

TEAM MEETING AGENDA

FCPS BUS FACILITY FEASIBILITY STUDY

MAY 26, 2016

1. Recap of Superintendent's Cabinet presentation
2. Discuss new capacity analysis
3. Discuss facility space summary
4. Other feedback on the report
5. Next steps

Bus Garage Capacity Analysis

Capacity Goals - Average Area Ratios

Average area school bus to mechanic ratio	21
Average area school buses per bay	35
Average area mechanics per bay per shift	1.6

Capacity - Existing and Future FCPS Facilities

	FCPS - Existing Facility	FCPS - Existing Facility in 2040	Future Facility in 2040
Number of School Buses	426	514	514
Number of School Bus Repair Bays	3	3	12
Number of Mechanics	10	10	20
Bus to Mechanic Ratio	43	51	26
Bus to Bay Ratio	142	171	43
Mechanics Per Bay	3.3	3.3	1.7
Mechanics Per Bay per shift	1.7	1.7	0.8
Percent Space Capacity	406%	490%	122%
Percent Staff Capacity	203%	245%	122%

Existing Transportation Facilities

Space	Number of Staff	SF	Grossing Factor	Gross SF	Comments
7446 Hayward Road					
Large Maintenance Warehouse		1135	1.23	1392	
Tire Shop		945	1.23	1159	
Vehicle Maintenance Break Room		110	1.23	135	
Tire Shop Restroom		80	1.23	98	
Bus and Vehicle Maintenance Shop	16	5010	1.11	5586	
Fleet Manager Office	1	85	1.11	94	
Shop Admin	1	110	1.11	122	
Shop Foreman	1	100	1.11	111	
Closets		55	1.11	61	
Restroom		35	1.11	39	
White Fleet Service Bay	1	640	1.11	710	
White Fleet Equipment Storage		285	1.11	316	
Bus Service Bay 1	3	670	1.11	744	
Bus Service Bay 2	3	730	1.11	810	
Bus Service Bay 3	3	740	1.11	821	
Pit Bay	2	760	1.11	844	
Parts Storage	1	440	1.11	488	
Parts Trailer		360	1.11	400	
Fueling Station		1820	1.00	1820	2 pumps
Transportation Offices	19	2270	1.48	3350	
Director of Transportation	1	205	1.48	303	
Administrative Secretaries	2.5	400	1.48	592	
Transportation Manager	1	110	1.48	163	
Transportation Manager	1	140	1.48	207	
Transportation Manager	1	105	1.48	155	
Transportation Manager	1	105	1.48	155	
Transportation Manager	1	95	1.48	141	
Field Trips	2	80	1.48	118	
Payroll Specialist	1	100	1.48	148	
Routing Department	2.5	100	1.48	148	
Routing Manager	1	110	1.48	163	
Dispatch and Routing	4	215	1.48	318	
Transportation Conference		245	1.48	363	
Lobby		115	1.48	170	
Men's Restroom		60	1.48	89	
Women's Restroom		85	1.48	126	
Driver Training	2.5	750	1.04	777	
Offices	2	300	1.04	312	
Classroom	0.5	450	1.04	468	
Driver Lounge Trailer	1	415	1.08	450	
Driver Lounge		115	1.08	124	
Video	1	300	1.08	324	
Linganore High School					
Refueling Station		675	1.00	675	
Crestwood Middle School					
Bus Driver testing course					

Future Transportation Facilities

Space	Number of Staff	SF	Grossing Factor	Gross SF	Notes
Future Facility - Summary of All Spaces Needed					
(additional spaces may be needed if a decentralized operational model is chosen)					
Transportation Management	12	1700	1.4	2380	
Director of Transportation	1	200			
Administrative Secretaries	3	400			
Transportation Manager	7	700			2 new to account for growth
Payroll Specialist	1	100			
Transportation Conference		300			
Routing, Dispatch, Field Trips	11	1050	1.4	1470	
Routing Department	6	400			One new to account for growth
Routing Manager	1	100			
Dispatch	2	400			
Field Trips	2	150			
Bus Camera Review and Storage	1	300	1.4	420	Room is larger to account for multiple part time employees
Driver Services		250	1.4	350	
Driver's Lounge		250			
Driver Training	3	1000	1.4	1400	
Offices	2	200			
Classroom	1	600			
Storage		200			
General Shared Services	0	950	1.4	1330	
Lobby		200			
Men's Restrooms		200			
Women's Restrooms		200			
Technology Closet		150			
Mechanical Room		200			
Bus and Vehicle Maintenance Shop	25	22950	1.4	32130	
Fleet Manager Office	1	100			
Shop Admin	1	100			
Shop Foreman	1	100			
Lead Mechanic Office		100			
Office Storage		200			
Men's Restroom and Locker Room		150			
Women's Restroom and Locker Room		150			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Garage Break Room/Meeting Room		300			
Customer Service Area		150			

White Fleet Service Bay 1	1	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
White Fleet Service Bay 2	1	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 1	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 2	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 3	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 4	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 5	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 6	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 7	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 8	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 9	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 10	2	1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 11		1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Service Bay 12		1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Quick Service Bay 1		1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Quick Service Bay 2		1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Bus Wash Bay		1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Other Specialized Bay?		1200			Approximately 22' x 60' to allow for tool storage and vehicle size increases
Parts and Tool Storage	3	3300	1.4	4620	
Parts room	2	1000			Centralized within building
Tire Shop/Storage	1	1500			
Large Tool Storage		800			
Fueling Stations					
Hayward Road Refueling					
Linganore Refueling					
Other Refueling Station - West County?					
Linganore High School					
Refueling Station		675	1.00	675	
Crestwood Middle School					
Bus Driver testing course					

Existing and Future Facility Summary Comparison

Department Function	Existing SF	Future SF	Percent Change in Area	Existing Staff	Future Staff	Percent Change in Staff
Transportation Management	2227	2380	7%	9.5	12	26%
Routing, Dispatch, Field Trips	747	1470	97%	9.5	11	16%
Bus Camera Review and Storage	324	420	30%	1	1	0%
Driver Services	124	350	182%	0	0	
Driver Training	780	1400	79%	2.5	3	20%
General Shared Services	385	1330	246%	0	0	
Bus and Vehicle Maintenance Shop	4906	32130	555%	15	25	67%
Parts and Tool Storage	2047	4620	126%	2	3	50%
TOTAL	11541	44100	282%	40	55	39%

FCPS BUS FACILITY FEASIBILITY STUDY




MAY 26, 2016

AGENDA



- Recap of Superintendent's Cabinet presentation
- Discuss new capacity analysis
- Discuss facility space summary
- Other feedback on the report
- Next steps



**RECAP –
SUPERINTENDENT'S
CABINET
PRESENTATION**

MAY 16, 2016



PROJECT OVERVIEW

**[HTTPS://WWW.YOUTUBE.COM/WATCH?
V=0R7LOXZFLEA](https://www.youtube.com/watch?v=0R7LOXZFLEA)**

PROJECT PROCESS



- Three Phases (16 month project):
 - Phase 1 (January – June 2016): Inventory of existing conditions and definition of project scope
 - Phase 2: (July – December 2016): Feasibility study of existing and additional site resources to satisfy the project scope
 - Phase 3: (January – April 2017): Recommendation that optimizes FCPS bus operations and taxpayer dollars
- Project team meets on a biweekly basis, steering committee meets bimonthly
- Team will present to the BOE at end of Phases 1 and 3

DATA GATHERING AND EMPLOYEE OUTREACH

DATA GATHERING



- Inventory of existing facilities and Hayward Road facility tour
- Data collection and analysis
 - Best practices for bus garage size and capacity
 - Geographic distribution of resources and students
 - Population projections
- Visits to other area transportation facilities
 - March 31 – Baltimore County Public Schools, Baltimore City public works
 - April 7 – Washington County Public Schools, Mack Truck garage in Hagerstown
 - May 13 – Frederick County Fleet Maintenance Shop


OUTREACH



- Extensive employee outreach conducted
 - Interviews with bus garage employees
 - Surveys of bus drivers and bus aides
- Goal was to determine employee priorities and preferences




MAJOR CONCLUSIONS



TEAM PRIORITIES

- Efficiency and cost effectiveness
- Stewardship of resources
- Security
- Health and safety



EFFICIENCY AND COST EFFECTIVENESS



- FCPS bus maintenance facilities will have adequate space for vehicle maintenance and tool storage.
- FCPS will have the capacity to complete routine maintenance and repairs in a cost-effective manner.
- The FCPS bus garage will have adequate capacity for storage of vehicle parts.
- FCPS will provide bus facilities and services in geographically efficient locations.

STEWARDSHIP OF RESOURCES



- FCPS will provide adequate facilities for vehicle washing to prolong the life of the vehicles.
- FCPS strives to maintain its building stock and evaluate facilities for replacement on a regular basis.
- FCPS plans for facilities to operate at an efficient capacity by monitoring student populations and planning for new facility capacity where necessary.

SECURITY



- FCPS will minimize security risks.
- FCPS will provide adequate fleet vehicle parking.

HEALTH AND SAFETY



- FCPS will provide equipment to help mechanics perform their jobs efficiently and effectively.
- FCPS will provide adequate facilities for employee breaks.
- FCPS will comply with environmental codes and regulations.

FUTURE FACILITY NEEDS



- Bus maintenance
- Parts storage
- Bus wash
- Routing and dispatch
- Restrooms, showers, break rooms
- Driver training
- Number of parking spaces to be determined

NEXT STEPS

NEXT STEPS



- Phase 1 BOE presentation at July 13 meeting
- Phase 2 – Feasibility Phase
 - Renovation of existing facilities or new construction
 - Centralized or decentralized facilities
 - Evaluation of FCPS-owned land, County-owned land, and land available for purchase
 - Engineering and cost-benefit analysis of top options
- Phase 3 – Recommendation Phase
 - Selection of one or more options for recommendation to the BOE
 - Phasing plan

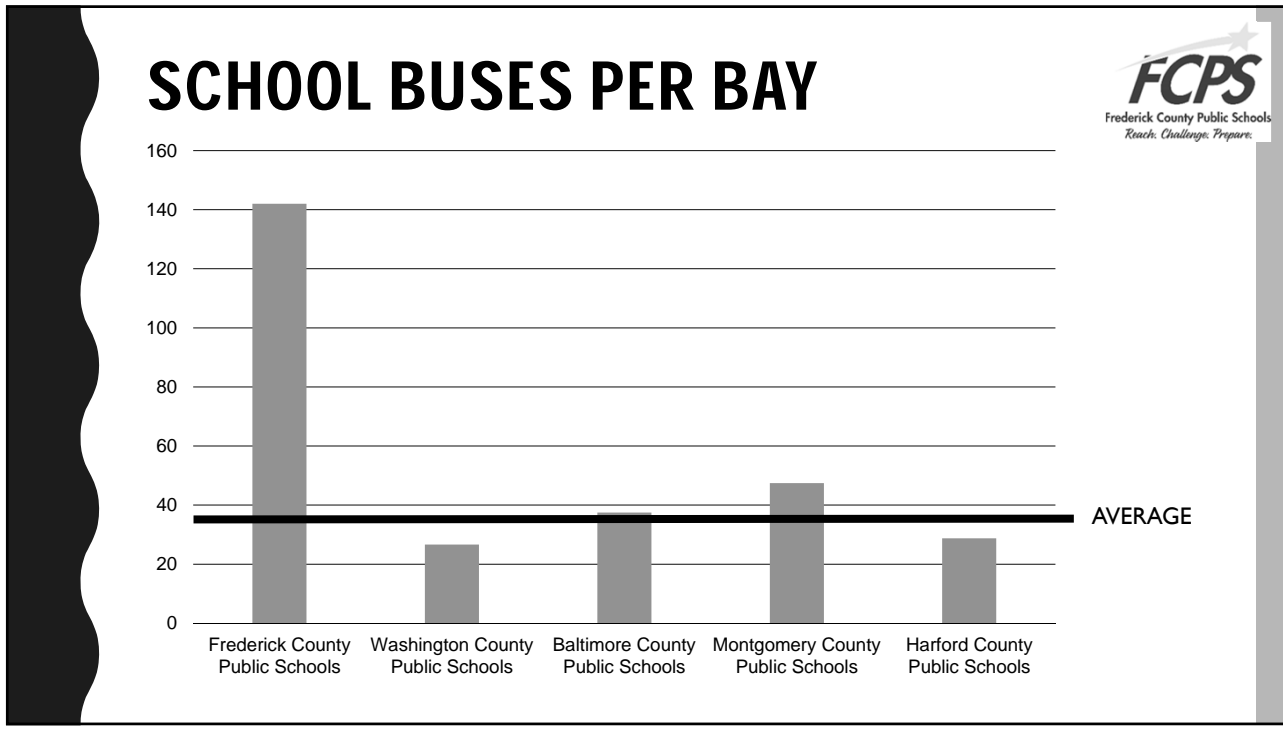
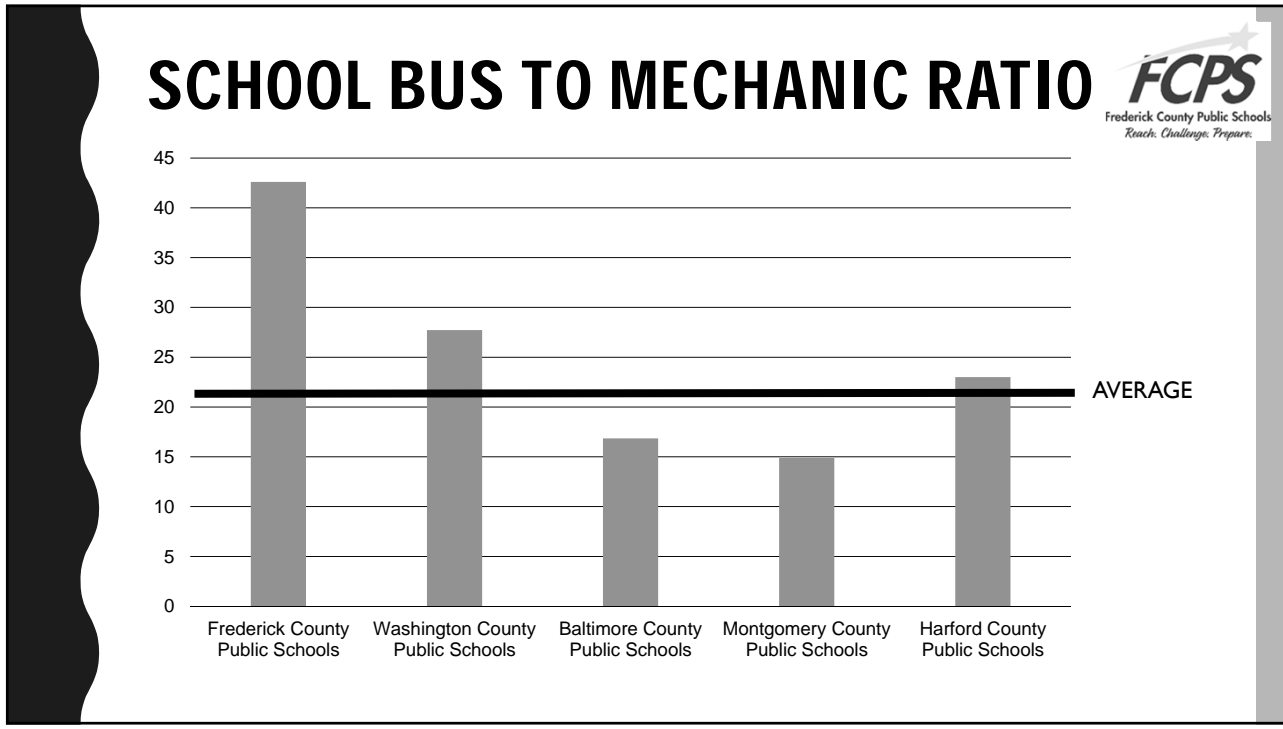
QUESTIONS?

FEEDBACK FROM THE CABINET

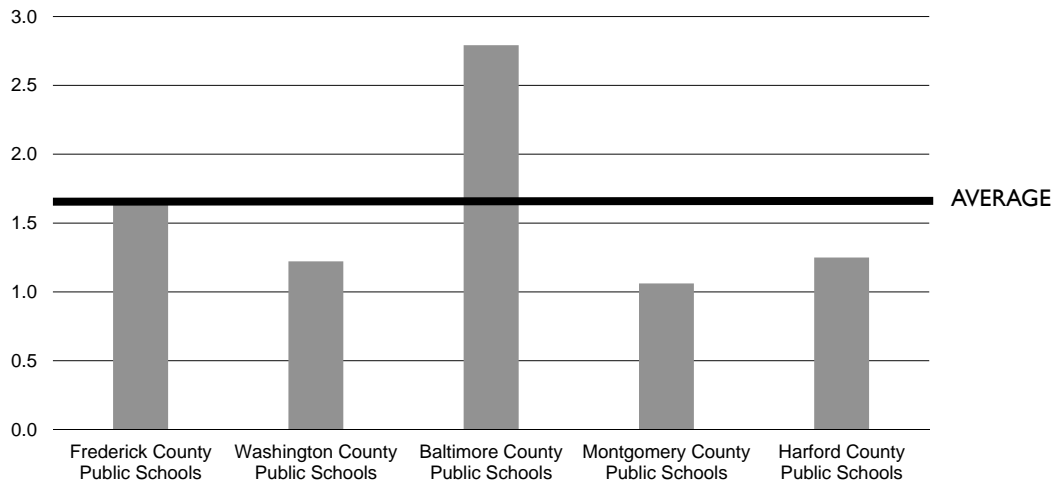


- Video is a great introduction
- Presentation had a good pace
- Need to link this study to conversations at a joint BOE/BOCC meeting a few years ago

CAPACITY ANALYSIS



BUS MECHANICS PER BAY PER SHIFT



CAPACITY ANALYSIS



Capacity Goals - Average Area Ratios

Average area school bus to mechanic ratio	21
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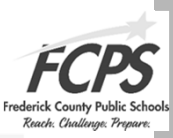
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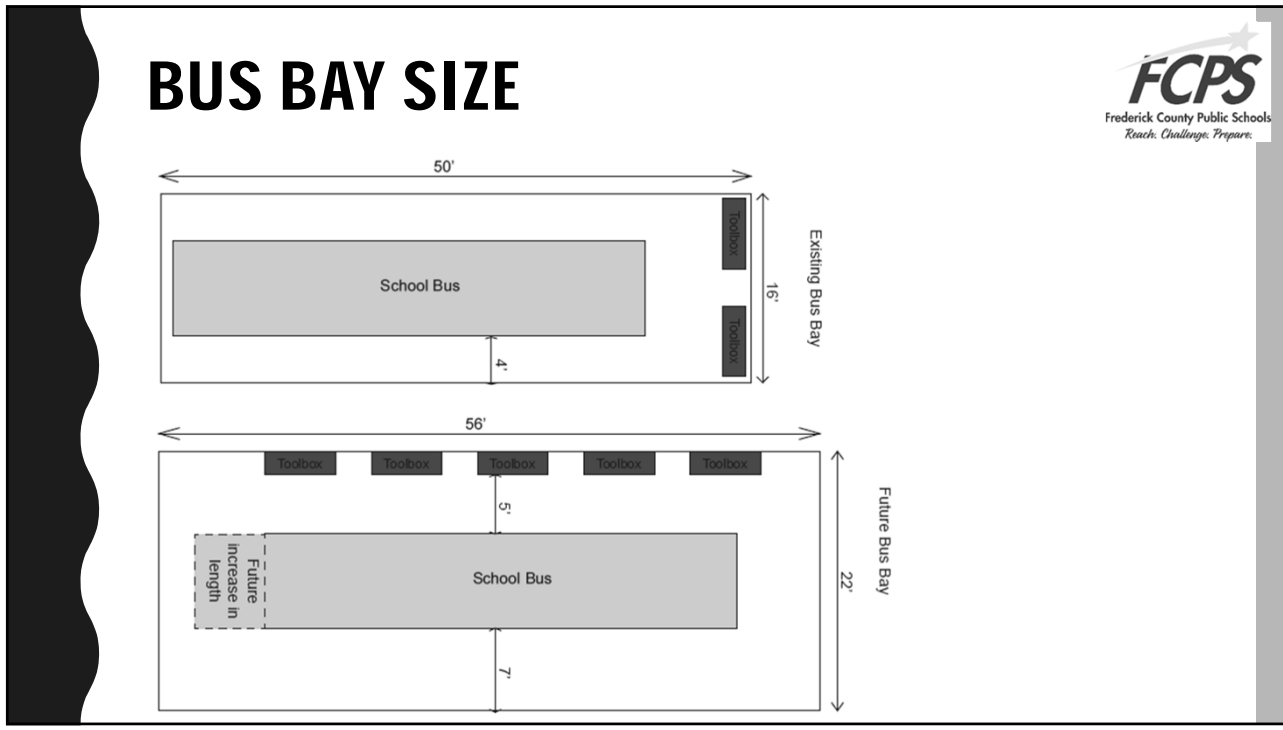
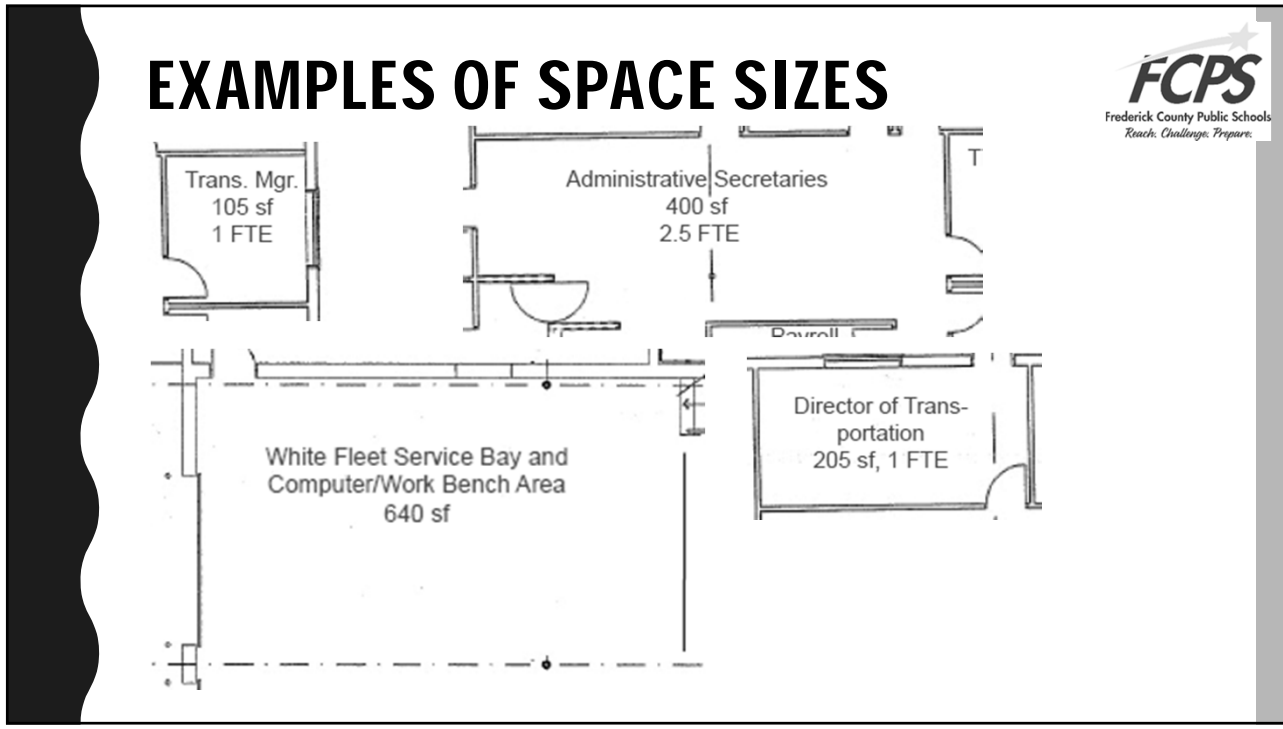


FACILITY SPACE SUMMARY

FACILITY SPACE SUMMARY



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**OTHER REPORT
FEEDBACK?**



NEXT STEPS

UPCOMING MEETINGS



- June ?? – Present report to other transportation staff?
- June 16 – Regular meeting to discuss report revisions
- June 20 – Present report to bus garage staff
- June 23 – Review staff feedback
- June 27 – Materials for BOE presentation due
- July 7 – Kick off Phase 2
- July 13 – Phase I BOE presentation