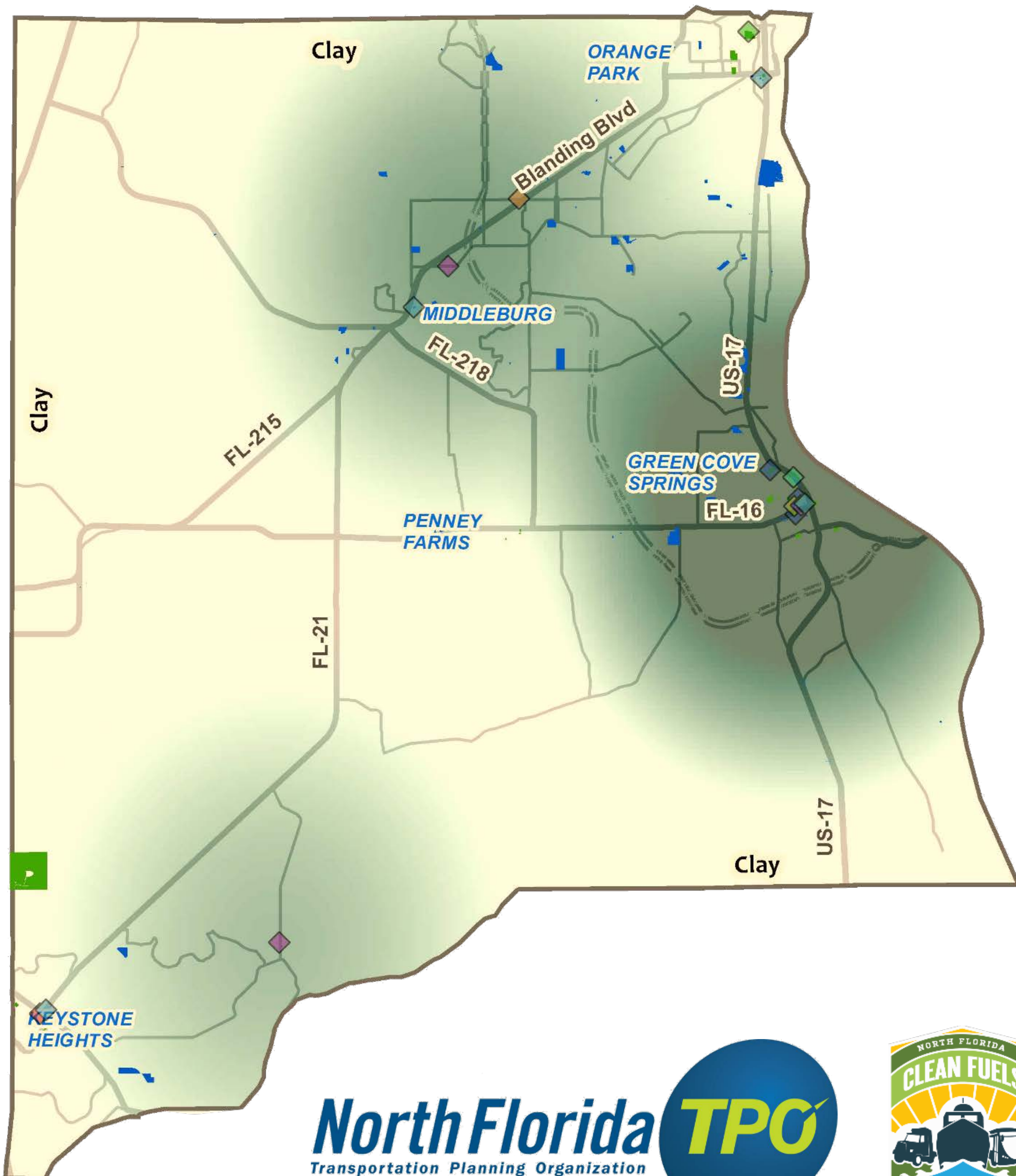
CLAY COUNTY CLEAN FUELS ASSESSMENT



North Florida TPO
Transportation Planning Organization
PLAN • FUND • MOBILIZE

North Florida Clean Fuels Coalition

CLAY COUNTY CLEAN FUELS ASSESSMENT

2/22/17

Prepared by RS&H, Inc. at the direction of the North Florida TPO

RS&H

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

Clay County public fleet data was assessed to determine the feasibility of transitioning to clean fuels. The public fleet stakeholders included in this analysis include:

- City of Green Cove Springs
- City of Keystone Heights
- Clay County Board of County Commissioners
- Clay County Schools
- Clay County Sheriff
- Clay County Transit
- Clay County Utility Authority
- Town of Orange Park

Due to lingering effects of the Great Recession, most county agencies have deferred vehicle replacements in recent years. As result, there is now a unique opportunity to replace fleets with new, clean fuel vehicles.

The feasibility of transitioning to compressed natural gas (CNG), propane (Autogas), electricity and biodiesel (B20) was evaluated from technical and financial perspectives, based on the number and age of vehicles, location of fleet vehicles, fuel expenditure, fuel use and vehicle miles travelled.

The preliminary results indicate that each fuel is feasible for particular fleet segments assuming current conditions, as well as most alternative scenarios (e.g. more / less vehicles, high / low future oil prices, higher / lower financial incentives, traditional / public-private project delivery).

- **Autogas:** transitions of **school bus, transit, police** and/or **class 1 & 2 truck** fleets – together or alone - may be the most technically and financial feasible projects, with a public-private partnership delivery method (P3) providing the fastest pay back periods.

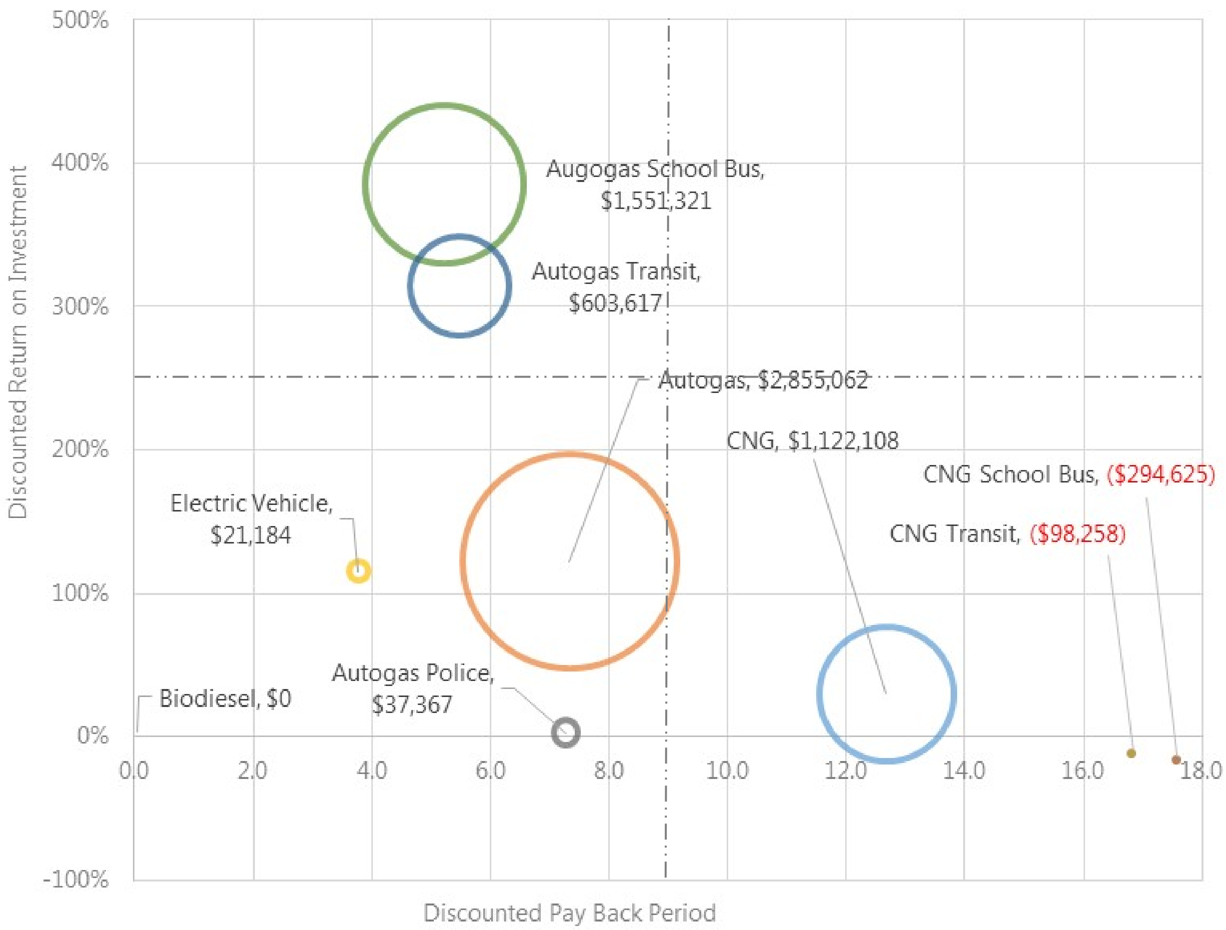
- **Electricity:** Transitions of **passenger vehicles** to electric vehicles (EV) is also technically and financially feasible. Currently the potential for use of EVs is limited by County fleets' willingness to utilize EVs at scale.

- **CNG:** Transitions of **school bus, transit, class 1-3 truck** fleets together (but likely not alone) to CNG may also be financially feasible, with public-private partnerships likely to play a role. However, there are concerns about the technical feasibility of any CNG project, given the need to site a fueling facility in a location that could be conveniently utilized by multiple entities.

- **B20:** Transition of **any/all diesel fleet vehicles** to biodiesel is technically feasible with little or no new infrastructure. Financial feasibility depends on obtaining B20 at a price equal to or less than the current diesel price.

Figure 1 graphs the estimated cost-effectiveness of the base case projects. Generally, projects involving Autogas show the best financial performance, followed by electricity and some natural gas projects. Compressed natural gas involving solely school bus or transit fleets are not likely to be cost effective.

FIGURE 1: BASE CASE ALTERNATIVE FUEL PROJECT COST-EFFECTIVENESS (DISCOUNTED PAY BACK PERIOD, RETURN ON INVESTMENT AND NET PRESENT VALUE)



New infrastructure will be required to support transition to clean fuels. While most new infrastructure may be conveniently and affordably located "behind the fence," it is likely that CNG infrastructure must be sited centrally and shared by multiple entities, which will present barriers to implementing a CNG project.

Public electric vehicle infrastructure is a regional priority. Ten to 30 new stations are recommended, predominantly in the Orange Park, Fleming Island and Green Cove Springs areas, with other stations located throughout the County to ensure coverage.

1.1 STAKEHOLDER SUMMARIES

Clay County organizations differ significantly in their potential to use alternative fuels. A summary of each organization's potential is discussed below.

FIGURE 2: JACKSONVILLE TRANSPORTATION AUTHORITY'S PUBLIC CNG STATION

1.1.1 City of Green Cove Springs

» **Autogas:** The City may cost-effectively transition between 37 and 45 Class 1 and 2 trucks and police cruisers to Autogas, including new fueling infrastructure at its current fleet facilities.

» **CNG:** The City may play a small role (5 to 16 Class 2 and 3 trucks) in a cooperative project to transition County fleets to CNG. Project feasibility is limited by convenient siting of a CNG fueling station.

» **Electricity:** The City may cost effectively transition up to six passenger vehicles to EVs, including new fueling infrastructure at present fleet locations, depending upon the feasibility of altering present fleet operational assumptions.

» **Biodiesel:** The City may cost-effectively utilize B20 in up to 15 Class 2 and 3 diesel trucks.

1.1.2 City of Keystone Heights

» **Autogas:** The City may cost-effectively transition 3 Class 1 and 2 trucks to Autogas, under the condition that another organization locates fueling structure in the vicinity of the City's fleet and consents to the City's use of their infrastructure.

- **CNG:** It is unlikely that CNG use will be feasible for the City.
- **Electricity:** It is unlikely EV use will be feasible for the City in the near future, unless it procures new passenger vehicles.
- **Biodiesel:** They City may cost-effectively utilize B20 in up to 2 Class 1 and 2 diesel trucks, under the condition that another organization provides fuel in the vicinity of the City's fleet and consents to the City's use of their infrastructure.

1.1.3 Clay County BOCC

- **Autogas:** The BOCC may cost-effectively transition between 28 and 222 Class 1 and 2 trucks to Autogas, including new fueling infrastructure at its current fleet facilities.
- **CNG:** The BOCC may play a key role (16 to 146 Class 1, 2 and 3 trucks) in a cooperative project to transition County fleets to CNG. Project feasibility is limited by convenient siting of a CNG fueling station.
- **Electricity:** The BOCC may cost-effectively transition up to 24 passenger vehicles to EVs, including new fueling infrastructure at present fleet locations, assuming it is feasible to alter present fleet operational requirements.
- **Biodiesel:** The BOCC may cost-effectively utilize B20 in up to 146 Class 1 and 2 diesel trucks.

1.1.4 Clay County Schools

- **Autogas:** Clay County Schools (CCS) may cost-effectively transition between 114 and 388 Class 1 and 2 trucks and School Buses (66 to 245) to Autogas, including new fueling infrastructure at its current fleet facilities.
- **CNG:** CCS may play a key role (80 to 273 Class 1 and 2 trucks and school buses) in a cooperative project to transition County fleets to CNG. Project feasibility is limited by convenient siting of a CNG fueling station. It is unlikely that CCS could cost-effectively develop such a project on its own.
- **Electricity:** The City may cost effectively transition between one and nine passenger vehicles to EVs, including new fueling infrastructure at present fleet locations.
- **Biodiesel:** The City may cost-effectively utilize B20 in between 87 to 254 Class 1 and 2 diesel trucks and school buses.

1.1.5 Clay County Sheriff

- **Autogas:** The Clay County Sheriff's Office (CSO) may cost-effectively transition between 240 and 354 Class 1 and 2 trucks and police cruisers (171 to 252 of the total) to Autogas, including new fueling infrastructure at its current fleet facilities.
- **CNG:** CSO may play a small role (up to 6 Class 1 and 2 trucks) in a cooperative project to transition County fleets to CNG. Project feasibility is limited by convenient siting of a CNG fueling station.
- **Electricity:** CSO may cost effectively transition up to 7 passenger vehicles to EVs, including new fueling infrastructure at present fleet locations, assuming it is feasible to alter present fleet operational requirements. This does not include vehicles currently programmed as police cruisers.

- **Biodiesel:** CSO may cost-effectively utilize B20 in up to 6 Class 1 and 2 diesel trucks, under the condition that another organization provides the fuel in the vicinity of the CSO's fleet and consents to the City's use of their infrastructure.

1.1.6 Clay County Transit

- **Autogas:** Clay County Transit (CCT) may cost-effectively transition between 13 and 36 Class 1 trucks and transit buses to Autogas, assuming it can cooperatively utilize new fueling infrastructure at the municipal fueling locations its uses in Orange Park and Green Cove Springs
- **CNG:** CCT may play a key role (13 to 36 Class 1 trucks and transit buses) in a cooperative project to transition County fleets to CNG. Project feasibility is limited by convenient siting of a single CNG fueling station. It is unlikely that CCT could cost-effectively develop such a project on its own.
- **Electricity:** It is unlikely that use of EVs will be feasible for the CCT in the near future. However, it should monitor advancements in developing of cost-effective electric transit buses.
- **Biodiesel:** CCT may cost-effectively utilize B20 in between 5 to 14 transit buses, assuming that the fuel is available at the municipal fueling locations in Orange Park and Green Cove Springs.

1.1.7 Clay County Utility Authority

- **Autogas:** Clay County Utility Authority (CUA) may cost-effectively transition between 36 and 76 Class 1 and 2 trucks to Autogas, including new fueling infrastructure at its current fleet facility.
- **CNG:** CUA may play a small role (13 to 39 Class 1 and 2 trucks) in a cooperative project to transition County fleets to CNG. Project feasibility is limited by convenient siting of a single CNG fueling station.
- **Electricity:** It is unlikely EV use will be feasible for the CCT in the near future.
- **Biodiesel:** CUA may cost-effectively utilize B20 in 34 Class 1 and 2 trucks.

1.1.8 Town of Orange Park

- **Autogas:** The Town may cost-effectively transition between 7 and 57 Class 1 and 2 trucks and police cruisers to Autogas, assuming it can cooperatively site (e.g. with CSO and CCT) new fueling infrastructure at its current fleet facilities.
- **CNG:** The Town is unlikely to play a role (potentially 14 to 18 Class 1, 2 and 3 trucks) in a cooperative project to transition County fleets to CNG, since project feasibility is limited by convenient siting of a CNG fueling station. It is unlikely fueling infrastructure would be sited close to the Town's fleet facility in the near future unless it is developed privately.
- **Electricity:** The Town may cost effectively transition 2 to 4 passenger vehicles to EVs. It already has EV charging infrastructure on its property.
- **Biodiesel:** The Town may cost-effectively utilize B20 in 14 Class 1, 2 and 3 trucks.

INTRODUCTION

Clean fuels provide an opportunity for Clay County to save money, improve environmental performance and enhance the quality of life of citizens.

As part of its Unified Planning Work Program, the North Florida TPO organized this assessment to determine the feasibility of transitioning to clean fuels among Clay County government agencies.

A kick-off meeting was held with Clay County Board of County Commissioners (BOCC) officials, during which the public fleets included in this analysis were identified and subsequently invited to participate.[1] These included:

- City of Green Cove Springs
- City of Keystone Heights
- Clay County BOCC
- Clay County Sheriff
- Clay County Schools
- Clay County Transit
- Clay County Utility Authority
- Town of Orange Park

This report is organized into three sections with an Appendix containing information supporting these.

- **Baseline:** The first section provides a baseline of current fleet conditions based on quantitative and qualitative data collected from the participating organizations. Baseline data was used to develop preliminary clean fuels projects. Data limitations, modifications and assumptions are detailed in the first Appendix.

- **Preliminary Clean Fuels Projects:** The second section describes preliminary clean fuels projects. These projects are designed to demonstrate feasibility of a generalized scope of work and facilitate prioritization of options. The assumptions and calculations underlying the preliminary projects are included in the second appendix.

- **Clean Fuels Infrastructure:** All clean fuels projects (with the possible exception of B20) will require new fueling infrastructure. The final section explores the special infrastructure requirements of CNG and electricity in particular, which require decisions regarding the siting of new infrastructure. Geospatial Analysis (GIS) was used to provide a basis for identifying suitable locations for CNG and electric infrastructure. Supporting map sets are included in the third appendix. Since Autogas infrastructure may typically be sited "behind the fence" of existing fleet operations, formal evaluation of infrastructure was not conducted.

[1] At the direction of participants, private fleets were not included in this phase of assessment.

BASELINE

This section characterizes County fleets according to fuel expenditure, fuel use, vehicle miles travelled, vintage, quantities, replacement potential and facilities. The data supporting these characterizations were obtained from each organization via a formal data collection process and was supplemented with interviews with representatives from each organization. Below is a summary of key characteristics:

- County organizations spend over $3 million per year on gasoline and diesel fuel, although each organization tends to consume fuel and cover distances differently, based on their unique organizational requirements.
- Generally, County fleets are old, with 2007 the average model year and half of vehicles aged 8 or more years. This indicates potential for significant replacement of vehicles.
- There are more than 1,500 vehicles in operation among the organizations. The majority are police cruisers, light trucks / SUVs and medium-duty trucks, with relatively few passenger vehicles and heavy-duty trucks.
- The potential for vehicle replacements based on interviews with organizations' representatives is significant for most vehicle types and fuels. An exception is electric vehicles. Few passenger vehicles, a preference for SUVs / light trucks and a reluctance to use electric vehicles on unpaved roads limit the potential of this cost-effective option.
- Fleet facilities are located throughout the County, with at least seven fueling locations operated by County organizations. Most are used by more than one organization. Maintenance facilities are also often used in common. With the exception of two electric vehicle charging stations, owned by the Town of Orange Park and Clay Electric Cooperative in Keystone Heights, respectively, no clean fuel infrastructure is located in the County.

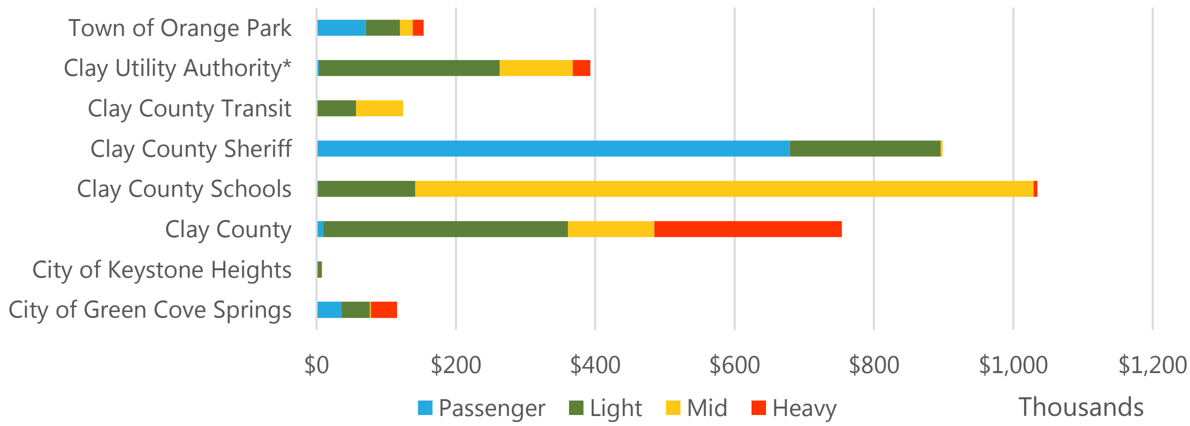
The baseline character of County fleets was used to develop potential clean fuels projects. These projects are detailed in the next section.

FIGURE 3: CHARGEWELL EV CHARGING STATION AT THE NORTH FLORIDA TPO'S OFFICES IN JACKSONVILLE

2.1 EXPENDITURE

As a whole, the County spends over $3 million dollars on on-road vehicle fuel per year, based on data ranging from the year 2013-2015. Figure 1 summarizes expenditures by County organization. For each organization, expenditure is further broken down by vehicle type.

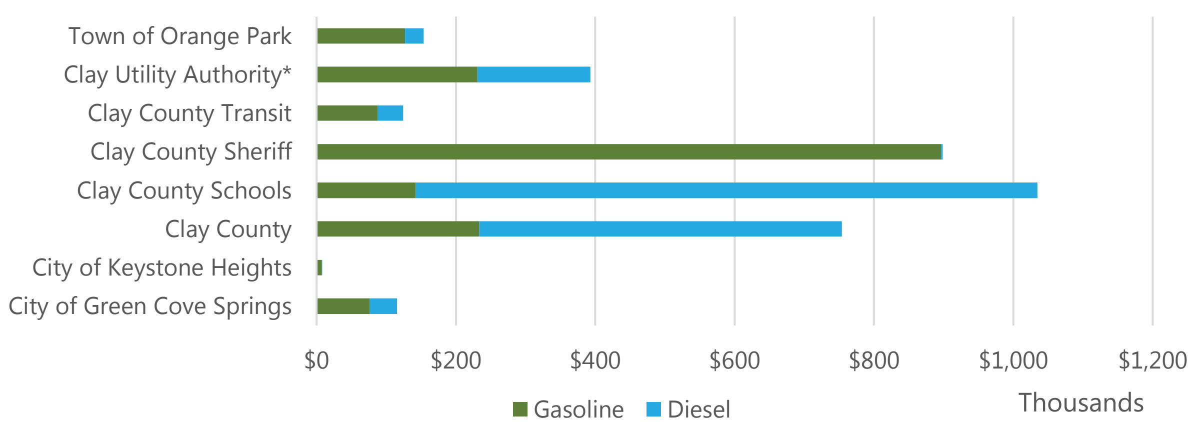
FIGURE 4: ROAD FUEL EXPENDITURE (DOLLARS) BY VEHICLE TYPE



**Cost by vehicle type estimated as a proportion of total vehicle fuel expenditure.*

Countywide, expenditures are roughly equally divided between gasoline and diesel expenditures, though the balance between the two fuels varies considerably among agencies (Figure 5).

FIGURE 5: ROAD FUEL EXPENDITURE (DOLLARS) BY FUEL TYPE

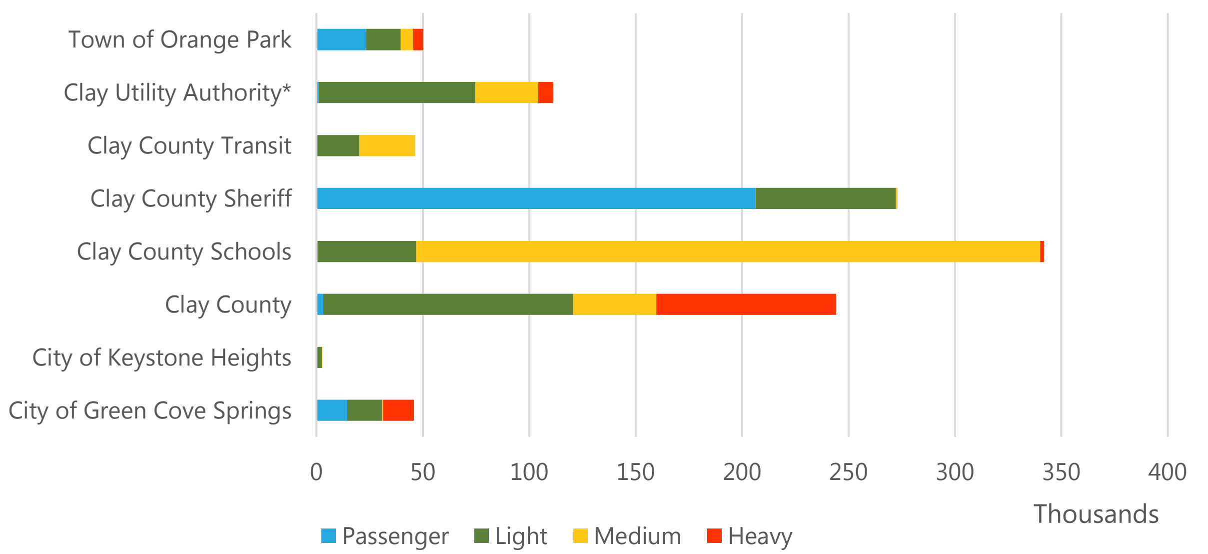


**Cost by fuel type estimated as a proportion of total vehicle fuel expenditure.*

2.2 FUEL USE

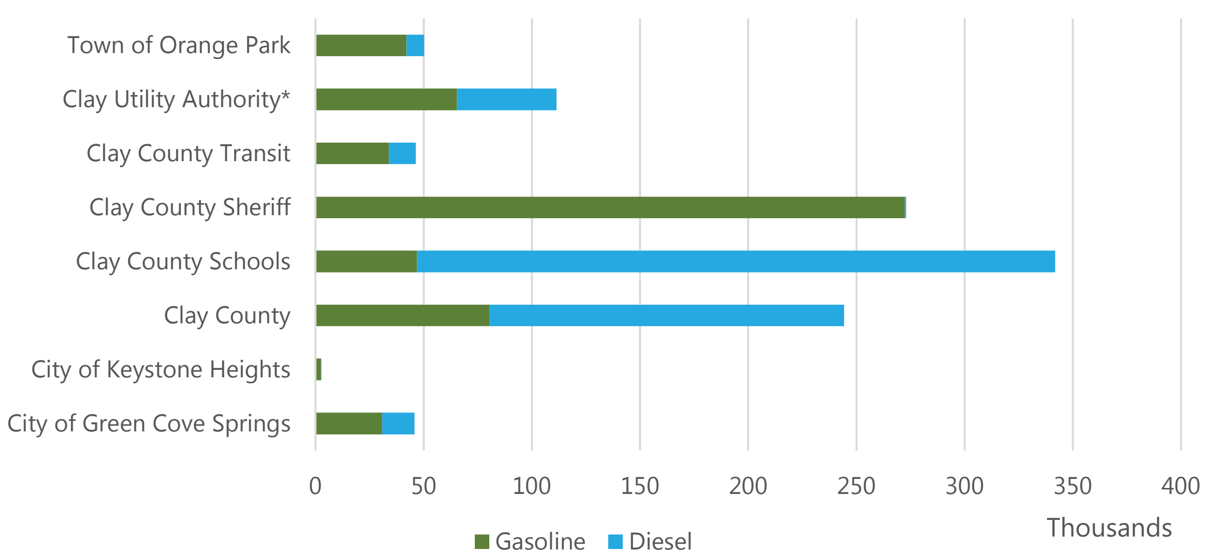
Fuel use correlates strongly with fuel expenditure and vice versa, as indicated by Figure 6 and Figure 7, which graph on-road fuel use by vehicle type and by fuel type, respectively.

FIGURE 6: ROAD FUEL USE (GALLONS) BY VEHICLE TYPE



**Use by vehicle type estimated as a proportion of total vehicle fuel consumption.*

FIGURE 7: ROAD FUEL USE (GALLONS) BY FUEL TYPE



**Use by fuel type estimated as a proportion of total vehicle fuel consumption.*

Average fuel use by vehicle class varies substantially by organization, reflecting differing organizational requirements for fleet vehicles and / or data quality issues. Values are shown in Table 1. Average values for each organization's fuel use by vehicle type were used as inputs in the clean fuels projects detailed in the following section.

TABLE 1: AVERAGE ROAD FUEL USE BY VEHICLE TYPE (GALLONS PER YEAR)

Organization	Passenger	Light	Medium	Heavy
City of Green Cove Springs	656	456	95	1,035
City of Keystone Heights	-	647	70	-
Clay County	136	716	464	1,364
Clay County Schools	51	348	974	576
Clay County Sheriff	665	673	61	-
Clay County Transit	-	4,049	607	-
Clay Utility Authority	1,022	1,022	1,022	1,022
Town of Orange Park	755	540	832	434
Average	621	661	820	1,127

The fuel economy of county fleets remains uncertain. As indicated by Table 2, data reported by organizations, or calculated based on data provided by organizations, indicates fuel economy values far higher than national averages for vehicle types in most cases. For the purposes of analysis, the values shown in this table were not used. Instead, national averages published by the U.S. Department of Transportation Bureau of Transportation Statistics for the average vehicle model year were used in clean fuels projects business cases.

TABLE 2: AVERAGE FUEL ECONOMY (MILES PER GALLON) BY FUEL AND VEHICLE TYPE

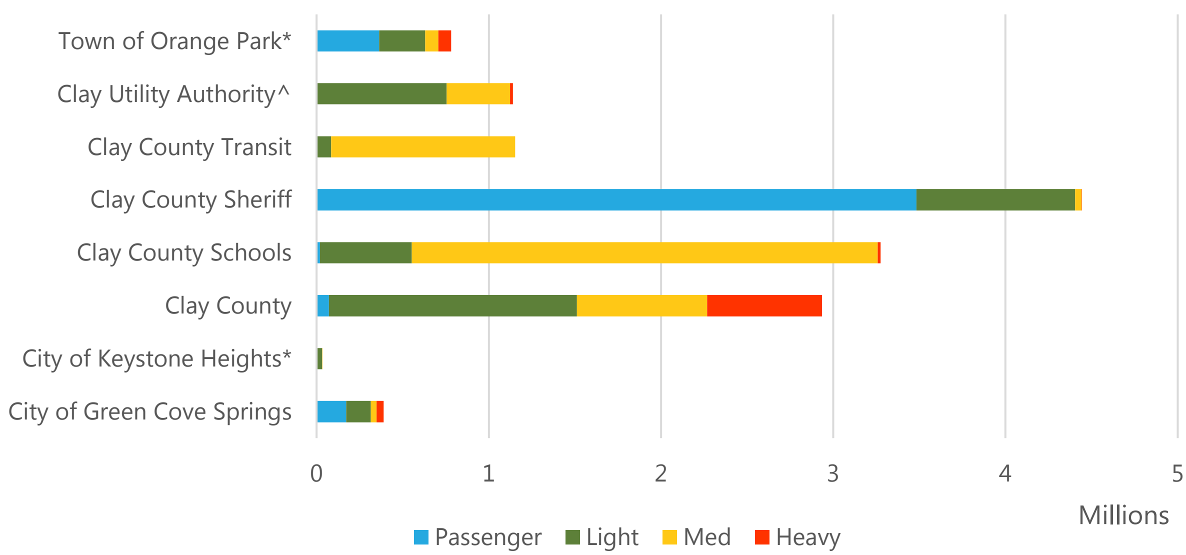
	Gasoline						Diesel				
Organization	Pass.	Light	Med.	Heavy	M/C	Sum	Light	Med.	Heavy	Sum	Total
City of Green Cove Springs	16.7	22.3	-	-	-	19.8		50.6	30.1	32.4	22.2
City of Keystone Heights	-	-	-	-	-	-	-	-	-	-	-
Clay County	23.0	20.0	38.3	-	-	20.9	46.7	31.3	31.3	34.1	27.3
Clay County Schools-	-	-	-	-	-	-	-	-	-	-	-
Clay County Sheriff	17.0	14.6	9.2	-	-	16.3	73.5	5.6	-	46.4	16.8
Clay County Transit	-	49.2	29.3	-	-	32.4	-	51.7	-	51.7	38.3
Clay Utility Authority	-	-	-	-	-	-	-	-	-	-	-
Town of Orange Park	-	-	-	-	-	-	-	-	-	-	-
Average	17.5	19.3	26.1			18.8	49.3	34.4	31.2	35.7	23.0

**Highlighted values are significantly higher than typical fuel economy range for the vehicle type. National averages by vehicle type were used in all analyses.*

2.3 VEHICLE MILES TRAVELLED

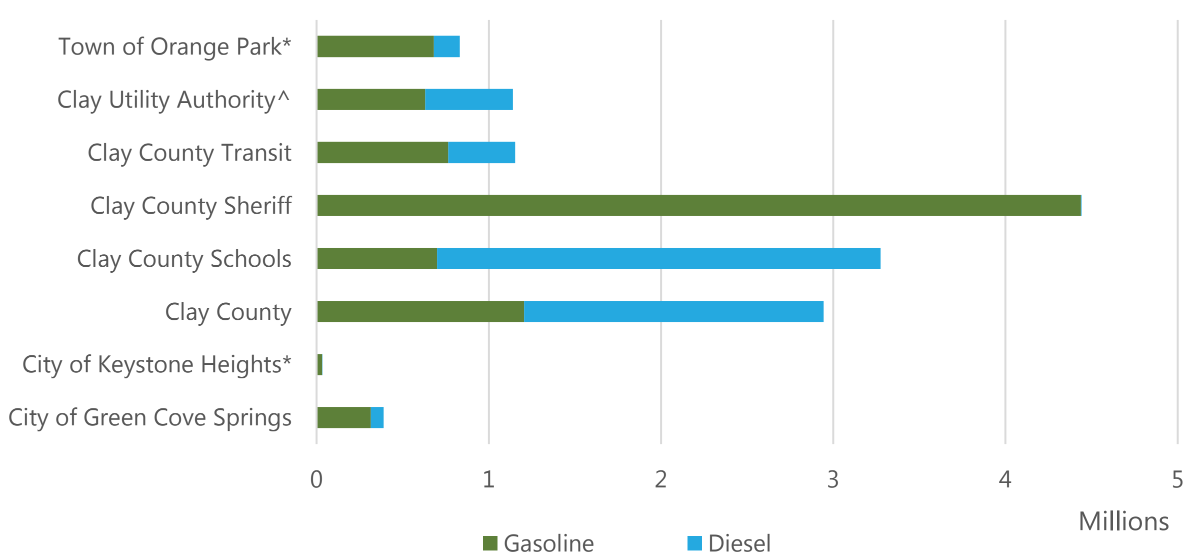
Figure 8 and Figure 9 graph estimated annual vehicle miles travelled (VMT) by vehicle type and fuel type for each organization, based on data received for the years 2013 – 2015. In some cases, VMT was estimated using methods indicated in the figures below.

FIGURE 8: ANNUAL VEHICLE MILES (MILLIONS) BY VEHICLE TYPE



**Vehicles miles by vehicle type estimated as a function of county-average fuel economy and the organization's annual fuel use (i.e. fuel use ÷ fuel economy = vehicle miles)*
^Vehicle miles by vehicle type estimated as a proportion of the fleet's total vehicle miles

FIGURE 9: ANNUAL VEHICLE MILES (MILLIONS) BY FUEL FYPE



** Vehicles miles by vehicle type estimated as a function of county-average fuel economy and the organization's annual fuel use (i.e. fuel use ÷ fuel economy = vehicle miles)*
^ Vehicle miles by vehicle type estimated as a proportion of the fleet's total vehicle miles

Each organization's average VMT by vehicle type and fuel type are shown in Table 3. The average of these values were used in the clean fuels projects business cases detailed in the following section.

TABLE 3: ANNUAL AVERAGE VEHICLE MILES (MILLIONS) BY FUEL AND VEHICLE TYPE

	Gasoline			Diesel		
Organization	Pass.	Light	Med.	Light	Med.	Heavy
City of Green Cove Springs	10,107	6,812	-	-	11,154	5,236
City of Keystone Heights	-	8,020	-	-	864	-
Clay County	2,952	8,329	3,758	11,087	9,604	11,128
Clay County Schools	1,557	4,060	7,564	2,662	9,088	5,154
Clay County Sheriff	11,727	9,976	4,070	1,112	560	70
Clay County Transit	-	16,872	25,193	-	24,323	-
Clay Utility Authority	-	13,939	11,911	16,665	15,475	4,195
Town of Orange Park	14,569	9,866	5,877	613	26,108	7,435
Average	10,931	8,059	13,576	11,174	10,126	9,491

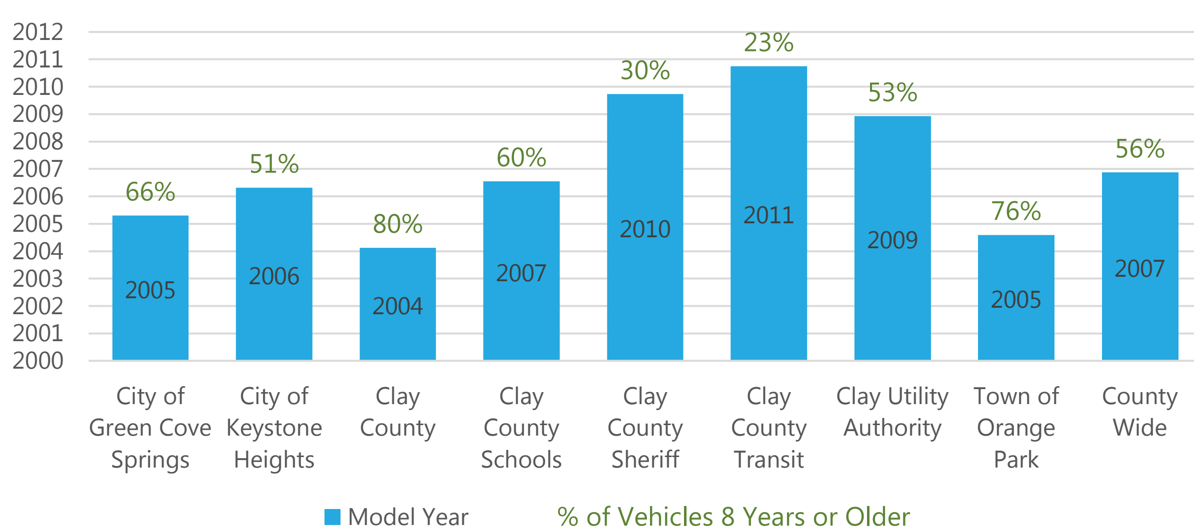
2.4 VINTAGE

The average model year county-wide is 2007, with over half of vehicles eight years old (i.e. model year 2009 or older). Exceptions are Clay County Transit and Clay County Sheriff's Office, both of which have relatively modern fleets.

During interviews, most representatives of County organizations indicated that the vintage of their fleet is older than in the past due to the lingering effects of the Great Recession, which have led to deferred investment in vehicle replacements. This suggests that some organizations are in a unique position to shift to clean fuels when and if conditions justify returning to historic replacement rate.

Figure 2 graphs the average model year of vehicles with the percentage of vehicles eight years or older.

FIGURE 10: COUNTY FLEETS BY AVERAGE MODEL YEAR (W/ PERCENTAGE OF VEHICLES EIGHT YEARS OR OLDER)



2.5 QUANTITIES

Among the seven organizations, there are approximately 1,535 vehicles, with 39 percent in the Passenger Vehicle category, 38 percent in the Light Truck category, 9 percent in the Medium Truck category and 14 percent in the Heavy Truck category.[2] In addition, Clay County Sheriff operates 10 motorcycles.

Figure 11 illustrates the proportion of vehicle types by organization, with selected quantities shown. It indicates the high variability among the County's fleets.

Table 4 tabulates quantities of vehicles by fuel and by type for each organization.

FIGURE 11: ROAD VEHICLES BY TYPE (I.E. WEIGHT CLASS)

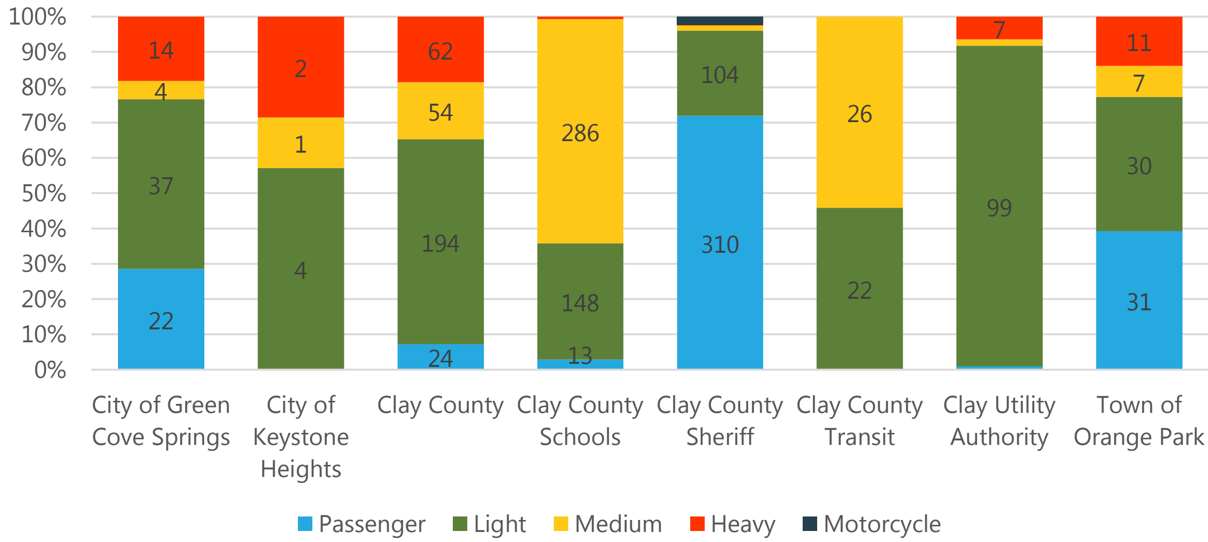


Table 4 indicates the number of vehicles operated by each organization by fuel type and by vehicle type.

TABLE 4: ROAD VEHICLES BY ORGANIZATION BY FUEL BY TYPE (I.E. WEIGHT CLASS)

	Gasoline						Diesel				
Organization	Pass.	Light	Med.	Heavy	M/C	Sum	Light	Med.	Heavy	Sum	Total
City of Green Cove Springs	22	36	1	0	0	59	0	4	14	18	77
City of Keystone Heights	0	4	0	1	0	5	0	1	1	2	7
Clay County	24	134	7	0	0	165	30	77	62	169	334
Clay County Schools	13	130	20	0	0	163	2	281	3	286	449
Clay County Sheriff	310	95	9	0	10	424	3	3	1	7	431
Clay County Transit	0	5	27	0	0	32	0	16	0	16	48
Clay Utility Authority	1	57	6	0	0	64	15	23	7	45	109
Town of Orange Park	31	29	5	0	0	65	1	2	11	14	79
Total	401	490	75	1	10	977	51	407	99	557	1534

[2] Vehicle type for trucks is defined by the Federal Highway Administration system of vehicle classification, which organizes vehicles into eight classes based on gross vehicle weight ratings. Light = Class 1 & 2, Medium = Class 3 – 6, Heavy = Class 7 & 8.

The majority of passenger vehicles in the county are police cruisers. Most vehicles serving the role of passenger vehicles that are not police cruisers are actually light trucks of the "Sport Utility Vehicle" type. Interviews with representatives of Clay County organizations indicated that these vehicles are preferred for tasks that typically call for passenger vehicles due to the preponderance of unpaved roads in the County. However, most of these SUVs do not appear to be equipped with four-wheel drive. The perception among these representatives that these vehicles provide superior access to such roads may represent a strong preference for these vehicles that is based on factors other than performance. Market research indicates that American consumers prefer SUVs / light trucks to sedans, despite fuel economy disadvantages.

2.6 REPLACEMENT POTENTIAL

Potential vehicle replacements over the next 5-6 years were identified via interviews with representatives of each organization. The results of this qualitative assessment is summarized in Table 5.

The table shows stated potential replacements of conventionally fueled vehicles with electric, Autogas, biodiesel or natural gas vehicles for each organization. The potential number of conventional transit ("Transit"), school bus ("School") and police cruiser ("Police") vehicles replaced with Autogas vehicles, and the potential number of conventional transit and school vehicles replaced with natural gas vehicles were estimated in comparison with all ("All") potential vehicle replacements for these fuels.

TABLE 5: STATED POTENTIAL REPLACEMENTS OVER THE NEXT 5-6 YEARS BY ORGANIZATION

Organization	Electricity	Autogas				Biodiesel	Natural Gas		
		All	Transit	School	Police		All	Transit	School
City of Green Cove Springs	0	37	0	0	16	15	5	0	0
City of Keystone Heights	0	3	0	0	0	2	0	0	0
Clay County	2	28	0	0	0	16	16	0	0
Clay County Schools	1	114	0	66	0	87	80	0	66
Clay County Sheriff	0	240	0	0	240	6	6	0	0
Clay County Transit	0	13	12	0	0	5	13	12	0
Clay Utility Authority	0	36	0	0	0	34	13	0	0
Town of Orange Park	2	7	0	0	3	14	3	0	0
Total	5	478	12	66	259	179	136	12	66

The values in Table 5 were used to develop preliminary business cases for clean fuels projects. The results of these analyses are detailed in the following section.

In general, the estimates in Table 5 are informally based on historical rates of procurement and do not represent specific commitments by the organizations. The notably low number of potential replacements of conventional vehicles with electric models is a reflection of two factors. The first is the relatively low number of passenger vehicles in the County relative to light trucks / SUVs. The second is the perception that electric vehicles are not capable of accessing unpaved roads within the County.

The actual number of vehicles suitable for replacement with alternative fuel vehicles may be much higher than the estimates in Table 5, which is based on recent, historically low rates of replacement. Given the model year of vehicles, the technical potential for replacement may be as much as three times higher than the estimates in Table 5 (and as much as 10 times higher for electric vehicles). These values are shown in Table 6.

TABLE 6: TECHNICAL POTENTIAL REPLACEMENTS BY ORGANIZATION

Organization	Electricity	Autogas				Biodiesel	Natural Gas		
		All	Transit	School	Police		All	Transit	School
City of Green Cove Springs	24	222	0	0	0	146	146	0	0
City of Keystone Heights	9	388	0	245	0	254	273	0	245
Clay County	0	36	35	0	0	14	36	35	0
Clay County Schools	0	3	0	0	0	2	3	0	0
Clay County Sheriff	7	354	0	0	354	6	6	0	0
Clay County Transit	0	76	0	0	0	34	39	0	0
Clay Utility Authority	6	45	0	0	16	15	16	0	0
Town of Orange Park	4	57	0	0	23	14	18	0	0
Total	50	1181	35	245	393	485	537	35	245

This technical potential represents a potential upper limit based on the organization's current vehicle inventory. Procurement of more clean fuels vehicles than the numbers summarized in Table 5 will require departures from recent rates of vehicle procurement and careful consideration of the operational requirements of the vehicles to be replaced.

The sensitivity of the business cases for clean fuels projects to the number of vehicles procured was evaluated using the values in Table 8. These analyses generally indicated that the economic performance of clean fuels projects improves as the number of vehicles involved increases.

In some cases, a greater number of vehicles than indicated in Table 5 will be required for a project to be financially feasible. This includes scenarios in which Clay County Transit and Clay County Schools unilaterally transition their fleets to run on compressed natural gas. These scenarios are discussed in more detail in the next section.

2.8 FLEET FACILITIES

Organizations house fleets across the county. Table 7 lists the locations of fleet assets by organization.

TABLE 7: FLEET LOCATIONS

Organization	Address	City	Zip
City of Green Cove Springs	900 Gum Street	Green Cove Springs	32043
City of Green Cove Springs	1289 Harbor Road	Green Cove Springs	32043
City of Green Cove Springs	1001 Idlewild Avenue	Green Cove Springs	32043
City of Keystone Heights	50 Magnolia Avenue	Keystone Heights	32656
Clay County	5 Esplande Avenue	Green Cove Springs	32043
Clay County Schools	800 Walnut Street	Green Cove Springs	32043
Clay County Schools	6770 County Road 315C	Keystone Heights	32656
Clay County Schools	3674 County Road 220	Middleburg	32068
Clay County Sheriff	901 North Orange Avenue	Green Cove Springs	32043
Clay County Transit	604 Walnut Street	Green Cove Springs	32043
Clay County Transit	414 Stowe Avenue	Orange Park	32073
Clay County Transit	3916 Section Street	Middleburg	32068
Clay County Transit	125 Commercial Circle	Keystone Heights	32656
Clay Utility Authority	3173 Old Jennings Road	Middleburg	32068
Town of Orange Park	700 Ash Street	Orange Park	32073

Fleets also fuel vehicles throughout the county, typically via fuel locations owned by the organization or shared with another organization. County fleets fuel at seven locations, most of which are utilized by more than one county fleet. Table 8 collects these locations. County fleets also share maintenance facilities. Locations of fueling locations and maintenance facilities are important considerations to evaluate the potential clean fuels infrastructure locations and the feasibility of transitions to clean fuels.

TABLE 8: COUNTY FUELING LOCATIONS

Street	City / Town	Users
700 Ash Street	Orange Park	Town of Orange Park, Clay County Sheriff's Office, Clay County Transit
4003 Everett Avenue	Middleburg	Clay County Sheriff's Office
County Road 220	Middleburg	Clay County Schools
900 Gum Street	Green Cove Springs	City of Green Cove Springs, Clay County Sheriff's Office, Clay County Transit
5 Esplanade Avenue	Green Cove Springs	Clay County BOCC, Green Cove Springs
10 Citrus Drive	Keystone Heights	Clay County Sheriff's Office
6770 County Road 315C	Keystone Heights	Clay County Schools

PRELIMINARY CLEAN FUELS PROJECTS

3.1 SUMMARY

Nine clean fuels projects were evaluated technically and economically. For each project, a base case using prevailing assumptions was evaluated. Table 9 summarizes the projects evaluated, including a description of the base case and whether the project is likely to be cost-effective.

TABLE 9: CLEAN FUELS PROJECTS, BASE CASE

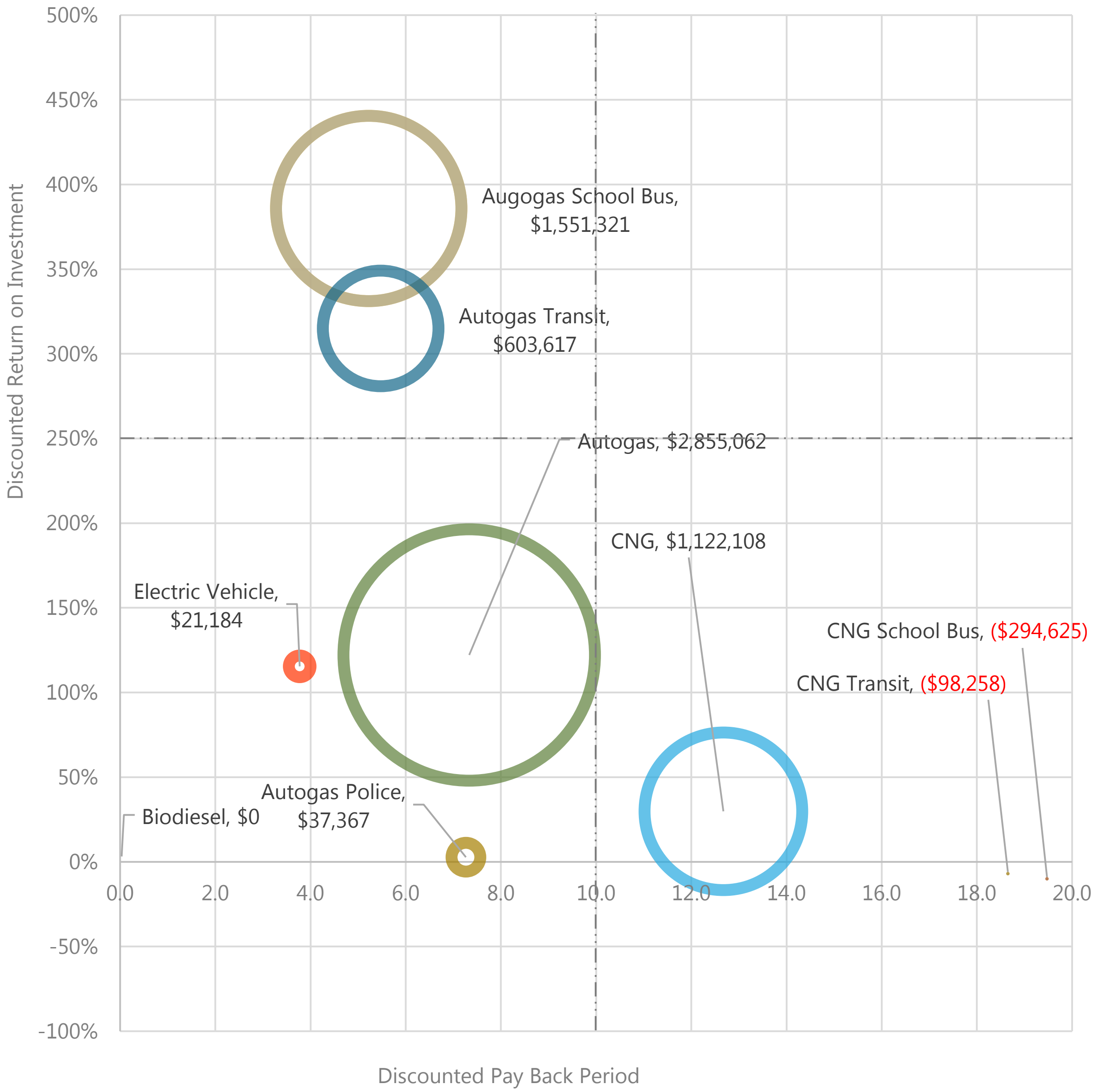
Project	Fuel	Vehicles	Base Case Description	Likely to be Cost Effective?
1	Autogas	Light & Medium Trucks	Procure 485 new Autogas vehicles (school & transit buses, class 1 & 2 trucks, police cruisers); design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives.	**Yes**
2	Autogas	Transit	As above, with 12 transit buses only.	**Yes**
3	Autogas	School Bus	As above, with 66 school buses only.	**Yes**
4	Autogas	Police	As above, with 100 police passenger vehicles only.	**Maybe**
5	CNG	Truck Fleet	Procure 136 new CNG vehicles (school and transit buses, class 1-3 trucks); design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives.	**Yes**
6	CNG	Transit	As above, with 12 transit buses only.	**No**
7	CNG	School Bus	As above, with 66 school buses only.	**No**
8	Electricity	Passenger Vehicles	Procure 5 new electric vehicles (EVs); Design, build, operate & maintain new fueling infrastructure.	**Yes**
9	Biodiesel	Diesel Trucks	Replace diesel with biodiesel 20% / diesel 80% blend (B20) for up to 485 existing diesel vehicles.	**Maybe**

Figure 12 graphs the estimated cost-effectiveness of base case projects. It includes the three cost-effectiveness measures defined below. All are "discounted" to account for the time-value of money, which quantifies the idea that a dollar received today is more valuable than a dollar received in the future. In all analyses a discount rate of 3.2% is used.

- Discounted payback period (DPP, x-axis). DPP indicates how fast an investment "breaks even."
- Discounted return on investment (DROI, y-axis). DROI compares the size of investment to gains
- Net present value (NPV, size of the graphed circles). NPV measures profitability.

Together, these cost-effectiveness measures provide a picture of the relative cost-effectiveness of a project.

FIGURE 12: BASE CASE ALTERNATIVE FUEL PROJECT COST-EFFECTIVENESS (DISCOUNTED PAY BACK PERIOD, RETURN ON INVESTMENT AND NET PRESENT VALUE)



Projects located in the upper-left quadrant of Figure 12 are the most cost-effective. Projects in the lower-left quadrant break even quickly, but require proportionately more investment compared to returns. Projects in the lower-right quadrant require more time to break even and proportionately even more investment compared to returns. Some projects in this quadrant are not cost-effective at all.

Generally, projects involving Autogas show the best financial performance, followed by electricity and some natural gas projects. Compressed natural gas involving solely school bus or transit fleets are not likely to be cost effective.

Several assumptions were made to develop project business cases. These assumptions include present day fuel prices, as well as judgements about key variables that include:

- infrastructure cost,
- available fuel tax credits,
- public-private partnership (P3) pricing parameters,
- rates of fuel price inflation,
- revenue from third party fuel sales, and
- available financial incentives for alternative fuel vehicles.

These variables were altered to produce four scenarios. These scenarios illustrate sensitivity to changes in key variables.

In addition to the base case, alternative cases were evaluated. These alternatives evaluated the effect of project scale (e.g. number of vehicles) and future fuel prices on project cost-effectiveness. The sensitivity of these alternative cases to changes in key assumptions was also evaluated.

Results of base case analyses as well, as alternative cases, are summarized in the fuel-specific sections that follow.

FIGURE 13: AMERIGAS' PUBLIC PROPANE AUTOGAS FUELING STATION NEAR US90 AND SR 115 IN JACKSONVILLE

3.2 PROPANE (AUTOGAS)

3.2.1 Light and Medium Duty Vehicle Fleet

Table 10 summarizes the potential financial performance of a transition to an Autogas fleet under four cases, each of which examine four scenarios. All cases assume that several organizations collaboratively transition to Autogas vehicles and utilize up to eight fueling stations individually or collaboratively.

- Base Case: 485 new Autogas vehicles (school and transit buses, class 2 and 1 trucks, police cruisers), based on the organizations' stated replacement potential.
  - Scenario 1: Design, build, operate and maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives.
  - Scenario 2: As Scenario 1 with a 50 percent decrease in vehicle incentives.
  - Scenario 3: As Scenario 2 with public-private (P3) development of fueling infrastructure.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure.
- Technical Potential: 1,246 new Autogas vehicles (school and transit buses, class 2 and 1 trucks, police cruisers). Scenarios are as in the Base Case.
- Low Fuel Prices: 485 new Autogas vehicles. Average annual price increases of 2.6, 2.5 and 2.1 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 485 new Autogas vehicles. Average annual price increases of 5.0 , 6.2 and 5.6 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 10: AUTOGAS LIGHT AND MID-DUTY VEHICLE FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	$2,855,062	19%	122%	7.3	20.5
Scenario 2	$1,962,145	12%	61%	9.3	20.5
Scenario 3	$2,041,766	14%	76%	9.0	20.5
Scenario 4	$2,934,683	25%	164%	6.8	20.5
2. Technical Potential					
Scenario 1	$7,021,210	22%	144%	6.9	20.5
Scenario 2	$4,998,860	13%	73%	8.9	20.5
Scenario 3	$4,740,228	14%	78%	8.9	20.5
Scenario 4	$6,762,578	26%	167%	6.8	20.5
3. Low Fuel Prices					
Scenario 1	$2,172,529	18%	94%	7.7	20.5
Scenario 2	$1,256,681	9%	39%	9.8	20.5
Scenario 3	$1,336,303	11%	50%	9.6	20.5
Scenario 4	$2,229,220	22%	125%	7.2	20.5
4. High Fuel Prices					
Scenario 1	$3,729,994	24%	161%	7.0	20.5
Scenario 2	$2,814,146	14%	87%	8.7	20.5
Scenario 3	$2,893,767	17%	108%	8.4	20.5
Scenario 4	$3,786,684	29%	212%	6.5	20.5

Table 10 indicates a transition of school and transit buses, class 2 and 1 trucks and police cruisers to Autogas is financially feasible under all cases and scenarios.

- While cost-effective under all scenarios, the Base Case performs best when utilizing all available financial incentives.
- Financial performance is not highly sensitive to the delivery method.
- Financial performance is slightly improved by procuring more vehicles, as indicated by the Technical Potential case, which produces marginally higher cost-effectiveness measures than the Base Case.
- Financial performance is not greatly affected by fuel price assumptions. Under both the Low and High Fuel price scenarios, results remain similar to the Base case.

While all cases assume a collaborative effort among county organizations sharing up to eight Autogas fueling stations, it is likely that each organization could cost-effectively pursue an Autogas transition unilaterally, as indicated by the Transit, School Bus and Police Fleet Projects that follow. Autogas fueling infrastructure is assumed to cost about $50,000 per station and can be located at existing fleet locations. Due to the relatively low cost of infrastructure, it does not have be co-located or shared among organizations, although doing so would likely improve the project's financial performance.

Table 11 shows the quantity of vehicles potentially transitioned by each organization, based on stated vehicle replacement potential (Base Case) as well as each organization's technical potential.

TABLE 11: BASE CASE AND TECHNICAL POTENTIAL VEHICLE REPLACEMENT BY ORGANIZATION FOR AUTOGAS

Row Labels	Base Case	Technical Potential
City of Green Cove Springs	37	45
City of Keystone Heights	3	3
Clay County BOCC	28	222
Clay County Schools	114	388
Clay County Sheriff	240	354
Clay County Transit	13	36
Clay Utility Authority	36	76
Town of Orange Park	7	57
Total	478	1181

3.2.3 Transit

Table 12 summarizes the potential financial performance of a transition to an Autogas fleet under four cases, each of which examines four scenarios. All cases assume that Clay Transit unilaterally pursues a transition to Autogas buses, including two new fueling stations.

- Base Case: 12 new Autogas transit buses (Clay Transit's stated replacement potential).
  - Scenario 1: Design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives, respectively.
  - Scenario 2: As Scenario 1 with a 50 percent decrease in vehicle incentives.
  - Scenario 3: As Scenario 2 with P3 development of fueling infrastructure.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure.
- Technical Potential: Procure 35 new Autogas transit buses. Scenarios are as in the Base Case.
- Low Fuel Prices: 12 new Autogas transit buses. Average annual price increases of 2.6, 2.5 and 2.1 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Oil Prices: 12 new Autogas transit buses. Average annual price increases of 5.0, 6.2 and 5.6 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 12: AUTOGAS TRANSIT VEHICLE FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	$603,617	29%	315%	5.5	20.5
Scenario 2	$576,710	26%	264%	6.0	20.5
Scenario 3	$626,065	89%	776%	2.8	20.5
Scenario 4	$652,972	167%	1213%	1.7	20.5
2. Technical Potential					
Scenario 1	$2,002,957	56%	679%	3.2	20.5
Scenario 2	$1,924,305	46%	515%	4.1	20.5
Scenario 3	$1,823,934	89%	773%	2.8	20.5
Scenario 4	$1,902,586	167%	1209%	1.7	20.5
3. Low Fuel Prices					
Scenario 1	$459,604	26%	240%	5.5	20.5
Scenario 2	$432,697	23%	198%	6.4	20.5
Scenario 3	$482,052	83%	597%	2.9	20.5
Scenario 4	$508,959	159%	946%	1.7	20.5
4. High Fuel Prices					
Scenario 1	$784,499	31%	409%	5.2	20.5
Scenario 2	$757,592	28%	347%	5.6	20.5
Scenario 3	$806,947	95%	1000%	2.6	20.5
Scenario 4	$833,855	175%	1549%	1.6	20.5

As Table 12 indicates, transitioning the Clay Transit fleet to Autogas is cost effective in all cases and scenarios. It is very sensitive to the availability of incentives and the delivery method. Cost effectiveness is improved by transitioning the entire fleet, but is not very sensitive to fuel prices.

3.2.4 School Bus

Table 13 summarizes the potential financial performance of a transition to an Autogas fleet under four cases, each of which examines four scenarios. All cases assume that Clay County Schools unilaterally pursues a transition to Autogas buses, including three new fueling stations.

- Base Case: 66 new Autogas school buses (Clay County Schools' stated replacement potential).
  - Scenario 1: Design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives, respectively.
  - Scenario 2: As Scenario 1 with a 50 decrease in vehicle incentives.
  - Scenario 3: As Scenario 2 with P3 development of fueling infrastructure.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure.
- Technical Potential: 240 new Autogas school buses. Scenarios are as in the Base Case.
- Low Fuel Prices: 66 new Autogas school buses. Average annual price increases of 2.6, 2.5 and 2.1 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 66 new Autogas school buses. Average annual price increases of 5.0, 6.2 and 5.6 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 13: AUTOGAS SCHOOL BUS VEHICLE FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	$1,551,321	33%	386%	5.2	20.5
Scenario 2	$1,453,648	28%	291%	6.4	20.5
Scenario 3	$1,490,812	51%	509%	4.4	20.5
Scenario 4	$1,588,485	86%	813%	3.0	20.5
2. Technical Potential					
Scenario 1	$6,145,328	58%	670%	3.4	20.5
Scenario 2	$5,790,152	42%	455%	4.8	20.5
Scenario 3	$5,421,133	51%	509%	4.4	20.5
Scenario 4	$5,776,309	86%	813%	3.0	20.5
3. Low Fuel Prices					
Scenario 1	$1,188,915	30%	296%	5.3	20.5
Scenario 2	$1,091,241	24%	218%	6.3	20.5
Scenario 3	$1,128,405	46%	385%	4.8	20.5
Scenario 4	$1,226,079	80%	628%	3.2	20.5
4. High Fuel Prices					
Scenario 1	$2,013,834	36%	501%	4.9	20.5
Scenario 2	$1,916,160	31%	383%	5.9	20.5
Scenario 3	$1,953,324	56%	667%	4.1	20.5
Scenario 4	$2,050,998	92%	1050%	2.8	20.5

As Table 13 indicates, transitioning the school bus fleet to Autogas is cost effective in all cases and scenarios. It is very sensitive to the availability of incentives and the delivery method. Cost-effectiveness is improved by transitioning a greater number of vehicles, but is not very sensitive to fuel prices.

3.2.5 Police Vehicle Fleet

Table 14 summarizes the potential financial performance of a transition to an Autogas fleet under four cases, each of which examines four scenarios. All cases assume that Clay Sheriff's Office unilaterally pursues a transition to Autogas police cruisers, including four new fueling stations.

- Base Case: 259 new Autogas police cruisers (Clay Sheriff's Office stated replacement potential).
  - Scenario 1: Design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives, respectively.
  - Scenario 2: As Scenario 1 with a 50 decrease in vehicle incentives.
  - Scenario 3: As Scenario 2 with P3 development of fueling infrastructure.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure.
- Technical Potential: 393 new Autogas police cruisers. Scenarios are as in the Base Case.
- Low Fuel Prices: 259 new Autogas police cruisers. Average annual price increases of 2.6, 2.5 and 2.1 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 259 new Autogas police cruisers. Average annual price increases of 5.0, 6.2 and 5.6 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 14: AUTOGAS POLICE VEHICLE FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	$37,367	6%	3%	7.3	15.5
Scenario 2	($369,036)	-	-21%	17.2	15.5
Scenario 3	$41,026	4%	3%	9.6	14.5
Scenario 4	$447,430	19%	55%	6.7	14.5
2. Technical Potential					
Scenario 1	$62,510	7%	3%	6.9	15.5
Scenario 2	($552,529)	-	-22%	17.6	15.5
Scenario 3	($78,065)	2%	-4%	10.3	14.5
Scenario 4	$536,973	17%	44%	6.7	14.5
3. Low Fuel Prices					
Scenario 1	($39,227)	-	-3%	13.3	15.5
Scenario 2	($445,631)	-	-25%	19.4	15.5
Scenario 3	($35,569)	2%	-3%	11.1	14.5
Scenario 4	$370,835	16%	46%	7.0	14.5
4. High Fuel Prices					
Scenario 1	$116,144	9%	9%	6.9	15.5
Scenario 2	($290,260)	-	-17%	15.8	15.5
Scenario 3	$119,802	6%	10%	8.5	14.5
Scenario 4	$526,206	22%	65%	6.4	14.5

Per Table 14, the cost-effectiveness of a transition to Autogas police cruisers is highly dependent on available incentives. While increasing the number of vehicles involved in a transition is not very important for cost-effectiveness, the future price of fuel will be very important for assessing the financial performance of any project. P3 procurement may improve cost-effectiveness.

3.3 ELECTRIC VEHICLES

Table 19 summarizes the potential financial performance of a transition to an electric vehicle (EV) fleet under four cases, each of which examine four scenarios. Scenarios 2-4 assume availability of financial incentives that decrease the cost of vehicles or infrastructure. The North Florida TPO has programmed $450 thousand for installation of EV charging stations in Clay, Nassau and St. Johns Counties. Currently there are no incentives for electric vehicles in the county. All cases assume one charging station per 2.5 EVs will be required at a cost of approximately $2,000 per charge point.

- Base Case: 5 new EVs, based on the organizations' stated replacement potential.
  - Scenario 1: 5 Design, build, operate & maintain new fueling infrastructure without any incentives.
  - Scenario 2: As Scenario 1, with a 25 percent increase in infrastructure incentives.
  - Scenario 3: As Scenario 1 with a 25 percent increase in vehicle incentives.
  - Scenario 4: As Scenario, with a 25 percent increase in infrastructure and vehicle incentives.
- Technical Potential: 50 new EVs. Scenarios are as in the Base Case.
- Low Fuel Prices: 50 EVs. Average annual price increases of 2.5, 2.5 and 2.1 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 50 EVs vehicles. Average annual price increases of 3.2, 6.2 and 5.6 percent for Autogas, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 15: ELECTRIC PASSENGER VEHICLE FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	$21,184	27%	115%	3.8	9.5
Scenario 2	$22,153	30%	127%	3.6	9.5
Scenario 3	$24,599	38%	165%	3.1	9.5
Scenario 4	$29,953	72%	313%	1.9	9.5
2. Technical Potential					
Scenario 1	$170,083	21%	89%	6.8	14.5
Scenario 2	$179,091	23%	98%	6.6	14.5
Scenario 3	$206,187	30%	133%	6.4	14.5
Scenario 4	$260,308	55%	258%	4.4	14.5
3. Low Fuel Prices					
Scenario 1	$122,359	17%	64%	7.3	14.5
Scenario 2	$131,368	19%	72%	7.1	14.5
Scenario 3	$158,463	25%	102%	6.3	14.5
Scenario 4	$212,584	49%	211%	4.3	14.5
4. High Fuel Prices					
Scenario 1	$225,274	25%	118%	6.4	14.5
Scenario 2	$234,282	27%	129%	6.2	14.5
Scenario 3	$261,378	34%	169%	5.8	14.5
Scenario 4	$315,499	61%	313%	4.0	14.5

Table 15 indicates that EVs are cost-effective under all cases and scenarios.[3]

- Financial performance is improved by adding incentives to purchase vehicles and infrastructure.
- Financial performance is slightly reduced by increasing the number of vehicles included in a transition, since this assumes procurement of proportionally more fueling infrastructure than the base case and because all vehicles are assumed to be purchased in the first year of the base case, while vehicles are purchased over 5½ years in the Technical Potential case.
- Cost-effectiveness is very sensitive to assumptions about the price of oil, since the price of electricity is relatively stable and not closely related to forecasted changes in oil prices. In general, as the price of oil and gasoline rises, the financial advantage of EVs will increase.

Table 20 shows the quantity of vehicles potentially transitioned to EVs by each organization, based on stated vehicle replacement potential (Base Case) as well as each organization's technical potential.

TABLE 16: BASE CASE AND TECHNICAL POTENTIAL VEHICLE REPLACEMENT BY ORGANIZATION FOR ELECTRICITY

Row Labels	Base Case	Technical Potential
City of Green Cove Springs	0	6
City of Keystone Heights	0	0
Clay County BOCC	2	24
Clay County Schools	1	9
Clay County Sheriff	0	7
Clay County Transit	0	0
Clay Utility Authority	0	0
Town of Orange Park	2	4
Total	5	50

EVs usage in Clay County is limited by two factors revealed during data collection and interviews with the organizations.

- County fleets contain very few passenger vehicles that are not utilized as police cruisers. This presents few opportunities for replacement with EVs.
  - County organizations preferentially procure light trucks / sport utility vehicles instead of passenger vehicles.
- County fleets are currently managed to possess operational characteristics viewed as incompatible with the capabilities of EVs by organizational representatives.
  - The Clay Sheriff's Office requires all its passenger vehicles have the operational characteristics of a police cruiser.
  - Clay County BOCC and Green Cove Springs require its vehicles be capable of accessing unpaved roads.

[3] Plug-in Electric Hybrid Vehicles (PHEVs) are not typically cost-effective, given current state contract pricing.

3.4 COMPRESSED NATURAL GAS (CNG)

3.4.1 Mid and Heavy Duty Vehicle Fleet

Table 17 summarizes the potential financial performance of a transition to a CNG fleet under four cases, each of which examines four scenarios. All cases assume that several organizations collaboratively transition to CNG vehicles and share a single CNG fueling station.

- Base Case: 136 new CNG vehicles (school and transit buses, class 3, 2 and 1 trucks).
  - Scenario 1: Design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives.
  - Scenario 2: As Scenario 1 with a 10 percent increase in vehicle incentives.
  - Scenario 3: As Scenario 1 with a 50 percent reduction in vehicle incentives.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure and fuel sales to 10 percent of Class 3 diesel market.
- Technical Potential: 537 new CNG vehicles (school and transit buses, class 3, 2 and 1 trucks). Scenarios are as in the Base Case.
- Low Fuel Prices: 136 new CNG vehicles. Average annual price increases of 1.8, 2.5 and 2.1 percent for CNG, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 136 new CNG vehicles. Average annual price increases of 2.6, 6.2 and 5.6 percent for CNG, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 17: CNG MID AND HEAVY DUTY TRUCK FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	$1,122,108	6%	30%	12.7	20.5
Scenario 2	$1,397,039	7%	40%	12.0	20.5
Scenario 3	$434,780	4%	10%	14.4	20.5
Scenario 4	$2,514,913	21%	183%	7.7	20.5
2. Technical Potential					
Scenario 1	$12,098,688	18%	151%	7.8	20.5
Scenario 2	$13,220,697	20%	192%	7.1	20.5
Scenario 3	$9,293,667	12%	86%	9.5	20.5
Scenario 4	$10,749,386	22%	192%	7.4	20.5
3. Low Fuel Prices					
Scenario 1	$112,125	4%	3%	15.2	20.5
Scenario 2	$387,057	4%	11%	14.1	20.5
Scenario 3	($575,202)	2%	-13%	18.0	20.5
Scenario 4	$1,503,806	16%	109%	8.7	20.5
4. High Fuel Prices					
Scenario 1	$2,307,317	8%	61%	11.3	20.5
Scenario 2	$2,582,248	9%	74%	10.7	20.5
Scenario 3	$1,619,989	7%	36%	12.6	20.5
Scenario 4	$3,708,403	26%	270%	7.1	20.5

Table 17 indicates a transition of school and transit buses, class 3, 2 and 1 trucks to CNG may be financially feasible under all cases and most scenarios.

- Under the Base Case, financial performance is somewhat insensitive to changes in available incentives. Financial performance is sensitive to the delivery method, indicating that returns may be higher via a public private partnership that relies on sales of CNG to third parties to generate royalties for the organizations.
- Financial performance is greatly improved under the Technical Potential case, indicating that a transition to CNG should include as many vehicles as feasible.
- Under low fuel prices, financial performance is marginal and dependent on financial incentives currently available from Federal and state sources.
- Financial performance is significantly increased under a high fuel prices case.

As noted, all cases assume a collaborative effort among county organizations sharing a single CNG station. Table 18 shows the quantity of vehicles potentially transitioned by each organization, based on stated vehicle replacement potential (Base Case) as well as each organization's technical potential.

TABLE 18: BASE CASE AND TECHNICAL POTENTIAL VEHICLE REPLACEMENT BY ORGANIZATION FOR NATURAL GAS

Row Labels	Base Case	Technical Potential
City of Green Cove Springs	5	16
City of Keystone Heights	0	3
Clay County BOCC	16	146
Clay County Schools	80	273
Clay County Sheriff	6	6
Clay County Transit	13	36
Clay Utility Authority	13	39
Town of Orange Park	3	18
Total	136	537

Interviews with organizational representatives indicate that the major limiting factor to any CNG project is the location of fueling infrastructure. Due to the cost of a fast-fuel station, estimated at greater than $2 million, it is likely that only one station could be developed by the organizations in a financially feasible manner. While several organizations view Green Cove Springs as the ideal location for a station, others (e.g. Clay County Schools and Clay County Transit) prefer a location in the vicinity of Middleburg. It would not be feasible for the Town of Orange Park to use either location.

3.4.2 Transit

Table 19 summarizes the potential financial performance of a transition to a CNG fleet under four cases, each of which examine four scenarios. All cases assume that Clay Transit unilaterally pursues a transition to CNG buses, including fueling infrastructure.

- Base Case: 12 new CNG transit buses (Clay Transit's stated replacement potential).
  - Scenario 1: Design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives, respectively.
  - Scenario 2: As Scenario 1 with a 10 percent increase in vehicle incentives.
  - Scenario 3: As Scenario 1 with a 50 percent reduction in vehicle incentives.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure.
- Technical Potential: Procure 35 new CNG transit buses. Scenarios are as in the Base Case.
- Low Fuel Prices: 12 new CNG transit buses. Average annual price increases of 1.8, 2.5 and 2.1 percent for CNG, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 12 new CNG transit buses. Average annual price increases of 2.6, 6.2 and 5.6 percent for CNG, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 19: CNG TRANSIT FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Case					
Scenario 1	($98,258)	3%	-6%	16.8	20.5
Scenario 2	($70,997)	3%	-5%	16.6	20.5
Scenario 3	($166,408)	2%	-10%	17.3	20.5
Scenario 4	($501,289)	-	-368%	20.5	20.5
2. Technical Potential					
Scenario 1	$1,324,924	9%	73%	10.6	20.5
Scenario 2	$1,404,282	10%	81%	10.3	20.5
Scenario 3	$1,126,528	8%	56%	11.5	20.5
Scenario 4	$1,604,067	34%	404%	5.7	20.5
3. Low Fuel Prices					
Scenario 1	($620,274)	-1%	-40%	20.5	20.5
Scenario 2	($593,014)	-1%	-39%	20.5	20.5
Scenario 3	($688,425)	-1%	-43%	20.5	20.5
Scenario 4	($1,023,305)	-	-751%	20.5	20.5
4. High Fuel Prices					
Scenario 1	($98,258)	3%	-6%	16.8	20.5
Scenario 2	($70,997)	3%	-5%	16.6	20.5
Scenario 3	($166,408)	2%	-10%	17.3	20.5
Scenario 4	($501,289)	-	-368%	20.5	20.5

As Table 17 indicates, a unilateral transition to CNG is only cost-effective if Clay Transit converts nearly all its transit vehicles (Technical Potential). Under this case, returns would likely be higher with a P3. It is also likely that fuel prices would have a significant impact on cost-effectiveness.

3.4.3 School Bus

Table 20 summarizes the potential financial performance of a transition to a CNG fleet under four cases, each of which examine four scenarios. All cases assume that Clay County Schools unilaterally pursue a transition to CNG vehicles, including fueling infrastructure.

- Base Case: 66 new CNG school buses (Clay County Schools' stated replacement potential);
  - Scenario 1: Design, build, operate & maintain new fueling infrastructure; utilize available federal and state fuel and vehicle incentives, respectively.
  - Scenario 2: As Scenario 1 with a 10 percent increase in vehicle incentives.
  - Scenario 3: As Scenario 1 with a 50 percent reduction in vehicle incentives.
  - Scenario 4: As Scenario 1, with P3 development of fueling infrastructure.
- Technical Potential: Procure 245 new school buses. Scenarios are as in the Base Case.
- Low Fuel Prices: 66 new CNG school buses. Average annual price increases of 1.8, 2.5 and 2.1 percent for CNG, diesel and gasoline, respectively. Scenarios are as in the Base Case.
- High Fuel Prices: 66 new CNG school buses. Average annual price increases of 2.6, 6.2 and 5.6 percent for CNG, diesel and gasoline, respectively. Scenarios are as in the Base Case.

TABLE 20: CNG SCHOOL BUS FLEET PROJECT COST-EFFECTIVENESS SUMMARY

Case / Scenarios	NPV	IRR	ROI	PP	Life
1. Base Cases					
Scenario 1	($294,625)	2%	-10%	17.6	20.5
Scenario 2	($439,473)	2%	-16%	17.2	20.5
Scenario 3	($1,061,032)	0%	-31%	20.5	20.5
Scenario 4	($586,245)	-4%	-66%	20.5	20.5
2. Technical Potential					
Scenario 1	$3,904,449	10%	73%	11.2	20.5
Scenario 2	$3,962,869	11%	84%	10.6	20.5
Scenario 3	$1,656,885	6%	24%	13.9	20.5
Scenario 4	$5,277,066	18%	160%	8.7	20.5
3. Low Fuel Prices					
Scenario 1	($833,349)	0%	-28%	20.4	20.5
Scenario 2	($977,221)	-1%	-35%	20.5	20.5
Scenario 3	($1,598,780)	-3%	-47%	20.5	20.5
Scenario 4	($1,123,993)	-16%	-127%	20.5	20.5
4. High Fuel Prices					
Scenario 1	$348,880	4%	12%	15.3	20.5
Scenario 2	$196,890	4%	7%	15.0	20.5
Scenario 3	($424,670)	2%	-13%	16.9	20.5
Scenario 4	$1,455,024	12%	109%	11.6	20.5

As Table 18 indicates, a unilateral transition to CNG is only cost-effective under the High Oil Prices case in which current state and Federal incentives are available or if Clay Transit converts more of its buses (Technical Potential). In both cases, a P3 may enhance cost effectiveness.

3.5 BIODIESEL

Biodiesel blends of 80 percent diesel and 20 percent biodiesel (B20) can be utilized in existing diesel vehicles with no modification and limited changes to maintenance procedures.

If purchased in bulk, biodiesel pricing may be equivalent to diesel. In such an instance, organizations can expect to "break even" relative to current conditions. This does not take into account the advantages of using a fuel that reduces air pollution and greenhouse gas emissions.

Of course, if even slightly more expensive than diesel, biodiesel will not be cost effective.

For these reasons, Clay County organizations can experiment with utilizing biodiesel with little or no investment, other than education of maintenance professionals, and minimal risk.

Clay County organizations have up to 485 diesel vehicles capable of utilizing B20.

CLEAN FUELS INFRASTRUCTURE

In most cases, transition to alternative fuel vehicles will require new fueling infrastructure. In particular, due to the magnitude of required investment, the location of compressed natural gas infrastructure must be carefully considered. The economic, social and environmental benefits of transitions to alternative fuels can be enhanced by encouraging public use. In these cases, the location of infrastructure is also important.

This section considers the location of compressed natural gas and electric vehicle infrastructure. Autogas infrastructure is assumed to be located where county vehicles are currently stored[4], while B20 may not any require new infrastructure.

The analysis is based on Geospatial Information Systems (GIS). GIS map exhibits are included in the appendix.

4.1 CURRRENT ALTERNATIVE FUELS LOCATIONS

There is limited, but growing, alternative fuel infrastructure in North Florida. In Clay County, there are currently no accessible Autogas, CNG or Biodiesel fueling stations. There is limited EV charging infrastructure. Infrastructure outside the County is too far away for County fleets to utilize regularly.

- Alternative fuel infrastructure in the county is currently limited to two public EV charging stations: one located at the Orange Park Town Hall, the other located at Clay Electric Cooperative's offices in Keystone Heights. The Orange Park station was installed as part of the North Florida TPO's ChargeWell program.
- Nearby public EV stations are located at a car dealership in nearby southern Duval County (north of Collins Road on SR 21 / Blanding Boulevard) and grocery stores in St. Johns County near Interstate 295 and SR 13.
- CNG fueling facilities are located approximately 15 and 20 miles away at St. Johns County's Fleet Maintenance facility located along SR 16, and at the Jacksonville Transportation Authority's Operations Center near downtown Jacksonville, respectively.

[4] Public Autogas infrastructure is not common and not required to justify private investment in new facilities, as is sometimes the case with compressed natural gas facilities.

4.3 COMPRESSED NATURAL GAS

The previous section assumes that developing one CNG station may be feasible, based on the present fuel consumption of the County's public fleets. Based on stated replacement potential, it is unlikely that more than one station may be cost-effectively developed by the organizations included in this assessment.[5] Consequently, the location of this single facility must be centrally located so that the county's major public fleets can utilize it.

A series of GIS analyses were conducted to identify suitable locations. These correspond to the bulleted topics below, followed by a brief description. Full-size map exhibits of these analyses are included in the Appendix.

In addition to these GIS analyses, interviews were conducted with each organization. Interviews indicate that the major limiting factor to any CNG project is the location of fueling infrastructure. While several organizations view Green Cove Springs as the ideal location for a station, others (e.g. Clay County Schools and Clay County Transit) prefer a location closer to Middleburg. It would not be feasible for the Town of Orange Park or Keystone Heights to use either location.

Based on stated vehicle replacement potential, it is unlikely that fleets primarily based in Green Cove Springs will consume enough CNG to make investment in a CNG station in that location to be financially feasible. A station in Green Cove Springs may be feasible if fleets centered in this area commit to replacing a number of vehicles closer to their technical potential than their stated potential.

Further, it may be feasible for Clay County Schools and Clay Transit to jointly develop a CNG station in the Middleburg area for their common use. However, fleets based in Green Cove Springs are unlikely to find using the station feasible.

Developing more than one station serving County fleets would require larger numbers of vehicle replacements than currently considered likely by study participants and/or involvement of private fleets.

In any case, the GIS analysis introduced above and described below identifies several potential CNG station locations in Green Cove Springs and the vicinity of Middleburg. Further cooperation and evaluation among interested Clay County organizations would be required to determine the ideal site(s) for CNG infrastructure. The factors considered by the GIS analysis are a starting point for such deliberations.

---

[5] Additional stations may be justified if County agencies commit to replacing a number of vehicles closer to their technical potential than current stated replacement potential, or if the fuel demand of large private fleets located within the County can be incorporated into the analysis.

The GIS analysis includes the following analyses and associated map exhibits:

- Natural Gas Availability by Zip Code
  - While precise locations of natural gas distribution infrastructure is not publicly available information, service availability by zip code is known. Natural gas is currently available in the vicinity of Orange Park and Middleburg. Service has recently been extended to Green Cove Springs.
- Transit
  - Transit is one of the larger single potential consumers of CNG. Current routes link Orange Park to Keystone Heights via Middleburg. A separate spur connects Orange Park to Penney Farms via Green Cove Springs. The location of CNG infrastructure must consider accessibility to transit operations.
- Freight Facilities and Traffic
  - CNG facilities developed by third parties may rely on sales to third-party private fleets for financial viability. In addition, the County may be interested in promoting alternative fuel consumption among local businesses to enhance the economy, environmental performance and quality of life. In addition to waste haulers, freight fleets are among the most likely to transition to CNG and utilize new facilities.
  - In Clay County large freight facilities are located in Orange Park and Green Cove Springs. In addition, significant freight traffic occurs along US-17 from Orange Park to Green Cove Springs and FL-16 in Green Cove Springs. Major freight traffic is also forecast for the First Coast Expressway, which will travel through Middleburg and Green Cove Springs.
- Assets and Potential Sites
  - Current locations of public fleets and publicly owned parcels are important considerations for citing new CNG infrastructure.
- Analysis
  - Estimating public fleet fuel demand by location indicates priority locations for new infrastructure.
- Analysis (Detail)
  - Data indicate that public fleet fuel demand may be highest in the vicinity of Green Cove Springs, with Middleburg as a lesser priority.

4.4 ELECTRIC VEHICLES

Electric Vehicle Support Equipment (EVSE) for the County's public fleets may be located where vehicles are stored and used exclusively by the fleets. However, the County's transition to alternative fuels may also include provision of new EVSE for public use.

The North Florida TPO's ChargeWell program aims to develop a regional network of EVSE in North Florida. In its first phase, the TPO teamed with JEA to locate EVSE throughout the utility's service territory via competitive solicitation process. This resulted in one EV charging station at Orange Park Town Hall. In its second phase, the North Florida TPO has programmed $450 thousand for EVSE in Clay, Nassau and St. Johns Counties located on government owned land. EVSE may be located through the County based on a consideration of public parcels, existing EV registrations and locations where workplace charging and other compatible activities are likely.

» EV Registrations by Zip Code (June, 2016)
  - As of June 2016, approximately 116 EVs were registered to Clay County addresses, with the majority located in the Fleming Island and Doctor's Lake areas.
  - Recent research suggests that a ratio of 1:2 or 1:3 vehicles to charge points is ideal. The national ratio is 1:10. The County's ratio is 1:58. Based on these assumptions, Clay County may support 10 to 30 new EV charging stations of the type recently installed as part of the ChargeWell program (i.e. Level 2 stations each equipped with two charge points).

» EV Charging Station Placement – Employment
  - Providing EVSE at workplaces may be particularly effective. Large concentrations of workers are more likely to support EVSE.

» EV Charging Station Placement – Workplace
  - Concentrations of workplace parcels of the type assumed to support EVSE are located in Orange Park, Fleming Island and Green Cove Springs.

» EV Charging Station Placement – Category 1: Attractions
  - Other important locations for EVSE are those where drivers are likely to stay for up to one to two hours, the time required to charge an electric vehicle using Level 2 infrastructure.[6] These include the Orange Park Mall and the Fleming Island Shopping Center.

» EV Charging Station Placement – Category 2: Public Facilities
  - Another suitable location are public facilities, such as libraries, parks and other municipal properties. These are located throughout the county along major thoroughfares. These locations may be suitable for ChargeWell-branded EVSE funded by the North Florida TPO.

» EV Charging Station Placement – Suitability
  - Combining workplace and other suitable locations and considering distances between important locations in the county, locations with five-mile grids were prioritized. Priority locations center on Orange Park and the Blanding Boulevard corridor. Fleming Island, and Green Cove Springs also include several suitable locations, while Middleburg and Keystone Heights should be considered to assure access to EVSE through the County.

---

[6] An EV driver can expect enough charge to travel between ten and 25 miles from one hour of Level 2 charging.

APPENDICES

DATA LIMITATIONS, TRANSFORMATIONS AND ASSUMPTIONS

Database Description, including Limitations Transformations and Assumptions

Data Code	Detail	CCO	CSO	CKH	TOP	CCS	CCT	GCS	CUA	COA
KEYID	Unique Identifier									All data provided by CCT
ORGCODE	Unique Organizational Code			No code provided						All data provided by CCT
ORGNAME	Organization Name									All data provided by CCT
ORGID	Organization's Unique Identifier									All data provided by CCT
MAKE	Vehicle Make									All data provided by CCT
MODEL	Vehicle Model									
CLASS	Vehicle classification based on GVWR (0 = passenger car, 1 = light duty [class 1 - 3], 2 = med duty [class 4 - 6], 3 = heavy duty [class 7 - 9])	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL	CLASS determined by MAKE & MODEL
YEAR	Vehicle Vintage Year									All data provided by CCT
ROAD	On-road vehicle? (1 = yes, 0 = no)		No USE or QUANTITY data provided for ROAD = 0 ORGCODES			ROAD determined by identifications ("Buses," Vehicles," "Tractors," "Trailers," "Forklift"		ROAD determined by identifications provided with data		All data provided by CCT
NRTYPE	Non-road Type (1=Pump, 2=Generator, 3=Lanscaping,4=Construction, 0=Other)									
PUMP	Pump? (1 = yes, 0 = no)							PUMP determined by identifications provided with data		All data provided by CCT
GEN	Generator? (1 = yes, 0 = no)							GEN determined by identifications provided with data		All data provided by CCT
MOWER	Landscaping Equipment? (1 = yes, 0 = no)							MOWER determined by identifications provided with data		All data provided by CCT
FUELTYPE	Fuel Type (e.g. G = gasoline, D = diesel, E = Electricity, MG = mixed gas & oil, N/A = not applicable)							FUELTYPE not provided. Determined by CLASS (0, 1, 4 = G; 2 & 3 = D) and NRTYPE (1,2,4 = D;		All data provided by CCT
USE	Annual Fuel Consumption	Estimated 2014 use based on combination of averaged FY13/14 & FY 14/15 use.	"N/A" or non-numeric values transformed to 0	No USE values provided. Estimated using provide COST values divided by average RATE values.		No USE values provided. Estimated based on COST values using average RATE	Estimated 2014 use based on combination of averaged FY13/14 & FY 14/15 use. (Data provided by CCO).		USE by ORGCODE not provided, instead provided by year. No method for estimation / extrapolation to ORGCODE is	All data provided by CCT
USEUNIT	Fuel Consumption Unit (e.g. Gallons)									All data provided by CCT
USEYEAR	Year of USE							USEYEAR not specified. Assume 2014.		All data provided by CCT
COST	Annual Fuel Cost		COST not provided by ORGID, instead by fleet card. Average $/G rate for diesel and weighted average rate for gasoline grades were applied to reported USE to estimate COST	COST values provided for four months (10/15 - 1/16) only. Values are extrapolated by multiplying the sum of 4 months by .25 and multiplying by 12. These values are applied to 2014 for consistency					COST by ORGCODE not provided, instead provided by year. No method for estimation / extrapolation to ORGCODE is available.	All data provided by CCT
COSTUNIT	Fuel Cost Unit (i.e. Dollars)									All data provided by CCT
COSTYEAR	Year of COST	Estimated 2014 cost based on combination of averaged FY13/14 & FY 14/15 cost.				Year of COST not specified. Assume 2014 for purposes of analysis.	Estimated 2014 cost based on combination of averaged FY13/14 & FY 14/15 cost. (Data provided	COSTYEAR not specified. Assume 2014.		All data provided by CCT
QUANTCODE	Quantity Type (e.g. M = miles, H = Hours)		No H category values provided							All data provided by CCT
QUANTITY	Annual Quantity (e.g. miles or hours)	12 month average of difference between Q1 FY 13/14 and Q4 14/15	"N/A" or non-numeric values transformed to 0	No data provided for QUANTITY. Estimated by multiplying total average MPG by USE	No data provided for QUANTITY. Estimated by multiplying total average MPG by USE		12 month average of difference between Q1 FY 13/14 and Q4 14/15 (Data provided by CCO)	QUANTITY estimated from provided odometer readings (e.g. value / (2016.25-YEAR)	QUANTITY data not provided in an annualized format or for a specified time period. Average annual values estimated from cumulative mileage through Q1 of calendar year 2016 divided by	All data provided by CCT
QUANTYEAR	Year of QUANTITY					Year of QUANTITY not specified. Assume 2014 for analysis		2016		All data provided by CCT
PURCHASE	Vehicle Purchase Price		Data not provided							All data provided by CCT
MAINTENANCE	Estimated Annual Maintenance Cost		Values provided for period 2013-2015. These values were averaged by divided by 3 and applied to							All data provided by CCT

CLEAN FUELS PROJECTS FINANCIAL MODELS

EV & PHEV Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	EV gain	mpGGE	EV Use	Mnthly EV Use	Salvage Value
1	Large	EV	$ 2,820	11345	656	8	17.3	605%	105	108	9	20%
2	Mid	EV	$ 2,941	3360	153	8	21.9	480%	105	32	3	20%
3	Compact	EV	$ 6,423	1873	69	8	27	390%	105	18	1	20%
4	Large	PHEV	$ 15,746	11345	656	8	17.3	613%	106	107	9	20%
5			$ -	0	0	0	0	0%	0	0	0	0

VMT = Average annual VMT, USE = Average annual USE, EV Use = Average annual EV use, M EV Use = Average monthly EV us

EV = Ford Focus Electric; PHEV = Chevrolet Volt; Inc. cost based on Florida State Contract

Base Case Inputs

				Scenario 1	**Scenario 2**	**Scenario 3**
				Owned Infra @ 25% discount & 0% fleet discount	*Owned Infra @ 0% discount & 25% fleet*	*Owned Infra @ 50% discount & 50% fleet*
Infrastructure	Cell Name	Value	Unit			
Infrastructure Cost	*Infra_Cost*	$4,000	$	$3,000	$4,000	$2,000
Salvage Value	*EV_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent	25%	0%	50%
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$			
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.00	$/GGE	$ -	$ -	$ -
Price of Electricity (per GGE)	*EV_Price*	$3.95	$/GGE	$3.95	$3.95	$3.95
EV Price Markup (Station Developer)	*EV_Markup*	$0.00		$0.00	$0.00	$0.00
EV Fuel Sales Royalty (from Developer)	*EV_Royalty*	$0.00	$/GGE	$0.00	$0.00	$0.00
Electricity Price Increase	Low Case	2.80%	%/Year	2.8%	2.8%	2.8%
EV Lifecycle GHG Factor (per GGE)	*EV_GHG_Factor*	$56.20	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	Low Case	2.5%	%/Year	2.5%	2.5%	2.5%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	$2.10	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	Low Case	2.1%	%/Year	2.1%	2.1%	2.1%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
EV Vehicle Maintenance Costs	*EV_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV EV Vehicle Maintenance Costs	*EV_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	0%
Incentives						
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	0%	% of Inc Cost	0%	25%	50%

Vehicle Procurement *Procurement Factor* 50%

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	Large	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
2	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Compact	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Large	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0
2	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Compact	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	Type																					
1	Large	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Mid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Compact	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Large	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Large	$14,100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Mid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Compact	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Large	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	0																					
Subtotal (w/o Incentive)		$14,100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$14,100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Large	273	273	273	273	273	273	273	273	273	0	0	0	0	0	0	0	0	0	0	0	0
2	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Compact	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		273	273	273	273	273	273	273	273	273	0	0	0	0	0	0	0	0	0	0	0	0

EV Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Large	45	45	45	45	45	45	45	45	45	0	0	0	0	0	0	0	0	0	0	0	0
2	Mid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Compact	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		45	45	45	45	45	45	45	45	45	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Capacity (GGE/mo)		45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$4,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$3,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$4,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$2,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$4,000																				
Scenario 1 Station Cost		$3,000																				
Scenario 2 Station Cost		$4,000																				
Scenario 3 Station Cost		$2,000																				

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($14,100)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		($4,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$800.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EV Price		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV Price (after tax credit)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EV Price (after tax credit & mark up)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
Diesel Price		$2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Diesel Price (after tax exemption)		2.30	2.36	2.42	2.48	2.54	2.60	2.67	2.73	2.80	2.87	2.94	3.02	3.09	3.17	3.25	3.33	3.41	3.50	3.59	3.68	3.77
Gasoline Price		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
Gasoline Price (after exemption)		2.10	2.14	2.19	2.24	2.28	2.33	2.38	2.43	2.48	2.53	2.59	2.64	2.69	2.75	2.81	2.87	2.93	2.99	3.05	3.12	3.18
EV Fleet Maintenance																						
EV Fleet Fuel Costs		$1,069	$2,198	$2,260	$2,323	$2,388	$2,455	$2,524	$2,594	$2,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,443	$7,030	$7,178	$7,329	$7,483	$7,640	$7,800	$7,964	$8,131	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Maintenance (inc. in EV price)		($0)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Electricity (included in electricity price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Costs		($18,100)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($15,726)	$4,712	$4,798	$4,886	$4,974	$5,065	$5,156	$5,250	$5,344	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		($15,726)	($11,014)	($6,216)	($1,331)	$3,644	$8,709	$13,865	$19,114	$24,459	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079	$28,079
Whole Years		0.5	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	9.5																					
Payback Period	3.8																					
Discounted Return on Investment	115%																					
Internal Rate of Return	27%																					
Net Present Value	$21,184																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($14,100)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Cost Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		($3,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$800	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Price		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV Price (after tax credit)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EV Price (after tax credit & mark up)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
Diesel Price		$2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Diesel Price (after tax exemption)		2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Gasoline Price		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
Gasoline Price (after exemption)		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
EV Fleet Maintenance																						
EV Fleet Fuel Costs		$1,069	$2,198	$2,260	$2,323	$2,388	$2,455	$2,524	$2,594	$2,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,443	$7,030	$7,178	$7,329	$7,483	$7,640	$7,800	$7,964	$8,131	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Maintenance		($0)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Electricity (included in electricity price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Costs		($17,100)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($14,726)	$4,712	$4,798	$4,886	$4,974	$5,065	$5,156	$5,250	$5,344	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		($14,726)	($10,014)	($5,216)	($331)	$4,644	$9,709	$14,865	$20,114	$25,459	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079	$29,079
Whole Years		0.5	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	9.5																					
Payback Period	3.6																					
Discounted Return on Investment	127%																					
Internal Rate of Return	30%																					
Net Present Value	$22,153																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($10,575)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		($4,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$800	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Price		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV Price (after tax credit)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EV Price (after tax credit & mark up)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
Diesel Price		$2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Diesel Price (after tax exemption)		2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Gasoline Price		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
Gasoline Price (after exemption)		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
EV Fleet Maintenance																						
EV Fleet Fuel Costs		$1,069	$2,198	$2,260	$2,323	$2,388	$2,455	$2,524	$2,594	$2,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,443	$7,030	$7,178	$7,329	$7,483	$7,640	$7,800	$7,964	$8,131	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Maintenance (inc. in EV price)		($0)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Electricity (included in electricity price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Costs		($14,575)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($12,201)	$4,712	$4,798	$4,886	$4,974	$5,065	$5,156	$5,250	$5,344	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		($12,201)	($7,489)	($2,691)	$2,194	$7,169	$12,234	$17,390	$22,639	$27,984	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604	$31,604
Whole Years		0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	9.5																					
Payback Period	3.1																					
Discounted Return on Investment	165%																					
Internal Rate of Return	38%																					
Net Present Value	$24,599.24																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($7,050)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Cost Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		($2,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$800	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Price		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV Price (after tax credit)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
EV P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EV Price (after tax credit & mark up)		$3.95	$4.06	$4.17	$4.29	$4.41	$4.53	$4.66	$4.79	$4.92	$5.06	$5.20	$5.35	$5.50	$5.65	$5.81	$5.97	$6.14	$6.31	$6.49	$6.67	$6.85
Diesel Price		$2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Diesel Price (after tax exemption)		2.30	$2.36	$2.42	$2.48	$2.54	$2.60	$2.67	$2.73	$2.80	$2.87	$2.94	$3.02	$3.09	$3.17	$3.25	$3.33	$3.41	$3.50	$3.59	$3.68	$3.77
Gasoline Price		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
Gasoline Price (after exemption)		2.10	$2.14	$2.19	$2.24	$2.28	$2.33	$2.38	$2.43	$2.48	$2.53	$2.59	$2.64	$2.69	$2.75	$2.81	$2.87	$2.93	$2.99	$3.05	$3.12	$3.18
EV Fleet Maintenance																						
EV Fleet Fuel Costs		$1,069	$2,198	$2,260	$2,323	$2,388	$2,455	$2,524	$2,594	$2,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,443	$7,030	$7,178	$7,329	$7,483	$7,640	$7,800	$7,964	$8,131	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Royalty		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Maintenance (inc. in EV price)		($0)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EV Station Electricity (included in electricity price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$2,374	$4,832	$4,918	$5,006	$5,094	$5,185	$5,276	$5,370	$5,464	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Costs		($9,050)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	($120)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($6,676)	$4,712	$4,798	$4,886	$4,974	$5,065	$5,156	$5,250	$5,344	$3,620	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		($6,676)	($1,964)	$2,834	$7,719	$12,694	$17,759	$22,915	$28,164	$33,509	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129	$37,129
Whole Years		0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	$9.50																					
Payback Period	1.92																					
Discounted Return on Investment	3.13																					
Internal Rate of Return	0.72																					
Net Present Value	$29,952.92																					

Propane-Autogas (PAG) Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	Autogas loss	mpGGE	Autogas Use	Mnthly Autogas Use	Salvage Value
1	Para. Transit	G	$ 10,000	24131	3656	15	6.6	10.0%	5.9	4,062	339	20%
2	School Buses	D	$ 6,600	9137	1305	15	7	11.1%	6.2	1,468	122	20%
3	Class 2 Truck	D	$ 10,000	11199	806	8	13.9	11.1%	12.4	906	75	20%
4	Class 1 Truck	G	$ 10,000	8705	435	8	20	10.0%	18.0	484	40	20%
5	Police Cruiser	G	$ 7,000	11701	688	8	17	10.0%	15.3	765	64	20%

VMT = Average annual VMT, USE = Average annual USE, PAG Use = Average annual PAG use, M PAG Use = Average monthly PAG us

Base Case Inputs

Infrastructure	Cell Name	Value	Unit	**Scenario 1** *Owned Infra + reduced Vehicle Incentive*	**Scenario 2** *P3 Infra + reduced Vehicle Incentive*	**Scenario 3** *P3 Infra + Vehicle Incentive*
Infrastructure Cost	*Infra_Cost*	$400,000	$	$400,000	$0	$0
Salvage Value	*PAG_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent	0%	0%	0%
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$ 0.50	$ 0.50	$ 0.50
Price of PAG (per GGE)	*PAG_Price*	$1.37	$/GGE	$1.37	$1.37	$1.37
PAG Price Markup (Station Developer)	*PAG_Markup*	$0.00		$0.00	$0.10	$0.10
PAG Fuel Sales Royalty (from Developer)	*PAG_Royalty*	$0.00	$/GGE	$0.00	$0.00	$0.00
PAG Price Increase	*Base Case*	3.7%	%/Year	3.7%	3.7%	3.7%
PAG Lifecycle GHG Factor (per GGE)	*PAG_GHG_Factor*	22.5	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%	4.3%	4.3%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	2.1	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%	3.8%	3.8%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
PAG Vehicle Maintenance Costs	*PAG_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV PAG Vehicle Maintenance Costs	*PAG_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	0%
Incentives						
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	25%	25%	50%

Vehicle Procurement *Procurement Factor* 100%

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	Para. Transit	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
2	School Buses	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
3	Class 2 Truck	6	6	6	6	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
4	Class 1 Truck	28	28	29	29	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172
5	Police Cruiser	31	31	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190
Total	478	78	78	80	80	81	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	478

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	2	4	6	8	10	12	12	12	12	12	12	12	12	12	12	12	10	8	6	4	2
2	School Buses	11	22	33	44	55	66	66	66	66	66	66	66	66	66	66	66	66	55	44	33	22
3	Class 2 Truck	6	12	18	24	31	38	38	38	38	32	26	20	14	7	0	0	0	0	0	0	0
4	Class 1 Truck	28	56	85	114	143	172	172	172	172	144	116	87	58	29	0	0	0	0	0	0	0
5	Police Cruiser	31	62	94	126	158	190	190	190	190	159	128	96	64	32	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	Type																					
1	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,000	$4,000	$4,000	$4,000	$4,000
2	School Buses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520
3	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,000	$12,000	$12,000	$12,000	$14,000	$14,000	$0	$0	$0	$0	$0	$0
4	Class 1 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$56,000	$56,000	$58,000	$58,000	$58,000	$58,000	$0	$0	$0	$0	$0	$0
5	Police Cruiser	$0	$0	$0	$0	$0	$0	$0	$0	$0	$43,400	$43,400	$44,800	$44,800	$44,800	$44,800	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$111,400	$111,400	$114,800	$114,800	$116,800	$116,800	$0	$4,000	$18,520	$18,520	$18,520	$18,520

Vehicle Incremental Costs

		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	School Buses	$72,600	$72,600	$72,600	$72,600	$72,600	$72,600	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Class 2 Truck	$60,000	$60,000	$60,000	$60,000	$70,000	$70,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Class 1 Truck	$280,000	$280,000	$290,000	$290,000	$290,000	$290,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Police Cruiser	$217,000	$217,000	$224,000	$224,000	$224,000	$224,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal (w/o Incentive)		$649,600	$649,600	$666,600	$666,600	$676,600	$676,600	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$324,800	$324,800	$333,300	$333,300	$338,300	$338,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$324,800	$324,800	$333,300	$333,300	$338,300	$338,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	609	1,219	1,828	2,437	3,047	3,656	3,656	3,656	3,656	3,656	3,656	3,656	3,656	3,656	3,656	3,656	3,047	2,437	1,828	1,219	609
2	School Buses	1,197	2,393	3,590	4,786	5,983	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	5,983	4,786	3,590	2,393
3	Class 2 Truck	403	806	1,209	1,611	2,081	2,551	2,551	2,551	2,551	2,148	1,746	1,343	940	470	0	0	0	0	0	0	0
4	Class 1 Truck	1,016	2,031	3,083	4,135	5,187	6,239	6,239	6,239	6,239	5,223	4,207	3,156	2,104	1,052	0	0	0	0	0	0	0
5	Police Cruiser	1,778	3,556	5,392	7,227	9,063	10,898	10,898	10,898	10,898	9,120	7,342	5,506	3,671	1,835	0	0	0	0	0	0	0
Total		5,002	10,005	15,101	20,197	25,360	30,523	30,523	30,523	30,523	27,327	24,130	20,840	17,550	14,193	10,835	10,835	10,226	8,420	6,614	4,808	3,002

PAG Monthly Fuel Requirements

		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	677	1,354	2,031	2,708	3,385	4,062	4,062	4,062	4,062	4,062	4,062	4,062	4,062	4,062	4,062	4,062	3,385	2,708	2,031	1,354	677
2	School Buses	1,345	2,691	4,036	5,381	6,727	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	6,727	5,381	4,036	2,691
3	Class 2 Truck	453	906	1,359	1,812	2,340	2,869	2,869	2,869	2,869	2,416	1,963	1,510	1,057	528	0	0	0	0	0	0	0
4	Class 1 Truck	1,128	2,257	3,426	4,594	5,763	6,932	6,932	6,932	6,932	5,803	4,675	3,506	2,337	1,169	0	0	0	0	0	0	0
5	Police Cruiser	1,976	3,951	5,991	8,030	10,069	12,109	12,109	12,109	12,109	10,133	8,158	6,118	4,079	2,039	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		5,579	11,159	16,842	22,526	28,285	34,044	34,044	34,044	34,044	30,487	26,930	23,269	19,608	15,871	12,134	12,134	11,457	9,435	7,413	5,390	3,368
Incremental Capacity (GGE/mo)		5,579	5,579	5,683	5,683	5,759	5,759	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$400,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$400,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$400,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$400,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$400,000																				
Scenario 1 Station Cost		$400,000																				
Scenario 2 Station Cost		$400,000																				
Scenario 3 Station Cost		$400,000																				
Total Station Cost (w/ Tax Credit)		$400,000																				
Station Amortization		$22,063.23	$0.12	$0.33	$0.16	$0.11	$0.08	$0.07	$0.05	$0.05	$0.05	$0.05	$0.06	$0.07	$0.08	$0.09	$0.12	$0.15	$0.15	$0.16	$0.19	$0.25

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($324,800)	($324,800)	($333,300)	($333,300)	($338,300)	($338,300)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$111,400	$111,400	$114,800	$114,800	$116,800	$116,800	$0	$4,000	$18,520	$18,520	$18,520	$18,520
Station		($400,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$80,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$30,084	$127,351	$203,151	$286,899	$380,117	$482,295	$507,956	$534,566	$562,160	$530,279	$493,379	$449,238	$399,278	$341,461	$276,966	$290,098	$287,888	$248,300	$204,327	$155,715	$102,199
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$22,071	$92,081	$144,060	$200,339	$263,386	$331,483	$345,737	$360,604	$376,110	$376,042	$375,272	$373,742	$371,386	$364,933	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$42,878	$178,031	$279,736	$388,914	$505,986	$631,393	$655,386	$680,291	$706,142	$634,494	$556,382	$467,860	$371,808	$267,780	$155,308	$161,210	$139,447	$115,797	$90,148	$62,382	$32,376
Fuel Savings		$34,865	$142,761	$220,645	$302,355	$389,254	$480,581	$493,168	$506,329	$520,091	$480,257	$438,275	$392,364	$343,915	$291,251	$235,580	$243,711	$240,180	$205,273	$167,661	$127,137	$83,478
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$34,865	$142,761	$220,645	$302,355	$389,254	$480,581	$493,168	$506,329	$520,091	$591,657	$549,675	$507,164	$458,715	$408,051	$352,380	$243,711	$244,180	$223,793	$186,181	$145,657	$181,998
Total Costs		($724,800)	($336,800)	($345,300)	($345,300)	($350,300)	($350,300)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	$0
Net Cash Flow		($689,935)	($194,039)	($124,655)	($42,945)	$38,954	$130,281	$481,168	$494,329	$508,091	$579,657	$537,675	$495,164	$446,715	$396,051	$340,380	$231,711	$232,180	$211,793	$174,181	$133,657	$181,998
Cumulative Cash Flow		($689,935)	($883,974)	($1,008,629)	($1,051,574)	($1,012,620)	($882,339)	($401,171)	$93,158	$601,249	$1,180,906	$1,718,582	$2,213,746	$2,660,461	$3,056,512	$3,396,892	$3,628,603	$3,860,783	$4,072,576	$4,246,757	$4,380,414	$4,562,412
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	7.3																					
Discounted Return on Investment	122%																					
Internal Rate of Return	19%																					
Net Present Value	$2,855,062																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($487,200)	($487,200)	($499,950)	($499,950)	($507,450)	($507,450)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$111,400	$111,400	$114,800	$114,800	$116,800	$116,800	$0	$4,000	$18,520	$18,520	$18,520	$18,520
Station		($400,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$80,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$30,084	$127,351	$203,151	$286,899	$380,117	$482,295	$507,956	$534,566	$562,160	$530,279	$493,379	$449,238	$399,278	$341,461	$276,966	$290,098	$287,888	$248,300	$204,327	$155,715	$102,199
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$22,071	$92,081	$144,060	$200,339	$263,386	$331,483	$345,737	$360,604	$376,110	$376,042	$375,272	$373,742	$371,386	$364,933	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$42,878	$178,031	$279,736	$388,914	$505,986	$631,393	$655,386	$680,291	$706,142	$634,494	$556,382	$467,860	$371,808	$267,780	$155,308	$161,210	$139,447	$115,797	$90,148	$62,382	$32,376
Fuel Savings		$34,865	$142,761	$220,645	$302,355	$389,254	$480,581	$493,168	$506,329	$520,091	$480,257	$438,275	$392,364	$343,915	$291,251	$235,580	$243,711	$240,180	$205,273	$167,661	$127,137	$83,478
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$34,865	$142,761	$220,645	$302,355	$389,254	$480,581	$493,168	$506,329	$520,091	$591,657	$549,675	$507,164	$458,715	$408,051	$352,380	$243,711	$244,180	$223,793	$186,181	$145,657	$181,998
Total Costs		($887,200)	($499,200)	($511,950)	($511,950)	($519,450)	($519,450)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	($12,000)	$0
Net Cash Flow		($852,335)	($356,439)	($291,305)	($209,595)	($130,196)	($38,869)	$481,168	$494,329	$508,091	$579,657	$537,675	$495,164	$446,715	$396,051	$340,380	$231,711	$232,180	$211,793	$174,181	$133,657	$181,998
Cumulative Cash Flow		($852,335)	($1,208,774)	($1,500,079)	($1,709,674)	($1,839,870)	($1,878,739)	($1,397,571)	($903,242)	($395,151)	$184,506	$722,182	$1,217,346	$1,664,061	$2,060,112	$2,400,492	$2,632,203	$2,864,383	$3,076,176	$3,250,357	$3,384,014	$3,566,012
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	9.3																					
Discounted Return on Investment	61%																					
Internal Rate of Return	0.1																					
Net Present Value	$1,962,145																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($487,200)	($487,200)	($499,950)	($499,950)	($507,450)	($507,450)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$111,400	$111,400	$114,800	$114,800	$116,800	$116,800	$0	$4,000	$18,520	$18,520	$18,520	$18,520
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$80,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$33,546	$141,615	$225,322	$317,438	$419,620	$531,271	$558,400	$586,524	$615,677	$579,757	$538,527	$489,579	$434,484	$371,039	$300,548	$314,387	$311,601	$268,431	$220,638	$167,959	$110,117
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$22,071	$92,081	$144,060	$200,339	$263,386	$331,483	$345,737	$360,604	$376,110	$376,042	$375,272	$373,742	$371,386	$364,933	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$42,878	$178,031	$279,736	$388,914	$505,986	$631,393	$655,386	$680,291	$706,142	$634,494	$556,382	$467,860	$371,808	$267,780	$155,308	$161,210	$139,447	$115,797	$90,148	$62,382	$32,376
Fuel Savings		$31,403	$128,496	$198,474	$271,815	$349,752	$431,606	$442,723	$454,371	$466,575	$430,779	$393,127	$352,023	$308,710	$261,673	$211,999	$219,422	$216,467	$185,142	$151,351	$114,893	$75,559
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$31,403	$128,496	$198,474	$271,815	$349,752	$431,606	$442,723	$454,371	$466,575	$542,179	$504,527	$466,823	$423,510	$378,473	$328,799	$219,422	$220,467	$203,662	$169,871	$133,413	$174,079
Total Costs		($487,200)	($487,200)	($499,950)	($499,950)	($507,450)	($507,450)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($455,797)	($358,704)	($301,476)	($228,135)	($157,698)	($75,844)	$442,723	$454,371	$466,575	$542,179	$504,527	$466,823	$423,510	$378,473	$328,799	$219,422	$220,467	$203,662	$169,871	$133,413	$174,079
Cumulative Cash Flow		($455,797)	($814,501)	($1,115,976)	($1,344,111)	($1,501,809)	($1,577,653)	($1,134,930)	($680,559)	($213,985)	$328,195	$832,722	$1,299,544	$1,723,054	$2,101,527	$2,430,326	$2,649,748	$2,870,215	$3,073,877	$3,243,748	$3,377,161	$3,551,241
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	9.0																					
Discounted Return on Investment	76%																					
Internal Rate of Return	14%																					
Net Present Value	$2,041,766																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($324,800)	($324,800)	($333,300)	($333,300)	($338,300)	($338,300)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$111,400	$111,400	$114,800	$114,800	$116,800	$116,800	$0	$4,000	$18,520	$18,520	$18,520	$18,520
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$80,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$33,546	$141,615	$225,322	$317,438	$419,620	$531,271	$558,400	$586,524	$615,677	$579,757	$538,527	$489,579	$434,484	$371,039	$300,548	$314,387	$311,601	$268,431	$220,638	$167,959	$110,117
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$22,071	$92,081	$144,060	$200,339	$263,386	$331,483	$345,737	$360,604	$376,110	$376,042	$375,272	$373,742	$371,386	$364,933	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$42,878	$178,031	$279,736	$388,914	$505,986	$631,393	$655,386	$680,291	$706,142	$634,494	$556,382	$467,860	$371,808	$267,780	$155,308	$161,210	$139,447	$115,797	$90,148	$62,382	$32,376
Fuel Savings		$31,403	$128,496	$198,474	$271,815	$349,752	$431,606	$442,723	$454,371	$466,575	$430,779	$393,127	$352,023	$308,710	$261,673	$211,999	$219,422	$216,467	$185,142	$151,351	$114,893	$75,559
Fuel Royalty		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$31,403	$128,496	$198,474	$271,815	$349,752	$431,606	$442,723	$454,371	$466,575	$542,179	$504,527	$466,823	$423,510	$378,473	$328,799	$219,422	$220,467	$203,662	$169,871	$133,413	$174,079
Total Costs		($324,800)	($324,800)	($333,300)	($333,300)	($338,300)	($338,300)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($293,397)	($196,304)	($134,826)	($61,485)	$11,452	$93,306	$442,723	$454,371	$466,575	$542,179	$504,527	$466,823	$423,510	$378,473	$328,799	$219,422	$220,467	$203,662	$169,871	$133,413	$174,079
Cumulative Cash Flow		($293,397)	($489,701)	($624,526)	($686,011)	($674,559)	($581,253)	($138,530)	$315,841	$782,415	$1,324,595	$1,829,122	$2,295,944	$2,719,454	$3,097,927	$3,426,726	$3,646,148	$3,866,615	$4,070,277	$4,240,148	$4,373,561	$4,547,641
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	6.81																					
Discounted Return on Investment	164%																					
Internal Rate of Return	25%																					
Net Present Value	$2,934,683																					

Propane-Autogas (PAG) Transit Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	Autogas loss	mpGGE	Autogas Use	Mnthly Autogas Use	Salvage Value
1	Para. Transit	G	$ 10,000	23838	3612	15	6.6	10.0%	5.9	4,013	334	20%
2	Para. Transit	D	$ 10,000	24323	3475	15	7	11.1%	6.2	3,907	326	20%
3				0	0	0	0	0.0%	0.0	0	0	20%
4				0	0	0	0	0.0%	0.0	0	0	20%
5				0	0	0	0	0.0%	0.0	0	0	0

VMT = Average annual VMT, USE = Average annual USE, PAG Use = Average annual PAG use, M PAG Use = Average monthly PAG us

Base Case Inputs

	Cell Name	Value	Unit	**Scenario 1** *Owned Infra + reduced Vehicle Incentive*	**Scenario 2** *P3 Infra + reduced Vehicle Incentive*	**Scenario 3** *P3 Infra + Add'l Vehicle Incentive*
Infrastructure						
Infrastructure Cost	*Infra_Cost*	$100,000	$	$100,000	$0	$0
Salvage Value	*PAG_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent	0%	30%	30%
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$0.50	$0.50	$0.50
Price of PAG (per GGE)	*PAG_Price*	$1.37	$/GGE	$1.37	$1.37	$1.37
PAG Infrastructure Markup (Station Developer)	*PAG_Markup*	$0.00		$0.00	$0.10	$0.10
PAG Fuel Sales Royalty (from Developer)	*PAG_Royalty*	$0.00	$/GGE	$0.00	$0.00	$0.00
PAG Price Increase	*Base Case*	3.7%	%/Year	3.7%	3.7%	3.7%
PAG Lifecycle GHG Factor (per GGE)	*PAG_GHG_Factor*	22.5	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%	4.3%	4.3%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	2.1	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%	3.8%	3.8%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
PAG Vehicle Maintenance Costs	*PAG_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV PAG Vehicle Maintenance Costs	*PAG_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	0%
Incentives						
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	25%	25%	50%

Vehicle Procurement *Procurement Factor* 100%

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	Para. Transit	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
2	Para. Transit	1	1	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	12	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	1	2	3	4	5	5	5	5	5	5	5	5	5	5	5	5	4	3	2	1	0
2	Para. Transit	1	2	3	4	5	7	7	7	7	7	7	7	7	7	7	7	7	6	5	4	3
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	Type																					
1	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$2,000	$2,000	$2,000	$2,000
2	School Buses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$2,000	$2,000	$2,000
3	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Class 1 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Police Cruiser	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$4,000	$4,000	$4,000	$4,000

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	$10,000	$10,000	$10,000	$10,000	$10,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Para. Transit	$10,000	$10,000	$10,000	$10,000	$10,000	$20,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal (w/o Incentive)		$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	301	602	903	1,204	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,204	903	602	301	0
2	Para. Transit	290	579	869	1,158	1,448	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	1,737	1,448	1,158	869
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		591	1,181	1,772	2,362	2,953	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,231	2,640	2,050	1,459	869

PAG Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	334	669	1,003	1,338	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,338	1,003	669	334	0
2	Para. Transit	326	651	977	1,302	1,628	2,279	2,279	2,279	2,279	2,279	2,279	2,279	2,279	2,279	2,279	2,279	2,279	1,953	1,628	1,302	977
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		660	1,320	1,980	2,640	3,300	3,951	3,951	3,951	3,951	3,951	3,951	3,951	3,951	3,951	3,951	3,951	3,617	2,957	2,297	1,637	977
Incremental Capacity (GGE/mo)		660	660	660	660	660	651	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$100,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$100,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$100,000																				
Scenario 1 Station Cost		$100,000																				
Scenario 2 Station Cost		$0																				
Scenario 3 Station Cost		$0																				
Total Station Cost (w/ Tax Credit)		$100,000																				
Station Amortization		$5,515.81	$0.18	$0.70	$0.35	$0.23	$0.17	$0.14	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	$0.13	$0.16	$0.20

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($10,000)	($10,000)	($10,000)	($10,000)	($10,000)	($10,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$4,000	$4,000	$4,000	$4,000
Station		($100,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$20,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$3,621	$15,329	$24,307	$34,225	$45,135	$57,444	$60,500	$63,670	$66,956	$70,365	$73,899	$77,564	$81,365	$85,306	$89,394	$93,632	$90,209	$77,411	$63,202	$47,501	$30,223
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$3,996	$16,671	$26,082	$36,271	$47,288	$69,050	$72,020	$75,116	$78,346	$81,715	$85,229	$88,894	$92,716	$96,703	$100,861	$105,199	$109,722	$98,092	$85,258	$71,139	$55,649
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,792	$15,746	$24,517	$33,931	$44,026	$45,699	$47,435	$49,238	$51,109	$53,051	$55,067	$57,159	$59,331	$61,586	$63,926	$66,355	$55,101	$42,896	$29,684	$15,406	$0
Fuel Savings		$4,167	$17,088	$26,291	$35,977	$46,179	$57,305	$58,954	$60,684	$62,499	$64,401	$66,397	$68,489	$70,683	$72,983	$75,394	$77,922	$74,614	$63,577	$51,740	$39,044	$25,425
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$4,167	$17,088	$26,291	$35,977	$46,179	$57,305	$58,954	$60,684	$62,499	$64,401	$66,397	$68,489	$70,683	$72,983	$75,394	$77,922	$76,614	$67,577	$55,740	$43,044	$49,425
Total Costs		($110,000)	($13,000)	($13,000)	($13,000)	($13,000)	($13,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	$0
Net Cash Flow		($105,833)	$4,088	$13,291	$22,977	$33,179	$44,305	$55,954	$57,684	$59,499	$61,401	$63,397	$65,489	$67,683	$69,983	$72,394	$74,922	$73,614	$64,577	$52,740	$40,044	$49,425
Cumulative Cash Flow		($105,833)	($101,745)	($88,453)	($65,476)	($32,298)	$12,007	$67,961	$125,646	$185,144	$246,546	$309,943	$375,432	$443,114	$513,097	$585,491	$660,413	$734,027	$798,605	$851,345	$891,389	$940,814
Whole Years		0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	5.5																					
Discounted Return on Investment	315%																					
Internal Rate of Return	29%																					
Net Present Value	$603,617																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($15,000)	($15,000)	($15,000)	($15,000)	($15,000)	($15,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$4,000	$4,000	$4,000	$4,000
Station		($100,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$20,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$3,621	$15,329	$24,307	$34,225	$45,135	$57,444	$60,500	$63,670	$66,956	$70,365	$73,899	$77,564	$81,365	$85,306	$89,394	$93,632	$90,209	$77,411	$63,202	$47,501	$30,223
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$3,996	$16,671	$26,082	$36,271	$47,288	$69,050	$72,020	$75,116	$78,346	$81,715	$85,229	$88,894	$92,716	$96,703	$100,861	$105,199	$109,722	$98,092	$85,258	$71,139	$55,649
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,792	$15,746	$24,517	$33,931	$44,026	$45,699	$47,435	$49,238	$51,109	$53,051	$55,067	$57,159	$59,331	$61,586	$63,926	$66,355	$55,101	$42,896	$29,684	$15,406	$0
Fuel Savings		$4,167	$17,088	$26,291	$35,977	$46,179	$57,305	$58,954	$60,684	$62,499	$64,401	$66,397	$68,489	$70,683	$72,983	$75,394	$77,922	$74,614	$63,577	$51,740	$39,044	$25,425
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$4,167	$17,088	$26,291	$35,977	$46,179	$57,305	$58,954	$60,684	$62,499	$64,401	$66,397	$68,489	$70,683	$72,983	$75,394	$77,922	$76,614	$67,577	$55,740	$43,044	$49,425
Total Costs		($115,000)	($18,000)	($18,000)	($18,000)	($18,000)	($18,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	($3,000)	$0
Net Cash Flow		($110,833)	($912)	$8,291	$17,977	$28,179	$39,305	$55,954	$57,684	$59,499	$61,401	$63,397	$65,489	$67,683	$69,983	$72,394	$74,922	$73,614	$64,577	$52,740	$40,044	$49,425
Cumulative Cash Flow		($110,833)	($111,745)	($103,453)	($85,476)	($57,298)	($17,993)	$37,961	$95,646	$155,144	$216,546	$279,943	$345,432	$413,114	$483,097	$555,491	$630,413	$704,027	$768,605	$821,345	$861,389	$910,814
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	6.0																					
Discounted Return on Investment	264%																					
Internal Rate of Return	0.3																					
Net Present Value	$576,710																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($15,000)	($15,000)	($15,000)	($15,000)	($15,000)	($15,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$4,000	$4,000	$4,000	$4,000
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$4,038	$17,046	$26,960	$37,868	$49,826	$63,277	$66,509	$69,858	$73,331	$76,930	$80,661	$84,529	$88,539	$92,696	$97,005	$101,471	$97,640	$83,687	$68,247	$51,236	$32,565
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$3,996	$16,671	$26,082	$36,271	$47,288	$69,050	$72,020	$75,116	$78,346	$81,715	$85,229	$88,894	$92,716	$96,703	$100,861	$105,199	$109,722	$98,092	$85,258	$71,139	$55,649
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,792	$15,746	$24,517	$33,931	$44,026	$45,699	$47,435	$49,238	$51,109	$53,051	$55,067	$57,159	$59,331	$61,586	$63,926	$66,355	$55,101	$42,896	$29,684	$15,406	$0
Fuel Savings		$3,750	$15,371	$23,639	$32,334	$41,488	$51,472	$52,946	$54,496	$56,125	$57,836	$59,634	$61,524	$63,509	$65,593	$67,783	$70,082	$67,184	$57,301	$46,695	$35,309	$23,084
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$3,750	$15,371	$23,639	$32,334	$41,488	$51,472	$52,946	$54,496	$56,125	$57,836	$59,634	$61,524	$63,509	$65,593	$67,783	$70,082	$69,184	$61,301	$50,695	$39,309	$27,084
Total Costs		($15,000)	($15,000)	($15,000)	($15,000)	($15,000)	($15,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($11,250)	$371	$8,639	$17,334	$26,488	$36,472	$52,946	$54,496	$56,125	$57,836	$59,634	$61,524	$63,509	$65,593	$67,783	$70,082	$69,184	$61,301	$50,695	$39,309	$27,084
Cumulative Cash Flow		($11,250)	($10,879)	($2,240)	$15,094	$41,582	$78,054	$131,000	$185,496	$241,620	$299,456	$359,091	$420,615	$484,123	$549,716	$617,499	$687,582	$756,766	$818,067	$868,762	$908,071	$935,155
Whole Years		0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	2.8																					
Discounted Return on Investment	776%																					
Internal Rate of Return	89%																					
Net Present Value	$626,065																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($10,000)	($10,000)	($10,000)	($10,000)	($10,000)	($10,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000	$4,000	$4,000	$4,000	$4,000
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$4,038	$17,046	$26,960	$37,868	$49,826	$63,277	$66,509	$69,858	$73,331	$76,930	$80,661	$84,529	$88,539	$92,696	$97,005	$101,471	$97,640	$83,687	$68,247	$51,236	$32,565
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$3,996	$16,671	$26,082	$36,271	$47,288	$69,050	$72,020	$75,116	$78,346	$81,715	$85,229	$88,894	$92,716	$96,703	$100,861	$105,199	$109,722	$98,092	$85,258	$71,139	$55,649
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$3,792	$15,746	$24,517	$33,931	$44,026	$45,699	$47,435	$49,238	$51,109	$53,051	$55,067	$57,159	$59,331	$61,586	$63,926	$66,355	$55,101	$42,896	$29,684	$15,406	$0
Fuel Savings		$3,750	$15,371	$23,639	$32,334	$41,488	$51,472	$52,946	$54,496	$56,125	$57,836	$59,634	$61,524	$63,509	$65,593	$67,783	$70,082	$67,184	$57,301	$46,695	$35,309	$23,084
Fuel Royalty		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$3,750	$15,371	$23,639	$32,334	$41,488	$51,472	$52,946	$54,496	$56,125	$57,836	$59,634	$61,524	$63,509	$65,593	$67,783	$70,082	$69,184	$61,301	$50,695	$39,309	$27,084
Total Costs		($10,000)	($10,000)	($10,000)	($10,000)	($10,000)	($10,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($6,250)	$5,371	$13,639	$22,334	$31,488	$41,472	$52,946	$54,496	$56,125	$57,836	$59,634	$61,524	$63,509	$65,593	$67,783	$70,082	$69,184	$61,301	$50,695	$39,309	$27,084
Cumulative Cash Flow		($6,250)	($879)	$12,760	$35,094	$66,582	$108,054	$161,000	$215,496	$271,620	$329,456	$389,091	$450,615	$514,123	$579,716	$647,499	$717,582	$786,766	$848,067	$898,762	$938,071	$965,155
Whole Years		0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	1.66																					
Discounted Return on Investment	1213%																					
Internal Rate of Return	167%																					
Net Present Value	$652,972																					

Propane-Autogas (PAG) School Bus Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	Autogas loss	mpGGE	Autogas Use	Mnthly Autogas Use	Salvage Value
1					0			10.0%	0.0	0	0	20%
2	School Buses	D	$ 6,600	9137	1305	15	7	11.1%	6.2	1,468	122	20%
3					0			11.1%	0.0	0	0	20%
4					0			10.0%	0.0	0	0	20%
5					0			10.0%	0.0	0	0	0

VMT = Average annual VMT, USE = Average annual USE, PAG Use = Average annual PAG use, M PAG Use = Average monthly PAG us

Base Case Inputs

				Scenario 1 *Owned Infra + reduced Vehicle Incentive*	**Scenario 2** *P3 Infra + reduced Vehicle Incentive*	**Scenario 3** *P3 Infra + Add'l Vehicle Incentive*
Infrastructure	Cell Name	Value	Unit			
Infrastructure Cost	*Infra_Cost*	$150,000	$	$150,000	$0	$0
Salvage Value	*PAG_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent	0%	30%	30%
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$ 0.50	$ 0.50	$ 0.50
Price of PAG (per GGE)	*PAG_Price*	$1.37	$/GGE	$1.37	$1.37	$1.37
PAG Infrastructure Markup (Station Developer)	*PAG_Markup*	$0.00		$0.00	$0.10	$0.10
PAG Fuel Sales Royalty (from Developer)	*PAG_Royalty*	$0.00	$/GGE	$0.00	$0.00	$0.00
PAG Price Increase	*Base Case*	3.7%	%/Year	3.7%	3.7%	3.7%
PAG Lifecycle GHG Factor (per GGE)	*PAG_GHG_Factor*	22.5	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%	4.3%	4.3%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	2.1	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%	3.8%	3.8%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
PAG Vehicle Maintenance Costs	*PAG_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV PAG Vehicle Maintenance Costs	*PAG_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	0%
Incentives						
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	25%	25%	50%

Vehicle Procurement *Procurement Factor* 100%

Project Year		4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	School Buses	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	66	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	School Buses	11	22	33	44	55	66	66	66	66	66	66	66	66	66	66	66	66	55	44	33	22
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	Type																					
1	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	School Buses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520
3	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Class 1 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Police Cruiser	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	School Buses	$72,600	$72,600	$72,600	$72,600	$72,600	$72,600	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

3	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal (w/o Incentive)		$72,600	$72,600	$72,600	$72,600	$72,600	$72,600	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$36,300	$36,300	$36,300	$36,300	$36,300	$36,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$36,300	$36,300	$36,300	$36,300	$36,300	$36,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	School Buses	1,197	2,393	3,590	4,786	5,983	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	5,983	4,786	3,590	2,393
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,197	2,393	3,590	4,786	5,983	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	7,179	5,983	4,786	3,590	2,393

PAG Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	School Buses	1,345	2,691	4,036	5,381	6,727	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	6,727	5,381	4,036	2,691
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		1,345	2,691	4,036	5,381	6,727	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	8,072	6,727	5,381	4,036	2,691
Incremental Capacity (GGE/mo)		1,345	1,345	1,345	1,345	1,345	1,345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$150,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$150,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$150,000																				
Scenario 1 Station Cost		$150,000																				
Scenario 2 Station Cost		$0																				
Scenario 3 Station Cost		$0																				
Total Station Cost (w/ Tax Credit)		$150,000																				
Station Amortization		$8,273.71	$0.13	$0.51	$0.26	$0.17	$0.13	$0.10	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.10	$0.13

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($36,300)	($36,300)	($36,300)	($36,300)	($36,300)	($36,300)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520
Station		($150,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$30,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$7,014	$29,691	$47,080	$66,291	$87,423	$110,581	$116,465	$122,566	$128,893	$135,454	$142,258	$149,313	$156,630	$164,217	$172,085	$180,244	$188,705	$164,566	$137,719	$108,007	$75,266
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,512	$68,887	$107,774	$149,878	$195,404	$244,568	$255,084	$266,053	$277,493	$289,425	$301,870	$314,851	$328,389	$342,510	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$9,498	$39,196	$60,694	$83,587	$107,981	$133,986	$138,619	$143,487	$148,600	$153,971	$159,613	$165,538	$171,760	$178,293	$185,153	$192,355	$199,916	$173,210	$144,122	$112,463	$78,034
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$9,498	$39,196	$60,694	$83,587	$107,981	$133,986	$138,619	$143,487	$148,600	$153,971	$159,613	$165,538	$171,760	$178,293	$185,153	$192,355	$199,916	$187,730	$158,642	$126,983	$122,554
Total Costs		($186,300)	($40,800)	($40,800)	($40,800)	($40,800)	($40,800)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	$0
Net Cash Flow		($176,802)	($1,604)	$19,894	$42,787	$67,181	$93,186	$134,119	$138,987	$144,100	$149,471	$155,113	$161,038	$167,260	$173,793	$180,653	$187,855	$195,416	$183,230	$154,142	$122,483	$122,554
Cumulative Cash Flow		($176,802)	($178,406)	($158,511)	($115,724)	($48,543)	$44,643	$178,762	$317,749	$461,849	$611,320	$766,432	$927,470	$1,094,729	$1,268,522	$1,449,175	$1,637,030	$1,832,446	$2,015,676	$2,169,818	$2,292,301	$2,414,855
Whole Years		0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	5.2																					
Discounted Return on Investment	386%																					
Internal Rate of Return	33%																					
Net Present Value	$1,551,321																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($54,450)	($54,450)	($54,450)	($54,450)	($54,450)	($54,450)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520
Station		($150,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$30,000
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$7,014	$29,691	$47,080	$66,291	$87,423	$110,581	$116,465	$122,566	$128,893	$135,454	$142,258	$149,313	$156,630	$164,217	$172,085	$180,244	$188,705	$164,566	$137,719	$108,007	$75,266
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,512	$68,887	$107,774	$149,878	$195,404	$244,568	$255,084	$266,053	$277,493	$289,425	$301,870	$314,851	$328,389	$342,510	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$9,498	$39,196	$60,694	$83,587	$107,981	$133,986	$138,619	$143,487	$148,600	$153,971	$159,613	$165,538	$171,760	$178,293	$185,153	$192,355	$199,916	$173,210	$144,122	$112,463	$78,034
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$9,498	$39,196	$60,694	$83,587	$107,981	$133,986	$138,619	$143,487	$148,600	$153,971	$159,613	$165,538	$171,760	$178,293	$185,153	$192,355	$199,916	$187,730	$158,642	$126,983	$122,554
Total Costs		($204,450)	($58,950)	($58,950)	($58,950)	($58,950)	($58,950)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	($4,500)	$0
Net Cash Flow		($194,952)	($19,754)	$1,744	$24,637	$49,031	$75,036	$134,119	$138,987	$144,100	$149,471	$155,113	$161,038	$167,260	$173,793	$180,653	$187,855	$195,416	$183,230	$154,142	$122,483	$122,554
Cumulative Cash Flow		($194,952)	($214,706)	($212,961)	($188,324)	($139,293)	($64,257)	$69,862	$208,849	$352,949	$502,420	$657,532	$818,570	$985,829	$1,159,622	$1,340,275	$1,528,130	$1,723,546	$1,906,776	$2,060,918	$2,183,401	$2,305,955
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	6.4																					
Discounted Return on Investment	291%																					
Internal Rate of Return	0.3																					
Net Present Value	$1,453,648																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($54,450)	($54,450)	($54,450)	($54,450)	($54,450)	($54,450)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$7,821	$33,017	$52,218	$73,347	$96,508	$121,811	$128,031	$134,479	$141,163	$148,092	$155,275	$162,721	$170,440	$178,442	$186,737	$195,335	$204,249	$177,908	$148,712	$116,499	$81,098
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,512	$68,887	$107,774	$149,878	$195,404	$244,568	$255,084	$266,053	$277,493	$289,425	$301,870	$314,851	$328,389	$342,510	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$8,691	$35,871	$55,556	$76,531	$98,896	$122,757	$127,053	$131,574	$136,330	$141,333	$146,595	$152,129	$157,949	$164,068	$170,501	$177,264	$184,372	$159,869	$133,128	$103,971	$72,203
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$8,691	$35,871	$55,556	$76,531	$98,896	$122,757	$127,053	$131,574	$136,330	$141,333	$146,595	$152,129	$157,949	$164,068	$170,501	$177,264	$184,372	$174,389	$147,648	$118,491	$86,723
Total Costs		($54,450)	($54,450)	($54,450)	($54,450)	($54,450)	($54,450)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($45,759)	($18,579)	$1,106	$22,081	$44,446	$68,307	$127,053	$131,574	$136,330	$141,333	$146,595	$152,129	$157,949	$164,068	$170,501	$177,264	$184,372	$174,389	$147,648	$118,491	$86,723
Cumulative Cash Flow		($45,759)	($64,338)	($63,232)	($41,152)	$3,294	$71,601	$198,654	$330,228	$466,557	$607,890	$754,485	$906,614	$1,064,563	$1,228,631	$1,399,133	$1,576,397	$1,760,769	$1,935,157	$2,082,805	$2,201,296	$2,288,019
Whole Years		0.5	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	4.4																					
Discounted Return on Investment	509%																					
Internal Rate of Return	51%																					
Net Present Value	$1,490,812																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($36,300)	($36,300)	($36,300)	($36,300)	($36,300)	($36,300)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,520	$14,520	$14,520	$14,520
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$7,821	$33,017	$52,218	$73,347	$96,508	$121,811	$128,031	$134,479	$141,163	$148,092	$155,275	$162,721	$170,440	$178,442	$186,737	$195,335	$204,249	$177,908	$148,712	$116,499	$81,098
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,512	$68,887	$107,774	$149,878	$195,404	$244,568	$255,084	$266,053	$277,493	$289,425	$301,870	$314,851	$328,389	$342,510	$357,238	$372,599	$388,621	$337,776	$281,841	$220,470	$153,300
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$8,691	$35,871	$55,556	$76,531	$98,896	$122,757	$127,053	$131,574	$136,330	$141,333	$146,595	$152,129	$157,949	$164,068	$170,501	$177,264	$184,372	$159,869	$133,128	$103,971	$72,203
Fuel Royalty		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$8,691	$35,871	$55,556	$76,531	$98,896	$122,757	$127,053	$131,574	$136,330	$141,333	$146,595	$152,129	$157,949	$164,068	$170,501	$177,264	$184,372	$174,389	$147,648	$118,491	$86,723
Total Costs		($36,300)	($36,300)	($36,300)	($36,300)	($36,300)	($36,300)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($27,609)	($429)	$19,256	$40,231	$62,596	$86,457	$127,053	$131,574	$136,330	$141,333	$146,595	$152,129	$157,949	$164,068	$170,501	$177,264	$184,372	$174,389	$147,648	$118,491	$86,723
Cumulative Cash Flow		($27,609)	($28,038)	($8,782)	$31,448	$94,044	$180,501	$307,554	$439,128	$575,457	$716,790	$863,385	$1,015,514	$1,173,463	$1,337,531	$1,508,033	$1,685,297	$1,869,669	$2,044,057	$2,191,705	$2,310,196	$2,396,919
Whole Years		0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	2.96																					
Discounted Return on Investment	813%																					
Internal Rate of Return	86%																					
Net Present Value	$1,588,485																					

–

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	Autogas loss	mpGGE	Autogas Use	Mnthly Autogas Use	Salvage Value
1					0			10.0%	0.0	0	0	20%
2					0			11.1%	0.0	0	0	20%
3					0			11.1%	0.0	0	0	20%
4					0			10.0%	0.0	0	0	20%
5	Police Cruiser	G	$ 7,000	11701	688	7	17	10.0%	15.3	765	64	20%

VMT = Average annual VMT, USE = Average annual USE, PAG Use = Average annual PAG use, M PAG Use = Average monthly PAG us

Base Case Inputs

Infrastructure	Cell Name	Value	Unit	**Scenario 1** *Owned Infra + reduced Vehicle Incentive*	**Scenario 2** *P3 Infra + reduced Vehicle Incentive*	**Scenario 3** *P3 Infra + Add'l Vehicle Incentive*
Infrastructure Cost	*Infra_Cost*	$200,000	$	$200,000	$0	$0
Salvage Value	*PAG_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent	0%	30%	30%
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$ 0.50	$ 0.50	$ 0.50
Price of PAG (per GGE)	*PAG_Price*	$1.37	$/GGE	$1.37	$1.37	$1.37
PAG Price Markup (Station Developer)	*PAG_Markup*	$0.00		$0.00	$0.10	$0.10
PAG Fuel Sales Royalty (from Developer)	*PAG_Royalty*	$0.00	$/GGE	$0.00	$0.00	$0.00
PAG Price Increase	*Base Case*	3.7%	%/Year	3.7%	3.7%	3.7%
PAG Lifecycle GHG Factor (per GGE)	*PAG_GHG_Factor*	22.5	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%	4.3%	4.3%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	2.10	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%	3.8%	3.8%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
PAG Vehicle Maintenance Costs	*PAG_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV PAG Vehicle Maintenance Costs	*PAG_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	0%
Incentives						
Required Rate of Return / Nominal Discount Rate	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	25%	25%	50%

Vehicle Procurement *Procurement Factor* 100%

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Police Cruiser	43	43	43	43	43	44		0	0	0	0	0	0	0	0	0	0	0	0	0	0	259
Total	259	43	43	43	43	43	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	259

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Police Cruiser	43	86	129	172	215	259	259	100	96	80	64	48	5	-38	-82	0	0	0	0	0	0

Vehicle Salvage Value

1400

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	Type																					
1	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	School Buses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Class 1 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Police Cruiser	$0	$0	$0	$0	$0	$0	$0	$222,600	$5,600	$22,400	$22,400	$22,400	$60,200	$60,200	$61,600	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$222,600	$5,600	$22,400	$22,400	$22,400	$60,200	$60,200	$61,600	$0	$0	$0	$0	$0	$0

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

3	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Police Cruiser	$301,000	$301,000	$301,000	$301,000	$301,000	$308,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal (w/o Incentive)		$301,000	$301,000	$301,000	$301,000	$301,000	$308,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$150,500	$150,500	$150,500	$150,500	$150,500	$154,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$150,500	$150,500	$150,500	$150,500	$150,500	$154,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Police Cruiser	2,466	4,933	7,399	9,866	12,332	14,856	14,856	5,736	5,506	4,589	3,671	2,753	287	-2,180	-4,703	0	0	0	0	0	0
Total		2,466	4,933	7,399	9,866	12,332	14,856	14,856	5,736	5,506	4,589	3,671	2,753	287	-2,180	-4,703	0	0	0	0	0	0

PAG Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Police Cruiser	2,740	5,481	8,221	10,962	13,702	16,506	16,506	6,373	6,118	5,098	4,079	3,059	319	-2,422	-5,226	0	0	0	0	0	0
Required Capacity (GGE/mo)		2,740	5,481	8,221	10,962	13,702	16,506	16,506	6,373	6,118	5,098	4,079	3,059	319	-2,422	-5,226	0	0	0	0	0	0
Incremental Capacity (GGE/mo)		2,740	2,740	2,740	2,740	2,740	2,804	0	0	0	0	0	0	0	0	0	5,226	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$200,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$477,929	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$200,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$477,929	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$200,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$477,929	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$200,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$477,929	$0	$0	$0	$0	$0
Base Total Station Cost		$200,000																				
Scenario 1 Station Cost		$200,000																				
Scenario 2 Station Cost		$200,000																				
Scenario 3 Station Cost		$200,000																				
Total Station Cost (w/ Tax Credit)		$140,000																				
Station Amortization		$7,408.96	$0.19	$0.23	$0.11	$0.08	$0.06	$0.05	$0.04	$0.04	$0.10	$0.10	$0.12	$0.15	$0.20	$1.94	($0.25)	($0.12)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($150,500)	($150,500)	($150,500)	($150,500)	($150,500)	($154,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$222,600	$5,600	$22,400	$22,400	$22,400	$60,200	$60,200	$61,600	$0	$0	$0	$0	$0	$0
Station		($200,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	($477,929)	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,000	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$14,287	$60,480	$95,902	$135,034	$178,080	$226,126	$238,157	$96,770	$97,694	$85,556	$71,883	$56,586	$6,183	($49,269)	($111,411)	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$31,076	$129,030	$200,899	$278,044	$360,762	$451,107	$468,249	$187,661	$187,001	$161,756	$134,322	$104,570	$11,307	($89,195)	($199,788)	$0	$0	$0	$0	$0	$0
Fuel Savings		$16,789	$68,549	$104,997	$143,010	$182,682	$224,981	$230,092	$90,892	$89,306	$76,200	$62,439	$47,984	$5,123	($39,927)	($88,378)	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$16,789	$68,549	$104,997	$143,010	$182,682	$224,981	$230,092	$313,492	$94,906	$98,600	$84,839	$70,384	$65,323	$60,273	($26,778)	$0	$0	$0	$0	$0	$0
Total Costs	($1,352,521.09)	($350,500)	($156,500)	($156,500)	($156,500)	($156,500)	($160,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	$0	$0	($477,929)	$0	$0	$0	$0	$0
Net Cash Flow		($333,711)	($87,951)	($51,503)	($13,490)	$26,182	$64,981	$224,092	$307,492	$88,906	$92,600	$78,839	$64,384	$59,323	$60,273	($26,778)	($477,929)	$0	$0	$0	$0	$0
Cumulative Cash Flow		($333,711)	($421,662)	($473,165)	($486,655)	($460,473)	($395,492)	($171,400)	$136,091	$224,998	$317,597	$396,436	$460,820	$520,143	$580,417	$553,639	$75,710	$75,710	$75,710	$75,710	$75,710	$75,710
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	15.5																					
Payback Period	7.3																					
Discounted Return on Investment	3%																					
Internal Rate of Return	6%																					
Net Present Value	$37,367																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($225,750)	($225,750)	($225,750)	($225,750)	($225,750)	($231,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$222,600	$5,600	$22,400	$22,400	$22,400	$60,200	$60,200	$61,600	$0	$0	$0	$0	$0	$0
Station		($200,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	($477,929)	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,000	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PAG Price (after tax credit & mark up)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$14,287	$60,480	$95,902	$135,034	$178,080	$226,126	$238,157	$96,770	$97,694	$85,556	$71,883	$56,586	$6,183	($49,269)	($111,411)	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$31,076	$129,030	$200,899	$278,044	$360,762	$451,107	$468,249	$187,661	$187,001	$161,756	$134,322	$104,570	$11,307	($89,195)	($199,788)	$0	$0	$0	$0	$0	$0
Fuel Savings		$16,789	$68,549	$104,997	$143,010	$182,682	$224,981	$230,092	$90,892	$89,306	$76,200	$62,439	$47,984	$5,123	($39,927)	($88,378)	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$16,789	$68,549	$104,997	$143,010	$182,682	$224,981	$230,092	$313,492	$94,906	$98,600	$84,839	$70,384	$65,323	$60,273	($26,778)	$0	$0	$0	$0	$0	$0
Total Costs		($425,750)	($231,750)	($231,750)	($231,750)	($231,750)	($237,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	($6,000)	$0	$0	($477,929)	$0	$0	$0	$0	$0
Net Cash Flow		($408,961)	($163,201)	($126,753)	($88,740)	($49,068)	($12,019)	$224,092	$307,492	$88,906	$92,600	$78,839	$64,384	$59,323	$60,273	($26,778)	($477,929)	$0	$0	$0	$0	$0
Cumulative Cash Flow		($408,961)	($572,162)	($698,915)	($787,655)	($836,723)	($848,742)	($624,650)	($317,159)	($228,252)	($135,653)	($56,814)	$7,570	$66,893	$127,167	$100,389	($377,540)	($377,540)	($377,540)	($377,540)	($377,540)	($377,540)
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	15.5																					
Payback Period	17.2																					
Discounted Return on Investment	-21%																					
Internal Rate of Return	#NUM!																					
Net Present Value	($369,036)																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($225,750)	($225,750)	($225,750)	($225,750)	($225,750)	($231,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$222,600	$5,600	$22,400	$22,400	$22,400	$60,200	$60,200	$61,600	$0	$0	$0	$0	$0	$0
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$15,932	$67,255	$106,369	$149,408	$196,587	$249,089	$261,809	$106,175	$106,995	$93,539	$78,461	$61,667	$6,728	($53,537)	($120,896)	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$31,076	$129,030	$200,899	$278,044	$360,762	$451,107	$468,249	$187,661	$187,001	$161,756	$134,322	$104,570	$11,307	($89,195)	($199,788)	$0	$0	$0	$0	$0	$0
Fuel Savings		$15,145	$61,775	$94,530	$128,636	$164,176	$202,019	$206,441	$81,486	$80,006	$68,217	$55,861	$42,902	$4,578	($35,659)	($78,892)	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$15,145	$61,775	$94,530	$128,636	$164,176	$202,019	$206,441	$304,086	$85,606	$90,617	$78,261	$65,302	$64,778	$24,541	($17,292)	$0	$0	$0	$0	$0	$0
Total Costs		($225,750)	($225,750)	($225,750)	($225,750)	($225,750)	($231,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($210,605)	($163,975)	($131,220)	($97,114)	($61,574)	($28,981)	$206,441	$304,086	$85,606	$90,617	$78,261	$65,302	$64,778	$24,541	($17,292)	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		($210,605)	($374,580)	($505,800)	($602,914)	($664,488)	($693,470)	($487,029)	($182,943)	($97,337)	($6,720)	$71,541	$136,843	$201,621	$226,162	$208,870	$208,870	$208,870	$208,870	$208,870	$208,870	$208,870
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	14.5																					
Payback Period	9.6																					
Discounted Return on Investment	3%																					
Internal Rate of Return	4%																					
Net Present Value	$41,026																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		($150,500)	($150,500)	($150,500)	($150,500)	($150,500)	($154,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$222,600	$5,600	$22,400	$22,400	$22,400	$60,200	$60,200	$61,600	$0	$0	$0	$0	$0	$0
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Price		$1.37	$1.42	$1.47	$1.53	$1.58	$1.64	$1.70	$1.77	$1.83	$1.90	$1.97	$2.04	$2.12	$2.20	$2.28	$2.36	$2.45	$2.54	$2.63	$2.73	$2.83
PAG Price (after tax credit)		$0.87	$0.92	$0.97	$1.03	$1.08	$1.14	$1.20	$1.27	$1.33	$1.40	$1.47	$1.54	$1.62	$1.70	$1.78	$1.86	$1.95	$2.04	$2.13	$2.23	$2.33
PAG P3 Markup		$0.10	$0.10	$0.11	$0.11	$0.11	$0.12	$0.12	$0.12	$0.13	$0.13	$0.13	$0.14	$0.14	$0.15	$0.15	$0.16	$0.16	$0.17	$0.17	$0.18	$0.18
PAG Price (after tax credit & mark up)		$0.97	$1.02	$1.08	$1.14	$1.20	$1.26	$1.32	$1.39	$1.46	$1.53	$1.60	$1.68	$1.76	$1.84	$1.93	$2.02	$2.11	$2.20	$2.30	$2.41	$2.51
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
PAG Fleet Maintenance																						
PAG Fleet Fuel Costs		$15,932	$67,255	$106,369	$149,408	$196,587	$249,089	$261,809	$106,175	$106,995	$93,539	$78,461	$61,667	$6,728	($53,537)	($120,896)	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$31,076	$129,030	$200,899	$278,044	$360,762	$451,107	$468,249	$187,661	$187,001	$161,756	$134,322	$104,570	$11,307	($89,195)	($199,788)	$0	$0	$0	$0	$0	$0
Fuel Savings		$15,145	$61,775	$94,530	$128,636	$164,176	$202,019	$206,441	$81,486	$80,006	$68,217	$55,861	$42,902	$4,578	($35,659)	($78,892)	$0	$0	$0	$0	$0	$0
Fuel Royalty		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Maintenance (inc. in PAG price)		($0)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PAG Station Electricity (inc. in PAG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$15,145	$61,775	$94,530	$128,636	$164,176	$202,019	$206,441	$304,086	$85,606	$90,617	$78,261	$65,302	$64,778	$24,541	($17,292)	$0	$0	$0	$0	$0	$0
Total Costs		($150,500)	($150,500)	($150,500)	($150,500)	($150,500)	($154,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($135,355)	($88,725)	($55,970)	($21,864)	$13,676	$48,019	$206,441	$304,086	$85,606	$90,617	$78,261	$65,302	$64,778	$24,541	($17,292)	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		($135,355)	($224,080)	($280,050)	($301,914)	($288,238)	($240,220)	($33,779)	$270,307	$355,913	$446,530	$524,791	$590,093	$654,871	$679,412	$662,120	$662,120	$662,120	$662,120	$662,120	$662,120	$662,120
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	14.5																					
Payback Period	6.66																					
Discounted Return on Investment	55%																					
Internal Rate of Return	19%																					
Net Present Value	$447,430																					

B20 Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	B20 loss	mpGGE	B20 Use	Mthly B20 Use	Salvage Value
1	School Bus	D	$ -	9123	1303	15	7	1.8%	6.9	1,327	111	0%
2	Para. Transit	D	$ -	20865	3161	15	6.6	1.8%	6.5	3,219	268	0%
3	Class 3 Truck	D	$ -	9491	3390	12	2.8	1.8%	2.7	3,452	288	0%
4	Class 2 Truck	D	$ -	10126	728	8	13.9	1.8%	13.6	742	62	0%
5	Class 1 Truck	D	$ -	11174	570	8	19.6	1.8%	19.2	581	48	0%

VMT = Average annual VMT, USE = Average annual USE, B20 Use = Average annual B20 use, M B20 Use = Average monthly B20 us

Base Case Inputs

	Cell Name	Value	Unit	Scenario 1	Scenario 2	Scenario 3
Infrastructure				*Same price*		
Infrastructure Cost	*Infra_Cost*	$0	$	$0		
Salvage Value	*B20_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent			
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0		
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.00	$/GGE	$0.00		
Price of B20 (per GGE)	*B20_Price*	$2.21	$/GGE	$2.30		
B20 Price Markup (Station Developer)	*B20_Markup*	$0.00		$0.00		
B20 Fuel Sales Royalty (from Developer)	*B20_Royalty*	$0.00	$/GGE	$0.00		
B20 Price Increase	*Base Case*	4.3%	%/Year	4.3%		
B20 Lifecycle GHG Factor (per GGE)	*B20_GHG_Factor*	22.4	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30		
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%		
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	1.02	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	$2.10	$/Gallon	$2.10		
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%		
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
B20 Vehicle Maintenance Costs	*B20_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV B20 Vehicle Maintenance Costs	*B20_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%		
Incentives						
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	0%	% of Inc Cost	0%		

Vehicle Procurement *Procurement Factor* 100%

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	School Bus	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
2	Para. Transit	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3	Class 3 Truck	6	6	6	6	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
4	Class 2 Truck	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
5	Class 1 Truck	2	2	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	179	29	29	30	30	31	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	11	22	33	44	55	66	66	66	66	66	66	66	66	66	66	66	55	44	33	22	11
2	Para. Transit	1	2	3	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	3	2	1
3	Class 3 Truck	6	12	18	24	31	38	38	38	38	38	38	38	38	32	26	20	14	7	0	0	0
4	Class 2 Truck	9	18	27	36	45	54	54	54	54	45	36	27	18	9	0	0	0	0	0	0	0
5		2	4	7	10	13	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16

Vehicle Salvage Value

Project Year																						
Vehicle #	*Type*																					
1	School Bus	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Class 3 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Class 3 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

4	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5																						
Subtotal (w/o Incentive)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	1,195	2,389	3,584	4,779	5,973	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	5,973	4,779	3,584	2,389	1,195
2	Para. Transit	263	527	790	1,054	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,054	790	527	263
3	Class 3 Truck	1,695	3,390	5,084	6,779	8,757	10,734	10,734	10,734	10,734	10,734	10,734	10,734	10,734	9,039	7,344	5,649	3,955	1,977	0	0	0
4	Class 2 Truck	546	1,093	1,639	2,185	2,732	3,278	3,278	3,278	3,278	2,732	2,185	1,639	1,093	546	0	0	0	0	0	0	0
5		95	190	333	475	618	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760
Total		3,794	7,589	11,431	15,272	19,397	23,258	23,258	23,258	23,258	22,711	22,165	21,618	21,072	18,831	16,590	14,895	12,005	8,570	5,135	3,676	2,218

B20 Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	1,217	2,433	3,650	4,866	6,083	7,300	7,300	7,300	7,300	7,300	7,300	7,300	7,300	7,300	7,300	7,300	6,083	4,866	3,650	2,433	1,217
2	Para. Transit	268	537	805	1,073	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,341	1,073	805	537	268
3	Class 3 Truck	1,726	3,452	5,178	6,904	8,917	10,931	10,931	10,931	10,931	10,931	10,931	10,931	10,931	9,205	7,479	5,753	4,027	2,014	0	0	0
4	Class 2 Truck	556	1,113	1,669	2,226	2,782	3,338	3,338	3,338	3,338	2,782	2,226	1,669	1,113	556	0	0	0	0	0	0	0
5		97	194	339	484	629	774	774	774	774	774	774	774	774	774	774	774	774	774	774	774	774
Required Capacity (GGE/mo)		3,864	7,728	11,640	15,553	19,753	23,684	23,684	23,684	23,684	23,128	22,572	22,015	21,459	19,177	16,894	15,168	12,226	8,727	5,229	3,744	2,259
Incremental Capacity (GGE/mo)		3,864	3,864	3,912	3,912	4,200	3,932	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$0																				
Scenario 1 Station Cost		$0																				
Scenario 2 Station Cost		$0																				
Scenario 3 Station Cost		$0																				
Total Station Cost (w/ Tax Credit)		$0																				
Station Amortization		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Price		$2.26	$2.36	$2.46	$2.56	$2.67	$2.79	$2.91	$3.03	$3.16	$3.30	$3.44	$3.59	$3.74	$3.90	$4.07	$4.25	$4.43	$4.62	$4.82	$5.03	$5.24
B20 Price (after tax credit)		$2.26	$2.36	$2.46	$2.56	$2.67	$2.79	$2.91	$3.03	$3.16	$3.30	$3.44	$3.59	$3.74	$3.90	$4.07	$4.25	$4.43	$4.62	$4.82	$5.03	$5.24
B20 P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Price (after tax credit & mark up)		$2.26	$2.36	$2.46	$2.56	$2.67	$2.79	$2.91	$3.03	$3.16	$3.30	$3.44	$3.59	$3.74	$3.90	$4.07	$4.25	$4.43	$4.62	$4.82	$5.03	$5.24
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
B20 Fleet Maintenance																						
B20 Fleet Fuel Costs		$52,362	$218,453	$343,197	$478,264	$633,539	$792,308	$826,377	$861,911	$898,974	$915,603	$932,000	$948,114	$963,890	$898,411	$825,519	$773,054	$649,879	$483,859	$302,360	$225,803	$142,103
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$52,362	$218,453	$343,197	$478,264	$633,539	$792,308	$826,377	$861,911	$898,973	$915,602	$931,999	$948,113	$963,890	$898,411	$825,519	$773,054	$649,879	$483,860	$302,361	$225,804	$142,105
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Fuel Savings		($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	$0	$0	$0	$1	$1	$1	$1
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Maintenance (inc. in B20 price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	$0	$0	$0	$1	$1	$1	$1
Total Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	$0	$0	$0	$1	$1	$1	$1
Cumulative Cash Flow		($0)	($0)	($0)	($0)	($1)	($1)	($1)	($1)	($2)	($2)	($2)	($3)	($3)	($3)	($3)	($3)	($2)	($2)	($1)	$0	$1
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Project Life	20.5																					
Payback Period	19.4																					
Discounted Return on Investment	#DIV/0!																					
Internal Rate of Return	3%																					
Net Present Value	$0																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Price		$2.35	$2.45	$2.55	$2.66	$2.78	$2.90	$3.02	$3.15	$3.29	$3.43	$3.57	$3.73	$3.89	$4.06	$4.23	$4.41	$4.60	$4.80	$5.01	$5.22	$5.45
B20 Price (after tax credit)		$2.35	$2.45	$2.55	$2.66	$2.78	$2.90	$3.02	$3.15	$3.29	$3.43	$3.57	$3.73	$3.89	$4.06	$4.23	$4.41	$4.60	$4.80	$5.01	$5.22	$5.45
B20 P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Price (after tax credit & mark up)		$2.35	$2.45	$2.55	$2.66	$2.78	$2.90	$3.02	$3.15	$3.29	$3.43	$3.57	$3.73	$3.89	$4.06	$4.23	$4.41	$4.60	$4.80	$5.01	$5.22	$5.45
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
B20 Fleet Maintenance																						
B20 Fleet Fuel Costs		$54,389	$226,913	$356,486	$496,784	$658,071	$822,989	$858,377	$895,287	$933,785	$951,058	$968,090	$984,828	$1,001,215	$933,201	$857,486	$802,989	$675,044	$502,596	$314,069	$234,547	$147,606
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$52,362	$218,453	$343,197	$478,264	$633,539	$792,308	$826,377	$861,911	$898,973	$915,602	$931,999	$948,113	$963,890	$898,411	$825,519	$773,054	$649,879	$483,860	$302,361	$225,804	$142,105
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		($2,028)	($8,459)	($13,290)	($18,520)	($24,533)	($30,681)	($32,000)	($33,376)	($34,811)	($35,455)	($36,090)	($36,714)	($37,325)	($34,789)	($31,967)	($29,935)	($25,165)	($18,736)	($11,708)	($8,743)	($5,502)
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Maintenance (inc. in B20 price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		($2,028)	($8,459)	($13,290)	($18,520)	($24,533)	($30,681)	($32,000)	($33,376)	($34,811)	($35,455)	($36,090)	($36,714)	($37,325)	($34,789)	($31,967)	($29,935)	($25,165)	($18,736)	($11,708)	($8,743)	($5,502)
Total Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,028)	($8,459)	($13,290)	($18,520)	($24,533)	($30,681)	($32,000)	($33,376)	($34,811)	($35,455)	($36,090)	($36,714)	($37,325)	($34,789)	($31,967)	($29,935)	($25,165)	($18,736)	($11,708)	($8,743)	($5,502)
Cumulative Cash Flow		($2,028)	($10,487)	($23,777)	($42,297)	($66,830)	($97,511)	($129,511)	($162,887)	($197,699)	($233,154)	($269,244)	($305,959)	($343,284)	($378,073)	($410,040)	($439,975)	($465,140)	($483,876)	($495,584)	($504,327)	($509,828)
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	20.5																					
Discounted Return on Investment	#DIV/0!																					
Internal Rate of Return	#NUM!																					
Net Present Value	($363,538)																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Price		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Price (after tax credit)		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Price (after tax credit & mark up)		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Diesel Price		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Diesel Price (after tax exemption)		0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Gasoline Price		0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Gasoline Price (after exemption)		0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Fleet Maintenance																						
B20 Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel SaviB20s		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Maintenance (inc. in B20 price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Whole Years		0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	0.5																					
Payback Period	0.5																					
Discounted Return on Investment	#DIV/0!																					
Internal Rate of Return	#NUM!																					
Net Present Value	$0																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Cost of Vehicles (after incentives)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Price		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Price (after tax credit)		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 P3 Markup		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Price (after tax credit & mark up)		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Diesel Price		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Diesel Price (after tax exemption)		0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Gasoline Price		0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Gasoline Price (after exemption)		0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B20 Fleet Maintenance																						
B20 Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel SaviB20s		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Maintenance (inc. in B20 price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B20 Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cumulative Cash Flow		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Whole Years		0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	0.5																					
Payback Period	0.50																					
Discounted Return on Investment	#DIV/0!																					
Internal Rate of Return	#NUM!																					
Net Present Value	$0																					

CNG Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	CNG loss	mpGGE	CNG Use	Mthly CNG Use	Salvage Value
1	School Bus	D	$ 30,000	9123	1303	15	7	12.5%	6.1	1,489	124	20%
2	Para. Transit	D	$ 25,000	20865	3161	15	6.6	10.5%	5.9	3,532	294	20%
3	Class 3 Truck	D	$ 30,000	9699	3464	12	2.8	5.30%	2.7	3,658	305	20%
4	Class 2 Truck	D	$ 10,000	9837	708	8	13.9	5.3%	13.2	747	62	20%
5	Class 1 Truck	D	$ 10,000	11174	570	8	19.6	5.3%	18.6	602	50	20%

VMT = Average annual VMT, USE = Average annual USE, CNG Use = Average annual CNG use, M CNG Use = Average monthly CNG us

Base Case Inputs

				Scenario 1 *Owned Infra + Increased AFV Incentive*	**Scenario 2** *Owned Infra + Reduced AFV Incentive*	**Scenario 3** *P3 Infra + Inc. AFV Incentive + Royalties*
Infrastructure	Cell Name	Value	Unit			
Infrastructure Cost	*Infra_Cost*	$2,460,000	$	$2,460,000	$2,460,000	$0
Salvage Value	*CNG_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	0%	percent			
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$0.50	$0.50	$0.00
Price of CNG (per GGE)	*CNG_Price*	$0.72	$/GGE	$0.72	$0.72	$0.72
CNG Price Markup (O&M, Electricity +/- Capex)	*CNG_Markup*	$0.50		$0.50	$0.50	$0.77
CNG Fuel Sales Royalty (from Developer)	*CNG_Royalty*	$0.06	$/GGE	$0.00	$0.00	$0.06
CNG Price Increase	*Base Case*	1.9%	%/Year	1.9%	1.9%	1.9%
CNG Lifecycle GHG Factor (per GGE)	*CNG_GHG_Factor*	22.4	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%	4.3%	4.3%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	2.1	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%	3.8%	3.8%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
CNG Vehicle Maintenance Costs	*CNG_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV CNG Vehicle Maintenance Costs	*CNG_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	10%
Incentives						
Required Rate of Return / Nominal Discount Rate	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	60%	25%	50%
		3.71	2.92	8.4	4.23	2.47

Vehicle Procurement

	Procurement Factor	100%	100%	100%	100%	100%																
Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	School Bus	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
2	Para. Transit	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
3	Class 3 Truck	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
4	Class 2 Truck	6	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
5	Class 1 Truck	3	3	3	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Total	136	24	23	23	23	22	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136

*Vehicle Assumptions: Replace ~35% of School Buses; 100% of Class 4-7 Paratransit Buses; 50% of Class 8+ Trucks; 34% of Class 4-7 Truck

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	11	22	33	44	55	66	66	66	66	66	66	66	66	66	66	66	55	44	33	22	11
2	Para. Transit	2	4	6	8	10	12	12	12	12	12	12	12	12	12	12	12	12	10	8	6	4
3	Class 3 Truck	2	4	6	8	9	10	10	10	10	10	10	10	10	8	6	4	2	1	0	0	0
4	Class 2 Truck	6	11	16	21	26	31	31	31	31	25	20	15	10	5	0	0	0	0	0	0	0
5	Class 1 Truck	3	6	9	12	15	17	17	17	17	14	11	8	5	2	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year																						
Vehicle #	*Type*																					
1	School Bus	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000
2	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$10,000	$10,000	$10,000
3	Class 3 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,000	$12,000	$12,000	$12,000	$6,000	$6,000	$0	$0
4	Class 2 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,000	$10,000	$10,000	$10,000	$10,000	$10,000	$0	$0	$0	$0	$0	$0
5	Class 1 Truck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,000	$6,000	$6,000	$6,000	$6,000	$4,000	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,000	$16,000	$16,000	$16,000	$28,000	$26,000	$12,000	$78,000	$82,000	$82,000	$76,000	$76,000

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	$330,000	$330,000	$330,000	$330,000	$330,000	$330,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

2	Para. Transit	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Class 3 Truck	$60,000	$60,000	$60,000	$60,000	$30,000	$30,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Class 2 Truck	$60,000	$50,000	$50,000	$50,000	$50,000	$50,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Class 1 Truck	$30,000	$30,000	$30,000	$30,000	$30,000	$20,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal (w/o Incentive)		$530,000	$520,000	$520,000	$520,000	$490,000	$480,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$265,000	$260,000	$260,000	$260,000	$245,000	$240,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	1,195	2,389	3,584	4,779	5,973	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	5,973	4,779	3,584	2,389	1,195
2	Para. Transit	527	1,054	1,581	2,108	2,634	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	2,634	2,108	1,581	1,054
3	Class 3 Truck	577	1,155	1,732	2,309	2,598	2,887	2,887	2,887	2,887	2,887	2,887	2,887	2,887	2,309	1,732	1,155	577	289	0	0	0
4	Class 2 Truck	354	649	944	1,238	1,533	1,828	1,828	1,828	1,828	1,474	1,179	885	590	295	0	0	0	0	0	0	0
5	Class 1 Truck	143	285	428	570	713	808	808	808	808	665	523	380	238	95	0	0	0	0	0	0	0
Total		2,795	5,532	8,268	11,004	13,452	15,852	15,852	15,852	15,852	15,356	14,918	14,481	14,043	13,029	12,061	11,484	9,712	7,702	5,692	3,970	2,248

CNG Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	1,365	2,731	4,096	5,461	6,827	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	6,827	5,461	4,096	2,731	1,365
2	Para. Transit	589	1,177	1,766	2,355	2,944	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	3,532	2,944	2,355	1,766	1,177
3	Class 3 Truck	610	1,219	1,829	2,439	2,743	3,048	3,048	3,048	3,048	3,048	3,048	3,048	3,048	2,439	1,829	1,219	610	305	0	0	0
4	Class 2 Truck	374	685	996	1,308	1,619	1,931	1,931	1,931	1,931	1,557	1,246	934	623	311	0	0	0	0	0	0	0
5	Class 1 Truck	151	301	452	602	753	853	853	853	853	702	552	401	251	100	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		3,088	6,113	9,139	12,165	14,885	17,556	17,556	17,556	17,556	17,032	16,570	16,108	15,646	14,575	13,553	12,944	10,969	8,710	6,451	4,497	2,543
Incremental Capacity (GGE/mo)		3,088	3,026	3,026	3,026	2,721	2,671	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		818	1,840	1,840	1,840	1,840	1,840	2,044	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$2,460,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$2,460,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$2,460,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$2,460,000																				
Scenario 1 Station Cost		$2,460,000																				
Scenario 2 Station Cost		$2,460,000																				
Scenario 3 Station Cost		$0																				
Total Station Cost (w/ Tax Credit)		$2,460,000																				
Station Amortization		$155,310.09	$1.23	$4.19	$2.12	$1.42	$1.06	$0.87	$0.74	$0.74	$0.74	$0.74	$0.76	$0.78	$0.80	$0.83	$0.89	$0.95	$1.00	$1.18	$1.49	$2.01

Financial Analysis Base Case

		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($265,000)	($260,000)	($260,000)	($260,000)	($245,000)	($240,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,000	$16,000	$16,000	$16,000	$28,000	$26,000	$12,000	$78,000	$82,000	$82,000	$76,000	$76,000
Station		($2,460,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$492,000
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.30	$0.31	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.79	$0.82	$0.85	$0.89	$0.92	$0.95	$0.99	$1.02	$1.06	$1.09	$1.13	$1.17	$1.21	$1.25	$1.29	$1.33	$1.37	$1.42	$1.46	$1.51	$1.56
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$14,711	$60,454	$93,747	$129,384	$164,091	$200,500	$207,640	$214,957	$222,453	$223,263	$224,637	$225,775	$226,667	$218,175	$209,586	$206,717	$180,870	$148,257	$113,325	$81,511	$47,548
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$38,575	$159,236	$248,239	$344,603	$439,366	$540,023	$563,244	$587,463	$612,724	$619,060	$627,287	$635,078	$642,378	$621,589	$600,188	$596,032	$525,739	$434,848	$335,167	$243,840	$144,040
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Fuel Savings		$23,864	$98,782	$154,492	$215,218	$275,275	$339,523	$355,603	$372,507	$390,271	$395,797	$402,650	$409,303	$415,712	$403,414	$390,602	$389,316	$344,869	$286,591	$221,843	$162,329	$96,491
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$23,864	$98,782	$154,492	$215,218	$275,275	$339,523	$355,603	$372,507	$390,271	$413,797	$418,650	$425,303	$431,712	$431,414	$416,602	$401,316	$422,869	$368,591	$303,843	$238,329	$664,491
Total Costs		($2,725,000)	($260,000)	($260,000)	($260,000)	($245,000)	($240,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,701,136)	($161,218)	($105,508)	($44,782)	$30,275	$99,523	$355,603	$372,507	$390,271	$413,797	$418,650	$425,303	$431,712	$431,414	$416,602	$401,316	$422,869	$368,591	$303,843	$238,329	$664,491
Cumulative Cash Flow		($2,701,136)	($2,862,355)	($2,967,863)	($3,012,644)	($2,982,369)	($2,882,846)	($2,527,243)	($2,154,736)	($1,764,465)	($1,350,668)	($932,017)	($506,715)	($75,003)	$356,411	$773,013	$1,174,329	$1,597,197	$1,965,788	$2,269,630	$2,507,960	$3,172,451
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	12.7																					
Discounted Return on Investment	30%																					
Internal Rate of Return	6%																					
Net Present Value	$1,122,108																					

Financial Scenario 1

		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($212,000)	($208,000)	($208,000)	($208,000)	($196,000)	($192,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,000	$16,000	$16,000	$16,000	$28,000	$26,000	$12,000	$78,000	$82,000	$82,000	$76,000	$76,000
Station		($2,460,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$492,000
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.30	$0.31	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.79	$0.82	$0.85	$0.89	$0.92	$0.95	$0.99	$1.02	$1.06	$1.09	$1.13	$1.17	$1.21	$1.25	$1.29	$1.33	$1.37	$1.42	$1.46	$1.51	$1.56
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$14,711	$60,454	$93,747	$129,384	$164,091	$200,500	$207,640	$214,957	$222,453	$223,263	$224,637	$225,775	$226,667	$218,175	$209,586	$206,717	$180,870	$148,257	$113,325	$81,511	$47,548
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$38,575	$159,236	$248,239	$344,603	$439,366	$540,023	$563,244	$587,463	$612,724	$619,060	$627,287	$635,078	$642,378	$621,589	$600,188	$596,032	$525,739	$434,848	$335,167	$243,840	$144,040
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$23,864	$98,782	$154,492	$215,218	$275,275	$339,523	$355,603	$372,507	$390,271	$395,797	$402,650	$409,303	$415,712	$403,414	$390,602	$389,316	$344,869	$286,591	$221,843	$162,329	$96,491
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$23,864	$98,782	$154,492	$215,218	$275,275	$339,523	$355,603	$372,507	$390,271	$413,797	$418,650	$425,303	$431,712	$431,414	$416,602	$401,316	$422,869	$368,591	$303,843	$238,329	$664,491
Total Costs		($2,672,000)	($208,000)	($208,000)	($208,000)	($196,000)	($192,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,648,136)	($109,218)	($53,508)	$7,218	$79,275	$147,523	$355,603	$372,507	$390,271	$413,797	$418,650	$425,303	$431,712	$431,414	$416,602	$401,316	$422,869	$368,591	$303,843	$238,329	$664,491
Cumulative Cash Flow		($2,648,136)	($2,757,355)	($2,810,863)	($2,803,644)	($2,724,369)	($2,576,846)	($2,221,243)	($1,848,736)	($1,458,465)	($1,044,668)	($626,017)	($200,715)	$230,997	$662,411	$1,079,013	$1,480,329	$1,903,197	$2,271,788	$2,575,630	$2,813,960	$3,478,451
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	12.0																					
Discounted Return on Investment	40%																					
Internal Rate of Return	7%																					
Net Present Value	$1,397,039																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($397,500)	($390,000)	($390,000)	($390,000)	($367,500)	($360,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,000	$16,000	$16,000	$16,000	$28,000	$26,000	$12,000	$78,000	$82,000	$82,000	$76,000	$76,000
Station		($2,460,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$492,000
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.30	$0.31	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.79	$0.82	$0.85	$0.89	$0.92	$0.95	$0.99	$1.02	$1.06	$1.09	$1.13	$1.17	$1.21	$1.25	$1.29	$1.33	$1.37	$1.42	$1.46	$1.51	$1.56
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$14,711	$60,454	$93,747	$129,384	$164,091	$200,500	$207,640	$214,957	$222,453	$223,263	$224,637	$225,775	$226,667	$218,175	$209,586	$206,717	$180,870	$148,257	$113,325	$81,511	$47,548
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$38,575	$159,236	$248,239	$344,603	$439,366	$540,023	$563,244	$587,463	$612,724	$619,060	$627,287	$635,078	$642,378	$621,589	$600,188	$596,032	$525,739	$434,848	$335,167	$243,840	$144,040
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$23,864	$98,782	$154,492	$215,218	$275,275	$339,523	$355,603	$372,507	$390,271	$395,797	$402,650	$409,303	$415,712	$403,414	$390,602	$389,316	$344,869	$286,591	$221,843	$162,329	$96,491
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$23,864	$98,782	$154,492	$215,218	$275,275	$339,523	$355,603	$372,507	$390,271	$413,797	$418,650	$425,303	$431,712	$431,414	$416,602	$401,316	$422,869	$368,591	$303,843	$238,329	$664,491
Total Costs		($2,857,500)	($390,000)	($390,000)	($390,000)	($367,500)	($360,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,833,636)	($291,218)	($235,508)	($174,782)	($92,225)	($20,477)	$355,603	$372,507	$390,271	$413,797	$418,650	$425,303	$431,712	$431,414	$416,602	$401,316	$422,869	$368,591	$303,843	$238,329	$664,491
Cumulative Cash Flow		($2,833,636)	($3,124,855)	($3,360,363)	($3,535,144)	($3,627,369)	($3,647,846)	($3,292,243)	($2,919,736)	($2,529,465)	($2,115,668)	($1,697,017)	($1,271,715)	($840,003)	($408,589)	$8,013	$409,329	$832,197	$1,200,788	$1,504,630	$1,742,960	$2,407,451
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	14.4																					
Discounted Return on Investment	10%																					
Internal Rate of Return	4%																					
Net Present Value	$434,780																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($265,000)	($260,000)	($260,000)	($260,000)	($245,000)	($240,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,000	$16,000	$16,000	$16,000	$28,000	$26,000	$12,000	$78,000	$82,000	$82,000	$76,000	$76,000
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.80	$0.81	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$0.77	$0.79	$0.82	$0.84	$0.87	$0.89	$0.92	$0.95	$0.98	$1.00	$1.03	$1.07	$1.10	$1.13	$1.16	$1.20	$1.24	$1.27	$1.31	$1.35	$1.39
NG Price (after tax credit & mark up)		$1.57	$1.61	$1.15	$1.19	$1.23	$1.27	$1.31	$1.36	$1.40	$1.45	$1.50	$1.55	$1.60	$1.65	$1.70	$1.76	$1.82	$1.87	$1.93	$1.99	$2.05
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$29,070	$117,914	$125,743	$173,250	$219,377	$267,662	$276,817	$286,209	$295,842	$296,597	$298,123	$299,356	$300,282	$288,805	$277,238	$273,263	$238,955	$195,763	$149,566	$107,532	$62,703
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$38,575	$159,236	$248,239	$344,603	$439,366	$540,023	$563,244	$587,463	$612,724	$619,060	$627,287	$635,078	$642,378	$621,589	$600,188	$596,032	$525,739	$434,848	$335,167	$243,840	$144,040
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$9,505	$41,322	$122,497	$171,353	$219,988	$272,361	$286,427	$301,255	$316,882	$322,463	$329,164	$335,722	$342,097	$332,783	$322,950	$322,769	$286,784	$239,084	$185,601	$136,308	$81,336
Fuel Sales		$235	$1,558	$2,687	$3,858	$5,073	$6,332	$7,769	$7,917	$8,067	$8,220	$8,377	$8,536	$8,698	$8,863	$9,032	$9,203	$9,378	$9,556	$9,738	$9,923	$10,111
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$9,740	$42,880	$125,184	$175,211	$225,061	$278,693	$294,196	$309,171	$324,949	$348,683	$353,541	$360,258	$366,795	$369,647	$357,982	$343,972	$374,162	$330,640	$277,339	$222,231	$167,447
Total Costs		($265,000)	($260,000)	($260,000)	($260,000)	($245,000)	($240,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($255,260)	($217,120)	($134,816)	($84,789)	($19,939)	$38,693	$294,196	$309,171	$324,949	$348,683	$353,541	$360,258	$366,795	$369,647	$357,982	$343,972	$374,162	$330,640	$277,339	$222,231	$167,447
Cumulative Cash Flow		($255,260)	($472,380)	($607,196)	($691,985)	($711,924)	($673,231)	($379,035)	($69,864)	$255,085	$603,768	$957,309	$1,317,567	$1,684,361	$2,054,008	$2,411,990	$2,755,962	$3,130,124	$3,460,764	$3,738,103	$3,960,334	$4,127,782
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	7.73																					
Discounted Return on Investment	183%																					
Internal Rate of Return	21%																					
Net Present Value	$2,514,913																					

Estimated CNG Station O&M Costs (from VICE 2.0 Model)*

CNG Station Maintenance		$0	($96,000)	($103,000)	($111,000)	($118,000)	($124,000)	($125,000)	($125,000)	($125,000)	($125,000)	($125,000)	($125,000)	($124,000)	($124,000)	($122,000)	($121,000)	($116,000)	($108,000)	($101,000)	($96,000)	($90,000)
CNG Station Electricity		($1,500)	($15,000)	($25,000)	($34,000)	($44,000)	($52,000)	($54,000)	($54,000)	($54,000)	($54,000)	($53,000)	($53,000)	($52,000)	($54,000)	($50,000)	($47,000)	($41,000)	($30,000)	($22,000)	($15,000)	($7,000)

*Amortized into CNG fuel costs assumptions

CNG Paratransit Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	CNG loss	mpGGE	CNG Use	Mthly CNG Use	Salvage Value
1	Para. Transit	G	$ 25,000	23838	3405	15	7	12.5%	6.1	3,892	324	20%
2	Para. Transit	D	$ 25,000	24323	3685	15	6.6	10.5%	5.9	4,118	343	20%
3					0			5.30%	0.0	0	0	20%
4					0			5.3%	0.0	0	0	20%
5			0	0	0	0	0	0	0	0	0	0

VMT = Average annual VMT, USE = Average annual USE, CNG Use = Average annual CNG use, M CNG Use = Average monthly CNG us

Base Case Inputs

Infrastructure	Cell Name	Value	Unit	**Scenario 1** *Owned Infra + Increased AFV Incentive*	**Scenario 2** *Owned Infra + Reduced AFV Incentive*	**Scenario 3** *P3 Infra + Inc. AFV Incentive + Royalties*
Infrastructure Cost	*Infra_Cost*	$1,458,000	$	$1,458,000	$1,458,000	$0
Salvage Value	*CNG_Salv*	20%	% of original price			
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	30%	percent			
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0
Fuels						
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$0.50	$0.50	$0.00
Price of CNG (per GGE)	*CNG_Price*	$0.72	$/GGE	$0.72	$0.72	$0.72
CNG Price Markup (Station Developer)	*CNG_Markup*	$0.50		$0.50	$0.50	$2.62
CNG Fuel Sales Royalty (from Developer)	*CNG_Royalty*	$0.06	$/GGE	$0.00	$0.00	$0.06
CNG Price Increase	*High Case*	2.6%	%/Year	2.6%	2.6%	2.6%
CNG Lifecycle GHG Factor (per GGE)	*CNG_GHG_Factor*	22.4	lbs/GGE			
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30
Diesel Price Increase	*High Case*	6.2%	%/Year	6.2%	6.2%	6.2%
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon			
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon			
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon			
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE			
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE			
Gasoline Fuel Price	*G_Price*	2.1	$/Gallon	$2.10	$2.10	$2.10
Gasoline Price Increase	*High Case*	5.6%	%/Year	5.6%	5.6%	5.6%
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon			
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon			
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon			
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE			
Operations						
CNG Vehicle Maintenance Costs	*CNG_D_Maint*	0.52	$/mile			
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile			
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile			
LDV CNG Vehicle Maintenance Costs	*CNG_G_Maint*	0.047	$/mile			
% of commercial market	*Comm*	0%	percent	0%	0%	0%
Incentives						
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%			
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost			
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	60%	25%	50%
		274%				

avg. MPG	6.8	
Price diff	-$1.05	
5	0.735294118	-0.768668258
6	0.882352941	-0.92240191
7	1.029411765	-1.076135562
7.575	1.113970588	-1.164532412
8	1.176470588	-1.229869213
9	1.323529412	-1.383602865
10	1.470588235	-1.537336517
15	2.205882353	-2.306004775
20	2.941176471	-3.074673034
25	3.676470588	-3.843341292
30	4.411764706	-4.612009551
	0.062	
	0.038	
	0.021	
	0.056	

Vehicle Procurement *Procurement Factor* 100%

Project Year		0	1	2	3	4	5	6	7	8	9	10
Vehicle #	*Type*											
1	Para. Transit	2	1	1	1	1	1	0	0	0	0	0
2	Para. Transit	1	1	1	1	1	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0
Total	12	3	2	2	2	2	1	0	0	0	0	0

Project Year	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #											
1	0	0	0	0	0	0	0	0	0	0	7
2	0	0	0	0	0	0	0	0	0	0	5
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	12

*Vehicle Assumptions: Replace ~35% of School Buses; 100% of Class 4-7 Paratransit Buses; 50% of Class 8+ Trucks; 34% of Class 4-7 Truck

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10
Vehicle #	*Type*											
1	Para. Transit	2	3	4	5	6	7	7	7	7	7	7
2	Para. Transit	1	2	3	4	5	5	5	5	5	5	5
3		0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0

Project Year	11	12	13	14	15	16	17	18	19	20
Vehicle #										
1	7	7	7	7	7	5	4	3	2	1
2	5	5	5	5	5	5	4	3	2	1
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year												
Vehicle #	*Type*											
1	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Para. Transit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Project Year										
Vehicle #										
1	$0	$0	$0	$0	$0	$10,000	$5,000	$5,000	$5,000	$5,000
2	$0	$0	$0	$0	$0	$0	$5,000	$5,000	$5,000	$5,000
3	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$10,000	$10,000	$10,000	$10,000	$10,000

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10
Vehicle #	*Type*											
1	Para. Transit	$50,000	$25,000	$25,000	$25,000	$25,000	$25,000	$0	$0	$0	$0	$0

Project Year	11	12	13	14	15	16	17	18	19	20
Vehicle #										
1	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

2	Para. Transit	$25,000	$25,000	$25,000	$25,000	$25,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5																						
Subtotal (w/o Incentive)		$75,000	$50,000	$50,000	$50,000	$50,000	$25,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$37,500	$25,000	$25,000	$25,000	$25,000	$12,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$37,500	$25,000	$25,000	$25,000	$25,000	$12,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	568	851	1,135	1,419	1,703	1,987	1,987	1,987	1,987	1,987	1,987	1,987	1,987	1,987	1,987	1,987	1,419	1,135	851	568	284
2	Para. Transit	307	614	921	1,228	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,228	921	614	307
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		875	1,466	2,056	2,647	3,238	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	2,954	2,364	1,773	1,182	591

CNG Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	Para. Transit	649	973	1,297	1,622	1,946	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	1,622	1,297	973	649	324
2	Para. Transit	343	686	1,029	1,373	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,373	1,029	686	343
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		992	1,659	2,327	2,994	3,662	3,986	3,986	3,986	3,986	3,986	3,986	3,986	3,986	3,986	3,986	3,986	3,337	2,670	2,002	1,335	667
Incremental Capacity (GGE/mo)		992	667	667	667	667	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$1,458,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$1,458,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$1,458,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$1,458,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$1,458,000																				
Scenario 1 Station Cost		$1,458,000																				
Scenario 2 Station Cost		$1,458,000																				
Scenario 3 Station Cost		$1,458,000																				
Total Station Cost (w/ Tax Credit)		$1,458,000																				
Station Amortization		$80,420.49	$2.32	$6.76	$4.04	$2.88	$2.24	$1.83	$1.68	$1.68	$1.68	$1.68	$1.68	$1.68	$1.68	$1.68	$1.68	$1.68	$1.68	$2.01	$2.51	$3.35

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($37,500)	($25,000)	($25,000)	($25,000)	($25,000)	($12,500)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$10,000	$10,000	$10,000	$10,000
Station		($1,458,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$291,600
NG Price		$0.72	$0.74	$0.76	$0.78	$0.80	$0.82	$0.84	$0.86	$0.89	$0.91	$0.93	$0.96	$0.98	$1.01	$1.03	$1.06	$1.09	$1.12	$1.15	$1.18	$1.21
NG Price (after tax credit)		$0.22	$0.24	$0.26	$0.28	$0.30	$0.32	$0.34	$0.36	$0.39	$0.41	$0.43	$0.46	$0.48	$0.51	$0.53	$0.56	$0.59	$0.62	$0.65	$0.68	$0.71
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.72	$0.75	$0.79	$0.82	$0.86	$0.90	$0.93	$0.97	$1.01	$1.06	$1.10	$1.14	$1.19	$1.24	$1.28	$1.33	$1.38	$1.44	$1.49	$1.54	$1.60
Diesel Price		$2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Diesel Price (after tax exemption)		2.30	2.44	2.59	2.75	2.93	3.11	3.30	3.50	3.72	3.95	4.20	4.46	4.73	5.03	5.34	5.67	6.02	6.40	6.79	7.21	7.66
Gasoline Price		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
Gasoline Price (after exemption)		2.10	2.22	2.34	2.47	2.61	2.76	2.91	3.08	3.25	3.43	3.62	3.82	4.04	4.26	4.50	4.76	5.02	5.30	5.60	5.91	6.24
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$4,425	$15,609	$22,963	$30,936	$39,556	$44,770	$46,699	$48,682	$50,720	$52,814	$54,967	$57,179	$59,453	$61,790	$64,193	$66,662	$58,431	$48,506	$37,738	$26,089	$13,523
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$4,238	$18,003	$28,679	$40,610	$53,910	$57,252	$60,802	$64,572	$68,575	$72,827	$77,342	$82,137	$87,230	$92,638	$98,382	$104,481	$110,959	$94,271	$75,087	$53,161	$28,229
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$7,151	$22,656	$31,899	$42,107	$53,358	$65,737	$69,418	$73,305	$77,411	$81,746	$86,323	$91,157	$96,262	$101,653	$107,346	$113,357	$85,503	$72,233	$57,209	$40,275	$21,265
Fuel Savings		$6,964	$25,050	$37,616	$51,781	$67,712	$78,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$138,032	$117,998	$94,558	$67,347	$35,971
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$6,964	$25,050	$37,616	$51,781	$67,712	$78,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$148,032	$127,998	$104,558	$77,347	$337,571
Total Costs		($1,495,500)	($25,000)	($25,000)	($25,000)	($25,000)	($12,500)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($1,488,536)	$50	$12,616	$26,781	$42,712	$65,719	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$148,032	$127,998	$104,558	$77,347	$337,571
Cumulative Cash Flow		($1,488,536)	($1,488,486)	($1,475,870)	($1,449,089)	($1,406,377)	($1,340,658)	($1,257,138)	($1,167,942)	($1,072,676)	($970,918)	($862,219)	($746,103)	($622,065)	($489,564)	($348,029)	($196,853)	($48,821)	$79,177	$183,735	$261,082	$598,653
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	16.8																					
Discounted Return on Investment	-6%																					
Internal Rate of Return	3%																					
Net Present Value	($98,258)																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($30,000)	($20,000)	($20,000)	($20,000)	($20,000)	($10,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$10,000	$10,000	$10,000	$10,000
Station		($1,458,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$291,600
NG Price		$0.72	$0.74	$0.76	$0.78	$0.80	$0.82	$0.84	$0.86	$0.89	$0.91	$0.93	$0.96	$0.98	$1.01	$1.03	$1.06	$1.09	$1.12	$1.15	$1.18	$1.21
NG Price (after tax credit)		$0.22	$0.24	$0.26	$0.28	$0.30	$0.32	$0.34	$0.36	$0.39	$0.41	$0.43	$0.46	$0.48	$0.51	$0.53	$0.56	$0.59	$0.62	$0.65	$0.68	$0.71
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.72	$0.75	$0.79	$0.82	$0.86	$0.90	$0.93	$0.97	$1.01	$1.06	$1.10	$1.14	$1.19	$1.24	$1.28	$1.33	$1.38	$1.44	$1.49	$1.54	$1.60
Diesel Price		$2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Diesel Price (after tax exemption)		2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Gasoline Price		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
Gasoline Price (after exemption)		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$4,425	$15,609	$22,963	$30,936	$39,556	$44,770	$46,699	$48,682	$50,720	$52,814	$54,967	$57,179	$59,453	$61,790	$64,193	$66,662	$58,431	$48,506	$37,738	$26,089	$13,523
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$4,238	$18,003	$28,679	$40,610	$53,910	$57,252	$60,802	$64,572	$68,575	$72,827	$77,342	$82,137	$87,230	$92,638	$98,382	$104,481	$110,959	$94,271	$75,087	$53,161	$28,229
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$7,151	$22,656	$31,899	$42,107	$53,358	$65,737	$69,418	$73,305	$77,411	$81,746	$86,323	$91,157	$96,262	$101,653	$107,346	$113,357	$85,503	$72,233	$57,209	$40,275	$21,265
Fuel Savings		$6,964	$25,050	$37,616	$51,781	$67,712	$78,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$138,032	$117,998	$94,558	$67,347	$35,971
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$6,964	$25,050	$37,616	$51,781	$67,712	$78,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$148,032	$127,998	$104,558	$77,347	$337,571
Total Costs		($1,488,000)	($20,000)	($20,000)	($20,000)	($20,000)	($10,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($1,481,036)	$5,050	$17,616	$31,781	$47,712	$68,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$148,032	$127,998	$104,558	$77,347	$337,571
Cumulative Cash Flow		($1,481,036)	($1,475,986)	($1,458,370)	($1,426,589)	($1,378,877)	($1,310,658)	($1,227,138)	($1,137,942)	($1,042,676)	($940,918)	($832,219)	($716,103)	($592,065)	($459,564)	($318,029)	($166,853)	($18,821)	$109,177	$213,735	$291,082	$628,653
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	16.6																					
Discounted Return on Investment	-5%																					
Internal Rate of Return	3%																					
Net Present Value	($70,997)																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($56,250)	($37,500)	($37,500)	($37,500)	($37,500)	($18,750)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$10,000	$10,000	$10,000	$10,000
Station		($1,458,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$291,600
NG Price		$0.72	$0.74	$0.76	$0.78	$0.80	$0.82	$0.84	$0.86	$0.89	$0.91	$0.93	$0.96	$0.98	$1.01	$1.03	$1.06	$1.09	$1.12	$1.15	$1.18	$1.21
NG Price (after tax credit)		$0.22	$0.24	$0.26	$0.28	$0.30	$0.32	$0.34	$0.36	$0.39	$0.41	$0.43	$0.46	$0.48	$0.51	$0.53	$0.56	$0.59	$0.62	$0.65	$0.68	$0.71
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.72	$0.75	$0.79	$0.82	$0.86	$0.90	$0.93	$0.97	$1.01	$1.06	$1.10	$1.14	$1.19	$1.24	$1.28	$1.33	$1.38	$1.44	$1.49	$1.54	$1.60
Diesel Price		$2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Diesel Price (after tax exemption)		2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Gasoline Price		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
Gasoline Price (after exemption)		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$4,425	$15,609	$22,963	$30,936	$39,556	$44,770	$46,699	$48,682	$50,720	$52,814	$54,967	$57,179	$59,453	$61,790	$64,193	$66,662	$58,431	$48,506	$37,738	$26,089	$13,523
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$4,238	$18,003	$28,679	$40,610	$53,910	$57,252	$60,802	$64,572	$68,575	$72,827	$77,342	$82,137	$87,230	$92,638	$98,382	$104,481	$110,959	$94,271	$75,087	$53,161	$28,229
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$7,151	$22,656	$31,899	$42,107	$53,358	$65,737	$69,418	$73,305	$77,411	$81,746	$86,323	$91,157	$96,262	$101,653	$107,346	$113,357	$85,503	$72,233	$57,209	$40,275	$21,265
Fuel Savings		$6,964	$25,050	$37,616	$51,781	$67,712	$78,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$138,032	$117,998	$94,558	$67,347	$35,971
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$6,964	$25,050	$37,616	$51,781	$67,712	$78,219	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$148,032	$127,998	$104,558	$77,347	$337,571
Total Costs		($1,514,250)	($37,500)	($37,500)	($37,500)	($37,500)	($18,750)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($1,507,286)	($12,450)	$116	$14,281	$30,212	$59,469	$83,521	$89,195	$95,266	$101,758	$108,699	$116,116	$124,039	$132,501	$141,535	$151,177	$148,032	$127,998	$104,558	$77,347	$337,571
Cumulative Cash Flow		($1,507,286)	($1,519,736)	($1,519,620)	($1,505,339)	($1,475,127)	($1,415,658)	($1,332,138)	($1,242,942)	($1,147,676)	($1,045,918)	($937,219)	($821,103)	($697,065)	($564,564)	($423,029)	($271,853)	($123,821)	$4,177	$108,735	$186,082	$523,653
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	17.3																					
Discounted Return on Investment	-10%																					
Internal Rate of Return	2%																					
Net Present Value	($166,408)																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($37,500)	($25,000)	($25,000)	($25,000)	($25,000)	($12,500)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$10,000	$10,000	$10,000	$10,000
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Price		$0.72	$0.74	$0.76	$0.78	$0.80	$0.82	$0.84	$0.86	$0.89	$0.91	$0.93	$0.96	$0.98	$1.01	$1.03	$1.06	$1.09	$1.12	$1.15	$1.18	$1.21
NG Price (after tax credit)		$0.72	$0.74	$0.26	$0.28	$0.30	$0.32	$0.34	$0.36	$0.39	$0.41	$0.43	$0.46	$0.48	$0.51	$0.53	$0.56	$0.59	$0.62	$0.65	$0.68	$0.71
NG P3 Markup		$2.62	$2.70	$2.78	$2.87	$2.95	$3.04	$3.13	$3.23	$3.32	$3.42	$3.53	$3.63	$3.74	$3.85	$3.97	$4.09	$4.21	$4.34	$4.47	$4.60	$4.74
NG Price (after tax credit & mark up)		$3.35	$3.44	$3.04	$3.15	$3.25	$3.36	$3.47	$3.59	$3.71	$3.83	$3.96	$4.09	$4.22	$4.36	$4.50	$4.65	$4.80	$4.95	$5.11	$5.28	$5.44
Diesel Price		$2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Diesel Price (after tax exemption)		2.30	$2.44	$2.59	$2.75	$2.93	$3.11	$3.30	$3.50	$3.72	$3.95	$4.20	$4.46	$4.73	$5.03	$5.34	$5.67	$6.02	$6.40	$6.79	$7.21	$7.66
Gasoline Price		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
Gasoline Price (after exemption)		2.10	$2.22	$2.34	$2.47	$2.61	$2.76	$2.91	$3.08	$3.25	$3.43	$3.62	$3.82	$4.04	$4.26	$4.50	$4.76	$5.02	$5.30	$5.60	$5.91	$6.24
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$20,639	$71,562	$88,960	$118,556	$150,035	$168,165	$173,796	$179,592	$185,557	$191,696	$198,015	$204,519	$211,213	$218,104	$225,195	$232,494	$202,657	$167,349	$129,544	$89,129	$45,989
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$4,238	$18,003	$28,679	$40,610	$53,910	$57,252	$60,802	$64,572	$68,575	$72,827	$77,342	$82,137	$87,230	$92,638	$98,382	$104,481	$110,959	$94,271	$75,087	$53,161	$28,229
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$7,151	$22,656	$31,899	$42,107	$53,358	$65,737	$69,418	$73,305	$77,411	$81,746	$86,323	$91,157	$96,262	$101,653	$107,346	$113,357	$85,503	$72,233	$57,209	$40,275	$21,265
Fuel Savings		($9,249)	($30,903)	($28,381)	($35,839)	($42,767)	($45,176)	($43,576)	($41,714)	($39,571)	($37,124)	($34,350)	($31,224)	($27,721)	($23,812)	($19,468)	($14,656)	($6,194)	($845)	$2,752	$4,307	$3,505
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		($9,249)	($30,903)	($28,381)	($35,839)	($42,767)	($45,176)	($43,576)	($41,714)	($39,571)	($37,124)	($34,350)	($31,224)	($27,721)	($23,812)	($19,468)	($14,656)	$3,806	$9,155	$12,752	$14,307	$13,505
Total Costs		($37,500)	($25,000)	($25,000)	($25,000)	($25,000)	($12,500)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($46,749)	($55,903)	($53,381)	($60,839)	($67,767)	($57,676)	($43,576)	($41,714)	($39,571)	($37,124)	($34,350)	($31,224)	($27,721)	($23,812)	($19,468)	($14,656)	$3,806	$9,155	$12,752	$14,307	$13,505
Cumulative Cash Flow		($46,749)	($102,652)	($156,034)	($216,872)	($284,639)	($342,315)	($385,891)	($427,606)	($467,177)	($504,301)	($538,650)	($569,875)	($597,596)	($621,409)	($640,877)	($655,533)	($651,727)	($642,572)	($629,820)	($615,513)	($602,008)
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	20.50																					
Discounted Return on Investment	-368%																					
Internal Rate of Return	#NUM!																					
Net Present Value	($501,289)																					

Estimated CNG Station O&M Costs (from VICE 2.0 Model)*

CNG Station Maintenance		$0	($96,000)	($103,000)	($111,000)	($118,000)	($124,000)	($125,000)	($125,000)	($125,000)	($125,000)	($125,000)	($125,000)	($124,000)	($124,000)	($122,000)	($121,000)	($116,000)	($108,000)	($101,000)	($96,000)	($90,000)
CNG Station Electricity		($1,500)	($15,000)	($25,000)	($34,000)	($44,000)	($52,000)	($54,000)	($54,000)	($54,000)	($54,000)	($53,000)	($53,000)	($52,000)	($54,000)	($50,000)	($47,000)	($41,000)	($30,000)	($22,000)	($15,000)	($7,000)

*Amortized into CNG fuel costs assumptions

CNG School Bus Business Case

Vehicle Inputs

Vehicle #	Type	FuelType	Inc. Cost	VMT	USE	Life	MPG	CNG loss	mpGGE	CNG Use	Mthly CNG Use	Salvage Value
1	School Bus	D	$ 30,000	9123	1303	15	7	12.5%	6.1	1,489	124	20%
2	Para. Transit	D	$ 17,500	20865	3161	15	6.6	10.5%	5.9	3,532	294	20%
3	Class 3 Truck	D	$ 30,000	9699	3464	12	2.8	5.30%	2.7	3,658	305	20%
4	Class 2 Truck	D	$ 10,000	9837	708	8	13.9	5.3%	13.2	747	62	20%
5			0	0	0	0	0	0	0	0	0	0

VMT = Average annual VMT, USE = Average annual USE, CNG Use = Average annual CNG use, M CNG Use = Average monthly CNG us

Base Case Inputs

				Scenario 1	**Scenario 2**	**Scenario 3**				
				Owned Infra + Increased AFV Incentive	*Owned Infra + Reduced AFV Incentive*	*P3 Infra + Inc. AFV Incentive + Royalties*				
Infrastructure	Cell Name	Value	Unit							
Infrastructure Cost	*Infra_Cost*	$2,130,000	$	$2,130,000	$2,130,000	$0	avg. MPG		7.575	
Salvage Value	*CNG_Salv*	20%	% of original price				Price diff		-$0.35	
Infrastructure Tax Credit Rate	*Infra_Tax_Credit_Rate*	30%	percent							
Infrastructure Tax Credit Value	*Infra_Tax_Credit_Value*	$0	$	$0	$0	$0		5	0.660066007	-0.229921864
Fuels								6	0.792079208	-0.275906237
Alt Fuel Excise Tax Credit Value	*AF_Excise_Value*	$0.50	$/GGE	$0.50	$0.50	$0.00		7	0.924092409	-0.321890609
Price of CNG (per GGE)	*CNG_Price*	$0.72	$/GGE	$0.72	$0.72	$0.72		7.575	1	-0.348331624
CNG Price Markup (Station Developer)	*CNG_Markup*	$0.50		$0.50	$0.50	$1.85		8	1.056105611	-0.367874982
CNG Fuel Sales Royalty (from Developer)	*CNG_Royalty*	$0.06	$/GGE	$0.00	$0.00	$0.06		9	1.188118812	-0.413859355
CNG Price Increase	*Base Case*	1.9%	%/Year	1.9%	1.9%	1.9%		10	1.320132013	-0.459843728
CNG Lifecycle GHG Factor (per GGE)	*CNG_GHG_Factor*	22.4	lbs/GGE					15	1.98019802	-0.689765592
Diesel Fuel Price	*D_Price*	$2.30	$/Gallon	$2.30	$2.30	$2.30		20	2.640264026	-0.919687456
Diesel Price Increase	*Base Case*	4.3%	%/Year	4.3%	4.3%	4.3%		25	3.300330033	-1.14960932
Federal Diesel Excise Tax	*Fed_D_Excise*	$0.00	$/Gallon					30	3.96039604	-1.379531184
State Diesel Excise Tax	*State_D_Excise*	$0.00	$/Gallon						0.062	
Realized Diesel Excise Tax Exemption	*D_Excise_Value*	$0.00	$/Gallon						0.038	
DGE/GGE Conversion Factor	*DGE_GGE_Convert*	0.904	DGE / GGE						0.021	
Diesel Lifecycle GHG Factor (per GGE)	*D_GHG_Factor*	25.4	lbs/GGE						0.056	
Gasoline Fuel Price	*G_Price*	2.1	$/Gallon	$2.10	$2.10	$2.10				
Gasoline Price Increase	*Base Case*	3.8%	%/Year	3.8%	3.8%	3.8%				
Federal Gasoline Excise Tax	*Fed_G_Excise*	$0.00	$/Gallon							
State Gasoline Excise Tax	*State_G_Excise*	$0.00	$/Gallon							
Realized Gasoline Excise Tax Exemption	*G_Excise_Value*	$0.00	$/Gallon							
Gasoline Lifecycle GHG Factor (per GGE)	*G_GHG_Factor*	24.8	lbs/GGE							
Operations										
CNG Vehicle Maintenance Costs	*CNG_D_Maint*	0.52	$/mile							
Diesel Vehicle Maintenance Costs	*D_Maint*	0.52	$/mile							
LDV Gasoline Vehicle Maintenance	*G_Maint*	0.047	$/mile							
LDV CNG Vehicle Maintenance Costs	*CNG_G_Maint*	0.047	$/mile							
% of commercial market	*Comm*	0%	percent	0%	0%	0%				
Incentives										
Required Rate of Return / Nominal Discount Rat	*Discount*	3.2%	%							
Federal Vehicle Tax Incentive	*Fed_Vehicle_Inc*	0%	% of Inc Cost							
State Vehicle Incentive	*State_Vehicle_Inc*	50%	% of Inc Cost	60%	25%	50%				

Vehicle Procurement *Procurement Factor* 100%

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Vehicle #	*Type*																						
1	School Bus	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	66	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66

*Vehicle Assumptions: Replace ~35% of School Buses; 100% of Class 4-7 Paratransit Buses; 50% of Class 8+ Trucks; 34% of Class 4-7 Truck

Vehicles In Service

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	11	22	33	44	55	66	66	66	66	66	66	66	66	66	66	66	55	44	33	22	11
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Vehicle Salvage Value

Project Year																						
Vehicle #	*Type*																					
1	School Bus	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000
2		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000

Vehicle Incremental Costs

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	$330,000	$330,000	$330,000	$330,000	$330,000	$330,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

2		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5																						
Subtotal (w/o Incentive)		$330,000	$330,000	$330,000	$330,000	$330,000	$330,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incentive		$165,000	$165,000	$165,000	$165,000	$165,000	$165,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total w/ Incentive		$165,000	$165,000	$165,000	$165,000	$165,000	$165,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Conventional Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	1,195	2,389	3,584	4,779	5,973	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	5,973	4,779	3,584	2,389	1,195
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,195	2,389	3,584	4,779	5,973	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	7,168	5,973	4,779	3,584	2,389	1,195

CNG Monthly Fuel Requirements

Project Year	-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle #	*Type*																					
1	School Bus	1,365	2,731	4,096	5,461	6,827	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	6,827	5,461	4,096	2,731	1,365
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Required Capacity (GGE/mo)		1,365	2,731	4,096	5,461	6,827	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	8,192	6,827	5,461	4,096	2,731	1,365
Incremental Capacity (GGE/mo)		1,365	1,365	1,365	1,365	1,365	1,365	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Commercial Demand (GGE/mo)		102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222	102,222
Base Case Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 1 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 2 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scenario 3 Incremental Demand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Case Incremental Station Cost		$2,130,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 1 Incremental Station Cost		$2,130,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 2 Incremental Station Cost		$2,130,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Scenario 3 Incremental Station Cost		$2,130,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Base Total Station Cost		$2,130,000																				
Scenario 1 Station Cost		$2,130,000																				
Scenario 2 Station Cost		$2,130,000																				
Scenario 3 Station Cost		$2,130,000																				
Total Station Cost (w/ Tax Credit)		$2,130,000																				
Station Amortization		$117,486.72	$1.85	$7.17	$3.59	$2.39	$1.79	$1.43	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.43	$1.79	$2.39

Financial Analysis Base Case

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000
Station		($2,130,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$426,000
NG Price		$0.72	$0.74	$0.75	$0.76	$0.78	$0.79	$0.81	$0.82	$0.84	$0.86	$0.87	$0.89	$0.91	$0.92	$0.94	$0.96	$0.98	$0.99	$1.01	$1.03	$1.05
NG Price (after tax credit)		$0.22	$0.24	$0.25	$0.26	$0.28	$0.29	$0.31	$0.32	$0.34	$0.36	$0.37	$0.39	$0.41	$0.42	$0.44	$0.46	$0.48	$0.49	$0.51	$0.53	$0.55
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.72	$0.75	$0.78	$0.81	$0.84	$0.87	$0.90	$0.93	$0.97	$1.00	$1.04	$1.07	$1.11	$1.15	$1.19	$1.23	$1.27	$1.31	$1.36	$1.40	$1.45
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	2.40	2.50	2.61	2.72	2.84	2.96	3.09	3.22	3.36	3.50	3.65	3.81	3.98	4.15	4.33	4.51	4.71	4.91	5.12	5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	2.18	2.26	2.35	2.44	2.53	2.63	2.73	2.83	2.94	3.05	3.17	3.29	3.41	3.54	3.67	3.81	3.96	4.11	4.27	4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$5,876	$24,442	$38,102	$52,769	$68,480	$85,274	$88,449	$91,702	$95,037	$98,455	$101,958	$105,548	$109,228	$113,001	$116,868	$120,832	$104,079	$86,041	$66,666	$45,903	$23,700
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,487	$68,782	$107,609	$149,649	$195,105	$244,193	$254,693	$265,645	$277,068	$288,982	$301,408	$314,368	$327,886	$341,985	$356,691	$372,028	$323,355	$269,807	$211,057	$146,755	$76,533
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Fuel Savings		$10,610	$44,340	$69,507	$96,880	$126,624	$158,919	$166,244	$173,943	$182,031	$190,527	$199,450	$208,820	$218,658	$228,985	$239,823	$251,197	$219,275	$183,766	$144,391	$100,851	$52,833
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$10,610	$44,340	$69,507	$96,880	$126,624	$158,919	$166,244	$173,943	$182,031	$190,527	$199,450	$208,820	$218,658	$228,985	$239,823	$251,197	$285,275	$249,766	$210,391	$166,851	$544,833
Total Costs		($2,295,000)	($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,284,390)	($120,660)	($95,493)	($68,120)	($38,376)	($6,081)	$166,244	$173,943	$182,031	$190,527	$199,450	$208,820	$218,658	$228,985	$239,823	$251,197	$285,275	$249,766	$210,391	$166,851	$544,833
Cumulative Cash Flow		($2,284,390)	($2,405,050)	($2,500,542)	($2,568,663)	($2,607,039)	($2,613,120)	($2,446,876)	($2,272,933)	($2,090,902)	($1,900,375)	($1,700,925)	($1,492,105)	($1,273,447)	($1,044,462)	($804,639)	($553,443)	($268,167)	($18,401)	$191,990	$358,841	$903,674
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Project Life	20.5																					
Payback Period	17.6																					
Discounted Return on Investment	-10%																					
Internal Rate of Return	2%																					
Net Present Value	($294,625)																					

Financial Scenario 1

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($132,000)	($132,000)	($132,000)	($132,000)	($132,000)	($132,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000
Station		($2,130,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.30	$0.31	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.79	$0.82	$0.85	$0.89	$0.92	$0.95	$0.99	$1.02	$1.06	$1.09	$1.13	$1.17	$1.21	$1.25	$1.29	$1.33	$1.37	$1.42	$1.46	$1.51	$1.56
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$6,505	$27,003	$42,017	$58,088	$75,256	$93,559	$96,891	$100,305	$103,803	$107,387	$111,060	$114,823	$118,680	$122,632	$126,682	$130,832	$112,572	$92,964	$71,957	$49,498	$25,531
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,487	$68,782	$107,609	$149,649	$195,105	$244,193	$254,693	$265,645	$277,068	$288,982	$301,408	$314,368	$327,886	$341,985	$356,691	$372,028	$323,355	$269,807	$211,057	$146,755	$76,533
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$9,982	$41,779	$65,592	$91,560	$119,849	$150,634	$157,802	$165,340	$173,265	$181,594	$190,348	$199,545	$209,206	$219,354	$230,009	$241,196	$210,783	$176,844	$139,100	$97,257	$51,001
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$9,982	$41,779	$65,592	$91,560	$119,849	$150,634	$157,802	$165,340	$173,265	$181,594	$190,348	$199,545	$209,206	$219,354	$230,009	$241,196	$276,783	$242,844	$205,100	$163,257	$117,001
Total Costs		($2,262,000)	($132,000)	($132,000)	($132,000)	($132,000)	($132,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,252,018)	($90,221)	($66,408)	($40,440)	($12,151)	$18,634	$157,802	$165,340	$173,265	$181,594	$190,348	$199,545	$209,206	$219,354	$230,009	$241,196	$276,783	$242,844	$205,100	$163,257	$117,001
Cumulative Cash Flow		($2,252,018)	($2,342,239)	($2,408,647)	($2,449,087)	($2,461,238)	($2,442,604)	($2,284,802)	($2,119,462)	($1,946,197)	($1,764,603)	($1,574,255)	($1,374,710)	($1,165,504)	($946,150)	($716,141)	($474,945)	($198,162)	$44,682	$249,782	$413,039	$530,040
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	17.2																					
Discounted Return on Investment	-16%																					
Internal Rate of Return	2%																					
Net Present Value	($439,473)																					

Financial Scenario 2

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($247,500)	($247,500)	($247,500)	($247,500)	($247,500)	($247,500)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000
Station		($2,130,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.30	$0.31	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$0.50	$0.51	$0.53	$0.54	$0.56	$0.57	$0.59	$0.61	$0.63	$0.65	$0.67	$0.69	$0.71	$0.73	$0.75	$0.77	$0.79	$0.82	$0.84	$0.87	$0.89
NG Price (after tax credit & mark up)		$0.79	$0.82	$0.85	$0.89	$0.92	$0.95	$0.99	$1.02	$1.06	$1.09	$1.13	$1.17	$1.21	$1.25	$1.29	$1.33	$1.37	$1.42	$1.46	$1.51	$1.56
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$6,505	$27,003	$42,017	$58,088	$75,256	$93,559	$96,891	$100,305	$103,803	$107,387	$111,060	$114,823	$118,680	$122,632	$126,682	$130,832	$112,572	$92,964	$71,957	$49,498	$25,531
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,487	$68,782	$107,609	$149,649	$195,105	$244,193	$254,693	$265,645	$277,068	$288,982	$301,408	$314,368	$327,886	$341,985	$356,691	$372,028	$323,355	$269,807	$211,057	$146,755	$76,533
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		$9,982	$41,779	$65,592	$91,560	$119,849	$150,634	$157,802	$165,340	$173,265	$181,594	$190,348	$199,545	$209,206	$219,354	$230,009	$241,196	$210,783	$176,844	$139,100	$97,257	$51,001
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		$9,982	$41,779	$65,592	$91,560	$119,849	$150,634	$157,802	$165,340	$173,265	$181,594	$190,348	$199,545	$209,206	$219,354	$230,009	$241,196	$276,783	$242,844	$205,100	$163,257	$117,001
Total Costs		($2,377,500)	($247,500)	($247,500)	($247,500)	($247,500)	($247,500)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($2,367,518)	($205,721)	($181,908)	($155,940)	($127,651)	($96,866)	$157,802	$165,340	$173,265	$181,594	$190,348	$199,545	$209,206	$219,354	$230,009	$241,196	$276,783	$242,844	$205,100	$163,257	$117,001
Cumulative Cash Flow		($2,367,518)	($2,573,239)	($2,755,147)	($2,911,087)	($3,038,738)	($3,135,604)	($2,977,802)	($2,812,462)	($2,639,197)	($2,457,603)	($2,267,255)	($2,067,710)	($1,858,504)	($1,639,150)	($1,409,141)	($1,167,945)	($891,162)	($648,318)	($443,218)	($279,961)	($162,960)
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	20.5																					
Discounted Return on Investment	-31%																					
Internal Rate of Return	0%																					
Net Present Value	($1,061,032)																					

Financial Scenario 3

Project Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project Active?		0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Incremental Cost of Vehicles (after incentives)		($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Incremental Vehicle Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$66,000	$66,000	$66,000	$66,000
Station		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Station Salvage Value		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Price		$0.80	$0.81	$0.83	$0.85	$0.86	$0.88	$0.89	$0.91	$0.93	$0.95	$0.96	$0.98	$1.00	$1.02	$1.04	$1.06	$1.08	$1.10	$1.12	$1.14	$1.16
NG Price (after tax credit)		$0.80	$0.81	$0.33	$0.35	$0.36	$0.38	$0.39	$0.41	$0.43	$0.45	$0.46	$0.48	$0.50	$0.52	$0.54	$0.56	$0.58	$0.60	$0.62	$0.64	$0.66
NG P3 Markup		$1.85	$1.90	$1.96	$2.02	$2.08	$2.14	$2.21	$2.27	$2.34	$2.41	$2.49	$2.56	$2.64	$2.72	$2.80	$2.88	$2.97	$3.06	$3.15	$3.24	$3.34
NG Price (after tax credit & mark up)		$2.65	$2.72	$2.29	$2.37	$2.44	$2.52	$2.60	$2.69	$2.77	$2.86	$2.95	$3.04	$3.14	$3.24	$3.34	$3.44	$3.55	$3.66	$3.77	$3.89	$4.00
Diesel Price		$2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Diesel Price (after tax exemption)		2.30	$2.40	$2.50	$2.61	$2.72	$2.84	$2.96	$3.09	$3.22	$3.36	$3.50	$3.65	$3.81	$3.98	$4.15	$4.33	$4.51	$4.71	$4.91	$5.12	$5.34
Gasoline Price		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
Gasoline Price (after exemption)		2.10	$2.18	$2.26	$2.35	$2.44	$2.53	$2.63	$2.73	$2.83	$2.94	$3.05	$3.17	$3.29	$3.41	$3.54	$3.67	$3.81	$3.96	$4.11	$4.27	$4.43
NG Fleet Maintenance																						
NG Fleet Fuel Costs		$21,695	$89,097	$112,638	$155,075	$200,126	$247,898	$255,860	$264,043	$272,454	$281,097	$289,981	$299,112	$308,497	$318,144	$328,059	$338,251	$290,606	$239,664	$185,283	$127,315	$65,607
Diesel Fleet Maintenance																						
Diesel Fleet Fuel Costs		$16,487	$68,782	$107,609	$149,649	$195,105	$244,193	$254,693	$265,645	$277,068	$288,982	$301,408	$314,368	$327,886	$341,985	$356,691	$372,028	$323,355	$269,807	$211,057	$146,755	$76,533
Gasoline Fleet Maintenance																						
Gasoline Fleet Fuel Costs		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Savings		($5,209)	($20,315)	($5,029)	($5,426)	($5,021)	($3,705)	($1,167)	$1,602	$4,614	$7,884	$11,427	$15,256	$19,389	$23,841	$28,631	$33,777	$32,749	$30,143	$25,774	$19,440	$10,926
Fuel Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Maintenance (inc. in NG price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NG Station Electricity (inc. in Maint. price)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Benefits		($5,209)	($20,315)	($5,029)	($5,426)	($5,021)	($3,705)	($1,167)	$1,602	$4,614	$7,884	$11,427	$15,256	$19,389	$23,841	$28,631	$33,777	$98,749	$96,143	$91,774	$85,440	$76,926
Total Costs		($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	($165,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Cash Flow		($170,209)	($185,315)	($170,029)	($170,426)	($170,021)	($168,705)	($1,167)	$1,602	$4,614	$7,884	$11,427	$15,256	$19,389	$23,841	$28,631	$33,777	$98,749	$96,143	$91,774	$85,440	$76,926
Cumulative Cash Flow		($170,209)	($355,524)	($525,552)	($695,978)	($865,999)	($1,034,705)	($1,035,872)	($1,034,270)	($1,029,656)	($1,021,772)	($1,010,345)	($995,089)	($975,700)	($951,859)	($923,228)	($889,450)	($790,702)	($694,559)	($602,785)	($517,345)	($440,419)
Whole Years		0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Residual		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project Life	20.5																					
Payback Period	20.50																					
Discounted Return on Investment	-66%																					
Internal Rate of Return	-4%																					
Net Present Value	($586,245)																					

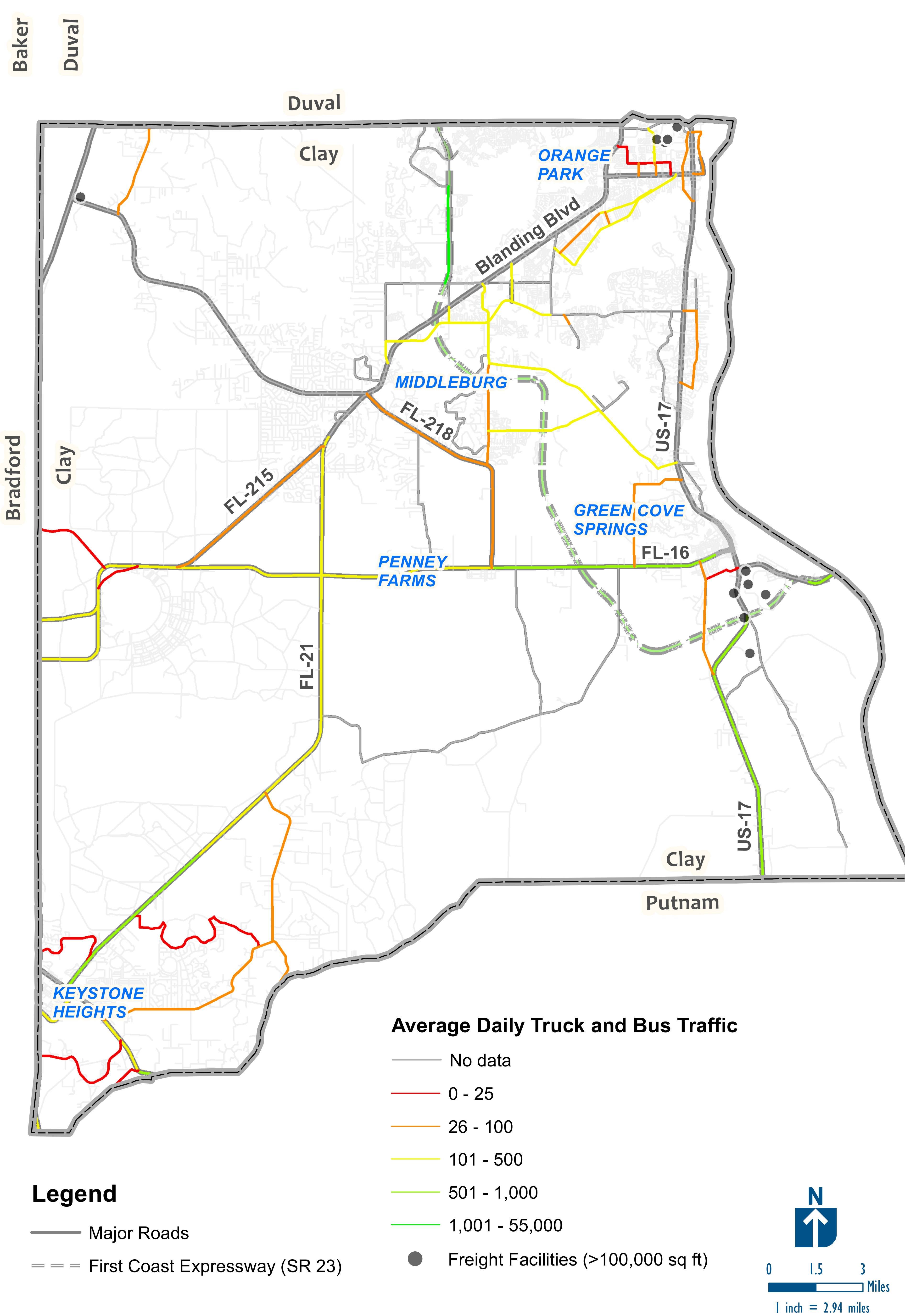
Estimated CNG Station O&M Costs (from VICE 2.0 Model)*

CNG Station Maintenance		$0	($96,000)	($103,000)	($111,000)	($118,000)	($124,000)	($125,000)	($125,000)	($125,000)	($125,000)	($125,000)	($125,000)	($124,000)	($124,000)	($122,000)	($121,000)	($116,000)	($108,000)	($101,000)	($96,000)	($90,000)
CNG Station Electricity		($1,500)	($15,000)	($25,000)	($34,000)	($44,000)	($52,000)	($54,000)	($54,000)	($54,000)	($54,000)	($53,000)	($53,000)	($52,000)	($54,000)	($50,000)	($47,000)	($41,000)	($30,000)	($22,000)	($15,000)	($7,000)

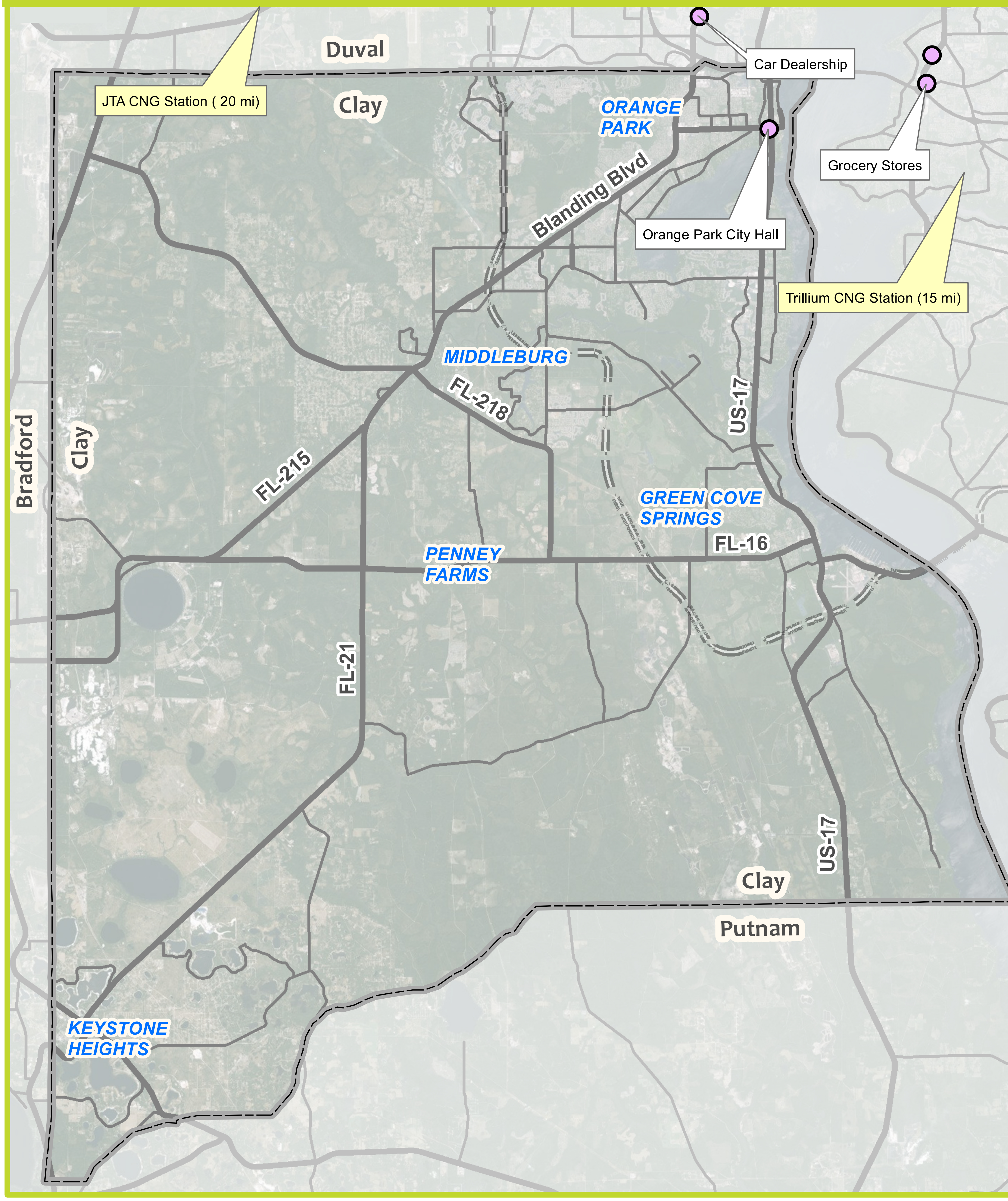
*Amortized into CNG fuel costs assumptions

CLEAN FUELS INFRASTRUCTURE GIS MAPS

Clay County - Freight Facilities and Traffic



Clay County - Alternative Fuels Locations



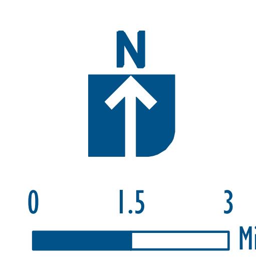
Alternative Fuels

- BD (0)
- CNG (0)
- E85 (0)
- ELEC (1)
- LNG (0)
- LPG (0)

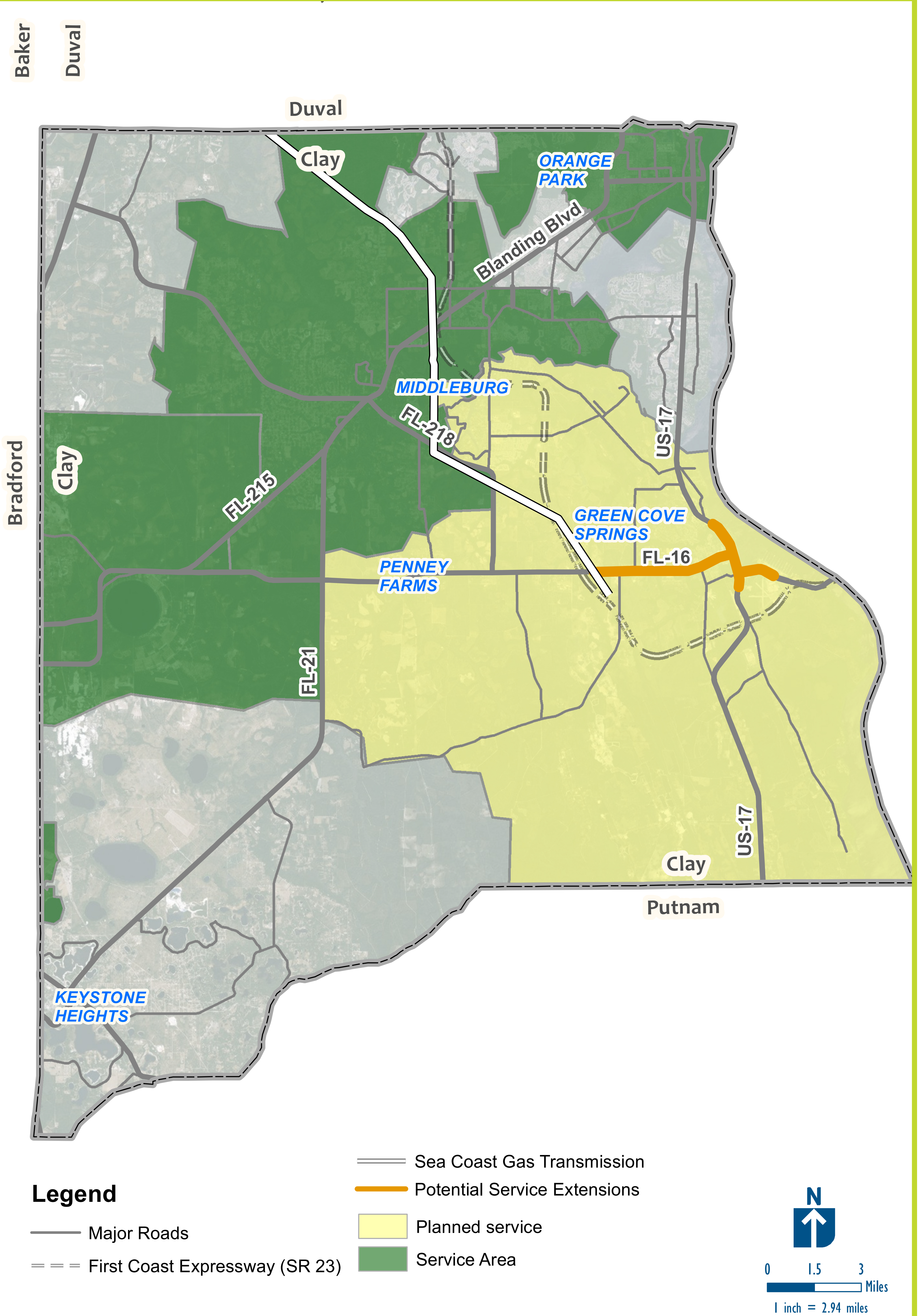
Source: DOE, 2016

Legend

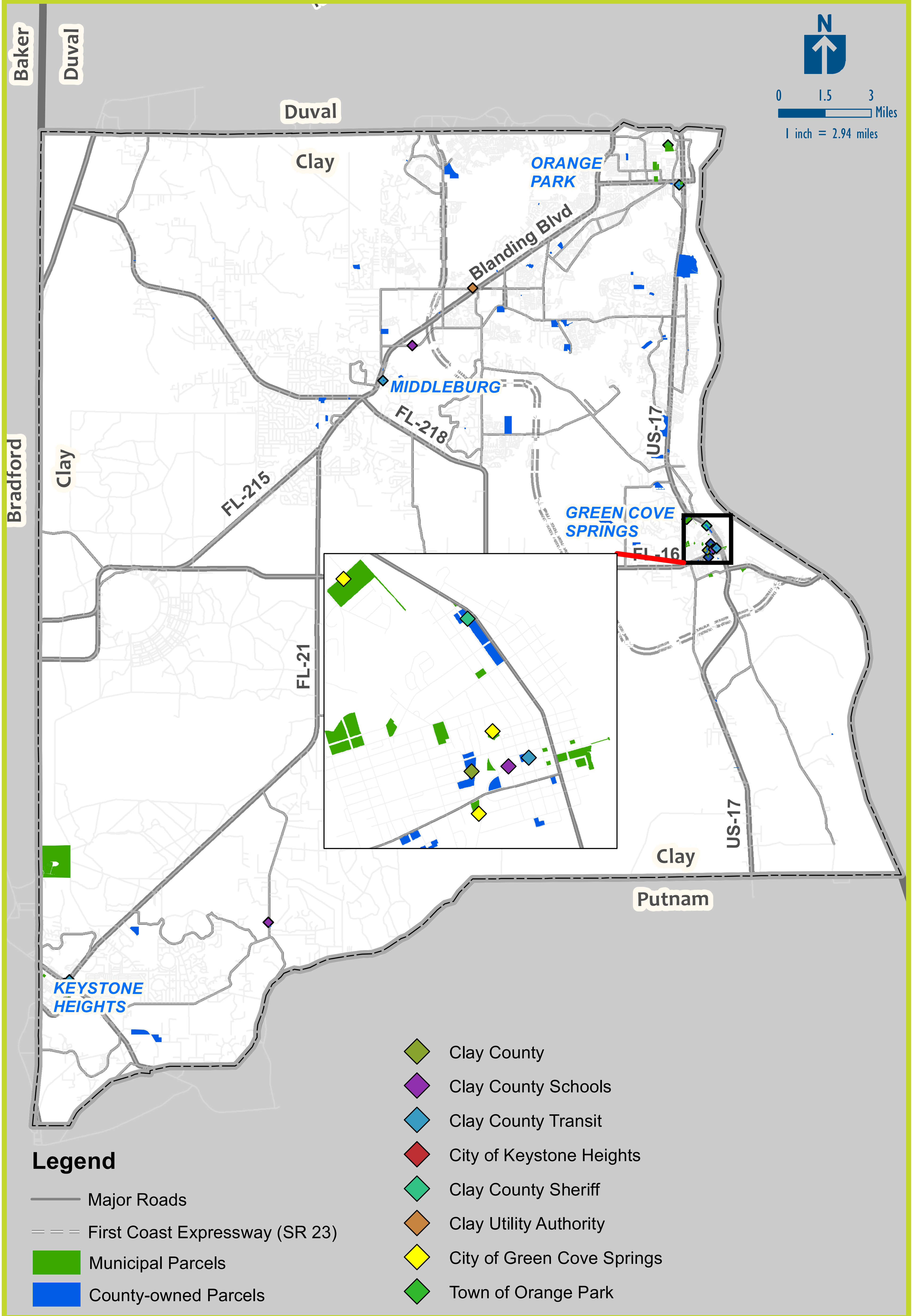
- Major Roads
- First Coast Expressway (SR 23)



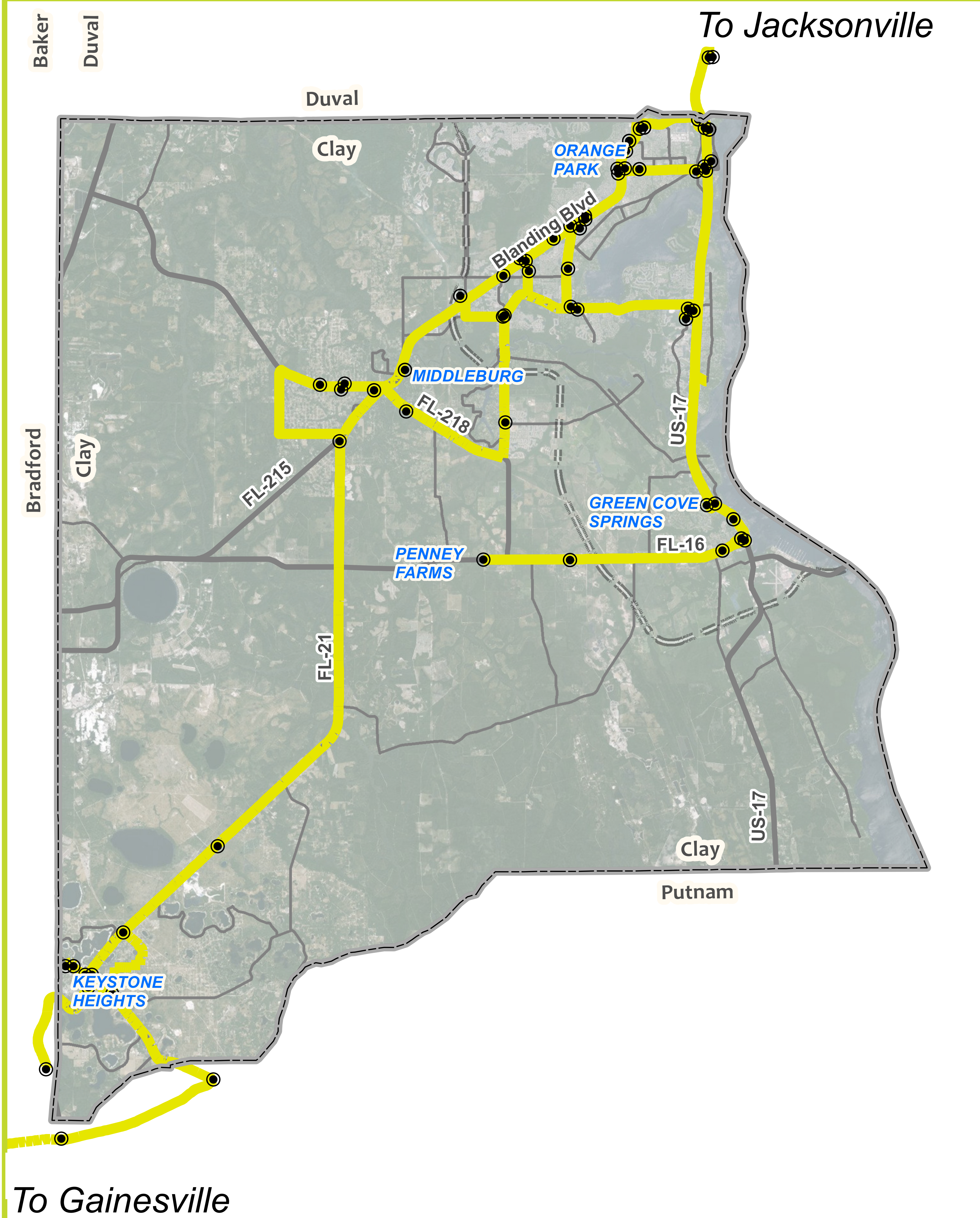
Clay County - Natural Gas Availability by Zip Code



Clay County - Assets and Potential Sites



Clay County - Transit



Legend

Major Roads

First Coast Expressway (SR 23)

Clay Transit Bus Stop

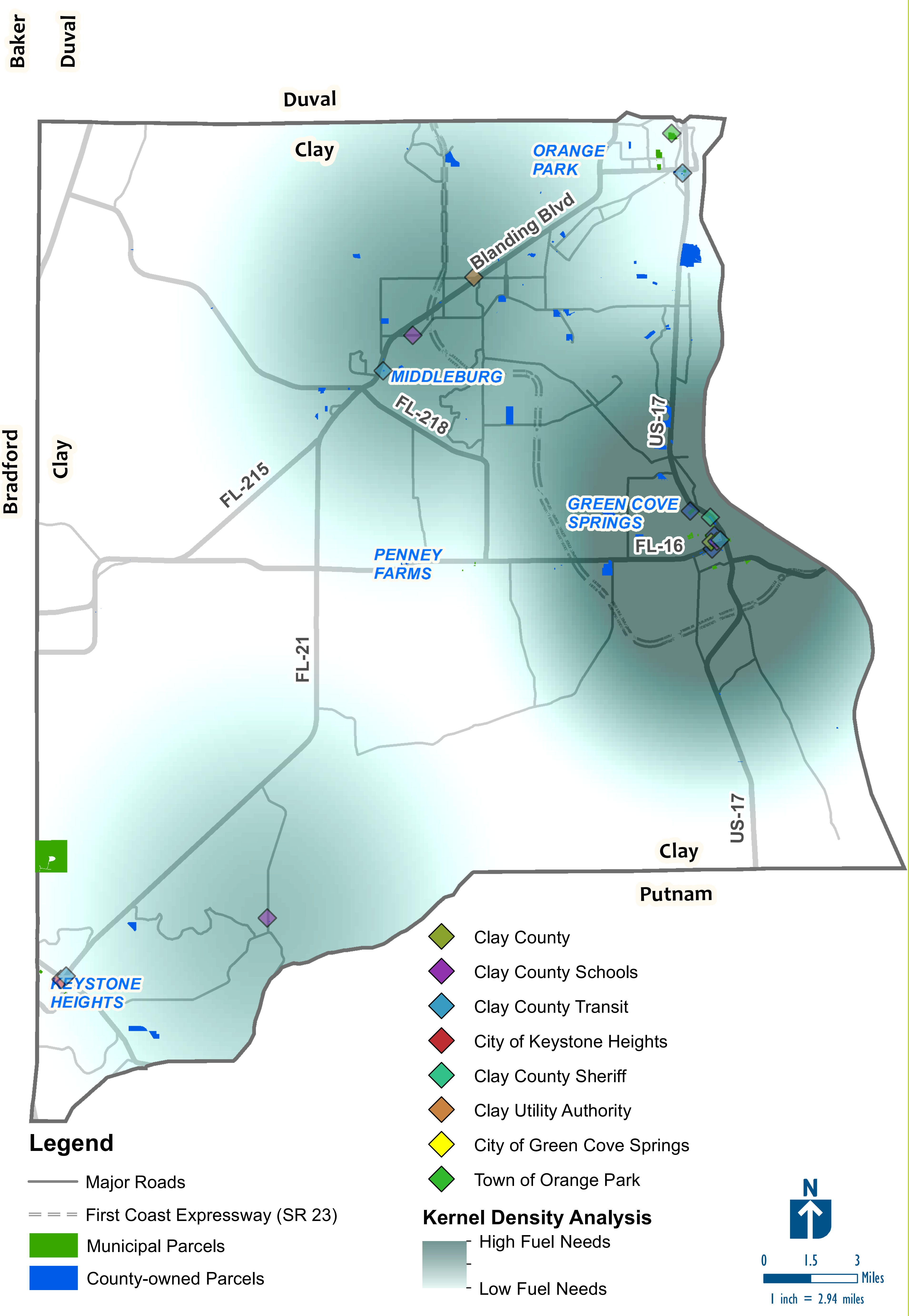
Clay Transit Bus Routes Coverage

N

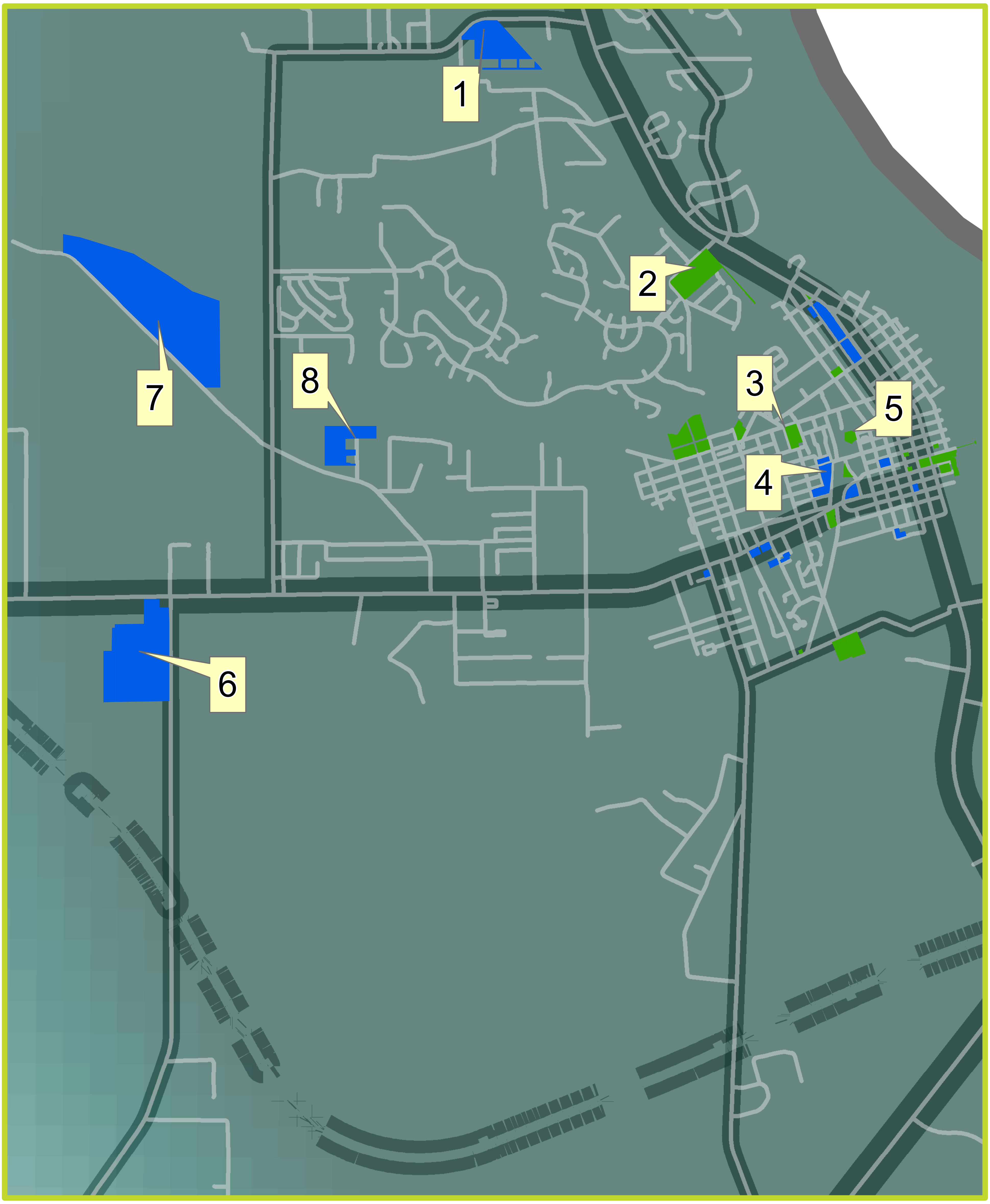
0 1.5 3 Miles

1 inch = 3.16 miles

Clay County - Analysis



Clay County - Detail



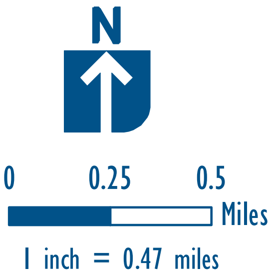
Legend

Major Roads

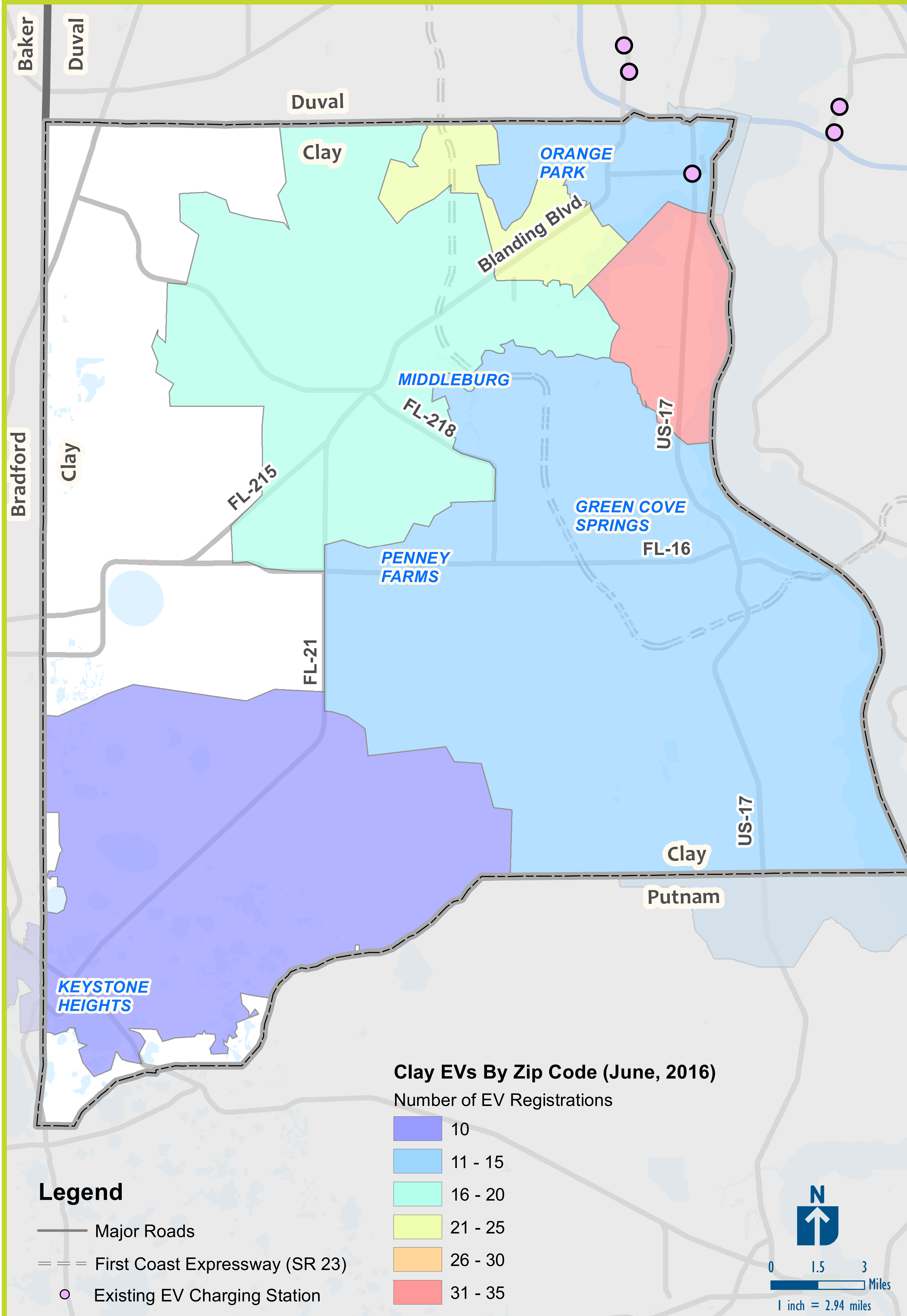
First Coast Expressway (SR 23)

Municipal Parcels

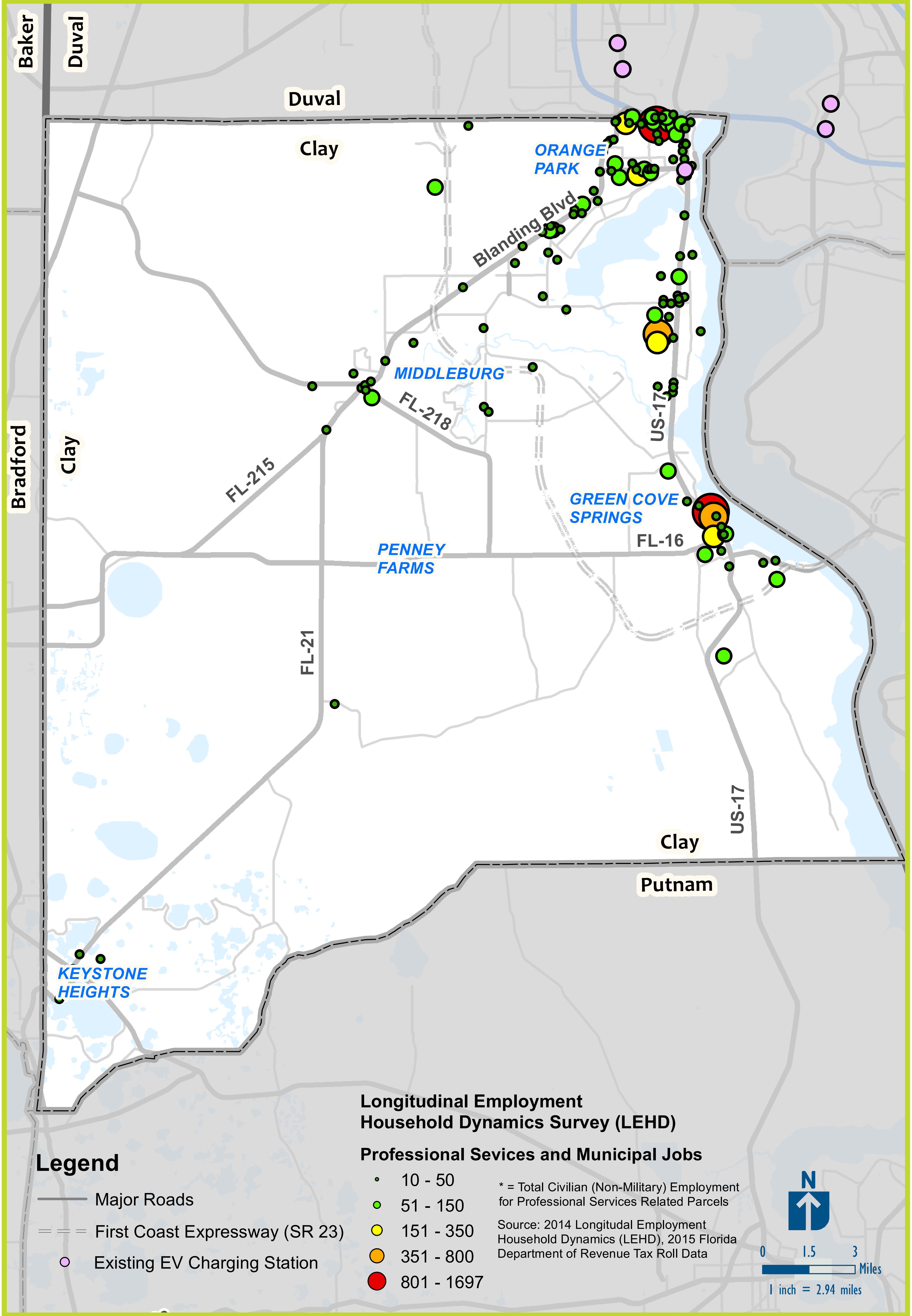
County-owned Parcels



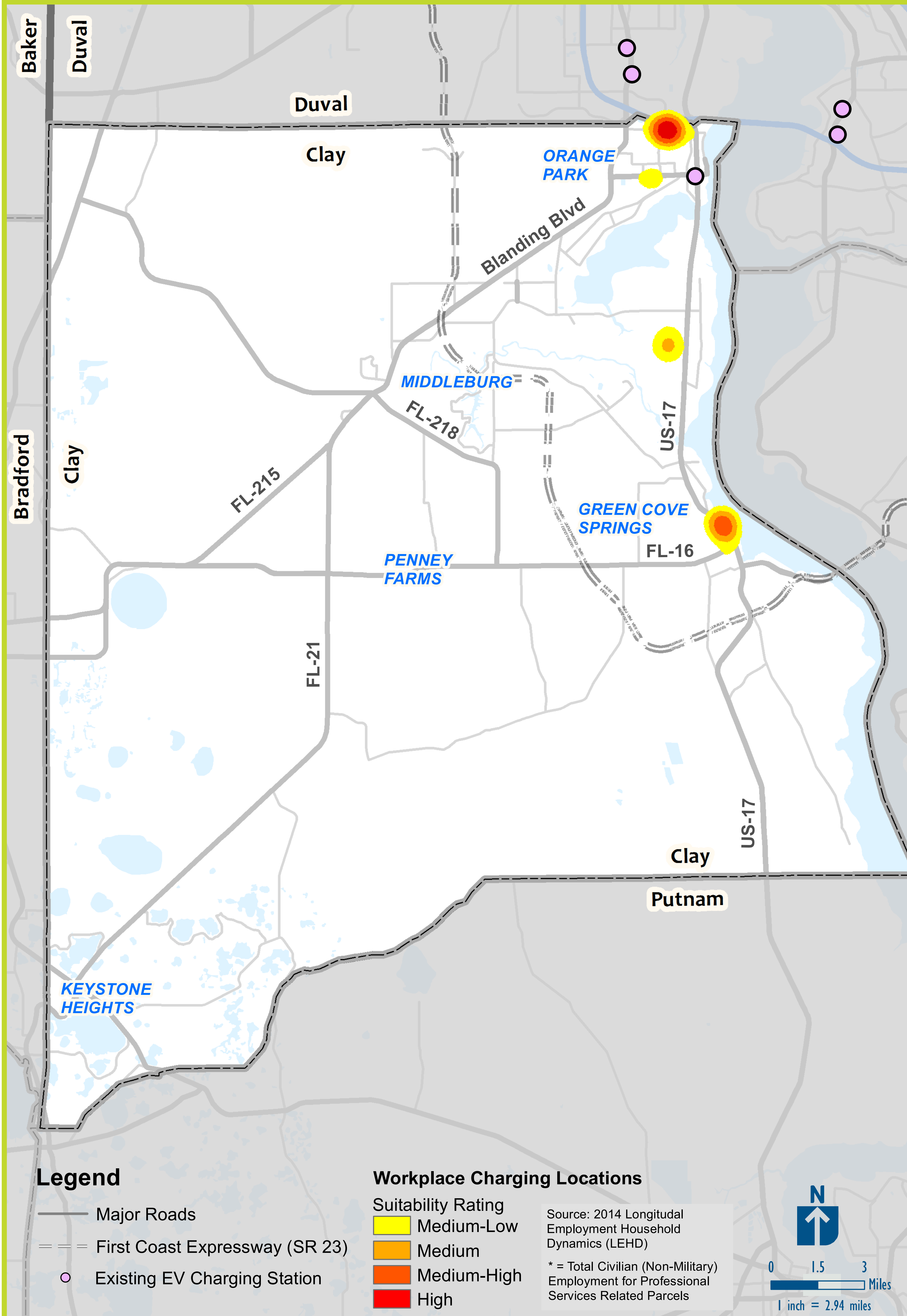
Clay County EV Registrations by Zip Code (June, 2016)



Clay County EV Charging Station Placement - Employment



Clay County EV Charging Station Placement - Workplace



Legend

- Major Roads
- First Coast Expressway (SR 23)
- Existing EV Charging Station

Workplace Charging Locations

Suitability Rating

- Medium-Low
- Medium
- Medium-High
- High

Source: 2014 Longitudal Employment Household Dynamics (LEHD)

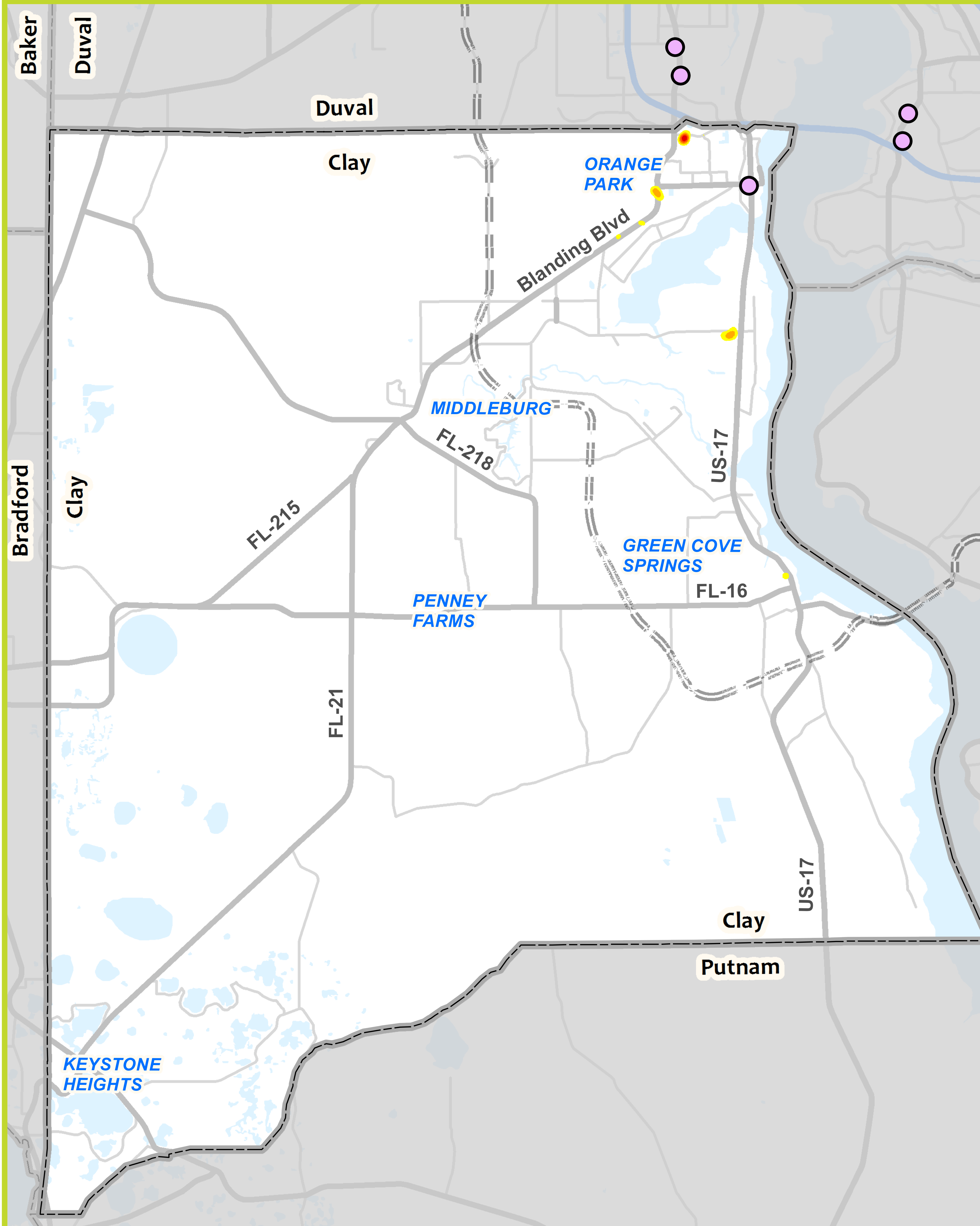
* = Total Civilian (Non-Military) Employment for Professional Services Related Parcels

N

0 1.5 3 Miles

1 inch = 2.94 miles

Clay County EV Charging Station Placement - Category 1



Legend

- Major Roads
- First Coast Expressway (SR 23)
- Existing EV Charging Station

Opportunity Charging Locations - Category 1*

Suitability Rating

- Medium-Low
- Medium
- Medium-High
- High

*Kernel Density Analysis based on proximity of features including: shopping centers, multi-family housing, drugstores, restaurants, supermarkets, banks, theaters, nightclubs and bars, and cultural centers.

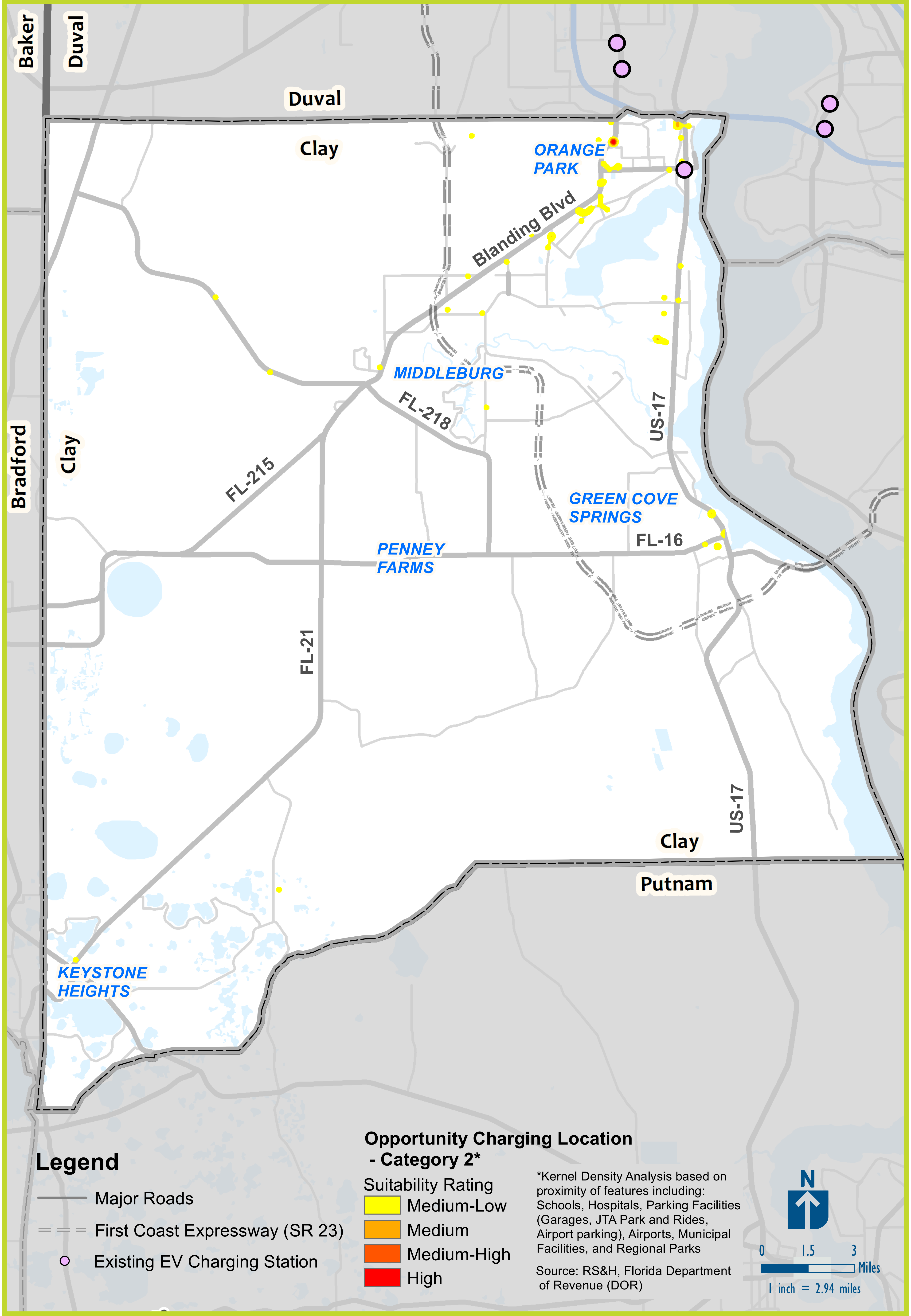
Source: RS&H, Florida Department of Revenue (DOR)

N

0 1.5 3 Miles

1 inch = 2.94 miles

Clay County EV Charging Station Placement - Category 2



Clay County EV Charging Station Placement - Suitability