



## ARLINGTON COUNTY, VIRGINIA

**County Board Agenda Item  
Meeting of December 8, 2012**

**DATE:** December 5, 2012

**SUBJECT:** Award of New Taxicab Certificates of Public Convenience and Necessity to existing and/or proposed new taxicab companies to permit operation in Arlington County.

**C.M. RECOMMENDATION:**

Authorize the award of new taxicab Certificates of Public Convenience and Necessity ("Certificates") to EV Taxicabs, enviroCAB, Friendly Cab, Red Top Cab, and Blue Top Cab companies.

**ISSUES:**

- How many new Certificates for operation of standard and wheelchair-accessible taxicabs should be issued, and to which taxicab companies should they be issued?
- What conditions, if any, should be placed on the issuance of those Certificates?
- Should a new taxicab company, EV Taxicabs, be authorized to operate in Arlington, and what conditions, if any, should be placed upon the issuance of a Certificate to it?

**BACKGROUND:**

A public hearing on this item was held on November 27 and 28 during the carry-over session of the County Board's November 17, 2012 meeting. The Board Report for that meeting, included in this report as **Attachment A**, provides a summary of the taxicab Certificate applicants and the allocation process and issues.

At the public hearing the County Board heard testimony from nine (9) taxicab companies that are applying for new Certificates. The Board also heard testimony from 32 other persons that wished to comment on one or more of the applications. The speakers included current and prospective taxi drivers, persons associated with some of the applicants, owners of electric-powered vehicles, and representatives of Dominion Virginia Power and the Nissan automobile company.

Upon completion of the testimony the County Board asked a number of questions for County staff to address. The questions and responses are contained in the Discussion section of this report. The County Board also requested that staff develop language for motions that could be used to award new Certificates, and that language will be provided at the Board's meeting.

County Manager:

County Attorney:

BRC

27.

Staff: Richard Viola, DES, Transportation Planning  
Angie de la Barrera, DES, Transportation Planning

## **DISCUSSION:**

The discussion at the November 27-28 Board hearing focused on several issues, primarily: 1) the need for additional standard and wheelchair-accessible taxicabs to serve Arlington customers, 2) the viability of electric vehicle (EV) and EV charging technology for taxicab operations, 3) taxi driver considerations, and 4) strategies for achieving more competition in the industry.

## **County Board Questions:**

### **A. Certificates**

1. How many certificates are optimal?

#### *Staff Response:*

The process under the “new” (since 2009) ordinance for evaluating the “optimal” number of taxis is much more objective and analytical than was the case prior to 2009. It uses both actual taxi trip data and reasonable surrogates for potential ridership, but we still must assume that the previous decades of taxicab regulation and reasonable decision-making by public officials and citizen advisers brought us to a legitimate starting point. Available evidence, including the County customer surveys, validate that Arlington has high-quality taxi service and that we are in the right ballpark for the size of the County taxi fleet. It also shows that we now need additional taxis to provide acceptable service levels.

The 2012 Taxicab Certificate Allocation Report recommended that a total of 50 to 65 taxicabs be added to the existing 765 existing cabs. Of the 65 taxicabs proposed, 10 would be wheelchair-accessible vehicles.

2. Why five taxicabs to Friendly? This does not get them to 40-50 taxicabs.

#### *Staff Response:*

Friendly is a well established company that has been in operation for more than 40 years. It will be less costly for them to upgrade their operations as they already have an office, cabs, drivers and many resources that a new company would have to pay for in order to start up.

### **B. Wheelchair-Accessible Cabs**

1. Are the additional 10 new wheelchair-accessible cabs adequate?

#### *Staff Response:*

Demand for wheelchair-accessible cabs is increasing. Fiscal Year 2012 (FY12) STAR ridership was 4.1% higher than in FY11. FY13 ridership through October is 6.8% higher than the same months in FY12. The number of on-time performance complaints is increasing: 53 called in over the past year, of which 36% were from wheelchair users, compared to 11 in FY11. The wait time for STAR Will-Call trips can be an hour for ambulatory clients and is regularly two or more hours for wheelchair users.

2. What percentage of time are wheelchair-accessible taxicabs used for transporting people with disabilities?

*Staff Response:*

Wheelchair-accessible taxicab (WC) drivers spend on average more than 50% of their time servicing WC trips, which represent about 40% of the total trips that WC taxis make. It takes a great deal of a driver's time to service these trips. Since there is a limited number of these specialized vehicles in the fleet, WC trips must be assigned to drivers and those drivers must make sure that they have dropped off the previous passenger much further in advance than with standard taxi trips, and usually the driver has to go a longer distance to the pickup than for standard trips. Once at the pickup location, the driver must assist the passenger into the taxi, secure the wheelchair and assist the passenger with the seatbelt, and then reverse this process at the destination. As a result of the additional time spent, WC drivers do well if they can transport 70% as many total trips in a day as a standard taxi.

3. Could you convert regular taxicabs to wheelchair-accessible taxicabs?

*Staff Response:*

Operationally, WC taxis serve significantly fewer trips than standard taxis. So increasing the number of WC taxis by converting standard taxis would reduce capacity and negatively impact service. WC vehicles are much more expensive to own and operate, yet they are leased to the drivers for less money than standard vehicles to compensate drivers for the time requirements discussed above, so income would be reduced by converting standard certificates to WC. Adding new WC certificates will increase WC capacity and provide a better level of service to meet increasing demand while producing incremental revenue.

C. Technology

Is EV technology mature enough to deploy for taxicab service?

*Staff Response:*

Yes. The industry as a whole is working to coordinate the simultaneous growth in electric vehicles with growth in the charging infrastructure. The EV Taxicabs proposal addresses both vehicles and infrastructure, and it is that combination that makes the proposal feasible. The success of this firm could jump-start the acceptance and use of electric vehicles in Arlington and the D.C. metropolitan region, and be an important milestone in Arlington's leadership in transportation and the environment.

D. Range

What is the range of a fully charged Nissan Leaf?

*Staff Response:*

The 2013 model Leaf has a range of just over 100 miles (less for older models).

E. Charging of Electric Vehicles

1. How many existing EV chargers are in Arlington?

*Staff Response:*

The PlugShare website identifies the location and type of public charging stations currently available for EV drivers. Currently there are 13 locations within Arlington that provide a total of 22 Level 2 chargers for public use. Another three locations in nearby Virginia (Falls Church & Bailey's Crossroads) have five chargers for public use. Many more locations exist in Washington, D.C., Alexandria and the suburban parts of Virginia, and additional Level 2 and Level 3 (DC fast charge) stations are being installed presently in Arlington and elsewhere in Northern Virginia. For example, a firm called eVgo has applied for permits to provide Level 2 and Level 3 charging in the parking lot of the Walgreens on Wilson Boulevard in Clarendon. They are also locating Level 3 chargers in Woodbridge, Centreville and Sterling.

2. How would drivers charge EVs at night?

*Staff Response:*

Installing an EV charging station at a single-family home is straightforward where off-street parking is available. Only a simple electrical permit is needed and installation of a Level 2 charger is relatively inexpensive. EV charging at condominiums requires an electrical permit from the County, but the owner also would need to work through their association to determine location and reserved parking considerations. EV charging at apartment buildings is growing, through partnerships between EV charging suppliers and property owners and management firms (e.g. Forest City, Equity Residential, etc.). Property managers would likely be happy to install this equipment, especially if it's subsidized by EV Taxicabs. Options for EV charging at low-rise apartment buildings, where only surface lots or on-street parking are available, will require alternative parking arrangements or plugging into ordinary (110V) electrical outlets. The applicant indicated that he could provide 10 to 20 charging spaces at the company's office location for drivers without home charging capability. Drivers could leave their cabs there overnight to charge and commute home. As the number of fast-charge stations increases, the need for overnight charging will decrease.

EV Taxicabs has reviewed 28 driver candidates that have expressed interest in driving for the company. Of the 28 candidates, half (14) live in Arlington County, eight live in Falls Church or Fairfax County, five in the City of Alexandria and one in Herndon. Eleven of the candidates should have no problems installing Level 2 chargers at their homes and 13 will have the potential to install chargers at their present residences. The owner of EV Taxicabs has also contacted several property managers and apartment complexes in Arlington. One has said to have already filed a permit application to install chargers for residents and others have shown interest in further discussions of installation of charging stations for resident use.

3. How will the infrastructure develop with partners?

*Staff Response:*

EV Taxicabs has contracted with Aerovironment to make an assessment of locations and prepare plans for installation of fast-charging stations. Aerovironment will also work with the land owners, Dominion Virginia Power and the County, to obtain the necessary permits.

Nissan is working with EV and Aerovironment to provide significant discounts (about 50% off) for the price of the charging equipment.

Process:

- Applicant (EV Taxicabs) has contracted with Aerovironment to complete site assessments for six Level 3 (fast) chargers.
- Applicant is developing descriptions/photos of the proposed charger locations and sending them to Dominion Virginia Power (DVP) for an assessment of installation feasibility.
- When DVP responds as to feasibility, the applicant will approach property owners (e.g. Giant Food, Rite Aid, etc.) to seek their approval and interest in a partnership.
- When the property owner is interested, the applicant will negotiate an agreement and coordinate with Aerovironment and DVP to get engineering and pricing for installation. Aerovironment will then seek appropriate permits from Arlington County.
- After a permit is received, installation will commence.

4. How many EV chargers will be installed?

*Staff Response:*

EV Taxicabs will install six Level 3 (30 minute) charging stations countywide and approximately 40 Level 2 (4 to 5 hrs.) charging stations.

F. Financials

Provide more information on financials that shows benefits, i-Pads, and other aspects of the EV Taxi proposal.

*Staff Response:*

The applicant provided extensive financial information as part of its application materials. This information came after working closely with a business counselor through the County's BizLaunch program who is specialist in financial review of start-up companies. The counselor approved the business plan as to the available financial capacity for start-up and operation of the company.

G. Zoning

Does the definition of 'service station' include electric vehicle charging?

*Staff Response*

According to the Arlington Zoning Ordinance an *Automobile service station/gas station* is any premises used for supplying gasoline and oil, at retail direct to the customer, including minor accessories and services for automobiles. Electric vehicle charging stations that are unassociated with the sale of gasoline or oil are not "service stations".

H. Examples from other cities

1. Are there only five EV taxis in NYC?

*Staff Response:*

New York City had a pilot program with five Nissan Leafs in 2011 and 2012. The New York City Nissan Leaf pilot project was so successful that the city has signed a \$1 billion contract with Nissan to replace the entire NYC Yellow Cab Fleet with the “Taxi of Tomorrow”, a wheelchair-accessible Nissan van that can be manufactured by 2014 as a fully electric-powered vehicle.

2. How many EV taxis are there in Mexico City?

*Staff Response:*

The Mexico City electric taxi green initiative is a government-funded project in conjunction with Nissan Mexico to reduce pollution in the city by introducing electric vehicles into public transportation sector. The pilot program started in 2011 with 20 electric vehicles. By the beginning of 2013, 100 electric vehicles are expected to be in operation. The charging stations are paid for primarily by the Mexican government with support from GE and Nissan.

3. What has been the experience of other areas?

*Staff Response:*

So far, the news reports point to great success in the many cities and countries where EV taxis have been entered into service. Most of the vehicles have been in service for only about a year; therefore long-term performance data is currently not available.

I. Worst Case Scenario

What is the worst case scenario for EV? How would it affect the County, drivers or cab riders?

*Staff Response:*

If certificates are awarded to EV Taxicabs, and they do not install the specified number of fast chargers or secure drivers and 100% electric vehicles within one year of Board action, their Certificate authorization could lapse. In case of a business failure, the charging infrastructure that is installed in publicly accessible locations will stay in place and be operated by a third party (Aerovironment). As an alternative to having drivers buy the cabs, EV Taxicabs is prepared to buy all the cars and equipment. EV would lease the cabs to drivers and work with drivers over time to purchase the vehicles.

J. Incentives

1. What incentives are being used to ensure taxi availability at peak times?

*Staff Response:*

Several companies have proposed to provide financial incentives, in the form of reduced stand dues, to get drivers to work more during times, such as late at night, when the supply of cabs may be lower than is currently demanded. Placing more cabs on the street will certainly help to cover the cab shortages that occur during the peak hours and with the right incentives will get more cabs working late at night and on weekends.

2. How can we make sure that the County gets what applicants promise they will provide?

*Staff Response:*

If the commitments made are for a particular type of vehicle, e.g., EV or wheelchair-accessible taxis, the Certificates can be issued with requirements for those types of vehicles. County staff monitors compliance with those requirements. If taxis are proposed to have specific equipment in them, such as rear seat tablet computers or other technology, it could be required to be installed and operable when the vehicles are placed into service. Operating methods present more of a challenge for the County to enforce. Driver incentives, for example, may or may not produce the desired results, such as getting drivers to work at the times of peak demand, or demand patterns may change. The County's authority to regulate private driver/company relationships is very limited. Monitoring hours of operation for particular taxis would be challenging for both the County and the companies. County staff could request that the companies regularly provide information about driver agreements and incentives so that these can be compared with what had been proposed. Good-faith compliance could then be monitored and noncompliance would be considered in future regulatory proceedings.

K. Taxi Stands

1. Does the County need more stands?

*Staff Response:*

The County currently has 33 taxi stands with about 115 spaces. In the past two years the County has significantly increased the available stand space for taxis. A number of existing taxi stands were lengthened, which resulted in about 15 new stand spaces, and staff also established new stands in the Shirlington, Columbia Pike, Potomac Yard and Clarendon areas. Upon completion of the certificate allocation process, County staff will be evaluating additional new stand locations in places such as Rosslyn, Pentagon City and along Columbia Pike that were suggested by focus group participants.

Another benefit of the transformation of the taxi fleet to hybrid vehicles has been an increase in capacity of taxi stands. The replacement of Crown Victorias (212" in length) by cars like the Camry (189" in length) or Prius (175" in length) is making it possible to fit an additional cab at many of the County's taxi stands.

2. How many tickets have been issued to drivers for loitering at taxi stands?

*Staff Response:*

Unfortunately, we don't have the data for loitering tickets. A loitering violation gets lumped in with "Other non-moving violations" in the database. That category encompasses many different violations. Contrary to what was stated at the meeting by one driver, receiving three loitering violations does not automatically result in the revocation of the driver's hack license. A driver can technically lose his/her license for loitering but unless he/she also is convicted of something else of a more serious nature or has a bad driving record, a taxicab driver's license would not be revoked. Revocations of hack licenses are not common.

L. Drivers' Hours

How can we track how many hours drivers work?

*Staff Response:*

Concerns have been raised about the number of hours per day that drivers work. The best data source on work hours that the County currently has is the daily manifests that drivers complete. A review of a sample of such manifests identified that an average work day is about 9 to 10 hours although there is a great deal of variance in work hours. That analysis is based upon self-reported driver records which could misrepresent actual work time.

M. Competition

What is the strategy to have good competition among taxicab certificate holders?

*Staff Response:*

The preferred strategy for enhancing competition within the industry is to strengthen existing companies and add new companies when they can improve the overall industry. That involves strengthening existing companies by giving them more taxicabs and by upgrading the quality of service that the small companies are providing. It is easier for the small companies, both existing and new, to compete on quality of service and driver satisfaction rather than on size. Good service quality and employee relations will produce the loyalty of customers and drivers needed to grow the small companies and achieve greater balance within the industry. In addition, innovative companies, either new or existing, that propose to “raise the bar” for the industry should be supported to bring about major advances in the industry.

Most of the companies started over 40 years ago and some have grown faster than others. The current ordinance encourages competition while favoring those companies that bring improvement in services, innovation, driver’s issues, etc. All of the certificate holders should be encouraged to improve in order to remain competitive.



## ARLINGTON COUNTY, VIRGINIA

### County Board Agenda Item Meeting of November 17, 2012

**DATE:** November 6, 2012

**SUBJECT:** Award of new Certificates of Public Convenience and Necessity to existing and/or proposed new taxicab companies to permit operation within Arlington.

#### **C. M. RECOMMENDATION:**

Authorize the award of new taxicab Certificates of Public Convenience and Necessity (Certificates) to EV Taxicab, enviroCAB, Friendly Cab, Red Top Cab, and Blue Top Cab companies.

**ISSUES:** The Arlington Taxicab Ordinance (Chapter 25.1 of the Arlington County Code) requires County Board approval of all changes to taxicab certificates. Two issues need to be addressed:

- How many new standard and wheelchair-accessible taxicabs should be authorized and to what companies should new taxicab certificates be issued?
- Should a new taxicab company, EV Taxicab, be authorized to operate in Arlington?

**SUMMARY:** Arlington's Taxicab Ordinance permits business entities and individuals to submit applications for taxicab operations certificates during a specified time period in even-numbered years. This year 10 applications were received, requesting authority to add a total of 323 taxicabs to the Arlington taxicab fleet. Upon review of data evaluating the current demand and operations of the Arlington taxicab industry, the County Manager recommends that a total of 65 taxicabs be added to the 765 existing cabs in Arlington County. Of the 65 taxicabs, 55 should be standard, non-wheelchair-accessible vehicles and 10 should be wheelchair-accessible taxicabs. As a result, the total number of taxicabs in Arlington will be 830, of which 37 will be wheelchair-accessible vehicles.

The 55 new standard taxicabs are recommended to be allocated to:

*BMD*

*AV*

*ARC*

Staff: Angie de la Barrera, DES Transportation  
Richard Viola, DES Transportation

<b>Applicant</b>	<b>Cabs Requested</b>	<b>Recommendation</b>
<b>Friendly</b>	10	5
<b>enviroCAB</b>	40	10
<b>EV Taxicab</b>	49	40
<b>Total</b>	<b>99</b>	<b>55</b>

The 10 wheelchair-accessible taxicabs are recommended to be allocated to:

<b>Applicant</b>	<b>No. Requested</b>	<b>Recommendation</b>
<b>Blue Top</b>	5	5
<b>Red Top</b>	10	5
<b>Total</b>	<b>15</b>	<b>10</b>

**BACKGROUND:** According to Section 25.1-4 of the Taxicab Ordinance the number of Taxicab Certificates is to be determined by the County Board biennially in even-numbered years. The process begins with the County staff assessing the need for additional taxicabs in Arlington and reporting findings of the assessment to the Board and taxicab industry. The Ordinance also specifies a process wherein existing and proposed new taxicab companies can submit applications to request authority to operate additional standard or wheelchair-accessible taxicabs.

On July 1, the County Manager reported that recent growth in demand for taxicabs, as demonstrated by a number of factors including population and job growth, airport use, hotel occupancy, and taxi dispatch activity, warranted an additional of 40 to 55 new standard cabs plus an additional five new wheelchair-accessible vehicles. During the July 1 to September 1 application period, 10 companies applied for new certificates. The applications came from six of the seven current taxicab companies operating in Arlington plus four proposed companies. The ten applicants applied for a total of 323 new standard cabs and 23 new wheelchair-accessible taxicabs.

On October 15, 2012, the County Manager's 2012 Taxicab Certificates Application Report was issued. It summarized the process that staff used to evaluate the ten applications and recommended how new certificates should be authorized. Included in the report, and attached as Appendix A to this report, are the factors and procedures that staff used in evaluating the applications. Appendix B is a table that shows how each of the applications was scored using the information that was provided in the applications.

**DISCUSSION:** The determination process for the current year began July 1, 2012, with the *2012 Certificate Determination Report* (attached) issued by the County Manager which recommended an increase of 40 to 55 additional standard taxicabs, as well as five (5) new wheelchair-accessible vehicles, to the currently authorized 765 taxicabs. Existing certificate holders and new applicants had the opportunity to present applications for additional taxicabs from July 1 until September 1, 2012.

**Current Certificate Number and Applications Received**

There are currently 765 taxicabs authorized in Arlington County. They are operated by seven (7) certificate holders. The current taxicab fleet includes 319 hybrid taxicabs (43% of the total non-wheelchair-accessible vehicles) and 27 wheelchair-accessible taxicabs (3.5% of the entire fleet). The four companies that provide dispatch service total 666 taxicabs (87% of the entire fleet). Table 1 provides the current distribution of taxicab certificates by company.

**Table 1. Current Number of Taxicabs by Company**

<b>Certificate Holder</b>	<b>Number of Taxicabs</b>	<b>Wheelchair</b>
<b>Red Top*</b>	350	23
<b>Blue Top*</b>	166	4
<b>Arlington Yellow Cab*</b>	100	-
<b>enviroCAB*</b>	50	-
<b>Crown Cab</b>	37	-
<b>Hess Cab</b>	35	-
<b>Friendly Cab</b>	27	-
<b>Total</b>	<b>765</b>	<b>27</b>

\*Taxicab companies that provide dispatch service

Table 2 lists the ten applicants for new certificates in the order in which their applications were received. The last application, by Arlington Cab Cooperative Co., initially requested authorization to operate 110 taxis but the applicant amended its application to request 60 taxis.

**Table 2. Applications Received**

<b>Applicant</b>	<b>Total request</b>	<b>No. of wheelchair</b>
<b>EV Taxicab<sup>1</sup>*</b>	50	1
<b>Hess</b>	5	-
<b>Green Line Cab<sup>1</sup>*</b>	60	5
<b>Red Top*</b>	25	10
<b>Blue Top</b>	25	5
<b>Friendly</b>	12	2
<b>Go Green<sup>1</sup></b>	40	-
<b>enviroCAB</b>	40	-
<b>Crown</b>	6	-
<b>Arlington Cab Cooperative Co.<sup>1</sup></b>	60	-
<b>Total</b>	<b>323</b>	<b>23</b>

<sup>1</sup> New Company

\* Presented to panel

As part of this year's determination process, staff formed an interdepartmental panel to assist in reviewing applications. The panel was comprised of County staff with expertise in small business development, hotel and visitor services, energy management, paratransit service provision and transportation planning. The 2012 application form, as well as the 2012 *Taxicab*

*Certificate Determination Report*, requested all companies to present to this panel. Three candidates took advantage of this new part of the process: EV Taxicab, Green Line Cab and Red Top. During these presentations, staff was able to ask questions, gather additional facts and provide feedback on how to improve the applications.

Staff developed a system for rating the applications that considered how well each application satisfied the County’s stated consideration factors and the expectations. See Appendix A for the list of factors and the scoring system used to rate the applicants. The County’s primary concerns are in four areas:

- Improvement of customer service quality
- Commitment to driver welfare
- Innovation and growth of the local taxicab industry
- Soundness of the company’s financial condition

These primary factors are double-weighted to reflect their greater importance in the evaluation. See Appendix A for a full description of the methodology for each factor.

Table 3a – new companies and 3b – existing companies show the total weighted score for each applicant for standard (non-wheelchair-accessible) vehicles. See Appendix B for the scores on each category and the resulting score.

**Score for Standard Taxicabs – New companies**

<b>Table 3a.</b>	<b>Weighted Score</b>
<b>Arlington Cab Coop</b>	80
<b>EV Cab</b>	84
<b>Go Green</b>	70
<b>Green Line</b>	77

**Score for Standard Taxicabs – Existing Companies**

<b>Table 3b.</b>	<b>Weighted Score</b>
<b>Blue Top</b>	74
<b>Crown</b>	53
<b>EnviroCab</b>	83
<b>Friendly</b>	68
<b>Hess</b>	49
<b>Red Top</b>	76

Table 4 shows the score for applicants that requested wheelchair-accessible vehicles.

<b>Table 4.</b>	<b>Score</b>
<b>Arlington Cab Cooperative</b>	<b>3</b>
<b>Blue Top</b>	<b>5</b>
<b>EV Taxicab</b>	<b>3</b>
<b>Friendly</b>	<b>2</b>
<b>Green Line</b>	<b>3</b>
<b>Red Top</b>	<b>5</b>

## **Certificate Allocation Recommendation**

### **Allocation Recommendation for Standard Taxicabs**

	<b>No. of new Taxicabs</b>
<b>EV Taxicab</b>	<b>40</b>
<b>enviroCAB</b>	<b>10</b>
<b>Friendly</b>	<b>5</b>
<b>Totals</b>	<b>55</b>

Generally, for a new dispatch company to start, a minimum of 40 to 50 cabs are needed both to provide the revenue to cover the business's up-front and operating costs and to have enough cabs on the street to meet the demand for dispatch service. The County Manager determined in the *2012 Certificate Determination Report* that the County needs between 40 to 55 non-wheelchair-accessible taxicabs; therefore there is only room to add one new dispatch company this year.

### **EV Taxicab**

Appendix B shows the maximum and assigned scores that could be or were given to each of the applications. As it was not possible to score the new applicants on all of the factors, each application was also given a weighted score that is a percentage of the total maximum score that the applicant could receive. Based on the rating system, EV Taxicab was rated the highest of all applicants. It proposes to have a fleet entirely made up of all-electric taxicabs. To service the taxi vehicles, EV Taxicab proposes to install six quick-charge stations across the County that will be available to the general public as well as EV's drivers. This will encourage additional usage of zero-emission vehicles, helping Arlington County to be a pioneer in this new technology.

The vehicles will be equipped with high-speed internet access and iPads mounted in the backseat for customers to use during the cab ride. EV will also utilize smartphone apps and telephone calls for its reservation system. EV also proposed to employ the *Cabulous* state-of-the-art, cloud-based dispatch system that allows smart-phone and tablet users to identify the real-time locations of taxis in the vicinity. The technology proposed by EV equals or exceeds that of all the other cabs either existing or proposed.

The EV Taxicab applicant is a current Arlington County taxi driver and a recent business school graduate. He brings his experience to the position and wants to work with County staff to improve the drivers' profession. He proposes to provide his drivers with customer and business training, two weeks of annual vacation, health and fitness club membership, financial management training, customer service training, assistance with legal representation and is looking into providing life insurance. The EV Taxicab application impressed County staff through both its use of technology and its apparent commitment to fair treatment for its drivers.

Members of the County's interdepartmental panel were asked to address concerns about the technical and financial aspects of the EV Taxicab application. The panelists' responses are provided below:

**Arlington Economic Development – Small Business Program:** “Overall, EV Taxicab has a solid business plan that does a good job assessing the business risks and showing effective plans to manage those risks. It presents a well thought out and comprehensive business plan. EV met with Arlington Economic Development (AED) staff and implemented all the changes and suggestions staff pointed out on its business plan. Staff discussed and reviewed in depth its business economic feasibility, based on its projected income and costs, business operations and marketing strategies. Staff concluded that EV Taxicab can add great value to the existing Arlington County taxicab fleet due to their financial feasibility, experience, and innovation on the use of latest technology and customer service initiatives.”

**Sustainability and Environmental Management – Energy Management Program:** “The proposal by EV Taxicab is a credible game-changer and leap forward for cleaner transportation in Arlington. In addition to reduced greenhouse gas emissions, electric vehicles produce zero tailpipe emissions, thereby improving local air quality. The applicant's proposal is feasible, although it does require the cooperation of other partners. The success of this firm could jump-start the acceptance and use of electric vehicles in Arlington and the DC metropolitan region, and be an important milestone in Arlington's leadership in transportation and the environment.”

The Nissan Leaf can travel 80-120 miles on a full charge (24 kWh), depending on driving conditions. This range is sufficient for hours of travel around Arlington, and a trip to Dulles International Airport and back could be made with about a half-full charge of its battery. The Metropolitan Airport Authority (MWAA) has installed this year four electric vehicles charging stations at Dulles Airport and additionally four more at Reagan National Airport.

An electric taxicab driving 120-180 miles per day will likely require at least one recharging, and quickly. Fast-charge options for the Nissan Leaf exist, but are only now being introduced to the Washington DC metro region. These fast-charge stations provide about 80-100 miles of range in 20-30 minutes of charging. The applicant is in discussions with appropriate property owners (e.g. grocery store parking lots) for the installation and use of fast-charge technology by the firm's drivers, and also for use by the general public. The vehicles could also be charged at home overnight on more-basic charging equipment. The overnight re-chargers are much slower providing about 10 miles of range per hour of charging.

Therefore, not only does this taxicab proposal include recharging infrastructure for its own vehicles, but it facilitates the deployment of fast-charge EV infrastructure for use by Arlington residents and the general public. This investment of private infrastructure for EV fast-charge stations in Arlington will enhance Arlington as a site for purchase and use of EVs for personal transportation in the region.

Staff recognizes that the use of electric vehicles for taxi service is still a new technology in development. Cities around the world are implementing electric taxis and so far have not reported major problems. There is still some risk that the technology is not yet mature. Staff believes that EV Taxicab should be given up to 12 months to fully implement their service. If at that time the company is not fully operational utilizing all electric-powered taxicabs, then the County may withdraw EV's Certificate. Taxicab authorization not used by EV may be reserved for reallocation by the County Board at a later date.

**EnviroCAB**

EnviroCAB had the second highest ratings. It received high scores for its commitment to sustainability and to its employment of better technology for dispatch, credit-card payment and GPS location of vehicles. EnviroCAB has also incorporated an electric vehicle in its fleet for testing and to showcase new technology to the public. Currently, enviroCAB is the smallest full-service company in Arlington. The additional cabs will improve service by reducing customer wait times and also will allow the company to reduce the stand dues it charges its drivers. In their application, enviroCAB proposed to create an incentive program to get more drivers to work peak hours by further reducing their stand dues.

**Friendly Cab**

Although Friendly Cab has been in business for more than 40 years, it is the smallest of Arlington's cab companies. Friendly has requested 10 new cabs in order to grow their business and to enable them to implement dispatch service. The company is already equipped with credit card payment terminals and has been increasing its percentage of hybrid-fueled vehicles. County staff believes that transforming Friendly to a full-service company would add great benefit to Arlington's overall taxi service. The addition of five new cabs to Friendly and its establishment of dispatch service in effect would create another 32 new dispatch cabs.

**Wheelchair-Accessible Taxicabs**

**Table 6. Allocation Recommendation for Wheelchair-Accessible Taxicabs**

	<b>Number of Wheelchair Taxicabs</b>
<b>Blue Top</b>	5
<b>Red Top</b>	5
<b>Totals</b>	<b>10</b>

During the application process, new information regarding the need for additional wheelchair-accessible vehicles came to County staff's attention. This new data regarding higher than previously reported use of Red Top's wheelchair-accessible cabs and new service contracts

secured by Blue Top, in addition to requests heard during a focus group of seniors and persons with disabilities, convinced staff that 10, rather than five, new wheelchair-accessible vehicles are needed. This is five more than the *2012 Certificate Determination Report* had recommended.

Blue Top, in September, signed an agreement with a Medicare/Medicaid transportation service provider to transport all of its clients. Blue Top is estimating that the contract will generate up to an additional 300 trips per day. Also, Red Top stated in its application that in the first seven months of 2012, the demand for wheelchair-accessible trips have increased nearly 42% over the same time in 2011. Given this new data, Red Top requested more wheelchair-accessible vehicles than County staff had estimated in the *2012 Certificate Determination Report*.

Staff recommends the award of five wheelchair-accessible taxis each to Red Top Cab and Blue Top Cab. The Red Top Cab award will improve the on-time performance of the largest provider of taxi rides to wheelchair users in Arlington County. Currently, customers using wheelchairs are advised to schedule rides the day before. Same-day ride requests require two hours' notice. Additional accessible Red Top taxis will improve the overall availability of the fleet. As Red Top Cab is also a provider for Arlington County's Specialized Transportation for Arlington Residents (STAR) Program, on-time performance for STAR trips may also improve.

Blue Top Cab also requires two hours to meet same-day requests for accessible taxi service. Blue Top Cab has two contracts for transportation of people with disabilities, including those using wheelchairs. Awarding five wheelchair-accessible taxi permits to Blue Top Cab will improve on-time performance to its customers. An added benefit of awarding certificates to Blue Top is to ensure that private-pay customers using wheelchairs have a choice of vendors.

These two companies are the only taxi vendors in Arlington County requiring drivers of accessible taxicabs to complete training in disability sensitivity and passenger assistance. These two companies are also the only taxi vendors in Arlington County with wheelchair-accessible vehicles and a strong taxi dispatch capability (wheelchair users are less likely to hail a taxi ride). Concentrating the wheelchair access within these two companies increases the likelihood that a wheelchair-accessible cab will be available when a customer calls to request one.

The proposed increase in the number of taxicabs authorized should improve the quality of taxi service in several ways. The additional 65 cabs will increase the size of the overall fleet, enabling cab numbers to match the recent growth in taxi demand. Moreover, the expansion along with new incentives for peak-hour service and improvements in telephone and electronic dispatch services will help to improve on-time reliability especially during peak demand hours. Almost all of the new cabs placed in service will be driver-owned, thereby creating opportunities for taxi drivers that currently rent cabs to become more invested in the industry.

The additional 10 wheelchair-accessible cabs will expand the Arlington taxi industry's ability to provide travel services for persons with mobility impairments. Red Top, which has the largest fleet of wheelchair-accessible cabs and currently provides much of Arlington's STAR paratransit service, would gain new capacity, while the Blue Top fleet of accessible vehicles would be more than doubled in size and create a second viable taxicab provider for persons with disabilities.

There are a number of environmental and technological advancements that would also be achieved. Foremost would be the introduction of a new fleet of electric vehicles under the operation of EV Taxicab. The quiet, low-pollution cabs will be serviced by a new network of electric charging stations that can also be made available to the general public. In addition enviroCAB is proposing to add one electric vehicle to its expanded fleet of hybrid vehicles. All of the new standard cabs will be either electric or hybrid powered. New technology innovations such as in-cab wi-fi, and tablet/smart phone reservation systems will also be implemented. The traveling public will also benefit from the award of five new cabs to Friendly Cab as this may enable a conversion of their entire fleet to dispatch service.

Staff feels that the demand in the industry warrants some growth at this time. However, the applications received greatly exceed that demand. Selection from amongst the ten applications was made in a manner that would best serve the public health, safety and welfare and in rewarding those applicant companies that are seeking to provide the best service to the traveling public.

### **Transportation Commission:**

On November 1, 2012, the Arlington Transportation Commission held a public hearing regarding the authorization of new taxicab certificates. The Commission received testimony from eight of the 10 applicants, as well as from several taxi drivers, including a representative of Arlington United Taxicab Operators (AUTO). The majority of the Commission's concerns were about the method that County staff developed to rate the applicants and the ability of the proposed new company, EV Taxicab, to provide service utilizing electric cabs. The Commission expressed interest in electric vehicles but felt that the technology is not currently adequate for the operation of a taxicab fleet. Although lacking an official quorum, the Commission voted five to zero (5 to 0) in favor of a motion to allocate 20 standard certificates to EnviroCab, 10 standard certificates to Friendly Cab, 10 wheelchair-accessible certificates to Red Top Cab and five (5) wheelchair-accessible certificates to Blue Top Cab.

**FISCAL IMPACT:** The taxicab certificate holders are required to pay the County an annual fee of \$150 per cab to help to cover the cost of the County's full-time Taxicab Industry Regulator and the County's part-time Hack Inspector. The addition of 65 new cabs would generate another \$9,750 in annual revenue for the County plus revenue collected associated with the annual vehicle inspections (\$20 per cab, \$1,300 annually) and the biennial renewal of cab driver licenses (\$40 each). Fees are collected by January 1 of each year. The additional revenue will offset the net tax support of the program. As the number of taxi companies and overall size of the industry increases, additional work is created for the two positions that currently work on taxicab issues and in future years could result in the need for additional staffing resources.

## **Appendix A. Method for Evaluation of Taxicab Certificate Applications**

### **Factors to Consider**

According to Section 25.1-4 of the Taxicab Ordinance, in making her determination regarding the allocation of taxicabs to each applicant, the County Manager shall consider the following factors, and such other relevant information as the County Manager deems appropriate, including the effect of the approval of the application(s) on Taxicab Service in Arlington County:

1. Whether the applicant will offer hail and taxi stand service;
2. Whether the applicant will offer telephone-reservation and dispatch service;
3. How many of the additional taxicabs will be wheelchair-accessible vehicles;
4. To what extent customers may pay using credit or debit cards;
5. Fuel efficiency of proposed additional taxicabs including whether the additional Taxicabs will be hybrid or vehicles not primarily powered by gasoline or diesel fuel;
6. The applicant's recent vehicle productivity, if any, as evidenced by paid taxicab trips per authorized taxicab per day;
7. The applicant's recent vehicle efficiency, if any, as evidenced by percent of total miles travelled for which passengers travel;
8. The days and hours for which service will be available;
9. The applicant's recent customer-service record, if any, as evidenced by the scarcity of complaints per authorized taxicab;
10. The applicant's intended fleet sustainability, as evidenced by the current (if any) and proposed fleet fuel-efficiency ratings;
11. Competition within the industry including the number of taxicabs that the applicant(s) would be authorized, should the number applied for be granted, relative to the total number of taxicabs authorized under all certificates, and the effect thereof on the public convenience and welfare; and
12. Proposed innovation to taxicab service in Arlington County.

In addition to these factors, County staff established additional expectations to be addressed by applicants. These expectations are intended to protect the health, safety and welfare of the traveling public, improve drivers' profession, and maintain competition within the industry. They are as follows:

- The applicant should demonstrate its sound financial condition and a well-developed plan for operation of its business.
- The applicant should demonstrate its ability to accept and guarantee a customer ride reservation by telephone, text message, computer application, or e-mail. The applicant should provide a mechanism to alert a customer of a significant delay.
- The applicant should demonstrate its ability to provide incentives or other mechanisms to address the need for more cabs during the early weekday morning and late weekend night peak hours.
- The applicant should demonstrate that its management agrees to treat drivers fairly, including outlining an internal appeals process for disciplinary actions undertaken by the applicant against its drivers.
- The applicant should demonstrate that its management will provide drivers with adequate training and support to ensure that customers receive high-quality customer service. High-quality service involves courtesy and attention to customers' needs, as well as cleanliness, timeliness, safety, and knowledge of local streets.
- The applicant should demonstrate that it will plan for a majority of the cabs in its fleet to be owned by their operators. The applicant should provide information regarding the number of driver-owned and driver-leased vehicles in its fleet and the dues associated with each type of vehicle (driver-owned and driver-leased).
- The applicant should demonstrate its ability to accept credit & debit cards for payment for all rides.
- The applicant should demonstrate its ability to track and record vehicles' service by both taximeters and GPS. Also, the applicant should demonstrate its ability and willingness to share this electronic data or manifests with County staff.
- The applicant should indicate its willingness to cooperate with County staff on matters such as data collection, information distribution, driver testing and scheduling of vehicle inspections.
- The applicant should demonstrate its ability to provide a fleet that includes energy-efficient vehicles, vehicles with seating for four passengers and ample luggage space, and wheelchair-accessible vehicles.

**Primary Factors:** *County staff has determined that the certain factors are more important in addressing the County's primary considerations and should accordingly be given double weight in the selection process; they are:*

- Improvement of Customer Service Quality – factors # 2, 4 and 14
- Commitment to Driver Welfare – factors #15 and 17
- Industry Innovation and Growth – factor #12
- Sound Company Financial Condition – factor #13

**Wheelchair-Accessible Cabs:** *Factor #3 is the primary consideration for granting of certificates for wheelchair accessible vehicles. It is not included in the evaluation of certificate applications for standard taxicabs.*

***System for Scoring the Factors***

*All factors are scored on a scale of 1 to 5. Primary factors are double-weighted (2 X score) to reflect their greater importance in the evaluation.*

**Factor #1- Hail or Stand:**

Score of 1 = No hail or stand service is provided

Score of 3 = some portion of vehicles will provide hail and stand service

Score of 5 = all vehicles can provide service for hail and taxi stand requests

**Factor #2 – Telephone reservation and dispatch service:**

Score of 1 = No telephone reservation and dispatch provided

Score of 3 = Telephone reservation/dispatch is provided for part-day

Score of 4 = Telephone reservation/dispatch is provided all day

Score of 5 = Telephone & e-mail or text reservation/dispatch is provided all day

**Factor #3 – Wheelchair Accessible vehicles:**

Score of 1 = No wheelchair accessible cabs requested

Score of 2 = Wheelchair cab is requested but no dispatch or medical/senior contracts

Score of 3 = Company has either dispatch service or a medical/senior contract

Score of 4 = Company has both dispatch and medical/senior service contract

Score of 5 = Has both dispatch and medical/senior contract plus other WC cab business

**Factor #4 – Payment by credit or debit cards:**

Score of 1 = No system for accepting credit & debit card payments is provided

Score of 4 = System for credit & debit card payments is provided

Score of 5 = System allows for “back-seat” payment using credit & debit cards

**Factor #5 – Fuel efficiency of new cabs:**

Score of 1 = Cabs to be conventionally fueled with low mpg ratings

Score of 2 = Cabs to be mix of hybrids and conventionally fueled

Score of 3 = All cabs to be hybrid fueled

Score of 4 = Cabs to be a mix of hybrids and electric or alternative fueled

Score of 5 = All cabs to be plug-in electric or alternative fueled

**Factor #6 – Vehicle productivity: (Based upon most recently reported company data averages.**

Only applies to operating companies)

Score of 1 = Under 10 reported trips per vehicle per day

Score of 2 = Between 10 and 12 reported trips per vehicle per day

Score of 3 = Between 12 and 16 reported trips per vehicle per day

Score of 4 = 16 to 20 reported trips per vehicle per day

Score of 5 = Greater than 20 reported vehicles per day

**Factor # 7 – Vehicle efficiency: (Based upon most recently reported company data averages.**

Only applies to currently operating companies)

Score of 1 = 25 % or fewer reported miles traveled are paid miles

Score of 2 = Between 25 and 35% of reported miles traveled are paid miles

Score of 3 = Between 35 and 42% of reported miles traveled are paid miles

Score of 4 = Between 42 and 50% of reported miles traveled are paid miles

Score of 5 = Greater than 50% of reported miles traveled are paid miles

**Factor #8 – Days and Hours of Service:**

Score of 1 = Less than 24 hours of service per day and fewer than 7 days per week

Score of 2 = Service is part day for everyday

Score of 5 = Service is 24 hours per day everyday

**Factor #9 – Customer Service Record:** (Based upon data collected by County staff. Only applies to currently operating companies)

N/A – Very few complaints received

**Factor #10 – Intended Sustainability: (Includes current vehicles if applicable)**

Score of 1 = Percentage of fleet that is hybrid or alternative power less than 20%

Score of 2 = Percentage of fleet that is hybrid or alt. power is between 20 and 40%

Score of 3 = Percentage of fleet that is hybrid or alt. power is between 40 and 60%

Score of 4 = Percentage of fleet that is hybrid or alt. power is between 60 and 80%

Score of 5 = Entire fleet to be hybrid or alternative powered

**Factor #11 – Competition in Industry:**

Score of 1 = Company to have 33% or more share of total industry cabs

Score of 2 = Company to have 20 to 33% share of total industry cabs

Score of 3 = Existing company to have less than 20% share of total industry cabs

Score of 4 = New company to have 75 cabs or greater

Score of 5 = New company to have fewer than 75 cabs

**Factor #12 – Innovation:**

Score of 1 = Status quo; no changes to existing industry service or operations

Score of 3 = At least one innovation in local industry service or operation

Score of 4 = Multiple innovations in local industry service and/or operation

Score of 5 = First of its kind in USA type of service or operation innovation

**Factor #13 – Sound Financial Condition:** (Financial plans required only for new companies)

Score of 1 = Financial plan deemed to be inadequate

Score of 3 = Financial plan deemed to be adequate

Score of 4 = Existing company with 5 years or less operating experience

Score of 5 = Existing company with greater than 5 years of operating experience

**Factor #14 – Incentives for Peak Hour Service:**

Score of 1 = Provides no extra incentives for drivers to work peak demand periods

Score of 3 = Provides at least one extra incentive for drivers to work peak periods

Score of 5 = Provides several extra incentives for drivers to work peak periods

**Factor #15 – Treats Drivers Fairly:**

Score of 1 = No mention of driver written contracts or internal complaint appeals process

Score of 3 = Provides either written contracts for all drivers or an internal complaint appeals process

Score of 5 = All drivers have written contracts and an internal complaint appeals process

**Factor#16 – Provides Driver Training:**

Score of 1 = No driver training provided by company

Score of 3 = Company provides training for license examination or service to customers

Score of 5 = Company provides training for license examination and service to customers including those with special needs

**Factor #17 – Cab Operator Ownership:**

Score of 1 = No cabs (both new and proposed) owned by operators

Score of 2 = Less than 50 % of cabs to be owned by operators

Score of 3 = Between 50 and 80% of cabs to be owned by operators

Score of 5 = At least 80% of cabs to be owned by operators

**Factor #18 – GPS and Taximeter data collection:**

Score of 1 = No GPS in cabs and taximeters cannot provide vehicle use data

Score of 2 = No GPS in cabs and taximeter can provide vehicle use data

Score of 3 = All or some cabs have GPS, however taximeters cannot provide data

Score of 5 = All cabs to have GPS and taximeters that can provide vehicle use data

**Factor #19 – Cooperation with County (Only applies to currently operating companies):**

Score of 1 = Company representatives do not meet with County staff and do not comply with information requests.

Score of 3 = Company representatives attend most meetings with County staff and usually comply with all information requests in a complete and timely manner.

Score of 5 = Company representatives always attend meetings with County staff and always comply with information requests in a timely and complete manner.

## Appendix B: Scoring of Applications

### Formula – Total Maximum Points

Factors	#1	#2*	#3	#4*	#5	#6	#7	#8	#9	#10	#11	#12*	#13*	#14*	#15*	#16	#17*	#18	#19	Total Points	To Weight Score
New Companies	5	10	5	10	5	N/A	N/A	5	N/A	5	5	10	10	10	10	N/A	10	5	N/A	100	Points/100
Existing Companies	5	10	5	10	5	5	5	5	N/A	5	5	10	10	10	10	5	10	5	5	120	Points/120

### Scores

<u>New Companies</u>	#1	#2*	#3	#4*	#5	#6	#7	#8	#9	#10	#11	#12*	#13*	#14*	#15*	#16	#17*	#18	#19	Total Points	Weighted Score
Arlington Cab Coop	5	5	3	4	3	N/A	N/A	5	N/A	5	5	3	1	3	5	N/A	5	5	N/A	80	80
EV Cab	5	5	3	5	5	N/A	N/A	5	N/A	5	5	5	3	1	3	N/A	5	5	N/A	84	84
Go Green	5	4	1	4	3	N/A	N/A	5	N/A	5	5	1	3	3	1	N/A	5	5	N/A	70	70
Green Line	5	5	3	4	4	N/A	N/A	5	N/A	5	5	3	3	3	1	N/A	5	5	N/A	77	77

<u>Existing Companies</u>	#1	#2*	#3	#4*	#5	#6	#7	#8	#9	#10	#11	#12*	#13*	#14*	#15*	#16	#17*	#18	#19	Total Points	Weighted Score
Blue Top	5	5	5	4	3	3	3	5	N/A	3	2	1	5	1	5	3	5	5	5	89	74
Crown	5	1	1	1	3	1	2	5	N/A	3	3	1	5	1	3	3	5	2	3	64	53
EnviroCab	5	5	1	4	4	4	4	5	N/A	5	3	3	5	3	3	3	5	5	5	99	83
Friendly	5	3	2	4	3	2	3	5	N/A	3	3	3	5	1	3	1	5	5	3	81	68
Hess	5	1	1	1	3	2	3	5	N/A	2	3	1	5	1	1	1	5	2	3	59	49
Red Top	5	5	5	5	3	4	4	5	N/A	2	1	3	5	3	3	5	3	5	5	91	76

\* Factor is double-weighted