

Lake Travis ISD

Facility Condition Assessment Services

November 15, 2016



Project Overview

- Approximately 1.8M square feet of facilities
- Data collected and entered into District database for 85 structures
 - Permanent
 - Portables
 - Sheds
- Assume replace portables in kind
- Assume replace sheds with standardized size and type of construction

Scope - Facility Condition Assessment

- Facility condition assessment included:
 - Identifying and documenting current facility conditions
 - Determining remaining service life of major building systems such as mechanical, electrical and plumbing (MEP) systems, roofs, and finishes for permanent buildings
 - Providing rough order of magnitude cost estimates for system renewal

Scope - Facility Condition Assessment

- Facility condition assessment included:
(Cont'd)
 - Forecasting future facility renewal requirements based on life cycle analysis over the next 15 years
 - Calculating Facility Condition Index (FCI) for each building
 - Entering information in CapitalForecastDirect

Scope - Site and Infrastructure

- Site and infrastructure assessment included:
 - Roadways and parking lots
 - Pedestrian paving
 - Sanitary and storm sewer systems
 - Site Appurtenances
 - Fences
 - Marquees and scoreboards
 - Bleachers and benches
 - Providing rough order of magnitude cost estimates
 - Entering information in CapitalForecastDirect

Scope - Irrigation and Landscaping

- Irrigation and landscaping assessment included:
 - Determining condition and functionality of:
 - Controls
 - Automatic valves
 - Backflow preventers
 - Coverage of landscaped areas to including playfields, planters and trees
 - Providing rough order of magnitude cost estimates
 - Entering information in CapitalForecastDirect

Terminology

- Cost Assumptions
 - Rough Order of Magnitude (ROM) cost estimate provided for the replacement of systems at the end of service life
 - Regionally adjusted cost indices utilized to obtain pricing
- Building Owners and Managers Association (BOMA)
 - Life cycles generally based on average service life for systems and components as developed by BOMA
 - As systems approach and pass the end of expected service life, risk of failure increases

Terminology (cont'd)

Facility Condition Index (FCI)

Example

- Total cost of expired systems to be replaced = **\$3,000,000**
- Total cost of facility (*Current Replacement Value*) = **\$10,000,000**

$$\text{FCI} = 1 - \left(\frac{\$3,000,000}{\$10,000,000} \times 100 \right) = 70\%$$

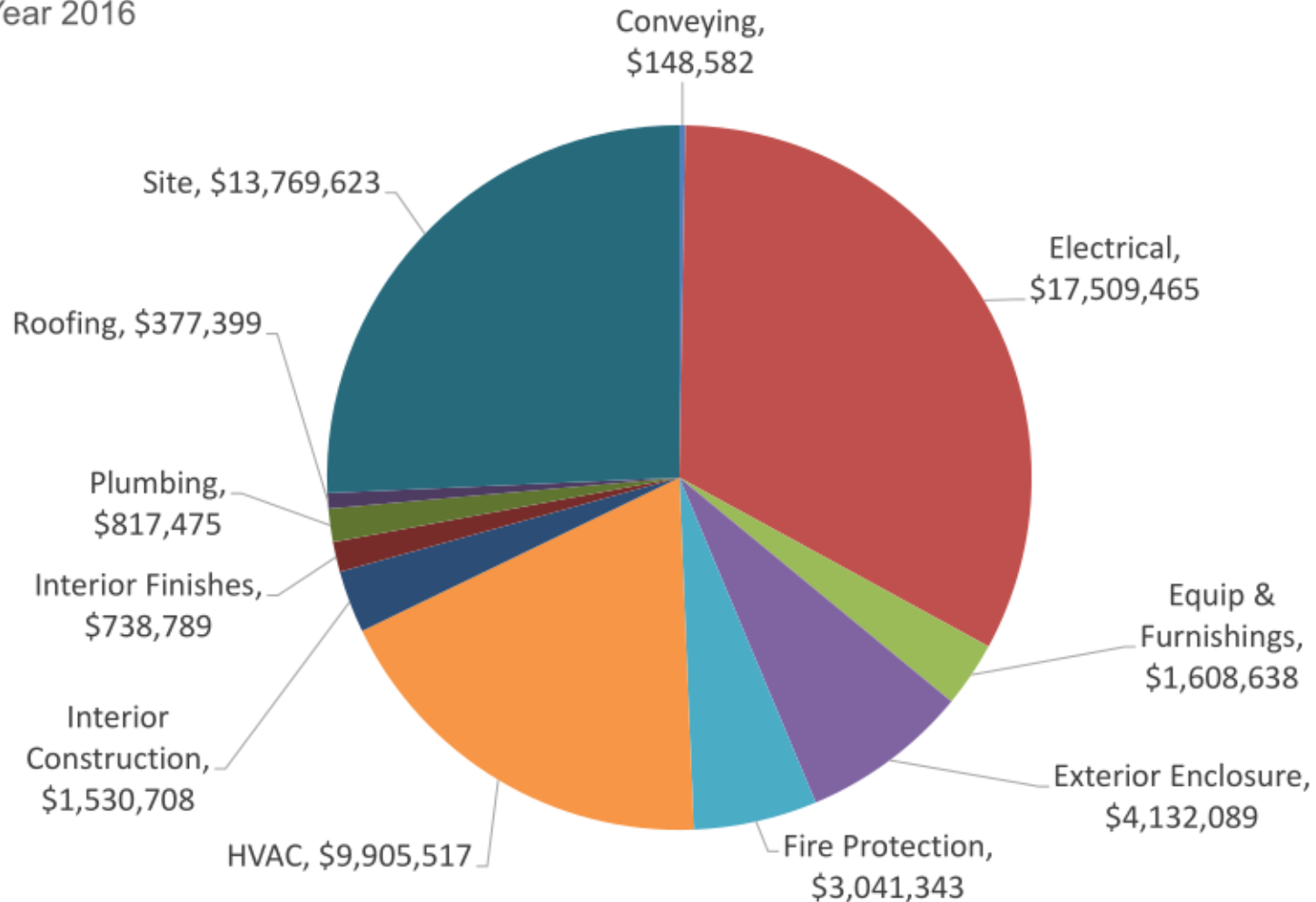


System Priorities

High	Medium	Low
<ul style="list-style-type: none">• Domestic Water Distribution• Electrical Branch Wiring• Electrical Service and Distribution• Electrical Services (Generators)• Fire Alarm and Detection• Fire Sprinklers and Standpipe• Fire Alarm and Detection• Fire Sprinklers and Standpipe• HVAC Cooling Generating (Chillers)• HVAC Terminal and Package Units• Roof Coverings	<ul style="list-style-type: none">• Conveying (elevators and wheelchair lifts)• Exterior Doors• Exterior Windows• Lighting• HVAC Controls and Instrumentation• HVAC Distribution• Interior Doors• Plumbing Fixtures• Rain Water Drainage (roof drains)• Sanitary Waste• Security Systems• Site Improvement and Infrastructure• Vehicular Equipment	<ul style="list-style-type: none">• Equipment and Furnishings (athletic equip. and fixed seating)• Exterior Wall Finishes• Institutional Equipment (Auditorium/Stage Equipment)• Interior Ceilings Finishes• Interior Floor Finishes• Interior Wall Finishes• Specialties (casework, lockers, toilet cubicles, etc.)• Site Infrastructure and Irrigation

Preliminary Overview - Current Needs

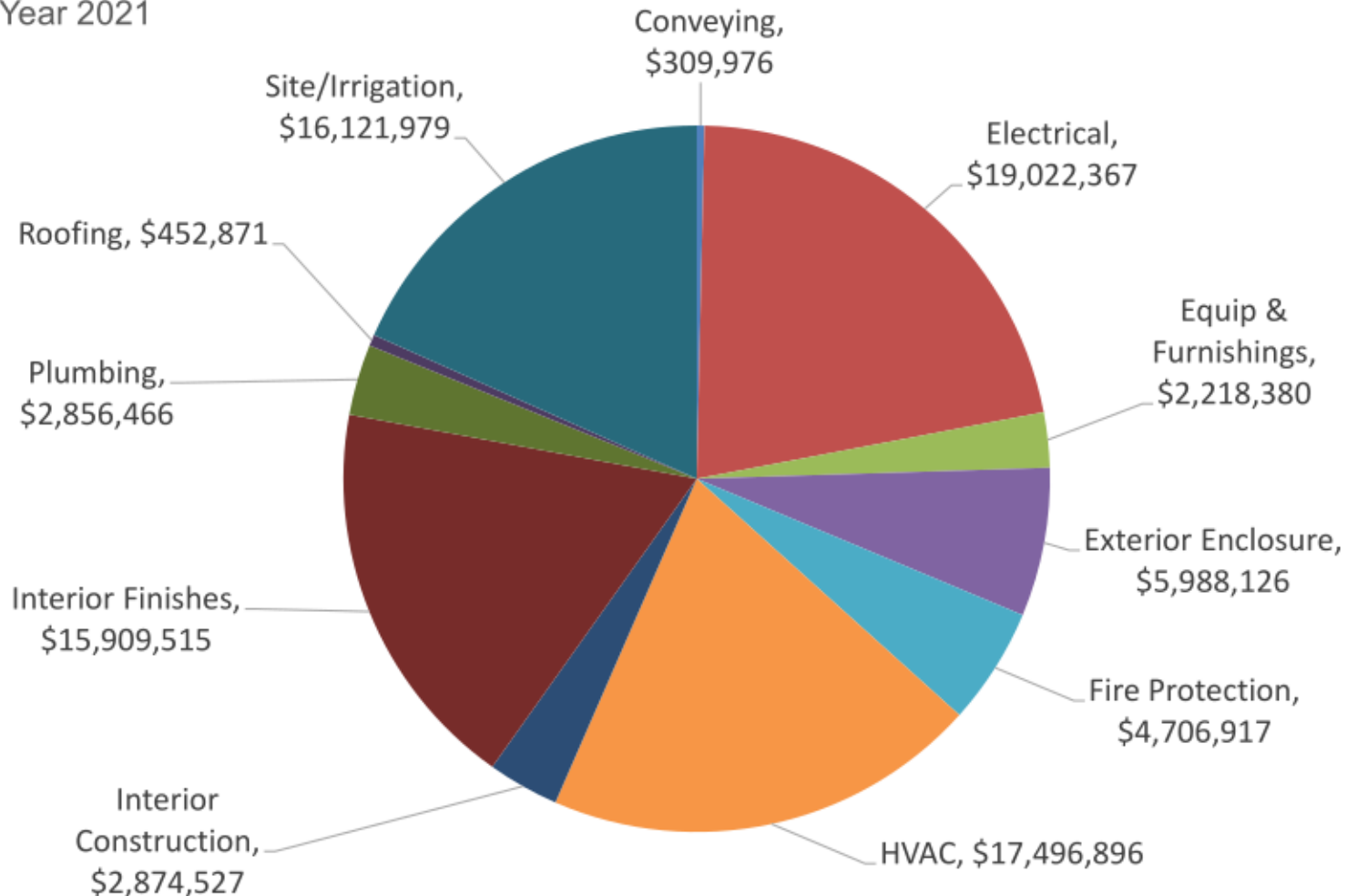
Current Total: \$53,579,628
Year 2016



Note: Most electrical costs associated with replacement lighting (LED Technology)

Preliminary Overview - Forecasted Needs (Current + 5 Years)

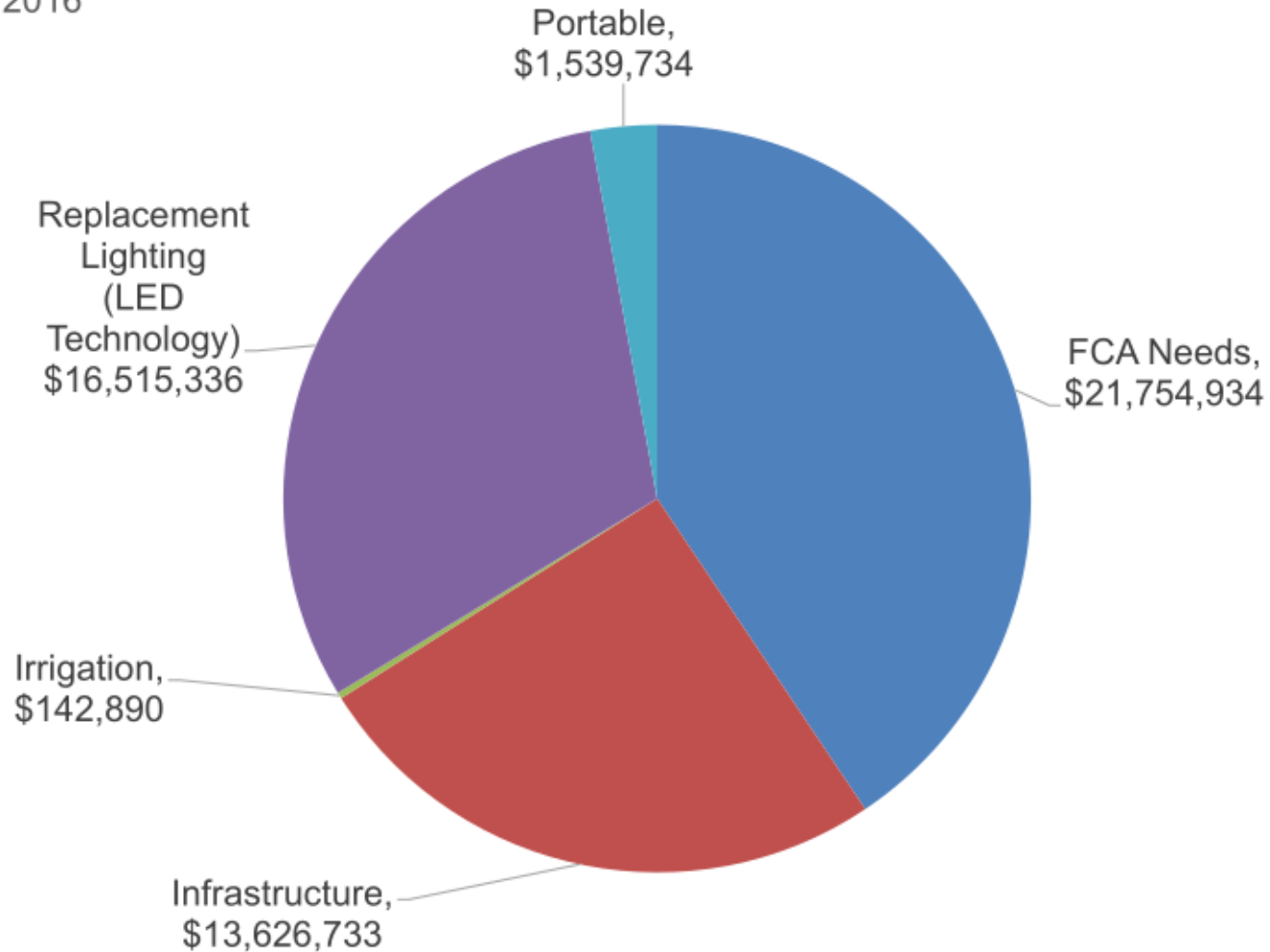
Forecasted Total: \$87,958,019
Year 2021



Note: Assumes current sustainment funding levels

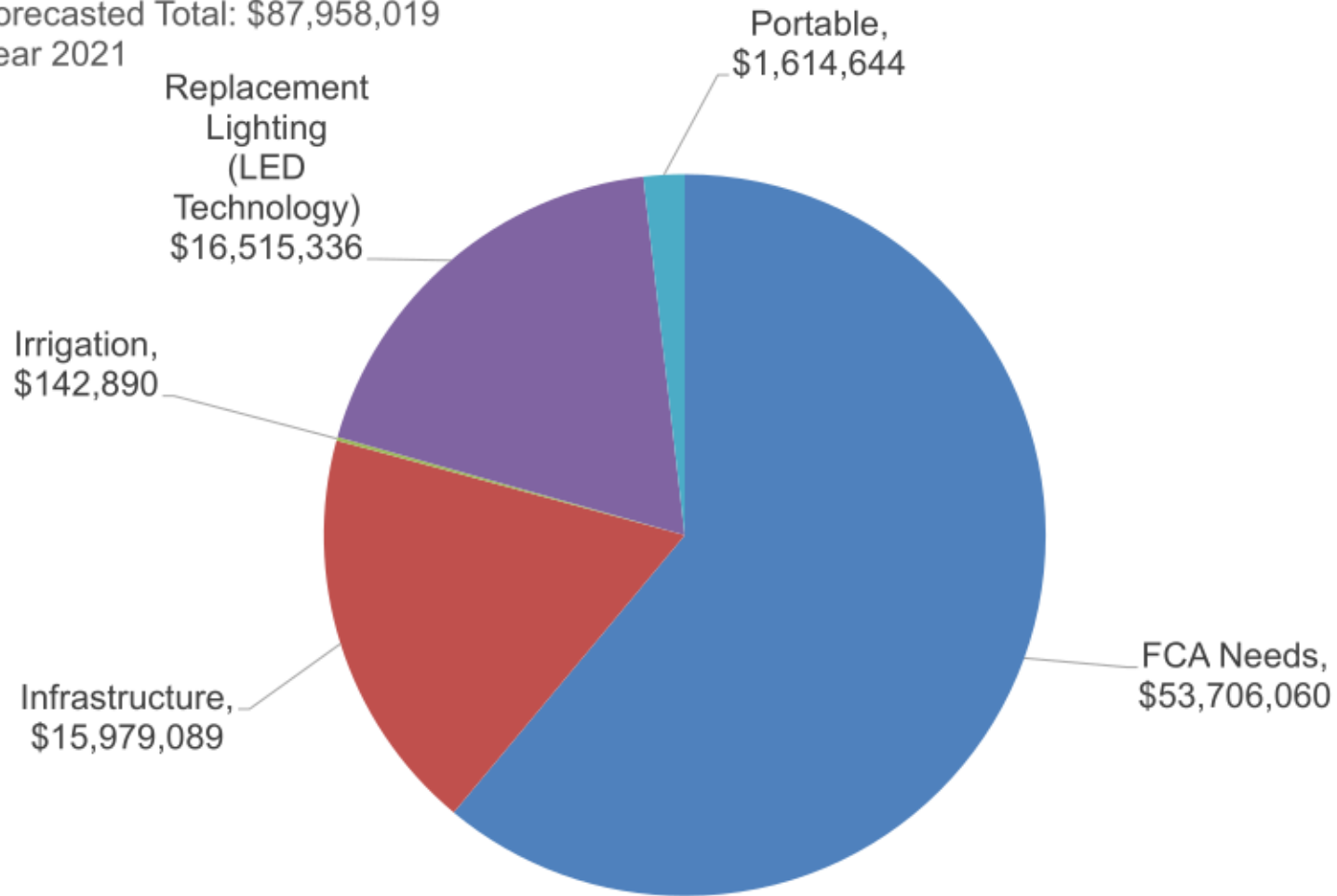
Needs Breakdown – Current

Current Total: \$53,579,628
Year 2016



Needs Breakdown – Forecasted (Current + 5 Years)

Forecasted Total: \$87,958,019
Year 2021



Note: Assumes current sustainment funding levels

Needs Breakdown

Needs	2016	2021
Replace 16 Portables (Installed ~1995-2000 time-frame)	\$1,539,734	\$1,614,644
Replace facility lighting (LED technology)	\$16,515,336	\$16,515,336
Site and Infrastructure	\$13,626,733	\$15,979,089
Irrigation Repairs	\$142,890	\$142,890
Subtotal	\$31,824,693	\$34,251,959
Total Needs	\$53,579,628	\$87,958,019
Subtotal	(\$31,824,693)	(\$34,251,959)
Needs not Listed Above	\$21,754,935	\$53,706,060

Needs Breakdown

Needs	2016	2021
Site and Infrastructure - Includes the following:		
New indoor softball batting cage at Lake Travis High School	\$225,000	\$225,000
New golf cart storage building near Cavalier Activity Center	\$250,000	\$250,000
New equipment storage shelter at maintenance yard	\$200,000	\$200,000
250 new parking spaces at the Lake Travis High School	\$600,000	\$600,000
Replace grass with artificial turf at various sports fields	\$4,171,100	\$4,171,100
Replace lighting at sports fields (LED technology)	\$1,321,550	\$1,321,550
Pavements and other miscellaneous requirements	\$6,859,083	\$9,211,439
Site and Infrastructure Subtotal	\$13,626,733	\$15,979,089

Portables

Name	Year Built	Area (SF)	Total Needs 2016	Current Replacement Value	2016 FCI%	Total Needs 2021	2021 FCI%
Bee Cave Elementary School							
Portable Classroom Building	2000	1,625	\$148,170 ¹	\$134,550	0	\$148,170 ¹	0
Lakeway Elementary School							
Portable Classroom Building	2000	850	\$70,380	\$70,380	0	\$77,190 ¹	0
Lake Travis High School							
AP Portable 25/ 26	1995	1,625	\$134,550	\$134,550	0	\$148,170 ¹	0
AP Portable 27/ 28	1995	1,625	\$134,550	\$134,550	0	\$148,170 ¹	0
AP Portable Restrooms	1995	570	\$78,660	\$78,660	0	\$78,660	0
Band Portable	1995	875	\$72,450	\$72,450	0	\$72,450	0

Note: ¹ Value includes replacement of wall-mounted terminal and package unit(s) resulting in requirements exceeding total replacement value

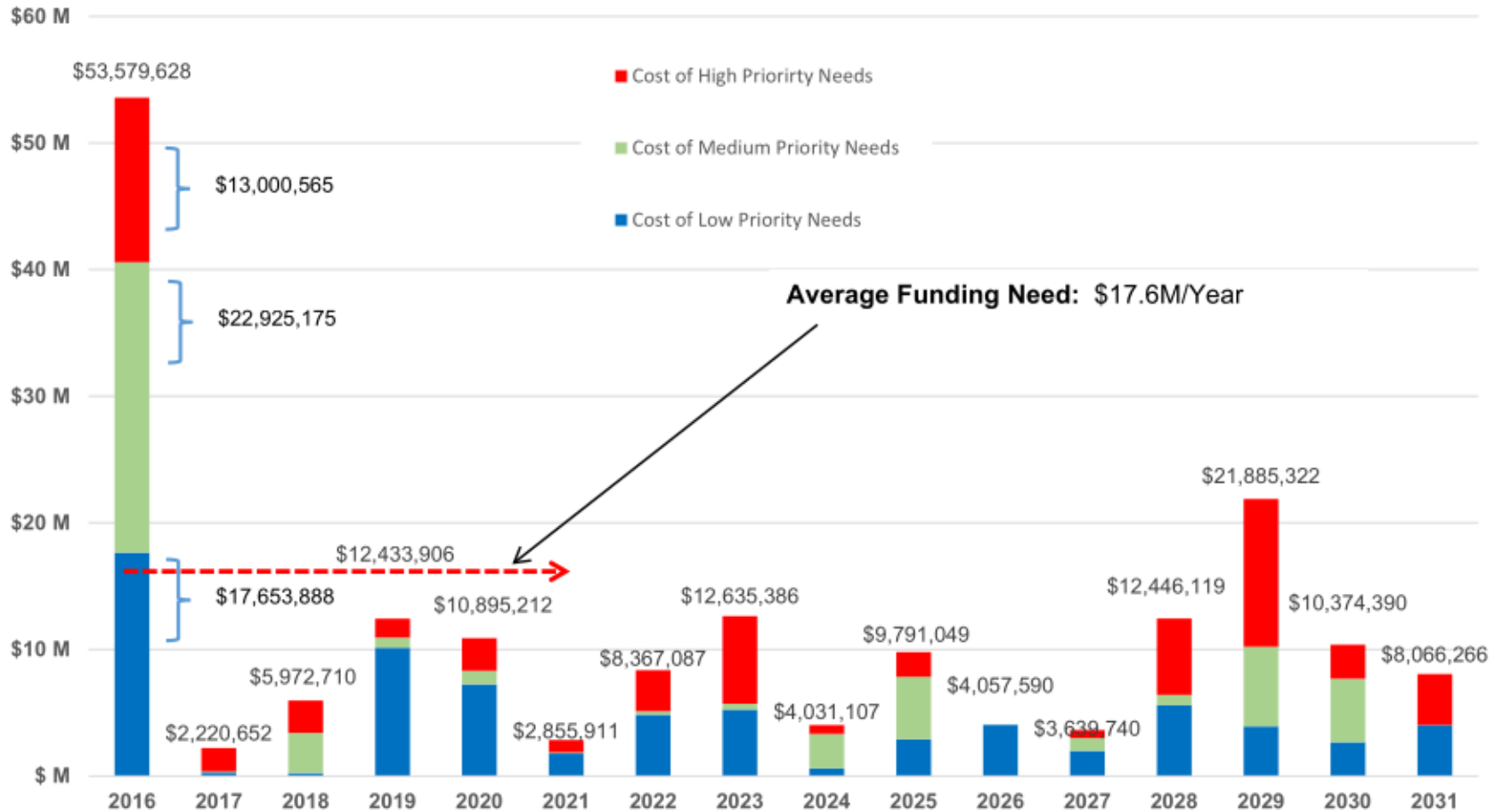
Portables (Continued)

Name	Year Built	Area (SF)	Total Needs 2016	Current Replacement Value	2016 FCI%	Total Needs 2021	2021 FCI%
Lake Travis High School (cont.)							
Booster Club Spirit Shack	1995	875	\$72,450	\$72,450	0	\$79,260 ¹	0
Maintenance Irrigation Portable 4	1995	768	\$63,590	\$63,590	0	\$63,590	0
Maintenance Portable 22	1995	875	\$72,450	\$72,450	0	\$72,450	0
Maintenance Portable 23/24	1995	1,625	\$134,550	\$134,550	0	\$134,550	0
Portable 9	2000	875	\$72,450	\$72,450	0	\$79,260 ¹	0
Portable 15	2000	1,625	\$134,550	\$134,550	0	\$148,170 ¹	0
Storage Portable 32/ 33	1995	1,625	\$134,550	\$134,550	0	\$134,550	0
Storage Portable 35	1995	875	\$72,450	\$72,450	0	\$72,450	0
Tennis Portable 14	2000	875	\$72,450	\$72,450	0	\$79,260 ¹	0
Tennis Restrooms Portable	2000	518	\$71,484	\$71,484	0	\$78,294 ¹	0
Total		17,706	\$1,539,734¹	\$1,526,114	0	\$1,614,644¹	0

Note: ¹ Value includes replacement of wall-mounted terminal and package unit(s) resulting in requirements exceeding total replacement value

Preliminary Overview - Renewal Schedule (15 Years)

Cumulative Cost of Annual Facility Needs



Preliminary Overview - Current FCI By Location

Location	Year Built	Area (SF)	Total Needs 2016	Current		Total Needs 2021	2021 FCI%
				Replacement Value	2016 FCI%		
Bee Cave Elementary School	1999	91,392	\$2,651,637	\$17,314,401	85	\$4,975,507	71
District Administration Complex	1987	16,784	\$396,242	\$3,194,801	88	\$477,000	85
District Training Center	1992	21,434	\$416,780	\$4,079,919	90	\$850,685	79
District Transportation Complex	2010	46,009	\$426,905	\$8,994,919	95	\$491,841	95
Hudson Bend Middle School	1000	212,642	\$3,311,890	\$40,457,505	92	\$4,199,224	90
Lake Pointe Elementary School	2002	93,881	\$1,387,480	\$17,990,116	92	\$5,441,799	70
Lake Travis Elementary School	2005	101,856	\$1,457,441	\$19,518,339	93	\$5,919,158	70
Lake Travis High School	1988	589,623	\$17,359,070	\$100,575,436	83	\$30,580,532	70

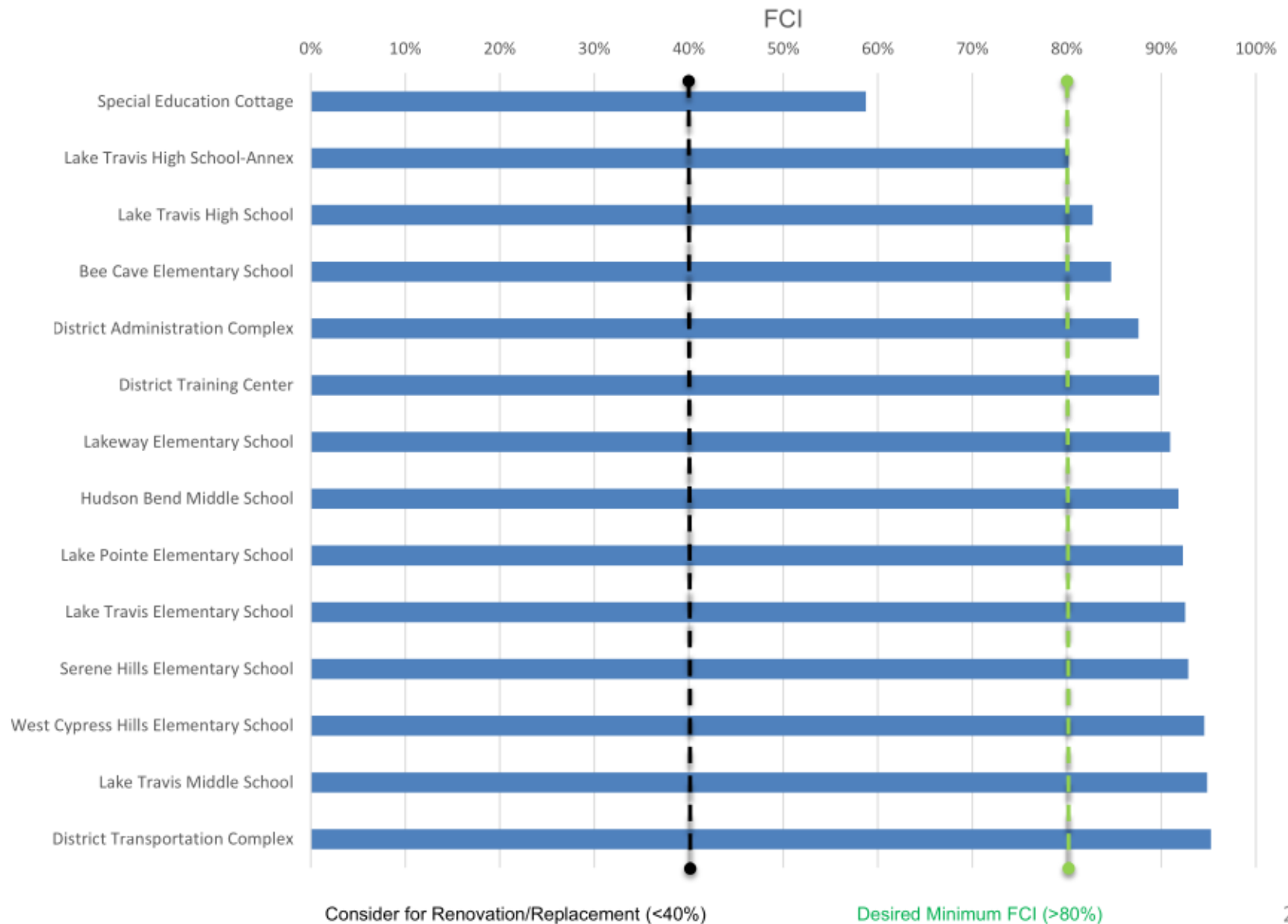
Note: Does not include site requirements

Preliminary Overview - Current FCI By Location (Continued)

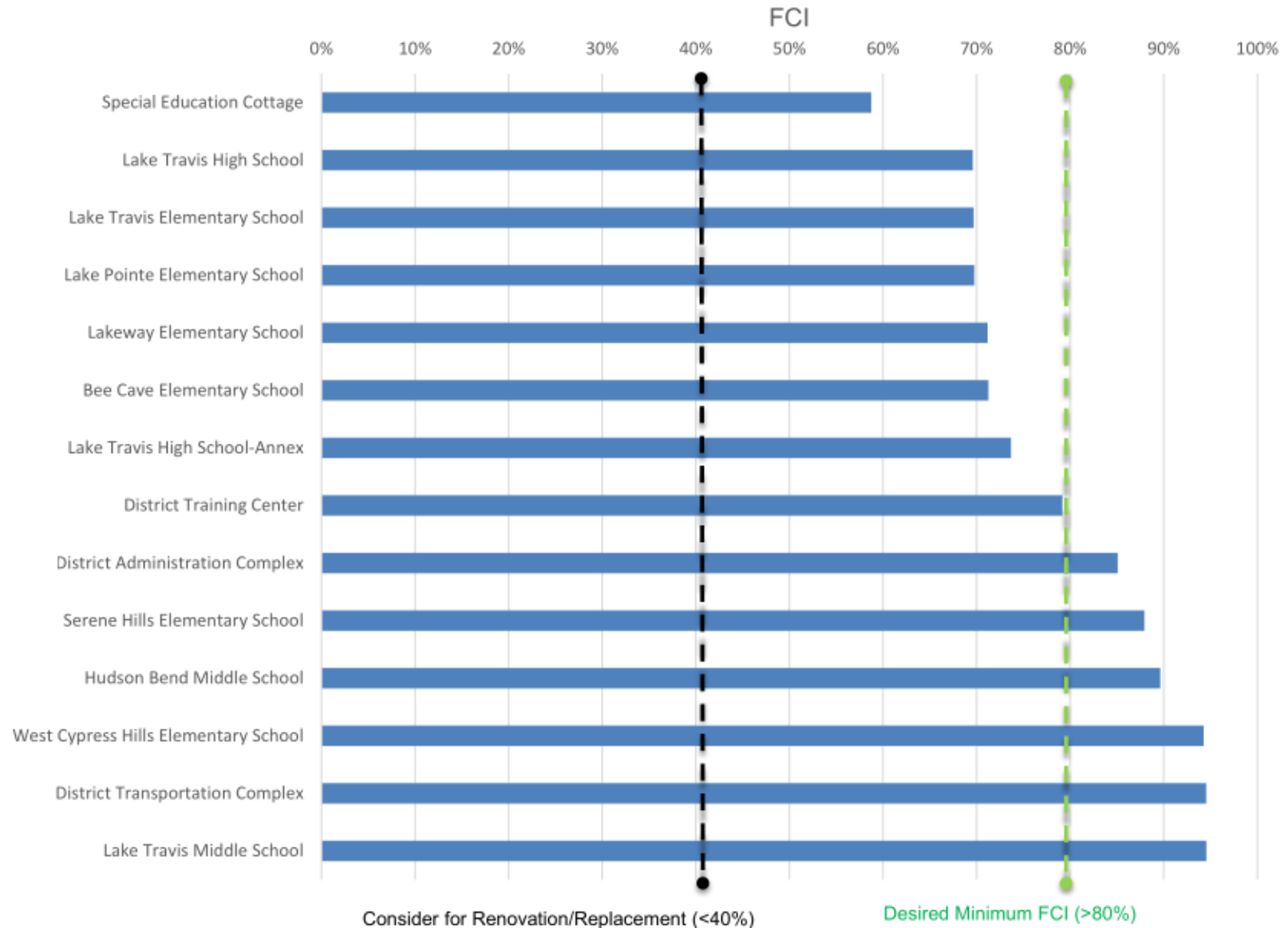
Location	Year Built	Area (SF)	Total Needs 2016	Current		2021 Total Needs	2021 FCI%
				Replacement Value	2016 FCI%		
Lake Travis High School -Annex	1976	158,453	\$5,950,306	\$30,070,342	80	\$7,915,341	74
Lake Travis Middle School	2014	223,990	\$2,207,332	\$42,873,030	95	\$2,338,887	95
Lakeway Elementary School	1995	89,839	\$1,550,398	\$17,123,057	91	\$4,935,103	71
Serene Hills Elementary School	2008	101,259	\$1,385,572	\$19,403,938	93	\$2,342,334	88
Special Education Cottage	1960	3,940	\$237,214	\$575,002	59	\$237,214	59
West Cypress Hills Elementary School	2014	102,728	\$1,071,741	\$19,685,438	95	\$1,131,416	94
Total		1,853,830	\$39,810,005	\$341,856,244	88	\$71,836,040	79

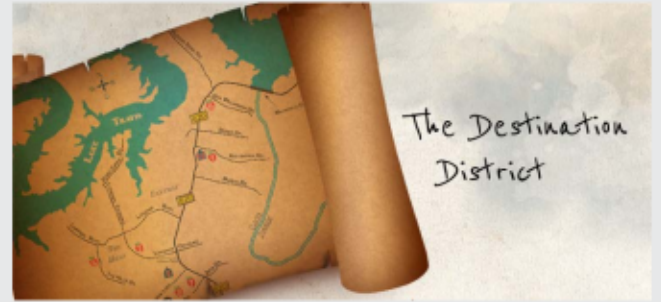
Note: Does not include site requirements

2016 FCI by Location



2021 FCI by Location





Next steps...