

**ANALYSIS OF ROUTE 28 STATION SOUTH
ENROLLMENT IMPACT ON FAIRFAX COUNTY PUBLIC SCHOOLS**

**ROUTE 28 WORKING GROUP MEETING
AUGUST 7, 2012
COATES ELEMENTARY SCHOOL**



THE ENROLLMENT PROJECTION PROCESS

Facilities Planning Services projects and coordinates projections of enrollment for most schools by grade and for a number of student categories. We directly participate in functions for which our projections are used and important, including: facilities planning/programming, the CIP, boundary studies, and instructional staffing. Along the way we attempt to understand a frequently-changing array of factors, both internal and external, affecting enrollment and the accuracy of our projections.

THE ENROLLMENT PROJECTION PROCESS (cont.)

- **FCPS develops 6-year projections for each school once each year during March. Projections are based in part on September and January historical enrollment data by grade for up to the prior 7 years.**
- **The primary method used to develop the initial projections for general education is a cohort “survival” technique – which is a very commonly used demographic method for age- or grade-based projections. We usually consider the entry grade at each school separately and may make other adjustments based on known factors we believe are likely to affect enrollment significantly during the projection horizon.**
- **For Kindergarten projections we are now using address-specific historical births and the relationship to Kindergarten class sizes 5 years later. We will continue refining these birth data to Kindergarten sizes as we build more historical data and evaluate the accuracies of our projection method.**
- **Adjustments to projected cohort survival rates can be made by grade(s) at each school based on factors such as expected new housing to be built, program changes, etc.**

STUDENT YIELD RATIOS

Student yield ratios indicate the average number of public school students, by school level, generated by the various types of residential housing units in Fairfax County. These countywide student yield ratios are updated on a regular basis to reflect changes in the student population and residential housing. The process used to generate student yield ratios is as follows:

- Dwelling unit information by unit type and location is obtained from the county's Integrated Parcel Life Cycle (IPLS) data base; housing data for Fairfax City and Fort Belvoir are obtained and added to the IPLS data.**
- Student addresses from the FCPS Student Information System are address matched to the IPLS housing data by dwelling unit type.**

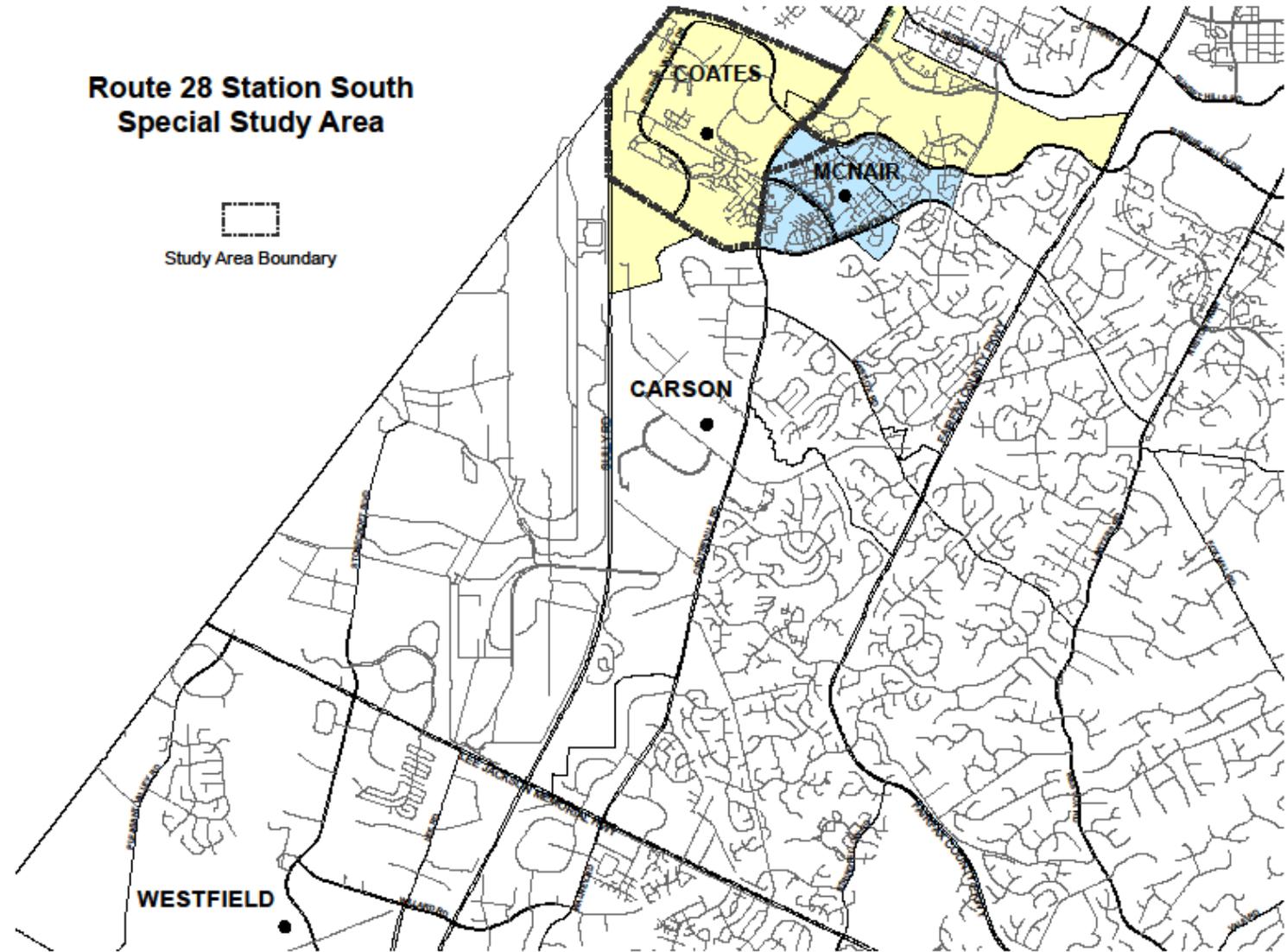
STUDENT YIELD RATIOS (cont.)

- **The number of students residing in each dwelling type is divided by the number of available units to determine the countywide average student yield ratios.**
- **Ratios are calculated for several types of dwelling units including single family detached and attached units, low-rise multifamily units and high rise multifamily units.**

Countywide student yields are used in determining the impact of projects in the development review process as they represent the potential number of students anticipated from the development over an extended period of time.

Route 28 Station South Special Study Area


Study Area Boundary



COMPARISON OF ROUTE 28 STATION SOUTH CURRENT & STUDY PLAN STUDENT YIELDS

RT. 28 CURRENT PLAN		
	<u>TOTAL UNITS</u>	<u>STUDENT YIELD</u>
ELEMENTARY	6424	643
MIDDLE	6424	165
HIGH	<u>6424</u>	<u>342</u>
TOTAL	6424	1150

RT. 28 STUDY		
	<u>TOTAL UNITS</u>	<u>STUDENT YIELD</u>
ELEMENTARY	7091	577
MIDDLE	7091	153
HIGH	<u>7091</u>	<u>318</u>
TOTAL	7091	1048

DIFFERENCE FROM CURRENT PLAN		
	<u>UNITS</u>	<u>STUDENT YIELD</u>
ELEMENTARY	667	-66
MIDDLE	667	-12
HIGH	<u>667</u>	<u>-24</u>
TOTAL	667	-102

SCHOOLS SERVING ROUTE 28 STATION SOUTH STUDY AREA

SCHOOLS	CAPACITY	ENROLLMENT (9/30/2011)	PROJECTED ENROLLMENT 2012-13	CAPACIT Y BALANCE 2012-13	PROJECTED ENROLLMENT 2017-18	CAPACITY BALANCE 2017-18	POTENTIAL STUDENTS FROM RT. 28 STATION SOUTH DEVELOPMENT
<i>ELEMENTARY SCHOOLS</i>							
COATES	762	716	791	-29	1379	-617	
McNAIR	<u>880</u>	<u>833</u>	<u>927</u>	<u>-47</u>	<u>1144</u>	<u>-264</u>	
TOTAL	1642	1549	1718	-76	2523	-881	577
<i>MIDDLE SCHOOLS</i>							
CARSON	1350	1351	1406	-56	1506	-156	153
<i>HIGH SCHOOLS</i>							
WESTFIELD	2772	2805	2730	42	2658	114	318

SCHOOLS SERVING RESTON MASTER PLAN SPECIAL STUDY-SCENARIO F

SCHOOLS	CAPACITY	ENROLLMENT (9/30/2011)	PROJECTED ENROLLMENT 2012-13	CAPACITY BALANCE 2012-13	PROJECTED ENROLLMENT 2017-18	CAPACITY BALANCE 2017-18	POTENTIAL STUDENTS FROM HERNDON-MONROE DEVELOPMENT	POTENTIAL STUDENTS FROM RESTONTOWN CENTER DEVELOPMENT	POTENTIAL STUDENTS FROM WIEHLE DEVELOPMENT	TOTAL SCENARIO F STUDENT POTENTIAL
ELEMENTARY SCHOOLS										
ALDRIN	700	677	714	-14	833	-133				
ARMSTRONG	536	464	524	12	555	-19				
COATES	762	716	791	-29	1379	-617				
DOGWOOD	764	771	809	-45	877	-113				
FOREST EDGE	863	810	786	77	813	50				
FORESTVILLE	721	694	636	85	431	290				
HUNTERS WOODS	903	1048	1051	-148	1079	-176				
LAKE ANNE	764	667	703	61	934	-170				
McNAIR	880	833	927	-47	1144	-264				
SUNRISE VALLEY	750	622	607	143	662	88				
TERRASET	800	468	471	329	632	168				
TOTAL	8443	7770	8019	424	9339	-896	510	1382	721	2613
MIDDLE SCHOOLS										
CARSON	1350	1351	1406	-56	1506	-156				
HERNDON	1128	936	946	182	1178	-50				
HUGHES	1050	921	1025	25	1246	-196				
TOTAL	3528	3208	3377	151	3930	-402	129	375	199	703
HIGH SCHOOLS										
HERNDON	2017	2208	2159	-142	2333	-316				
LANGLEY	2100	2018	1979	121	1770	330				
SOUTH LAKES	2131	2281	2393	-262	2983	-852				
WESTFIELD	2772	2805	2730	42	2658	114				
TOTAL	9020	9312	9261	-241	9744	-724	268	775	414	1457

**SCHOOL FACILITY REQUIREMENTS
PROJECTED CAPACITY BALANCES FOR SCHOOL YEAR 2017-18**

<u>ELEMENTARY SCHOOLS</u>		<u>MIDDLE SCHOOL</u>		<u>HIGH SCHOOL</u>	
Coates	-617	Carson	-156	Westfield	114
McNair	<u>-264</u>		_____		_____
Total	-881		-156		114

APPROVED FY 2013-17 CIP PROJECTS

West County Elementary School	\$23,150,000 (unfunded)
West County High School Addition	\$16,500,000 (unfunded)

ROUTE 28 STATION SOUTH ENROLLMENT IMPACT

ELEMENTARY SCHOOL

577 students

MIDDLE SCHOOL

153 students

HIGH SCHOOL

318 students

RESTON MASTER PLAN SPECIAL STUDY SCENARIO F

ELEMENTARY SCHOOL

2613 students

MIDDLE SCHOOL

703 students

HIGH SCHOOL

1457 students

**POTENTIAL SCHOOL FACILITY REQUIREMENTS
GENERATED BY RT. 28 STUDY AND SCENARIO F**

- **Four Elementary Schools**
- **One Middle School**
- **One High School**