Taxi-share Programs in Canada and Abroad

Overview

Taxi sharing is just as it sounds. Two or more people, who may have different origins and destinations, share one taxi and split the cost. It's a simple system that has been in place for decades on an informal basis.

In many developing countries, although taxis are often not regulated, taxi sharing makes up the main form of public transportation. Formal taxi-share programs are now beginning to make an appearance in the Western world, in cities like New York, London and Montreal.

These initiatives help to reduce traffic congestion and greenhouse gas emissions, as well as provide a more cost-effective option for residents and tourists. Taxi sharing may also offer additional transportation options for those living in rural or outlying areas that have no or limited public transportation.

Resources

CabCorner, http://www.cabcorner.com/.

José Viegas (2007). *Using Taxis to Bridge the Gap between Individual and Collective Transport.* http://www.ville-en-mouvement.com/taxi/telechargements/Viegas%20gb.pdf.

For other resources mentioned specifically in this paper, please see the **Resources** section at the end of this paper.

Context

Has this ever happened to you? You've just arrived home from a business trip and are standing with a group of other people at the airport, waiting your turn for the next available taxi. There's a good chance that at least one other person in line is heading in the same direction you are. If you're lucky, you find that person and you agree to share a taxi and the cost. More often than not, however, each individual gets into his or her own taxi and speeds off. Doesn't seem very efficient, does it?

Taxi-sharing schemes could help to alleviate these types of situations while providing residents, commuters and tourists with a more cost-effective option of getting around.

Taxi-sharing initiatives are well suited to urban areas where people tend to travel to the same destinations, but they can be used in any community, large or small, urban or rural, to reduce traffic congestion and pollution, to provide much-needed transportation services, and to save time and costs. Although similar in philosophy to car-sharing or carpooling programs, with taxi-share initiatives there are typically no forms to fill out or membership fees to pay.

Note to Readers: Due to the vast differences in taxi licensing and regulations between developed and developing countries, this issue paper will concentrate on taxi-sharing initiatives found in developed countries. In addition, because taxi sharing is still a relatively new concept in the Western world, program results for these initiatives are often not yet available.

How does taxi sharing work?

At its most basic, taxi sharing involves two or more people traveling in one taxi, each sharing the same or nearby destination and each paying a portion of the fare.

In developing countries, taxi sharing is a common form of transport, with vehicles ranging from standard four-seat cars to minibuses or what are called "jitneys." Many of these systems are unlicensed, and unregulated, and, depending on the country or area, foreign tourists may not be encouraged to share taxis due to safety reasons.

In developed countries, the taxi is not often considered as a transportation solution. In his 2007 paper, *Using Taxis to Bridge the Gap*, José Viegas of the Instituto Superior Técnico in Lisbon, Portugal, notes that, "In most discussions about road congestion in urban areas we tend to consider only the private car and [public] transport. Rarely is the taxi mentioned as a contributor to solving congestion problems."

Planners and policy makers in Canada and elsewhere are now beginning to see taxi sharing as one of the solutions to growing traffic problems. In addition, existing taxi-sharing initiatives are being supported by technological advancements such as global positioning systems (GPS), Internet booking and mobile phone applications.

In his paper, Viegas presents a model of how technology can be used in a taxi-sharing program:
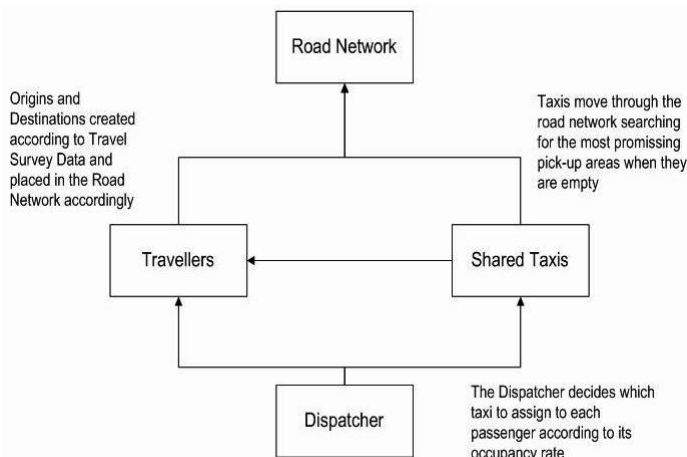
Types of taxi sharing

Taxi-sharing initiatives generally fall into four categories: taxi marshals, group taxi stands, web-based taxi-sharing applications, and cell phone applications, or "apps."
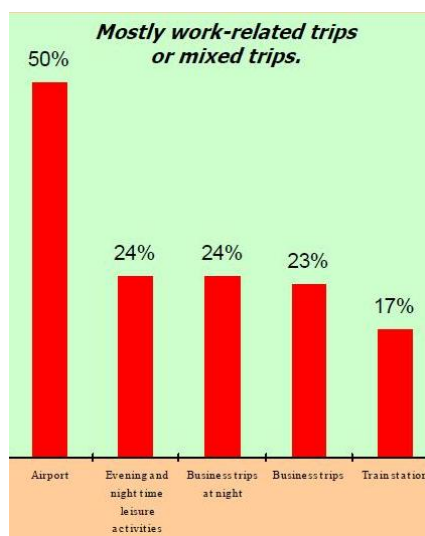
Taxi marshals

One of the most common forms of taxi sharing can be found at transportation transfer stations, such as airports, train and inter-city bus stations, where taxi marshals coordinate travellers who are heading in the same direction. In some countries where unlicensed taxis operate, such as the UK, taxi marshals help reduce illegal pick-ups and control passenger queues.

Group taxi stands

Similar to taxi marshals, some cities offer group taxi stands at major transfer destinations or within the city centre. Group taxi stands most commonly handle groups of people with regular commuting habits, or those who are heading in the same direction.

In a study conducted for the Institut pour la Ville en Mouvement, more than 2,000 people in five large cities (London, Paris, New York, Amsterdam and Lisbon) were surveyed about their taxi use. The study found that the majority of trips taken by taxi are to the airport, with other business trips and evenings out also cited as top reasons to use taxis (*depicted in the graph at right. Image courtesy of Institut pour la Ville en Mouvement)*. Many airports around the world,

therefore, already have some form of taxi sharing (taxi marshals or group taxi stands) because it responds to the needs of travellers.

Web-based taxi sharing

Some taxi companies, or cities that have contracted with taxi companies, offer online booking. Similar to carpooling or ridesharing sites, users input their origin and destination information and indicate whether or not they want to share the cab if other passengers within the system are beginning or ending at or near the same point. Data mapping systems are often used to coordinate these trips and, in some cases, the website can provide an estimate of the shared fare.

Cell phone applications

Although still in their infancy, cell phone taxi-sharing apps are starting to make an appearance. These apps allow users to input their origin and destination and the system then finds a matching passenger. The system chooses a convenient meet-up spot for the taxi sharers and, in some cases, determines the fare per person before the ride has even taken place.

Examples of each of these taxi-sharing types are outlined in more detail in the next section.

Taxi-sharing programs

In this section, taxi-sharing programs in North America and Europe are examined.

CabCorner.com, several cities

CabCorner is a free web-based cab-sharing platform. It launched in 2009 and operates in Montreal, 13 US cities and 13 cities overseas, but has been primarily used in New York City. It is the only cab-sharing platform that is accessible worldwide.

Brooklyn resident Jonathan McKinney developed the cab-sharing website in response to his own travel issues. One night in the summer of 2008, McKinney found himself in Manhattan facing the prospect of an expensive taxi ride home. "Everyone was filtering out of the bars and into taxis and there was so much unoccupied backseat real estate that I thought there has to be a better way to help people connect," he recalls.

Within months of launching the site, CabCorner acquired two cab-sharing competitors and partnered with SenseNetworks to forecast taxi availability at various times and locations. In order to access the geographical data required to offer the service, CabCorner has worked with dozens of taxi companies around the world.

Users can book a taxi online or with the company's newly launched cell phone app. Depending on the availability of data in a particular city, CabCorner users can also take advantage of the fare calculator, which automatically calculates the trip cost per person.

Users first create an account with CabCorner that allows them to upload a photograph of themselves (so that taxi sharers can identify each other at a meeting location), link the CabCorner account with their Facebook account, and narrow the system's search parameters by gender (e.g., women may wish to only cab share with other women). The website also includes a list of safety tips for taxi sharers who may be hesitant to share a cab with a stranger.

Similar to the trip-planning features on public transit, carpooling and ridesharing websites, CabCorner allows people to search for shared taxi rides by entering their current location (by address, intersection or a commonly known landmark), their destination, and the date and time of the trip.

The system then searches for already posted rides leaving around the same time and that are heading in the same general direction.

If there is a match or multiple matches, users choose the ride that best suits their travel needs. If no match is found, users can post the ride and wait for a match, or book a taxi anyway and take the taxi alone.

Once a match is created, both users are notified via email of the departure time, meeting point and the cost of the trip for each rider.

CabCorner also recently launched a free cell phone app, which offers users the same features as the website but allows them to remotely search for taxi matches on the go.

The website is also free to use, so CabCorner needed to find revenue sources. One of their most popular advertising features is the "Hot Spots," which are easily identifiable meeting points (typically retail or restaurant outlets). CabCorner works with retailers who want to sponsor a "Hot Spot" and these retailers then provide users with special offers such as coupons or discounts that can be redeemed before sharing their taxi ride.

Although the service has been running for less than a year, media coverage and customer feedback has been overwhelmingly positive.

Heathrow Airport, London, England

Since 1998, Heathrow Express has operated a taxi-sharing service from London's Paddington Station (train station) to central London.

The rationale behind the project was simple: during peak periods there are simply not enough taxis to meet demand. The service operates only during peak morning times (8:30 a.m. to 10:30 a.m.), or until there are a sufficient number of taxis to meet demand.

Taxi users are not required to share a taxi, but those who share generally depart more quickly because taxi sharing is given priority.

At the group taxi stand, taxi marshals—members of London's Licensed Taxi Drivers Association—help organize taxi sharers into groups of up to four people who are travelling to the same central London zone. Those who wish to share a taxi simply collect a destination zone voucher from the marshals at the taxi queue. The voucher takes into account the number of people in the taxi and shows exactly what each passenger must pay the driver at the end of the trip.

In 2007, almost 78,500 passengers shared taxis from Paddington station to central London, saving more than 42,000 normal taxi trips.

Treintaxi (train taxi), The Netherlands

More than 100 train stations in The Netherlands offer a train taxi service that takes travellers to and from the station within a limited area.

Passengers purchase a shared taxi ticket from the train station counter or at the station's ticketing machine, or shared taxi users can choose to pay the driver directly. At some stations, passengers can also use a special call box near the taxi queue to request a shared taxi. Those purchasing from the counter or ticketing machine pay a slightly lower fare (about $1 less).

The service operates daily from 7 a.m. (8 a.m. Sunday and public holidays) until the last train. The driver determines the route so the ride can take slightly longer than a normal taxi.

Municipal taxi-share programs

Of the few Canadian taxi-sharing programs that exist, most are located in Quebec. Several small Quebec cities engage in these services, including many of the bedroom communities surrounding Montreal.

Montreal communities

The Société de Transport de Montréal (STM) offers taxibus services in 10 suburban communities around Montreal.

Each service has slightly different schedules and routes, but most run only during weekdays and have fixed routes between taxibus stops (similar to transit stops) and major destinations, such as subway stations, university campuses, shopping malls, or major business centres. All of the taxibus services offered through STM allow users to pay the driver with their STM transit passes.

In some cases, passengers must book ahead, up to 40 minutes in advance, while other communities offer the service to anyone who shows up at the taxibus stops.

Projets Saint-Laurent, a Montreal-based non-profit organization, hopes to launch a cell phone taxi-sharing application, similar to CabCorner's phone app, in the near future.

The idea is to match passengers who do not know each other but who travel similar routes, so that they can share the cost of a taxi ride. The goal is to divide the Island of Montreal in order to determine fixed rates depending on the number of zones crossed, while still offering door-to-door service to each passenger.

Pierre Lussier, Vice-President of Projets Saint-Laurent, believes that the taxi-sharing system will appeal to employees who regularly use their cars to get to work, but who do not wish to use public transit because they feel it is less convenient or efficient. "Given the recent increase in Montreal transit fares, Montrealers may also be eager to adopt a more budget-friendly transit-sharing alternative," says Lussier.

Rimouski

A Transport Canada case study examined the use of taxibuses and inter-city taxibuses in Rimouski. A link to the full case study can be found in the **Resources** section at the end of this paper.

During the 1980s, the small privately run bus service that had existed in Rimouski went out of business. Unable to provide its own transit service, in 1993 the city worked with local contractors to implement a taxibus service.

Two different services were offered: Taxibus and INTER-Taxibus.

Rimouski's Taxibus logo. Image courtesy of City of Rimouski.

Taxibus serves the neighbourhoods within the City of Rimouski and passengers can travel between any two of 350 designated stop points. Users apply for a registration card and either pay a straight fare or can purchase a monthly pass, which offers unlimited use of the Taxibus.

INTER-Taxibuses cross former municipal boundaries to serve smaller rural neighbourhoods, with separate services operating to the east and south. INTER-Taxibus passengers can travel either within two outer service zones, or between their originating zone and the Taxibus zone.

Trips are demand-responsive, meaning that trips are made only if one or more rides have been booked. The origin, destination and routing of trips depend on the travel needs of each passenger. Service schedules identify the time at which taxis will pick up the first passenger, meaning that other passengers on the same trip may have to wait several minutes for the taxi to reach them.

Since their inception, both services have been popular with residents, particularly the Taxibus service. During the first four years of the Taxibus operation, annual ridership grew by 38%, while costs increased by only 6%.

Cities of West Bend and Sun Prairie, Wisconsin

The City of West Bend's shared-ride taxi service began in 1993 with only two taxi vans. It now has 10 vans with handicap accessible service. The taxis can carry passengers anywhere throughout the City of West Bend, with limited service outside city limits.

Passengers call ahead to book a taxi (the service runs from 6 a.m. to 10 p.m. on weekdays, and from 8 a.m. to 4 p.m. on Sundays, and is closed on holidays). An individual one-way fare costs $3.50 (USD) and covers any travel within city limits. Passengers can also purchase a 10-ride coupon for $35. An additional charge of $1/mile is charged for destinations outside the city limits with a two-mile maximum.

A similar service is offered in the City of Sun Prairie, Wisconsin, a small city of 26,300 located 21 kilometres north of Madison, the state capital.

With no bus service of its own, the city contracted with private taxi providers for the service and, like West Bend, operates primarily within city limits. Municipal grants offset the costs of the program.

Sun Prairie's shared-ride taxi service. Photo courtesy of the City of Sun Prairie.

There are no fixed routes and the service provides curb-to-curb transportation.

Regular fares are $3 within city limits (fares are discounted for seniors, the disabled, children and students) and the service operates during similar hours as West Bend.

The city recently began offering "Corner Service," a service that is available on all regular school days. Transportation is available from specified street intersections to the middle schools and the high schools in

the morning and the reverse in the afternoon. The cost of a regular one-way taxi ride for students is $2.00. Low-income residents who qualify for the service receive a reduced rate and are provided with an identification card that is presented to the driver.

Sun Prairie's shared taxi service also includes a thrice-daily shuttle to a nearby mall, which connects to the Madison transit system.

New York City taxi-sharing initiatives

Two taxi-sharing initiatives were launched within the last two years in New York City, but have not had the desired impact.

The first involved installing signs for three group taxi stands set up by the Taxi and Limousine Commission (TLC). Two to four passengers would pay a per-person flat fare of $3-$4 to share a taxi from a group ride stand to a common destination, with passengers able to get out anywhere along the route.

The idea behind the program was to mimic the "Wall Street Run," a taxi share that happened organically. For years, employees working in the city's financial district lined up at York Avenue and 79th Street and split the cost of taxi fare to the district.

Group taxi stand signage in New York City. Photo courtesy of TLC.

However, after seven months, the TLC removed the group stand signs due to lack of riders. More information on these group taxi stands can be found in the **Lessons Learned** section near the end of this paper.

The second initiative was a taxi-sharing app, similar to that offered by CabCorner, which was launched by Fare/Share in the spring of 2010. Despite some initial media fanfare, the service has not attracted many users.

"A lot of people downloaded the app, but we never reached a critical mass of people," says Jeff Novich, one of the principals of Fare/Share. "It's difficult to advertise all over the city. It takes a lot of money to do that, which we didn't have."

Novich says that they plan to relaunch the app but with a much narrower focus. "We plan to focus on specific use cases, like possibly only having it available on weekends, or only in certain areas, like Manhattan," he says. "We're also looking to market it for group events, like conferences where hundreds of people are at the same place at the same time."

Fare/Share has now partnered with Green Tomato Cars, a private UK car-hire service that uses only hybrid vehicles. "We'll launch the app in London and test it there before we retest in New York," says Novich.

He adds that Fare/Share will also be looking at changes to their business model to see how local advertising could help offset costs.

Benefits

Benefits to passengers

The main benefit of taxi sharing is obvious for the user: a lower fare by sharing the ride with another person going in the same direction.

For example, a person traveling to John F. Kennedy Airport from midtown Manhattan would pay about $45 for a taxi. If he or she was to use the CabCorner service and there were two people in the taxi, each would pay only half the cost.

Jesse Sommer, CabCorner's Chief Operating Officer (*pictured at left. Photo courtesy of CabCorner*), says that, "By lowering transportation costs, we're enabling a whole new segment of society to afford taxi transportation. If people don't mind sharing a seat on a bus, why wouldn't they prefer to share a more comfortable cab?"

As Viegas points out, "The taxi is rarely considered inconvenient by public transit users or drivers. For the former it offers a direct and faster connection, and for the latter it offers the same speed and flexibility but without the hassle of finding a parking space." (Viegas, 2007)

There is also the possibility that, as our population ages (the number of Canadians over the age of 65 is expected to reach more than 10 million by 2036, more than double the 2009 figure of 4.7 million), the demand for mobility services for the elderly will increase. Taxi sharing could fill the gap.

"There is a growing demand for mobility by elderly people who used to drive but no longer can or want to do it," says Viegas. "[Shared] taxis are an ideal means of transport for this growing segment of the population as it offers similar patterns of motion to their habits [i.e., seniors who are used to driving their own vehicle may be more comfortable taking taxis than taking public transit], while providing another opportunity for socializing."

Using shared taxis could also greatly benefit those living in outlying or rural areas. Viegas notes that, as technology improves, there are opportunities to link smart card fee

collection technology (as is already happening in many public transit systems) with taxi sharing. "With such a system, it would be rather simple to have taxis serving as the final leg of bus services into lower density areas, at a much lower cost than can be offered by standard transit buses." (Viegas, 2007) As demonstrated by STM's taxibus services, this is already happening in some municipalities.

Benefits to taxi drivers

Shared taxis can increase the operator's profit because there is the possibility of collecting a price from each passenger. In modeling the demand for shared taxi services, Viegas provides an example of how it could work.

"Using electronic payment, if there are two people on board, each would pay 60% of the full fare and the operator would receive 120% of the fare. With three people on board, each would pay 45%, meaning that the operator gets 135% of the fare," he says. Under this scenario, the taxi driver makes more money, while each passenger still saves money off the full fare (Viegas, 2007).

Jesse Sommer of CabCorner notes that by offering taxi-sharing services, CabCorner "drives business to taxi drivers in a tough economic climate." Ajay Rajani, CabCorner's Chief Financial Officer, agrees. "Cabbies can look forward to more business, thanks to the savings we offer our users. And in smaller markets with less cab coverage, we're forging partnerships with livery cab companies to ensure our users can get a taxi."

Benefits to local businesses

As CabCorner has demonstrated, there are benefits to local retailers. In their case, local stores and restaurants can opt to sponsor "Hot Spots," common locations where shared taxi passengers meet up.

Lou Carpino, CabCorner's Chief Marketing Officer, says that, "Aside from our standard advertising opportunities, we're delivering customers to our local partners. For example, Sanford's [a popular diner located in Astoria] offers CabCorner users discounts on its menu," he says. "We recommend to our users that they meet their fellow travellers outside the diner, and grab something to eat while they wait. Thanks to CabCorner, they have a few extra bucks to spend."

Benefits to municipalities

Most Canadian cities have integrated taxis with their public transit and other transportation systems (e.g., direct phone lines to taxi services at airports, transit, train or inter-city stations, or allowing taxis the use of bus-only lanes).

Viegas points out that, regardless of whether taxis are shared or not, allowing them the use of bus-only lanes reduces the overall number of vehicles on the roads, particularly in downtown areas. In addition, he argues that if priority were given to shared taxis in transit lanes,

gridlock could be reduced even further and taxi passengers would benefit from shorter travel times, even if a shared taxi has to make a small detour to pick up or drop off passengers. (Viegas, 2007)

Taxi sharing could also free up valuable real estate used by park-and-ride facilities.

Many Canadian cities already have such facilities attached to their transit stations, typically in outlying areas where a passenger drives to the station, parks, then takes transit for the remainder of their journey. The problem, however, is that many of these park-and-ride facilities fill up fast and many would-be transit users may be turned off if they have to search for a paid parking space.

Shared taxis could be part of the solution. Shared taxis could run on a fixed route, picking up passengers from their homes or at posted intersections, and delivering them directly to the transit station. Such a service could also be combined with smart card technology so that the public transit user would pay a premium on their transit pass to cover the taxi service.

Safety is another issue that must be addressed in any taxi-sharing initiative. For example, for the last two years the City of Leeds, England, has employed private security marshals to patrol taxi ranks in the downtown on Friday and Saturday nights. The marshals help to coordinate shared taxi trips and are trained in security and first aid. These marshals not only get large numbers of people home safely, but there has been less congestion and noise because fewer taxi trips are needed to serve all passengers. Most importantly, from a safety perspective, the city reports that crime has been reduced in key downtown areas.

Barriers and other issues

Since there is no one-size-fits-all solution to taxi sharing, there are a number of technology, licensing and other regulatory issues that must be considered.

Licensing/regulatory/operational barriers

Canada's taxi industry differs markedly from province to province, but, in general, fares and licenses are regulated either by the province or the municipality. For communities with multiple taxi companies, municipal bylaws may also restrict where such taxi companies can operate within the city.

The number of new taxi licenses available each year in any given Canadian city is often quite low and the cost of a

single license can be as much as $200,000. This can affect taxi availability. For example, the Montreal Economic Institute (MEI) reports that despite population growth over the last several decades, limits have been placed on the number of taxi licenses issued. In 1952 there were 4,978 taxis on the Island of Montreal, whereas in 2009 there were only 4,445. Similar situations have been found in other cities across Canada.

The MEI argues that the scarcity of new taxi licenses leads to longer wait times for customers, higher fares, and prevents the market from operating efficiently. The elderly or those on fixed or low incomes are more heavily affected by high fares and their mobility is reduced, particularly in the winter or in bad weather.

When it comes to individual taxi operations, different rules apply. For instance, some taxi companies will only pick up passengers who have booked through the company's dispatcher (i.e., no on-street pick-ups), others do not accept pre-booked taxi rides, and some will not do multiple pick-ups or drop offs. Furthermore, municipal taxi regulations could pose additional barriers to taxi-sharing initiatives.

Technology

All of the technologies required to operate a taxi-sharing system are currently available. Most taxis in Canada are already equipped with GPS, electronic payment devices, and mobile communication devices (either cell phones or other link to the dispatcher). Further refinements to cell phone technology will likely make such technologies even more user friendly.

Deregulation

Some jurisdictions, like Ireland, have deregulated their taxi industry. In 2000, Ireland removed restrictions on the number of taxi permits available. The number of taxis tripled within the first two years after deregulation, and quintupled after 10 years (MEI). Waiting times fell, with the proportion of clients waiting less than 10 minutes for a taxi going from 58% in 1997 to 81% by 2008.

Eliminating the restrictions also allowed fares to be negotiated between driver and passenger. Although Ireland has retained a fare schedule based on the starting fare, the fare per kilometre travelled and the price per minute of waiting time, customers can negotiate lower fares with the driver before the trip.

Overcoming safety fears

Sharing a cab with a stranger is often cited as one of the main reasons that people, particularly women, do not share taxis. Although these fears can be overcome with time and educational efforts, it is a factor that municipalities need to consider.

Most web-based taxi-sharing sites provide users with a list of safety tips (similar to the tips provided on carpooling websites), while some allow users to specify the gender of riders with whom they wish to share.

Many taxi companies in North America have added security cams inside taxis. Cameras are often installed for the safety of drivers, but have also been shown to limit unlawful behaviour. They can also promote feelings of security for passengers because they know the trip is being recorded.

Other issues

Taxis are one of the few business areas that don't provide loyalty discounts or the ability to collect "points" as one would with an airline reward system. In *Continuity and Discontinuity in Canadian Cab History*, Donald F. Davis admits that, "Variable fares would make the taxi industry more difficult to supervise." However, he also notes that most jurisdictions don't allow taxi companies to offer discounts or to charge less for trips in certain areas or at times when business is slow.

Offering reward points could benefit the taxi industry itself (e.g., drivers could charge a lower fare for repeat customers), or could be tied to other rewards, such as discounts at local retailers (e.g., as sponsors).

Partners

In the examples used for this paper, a number of potential partners in taxi-sharing programs have been identified. Partners depend upon the type of taxi-sharing initiative being considered, but in general, partners could include:

- Taxi and limousine companies
- Private car-hire services
- Adjacent municipalities
- Public transit agencies and other transportation agencies, such as airport and train authorities
- Local retailers and businesses such as shops, hotels, restaurants and bars
- Chambers of commerce, business improvement associations, or other business organizations
- Local technology companies (if developing smart card technologies or cell phone applications)

Lessons learned

Lessons about taxi-sharing programs depend, primarily on the type of project. In this section, some of the people interviewed for this paper share their most important lessons learned.

Leverage existing taxi networks and resources

CabCorner not only acquired two other taxi-sharing companies but also struck strategic partnerships with taxi

companies in cities around the world in order to deliver information to customers.

"Beyond the environmental benefits, we seek to transform taxicab paradigms and habits, expanding taxi travel to a new demographic that previously couldn't afford it," says Jesse Sommer, CabCorner's Chief Operating Officer. "By leveraging cities' private taxi networks, we're creating a new form of public transit and are driving more business to cabbies."

The City of Rimouski worked with its local taxi industry to provide the TaxiBus and INTER-Taxibus services to its residents. The taxi company was open to the idea because, when the service first began, it had already been participating in a project that dealt with the transportation of people with disabilities.

Rather than undertake the complicated logistical exercise of receiving calls, organizing rides, dispatching taxis and verifying fare payments, Rimouski modified software that the Quebec Ministry of Transportation had already developed to manage paratransit services.

Use incentives and grants to offset costs

Offering advertising opportunities is one way to offset the costs of a taxi-sharing service. CabCorner, for example, offers local retailers the opportunity to sponsor "Hot Spots," common meeting locations for taxi sharers. This not only provides the company with revenue but also encourages taxi-share users to patronize local establishments. Revenues are also gained through banner advertisements on its website.

"Our most popular advertising opportunity has been the 'sponsored messaging,' through which promotional text and graphics are emailed to users as they interact with the website or phone app," says Sommer.

In Quebec, Rimouski's taxis-sharing service is recognized as a public transit service and is, therefore, eligible for municipal and provincial subsidies to offset the cost of its Taxibus and INTER-Taxibus services. Unlike some other municipal taxi-sharing programs where taxi drivers are paid a flat fee, Rimouski pays the metered fares at a discount, which gives drivers the incentive to accept longer trips.

Understand your market

Jeff Novich of Fare/Share says that in developing a taxi-sharing program, organizers need to understand the local situation.

In their case, he says the company focused too much on the borough of Manhattan, rather than recognizing the differences between city areas. For example, Yellow Cabs, the famous taxis of Manhattan, do not operate in Brooklyn. "When we relaunch we'll be narrowing our focus to respond to more specific markets."

One of the reasons cited for the failure of TLC's group taxi stands was that taxi drivers had trouble finding spots at the curb to wait for fares. The TLC and others have also speculated that, because the stands were set up in "well-to-do" areas, affluent customers did not wish to wait in line until there were enough people to share a taxi with. A local retailer, whose business is near the intersection of one of the taxi stands, said in a March 2010 *New York Times* article that, "People want instant gratification. Around here, most people can afford the ride. Queuing up for a morning cab is not in their DNA."

In an October 2010 *New York Post* article, TLC Commissioner David Yassky said, "They simply have not worked, but I'm not sure if there's not enough common routes from [people's homes] to work or if it's a chicken-and-egg problem, where passengers will only go there if there are taxis and taxis will only go there if there are passengers, and no one will act first."

Promote, promote, promote

Novich says that Fare/Share suffered from a lack of advertising dollars to market the service citywide. "If you want it to work really well, you have to have money to launch an advertising campaign," he says. "It'll take six to 12 months before people will consider using the service and only if they've been inundated with ads."

Jeff Novich of Fare/Share. Photo courtesy of Fare/Share.

He also notes that any taxi-sharing service is really about changing people's behaviours. "People are used to their own routines, so you need to shift people's habits—that's a big challenge," he says.

When Fare/Share relaunches, Novich hopes to attract high-profile people to taxi sharing. "If a celebrity is already at an event in your city there may be a chance that the average person can share with them," he says. "I was at a tech event and the guest speaker was a venture capitalist. He tweeted that he wanted to share a cab and, in exchange, offered to listen to someone's pitch for start-up funding. The guy he rode with ended up getting a $50,000 investment from him."

CabCorner received significant media exposure when it first launched, and also actively promoted its service through Internet search engines. It has recently partnered with Digital Media Army (DMA), a company that helps organizations grow their online audience. Through DMA,

CabCorner is offering its taxi-sharing application to local media outlets free of charge.

Start small

For some municipalities interested in launching a taxi-sharing initiative, opportunities may lie in city-sponsored events such as conferences, festivals and fairs.

"If you know that you have these kinds of highly social events, then that's an opportunity to taxi share," says Novich. He says that by reaching even a small number of people at those events and offering them the opportunity to share taxis, the idea latches in people's brains.

"I'm involved in a lot of tech groups that meet for specific reasons," he says. "I can go to these events, and tweet that I want to share a cab with someone after the event is over." Although this is an informal example, municipalities could use taxi marshals or group taxi stands at city events to encourage taxi sharing.

Conclusion

Taxi sharing has a much longer history in developing countries than in the developed world, but that shouldn't stop municipalities in Canada from considering it as part of their transportation system.

"It is high time to expand the argument that taxis are an integral part of the urban mobility system," says Viegas. "The argument must be brought to regulators, organizing authorities, transport operators, local politicians and the general public so that the opportunities can be perceived, business models developed and regulations opened." (Viegas, 2007)

As the examples in this paper demonstrate, technological advancements have helped a number of taxi-sharing initiatives push the envelope of what is possible. Even simple, non-technological solutions, such as group taxi stands or the use of taxi marshals, offer opportunities to reduce congestion, lower transportation costs and improve mobility for residents, as well as provide a multitude of benefits to municipalities, local businesses, and the taxi industry itself.

Resources

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http://www.cityofsunprairie.com/docs/category.php?department_id=22&category_id=3113.

City of West Bend, Wisconsin. http://www.ci.west-bend.wi.us/index.php?option=com_content&view=article&id=111&Itemid=113.

Fare/Share NYC. http://faresharenyc.com.

Heathrow Express. http://www.heathrowexpress.com/taxi-share.

Institut pour la Ville en Mouvement. *Using Taxis to Bridge the Gap between Individual and Collective Transport.* http://www.ville-en-mouvement.com/taxi/telechargements/Viegas%20gb.pdf.

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Urbanicity. *Shared Taxis in Brussels: the missing link in urban transport?* http://www.urbanicity.org/Site/Articles/Dufour.aspx.

Wikipedia. *Share Taxi.* http://en.wikipedia.org/wiki/Share_taxi.