

Bus Lot Update

Community Brief

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Requirement

- Need for a central bus lot to support James Island Schools
- Buses are currently parked at Ft Johnson Middle School



“Why can’t the buses be parked at all of the schools?”

- Need a centralized bus lot
 - Safety of students, faculty, and bus drivers
 - Timely transportation of students
 - Better bus operations

James Island Sites Reviewed

- Ft Johnson Middle School James Island Middle School
- James Island Charter High School
- Stiles Point Elementary School
- James Island Elementary School
- Gresham-Meggett Campus
- James Island Public Properties (new)

Areas behind James Island Elementary School is the only option with enough space for safe parking

Public James Island Sites Reviewed

The District has reviewed ALL other government owned properties on James Island

- All but 3 are currently in use as municipal facilities and/or parks
- 1 is designated for a future Town of James Island park
- 2 contain wetlands and are currently being planned for a future City of Charleston Park

There is no available public property on James Island for the bus lot

Planning Completed to Date

- Traffic Study
 - Included vehicles for new library
 - Limited impact on surrounding transportation network
- Lot design
- All permitting
- Air dispersion (new)

Bus Lot Features/Operations

- 38 bus parking positions; would use 26
- Site design to include vegetation buffers
- Buses cannot idle for more than 10 minutes



Air Dispersion

Purpose: To estimate the pollutant risk from exposure to particulate matter, carbon monoxide, and nitrogen oxide concentrations from idling buses

Results:

- Pollutants are well below the ambient air quality standards
- Maximum concentration occurs within the bus lot boundaries and quickly dissipate to lower concentrations moving further away from the fence line

Air Dispersion Summary

Pollutant	Averaging Period ¹	South Carolina Ambient Air Quality Standards ($\mu\text{g}/\text{m}^3$) ²	Model Results ($\mu\text{g}/\text{m}^3$) ³	Concentration at fence line on east ($\mu\text{g}/\text{m}^3$)		
				FL #1	FL #2	FL #3
Particulate Matter with diameter less than 10 microns (PM_{10})	24 hours	150	9.34	8.58	3.06	1.03
	Annual	50	1.26	1.23	0.26	0.06
Carbon Monoxide	1 hour	40,000	3233	3233	911	328.26
	8 hours	10,000	746	661.79	244.17	84.49
Nitrogen Oxides	Annual	100	53.5	52.18	11.07	2.42