a single state (or province, as the case dictates). These will often be the services provided by state-level government.

7. Carpools, Vanpools or Both: This field indicates whether the provider offers carpool services, vanpool services or both.

8. Level of Participation: This measure may include the number of participants using the service, level of ridership, or some other measure of program size. Some participation metrics may include the number of participants registered (preferably number of participants registered over time), number of 'active' participants, number of rideshare matches achieved or the number of actual matched rides undertaken. For very detailed ridership information, users should be directed to the service provider summary sheet.

9. Type of Rideshare Trip: This category identifies the trip purpose that the rideshare service primarily focuses on. Four broad categories have been identified:

- *Commuting Trips (Long Term or Occasional)*: These are trips that transport people from home to work and back.
- *Non-Work Trips*: These are trips that are generally non-work related. They may include school trips or trips to special events (such as a large sporting event).
- *Inter-City Trips*: These are trips between cities.
- *All Trips (No specific Trip Purpose)*: If the rideshare provider does not focus on a specific type of trip, they fall into this category.

10. Sources of Funding: Sources of Funding will only apply to private and not-for-profit/non-profit rideshare organizations; this characteristic does not apply to the government-run programs. Three categories have been identified for revenue model:

- *Advertising*: This revenue model is indirect; providers agree to advertise on their site in exchange for revenue. The number of visitors to the service provider's website often determines the level of revenue that is received.
- *Commission*: This is a more direct revenue model for service providers. When a rideshare is agreed to, a charge is estimated for the cost of the trip (in reality, this transaction may or may not occur between the participants). The service provider generally collects a commission, either a fixed fee or a percentage of the transaction value.

- *Other*: This category refers to other revenue models that organizations may be using, but not covered by the other two categories. This may include revenue streams such as donations, awards and/or grants.

11. Trip Cost: For those providers that have a mandatory or recommended charge, any details on the cost calculation should be included here. In general terms, costs are likely to fall into four categories:

- *Cost per Mile*
- *Cost per Trip (Flat Rate)*
- *Weekly/Monthly Fee*
- *Other*

If additional trip cost details are needed, they should be included in the service provider summary sheets.

12. Communication Mediums Used: This category identifies the variety of communication mediums that a rideshare service may be using to communicate with rideshare participants.

- **Phone**: Rideshare services where participants call a number and are connected to an automated system or call center where they receive information on ridesharing and possible matches for their desired trip.
- **Mail / E-Mail**: Rideshare services that require participants to submit their desired trips via standard mail or e-mail. Responses from the rideshare provider are generally via mail/e-mail but could be through any other communications medium.
- **Website**: Rideshare services that have a web presence that allows users to register, search existing rideshare listings, post trips, etc.
- **In-Vehicle Navigation Device**: Rideshare providers that have applications developed specifically for in-vehicle navigation devices. These devices will most likely include a connection to the Internet (WiFi or GPRS).
- **Mobile Phone Text Msgs**: Rideshare services that send information to participants' mobile phones via text message.
- **Data-enabled Mobile Phone/PDA**: Rideshare services that utilize the "always-on" functionality of data-enabled mobile phones and PDA's. This may include the use of specific mobile applications for ridesharing, or the development of mobile versions of their website.

13. Rider Matching Technology: This category attempts to broadly define what form of technology the service provider is using to match rideshare participants. There are currently three categories that have been identified, although this may change:

- *Notice Board*: A basic form of ridesharing whereby drivers and passengers post planned/desired trips along with contact information. Users manually scan the board and choose to contact drivers/passengers at their discretion.
- *Automated Matching – Pre-Planned Trips*: Drivers and passengers are matched up based on historical entries into a database. Participants provide origin, destination, time of day and other characteristics of their trip. The database will search for appropriate matches and will send a list to the participants, but generally only when they submit a request (the participant is generally not contacted with new matches, as new participants join, or as existing participants change their trip characteristics).
- *Automated Matching – Real-Time*: Drivers and passengers are matched up in real-time based on entries in a database, as drivers and passengers make their trips known.

Participants provide origin, destination, time of day and other characteristics of their trip. The database will search for appropriate matches when new trips are added and will contact the participant in real-time (or almost real-time) via e-mail/text/or some other form of communication.

14. Route Matching Technology: This category outlines the methods by which drivers and passengers are matched, related specifically to route determination. There are two categories by which participants may be matched:

- *Origin/Destination*: Drivers and passengers are only matched if their origins and/or destinations are within a specified range (within the same zip code, for example)
- *Along the Route*: Passengers may be matched to a driver whose route passes within a reasonable distance of the passenger's origin/destination. This requires that the driver specify not only their origin/destination but their preferred route of travel as well.

15. Employer Connection: If the service provider works with specific organizations to provide rideshare services to their employees, that information should be noted here. In the event that a service is being provided to many organizations, users of the database should be directed to the rideshare summary sheets for a full list of participating companies.

16. Vehicle Ownership/Fleet Size: Rideshare providers that own and operate their own fleet of vehicles (cars, vans, mini-buses, etc.) will be identified here. If the ownership appears to be unique in some way, further details may be included in the service provider summary sheets. Services that operate a fleet of vehicles primarily for paratransit or transit services should not be included in the database. The initial assumption is that the majority of the firms in this category will be vanpool operators.

17. Incentives: If the rideshare service provides incentives to encourage registration and participation that should be noted here. Incentives may include financial benefits, discounts/gift certificates, priority parking, etc. In the case where multiple incentives are provided, database users will be directed to the rideshare summary sheets for a full list.

18. Agreements/Collaborations with Other Rideshare Service Providers: If a rideshare service provider has agreed to work with another service provider to improve their combined service offerings, that sort of information should be included here. The reason for the interest in agreements or collaborations between providers is that it may signal an ability to integrate services.

19. Integration with Other Commute Information Sources: Rideshare services that are linked to, or integrated with, other sources of travel information such as transit schedules and traffic information should be identified here. Sources of travel information may include 511-type services, transit agency websites, etc.

20. Additional Information: This is a text field that will include information on a given service provider that cannot be incorporated into any of the other categories.