



FACILITIES LIFE CYCLE ANALYSIS

Scottsdale Unified School District Governing Board Study Session
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COCHISE Elementary School



Construction:

1991 Media Center
2001 Classrooms, Administration & Cafeteria
2001 Media Center addition

Area:

Site: 1,524,600 sf = **35.0 acres**
Street adjacent W, City of Scottsdale fields surrounding

Building: **86,366 gross sf** = 5.66 % site coverage

2016 100ADM Student Occupancy:

PreK @ **19** students + K-8 @ **619** students = **638** total

Facility Life Cycle Analysis

Architectural & Structural:

low volume, load bearing, 8-8-16 integral color and painted stucco on concrete masonry unit walls, pitched and low slope steel roof structure and deck, uncovered exterior pedestrian concourse with student courtyards at classroom pods. Hollow metal exterior doors, concrete slab on grade, gypsum partitions, suspended ceiling grid and panels, above ceiling hvac fan coil units.

Characteristics:

City of Scottsdale share the activity surrounding fields through Intergovernmental agreement collaborations. The Cochise property is very significant. School design is an axis & courtyard concept, Parking areas has ground mount solar systems, bus and car lanes are segregated
2015 utility costs = \$2.45/sf



COPPER RIDGE K-8 School



Construction:

2001 Classrooms, Administration, Cafeteria, Gymnasium

Area:

Site: 1,350,360 sf = **31.0 acres**

School site is native desert, facilities are surrounded by native desert and SUSD developed athletic fields, W

Building: **145,236 gross sf** = 10.75 % site coverage

2016 100ADM Student Occupancy:

PreK @ **70** students + K-8 @ **1,077** students = **1,147** total

Facility Life Cycle Analysis

Architectural & Structural:

Multi-story, exterior columned-covered circulation, load bearing, 8-8-16 painted color concrete masonry, steel roof structure and with sloped steel roof decks, metal standing seam roofing, hollow metal exterior doors on elevated walkways under cover of roof canopies. Elevated & concrete slab on grade, interior steel framing, gypsum partitions, suspended ceiling grid and panels, above ceiling hvac fan coil units

Characteristics:

Beautiful school design in a courtyard concept. Native desert site has significant gradient. Exterior hardscape features site retaining walls and vertical circulation stairs with elevator towers. Ground & roof solar systems. 2015 utility costs = \$1.44/sf



Desert Canyon (ES & MS)



Construction:

1996 MS Classrooms, Administration, Cafeteria, Gymnasium
1998 ES Classrooms & Multipurpose

Area:

Site: 1,533,312 sf = **35.2 acres**

School site is native desert, facilities are surrounded by native desert and SUSD developed athletic fields, W

Buildings: **192,913 gross sf** = 12.58 % site coverage

2016 100ADM Student Occupancies:

PreK @ **15** students + K-8 @ **1,053** students = **1,068** total

Facility Life Cycle Analysis

Architectural & Structural:

Low volume-ES and multi-story buildings-MS, interior corridor circulations, load bearing, 8-8-16 integral color and painted stucco concrete masonry walls, steel roof structure, pitched and low slope steel roof decks, hollow metal exterior circulation doors, interior wood doors along corridors, Elevated & concrete slab on grade, interior steel framing, gypsum partitions, suspended ceiling grid and panels, above ceiling hvac fan coil units. The administration building facilitates both school administrations and staffs.

Characteristics:

Original native desert site with desert wash drainage. Schools are surrounded by City of Scottsdale activity fields, parks and recreation-public facilities. C
2015 utility costs = \$1.24/sf



REDFIELD Elementary School

Construction:

1987 Classrooms, Administration & Cafeteria

Area:

Site: 523,591 sf = **12.02 acres**

Street adjacent N & E, Residential adjacent S & W

Building: **81,814 gross sf** = 15.62 % site coverage

2016 100ADM Student Occupancy:

PreK @ **19** students + K-5 @ **443** students = **462** total



Facility Life Cycle Analysis

Architectural & Structural:

low volume, partial subgrade multi-level courtyard with exterior columned-covered circulation, load bearing integral color and painted stucco on concrete masonry unit parapet walls, steel roof joists and low slope steel roof deck, hollow metal exterior doors, concrete slabs on grade and partial elevated slabs, interior steel framing, gypsum partitions, suspended ceiling grid and panels, above ceiling hvac fan coil units.

Characteristics:

Spacious student exterior circulation and turf courtyard that exits to playground and play fields on the south, and features a prominent northern school entry.

2015 utility costs = \$1.05/sf



SEQUOYA Elementary School



Facility Life Cycle Analysis

Construction:

1988 Classrooms, Administration & Cafeteria
2007 Computer Classroom addition

Area:

Site: 473,497 sf = **10.87 acres**

Street adjacent E, City of Scottsdale park adjacent N,S,W

Building: **66,470 gross sf** = 14.0 % site coverage

2016 100ADM Student Occupancy:

PreK @ **0** students + K-5 @ **481** students = **481** total

Architectural & Structural:

low volume, exterior columned-covered circulation, load bearing, stucco on exterior metal stud frame walls, parapets, steel roof joists, low slope steel roof deck, hollow metal exterior doors, concrete courtyards, all concrete slabs on grade, interior steel framing, gypsum partitions, suspended ceiling grid and panels, above ceiling hvac fan coil units.

Characteristics:

Sequoia Elementary School is architecturally similar to Laguna Elementary School. Spacious student exterior circulation and courtyards exit to playground and play fields, and represent the school's entry. Administration views are toward the student courtyards.

2015 utility costs = \$1.11/sf



TONALEA K-8 School (Supai)



Construction:

1971 Lecture

1988 Gymnasium

2003 Classrooms, Administration, Media Center, Cafeteria

2012 Band, Strings, Art

Area:

Site: 775,803 sf = **17.81 acres**

Streets adjacent E & S, Residential-(alley) N, SRP private W

Building: **114,525 gross sf** = 14.76 % site coverage

2016 100ADM Student Occupancy (Tonalea & Supai):
PreK @ **39** students + K-5 @ **336** + Middle 6,7,8 students @ **645**
= total combined occupancy = **1,020**

Facility Life Cycle Analysis

Architectural & Structural:

High and low volume parapet load bearing 8-8-16 painted concrete masonry units. Steel roof structure and steel low slope decks, concrete slab on grade.

Classroom pod buildings with common areas, interior steel framing, suspended interior ceilings & gypsum partitions. Pod buildings feature large, 3 classrooms, shared commons with generous north-south glazing, making excellent education environments to prototype contemporary classroom furniture systems.

Characteristics:

Tonalea K-8 is an expansive campus that features generous areas surrounding the buildings. The majority of the architecture is newer, however needing visible Life Cycle attentions and improvements
2015 utility costs = \$1.58/sf