



OFFICE OF PLANNING AND BUDGET

Nathan Deal
Governor

Teresa A. MacCartney
Director

August 27, 2018

Mr. Russell L. Crane, MBA
Banking Officer | Wilmington Trust, N.A.
Global Capital Markets | Capital Markets and Agency Services
Rodney Square North
1100 North Market Street
Wilmington, Delaware 19890

Dear Mr. Crane:

As the approved Lead Agency for the State of Georgia, the Governor's Office of Planning and Budget is submitting the attached D-4 application form requesting \$36,839,255 of its share of the Volkswagen Mitigation funds. The funding request is the first of what is expected to be three allocation requests to fund the projects described in state's Beneficiary Mitigation Plan. This request is for the replacement of 67 aging, higher-polluting diesel transit buses and the purchase of new electric bus charging infrastructure. As stated in the Beneficiary Mitigation Plan for the State of Georgia issued on January 30, 2018, the overall goals of the plan are:

- To reduce overall NOx emissions in the State;
- To implement Eligible Mitigation Actions in areas not meeting the national ambient air quality standard for ozone or in a ozone maintenance area;
- To implement Eligible Mitigation Actions that further Georgia's energy, environmental, and economic development goals, including those that support improved mobility;
- To implement Eligible Mitigation Actions with SMART (Specific, Measurable, Attainable, Realistic, and Timely) emissions reductions;
- To implement Eligible Mitigation Actions by working with entities that have administrative and programmatic structures in place for implementing diesel emissions reduction projects;

D-4 Application - Volkswagen Mitigation Funds

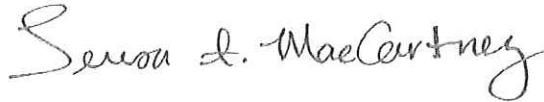
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- To implement Eligible Mitigation Actions that can be completed within three years of request date; and
- To implement Eligible Mitigation Actions requiring no administrative costs from the State Trust funds to implement.

The projects described in this allocation request meet all of the goals stated above.

Sincerely,

A handwritten signature in cursive script that reads "Teresa A. MacCartney".

Teresa A. MacCartney

TAM/cwg

Attachments

If applicable, describe how the mitigation action will mitigate the impacts of NOx emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

The Atlanta Metropolitan Area bears a disproportionate share of the NOx burden in Georgia. The new buses will replace current transit buses operating in the region (see attachments for additional detail)

ATTACHMENTS
(CHECK BOX IF ATTACHED)

- Attachment A Funding Request and Direction.
- Attachment B Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).
- Attachment C Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).
- Attachment D Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6). [Attach only if project involves vendor expenditures exceeding \$25,000.]
- Attachment E DERA Option (5.2.12). [Attach only if using DERA option.]
- Attachment F Attachment specifying amount of requested funding to be debited against each beneficiary's allocation (5.2.13). [Attach only if this is a joint application involving multiple beneficiaries.]

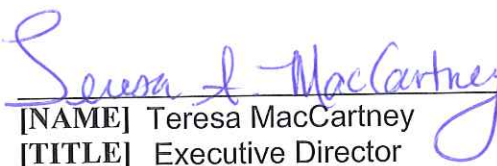
CERTIFICATIONS

By submitting this application, the Lead Agency makes the following certifications:

1. This application is submitted on behalf of Beneficiary Georgia, and the person executing this certification has authority to make this certification on behalf of the Lead Agency and Beneficiary, pursuant to the Certification for Beneficiary Status filed with the Court.
2. Beneficiary requests and directs that the Trustee make the payments described in this application and Attachment A to this Form.
3. This application contains all information and certifications required by Paragraph 5.2 of the Trust Agreement, and the Trustee may rely on this application, Attachment A, and related certifications in making disbursements of trust funds for the aforementioned Project ID.
4. Any vendors were or will be selected in accordance with a jurisdiction's public contracting law as applicable. (5.2.5)
5. Beneficiary will maintain and make publicly available all documentation submitted in

support of this funding request and all records supporting all expenditures of eligible mitigation action funds subject to applicable laws governing the publication of confidential business information and personally identifiable information. (5.2.7.2)

DATED: October 31, 2018



[NAME] Teresa MacCartney

[TITLE] Executive Director

Governor's Office of Planning and Budget

[LEAD AGENCY]

for

Georgia

[BENEFICIARY]

Supplemental D-4 Form Summary Document

1. Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1): This funding request is the first of what is expected to be three allocation requests to fund the projects described in the Beneficiary Mitigation Plan for the State of Georgia. This funding request is for the replacement of aging, higher-polluting diesel transit buses and the purchase of new electric bus charging infrastructure. As stated in the Beneficiary Mitigation Plan for the State of Georgia issued on January 30, 2018, the overall goals of the plan are:

- To reduce overall NO_x emissions in the State;
- To implement Eligible Mitigation Actions in areas not meeting the national ambient air quality standard for ozone or in a ozone maintenance area;
- To implement Eligible Mitigation Actions that further Georgia's energy, environmental, and economic development goals, including those that support improved mobility;
- To implement Eligible Mitigation Actions with SMART (Specific, Measurable, Attainable, Realistic, and Timely) emissions reductions;
- To implement Eligible Mitigation Actions by working with entities that have administrative and programmatic structures in place for implementing diesel emissions reduction projects;
- To implement Eligible Mitigation Actions that can be completed within three years of request date; and
- To implement Eligible Mitigation Actions requiring no administrative costs from the State Trust funds to implement.

The projects described in this allocation request meet all of the goals stated above. Additionally, the attached request is to replace 67 transit buses and begin development on electrical infrastructure to support additional electric buses. The specific breakdown includes 53 model year 2006 transit buses and 14 model year 2007 transit buses. The VIN numbers are included in Appendix One.

2. Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2): On April 30, 2018, the U.S. Environmental Protection Agency designated seven counties in the Atlanta Metropolitan Area as nonattainment for the 2015 national ambient air quality standard for ozone. The Atlanta Metropolitan Area is the only area in Georgia that is not meeting the U.S. Environmental Protection Agency's national air quality standard for ozone. Reducing ground level ozone is important because high levels can adversely impact the respiratory system and cardiovascular health. NO_x, when combined with volatile organic compounds (VOCs) and sunlight, reacts to form ground level ozone.

Funding the Xpress projects will benefit the Atlanta Metropolitan Area by reducing NO_x emissions from commuter buses. NO_x emissions reductions of 80 to 90 percent are expected, depending on the age of the buses to be replaced. Georgia's first allocation request will fund replacement of 67

older, higher-polluting, diesel Xpress transit buses with new diesel transit buses, and the purchase of electric charging infrastructure for future all-electric Xpress transit buses.

The State Road and Tollway Authority (SRTA) manages the Xpress transit bus system, which operates in 12 Atlanta Metropolitan Area counties with ridership from 40 counties. The Xpress buses provide Atlanta Metropolitan Area commuters with transportation options. Funding infrastructure for future electric transit buses will reduce commuter passengers' and residents' exposure to NO_x emissions and other air pollutants.

3. **Estimate of Anticipated NO_x Reductions (5.2.3):** The NO_x emissions reductions for replacing 67 older, higher-emitting transit buses with new, clean diesel transit buses were calculated using EPA's Diesel Emission Quantifier (DEQ)¹. The DEQ includes inputs for the retiring bus model year, engine type, miles traveled, and fuel usage. Based on these calculations, metro Atlanta will see NO_x reductions of approximately 35.9 tons/year, or 253.8 tons over the lifetime of the new buses. This is equivalent to an 88.4% reduction in NO_x emissions when utilizing the cleaner diesel buses.

Bus Model Year	2006	2007	Overall Project
Sum of NO _x Reduced per Year (short tons)	32.00	3.93	35.93
Sum of Lifetime NO _x Reduced (short tons)	221.8	32.0	253.8
Average of Percent NO _x Reduced (%)	89.8%	79.7%	88.4%

4. **Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).**

Period of Performance: 10/15/2018 through 06/30/2021

Budget Category	Total Approved Budget – Draw #1	Share of Total Budget to be Funded by the Trust	Cost-Share if applicable (State Road and Tollway Authority)
Equipment Expenditure	\$33,819,255.00	\$33,819,255.00	\$0.00
Contractor Support	\$3,020,000.00	\$3,020,000.00	\$0.00
Sub-recipient Support	\$0.00	\$0.00	\$0.00
Administrative (15% Cap)	\$0.00	\$0.00	\$0.00
Project Totals	\$36,839,255.00	\$36,839,255.00	\$0.00

5. **Identification of Governmental Entity Responsible for Reviewing and Auditing Expenditures of Eligible Mitigation Action Funds to Ensure Compliance with Applicable Law (5.2.7.1):** The Governor's Office of Planning and Budget (OPB) will be responsible for reviewing and auditing expenditures of eligible mitigation action funds. OPB will require agencies to submit payment requests along with supporting documentation before payments will be released. All funds are tracked by identifiers necessary to maintain accounting records as required by budgetary statutes and by generally accepted accounting principles. At a lower level, funds will be tracked by fund source and project. The fund source identifies the source or origin of the funds whereas the

¹ <https://www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq>

project identifies the intended purpose of the funds. The Georgia Environmental Protection Division will be responsible for reviewing estimates of NO_x emission reductions for funded projects, proper disposition.

6. **Describe how the Beneficiary will make documentation publicly available (5.2.7.2).** Section 4.2.7 of the State Trust Agreement describes Georgia's obligations with regard to consideration of public input on the Beneficiary Mitigation Plan for the State of Georgia, and for providing the public access to all documentation and records submitted to the Trustee, including those submitted in support of each funding request made by OPB for State Trust funds. The public input plan and public access plan is contained in Certification Form D-3, which was submitted by Georgia to the Trustee on October 13, 2017, and is described below. OPB has created the OPB VW Mitigation Webpage, which can be found at <https://opb.georgia.gov/vw-settlement-agreement>. The OPB VW Mitigation Webpage provides information regarding the State Trust Agreement and the State Trust. Documents submitted by Georgia to the Trustee will be available to the public on the OPB VW Mitigation Webpage including those submitted in support of each funding request. Information will also be available to the public on the Trustee's website at <http://www.vwenvironmentalmitigationtrust.com>. The OPB VW Mitigation Webpage will be updated as needed.
7. **Describe any cost share requirement to be placed on each NO_x source proposed to be mitigated (5.2.8).** The state of Georgia owns and operates the assets associated with the current request. The funds will be used to fully execute the replacement of buses and infrastructure associated with newer diesel and electrical buses. All administrative costs and additional requirements associated with equipment for Georgia Transit operations will be purchased and maintained by the state.
8. **Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9).** Georgia and the Governor's Office of Planning and Budget (as lead Agency) received beneficiary notice on Monday January 30, 2018. On February 21, 2018, OPB provided email correspondence to the Department of Interior and Department of Agriculture with its attached Mitigation plan to ensure compliance with section 4.2.8 of the Consent Decree.
9. **If applicable, describe how the mitigation action will mitigate the impacts of NO_x emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).** The new diesel transit buses funded by this allocation will be deployed in the Atlanta Metropolitan Area. The Atlanta Metropolitan Area bears a disproportionate share of the NO_x burden in Georgia, including impacts resulting from the VW defeat devices, for the following reasons:
 - NO_x emissions contribute to ground level ozone formation. The Atlanta Metropolitan Area is the only area of the state that is not meeting the current ozone standard (NAAQS). Seven counties in the Atlanta Metropolitan Area are nonattainment of the 2015 ozone standard. Fifteen counties in the Atlanta Metropolitan Area are in the 2008 ozone maintenance area;

- The Atlanta Metropolitan Area is disproportionately impacted by mobile source NO_x emissions: 81.6% of the NO_x emissions in the Atlanta Metropolitan Area come from mobile sources versus 66.7% state-wide; and
- Seven of the top ten counties in Georgia with the highest number of affected VW diesel vehicles are located in the Atlanta Metropolitan Area.

All-electric transit buses will reduce passengers' exposure to air pollutants, including NO_x emissions. The first step to deploying all-electric buses is to develop the charging infrastructure.

Attachment B

Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).

Table 1. PROJECT MANAGEMENT PLAN PROJECT SCHEDULE AND MILESTONES FOR DRAW #1

Milestones for Draw #1 Funding	Date
Lead Agency Identifies Project Sponsor's Potential Project in Mitigation Plan	01/30/2018
Lead Agency Provides Notice of Availability of Mitigation Action Funds	02/01/2018
Electric Bus Infrastructure Design, Engineering, and Utility Coordination Begins	04/01/2018
Project Sponsor Submits Proposal and Cost Information to Lead Agency for Draw #1	08/03/2018
Lead Agency Certifies Project Sponsor's Proposal and Cost Information for Draw #1	09/01/2018
Lead Agency Transmits Funding Request to Trustee for Draw #1	09/15/2018
Trustee Acknowledges Receipt of Project Certification and Funding Direction for Draw #1	10/01/2018
Lead Agency Directs Funding (Advance Funded Project) for Draw #1	10/01/2018
Project Sponsor Enters into Bus Purchase Contract (67 replacement buses) – Start	10/15/2018
Project Sponsor Begins Implementation Activities for Electric Bus Infrastructure – Start	10/15/2018
Project Sponsor provides detailed invoices for all claimed project costs and required certification documents to Lead Agency	07/15/2019 to 06/30/2021
Project Sponsor's Implementation Activities for Electric Bus Infrastructure - End	09/27/2019
Project Sponsor's Bus Purchase Contract (67 replacement buses) - End	06/30/2021
Project Sponsor Certifies Project Completion	07/15/2021
Lead Agency Reports Project Completion	08/01/2021

Table 2. Period of Performance: 10/15/2018 through 06/30/2021 - PROJECT BUDGET FOR DRAW #1

Budget Category	Total Approved Budget – Draw #1	Share of Total Budget to be Funded by the Trust	Cost-Share if applicable (State Road and Tollway Authority)
Equipment Expenditure	\$33,819,255.00	\$33,819,255.00	\$0.00
Contractor Support	\$3,020,000.00	\$3,020,000.00	\$0.00
Sub-recipient Support	\$0.00	\$0.00	\$0.00
Administrative (15% Cap)	\$0.00	\$0.00	\$0.00
Project Totals	\$36,839,255.00	\$36,839,255.00	\$0.00

Table 3. PROJECTED TRUST ALLOCATIONS

	2017	2018	2019	Totals
1. Anticipated Annual Project Funding Request to be paid through the Trust	\$0.00	\$60,500,000.00	\$3,124,725.56	\$63,624,725.56
2. Anticipated Annual Cost Share	\$0.00	\$2,112,739.00	\$0.00	\$2,112,739.00
3. Anticipated Total Project Funding by Year (line 1 plus line 2)	\$0.00	\$62,612,739.00	\$3,124,725.56	\$65,737,464.56
4. Cumulative Trustee Payments Made to Date Against Cumulative Approved Beneficiary Allocation	\$0.00	\$0.00	\$60,500,000.00	---

5. Current Beneficiary Project Funding to be paid through the Trust (Draw #1)	\$0.00	\$36,839,255.00	\$3,124,725.56	---
6. Remaining Annual Beneficiary Project Funding to be paid through the Trust (Draw #2)	\$0.00	\$23,660,745.00	\$0.00	---
7. Total Funding Allocated to Beneficiary, inclusive of Current Action by Year (line 4 plus line 5)	\$0.00	\$60,500,000.00	\$3,124,725.56	---
8. Beneficiary Share of Estimated Funds Remaining in Trust	\$63,624,725.56	\$63,624,725.56	\$3,124,725.56	---
9. Net Beneficiary Funds Remaining in Trust after all Annual Project Funding is Requested (line 8 minus line 7)	---	\$3,124,725.56	\$0.00	---

Attachment C

Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).

Georgia's lead agency, the Governor's Office of Planning and Budget, has created the OPB VW Mitigation Webpage at <https://opb.georgia.gov/vw-settlement-agreement>. Documents submitted by Georgia to the Trustee in accordance with paragraph 7 of the Beneficiary Certification will be available to the public on the OPB VW Mitigation Webpage, including Appendix D-4 "Beneficiary Eligible Mitigation Action Certification Form" and the semi-annual reporting required by Section 5.3, "Beneficiary Reporting Obligations" in Attachment A of the Environmental Mitigation Trust Agreement for State Beneficiaries. The semi-annual reports shall include the following information for each project:

1. Number of new electric/diesel buses deployed during the semi-annual reporting period and during the project (rolling total);
2. Number of new electric/diesel buses currently on order;
3. Number of buses disposed during the semi-annual reporting period and during the project (rolling total);
4. Any changes to the project plan during the semiannual period;
5. Project status for the installation and deployment of charging infrastructure, if applicable;
6. VW mitigation funds utilized to accomplish the project, to date; and actual/projected date for completion of the project.

Bus Replacement Evaluation and Emissions*

*This information was used to estimate the emission reductions and cost effectiveness of the project.

Financial Summary of Project

VW Funding Amount	\$33,819,255.00
Match Funding Provided	\$0.00
Total Project Funding Budget	\$33,819,255.00

Number of New Buses	67
Total Cost of New Buses	\$33,819,255.00

New Clean Bus Technology Options

New Bus MY	New Bus MPG	Annual Fuel Used Per Bus (Gallons)	Annual Vehicle Miles Traveled (VMT) average per bus	New Bus Average Annual Idling Hours	New Bus Fuel Type (example ULSD or Electric)	Expected Service Life of New Bus	Replacement Option	Material Cost	Total Bus Cost	Number of Buses	Total Option Cost
2018	6.0	8,052	35,101	2760	ULSD	16	1	\$504,765.00	\$504,765.00 \$0.00 \$0.00	67	\$33,819,255.00 \$0.00 \$0.00
Totals										67	\$33,819,255.00

#	Coach #	Engine Type	VIN	Old Bus MY	Old Bus (MPG)	Annual Fuel Used (Gallons)	Annual Vehicle Miles Traveled (VMT)	Old Bus Average Annual Idling Hours	Old Bus Fuel Type (example ULSD)	Remaining Service Life If There Was No Early Replacement	Intended Replacement Option from Above
1	4001	Detroit Diesel	1M8FDMPA16P056906	2006	4.39	8,792	38,577	2760	ULSD	6	1
2	4002	Detroit Diesel	1M8FDMPA66P056907	2006	4.47	5,622	25,130	2760	ULSD	6	1
3	4003	Detroit Diesel	1M8FDMPA86P056908	2006	4.63	7,932	36,760	2760	ULSD	6	1
4	4004	Detroit Diesel	1M8FDMPAX6P056909	2006	3.01	9,281	27,958	2760	ULSD	6	1
5	4005	Detroit Diesel	1M8FDMPA66P056910	2006	4.41	8,239	36,342	2760	ULSD	6	1
6	4006	Detroit Diesel	1M8FDMPA86P056911	2006	4.29	6,198	26,574	2760	ULSD	6	1
7	4007	Detroit Diesel	1M8FDMPAX6P056912	2006	4.18	7,634	31,917	2760	ULSD	6	1
8	4008	Detroit Diesel	1M8FDMPA16P056913	2006	4.20	8,600	36,152	2760	ULSD	6	1
9	4009	Detroit Diesel	1M8FDMPA36P056914	2006	4.71	7,499	35,290	2760	ULSD	6	1
10	4010	Detroit Diesel	1M8FDMPA56P056915	2006	4.20	8,097	34,018	2760	ULSD	6	1
11	4011	Detroit Diesel	1M8FDMPA76P056916	2006	4.30	6,164	26,535	2760	ULSD	6	1
12	4012	Detroit Diesel	1M8FDMPA96P056917	2006	4.59	7,633	35,007	2760	ULSD	6	1
13	4013	Detroit Diesel	1M8FDMPA06P056918	2006	4.41	8,033	35,394	2760	ULSD	6	1
14	4014	Detroit Diesel	1M8FDMPA26P056919	2006	4.71	7,294	34,346	2760	ULSD	6	1
15	4015	Detroit Diesel	1M8FDMPA96P056920	2006	4.50	7,860	35,409	2760	ULSD	6	1
16	4016	Detroit Diesel	1M8FDMPA06P056921	2006	4.55	8,195	37,268	2760	ULSD	7	1
17	4017	Detroit Diesel	1M8FDMPA26P056922	2006	4.56	7,602	34,675	2760	ULSD	7	1
18	4018	Detroit Diesel	1M8FDMPA46P056923	2006	4.51	8,342	37,649	2760	ULSD	7	1
19	4019	Detroit Diesel	1M8FDMPA66P056924	2006	4.90	8,221	40,253	2760	ULSD	7	1
20	4020	Detroit Diesel	1M8FDMPA86P056925	2006	4.41	8,954	39,503	2760	ULSD	7	1
21	4021	Detroit Diesel	1M8FDMPA16P057219	2006	4.48	7,486	33,518	2760	ULSD	7	1
22	4022	Detroit Diesel	1M8FDMPA86P057220	2006	4.39	9,401	41,253	2760	ULSD	7	1
23	4023	Detroit Diesel	1M8FDMPAX6P057221	2006	4.38	8,925	39,080	2760	ULSD	7	1
24	4024	Detroit Diesel	1M8FDMPA16P057222	2006	4.11	8,933	36,675	2760	ULSD	7	1
25	4025	Detroit Diesel	1M8FDMPA36P057223	2006	4.60	7,916	36,404	2760	ULSD	7	1
26	4026	Detroit Diesel	1M8FDMPA56P057224	2006	4.94	7,607	37,551	2760	ULSD	7	1
27	4027	Detroit Diesel	1M8FDMPA76P057225	2006	4.62	8,003	36,959	2760	ULSD	7	1
28	4028	Detroit Diesel	1M8FDMPA96P057229	2006	4.00	9,003	36,022	2760	ULSD	7	1
29	4029	Detroit Diesel	1M8FDMPA66P057300	2006	4.03	8,905	35,894	2760	ULSD	7	1
30	4030	Detroit Diesel	1M8FDMPA86P057301	2006	4.62	8,999	41,612	2760	ULSD	7	1
31	4031	Detroit Diesel	1M8FDMPAX6P057302	2006	4.55	8,849	40,247	2760	ULSD	7	1
32	4032	Detroit Diesel	1M8FDMPA16P057303	2006	4.64	6,554	30,379	2760	ULSD	7	1
33	4033	Detroit Diesel	1M8FDMPA36P057304	2006	4.81	7,965	38,319	2760	ULSD	7	1
34	4034	Detroit Diesel	1M8FDMPA56P057305	2006	4.07	8,612	35,087	2760	ULSD	7	1
35	4035	Detroit Diesel	1M8FDMPA76P057306	2006	4.32	7,558	32,656	2760	ULSD	7	1
36	4036	Detroit Diesel	1M8FDMPA96P057307	2006	3.59	9,288	33,319	2760	ULSD	7	1
37	4037	Detroit Diesel	1M8FDMPA06P057308	2006	3.98	7,220	28,763	2760	ULSD	7	1
38	4038	Detroit Diesel	1M8FDMPA26P057309	2006	3.82	8,851	33,793	2760	ULSD	7	1
39	4039	Detroit Diesel	1M8FDMPA46P057310	2006	3.66	7,591	27,791	2760	ULSD	7	1
40	4040	Detroit Diesel	1M8FDMPA66P057311	2006	3.25	8,107	26,373	2760	ULSD	7	1
41	4041	Detroit Diesel	1M8FDMPA86P057312	2006	3.93	7,822	30,740	2760	ULSD	8	1
42	4042	Detroit Diesel	1M8FDMPA16P057313	2006	3.61	8,259	29,854	2760	ULSD	8	1
43	4043	Detroit Diesel	1M8FDMPA36P057314	2006	3.63	8,414	30,521	2760	ULSD	8	1
44	4044	Detroit Diesel	1M8FDMPA56P057315	2006	3.96	7,942	31,423	2760	ULSD	8	1
45	4045	Detroit Diesel	1M8FDMPA76P057316	2006	3.63	7,031	25,539	2760	ULSD	8	1
46	4046	Detroit Diesel	1M8FDMPA96P057317	2006	3.75	8,052	30,163	2760	ULSD	8	1
47	4047	Detroit Diesel	1M8FDMPA16P057318	2006	3.70	7,968	29,450	2760	ULSD	8	1
48	4048	Detroit Diesel	1M8FDMPA36P057319	2006	3.48	8,426	29,322	2760	ULSD	8	1
49	4049	Detroit Diesel	1M8FDMPA56P057320	2006	3.92	7,154	28,078	2760	ULSD	8	1
50	4050	Detroit Diesel	1M8FDMPA76P057321	2006	3.53	8,310	29,338	2760	ULSD	8	1
51	4051	Detroit Diesel	1M8FDMPA96P057322	2006	3.49	8,463	29,537	2760	ULSD	8	1
52	4052	Detroit Diesel	1M8FDMPA16P057323	2006	3.64	8,117	29,567	2760	ULSD	8	1
53	4053	Detroit Diesel	1M8FDMPA36P057324	2006	4.04	7,717	31,142	2760	ULSD	8	1
54	5000	Caterpillar	1M8FDMDA27P057901	2007	4.21	6,511	27,402	2760	ULSD	8	1
55	5001	Caterpillar	1M8FDMDA47P057902	2007	4.62	7,605	35,101	2760	ULSD	8	1
56	5002	Caterpillar	1M8FDMDA67P057903	2007	4.59	9,012	41,407	2760	ULSD	8	1
57	5003	Caterpillar	1M8FDMDA87P057904	2007	4.74	8,898	42,183	2760	ULSD	8	1
58	5004	Caterpillar	1M8FDMDAX7P057905	2007	4.73	7,566	35,803	2760	ULSD	8	1
59	5005	Caterpillar	1M8FDMDA17P057906	2007	4.62	7,663	35,427	2760	ULSD	8	1
60	5006	Caterpillar	1M8FDMDA37P057907	2007	4.37	8,789	38,429	2760	ULSD	8	1
61	5007	Caterpillar	1M8FDMDA57P057908	2007	4.65	7,814	36,333	2760	ULSD	8	1
62	5009	Caterpillar	1M8FDMDA77P057910	2007	4.55	9,231	41,992	2760	ULSD	8	1
63	5010	Caterpillar	1M8FDMDA97P057911	2007	4.12	6,738	27,788	2760	ULSD	8	1
64	5011	Caterpillar	1M8FDMDA17P057912	2007	4.59	7,866	36,133	2760	ULSD	8	1
65	5012	Caterpillar	1M8FDMDA37P057913	2007	4.52	9,431	42,631	2760	ULSD	9	1
66	5013	Caterpillar	1M8FDMDA57P057914	2007	4.42	8,147	35,987	2760	ULSD	9	1
67	5014	Caterpillar	1M8FDMDA77P057915	2007	4.64	8,165	37,908	2760	ULSD	9	1

Attachment D

2017 Georgia Supplemental Mass Transit Pricing Sheet (Coaches)				
F-1: 45 Ft Suburban/Commuter/Coach (Over The Road)				
GENERAL INFORMATION				
FTA COMPLIANT VEHICLE (Y/N):				FTA
DELIVERY CHARGE (\$/mi):				\$1.00
EARLY PAY DISCOUNT %				0.0%
BASE VEHICLE INFORMATION				
VEHICLE DESCRIPTION	PRICE			
45 Ft Suburban/Commuter/Coach (Over The Road)	\$463,546.00		\$463,546.00	
VEHICLE ATTRIBUTES				
This section does not impact the overall quantitative evaluation towards the evaluated. Enter the Attribute and a credit value in order for the customer to know the credit value of the option they wish to change ("A la Carte")				
#	ATTRIBUTE CATEGORY	ATTRIBUTE DESCRIPTION	CREDIT VALUE	SRTA OPTIONS
1	Engine	Cummins	\$53,291.00	
2	Transmission (CAT 3 EXEMPT)	Allison	\$16,385.00	
3	Wheels and Tires	Firestone Tires Alcoa Wheels	\$7,288.00	
4	Fire Suppression System	Amerex	\$2,870.00	(\$2,870.00)
5	Bumpers	Firestone Help Bumpers	\$2,819.00	
6	Air Suspension	Goodyear	\$7,620.00	
7	HVAC System	Bitzer and MCC	\$16,068.00	
8	Brake System	Meritor	\$3,477.00	
9	Air Compressor	Wabco	\$2,415.00	
10	Cooling System	Modine	\$6,090.00	
11	Alternator (CAT 3 EXEMPT)	Denso	\$1,337.00	
12	Steering	TRW	\$3,209.00	
13	Propshaft/Driveshaft	Dana	\$515.40	
14	Axles	Meritor	\$17,886.00	
15	Multiplexing	Parker/Vansco	\$16,005.00	
16	Seating	Amaya A220 (Freedman)	\$34,200.00	(\$34,200.00)
17	Body Style	MCI	\$101,485.00	
18	AVL System	Provisions	\$2,200.00	
VEHICLE REQUIRED OPTIONS				
#	OPTION CATEGORY	OPTION DESCRIPTION	PRICE	
1	Polished Aluminum Wheels	Alcoa	\$2,100.00	\$0.00
2	Video Surveillance System	8 Camera Video	\$9,500.00	
3	Transmission	Allison	\$16,385.00	
4	Interior Lighting	LED	\$3,500.00	\$0.00
5	Wheelchair Restraint	Q Strain	\$1,400.00	\$0.00
6	Passenger Seats	Kiel Advance 2010	\$37,200.00	
7	Destination Sign	Luminator Front and Side	\$4,455.00	
8	Driver Seat	USSC 9100 ALX	\$2,200.00	\$400.00
9	Seat Fabric	Holdsworth Fabric	\$2,500.00	\$0.00
10	Flooring	RCA or Altro	\$2,200.00	\$0.00
11	Fire Suppression System	Amerex	\$4,500.00	
12	Stand Alone Wi-Fi	Cradle Point	\$1,100.00	
13	Bike Rack	Sportworks Bumper Mounted	\$1,300.00	\$1,300.00
14	Disc Brakes	Meritor	\$2,200.00	\$0.00
15	AVL System	Avail	\$28,600.00	
16	Windows	Frameless Sash	\$1,200.00	\$0.00
17	Alternator	Denso	\$1,337.00	\$0.00
18	Exterior Mirrors	Hadley	\$400.00	\$0.00
19	Air Conditioning	Parcel Rack A/C	\$2,200.00	\$0.00

#	ATTRIBUTE CATEGORY	ATTRIBUTE DESCRIPTION	CREDIT VALUE	SRTA OPTIONS
20	Automated Pass. Counting System	Trapeze	\$2,866.00	

OTHER AVAILABLE OPTIONS

#	Option Category	Option Description	Price	
1	Upgrade to CNG option	MCI	\$147,906.00	
2	Driver's Seat (Recaro) Options	Heated Seat	\$216.00	
3	Driver's Seat (Recaro) Options	Seat Alarm	\$114.00	\$0.00
4	Driver's Seat (Recaro) Options	Fabric Options	\$200.00	
5	Driver's Seat (Recaro) Options	Seat Air Vent	Not Available	
6	Driver's Seat (Recaro) Options	Side Bolsters (Standard)	\$5.00	
7	Driver's Seat (Recaro) Options	Silicone Seat Cushion	\$660.00	
8	Passenger Seat Options	Foot Rests (manual)	\$900.00	
9	Passenger Seat Options	Foot Rests (retractable)	\$1,980.00	
10	Passenger Seat Options	Snack Trays	\$1,188.00	
11	Passenger Seat Options	Fold up center armrests	\$828.00	\$828.00
12	Passenger Seat Options	Cup Holder	\$501.00	
13	Passenger Seat Options	Magazine Pocket	\$998.00	
14	Passenger Seat Options	Grab Handle	\$480.00	\$480.00
15	Passenger Seat Options	USB and or 110 Volt Outlets	\$8,180.00	
	Passenger Seat Options	USB only	\$5,320.00	\$5,320.00
16	Batteries Options as requested	Four Group 31 Batteries	\$275.00	
17	Batteries Options as requested	Two 8 D Batteries	\$120.00	
18	Batteries Options as requested	Two 8 D Maint. Free	\$240.00	\$240.00
19	Batteries Options as requested	Four Group 31 AGM Batteries	\$430.00	
20	Design and Construction CNG	Stainless Steel prd vent lines	\$5,400.00	
21	Emergency Alarm TS79.9	Luminator	\$200.00	
22	Restroom	Chemical type lavatory	\$2,145.00	
23	Pre wire for fare box installation	Wiring and Power	\$800.00	\$800.00
24	Radio Communication	Cadec complete	\$15,000.00	
25	Radio Communication	Cadec pre wire only	\$2,100.00	
26	Paint schemes and Letters	Dependent on Agency req.	\$5000.00-\$10,000.00	\$5,500.00
27	Fire Suppression	Amerex (Kidde)	\$4,500.00	\$4,500.00
28	Wheelchair Lift	Ricon 600 lb capacity	\$1,400.00	
29	Vehicle Location Enunciator System	Luminator	\$6,000.00	
30	Back Up Camera	ASA	\$940.00	
31	AVL System	Dependent on agency req.	\$20,000-\$35,000	
32	Roof Hatch	Tran spec	\$0.00	\$0.00
33	Parcel Rack	Fully Enclosed	\$3,850.00	\$300.00
34	Tire Options	Credit of Agency provides	\$3,600.00	
35	Driver's Alarm	Emergency Switch	\$175.00	\$175.00
36	Cruise Control	Steering column Mounted	\$75.00	
37	Parcel Rack	Hand Holds to be Yellow	\$241.00	\$241.00
38	Hanover Destination Sign	Front and Side	\$5,100.00	\$5,100.00
39	Amber LED Deceleration Lights	Rear of Coach	\$275.00	\$275.00
40	Gauges in the engine compartment	Oil and Water	\$250.00	\$250.00
41	Gladhands at front of coach	Towing Gladhands	\$475.00	\$0.00
42	Upcharge for Amaya Passenger Seats	Torino GT	\$37,500.00	\$37,500.00
43	Additional Training	Price for each additional day	\$1,500.00	\$6,000.00
44	Additional Base Year Warranty	Total of 3 years	\$3,275.00	
45	Extended Engine/Trans Warranty	Diesel Option	\$8,122.00	
46	Extended Engine/Trans Warranty	Diesel Option	\$8,122.00	
47	Tire Pressure Monitoring	Smart Tire	\$940.00	\$940.00
48	Window Lights	LED	\$2,000.00	\$2,000.00
49	Boom Microphone	Dash Mounted	\$175.00	\$175.00
50	Optional Diagnostic tools	Allison	\$700.00	
51	Optional Diagnostic tools	Cummins	\$1,120.00	
52	Take One Holder	Multi Pocket	\$250.00	\$250.00
53	Black Metal Holder	Driver's Modesty Panel	\$125.00	\$125.00
54	Rear Route Sign	Luminator/Hanover	\$750.00	
55	LED Headlights	JW Speaker	\$600.00	
56	360 camera with DVR	Brigade	\$5,600.00	

#	ATTRIBUTE CATEGORY	ATTRIBUTE DESCRIPTION	CREDIT VALUE	SRTA OPTIONS
Customization				
57	Interior Side panels	Side panel color options	No Charge	\$0.00
58	Instrumentation	Dash Layout for Instruments	No Charge	\$0.00
59	Speaker System	Interior and ext. speaker switch	\$185.00	\$185.00
60	Emergency Door Opening from Rear	Switch that will open all doors	Not available	
61	Cooling System	Electric fan cooling system	incl in base	incl in base
62	Fuel System	Fuel Master module	\$710.00	\$710.00
63	Cabin Temperature	Program thermistor for select ran	g No Charge	\$0.00
64	Engine Computer programming	Throttle lockout	No Charge	\$0.00
65	USB Charging	USB Charging at every seat.	\$8,180.00	incl in options
66	Engine Fast Idle	Only one fast idle speed	No Charge	\$0.00
67	Transmission Fluid Extraction Port	Oil sampling	No Charge	\$0.00
68	Transmission Fluid Drain Plug	Femco non-spill with cap	\$160.00	\$160.00
69	Engine Oil Drain Plug	Femco non-spill with cap	\$180.00	\$180.00
70	Engine Fluid Extraction Port	Femco non-spill with cap	No Charge	\$0.00
71	Fast Fill Fuel Nozzle	Emco Wheaton Posi Lock	\$800.00	\$800.00
72	Prewire for AVL	Route Match??	\$6,000.00	
73	Prewire for Camera	Apollo	\$760.00	\$760.00
74	Prewire for Smart Drive	Smart Drive (Transdev)	\$400.00	\$400.00
75	Prewire for mic plug on curb side parcel rac	Public Address	\$200.00	\$200.00
76	Prewire for Kenwood radio	Kenwood	No charge	\$0.00
77	Pro Fuel Filter	Visual Fuel Filter	No Charge	\$0.00
78	Seat Fabric Protection	USSC Seat only	\$570.00	\$570.00
79	Automatic Drain Valve for wet tank	Halidex	\$425.00	\$425.00
80	Wear Monitor	Disc Brakes	\$1,200.00	\$1,200.00
			Grand Total: \$504,765.00	

State Road & Toll Authority (SRTA)
E-Bus Deployment Station (Electrical Scope ONLY)
 Conceptual Design Submittal

ESTIMATED PROBABLE CONSTRUCTION COST

Station	Bid Item Description	Construction Estimate
1	Existing Building Upgrades (Electrical)	\$43,000
2	Site Utilities (Electrical)	\$2,976,000
	On-Site Improvements (roadway, pavements, traffic signals, etc.)	Not Included
	Off-Site Improvements (roadway, traffic signals, utility extensions, etc.)	Not Included
	Design / Engineering, Planning, Programming	Not Included
	Property Acquisition	Not Included
Estimated Total Construction Cost (Rounded) Present Day (2018)		\$3,020,000
Estimated Bid Range of Construction Costs Present Day (2018)		\$2.9M - \$3.1M

** Due to the impact of recent major storms on the construction industry, there is a potential that bids for this project could be higher to account for shortages in material, labor and equipment as well as lack of bidding competition. That impact has NOT been accounted for in the above cost estimate due to insufficient data at this time.

Estimate Qualification: Atkins estimated range of probable construction cost for this project is based on conceptual plans and could vary from final bids based on final design, design progress, means and methods, phasing/sequencing, associated other necessary work, perceived risk, competitive prices from subcontractors and suppliers, market conditions, etc. Estimate assumes that project will be bid using traditional low bid delivery method with reasonable competition. Intent of estimate is to provide probable construction cost range to complete this project based on the scope noted. Atkins does not guarantee that any bids for this project will not vary from the estimated costs.

State Road & Toll Authority (SRTA)
E-Bus Deployment Station (Electrical Scope ONLY)
Conceptual Design Submittal

Estimate Basis, Assumptions & Exclusions

Project Specific:

- Estimate based on Conceptual Plan Submittal provided by Atkins.
- Estimate costs are associated with Electrical Scope ONLY.
- Estimate intent is to establish a reasonable price range for project based on current market conditions
- Estimate excludes the following:
 - Design / Engineering, Planning, Programming
 - Property Acquisition
 - Escalation, all cost present day, June 2018

General:

- Unit prices are based on standard references / historical projects and include subcontractor's mark-ups.
- Unit prices include material, labor, equipment, freight, taxes, and subcontractor overhead and profit
- Quantities and unit-prices are subject to change pending design progress.
- Estimate excludes any other scope of work, unless noted.
- Estimate excludes Design/Engineering, and Construction Engineering & Inspection (CEI) fees.
- Estimate excludes any Owner's Contingency for Owner directed changes and unforeseen conditions (post bid).
- Estimate excludes any Environmental Remediation/Mitigation, if required (Asbestos, Lead, Mold/Mildew, adverse site conditions)
- Estimate assumes design-bid-build contract delivery mechanism with competitive bidding and reasonable number of bidders (4+)
- Estimate assumes that the entire scope of work is to be let and constructed under one single contract

State Road & Toll Authority (SRTA)
E-Bus Deployment Station (Electrical Scope ONLY)
 Conceptual Design Submittal

Existing Building Upgrade
 Estimate of Probable Construction Costs

DIV	DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL COST
5 MASONRY					
	Core Drill Masonry Block Wall (New Conduit)	1	LOC	\$350.00	\$350
SUBTOTAL MASONRY					\$350
7 THERMAL & MOISTURE PROTECTION					
	Seal existing wall penetration (Allowance)	1	LOC	\$250.00	\$250
SUBTOTAL THERM. & MOIST. PROT.					\$250
9 FINISHES					
	Patch & Repair Core Drilled Wall - As Need (Allowance)	1	LOC	\$500.00	\$500
	Paint Wall - As Need (Allowance)	1	LS	\$250.00	\$250
SUBTOTAL FINISHES					\$750
26 ELECTRICAL					
	Upgrade ext. Switchboard (Circuit Breaker 65KAIC, 400Amps)	1	EA	\$4,100.00	\$4,100
	Pull Box 8" x 8"	5	EA	\$150.00	\$750
	350 MCM THWN	12	CLF	\$1,100.00	\$13,200
	#4 THWN GND	4	CLF	\$217.00	\$868
	3" PVC Conduit (Schedule 40) (Wall Hung)	400	LF	\$21.00	\$8,400
	Misc. Electrical (Allowance)	1	LS	\$1,500.00	\$1,500
SUBTOTAL ELECTRICAL					\$28,818
Subtotal Direct Costs					\$30,168
General Conditions @ 12%					\$3,620
Subtotal					\$33,788
Bonds & Insurances @ 3%					\$1,014
Subtotal					\$34,802
Overhead & Profit @ 10%					\$3,480
Subtotal					\$38,282
Estimate Contingency @ 10%					\$3,828
Estimate Total					\$42,110
TOTAL CONSTRUCTION COST					ESTIMATE (Rounded) \$43,000

State Road & Toll Authority (SRTA)
E-Bus Deployment Station (Electrical Scope ONLY)
 Conceptual Design Submittal

Site Utilities - Electrical Scope
 Estimate of Probable Construction Costs

DIV	DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL COST
31 EARTHWORK					
	Sawcut & Remove existing Concrete driveway	2,752	SF	\$1.00	\$2,752
	Excavation (Ductbanks)	771	CY	\$15.00	\$11,569
	Backfill (Ductbanks)	250	CY	\$5.00	\$1,248
		SUBTOTAL EARTHWORK			\$15,569
32 EXTERIOR IMPROVEMENTS					
	Compacted Subgrade (12") (Assumed Quantity)	372	SY	\$3.00	\$1,117
	Reinforced Concrete Pavement (8") (Assumed Qty.)	372	SY	\$70.00	\$26,056
	Sod Replacement	49	SY	\$10.00	\$491
		SUBTOTAL EXTERIOR IMPROVEMENTS			\$27,663
33 UTILITIES					
	Concrete Ductbank (Type A: 41" x 26")	27.5	CY	\$180.00	\$4,948
	Concrete Ductbank (Type B: 41" x 26")	27.5	CY	\$180.00	\$4,948
	Concrete Ductbank (Type C: 62" x 32")	204.5	CY	\$180.00	\$36,810
	Concrete Pad 12" Thick (Switchboards)	198	SF	\$14.00	\$2,772
	600 MCM THWN	272	CLF	\$2,211.00	\$601,392
	#3/0 THWN GND	2	CLF	\$632.00	\$1,264
	250 MCM THWN	112	CLF	\$916.00	\$102,592
	#4/0 THWN	76	CLF	\$776.00	\$58,976
	#3/0 THWN	119	CLF	\$632.00	\$75,208
	#2/0 THWN	76	CLF	\$568.00	\$43,168
	#1/0 THWN	32	CLF	\$424.00	\$13,568
	#2 THWN GND	78	CLF	\$286.00	\$22,308
	#4 THWN GND	19	CLF	\$217.00	\$4,123
	#6 THWN	8	CLF	\$177.00	\$1,416
	3" EMT Conduit	400	LF	\$39.00	\$15,600
	2" PVC Conduit (Schedule 40)	800	LF	\$3.25	\$2,600
	3" PVC Conduit (Schedule 40)	9,610	LF	\$5.95	\$57,180
	4" PVC Conduit (Schedule 40)	4,760	LF	\$10.70	\$50,932
	5/8" O.D x 20' L Copper Clad Steel Ground Rod	8	EA	\$322.00	\$2,576
	Switchboard (4,000Amps MCB, NEMA 3R, 65 KAIC, w/ (11) 300Amps Circuit Breakers) (Material Cost as per Quote. Installation & Taxes Incd.)	2	EA	\$106,358.00	\$212,716
	Switchboard (2,000Amps MCB, NEMA 3R, 65 KAIC, w/ (6) 300Amps Circuit Breakers) (Material Cost as per Quote. Installation & Taxes Incd.)	2	EA	\$88,382.00	\$176,764
	Generator Backup				
	Concrete Ductbank 41" x 26"	27.5	CY	\$180.00	\$4,948
	Concrete Pad 12" Thick (Transfer Switch)	198	SF	\$14.00	\$2,772
	Generator (Provided by Others - Connection LABOR ONLY)	1	EA	\$3,500.00	\$3,500
	Transfer Switch (2,000Amps, Non-Automatic)	2	EA	\$40,000.00	\$80,000
	Concrete Pullbox w/ Metal Cover (5' W x 2' L x 3' D)	1	EA	\$4,000.00	\$4,000
	600 MCM THWN	120	CLF	\$2,211.00	\$265,320
	4" PVC Conduit (Schedule 40)	3,000	LF	\$10.70	\$32,100

State Road & Toll Authority (SRTA)
E-Bus Deployment Station (Electrical Scope ONLY)
 Conceptual Design Submittal

Site Utilities - Electrical Scope
 Estimate of Probable Construction Costs

DIV	DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL COST
	Coordination with existing Site Electrical (Allowance)	1	LS	\$7,500.00	\$7,500
	Misc. Site Electrical (Allowance)	1	LS	\$19,000.00	\$19,000
		SUBTOTAL UTILITIES			\$1,911,000
		Subtotal Direct Costs			\$1,954,232
				General Conditions @ 12%	\$234,508
				Subtotal	\$2,188,740
				Bonds & Insurances @ 3%	\$65,662
				Subtotal	\$2,254,402
				Overhead & Profit @ 10%	\$225,440
				Subtotal	\$2,479,843
				Estimate Contingency @ 20%	\$495,969
				Estimate Total	\$2,975,811
TOTAL CONSTRUCTION COST		ESTIMATE (Rounded)			\$2,976,000