



Wake Transit Plan

Facility Programming

TASK 4.3 – FACILITY PROGRAMMING

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Task 4.3 – Facility Programming

PURPOSE

This document reviews programming scenarios for each facility based on projected fleet data provided by NN and information provided by the Transit Partners. The possible scenarios vary by facility from building additions and renovations to new construction. It is important to note that the programming and cost information presented in this section is high level and would require more in depth research and planning if a Transit Partner proceeds with a scenario.

INTRODUCTION

HDR | Maintenance Design Group (HDR | MDG) developed cost and programming models based on the estimated fleet growth information provided by Nelson Nygaard (referred to as NN in this document). From this data, scenarios were developed as possible solutions to the deficiencies and constraints of each Transit Partner that were identified in Task 4.1. Exhibits A and B represent the cost summary of the four scenarios that were developed and reviewed with the Transit Partners. The following document elaborates on the programming scenario(s) for each Transit Partner and presents a Rough Order of Magnitude (R.O.M.) cost breakdown. Each section includes the Fleet Data, Program Summary, and the Budget Worksheet. The detailed Facility Program Data is located in Appendix A: Facility Program Data.

Exhibit A: Facilities Scenario A

Transit Partner	Program Scenario A.1	R.O.M. Cost
GoRaleigh	Construct expansion of Existing Poole Road Facility	\$4,471,900
GoRaleigh/ GoWake Access	Construct New 100 Bus Paratransit Only Administration, Operations, and Maintenance Facility	\$25,553,400
GoTriangle	Construct expansion of existing Nelson Road Facility	\$6,301,500
GoCary	Construct New Bus Administration, Operations, and Maintenance Facility	\$19,680,100
TOTAL		\$56,006,900

Transit Partner	Program Scenario A.2	R.O.M. Cost
GoRaleigh	Construct expansion of Existing Poole Road Facility	\$4,471,900
GoRaleigh/ GoWake Access	Construct New 76 Bus Paratransit Only Administration, Operations, and Maintenance Facility	\$23,851,600
GoTriangle	Construct expansion of existing Nelson Road Facility	\$6,301,500
GoCary	Construct New Bus Administration, Operations, and Maintenance Facility	\$19,680,100
TOTAL		\$54,305,100



Transit Partner	Program Scenario A.3	R.O.M. Cost
GoRaleigh	Construct expansion of Existing Poole Road Facility	\$4,471,900
GoRaleigh/ GoWake Access	Construct New 34 Bus Paratransit Only Administration, Operations, and Maintenance Facility	\$16,745,400
GoTriangle	Construct expansion of existing Nelson Road Facility	\$6,301,500
GoCary	Construct New Bus Administration, Operations, and Maintenance Facility	\$19,680,100
TOTAL		\$47,198,900

Exhibit B: Facilities Scenario B

Transit Partner	Program Scenario B	R.O.M. Cost
GoRaleigh	Construct expansion of existing Poole Road Facility	\$4,471,900
GoRaleigh/ GoWake Access	Remodel Existing Nelson Road for GoRaleigh/GoWake Access 100 Bus Paratransit Admin, Operations, and Maintenance.	\$4,002,100
GoTriangle	Construct New Bus Administration, Operations, and Maintenance Facility	\$44,915,000
GoCary	Construct New Bus Administration, Operations, and Maintenance Facility	\$19,680,100
TOTAL		\$73,069,100

GORALEIGH FACILITY PROGRAMMING

Overview

When the GoRaleigh facility was constructed in 2013, a building expansion was planned and accommodated for in the design. This enabled the facility to be constructed with future planning kept in mind. The Operations and Administration areas of the facility were constructed with future growth accounted for and therefore do not need to be expanded. Building these areas initially limits the cost of expansion. The Maintenance building was easier to plan for expansion since the construction will consist of repair bays, shops, and storage areas.

Fleet Data

Based on the fleet growth projections from NN and the expertise of the Planning Team, the GoRaleigh fleet will increase by 47 buses throughout the next 20 years. As the fleet increases, the need for employee and non-revenue vehicles will increase as well. This includes parking areas for operators, technicians, and supervisor vehicles. Exhibit C represents the overall parking requirements based on the projected fleet growth.



Exhibit C: GoRaleigh Fleet Data

Fleet Data				HDR	Maintenance Design Group
GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion					
BUSES AND VEHICLES ANTICIPATED TO BE ADDED TO THE EXISTING FACILITY					
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (Includes Circulation)	Entry Quantity of this Vehicle Type	
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0	
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	47	Note: The Fleet expansion is projected to be 71 vehicles for a total of 167 at the Poole Road Site. The existing maintenance facility was designed for 120 buses.
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	0	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	4	
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	50	

Program Summary

With the fleet growth, certain building site areas will be impacted with the expansion. A larger fleet requires more vehicle maintenance areas including shops and repair bays. To support the repair bays, and increase of parts storage areas is needed. Service areas such as fuel and wash will also require additional positions to prevent a backflow of buses. The impact to site areas include additional fleet, non-revenue, and employee vehicle parking. Exhibit D documents the programmed space required to efficiently expand the GoRaleigh facility. The detailed Facility Program Data is located in Appendix A: Fleet Program Data.



Exhibit D: GoRaleigh Program Summary

Facility Program Summary		HDR	Maintenance Design Group
GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion			
<u>Fleet Projections/Assumptions</u>		Quantity	
Articulated Buses: Includes both fixed route and BRT configurations		0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration		0	
Standard Transit Bus: Includes all fixed route config w/Wheel Chair Lifts and Bicycle Racks		47	
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks		0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.		0	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles		4	
<u>Building Areas</u>		Area (SQ. FT.) rounded	
Total Administrative Area for the Facility (SF)		0	
Total Operations Areas for the Facility (SF)		0	
Total Vehicle Maintenance Areas for the Facility (SF)		6,300	
Total Parts Storage Areas for the Facility (SF)		2,400	
Total Interior Bus Parking		0	
Total Service Areas (Fuel/Fare/Wash)		1,500	
Total All Building Areas		10,200	
<u>Covered Areas</u>			
Total Covered Bus Parking		0	
Total All Covered Areas		0	



<u>Exterior Areas</u>	
Total Exterior Bus Parking	50,760
Total Vehicle Parking Areas for the Facility (SF)	18,400
Total Exterior Storage Areas for the Facility (SF)	0
Total Exterior Storm Water Management Areas for the Facility (SF)	0
Total All Exterior Areas	69,160
Subtotal All Areas	79,360
Other Site Circulation, Setbacks and Landscaping -100%	0
Grand Total - Site Requirements	79,360
Acres	1.82

Rough Order of Magnitude Cost

The estimated project budget cost projection for design and construction of the expansion to the GoRaleigh maintenance facility and site elements is presented in Exhibit E. The total cost shown is based on 2018 dollars and based only on theoretical program data. For comparison, Appendix B: Cost Escalation shows the adjusted total estimated budget cost projection based on an escalation factor of 5% each year the building addition is postponed.



Exhibit E: GoRaleigh Budget Worksheet

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>												
GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion												
Item	A Unit	B Unit Cost Adjustable Values	C Quantity	Remarks	D Extended Cost (B x C)	E Design Contingency 20% (D x .20)	F Subtotal (D + E)	G General Conditions 7.0% (F x .07)	H Contractors Fee and Profit 3.5% (F x .035)	I Construction Contingency 5% (F x .05)	K End of the Day Cost/SF	L Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	79,360	Total Site Area	\$119,040	\$23,808	\$142,848	\$9,999	\$5,000	\$7,142	\$2.10	\$164,989
Site Landscaping/Security Fencing	SF	\$1.75	11,904	15% of Total Site Area	\$20,832	\$4,166	\$24,998	\$1,750	\$875	\$1,250	\$2.40	\$28,900
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	6,496	Area Calculated Based on Parking	\$40,600	\$8,120	\$48,720	\$3,410	\$1,705	\$2,436	\$8.70	\$56,300
Total Exterior Bus Parking	SF	\$8.25	50,760	Area Calculated Based on Parking	\$418,770	\$83,754	\$502,524	\$35,177	\$17,588	\$25,126	\$11.40	\$580,400
Subtotal for Site work					\$599,242	\$119,848	\$719,090	\$50,336	\$25,168	\$35,955		\$830,589
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	0		\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0
Total Operations Areas for the Facility (SF)	SF	\$250.00	0		\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$175.00	6,300		\$1,102,500	\$220,500	\$1,323,000	\$92,610	\$46,305	\$66,150	\$242.60	\$1,528,100
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	2,400		\$420,000	\$84,000	\$504,000	\$35,280	\$17,640	\$25,200	\$242.50	\$582,100
Total Interior Bus Parking	SF	\$110.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	1,500		\$187,500	\$37,500	\$225,000	\$15,750	\$7,875	\$11,250	\$173.30	\$259,900
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	0	Based on typical office systems furniture	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0
Maintenance & Storage Equipment												
	SF	\$35.00	8,700	Includes Lifts, Shop, and Storage Equipment	\$304,500	\$45,675	\$350,175	\$0	\$0	\$17,509	\$42.30	\$367,700
Fuel and Wash Equipment												
	SF	\$100.00	1,500	Includes Automated Wash Systems and typical Fueling Systems	\$150,000	\$22,500	\$172,500	\$0	\$0	\$8,625	\$120.70	\$181,100
Subtotal for Building Areas			10,200		\$2,164,500	\$410,175	\$2,574,675	\$143,640	\$71,820	\$128,734		\$2,918,900
Subtotal					\$2,763,742	\$530,023	\$3,293,765	\$193,976	\$96,988	\$164,688		\$3,749,489
Land Acquisition												
Land Acquisition	SF	\$4.00										\$0
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$374,949
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$37,495
Environmental Reports												
Environmental Reports	LS	\$10,000.00										\$10,000
Commissioning												
Commissioning	%	1%										\$37,495
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	5%										\$187,474
Construction Management - In-house												
Construction Management - In-house	%	3%										\$74,990
Subtotal												\$722,403
Total					\$2,763,742	\$530,023	\$3,293,765	\$193,976	\$96,988	\$164,688		\$4,471,892
Total Preliminary Budget Cost Projection											Rounded and in Current Year Dollars	\$4,471,900



GORALEIGH/GOWAKE ACCESS FACILITY PROGRAMMING

Overview

The information presented in Task 4.1 concluded that GoRaleigh/GoWake Access should abandon the current facility and relocate to a new facility due to the building and site conditions and constraints. There are no expansion opportunities of the current facility and it would not be cost effective to construct a new facility on the current site. Based on the information provided by Nelson/Nygaard, there are three possible growth/reduction predictions.

Scenario A.1 assumes that the GoWake Access partner will function as the Medicaid broker and dispatch contracted and owner vehicles. This also assumes that the ADA program for GoRaleigh will grow faster than originally anticipated. Scenario A.2 assumes a consistent growth pattern through 2027 as Medicaid trips are divided between GoWake Access and GoRaleigh. Scenario A.3 covers a reduction of the total fleet assuming GoRaleigh eliminates their ADA program and uses taxi type services. GoWake would also no longer use their Medicaid program and would utilize their fleet to support the rural areas of Raleigh.

Through the programming efforts for the other Transit Partners another possible scenario was noticed. Depending on GoTriangle's plans for addressing their significant facility needs, an option could include their existing facility becoming vacant which would be a considerable option for GoRaleigh/GoWake Access to look into renovating for their operation.

Fleet Data

Based on the fleet growth projections from NN and the expertise of the Planning Team, the GoRaleigh/GoWake Access fleet will consist of an estimates 120 paratransit vehicles within the next 20 years. As the fleet increases, the need for employee and non-revenue vehicles will increase as well. This includes parking areas for operators, technicians, and supervisor vehicles. Exhibit F represents the overall parking requirements based on the projected fleet growth for each of the scenarios.



Exhibit F: GoRaleigh/GoWake Access Fleet Data

Fleet Data				HDR	Maintenance Design Group
Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility					
BUSES AND VEHICLES ANTICIPATED TO BE DOMICILED AT THE FACILITY					
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (includes Circulation)	Entry Quantity of this Vehicle Type	
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0	
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	0	
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	100	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	15	
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	130	



Fleet Data		HDR		Maintenance Design Group
Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility				
BUSES AND VEHICLES ANTICIPATED TO BE DOMICILED AT THE FACILITY				
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (Includes Circulation)	Entry Quantity of this Vehicle Type
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	0
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	76
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	10
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	115



Fleet Data		HDR		Maintenance Design Group
Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility				
BUSES AND VEHICLES ANTICIPATED TO BE DOMICILED AT THE FACILITY				
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (Includes Circulation)	Entry Quantity of this Vehicle Type
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	0
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	34
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	4
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	50



Fleet Data				HDR	Maintenance Design Group
Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility					
BUSES AND VEHICLES ANTICIPATED TO BE DOMICILED AT THE FACILITY					
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (includes Circulation)	Entry Quantity of this Vehicle Type	
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0	
Standard Transit BUS: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	0	
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	120	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUVs and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	15	
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUVs and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	130	

Program Summary

Scenario A: New Facility Construction

The construction of a new facility would include modern design and construction features and processes to increase the efficiency and longevity of a new facility. Exhibit G summarizes the estimated programmed space required to support each of the projected fleet numbers for a newly constructed Administration, Operations, and Maintenance facility for GoRaleigh/GoWake Access. The detailed Facility Program Data for Scenarios A.1, A.2, and A.3 are located in Appendix A: Fleet Program Data.

Scenario B: GoTriangle Facility Renovation

Exhibit H summarizes the area available for renovation if GoRaleigh/GoWake Access was to relocate their Administration, Operations, and Maintenance functions to the existing GoTriangle facility if a new facility was constructed for that Transit Partner. Compared to the program for a new facility in Scenario A, the GoTriangle facility has enough area to support a majority of the GoRaleigh/GoWake Access projected growth. The detailed Facility Program Data for Scenario B is located in Appendix A: Fleet Program Data.



Exhibit G: GoRaleigh/GoWake Access Program Summary (Scenario A)

Facility Program Summary		HDR Maintenance Design Group
Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility		
Fleet Projections/Assumptions		
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Quantity	100
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Quantity	15
Building Areas		
Total Administrative Area for the Facility (SF)	Area (SQ. FT.) rounded	6,800
Total Operations Areas for the Facility (SF)	Area (SQ. FT.) rounded	8,400
Total Vehicle Maintenance Areas for the Facility (SF)	Area (SQ. FT.) rounded	18,400
Total Parts Storage Areas for the Facility (SF)	Area (SQ. FT.) rounded	2,700
Total Interior Bus Parking	Area (SQ. FT.) rounded	0
Total Service Areas (Fuel/Fare/Wash)	Area (SQ. FT.) rounded	5,300
Total All Building Areas	Area (SQ. FT.) rounded	41,600
Covered Areas		
Total Covered Bus Parking	Area (SQ. FT.) rounded	0
Total All Covered Areas	Area (SQ. FT.) rounded	0
Exterior Areas		
Total Exterior Bus Parking	Area (SQ. FT.) rounded	84,000
Total Vehicle Parking Areas for the Facility (SF)	Area (SQ. FT.) rounded	49,600
Total Exterior Storage Areas for the Facility (SF)	Area (SQ. FT.) rounded	3,500
Total Exterior Storm Water Management Areas for the Facility (SF)	Area (SQ. FT.) rounded	45,000
Total All Exterior Areas	Area (SQ. FT.) rounded	182,100
Subtotal All Areas	Area (SQ. FT.) rounded	223,700
Other Site Circulation, Setbacks and Landscaping -100%	Area (SQ. FT.) rounded	223,700
Grand Total - Site Requirements	Area (SQ. FT.) rounded	447,400
Acres		10.27



Facility Program Summary		HDR	Maintenance Design Group
Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility			
Fleet Projections/Assumptions		Quantity	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.		76	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles		10	
Building Areas		Area (SQ. FT.) rounded	
Total Administrative Area for the Facility (SF)		6,500	
Total Operations Areas for the Facility (SF)		7,900	
Total Vehicle Maintenance Areas for the Facility (SF)		18,400	
Total Parts Storage Areas for the Facility (SF)		2,200	
Total Interior Bus Parking		0	
Total Service Areas (Fuel/Fare/Wash)		5,300	
Total All Building Areas		40,300	
Covered Areas			
Total Covered Bus Parking		0	
Total All Covered Areas		0	
Exterior Areas			
Total Exterior Bus Parking		63,840	
Total Vehicle Parking Areas for the Facility (SF)		42,600	
Total Exterior Storage Areas for the Facility (SF)		3,500	
Total Exterior Storm Water Management Areas for the Facility (SF)		45,000	
Total All Exterior Areas		154,940	
Subtotal All Areas		195,240	
Other Site Circulation, Setbacks and Landscaping -100%		195,240	
Grand Total - Site Requirements		390,480	
		Acres	8.96



Facility Program Summary		HDR	Maintenance Design Group
Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility			
Fleet Projections/Assumptions		Quantity	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.		34	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles		4	
Building Areas		Area (SQ. FT.) rounded	
Total Administrative Area for the Facility (SF)		3,700	
Total Operations Areas for the Facility (SF)		5,200	
Total Vehicle Maintenance Areas for the Facility (SF)		16,600	
Total Parts Storage Areas for the Facility (SF)		1,400	
Total Interior Bus Parking		0	
Total Service Areas (Fuel/Fare/Wash)		3,200	
Total All Building Areas		30,100	
Covered Areas			
Total Covered Bus Parking		0	
Total All Covered Areas		0	
Exterior Areas			
Total Exterior Bus Parking		28,560	
Total Vehicle Parking Areas for the Facility (SF)		18,400	
Total Exterior Storage Areas for the Facility (SF)		2,900	
Total Exterior Storm Water Management Areas for the Facility (SF)		45,000	
Total All Exterior Areas		94,860	
Subtotal All Areas		124,960	
Other Site Circulation, Setbacks and Landscaping -100%		124,960	
Grand Total - Site Requirements		249,920	
		Acres	5.74



Exhibit H: GoRaleigh/GoWake Access Program Summary (Scenario B)

Facility Program Summary		HDR	Maintenance Design Group
Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility			
Fleet Projections/Assumptions			
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Quantity	120	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles		15	
Building Areas			
Total Administrative Area for the Facility (SF)	Area (SQ. FT.) rounded	5,300	Available for Remodel
Total Operations Areas for the Facility (SF)		5,900	Available for Remodel
Total Vehicle Maintenance Areas for the Facility (SF)		17,300	Available for Remodel
Total Parts Storage Areas for the Facility (SF)		5,100	Available for Remodel
Total Service Areas (Fuel/Fare/Wash)		4,200	Available for Remodel
Total All Building Areas		37,800	Remodel
Covered Areas			
Total Covered Bus Parking		0	
Total All Covered Areas		0	
Exterior Areas			
Total Exterior Bus Parking		0	
Total Vehicle Parking Areas for the Facility (SF)		0	
Total Exterior Storage Areas for the Facility (SF)		0	
Total Exterior Storm Water Management Areas for the Facility (SF)		0	
Total All Exterior Areas		0	
Subtotal All Areas		37,800	
Other Site Circulation, Setbacks and Landscaping -100%		0	
Grand Total - Site Requirements		37,800	
	Acres		0.87



Rough Order of Magnitude Cost

Scenario A: New Facility Construction

The estimated project budget cost projection for design and construction of a new Administration, Operation, and Maintenance facility to support the projected fleet numbers for GoRaleigh/GoWake Access is presented in Exhibit I. The total cost shown is based on 2018 dollars and based only on theoretical program data. For comparison, Appendix B: Cost Escalation shows the adjusted total estimated budget cost projection based on an escalation factor of 5% each year the building addition is postponed.

Scenario B: GoTriangle Facility Renovation

The estimated project budget cost projection for renovating the GoTriangle facility to accommodate the GoRaleigh/GoWake Access Administration, Operations, and Maintenance functions is presented in Exhibit J. The total cost shown is based on 2018 dollars and based only on theoretical program data. For comparison, Appendix B: Cost Escalation shows the adjusted total estimated budget cost projection based on an escalation factor of 5% each year the building addition is postponed.



Exhibit I: GoRaleigh/GoWake Access Budget Worksheet (Scenario A)

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="font-size: 8px; font-weight: bold;">Maintenance Design Group</div> </div>												
Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility												
Item	A	B	C	Remarks	D	E	F	G	H	I	K	L
	Unit	Unit Cost Adjustable Values	Quantity		Extended Cost (B x C)	Design Contingency 20% (D x .20)	Subtotal (D + E)	General Conditions 7.0% (F x .07)	Contractors Fee and Profit 3.5% (F x .035)	Construction Contingency 5% (F x .05)	End of the Day Cost/SF	Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	447,400	Total Site Area	\$671,100	\$134,220	\$805,320	\$56,372	\$28,186	\$40,266	\$2.10	\$930,100
Site Landscaping/Security Fencing	SF	\$1.75	67,110	15% of Total Site Area	\$117,443	\$23,489	\$140,931	\$9,865	\$4,933	\$7,047	\$2.40	\$162,800
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	254,690	Area Calculated Based on Parking	\$1,591,813	\$318,363	\$1,910,175	\$133,712	\$66,856	\$95,509	\$8.70	\$2,206,300
Total Exterior Bus Parking	SF	\$8.25	84,000	Area Calculated Based on Parking	\$693,000	\$138,600	\$831,600	\$58,212	\$29,106	\$41,580	\$11.40	\$960,500
Subtotal for Site work					\$3,073,355	\$614,671	\$3,688,026	\$258,162	\$129,081	\$184,401		\$4,259,700
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	6,800		\$1,700,000	\$340,000	\$2,040,000	\$142,800	\$71,400	\$102,000	\$346.50	\$2,356,200
Total Operations Areas for the Facility (SF)	SF	\$250.00	8,400		\$2,100,000	\$420,000	\$2,520,000	\$176,400	\$88,200	\$126,000	\$346.50	\$2,910,600
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$175.00	18,400		\$3,220,000	\$644,000	\$3,864,000	\$270,480	\$135,240	\$193,200	\$242.50	\$4,462,900
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	2,700		\$472,500	\$94,500	\$567,000	\$39,690	\$19,845	\$28,350	\$242.60	\$654,900
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	5,300		\$662,500	\$132,500	\$795,000	\$55,650	\$27,825	\$39,750	\$173.20	\$918,200
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	15,200	Based on typical office systems furniture	\$380,000	\$57,000	\$437,000	\$0	\$0	\$21,850	\$30.20	\$458,900
Maintenance & Storage Equipment												
	SF	\$35.00	21,100	Includes Lifts, Shop, and Storage Equipment	\$738,500	\$110,775	\$849,275	\$0	\$0	\$42,464	\$42.30	\$891,700
Fuel and Wash Equipment												
	SF	\$100.00	5,300	Includes Automated Wash Systems and typical Fueling Systems	\$530,000	\$79,500	\$609,500	\$0	\$0	\$30,475	\$120.80	\$640,000
Subtotal for Building Areas			41,600		\$9,803,500	\$1,878,275	\$11,681,775	\$685,020	\$342,510	\$584,089		\$13,293,400
Subtotal					\$12,876,855	\$2,492,946	\$15,369,801	\$943,182	\$471,591	\$768,490		\$17,553,100
Land Acquisition												
Land Acquisition	SF	\$6.00										\$2,684,400
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$1,755,300
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$175,500
Environmental Reports												
Environmental Reports	LS	\$50,000.00										\$50,000
Commissioning												
Commissioning	%	1%										\$175,500
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	15%										\$2,633,000
Construction Management - In-house												
Construction Management - In-house	%	3%										\$526,600
Subtotal												\$8,000,300
Total					\$12,876,855	\$2,492,946	\$15,369,801	\$943,182	\$471,591	\$768,490		\$25,553,400
Total Preliminary Budget Cost Projection											Rounded and in Current Year Dollars	\$25,553,400



Preliminary Budget Worksheet



Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility

Item	A Unit	B Unit Cost Adjustable Values	C Quantity	Remarks	D Extended Cost (B x C)	E Design Contingency 20% (D x .20)	F Subtotal (D + E)	G General Conditions 7.0% (F x .07)	H Contractors Fee and Profit 3.5% (F x .035)	I Construction Contingency 5% (F x .05)	K End of the Day Cost/SF	L Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	390,480	Total Site Area	\$585,720	\$117,144	\$702,864	\$49,200	\$24,600	\$35,143	\$2.10	\$811,800
Site Landscaping/Security Fencing	SF	\$1.75	58,572	15% of Total Site Area	\$102,501	\$20,500	\$123,001	\$8,610	\$4,305	\$6,150	\$2.40	\$142,100
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	227,768	Area Calculated Based on Parking	\$1,423,550	\$284,710	\$1,708,260	\$119,578	\$59,789	\$85,413	\$8.70	\$1,973,000
Total Exterior Bus Parking	SF	\$8.25	63,840	Area Calculated Based on Parking	\$526,680	\$105,336	\$632,016	\$44,241	\$22,121	\$31,601	\$11.40	\$730,000
Subtotal for Site work					\$2,638,451	\$527,690	\$3,166,141	\$221,630	\$110,815	\$158,307		\$3,656,900
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	6,500		\$1,625,000	\$325,000	\$1,950,000	\$136,500	\$68,250	\$97,500	\$346.50	\$2,252,300
Total Operations Areas for the Facility (SF)	SF	\$250.00	7,900		\$1,975,000	\$395,000	\$2,370,000	\$165,900	\$82,950	\$118,500	\$346.50	\$2,737,400
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$175.00	18,400		\$3,220,000	\$644,000	\$3,864,000	\$270,480	\$135,240	\$193,200	\$242.50	\$4,462,900
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	2,200		\$385,000	\$77,000	\$462,000	\$32,340	\$16,170	\$23,100	\$242.50	\$533,600
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	5,300		\$662,500	\$132,500	\$795,000	\$55,650	\$27,825	\$39,750	\$173.20	\$918,200
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	14,400	Based on typical office systems furniture	\$360,000	\$54,000	\$414,000	\$0	\$0	\$20,700	\$30.20	\$434,700
Maintenance & Storage Equipment												
	SF	\$35.00	20,600	Includes Lifts, Shop, and Storage Equipment	\$721,000	\$108,150	\$829,150	\$0	\$0	\$41,458	\$42.30	\$870,600
Fuel and Wash Equipment												
	SF	\$100.00	5,300	Includes Automated Wash Systems and typical Fueling Systems	\$530,000	\$79,500	\$609,500	\$0	\$0	\$30,475	\$120.80	\$640,000
Subtotal for Building Areas			40,300		\$9,478,500	\$1,815,150	\$11,293,650	\$660,870	\$330,435	\$564,683		\$12,849,700
Subtotal					\$12,116,951	\$2,342,840	\$14,459,791	\$882,500	\$441,250	\$722,990		\$16,506,600
Land Acquisition												
Land Acquisition	SF	\$6.00										\$2,342,900
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$1,650,700
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$165,100
Environmental Reports												
Environmental Reports	LS	\$50,000.00										\$50,000
Commissioning												
Commissioning	%	1%										\$165,100
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	15%										\$2,476,000
Construction Management - In-house												
Construction Management - In-house	%	3%										\$495,200
Subtotal												\$7,345,000
Total					\$12,116,951	\$2,342,840	\$14,459,791	\$882,500	\$441,250	\$722,990		\$23,851,600
Total Preliminary Budget Cost Projection											Rounded and in Current Year Dollars	\$23,851,600



Preliminary Budget Worksheet



Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility

Item	A Unit	B Unit Cost Adjustable Values	C Quantity	Remarks	D Extended Cost (B x C)	E Design Contingency 20% (D x .20)	F Subtotal (D + E)	G General Conditions 7.0% (F x .07)	H Contractors Fee and Profit 3.5% (F x .035)	I Construction Contingency 5% (F x .05)	K End of the Day Cost/SF	L Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	249,920	Total Site Area	\$374,880	\$74,976	\$449,856	\$31,490	\$15,745	\$22,493	\$2.10	\$519,600
Site Landscaping/Security Fencing	SF	\$1.75	37,488	15% of Total Site Area	\$65,604	\$13,121	\$78,725	\$5,511	\$2,755	\$3,936	\$2.40	\$90,900
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	153,772	Area Calculated Based on Parking	\$961,075	\$192,215	\$1,153,290	\$80,730	\$40,365	\$57,665	\$8.70	\$1,332,000
Total Exterior Bus Parking	SF	\$8.25	28,560	Area Calculated Based on Parking	\$235,620	\$47,124	\$282,744	\$19,792	\$9,896	\$14,137	\$11.40	\$326,600
Subtotal for Site work					\$1,637,179	\$327,436	\$1,964,615	\$137,523	\$68,762	\$98,231		\$2,269,100
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	3,700		\$925,000	\$185,000	\$1,110,000	\$77,700	\$38,850	\$55,500	\$346.50	\$1,282,100
Total Operations Areas for the Facility (SF)	SF	\$250.00	5,200		\$1,300,000	\$260,000	\$1,560,000	\$109,200	\$54,600	\$78,000	\$346.50	\$1,801,800
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$175.00	16,600		\$2,905,000	\$581,000	\$3,486,000	\$244,020	\$122,010	\$174,300	\$242.50	\$4,026,300
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	1,400		\$245,000	\$49,000	\$294,000	\$20,580	\$10,290	\$14,700	\$242.60	\$339,600
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	3,200		\$400,000	\$80,000	\$480,000	\$33,600	\$16,800	\$24,000	\$173.30	\$554,400
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	8,900	Based on typical office systems furniture	\$222,500	\$33,375	\$255,875	\$0	\$0	\$12,794	\$30.20	\$268,700
Maintenance & Storage Equipment												
	SF	\$35.00	18,000	Includes Lifts, Shop, and Storage Equipment	\$630,000	\$94,500	\$724,500	\$0	\$0	\$36,225	\$42.30	\$760,700
Fuel and Wash Equipment												
	SF	\$100.00	3,200	Includes Automated Wash Systems and typical Fueling Systems	\$320,000	\$48,000	\$368,000	\$0	\$0	\$18,400	\$120.80	\$386,400
Subtotal for Building Areas			30,100		\$6,947,500	\$1,330,875	\$8,278,375	\$485,100	\$242,550	\$413,919		\$9,420,000
Subtotal					\$8,584,679	\$1,658,311	\$10,242,990	\$622,623	\$311,312	\$512,149		\$11,689,100
Land Acquisition												
Land Acquisition	SF	\$6.00										\$1,499,500
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$1,168,900
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$116,900
Environmental Reports												
Environmental Reports	LS	\$50,000.00										\$50,000
Commissioning												
Commissioning	%	1%										\$116,900
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	15%										\$1,753,400
Construction Management - In-house												
Construction Management - In-house	%	3%										\$350,700
Subtotal												\$5,056,300
Total					\$8,584,679	\$1,658,311	\$10,242,990	\$622,623	\$311,312	\$512,149		\$16,745,400

Total Preliminary Budget Cost Projection

Rounded and in Current Year Dollars

\$16,745,400



Exhibit J: GoRaleigh/GoWake Access Budget Worksheet (Scenario B)

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>												
Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility												
Item	A	B	C	Remarks	D	E	F	G	H	I	K	L
	Unit	Unit Cost Adjustable Values	Quantity		Extended Cost (B x C)	Design Contingency 20% (D x .20)	Subtotal (D + E)	General Conditions 7.0% (F x .07)	Contractors Fee and Profit 3.5% (F x .035)	Construction Contingency 5% (F x .05)	End of the Day Cost/SF	Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	0	Total Site Area	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Site Landscaping/Security Fencing	SF	\$1.75	0	15% of Total Site Area	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	0	Area Calculated Based on Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Total Exterior Bus Parking	SF	\$8.25	0	Area Calculated Based on Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Subtotal for Site work					\$0	\$0	\$0	\$0	\$0	\$0		\$0
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$15.00	5,300		\$79,500	\$15,900	\$95,400	\$6,678	\$3,339	\$4,770	\$20.80	\$110,200
Total Operations Areas for the Facility (SF)	SF	\$200.00	5,900		\$1,180,000	\$236,000	\$1,416,000	\$99,120	\$49,560	\$70,800	\$277.20	\$1,635,500
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$15.00	17,300		\$259,500	\$51,900	\$311,400	\$21,798	\$10,899	\$15,570	\$20.80	\$359,700
Total Parts Storage Areas for the Facility (SF)	SF	\$10.00	5,100		\$51,000	\$10,200	\$61,200	\$4,284	\$2,142	\$3,060	\$13.90	\$70,700
Total Service Areas (Fuel/Fare/Wash)	SF	\$25.00	4,200		\$105,000	\$21,000	\$126,000	\$8,820	\$4,410	\$6,300	\$34.60	\$145,500
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$5.00	11,200	Based on typical office systems furniture	\$56,000	\$8,400	\$64,400	\$0	\$0	\$3,220	\$6.00	\$67,600
Maintenance & Storage Equipment												
	SF	\$10.00	22,400	Includes Lifts, Shop, and Storage Equipment	\$224,000	\$33,600	\$257,600	\$0	\$0	\$12,880	\$12.10	\$270,500
Fuel and Wash Equipment												
	SF	\$75.00	4,200	Includes Automated Wash Systems and typical Fueling Systems	\$315,000	\$47,250	\$362,250	\$0	\$0	\$18,113	\$90.60	\$380,400
Subtotal for Building Areas			37,800		\$2,270,000	\$424,250	\$2,694,250	\$140,700	\$70,350	\$134,713		\$3,040,100
<i>Subtotal</i>					\$2,270,000	\$424,250	\$2,694,250	\$140,700	\$70,350	\$134,713		\$3,040,100
Land Acquisition												
Land Acquisition	SF	\$6.00										\$0
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$304,000
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$30,400
Environmental Reports												
Environmental Reports	LS	\$50,000.00										\$50,000
Commissioning												
Commissioning	%	1%										\$30,400
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	15%										\$456,000
Construction Management - In-house												
Construction Management - In-house	%	3%										\$91,200
<i>Subtotal</i>												\$962,000
<i>Total</i>					\$2,270,000	\$424,250	\$2,694,250	\$140,700	\$70,350	\$134,713		\$4,002,100
Total Preliminary Budget Cost Projection											Rounded and in Current Year Dollars	\$4,002,100



GOTRIANGLE FACILITY PROGRAMMING

Overview

The information presented in Task 4.1 showed that the GoTriangle facility is at its limits in terms of Administration, Operations, Maintenance, and site areas. There have been minimal expansion and construction opportunities discussed to correct the service flow, however these would only be a short term solution and would not address the compactness of the size.

Two scenarios have been developed for GoTriangle. Scenario A would be to expand the maintenance and operations building as much as possible with minimal renovation and construction. Scenario B would be to construct a new facility that would be designed for the future growth of the GoTriangle operations. If a new facility is constructed, the current site could be sold to a private party or possibly the GoRaleigh/GoWake Access.

Fleet Data

Two fleet data analyses were developed based on the programming scenario for GoTriangle. Exhibit K documents Scenario A which is based on a projected growth of 14 standard buses. This is the max number of buses that can fit on-site based on the information presented in Task 4.1. Exhibit L presents the Fleet Data for Scenario B which is a new facility and site capable of supporting up to 150 fleet vehicles. This includes 15 articulated buses, 105 standard buses, and 30 paratransit buses. As the fleet increases, the need for employee and non-revenue vehicles will increase as well. This includes parking areas for operators, technicians, and supervisor vehicles.



Exhibit K: GoTriangle Fleet Data (Scenario A)

Fleet Data				HDR	Maintenance Design Group
GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion					
BUSES AND VEHICLES ANTICIPATED TO BE ADDED TO THE EXISTING FACILITY					
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (Includes Circulation)	Entry Quantity of this Vehicle Type	
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0	
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	14	Note: The Fleet expansion is projected to be 14 in Wake County only by FY26 and then dropping to only 3 in FY 27. The existing maintenance facility has limited expansion capacity for parking.
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	0	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	0	
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	10	

Exhibit L: GoTriangle Fleet Data (Scenario B)

Fleet Data				HDR	Maintenance Design Group
GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility					
BUSES AND VEHICLES ANTICIPATED TO BE DOMICILED AT THE FACILITY					
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (includes Circulation)	Entry Quantity of this Vehicle Type	
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	15	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0	
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	105	
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	30	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	10	
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	150	

Program Summary

Scenario A: Existing Site & Facility Renovation/Expansion

The program for accommodating an additional 14 buses is presented in Exhibit M. The site and building areas impacted would include maintenance, operations and service. The detailed Facility Program Data is located in Appendix A: Fleet Program Data.

Scenario B: New Facility Construction

Exhibit N summarizes the space needs for a new Administration, Operations, and Maintenance facility to accommodate 150 buses. The spaces and area depicted are based on space standards developed by the Planning Team derived by past project experience. The detailed Facility Program Data is located in Appendix A: Fleet Program Data.



Exhibit M: GoTriangle Program Summary (Scenario A)

Facility Program Summary		HDR	Maintenance Design Group
GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion			
<u>Fleet Projections/Assumptions</u>			
	Quantity		
Articulated Buses: Includes both fixed route and BRT configurations	0		
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	0		
Standard Transit Bus: Includes all fixed route config w/Wheel Chair Lifts and Bicycle Racks	14		
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	0		
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	0		
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	0		
<u>Building Areas</u>			
	Area (SQ. FT.) rounded		
Total Administrative Area for the Facility (SF)	0		
Total Operations Areas for the Facility (SF)	6,300		
Total Vehicle Maintenance Areas for the Facility (SF)	2,000		
Total Parts Storage Areas for the Facility (SF)	0		
Total Interior Bus Parking	0		
Total Service Areas (Fuel/Fare/Wash)	9,100		
Total All Building Areas	17,400		
<u>Covered Areas</u>			
Total Covered Bus Parking	0		
Total All Covered Areas	0		
<u>Exterior Areas</u>			
Total Exterior Bus Parking	11,340		
Total Vehicle Parking Areas for the Facility (SF)	3,200		
Total Exterior Storage Areas for the Facility (SF)	0		
Total Exterior Storm Water Management Areas for the Facility (SF)	0		
Total All Exterior Areas	14,540		
Subtotal All Areas	31,940		
Other Site Circulation, Setbacks and Landscaping -100%	0		
Grand Total - Site Requirements*	23,640		
	Acres		0.54
* Site Area does not include are within existing building being remodeled.			



Exhibit N: GoTriangle Program Summary (Scenario B)

Facility Program Summary		HDR	Maintenance Design Group
GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility			
<u>Fleet Projections/Assumptions</u>			
	Quantity		
Articulated Buses: Includes both fixed route and BRT configurations	15		
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	0		
Standard Transit Bus: Includes all fixed route config w/Wheel Chair Lifts and Bicycle Racks	105		
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	0		
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	30		
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10		
<u>Building Areas</u>			
	Area (SQ. FT.) rounded		
Total Administrative Area for the Facility (SF)	6,600		
Total Operations Areas for the Facility (SF)	12,500		
Total Vehicle Maintenance Areas for the Facility (SF)	45,000		
Total Parts Storage Areas for the Facility (SF)	7,300		
Total Interior Bus Parking	0		
Total Service Areas (Fuel/Fare/Wash)	9,100		
Total All Building Areas	80,500		
<u>Covered Areas</u>			
Total Covered Bus Parking	0		
Total All Covered Areas	0		
<u>Exterior Areas</u>			
Total Exterior Bus Parking	162,000		
Total Vehicle Parking Areas for the Facility (SF)	54,400		
Total Exterior Storage Areas for the Facility (SF)	4,600		
Total Exterior Storm Water Management Areas for the Facility (SF)	45,000		
Total All Exterior Areas	266,000		
Subtotal All Areas	346,500		
Other Site Circulation, Setbacks and Landscaping -100%	346,500		
Grand Total - Site Requirements	693,000		
Acres	15.91		



Rough Order of Magnitude Cost

Scenario A: Existing Site & Facility Renovation/Expansion

The estimated project budget cost projection for design and construction for renovating the existing GoTriangle site and facility is presented in Exhibit O. The total cost shown is based on 2018 dollars and based only on theoretical program data. For comparison, Appendix B: Cost Escalation shows the adjusted total estimated budget cost projection based on an escalation factor of 5% each year the building addition is postponed.

Scenario B: New Facility Construction

The estimated project budget cost projection for a new Administration, Operations, and Maintenance facility for a 150 bus operation is presented in Exhibit P. The total cost shown is based on 2018 dollars and based only on theoretical program data. For comparison, Appendix B: Cost Escalation shows the adjusted total estimated budget cost projection based on an escalation factor of 5% each year the building addition is postponed.



Exhibit O: GoTriangle Budget Worksheet (Scenario A)

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>												
GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion												
Item	A Unit	B Unit Cost Adjustable Values	C Quantity	Remarks	D Extended Cost (B x C)	E Design Contingency 20% (D x .20)	F Subtotal (D + E)	G General Conditions 7.0% (F x .07)	H Contractors Fee and Profit 3.5% (F x .035)	I Construction Contingency 5% (F x .05)	K End of the Day Cost/SF	L Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	23,640	Total Site Area	\$35,460	\$7,092	\$42,552	\$2,979	\$1,489	\$2,128	\$2.10	\$49,148
Site Landscaping/Security Fencing	SF	\$1.75	0	15% of Total Site Area	\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	3,200	Area Calculated Based on Parking	\$20,000	\$4,000	\$24,000	\$1,680	\$840	\$1,200	\$8.70	\$27,700
Total Exterior Bus Parking	SF	\$5.25	11,340	Area Calculated Based on Bus Parking Calculations - reconfiguration of existing	\$59,535	\$11,907	\$71,442	\$5,001	\$2,500	\$3,572	\$7.30	\$82,500
Subtotal for Site work					\$114,995	\$22,999	\$137,994	\$9,660	\$4,830	\$6,900		\$159,348
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	0		\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0
Total Operations Areas for the Facility (SF)	SF	\$200.00	6,300	Remodeled Areas	\$1,260,000	\$252,000	\$1,512,000	\$105,840	\$52,920	\$75,600	\$277.20	\$1,746,400
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$125.00	2,000	Remodeled Areas	\$250,000	\$50,000	\$300,000	\$21,000	\$10,500	\$15,000	\$173.30	\$346,500
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	0		\$0	\$0	\$0	\$0	\$0	\$0	#DIV/0!	\$0
Total Interior Bus Parking	SF	\$110.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	9,100	New Stand Alone Consolidated Facility	\$1,137,500	\$227,500	\$1,365,000	\$95,550	\$47,775	\$68,250	\$173.30	\$1,576,600
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	6,300	Based on typical office systems furniture	\$157,500	\$23,625	\$181,125	\$0	\$0	\$9,056	\$30.20	\$190,200
Maintenance & Storage Equipment												
	SF	\$70.00	2,000	Includes Lifts, Shop, and Storage Equipment	\$140,000	\$21,000	\$161,000	\$0	\$0	\$8,050	\$84.60	\$169,100
Fuel and Wash Equipment												
	SF	\$100.00	9,100	Includes Automated Wash Systems and typical Fueling Systems	\$910,000	\$136,500	\$1,046,500	\$0	\$0	\$52,325	\$120.70	\$1,098,800
Subtotal for Building Areas			17,400		\$3,855,000	\$710,625	\$4,565,625	\$222,390	\$111,195	\$228,281		\$5,127,600
Subtotal					\$3,969,995	\$733,624	\$4,703,619	\$232,050	\$116,025	\$235,181		\$5,286,948
Land Acquisition												
Land Acquisition	SF	\$4.00										\$0
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$528,695
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$52,869
Environmental Reports												
Environmental Reports	LS	\$10,000.00										\$10,000
Commissioning												
Commissioning	%	1%										\$52,869
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	5%										\$264,347
Construction Management - In-house												
Construction Management - In-house	%	3%										\$105,739
Subtotal												\$1,014,520
Total					\$3,969,995	\$733,624	\$4,703,619	\$232,050	\$116,025	\$235,181		\$6,301,468
Total Preliminary Budget Cost Projection												\$6,301,500
Rounded and in Current Year Dollars												



Exhibit P: GoTriangle Budget Worksheet (Scenario B)

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> <small>Maintenance Design Group</small> </div> </div>												
GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility												
Item	A Unit	B Unit Cost Adjustable Values	C Quantity	Remarks	D Extended Cost (B x C)	E Design Contingency 20% (D x .20)	F Subtotal (D + E)	G General Conditions 7.0% (F x .07)	H Contractors Fee and Profit 3.5% (F x .035)	I Construction Contingency 5% (F x .05)	K End of the Day Cost/SF	L Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	693,000	Total Site Area	\$1,039,500	\$207,900	\$1,247,400	\$87,318	\$43,659	\$62,370	\$2.10	\$1,440,700
Site Landscaping/Security Fencing	SF	\$1.75	103,950	15% of Total Site Area	\$181,913	\$36,383	\$218,295	\$15,281	\$7,640	\$10,915	\$2.40	\$252,100
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	346,550	Area Calculated Based on Parking	\$2,165,938	\$433,188	\$2,599,125	\$181,939	\$90,969	\$129,956	\$8.70	\$3,002,000
Total Exterior Bus Parking	SF	\$8.25	162,000	Area Calculated Based on Parking	\$1,336,500	\$267,300	\$1,603,800	\$112,266	\$56,133	\$80,190	\$11.40	\$1,852,400
Subtotal for Site work					\$4,723,850	\$944,770	\$5,668,620	\$396,803	\$198,402	\$283,431		\$6,547,200
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	6,600		\$1,650,000	\$330,000	\$1,980,000	\$138,600	\$69,300	\$99,000	\$346.50	\$2,286,900
Total Operations Areas for the Facility (SF)	SF	\$250.00	12,500		\$3,125,000	\$625,000	\$3,750,000	\$262,500	\$131,250	\$187,500	\$346.50	\$4,331,300
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$175.00	45,000		\$7,875,000	\$1,575,000	\$9,450,000	\$661,500	\$330,750	\$472,500	\$242.60	\$10,914,800
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	7,300		\$1,277,500	\$255,500	\$1,533,000	\$107,310	\$53,655	\$76,650	\$242.50	\$1,770,600
Total Interior Bus Parking	SF	\$110.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	9,100		\$1,137,500	\$227,500	\$1,365,000	\$95,550	\$47,775	\$68,250	\$173.30	\$1,576,600
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	19,100	Based on typical office systems furniture	\$477,500	\$71,625	\$549,125	\$0	\$0	\$27,456	\$30.20	\$576,600
Maintenance & Storage Equipment												
	SF	\$35.00	52,300	Includes Lifts, Shop, and Storage Equipment	\$1,830,500	\$274,575	\$2,105,075	\$0	\$0	\$105,254	\$42.30	\$2,210,300
Fuel and Wash Equipment												
	SF	\$100.00	9,100	Includes Automated Wash Systems and typical Fueling Systems	\$910,000	\$136,500	\$1,046,500	\$0	\$0	\$52,325	\$120.70	\$1,098,800
Subtotal for Building Areas			80,500		\$18,283,000	\$3,495,700	\$21,778,700	\$1,265,460	\$632,730	\$1,088,935		\$24,765,900
Subtotal					\$23,006,850	\$4,440,470	\$27,447,320	\$1,662,263	\$831,132	\$1,372,366		\$31,313,100
Land Acquisition												
Land Acquisition	SF	\$6.00										\$4,158,000
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$3,131,300
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$313,100
Environmental Reports												
Environmental Reports	LS	\$50,000.00										\$50,000
Commissioning												
Commissioning	%	1%										\$313,100
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	15%										\$4,697,000
Construction Management - In-house												
Construction Management - In-house	%	3%										\$939,400
Subtotal												\$13,601,900
Total					\$23,006,850	\$4,440,470	\$27,447,320	\$1,662,263	\$831,132	\$1,372,366		\$44,915,000
Total Preliminary Budget Cost Projection											Rounded and in Current Year Dollars	\$44,915,000



GOCARY FACILITY PROGRAMMING

Overview

The GoCary Transit Partner has already decided to construct a new facility. They currently own a property that is estimated to be about eight acres which will house their Administration, Operations, and Maintenance. This section documents the projected fleet growth, program summary, and estimated budget cost to construct a new facility.

Fleet Data

Based on the fleet growth projections from NN and the expertise of the Planning Team, the GoCary operations could increase to as many as 30 fixed route buses and 45 paratransit buses. As the fleet increases, the need for employee and non-revenue vehicles will increase as well. This includes parking areas for operators, technicians, and supervisor vehicles. Exhibit Q represents the overall parking requirements based on the projected fleet growth.

Exhibit Q: GoCary Fleet Data

Fleet Data				HDR	Maintenance Design Group
GoCary - New Bus Administration, Operations, and Maintenance Facility					
BUSES AND VEHICLES ANTICIPATED TO BE DOMICILED AT THE FACILITY					
Type of Bus or Vehicle	Size	Space Standard	Resulting Area (Includes Circulation)	Entry Quantity of this Vehicle Type	
Articulated Buses: Includes both fixed route and BRT configurations	vehicles 8'-6" wide x 60'-0" long	12' X 65'	1560	0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration	Vehicles 8'-6" wide x 45'-0" long	12' X 50'	1200	0	
Standard Transit Bus: Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 42'-0" long	12' X 45'	1080	30	
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks	Vehicles 8'-6" wide x 37'-0" long	12' X 40'	960	0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.	Vehicles 8'-6" wide x 28'-0" long	12' X 30'	720	45	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	10' X 20'	400	5	
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	Vehicles 8'-6" wide x 12'-0" to 16'-0" long	9' X 18'	324	90	



Program Summary

The construction of a new facility would include modern design and construction features and processes to increase the efficiency and longevity of a new facility. Exhibit R summarizes the space needs for a new Administration, Operations, and Maintenance facility to accommodate the future growth of the GoCary Transit Partner. The spaces and area depicted are based on space standards developed by the Planning Team derived by past project experience. From the data it is confirmed that the eight acres GoCary purchased will be sufficient to support a new facility. The detailed Facility Program Data is located in Appendix A: Fleet Program Data.

Exhibit R: GoCary Program Summary

Facility Program Summary		HDR	Maintenance Design Group
GoCary - New Bus Administration, Operations, and Maintenance Facility			
<u>Fleet Projections/Assumptions</u>		Quantity	
Articulated Buses: Includes both fixed route and BRT configurations		0	
Over the Road (OTR) Coach: OTR either in touring or commuter configuration		0	
Standard Transit Bus: Includes all fixed route config w/Wheel Chair Lifts and Bicycle Racks		30	
Small Transit Bus: Buses 30 and 35 feet in length. Includes all fixed route configuration with Wheel Chair Lifts and Bicycle Racks		0	
Paratransit Buses: Cut-away Vans, Large Vans and Small Buses no longer than 28 feet.		45	
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles		5	
<u>Building Areas</u>		Area (SQ. FT.) rounded	
Total Administrative Area for the Facility (SF)		5,000	
Total Operations Areas for the Facility (SF)		7,300	
Total Vehicle Maintenance Areas for the Facility (SF)		15,900	
Total Parts Storage Areas for the Facility (SF)		2,900	
Total Interior Bus Parking		0	
Total Service Areas (Fuel/Fare/Wash)		7,200	
Total All Building Areas		38,300	
<u>Covered Areas</u>			
Total Covered Bus Parking		0	
Total All Covered Areas		0	



<u>Exterior Areas</u>	
Total Exterior Bus Parking	70,200
Total Vehicle Parking Areas for the Facility (SF)	32,200
Total Exterior Storage Areas for the Facility (SF)	2,500
Total Exterior Storm Water Management Areas for the Facility (SF)	22,500
Total All Exterior Areas	127,400
Subtotal All Areas	165,700
Other Site Circulation, Setbacks and Landscaping -100%	165,700
Grand Total - Site Requirements	331,400
Acres	7.61

Rough Order of Magnitude Cost

The estimated project budget cost projection for a new Administration, Operations, and Maintenance facility to support the projected growth of the GoCary Transit Partner is presented in Exhibit S. Since GoCary has already purchased a property, and acquisition is not accounted for. The total cost shown is based on 2018 dollars and based only on theoretical program data. For comparison, Appendix B: Cost Escalation shows the adjusted total estimated budget cost projection based on an escalation factor of 5% each year the building addition is postponed.



Exhibit S: GoCary Budget Worksheet

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>												
GoCary - New Bus Administration, Operations, and Maintenance Facility												
Item	A Unit	B Unit Cost Adjustable Values	C Quantity	Remarks	D Extended Cost (B x C)	E Design Contingency 20% (D x .20)	F Subtotal (D + E)	G General Conditions 7.0% (F x .07)	H Contractors Fee and Profit 3.5% (F x .035)	I Construction Contingency 5% (F x .05)	K End of the Day Cost/SF	L Total (Rounded)
Site work												
Site Clearing/Development & Site Utility Extensions	SF	\$1.50	331,400	Total Site Area	\$497,100	\$99,420	\$596,520	\$41,756	\$20,878	\$29,826	\$2.10	\$688,981
Site Landscaping/Security Fencing	SF	\$1.75	49,710	15% of Total Site Area	\$86,993	\$17,399	\$104,391	\$7,307	\$3,654	\$5,220	\$2.40	\$120,600
Other Paving - Drives and Circulation (Asphalt and Concrete)	SF	\$6.25	173,190	Area Calculated Based on Parking	\$1,082,438	\$216,488	\$1,298,925	\$90,925	\$45,462	\$64,946	\$8.70	\$1,500,300
Total Exterior Bus Parking	SF	\$8.25	70,200	Area Calculated Based on Parking	\$579,150	\$115,830	\$694,980	\$48,649	\$24,324	\$34,749	\$11.40	\$802,700
Subtotal for Site work					\$2,245,680	\$449,136	\$2,694,816	\$188,637	\$94,319	\$134,741		\$3,112,581
Building Areas												
Total Administrative Area for the Facility (SF)	SF	\$250.00	5,000		\$1,250,000	\$250,000	\$1,500,000	\$105,000	\$52,500	\$75,000	\$346.50	\$1,732,500
Total Operations Areas for the Facility (SF)	SF	\$250.00	7,300		\$1,825,000	\$365,000	\$2,190,000	\$153,300	\$76,650	\$109,500	\$346.50	\$2,529,500
Total Vehicle Maintenance Areas for the Facility (SF)	SF	\$175.00	15,900		\$2,782,500	\$556,500	\$3,339,000	\$233,730	\$116,865	\$166,950	\$242.50	\$3,856,500
Total Parts Storage Areas for the Facility (SF)	SF	\$175.00	2,900		\$507,500	\$101,500	\$609,000	\$42,630	\$21,315	\$30,450	\$242.60	\$703,400
Total Interior Bus Parking	SF	\$110.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
Total Service Areas (Fuel/Fare/Wash)	SF	\$125.00	7,200		\$900,000	\$180,000	\$1,080,000	\$75,600	\$37,800	\$54,000	\$173.30	\$1,247,400
Covered Areas												
Total Covered Bus Parking	SF	\$60.00	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	\$0
FF&E (Administrative & Operations Areas)												
	SF	\$25.00	12,300	Based on typical office systems furniture	\$307,500	\$46,125	\$353,625	\$0	\$0	\$17,681	\$30.20	\$371,300
Maintenance & Storage Equipment												
	SF	\$35.00	18,800	Includes Lifts, Shop, and Storage Equipment	\$658,000	\$98,700	\$756,700	\$0	\$0	\$37,835	\$42.30	\$794,500
Fuel and Wash Equipment												
	SF	\$100.00	7,200	Includes Automated Wash Systems and Typical Fueling Systems	\$720,000	\$108,000	\$828,000	\$0	\$0	\$41,400	\$120.80	\$869,400
Subtotal for Building Areas			38,300		\$8,950,500	\$1,705,825	\$10,656,325	\$610,260	\$305,130	\$532,816		\$12,104,500
Subtotal					\$11,196,180	\$2,154,961	\$13,351,141	\$798,897	\$399,449	\$667,557		\$15,217,081
Land Acquisition												
Land Acquisition	SF	\$6.00										\$0
Architectural/Engineering Fees												
Architectural/Engineering Fees	%	10%										\$1,521,708
Surveys/Tests/Reports												
Surveys/Tests/Reports	%	1%										\$152,171
Environmental Reports												
Environmental Reports	LS	\$50,000.00										\$50,000
Commissioning												
Commissioning	%	1%										\$152,171
Additional Contingency (Planning Level)												
Additional Contingency (Planning Level)	%	15%										\$2,282,562
Construction Management - In-house												
Construction Management - In-house	%	3%										\$304,342
Subtotal												\$4,462,953
Total					\$11,196,180	\$2,154,961	\$13,351,141	\$798,897	\$399,449	\$667,557		\$19,680,034
Total Preliminary Budget Cost Projection											\$19,680,100	
											Rounded and in Current Year Dollars	



Wake Transit Plan

Appendix 4.3A: Facility Program Data



GoRaleigh Facility Programming

Facility Program Data

GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required
BUILDING AREAS				
<u>Administrative Offices</u>				
Private Office for Director or General Manager	14'-0" X 16'-0"	224	0	<input type="text" value="0"/>
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	0	<input type="text" value="0"/>
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	0	<input type="text" value="0"/>
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	0	<input type="text" value="0"/>
<u>Support Areas</u>				
Reception/Lobby Area	250 SQ. FT. Min	250	0	<input type="text" value="0"/>
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	0	<input type="text" value="0"/>
Copy Files and Storage	200 SQ. FT. Min	200	0	<input type="text" value="0"/>
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	<input type="text" value="0"/>
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	<input type="text" value="0"/>
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	<input type="text" value="0"/>
Training Table and Chair Storage	200 SQ. FT. Min	200	0	<input type="text" value="0"/>
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	0	<input type="text" value="0"/>
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	0	<input type="text" value="0"/>
Men's Restroom (Public Use)	120 SQ. FT. Min	120	0	<input type="text" value="0"/> Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	0	<input type="text" value="0"/> Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			<input type="text" value="0"/>	
<u>Operations Office Areas</u>				
Private Office for Operations Manager	14'-0" X 16'-0"	224	0	<input type="text" value="0"/>
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	0	<input type="text" value="0"/>
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	0	<input type="text" value="0"/>
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	0	<input type="text" value="0"/>
Copy Files and Storage	200 SQ. FT. Min	200	0	<input type="text" value="0"/>
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	<input type="text" value="0"/>
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	<input type="text" value="0"/>

Facility Program Data

GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Operations Support Areas

Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	0	99	No Data Entry Required. Number of Operators calculated by number of buses x 2.1
Quite Room(s)	225 SQ. FT. Min	225	0	0	
Bid Room	225 SQ. FT. Min	225	0	0	
Locker Alcove	3 SQ. FT. /operator	3	0	99	No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x 2.1
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	500	0	0	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	350	0	0	
Total Operations Areas for the Facility (SF)			0		

Vehicle Maintenance Areas

Vehicle Maintenance Office Areas

Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	0	0	
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	0	0	

VM Support and Training Areas

Reception/Lobby Area	150 SQ. FT. Min	150	0	0	
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	0	0	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	0	0	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	0	0	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	350	0	0	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	250	0	0	

Facility Program Data

GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Vehicle Maintenance Bays & Shops						
Articulated Bus Repair Bay (1:15)	20'-0" X 75'-0"	1500	0	0	No Data Entry - Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:10	
Articulated Bus PM/Inspection Bay (1:50)	20'-0" X 75'-0"	1500	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:50	
Standard and Small Bus Repair Bay (1:15)	20'-0" X 60'-0"	1200	5760	4	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:15	
Standard and Small Bus PM/Inspection Bay (1:50)	20'-0" X 60'-0"	1200	0	0	Existing Facility includes additional PM Inspection Bays not fully being utilized.	
Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35	
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100	
Specialty Bay - Paint Booth	35'-0" X 80'-0"	2800	0	0		
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Articulated Length	25'-0" X 75'-0"	1875	0	0	Enter number required here - if fleet includes Articulated Buses	
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.	
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Articulated Length	25'-0" X 75'-0"	1875	0		Enter number required here - if fleet includes Articulated Buses	
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Standard Length	25'-0" X 60'-0"	1500	0	0	Existing Facility includes a Chassis Wash Bay	
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	250	4	No Data Entry - area calculated by total number of Bays	
Specialty Bay - Tire Bay_ Articulated Length	25'-0" X 75'-0"	1875	0	0	Enter number required here - if fleet includes Articulated Buses	
Specialty Bay - Tire Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.	
Tire Shop & Storage	750 SQ. FT. Min	750	0	0		
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	250	4	No Data Entry - area calculated by total number of Bays.	
Lube/Compressor Room	600 SQ. FT. Min	600	0	0		
Battery Room/Storage	150 SQ. FT. Min	150	0	0		
Total Vehicle Maintenance Areas for the Facility (SF)				6,260		

Facility Program Data

GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Parts Storage Areas						
Parts Office Areas						
Parts Manager Private Office	14'-0" X 16'-0"	224		0	0	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48		0	0	Enter number of workstations - includes 20% Circulation
Parts Storage Areas						
Palletized Storage Areas	15 SQ. FT./Bus	12		1454	101	No Data Entry. Area calculation based on 12 SF per bus + 20% Circulation
Small Parts Storage Areas	7.5 SQ. FT./Bus	7.5		909	101	No Data Entry. Area calculation based on 7.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320		0	0	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)					2,363	
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)						
Covered Fueling, Fare, and Interior Cleaning Position - (Position for Fueling, Fluids Check/Refill, Fare Recovery and Interior Cleaning, 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 75'	1500		1500	1	includes no Circulation
Fueling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 75'	1125	---	0	0	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 25	375	---	0	0	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 95'	1900		0	0	includes no Circulation
Wash Equipment Room	15' x 50'	750	---	0	0	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)					1,500	

Facility Program Data

GoRaleigh - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
EXTERIOR AREAS					
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	1600	4	No Entry Required - Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	16200	50	No Entry Required - Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	585	1	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			18,385		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	0	0	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	0	0	Enter number of Dumpsters, Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	0	0	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	0	0	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			0		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	0	0	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMP's
Total Exterior Storm Water Management Areas for the Facility (SF)			0		
Total Area Requirements for the Facility (SF) - less site circulation and drives			28,508		



GoRaleigh/GoWake Access Facility Programming

Facility Program Data

Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
BUILDING AREAS					
Administrative Offices					
Private Office for Director or General Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	162	1	
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	648	4	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	346	4	
Support Areas					
Reception/Lobby Area	250 SQ. FT. Min	250	338	1	
Eligibility Testing Area	500SQ. FT. Min	500	675	1	Adjacent to or extension of Lobby
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	1215	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	608	2	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			6,845		
Operations Office Areas					
Private Office for Paratransit Operations Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	162	1	
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	194	4	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Workstations for Paratransit Reservationist	8'-0" X 8'-0"	64	691	8	
Paratransit Dispatch	8'-0" X 8'-0"	64	259	3	
Dispatch Vestibule (Paratransit)	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	

Facility Program Data

Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Operations Support Areas

Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	1519	125	No Data Entry Required. Number of Operators calculated by number of buses x1.25
Quiet Room(s)	225 SQ. FT. Min	225	608	2	
Bid Room	225 SQ. FT. Min	225	304	1	
Locker Alcove	3 SQ. FT. /operator	3	506	125	No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x1.25
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	750	1013	1	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	450	608	1	
Total Operations Areas for the Facility (SF)			8,431		

Vehicle Maintenance Areas

Vehicle Maintenance Office Areas

Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	302	1	
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	270	2	

VM Support and Training Areas

Reception/Lobby Area	150 SQ. FT. Min	150	203	1	
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	203	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	500	675	1	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	350	473	1	

Vehicle Maintenance Bays & Shops

Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	2016	3	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	672	1	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100
Specialty Bay - Paint Booth	35'-0" X 50'-0"	2100	2520	1	
Specialty Bay - Body Repair Bay/Paint Prep Bay_Paratransit Length	25'-0" X 50'-0"	1500	1800	1	Enter number required here
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Paratransit Length	25'-0" X 50'-0"	1250	1500	1	Enter number required here - if fleet includes Articulated Buses
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6	No Data Entry - area calculated by total number of Bays
Specialty Bay - Tire Bay_ Paratransit Length	25'-0" X 35'-0"	1875	2250	1	Enter number required here - if fleet includes Articulated Buses
Tire Shop & Storage	750 SQ. FT. Min	750	900	1	
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6	No Data Entry - area calculated by total number of Bays
Lube/Compressor Room	600 SQ. FT. Min	900	1080	1	
Battery Room/Storage	150 SQ. FT. Min	150	180	1	

Total Vehicle Maintenance Areas for the Facility (SF)	18,362
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Facility Program Data

Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Parts Storage Areas						
Parts Office Areas						
Parts Manager Private Office	14'-0" X 16'-0"	224		269	1	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48		115	2	Enter number of workstations - includes 20% Circulation
Parts Storage Areas						
Palletized Storage Areas	10 SQ. FT./Bus	10		1380	115	No Data Entry. Area calculation based on 10 SF per bus + 20% Circulation
Small Parts Storage Areas	4.5 SQ. FT./Bus	4.5		621	115	No Data Entry. Area calculation based on 4.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320		352	1	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)				2,737		
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)						
Covered Fuelling, Fare, and Interior Cleaning Position - (Position for Fuelling, Fluids Check/Refill, Fare Recovery and Interior Cleaning, 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 45'	900		1800	2	includes no Circulation
Fuelling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 15	225	---	225	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 60'	1200		2400	2	includes no Circulation
Wash Equipment Room	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)				5,325		

Facility Program Data

Scenario A.1: GoRaleigh/GoWake Access - New 100 Bus Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
EXTERIOR AREAS					
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	6000	15	No Entry Required - Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	42120	130	No Entry Required - Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	1521	3	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			49,641		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	1100	1	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	180	2	Enter number of Dumpsters. Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	600	2	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	1575	2	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			3,455		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	45000	2	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMPs
Total Exterior Storm Water Management Areas for the Facility (SF)			45,000		
Total Area Requirements for the Facility (SF) - less site circulation and drives			139,795		

Facility Program Data

Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
BUILDING AREAS					
Administrative Offices					
Private Office for Director or General Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	162	1	
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	648	4	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	346	4	
Support Areas					
Reception/Lobby Area	250 SQ. FT. Min	250	338	1	
Eligibility Testing Area	500SQ. FT. Min	500	675	1	Adjacent to or extension of Lobby
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	1215	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			6,541		
Operations Office Areas					
Private Office for Paratransit Operations Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	162	1	
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	194	4	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Workstations for Paratransit Reservationist	8'-0" X 8'-0"	64	691	8	
Paratransit Dispatch	8'-0" X 8'-0"	64	259	3	
Dispatch Vestibule (Paratransit)	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	

Facility Program Data

Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

<u>Operations Support Areas</u>				
Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	1154	95 <small>No Data Entry Required. Number of Operators calculated by number of buses x1.25</small>
Quiet Room(s)	225 SQ. FT. Min	225	608	2
Bid Room	225 SQ. FT. Min	225	304	1
Locker Alcove	3 SQ. FT. /operator	3	385	95 <small>No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x 1.25</small>
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	750	1013	1
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	450	608	1
Total Operations Areas for the Facility (SF)			7,945	
<u>Vehicle Maintenance Areas</u>				
<u>Vehicle Maintenance Office Areas</u>				
Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	302	1
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	270	2
<u>VM Support and Training Areas</u>				
Reception/Lobby Area	150 SQ. FT. Min	150	203	1
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	203	1
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	500	675	1
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	350	473	1
<u>Vehicle Maintenance Bays & Shops</u>				
Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	2016	3 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35</small>
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	672	1 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100</small>
Specialty Bay - Paint Booth	35'-0" X 50'-0"	2100	2520	1
Specialty Bay - Body Repair Bay/Paint Prep Bay_Paratransit Length	25'-0" X 50'-0"	1500	1800	1 <small>Enter number required here</small>
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Paratransit Length	25'-0" X 50'-0"	1250	1500	1 <small>Enter number required here - if fleet includes Articulated Buses</small>
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6 <small>No Data Entry - area calculated by total number of Bays</small>
Specialty Bay - Tire Bay_ Paratransit Length	25'-0" X 35'-0"	1875	2250	1 <small>Enter number required here - if fleet includes Articulated Buses</small>
Tire Shop & Storage	750 SQ. FT. Min	750	900	1
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6 <small>No Data Entry - area calculated by total number of Bays</small>
Lube/Compressor Room	600 SQ. FT. Min	900	1080	1
Battery Room/Storage	150 SQ. FT. Min	150	180	1
Total Vehicle Maintenance Areas for the Facility (SF)			18,362	

Facility Program Data

Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Parts Storage Areas						
Parts Office Areas						
Parts Manager Private Office	14'-0" X 16'-0"	224		269	1	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48		115	2	Enter number of workstations - includes 20% Circulation
Parts Storage Areas						
Palletized Storage Areas	10 SQ. FT./Bus	10		1032	86	No Data Entry. Area calculation based on 10 SF per bus + 20% Circulation
Small Parts Storage Areas	4.5 SQ. FT./Bus	4.5		464	86	No Data Entry. Area calculation based on 4.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320		352	1	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)				2,232		
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)						
Covered Fueling, Fare, and Interior Cleaning Position - (Position for Fueling, Fluids Check/Refill, Fare Recovery and Interior Cleaning, 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 45'	900		1800	2	includes no Circulation
Fueling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 15	225	---	225	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 60'	1200		2400	2	includes no Circulation
Wash Equipment Room	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)				5,325		

Facility Program Data

Scenario A.2: GoRaleigh/GoWake Access - New 76 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
EXTERIOR AREAS					
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	4000	10	No Entry Required: Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	37260	115	No Entry Required: Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	1346	3	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			42,606		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	1100	1	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	180	2	Enter number of Dumpsters, Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	600	2	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	1575	2	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			3,455		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	45000	2	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMPs
Total Exterior Storm Water Management Areas for the Facility (SF)			45,000		
Total Area Requirements for the Facility (SF) - less site circulation and drives			131,465		

Facility Program Data

Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
BUILDING AREAS					
Administrative Offices					
Private Office for Director or General Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	162	1	
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	324	2	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Support Areas					
Reception/Lobby Area	250 SQ. FT. Min	250	338	1	
Eligibility Testing Area	500SQ. FT. Min	500	0	0	Adjacent to or extension of Lobby
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	0	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			3,681		
Operations Office Areas					
Private Office for Paratransit Operations Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	162	1	
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	97	2	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Workstations for Paratransit Reservationist	8'-0" X 8'-0"	64	173	2	
Paratransit Dispatch	8'-0" X 8'-0"	64	173	2	
Dispatch Vestibule (Paratransit)	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	0	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	

Facility Program Data

Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

<u>Operations Support Areas</u>				
Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	516	43 <small>No Data Entry Required. Number of Operators calculated by number of buses x 2.1</small>
Quiet Room(s)	225 SQ. FT. Min	225	304	1
Bid Room	225 SQ. FT. Min	225	0	0
Locker Alcove	3 SQ. FT. /operator	3	172	43 <small>No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x 2.1</small>
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	500	675	1
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	400	540	1
Total Operations Areas for the Facility (SF)			5,211	
<u>Vehicle Maintenance Areas</u>				
<u>Vehicle Maintenance Office Areas</u>				
Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	302	1
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	135	1
<u>VM Support and Training Areas</u>				
Reception/Lobby Area	150 SQ. FT. Min	150	203	1
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	203	1
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	500	675	1
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	350	473	1
<u>Vehicle Maintenance Bays & Shops</u>				
Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	672	1 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35</small>
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	672	1 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100</small>
Specialty Bay - Paint Booth	35'-0" X 50'-0"	2100	2520	1
Specialty Bay - Body Repair Bay/Paint Prep Bay_Paratransit Length	25'-0" X 50'-0"	1500	1800	1 <small>Enter number required here</small>
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Paratransit Length	25'-0" X 50'-0"	1250	1500	1 <small>Enter number required here - if fleet includes Articulated Buses</small>
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6 <small>No Data Entry - area calculated by total number of Bays</small>
Specialty Bay - Tire Bay_ Paratransit Length	25'-0" X 35'-0"	1875	2250	1 <small>Enter number required here - if fleet includes Articulated Buses</small>
Tire Shop & Storage	750 SQ. FT. Min	750	900	1
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6 <small>No Data Entry - area calculated by total number of Bays</small>
Lube/Compressor Room	600 SQ. FT. Min	900	1080	1
Battery Room/Storage	150 SQ. FT. Min	150	180	1
Total Vehicle Maintenance Areas for the Facility (SF)			16,579	

Facility Program Data

Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Parts Storage Areas						
Parts Office Areas						
Parts Manager Private Office	14'-0" X 16'-0"	224		269	1	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48		115	2	Enter number of workstations - includes 20% Circulation
Parts Storage Areas						
Palletized Storage Areas	10 SQ. FT./Bus	10		456	38	No Data Entry. Area calculation based on 10 SF per bus + 20% Circulation
Small Parts Storage Areas	4.5 SQ. FT./Bus	4.5		205	38	No Data Entry. Area calculation based on 4.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320		352	1	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)					1,397	
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)						
Covered Fuelling, Fare, and Interior Cleaning Position - (Position for Fuelling, Fluids Check/Refill, Fare Recovery and Interior Cleaning, 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 45'	900		900	1	includes no Circulation
Fuelling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 15	225	---	225	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 60'	1200		1200	1	includes no Circulation
Wash Equipment Room	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)					3,225	

Facility Program Data

Scenario A.3: GoRaleigh/GoWake Access - New 34 Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
EXTERIOR AREAS					
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	1600	4	No Entry Required - Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	16200	50	No Entry Required - Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	585	1	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			18,385		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	1100	1	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	180	2	Enter number of Dumpsters, Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	0	0	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	1575	2	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			2,855		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	45000	2	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMP's
Total Exterior Storm Water Management Areas for the Facility (SF)			45,000		
Total Area Requirements for the Facility (SF) - less site circulation and drives			96,334		

Facility Program Data

Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
BUILDING AREAS					
Administrative Offices *** Remodeled Area***					
Private Office for Director or General Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	162	1	
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	648	4	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	518	6	
Support Areas					
Reception/Lobby Area	250 SQ. FT. Min	250	338	1	
Eligibility Testing Area	500SQ. FT. Min	500	675	1	Adjacent to or extension of Lobby
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	1215	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	608	2	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			7,017		
Area Available for Remodel			5,253		
Operations Office Areas *** Remodeled Area***					
Private Office for Paratransit Operations Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	162	1	
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	194	4	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Workstations for Paratransit Reservationist	8'-0" X 8'-0"	64	864	10	
Paratransit Dispatch	8'-0" X 8'-0"	64	346	4	
Dispatch Vestibule (Paratransit)	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	
Operations Support Areas					
Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	3062	252	No Data Entry Required. Number of Operators calculated by number of buses x 2.1
Quiet Room(s)	225 SQ. FT. Min	225	608	2	
Bid Room	225 SQ. FT. Min	225	304	1	

Facility Program Data

Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Locker Alcove	3 SQ. FT. /operator	3	1021	252	No Data Entry Required - Number of Lockers equals number of Operators Drivers calculated by number of buses x 2.1
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	750	1013	1	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	450	608	1	
Total Operations Areas for the Facility (SF)			10,747		
Area Available for Remodel			5,855		

Vehicle Maintenance Areas *** Remodeled Area***

Vehicle Maintenance Office Areas

Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	302	1	
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	270	2	

VM Support and Training Areas

Reception/Lobby Area	150 SQ. FT. Min	150	203	1	
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	203	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	500	675	1	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	350	473	1	

Vehicle Maintenance Bays & Shops

Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	2688	4	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	1344	2	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100
Specialty Bay - Paint Booth	35'-0" X 50'-0"	2100	2520	1	
Specialty Bay - Body Repair Bay/Paint Prep Bay_Paratransit Length	25'-0" X 50'-0"	1500	1800	1	Enter number required here
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Paratransit Length	25'-0" X 50'-0"	1250	1500	1	Enter number required here - if fleet includes Articulated Buses
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6	No Data Entry - area calculated by total number of Bays
Specialty Bay - Tire Bay_ Paratransit Length	25'-0" X 35'-0"	1875	2250	1	Enter number required here - if fleet includes Articulated Buses
Tire Shop & Storage	750 SQ. FT. Min	750	900	1	
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	360	6	No Data Entry - area calculated by total number of Bays
Lube/Compressor Room	600 SQ. FT. Min	900	1080	1	
Battery Room/Storage	150 SQ. FT. Min	150	180	1	

Total Vehicle Maintenance Areas for the Facility (SF)			19,706		
Area Available for Remodel			17,275		

Parts Storage Areas *** Remodeled Area***

Facility Program Data

Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Parts Office Areas						
Parts Manager Private Office	14'-0" X 16'-0"	224		269	1	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48		115	2	Enter number of workstations - includes 20% Circulation
Parts Storage Areas						
Palletized Storage Areas	10 SQ. FT./Bus	10		1620	135	No Data Entry. Area calculation based on 10 SF per bus + 20% Circulation
Small Parts Storage Areas	4.5 SQ. FT./Bus	4.5		729	135	No Data Entry. Area calculation based on 4.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320		352	1	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)				3,085		
Area Available for Remodel				5,139		
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas) ***New Areas***						
Covered Fueling, Fare, and Interior Cleaning Position - (Position for Fueling, Fluids Check/Refill, Fare Recovery and Interior Cleaning, 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 45'	900		1800	2	includes no Circulation
Fueling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 15	225	---	225	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 60'	1200		2400	2	includes no Circulation
Wash Equipment Room	15' x 30'	450	---	450	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)				5,325		
Area Available for Remodel				4,215		

Facility Program Data

Scenario B: GoRaleigh/GoWake Access - Remodeled Nelson Road Facility for Paratransit Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
EXTERIOR AREAS					
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	6000	15	No Entry Required: Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	42120	130	No Entry Required: Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	1521	3	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			49,641		
Area Available for Remodel			49,641		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	1100	1	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	180	2	Enter number of Dumpsters. Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	600	2	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	1575	2	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			3,455		
Area Available for Remodel			3,455		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	0	0	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMP's
Total Exterior Storm Water Management Areas for the Facility (SF)			0		
Total Area Requirements for the Facility (SF) - less site circulation and drives			98,976		
Total Area Available for Remodel			90,833		



GoTriangle Facility Programming

Facility Program Data

GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
BUILDING AREAS					
Administrative Offices					
Private Office for Director or General Manager	14'-0" X 16'-0"	224	0	0	
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	0	0	
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	0	0	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	0	0	
Support Areas					
Reception/Lobby Area	250 SQ. FT. Min	250	0	0	
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	0	0	
Copy Files and Storage	200 SQ. FT. Min	200	0	0	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	0	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	0	0	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	0	0	
Men's Restroom (Public Use)	120 SQ. FT. Min	120	0	0	Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	0	0	Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			0		
Operations Office Areas					
Private Office for Operations Manager	14'-0" X 16'-0"	224	605	2	Remodeled Areas - Fixed Route and Paratransit Operations Managers
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	162	1	Remodeled Areas - Paratransit Reservationist Supervisor
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	0	0	
Workstations for Paratransit Reservationist and Schedulers	4'-0" X 5'-0"	20	216	8	Remodeled Areas - Workstations in Shared office area
Shared Dispatch Office	6'-0" X 6'-0"	36	340	7	Remodeled Areas - Workstations in Shared office area
Dispatch Vestibule (Shared)	200 SQ. FT. Min	200	270	1	Remodeled Areas - Shared vestibule adjacent to Dispatch Areas
Copy Files and Storage	200 SQ. FT. Min	200	270	1	Remodeled Areas - For Operations staff
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	0	Remodeled Areas - Shared Conference Room
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	Remodeled Areas - Shared Conference Room

Facility Program Data

GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Operations Support Areas					
Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	1500	29	SF represents a new Shared Drivers' Room from existing SF - No Building Expansion
Quiet Room(s)	225 SQ. FT. Min	225	304	1	
Bid Room	225 SQ. FT. Min	225	0	0	
Locker Alcove	3 SQ. FT. /operator	3	350	29	No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x 2.1
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	720	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	500	600	1	Remodeled Existing Areas - No Building Expansion
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	350	420	1	Remodeled Existing Areas - No Building Expansion
Total Operations Areas for the Facility (SF)			6,331		

Vehicle Maintenance Areas

Vehicle Maintenance Office Areas

Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	0	0	
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	0	0	

VM Support and Training Areas

Reception/Lobby Area	150 SQ. FT. Min	150	0	0	
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	0	0	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	0	0	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	0	0	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	350	0	0	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	250	0	0	

Facility Program Data

GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Vehicle Maintenance Bays & Shops					
Articulated Bus Repair Bay (1:15)	20'-0" X 75'-0"	1500	0	0	No Data Entry - Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:10
Articulated Bus PM/Inspection Bay (1:50)	20'-0" X 75'-0"	1500	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:50
Standard and Small Bus Repair Bay (1:15)	20'-0" X 60'-0"	1200	0	1	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:15
Standard and Small Bus PM/Inspection Bay (1:50)	20'-0" X 60'-0"	1200	0	0	Existing Facility includes additional PM Inspection Bays not fully being utilized.
Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100
Specialty Bay - Paint Booth	35'-0" X 80'-0"	2800	0	0	
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Articulated Length	25'-0" X 75'-0"	1875	0	0	Enter number required here - if fleet includes Articulated Buses
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Articulated Length	25'-0" X 75'-0"	1875	0		Enter number required here - if fleet includes Articulated Buses
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Standard Length	25'-0" X 60'-0"	1500	1800	1	Remodeled Existing Areas - No Building Expansion
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	0	1	No Data Entry - area calculated by total number of Bays
Specialty Bay - Tire Bay_ Articulated Length	25'-0" X 75'-0"	1875	0	0	Enter number required here - if fleet includes Articulated Buses
Specialty Bay - Tire Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.
Tire Shop & Storage	750 SQ. FT. Min	750	0	0	
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	200	1	Remodeled Existing Areas - No Building Expansion
Lube/Compressor Room	600 SQ. FT. Min	600	0	0	
Battery Room/Storage	150 SQ. FT. Min	150	0	0	
Total Vehicle Maintenance Areas for the Facility (SF)				2,000	
Parts Storage Areas					
Parts Office Areas					
Parts Manager Private Office	14'-0" X 16'-0"	224	0	0	Includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48	0	0	Enter number of workstations - Includes 20% Circulation
Parts Storage Areas					
Palletized Storage Areas	15 SQ. FT./Bus	12	0	24	No Expansion possible - High Density Storage systems must be utilized to accommodate any additional parts storage needed.
Small Parts Storage Areas	7.5 SQ. FT./Bus	7.5	0	24	No Expansion possible - High Density Storage systems must be utilized to accommodate any additional parts storage needed.
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320	0	0	Includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)				0	

Facility Program Data

GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)						
Covered Fueling, Fare, and Interior Cleaning Position - (Position for Fueling, Fluids Check/Refill, Fare Recovery and Interior Cleaning. 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 75'	1500		3000	2	includes no Circulation
Fueling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 75'	1125	---	1125	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15' x 25'	375	---	375	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 95'	1900		3800	2	includes no Circulation
Wash Equipment Room	15' x 50'	750	---	750	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)				9,050		

EXTERIOR AREAS

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required
Exterior Vehicle Parking Areas				
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>				
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	0	0 <small>No Entry Required - Value based on Fleet Data - changing value breaks link</small>
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	3240	10 <small>No Entry Required - Value based on Fleet Data - changing value breaks link</small>
Disability Spaces	13' X 18'	234	0	0 <small>No Entry Required - Calculation is 1 space for every 40 Staff Spaces</small>
Total Vehicle Parking Areas for the Facility (SF)				3,240

Facility Program Data

GoTriangle - Bus Administration, Operations, and Maintenance Facility Expansion

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	0	0	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	0	0	Enter number of Dumpsters. Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	0	0	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	0	0	Enter number of AST's. Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			0		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	0	0	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMPs
Total Exterior Storm Water Management Areas for the Facility (SF)			0		
Total Area Requirements for the Facility (SF) - less site circulation and drives			20,621		

Facility Program Data

GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required
BUILDING AREAS				
<u>Administrative Offices</u>				
Private Office for Director or General Manager	14'-0" X 16'-0"	224	302	1
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	162	1
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	972	6
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	691	8
<u>Support Areas</u>				
Reception/Lobby Area	250 SQ. FT. Min	250	338	1
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	1215	1
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0
Copy Files and Storage	200 SQ. FT. Min	200	270	1
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	608	2
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1
Men's Restroom (Public Use)	120 SQ. FT. Min	120	162	1
Women's Restroom (Public Use)	120 SQ. FT. Min	120	162	1
				<small>Needed if a Public Meeting Room is Selected</small>
				<small>Needed if a Public Meeting Room is Selected</small>
Total Administrative Area for the Facility (SF)			6,569	
<u>Operations Office Areas</u>				
Private Office for Operations Manager	14'-0" X 16'-0"	224	302	1
Private Office for Paratransit Operations Manager	14'-0" X 16'-0"	224	302	1
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	324	2
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	292	6
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2
Workstations for Paratransit Reservationist	8'-0" X 8'-0"	64	864	10
Fixed Route Dispatch	8'-0" X 8'-0"	64	346	4
Paratransit Dispatch	8'-0" X 8'-0"	64	173	2
Dispatch Vestibule (Fixed Route)	200 SQ. FT. Min	200	270	1
Dispatch Vestibule (Paratransit)	200 SQ. FT. Min	200	270	1
Copy Files and Storage	200 SQ. FT. Min	200	270	1
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0

Facility Program Data

GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

<u>Operations Support Areas</u>				
Operators' Room (aka: Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	3827	315 <small>No Data Entry Required. Number of Operators calculated by number of buses x 2.1</small>
Quiet Room(s)	225 SQ. FT. Min	225	608	2
Bid Room	225 SQ. FT. Min	225	304	1
Locker Alcove	3 SQ. FT. /operator	3	1276	315 <small>No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x 2.1</small>
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	750	1013	1
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	450	608	1
Total Operations Areas for the Facility (SF)			12,470	
<u>Vehicle Maintenance Areas</u>				
<u>Vehicle Maintenance Office Areas</u>				
Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	302	1
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	270	2
<u>VM Support and Training Areas</u>				
Reception/Lobby Area	150 SQ. FT. Min	150	203	1
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	203	1
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	500	675	1
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	350	473	1
<u>Vehicle Maintenance Bays & Shops</u>				
Articulated Bus Repair Bay (1:15)	20'-0" X 75'-0"	1500	9000	5 <small>No Data Entry - Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:10</small>
Articulated Bus PM/Inspection Bay (1:50)	20'-0" X 75'-0"	1500	1800	1 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:50</small>
Standard and Small Bus Repair Bay (1:15)	20'-0" X 60'-0"	1200	10080	7 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:15</small>
Standard and Small Bus PM/Inspection Bay (1:50)	20'-0" X 60'-0"	1200	4320	3 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:50</small>
Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	672	1 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35</small>
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	672	1 <small>No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100</small>
Specialty Bay - Paint Booth	35'-0" X 80'-0"	2800	3360	1
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Articulated Length	25'-0" X 75'-0"	1875	2250	1 <small>Enter number required here - if fleet includes Articulated Buses</small>
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0 <small>Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.</small>
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Articulated Length	25'-0" X 75'-0"	1875	2250	1 <small>Enter number required here - if fleet includes Articulated Buses</small>
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Standard Length	25'-0" X 60'-0"	1500	0	0 <small>Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.</small>
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	720	12 <small>No Data Entry - area calculated by total number of Bays</small>

Facility Program Data

GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Specialty Bay - Tire Bay_ Articulated Length	25'-0" X 75'-0"	1875	2250	1	Enter number required here - if fleet includes Articulated Buses
Specialty Bay - Tire Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.
Tire Shop & Storage	750 SQ. FT. Min	750	900	1	
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	720	12	No Data Entry - area calculated by total number of Bays.
Lube/Compressor Room	600 SQ. FT. Min	900	1080	1	
Battery Room/Storage	150 SQ. FT. Min	150	180	1	
Total Vehicle Maintenance Areas for the Facility (SF)			44,978		
Parts Storage Areas					
Parts Office Areas					
Parts Manager Private Office	14'-0" X 16'-0"	224	269	1	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48	115	2	Enter number of workstations - includes 20% Circulation
Parts Storage Areas					
Palletized Storage Areas	15 SQ. FT./Bus	12	4032	280	No Data Entry. Area calculation based on 12 SF per bus + 20% Circulation
Small Parts Storage Areas	7.5 SQ. FT./Bus	7.5	2520	280	No Data Entry. Area calculation based on 7.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320	352	1	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)			7,288		
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)					
Covered Fueling, Fare, and Interior Cleaning Position - (Position for Fueling, Fluids Check/Refill, Fare Recovery and Interior Cleaning, 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 75'	1500	3000	2	includes no Circulation
Fueling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 75'	1125	1125	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 25	375	375	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 95'	1900	3800	2	includes no Circulation
Wash Equipment Room	15' x 50'	750	750	1	Enter "1" here if the facility will include a Fueling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)			9,050		

Facility Program Data

GoTriangle - New 150 Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

EXTERIOR AREAS					
Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	4000	10	No Entry Required - Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	48600	150	No Entry Required - Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	1755	4	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			54,355		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	2200	2	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	180	2	Enter number of Dumpsters. Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	600	2	Enter number of roll off bins. Based on most efficient depth for storage access Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	1575	2	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			4,555		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	45000	2	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMP's
Total Exterior Storm Water Management Areas for the Facility (SF)			45,000		
Total Area Requirements for the Facility (SF) - less site circulation and drives			184,265		



GoCary Facility Programming

Facility Program Data

GoCary - New Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
BUILDING AREAS					
Administrative Offices					
Private Office for Director or General Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Directors or Assistant General Managers	10'-0" X 12'-0"	120	162	1	
Private Offices for Department or Group Managers	10'-0" X 12'-0"	120	324	2	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Support Areas					
Reception/Lobby Area	250 SQ. FT. Min	250	338	1	
Public Meeting/Board Room (40-50 Persons)	900 SQ. FT. Min	900	0	0	
Copy Files and Storage	200 SQ. FT. Min	200	270	1	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	473	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	810	1	
Training Table and Chair Storage	200 SQ. FT. Min	200	270	1	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Women's Restroom (Public Use)	120 SQ. FT. Min	120	162	1	Needed if a Public Meeting Room is Selected
Total Administrative Area for the Facility (SF)			4,964		
Operations Office Areas					
Private Office for Operations Manager	14'-0" X 16'-0"	224	302	1	
Private Office for Paratransit Operations Manager	14'-0" X 16'-0"	224	302	1	
Private Offices for Assistant Managers	10'-0" X 12'-0"	120	324	2	
Shared Office for Transit/Road Supervisors	6'-0" X 6'-0"	36	292	6	
Workstations for Clerical, Technical, and Reception staff	8'-0" X 8'-0"	64	173	2	
Workstations for Paratransit Reservationist	8'-0" X 8'-0"	64	864	10	
Fixed Route Dispatch	8'-0" X 8'-0"	64	346	4	
Paratransit Dispatch	8'-0" X 8'-0"	64	173	2	
Dispatch Vestibule (Fixed Route)	200 SQ. FT. Min	200	270	1	
Dispatch Vestibule (Paratransit)	200 SQ. FT. Min	200	270	1	
Copy Files and Storage	200 SQ. FT. Min	200	0	0	
Conference Room (Large) - 10 to 14 Staff	350 SQ. FT. Min	350	0	0	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	0	0	
Operations Support Areas					
Operators' Room (aka. Drivers' Room, Day Room, Drivers' Lounge)	9 SQ. FT. /person	9	1914	158	No Data Entry Required. Number of Operators calculated by number of buses x 2.1

Facility Program Data

GoCary - New Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Quite Room(s)	225 SQ. FT. Min	225	304	1	
Bid Room	225 SQ. FT. Min	225	0	0	
Locker Alcove	3 SQ. FT. /operator	3	638	158	No Data Entry Required. Number of Lockers equals number of Operators Drivers calculated by number of buses x 2.1
Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	500 SQ. FT. Min	500	675	1	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	350 SQ. FT. Min	350	473	1	

Total Operations Areas for the Facility (SF) 7,318

Vehicle Maintenance Areas

Vehicle Maintenance Office Areas

Vehicle Maintenance Manager Private Office	14'-0" X 16'-0"	224	302	1	
Shared Offices for Supervisors/Foreman/Leads	10'-0" X 10'-0"	100	270	2	

VM Support and Training Areas

Reception/Lobby Area	150 SQ. FT. Min	150	0	0	
Manuals/Copy/ Files and Storage	150 SQ. FT. Min	150	203	1	
Conference Room (Small) - 6 to 8 Staff	225 SQ. FT. Min	225	304	1	
Maintenance Training Room (25 Persons Academic Setting)	600 SQ. FT. Min	600	0	0	
Training Table and Chair Storage	200 SQ. FT. Min	200	0	0	
Lunch/Break Room	400 SQ. FT. Min (Incl. Kitchenette)	400	540	1	
Building Support Areas (IT, Electrical Room and Mechanical Rooms)	500 SQ. FT. Min	500	675	1	
Men's Restroom/Showers/Lockers (Sized for 100% of Staff for Functional Reality)	350 SQ. FT. Min	350	473	1	
Women's Restroom/Showers/Lockers (Sized for 50% of Staff by Code)	250 SQ. FT. Min	250	338	1	

Vehicle Maintenance Bays & Shops

Articulated Bus Repair Bay (1:15)	20'-0" X 75'-0"	1500	0	0	No Data Entry - Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:10
Articulated Bus PM/Inspection Bay (1:50)	20'-0" X 75'-0"	1500	0	0	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:50
Standard and Small Bus Repair Bay (1:15)	20'-0" X 60'-0"	1200	2880	2	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:15
Standard and Small Bus PM/Inspection Bay (1:50)	20'-0" X 60'-0"	1200	1440	1	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:50
Paratransit Repair Bay (1:35 Vehicles)	16'-0" X 35'-0"	560	1344	2	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:35
Paratransit PM/Inspection Bay (1:100 Vehicles)	16'-0" X 35'-0"	560	672	1	No Data Entry -Rounded Value based on Fleet Data and Bay to Vehicle Ratio of 1:100
Specialty Bay - Paint Booth	35'-0" X 80'-0"	2800	0	0	
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Articulated Length	25'-0" X 75'-0"	1875	0	0	Enter number required here - if fleet includes Articulated Buses
Specialty Bay - Body Repair Bay/Paint Prep Bay_ Standard Length	25'-0" X 60'-0"	1875	0	0	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Articulated Length	25'-0" X 75'-0"	1875	0		Enter number required here - if fleet includes Articulated Buses
Specialty Bay - Chassis Wash (Engine/Undercarriage) Bay Standard Length	25'-0" X 60'-0"	1500	1800	1	Enter number required here - if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.
Common Work Area (General Machine Shop)	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	300	6	No Data Entry - area calculated by total number of Bays
Specialty Bay - Tire Bay_ Articulated Length	25'-0" X 75'-0"	1875	0	0	Enter number required here - if fleet includes Articulated Buses

Facility Program Data

GoCary - New Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Specialty Bay - Tire Bay_ Standard Length	25'-0" X 60'-0"	1875	2250	1	Enter number required here -- if fleet includes NO Articulated Buses and there is no prospect of having Articulated Buses.
Tire Shop & Storage	750 SQ. FT. Min	750	900	1	
Portable Equipment Storage	50 SQ. FT. per Bay Or a 250 SQ. FT.	50	300	6	No Data Entry - area calculated by total number of Bays
Lube/Compressor Room	600 SQ. FT. Min	600	720	1	
Battery Room/Storage	150 SQ. FT. Min	150	180	1	
Total Vehicle Maintenance Areas for the Facility (SF)			15,890		
Parts Storage Areas					
Parts Office Areas					
Parts Manager Private Office	14'-0" X 16'-0"	224	269	1	includes 20% Circulation
Shared Offices for Parts Room Staff	6'-0" X 8'-0"	48	0	0	Enter number of workstations - Includes 20% Circulation
Parts Storage Areas					
Palletized Storage Areas	15 SQ. FT./Bus	10	1500	125	No Data Entry. Area calculation based on 10 SF per bus + 20% Circulation
Small Parts Storage Areas	7.5 SQ. FT./Bus	5.5	825	125	No Data Entry. Area calculation based on 5.5 SF per bus + 20% Circulation
Shipping & Receiving (Dock Areas)	16'-0" x 20'-0"	320	352	1	includes 20% Circulation
Total Parts Storage Areas for the Facility (SF)			2,946		
Service Areas (Fuel, Fare Retrieval, and Exterior Bus Wash Areas)					
Covered Fuelling, Fare, and Interior Cleaning Position - (Position for Fuelling, Fluids Check/Refill, Fare Recovery and Interior Cleaning. 20 ft Wide (12 ft. wide Lane, 8 ft. wide Island) and 75 ft. Long)	20' x 75'	1500	3000	2	includes no Circulation
Fuelling Operation Support Areas: (includes 15 ft x 75 ft. area for Office, Restroom, Cleaning Storage and Lube/Compressor Room)	15' x 75'	1125	1125	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Revenue Counting Room - Special Secure counting room - typically associated with Fare Retrieval Positions	15 x 25	375	375	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Bus Wash Position/Lane - Automated Bus Washer, Drive-Through	20' x 95'	1900	1900	1	includes no Circulation
Wash Equipment Room	15' x 50'	750	750	1	Enter "1" here if the facility will include a Fuelling Facility. Includes no Circulation
Total Fuel and Wash Areas for the Facility (SF)			7,150		

Facility Program Data

GoCary - New Bus Administration, Operations, and Maintenance Facility

SPACES ANTICIPATED TO BE INCLUDED AT THE FACILITY

Space Description	Space Standard	Resulting Area	Area Required (SF) <i>Includes Circulation</i>	Enter Number of Staff Positions or Quantity Required	
EXTERIOR AREAS					
Exterior Vehicle Parking Areas					
<i>Go to Bus Parking Scenarios Tab to select Bus Parking Approach for the Facility</i>					
Non-Revenue Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	10' x 20'	200	2000	5	No Entry Required: Value based on Fleet Data - changing value breaks link
Staff and Visitors: Personal Vehicles: Pick-up Trucks, Sedans, Vans, SUV's and Motorcycles	9' X 18'	162	29160	90	No Entry Required: Value based on Fleet Data - changing value breaks link
Disability Spaces	13' X 18'	234	1053	2	No Entry Required - Calculation is 1 space for every 40 Staff Spaces
Total Vehicle Parking Areas for the Facility (SF)			32,213		
Exterior Storage Areas					
General Exterior Stops and Zones Storage	20' x 25'	1000	1500	1	Enter number of every 1000 SF storage areas required.
Waste Collection Dumpster and Recycling Collection Dumpster	6' x 10'	60	180	2	Enter number of Dumpsters, Based on common configuration Plus Circulation
Roll-off Waste Bins	10' x 20'	200	0	0	Enter number of roll off bins. Based on most efficient depth for storage access: Plus Circulation
Fuel Storage Tank Yard	10' x 35'	525	788	1	Enter number of AST's: Based on a 20000 gallon Above Ground Fuel Storage Tank plus safety area
Total Exterior Storage Areas for the Facility (SF)			2,468		
Exterior Storm Water Management Areas					
Detention/Retention Ponds	150' x 150'	22500	22500	1	1/2 acre minimum. Area to be confirmed based on local requirements and adopted BMP's
Total Exterior Storm Water Management Areas for the Facility (SF)			22,500		
Total Area Requirements for the Facility (SF) - less site circulation and drives			95,448		



Wake Transit Plan

Appendix 4.3B: Cost Escalation





GoRaleigh Cost Escalation

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>															
GoRaleigh Budget Escalation Calculator															
Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$173,239	\$181,901	\$190,996	\$200,546	\$210,573	\$221,102	\$232,157	\$243,765	\$255,953	\$268,750	\$282,188	\$296,297	\$311,112	\$326,668	\$343,001
Site Landscaping/Security Fencing	\$30,345	\$31,862	\$33,455	\$35,128	\$36,885	\$38,729	\$40,665	\$42,698	\$44,833	\$47,075	\$49,429	\$51,900	\$54,495	\$57,220	\$60,081
Other Paving - Drives and Circulation (Asphalt and Concrete)	\$59,115	\$62,071	\$65,174	\$68,433	\$71,855	\$75,447	\$79,220	\$83,181	\$87,340	\$91,707	\$96,292	\$101,107	\$106,162	\$111,470	\$117,044
Total Exterior Bus Parking	\$609,420	\$639,891	\$671,886	\$705,480	\$740,754	\$777,792	\$816,681	\$857,515	\$900,391	\$945,410	\$992,681	\$1,042,315	\$1,094,431	\$1,149,152	\$1,206,610
Subtotal for Site work	\$872,119	\$915,725	\$961,511	\$1,009,587	\$1,060,066	\$1,113,069	\$1,168,723	\$1,227,159	\$1,288,517	\$1,352,943	\$1,420,590	\$1,491,619	\$1,566,200	\$1,644,510	\$1,726,736
Building Areas															
Total Administrative Area for the Facility (SF)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operations Areas for the Facility (SF)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Vehicle Maintenance Areas for the Facility (SF)	\$1,604,505	\$1,684,730	\$1,768,967	\$1,857,415	\$1,950,286	\$2,047,800	\$2,150,190	\$2,257,700	\$2,370,585	\$2,489,114	\$2,613,570	\$2,744,248	\$2,881,460	\$3,025,533	\$3,176,810
Total Parts Storage Areas for the Facility (SF)	\$611,205	\$641,765	\$673,854	\$707,546	\$742,923	\$780,070	\$819,073	\$860,027	\$903,028	\$948,180	\$995,589	\$1,045,368	\$1,097,636	\$1,152,518	\$1,210,144
Total Interior Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Service Areas (Fuel/Fare/Wash)	\$272,895	\$286,540	\$300,867	\$315,910	\$331,706	\$348,291	\$365,705	\$383,991	\$403,190	\$423,350	\$444,517	\$466,743	\$490,080	\$514,584	\$540,313
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance & Storage Equipment	\$386,085	\$405,389	\$425,659	\$446,942	\$469,289	\$492,753	\$517,391	\$543,260	\$570,423	\$598,945	\$628,892	\$660,336	\$693,353	\$728,021	\$764,422
Fuel and Wash Equipment	\$190,155	\$199,663	\$209,646	\$220,128	\$231,135	\$242,691	\$254,826	\$267,567	\$280,946	\$294,993	\$309,742	\$325,230	\$341,491	\$358,566	\$376,494
Subtotal for Building Areas	\$3,064,845	\$3,218,087	\$3,378,992	\$3,547,941	\$3,725,338	\$3,911,605	\$4,107,185	\$4,312,545	\$4,528,172	\$4,754,581	\$4,992,310	\$5,241,925	\$5,504,021	\$5,779,222	\$6,068,183
Subtotal	\$3,936,964	\$4,133,812	\$4,340,503	\$4,557,528	\$4,785,404	\$5,024,674	\$5,275,908	\$5,539,704	\$5,816,689	\$6,107,523	\$6,412,899	\$6,733,544	\$7,070,222	\$7,423,733	\$7,794,919
Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Architectural/Engineering Fees	\$393,696	\$413,381	\$434,050	\$455,753	\$478,540	\$502,467	\$527,591	\$553,970	\$581,669	\$610,752	\$641,290	\$673,354	\$707,022	\$742,373	\$779,492
Surveys/Tests/Reports	\$39,370	\$41,338	\$43,405	\$45,575	\$47,854	\$50,247	\$52,759	\$55,397	\$58,167	\$61,075	\$64,129	\$67,335	\$70,702	\$74,237	\$77,949
Environmental Reports	\$10,500	\$11,025	\$11,576	\$12,155	\$12,763	\$13,401	\$14,071	\$14,775	\$15,513	\$16,289	\$17,103	\$17,959	\$18,856	\$19,799	\$20,789
Commissioning	\$39,370	\$41,338	\$43,405	\$45,575	\$47,854	\$50,247	\$52,759	\$55,397	\$58,167	\$61,075	\$64,129	\$67,335	\$70,702	\$74,237	\$77,949
Additional Contingency (Planning Level)	\$196,848	\$206,691	\$217,025	\$227,876	\$239,270	\$251,234	\$263,795	\$276,985	\$290,834	\$305,376	\$320,645	\$336,677	\$353,511	\$371,187	\$389,746
Construction Management - In-house	\$118,108.92	\$124,014.36	\$130,215.08	\$136,725.84	\$143,562.13	\$150,740.23	\$158,277.25	\$166,191.11	\$174,500.66	\$183,225.70	\$192,386.98	\$202,006.33	\$212,106.65	\$222,711.98	\$233,847.58
Subtotal	\$797,893	\$837,787	\$879,677	\$923,661	\$969,844	\$1,018,336	\$1,069,253	\$1,122,715	\$1,178,851	\$1,237,794	\$1,299,683	\$1,364,667	\$1,432,901	\$1,504,546	\$1,579,773
Total	\$4,734,857	\$4,971,600	\$5,220,180	\$5,481,188	\$5,755,248	\$6,043,010	\$6,345,161	\$6,662,419	\$6,995,540	\$7,345,317	\$7,712,583	\$8,098,212	\$8,503,122	\$8,928,278	\$9,374,692
Total Preliminary Budget Cost Projection	\$4,734,900	\$4,971,600	\$5,220,200	\$5,481,200	\$5,755,200	\$6,043,000	\$6,345,200	\$6,662,400	\$6,995,500	\$7,345,300	\$7,712,600	\$8,098,200	\$8,503,100	\$8,928,300	\$9,374,700



GoRaleigh/GoWake Access Scenario A Cost Escalation

 															
Scenario A.1: Budget Escalation Calculator															
Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$976,605	\$1,025,435	\$1,076,707	\$1,130,542	\$1,187,069	\$1,246,423	\$1,308,744	\$1,374,181	\$1,442,890	\$1,515,035	\$1,590,787	\$1,670,326	\$1,753,842	\$1,841,534	\$1,933,611
Site Landscaping/Security Fencing	\$170,940	\$179,487	\$188,461	\$197,884	\$207,779	\$218,168	\$229,076	\$240,530	\$252,556	\$265,184	\$278,443	\$292,365	\$306,984	\$322,333	\$338,450
Other Paving – Drives and Circulation (Asphalt and Concrete)	\$2,316,615	\$2,432,446	\$2,554,068	\$2,681,771	\$2,815,860	\$2,956,653	\$3,104,486	\$3,259,710	\$3,422,695	\$3,593,830	\$3,773,522	\$3,962,198	\$4,160,308	\$4,368,323	\$4,586,739
Total Exterior Bus Parking	\$1,008,525	\$1,058,951	\$1,111,899	\$1,167,494	\$1,225,868	\$1,287,162	\$1,351,520	\$1,419,096	\$1,490,051	\$1,564,553	\$1,642,781	\$1,724,920	\$1,811,166	\$1,901,724	\$1,996,811
Subtotal for Site work	\$4,472,685	\$4,696,319	\$4,931,135	\$5,177,692	\$5,436,577	\$5,708,405	\$5,993,826	\$6,293,517	\$6,608,193	\$6,938,602	\$7,285,533	\$7,649,809	\$8,032,300	\$8,433,915	\$8,855,610
Building Areas															
Total Administrative Area for the Facility (SF)	\$2,474,010	\$2,597,711	\$2,727,596	\$2,863,976	\$3,007,175	\$3,157,533	\$3,315,410	\$3,481,181	\$3,655,240	\$3,838,002	\$4,029,902	\$4,231,397	\$4,442,967	\$4,665,115	\$4,898,371
Total Operations Areas for the Facility (SF)	\$3,056,130	\$3,208,937	\$3,369,383	\$3,537,852	\$3,714,745	\$3,900,482	\$4,095,506	\$4,300,282	\$4,515,296	\$4,741,061	\$4,978,114	\$5,227,019	\$5,488,370	\$5,762,789	\$6,050,928
Total Vehicle Maintenance Areas for the Facility (SF)	\$4,686,045	\$4,920,347	\$5,166,365	\$5,424,683	\$5,695,917	\$5,980,713	\$6,279,748	\$6,593,736	\$6,923,423	\$7,269,594	\$7,633,074	\$8,014,727	\$8,415,464	\$8,836,237	\$9,278,049
Total Parts Storage Areas for the Facility (SF)	\$687,645	\$722,027	\$758,129	\$796,035	\$835,837	\$877,629	\$921,510	\$967,586	\$1,015,965	\$1,066,763	\$1,120,101	\$1,176,106	\$1,234,912	\$1,296,657	\$1,361,490
Total Service Areas (Fuel/Fare/Wash)	\$964,110	\$1,012,316	\$1,062,931	\$1,116,078	\$1,171,882	\$1,230,476	\$1,292,000	\$1,356,600	\$1,424,430	\$1,495,651	\$1,570,434	\$1,648,955	\$1,731,403	\$1,817,973	\$1,908,872
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$481,845	\$505,937	\$531,234	\$557,796	\$585,686	\$614,970	\$645,718	\$678,004	\$711,905	\$747,500	\$784,875	\$824,118	\$865,324	\$908,591	\$954,020
Maintenance & Storage Equipment	\$936,285	\$983,099	\$1,032,254	\$1,083,867	\$1,138,060	\$1,194,963	\$1,254,711	\$1,317,447	\$1,383,319	\$1,452,485	\$1,525,110	\$1,601,365	\$1,681,433	\$1,765,505	\$1,853,780
Fuel and Wash Equipment	\$672,000	\$705,600	\$740,880	\$777,924	\$816,820	\$857,661	\$900,544	\$945,571	\$992,850	\$1,042,493	\$1,094,617	\$1,149,348	\$1,206,815	\$1,267,156	\$1,330,514
Subtotal for Building Areas	\$13,958,070	\$14,655,974	\$15,388,772	\$16,158,211	\$16,966,121	\$17,814,427	\$18,705,149	\$19,640,406	\$20,622,427	\$21,653,548	\$22,736,225	\$23,873,036	\$25,066,688	\$26,320,023	\$27,636,024
Subtotal	\$18,430,755	\$19,352,293	\$20,319,907	\$21,335,903	\$22,402,698	\$23,522,833	\$24,698,974	\$25,933,923	\$27,230,619	\$28,592,150	\$30,021,758	\$31,522,846	\$33,098,988	\$34,753,937	\$36,491,634
Land Acquisition	\$2,818,620	\$2,959,551	\$3,107,529	\$3,262,905	\$3,426,050	\$3,597,353	\$3,777,220	\$3,966,081	\$4,164,385	\$4,372,605	\$4,591,235	\$4,820,797	\$5,061,837	\$5,314,928	\$5,580,675
Architectural/Engineering Fees	\$1,843,076	\$1,935,229	\$2,031,991	\$2,133,590	\$2,240,270	\$2,352,283	\$2,469,897	\$2,593,392	\$2,723,062	\$2,859,215	\$3,002,176	\$3,152,285	\$3,309,899	\$3,475,394	\$3,649,163
Surveys/Tests/Reports	\$184,308	\$193,523	\$203,199	\$213,359	\$224,027	\$235,228	\$246,990	\$259,339	\$272,306	\$285,922	\$300,218	\$315,228	\$330,990	\$347,539	\$364,916
Environmental Reports	\$52,500	\$55,125	\$57,881	\$60,775	\$63,814	\$67,005	\$70,355	\$73,873	\$77,566	\$81,445	\$85,517	\$89,793	\$94,282	\$98,997	\$103,946
Commissioning	\$184,308	\$193,523	\$203,199	\$213,359	\$224,027	\$235,228	\$246,990	\$259,339	\$272,306	\$285,922	\$300,218	\$315,228	\$330,990	\$347,539	\$364,916
Additional Contingency (Planning Level)	\$2,764,613	\$2,902,844	\$3,047,986	\$3,200,385	\$3,360,405	\$3,528,425	\$3,704,846	\$3,890,088	\$4,084,593	\$4,288,823	\$4,503,264	\$4,728,427	\$4,964,848	\$5,213,091	\$5,473,745
Construction Management - In-house	\$552,922.65	\$580,568.78	\$609,597.22	\$640,077.08	\$672,080.94	\$705,684.98	\$740,969.23	\$778,017.69	\$816,918.58	\$857,764.51	\$900,652.73	\$945,685.37	\$992,969.64	\$1,042,618.12	\$1,094,749.03
Subtotal	\$8,400,347	\$8,820,364	\$9,261,382	\$9,724,451	\$10,210,674	\$10,721,207	\$11,257,268	\$11,820,131	\$12,411,138	\$13,031,695	\$13,683,279	\$14,367,443	\$15,085,815	\$15,840,106	\$16,632,111
Total	\$26,831,102	\$28,172,657	\$29,581,289	\$31,060,354	\$32,613,372	\$34,244,040	\$35,956,242	\$37,754,054	\$39,641,757	\$41,623,845	\$43,705,037	\$45,890,289	\$48,184,803	\$50,594,044	\$53,123,746
Total Preliminary Budget Cost Projection	\$26,831,100	\$28,172,700	\$29,581,300	\$31,060,400	\$32,613,400	\$34,244,000	\$35,956,200	\$37,754,100	\$39,641,800	\$41,623,800	\$43,705,000	\$45,890,300	\$48,184,800	\$50,594,000	\$53,123,700



Preliminary Budget Worksheet



Scenario A.2: Budget Escalation Calculator

Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$852,390	\$895,010	\$939,760	\$986,748	\$1,036,085	\$1,087,890	\$1,142,284	\$1,199,398	\$1,259,368	\$1,322,337	\$1,388,453	\$1,457,876	\$1,530,770	\$1,607,308	\$1,687,674
Site Landscaping/Security Fencing	\$149,205	\$156,665	\$164,499	\$172,723	\$181,360	\$190,428	\$199,949	\$209,946	\$220,444	\$231,466	\$243,039	\$255,191	\$267,951	\$281,348	\$295,416
Other Paving – Drives and Circulation (Asphalt and Concrete)	\$2,071,650	\$2,175,233	\$2,283,994	\$2,398,194	\$2,518,104	\$2,644,009	\$2,776,209	\$2,915,020	\$3,060,771	\$3,213,809	\$3,374,500	\$3,543,225	\$3,720,386	\$3,906,405	\$4,101,725
Total Exterior Bus Parking	\$766,500	\$804,825	\$845,066	\$887,320	\$931,686	\$978,270	\$1,027,183	\$1,078,542	\$1,132,470	\$1,189,093	\$1,248,548	\$1,310,975	\$1,376,524	\$1,445,350	\$1,517,618
Subtotal for Site work	\$3,839,745	\$4,031,732	\$4,233,319	\$4,444,985	\$4,667,234	\$4,900,596	\$5,145,626	\$5,402,907	\$5,673,052	\$5,956,705	\$6,254,540	\$6,567,267	\$6,895,630	\$7,240,412	\$7,602,432
Building Areas															
Total Administrative Area for the Facility (SF)	\$2,364,915	\$2,483,161	\$2,607,319	\$2,737,685	\$2,874,569	\$3,018,297	\$3,169,212	\$3,327,673	\$3,494,057	\$3,668,759	\$3,852,197	\$4,044,807	\$4,247,048	\$4,459,400	\$4,682,370
Total Operations Areas for the Facility (SF)	\$2,874,270	\$3,017,984	\$3,168,883	\$3,327,327	\$3,493,693	\$3,668,378	\$3,851,797	\$4,044,387	\$4,246,606	\$4,458,936	\$4,681,883	\$4,915,977	\$5,161,776	\$5,419,865	\$5,690,858
Total Vehicle Maintenance Areas for the Facility (SF)	\$4,686,045	\$4,920,347	\$5,166,365	\$5,424,683	\$5,695,917	\$5,980,713	\$6,279,748	\$6,593,736	\$6,923,423	\$7,269,594	\$7,633,074	\$8,014,727	\$8,415,464	\$8,836,237	\$9,278,049
Total Parts Storage Areas for the Facility (SF)	\$560,280	\$588,294	\$617,709	\$648,594	\$681,024	\$715,075	\$750,829	\$788,370	\$827,789	\$869,178	\$912,637	\$958,269	\$1,006,182	\$1,056,492	\$1,109,316
Total Service Areas (Fuel/Fare/Wash)	\$964,110	\$1,012,316	\$1,062,931	\$1,116,078	\$1,171,882	\$1,230,476	\$1,292,000	\$1,356,600	\$1,424,430	\$1,495,651	\$1,570,434	\$1,648,955	\$1,731,403	\$1,817,973	\$1,908,872
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$456,435	\$479,257	\$503,220	\$528,381	\$554,800	\$582,540	\$611,667	\$642,250	\$674,362	\$708,080	\$743,485	\$780,659	\$819,692	\$860,676	\$903,710
Maintenance & Storage Equipment	\$914,130	\$959,837	\$1,007,828	\$1,058,220	\$1,111,131	\$1,166,687	\$1,225,022	\$1,286,273	\$1,350,586	\$1,418,116	\$1,489,021	\$1,563,473	\$1,641,646	\$1,723,728	\$1,809,915
Fuel and Wash Equipment	\$672,000	\$705,600	\$740,880	\$777,924	\$816,820	\$857,661	\$900,544	\$945,571	\$992,850	\$1,042,493	\$1,094,617	\$1,149,348	\$1,206,815	\$1,267,156	\$1,330,514
Subtotal for Building Areas	\$13,492,185	\$14,166,794	\$14,875,134	\$15,618,891	\$16,399,835	\$17,219,827	\$18,080,818	\$18,984,859	\$19,934,102	\$20,930,807	\$21,977,348	\$23,076,215	\$24,230,026	\$25,441,527	\$26,713,603
Subtotal	\$17,331,930	\$18,198,527	\$19,108,453	\$20,063,875	\$21,067,069	\$22,120,423	\$23,226,444	\$24,387,766	\$25,607,154	\$26,887,512	\$28,231,888	\$29,643,482	\$31,125,656	\$32,681,939	\$34,316,036
Land Acquisition	\$2,460,045	\$2,583,047	\$2,712,200	\$2,847,810	\$2,990,200	\$3,139,710	\$3,296,696	\$3,461,530	\$3,634,607	\$3,816,337	\$4,007,154	\$4,207,512	\$4,417,887	\$4,638,782	\$4,870,721
Architectural/Engineering Fees	\$1,733,193	\$1,819,853	\$1,910,845	\$2,006,388	\$2,106,707	\$2,212,042	\$2,322,644	\$2,438,777	\$2,560,715	\$2,688,751	\$2,823,189	\$2,964,348	\$3,112,566	\$3,268,194	\$3,431,604
Surveys/Tests/Reports	\$173,319	\$181,985	\$191,085	\$200,639	\$210,671	\$221,204	\$232,264	\$243,878	\$256,072	\$268,875	\$282,319	\$296,435	\$311,257	\$326,819	\$343,160
Environmental Reports	\$52,500	\$55,125	\$57,881	\$60,775	\$63,814	\$67,005	\$70,355	\$73,873	\$77,566	\$81,445	\$85,517	\$89,793	\$94,282	\$98,997	\$103,946
Commissioning	\$173,319	\$181,985	\$191,085	\$200,639	\$210,671	\$221,204	\$232,264	\$243,878	\$256,072	\$268,875	\$282,319	\$296,435	\$311,257	\$326,819	\$343,160
Additional Contingency (Planning Level)	\$2,599,790	\$2,729,779	\$2,866,268	\$3,009,581	\$3,160,060	\$3,318,063	\$3,483,967	\$3,658,165	\$3,841,073	\$4,033,127	\$4,234,783	\$4,446,522	\$4,668,848	\$4,902,291	\$5,147,405
Construction Management - In-house	\$519,957.90	\$545,955.80	\$573,253.58	\$601,916.26	\$632,012.08	\$663,612.68	\$696,793.32	\$731,632.98	\$768,214.63	\$806,625.36	\$846,956.63	\$889,304.46	\$933,769.68	\$980,458.17	\$1,029,481.08
Subtotal	\$7,712,124	\$8,097,730	\$8,502,617	\$8,927,748	\$9,374,135	\$9,842,842	\$10,334,984	\$10,851,733	\$11,394,320	\$11,964,036	\$12,562,237	\$13,190,349	\$13,849,867	\$14,542,360	\$15,269,478
Total	\$25,044,054	\$26,296,257	\$27,611,070	\$28,991,623	\$30,441,204	\$31,963,264	\$33,561,428	\$35,239,499	\$37,001,474	\$38,851,548	\$40,794,125	\$42,833,831	\$44,975,523	\$47,224,299	\$49,585,514
Total Preliminary Budget Cost Projection	\$25,044,100	\$26,296,300	\$27,611,100	\$28,991,600	\$30,441,200	\$31,963,300	\$33,561,400	\$35,239,500	\$37,001,500	\$38,851,500	\$40,794,100	\$42,833,800	\$44,975,500	\$47,224,300	\$49,585,500



Preliminary Budget Worksheet



Scenario A.3: Budget Escalation Calculator

Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$545,580	\$572,859	\$601,502	\$631,577	\$663,156	\$696,314	\$731,129	\$767,686	\$806,070	\$846,374	\$888,692	\$933,127	\$979,783	\$1,028,772	\$1,080,211
Site Landscaping/Security Fencing	\$95,445	\$100,217	\$105,228	\$110,490	\$116,014	\$121,815	\$127,905	\$134,301	\$141,016	\$148,067	\$155,470	\$163,243	\$171,406	\$179,976	\$188,975
Other Paving – Drives and Circulation (Asphalt and Concrete)	\$1,398,600	\$1,468,530	\$1,541,957	\$1,619,054	\$1,700,007	\$1,785,007	\$1,874,258	\$1,967,971	\$2,066,369	\$2,169,688	\$2,278,172	\$2,392,081	\$2,511,685	\$2,637,269	\$2,769,132
Total Exterior Bus Parking	\$342,930	\$360,077	\$378,080	\$396,984	\$416,834	\$437,675	\$459,559	\$482,537	\$506,664	\$531,997	\$558,597	\$586,527	\$615,853	\$646,646	\$678,978
Subtotal for Site work	\$2,382,555	\$2,501,683	\$2,626,767	\$2,758,105	\$2,896,010	\$3,040,811	\$3,192,852	\$3,352,494	\$3,520,119	\$3,696,125	\$3,880,931	\$4,074,978	\$4,278,726	\$4,492,663	\$4,717,296
Building Areas															
Total Administrative Area for the Facility (SF)	\$1,346,205	\$1,413,515	\$1,484,191	\$1,558,401	\$1,636,321	\$1,718,137	\$1,804,043	\$1,894,246	\$1,988,958	\$2,088,406	\$2,192,826	\$2,302,467	\$2,417,591	\$2,538,470	\$2,665,394
Total Operations Areas for the Facility (SF)	\$1,891,890	\$1,986,485	\$2,085,809	\$2,190,099	\$2,299,604	\$2,414,584	\$2,535,314	\$2,662,079	\$2,795,183	\$2,934,942	\$3,081,689	\$3,235,774	\$3,397,563	\$3,567,441	\$3,745,813
Total Vehicle Maintenance Areas for the Facility (SF)	\$4,227,615	\$4,438,996	\$4,660,946	\$4,893,993	\$5,138,692	\$5,395,627	\$5,665,408	\$5,948,679	\$6,246,113	\$6,558,418	\$6,886,339	\$7,230,656	\$7,592,189	\$7,971,799	\$8,370,389
Total Parts Storage Areas for the Facility (SF)	\$356,580	\$374,409	\$393,129	\$412,786	\$433,425	\$455,096	\$477,851	\$501,744	\$526,831	\$553,173	\$580,831	\$609,873	\$640,366	\$672,385	\$706,004
Total Service Areas (Fuel/Fare/Wash)	\$582,120	\$611,226	\$641,787	\$673,877	\$707,570	\$742,949	\$780,096	\$819,101	\$860,056	\$903,059	\$948,212	\$995,623	\$1,045,404	\$1,097,674	\$1,152,558
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$282,135	\$296,242	\$311,054	\$326,607	\$342,937	\$360,084	\$378,088	\$396,992	\$416,842	\$437,684	\$459,568	\$482,547	\$506,674	\$532,008	\$558,608
Maintenance & Storage Equipment	\$798,735	\$838,672	\$880,605	\$924,636	\$970,867	\$1,019,411	\$1,070,381	\$1,123,900	\$1,180,095	\$1,239,100	\$1,301,055	\$1,366,108	\$1,434,413	\$1,506,134	\$1,581,441
Fuel and Wash Equipment	\$405,720	\$426,006	\$447,306	\$469,672	\$493,155	\$517,813	\$543,704	\$570,889	\$599,433	\$629,405	\$660,875	\$693,919	\$728,615	\$765,046	\$803,298
Subtotal for Building Areas	\$9,891,000	\$10,385,550	\$10,904,828	\$11,450,069	\$12,022,572	\$12,623,701	\$13,254,886	\$13,917,630	\$14,613,512	\$15,344,187	\$16,111,397	\$16,916,967	\$17,762,815	\$18,650,956	\$19,583,503
Subtotal	\$12,273,555	\$12,887,233	\$13,531,594	\$14,208,174	\$14,918,583	\$15,664,512	\$16,447,738	\$17,270,124	\$18,133,631	\$19,040,312	\$19,992,328	\$20,991,944	\$22,041,541	\$23,143,618	\$24,300,799
Land Acquisition	\$1,574,475	\$1,653,199	\$1,735,859	\$1,822,652	\$1,913,784	\$2,009,473	\$2,109,947	\$2,215,444	\$2,326,217	\$2,442,527	\$2,564,654	\$2,692,887	\$2,827,531	\$2,968,907	\$3,117,353
Architectural/Engineering Fees	\$1,227,356	\$1,288,723	\$1,353,159	\$1,420,817	\$1,491,858	\$1,566,451	\$1,644,774	\$1,727,012	\$1,813,363	\$1,904,031	\$1,999,233	\$2,099,194	\$2,204,154	\$2,314,362	\$2,430,080
Surveys/Tests/Reports	\$122,736	\$128,872	\$135,316	\$142,082	\$149,186	\$156,645	\$164,477	\$172,701	\$181,336	\$190,403	\$199,923	\$209,919	\$220,415	\$231,436	\$243,008
Environmental Reports	\$52,500	\$55,125	\$57,881	\$60,775	\$63,814	\$67,005	\$70,355	\$73,873	\$77,566	\$81,445	\$85,517	\$89,793	\$94,282	\$98,997	\$103,946
Commissioning	\$122,736	\$128,872	\$135,316	\$142,082	\$149,186	\$156,645	\$164,477	\$172,701	\$181,336	\$190,403	\$199,923	\$209,919	\$220,415	\$231,436	\$243,008
Additional Contingency (Planning Level)	\$1,841,033	\$1,933,085	\$2,029,739	\$2,131,226	\$2,237,787	\$2,349,677	\$2,467,161	\$2,590,519	\$2,720,045	\$2,856,047	\$2,998,849	\$3,148,792	\$3,306,231	\$3,471,543	\$3,645,120
Construction Management - In-house	\$368,206.65	\$386,616.98	\$405,947.83	\$426,245.22	\$447,557.48	\$469,935.36	\$493,432.13	\$518,103.73	\$544,008.92	\$571,209.37	\$599,769.83	\$629,758.33	\$661,246.24	\$694,308.55	\$729,023.98
Subtotal	\$5,309,042	\$5,574,494	\$5,853,218	\$6,145,879	\$6,453,173	\$6,775,832	\$7,114,623	\$7,470,355	\$7,843,872	\$8,236,066	\$8,647,869	\$9,080,263	\$9,534,276	\$10,010,990	\$10,511,539
Total	\$17,582,597	\$18,461,726	\$19,384,813	\$20,354,053	\$21,371,756	\$22,440,344	\$23,562,361	\$24,740,479	\$25,977,503	\$27,276,378	\$28,640,197	\$30,072,207	\$31,575,817	\$33,154,608	\$34,812,338
Total Preliminary Budget Cost Projection	\$17,582,600	\$18,461,700	\$19,384,800	\$20,354,100	\$21,371,800	\$22,440,300	\$23,562,400	\$24,740,500	\$25,977,500	\$27,276,400	\$28,640,200	\$30,072,200	\$31,575,800	\$33,154,600	\$34,812,300



GoRaleigh/GoWake Access Scenario B Cost Escalation

<h1 style="margin: 0;">Preliminary Budget Worksheet</h1>														
Scenario B: Budget Escalation Calculator														
Item	Escalation Calculator													
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031
Site work														
Site Clearing/Development & Site Utility Extensions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Site Landscaping/Security Fencing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Paving - Drives and Circulation (Asphalt and Concrete)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Exterior Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal for Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building Areas														
Total Administrative Area for the Facility (SF)	\$115,710	\$121,496	\$127,570	\$133,949	\$140,646	\$147,679	\$155,062	\$162,816	\$170,956	\$179,504	\$188,479	\$197,903	\$207,799	\$218,188
Total Operations Areas for the Facility (SF)	\$1,717,275	\$1,803,139	\$1,893,296	\$1,987,960	\$2,087,358	\$2,191,726	\$2,301,313	\$2,416,378	\$2,537,197	\$2,664,057	\$2,797,260	\$2,937,123	\$3,083,979	\$3,238,178
Total Vehicle Maintenance Areas for the Facility (SF)	\$377,685	\$396,569	\$416,398	\$437,218	\$459,078	\$482,032	\$506,134	\$531,441	\$558,013	\$585,913	\$615,209	\$645,970	\$678,268	\$712,181
Total Parts Storage Areas for the Facility (SF)	\$74,235	\$77,947	\$81,844	\$85,936	\$90,233	\$94,745	\$99,482	\$104,456	\$109,679	\$115,163	\$120,921	\$126,967	\$133,315	\$139,981
Total Service Areas (Fuel/Fare/Wash)	\$152,775	\$160,414	\$168,434	\$176,856	\$185,699	\$194,984	\$204,733	\$214,970	\$225,718	\$237,004	\$248,854	\$261,297	\$274,362	\$288,080
Covered Areas														
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$70,980	\$74,529	\$78,255	\$82,168	\$86,277	\$90,590	\$95,120	\$99,876	\$104,870	\$110,113	\$115,619	\$121,400	\$127,470	\$133,843
Maintenance & Storage Equipment	\$284,025	\$298,226	\$313,138	\$328,794	\$345,234	\$362,496	\$380,621	\$399,652	\$419,634	\$440,616	\$462,647	\$485,779	\$510,068	\$535,571
Fuel and Wash Equipment	\$399,420	\$419,391	\$440,361	\$462,379	\$485,498	\$509,772	\$535,261	\$562,024	\$590,125	\$619,632	\$650,613	\$683,144	\$717,301	\$753,166
Subtotal for Building Areas	\$3,192,105	\$3,351,710	\$3,519,296	\$3,695,261	\$3,880,024	\$4,074,025	\$4,277,726	\$4,491,612	\$4,716,193	\$4,952,003	\$5,199,603	\$5,459,583	\$5,732,562	\$6,019,190
Subtotal	\$3,192,105	\$3,351,710	\$3,519,296	\$3,695,261	\$3,880,024	\$4,074,025	\$4,277,726	\$4,491,612	\$4,716,193	\$4,952,003	\$5,199,603	\$5,459,583	\$5,732,562	\$6,019,190
Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Architectural/Engineering Fees	\$319,211	\$335,171	\$351,930	\$369,526	\$388,002	\$407,402	\$427,773	\$449,161	\$471,619	\$495,200	\$519,960	\$545,958	\$573,256	\$601,919
Surveys/Tests/Reports	\$31,921	\$33,517	\$35,193	\$36,953	\$38,800	\$40,740	\$42,777	\$44,916	\$47,162	\$49,520	\$51,996	\$54,596	\$57,326	\$60,192
Environmental Reports	\$52,500	\$55,125	\$57,881	\$60,775	\$63,814	\$67,005	\$70,355	\$73,873	\$77,566	\$81,445	\$85,517	\$89,793	\$94,282	\$98,997
Commissioning	\$31,921	\$33,517	\$35,193	\$36,953	\$38,800	\$40,740	\$42,777	\$44,916	\$47,162	\$49,520	\$51,996	\$54,596	\$57,326	\$60,192
Additional Contingency (Planning Level)	\$478,816	\$502,757	\$527,894	\$554,289	\$582,004	\$611,104	\$641,659	\$673,742	\$707,429	\$742,800	\$779,940	\$818,937	\$859,884	\$902,879
Construction Management - In-house	\$95,763.15	\$100,551.31	\$105,578.87	\$110,857.82	\$116,400.71	\$122,220.74	\$128,331.78	\$134,748.37	\$141,485.79	\$148,560.08	\$155,988.08	\$163,787.48	\$171,976.86	\$180,575.70
Subtotal	\$1,010,132	\$1,060,638	\$1,113,670	\$1,169,353	\$1,227,821	\$1,289,212	\$1,353,673	\$1,421,356	\$1,492,424	\$1,567,045	\$1,645,398	\$1,727,668	\$1,814,051	\$1,904,754
Total	\$4,202,237	\$4,412,348	\$4,632,966	\$4,864,614	\$5,107,845	\$5,363,237	\$5,631,399	\$5,912,969	\$6,208,617	\$6,519,048	\$6,845,000	\$7,187,250	\$7,546,613	\$7,923,944
Total Preliminary Budget Cost Projection	\$4,202,200	\$4,412,300	\$4,633,000	\$4,864,600	\$5,107,800	\$5,363,200	\$5,631,400	\$5,913,000	\$6,208,600	\$6,519,000	\$6,845,000	\$7,187,300	\$7,546,600	\$7,923,900



GoTriangle Scenario A Cost Escalation

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>															
Budget Escalation Calculator															
Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$51,605	\$54,185	\$56,894	\$59,739	\$62,726	\$65,862	\$69,156	\$72,613	\$76,244	\$80,056	\$84,059	\$88,262	\$92,675	\$97,309	\$102,174
Site Landscaping/Security Fencing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Paving - Drives and Circulation (Asphalt and Concrete)	\$29,085	\$30,539	\$32,066	\$33,670	\$35,353	\$37,121	\$38,977	\$40,926	\$42,972	\$45,120	\$47,376	\$49,745	\$52,232	\$54,844	\$57,586
Total Exterior Bus Parking	\$86,625	\$90,956	\$95,504	\$100,279	\$105,293	\$110,558	\$116,086	\$121,890	\$127,985	\$134,384	\$141,103	\$148,158	\$155,566	\$163,344	\$171,512
Subtotal for Site work	\$167,315	\$175,681	\$184,465	\$193,688	\$203,372	\$213,541	\$224,218	\$235,429	\$247,200	\$259,560	\$272,538	\$286,165	\$300,474	\$315,497	\$331,272
Building Areas															
Total Administrative Area for the Facility (SF)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operations Areas for the Facility (SF)	\$1,833,720	\$1,925,406	\$2,021,676	\$2,122,760	\$2,228,898	\$2,340,343	\$2,457,360	\$2,580,228	\$2,709,240	\$2,844,702	\$2,986,937	\$3,136,283	\$3,293,098	\$3,457,753	\$3,630,640
Total Vehicle Maintenance Areas for the Facility (SF)	\$363,825	\$382,016	\$401,117	\$421,173	\$442,232	\$464,343	\$487,560	\$511,938	\$537,535	\$564,412	\$592,633	\$622,264	\$653,377	\$686,046	\$720,349
Total Parts Storage Areas for the Facility (SF)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Interior Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Service Areas (Fuel/Fare/Wash)	\$1,655,430	\$1,738,202	\$1,825,112	\$1,916,367	\$2,012,186	\$2,112,795	\$2,218,435	\$2,329,356	\$2,445,824	\$2,568,115	\$2,696,521	\$2,831,347	\$2,972,914	\$3,121,560	\$3,277,638
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$199,710	\$209,696	\$220,180	\$231,189	\$242,749	\$254,886	\$267,631	\$281,012	\$295,063	\$309,816	\$325,307	\$341,572	\$358,650	\$376,583	\$395,412
Maintenance & Storage Equipment	\$177,555	\$186,433	\$195,754	\$205,542	\$215,819	\$226,610	\$237,941	\$249,838	\$262,330	\$275,446	\$289,218	\$303,679	\$318,863	\$334,806	\$351,547
Fuel and Wash Equipment	\$1,153,740	\$1,211,427	\$1,271,998	\$1,335,598	\$1,402,378	\$1,472,497	\$1,546,122	\$1,623,428	\$1,704,599	\$1,789,829	\$1,879,321	\$1,973,287	\$2,071,951	\$2,175,549	\$2,284,326
Subtotal for Building Areas	\$5,383,980	\$5,653,179	\$5,935,838	\$6,232,630	\$6,544,261	\$6,871,474	\$7,215,048	\$7,575,801	\$7,954,591	\$8,352,320	\$8,769,936	\$9,208,433	\$9,668,855	\$10,152,297	\$10,659,912
Subtotal	\$5,551,295	\$5,828,860	\$6,120,303	\$6,426,318	\$6,747,634	\$7,085,015	\$7,439,266	\$7,811,229	\$8,201,791	\$8,611,880	\$9,042,474	\$9,494,598	\$9,969,328	\$10,467,795	\$10,991,184
Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Architectural/Engineering Fees	\$555,129	\$582,886	\$612,030	\$642,632	\$674,763	\$708,502	\$743,927	\$781,123	\$820,179	\$861,188	\$904,247	\$949,460	\$996,933	\$1,046,779	\$1,099,118
Surveys/Tests/Reports	\$55,513	\$58,289	\$61,203	\$64,263	\$67,476	\$70,850	\$74,393	\$78,112	\$82,018	\$86,119	\$90,425	\$94,946	\$99,693	\$104,678	\$109,912
Environmental Reports	\$10,500	\$11,025	\$11,576	\$12,155	\$12,763	\$13,401	\$14,071	\$14,775	\$15,513	\$16,289	\$17,103	\$17,959	\$18,856	\$19,799	\$20,789
Commissioning	\$55,513	\$58,289	\$61,203	\$64,263	\$67,476	\$70,850	\$74,393	\$78,112	\$82,018	\$86,119	\$90,425	\$94,946	\$99,693	\$104,678	\$109,912
Additional Contingency (Planning Level)	\$277,565	\$291,443	\$306,015	\$321,316	\$337,382	\$354,251	\$371,963	\$390,561	\$410,090	\$430,594	\$452,124	\$474,730	\$498,466	\$523,390	\$549,559
Construction Management - In-house	\$166,538.85	\$174,865.79	\$183,609.08	\$192,789.53	\$202,429.01	\$212,550.46	\$223,177.98	\$234,336.88	\$246,053.73	\$258,356.41	\$271,274.23	\$284,837.95	\$299,079.84	\$314,033.84	\$329,735.53
Subtotal	\$1,120,759	\$1,176,797	\$1,235,637	\$1,297,419	\$1,362,290	\$1,430,404	\$1,501,924	\$1,577,020	\$1,655,871	\$1,738,665	\$1,825,598	\$1,916,878	\$2,012,722	\$2,113,358	\$2,219,026
Total	\$6,672,054	\$7,005,657	\$7,355,939	\$7,723,736	\$8,109,923	\$8,515,419	\$8,941,190	\$9,388,250	\$9,857,662	\$10,350,546	\$10,868,073	\$11,411,476	\$11,982,050	\$12,581,153	\$13,210,210
Total Preliminary Budget Cost Projection	\$6,672,100	\$7,005,700	\$7,355,900	\$7,723,700	\$8,109,900	\$8,515,400	\$8,941,200	\$9,388,200	\$9,857,700	\$10,350,500	\$10,868,100	\$11,411,500	\$11,982,100	\$12,581,200	\$13,210,200



GoTriangle Scenario B Cost Escalation

<div style="display: flex; justify-content: space-between; align-items: center;"> <h1 style="margin: 0;">Preliminary Budget Worksheet</h1> <div style="text-align: right;"> Maintenance Design Group </div> </div>															
Budget Escalation Calculator															
Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$1,512,735	\$1,588,372	\$1,667,790	\$1,751,180	\$1,838,739	\$1,930,676	\$2,027,210	\$2,128,570	\$2,234,999	\$2,346,748	\$2,464,086	\$2,587,290	\$2,716,655	\$2,852,487	\$2,995,112
Site Landscaping/Security Fencing	\$264,705	\$277,940	\$291,837	\$306,429	\$321,751	\$337,838	\$354,730	\$372,467	\$391,090	\$410,644	\$431,177	\$452,735	\$475,372	\$499,141	\$524,098
Other Paving - Drives and Circulation (Asphalt and Concrete)	\$3,152,100	\$3,309,705	\$3,475,190	\$3,648,950	\$3,831,397	\$4,022,967	\$4,224,115	\$4,435,321	\$4,657,087	\$4,889,942	\$5,134,439	\$5,391,161	\$5,660,719	\$5,943,755	\$6,240,942
Total Exterior Bus Parking	\$1,945,020	\$2,042,271	\$2,144,385	\$2,251,604	\$2,364,184	\$2,482,393	\$2,606,513	\$2,736,838	\$2,873,680	\$3,017,364	\$3,168,233	\$3,326,644	\$3,492,976	\$3,667,625	\$3,851,007
Subtotal for Site work	\$6,874,560	\$7,218,288	\$7,579,202	\$7,958,163	\$8,356,071	\$8,773,874	\$9,212,568	\$9,673,196	\$10,156,856	\$10,664,699	\$11,197,934	\$11,757,831	\$12,345,722	\$12,963,008	\$13,611,159
Building Areas															
Total Administrative Area for the Facility (SF)	\$2,401,245	\$2,521,307	\$2,647,373	\$2,779,741	\$2,918,728	\$3,064,665	\$3,217,898	\$3,378,793	\$3,547,732	\$3,725,119	\$3,911,375	\$4,106,944	\$4,312,291	\$4,527,906	\$4,754,301
Total Operations Areas for the Facility (SF)	\$4,547,865	\$4,775,258	\$5,014,021	\$5,264,722	\$5,527,958	\$5,804,356	\$6,094,574	\$6,399,303	\$6,719,268	\$7,055,231	\$7,407,993	\$7,778,393	\$8,167,312	\$8,575,678	\$9,004,462
Total Vehicle Maintenance Areas for the Facility (SF)	\$11,460,540	\$12,033,567	\$12,635,245	\$13,267,008	\$13,930,358	\$14,626,876	\$15,358,220	\$16,126,131	\$16,932,437	\$17,779,059	\$18,668,012	\$19,601,413	\$20,581,483	\$21,610,557	\$22,691,085
Total Parts Storage Areas for the Facility (SF)	\$1,859,130	\$1,952,087	\$2,049,691	\$2,152,175	\$2,259,784	\$2,372,773	\$2,491,412	\$2,615,983	\$2,746,782	\$2,884,121	\$3,028,327	\$3,179,743	\$3,338,730	\$3,505,667	\$3,680,950
Total Interior Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Service Areas (Fuel/Fare/Wash)	\$1,655,430	\$1,738,202	\$1,825,112	\$1,916,367	\$2,012,186	\$2,112,795	\$2,218,435	\$2,329,356	\$2,445,824	\$2,568,115	\$2,696,521	\$2,831,347	\$2,972,914	\$3,121,560	\$3,277,638
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$605,430	\$635,702	\$667,487	\$700,861	\$735,904	\$772,699	\$811,334	\$851,901	\$894,496	\$939,221	\$986,182	\$1,035,491	\$1,087,265	\$1,141,629	\$1,198,710
Maintenance & Storage Equipment	\$2,320,815	\$2,436,856	\$2,558,699	\$2,686,633	\$2,820,965	\$2,962,013	\$3,110,114	\$3,265,620	\$3,428,901	\$3,600,346	\$3,780,363	\$3,969,381	\$4,167,850	\$4,376,243	\$4,595,055
Fuel and Wash Equipment	\$1,153,740	\$1,211,427	\$1,271,998	\$1,335,598	\$1,402,378	\$1,472,497	\$1,546,122	\$1,623,428	\$1,704,599	\$1,789,829	\$1,879,321	\$1,973,287	\$2,071,951	\$2,175,549	\$2,284,326
Subtotal for Building Areas	\$26,004,195	\$27,304,405	\$28,669,625	\$30,103,106	\$31,608,262	\$33,188,675	\$34,848,108	\$36,590,514	\$38,420,039	\$40,341,041	\$42,358,094	\$44,475,998	\$46,699,798	\$49,034,788	\$51,486,527
Subtotal	\$32,878,755	\$34,522,693	\$36,248,827	\$38,061,269	\$39,964,332	\$41,962,549	\$44,060,676	\$46,263,710	\$48,576,896	\$51,005,740	\$53,556,027	\$56,233,829	\$59,045,520	\$61,997,796	\$65,097,686
Land Acquisition	\$4,365,900	\$4,584,195	\$4,813,405	\$5,054,075	\$5,306,779	\$5,572,118	\$5,850,724	\$6,143,260	\$6,450,423	\$6,772,944	\$7,111,591	\$7,467,171	\$7,840,529	\$8,232,556	\$8,644,183
Architectural/Engineering Fees	\$3,287,876	\$3,452,269	\$3,624,883	\$3,806,127	\$3,996,433	\$4,196,255	\$4,406,068	\$4,626,371	\$4,857,690	\$5,100,574	\$5,355,603	\$5,623,383	\$5,904,552	\$6,199,780	\$6,509,769
Surveys/Tests/Reports	\$328,788	\$345,227	\$362,488	\$380,613	\$399,643	\$419,625	\$440,607	\$462,637	\$485,769	\$510,057	\$535,560	\$562,338	\$590,455	\$619,978	\$650,977
Environmental Reports	\$52,500	\$55,125	\$57,881	\$60,775	\$63,814	\$67,005	\$70,355	\$73,873	\$77,566	\$81,445	\$85,517	\$89,793	\$94,282	\$98,997	\$103,946
Commissioning	\$328,788	\$345,227	\$362,488	\$380,613	\$399,643	\$419,625	\$440,607	\$462,637	\$485,769	\$510,057	\$535,560	\$562,338	\$590,455	\$619,978	\$650,977
Additional Contingency (Planning Level)	\$4,931,813	\$5,178,404	\$5,437,324	\$5,709,190	\$5,994,650	\$6,294,382	\$6,609,101	\$6,939,557	\$7,286,534	\$7,650,861	\$8,033,404	\$8,435,074	\$8,856,828	\$9,299,669	\$9,764,653
Construction Management - In-house	\$986,362.65	\$1,035,680.78	\$1,087,464.82	\$1,141,838.06	\$1,198,929.97	\$1,258,876.46	\$1,321,820.29	\$1,387,911.30	\$1,457,306.87	\$1,530,172.21	\$1,606,680.82	\$1,687,014.86	\$1,771,365.60	\$1,859,933.88	\$1,952,930.58
Subtotal	\$14,282,027	\$14,996,128	\$15,745,934	\$16,533,231	\$17,359,892	\$18,227,887	\$19,139,281	\$20,096,246	\$21,101,058	\$22,156,111	\$23,263,916	\$24,427,112	\$25,648,468	\$26,930,891	\$28,277,436
Total	\$47,160,782	\$49,518,821	\$51,994,762	\$54,594,500	\$57,324,225	\$60,190,436	\$63,199,958	\$66,359,956	\$69,677,953	\$73,161,851	\$76,819,944	\$80,660,941	\$84,693,988	\$88,928,687	\$93,375,122
Total Preliminary Budget Cost Projection	\$47,160,800	\$49,518,800	\$51,994,800	\$54,594,500	\$57,324,200	\$60,190,400	\$63,200,000	\$66,360,000	\$69,678,000	\$73,161,900	\$76,819,900	\$80,660,900	\$84,694,000	\$88,928,700	\$93,375,100



GoCary Cost Escalation

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Budget Escalation Calculator															
Item	Escalation Calculator														
	5% 2019	5% 2020	5% 2021	5% 2022	5% 2023	5% 2024	5% 2025	5% 2026	5% 2027	5% 2028	5% 2029	5% 2030	5% 2031	5% 2031	5% 2031
Site work															
Site Clearing/Development & Site Utility Extensions	\$723,430	\$759,601	\$797,581	\$837,460	\$879,333	\$923,300	\$969,465	\$1,017,938	\$1,068,835	\$1,122,277	\$1,178,391	\$1,237,310	\$1,299,176	\$1,364,134	\$1,432,341
Site Landscaping/Security Fencing	\$126,630	\$132,962	\$139,610	\$146,590	\$153,920	\$161,616	\$169,696	\$178,181	\$187,090	\$196,445	\$206,267	\$216,580	\$227,409	\$238,780	\$250,719
Other Paving – Drives and Circulation (Asphalt and Concrete)	\$1,575,315	\$1,654,081	\$1,736,785	\$1,823,624	\$1,914,805	\$2,010,545	\$2,111,073	\$2,216,626	\$2,327,458	\$2,443,831	\$2,566,022	\$2,694,323	\$2,829,039	\$2,970,491	\$3,119,016
Total Exterior Bus Parking	\$842,835	\$884,977	\$929,226	\$975,687	\$1,024,471	\$1,075,695	\$1,129,480	\$1,185,953	\$1,245,251	\$1,307,514	\$1,372,889	\$1,441,534	\$1,513,611	\$1,589,291	\$1,668,756
Subtotal for Site work	\$3,268,210	\$3,431,620	\$3,603,201	\$3,783,361	\$3,972,529	\$4,171,156	\$4,379,713	\$4,598,699	\$4,828,634	\$5,070,066	\$5,323,569	\$5,589,748	\$5,869,235	\$6,162,697	\$6,470,832
Building Areas															
Total Administrative Area for the Facility (SF)	\$1,819,125	\$1,910,081	\$2,005,585	\$2,105,865	\$2,211,158	\$2,321,716	\$2,437,801	\$2,559,692	\$2,687,676	\$2,822,060	\$2,963,163	\$3,111,321	\$3,266,887	\$3,430,231	\$3,601,743
Total Operations Areas for the Facility (SF)	\$2,655,975	\$2,788,774	\$2,928,212	\$3,074,623	\$3,228,354	\$3,389,772	\$3,559,261	\$3,737,224	\$3,924,085	\$4,120,289	\$4,326,303	\$4,542,619	\$4,769,750	\$5,008,237	\$5,258,649
Total Vehicle Maintenance Areas for the Facility (SF)	\$4,049,325	\$4,251,791	\$4,464,381	\$4,687,600	\$4,921,980	\$5,168,079	\$5,426,483	\$5,697,807	\$5,982,697	\$6,281,832	\$6,595,924	\$6,925,720	\$7,272,006	\$7,635,606	\$8,017,387
Total Parts Storage Areas for the Facility (SF)	\$738,570	\$775,499	\$814,273	\$854,987	\$897,736	\$942,623	\$989,754	\$1,039,242	\$1,091,204	\$1,145,764	\$1,203,053	\$1,263,205	\$1,326,366	\$1,392,684	\$1,462,318
Total Interior Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Service Areas (Fuel/Fare/Wash)	\$1,309,770	\$1,375,259	\$1,444,021	\$1,516,222	\$1,592,034	\$1,671,635	\$1,755,217	\$1,842,978	\$1,935,127	\$2,031,883	\$2,133,477	\$2,240,151	\$2,352,159	\$2,469,767	\$2,593,255
Covered Areas															
Total Covered Bus Parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FF&E (Administrative & Operations Areas)	\$389,865	\$409,358	\$429,826	\$451,317	\$473,883	\$497,578	\$522,456	\$548,579	\$576,008	\$604,809	\$635,049	\$666,801	\$700,142	\$735,149	\$771,906
Maintenance & Storage Equipment	\$834,225	\$875,936	\$919,733	\$965,720	\$1,014,006	\$1,064,706	\$1,117,941	\$1,173,838	\$1,232,530	\$1,294,157	\$1,358,865	\$1,426,808	\$1,498,148	\$1,573,056	\$1,651,708
Fuel and Wash Equipment	\$912,870	\$958,514	\$1,006,439	\$1,056,761	\$1,109,599	\$1,165,079	\$1,223,333	\$1,284,500	\$1,348,725	\$1,416,161	\$1,486,969	\$1,561,317	\$1,639,383	\$1,721,353	\$1,807,420
Subtotal for Building Areas	\$12,709,725	\$13,345,211	\$14,012,472	\$14,713,095	\$15,448,750	\$16,221,188	\$17,032,247	\$17,883,859	\$18,778,052	\$19,716,955	\$20,702,803	\$21,737,943	\$22,824,840	\$23,966,082	\$25,164,386
Subtotal	\$15,977,935	\$16,776,831	\$17,615,673	\$18,496,457	\$19,421,279	\$20,392,343	\$21,411,961	\$22,482,559	\$23,606,686	\$24,787,021	\$26,026,372	\$27,327,690	\$28,694,075	\$30,128,779	\$31,635,218
Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Architectural/Engineering Fees	\$1,597,793	\$1,677,683	\$1,761,567	\$1,849,646	\$1,942,128	\$2,039,234	\$2,141,196	\$2,248,256	\$2,360,669	\$2,478,702	\$2,602,637	\$2,732,769	\$2,869,407	\$3,012,878	\$3,163,522
Surveys/Tests/Reports	\$159,779	\$167,768	\$176,157	\$184,965	\$194,213	\$203,923	\$214,120	\$224,826	\$236,067	\$247,870	\$260,264	\$273,277	\$286,941	\$301,288	\$316,352
Environmental Reports	\$52,500	\$55,125	\$57,881	\$60,775	\$63,814	\$67,005	\$70,355	\$73,873	\$77,566	\$81,445	\$85,517	\$89,793	\$94,282	\$98,997	\$103,946
Commissioning	\$159,779	\$167,768	\$176,157	\$184,965	\$194,213	\$203,923	\$214,120	\$224,826	\$236,067	\$247,870	\$260,264	\$273,277	\$286,941	\$301,288	\$316,352
Additional Contingency (Planning Level)	\$2,396,690	\$2,516,525	\$2,642,351	\$2,774,468	\$2,913,192	\$3,058,852	\$3,211,794	\$3,372,384	\$3,541,003	\$3,718,053	\$3,903,956	\$4,099,154	\$4,304,111	\$4,519,317	\$4,745,283
Construction Management - In-house	\$479,338.04	\$503,304.94	\$528,470.19	\$554,893.70	\$582,638.38	\$611,770.30	\$642,358.82	\$674,476.76	\$708,200.59	\$743,610.62	\$780,791.16	\$819,830.71	\$860,822.25	\$903,863.36	\$949,056.53
Subtotal	\$4,845,880	\$5,088,174	\$5,342,583	\$5,609,712	\$5,890,198	\$6,184,708	\$6,493,943	\$6,818,640	\$7,159,572	\$7,517,551	\$7,893,429	\$8,288,100	\$8,702,505	\$9,137,630	\$9,594,512
Total	\$20,823,815	\$21,865,006	\$22,958,256	\$24,106,169	\$25,311,477	\$26,577,051	\$27,905,904	\$29,301,199	\$30,766,259	\$32,304,572	\$33,919,800	\$35,615,790	\$37,396,580	\$39,266,400	\$41,229,729
Total Preliminary Budget Cost Projection	\$20,823,800	\$21,865,000	\$22,958,300	\$24,106,200	\$25,311,500	\$26,577,100	\$27,905,900	\$29,301,200	\$30,766,300	\$32,304,600	\$33,919,800	\$35,615,800	\$37,396,600	\$39,266,400	\$41,229,700