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Partnerships between Ridehailing Companies and Public Transit Agencies: An Exploration of Inter-agency Learning about Pilot Programs

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Partnerships Between Ridehailing Companies and Public Transit Agencies: An Exploration of Inter-agency Learning about Pilot Programs

A Research Report from the University of California Institute of Transportation Studies

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16. Abstract

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In early 2016 the Pinellas Suncoast Transit Authority implemented a pilot program in partnership with Uber and United Taxi (a local company) to provide subsidized travel for trips to and from specified public transportation stops (Pinellas Suncoast Transit Authority). Since that time, similar pilots have sprung up throughout the US. Presumably, the proliferation of these pilots is due to early successes; likely measured by cost savings, increased ridership, expanded service areas, improved first/last mile connections, and increased visibility of ridehailing services. We would expect the outcomes of these pilots to be shared among public transportation operators, resulting in improvements as they are implemented in new locations over time. However, much of the information that might be used to evaluate these programs is confidential or proprietary, creating challenges for public transportation operators to discuss details with others. This project aims to identify the factors informing the implementation of these pilots and the pathways by which relevant information is shared among public transportation operators. Key questions are: Do transit agencies gather information independently; from one another, academic sources, or policy experts, or others? Are transit agencies primarily informed by potential ridehailing industry partners as they consider these partnerships and programs? And how do these different pathways impact the partnerships transit agencies form with ridehailing companies and the programs they launch?

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Partnerships Between Ridehailing Companies and Public Transit Agencies: An Exploration of Inter-agency Learning about Pilot Programs

UNIVERSITY OF CALIFORNIA INSTITUTE OF TRANSPORTATION STUDIES

November 2019

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Executive Summary

In response to the increasing presence of ridehailing services, namely Uber and Lyft, transit agencies have begun forming partnerships with the industry and offering programs that integrate these services with traditional transit. These programs often start as pilot programs and typically involve subsidizing ridehailing travel for passengers connecting to public transit routes or travelling at times that public transit offers limited or no service (such as late at night).

This study investigates how transit agencies gather information as they consider this kind of partnership and the ways this information was used in the planning process. Focusing on these two inter-related questions:

- 1. Do transit agencies gather information independently, from one another, academic sources, policy experts, or others? Or,
- 2. Are transit agencies primarily dependent on potential ridehailing industry partners for information as they consider these partnerships and programs?

While both of these pathways could result in similar short-term outcomes, they may have different long-term implications for public transportation. To evaluate which of these pathways is being used, we conducted surveys and interviews with transit agencies involved in these partnerships. We had limited participation in the survey, however evaluating the survey responses in coordination with the interviews provides preliminary results that begin to answer these questions. Key findings thus far include the following:

- 1. Transit agencies communicate with one another extensively about these partnerships and look for information from a variety of other sources; one of those key sources is the ridehailing industry.
- 2. Learning from a variety of sources does not necessarily give the transit agencies more leverage with the ridehailing industry.
- 3. The following are moderately or very important to transit agencies in their partnerships: data sharing, coordination, reputation for safety, low cost for passengers, and low costs for the agency.
- 4. The transit agencies in our survey all pursued partnerships to improve first and last mile connections. Some agencies also pursued additional goals.
- 5. Transit agencies involved in these partnerships tend to view the ridehailing industry more favorably following these partnerships than when they first entered the market.
- 6. Surprisingly, almost all, rather than all of the survey participants indicated that they had heard of at least one other location that had this type of partnership.
- 7. The transit agencies that have formed these partnerships have largely been asked to share information about their pilot programs as well as their partnership arrangements—in particular the data sharing agreements.

These findings illustrate that transit agencies are learning from one another about these partnerships, how to implement them, and what kinds of arrangements to make with the ridehailing industry. Either because, or in spite, of this, the agencies in our sample tended to pursue similar goals and similar types of partners. Further, the agencies faced similar challenges related primarily to data sharing and some other aspects of working with ridehailing companies. Though the ridehailing industry is not guiding all of the arrangements, the transit agencies have limited power to dictate outcomes.

For the transit agencies that we talked to in the interview process, some noted that every location requires a program developed to fit their specific needs. At the same time, transit agencies are able to adjust or expand and change program features in order to adapt.

One key contribution of this study is the distinct examination of the *partnerships* between transit agencies and the ridehailing industry and their formation, as opposed to the *programs* implemented as outcomes of these partnerships. Thus, we build on past work that has largely been focused on the best practices for the pilot programs, with a small amount of attention to the partnership formation process.

The work presented in this report sums up the first year of a two-year effort. The next phase of this study builds on this work and expands the research questions to explore the barriers and challenges transit agencies identify in relation to these partnerships and what other factors are affect the implementation of these partnerships and programs.

Introduction

In recent years, ridehailing providers such as Uber and Lyft have become ubiquitous throughout the US and many other parts of the world. In response to the increasing presence of these services, transit agencies have begun forming partnerships with the industry and offering programs that integrate these services with traditional transit. These programs often start as pilot programs and typically involve subsidizing ridehailing travel for passengers connecting to public transportation routes or travelling at times that public transportation offers limited or no service (such as late at night).

There are a number of potential public benefits of these programs such as increased visibility of transit and increased transit ridership. Other possible benefits include improved access in areas where it is not feasible to provide line-haul transit, for example lower density areas, or areas where passengers face first/last mile challenges. Ideally, all of these benefits are achieved with costs to the transit agency that are much lower than the costs of fixed route services. These partnerships also benefit the ridehailing providers as they increase visibility and likely increase the adoption of ridehailing. If these partnerships are successful, they could serve as a part of a new model of sustainable, cost-effective, and equitable public transportation. This report provides preliminary analysis of survey and interview data collected from a sample of agencies that have formed these partnerships and implemented these types of programs.

In a few isolated areas, the implementation of these pilots may have spread along geographic lines, however the majority of these pilots occur in geographically dispersed locations, and this prompts questions about the diffusion of this new practice. How are transit agencies becoming informed about these partnerships and pilot programs, in particular, when they are planning a partnership or program of their own? We propose two pathways; first, municipalities and transit operators may seek out and share information related to these partnerships and programs with one another. As these public transit operators share experiences, other operators learn and embark on their own programs in turn. This pathway allows each agency or operator to improve the pilot design and better address challenges that have arisen for others. Alternatively, the transit agencies involved in these partnerships may be primarily informed by the ridehailing company with whom they form a partnership. If this is the case, the ridehailing companies likely learned from each partnership they have formed and each program they have launched, and they have improved the design themselves with each new implementation.

Both of these pathways could result in similar short-term outcomes, however they may have different long-term implications for public transportation.

There is a high level of interest in these partnerships and programs, and since their inception transit agencies and scholars have sought to characterize them, examine their fit with the needs of the implementing transit agency, and identify emerging best practices.

Much of this past work is aimed at identifying best practices for implementing these types of pilot programs. Thus far, notable best practices include matching the program to the needs of the area; for example, in dense urban locations fixed route transit services may be best

supplemented by on-demand ride services operating late at night, whereas suburban locations are likely to be best served through pilots that improve first and last mile connections (Feigon and Murphy 2018). Another important area of best practices is regulatory consistency. State and federal regulators should provide more detailed guidance for public agencies on how to meet ADA, environmental justice, union and other requirements, when partnering with private industry transportation services (Westervelt et al. 2017). Another important practice is providing good information to potential passengers about these pilots and programs; all potential customers should know what the program is and how it works (Westervelt et al. 2017).

Despite the apparent popularity of these partnerships, and the interest in understanding what is happening and where, there has been limited coverage of why they are implemented where they are, and what the diffusion process looks like. Scholars describe a number of ways that policies diffuse from one location to another, and even more ways that policies are considered for adoption. Here, we consider this approach to providing public transportation to be an innovation that may be adopted by "innovative" agencies with a few mechanisms. This project builds on past work, but further explores the agencies involved in these types of partnerships and considers how they are engaging in learning and research related to the implementation of these partnerships.

Methods

Identifying the Partnerships and Programs

The focus of this study was partnerships between public agencies—primarily transit operators—and on-demand ridehailing services, namely Uber and Lyft. In some cases, these partnerships also involved municipalities and/or taxi companies or local on-demand services.

The first research task we undertook was sorting through lists of partnerships involving a ridehailing company and a transit operator or public agency that had been planned or implemented by the fall of 2017. One key source was the Shared Use Mobility Center (SUMC) online policy database. This database includes a brief description of programs and policies related to shared-use mobility that have been adopted by agencies, local governments, state governments, and others. We looked at policies in the categories of "TNC," "Public Transportation," and "Partnerships," as a starting point to identify the partnerships of interest to this study. We reviewed the summaries of each entry in all of these categories, and gathered additional information from the agency websites, news media, or blogs on the topic, and from the ridehailing company websites.

We also had conversations with Uber, Lyft, and Via and learned about their experiences in partnerships with transit agencies. We gathered information using early reports and studies covering the very first few partnerships and programs of this kind.

In June 2018, we stopped adding to the list, as new partnerships were constantly coming online, being planned, or hyped. The list of partnerships we identified was not exhaustive, and ultimately included some partnerships that never came to be implemented, despite apparent planning efforts and publicity. Once we had a working list of partnerships, we used agency websites, local news information, and the ridehailing industry websites to gather additional information about the partnerships and determine which partnerships should be invited to participate in our study. Approximately 45 agencies were invited via email to participate in an online survey.

Survey Data Collection

We launched an online survey in December 2018, and responses were collected through the end of January 2019. As of the writing of this report, there are 13 responses to the survey, which is approximately a 30% response rate. However, only nine of those individuals completed all or most of the survey. The responses are summarized in this report.

The survey had five sections of questions related to partnerships involving transit agencies and operators with on-demand ride services, as well as the planning and operation of related programs.

Section 1 gathered background information about the types of service offered by the agency/operator, as well as their membership in transit associations and communication with other transit agencies.

Section 2 covered the extent to which the agency was aware of other programs of this nature, and whether they did any research or other work to learn about the experiences of others, or the potential format of their program, from a variety of sources.

Section 3 of the survey was related to the importance of different types of services and other criteria the transit agency used in selecting a ridehailing company. This section also covered some details about the partnership formed between the transit agency and the ridehailing company.

Section 4 covered the program implemented as part of the partnership; the types of service provided, including details about the service operation, the costs to participants, etc.

In the final section, we asked participants about the criteria that were important for evaluation of the success of the program, as well as how well the program met those criteria. Finally, we asked whether participants' perception of ridehailing had changed from the time they first entered the market to the time of the survey (after working with them in some form of partnership). The full survey text is included as Appendix A.

Interview Data Collection

Since our survey sample was very limited, we aimed, by conducting interviews, to perform a deeper examination of the learning that transit agencies are involved in. All of the survey participants were contacted by email to ask whether they would take part in a short interview about the project and their programs. We also conducted interviews with additional transit

agencies as well as a focus-group-like phone call with the California Transit Association's (a project partner) New Mobility Task Force.

The goals of the interviews were twofold. First, the interviews provided more detailed information about the information-gathering activities that transit agencies engaged in during the stages of partnership planning. In addition, we used the interviews to inform the next phase of this study, where we will examine the factors affecting whether or not transit agencies consider, pursue, and carry-out these types of partnerships and programs. We did this by asking interviewees to share information about important factors affecting their partnership formation and program execution. The interview script is shown in Appendix B.

Results

The analysis presented here summarizes the responses to our surveys and interviews. In this analysis we focus on the questions and discussions about how transit agencies engage in gathering information before partnering with ridehailing companies and implementing pilots or other programs.

Survey Results

Of the 45 agencies invited to participate in the survey, 13 (29%) responded. Of these 13, 9 completed the entire survey, and 4 responded to some of the questions. The low number of respondents was likely due to the small number of partnerships that exist between transit agencies and the ridehailing industry, and due to the frequency with which these agencies have been asked to provide information about their programs and experiences. For all of the data presented here, we consider only those respondents that answered each question.

We first consider the types of services offered by the transit agencies involved in these partnerships (Figure 1). While many of the public agencies involved in these partnerships are transit authorities or agencies, some municipalities have formed partnerships with ridehailing companies to provide new options to residents or solve local challenges. Thus, of the 13 agencies that participated, 3 do not directly offer transit services themselves.

The transit agencies in our sample all offer fixed route bus services, and most offer paratransit. No transit agency from our sample indicated that they offer subways to passengers. A few of the agencies also have other types of service, including bus rapid transit (operated by two of the agencies), trolleys or cable cars (one agency), light rail (two agencies), commuter or regional rail (two agencies), and dial-a-ride (two agencies).

We provided a write-in option and respondents also reported these "other" services: ondemand service (e.g., Uber), door-to-door overnight service, first-last mile service, vanpool, and on-demand service. In addition, we had the following "other" responses from participants that were not transit agencies: "Emergency Ride Home" and "Transportation Demand Management Program" offered by a Transportation Sales Tax Authority.

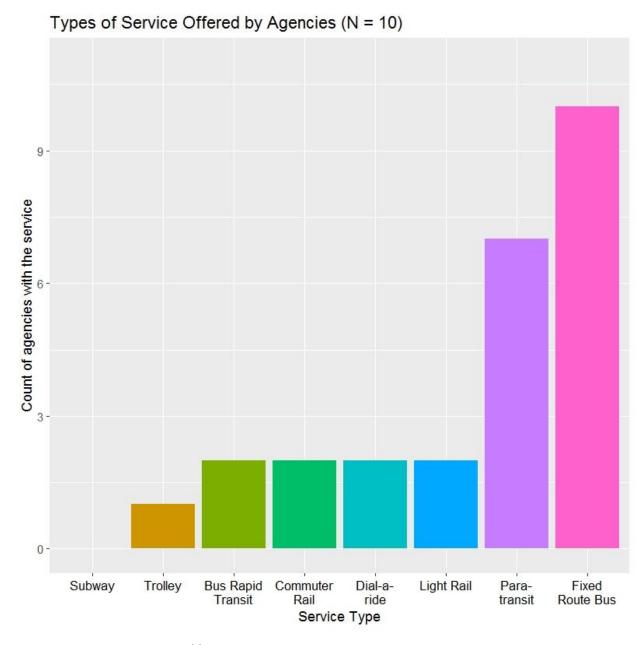
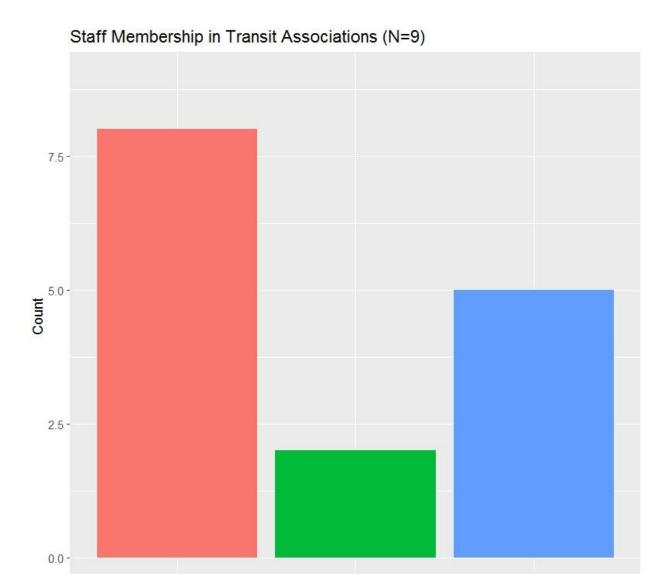


Figure 1. Services Operated by Transit Agencies.

To control for the level of engagement of the agencies, we asked respondents whether staff at their agency were members of a selection of public transit associations, and the level of frequency they communicate with other transit agencies for a variety of reasons. The responses to these questions are shown in Figure 2 and Figure 3. All but one of the respondents reported that someone in their agency was a member of the American Public Transit Association, with about half reporting membership in a state level association and a few reporting membership in the Community Transportation Association of America.



Note: Sample size is 9 because 3 respondents selected both ATA and State Level

State

Figure 2. Membership in Transit Associations. (APTA, American Public Transit Association; CTAA, Community Transportation Association of America; State, state level association)

CTAA

Association Type

APTA

We also asked about communication and engagement with other transit agencies in a variety of ways to assess and control for the level of information seeking by the agency and the extent to which they are a source of information for other agencies. This question asked: "On average, how often does someone from your agency do the following?" and the subsequent list of engagement activities included various ways of exchanging information with other agencies. The question was designed to determine how active our respondents are in terms of engagement with other transit agencies. The responses are shown in Figure 3.

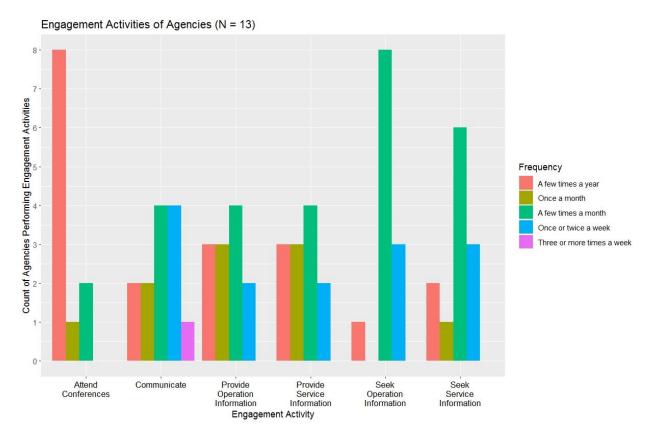


Figure 3. Frequency of Engagement Activities

The transit agencies in our sample communicate with members of other transit agencies quite often. Although there is a high degree of variation among the general "communication" responses, all of but one of the participants indicated they seek information related to operations at least a few times a month. And all but three of two of the agencies seek information on operations once a month or more. Not surprisingly, the transit agencies typically attend conferences a few times a year.

We asked participants if they were aware of partnerships and pilots with ridehailing companies in other locations, prior to initiating their own. Of the 11 respondents, 9, or just over 80%, were aware of partnerships in other areas.

In addition to asking whether our participants had gathered information from agencies that had already implemented these types of partnerships and programs, we asked participants if they had looked for information in other places (Figure 4). Almost all of our survey participants learned from the ridehailing agencies as well as news outlets and blogs. There were fewer cases of gathering information from transportation experts or agencies, and only a few cases of gathering information from residents or existing transit users.

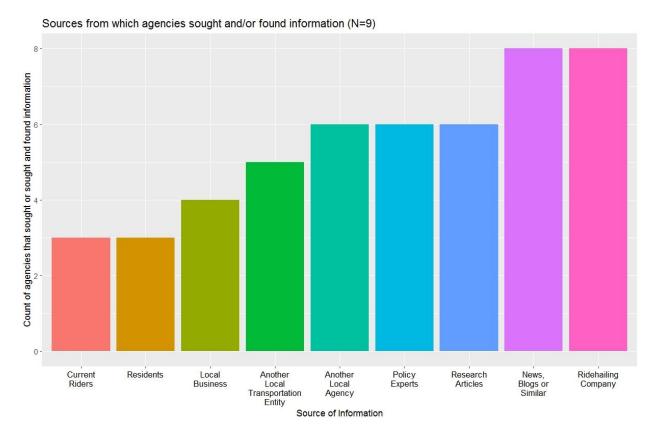


Figure 4. Sources of Information Agencies Sought and/or Found Information

For those that indicated they had found information from each type of source, we asked what was the most important thing they learned from that source. This is presented in Table 1, below (aggregated across participants: one row ≠ one participant). Not all survey participants found information from the sources summarized in Figure 4; and not all provided responses when asked about what they had learned.

Table 1. Information Found by Transit Agencies Prior to Implementing a Pilot Program

Information Source	Information gathered by transit agencies		
Current Riders	Local pain points, areas of need		
Residents	Local pain points, areas of need		
Another Local Transportation Planning Entity	Guidelines, possible funding	RTPA [Regional Transportation Planning Authority], APA [American Planning Association]	
Another Local Agency	Options for project design		
Policy Experts	Guidelines		
Research Articles	Project design, challenges		
News Blots or Similar	Metrics to be tracked by other agencies (no agencies had reported data at the time we launched)	Project design	Metro Magazine
Ridehailing Company	Various project use cases across the country	Uber was open to discussing a partnership	Services available

Figure 5 shows the responses to the survey question asking about the source of the idea to develop a partnership with a ridehailing company. Of 11 respondents, 7 (64%) stated that they formed the idea within their own transit agency. Only one respondent indicated that they got the idea from another transit agency. This may indicate that while transit agencies communicate with another frequently (refer to Figure 3), they do not necessarily form the idea of partnership from other agencies.

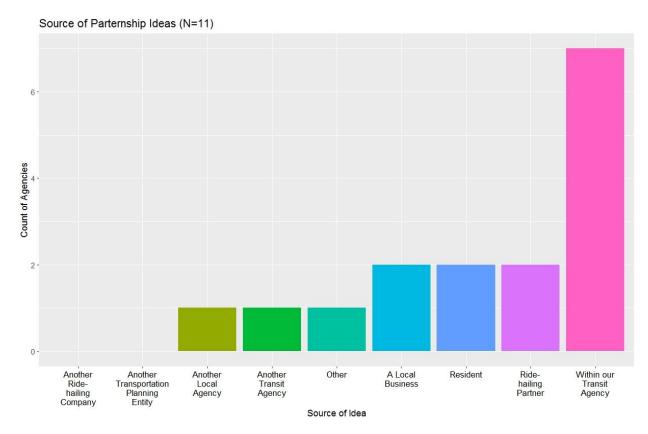


Figure 5. Source of Partnership Idea

Another question asked respondents to describe the objectives of their agency's partnership with their private partner (Figure 6). Every single respondent indicated that first and last mile access was an important objective for the partnership. Notably, because one key area of discussion surrounding the relationship between ridehailing and public transit relates to competition and cannibalizing passengers, none of the respondents indicated that reduced competition with ride-hailing companies was an objective for forming the partnership. Thus, this objective is not included in Figure 6. Public agencies also prioritized increasing ridership but seemingly devalued reducing parking at transit stops as something that could be addressed with these partnerships or related programs.

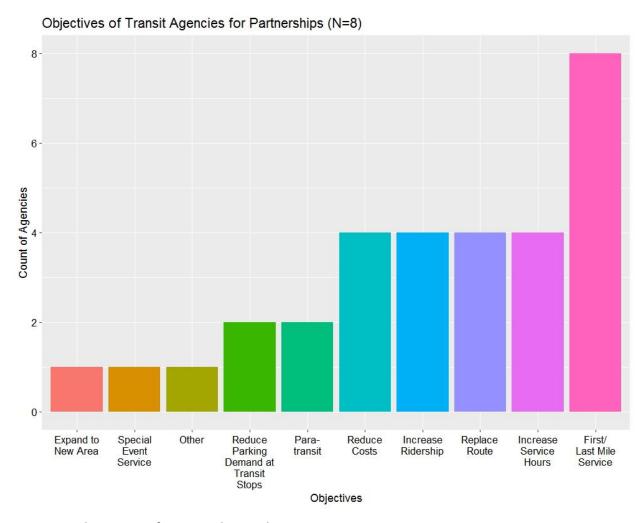


Figure 6. Objectives of Partnership and Program

We asked participants to tell us about what characteristics they were looking for in a ridehailing partner. There was little variation in the responses to this question. All of the survey participants indicated that the following characteristics were *moderately* or *very* important:

- data sharing
- coordination
- reputation for safety
- low cost for passengers
- low costs for the agency

We compared these responses with the responses to a question asking what ridehailing companies the transit agencies ultimately formed partnerships with.

Lyft was the most popular ridehailing company among the survey respondents (Figure 8). Of the 11 agencies that answered this question, 5 (45%) partnered with Lyft. Some of those also

partnered with others at the same time. There were a few "other" responses, which included partnerships with a local para-transit operator, and a local ADA service provider.

One notable pattern is that all of the agencies that partnered with Lyft reported that, in their selection process, a candidate ridehailing company's past experience with such partnerships was at least *moderately important*. In contrast, those that partnered with Uber reported that past experience was *not important at all* (except for one agency that partnered with both Uber and Lyft). At the times these agencies were embarking on the partnerships, it may be that Lyft had more experience in this area. There are only three agencies that partnered with Uber in our sample.

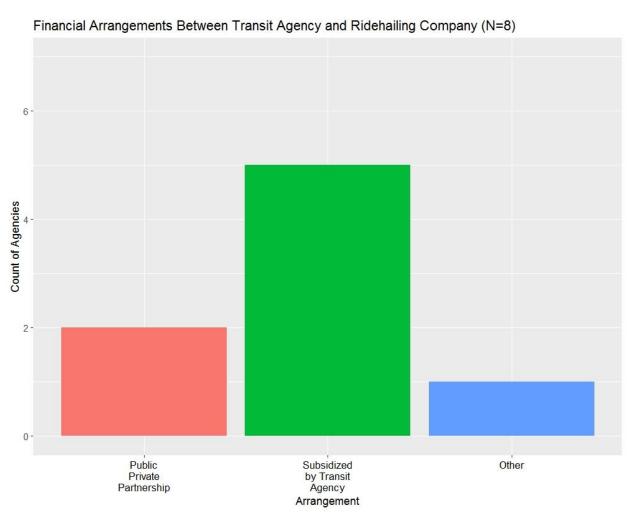


Figure 7. Financial Arrangements of Partnerships

Figure 7 shows the responses to our survey question about the type of financial arrangements made between the transportation agency and the ridehailing company. By and large, transit agencies have funded these types of partnerships and programs. The "other" response said: "Exchanged Bus Shelter Advertising for Discounted Lyft Rides in designated zones."

In another question, we asked transit agencies about the sources of funding for the program. Of the 8 agencies that reported the sources of funding, 6 indicated the use of local or regional funding from the existing budget. Two of these agencies also obtained funding from other sources. And two agencies reported sources other than the use of local or regional funding. Of these, one reported that state funds from within the existing budget were used, and the other reported that the ridehailing partner funded the program. This is the same case as the case that reported "Other" in Figure 7.

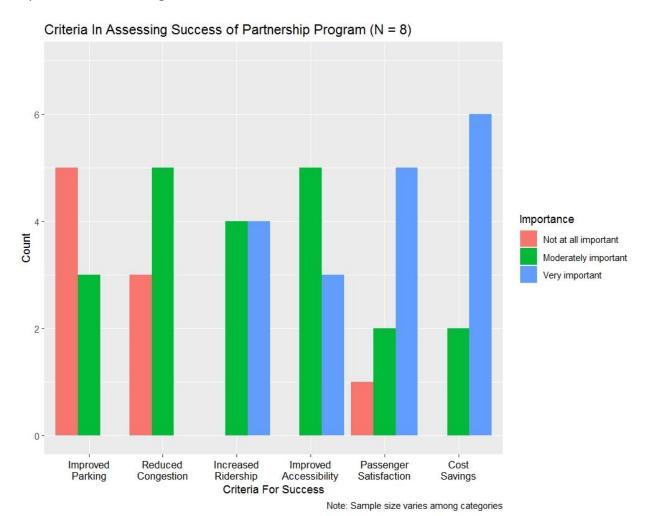


Figure 8. Important Evaluation Criteria

Figure 8 shows the responses to the question: "How important were the following criteria in assessing the success of your program?" The data indicate that cost savings was the most important criterion for most respondents (75% reported that it was *very important*). In contrast, reduced congestion and parking related issues were least important among respondents.

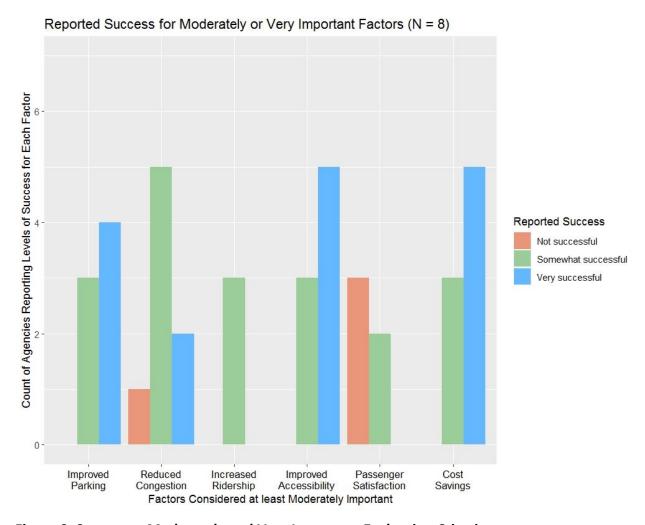


Figure 9. Success at Moderately and Very Important Evaluation Criteria

Respondents were asked to indicate how successful they were at achieving factors they reported were either moderately or very important in evaluating their programs (Figure 9). Respondents only saw this question for things they indicated were moderately or very important. They indicated they were least successful at factors related to congestion and most successful at improving accessibility and reducing costs. Parking was not important to many of the agencies that participated, and of those for which it was important, they were moderately successful at improving parking conditions. All of the agencies that participated indicated that customer satisfaction, improved accessibility, and reducing costs were important. Further, all of these agencies reported that they were at least somewhat successful at achieving these objectives.

Respondents were asked to assess their attitude toward on-demand ridehailing companies at the time of the survey in comparison to when these companies first entered the market (Figure 10). From the eight individuals that answered this question, five respondents (63%) indicated that they had more favorable attitude towards ridehailing companies after forming a

partnership. Interestingly, none stated that their attitude towards ridehailing companies declined.

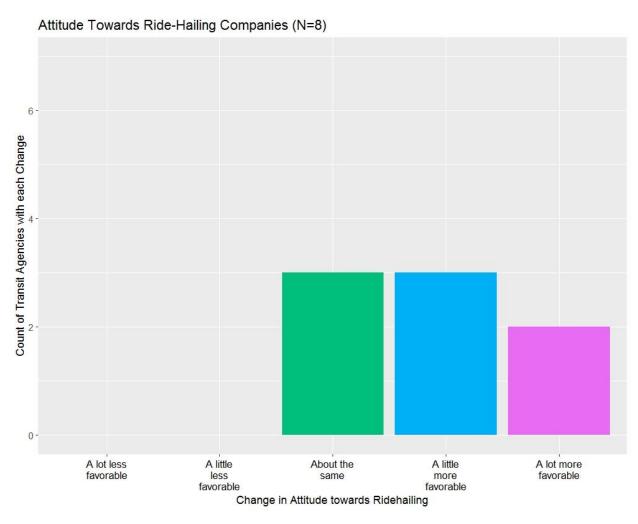


Figure 10. Changes in Transit Agency Attitudes towards Ridehailing Companies

Interview Results

As a follow-up to the surveys, we contacted transit the agencies that had participated in the survey and indicated that they were willing to discuss these topics in an interview format. We also conducted several interviews as part of the planning stage for the next phase of this study. We conducted eight interviews, and one group phone call with members of a transit association task force on new mobility. The interviews covered the following topics: the features of the partnerships and programs transit agencies were a part of, the process leading up to the formation of the partnerships and implementation of a program, and challenges and other important factors in that process. We also covered the elements that are key to this part of the study: how do transit agencies gather information. In our interviews, we were able to address this question both from the side of the transit agency we were talking to as an information seeker and as an information source. The agencies in our survey sample were some of the first

to form these kinds of partnerships and programs, and most had been contacted by many others and participated in conferences and other events to share their experiences. All of this was relevant to the question about how information sharing might impact the ways these partnerships and programs play out.

In addition to the questions specifically about gathering information and learning, the questions about challenges are relevant to this line of inquiry. Since the transit agencies noted challenges related to working with different ridehailing companies, and this was some of the information it was important to them to share, and that they were contacted about a lot, it is connected to this topic.

Gathering information in the planning phase

In all of the interviews we asked how much the agency reached out to others as they considered the implementation of a partnership, or the details of what that partnership would look like. Illustrative responses to this question include:

When we first got started – looked at pilot at []. That is where we got the idea; they had a program with Uber between the student union. They were subsidizing Uber trips for students within certain areas, within a geo-fenced area of the university. So we thought maybe we can do that here. Also [] had something...

...[I] had done some reading of publications, about TNC services, some microtransit services; why they didn't succeed or why they failed. So I didn't do outreach to other transit agencies. That had to do with the timespan. We were approached by [] with the service concept. We liked the idea, and especially if we could get the federal grant money.

...the thing that I guess I gleaned was I guess that the idea that there would be learning on both sides on the public transit side and the TNC side, that it does take a fair bit of work to see how the two can fit together. You can't find a cookie cutter approach; Uber here is different than Chicago, some have accessible vehicles some have Uber pool.

The convincing thing was talking to Centennial Colorado and it was a Lyft partnership that was very narrowly defined, and I started to think about people and behavior and how we make choices... We did a lot of homework – talked to Robert Betz a lot of times... asked for the agreement. We talked to AC transit and VTA. Being in the TNC space we know who to talk to... Sac RT, West Sac... what they like, what they do differently, etc.

The interviews reflect the information we found in the survey; transit agencies and others who entered into these kinds of partnerships looked for information from a variety of sources. This question asked them specifically about contacting other agencies, so it is the focus of their responses, while the survey question provided a set of options for them to select from.

Contact from other transit agencies

Flipping to the other side, we asked the transit agencies we spoke with whether they had been contacted by other transit agencies thinking about pursuing these kinds of partnerships, and what issues they wanted to ask about. One critical element that emerged from these interviews was that they were interested in hearing about the details of the partnership arrangements as much as they were interested in the service details and program features. However, the arrangements of the partnership were more of a sore point for the transit agencies and what they really wanted to learn about. Here are some of the things they said about their conversations with transit agencies that reached out:

All kinds of questions – more detailed about how the programs are set up, how people pay out of pocket, do they need a credit card or cell phone, or how do you get around requirements for ADA? We do have a wheel chair provider... what are the response times? [] we have so few trips that I don't have the answer... Was it equitable? Similar response times?

Insurance, contracts, what data we can get... marketing and outreach, they want to see our data and I am able to share our combined program data, but not anything directly from [].

Yeah at least a call a week which is great, so I like chatting about it because it is like my work is worth it! ... every month to talk about what is going on, and who has good examples of things like banners or agreements... to get agreements etc. So that was really valuable.

The data sharing is the most common question I get. How easy is it to work with them, and how easy is it to work with the union? Do you charge? We don't... other agencies do; logistics questions, how many rides are you doing? People have problems with the app etc. What is it like in the community? How is it working in conjunction with being a fixed route provider?

...if we had it to do over again here is what we might do differently. Think just — consideration of how much time is involved to getting to the point where you are launching a service. This was a new kind of thing for us — we have several partnerships with cities, or economic development boards. They have always been demo projects with fixed route[s]... this is a new kind of partner, and we didn't realize how much time it would take to do the negotiations. It was probably 8 months... with Uber. A great intent [would have been] to get the project started way earlier than it did start.

Others contact you? Every single one. All over the country. Texas, I don't even remember. Probably someone in NH, Canada, you know I presented about it at conferences, and a lot of CA conferences and hyper local conversations. Once word is out, people want to hear. One consultant suggested I do a monthly webinar, and everyone could call in.

Very rarely was I given the opportunity to solve a problem, and more often they wanted to know how to set it up, how to deal with board, union, can I see your agreement, what would you do differently, can I see your data. But not counseling people from the ground up, but more agencies had given some thought to it, and wanted to know about how to do it.

Other topics

We also asked the transit agencies to talk to us about anything else they thought might be relevant. Some of the responses really shaped the way that we can think about how they are learning and approaching this topic, for example: what they need in terms of support to make these programs the best for them and their passengers, and a good use of public funds; and how to get more people to use transit rather than driving.

Have a question; is this going into a white paper; how much transit agencies are learning from each other. I wish it was more.

I would say, make sure that you have really good relationships with the private sector partners. One thing that we didn't have a problem with but the other agencies that were working with Uber and Lyft had issues, mostly related to data sharing and ability to be flexible. Our partners were great, but that is what we heard from the others.

Really do your homework make sure that the demographic profile fits people that would need a service like this ... Do your research on your community.

I can't emphasize enough how important the Sandbox networking [was, which] we were a part of. And talking with others, and reading about them, and learning about how they came to be. And learning about the funding... do we keep this project going? FTA funds can be used in certain ways, it is so good to be able to pick up the phone and talk with [] at [] for example.

Other parts of the interview

In response to other parts of the interviews, respondents talked about pieces of the story we are interested in—how transit agencies are learning from one another, and how much this learning helps. We are finding that it does make some difference, but the information they might have does not necessarily give them more leverage working with these private ridehailing companies.

With Uber – most of sandbox grant recipients; the data sharing was the biggest issue throughout the entire process; all of the projects varied in provision or the way they were partnering, but that was the main hurdle. Public agency on one side, and TNC on the other side that has a lot of personal information they want to keep private and is somewhat competitive on the other side.

Working together more to speak with one voice about the data we want and how the contracts look. Saying what is most important to us and what we want. They are working to streamline and building those teams, and APTA [American Public Transit Association] mobility management is working on that and building data from NTD [National Transit Database].

Both the survey and interviews were useful for beginning to carve out the picture for how transit agencies are operating in this space, and how they are learning to form these partnerships in a way that will work for them. We see that they are gathering information from

many sources, but that this is not necessarily impacting what they do, and not allowing them to push back very much on the ridehailing companies as they form partnerships.

Discussion and Conclusions

This study begins to shed light on how information sharing has occurred between transit agencies that have implemented partnerships and pilot programs with ridehailing providers and those that might. It is not known whether these pilots have met specific goals or needs of transit agencies, nor how they have been improved from one implementation to another. We set out to explore which of two possible pathways of information sharing was pursued: transit agencies speaking with one another about their experiences and learning from one another, or transit agencies primarily discussing their partnerships and programs with the ridehailing industry.

We find that transit agencies are gathering information from a variety of sources and that one important resource is the community itself. Some critical information gathered and shared by transit agencies as they plan has been related to program details, but the arrangements, and contract details with ridehailing and other private partners is also important.

Best practices moving forward for transit agencies may need to be focused on the contract arrangements and issues related to data sharing. This was noted by one interviewee as a prime area where more learning needs to happen. We see that agencies have sought information on contract issues, even if they learn from others only that there are difficulties around this topic. How can the transit agencies and other public groups that are involved put more pressure on the ridehailing companies? Are they doing it already by moving to partnerships more frequently with companies like the mictotransit provider Via that are more transparent when it comes to data sharing?

The work presented in this report sums up the first year of a two-year effort. The next phase of this study builds on this work and expands the research questions to explore the barriers and challenges transit agencies identify in relation to these partnerships, and what other factors are necessary to lead to the implementation of a partnership and program.

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Appendix

Appendix A: Survey Content

Q1.1 – Welcome to the Ridehailing and Public Transit Partnerships Survey

This survey is part of a study being conducted at the University of California Davis, Institute of Transportation Studies. In this study we are interested in learning about partnerships between public transit agencies and operators, and on-demand ridehailing companies including Uber, Lyft, local taxis, and others.

Your participation in this study will contribute to the development of best practices for the implementation and evaluation of these partnerships and provide valuable insights to update public transportation policy. This survey takes about 10 to 15 minutes to complete.

Participation in this survey is entirely voluntary. Your responses will be completely confidential, and all reports and publications resulting from this study will include information only in the aggregate, and will not reference any individual. Only people who are 18 years of age and above are eligible to participate in this study. By participating in this survey, you are indicating that you meet this criteria. If you have any questions, or would like more information please contact Dr. Susan Pike at scribe@ucdavis.edu.

Thank you for your participation!

Q2.1 -	- We will start by asking you a few questions about your agency.
Q2.2 -	- Which types of transit service does your agency currently provide? (Select all that apply)
	Fixed route bus
	Cable cars, trolley or streetcar
	Bus rapid transit
	Light rail
	Commuter or regional rail
	Subway, underground or metro
	Para-transit
	Dial-a-ride
	Other (List here)

 Is your agency (or a staff member), a member of any public transit associations? (Select at apply)
American Public Transit Association
Community Transportation Association of America
International Association of Public Transport
State Level Association (List here)
Other (List here)

Q2.4 – On average, how often does someone from your agency do the following?

	Once a year or less	A few times a year	Once a month	A few times a month	Once or twice a week	Three or more times a week
Communicate with members of other transit agencies	0	0	0	0	0	0
Seek out information on operations from other transit agencies	0	0	0	0	0	0
Seek out information on services from other transit agencies	0	0	0	0	0	0
Attend conferences related to public transit	0	0	0	0	0	0
Provide other transit agencies information about your operations	0	0	0	0	0	0
Provide other transit agencies information about your services	0	0	0	0	0	0

Q3.1 – Next, we will ask you about the formation of your agency's partnership with an ondemand ridehailing company. For these questions, think about the **first partnership** your agency formed with a ridehailing company, and the **first program** your agency implemented as a result of that partnership. For these questions we will use the terms:

Partnership: the arrangement involving your agency and an on-demand ridehailing company. **Program:** the services offered through your agency's partnership with an on-demand ridehailing company.

ridehailing company.
Q3.2 – For your transit agency, where did the idea of forming a partnership with a ridehailing company come from? (Select all that apply)
 Within our own transit agency
 The ridehailing company we partnered with
 A different ridehailing company (one we did not ultimately partner with)
 Another transit agency
 Suggestion from a resident
 Another agency in our area (city council, community development department, etc.)
□ A local business
 Another transportation planning entity (RTPA, MPO, etc.)
Other (Describe here)
${\tt Q3.3-Had\ you\ heard\ about\ transit\ agencies\ or\ providers\ in\ other\ locations\ partnering\ with\ ondemand\ ridehailing\ companies?}$
o Yes
O No
Display This Question: If Q3.3 = Yes
Q3.4 – List up to three partnerships you had heard of; if you had heard of more than three, list those you knew the most about.
Partnership 1
O Partnership 2
O Partnership 3
Carry Forward All Choices - Entered Text from "Q3.4"

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	Yes	No
Partnership 1	0	0
Partnership 2	0	0
Partnership 3	0	0
Display This Question: If Q3.5 [Yes] (Count) >= 1		
Q3.6 – What was the most importa	ot thing you learned from the	other agencies you contacted?

Q3.5 – Did your agency contact any of the agencies you listed above to learn about their

Q3.7 – Did your agency look for information related to public transit partnerships with ridehailing companies from any of these other sources?

	Did not look for information	Looked for, but did not find information	Looked for and found information
On-demand ridehailing company	0	0	0
News outlets, blogs or similar sources	0	0	0
Research articles or results	0	0	0
Current public transit users	0	0	0
Residents	0	0	0
Another agency in our area	0	0	0
Transportation policy experts	0	0	0
A local business or chamber of commerce	0	0	0
Another local transportation planning entity (RTPA, MPO, etc.)	0	0	0
Other (List here)	0	0	0

Display This Question: If Q3.7 [Looked for and found information] (Count) >= 1 Carry Forward Selected Choices from "Q3.7"

Q3.8 – For those sources you found information from, what was the most relevant thing you learned?

\circ	On-demand ridehailing company
\circ	News outlets, blogs or similar sources
\circ	Research articles or results
\circ	Current public transit users
\circ	Residents
\circ	Another agency in our area
\circ	Transportation policy experts
\circ	A local business or chamber of commerce
\circ	Another local transportation planning entity (RTPA, MPO, etc.)
\circ	Other (List here)
	Which of the following best describe the objectives of your agency's partnership with an mand ridehailing company? (Select all that apply)
	Reduce service costs
	Provide non-first/last mile service in new areas
	Increase ridership
	Replace an existing route or part of a route
	Provide first/last mile access
	Provide extra service for special events (conferences, festivals, new school year, etc.)
	Improve service hours (late night, weekend)
	Reduce competition with ridehailing
	Reduce parking demand at transit stops or stations
	Improve para-transit service
	Other (Describe here)

Q4.2 – How important was it to your agency to work with a ridehailing company that met the following criteria?

	Very important	Moderately important	Not at all important	NA
Previous experience with similar partnerships	0	0	0	0
Willing to share data	0	0	0	0
Low cost for our agency	0	0	0	0
Simple coordination process	0	0	0	0
High brand recognition	0	0	0	0
Good reputation for safety	0	0	0	0
Popular service	0	0	0	0
Low cost for passengers	0	0	0	0
Other (List here)	0	0	0	0

Q4.3 – Which of the following best describes the arrangement you formed with the on-demand ridehailing company(s)?

- Our agency hired the ridehailing company to provide a service or a technology to support a service
- Our agency subsidized specific services provided by the ridehailing company to cover the discounts received by passengers
- Our agency formed a public private partnership with the ridehailing company; both made financial or in-kind contributions and assumed risk related to the program(s) we implemented
- Our agency purchased technology from the ridehailing company to support our program
- Our agency exchanged marketing resources with the ridehailing company via web links, in app connections, or other means

0	Other (Describe here)	
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Q4.4 – apply)	Which of the following companies were involved in your partnership? (Select all that		
	Uber		
	Lyft		
	Local Taxi		
	Via		
	Chariot		
	Scoop		
	Enterprise		
	Ventra		
	Other (List here)		
Q5.1 – partne	In this section, we will ask a few questions about the program offered through your rship.		
	Which of the following categories best describe the service offered through the program ansit agency implemented in partnership with a ridehailing company? (Select all that		
	Non-first/last mile service in a new area		
	Service in an area to replace an existing transit line		
	First/last mile service to and from existing fixed route transit stops or stations		
	Special event service for conferences, sports events, etc.		
	Late night service, during hours public transit does not operate		
	Weekend service when routes and/or schedules are reduced		
	Service to augment existing dial-a-ride or para-transit		
	Service to replace existing dial-a-ride or para-transit		
	A different service (List here)		

	Which of the following means could a passenger use to request a ride through the im? (Select all that apply)
	Ridehailing company's smartphone application
	Transit agency's smartphone application
	Telephone call (with any type of phone)
	Website (using an internet browser rather than a smartphone application)
	Other (List here)
Q5.4 – etc.)?	Were passengers able to reserve a ride in advance (e.g., one week, twenty-four hours,
0	No, rides were available on a strictly on demand basis
0	Yes, passengers could reserve a ride in advance
Displa	y This Question:
lf (Q5.4 = Yes, passengers could reserve a ride in advance
Q5.5 –	What is the maximum amount of time passengers could reserve a ride in advance?
	One hour
\circ	Five hours
0	
0	Twenty-four hours Two days
	One week
0	More than one week
	Are there any limitations on for whom or where the program is available within your e area? (Select all that apply)
	Geographic boundaries (limited to a specific area)
	Route-based boundaries (limited to pick-up/drop off at specific locations such as transit
	or bus stops)
	Temporal boundaries
	Limits on specific types of service (e.g. shared or pooled rides only)
	Income limitations
	Demographic limitations
	Other (List here)

Q5.7 –	What type of public transit discount was available through the program?			
\circ	No discount			
\circ	Free (passenger pays nothing)			
\circ	Percentage of fare with no limit			
\circ	Percentage of fare up to specified amount (passenger pays remainder)			
\circ	Flat amount with no limit			
\circ	Flat amount up to specified amount (passenger pays remainder)			
\circ	Other (List here)			
Q5.8 –	What type of ridehailing discount was available through the program?			
\circ	No discount			
	Free (passenger pays nothing)			
	Percentage of fare with no limit			
	Percentage of fare up to specified amount (passenger pays remainder)			
0	Flat amount with no limit Flat amount up to specified amount (passenger pays remainder)			
	Other (List here)			
	Which of the following means of payment were available to passengers using the m? (Select all that apply)			
	Cash on board			
	Credit card mobile application based payment			
	Transit card			
	Transit account			
	Vouchers			
	Coupons			
	Other (List here)			

apply)	
	Federal grant
	Special grant such as the Mobility On Demand Sandbox program
	State grant
	Local or regional grant
	Federal funds, from within our existing budget
	State funds, from within our existing budget
	Local or regional funds, from within our existing budget
	Local tax revenues designated specifically for this program
	Funding received from a non-profit
	Funding from a for profit company
	Our ridehailing partner funded the program
	Other (List here)

Q5.10 – What sources of funding were used to support your agency's program? (Select all that

Q6.1-In this final section of our survey, we have a few questions about the outcomes of your partnership and the associated programs.

Q6.2 – How important were the following criteria in assessing the success of your program?

	Very important	Moderately important	Not at all important
Passenger satisfaction	0	0	0
Increased ridership	0	0	\circ
Reduced congestion	0	0	0
Improved parking at transit stations or stops	0	0	0
Improved accessibility (i.e. more equitable)	0	0	0
Cost savings	0	0	0
Other (List here)	0	0	0

Q6.3 – Considering the criteria that were at least moderately important to your agency, how successful was the program?

	Very successful	Somewhat successful	Not successful
Passenger satisfaction	0	0	0
Increased ridership	0	0	0
Reduced congestion	0	0	0
Improved parking at transit stations or stops	0	0	0
Improved accessibility (i.e. more equitable)	0	0	0
Cost savings	0	0	0
Other (List here)	0	0	0

Q6.4 – In general, what is the attitude of your transit agency toward on-demand ridehailing companies now in comparison to when these companies first entered the market?

- A lot more favorable
- A little more favorable
- About the same
- A little less favorable
- A lot less favorable

Carry Forward Selected Choices from "Q4.4"

Q6.5 - How likely is your agency to continue a partnership with the same ridehailing company(s)?

	Very likely	Somewhat unlikely	Extremely unlikely
Uber	0	0	0
Lyft	0	0	0
Local Taxi	0	0	0
Via	0	0	0
Chariot	0	0	0
Scoop	0	0	0
Enterprise	0	0	0
Ventra	0	0	0
Other (List here)	0	0	0
.6 – Use the space belor tnership.	ow to tell us anything	g else about the outcomes	of your agency's
			

Q7.1 – Thank you for your participation in our survey. May we contact you in the future for the following? (Select all that apply)

Participate in an in-depth interview about this topic
Learn more about the outcomes of this study

□ Participate in a follow-up survey

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If If Thank you for your participation in our survey. May we contact you in the future for the following? (Select all that apply) q://QID35/SelectedChoicesCount Is Greater Than 0

\bigcirc	Name
\circ	Name of your agency
\circ	Telephone number
\circ	Email address

Appendix B: Questionnaire – Survey Follow up

First, I want to thank you again for participating in the survey last fall. We have learned a lot from that process, though I would like to gather more in depth information about the process leading up to the formation of a partnership with a ridehailing company, and how you planned the program with them, as well as internally; and in particular, this study aims to understand the role of learning in the process. I understand you are one of the first agencies to form this kind of partnership so you may have more to say about agencies contacting you, than your own information seeking activities as you planned your partnership.

Interviewee:

Transit Agency:

Section 1: Background information

- 1. Can you talk about the work you did at _____?
- 2. How did your partnership change over time what were the motivations for those changes? How did you decide which new avenues to pursue as the partnerships and programs were developed?
- 3. Did the agency have any shortages, low performing routes, or issues with service on off peak hours?
 - i. If so, did the agency propose any solutions?
 - ii. Where did the idea for these solutions originate?
 - iii. Was ride hailing a proposed solution?

Section 2: Barriers

- 1. Were there concerns? (Unions, Board Members, Regulations)
- 2. Or barriers?

Section 3: Learning

1. Did you contact other transit agencies for advice (whether to form a partnership, or assess the risks?)

Section 4: Information sharing

- 1. Have you been contacted by other transit agencies as they plan partnerships with ridehailing or other services?
- 2. What have been some of the main areas these agencies are interested in asking about?
- 3. Have you seen changes over time related to the kinds of partnerships that seem to be forming, or the types of questions that other public/transit agencies are asking about?

Anything else?

Section 5: Survey Format

What would be the best way to contact transit professionals in the future? Do you prefer an email survey, a short interview, or other?