

# Fall 2022-23 Report

Student Population Forecast Fall 2023-24 to 2027-28

Presented to the DJUSD Board of Education March 2, 2023





### Davis Demographics and the DJUSD

#### **Philosophy**

- Planning Based upon <u>Residence</u> of Students
  - Actual school enrollments do not necessarily reflect area demographics
  - School enrollment is influenced by many non-spatial variables
  - Enrollment trends can potentially change annually while community demographics evolve over a longer period
  - Allows District to proactively align future facilities with resident trends
  - Resident forecasts for schools with attendance areas
  - Two-year enrollment forecasts for all schools including schools of choice

#### History with the DJUSD

- DDP has been assisting the DJUSD since the 2005-06 school year
- Assisted in past redistricting efforts
- Recently merged with MGT America
  - Greatly expanding our scope of services

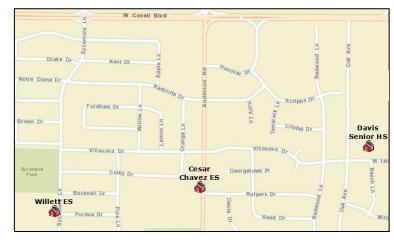




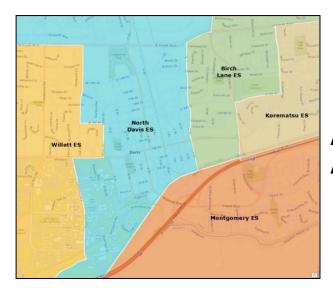
## **Data Collection**



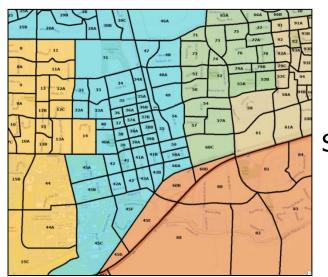
Address Information



Schools



Attendance Areas



Study Areas

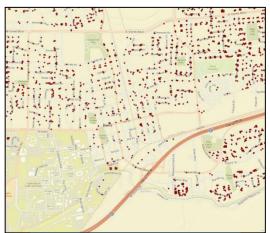


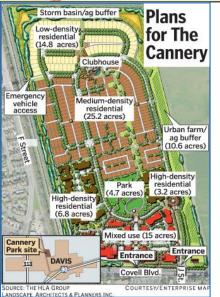


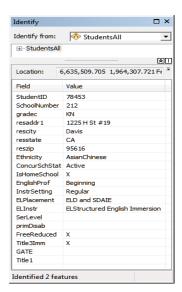
### **Data Collection**

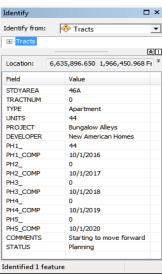
Each student is geocoded to their given address

Planned future residential development is researched and input













### **Forecast Calculations**

#### **Forecast**

- Calculated for each of the district's 247 Study Areas
- Based upon October 2022 student data and historical student data
- Based upon student residence rather than current school of enrollment
- Graduate 12th grade; Move up other grades

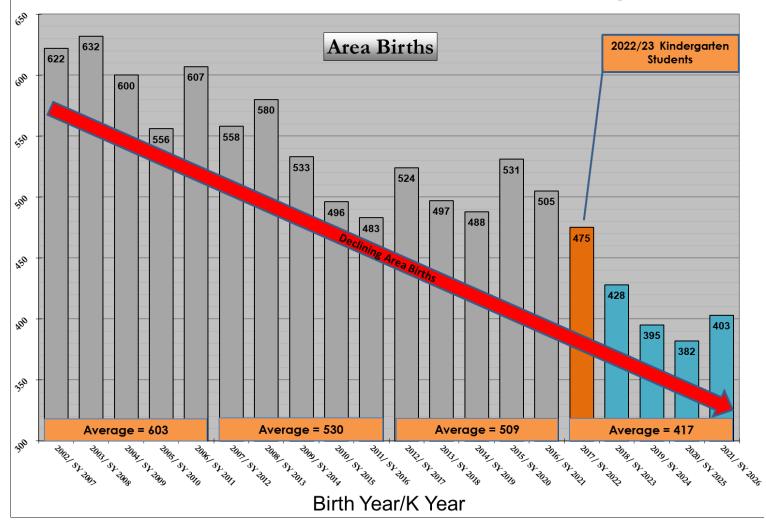
#### <u>Factors Influencing Future Student Population</u>

- Future Kindergarten Enrollment
  - Future K enrollment is based upon ratio of current K enrollment and area births
- Families Moving In or Out of the District (mobility)
  - Tracks students moving in and out of district by grade
  - Three-year average of student migration pattern
  - Biggest influence on forecast
- New Housing
  - Residential development researched and included in the report
  - Future students calculated based upon occupancy and a student yield factor





## Future Resident Kindergarten



Comparing 2002-2021 in five-year increments

# Future K enrollment is based upon ratio of current K enrollment and area births

Compa	arison of Birt	hs vs. Kindergarter	1 1
Birth Year/K Year	Birth Total	Resident K Class	Capture Rate
2009 / 2014	533	560	105%
2010 / 2015	496	539	109%
2011 / 2016	483	494	102%
2012 / 2017	524	509	97%
2013 / 2018	497	545	110%
2014 / 2019	488	497	102%
2015 / 2020	531	465	88%
2016 / 2021	505	472	93%
2017 / 2022	475	448	94%
Avera	age Capture	Rate	100%

1. Does not include TK Students or K students residing outside of the district boundaries

### Adjustments made to future K factors due to the Covid-19 pandemic

- Adjust K factors due to low resident K count in 2022-23
- Assumes 2023-24 resident K will be near the prepandemic capture rate of >100%
- Incrementally lower 2024-25 to 2027-28 K classes to account for decline in area births
- TK Increases until 2025/26 then stabilizes





# Mobility - Families Moving In or Out of the District

# Mobility is used to estimate future student retention pattern

- Tracks students moving in and out of district by grade
- Three-year average of student migration pattern
- Applied by elementary attendance area
- Biggest influence on forecast

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
Birch Lane ES	1.06	1.08	1.02	1.04	1.02	0.97	0.99	0.99	0.99	1.00	1.01	1.04
Korematsu ES	1.02	1.02	1.00	1.04	1.01	0.96	1.06	1.01	0.97	1.02	1.02	0.96
North Davis ES	0.97	0.97	0.98	0.93	1.02	1.01	1.03	0.97	1.06	1.00	0.99	1.02
Patwin ES	0.96	1.04	0.94	0.95	1.02	0.96	1.00	1.05	0.97	0.99	0.98	0.98
Pioneer ES	1.00	1.05	0.96	1.03	0.99	1.03	0.97	1.06	0.96	0.99	1.03	1.01
Willett ES	1.12	1.10	1.01	1.01	1.00	1.03	1.01	1.06	0.97	1.08	1.01	1.00





# Mobility - Families Moving In or Out of the District

#### District Wide Resident Student Mobility\* 2013/14 - 2022/23

											1	
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23		
<b>G1</b>	1.053	1.058	1.050	1.032	1.029	1.021	1.024	0.996	1.022	1.030		<u></u>
G2	0.998	1.004	1.004	1.027	1.029	1.019	1.026	0.990	0.999	1.018	-	
<b>G</b> 3	1.050	1.027	1.027	1.020	1.023	1.008	0.999	0.972	0.979	0.987	•	
<b>G</b> 4	0.989	0.997	1.018	1.020	1.011	1.002	0.993	0.968	0.956	0.991		
<b>G</b> 5	1.026	1.022	1.012	1.015	1.013	1.019	1.008	0.989	0.993	0.999	-	
G6	1.001	0.999	1.008	1.007	1.007	1.003	0.999	0.976	0.975	0.993	-	
<b>G7</b>	1.026	1.027	1.030	1.035	1.037	1.034	1.025	1.010	1.010	1.011		
G8	1.005	0.988	0.999	1.000	1.010	1.001	0.993	0.994	1.006	1.024	~~~	
<b>G9</b>	1.021	1.011	1.015	1.013	1.010	1.009	0.996	0.995	0.991	0.992	•	
G10	1.010	1.004	1.005	1.007	1.000	1.007	1.003	1.007	1.008	1.015	~~~	
G11	0.996	0.979	0.984	0.992	1.002	1.006	0.996	0.986	0.994	1.005		
G12	0.971	0.983	0.986	0.991	0.985	0.983	0.984	0.984	0.993	1.003		

This analysis is not the average Mobility for each year. These numbers are the overall mobility for each grade regardless of where the students reside. Each grade mobility is based upon the previous three (3) years of student data.

**Mobility was trending lower pre-pandemic** 





<sup>\*</sup> Excludes Out of District

## **New Housing**

Project Name	Study Area	Type	Total Units	Developer	City Approval	Student Housing	Status	Anticipated Buildout	Included in Forecast
715 Pole Line Rd	57A	MFA	30	Fouts Homes	Yes	No	Planning	2026	Yes
Bretton Woods	4A	SFD	70	David Taormino	Yes	No	Active	2024	Yes
Cannery Market Place	46A	APT	90	CFY Development	Yes	No	Active	2025	Yes
Chiles Ranch	53B	SFD	96	Fouts Homes	Yes	No	Active	2027	Yes
DISC 2022	90B	MFA	460	The Buzz Oates Group	Yes	No	Planning	Planning	No
Nishi	45E	MFA	700	Nishi Gateway LLC	Yes	Yes	Planning	Student Housing	No
Olive Drive Mixed Use	60B	MFA	47	Hallmark Micro	No	No	Planning	Planning	No
On the Curve	90B	MFA	484	Reynolds & Brown	No	No	Planning	Planning	No
On the Curve	90B	SFD	67	Reynolds & Brown	No	No	Planning	Planning	No
Palomino Place	69	MFA	49	David Taormino	No	No	Planning	Planning	No
Palomino Place	70	SFD	100	David Taormino	No	No	Planning	Planning	No
Plaza 2555 Apts	81	APT	200	Richard Harris	Yes	No	Planning	2024	Yes
Research Park Mixed	80	APT	160	Fulcrum Property	Yes	No	Planning	2025	Yes
Shriners Property	90A	SFD	1100	N/A	No	No	Planning	Planning	No
The Celeste	102A	APT	225	Chuck Cunningham	Yes	No	Active	2024	Yes
Trackside Center	59A	APT	27	Trackside LLC	Yes	No	Planning	2025	Yes
University View Townhomes	14	MFA	4	RMDBT Properties	Yes	No	Planning	2023	Yes
West Village	15	SFD	475	West Village LLC	Yes	Yes	Active	Student Housing	No

Student Yield Factors - District Wide*										
Туре	K-6 Yield	<u>7-8 Yield</u>	<u>9-12 Yield</u>							
SFD	0.265	0.082	0.102							
MFA	0.104	0.061	0.017							
APT	0.147	0.047	0.037							

<sup>\*</sup>Student Yields Factors based upon Verona development

#### Residential Development

- Development info from City of Davis
- Future students calculated based upon occupancy and appropriate student yield factor
- Only city approved, non-student housing developments are included in forecast

SFD - Single Family Detached

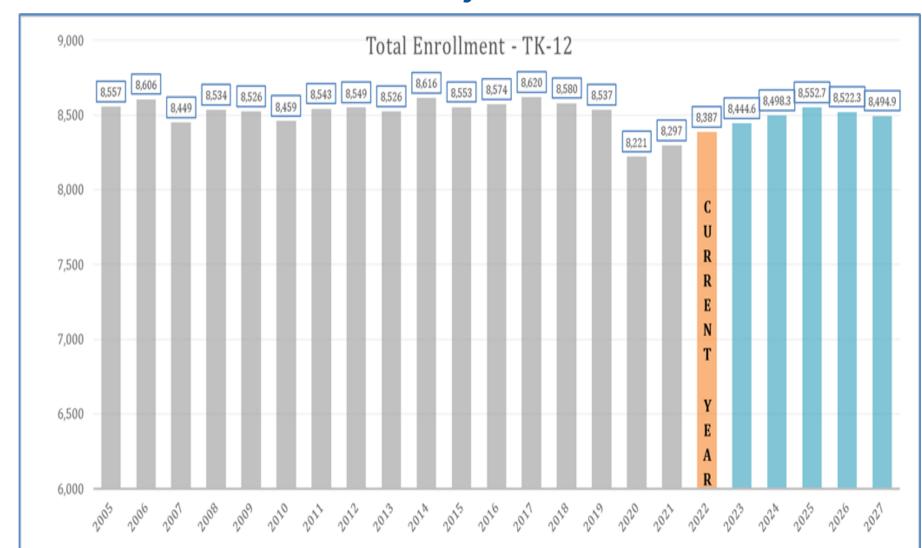
MFA - Multi-Family Attached

APT – Apartments





## District Wide Projections



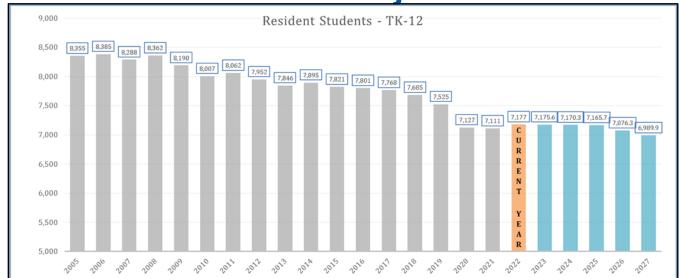
#### Forecast Assumptions

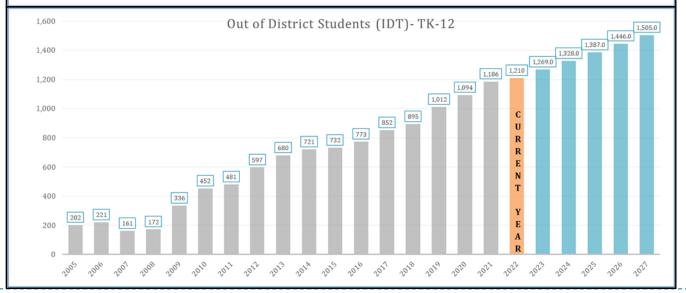
- Future resident kindergarten population will be lower than pre-pandemic due to continued decrease in area births and aging population
- An increase in TK enrollment is expected due to expansion from AB 130\*
- IDT's will be approximately 75% of pre-pandemic levels
- Mobility trends are slightly lower than pre-pandemic levels but may represent the new normal
- An unknown number of students currently opting for alternative learning environments will not return to DJUSD





### District Wide Projections – Resident/Non-Resident





#### Resident Enrollment

- Declined by 1,178 since 2005-06
- Average -65 annually
- Increase of 66 between 2021/22 to 2022/23
  - 35 Transitional K students

#### Non-Resident Enrollment

- Increased by 1,008 since 2005-06
- Average +56 annually
- Majority of the increase occurred after the 2008/09 SY
- Average +79 annually since 2008/09
- 75% of the trending increase is built into the forecast





### **Natural Decrease**

Grade	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TK**	0	0	0	0	0	0	0	0	56	72	91	65	80	85	66	70	63	59
K	570	560	544	583	539	525	553	489	502	564	540	495	511	525	497	465	472	448
1	574	588	569	589	600	536	553	583	514	536	582	540	523	516	529	482	509	486
2	587	565	605	592	587	588	544	533	592	532	554	590	562	524	534	494	498	556
3	665	603	585	598	580	569	633	568	548	598	547	566	601	553	521	501	497	508
4	592	674	600	588	598	595	573	618	560	566	619	542	569	607	532	482	492	532
5	683	595	681	630	592	614	617	589	626	575	564	633	552	578	601	511	497	496
6	632	677	607	696	622	596	623	609	590	631	583	564	637	554	570	565	513	520
7	676	666	680	642	690	621	614	630	631	610	643	615	586	643	569	566	571	529
8	687	650	662	677	637	685	637	609	629	615	625	644	617	585	629	573	587	587
9	668	696	654	674	680	633	705	638	629	628	624	642	637	624	578	619	574	582
10	673	698	698	682	679	687	657	699	639	641	625	629	640	647	622	582	632	583
11	709	688	720	720	684	680	700	642	692	619	636	634	629	642	638	602	599	644
12	639	725	683	691	702	678	653	689	622	689	614	627	619	621	635	622	611	612
Change	12th - K	-79	-181	-100	-152	-177	-125	-164	-187	-58	-149	-119	-116	-94	-124	-170	-150	-163

700's

500's

12<sup>th</sup> grade to following Year's K Class

Class Enrollment

600's

400's

Decline





### Smaller Student Pool

	Ce	nsus 2010		2022		2027
Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	2,746	3.7%	2,543	3.2%	2,658	3.3%
5 - 9	3,189	4.3%	2,834	3.6%	2,883	3.6%
10 - 14	3,561	4.8%	3,109	3.9%	3,062	3.8%
15 - 19	9,937	13.3%	8,652	10.9%	8,422	10.5%
20 - 24	18,557	24.9%	19,358	24.5%	18,809	23.4%
25 - 34	9,709	13.0%	12,404	15.7%	11,443	14.2%
35 - 44	6,740	9.0%	6,890	8.7%	8,818	10.9%
45 - 54	7,298	9.8%	6,248	7.9%	6,183	7.7%
55 - 64	6,510	8.7%	7,260	9.2%	6,839	8.5%
65 - 74	3,350	4.5%	5,525	7.0%	6,172	7.7%
75 - 84	1,910	2.6%	2,865	3.6%	3,702	4.6%
85+	1,003	1.3%	1,357	1.7%	1,539	1.9%

16,687

14,595

14,367

Source: Esri forecasts for 2022 and 2027. U.S. Census Bureau 2010 decennial Census data converted by Esri into 2020 geography.





Student Choice Analysis

					SC	CHOOL	OF EN	ROLLM	ENT			
	Attendance Area	Count of Students Living in Attendance Area	Birch Lane ES	Korematsu ES	North Davis ES	Patwin ES	Pioneer ES	Willett ES	Chavez ES	Davis School Independent Study	Fairfield School	Montgomery ES
E	Birch Lane ES	510	288	55	22	8	9	30	52	6	1	39
RESIDENCE	Korematsu ES	569	47	382	11	10	30	18	38	5	1	27
RESI	North Davis ES	849	72	16	443	23	9	91	139	5	8	43
LOF	Patwin ES	400	8	5	2	240	0	52	68	4	17	4
SCHOOL	Pioneer ES	875	44	38	7	11	488	17	48	2	1	219
SC	Willett ES	437	7	1	16	38	0	260	95	4	8	8
	Total Resident Students	3,640	466	497	501	330	536	468	440	26	36	340
	Out of District Students	508	88	43	40	64	46	62	59	18	5	83
	Total Enrollment	4,148	554	540	541	394	582	530	499	44	41	423

Students Attending School of Residence									
Birch Lane ES	56%								
Korematsu ES	67%								
North Davis ES	52%								
Patwin ES	60%								
Pioneer ES	56%								
Willett ES	59%								

Ranked Comparison										
School	Enrollment	Residence	Difference Enrollment/Residen							
Birch Lane ES	2	4	44	9%						
Korematsu ES	4	3	-29	-5%						
North Davis ES	3	2	-308	-36%						
Patwin ES	6	6	-6	-2%						
Pioneer ES	1	1	-293	-33%						
Willett ES	5	5	93	21%						





### **Observations**

#### Births in the Area

- Average births per 5-year increment dropped from 603 to 417 between 2002 to 2021
- An increase in TK students expected from AB 130

#### New Housing

- 902 city approved residential units planned within the next 5 years
- 81% are multi-family that typically do not house school age children

#### Resident Student Population/Overall Enrollment

- Total enrollment had been relatively stable pre-pandemic
  - Large decline in the 2020/21 school year (pandemic related)
  - Resident student population declining
  - Increased IDT's have helped mask decline

#### What does the future hold?

Continued decline of resident students





# Questions?





