

# **Taxicab Ridership Study Miami-Dade County**

**By  
Tennessee Transportation & Logistics Foundation**

# **TTLF**

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# Introduction

**“The Miami-Dade taxi system is an industry with a workforce of nearly 4,000 people, assets of over one half billion dollars and revenues in excess of \$1.5 billion annually.”**

(Ray Mundy, Ph.D, 2006)

As stated in the original RFP and project contract, the purpose of this third and final report of the Miami-Dade Taxicab Ridership Study is to provide key findings and recommendations emanating from the study. Initial research and findings from Phase One (low season) and Phase Two (peak season) of the project have previously been reported and are available electronically at [www.agtaweb.org/ttlf](http://www.agtaweb.org/ttlf).

This final report addresses several project issues and questions posed by the Scope of Service. These were:

- The relative use of taxicabs by visitors and residents
- The use of wheelchair accessible taxicabs and whether the target 3% of taxicabs being wheelchair accessible is appropriate to meet the needs of disabled residents and visitors
- The geographic distribution of taxicabs in the County, including identification of areas that are underserved and overserved and providing recommendations for deploying taxicabs to areas without adequate service levels
- Is service in the underserved area and the South Miami-Dade service area adequate to meet the needs of residents twenty-four hours a day
- What is the availability of taxicab service at Miami International Airport, including an assessment of the Airport Regional Taxicab Service Area Program
- What are the impacts of additional taxicabs on existing taxicab chauffeurs and medallion holders including, but not limited to, economic impact
- An assessment of the population ratio methodology as a system to measure the public demand or need for taxicabs and taxicab service, a determination of whether this system is appropriate to meet the service demands of Miami-Dade County, and recommendations on the appropriate population ratio. If it is determined that the population ratio is not an appropriate methodology, the selected Proposer shall provide options and recommendations on alternative systems.

- An assessment of the impact of seasonal fluctuations
- An assessment of the availability of taxicab stands in the County

Findings from the low and peak season reports are utilized in answer to these questions. Following this, a set of short range and long range recommendations is provided.

### Relative Taxicab Use

As stated in the Phase Two peak season report, Miami-Dade County taxi service quality and availability depends upon where you live or vacation within the County. For visitors arriving by air and people living in downtown Miami, Coral Gables, and Miami Beach areas, our hotel surveys and un-served taxi calls analysis indicates there is excellent taxi service available at all times of the day and night – even during peak tourist season.

If, however, a customer is in an outlying area of the County, such as Homestead, Cutler Ridge, Carol City, or North Miami, Mystery Shopper reports indicate that he/she will most likely have a difficult time obtaining taxi service on a regular basis and may have to call several companies. Indeed, for those residents living in Homestead, there may be no availability of taxicab service during peak tourist season.

For visitors using the Seaport, personal interviews with Seaport officials and a recent local newspaper editorial indicate a visitor may have considerable difficulty in obtaining a short trip from the pier. Curbside officers indicated to this researcher that without their presence, there would be many more short trip refusals.

Our methodology was to analyze a combination of the results from low- and off-season surveys, Mystery Shopper reports and unmet taxi call reports, along with personal taxicab driver interviews. The resultant findings show what appears to be a large geographic corridor running from the Airport, through Coral Gables, downtown Miami, the Seaport, and out to and along the beaches which has excellent taxi service at all times of the year. Taxi operators can work the stands, hotels, and with radios, to serve this central core population as well as the immediate surrounding areas. In fact, street and stand business appears to be so good that many taxi operators feel they have no need for radios, and if working the radio, would refuse calls that would take them unnecessarily away from this corridor – especially during peak season.

The relative use of taxis between residents and visitors is difficult to estimate due to the lack of accurate secondary data such as driver logs, computer summaries of caller's addresses, and the large number of taxi drivers that work off radio at the airport, the hotels, and the beaches. However, given the large tourist industry of Dade County, one may assume that taxi ridership does not follow national norms of approximately 50% visitors and 50% residents but is tilted more toward visitors.

For example, the airport and seaport during peak season generate slightly over 4000 daily taxi trips which would be considered primarily visitors. On the other hand, from the dispatching records of Yellow Cab of Miami, it is known that over 4000 trips are requested daily. Yellow executive's estimate that 80% of these requests for taxis are residential calls. Unaccounted for are the assumed large numbers of beach and hotel tourist trips which are dispatched by other PSC's such as Central, Diamond, and Super Yellow Taxi among others. Unfortunately these other PSC's do not have sufficient volume of calls to merit electronically capturing the area codes of their callers and thus there is no way to estimate the split between tourist and residential calls. Therefore, a professional "guess" is that Miami-Dade taxis provide 60% to 70% tourist trips and 30% to 40% residential trips. However, there is insufficient data to provide a more accurate estimate.

### Wheelchair Accessible Taxicabs

The use of wheelchair accessible taxicabs is of extreme importance to the elderly and mobility impaired segments of a community's population. It is of equal, if not greater, importance to visitors to an area since they most usually are dependant upon public transportation for their mobility. Miami-Dade County has attempted to encourage a higher supply of wheelchair accessible taxicabs by providing the sale of additional taxi permits to established taxi drivers at a substantially lower cost. Taxicab permit winners must pay \$25,000 for a "regular" taxi permit, but only \$15,000 for a permit to operate a wheelchair accessible taxicab. In the case of lottery medallions for underserved areas, the same 10K reduction applies and the cost to the lucky driver is only \$5,000. These financial incentives alone are substantial, but consider that a driver may sell his permit on the open market for \$200,000 + after five years of driving it himself, provides an even more significant "deal".

However, Mystery Shopper reports and Miami International Airport data analysis in the Phase One low season report previously reported that it is quite clear that riders with disabilities, especially those requiring the use of wheelchair accessible taxicabs, are finding it difficult to have their service needs met by the existing taxi services. The most obvious conclusion is that, while individual taxicabs are granted new permits to serve this segment of the market, many are not currently doing so – preferring instead to use their lottery-obtained taxi permit to serve primarily the airport. In fact, observation of Miami-Dade wheelchair accessible taxis revealed in the Airport taxi data analysis, that while approximately half (54 %) of these permittees primarily work the airport, they average slightly more trips than regular cabs due to the fact that they are larger cabs and are often called to the head of the airport taxi line to handle larger amounts of luggage. Interestingly, airport curb personnel report that they rarely, if ever, have used these cabs to assist wheelchair passengers.

Whether the 3% target for wheelchair accessible taxicabs in Miami-Dade County is adequate to serve the unmet needs of the disabled community depends upon actions taken

to require wheelchair permitted taxis to actually serve those with disability needs. A recommended set of actions is provided in a later section of this report.

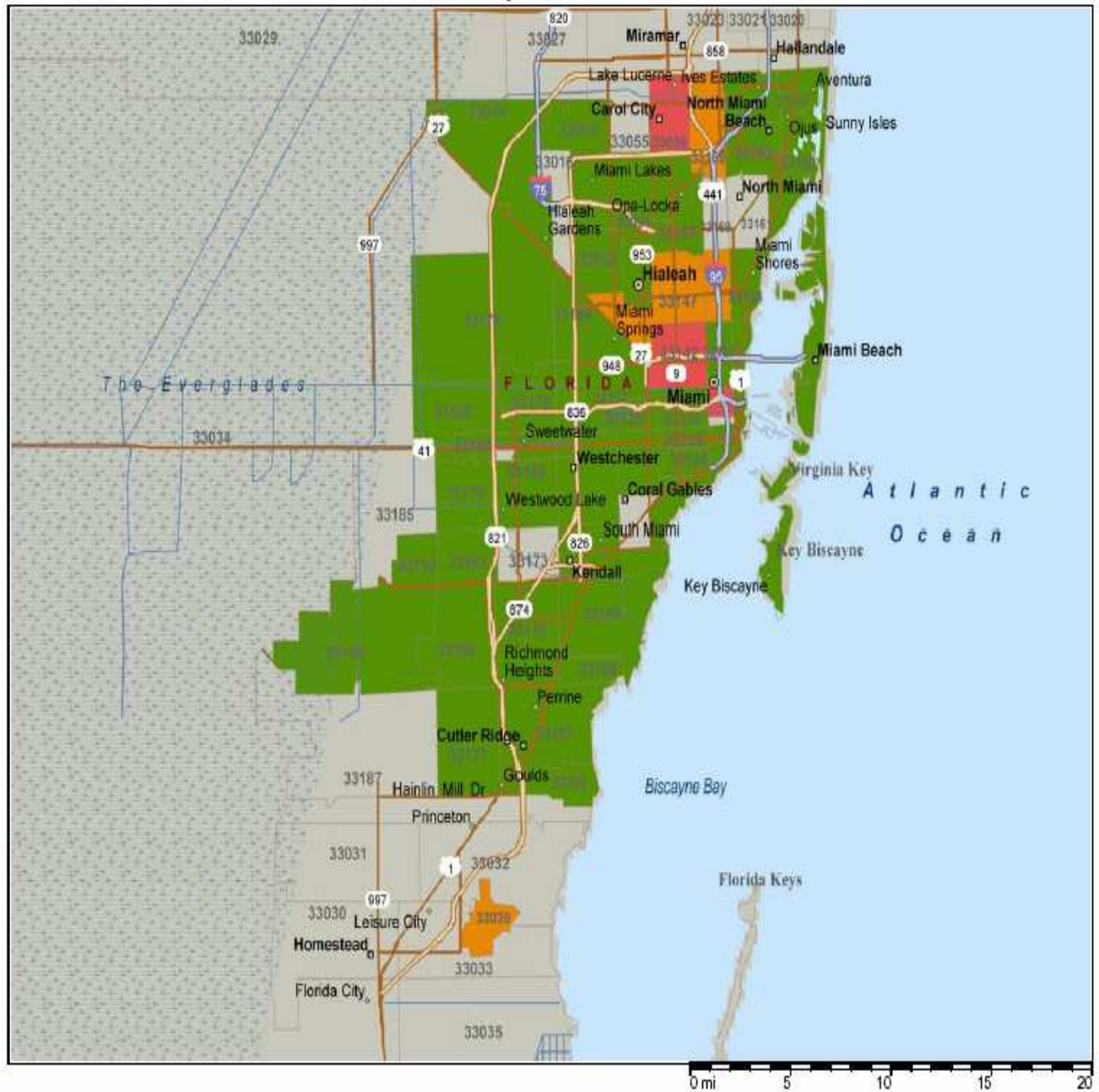
### Geographic Distribution

Geographic distribution of taxicab service was identified through mail surveys, Mystery Shopper reports, and the Unmet Demand Analysis by Zip Code. Survey responses and Mystery Shopper data are convenience samples. They are powerful indicators of how some users view taxi service, but they are difficult to generalize from. As a way of summarizing this analysis in a more statistical manner, the following map from the peak season Phase Two report is utilized to represent the experiences of one Miami-Dade taxi dispatch firm that receives telephone calls and serves the entire geographic area. As mentioned, this is a single taxi firm, but industry personnel agree that this firm dispatches significantly more calls per day (around 4000) than any of the others. It is also the only PSC that captures this information electronically and thus the only verifiable quantitative data available to estimate unmet demand.

As clearly shown by this summary map, if one calls for a Yellow Taxi, for example, in downtown Miami, the Beach, Coral Gables, etc., then service can be expected. If however, one calls Yellow from Homestead, Cutler Ridge, Carol City, or North Miami, for example, service is spotty at best and may not be available at all since none of the radio drivers will elect to take the order. After awhile, taxi customers stop calling as shown by the grey areas below. From individual PSC, hotel surveys, and driver interviews, however, it is known that other taxi firms serve some of these areas even though Yellow unmet calls records indicates they are unable to provide them service.

## 02/14/06 Rejections

- High Rejections  
31 to 40
- Moderate Rejections  
16 to 30
- Low Rejections  
0 to 15



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For example, South Beach is indicated as having some unmet needs, but residents of South Beach typically call Central Taxi, which primarily serves this area.

## Miami International Airport

Miami International Airport is more than adequately served by taxicabs. In fact, the primary overserved taxicab area is the airport. The taxi holding area lot at the airport currently has 300 to 350 spaces, depending upon the size of the vehicles, and these are typically filled according to airport officials. Also, within the terminal curb areas there is space for up to another 100 vehicles.

Simulation of low season taxi departures from the Airport demonstrated that 56% of the available supply of taxis in Miami Dade County provided service at the airport during this period. During the low season period sampled, the total taxi trips dispatched from the Airport varied, from a low of 2,095 trips on Saturday to a high of 3,293 trips on Friday. This represents a range of about 1.9 to 2.9 trips per week for each of the 1117 taxicabs involved in the Airport pick up service that week.

However, as shown by the frequency of trips per day, only 650 to 750 taxis work primarily on a daily basis at the airport. Of these taxis, the average number of trips per day will vary depending upon how many hours they work the airport. For those spending most of their time at the airport, there is an average of as few as 2.78 trips per day on Saturday to 3.84 trips per day on Monday, September 26, for example.

Each ARTS Cab, on the other hand, receives considerably more trips, averaging between 10.67 trips (Saturday) and 15.53 trips (Monday, Sept. 26) during this low season analysis. If the ARTS taxi system were folded into the regular taxi line, thereby adding the 1663 ARTS trips this week into the total number of regular dispatched trips, 18,986, there would be an increase of 8%, or an increase of 1.5 trips per week per taxi for the usual airport taxi population. This analysis assumes, of course, that there is no increase in the number of the 2004 Miami-Dade County taxi drivers that would choose to serve the airport that week.

A Micro Saint Simulation model was developed from the airport dispatch information to determine statistically the number of taxis actually required to serve the airport. This simulation model is dependent upon airport demand per hour (arriving passengers) and the time it takes a taxi to service a customer and return to the airport. This initial model had accurate demand data from the holding lot cashier data, but return time assumptions had to be utilized. This simulation was therefore run with several alternative return times.

One run of the model was calibrated to simulate that 99% of the taxi trips were to be completed within the mean time of 60 minutes, plus three standard deviations, or a total of 90 minutes. While this may seem an overly generous time required to service a taxi trip from Miami International Airport and return, it nevertheless shows that even under these loose conditions, during this low season period only 230 taxis were required to service the airport during the peak-time hours of 3:00 p.m. and 7:00 p.m.

If ARTS passenger trips were added to this demand and these taxis were eliminated, the total number of regular taxis required would be 255 taxis during the peak afternoon hours

of 3:00 p.m. to 7:00 p.m. At other times of the day, significantly fewer taxis could adequately serve the airport demand with no wait time for the customers.

As one might expect during peak tourist season, the Phase Two Peak Season Report showed that more taxis are required to service high season airport hourly peaks. In Phase One of the project, the peak hour average need for regular taxis was 203 taxis, but within the peak day observation on February 10<sup>th</sup>, the peak hour required 429 taxis, nearly double the off-peak average. Therefore, it can be expected that peak tourist season will require significantly more taxis at the airport during peak hour demand times.

During the peak season more Miami-Dade County taxicabs served the airport, and while some of these additional taxicabs made only one trip per day, others were able to make eight trips per day. As shown by the Phase Two Report, more taxicabs made four or five trips per day during this peak season than during off-peak season. Also, the data analysis of the peak season showed that the demand for short-term trips that were handled by ARTS Taxi was not affected much by seasons, while long-term trip demand significantly varied with seasons. However, hidden within the data is the fact that when ARTS taxis are not available, regular taxis are required to take the short trips and thus the real demand for short trips may be understated.

Simulation of the peak time demand for taxicabs using actual return times in the Phase Two Report demonstrated that the maximum number of taxicabs needed during peak hours would be 420 regular cabs and 26 ARTS taxis to handle current demand without user wait time. However, since there are currently only 18 authorized ARTS cabs, regular cabs are sometimes dispatched as short trips when ARTS cabs are not available. Thus, there would appear to be a need to increase the number of ARTS cabs – at least during peak tourist season.

This assumes ARTS cabs continue to handle the short trips. If ARTS cabs were folded into the regular taxi line, the maximum number of taxis required to satisfy even peak hours would be 440 taxis.

Also from the Phase Two Report, folding in the ARTS cabs with the regular cab line would add 242 trips per day during the peak days. However, this would be an increase of only .32 cab trips per day for the regular taxi fleet, or one extra trip per three days at the Airport. It is believed that the short trip refusal, the reason for the ARTS cabs in the first place, would return and significant problems at the airport curb would return.

Taxi data analysis in both the low and peak tourist seasons demonstrates that Miami Dade Airport is severely over served by taxis. Wait times between fares from the airport are reported by drivers to be two to three hours during low season and observed to average an hour during peak tourist season. During low season the Airport has between three and four times the number of taxis it requires even during peak demand hours. Even during peak tourist season at the peak demand hours, the airport has twice the number of taxicabs that it statistically requires.



This does not mean that occasionally some of the airport curbs will run out of taxis and some passenger build up (waiting in line) will occur. This is more of a factor of getting cabs through the holding lot and over to the downstream curbs than it is a shortage of cabs serving the Airport. Also, shortages of taxis at the airport can occur during holiday seasons, late night flights, or during an important local civic event such as the Art Show or Boat Show, when the vast majority of drivers independently decide to serve these other, then more lucrative markets rather than the airport.

### Miami Seaport Taxi Analysis

As shown by the Phase Two Peak Season Report, Miami Seaport develops a significant number of taxi trips per day (175 - 400) for Miami taxis. This demand, while significant, pales in comparison to the nearly 4,000 daily trips from the Miami International Airport. Nor does it approach the 4000 daily radio dispatched trips provided by Yellow Cab of Miami each day.

However, taxi service from the Seaport has recently been the topic of a local newspaper account which described complaints about taxi drivers who turn down short trips from the piers to local hotels. In personal interviews with this researcher, uniformed police at the Seaport indicated that without their presence, or that of Consumer Services Department officers, there would be a persistent problem of short trip refusal. Offended passengers, typically visitors to the area, would not be likely to file a formal complaint that would require them to return to the area.

Given the relatively short time period during which passengers disembark from the ships, it is doubtful if a short trip line similar to the ARTS Cabs at the airport would be feasible for this volume of traffic. It would be impractical to staff the Seaport with a curb dispatcher, ask disembarking passengers where they were going and direct them into one of two cab lines. Thus, the current system appears to be structurally sound with little modification required or recommended except to consider a short trip refusal at the Seaport to be an offense that would bar the driver from both the Seaport and the Airport for a time period of no less than one month.

### Additional Taxicabs

The impact of additional taxicabs in Miami-Dade County on existing taxicab chauffeurs (drivers) and medallion holders is relatively straightforward from an economic point of view. Increasing the supply of taxicabs within the central corridor of Beach--Downtown--Seaport--Coral Gables--Airport will not increase utilization, since there is already an abundance of taxicab service within this geographic area. Simply put, a 25% increase in taxicabs as requested by one taxi driver association, will result in spreading the existing demand over a greater number of taxis, resulting in less income per hour for existing drivers. This will mean lower incomes per driver or longer hours behind the wheel to achieve the same level of income.

Not all taxis operate double shifts, i.e., working 24 hours per day. Typical drivers, especially those who own their own medallion, lease a taxi by the week, or own their own cab, will work until they have achieved a target income for that day. If they can achieve this in 8 to 10 hours, many will go home. If 10% more taxis are added to the system, then it can be assumed that it would take at least 10% longer time to achieve the same level of income if taxi fare rates remain the same. If drivers experience an extra hour or two per day to achieve the same income, there will be increased pressure for a rate hike and probable cause to grant it since driver incomes have deteriorated.

Additional taxis and their impact on medallion holders are more indirect. A few more taxis, 30 per year for example, represent an increase of only 1½%. This would not appreciably affect the medallion holders and the approximate \$1,000 per month they currently receive for the use of their medallion as reported by PSC owners, drivers, and medallion holders. However, an increase of medallions, or 25%, would motivate these owners to lobby for significantly higher taxi rates in order to preserve the earning power of their medallions.

Also, as one might expect, taxi users in the overserved areas of Miami-Dade County would find more taxis on their streets and airport holding lots as drivers seek every opportunity to be available when needed. Users in underserved areas may or not see any improvement in their already poor service. One could argue that additional taxis would flow to these underserved areas and avoid the crowded oversupplied areas but, as reported in Phase Two, independent drivers choose not to service these areas fearing they will be taken from the central corridor and “get caught” out there with only a few grocery runs to make for the day. Therefore, it is concluded that under the current structure for taxicab service in Miami-Dade County, simply increasing the number of taxicab medallions would not solve the problems associated with the imbalance of taxi service.

### Seasonal Fluctuations

The perception of seasonal fluctuations and the level of taxi service were measured with surveys conducted at both low and peak tourist seasons. Hotel, restaurant, and social service establishment representatives were asked to rate their taxi services and whether they felt there was any difference in the service during peak tourist season. Ratings by these establishments regarding their taxi service appear to be nearly as good as during off-peak season. There is only a small statistical drop-off in the perception of the quality of the service. However, there appeared to be the perception that service levels are affected by the peak season activity. In the Phase One survey (off-peak), nearly 80% of the respondents indicated that there was no perceived seasonal difference in their taxi service levels, but only 64% responded this way during the peak season survey. Personal interviews with drivers however indicated a common theme that “life is good” during peak tourist season but difficult during low season. Some drivers indicated they often choose to work elsewhere during the slow season.

## Taxicab Stands

The issue of taxicab stands is often difficult to deal with since there are typically several aspects to be considered. There is the appropriate number of stands, the number of taxis permitted on the stand, and the location. Historically, taxi stands were centrally placed for the convenience of the public, the taxi driver, and the radio dispatch company. With conveniently located stands, the public could go these stands and find a cab right away. Drivers who parked on the stand could chat with other drivers, use nearby facilities, or purchase food nearby. The taxi company dispatcher would know immediately where the taxi was if the driver stated he was on the “Seventh Street stand”.

However, as parking meters became an everyday fact of life for most cities including Miami, municipal financial officers were arguing that giving up three to five prime parking spaces per day in busy areas was costing too much, and many taxi stands were either relocated or abandoned. This has been true for Miami-Dade County. Individual taxi drivers and PSC managers have suggested that over half of the taxi stand spaces that existed prior to the consolidation of area’s taxi regulatory authority have been eliminated. However, no one really knows because there has not been a recent inventory of taxi stands within the County.

Correcting this situation will require a major revamping of city street use requirements and involve a vigorous combined effort with the Miami Metropolitan Planning Organization and city traffic engineers. A good place to start would be the historical locations of the County’s taxi stands prior to consolidation. Each site would require a traffic engineering analysis to determine if it were still suitable for a taxi stand and if so, were there sufficient taxi demand in the area to warrant redevelopment of the stand.

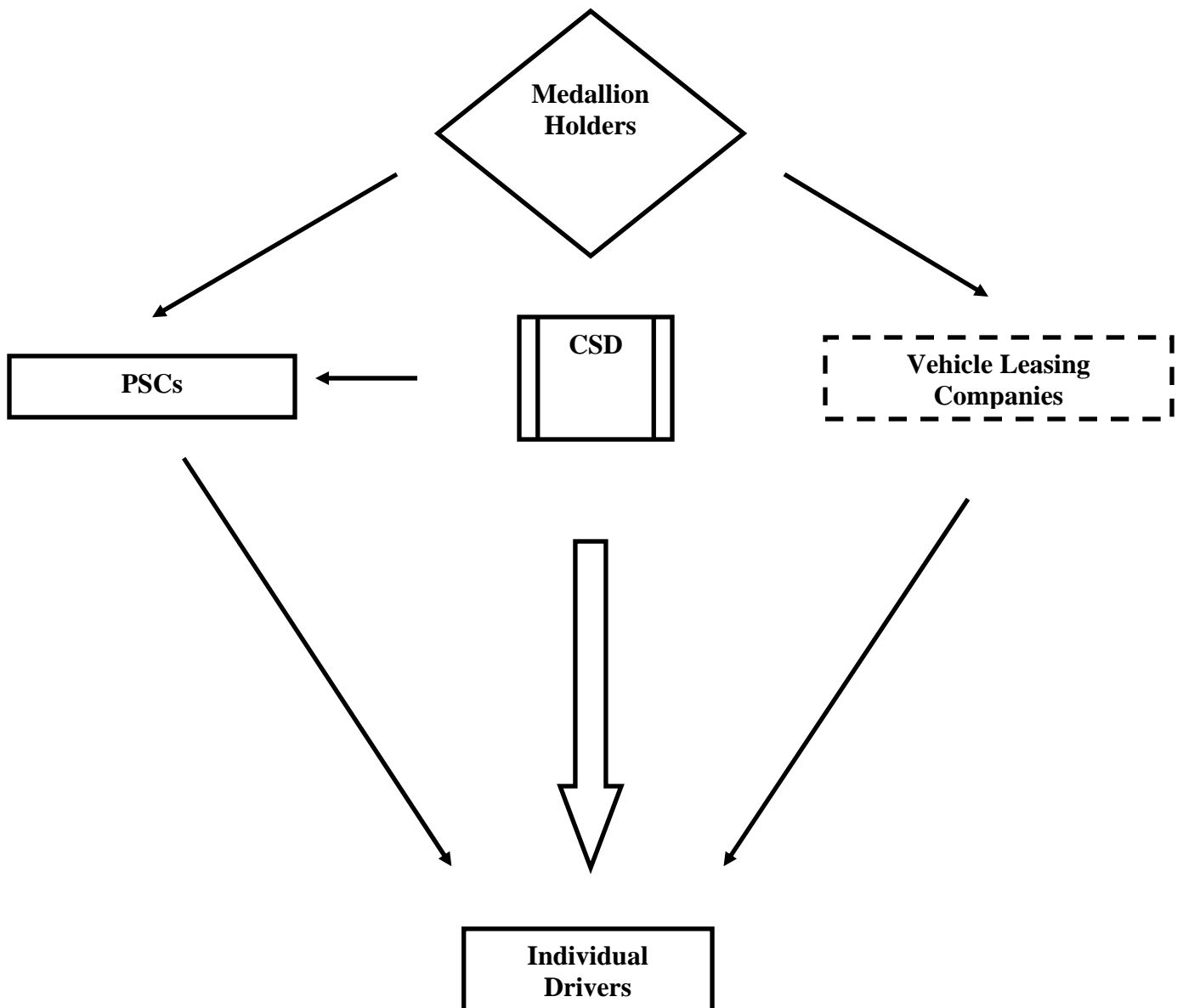
Finally, some type of financial arrangement between the County and local municipal governments may have to be worked in order to replace lost parking lot revenue experienced by these communities. Some sharing of the revenues generated by the taxi industry of Miami-Dade County may have to be offered as a cost of reinstating these stands. Miami-Dade County may have to pay local municipalities for some portion of the revenues lost from the removal of parking meters.

For North and South Dade County communities that have experienced considerable growth in the past decade, a totally new traffic engineering analysis may need to be conducted to determine the most logical places to develop a taxi stand. Here, population density, certain types of commercial activity such as restaurants, hotels, etc., and actual taxi usage would be factors utilized to justify the creation of a taxi stand.

## Overall Taxi Structure and Assessment

### **Structure**

The structure for the provision of taxicab services within Miami-Dade County is important to review as a pretext to assessing the current situation and the making of any recommendations. The simple but significant elements in the delivery of Miami-Dade taxicab service as viewed by this consultant are: (1) the medallion holders, (2) the PSCs, (Passenger Service Corporations) (3) the vehicle leasing companies, (4) Chauffeurs or drivers, and of course, (5) the Consumer Services Department. These elements can be depicted as:



As previously stated, taxi medallion holders are a significant part of the taxi structure within Miami-Dade County. No taxi service can be legally rendered without one. As reported by drivers, PSC owners, and medallion holders, the current going price of a taxi medallion lease, as reported by taxi drivers, is approximately \$1,000 per month or \$250 per week. However according to information supply by drivers through their CSD surveys, new drivers may be paying as much as \$350.00 per week. The only exceptions to this are apparently medallions held and used by Society Taxi. They report that their taxi medallions are typically leased to drivers for \$850 to \$900 per month.

This payment is made to whomever the driver obtains the use of the medallion from. The driver may be leasing his taxi, radio service, medallion, and buying his insurance from a single PSC. A driver may purchase the insurance, radio, and lease the medallion from a PSC, but lease the vehicle from a taxi vehicle leasing concern or another driver who may own the medallion and the car. Technically, vehicle leasing companies do not exist since subleasing of medallions is not permitted but they exist and are a major part of the existing taxi system

The taxi driver working six days per week pays \$42 per day or perhaps as much as \$10 per trip if he/she only makes four trips per day from the airport. Even if a taxi driver works the streets and the radio and makes 20 trips per day, the cost is still \$2 per trip. It is a fair question for the community and the taxi user to ask what benefit they receive from their current system of taxi medallions. Is the medallion holder adding value to this taxi medallion by offering it through a radio dispatch company that provides calls, voucher and other pre-arranged commercial business in order to lessen the per trip cost of the license? Or is the license holder simply receiving cash from the highest bidder with little concern as to how much actual community service is being provided through their medallion.

The PSC is in a position to offer several services to both the medallion holder and the taxi driver. For the medallion holder, a PSC can act as a broker for the medallion and offer it to individual drivers, collecting monies for the medallion holder and essentially managing the medallion asset for the holder. For the driver, the PSC can offer vehicles, insurance, radio service, voucher and credit card processing, and business generation through advertising, service contracts, corporate accounts, and general marketing of the company's taxicab service.

To a lesser extent, taxicab vehicle leasing firms, acting with the Power of Attorney for the medallion holder will broker medallions to drivers as well as lease them a vehicle. Many of these are small operations that have a number of taxis they maintain and lease much the same as a small rental car company might operate. However several operations have 100 more vehicles within their leased fleets. Their numbers are significant because it is the fleet vehicle leasers that double shift their taxis. That is, they lease it to two drivers per day obtaining 24 hour service per vehicle. Much of this service is provided in the evening hours when other taxi drivers may choose not to work. Medallion owner drivers are much less likely to double shift their taxis due to the wear and tear on their vehicle.

Finally, at the bottom of this pyramid is the individual taxi driver who may or may not own his or her own medallion, his/her own vehicle, or purchase insurance or radio service through a PSC. Therefore, when discussing the Miami-Dade County taxi service structure, it is difficult to state what a “typical” arrangement might be. In some cases the medallion holder may be an absentee landlord to the medallion, turning it over completely to a PSC, an individual driver, or even a taxi vehicle leasing concern. Or, the medallion holder may be another current or former driver with one or more medallions. While currently, County code states that a driver may only own two medallions, it is not unusual for a driver to own multiple medallions which he acquired prior to 1998, drive one and lease the others to other drivers.

Regulating this taxi delivery structure is the Consumer Services Department. As shown, the CSD’s primary activity is associated with the drivers and ensuring public service and safety. Through authority granted by County Code, they license each driver, provide initial and recurrent training on how to be a taxi driver, supervise the individual behavior of each driver while on public streets, and discipline drivers whenever they violate County taxi ordinances. In essence, the Consumer Services Department, through its actions to ensure public service and safety, acts as the personnel department for the medallion holder – whoever that may be.

While this form of taxi driver regulation has been generally true for many North American cities, the extent individual driver behavior, appearance, training, and customer attitude has been increasingly governed and provided by local code rather than taxi company policy. As the taxi industry has migrated away from employees and commissioned drivers to that of independent contractor drivers, cities have assumed driver control responsibilities. By doing so, individual taxi firm owners are much less likely to tell a driver what to do since there is a concern that the drivers will later be deemed as employees and the taxi company will be required to make significantly large employee related payments to present and former employees, state, and federal government

To a lesser extent, the CSD interacts with the PSCs by licensing them as a PSC. However, as viewed by this consultant, little other oversight of PSCs is performed, or probably required, by existing ordinance. There is a routine check to make sure there is an office at the address listed but, as the Mystery Shopper reports indicate, no testing of listed telephone numbers or other activities of the licensed PSC. As was found by individual interviews conducted by this consultant with PSC officers and taxi drivers, there is a wide variety of services PSCs actually perform -- from that of a full service taxi company to that of a pure “shell” operation, with few or no services provided to the drivers leasing their company name.

Also, some time ago, Miami-Dade County made the long-term commitment that eventually taxi medallions would be held by drivers. Currently taxi medallions may only be purchased or won in lottery by taxi drivers and about one-fourth of the medallions are owned by drivers. It is not expected that this policy will change. Therefore, the current

taxi structure is one in which it is assumed that in the future all medallions will be owned by drivers. Over time, the medallion, which is the County's permission to operate a taxi vehicle on its streets, will shift to drivers, and no individual or PSC will have the ability to own a group of medallions and aggregate a pool of taxis to serve the community as a taxi system without the willing cooperation of drivers.

While this type of structure accomplishes the objective of providing considerably more power to the drivers holding and driving with their medallions, it is a fractional. Over time, as multiple medallion holders sell their medallions one at a time to drivers, large blocks of taxi medallions will be broken apart, never again to be assembled. This breaks apart or fractures the concept of a taxi company that fields so many vehicles under its control or management. Without the presence of strong taxi companies (PSCs) there will be no way to field a large number of taxis to serve the area through a common dispatch system thereby forgoing modern communication technology and GPS that dispatches the closest taxi thereby decreasing deadhead miles and increasing taxi fleet efficiency.

Clearly, there is the need in Miami-Dade County to aggregate driver actions in order to provide equivalent area-wide taxi services. If drivers pick and choose to serve only certain markets they prefer, other more distant or undesirable (due to trip length) markets will be abandoned.

For those drivers who do desire their own medallion, the cost is approaching a level that may be out of reach. At the current informal market price of \$200,000 per medallion, drivers have to borrow funds on an informal secondary financial market with 10% or more interest rate in order to purchase their own medallion. Many are just not able to do so. There are also lenders which specialize in taxi medallions which will broker the deal and lend the money in the name of the driver but keep the medallion as collateral against the loan. Many drivers appear unwilling or unable to participate in this type of transaction.

Finally, drivers also indicated the fear that if they own a taxi in their own name, instead of that of a corporation, which is not presently permitted under County code interpretation, they are putting all the assets they and their family own into one highly liable situation.

### **Cash Business**

If future taxi medallions in Miami-Dade County are to be based in part on the actual increases in demand for taxi services, revenues generated by taxi operations and expenses will have to be taken into consideration. One of the current difficulties in performing analyses on Miami-Dade County taxi operations in general is that they have become, in large part, purely a "cash" business with little record-keeping. Traditionally, taxi meters were utilized 100% of the time, thereby capturing all economic activity for analysis by owners and regulators alike. Taxi logs were kept for all trips showing origin and

destinations and were often used by police for investigations after a crime was committed, tracking criminals who may have used a taxi in fleeing the scene of a crime.

Today, however, the vast majority of taxi companies no longer utilize employee or commissioned drivers, so keeping track of the fare revenues is not important. In the case of Miami-Dade County, what is important is that the medallion holder receives his/her revenue for letting someone use his “number”, that the PSC receives daily, weekly, or monthly income from whatever they lease or sell to the drivers; and that the vehicle leasing companies receive daily or weekly income from the drivers – all, preferably in cash! Many appear to accept only cash from the drivers and pay medallion holders only in cash – the preferred method. Thus, one would have to classify much of the Miami-Dade County taxi industry as part of the “underground” economy.

The rationale for this is obvious. It is to avoid taxation on medallion revenues, driver payments, and to conceal wealth from governmental scrutiny. As one driver who owned four medallions and drove one admitted, “I’m sixty plus years old and could sell my medallions for retirement but then I would have to pay capital gains and the government would know how much money I have. Now I receive \$3,000 per month for my numbers and its tax free.”

While the CSD requires a sample copy of any contracts between drivers and PSCs, and likewise of any agreement between PSC and medallion holders, no attempt is made to require financial reporting of any of these transactions. Such information would be valuable input to making decisions on rate adequacy and equipment requirements.

## **Assessment**

As evidenced by the peak tourist season analysis, severe unmet taxi service needs exist in the underserved areas, some areas of North Dade County, and especially the South Miami Dade service area during peak tourist season, while there is an ample supply of taxis for other areas such as the airport, major hotels and the beaches. The lack of viable traditional taxi radio call service is due to the fact that most PSCs do not provide radio dispatch and limited participation in radio dispatched service when it is available. Service that is already poor during low season becomes acute during the peak tourist season. Taxi medallion holders (and drivers holding their own medallions) permit drivers, or choose themselves, to not have any viable dispatch service other than a cell phone. As reported by individual drivers, they may even drop radio coverage during the peak season with the attitude they will repurchase it during the off peak season if non-radio business is slow.

## **Technology**

Project interviews during both peak and low season with PSC owners and managers at their offices revealed that only a very few of the PSCs have computerized dispatching and only one has the ability to track its calls by zone and keep records of dispatches by vehicle number. Even there, owners admit that the equipment, lacking GPS technology,



is not state-of-the-art, and lacking many of the capabilities of other more sophisticated systems. Thus, one would have to state that while Miami-Dade County has a population approaching two and a half million people, its taxi system lacks the modern technology of North American cities one-fifth their size.

Without the connectivity of radio/electronic dispatch, a large percentage of Miami-Dade County taxi operations take place without the benefit of these standard technologies utilized in the taxi industry to improve efficiency and productivity. These are technologies which help other taxi operations to maintain and even regain passenger traffic market share once lost to other competitors.

Foregone is the ability to use GPS technology for closest cab dispatching, electronic processing of credit cards, shortest route directions, immediate dispatch of police to the exact location in the event of an incident, dispatching of accessible vehicles when required, electronic payment of corporate or voucher business, elimination of manual record keeping, and any hope of lowering costs and fares through more efficient operations. Without these new taxi technologies which are common in other cities Miami-Dade County taxi operations will forever be an increasing cost industry, perpetually requesting rate increases and continued protection from more efficient forms of ground transportation such as shared ride van and sedan services.

As previously stated in both Phase One and Phase Two Reports, this lack of technology and forsaking of radio business creates a highly imbalanced market where some geographic market area needs go ignored and unmet while there is an abundant supply of taxi service in the geographic corridor from the airport to the beaches. Interestingly, there do not appear to be poor economic returns for these taxi operators serving only the central corridor without radio services. In fact, drivers admit being able to make “serious money” during this peak tourist season. Thus, any model or formula for adding additional taxi service suppliers (new medallions) must first address this significant peak time imbalance before addressing the issue of a new medallion formula and the future long term health of the industry.

Phase Two of the project, the peak use study, reinforced the initial set of observations from Phase One and pointed out the seriously underserved areas of South Miami Dade County. As noted, interviews with numerous PSC firms also reinforced the conclusion that only a handful of PSC taxi firms have viable radio dispatch operations in general and is considerably worse during peak season when taxi drivers feel their best opportunity to maximize income is to work the airport, stands, and the beaches staying in the relatively dense areas of Miami proper avoiding any radio calls that would take them away from this central corridor.

Miami-Dade County officials have been able to forestall competition among taxis and other forms of ground transportation through limiting the number of new medallions, and, having a relatively high barrier to entry from other ground transportation providers. Currently, the minimum fare for limousine/sedan service is approximately \$70 and requires a two hour minimum time for prearrangement.

In other Florida counties, such as Hillsborough County to the west, the minimum fare for competing sedan services is \$35, and even this was recently challenged in court as being an overly restrictive barrier to competition and not in the public's best interest. (*Steiner v. Hillsborough et. al.*, 2005). The suit was successfully defended.

Also, in Miami-Dade County, shared ride vans are limited to the airport concession agreement and can only provide service to/from the airport. If, however, areas currently not served or underserved by taxis continue to be neglected, public pressure will build to allow competitive forms of ground transportation such as shared ride vans and sedans to service these markets at significantly lower rates, and taxis will face the loss of these markets to others. Once these services are in other geographic areas of the County, pressure will mount to allow them in the central corridor as well, threatening taxis' primary markets.

Furthermore, given the lack of technology currently implemented in the Miami-Dade County taxi system, taxi operators will be ill-prepared to face a competitive challenge if conditions change. In October, 2005 taxi rates in Miami were \$4.50 for the first mile and \$2.40 per mile thereafter. This ranked Miami as the third highest rate among 23 large urban communities surveyed by Bruce Schaller. [www.schallerconsult.com/taxi/fares1.htm](http://www.schallerconsult.com/taxi/fares1.htm). (Schaller is a leading taxi consultant based in New York City) As one may point out, however, the taxi rates in Broward County, immediately to the North of Miami-Dade, are very similar but not classified by Schaller as a large metropolitan area, and therefore do not show up in his survey.

By comparison, in many other North American cities where competition among various ground transportation companies is permitted, there are many black car and sedan operators nationwide that are quite willing to operate at a \$25 minimum, charging \$2.50 and less per mile. For this the passenger typically gets a shiny late model luxury vehicle, uniformed chauffeur, bottled water, the paper and soft music to enhance the trip. Faced with this type of competition, taxi drivers, medallion holders, and PSC's of Miami-Dade County would all experience significant loss of income due to a shrinking market for their fares in the \$25 and up range.

The rationale and the overriding public interest in protecting taxi services from such severe competition is, of course, the needs of the community for short trips such as to the grocery, restaurants, doctor's offices, shopping, visiting friends, etc. The trade-off made by regulators and the general public is that they will give protection to the taxi industry for the lucrative longer trips – up to a point. There is an unstated assumption that the “industry” will use this protection to also allow it to serve the not-so-profitable short community-oriented trips required by the intra-urban residents for adequate mobility.

Unfortunately, in regulatory protected industries, the existing industry is often the last to recognize that its costs are out of line with its services. Unless Miami-Dade County does something to address the current imbalance of service, things will get much worse. Understanding why this imbalance occurs is necessary for making study

recommendations of how to correct the imbalance. As shown from the off-peak data collected at the airport, a large segment of the Miami-Dade County taxi population of taxi drivers work primarily the airport, and perhaps the beach, with no real radio service enabling them to service taxi call-in work. These drivers are idle much of the time and often inefficiently dead head back to the beach, airport, or hotel stand rather than work a radio. This is a classic example of inefficiency within the taxi industry.

From the peak season data collected at the airport and in discussions with PSC owners, the situation is much worse during peak season because drivers admit to either dropping their service completely or affiliate with smaller PSCs that offer no real radio call-in services. These smaller PSC operators also do not have the number of taxis available under their system necessary to provide adequate coverage for a geographic area should they decide to do so. Understandably, they charge considerably less for their radio/communication service, which acts primarily to provide the appearance of meeting the CSD's requirement for radio dispatch.

This results in many Miami-Dade taxi drivers operating in what is referred to as a "spider network" of friends and other drivers. Such a network uses cell phones to refer customer calls to whomever else is on their cell phone network or to call someone specifically. Thus, if a driver has a personal relationship with a hotel and/or a specific doorman, he/she can refer their call to another driver if he/she is currently busy.

Some would argue this is effective and is all that is needed to serve the public but such thinking is foolish. There is no way to use technology to dispatch the closest vehicle which is especially important when servicing a geographic area the size of Miami-Dade County. Also, there is no systematic service level maintained, no dispatcher to follow up with the customer, no approval of credit cards, and no way to really measure the day-to-day performance of such informal driver networks. Such may work in a very small community with a handful of taxis but it is totally unrealistic in a metropolitan area the size of Miami.

Ironically, as more of these taxi drivers choose to not work their radio, or use only an informal spider network, these taxis would be entering the beach and airport markets – threatening to stretch the peak time supply of taxis to these markets even more and causing a decline in revenues to those taxi drivers currently working those markets and renewing calls for rate increases to cover increased fuel costs, insurance, medallion leases, etc.

If this trend continues and/or if significantly more taxi medallion drivers choose to not work their radio dispatch, things will probably get much worse. Current taxi drivers will have to spend more hours to earn the same income or else leave the industry. Unhappy drivers will be even more likely to refuse calls that take them into lower density areas and even more will opt to leave the radio system as a means to cut their expenses. Deteriorating service levels result in fewer customers resulting in even more oversupply of the market, and the downward spiral of increasing rates, which only invites more competitors, continues.

Currently drivers maintain their taxi license and readily admit that their incomes are relatively good during peak tourist season but they either presently do or will be seeking other jobs during off peak times. Thus, the pool of taxi drivers does not have high year to year turnover but it would appear that some drivers drop out of the system during low tourist season but return for the winter months when the demand is higher.

On the other hand, underserved area taxi drivers interviewed during Phase Two argue that they are having an extremely difficult time making a living since most can not serve the airport. They indicate they have a hard time generating business within their appointed service areas. In addition, they complain about their inability to pick up someone from outside their service area and return them even if they initially transported them out of the area. Since these licenses have only been in existence a few years, they also wonder if their medallions will have any value in the future. Some of this fear maybe misplaced however. CSD reports that a UA medallion recently sold for \$170,000 – a price in line with that of a regular medallion

## **General Recommendations**

The question identified in Phase One of the report of how many new taxi licenses to add to the existing mix depends upon what changes might be made to the current imbalance of taxi service and the existing service delivery structure. Miami-Dade County has already addressed the first wave of problems by issuing some new taxi medallions for underserved areas and wheelchair taxis through a lottery. However, as shown, there is no guarantee that these cabs will serve their intended markets. Slightly more than half of the lottery wheelchair taxis are primarily at the airport. And it is extremely difficult to police underserved taxis since many do not subscribe to viable radio dispatch service. Having Underserved taxis belong to a radio dispatched PSC which utilizes GPS technology would be one way of ensuring these taxis serve only their intended areas.

Within Phase One of this project, several suggestions were offered for discussion and possible recommendation as Phase Two of this taxicab study was undertaken. First was the consideration of having a Class B Taxi License -- permitted to answer radio calls only – primarily from underserved areas. These taxi licenses could only be affiliated with a viable radio dispatch taxi company with intent to and later demonstrated, history of serving a specific geographic area or the entire community. These licenses would not be tangible property and exist only when registered with a PSC firm providing call-in and other contract work for them.

The idea would be to head off competition from other forms of ground transportation by offering a pre-arranged (metered) sedan service under the regulatory control of the County. It could be argued that these taxis would be serving demand the current drivers and medallion holders were choosing not to serve. By having no cost of the service tied to a medallion, other than the annual permit fee to the County, community based rates

could be lower, reflecting the numerous short trips these radio cabs would be making. Taxis could thus generate \$40 per day less and still provide an income for the driver comparable to the regular taxis within Miami-Dade County.

This need not be a significant departure from existing County code of transferring medallion ownership only to drivers. Drivers could still own the medallions for this Class B radio only sedan/cabs but they would have to sign operating agreements with viable PSC companies capable of providing GPS dispatched services and managing their efforts as a system – not a fragmented arrangement of independent contract drivers.

A second suggestion was improve the current taxi supply efficiency and reduce the oversupply of taxis at the airport by limiting both the days or time of day taxis could enter the holding lot and the total number of taxis permitted to serve the airport at all but peak hours. This would have the effect of saying to taxi medallion holders and drivers that their authorization to drive a taxi in Miami-Dade County extends to the entire community – not just the airport. Such regulation would force a large number of existing taxis to either serve the beach, hotels, or cabstands throughout the community and affiliate with a PSC firm that actually answers the phone and makes trips available to the drivers.

Airport restriction of taxi operations is not something radical or necessarily new. The Salt Lake International Airport recently began alternated days for their on demand taxis cutting in half the number of taxis permitted to wait at the airport. There have been no significant problems and drivers are happier in that the days they do work the airport they report getting fares much faster than in the old open system. Officials there report the number of “airport only taxis” is down considerably. Drivers report earning more total income per week from the extra trips they are now making on the days they do not serve the airport.

The ability to ration Miami taxis to the airport has been greatly enhanced by the recent decision to require all taxis to have operational SunPass transponders and accounts. Miami International Airport officials can now install electronic monitors to read these passes, charge the medallion holder or driver, and refuse entry into the holding lot if either their account was not current or it was not their day to serve the airport. Eventually, such technology could be utilized to permit full utilization of Miami Dade taxis and permit only cabs that have just dropped off at the airport to get into the holding lot.

It should also be mentioned that this recent event of equipping each taxi with a SunPass would significantly lower collection costs of the Seaport by replacing the personnel now collecting \$2.00 per trip with automatic collection devices.

Thus, the issue of how many taxi medallions, whether these should be Underserved medallions or regular medallions; how many taxi stands, and where they should be located depends in large part on the decision of whether or not to require existing taxis to serve the entire market area, if you are going to expand the Underserved area permits, or if you will create a Class B medallion for radio dispatched taxis only. If these taxis are

forced to serve other than the airport market, then they must have some place to park. This will require significantly more stands than are currently available.

Alternatively, or additionally, existing taxi medallion holders and their drivers could be required to demonstrate that their taxi medallion was being utilized either as a geographic specific area taxi or one serving the entire community through electronic logs citing trips taken by responding to radio calls throughout their service area. For example, San Francisco local taxi ordinance requires taxi logs to reflect an average of one radio call per hour during an average shift. In Philadelphia all taxis are to be equipped with GPS and their location as well as activity known and recorded at all times. Such requirements to serve the entire community would not tie an individual driver or medallion holder to a specific PSC, but require them to affiliate with one that actually generated and handled calls.

As with the Phase One and Phase Two reports, a general recommendation of this final report deals with the issue of ADA taxi services and the utilization of wheelchair accessible taxis. It is obvious that their presence at the airport solves none of the mobility problems experienced by the citizens of the Miami-Dade region. Adding more in the same fashion may not offer service improvements if these new taxis serve primarily the airport and non-radio dispatch markets. Needed is a central radio dispatching service whereby these taxis can be made available when needed. Preferably this would be a dispatching service offering GPS radio service so the nearest taxi can be routed to the caller, automatically approved billing, with acceptable reporting for the governmental or charitable agencies.

Additionally, these drivers, and all Miami-Dade County taxi drivers, require specialized training in dealing with individuals who have physical mobility problems. Often these customers require assistance with things such as stepping into or out of the vehicle, hearing instructions, unlocking a wheelchair, seat belts, etc. Taxi drivers need to be prepared to deal with and serve this potentially large market for their services.

When integrated into an active radio dispatch taxi system, such wheelchair accessible vehicles can be utilized for wheelchair and non-wheelchair trips together, thereby increasing their productivity substantially. In communities where this has occurred, agencies have found the cost of ADA mandated services typically cut by 40% or more and service substantially improved for the users. Therefore, future wheelchair taxi lottery winners should be required to maintain activity logs, belong to a central dispatch company with GPS, perhaps a single company, and electronically prove they are offering a percentage of their trips to the disadvantaged. This would probably require an RFP or RFQ for a new or existing PSC to manage a County wide dispatching service. Users would then have a single number to call and CSD would have one electronically viable service to monitor.

## **Short Term Recommendations As Amended via Workshop Comments 5/17/06**

Short term recommendations are those that typically address immediate problems with solutions that require little or no capital expenditure. As previously stated, two broad alternatives have been advanced to deal with the current imbalance of taxi service through the Phase One and the Phase Two Reports. One was a Class “B” Taxi License to provide service to the underserved areas within the County, and the second was a systematic process to require all medallion taxis to serve the entire county-wide market for taxi services.

Through discussions with CSD personnel, it was determined that the preference would be to concentrate on the latter as being the preferred direction which would provide improved efficiencies of the existing system and offer the best hope of improving the incomes of the drivers. If there is no broadening of the mandate for existing Underserved medallion taxis such as expanded geographic area, and/or the creation of a Class “B” (sedan) Taxi License to serve underserved taxi areas identified in this project, the short term recommendations are as follows:

- **Permit all PSCs to dispatch lottery won underserved area taxi medallions within designated underserved areas.**

Currently an Underserved Area medallion lottery winner may affiliate only with PSCs which have an office in an underserved area. Increasing access to all PSCs should improve service alternatives.

- **Vigorously enforce requirements for receipts for all payments made by taxi drivers to PSC, medallion holders, or taxi vehicle leasing companies.**

Present code 31-82 j (13) requires each for-hire license holder shall enter into a written chauffeur's agreement with each chauffeur it allows to operate any for-hire vehicle. The written chauffeur's agreement:

- (a) Shall provide for an express duration of the agreement;
- (b) Shall only be terminated with at least thirty (30) days prior notice unless good cause be shown and only for the reasons stated therein;
- (c) Shall state the full legal name and address (post office boxes shall not be acceptable) and respective license holder's number and chauffeur's registration numbers;
- (d) Shall state and itemize the compensation to be paid by the chauffeur for the right to operate a for-hire vehicle authorized by a for-hire license. It shall be unlawful for the for-hire license holder to receive any compensation from the chauffeur which is not specified in the existing chauffeur's agreement. The Agreement shall specifically provide that the compensation to be paid by a chauffeur may be paid utilizing any of at least two of the following: (1) cash, (2) money order, (3) certified check, (4) cashier's check, (5) valid traveler's check, (6) valid bank credit card, or

(7) valid personal check showing on its face the name and address of the chauffeur. The chauffeur shall be allowed to make payment as provided in the preceding sentence, and shall be provided with a written receipt which contains the name of the license holder or passenger service company, whichever is applicable, and the name of the driver, the for-hire license number, payment amount and form of payment utilized, date of payment and the period covered by the payment; (underlining added)

- **Permit individual taxi drivers to own their medallion through a personal Limited Liability type of corporation.**
  - This would make it possible for a driver to continue driving a taxi without putting his entire family's assets and total wealth at risk
- **Require all PSCs to generate an average of between 5 to 10 calls per day per vehicle registered with them within one year and eliminate the use of cell phones not associated with a computer dispatching system as an acceptable form of meeting the CSD requirements for a taxi dispatching operation.**
  - This would force smaller PSCs to either develop a realistic taxi dispatch business, associate with other PSCs to offer the service, or to leave the marketplace.
- **Require all PSCs to maintain logs of radio dispatch calls by vehicle, summarized by day, per vehicle, per month and publish a monthly average of calls per vehicle dispatched.**
  - This data will be important information from which to determine the appropriate number of new taxi medallions to offer each year.
  - This monthly average would be also be important information for independent taxi owner-drivers from which to choose a PSC.
- **Require all medallion holders to certify and prove their drivers are providing a minimum of seven trips per day, 30% of which are responding to radio dispatch.**
  - This requirement forces the medallion holders to become involved with how their asset is being utilized and gives them the burden of providing they are adding value to their medallion or face the possibility of losing it.
- **Continue the use of ARTS taxis at the airport until significant reduction in the number of daily taxis permitted at the airport is achieved.**
  - There would appear to be no reason for folding these ARTS cabs into the regular cab line unless the regular cab lines were significantly reduced each day to eliminate long waits in the holding area.
  - Substantial reduction in the wait time for taxis at the airport would remove the rationale for driver's being upset at having to serve the short trip but if this is not possible, then ARTS should remain.



- Add eight new ARTS cabs during peak tourist season which would relieve current regular driver's complaints about being required to take short trips.
- **Require all wheelchair accessible taxis to be GPS dispatched from a single dispatcher within one year.**
  - It is obvious that the current fragmented system is not providing a level of service to this market group desired by the community. Only by a single dispatch system can CSD determine if these vehicles are being utilized for their intended purpose and how many more such vehicles are needed in the community. This should be accomplished through an RFP process electing one PSC to serve the entire community.
- **Require all taxicabs to accept credit cards for all trips of \$10.00 or more.**
  - For many small businesses, there is a minimum amount required before it can be put on a credit card and the same should be true for taxicabs; but without question, all taxis should accept credit cards
- **While definitely outside the scope of this study, ban the use of cell phones when customers are in the vehicle (except those used for two-way-only communication with PSC) within one year.**
  - This politically difficult recommendation is made for two reasons – safety and forcing taxi drivers to work radios for their business. As shown by the Secret Shopper reports and by personal observation, certain taxi drivers are constantly on their cell phones with other drivers, friends, relatives, etc. This is dangerous in dense city traffic and it works to bypass the PSC radio dispatch operation. It also provides a way for taxi drivers to receive calls from doormen and others they may wish to compensate at a later date. This would effectively eliminate the calls for service that are not processed through a PSC.
- **Continue to offer an annual lottery equal to one and one half percent of the total taxi fleet as an interim step to more data-based methodologies in the future, but restrict these new medallions to undeserved and wheelchair accessible medallions.**
  - The rationale here is that the one and one half percent increase each year will not seriously impact the regular taxi market but additional taxis are needed in the underserved South Dade County markets.
  - Currently taxi needs are not being met in these markets
- **Require taxi lottery winners to affiliate only with PSCs that have shown increases in the number of calls per vehicle received.**
  - This will provide incentives for PSCs to invest in marketing of taxi services and expansion of their utilization

- **Expand U.S. Highway 1 exclusive bus lanes to include private sector bus, per capita shared ride van, and taxi operations.**
  - While outside the original scope of the study, this is an obvious recommendation.
  - South Miami-Dade County was identified several ways as the most neglected taxi service area within the county. One of the reasons for this was the long travel time it takes to get down to this area and return. Thus, increasing the use of this sparsely used access way would greatly improve the travel time and service options for many residents of the area.

## **Longer Term Recommendations**

Long term recommendations are typically easier to recommend because offer direction rather than specific actions that should be taken within the next year. Longer term typically suggests actions that should occur over a three to five year period and that, in this case, moves the Miami-Dade taxi industry toward more efficient and customer oriented services for all visitors and residents irrespective of where they live in the County. Specific longer term recommendations are:

- **Phase in alternate days that taxicabs may serve the Miami International Airport as taxis have sufficient technology to serve additional market segments.**
  - This would force excess taxi drivers away from the airport with the intention of driving them to underserved areas. It would require no capital investment on the part of the drivers and could be implemented with odd-even airport registration numbers with all serving the airport on Sundays.
- **Reinstate County-wide public taxi stands as they were prior to county-wide consolidation.**

If existing taxi operations are to be expected to expand their operations into underserved areas, then they will require a place to park and be available to the general public. Similar to public bus pullover areas, these spaces should be viewed as being in the traveling public's interest.

CSD officials should prepare and develop a proposal for the annual Miami Transportation Improvement Program (TIP) to secure state and federal transportation funds to redevelop old taxi stands and conduct analysis and construction of new ones.

Starting with taxi stands that once were in existence is recommended because it provides a basis from which to start. Some taxi stands may no longer be justified while new ones may be needed in other, now more densely populated areas. However, the template of the "old" taxi stands would provide a ready starting point.

- **Require all PSCs to have electronic dispatching, credit card swipe processing, and GPS tracking.**
  - This assumes that as a result of the short term recommendations there will only be a handful of large PSCs left to handle the dispatching of 2004 + taxicabs. These will be larger operations with the capital capability to upgrade their computerized taxi dispatching to national levels.
  - Such will obviously put some existing "shell" PSCs that prefer to not invest in new technologies out of business.

- **Institute a further reduction of airport taxi service to one in three days and eventually one in every four days. Ultimately, using GPS and SunPass technology, devise a system of allowing taxis that drop off a passenger at the airport to have the choice to get into the taxi holding area, thereby eliminating deadheading back to the airport on the day they are assigned to work the airport.**
  - The objective is to make the Miami-Dade County taxi operations as efficient as possible. If taxi drivers deadhead back to the airport after delivering a passenger somewhere, this is inefficient. Likewise, if a taxi driver is forced to leave the airport after dropping someone off, this is also needlessly inefficient. Thus, through the use of airport AVI technology, a system should be implemented allowing a taxi that has dropped off to immediately get into the taxi holding lot. Through simulation, a small number of different taxis would be assigned for the airport each day. These would be able to get into the holding lot without dropping off and would be used to buffer the difference in the number of taxis dropping off and the number of pickups. Thus, the airport taxi system, the largest single taxi traffic generator within the County would become primarily a two way market with efficient service in and out of its facility.
- **Annually update CSD knowledge of taxi customer service levels through logs of calls serviced and unmet calls supplied by PSCs and the continued use of Mystery Shoppers.**
- **Utilize a formula for future taxi medallions consisting of the electronic data files of the PSCs, percentage growth in taxi trips dispatched by the airport and Seaport, percentage growth in County hotel occupancy levels and general population of Miami-Dade County. Annual Medallion Taxi Permits to issue = .25 %>trips provided + .25% > Airport & Seaport + .25>Hotel Occupancy + .25% > in Population, where the symbol ">" refers to "growth in".**
  - This initial final recommendation will provide Miami-Dade County and CSD with an ongoing formula for the addition of new taxicab medallions that is based on evidenced demand. It basically states that the future demand for taxicabs is made up of existing demand plus evidence of new demand from four equally weighted sources or demand drivers. These are (1) PSC records indicating year over year increases in calls and the level of unmet calls, (2) Airport and Seaport records of the number of taxicabs dispatched year over year increase, (3) percentage increase in hotel occupancy room nights within Miami-Dade County as provided by the Hotel & Motel Visitors Bureau, and (4), general population growth. For example, if this formula were now in place and all four indicators went up 5% in a single year, an additional 100 taxi medallions (5% of 2004 taxis) would be called for under the formula. Note that population is still used as one of the demand drivers but it now represents only 25% of the formula to determine the total number of taxis to add to the system.

A final note would be on the case of reducing the number of taxicab medallions within Miami-Dade County should the need arise through a reduction in the demand as evidenced by these four demand generators. Current County code does not provide for this event.

However, like other major cities such as Dallas, Texas, annual convention and visitor business can actually decrease from year to year. Officials of Miami-Dade County need to consider some mechanism for adding taxi medallions which are revocable in the event that there is a downturn in demand. While deciding how to select individual medallions to reclaim (by lottery, industry assessment repurchase, or last issued for example) the above stated formula would at least be a mechanism to determine the actual number of medallions to reduce.

## **Recommendations**

### **As amended via workshop comments 6/29/06**

A second workshop on the study's recommendations was held on July 29<sup>th</sup>, 2006 as a portion of the regular Taxi Advisory Board meeting. Several excellent short term suggestions were discussed and have been incorporated into additional recommendations stemming from this year long study. These are:

- **Expand the underserved area thereby providing more opportunities for new lottery taxicabs which would then be restricted to these areas under other study recommendations.**
  - This recognizes that the current lack of taxi services in these areas has decreased market opportunities and it will take time to build these markets back into good radio call areas.
  - Expanding the size of these areas would encourage more PSC's to market their services to individuals living within these geographic areas
- **Consider the use of "TaxiPass" as an interim short term step to requiring credit cards to be accepted by all Miami –Dade taxicabs.**
  - TaxiPass is script that could be purchased at via credit card located next to the airport taxi dispatch booth. Having been authorized up to a \$50 or \$100 limit for example, the bearer of the script simply fills in the amount and tip for the driver at the destination.
  - Driver benefits because the script can be redeemed for the full face value on the same day as utilized.
  - Passenger benefits because this is one way to pay for taxi service via credit card without having to wait for the taxi driver to phone in credit card authorization and passenger does not have to physically hand their credit card and number to a driver.
  - Note that this is an interim solution. Over the course of a year, as newer technologies are required for PSCs, all taxicabs would be required to process credit cards electronically.
- **Develop a Taxi Technology Open House Day**
  - Taxi technology vendors would be invited to display their latest taxi dispatch and management technologies, sharing costs, timeframes for implementation, and payment plans for TAG members, PSCs, drivers, the media and other interested parties.
- **Permit the continued aggregation of taxi medallions to preserve Taxi Vehicle Leasing Companies**
  - Perhaps the most controversial aspect of these short term recommendations is the balancing of the community's desire to migrate to

a taxi system of driver owner medallion holders yet maintain a mechanism to have new drivers enter the system and aggregate the efforts of drivers within a particular PSC. This can only be done through the continued presence of Taxi Vehicle Leasing Companies

- Vehicle Leasing Companies provide new and existing taxicab drivers, who have no more than a chauffeur's registration with vehicles to drive. This offers new taxicab drivers the opportunity to get into taxi driving and familiarize themselves with the business without having to purchase a vehicle or medallion. These taxicab drivers generally do not have the experience or financial means to invest in a taxicab vehicle.
- Vehicle Leasing Companies lease taxicabs to drivers by the shift, often two shifts per day, per taxicab. Shift leased taxicabs are the predominate drivers that service the community during the night, on Sunday, and on holidays. The more shift leases that Vehicle Leasing Companies put on the street, the better the taxicab industry is able to satisfy county wide demand for service.
- Vehicle Leasing Companies by agreement secure for-hire taxicab medallions from taxicab medallion holders (investors) who existed before July 1998; the date taxicab reform was implemented in Miami-Dade County. As these investors voluntarily sell, or die, forcing their heirs to sell, these medallions will pass only to individual independent taxicab drivers, the only ones enabled by ordinance to purchase for-hire taxicab medallions. As planned, the number of independent taxicab owner drivers will grow until ultimately only independent taxicab owner drivers will comprise the Miami-Dade County taxi system. Taxi Vehicle Leasing Companies, at the same time, will be diminishing due to lack of medallions to lease with their vehicles. By diminishing the quantity of taxicabs available to Vehicle Leasing Companies, it will be difficult for new and existing taxicab drivers to find taxicabs to drive. Not all Miami-Dade taxi drivers wish to own their own medallion and vehicle, preferring to work only certain times of the day and of the year. In effect, this policy will inhibit the growth of new taxicab drivers and force existing taxicab drivers out of the business.
- Even after requiring individual independent for-hire taxicab owner drivers to belong and take work from technologically qualified radio dispatch passenger service companies, it will be difficult to coordinate said independent owner drivers because of a natural unwillingness to work weekends, nights and holidays. Vehicle Leasing Companies currently provide the taxicab drivers to fill that void but eventually they would not.
- World class cities like Miami cannot be without the taxicab middleman services of Passenger Service Companies and Vehicle Leasing Companies. Independent owner operator taxi drivers can not be expected to aggregate themselves into an efficient/effective taxi service without the technology coordination of PSCs and the vehicle/medallion leasing of the Vehicle Leasing Companies. Working together, these entities combine to provide a full service taxicab company. In this community as in other

communities there will need to be a mix of Vehicle Leasing Company operated vehicles and vehicles operated by independent individual for-hire taxicab owner drivers.

- Explicitly, it is recommended not to restrict the inheritance, gift, sale or transfer of for-hire taxicab licenses or the shares of the corporations that own for-hire taxicab licenses that existed before July 1998 to another person or entity by requiring the transferee to be the holder of a chauffeur's registration. Over time the lottery for additional taxi medallions will add to the percentage of owner driver medallion holders. However, this recommendation gives the choice and greater flexibility to existing medallion holders to sell to whomever they feel will provide them with the greatest return.



# TIME FRAME

Following is an outline of the recommended timeframe for the implementation of the study's recommendations. As shown, the conversion to an information based approach to determining the number of new taxi permits will require at least several years to accomplish. By giving notice of the intent and schedule of events, current medallion holders, PSCs, independent owner operators, and drivers in general will be able to understand the rationale for these changes and prepare for them.

## Phase One – Short Term Recommendations:

Dec. 2006 – April 2007

- Official approval of study's recommendations by CSD and County Commissioners
- Taxi Technology Open House and Display
  - Taxi dispatch and management systems
  - ADA wheelchair taxi vehicles
  - TaxiPass Technology
  - Alternative Fueled Vehicles for taxis
- Expand the underserved area
- Permit all PSCs to dispatch lottery won underserved area taxis
- Develop RFP for common dispatch of all wheelchair equipped taxis
- Begin inventory and expansion of the number and size of taxi stands within Miami-Dade Co.

May, 2007:

- Election by PSC's of new taxi technologies they will require
- Require 1099's for all medallion holders
- Enforce requirements for receipts for payments made to medallion holders, vehicle leasing companies, and PSCs.
- Permit individual taxi medallion holders to use LLC's for medallion ownership
- Develop wheelchair equipped taxi dispatch RFP for award concession start date of Jan. 1, 2008

Jan, 2008:

- Operation of required new taxi technologies
- Require monthly reporting by PSCs of calls per vehicle dispatched and unmet calls by zip code
- Require monthly reporting by PSCs of all trips undertaken by all taxis under their dispatch

- Require monthly reporting by PSCs of all taxi trips dispatched and the time required for actual passenger pick up. Report would be summarized by average time and standard deviations around this pickup time by zip codes.
- Phase in alternative days that taxicabs may serve the Miami International Airport
- Require all taxicabs to accept credit cards for fares exceeding \$10.00.
- Ban the use of cell phones in taxis when passengers in vehicle except to communicate with PSC
- Expand the use of U.S. Highway 1 exclusive bus lanes to include commercial taxis and vans.

June, 2008:

- Assess the progress each PSC is making with respect to target number of calls per day per vehicle dispatched and geographic areas with unserved calls and provide industry wide report.
- Assess the completion of the expansion of county-wide taxi stands and provide industry report.
- Assess the progress made by PSCs in utilization of electronic dispatching, credit card swipe processing, and GPS tracking.
- Institute a further reduction in the number of days per week taxis may serve the Miami International Airport to one in three days.
- Require medallion holders to report all income received from medallions held and demonstrated documentation of the number of trips per day their vehicles provided and the geographic distributions of these trips. (It is assumed that this information will be provided by PSCs dispatching these vehicles)

Jan, 2009:

- Assess whether PSC's have met their target goals of calls per vehicle dispatched and service to underserved areas and report to the taxi industry.
- Assess service to underserved areas through monthly PSC reports and the use of mystery shoppers for outlying areas
- Further phase in the restriction to pick up passengers at Miami International airport from the on demand line by requiring only a small number of taxis per day to act as an overflow amount in addition to those cabs that get into the on demand line by dropping off a passenger at the airport.

## **ADDENDUM**

The above set of recommendations is the result of considerable research and study of the current Miami-Dade County taxicab system and market. They have been thoroughly debated and considered by the Miami-Dade County Taxi Advisory Group (TAG). They are made with the firm belief that the current system of taxi services will continue to serve residents and visitors alike, provided that service is requested at the airport or within the central corridor from MIA to the Beaches. Other geographical areas, north, and especially south of this corridor will continue to experience declining service levels.

Rising costs of taxi services and little or no technology utilization to improve operational efficiency within this industry will, however, continue to put pressure upon public officials to raise taxi fares and protect taxi services from competitors such as shared ride vans, jitneys, sedans and limousine services. Unfortunately, Dade County's urban taxicab services, the only viable mobility option for many residents, will become even more expensive and difficult to use. Finally, for those with transportation disabilities, taxicab service will continue to require advance reservations and experience availability issues unless a centralized dispatch system with dedicated GPS tracking is implemented.

Two basic solution sets have been offered. The first was in the form of a lower cost Class B taxi license that is centrally managed and dispatched. Alternatively, the County could adopt the above set of short and long term recommendations. The Class B taxi license seeks to solve the Miami-Dade County taxi service dilemma through increasing supply. Just like New York's medallion yellow taxis which are all non-radio dispatched. Traditional medallion cabs would provide service to the airports, high density area walkups, taxi stands, and street hails, but leave radio calls to the Class B taxi/sedan or car-services. Miami-Dade County would have a large portion of their Miami-Dade County taxi service, which requires no aggregation in order to operate, serving the walk up demand but, similar to New York, a Class B license would create a secondary taxi system of sedans with meters which could not wait on stands, or the airport, or be hailed but would be aggregated to rely solely on dispatched, prearranged calls. While an owner driver could acquire an individual license to operate a Class B taxi, this license would not be medallion with a tangible property value. It would not be transferable and could not be passed on or sold.

The second alternative, adoption of the above recommendations, seeks to solve the taxi service problems by forcing existing taxi medallion holders and service providers to serve the entire geographic area by aggregating their efforts, utilizing technologies to improve operational efficiencies to hold down costs and track performance levels. This would require investment in newer available technologies but not an unreasonable investment considering the benefits derived. Additionally, the costs of these new technologies have

dropped dramatically within the past few years while the operational features and reporting capacities have greatly expanded.

For an investment estimated to be between \$1000 to \$1500 per vehicle, taxis could have electronic meters, GPS tracking and verbal directional driving information, computer dispatching, instant credit card swipe, electronic fare deposits and toll road/airport/seaport fee payments. For the cost of between one to one and a half months' medallion revenue per vehicle, Miami-Dade County taxi drivers and users could have GPS shortest route to destination service, improved personal safety, greater payment flexibility, accurate productivity per taxi information, and an industry capable of competing with other ground transportation providers without the need of extensive regulatory protection.

Should medallion holders and PSC firms choose to adopt a "pay as you go" method to acquire modern taxi technology, some of these firms offer total packages costing between \$40 to \$50 per month per vehicle. While this approach may be more expensive over a five year period, the advantages are that little upfront capital is required since the equipment is leased from the technology firm. Another advantage is that the equipment and software to support such an integrated taxi management system is maintained and upgraded by the technology firm.

An added benefit of such technology would be to make the task of taxi regulation much more informed and relatively easier. Many of these newer technologies provide for electronic capturing of all activity so that actual trips dispatched per hour per vehicle, trips per day per vehicle (including personals) as well as geographic area served. Service times and availability of services information would also be available.

There are several firms which offer these types of taxi technologies. A representative sample can be found at the following sites:

[www.mobile-knowledge.com](http://www.mobile-knowledge.com)

[www.digital-dispatch.com](http://www.digital-dispatch.com)

[www.TranWare.com](http://www.TranWare.com)

This list is not exhaustive and there are others that could meet all the reporting and dispatch requirements set forth in these recommendations. However, it is important to point out that many smaller communities within the state have already adopted these technologies to improve and manage their public taxi services. Miami-Dade County needs to assist their taxi operations to move quickly into the use of modern technologies irrespective of whether all medallion holders will be required to serve all market segments or a Class B medallion is created for aggregate dispatching to prearranged taxi services.

Like any set of recommendations, the above recommendations can be improved upon and changed as conditions warrant. However, the option of doing nothing will result in continued decline of taxi services to outlying areas of the County, increased pressure for fare hikes, more unregulated and illegal taxi-type services, and challenges to the regulatory protections now enjoyed by existing medallion holders.

The recommendations advanced in this report are steps the Miami-Dade Taxi Industry can take to make their industry more cost effective and customer service oriented. The future of Miami-Dade taxi services hinges upon the ability of the PSCs, the independent taxi owner-driver, and the taxi Vehicle Leasing Companies to aggregate their services. Only by dispatching a significant number of vehicles, 100 or more, in a market the population and geographic size of Greater Miami-Dade County can PSCs hope to provide reliable and realistic time-definite taxi service to residents and visitors in outlying (but well populated) areas. Thus, PSCs of the future should be required to dispatch a minimum of 100 vehicles. The only exception might be for Society Cab which specializes within a single geographical area and would most likely continue to do so.

On demand taxi services should be just that – on reasonable demand. While what constitutes “on demand” may vary both within and across cities, the time required to receive taxi service should not exceed commonly accepted community standards. Fifteen minutes or less within city center, ports, and tourist beach areas, and up to less than 30 minutes in less densely populated areas. Occasionally, it may take more than 30 minutes due to traffic and/or time of day, but if customers can be told a definite expected time with high reliability, this is still good customer on-demand taxi service.

If Miami-Dade County can implement the recommendations within this report, forcing higher customer service standards through aggregation of individual taxi medallions, the issue of how many new taxi medallions to offer becomes far less political and much more mechanical and professionally based on evidenced demand and need.