COMPLETE FINANCIAL & DEMOGRAPHIC PLANNING FOR EDUCATION





ELIZABETH SCHOOL DISTRICT

FACILITIES MASTER PLAN

MAY 2018

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Appendices (See Separate Document)



ACKNOWLEDGEMENTS

Cooperative Strategies, Wold Architects and Engineers, and JHL Constructors extends our appreciation to Elizabeth School District for commissioning this facilities master plan and for its cooperation to make this possible. We also thank the following groups.

School Board

Carol Hinds, President Dee Lindsey, Vice President Cary Karcher, Treasurer Paul Benkendorf, Secretary Richard Smith, Assistant Secretary/Treasurer

Administration

Douglas Bissonette, Superintendent Ron Patera, Director of Finance and Operations Melissa Hoelting, Communications Director Jeff Neer, Coordinator of Operations and Maintenance Marty Silva, Technology Director Tammy Krueger, Principal Running Creek Elementary Regina Montera, Principal Singing Hills Elementary Pam Eschief, Principal Elizabeth Middle School Rob McMullen, Director Frontier High School Bret McClendon, Principal Elizabeth High School Terry Wilson, Director of Transportation

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Wold Architects and Engineers

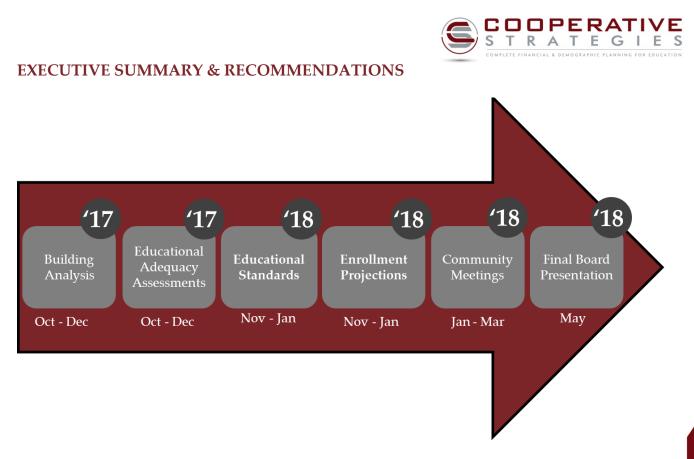
Job Gutierrez, Principal Aimee LaLone, Associate

JHL Constructors

Will Valkner, Director of Preconstruction Services

Elizabeth School District Community

Thank you for your participation and input in this planning effort.



Executive Summary of Process

I. Building Analysis

JHL performed an analysis of each school to develop and update the facility condition index. The facility condition index is a percentage of the of the building components that need to be replaced compared to the overall cost to replace the building. The components that need to be replaced is a combination of components that have outlived their life span and those components that are failing. We met with the facilities and maintenance staff to discuss projects that have occurred since the previous analysis and physically walked through each room of each building to assess the visible performance. We asked the maintenance staff of each facility to provide a list of issues they deal with to keep the buildings operational. We evaluated the ADA compliance of each building. We have provided building analysis of Elizabeth High School, Frontier High School, Elizabeth Middle School, Running Creek Elementary School, and Singing Hills Elementary School.

II. Enrollment Projections

Cooperative Strategies developed 10-year enrollment projections for Elizabeth School District using the cohort survival methodology. The cohort survival method is a popular methodology used to project K-12 enrollment. This methodology uses historical live birth data and historical student enrollment to age a known population throughout the school grades. The percentage of students who move from grade to grade, year to year (survival ratios) are analyzed to determine a projection ratio that is applied to current and future enrollment to develop the enrollment projections. The cohort survival methodology



inherently considers the net effects of historical trends in migration, housing, dropouts, transfers to and from charter schools, open enrollment, and deaths. This methodology does not assume changes in policies, program offerings, and migration patterns.

The projections presented in this report are meant to serve as a planning tool for the future and represent the most likely direction of the District. Enrollment projections were developed by analyzing the following data:

- Live birth data
- Historical enrollment by school, by grade
- Home based education
- Choice in & out
- Census data
- Building permits
- Planned housing development

A range of enrollment projections, including recommended, moderate, low, and high, were provided to Elizabeth School District. The moderate projection reflects a 3-year weighted average of survival ratios. The low and high projections offer a more conservative and liberal approach surrounding the moderate projection. The recommended projection is based on a detailed analysis of survival ratios by grade, by year and reflects more recent trends in the District.

Enrollment in the Elizabeth School District has decreased by 537 students since the 2003-04 school year. Over the next ten years, based on the recommended projection developed, K - 12 enrollment is projected to increase due to factors such as an increase in resident live birth counts; an increase in the birth to k ratio; and a gain in students at most grade levels in recent years and planned housing development.

There are many factors that can influence student enrollment including, but not limited to, changes or additions in program offerings, student transfer policy changes, housing activity, school voucher programs, school closures, etc. It is important to keep a close eye on these trends as they are difficult to predict and they do have an impact on projected enrollment. A more in-depth summary of these projections is offered later in this report and the full enrollment projections report is available in Appendix A.

III. Educational Standards

The master planning team met with District and School administration members together to understand ESD's existing district-wide educational programming goals, technology plan, and security infrastructure adequacy. The District's Strategic Plan, Technology Plan, and past Security analyses were reviewed through these discussions to identify current issues and potential desired updates. In addition, the District's adopted Class Size policy was used to calculate facility capacities.



IV. Educational Adequacy Assessments

Meetings were held with each school Principal to tour the facilities, document current building utilization and discuss educational adequacy. Specifically, the master planning team documented how well the facilities are supporting the mission of each school program; are there safety & security concerns on site; are core spaces adequately sized and configured to support learning; are the Specials, Cafeteria and outdoor spaces adequate, or are there any challenges to effective teaching/learning that are due to facility layout or infrastructure. As a result of these meetings, recommended actions to improve the educational environment were identified.

V. Community Meetings

Multiple community meetings were held to gather input from the greater Elizabeth community determine their wants, needs, and priorities in planning for the future. The planning team also shared their facility scorecards, enrollment projections, and garnered input on district priorities. Approximately 100+ participants attended these meetings. The meetings included an introduction from the Superintendent followed by the planning teams' presentation concluding with time for participants to answer a questionnaire, have group discussions and offer feedback. For those unable to attend these meetings, the District website hosted an online questionnaire for a month where an additional 189 participants submitted responses to this survey. *A summary of the results of these questionnaires is offered later in this report on and the full report is in Appendix B*.

VI. Final Board Presentation

The final report was presented to the Elizabeth Board of Education on May 21, 2018. The final presentation outlined the components of the physical building assessments, the calculated enrollment projections, and the educational adequacy assessments. The planning team outlined their recommendations, which were based on priority, future growth and available funding. Those recommendations are outlined on the following pages.



FACILITY RECOMMENDATIONS

RUNNING CREEK ELEMENTARY

Existing Needs

The current FCI, facility condition index is 73.5%. The site concrete paving and asphalt need to be replaced. There are many large cracks in the pavement and evident heaving and degradation of sidewalks and curb and gutter. The playground surfacing has reached the end of its life and should be repaired or replaced. The doors and hardware are functioning, however, they are not ADA compliant and should be replaced. The HVAC and plumbing systems are performing, however have exceeded their life expectancy and should be replaced in the near future. The electrical system has exceeded its life expectancy and should be replaced. The light fixtures have T-12 lamps which are inefficient and should be replaced.

Recommended Improvements

Safety/Security:

- Interior building remodel to relocate main office adjacent to the main entrance to provide a secure entrance vestibule that is monitored by staff.
- Upgrade security camera equipment, integrated across all district facilities, for improved monitoring capabilities and coverage.
- Increase PA system coverage on exterior of building.
- Reconfigure vehicle drop-off/pick-up driveway and parking to improve pedestrian/vehicle safety, and increase parking capacity.
- Renovate preschool and elementary playground surfacing, equipment and grass play field to provide safe outdoor play and learning spaces.
- Replace exterior doors with new safe/secure, code compliant doors and locks.

Educational Programming:

- Improve technology infrastructure to support increased interactive technology and future 1:1 device usage.
- An extensive interior building remodel could be considered to address the challenges of the small, triangular-shaped classrooms. Selective removal of some demising walls and creation of more flexible learning spaces could alleviate constraints and benefit educational programming.



SINGING HILLS ELEMENTARY

Existing Needs

The current FCI, facility condition index is 47.8%. The site concrete paving and asphalt need to be replaced. There are many large cracks in the pavement and evident heaving and degradation of sidewalks and curb and gutter. The concrete slab on grade within the building is settling in many locations causing an uneven floor, and walls to either heave or settle. We recommend a structural analysis and repairs or replacement as necessary. Many windows need to be replaced. The operable portions of the windows do not operate properly so maintenance staff has mechanically fastened them shut. The majority of the flooring within the building has exceeded its life expectancy and should be replaced. HVAC controls are not functioning properly and need to be replaced.

Recommended Improvements

Safety/Security:

- Interior building remodel to relocate main office adjacent to the main entrance to provide a secure entrance vestibule that is monitored by staff.
- Upgrade security camera equipment, integrated across all district facilities, for improved monitoring capabilities and coverage.
- Replace door hardware between adjoining classrooms for improved security.
- Install cellphone booster for improved coverage.
- Renovate grass play field to provide safe outdoor play and learning field space.

Educational Programming:

- Add electrical receptacles in classrooms for enhanced instruction and educational technology.
- Improve technology infrastructure to support increased interactive technology and future 1:1 device usage.
- Addition/Remodel to increase the Cafeteria size for future increase in enrollment and improve acoustics and daylighting.



ELIZABETH MIDDLE SCHOOL

Existing Needs

The current FCI, facility condition index is 69.7%. The site concrete paving and asphalt need to be replaced. There are many large cracks in the pavement and evident heaving and degradation of sidewalks and curb and gutter. The parking lot lighting is limited. Additional lighting is needed for safety and security. The exterior walls are not insulated. To increase energy efficiency, insulation should be added. The doors and hardware are functioning, however, they are not ADA compliant and should be replaced. The wood siding accents are deteriorating and need to be replaced. The HVAC and plumbing systems are performing, however they have exceeded their life expectancy and should be replaced in the near future. Many plumbing fixtures are not ADA compliant. The electrical system has exceeded its life expectancy and should be replaced. The intercom and clock system is past its life expectancy and should be replaced.

Recommended Improvements

General:

- Building replacement or extensive renovation should be considered in the +5 year timeframe, due to the educational adequacy concerns and condition deficiencies.
- Prioritize educational adequacy concerns that can be addressed in the short term until building replacement. Consider upgrading PA, security camera equipment, technology infrastructure and furniture.



FRONTIER HIGH SCHOOL

Existing Needs

The current FCI, facility condition index is 69.3%. Without repairs, in ten years the FCI will be 100%. The site concrete paving and asphalt need to be replaced. There are many large cracks in the pavement and evident heaving and degradation of sidewalks and curb and gutter. The exterior structure is deteriorating. The exterior brick needs repair and complete tuck pointing. In the original portions of the building, there is are a lot of cracks in the plaster and evidence of water infiltration. The wood trim on the addition needs to be replaced. The locksets and doors at the main entry are failing and need to be replaced. There is minimal electronic security installed. The exterior walls are not insulated. To increase energy efficiency, insulation should be added. The doors and hardware are not ADA compliant and should be replaced. Windows are single pane and in poor condition. They should be replaced. Furnishings and fixtures have exceed their life expectancy and need to be replaced. The HVAC and plumbing systems are not performing well; they have exceeded their life expectancy and should be replaced. When plumbing or hydronic pipes leak, the maintenance staff have taken a "Bandaid" approach to keep the system operational. Many plumbing fixtures are not ADA compliant. To make these fixtures ADA-complaint, significant remodeling is required. The electrical system has exceeded its life expectancy and should be replaced.

Recommended Improvements

General:

- Move the FHS program out of the current facility due to educational adequacy concerns and condition deficiencies.
- Addition/Remodel at EHS campus to provide dedicated FHS program space for core programs and CTE. EHS campus location provides potential opportunities for some shared facility usage as well as operational efficiencies (food service, student support/Special Ed. services, transportation, etc).
- Prioritize educational adequacy concerns that can be addressed in the short term until relocation. Consider upgrading PA, security camera equipment and technology infrastructure.



ELIZABETH HIGH SCHOOL

Existing Needs

The current FCI, facility condition index is 20.7%. The building is performing well. There are a few key areas that should be addressed in the near future. The site concrete paving has sections that are deteriorating and should be replaced. This appears to be caused by de-icing. There are cracks in the asphalt pavement that should be filled to extend the life of the paving. There are a few isolated areas where the exterior walls are separating from the floor structure. We recommend a structural engineer evaluate the issue and provide a recommendation for repair. Most windows are performing well, however, some have broken seals allowing condensation to develop between panes. These windows should be replaced.

Recommended Improvements

Safety/Security:

- Interior building remodel to provide a secure entrance vestibule that is monitored by staff.
- Upgrade security camera equipment, integrated across all district facilities, for improved monitoring capabilities and coverage.

General:

• Addition/Remodel for increased CTE programming, Athletics and Arts. Consider providing separate Cafeteria and Auditorium.



DISTRICTWIDE

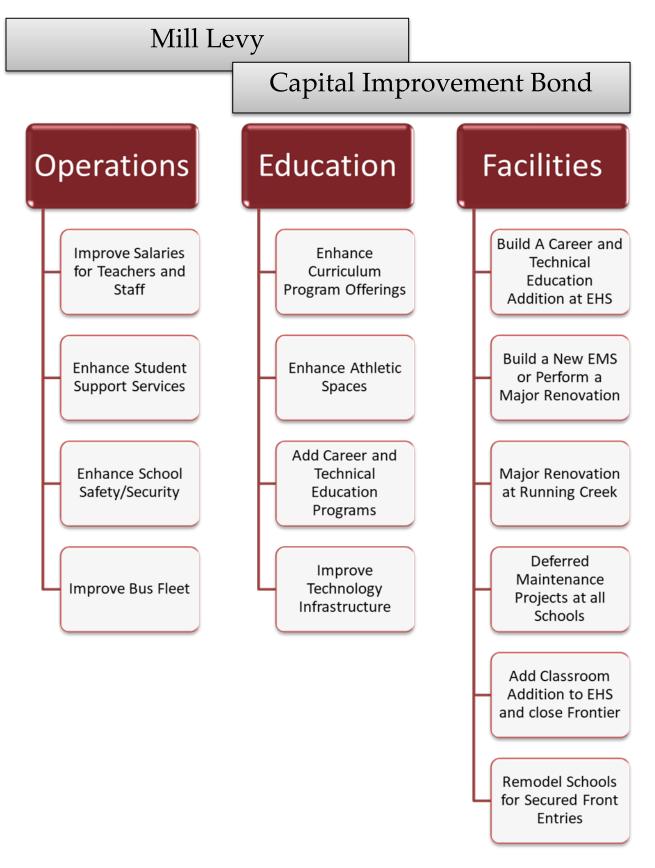
While not directly related to facility improvements, our planning team also investigated opportunities to improve the school district operationally. We surveyed school district administration, school district staff, and the greater Elizabeth school district community to identify areas where operations could be improved. Topics included: Teacher salaries, bus fleet, bus routes, before and after school programs, safety upgrades, current and enhanced program offerings, career and technical education development, technology enhancements, visual and performing arts enhancements, and athletic enhancements. Below is a list of the top priorities identified by the Elizabeth school district community:

- **Competitive salaries for teachers** This was identified as a top priority by the Elizabeth school district community. The community has a desire to hire and retain quality teachers for their students.
- **Safety and security** This priority is both improvements to the physical security at each school and improvements to the security measures at each school from an organization and personnel standpoint.
- Enhanced program offerings:
 - Expanded and centralized Career and Technical Development (CTE) programs The community has a desire to expand their CTE offerings in the Elizabeth school district to offer a greater selection of programs for students looking for pathways beyond college. This includes both high-bay (construction trades, woodworking, automotive, etc.) and low-bay (computer programming, robotics, healthcare, etc.)
 - Expanded athletic facilities and options
 - Expanded Science Technology Engineering Math (STEM) programs
 - **Visual and performing arts** This was the lowest priority of respondents, however it was noted the school district current has a robust visual and performing arts program and has made investments in recent years to enhance these.
- **Bus Fleet** The buses in Elizabeth school district have reached the end of their useful life and need to be replaced. While they are not in disrepair, they have reached a point where most school districts begin cycling in newer buses with less mileage and less maintenance costs. During our community outreach there was discussion around improving the bus routes and part of the overall transportation discussion.

The Elizabeth school district should take these operational priorities into consideration as they plan into the future. The school district may be able to address some of these priorities through existing general fund allocations however to fully implement all these priorities the school district will more then likely need tax payer support through the authorization of a mill levy increase.



FACILITY RECOMMENDATIONS SUMMARY

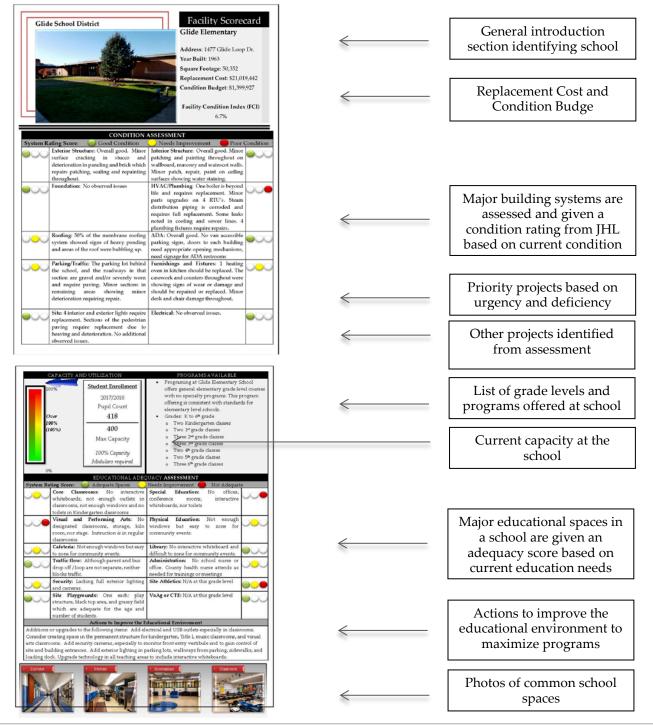




ASSESSMENT SUMMARY & SCORECARDS

As a result of the facility condition assessments and educational adequacy assessments, the following scorecards were generated to further explain the observations and recommended action items. It is important to note that these are planning figures based on life cycle cost models and actual bids for construction will be different. The assessment identifies needs and assigns a cost figure based on the assessed condition of that need.

Scorecard example on how to read:



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See raw data sheets showing all facility findings in Appendices D & E.



System Ra	ting Score: 🥥 Good Condition	🦲 Needs Improvement 👘 🔴 Poor C	ondition
	Exterior Structure: No observed issues.	Interior Structure: No apparent issues, but the interior walls and wall finishes have exceeded their life expectancy.	000
	Foundation: No observed issues.	HVAC/Plumbing: Systems have exceeded their life-expectancy; however, they are functioning. Control system upgrades are needed.	0 0 0
	Roofing: No observed issues. Replaced within last 10 years.	ADA : Restrooms are not ADA compliant; Door hardware and clearances are not ADA compliant.	000
	Parking/Traffic: Repair and fill cracks in asphalt.	Furnishings and Fixtures: No observed issues.	000
	Site: In many areas of concrete sidewalks and curb and gutter need to be replaced.	Electrical: System is functional, yet it is at the end of its life expectancy. Light fixtures have T-12 lamps and ballasts which should be upgraded to a more efficient type.	000
	Security: Existing system is functional and operating as intended.	Doors: Functioning, but not ADA compliant.	000
\mathbf{OOO}	Windows: Most windows are in good condition and have insulated	Flooring: No observed issues.	000



glass, but have exceeded their life expectancy.

Priority Projects

Concrete paving and curb and gutter repair/replacement. ADA upgrades. HVAC controls need to be upgraded.

Additional Projects, if Funds Become Available

HVAC, Plumbing, and Electrical system replacement.





CAPACIT	Y AND UTIL	IZATION	PROGRAMS AVAILABLE	
	100%	Student Enrollment	Programing at Running Creek offe elementary grade level courses.	rs general
	58%	2017-2018 K-5 Pupil Count: 314	This program offering is consis standards for elementary level school 2017-18 Grades:	
		K-5 Potential Capacity: 541	 (3) Pre-K classrooms (2) each K - 2nd Grade (3) each 3rd - 5th Grade 	
	0%	58% Capacity		
EDUCAT	IONAL ADEÇ	QUACY ASSESSMENT		
System Ra	ating Score:	Adequate Spaces	😑 Needs Improvement 👘 🔴 Not A	Adequate
$\bigcirc \bigcirc \bigcirc$	of classroom	boms : Triangular shape s is functional challenge. ural light and casework	Special Education : All needs are currently being met.	000
	needs are me	Performing Arts : Most et. A/V system in could be upgraded for onality.	Physical Education : Most needs are currently being met. A playfield would benefit physical education.	000
	Cafeteria: A being met.	ll needs are currently	Library: Greater access to natural light and views would benefit adequacy and function.	000
$\bigcirc \bigcirc \bigcirc$	very congest	: Drive/parking area is red at pick-up/drop-off. parking capacity.	Administration: Most needs are being met. There is no conference space currently and this would benefit functions.	000
000	visitors via v	ont office monitors rideo-phone as office is to entry. All other needs	Site Athletics: N/A at this grade level.	000
000	surface and a in need of up	unds: Playground equipment is older and ograde. Playfield is not I due to uneven ground plantings.	VoAg or CTE: N/A at this grade level.	000
Actions to	Improve the	Educational Environment		
A product o	f Cooperative Strate	gies, cannot be duplicated without pri	or written consent.	



Addressing classroom configuration would be ideal but would require a full remodel/addition. Site reconfiguration to provide improved pedestrian/vehicle separation, traffic routing and parking capacity would benefit safety and operations. Relocation of main office could be considered. Renovation of playground and field would provide a safer outdoor space for play and learning.













Facility Scorecard

Singing Hills Elementary Address: 41012 Madrid Drive Year Built: 1995 Square Footage: 53,000

Replacement Cost:

- **2018** \$ 14,541,420
- **2028** \$ 21,525,664

Condition Budget:

2018 \$ 6,950,218

2028 \$ 15,974,072

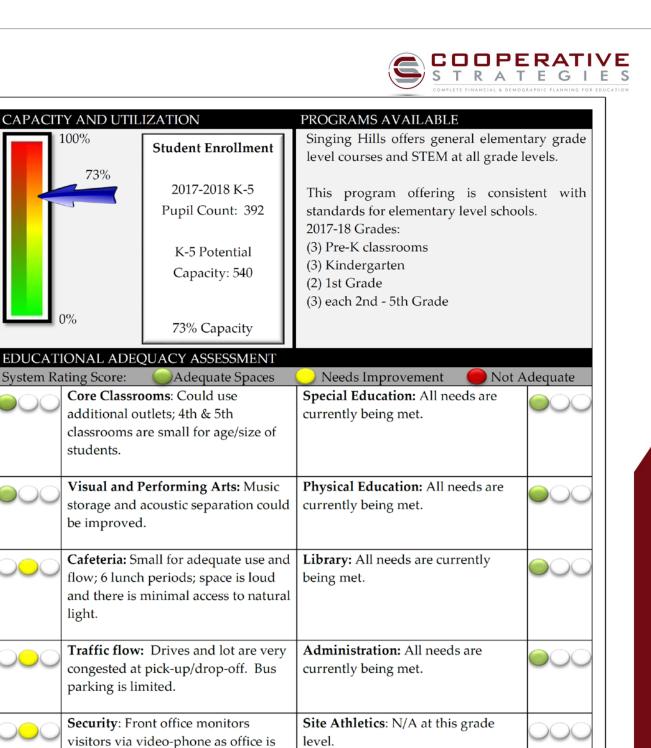
System Ra	ting Score: 🛛 🔘	Good Condition	Needs Improvement OPoor Contract	Condition
000		: Good condition; nce of caulking and	Interior Structure : Appear in good shape and have been well maintained.	000
	Foundation: The many locations.	slab is settling in	HVAC/Plumbing: Systems have or soon will exceeded their life- expectancy; however, they are functioning. Control system upgrades are needed.	000
	Roofing: All roofi replaced in last 2 y		ADA: No observed issues.	000
	Parking/Traffic: For cracks in asphalt is		Furnishings and Fixtures : No observed issues.	000
	Site: In many area sidewalks and cur to be replaced.		Electrical: No observed issues.	000
	Security: Existing functional and ope	system is erating as intended.	Doors: No observed issues.	000
	Windows: Many o do not function.	operable windows	Flooring: Some flooring has been replaced, but most of the flooring is past its life expectancy.	000
Priority Pr	oiects			



Repair the settling concrete slabs. Asphalt and concrete paving and curb and gutter repair/replacement. HVAC controls need to be upgraded.

Additional Projects, if Funds Become Available

Window replacement; HVAC, Plumbing, and Electrical system replacement.



VoAg or CTE: N/A at this grade

level.

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not adjacent to entry. Some

Actions to Improve the Educational Environment

upgrade.

classroom door hardware is need of

Site Playgrounds: Playgrounds are

adequate. Open field space is limited.



Adding electrical outlets in classrooms could enhance instruction. Cafeteria improvements to size, natural light and acoustics would benefit function and adequacy, as enrollment increases. Door hardware at doors between classrooms could be upgraded to improve functioning for lockdowns. Relocation of main office could be considered. Parking/drive expansion or reconfiguration could improve site safety. Improvements to grass playfields could benefit the learning environment.









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Facility Scorecard

Elizabeth Middle School Address: 34427 CO Road 13 Year Built: 1978 - Add's '84, '88 Square Footage: 67,000 Replacement Cost: 2018 \$ 20,578,010 2028 \$ 30,461,628 Condition Budget: 2018 \$ 14,348,753 2028 \$ 21,240,459

System Ra	nting Score: 🧼 Good Condition	💛 Needs Improvement 👘 🔴 Poor C	Condition
	Exterior Structure: The exterior	Interior Structure: Interior Walls	\bigcirc
	structure appears to be in good	are approaching end of life	
	condition. No evident signs of	expectancy.	
	structure failure; Lacks wall		
	insulation in exterior walls; Wood		
	siding accents are deteriorating.		
	Foundation: No observed issues.	HVAC/Plumbing: Majority of	\bigcirc
		systems are original; Most have	
		exceeded life expectancy;	
		Functioning, but in need of	
		replacement; Plumbing Fixtures are	
		not ADA-compliant.	
	Roofing: Replaced in the last 10	ADA: Doors and restrooms are not	00
	years, no observed issues.	ADA compliant.	
	Parking/Traffic: Surface is	Furnishings and Fixtures: All at the	\bigcirc
	deteriorated requiring repaving.	end of their useful life.	
	Site: Paving is deteriorated and	Electrical: Original clock/intercom	
	needs to be replaced. Additional site	system is past life expectancy; EM	
	lighting is needed for safety and	lighting needs to be replaced; May	
	security.	not have functional battery back-up.	
	Security: Systems functioning	Doors: Many non-ADA-compliant	\bigcirc
	however the layout of main entry	door knobs throughout.	



	lacks appropriate vision and control of visitors.		
000	Windows: Windows are single pane glazing, and water infiltration is evident; few windows in facility with minimal natural light.	Flooring: At the end of its useful life and requires replacement.	000

Priority Projects

Site paving replacement; window replacement; EM Lighting system replacement are top priorities.

Additional Projects, if Funds Become Available

Replacement of HVAC system; Security upgrades; ADA upgrades, flooring



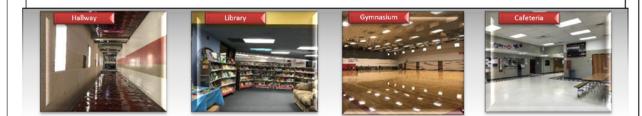


CAPACITY A		ZATION	PROGRAMS AVAILABLE	
	6 <u>2</u> %	Student Enrollment 2017-2018 6-8 Pupil Count: 430 K-5 Potential Capacity: 696 62% Capacity	Programing at Elizabeth Middle Scho general middle school grade level co electives in: - Drama - Fine Arts - STEAM - Technology - Music	
EDUCATION	JAL ADEC	UACY ASSESSMENT		
System Rating		Adequate Spaces	💛 Needs Improvement 👘 🔴 Not A	dequate
	÷	oms: Most classrooms	Special Education: Needs are being	
are are	e small for	adequate functioning	met.	
I I		e or no exterior		
wi	ndows. Mo	ore elec outlets needed.		
Vi	sual and P	erforming Arts: Needs	Physical Education: Use of gym and	\bigcirc
are	e being me	t.	locker room showers are sometimes	
			impacted by condition issues (roof	
			leaks and water service). Location of	
			gym is not ideal for public access.	
			Capacity of gym for large events is	
			limited.	
Ca	feteria: Ne	eeds are being met.	Library: Interior space w/o natural	\bigcirc
			light or views. No PA access to	000
			space. More technology would	
			benefit students.	
		Vehicle congestion,	Administration: Location at center	\bigcirc
1 1	<u> </u>	els, pedestrian safety	of building limits supervision and	000
co	ncerns and	inadequate parking for	access to natural light/views.	
L	ents.		Otherwise needs are being met.	
	•	ncerns noted regarding	Site Athletics: Student access to	\bigcirc
1 1		/main office location,	fields after school crosses traffic	000
	-	ameras could be	areas. Facilities are otherwise	
1 1		ability to limit access to	adequate.	
· · ·		uilding during		
I I		events; PA system		
im	provemen	ts needed.		



0	Site Playgrounds: Most needs are being met; play area for recess could	VoAg or CTE : N/A at this grade level.	00
	be improved with more equipment		
	and outdoor furnishing.		
Actions to	Improve the Educational Environment		

Security improvements for visitor access and monitoring would be a benefit. Classroom improvements to size and natural light throughout school would benefit the learning environment. Natural light, ventilation and temperature control issues throughout building would improve the adequacy of building. Parking and driveway layout, lighting, parking capacity could be improved for safety. The outdoor play/recess area for students is adequate, but could be improved.







Facility Scorecard

Frontier High School

Address: 589 S. Banner St. Year Built: 1920 Square Footage: 51,000 Replacement Cost: 2018 \$ 16,585,929 2028 \$ 24,552,151 Condition Budget: 2018 \$ 11,493,592 2028 \$ 24,102,172

System Ra	ating Score: OGood Condition	Needs Improvement OPoor Control	Conditior
	Exterior Structure: Masonry	Interior Structure: Past life	\bigcirc
	Repairs/Tuckpointing is needed;	expectancy; Many cracks in the	00
	Wood Fascia is deteriorating;	existing plaster, Interior masonry	
	Evidence of water infiltration.	walls appear sound.	
	Foundation: Appears to be in goo	d HVAC/Plumbing: Past Life	\bigcirc
	condition for age; nearing end of li	fe expectancy; Majority of systems are	00
	expectancy.	original and have been fixed when	
		broken with a "bandaid" approach.	
		Complete system replacement is	
		needed.	
	Roofing: Replaced in 2000;	ADA: Restrooms and many spaces	\bigcirc
	functioning well.	do not meet ADA requirements;	00
	-	Significant remodel work would be	
		required to bring building up to	
		ADA standards.	
	Parking/Traffic: At the end of its	Furnishings and Fixtures: Most	\bigcirc
	useful life, need to replace.	fixtures and furnishings are past life	00
	_	expectancy	
	Site: At the end of its useful life,	Electrical: Past life expectancy;	\bigcirc
	sidewalks, stairs and paving are	Entire system needs to be upgraded.	00
	uneven and in poor condition.		
	Security: Minimal security measur	e Doors : Past life expectancy;	\bigcirc
	installed, locksest are failing.	hardware is not ADA compliant;	00



Γ		Failing doors and hardware have	
		led to air and water infiltration and	
		security issues.	
6	Windows: At the end of their useful life; leaking air and moisture.	Flooring: Past life expectancy.	

Priority Projects

Masonry Repairs/Tuckpointing is needed; Wood Fascia is deteriorating; Replacement of windows and doors; Replacement of HVAC System; Site paving repairs.

Additional Projects, if Funds Become Available

ADA upgrades; site lighting; electrical system replacement.



		COMPLETE FINANCIAL & DEMOG	RAPHIC PLANNING FOR
CAPACITY AND UTIL	IZATION	PROGRAMS AVAILABLE	
100%	Student Enrollment 2017-2018 Pupil Count: 57	Frontier High School offers a broad traditional and life skills course alternative high school setting. The class size at FHS is 13 students per of school shares the building with sev non-District programs. Potential capa	es in an e average class. The eral other
0%	Potential Capacity: 108 53% Capacity	may be possible, but would de programming.	-
EDUCATIONAL ADEQ	QUACY ASSESSMENT		
System Rating Score:	Adequate Spaces		dequate
	oms: Needs are being	Special Education: N/A at this school.	$\bigcirc\bigcirc\bigcirc\bigcirc$
met.	Performing Arts: Current	Physical Education: Needs are	
	are not designed for arts	being met.	$\bigcirc \bigcirc \bigcirc \bigcirc$
-	and are not adequate for		
storage, acou	1		
	dequate for current	Library: N/A. There is no dedicated	$\bigcirc \bigcirc \bigcirc \bigcirc$
	Location is at main	library at this school.	$\bigcirc \bigcirc \bigcirc \bigcirc$
entrance with access contro	nout any visitor/public		
	Adequate, needs are	Administration: Needs are being	
being met.		met. For security, it would be ideal	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$
		for school visitors to enter the office	
		before gaining access to school.	
	cess to school is open to o access control. Age of	Site Athletics: N/A at this grade level.	OOO
	es periodic maintenance	level.	
issues.	I		
	unds: There is no	VoAg or CTE: Foods classroom	
	ning or field space.	equipment is out of date and in need	
-	g adapts to this, but it al to have outdoor	to upgrade. The school lacks spaces	
spaces availa		for other CTE programming, which is desired by the school and	
opueeo uvunu		students.	
Actions to Improve the	Educational Environmen	t	
A product of Cooperative Strates	gies, cannot be duplicated without pr	ior written consent.	



Educational adequacy is significantly impacted by the age and condition of the building, with regard to safety, access and support of programming. The school would benefit from an improved layout and educational spaces designed for their use.











Facility Scorecard

Elizabeth High School

S T R A T E G I E S

Address: 34500 Co Rd 13 Year Built: 2000 Square Footage: 139,000 Replacement Cost: 2018 \$ 43,135,215 2028 \$ 66,203,287 Condition Budget: 2018 \$ 8,916,311 2028 \$ 23,464,540

System Ra	ting Score: 🛛 🥥 Good Condition	Needs Improvement 🛛 🔴 Poor O	Condition
	Exterior Structure : No observed issues aside from minor caulking an sealer.	Interior Structure: There are gaps between the floor structure and the exterior walls in a few locations indicating there is post-construction movement.	000
	Foundation : No observed issues, except additional investigation is required where exterior walls are pulling away from the concrete slab.	HVAC/Plumbing : Plumbing fixtures and terminal boxes are approaching their life expectancy, but they are currently performing without issues. Control system upgrades are needed.	000
	Roofing : All roofing has been replaced in last 6 years.	ADA : No observed issues.	
$\bigcirc \bigcirc \bigcirc$	Parking/Traffic : Surface is deteriorating requiring repair and fil cracks in asphalt.	Furnishings and Fixtures:1No observed issues.	000
000	Site : Many areas of concrete sidewalks need to be replaced. It appears the snow and ice removal practices have greatly damaged the concrete.	Electrical : No observed issues.	000
	Security : Existing system is functional and operating as intended	Doors : No observed issues.	



000

Windows: While most windows are
in good condition. Some have
condensation build-up indicating the
seals have been compromised.F

Flooring: No observed issues.



Priority Projects

Exterior masonry and storefront caulking. Apply sealers to the exterior CMU. Stair tread bull nose replacement. These general building maintenance items will greatly help extend the life of the building. HVAC controls need to be upgraded.

Additional Projects, if Funds Become Available

Many areas of site paving are deteriorating. Review snow/ice removal practices. Many areas are in need of replacement.



CAPACITY AND UTIL	Student Enrollment 2017-2018 Pupil Count: 700 Potential Capacity: Count: 912	PROGRAMS AVAILABLE Elizabeth High School offers courses Language Arts, Social Studies and Sci Business, Family/Consumer Science, M Technology, Theater and World Langu	ience; Art Music, PE
EDUCATIONAL ADE	77% Capacity		
System Rating Score:	Adequate Spaces	💛 Needs Improvement 🛛 🔴 Not A	dequate
	ooms: Needs are being	Special Education : Needs are being met.	
are being me	Performing Arts : Needs et. Drama program needs e increasing as popularity grows.	Physical Education : There is a main gym and aux. gym, however they are fully utilized and more space is needed for desired programs. No space for wrestling mat storage, no space for inclement weather practice. Weight room is fully utilized and could benefit from more space.	
to schedule due to set-up	ombined uditorium is challenging and maintain/operate p/take down for different iered floor impedes	Library: Needs are being met.	000
Traffic flow	r: Drives and lot can be t pick-up/drop-off.	Administration: Needs are being met.	000
visual or ph access; Main unlocked th	fice does not have direct ysical control of visitor a entry doors are roughout the day. erage could be improved ations.	Site Athletics: Needs are being met. There is no dedicated space for band practice.	000
Site Playgro	ounds: Needs are being	VoAg or CTE : No space to support CTE industrial technology or trades.	00



Space to support construction, welding, CAD, other CTE options are desired to address student needs and interests. A separate auditorium and cafeteria would improve programming and operational efficiency. Dedicated space for wrestling and mat storage would improve gym space issues. Increased video monitoring around the facility, and remodel of office area to control visitor access at main entry could improve security.





ENROLLMENT PROJECTIONS

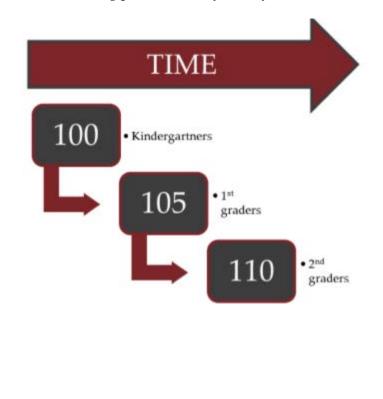
Cohort Survival Method

A cohort is a group of persons [in this case, students]. The cohort survival enrollment projection methodology uses historic live birth data and historic student enrollment to "age" a known population or cohort throughout the school grades. For instance, a cohort begins when a group of kindergarteners enrolls in grade K and moves to first grade the following year, second grade the next year, and so on.

A "survival ratio" is developed to track how this group of students increased or decreased in number as they moved through the grade levels. By developing survival ratios for each grade transition [i.e. 2nd to 3rd grade] over a ten year period of time, patterns emerge and can be folded into projections by using the survival ratio as a multiplier.

For example, if student enrollment has consistently increased from the 8th to the 9th grade over the past ten years, the survival ratio would be greater than 100% and could be multiplied by the current 8th grade to develop a projection for next year's 9th grade. This methodology can be carried through to develop ten years of projection figures. Because there is not a grade cohort to follow for students coming into kindergarten, live birth counts are used to develop a survival ratio. Babies born five years previous to the kindergarten class are compared in number, and a ratio can be developed to project future kindergarten enrollments.

The cohort survival method is useful in areas where population is stable [relatively flat, growing steadily, or declining steadily], and where there have been no significant fluctuations in enrollment, births, and housing patterns from year to year.





ELIZABETH SCHOOL DISTRICT HISTORICAL ENROLLMENT

As indicated in the table below, over the past fifteen years, PK-12 student enrollment in the Elizabeth School District has decreased by 537 students, or approximately 21 percent.

Historical Enrollment - by Sch	rool															
School	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Trend
Elizabeth High	824	809	848	866	835	812	786	776	721	778	764	717	701	693	676	Ş
Frontier High	52	51	58	60	44	39	59	59	65	61	63	57	54	57	55	~~
Elizabeth Middle	636	629	599	586	561	514	516	504	496	496	529	494	437	434	430	\sim
Running Creek Elementary	510	516	490	495	496	461	459	386	361	352	341	343	332	334	312	~
Singing Hills Elementary	477	442	448	442	460	482	463	441	446	424	403	395	394	398	392	\sim
Running Creek Preschool	24	33	80	92	72	57	82	77	82	83	68	61	66	72	63	~~
Singing Hills Preschool	20	11	20	66	67	65	68	71	51	60	49	55	63	64	78	5~~~
Total	2,543	2,491	2,543	2,607	2,535	2,430	2,433	2,314	2,222	2,254	2,217	2,122	2,047	2,052	2,006	

Source: Elizabeth School District

Historical Enrollment - District-wide

Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
PK	44	44	100	158	139	122	150	148	133	143	117	116	129	136	141
K	144	149	102	160	146	133	142	113	117	125	124	104	100	93	106
1	129	150	155	123	169	149	128	128	108	115	116	125	120	99	94
2	160	141	162	163	137	170	150	122	128	115	113	124	131	127	101
3	182	169	150	174	176	137	172	147	130	139	121	118	126	142	137
4	166	186	180	141	174	184	142	172	153	127	140	121	126	133	139
5	206	163	189	176	154	170	188	145	171	155	130	146	123	138	127
6	211	211	175	186	179	155	169	192	140	165	173	124	147	136	132
7	214	199	211	185	184	183	149	162	195	142	189	176	129	157	139
8	211	219	213	215	198	176	198	150	161	189	167	194	161	141	159
9	275	239	267	244	242	207	203	213	171	199	214	178	217	188	163
10	210	240	221	247	235	227	196	207	224	186	203	209	167	218	194
11	196	195	224	229	208	218	236	190	204	238	172	189	190	161	208
12	195	186	194	206	194	199	210	225	187	216	238	198	181	183	166
Grand Total	2,543	2,491	2,543	2,607	2,535	2,430	2,433	2,314	2,222	2,254	2,217	2,122	2,047	2,052	2,006

Source: Elizabeth School District

Historical Enrollment - District-wide

Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
PK	44	44	100	158	139	122	150	148	133	143	117	116	129	136	141
K - 5	987	958	938	937	956	943	922	827	807	776	744	738	726	732	704
6 - 8	636	629	599	586	561	514	516	504	496	496	529	494	437	434	430
9 - 12	876	860	906	926	879	851	845	835	786	839	827	774	755	750	731
Grand Total	2,543	2,491	2,543	2,607	2,535	2,430	2,433	2,314	2,222	2,254	2,217	2,122	2,047	2,052	2,006

School	Trend
Elizabeth High	\langle
Frontier High	{
Elizabeth Middle	$\langle \rangle$
Running Creek Elementary	\sim
Singing Hills Elementary	$\langle \rangle$
Running Creek Preschool	/
Singing Hills Preschool	$\left\langle \right\rangle$
Total	\sim



LIVE BIRTH DATA

Utilization of live birth data is recommended when projecting future kindergarten enrollments. This data provides a helpful overall trend. Large bubbles in birth counts, either up or down, can also be planned for or anticipated by the District.

In addition, the live birth counts are used in determining a birth-to-kindergarten and birth-to-first grade survival ratio. This ratio identifies the percentage of children born in a representative area who attend kindergarten and first grade in the District five and six years later. The survival ratios for birth-to-kindergarten, birth-to-first grade, as well as grades 1-12 can be found on page 19 of this report. Data is arranged by the residence of the mother. For example, if a mother lives in Elizabeth but delivers her baby in Denver, the birth is counted in Elizabeth. Live birth counts are different from live birth rates. The live birth count is simply the actual number of live births. A birth rate is the number of births per 1,000 women in a specified population group.

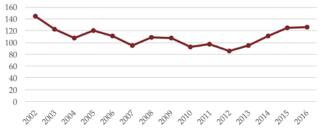
The table and graph includes the resident live birth counts for the Elizabeth School District. population group.

ELIZADETH SCI	HOOL DISTRICT
Year	# of live births
2002	144
2003	123
2004	108
2005	120
2006	111
2007	95
2008	109
2009	107
2010	92
2011	97
2012	86
2013	95
2014	111
2015	125
2016	126

RESIDENT LIVE BIRTH COUNTS ELIZABETH SCHOOL DISTRICT

Source: Vital Statistics Program, Colorado Department of Public Health and Environment.

RESIDENT LIVE BIRTH COUNTS ELIZABETH SCHOOL DISTRICT





HOUSING DATA

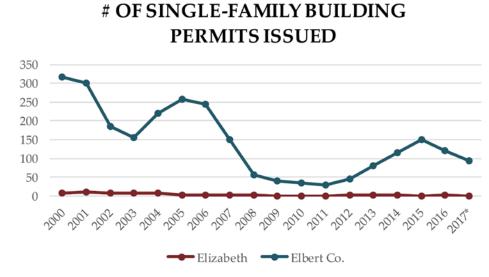
Housing development and building permits are tracked to determine their effect on student enrollment. The table and chart below illustrates the number of single-family building permits issued in Elizabeth and Elbert County since 2000.

BUILDING PERMITS SINGLE-FAMILY

SINGLE-FAMILY										
Year	Elizabeth	Elbert Co.								
2000	8	317								
2001	10	301								
2002	7	185								
2003	6	154								
2004	6	219								
2005	2	258								
2006	2	244								
2007	3	150								
2008	1	57								
2009	0	39								
2010	0	33								
2011	0	30								
2012	1	45								
2013	1	79								
2014	1	116								
2015	0	149								
2016	1	120								
2017*	0	94								

Source: SOCDS Building Permits Database

*preliminary through July 2017



NOTE: A full subdivision analysis is provided in the full study.

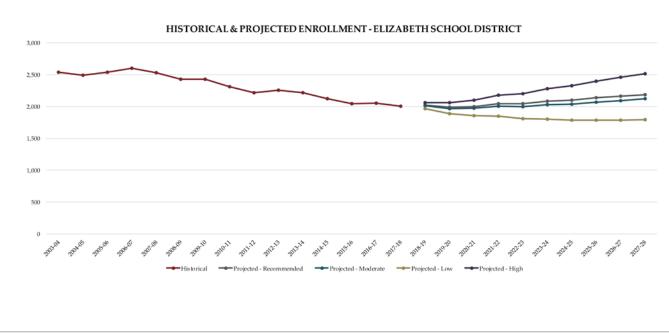


PROJECTED ENROLLMENT

Cooperative Strategies developed low, moderate, high, and recommended enrollment projections for the Elizabeth School District. The moderate enrollment projections are based on a selected average or weighted average of survival ratios (in this case, a 3 year weighted average, by school). The low and high enrollment projections are developed using statistical distributional theory, providing the District with a more cautious (low) and more generous (high) enrollment projection. The recommended enrollment projection is based on a detailed analysis of historical enrollment and resulting survival ratios over the past 15 years. Significant shifts in survival ratio patterns are realized and accounted for in determining projection ratios independently for each grade level. The recommended illustrates the most likely direction of the District based on more recent trends.

The range of enrollment projections from low (cautious) to high (generous) are offered due to the limitations of the cohort survival method in factoring changes to policies, program offerings, and future changes in housing and migration patterns. For example, the low enrollment projection might be used if housing declines significantly more than anticipated; the high enrollment projection might be used if housing growth increases at a more rapid rate than seen in recent years.

LOW PROJECTION	MODERATE PROJECTION	HIGH PROJECTION
↑ Higher inflation / interest rates	↔ Moderate inflation	\downarrow Low inflation / interest rates
↓ Decline in new housing	$\leftrightarrow \text{ Moderate level of new housing}$	\uparrow High level of new housing
\downarrow Decline in live births	\leftrightarrow Stagnate number of live births	\uparrow Increase in live births





ELIZABETH SCHOOL DISTRICT PROJECTED ENROLLMENT – RECOMMENDED

Based on the recommended projected enrollment, the student enrollment in the Elizabeth School District is projected to increase from 2,006 students in 2017-18 to 2,191 students in 2027-28, based on the cohort survival method.

Projected Enrollment - Re Grade	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
РК	141	141	141	141	141	141	141	141	141	141
K	114	132	149	150	143	143	143	143	143	143
1	107	115	134	150	152	145	145	145	145	145
2	98	112	119	139	157	158	151	151	151	151
3	106	103	117	125	146	164	166	159	159	159
4	139	108	104	119	127	149	168	168	161	161
5	140	140	109	105	121	128	150	169	170	163
6	125	138	139	107	104	119	127	148	166	168
7	136	129	142	143	111	107	122	130	152	172
8	142	139	132	145	146	113	109	125	133	156
9	206	169	180	167	184	187	142	147	168	174
10	165	209	172	182	169	187	190	144	149	171
11	188	159	200	165	175	163	179	182	138	144
12	217	194	164	208	170	182	168	185	189	143
Recommended Total	2,024	1,988	2,002	2,046	2,046	2,086	2,101	2,137	2,165	2,191
Spring Valley Ranch	32	32	32	32	32	32	32	32	11	0
Ritoro	28	28	28	28	7	0	0	0	0	0
NW Development	0	0	36	36	36	36	36	36	36	36
Student Potential from	60	60	96	96	75	68	68	68	47	36
Planned Development	00	00	90	90	73	00	00	00	47	30
Grand Total	2,084	2,048	2,098	2,142	2,121	2,154	2,169	2,205	2,212	2,227

Source: Cooperative Strategies

Projected Enrollment - Recommended - District-wide

Grade	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
PK	141	141	141	141	141	141	141	141	141	141
K - 5	704	710	732	788	846	887	923	935	929	922
6 - 8	403	406	413	395	361	339	358	403	451	496
9 - 12	776	731	716	722	698	719	679	658	644	632
Recommended Total	2,024	1,988	2,002	2,046	2,046	2,086	2,101	2,137	2,165	2,191
Spring Valley Ranch	32	32	32	32	32	32	32	32	11	0
Ritoro	28	28	28	28	7	0	0	0	0	0
NW Development	0	0	36	36	36	36	36	36	36	36
Student Potential from Planned Development	60	60	96	96	75	68	68	68	47	36
Grand Total	2,084	2,048	2,098	2,142	2,121	2,154	2,169	2,205	2,212	2,227

Source: Cooperative Strategies

The darker shades of blue represent smaller cohorts while the darker shades of red represent larger cohorts in comparison to the historical, and all of the projected district-wide enrollment. The bold red line separates the projected enrollment developed based on actual live birth counts and projected live birth counts as described on page 24. It should be noted that the student potential from planned development may include existing Elizabeth School District students.



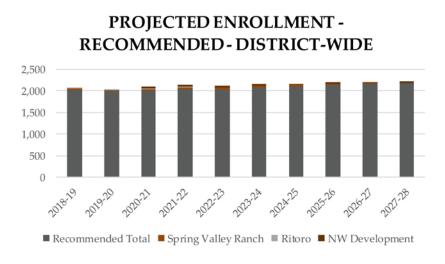
ELIZABETH SCHOOL DISTRICT PROJECTED ENROLLMENT – RECOMMENDED

Projected Enrollment - Recommended - by School

School	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Trend
Elizabeth High	717	676	662	667	647	665	627	607	595	586	}
Frontier High	59	55	54	55	51	54	52	51	49	46	}
Elizabeth Middle	403	406	413	395	361	339	358	403	451	496	\langle
Running Creek Elementary	308	306	317	340	362	381	396	401	398	395	
Singing Hills Elementary	396	404	415	448	484	506	527	534	531	527	
Running Creek Preschool	63	63	63	63	63	63	63	63	63	63	
Singing Hills Preschool	78	78	78	78	78	78	78	78	78	78	
Total	2,024	1,988	2,002	2,046	2,046	2,086	2,101	2,137	2,165	2,191	

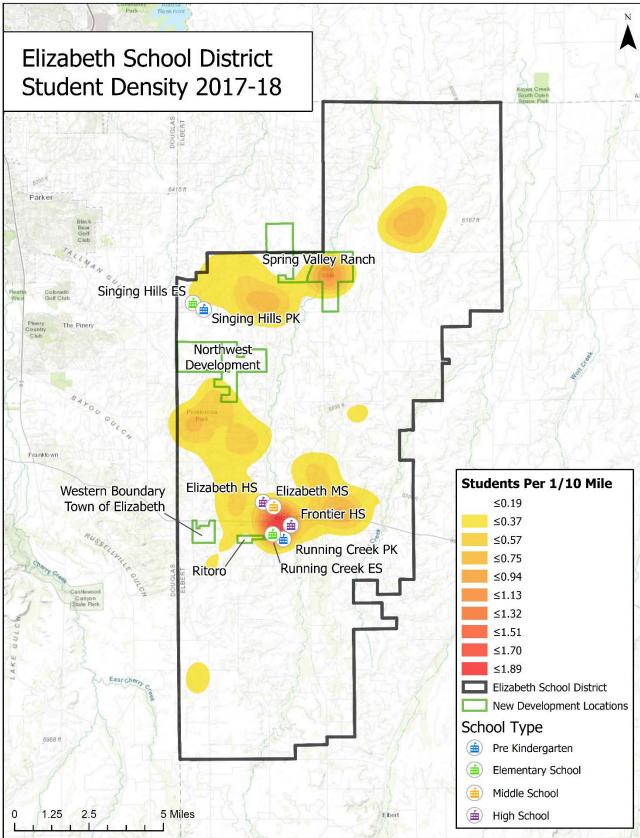
Source: Cooperative Strategies

School	Trend
Elizabeth High	
Frontier High	
Elizabeth Middle	
Running Creek Elementary	
Singing Hills Elementary	
Running Creek Preschool	
Singing Hills Preschool	
Total	



ELIZABETH SCHOOL DISTRICT FUTURE DEVELOPMENT AND CURRENT STUDENT DENSITY

COOPERATIVE STRATEGIES



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