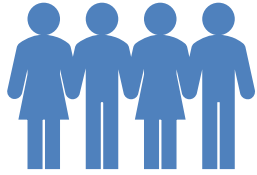# Demographic Study

Ten-Year Resident Student Forecasts
SY2022/23 to SY2032/33
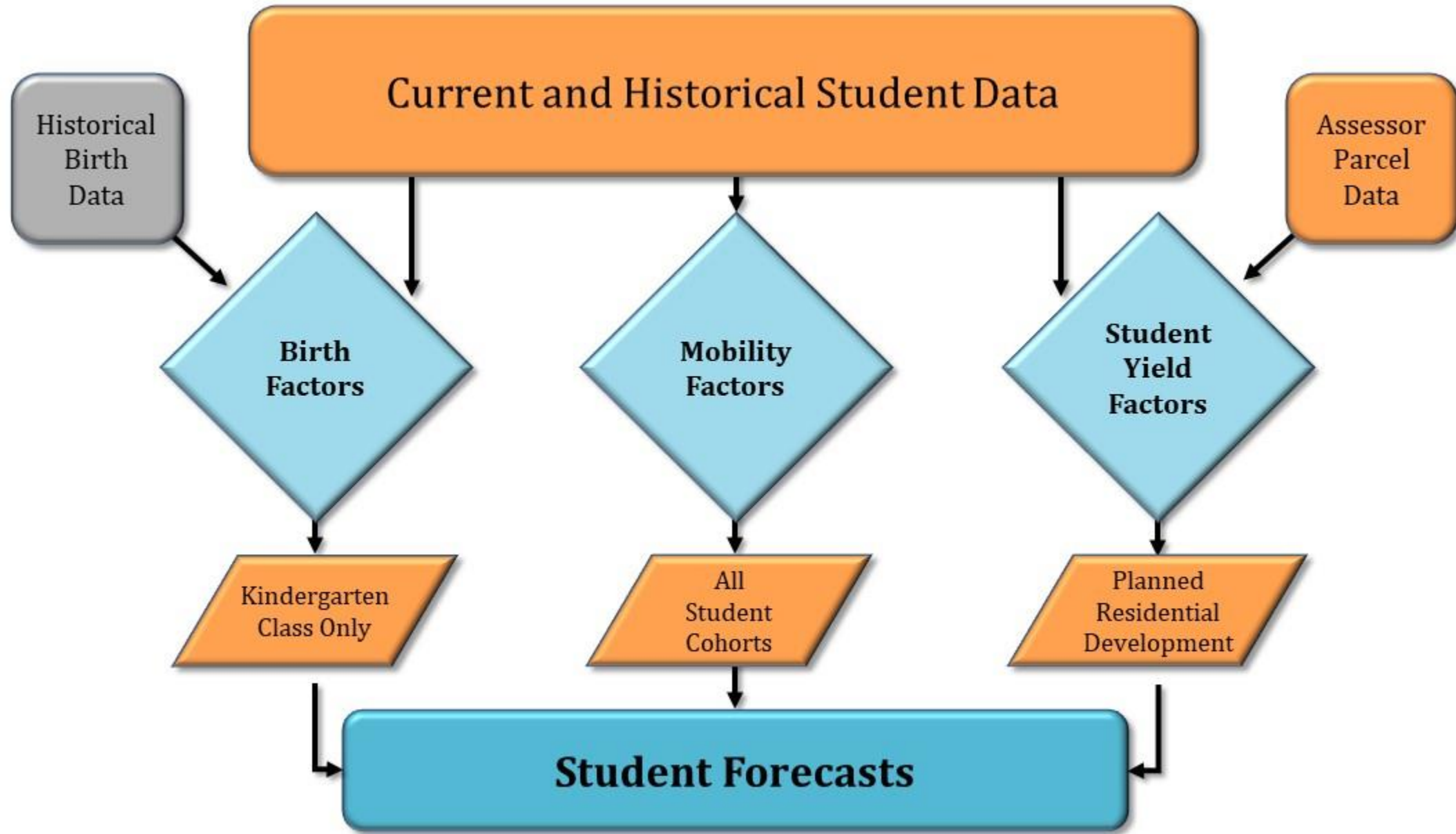
Work accomplished by Davis Demographics for Moon Area School District

✓ Updated data set for District

✓ Researched active, proposed, and future residential development projects.

✓ Analyzed current and future demographic dynamics of the district and attendance areas.

✓ Developed population forecasts by grade and attendance area for the next 10 years (i.e. 2022/23 through 2032/33)

✓ Data set provided from District

✓ Review data for any errors

✓ Provide Student Data Verification Form for District review.

DAVIS DEMOGRAPHICS

Student Data Verification Form
Current SY 2022 - 2023

District: Moon Area School District
To: Kim Prevost
Email: kprevost@moonarea.net

From: Analisa Garcia
Email: angarcia@davisdemographics.com

	Date Received
	11/22/2022
	Date Processed
	11/22/2022
Initial	Date of Data (Fall Snapshot)
	10-3-2022
	File Name
	Student_Snapshot_Template_Details_Oct2022
	Student Records
	4,035
	Valid Address Fields
	4,035
	*PO Boxes
	0
	*Invalid/Empty Address Fields
	0
	*Will not be geocoded

Data Fields In File:

The following fields are included in the file. If additional fields are necessary to correctly indentify students in various categories or programs for boundary planning or other types of analysis deemed important by the District, immediately notify Davis Demographics and send a new complete student data file with the added fields. PLEASE SEND A LIST OF VALUES (Data Dictionary) FOR EACH FIELD.

SCHOOL NUMBER
SCHOOL NUMBER OF RESIDENCE
Transfer Code
SCHOOL NAME
PASECUREID
ADDRESS 1
ADDRESS 2
GRADE
CITY
STATE CODE
ZIP
RACE / ETHNICITY
FOOD PGM PARTICIPATION CODE
CHALLENGE TYPE
EL STATUS CODE
EL STATUS
LIEP TYPE
LIEP TYPE DESCRIPTION
SPECIAL ED STATUS
ECONOMIC DISADVANTAGED STATUS CODE

Attribute Details

Grade	# of Records
1	323
2	317
3	346
4	291
5	302
6	322
7	293
8	292
9	332
10	295
11	336
12	277
K5F	309
Total	4,035

School Name	# of Records
Bon Meade El Sch	595
J H Brooks El Sch	377
J.A. Allard El Sch	208
McCormick El Sch	184
Moon Area Lower MS	623
Moon Area SD	28
Moon Area Upper MS	581
Moon SHS	1,218
Richard J. Hyde El Sch	221
Total	4,035

Race/Ethnicity	# of Records
1	5
10	1
3	228
4	315
5	3,008
6	258
9	220
Total	4,035
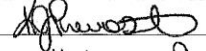
Food PGM Participation Code	# of Records
F	1,094
N	2,872
R	69
Total	4,035

Challenge Type	# of Records
2121	81
2123	13
2124	27
2125	5
2127	29
2128	221
2129	127
2130	2
2131	1
2132	141
(blank)	3,388
Total	4,035

EL Status	# of Records
Current EL LIFE	7
Current EL not LIFE	206
Former EL Exited and in 1st year of monitoring	11
Former EL Exited and in 2nd year of monitoring	9
Former EL Exited and in 3rd year of monitoring	6
Former EL Exited and in 4th year of monitoring	6
Former EL Exited and no longer monitored	11
Never EL	3,779
Total	4,035

LIEP Type	# of Records
EL Specific English-only	201
Parental refusal-mixed classes with English-only support	12
(blank)	3,822
Total	4,035

Special Ed Status	# of Records
E	4
N	3,388
Y	643
Total	4,035

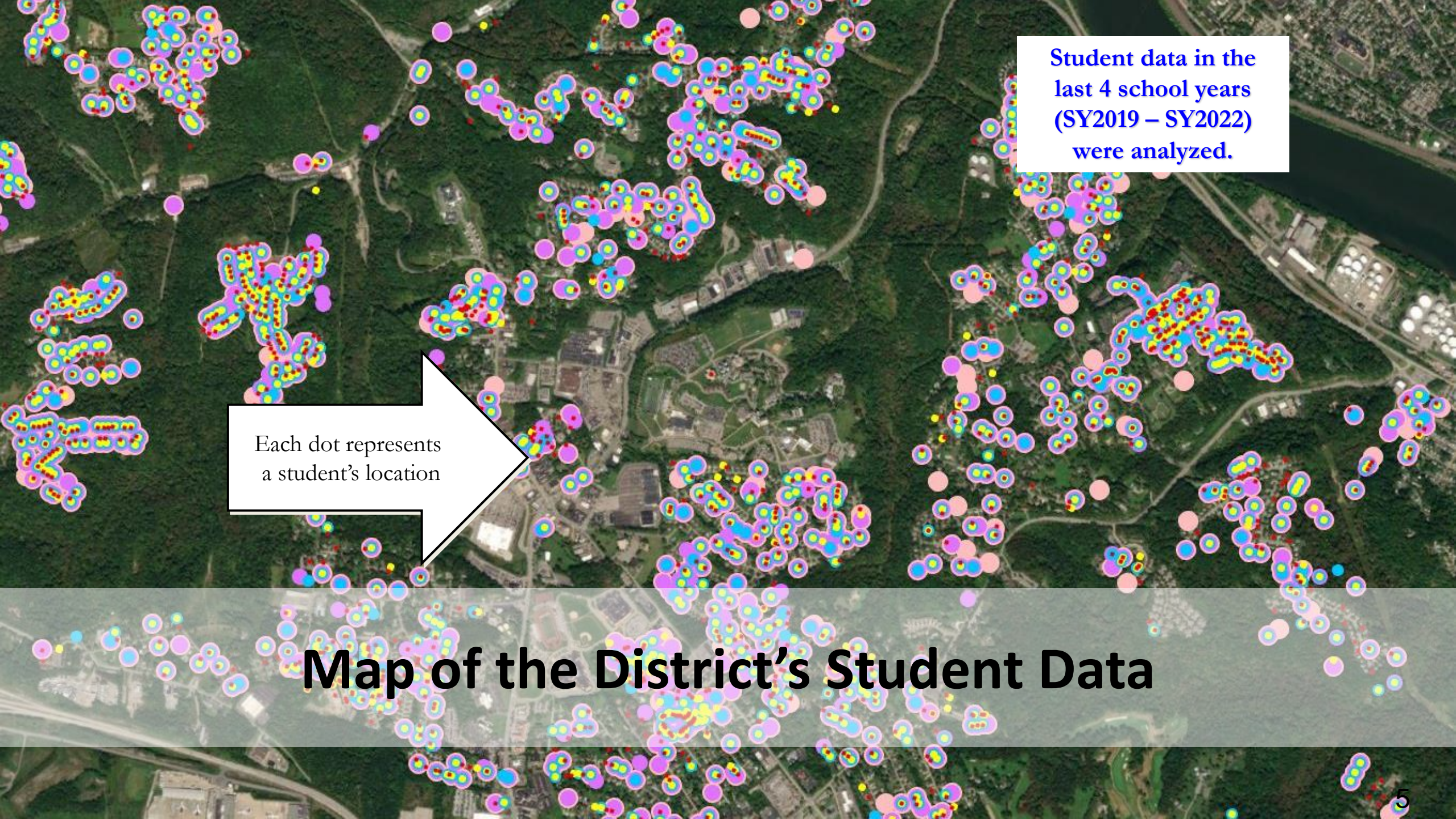| Economic Disadvantaged Status Code	# of Records
N	2,998
Y	1,037
Total	4,035

IMPORTANT! PLEASE READ CAREFULLY, COMPLETE AND SIGN

The District acknowledges by signature below that the above numbers accurately reflect the enrollment of the District as of the annual fall reporting date. In addition, the District represents that the fields included with the file, as listed above, are the only fields necessary to identify any students the District deems important for all anticipated types of boundary planning and analysis. Davis Demographics will be basing its project work on this file. If errors are later found to exist in the file or if important fields are not included, additional fees may be required by Davis Demographics to correct any inaccuracies and the project timeline may need to be extended.

Signature: Kimberly Prevost
Printed Name
Date: 12-1-2022
Title: Director of Data & Analysis

We will proceed with this file once this form has been returned signed. Time is of the essence, but accuracy is more important. Please contact us with any questions ASAP. Thank you!

DAVIS DEMOGRAPHICS

Student data in the last 4 school years (SY2019 – SY2022) were analyzed.
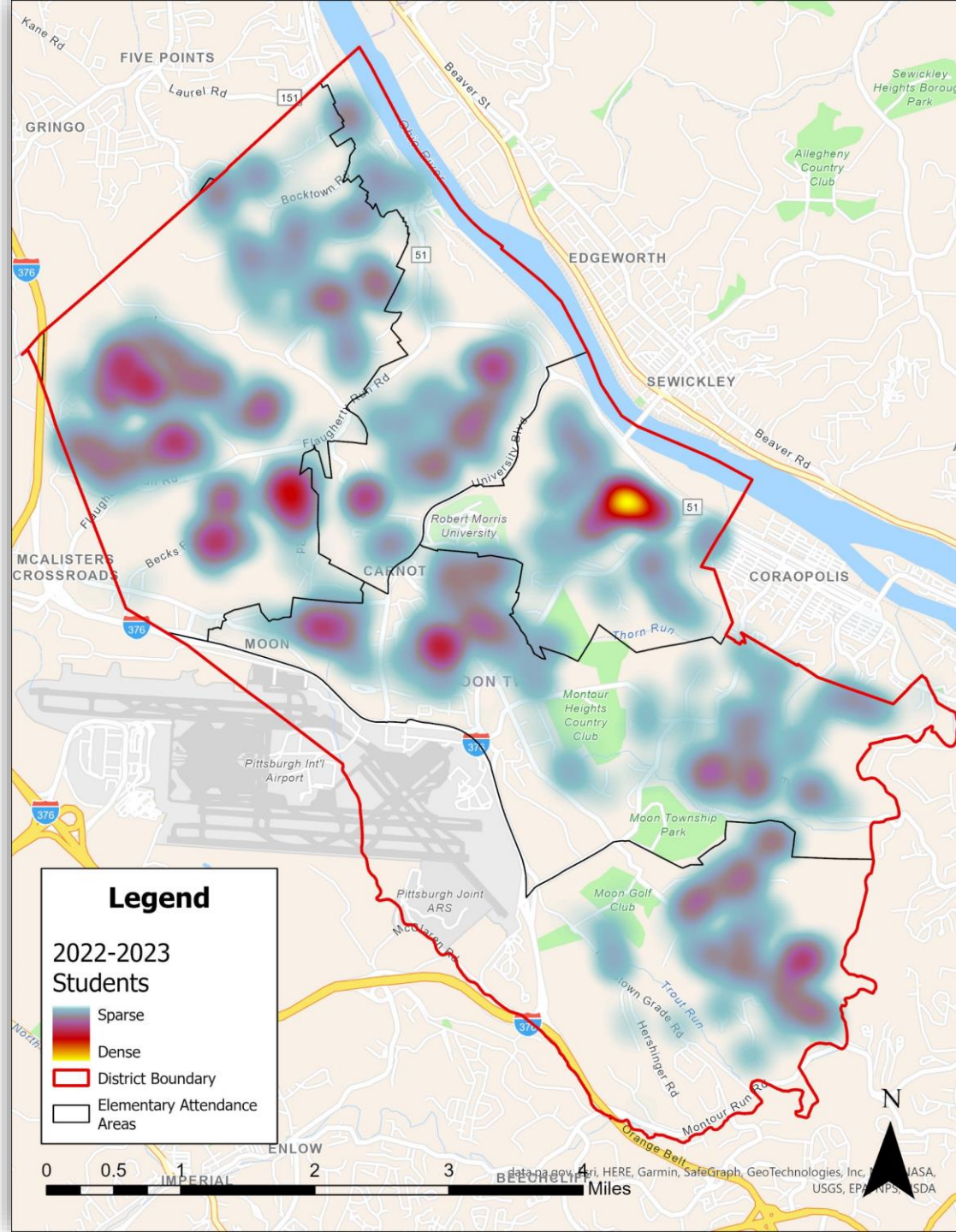
Each dot represents a student's location

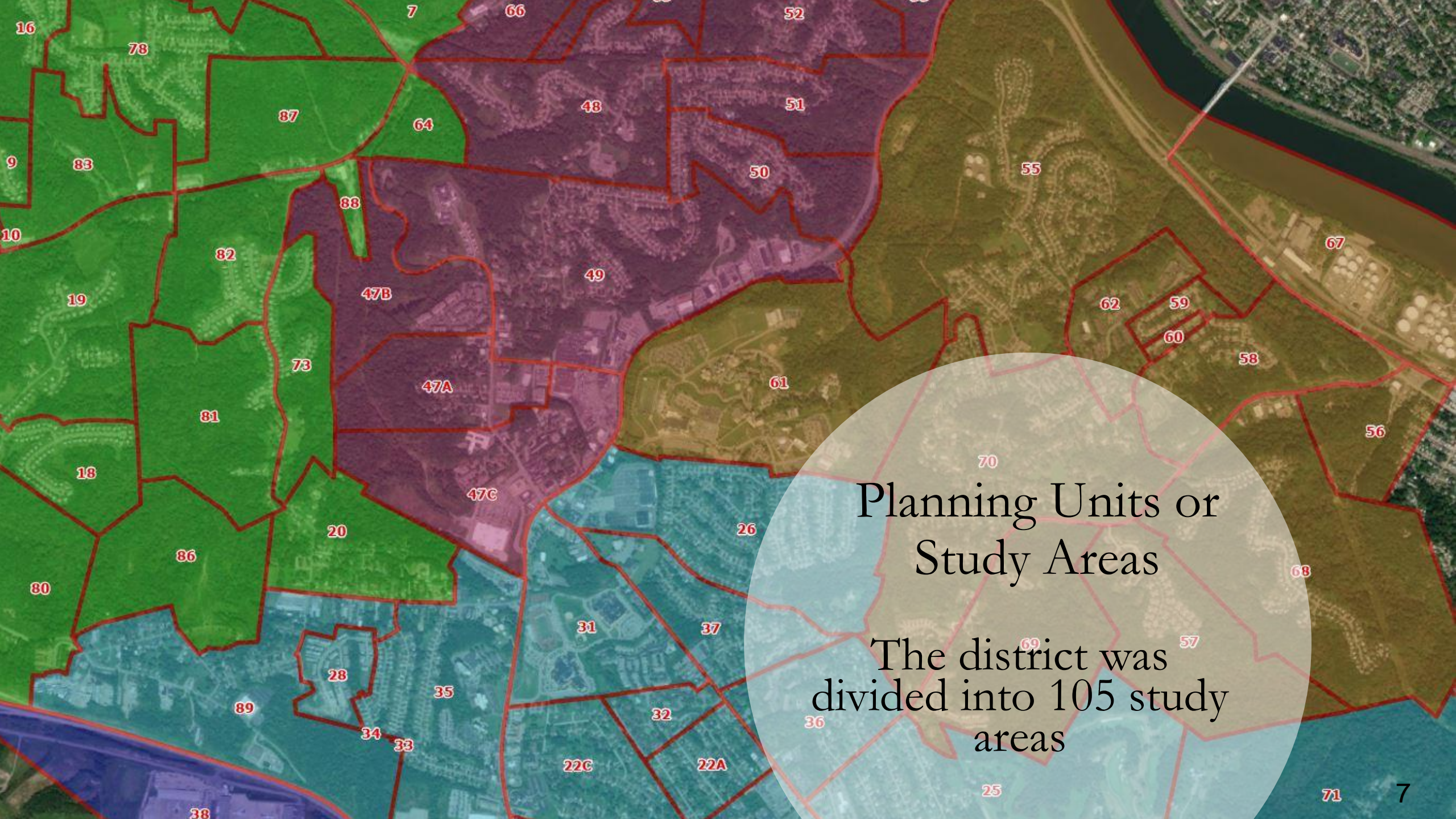# Map of the District's Student Data

Student Density
Fall 2022

Yellow areas indicate a higher concentration of student population, while areas shaded blue have fewer students.

6

Planning Units or Study Areas

The district was divided into 105 study areas

Attendance Matrix Summaries

Attendance Matrices were created for all attendance zones in Moon Area SD that detail where students reside compared to where they are enrolled.

Attendance Area	Campus Capacity	Resident Students	Enrolled Students	Utilization*		Resident Student Transfers		Non-Resident Students In	Net Total Transfers In
				Resident Students	Enrolled Students	Students In	Students Out		
Allard ES	350	212	208	60.6%	59.4%	10	15	1	11
Bon Meade ES	625	581	595	93.0%	95.2%	18	6	2	20
Brooks ES	550	373	377	67.8%	68.5%	23	21	2	25
Hyde ES	350	225	221	64.3%	63.1%	10	14	0	10
McCormick ES	350	190	184	54.3%	52.6%	0	6	0	0

The Attendance Matrix Summaries provide the count of Moon Area students who reside in each zone, the number of enrolled students, transfers in and out, and campus utilization.

Historic Live Birth Counts in Moon Area SD by Zip Code

		Births by Municipality			Birth Rate		
Birth Year	Kinder Year	Crescent Township	Moon Township	Total	% Change*	Birthrate Used in Forecast	School Year
2011	2016	23	263	286	93.5%		2016/17
2012	2017	28	247	275	89.9%		2017/18
2013	2018	14	282	296	96.7%		2018/19
2014	2019	20	272	292	95.4%		2019/20
2015	2020	27	288	315	102.9%		2020/21
2016	2021	26	273	299	97.7%		2021/22
2017	2022	13	293	306	Base Year		2022/23
2018	2023	18	298	316	103.3%	1.033	2023/24
2019	2024	23	267	290	94.8%	0.948	2024/25
2020	2025	31	262	293	95.8%	0.958	2025/26
2021	2026				97.9%	0.979	2026/27
2022	2027				96.2%	0.962	2027/28
2023	2028		Birth Data was not available at the time of study.		96.6%	0.966	2028/29
2024	2029				96.9%	0.969	2029/30
2025	2030				96.6%	0.966	2030/31
2026	2031				96.7%	0.967	2031/32
2027	2032				96.6%	0.966	2032/33

Mobility Factors
SY 2019 - 2022

- Determined from 4 years of historical mapped student data.

- Tracks the percentage gain or loss for each grade level as students progress through the grades.

- Factors are applied at the elementary attendance area

- Addresses move-ins/outs, private school movement, attrition at upper grades

How is Mobility Applied?

100	Kindergarten students in SY2021-22	
X **1.01**	(Allard ES 1st grade mobility)	
= 101	1st grade students in SY2022-23	

Attendance Area	K to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12
Allard ES	1.01	0.91	0.88	1.04	0.98	1.12	1.03	0.96	1.03	0.96	1.00	1.00
Bon Meade ES	1.01	1.00	1.00	0.98	0.99	1.02	0.99	1.02	1.02	0.97	0.97	1.03
Brooks ES	0.99	1.00	1.04	0.96	1.07	1.01	1.00	1.01	1.13	0.97	0.98	0.98
Hyde ES	1.05	1.00	1.10	1.05	1.00	0.95	1.01	1.05	0.99	0.87	1.03	0.93
McCormick ES	1.11	0.98	0.95	0.97	1.02	1.02	1.02	1.03	0.96	0.99	0.99	1.02

DAVIS DEMOGRAPHICS

MA MOON AREA SCHOOL DISTRICT

Student Yield Factors

Student Yield Factors (SYF) help determine the forecasted number of students from new residential developments. For single family detached homes, the K-12 SYF is **0.417**, which means Moon Area SD could expect to gain 42 students for every 100 new single family detached homes.

Grade	Single Family Detached 7,995 Units		Single Family Attached 1,508 Units		Apartments 77 Units		Multi-Family Attached 455 Units	
	Students	Factor	Students	Factor	Students	Factor	Students	Factor
K-4	1,303	0.163	77	0.051	2	0.026	83	0.182
5-6	509	0.064	23	0.015	1	0.013	35	0.077
7-8	472	0.059	32	0.021	3	0.039	31	0.068
9-12	1,051	0.131	49	0.032	1	0.013	57	0.125
K-12	3,335	0.417	181	0.120	7	0.091	206	0.453

All Units - All Years

Residential Development by Elementary Attendance Area

- 13 projects are currently active or planned in 4 ES attendance areas
- 1,153 units included in forecast
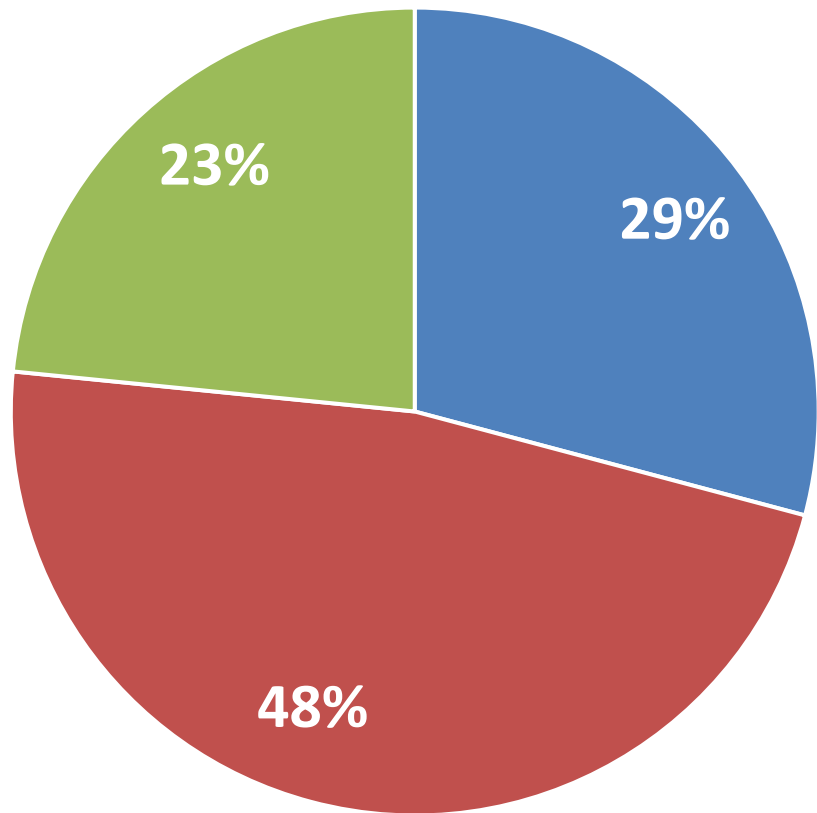- Majority of students from new developments would be zoned to McCormick ES.

16%

18%
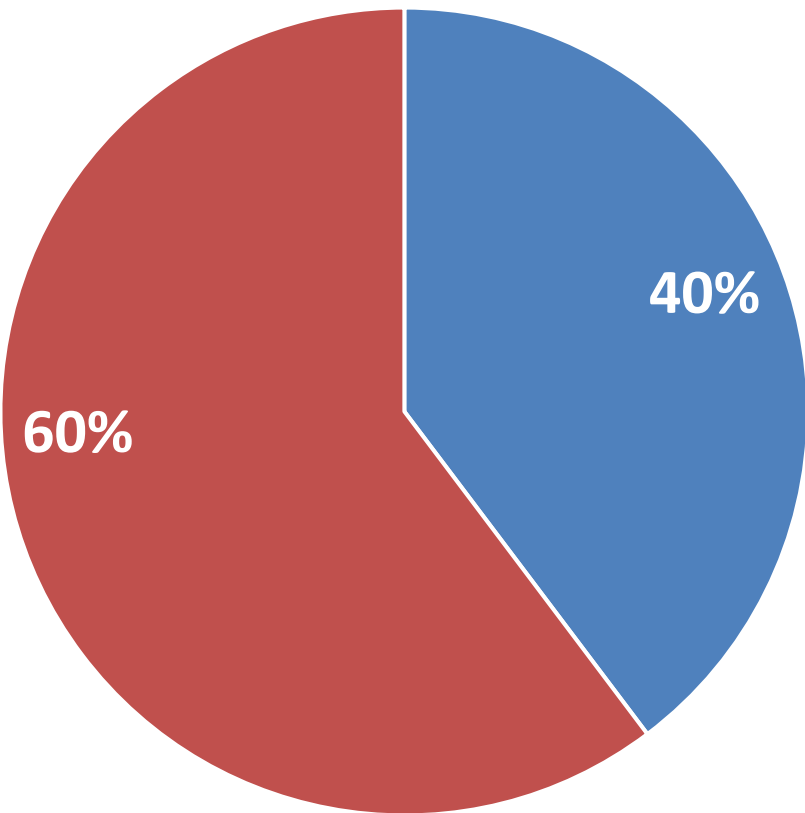
1%

65%
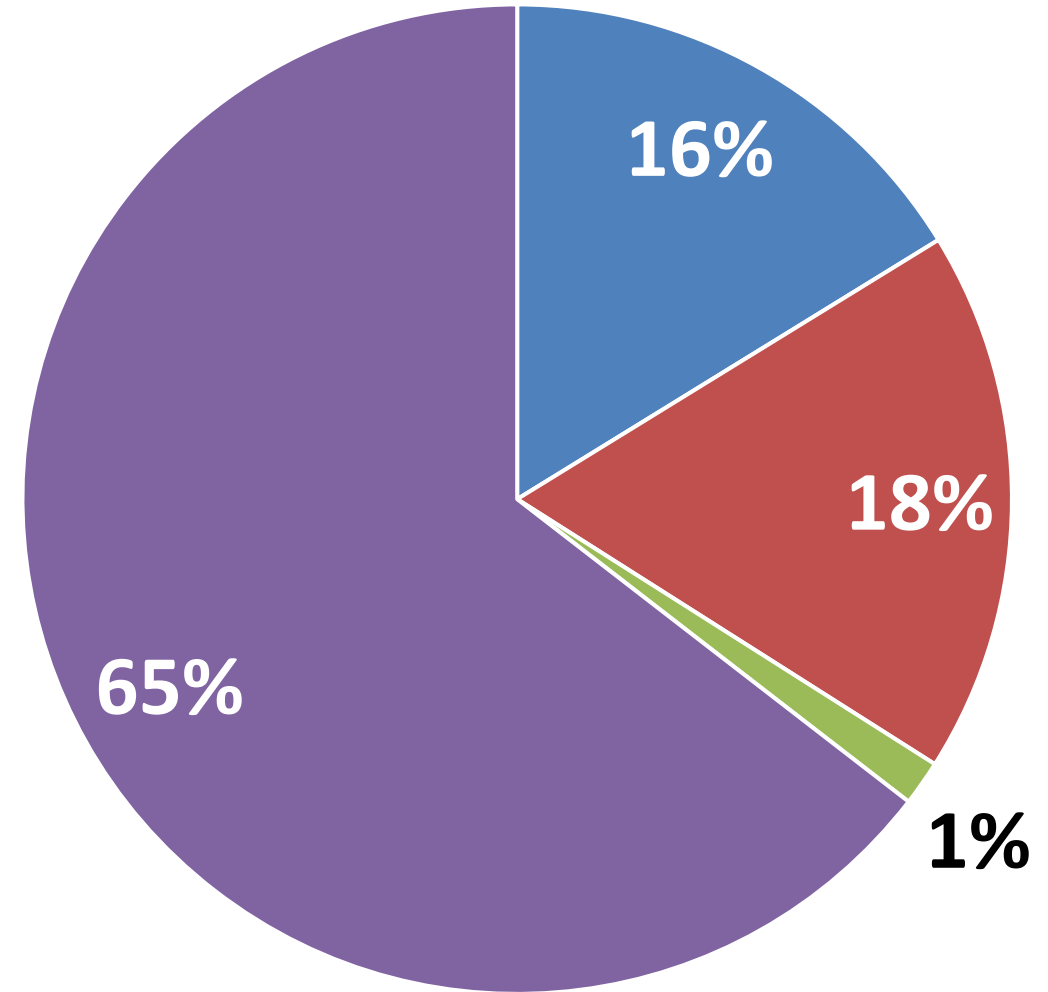
■ Allard ES ■ Bon Meade ES ■ Brooks ES ■ McCormick ES
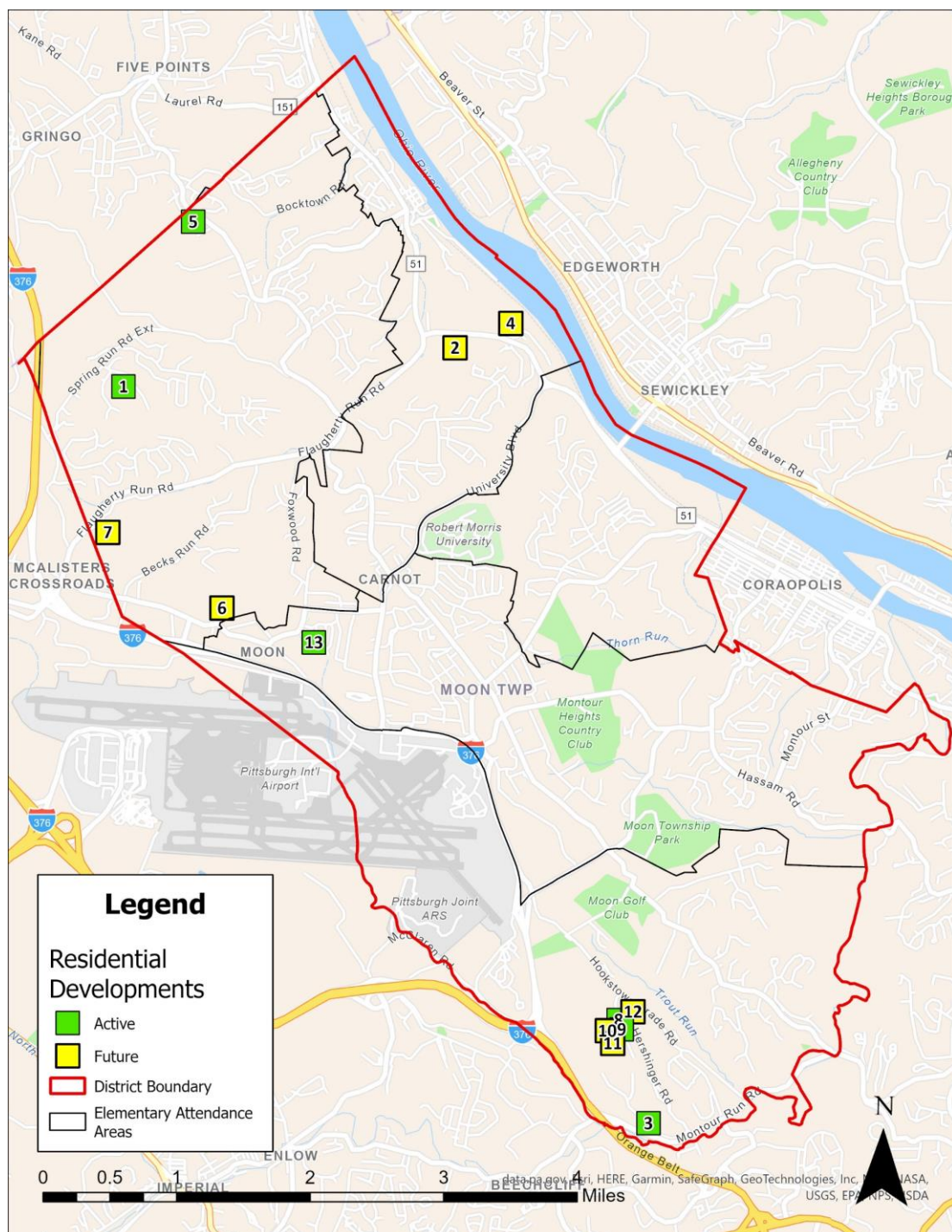
Residential Development

Map ID#	Project	Developer	Total Units	Units Applied in Forecast	Type	Status
Allard ES						
4	River Ridge	Montclair Development	88	84	SFA	Future
2	Elk Ridge	Elk Ridge Development LP	103	103	SFA	Future
Bon Meade ES						
5	Rolling Hills	DRB Homes	78	50	SFA	Active
1	Cimarron Community	Maronda Homes	15	15	SFD	Active
6	Rubenstein	Montclair Development	272	100	SFD	Future
7	Victoria Ridge	Maronda Homes	40	40	SFD	Future
Brooks ES						
13	Wiltshire Estates	Maronda Homes	39	17	SFA	Active
McCormick ES						
8	Village at Marketplace (Ph 1 SFD)	Heartland Homes	17	17	SFD	Active
12	Village at Marketplace (Ph 3)	Heartland Homes	18	18	SFD	Future
3	Prism at Diamond Ridge	Burns Scalo Development	336	336	APT	Active
9	Village at Marketplace (Ph 1 Townhome	Heartland Homes	53	23	SFA	Active
10	Village at Marketplace (Ph 2 SFD)	Heartland Homes	80	80	SFD	Future
11	Village at Marketplace (Ph 2 Townhome	Heartland Homes	270	270	SFA	Future

14

Forecasted Resident Students

	Historic Resident Counts			Current	Forecasted Resident Counts									
Grade	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
K	356	305	315	308	319.1	300.4	308.1	318.0	310.7	313.6	315.0	314.9	315.5	315.4
1	296	351	322	323	315.8	335.0	316.8	324.0	327.8	321.2	323.4	324.8	324.2	324.4
2	306	291	346	316	319.0	317.9	337.0	318.2	319.4	324.1	316.8	318.9	319.8	318.9
3	307	298	299	344	319.0	327.1	325.1	342.8	317.9	320.1	324.2	317.0	318.6	319.2
4	280	297	306	290	341.0	324.5	332.7	330.3	342.0	318.2	319.7	323.8	316.2	317.5
5	290	283	309	302	295.5	354.1	336.9	343.7	335.0	347.8	323.0	324.4	328.0	320.0
6	297	294	287	320	308.9	308.5	370.9	349.3	350.9	344.0	356.3	331.0	332.0	335.3
7	315	299	294	293	322.3	314.1	313.7	376.2	352.2	355.1	347.7	360.0	334.1	334.6
8	310	315	317	292	298.1	330.7	323.1	322.3	382.4	360.8	362.8	354.5	366.5	339.7
9	302	330	310	330	302.6	310.1	344.3	334.5	335.0	398.6	373.1	373.7	365.2	377.2
10	297	290	324	294	316.0	292.0	299.5	331.7	322.3	323.9	385.0	357.9	358.6	349.8
11	299	289	278	334	290.2	314.1	290.5	296.8	328.1	320.1	320.5	380.8	354.5	354.8
12	291	302	285	277	334.2	292.9	315.3	291.7	298.2	330.7	321.7	322.0	382.3	354.4
Resident Student Totals by Grade Configuration														
K-4	1,545	1,542	1,588	1,581	1,613.9	1,604.9	1,619.7	1,633.3	1,617.8	1,597.2	1,599.1	1,599.4	1,594.3	1,595.4
5-6	587	577	596	622	604.4	662.6	707.8	693.0	685.9	691.8	679.3	655.4	660.0	655.3
7-8	625	614	611	585	620.4	644.8	636.8	698.5	734.6	715.9	710.5	714.5	700.6	674.3
9-12	1,189	1,211	1,197	1,235	1,243.0	1,209.1	1,249.6	1,254.7	1,283.6	1,373.3	1,400.3	1,434.4	1,460.6	1,436.2
K-12	3,946	3,944	3,992	4,023	4,081.7	4,121.4	4,213.9	4,279.5	4,321.9	4,378.2	4,389.2	4,403.7	4,415.5	4,361.2

Resident forecasts are based on where the student's home address is within the district.

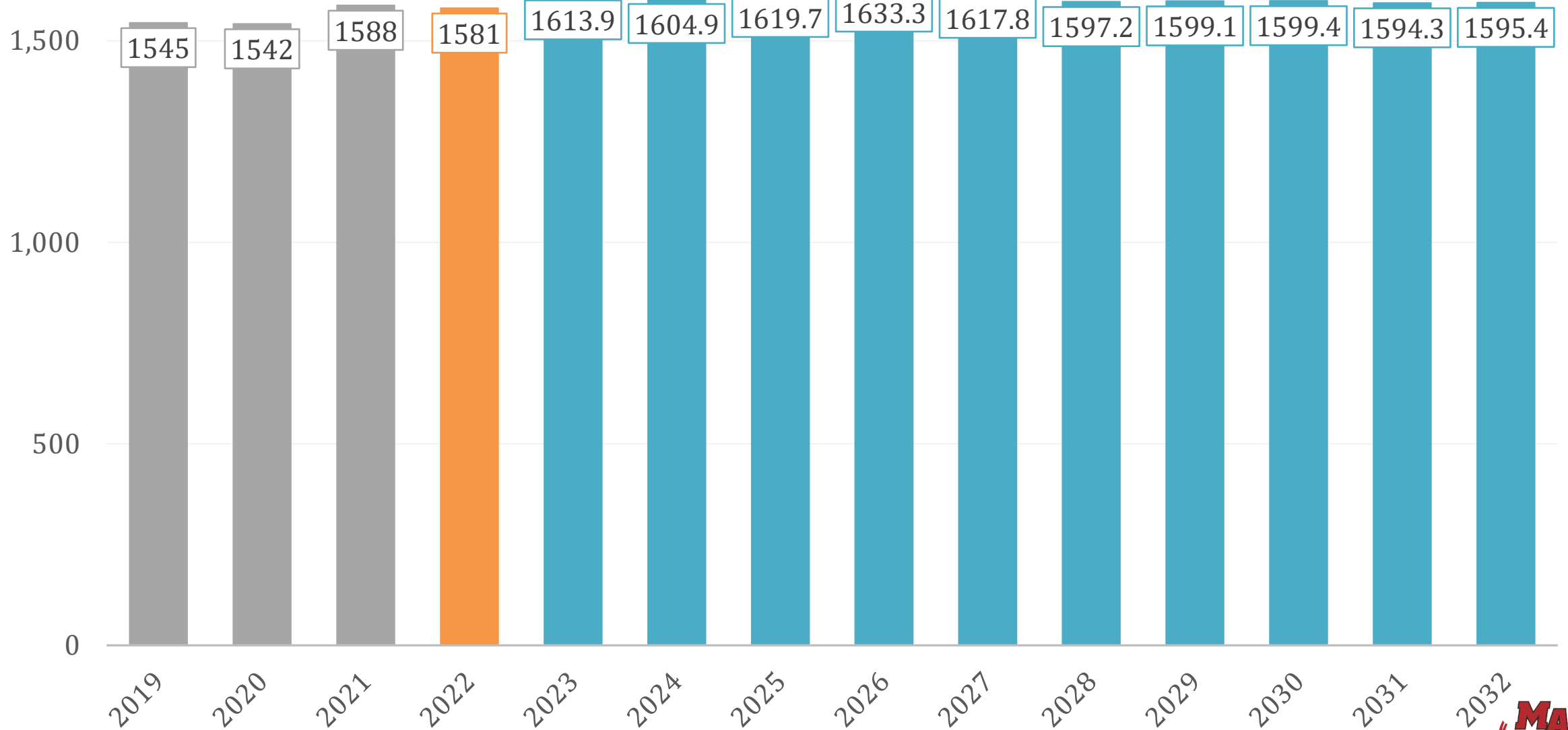Forecasts were generated using the Fall 2022 census student data as a base.

DAVIS DEMOGRAPHICS

MOON AREA SCHOOL DISTRICT

Districtwide 10-Year Resident Student Forecasts

	Historic Resident Counts			Current	Forecasted Resident Counts									
Grade	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
K	**Impact from**		315	308	319.1	300.4	308.1	318.0	310.7	313.6	315.0	314.9	315.5	315.4
1	**Mobility Factor**	351	322	323	315.8	335.0	316.8	324.0	327.8	321.2	323.4	324.8	324.2	324.4
2	306	291	346	316	319.0	317.9	337.0	318.2	319.4	324.1	316.8	318.9	319.8	318.9
3	307	298	299	344	319.0	327.1	325.1	342.8	317.9	320.1	324.2	317.0	318.6	319.2
4	280	297	306	290	341.0	324.5	332.7	330.3	342.0	318.2	319.7	323.8	316.2	317.5
5	290	283	309	302	295.5	354.1	336.9	343.7	335.0	347.8	323.0	324.4	328.0	320.0
6	297	294	287	320	308.9	308.5	370.9	349.3	350.9	344.0	356.3	331.0	332.0	335.3
7	315	299	294	293	322.3	314.1	313.7	376.2	352.2	355.1	347.7	360.0	334.1	334.6
8	310	315	317	292	298.1	330.7	323.1	322.3	382.4	360.8	362.8	354.5	366.5	339.7
9	302	330	310	330	302.6	310.1	344.3	334.5	335.0	398.6	373.1	373.7	365.2	377.2
10	297	290	324	294	316.0	292.0	299.5	331.7	322.3	323.9	385.0	357.9	358.6	349.8
11	299	289	278	334	290.2	314.1	290.5	296.8	328.1	320.1	320.5	380.8	354.5	354.8
12	291	302	285	277	334.2	292.9	315.3	291.7	298.2	330.7	321.7	322.0	382.3	354.4
Resident Student Totals by Grade Configuration														
K-4	1,545	1,542	1,588	1,581	1,613.9	1,604.9	1,619.7	1,633.3	1,617.8	1,597.2	1,599.1	1,599.4	1,594.3	1,595.4
5-6	587	577	596	622	604.4	662.6	707.8	693.0	685.9	691.8	679.3	655.4	660.0	655.3
7-8	625	614	611	585	620.4	644.8	636.8	698.5	734.6	715.9	710.5	714.5	700.6	674.3
9-12	1,189	1,211	1,197	1,235	1,243.0	1,209.1	1,249.6	1,254.7	1,283.6	1,373.3	1,400.3	1,434.4	1,460.6	1,436.2
K-12	3,946	3,944	3,992	4,023	4,081.7	4,121.4	4,213.9	4,279.5	4,321.9	4,378.2	4,389.2	4,403.7	4,415.5	4,361.2

Impact from Housing Projects

K – 4th Grade Resident Students

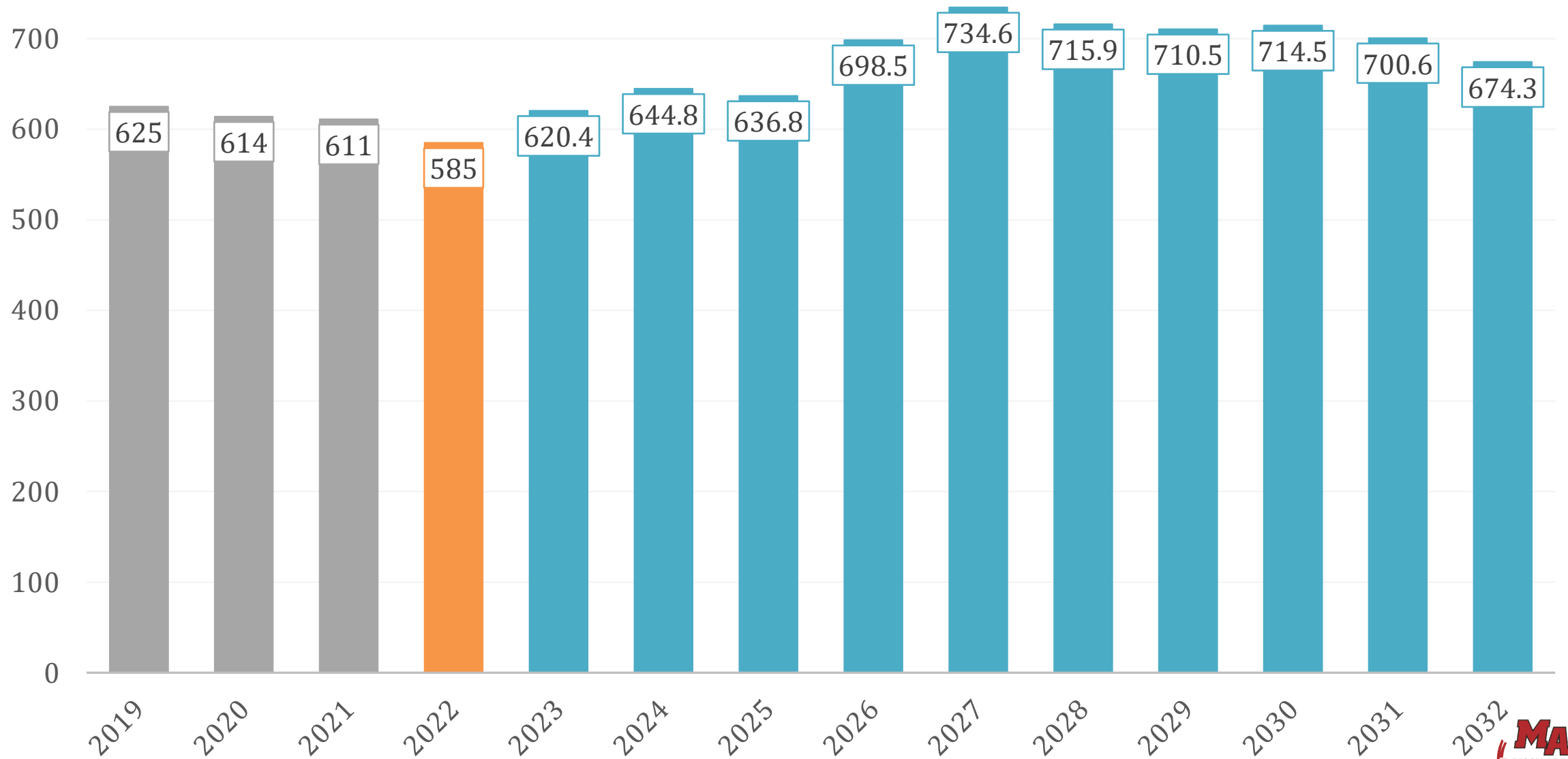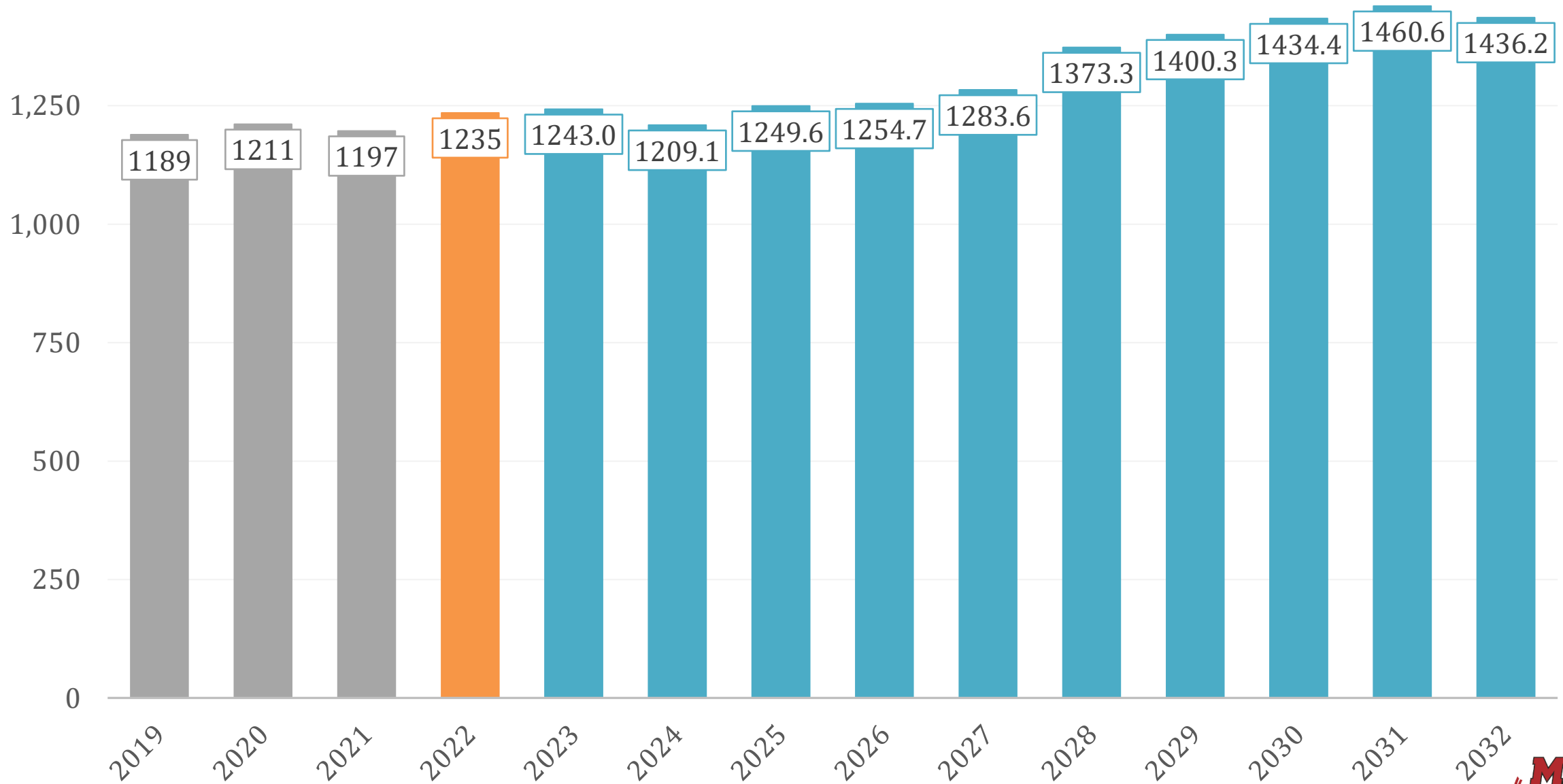| Year	Students
2019	1545
2020	1542
2021	1588
2022	1581
2023	1613.9
2024	1604.9
2025	1619.7
2026	1633.3
2027	1617.8
2028	1597.2
2029	1599.1
2030	1599.4
2031	1594.3
2032	1595.4

5th – 6th Grade Resident Students
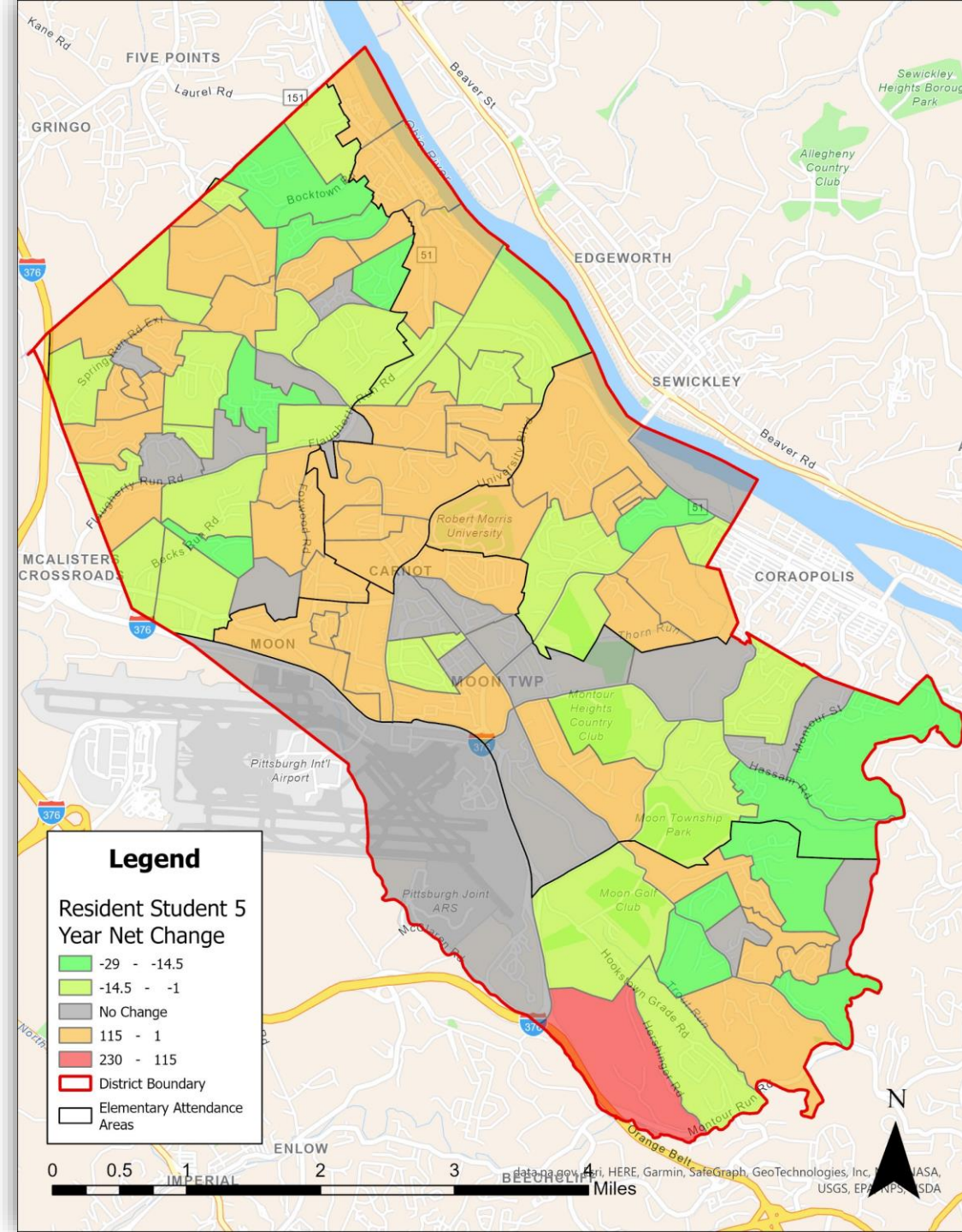
7th -8th Grade Resident Students

9th – 12th Grade Resident Students

Resident Student Projected Net Change
# SY 2022 to 2027

- Study areas with significant loss are darker green, while those with minor loss are light green.

- Gray indicates no net change in the study area.

- Study areas with significant growth are red, while those with minor growth are orange.

Legend

Resident Student 5 Year Net Change

- -29 – -14.5
- -14.5 – -1
- No Change
- 115 – 1
- 230 – 115
- District Boundary
- Elementary Attendance Areas

Current and Forecasted Resident Student Enrollment

	BASE YEAR SY2022-23	FORECAST FIVE YEARS OUT SY2027-28	FORECAST TEN YEARS OUT SY2032-33
PK-4	1,581	1,617.8	1,595.4
5-6	622	685.9	655.3
7-8	585	734.6	674.3
9-12	1,235	1,283.6	1,436.2
PK-12	4,023	4,321.9	4,361.2

- These figures represent **Resident Enrollment**
- "Out of District" enrolled students and "unmatched" students are not included.
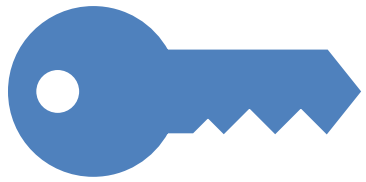
Key Items in Districtwide Analysis

- Overall, the student population for Moon Area SD is projected to increase by nearly 300 resident students over the next five years reflecting an increasing rate of 7%.

- The PK-4 resident student population is forecasted to increase 2% over the next 5 years.

- As larger class sizes matriculate through, grades 5-6 are expected to increase approximately 10%, while grades 7-8 are expected to increase 26% over the next 5 years.

- The district high school population is also expected to increase by 4% by SY 2026 as larger class sizes graduate.