ALLEGHENY INSTITUTE
FOR PUBLIC POLICY

AN ANALYSIS OF THE DEMAND FOR TAXICABS IN THE PITTSBURGH AREA

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TABLE OF CONTENTS

Key Findings

- The Pittsburgh area is not considered a "taxi" town. Residents typically do not use cabs as a primary mode of transportation.

- The regulatory environment in which cabs operate stifles competition.

    - Entrants to this industry must prove that the incumbents are not fulfilling demand. Incumbents often have the first chance to provide their own solutions to the accusations thereby shutting out the prospective entrants.

    - As a result of this regulatory environment, there is one dominant firm and a small number of cabs that service the area.

- A comparison of taxicab usage with comparable cities shows that usage per capita in Pittsburgh is well below the national average.

    - The average number of firms per city in the sample is 22, Pittsburgh has 5.

    - Pittsburgh cabs make approximately 40 percent fewer daily trips per 1,000 persons than the average city of similar size.

- A survey of local establishments indicates that there would be ample demand for taxicabs if residents believed they could get a cab in a reasonable amount of time.

    - Currently it takes a patron an average of about 35 minutes to get a cab, if one can be had at all, to take them across town.

- Based on the averages of comparable cities, and the results of the survey, there is ample room for one or more additional taxicab companies to serve the Pittsburgh area.

Background

Nationally, major metropolitan areas achieve an average taxi utilization that generates a market representing between 3 and 5 percent of population. Historically it is likely that taxi usage peaked and has been in decline for a decade or more in most major metropolitan areas. The reasons for the decline have been myriad, and include a dramatic shift in population from cities to suburbs making the average citizen dependent upon privately-owned automobiles for nearly all commuting. The decline of the cities as residential and retail centers has also changed the demographic composition of most city populations. In most major cities, the middle class population has declined, while the upper and lower economic strata have remained in residence.

Most governmental transportation programs emphasized the development of mass public transportation modes that effectively reduced taxi service to a niche industry focused upon the wealthy residents of and visitors to cities. Government transportation programs, designed to improve inner city transportation, severely weakened what had been a very cost-effective and unsubsidized mode of personal transport—the taxicab system. This happened in most major metropolitan areas where taxicabs were supplanted with an ineffective, inconvenient, costly and subsidy-requiring complex of mass surface transportation.

Still, Pittsburgh appears to be dramatically underserved by taxi transportation compared to other similar cities throughout the United States. For one thing the dominant firm in the area is apparently not interested in discovering the real needs of the marketplace, since it has a virtual monopoly on long distance cab service between downtown Pittsburgh and Pittsburgh International Airport.

In Pennsylvania, the effect of regulation is to afford existing cab companies a sheltered environment wherein innovation and, frankly, customer service are secondary to maintaining market share in a static environment. There is no incentive to innovate or improve service, especially in a slow growth economy. To make matters worse, the advent of two new stadiums and the construction of a new convention center bode well for an increase in tourism and visitors, and therefore, suggest that growth in demand for traditional taxi service will occur in the near future. Will there be a commensurate rise in competitive cab service?

In this context, this study was undertaken to assess the current and potential demand for cab service in the Pittsburgh area with a particular emphasis on determining if demand is or will be sufficient to support additional taxi companies.

Taxicab Service in Pittsburgh

Taxicab service in and around the City of Pittsburgh has often been criticized by the local media and even policymakers. Periodically, articles regale readers with stories of how difficult it is to travel around town via taxi. The reasoning behind the criticism goes something like this: cabbies are only willing to accept high priced fares to the airport and

ignore the lower fare, cross-town traveler. The underlining principle is that since Yellow Cab leases its cabs to the drivers, who are then obligated to pay Yellow Cab a fixed fee, the cabbies need to make longer runs to not only pay off the daily lease, but to make a profit for themselves. Therefore they eschew shorter trips in favor of longer ones. It has been reported that some cabbies even have a "preferred client" list. These clients have the cabbies' personal cell phone numbers and arrange for service directly with the cabbie. These cab drivers only accept these calls and ignore the dispatcher, which effectively takes them out of circulation.

Most Pittsburghers are used to this situation, but it surprises many visitors. Even though it is against the rules of the Pennsylvania Public Utility Commission (PUC) to refuse a rider because of distance (and subsequently fare size), cabbies allegedly do so on a consistent basis. For example, in 1999 the PUC fined Yellow Cab 10 times for refusal to take passengers on short trips.[1] In January of 2001, the Pittsburgh office of the PUC fielded 10 complaints of such violations.[2] The questions to be asked in this paper are twofold: Are there enough cabs or cab companies to accommodate the Pittsburgh market? Can other taxi companies enter the market and successfully compete?

In order to answer these questions, an examination of the current Pittsburgh market must be done. According to the PUC, there are only 5 taxicab companies registered to operate in Allegheny County.[3] They are listed in Table 1.

Table 1

Taxicab Company (Year Franchised)	No. of Cabs in Fleet	Market Concentration	Area of Operation
Yellow Cab (1946)	350	90.7%	City of Pittsburgh, 10 Mile outward radius, including airport.
Checker Cab	20	5.2%	City of Pittsburgh
People's Cab (1951)	10	2.6%	City of Pittsburgh, 10 Mile outward radius.
S&S Taxi (1982)	4	1.0%	Southeastern Suburbs
Eagle Taxi (1981)	2	0.5%	City of Pittsburgh
Total Cabs	386	100%	

As can be seen from the Table, there are less than 390 cabs operating in the Greater Pittsburgh area and only four companies have permission from the PUC to accept fares within Pittsburgh's city limits. The largest of these companies, Yellow Cab, owns/leases

[1] In 2000, the PUC fined Yellow Cab 6 times and were conducting 4 more investigations.
[2] Phone conversation with Pittsburgh office of the PUC. 1/30/01 Not all complaints result in fines.
[3] According to PUC records, there are only 5 taxi companies legally operating with call and demand authority. Numerous limousine companies are registered in Allegheny County and are suspected (sometimes proved) providing call and demand services (15 limo companies and 6 paratransit services).

91% (350 cars) of the taxis that operate in Allegheny County.[4] The next largest competitor is Checker Cab with 5% (20 cars). It is interesting to note that People's Cab is not a true "for profit" company. It's license is owned by a Carnegie Mellon University professor, who uses the company as a training ground for students studying business. Therefore, Peoples Cab is not a true competitor in the local market.

The Regulatory Environment

Why the disparity between the dominant firm (Yellow Cab) and the others? The answer lies in the way the taxicab industry is regulated. The current regulatory environment ensures that competitive entry is slanted toward the incumbent providers. A prospective cab company submits an application to the PUC, which makes the application public.[5] The applicant must demonstrate that the incumbents are not adequately serving the area it wishes to serve. At this time any incumbent providers may contest the application.[6] The incumbents often dispute the operating fitness of the applicant's company. Due to the economies of scale present in starting a taxi company, the incumbents argue that the new company cannot begin to offer the level of service currently being provided.

They may also challenge the notion that incumbents are providing inadequate service. The incumbents often provide a solution in which they offer expand to any new areas of demand. Since this seems to be an easy solution , the PUC often finds in favor of the established companies.

The burden of proof lies with the applicant. The applicant must convince regulatory officials that they can provide the areas in question with better service than those companies already in operation. It basically amounts to one person's word vs. the other. "Obviously, the cab companies that were franchised first have no quarrel with this process for the fact that when they were franchised, more areas needed service. Now the process has become twisted: instead of the new company responding to a market demand and commencing cab service, they are forced to 'accuse' the company that has 'failed'. Since this regulated monopoly model favors incumbents, they are given the benefit of the doubt that they can serve 'neglected' areas."[7]

This regulatory environment allows the incumbents to react to any ideas or strategies that may have been proposed by a potential entrant to the industry. For example, a story had run in the Pittsburgh Business Times about a potential entrant to the taxi industry, PT,Inc., that has proposed using the Daimler Chrysler PT Cruiser vehicle as its taxicab.[8] PT, Inc. and its owner John Wargo, had announced his plan to operate 40 PT Cruiser

[4] Yellow Cab has petitioned the PUC for permission to add 20 more cars to begin operation in March of 2001.
[5] The application is published in the Pennsylvania Bulletin.
[6] PUC leaves the application open for contest for 15 working days.
[7] Montarti, Eric. "Scared Yellow: An Analysis of Taxicab Competition in Allegheny County". *Allegheny Institute for Public Policy*. Report #00-03. January 2000.
[8] Schooley, Tim. "Voodoo Taxicabs". Pittsburgh Business Times. Pp. 53-55. November 24-30. 2000.

vehicles that would service Pittsburgh's Golden Triangle and not making airport runs. Specifically, the plan is to serve customers wishing to frequent the City's nightclubs, restaurants, and theater district. Four months later, Yellow Cab of Pittsburgh has announced, also in the Pittsburgh Business Times, that it too will be introducing 20 new PT Cruisers to its fleet of taxis. These new taxis will not be serving the airport but will be restricted to serving local restaurants and the theater district.

Is There Room for More Cab Companies?

The International Taxicab and Livery Association (ITLA) compiles data in the taxicab industry via survey. The ITLA provides national averages on data such as annual trips and distances per taxi. This data is represented in Table 2.

Table 2[9]

Item/Fleet Size	1-24	25-99	100-up	Average
Average Fleet Size	11.9	47.3	272.9	69.8
Avg. Annual Miles per Taxi	47,078	45,492	57,980	54,463
Avg. Daily Miles per Taxi	131	126	161	151
Avg. Distance per Taxi Trip	4.9	5.7	7.0	5.6
Avg. Annual Trips per Taxi	5,792	6,474	6,271	6,286
Avg. Daily Trips per Taxi	16	18	17	17
Avg. Annual Passengers/Taxi	8,339	9,003	8,511	8,619
Avg. Daily Passengers/Taxi	23	25	24	24
Avg. Passengers perTrip	1.44	1.39	1.36	1.38

The data from ITLA is sorted by fleet size to give a comparison of smaller companies and their larger competitors. The final column represents overall averages. In the Pittsburgh market, Yellow Cab was the only respondent to ITLA's survey. With their large fleet, Yellow Cab would fall in the 100 and up column. The other firms in the area would fall under the small fleet size category (1-24).

As can be seen from these national numbers, smaller companies average about 10,000 fewer annual miles per taxi than the larger companies. Smaller companies also make 500 fewer trips per year than their larger colleagues. When broken down to daily averages, a small firm logs 30 fewer miles (about 2 miles less per trip) and makes 1 less trip than its larger counterpart. The implication is that cabs operated by larger firms make longer trips than those operated by smaller firms.

City Comparison

To get a better idea of how this area's cab service stacks up with cities of similar size, we sampled cab companies in nine other cities and compared them to Pittsburgh. The sample consists of responses to a telephone survey in which cab companies in

[9] International Taxicab and Livery Association. Fact Book: Taxicab Services Division. 2000. Page 7.

comparable cities were asked two questions: How many trips per hour does the average cab make? And, what is the average distance per trip?[10] From the ITLA data referenced above, we were able to approximate the number of cabs per city. [11] Table 3 lists the results of the survey.

Table 3

City	State	Pop. (000's)*	# of Firms	Avg. # of Trips/hr/cab	Avg. # Trips/ Cab/day**	Avg.# of Cabs per City	Avg # of Daily Trips/ City***	Avg # of Trips/ 1,000 People	Avg. Dist./trip (miles)
Atlanta	GA	3500	71	2	36	1440	41,472	11.8491	5
Buffalo	NY	310	20	2	36	338	9,720	31.3548	10
Cincinnati	OH	475	16	4	72	485	27,936	58.8126	8
Cleveland	OH	1000	15	2	36	450	12,960	12.9600	4
Columbus	OH	562	23	3	54	500	21,600	38.4342	7
Denver	CO	2600	12	1	18	758	10,912	4.1970	5
Indianapolis	IN	780	15	4	72	580	33,408	42.8308	5.5
Philadelphia	PA	1500	23	3	54	1297	56,026	37.3507	4
Pittsburgh	***PA***	***1250***	***5***	***2***	***36***	***385***	***11,088***	8.8704	***5***
Seattle	WA	1000	23	2	36	503	14,486	14.4864	5
Average		1297.7	22	2.5	45	476	17,135	13.2043	5.9

Notes: *Population of area served by cab companies.

** Assume 18 hr. day.

***Assumes 80% of cabs are on the road

The first thing to note about Table 3 is the population count. This data, from the ITLA represents area served, not just the center city population. For example, the population of Buffalo is 310,000 persons, which represents the city population. However, the population of Pittsburgh is 1.25 million, which represents the population of the area (Allegheny County).

The next column indicates the number of firms that operate in that area. For the city of Buffalo, there are 20 companies serving 310,000 persons and in the Atlanta area there are 71 firms serving 3.5 million people. However, the Pittsburgh area, with its 1.25 million, is served by only 5 cab companies. The average number of firms serving markets of similar size to Pittsburgh is 22. From casual inspection there appear to be too few firms serving such a large population.

It can also be seen that when it comes to the average number of cabs per city, only Buffalo trails Pittsburgh. Buffalo, with about 340 cabs serves 310,000 citizens. Pittsburgh, with around 390 cabs serves 1.25 million citizens. The conclusion is that Buffalo serves 940,000 fewer persons with 50 fewer cabs. Looked at the other way

[10] At least two firms from each city were contacted.

[11] With the help from a City of Columbus survey, we were able to get close approximations for the numbers of cabs in the Ohio cities, Seattle and Indianapolis.

round, there are 109 cabs per 100,000 persons in Buffalo while in Pittsburgh there are only 30 cabs per 100,000 persons.

The column labeled "Average Number of Daily Trips per City " was obtained by talking to cab companies in the cities mentioned.[12] We asked each company to approximate the average number of trips a cab makes per hour. These averages were then used to estimate the number of daily trips per cab. When extrapolated to the average number of daily trips per city, Pittsburgh, with approximately 11,000 daily trips, ranks ahead of only Buffalo, approximately 9,700 daily trips, (by about 1,400 trips) and Denver, about 10,900 daily trips, (by about 175 trips). Pittsburgh lags well behind the sample average of 17,100 daily trips.

Likewise when comparing the average number of trips per 1,000 persons (to eliminate the population differences), Pittsburgh is near the bottom of the list and well below the sample average of 13 trips per 1,000 persons. With only 8.8 trips per 1,000 persons, Pittsburgh ranks ahead of only Denver, with its 4.2 trips per 1000 persons. Pittsburgh falls well behind neighboring cities Columbus (38 trips) , Cincinnati (59 trips) and Buffalo (31 trips per 1,000 persons).

If local cab use approximated the national averages, Allegheny County could generate 60% more daily taxi trips than it currently does. This would amount to about 5,000 trips per day. Even taking a very conservative view, there are easily 2,500 more potential trips per day. At an average of 36 trips per cab per day this implies that the Pittsburgh market could accommodate one medium sized company (25-60 cabs) or two, maybe three, small companies (1-24 cabs) comfortably.

Local Restaurant Survey

Are Pittsburgh's low usage rates a consequence of conditioning? Are Pittsburghers so accustomed to not being able to get a cab that they don't even try? Newspaper articles seem to indicate so, and a survey of Pittsburgh restaurants substantiates this theory. Table 4 summarizes the results of the survey.

This survey, which was conducted via phone, asked Pittsburgh area establishments three questions: How many taxis do you call , on behalf of patrons, on an average night? How long is the average wait once the call is made? And in your estimation, if customers knew that they could count on reliable service, do you think that demand for cabs would increase/decrease/or stay the same?

The respondents indicated that on a *busy* night they call an average of 4 cabs per night for their customers. The average wait is about 35 minutes with some waits as long as 90 minutes. Some managers emphasized that there was no guarantee the cab would even

[12] The interesting note here is that when Yellow Cab of Pittsburgh was contacted, the answer given was: "It depends on how hard the drivers hustled. We do not keep track of that type of information." While this answer is true for all cab drivers, other companies such as People's Taxi and Eagle Cab had no difficulty in estimating average trips per hour.

show. Some of the respondents commented that since the dominant cab company knows that these patrons are only interested in going across town, cabbies are not interested in the lower-fare trip. Some restaurants noted that either they or their employees would often shuttle customers across town when the cab failed to show. The owner of a downtown restaurant went so far as to lease his own shuttle bus to take customers a few blocks to the Cultural District.[13] A prominent city restaurant is running radio advertisements promoting shuttle service from its Mount Washington location to the Cultural District with dinner purchase.

Table 4

Number of Restaurants	Location	Avg. Number Cabs/Night	Anticipated Demand	Avg. Wait (mins)
8	Golden Triangle/ Strip District	4.6	increase	37.5
2	Mt. Washington/ Station Square	5	increase	30
5	South Side	3.8	increase	42
Overall Averages		4.5	increase	36.5

The overwhelming response came from the last question. All respondents agreed that if customers felt that reliable on-demand cab service were an available option, more customers would use that option. One restaurant/bar owner commented that with the federal government lowering the legal blood-alcohol limit from its current standard, an increasing number of patrons are going to be forced from their cars to alternative modes of transportation. Another responded that with the City opening two new stadiums (with limited parking) and expanding the convention center (more visitors), the demand for taxis would surely exceed the current supply.

Conclusion

The information above indicates that the availability of taxicabs in Pittsburgh is currently inadequate. The idea that one or more cab companies can be successfully added to the Pittsburgh market is entirely feasible. As table 3 illustrates, when comparing Pittsburgh to cities of comparable size, it has the fewest number of firms, the second fewest number of taxis, and the second lowest number of trips per thousand citizens. While it has not been the intention to prove here that Pittsburgh cab drivers eschew short, cross- town trips for longer and more lucrative airport runs, it has been established that the level of service in the area is inadequate when compared to similar metropolitan areas.

A major reason for the inadequate level of service is the regulatory environment in which taxicabs operate. The current system established by the Pennsylvania Public Utilities Commission favors the incumbents at the expense of potential entrants. Potential firms must prove that current firms are not satisfactorily servicing their customers.

[13] Zurawsky, Christopher. "Taxi Availability Driving Up Frustration Levels". Tribune-Review. May 26, 2000.

Furthermore, the potential firm must submit their plans to the PUC, which are then open to public inspection. This certainly gives the incumbents ample time to prepare counter arguments against the entrant. This system does not make for a level playing field.

A survey of City restaurants points convincingly to a need for more and better taxi service in Pittsburgh. Moreover, combining the current below average taxicab usage rates with the supply induced demand that will almost certainly occur with the advent of more and better service and the likely growth stemming from the new Convention Center, there is clear and rising unmet need for more competitive taxi service in Pittsburgh.