

Turquoise Trail Charter School



*Facility Master Plan/ Ed Spec
2017 - 2022
October 26, 2017*



Visions In Planning, Inc.
Educational Facility Planning Consultants

Acknowledgments



Physical Address:

13A San Marcos Loop

Santa Fe, NM 87508

Phone: 505-986-4000

www.turquoisetrailcharterschool.org

Original charter date - 1994

Most recent charter renewal - 2014

Next Charter Renewal - 2019

Current enrollment cap - 490

Governing Council

Floyd Trujillo - President

Kevin Stack - Treasurer

George Wallace - Council Member

Isabelle Sandoval - Council Member

Stephanie Slone - Council Member

Sammi Triolo - Council Member

Kenny Valdez - Council Member

Sharyn Gray - Teacher Representative

Jill Miyagawa - Teacher Representative

Francesca Margaritondo - Council Secretary

Jenny Crysler - Business Manager

Executive Director

Dr. Ray Griffin (Head Administrator)

Public Schools Facility Authority

Bill Sprick - Facility Master Planner

Master Planning Consultant

Visions In Planning, Inc.

P.O. Box 65130

Albuquerque, NM 87193

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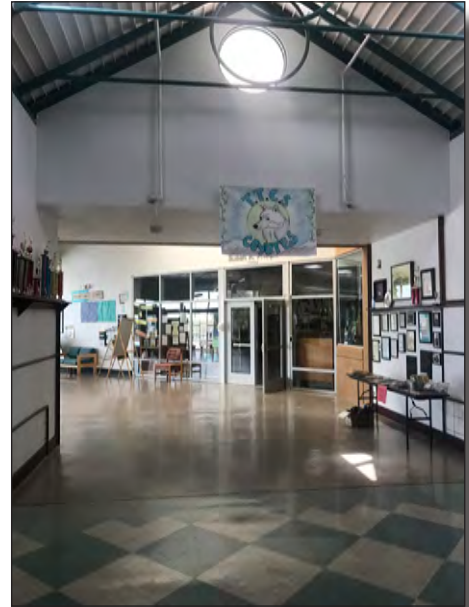
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Introduction

This document contains the Facilities Master Plan (FMP) and Educational Specifications (Ed Spec) requirements for the Turquoise Trail Charter School (TTCS), which is a PK-6th grade charter school chartered by the State of New Mexico and located in Santa Fe. The intent of this plan is to guide capital planning decisions that support the charter school's educational mission and that meet minimum state adequacy standards for school facilities. The Public School Capital Outlay Council (PSCOC) and the Public School Facilities Authority (PSFA) require that all New Mexico public charter schools have a five-year FMP and Ed Spec as a prerequisite for eligibility to receive state capital outlay assistance. The Master Plan and Ed Spec are in accordance with guidance issued by the PSCOC and PSFA and is required to be eligible for future Capital Outlay funds from the State of New Mexico.



The FMP and Ed Spec are combined to create a flexible facility planning tool that can be revised on a periodic basis as conditions change. It identifies the specific space needs for accommodating the charter school's anticipated five-year enrollment and the strategies and capital needs for implementation of facility needs.

The document also addresses the following facility issues:

- Life/health/safety
- Educational and programmatic needs, and curriculum needs
- Provision for growth (additions and new construction)
- Promotes efficient use of educational space
- Educational technology
- Energy management

The Master Plan and Ed Spec are comprised of five main sections:

- **Section 1** - Goals / Process provides information about the charter school's goals and the planning process
- **Section 2** - Projected Conditions provides information about programs and delivery methods, enrollment, details about existing facilities used by the school, technology and energy management
- **Section 3** - Proposed Facility Requirements outlines facility goals and concepts, identifies space needs and other facility requirements
- **Section 4** - Capital Improvement Plan provides information about capital resources, capital needs, and capital project implementation
- **Section 5** - Master Plan Supporting Material contains detailed information about school facilities, evaluations, plans, and other information.

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SECTION 1.0 - GOALS / MISSION

1.1 Goals

1.1.1 - Mission & Vision Statement

Mission: Turquoise Trail Charter School (TTCS) will be a high-achieving student-centered learning school preparing students academically and socially for lifelong success.

Vision: Turquoise Trail Charter School serves a diverse community of Pre-K through 6th grade students and families in a safe and supportive environment fostering communication, collaboration, critical thinking, and creativity. Students are empowered through a student-centered learning approach.

Teaching and learning are research-based, data-driven, and relevant to diverse student needs and interests. *As adopted by the Governance Council on September 18, 2014. (Info from website)*



1.1.2 - Educational Philosophy

The school was originally founded in 1990 as a traditional public school as part of the Santa Fe Public School District and in 1994, Turquoise Trail Charter School (TTCS) became one of the first district charter schools in New Mexico serving grades K-6th. As part of the school's last charter renewal in 2014, Turquoise Trail became a "State Charter School" and is no longer part of SFPS and now serves grades PK-6th. The vision of Turquoise Trail Charter School as identified in the most recent 2014 charter renewal is that the school "will be a high achieving student-centered learning school preparing students academically and socially for lifelong success." The results of the hard work of both the staff and students towards achieving this vision is reflected in the schools most recent 2016/17 NMPED letter grade of "B", for the second year in a row.

TTCS's mission for the years to come will focus on serving a diverse community, Pre-K through 6th grade, and within this community will foster communication skills, collaboration, critical thinking capabilities, and encourage student creativity. The school aims to empower students through research-based curricula and strong, data-driven instruction to create an innovative, progressive education based on students' needs and interests.

The school's academic priorities include:

1. Improve proficiency of the lowest performing students.

TTCS will improve the academic performance in reading and math of our lowest performing students as measured by short-cycle assessments.

2. Become a leading Student-Centered Learning Approach (SCLA) elementary school in NM.

TTCS will become a NM leader and school-based center for SCLA students through the Coalition of Essential Schools. We will have established measurable baselines, benchmarks, and measurable objectives for the following SCLA attributes

SECTION 1.0 - GOALS / MISSION

SCLA Attributes

Student-centered practices emphasize personalization; high expectations, hands-on and group learning experiences, teaching of 21st century skills, performance-based assessments; and opportunities for educators to reflect on their practice and develop their craft as well as shared leadership among teachers, staff, administrators, and parents.

Unfortunately, these practices are more often found in schools that serve affluent and middle-class students. Schools that incorporate these key features of student-centered practice such as Turquoise Trail Charter School are more likely to develop students that have transferable academic skills; feel a sense of purpose and connection to school; as well as graduate, attend, and persist in college at rates that exceed their district and state averages.

1.1.3 - School Community

Who the School Serves:

In 1994, Turquoise Trail Charter School became one of New Mexico's first charter schools, which enabled the Turquoise Trail community to maximize its vision by refining a unique academic curriculum, utilizing site-based budgeting and management of funds, and implementing participatory governance and community involvement to focus on improving the achievement of TTCS students.

Located 15 miles from downtown Santa Fe, the community is rural, with families living great distances from one another. TTCS children come from families diverse in their educational experiences and economic situations. Of the approximately 490 students enrolled at Turquoise Trail, the population has a 72/28 ratio of Hispanic children to children of all other ethnicities, including Anglo, Native American, African American, and Asian. Approximately 25% of our student population speaks Spanish as a first language. Turquoise Trail qualifies for Title I federal funds, with 66% of the student population receiving free or reduced lunches.

Since its inception, Turquoise Trail Charter School has followed an alternative curriculum that was developed and continues to be refined by the school's administration and teachers. The curriculum is centered around the interrelated theories of multiple intelligences, learning styles, and developmentally appropriate practices. The educational program at Turquoise Trail was developed for students by staff with the following Exit Outcomes in mind: Self Directed Learners, Collaborative Workers, Community Participants-Contributors, Quality Producers, and Complex Thinkers.

The learning experiences that the school has implemented has brought students in from the greater Santa Fe multicultural community into engagement with current, best instructional practices in the fine arts, physical education, and information resources. The TTCS educational program has further refined state standards and benchmarks into integrated units and learning goals per grade level. Balanced literacy is fundamental to our instructional program, as is a comprehensive bilingual/ESL program, and inclusion of special education children in the mainstream of classroom instruction to the greatest extent possible.

Through the enriched experiences offered at the school, students gain a greater sense of basic human values, particularly through the exposure, appreciation, and respect of multiple lifestyles and cultures present in the community.

SECTION 1.0 - GOALS / MISSION

1.2 Process

1.2.1 - Planning Process

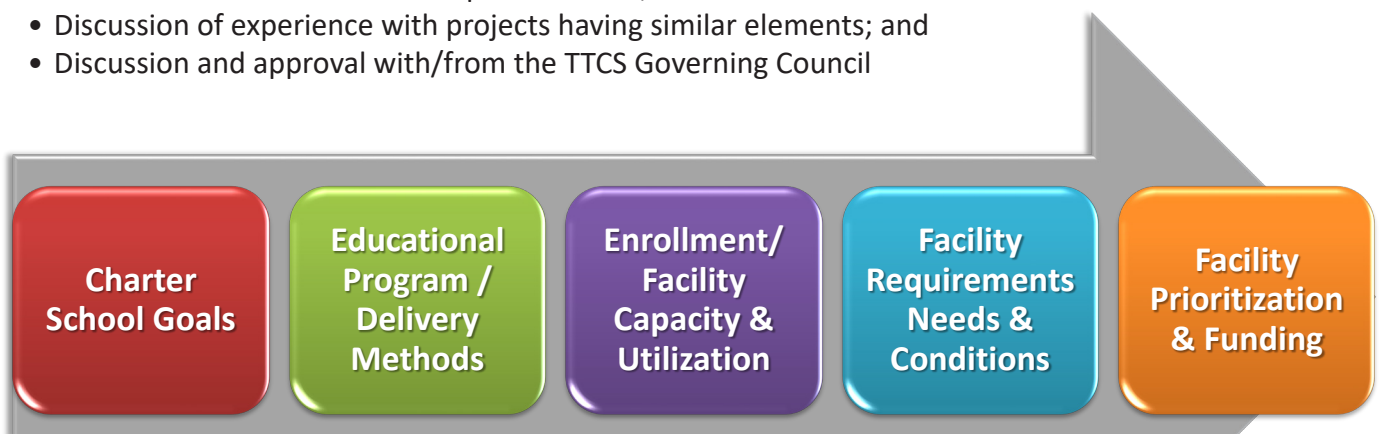
No building type has undergone greater change, in recent years, than the schoolhouse. These changes in the building are, for the most part, evidence of changing trends in student learning. As a dynamic reflection of the culture in which we live, the specific educational needs of each community must continually change to meet the demands of the present and to support the projections of the future. So too must facilities for education – rather than being merely a shelter in which the elements of education are delivered and received, they now have become a complete educational tool, capable of supporting a wide variety of learning experiences for citizens of all ages, abilities, and needs.

The following Facility Master Plan / Educational Specifications summarizes the long range facility master planning efforts and educational specifications for *Turquoise Trail Charter School* as required by the State of New Mexico. It contains project goals, key facts, key concepts, and space listings; presents key relationship diagrams; and describes key components of the facility that form the basis for the planning and design of the school’s new classroom building. This report communicates to the owner, user and architect essential facility requirements that provide a common basis for facility design, while encouraging the contribution of insights by the building designer. It contains a detailed space program, with room-by-room space requirements for the future new facility.

The project defined in this document reflects the statement of goals, objectives, curriculum / educational model and facility requirements obtained through on-site interviews, on-site investigation, facility workshops, TTCS administrators and support staff, students, parents, and community members.

This facility program contains information obtained through:

- Validation of policies established by the school’s most recently approved charter;
- Review of New Mexico Adequacy Standards and Guidelines;
- Discussion of future TTCS school and location;
- Interviews with various TTCS representatives;
- Discussion of experience with projects having similar elements; and
- Discussion and approval with/from the TTCS Governing Council



Final Five Year Facility Master Plan / Educational Specifications 2017- 2022

SECTION 1.0 - GOALS / MISSION

Governing Council

The TTCS Governing Council contracted with Visions In Planning, Inc. to develop the long range Facility Master Plan and Educational Specifications for the school. The scope of work included identification of capital improvement needs, space utilization and future facility needs. Considerations included school organization, success for students, relationships among teachers, effective learning experiences, and connections to the community.

Facility Master Plan Committee

Visions In Planning, Inc. worked with the school’s administration to understand and document the charter school’s programs and delivery methods, and to establish the additional facility needs to support the school’s educational requirements. As future changes are made to the school’s program and enrollment cap which will drive the need for future additional facilities; an update to this plan will be made and a Facilities Committee will be established consisting of administrators, teachers, parents and community members to incorporate the Educational Specifications component into the document. Visions In Planning, Inc. also analyzed the condition of the existing facility, including potential reconfiguration options to enlarge existing classrooms and identification of a new classroom addition in the future which will to improve program delivery for the school’s students.

Authority and How Decisions Are Made

The TTCS Governing Council consists of seven elected or appointed community volunteers and two non-voting teacher representatives established pursuant to the terms established in the school’s charter. The Council serves as TTCS’s governing body under TTCS’s Charter. The Council’s responsibilities include hiring and evaluating the head administrator, development and approval of school policy, academic goals, facility plans, and TTCS’s budget. The Council enters into a contract with the site principal and operates under applicable state laws and regulations, TTCS’s Charter, and the Council’s Bylaws.

Decision Making Process



1.2.2 - Data Gathering & Analysis

Facility Assessments

A Facility Assessment was conducted by Visions In Planning, Inc. for the school’s existing educational leased facilities. The facility assessment included:

- Site visit
- Meeting with school Business Manager

SECTION 1.0 - GOALS / MISSION

- Facility walk-through
- Review of State's Facilities Assessment Database
- Capacity and Utilization Study for the school

Facility Master Plan Committee Meetings:

Due to the existing condition of the facility, as well as the most recent partial renovation and expansion that was completed specifically for the school in 2011 by Santa Fe Public Schools, no facility committee meetings were held but will be established in the future by the Governing Council if significant changes to the facility are warranted such as building additions or facility reconfiguration. As the existing facility currently meets the schools programmatic needs and enrollment, a facility needs analysis was completed to identify upcoming capital improvements and maintenance needs that need to be addressed by the school and was reviewed by the school's Administration which included:

- PSFA/ PSCOC Ranking of the School
- Campus improvements of the existing buildings since the last FMP when the Facility was part of SFPS
- Facility Deficiencies/ Capital Improvement Needs
- Maintenance Needs
- Funding Sources

After identification all of the schools facility needs, several strategies were developed to provide TTCS various options that it can use to address capital improvement and maintenance needs as identified in Sections 3 and 4 of this document

Currently, TTCS is in the process of evaluating future grade level reconfiguration options and potential expansion of its enrollment cap but no decisions have been made by the Governing Council at this time. Once future changes have been determined and approved, a Facility Master Plan Committee will be established to review programmatic needs and impacts to the existing facility, and the Facility Master Plan will be updated and Educational Specifications will be prepared for any new facilities or additions that may be needed.

November 2, 2017 - Governing Council Approval

Presentation of the recommended Capital Improvement Projects that will be funded in part from the successful passage of the SFPS HB-33 Election which was passed in February 2017 and the upcoming SB-9 Election in February 2018, and also includes funding through an approved Lease-Purchase agreement for facilities. The final Facility Master Plan and Ed Spec was submitted to the TTCS Governing Council for final approval on November 2, 2017.

SECTION 1.0 - GOALS / MISSION

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SECTION 2.0 - PROJECTED CONDITIONS

2.1 Programs and Delivery Methods

2.1.1 - Program Overview

Current Educational Programs and Facilities - Overview

The Educational Vision is grounded in the mission and vision of Turquoise Trail Charter Schools as well as Guiding Principles, and the need to incorporate 21st Century Learning Standards into the curriculum. It is crafted with an understanding of where Turquoise Trail Charter School is now and the assumptions and givens that frame the direction of educational delivery. Then the educational vision is expanded through an understanding of national trends in education and what school leaders believe will be the future for Turquoise Trail Charter School and its students. Finally, the vision is defined by synthesizing philosophy, mission, vision, and applying those to the specific goals and needs of Turquoise Trail Charter School’s educational programs and facilities. All educational facilities (site and buildings) at the Turquoise Trail Charter School campus should strive to meet this vision over the next five to ten years, and beyond.



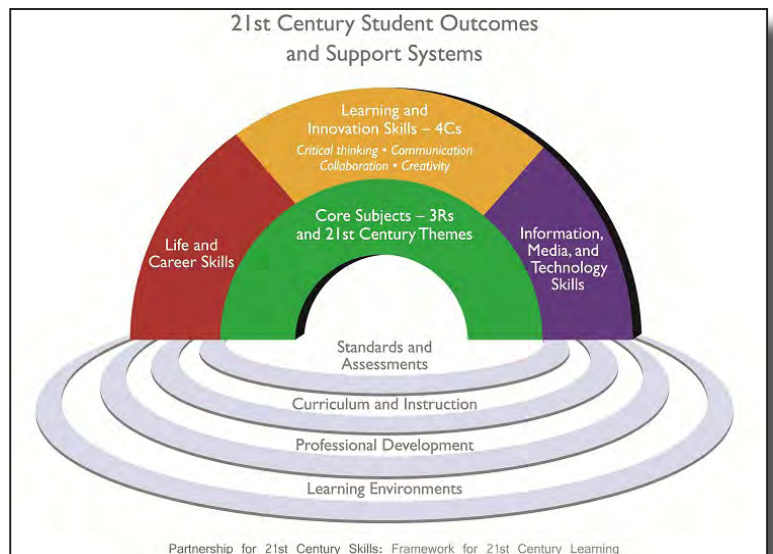
Instructional Programs

The Turquoise Trail Charter School curriculum follows the State of New Mexico Public Education Department Standards and has designed its instructional program as identified in its approved charter performance framework around providing a technology rich 21st Century Learning Framework that describes the skills, knowledge, and expertise each student must master to succeed in work and life: it is a blend of content knowledge specific skills, expertise and literacies. The essential skills for success in today’s world include the following:

- Learning and Innovation Skills (The Four C’s: Critical thinking, Communication, Collaboration, and Creativity)
- Life and Career Skills
- Information, Media, and Technological Skills

TTCS students will learn these skills across the expanded core subjects, essential for all students in the 21st Century, which include:

- English, Reading or Language Arts
- World Languages
- Arts & Music
- Mathematics
- Physical Education
- Economics
- Science
- Geography
- History
- Technology, Robotics, beginning coding, and related literacies
- Government and Civics



Partnership for 21st Century Skills: Framework for 21st Century Learning
Source: Partnership for 21st Century Skills

SECTION 2.0 - PROJECTED CONDITIONS

TTCS utilizes the following instructional approaches to integrate 21st Century Learning Framework into its curriculum to not only support developing skills in reading, math, science, and social studies, but also incorporates the critically important 21st century skills of critical thinking, collaboration, communication, creativity, technology literacy, and socio-emotional development for all students in grades PK-6th. These approaches are the key to the school’s success in improving test scores and providing students with 21st Century Skills necessary for success. Each description is followed by a summary of the space impact of the identified learning style. As an elementary school, students are assigned to classes based upon grade, with three classes per grade level K-6th and 2 classes for pre-kindergarten. Currently, the schools approved enrollment cap is 490 students as of 2017.

1. Project-Based Learning:

Project-based learning (PBL) is a model for classroom activity that shifts away from the classroom practices of short, isolated, teacher-centered lessons in favor of learning activities that are long-term, interdisciplinary, student-centered, and integrated with real-world issues. One immediate benefit of utilizing PBL as a primary instructional model is the unique way that it can motivate and engage students. PBL provides opportunities for TTCS students to pursue their interests and questions and make decisions about how they will find answers and solve problems.

PBL also provides opportunities for interdisciplinary learning. Students apply and integrate the content of different subject areas at authentic moments in the production process, instead of in isolation or in an artificial setting.

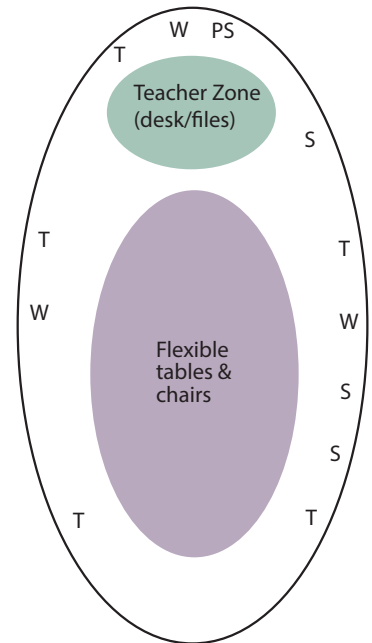
In the school and beyond, PBL is a rapidly growing teaching approach and this enthusiasm provides opportunities for teachers to build relationships with each other and with those in the larger community. Student work, which includes documentation of the learning process, as well as the student’s final projects, can be shared with other teachers, parents, and mentors, all of whom have a stake in the student’s education. Performance assessment is a preferred methodology of summative assessment at TTCS.

Other key elements of PBL include:

- *Key Knowledge, Understanding, and Success Skills* - The project is focused on student learning goals, including standards-based content and skills such as critical thinking/problem solving, communication, collaboration, and self-management.
- *Challenging Problem or Question* - The project is framed by a meaningful problem to solve or a question to answer, at the appropriate level of challenge.
- *Sustained Inquiry* - Students engage in a rigorous, extended process of asking questions, finding resources, and applying information.

Furniture & Equipment

- T = tackboards
- W = white boards
- S = Open shelves
- PS = Projection Screen



CLASSROOM

Functions of Furniture & Equipment

- flexibility
- display
- quickly reach teaching aids
- project to projection screen or white board

SECTION 2.0 - PROJECTED CONDITIONS

- *Authenticity* - The project features real-world context, tasks and tools, quality standards, or impact – or speaks to students’ personal concerns, interests, and issues in their lives.
- *Student Voice & Choice* - Students make some decisions about the project, including how they work and what they create.
- *Reflection* - Students and teachers reflect on learning, the effectiveness of their inquiry and project activities, the quality of student work, obstacles and how to overcome them.
- *Critique & Revision* - Students give, receive, and use feedback to improve their process and products.
- *Public Product* - Students make their project work public by explaining, displaying, and/or presenting it to people beyond the classroom.

Instructional Space Requirements

Standard general classrooms that meets NMAS and supports Project Based learning techniques through multiple furniture configurations and supportive technologies for 2D and 3D presentations. Other instructional spaces needs include: project storage with shelving and access to materials.

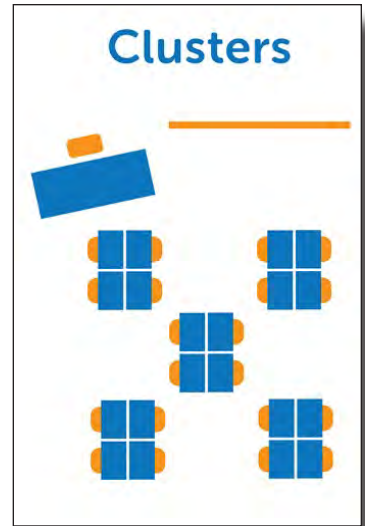
2. Scaffolded Learning:

“Scaffolded” learning, in which teachers build on concepts to reinforce them in several different ways, works well for English language learners. Success does not depend on the teacher’s knowledge of the student’s native language. Examples of scaffolding:

- Some resources such as textbooks and other written materials contain the same information as those in conventional classrooms, but they are written in simpler and more direct language or supported by teacher-produced annotations.
- There is considerable reliance on a variety of methods to deliver information. A teacher may explain an idea in English and then use several methods to convey the same information: For example, the teacher may act out the information or use illustrations.
- Continual student-teacher interaction is essential to ensure learning. It may involve diagnosis of gaps in understanding.
- In every lesson, teachers communicate and reinforce English through listening, speaking, reading, and writing.

Instructional Space Requirements

Standard general classroom that meets NMAS and supports scaffolded learning techniques through multiple furniture configurations and supportive technologies. Other instructional spaces needs include: areas with shelving and access to learning materials (visual, manipulative’s, projected images).



Clusters: Learner Centered Format

Pros:

- Encourages interaction of all students.
- Creates more personal and safe environment for students
- Promotes cooperation & teamwork
- Develops problem solving & communication skills
- Flexibility to strategically form groups
- Suitable for small spaces

Cons:

- Increased noise level, distractions and off-task behavior
- Less individual accountability
- Harder to assess students abilities

SECTION 2.0 - PROJECTED CONDITIONS

3. Active Learning:

TTCS's instruction is built on the idea of active, not passive learning. Active learning is a student-centered approach in which the responsibility for learning is placed upon the student, often working in collaboration with classmates. In active learning teachers are facilitators rather than one-way providers of information. The presentation of facts, so often introduced through straight lecture, is deemphasized in favor of class discussion, problem solving, cooperative learning, and writing exercises (graded and ungraded). Other examples of active learning techniques include:

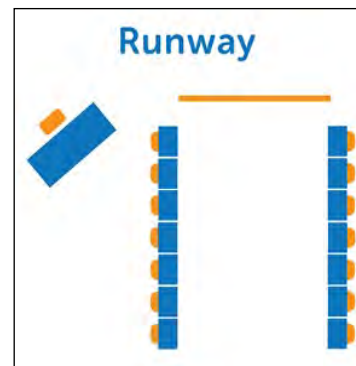
- *Think Pair Share:* Students ponder the answer to a question and then share their thoughts with a neighbor.
- *Role Playing:* "Each student takes the role of a person affected by an Earth science issue, such as a volcano or a polluted lake and studies the impacts of Earth science issues on human life and/or the effects of human activities on the world around us from the perspective of that person."
- *Peer Review:* Students review and comment on materials written by their classmates.
- *Discussion:* Promoting a successful discussion depends on correctly framing questions. Discover tips for framing discussion questions to promote higher order thinking.
- *Problem solving using real data:* Students use a variety of data to explore scientific questions.
- *Just in Time Teaching:* Students read assigned material outside of class, respond to short questions Online, then participate in collaborative exercises the following class period.
- *Game Based Learning:* game-based competitive exercises, either pitting the students against each other or through computer simulations.

Instructional Space Requirements

Standard general classroom that meets NMAS and supports active learning techniques through multiple furniture configurations and supportive technologies. Furniture may include large tables (or ability to group smaller tables or desks) for team projects. Table arrangements should allow individual work, group work, or discussion. Open shelving should provide space for project storage (while in process) and access to materials.

4. Interactive Technology Based Instruction

TTCS has begun to incorporate International Society for Technology in Education (ISTE) Standards into its curriculum to expand its use of technology based instruction. The use of these standards will affect the way students use and learn from technology inside the classroom



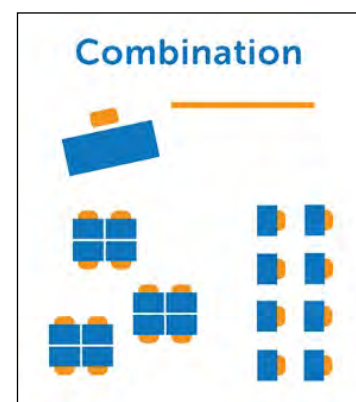
Runway: Individual Learning Format

Pros:

- Encourages individual work and productivity.
- Minimizes disruptions and cheating
- Effective for demonstrations & presentations
- Easy to supervise

Cons:

- Uneven distribution of interaction among students.
- May be more difficult supervise and assist students.



Combination: Small Group and Independent Learning Format

Pros:

- Encourages both individual and group work.
- Fairly easy to supervise and assist students.

Cons:

- Uneven distribution of interaction among students.
- May cause some students to lose focus
- May have increased noise level with mixed seating

SECTION 2.0 - PROJECTED CONDITIONS

and out by creating the “next generation” learning environment. This new environment will be created by transitioning from using technology “only to deliver” instruction to a “tool” to encourage and empower learners in the digital age. This includes teaching based on students’ collective and individual needs, creating a project-based learning environment, and promoting critical thinking skills. The school’s ultimate goal is to get ALL TTCS students prepared, at all stages, for a career in a global economy.

Technology and creativity

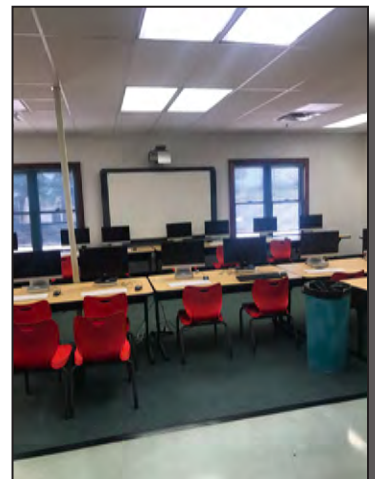
There are several learning models that tie together technology and creative thought:

- Real world problem solving
- Unique teaching tools such as games, videos, and interactive presentations
- Collaboration and group planning
- Pursuing curiosity and answering questions through digital media
- Online testing and writing assessments.

Digital tools enhance and add to student’s inherent creative skills. By creating a safe Online space for exploration, teachers can encourage students to try new things and innovate

Instructional Space Requirements

Standard general classroom that meets NMAS and supports Student-Driven Learning through robust and supportive technologies. Furniture should include large tables (or ability to group smaller tables) for team projects. Table arrangements should allow individual work, group work, or discussion. Open shelving should provide space for project storage (while in process) and access



Special Education

TTCS offers Special Education for all students and is an important part of the TTCS community. The School offers inclusion and special pullout instruction for all students including a gifted and reading intervention program.

For ancillary services the school contracts with one Social Worker, Speech Language Therapist, Occupational Therapist, Physical Therapist, and Diagnostician. The facility has dedicated areas in which services are provided to students.

Pre-Kindergarten

In 2007/08, TTCS incorporated Pre-K instruction into the schools academic program. The Pre-K program is capped at 40 students and is not counted against the schools overall enrollment cap of 490 students. The Pre-K program has two classes of up to 20 students each and is offered Monday - Thursday only for four hours.

SECTION 2.0 - PROJECTED CONDITIONS

Art & Music

TTCS provides all students developmentally appropriate grade level fine arts instruction that includes visual arts, general music, dance, and theater. The core of the program consists of weekly standards-based classes in music and visual arts for all students in kindergarten through 6th grade. The program continues to evolve through curriculum development, arts integration opportunities, after-school clubs, special projects, performances, and exhibitions.

Technology Instruction

TTCS classrooms are equipped with desktop computers, smart-board technology, and white boards. Students also have access to tablets and lap top computers for use in the classrooms. The School has two dedicated computer labs which is used for pull out technology instruction.

Physical Education

TTCS offers a Physical Education (PE) program for all students in grades K-6th to participate in as required by New Mexico Public Education Department (NMPED) PE Standards. The school has a full size gym on site that was constructed in 2012 that exceeds minimum NMAS for an elementary school.

Shared / Joint Use Facilities

The existing school site is located 15 miles south of downtown Santa Fe in a rural community that does not have facilities that the school can share. However, the school is a resource for the local community as it does allow use of school facilities such as the gym to be used by City Leagues for basketball and wrestling as long TTCS students are allowed to participate.

Alternative Methods for Educational Program Delivery

While not part of the “traditional” school day, TTCS does offer students “alternate” instruction or “blended learning” 2-3 days per week through after-school tutoring, which is staffed by a certified teacher. Students who elect to attend can participate in online learning that is specific to their individual areas of weakness as determined by standardized testing results. The tutoring is provided at no charge to students and is supported by Title I funds.

Currently, TTCS contracts with Canteen to prepare and serve both breakfast and lunch on-site for its students. As of the 2016/17 school year 66% of the students enrolled received Free or Reduced Lunch.

Scheduling Approach

In order to accommodate the needs of its students, TTCS has a 5-day instructional week. The regular school day meets from 7:50am - 2:50pm (Monday- Thursday), and 7:50am - 1:00pm on Fridays.

Special Curricular / Extra Curricular Activities to be Accommodated

While TTCS is primarily a traditional elementary school, it offers the following special curricular instruction: Art, Music, Physical Education (PE), Reading Intervention, Home Ec/ Nutrition, Library, Computer Instruction, and Special Education. The school also offers some after school clubs and programs such as: drama club, chorus, swim club, and an after school care program partially funded by CYFD. Over the next five years, the school intends to expand its science, technology based instruction, and art /music programs.

SECTION 2.0 - PROJECTED CONDITIONS

2.2 Proposed Enrollment

2.2.1 - Historic Enrollment

Enrollment Guidelines

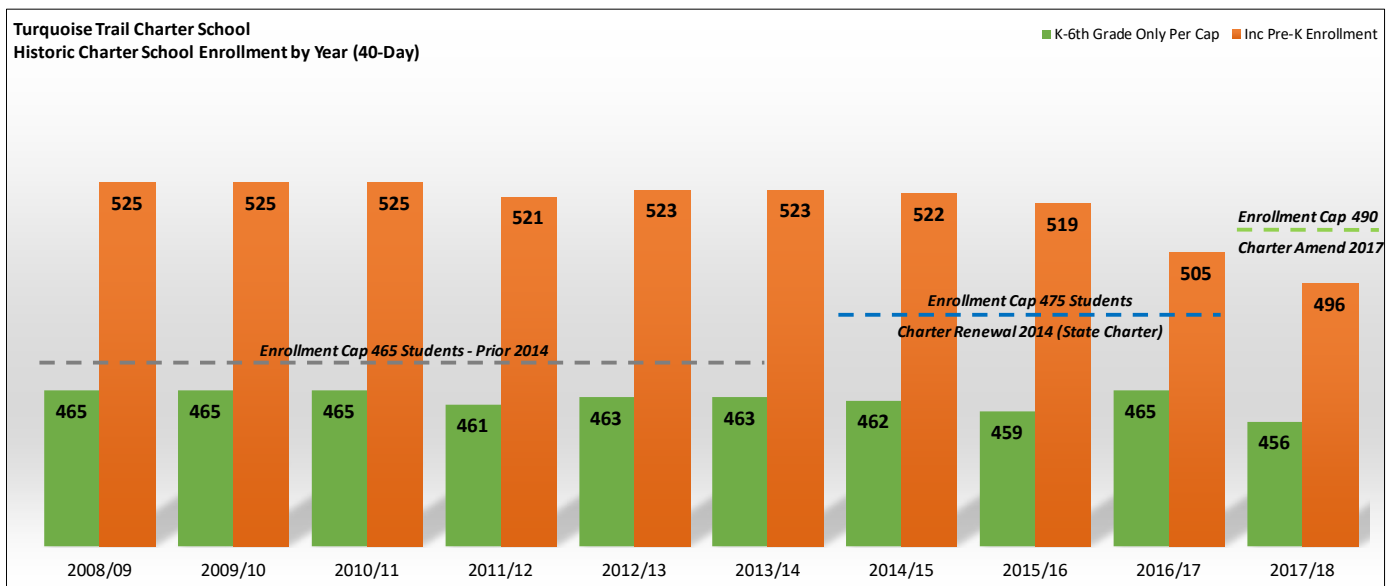
As a charter school, TTCS accepts all student applications for enrollment in the Spring time for the upcoming school year on a first-come, first served basis and accepts enrollment applications prior to each academic quarter as space is available. If the total number of enrollment applications exceeds the number of spaces available, the school will hold a lottery with the results posted on the school’s website: turquoisetrailcharterschool.org

Turquoise Trail consistently meets its enrollment targets annually and at times has a waiting list of between 5-30 students which varies by grade level. Although it is difficult to turn students away, it is a necessary part of maintaining the kind of educational environment and small-school atmosphere that allows for students to be successful. For planning purposes, the school tracks the percentage of students on the waiting list that actually enroll to ensure that all of school’s facilities are utilized.

Historic Enrollment

As an established charter school, TTCS is in its 27th year of operation. The school was originally a “district” charter school and part of the Santa Fe Public School District until 2014. Over the past ten years the school’s enrollment has been consistently at or near its enrollment cap. Prior to the school becoming a State Charter in 2014, the enrollment cap was 465 students, at the Charter renewal in 2014 when the TTCS became a State Charter, the enrollment cap was increased to 475 students; and in 2017 the schools charter was amended to increase the enrollment cap to 490 students in grades K-6th grade. TTCS also has a NMPED approved Pre-K program in place for up-to 40 students which are not included in the schools enrollment cap.

While TTCS has a slightly larger enrollment cap to accommodate fluctuations in cohorts, for class loading purposes as well as facility constraints, the school tries to maintain three full classes per grade level. As of the 2017/18 school year, the schools K-6th enrollment is 463 students and with the Pre-K enrollment (*not included in the chart below*) the total enrollment is 496 students.

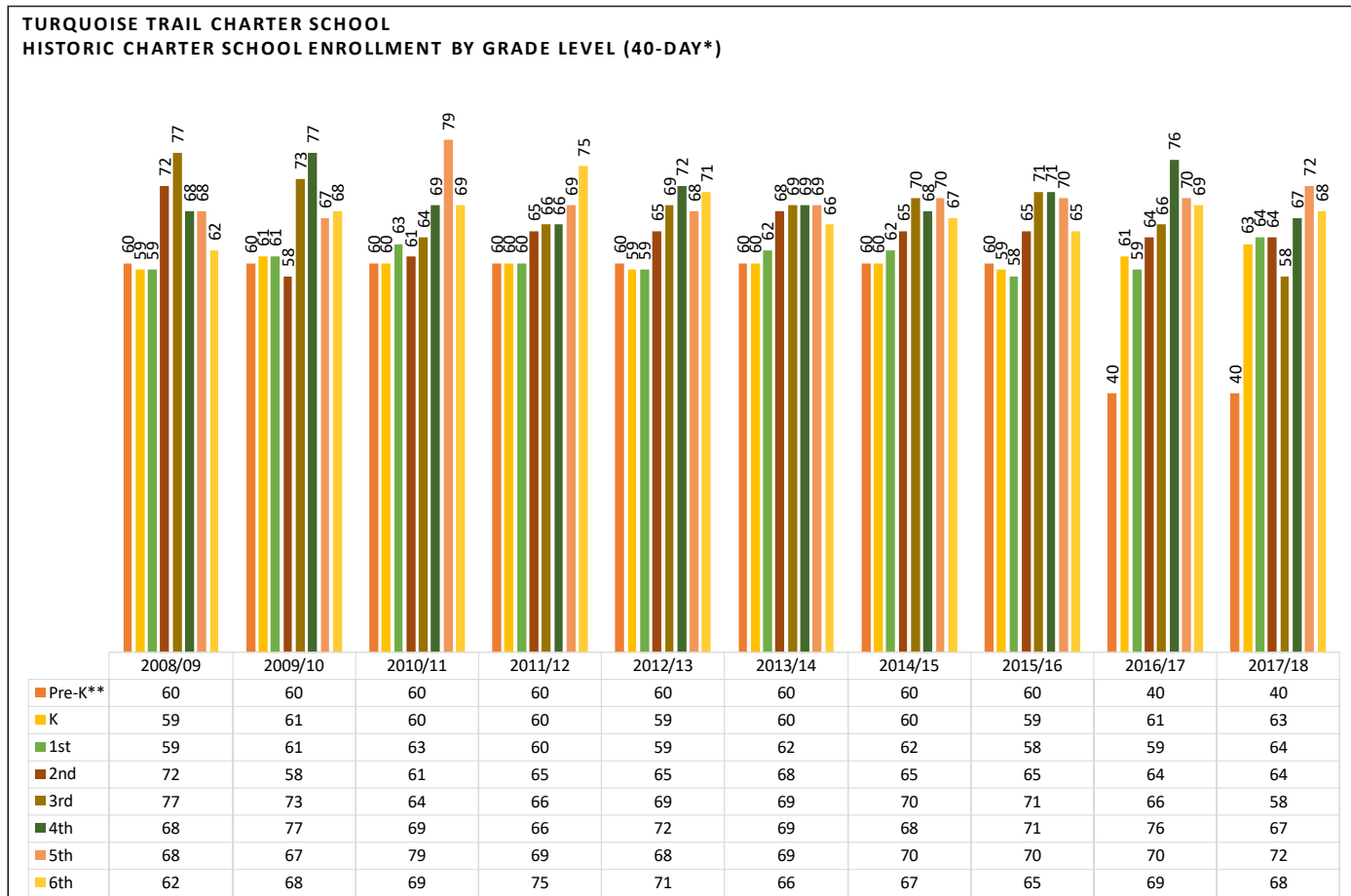


Source: New Mexico Public Education Department, 2008/09 - 2017/18 Official 40-Day Enrollment

SECTION 2.0 - PROJECTED CONDITIONS

Enrollment by Grade Level

Enrollment in grades K-6th over the past ten years has continuously hit the desired levels of 60-65 students on average in grades K-3rd and in the 66-75 range for grades 4th-6th, which has allowed the school to maintain at least 3 solid classes per grade level. This level of enrollment starting from Kindergarten is critical to sustaining the school’s cohorts at each grade level through sixth grade. Over the next five years the school has the potential to add an additional 25 students to reach its enrollment cap in grades K-6th, which depending on the availability of staffing and facilities could allow for either two combined grade level classes or two larger cohorts to cycle through the schools program. The school currently has a full-time Pre-K program that serves approximately 40 students annually that are *not subject* to the enrollment cap. Prior to 2015/16 school year, TTCS had a half-time Pre-K Program with (2) morning and afternoon classes that served 60 students annually. The chart below shows the schools enrollment by grade level over the past ten years.



Source: New Mexico Public Education Department, 2008/09 - 2017/18 Official 40-Day Enrollment

Projected Enrollment

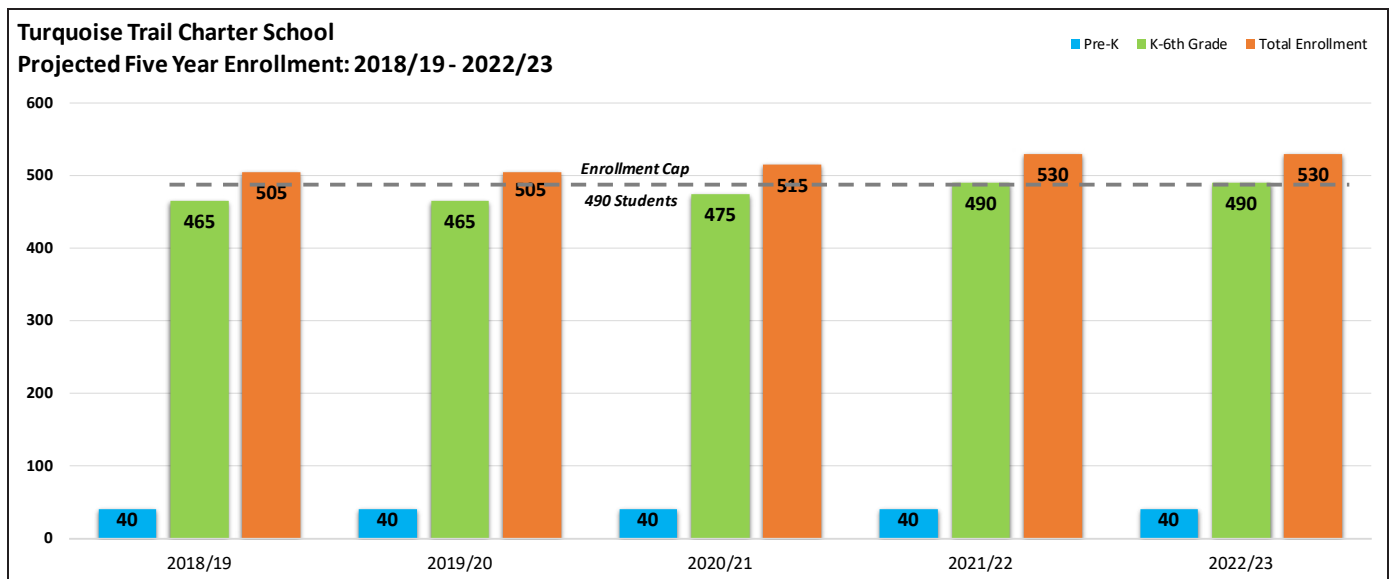
TTCS serves a large range of students in grades Pre-K - 6th and has maintained a solid enrollment history over the past ten years. As new housing continues to be constructed on the south side of Santa Fe, TTCS will continue to be desirable option for parents that want an alternative school environment that is not part of the SFPS system. Over the next five years the school could to grow its enrollment up to 490 students, not including the Pre-K enrollment of an additional 40 students. In order to meet the increased enrollment demand, based on the current utilization and capacity of the existing facilities, a 2 classroom addition or portables would be required.

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Future Enrollment Considerations

In May 2017, TTCS requested an amendment to its Charter to increase its enrollment cap to 490 students (not including Pre-K) in grades K-6th grade which was approved by the Public Education Commission. Currently, the functional capacity of TTCS is 492 students, if enrollment were to increase in grades K-6th to 490, and taking into consideration the Pre-K enrollment of an additional 40 students, the school would require additional classroom space.

The school will be renewing its charter in 2020 and may consider grade reconfiguration, expansion and possible changes to its enrollment cap as part of its renewal application, however no decisions have been made by the Governing Council at this time.



2.2.2 - Classroom Loading Policy

Turquoise Trail Charter School currently meets all NMPED requirements for general classroom loading as follows:

- Pre-Kindergarten: 16-20 Students per Class (2017/18 - 2 Classes)
- Kindergarten: 20 Students per Class (2017/18 - 3 Classes)
- Grades 1st - 3rd: 22 Students Per Class (2017/18 - 3 Classes)
- Grades 4th - 6th: 24 Students Per Class (2017/18 - 3 Classes)

Based on the current 2017/18 Enrollment of 464 students in grades K-6th TTCS's Average Pupil to Teacher Ratio (PTR) is 22:1 for general classrooms and when including all academic programs the actual PTR is 16:1.

2.2.3 - Classroom Needs

The projected classroom needs are based on enrollment at maximum level (determined by enrollment cap). This analysis assumes classroom loading numbers listed above and continuing the schools current delivery methods. The number and size of classrooms currently available at the TTCS campus is sufficient to accommodate the projected number of students under these conditions based on the enrollment of the school as well as the size of the existing classrooms. With the schools most recent renovation and expansion

SECTION 2.0 - PROJECTED CONDITIONS

in 2011, improvements were made in the following programmatic areas: Pre-K, Kindergarten, Home Ec, Physical Education, Library, Technology, Art, Music and Science.

The chart below lists the existing instructional spaces for the current year and the actual needed instructional spaces in the future required for the school to meet its classroom loading policy and provide its students with expanded educational programs, as well as provide for SPED resource classrooms for students that require supplemental academic instruction. Over the next five years, if enrollment increases in grades K-6th to the enrollment cap of 490 students, the school will need to construct an additional 2 classrooms or provide portables to be able to have sufficient capacity and hire additional teaching staff.

Turquoise Trail Charter School Grades Pre-K -6th	Existing Classrooms 2017/18	Future Classroom Demand*
General Classrooms		
Pre- Kindergarten	2	2
Kindergarten	3	3
1st -3rd Grade	9	10
4th-6th Grade	9	10
Subtotal General Classrooms	23	25
Specialized Classrooms		
Art	1	1
Physical Education (Gym)	1	1
Computer Technology	2	2
Music	1	1
Home Ec	0.5	0.5
Subtotal Specialized Classrooms	5.5	5.5
Special Program Classrooms		
SPED Resource	2	2
Reading Intervention/ Tutor	1	1
Bilingual	1	1
PT/OT/ SLP	1	1
Gifted	1	1
Subtotal Special Program Classrooms	6	6
Total Instructional Spaces	34.5	36.50

**Pre-K Enrollment of 40 Students (2 classes) is not included in the enrollment cap of 490 Students and when added to the cap, the max enrollment is 530 students Pre-K-6th.*

SECTION 2.0 - PROJECTED CONDITIONS

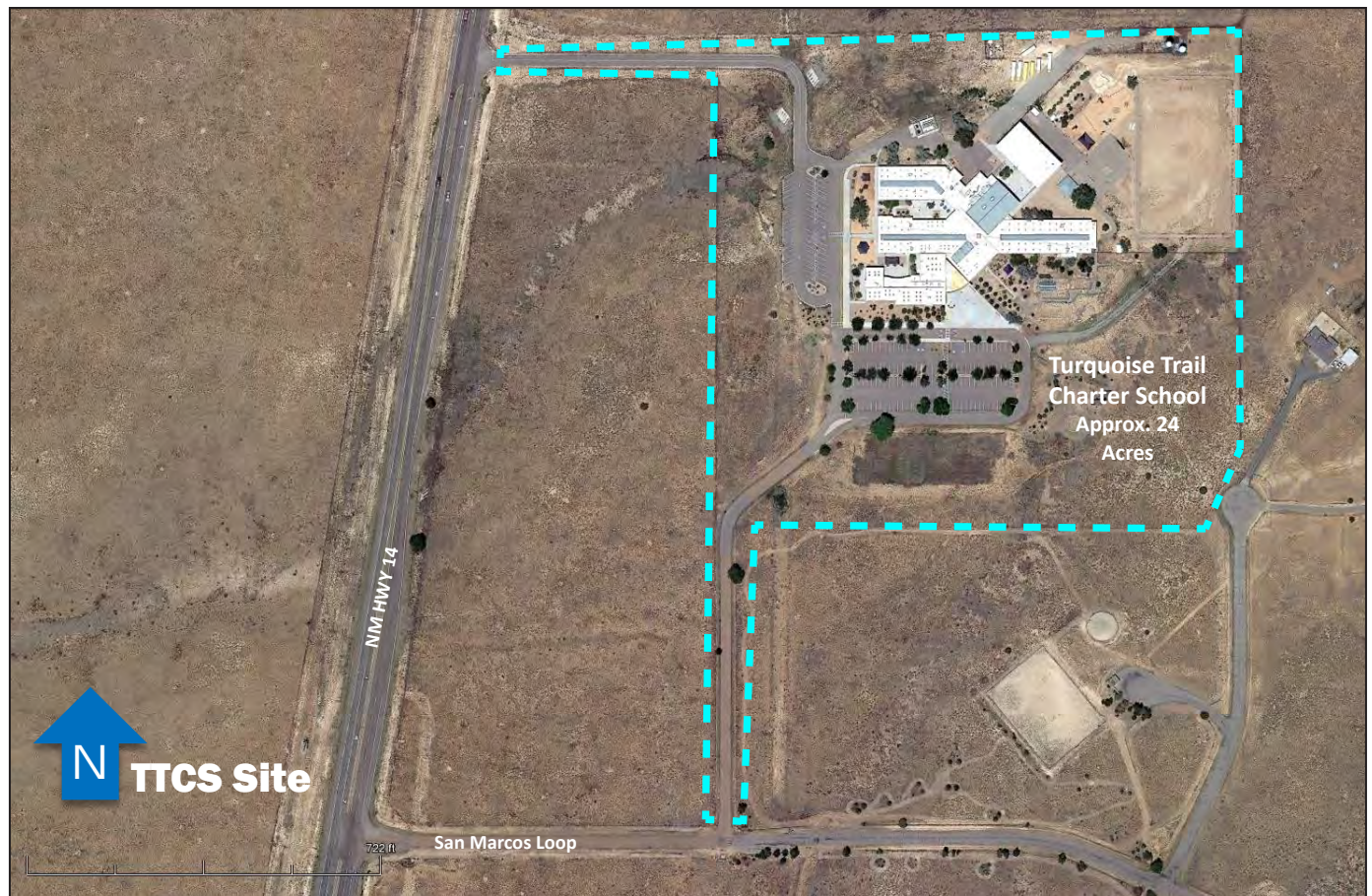
2.3 Site/ Facilities

2.3.1 - Location

The Turquoise Trail Charter School’s campus is located at 13A San Marcos Loop, approximately 15 miles south of downtown Santa Fe and is accessed from NM HWY 14. The site is surrounded by undeveloped real estate on all sides and is close to low density residential development to the south and east. The site is approximately 2 miles from police and fire stations, and the New Mexico State Penitentiary. The school currently leases the property and facilities from the Santa Fe Public School District, which is paid for through the school’s annual Lease Payment Assistance Award from the Public Schools Capital Outlay Council. The school may consider negotiating the purchase of the facilities in the future from the district.

The existing school site consisting of approximately 24 acres is located on the east-side of NM HWY 14 and has two access points to the north and south of the site. The north entrance is used for buses and staff parking, the south entrance at San Marcos Loop is for parent drop-off and pick-up before and after school and visitor parking. TTCS contracts with Herrera Bus Transportation for bus services, approximately 294 students utilize the transportation services on five buses. The main parking area is located on the south side of the campus near the main entrance contains 113 paved parking spaces and the west parking area for staff contains another 61 parking spaces for a total of 174 parking spaces including 6 ADA compliant parking spaces.

The site has outdoor playgrounds for Pre-K and Kindergarten -3rd grade students along the west side of the building and a larger playground and play fields to the north and east of the gym.



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TTCS campus consists of a permanent facility with 74,819 square feet used for educational use. The main school facility building was constructed in 1990 (54,880 SF). In 2011-12, when the school was a “district charter” and part of the Santa Fe Public Schools, the school was expanded to include a classroom and library addition to the south and a new gym was constructed on the northeast side of the cafeteria (19,939 SF) and three portables were removed from the site. The existing facility meets NMAS for classrooms and support spaces. As the current utilization and capacity analysis will show, the school is highly utilized and supports the current enrollment.

Conformance with Adequacy Standards

The facility as constructed currently conforms to all NM Adequacy Standards as required for an elementary school as they pertain to charter schools. All of the schools general, specialty classrooms and support spaces meet or exceed the minimum square footage requirement established by the NMAS and no variances are needed.

Facility Evaluation

Visions In Planning, Inc. evaluated the TTCS campus to identify both maintenance and long-range capital improvement needs for the school to work towards completing over the next five years. Visions In Planning, Inc. used the following methods to identify the list partial list of facility issues below:

- Analysis of compliance with adequacy standards
- Physical condition assessment to determine facility conditions needs
- Results of interviews with TTCS administration and staff
- Planning team observations

Section 5.4 - Master Plan Supporting Documents contains the facility evaluation.

FAD Update

The full FAD update is in Section 5.4 - Master Plan Supporting Documents and has been submitted to NMPSFA for updating

Statewide Adequacy Standards

New Mexico’s statewide Adequacy Standards for primary and secondary educational facilities (NMAS 6.27.30) are guidelines for public school districts to “... provide and sustain the environment to meet the needs of public schools.” They are intended to create a minimum facility standard to establish equity among all educational facilities serving New Mexico public school students. Alternative and charter schools may seek a variance for facilities, since they do not necessarily conform to the programs, delivery methods, and facility needs and budgets that are the basis for the standards. It is through these variances that these types of schools are intended to meet many of the facility requirements for their “alternative programs” through “alternative methods.” However, both alternative and charter schools must provide the minimum square footage allowances for general classroom spaces, as identified in the NM Adequacy Standards. Because TTCS operates very similar to a traditional elementary school, it requires some of the more “traditional” type classroom spaces found in other elementary schools in the SFPS district such as Pre-K and Kindergarten classrooms, general classrooms, science, and computer labs, library, art and music classrooms, and gymnasium.

SECTION 2.0 - PROJECTED CONDITIONS

It should be noted that TTCS meets all of the required NMAS in the areas listed below (statute section citations in parentheses), as well as meets all of the additional standards in the other areas listed that allow variances.

(6.27.30.8) General Requirements - Required

- Building structural soundness (A.1)
- Weather-tight exterior envelope (A.2)
- Interior surface condition (A.3)
- Interior finish harmful elements (A.4)
- Building system integrity (B.1)
- Plumbing type / accessibility (B.2)
- Adequate fire alarm system (B.3)
- Adequate two-way communication system (B.4)



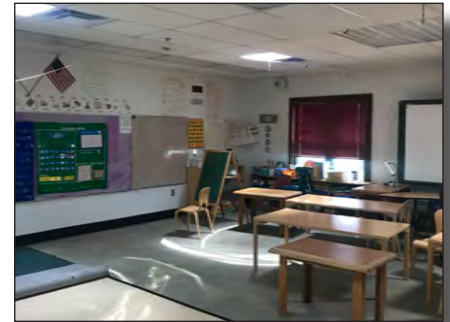
Media Center

(6.27.30.10) Site - Required

- Student drop-off pedestrian pathway (A)
- Protection of building structural integrity (C)
- Potential of flooding, ponding, or erosion (C)

(6.27.30.11) Site Recreation and Outdoor PE

- Playground and Play Area
- Multipurpose playing Area
- Playing Field w/ Equipment



Typical General Classroom

(6.27.30.12) Academic - Required

- Appropriate size (A)
- Lighting (C)
- Temperature range (D)
- Acoustics (E)
- Air quality (CO2 PPM) (F)



6th Grade Science Lab

(6.27.30.14) Specialty Classroom

- Science (A)
- Internet Access (B)
- Technology Lab (B)
- Art & Music Education (C)

(6.27.30.15) Physical Education

- Indoor PE Teaching
- Office
- PE Equip. Storage



New Gym Constructed in 2011

SECTION 2.0 - PROJECTED CONDITIONS

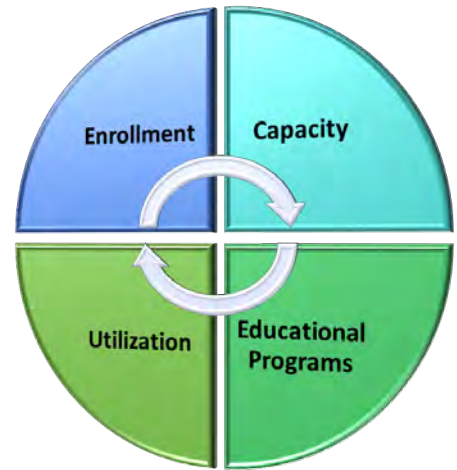
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SECTION 2.0 - PROJECTED CONDITIONS

2.4 Capacity Analysis/ Utilization

2.4.1 Capacity/ Utilization

The capacity of a school reflects how many students the school’s physical facility can serve effectively. There are various methodologies that exist to calculate capacity. It is not uncommon to review an existing building only to find that the capacity which once had been assigned to a building is greater than what can be reasonably accommodated today. That is primarily due to a change in how programs are delivered today, especially in a Charter School environment where alternative instructional programs and methodologies are often used.



During the past fifty years, educational programs in public schools and the manner in which they are delivered have changed significantly. Repeated arguments are heard that “This school was able to accommodate 600 students thirty years ago and now you are saying it can only accommodate 400 students today. How can this be the case?” Persons making these statements often do not realize that when the building was originally constructed, the average class size was 30 students, the music program was being held on the stage, the teacher provided art on a cart, there were no computer labs, the Kindergarten program went from half day to full day and severely handicapped special education students were in separate facilities and not attending mainstream public schools. Add to this the fact that many states have legislation for class sizes of 20 or under for the early elementary grades, schools are expanding Pre-K services, and there are many more at-risk student programs.

A critical component of analysis is how a space is actually used and managed. An analysis of how space is managed at Turquoise Trail Elementary was accomplished through analysis of the school’s master schedule, floor plans, facility walk-through’s, and confirmation of any questions regarding use by the school principal.

Capacity refers to the number of students a school can accommodate. There are two types of capacity measures: Maximum Capacity (also known as Design Capacity), and Functional Capacity.

- *Design Capacity* is the desired maximum capacity at the time of building design, and assumes the maximum number of students per classroom. This formula generally follows either NMPED ‘standards’ or a modification of this standard by the school’s charter multiplied by a student loading factor that reflects average pupil/teacher ratios (PTR) and also takes into consideration the special needs by the students attending the school.
- *Functional Capacity* identifies the actual number of students that can be housed, based on instructional spaces (teaching stations) available to regular and C & D level enrollments - multiplied by a student loading factor that reflects average pupil/teacher ratios (PTR) as identified in the school’s charter and approved by NMPED. The results are multiplied by factors addressing scheduling utilization, special education inclusion, school size and grade level. Instructional areas that are used for special (federal and categorical) programs are exempted.

Currently the *Maximum/ Design* (100%) Capacity of TTCS which leaves minimal to no flexibility is 776 students fully loaded, which with the size of the existing classroom spaces is not functional. The *Functional Capacity* for TTCS is calculated to be a total of 492 students. Currently, the 2017/18 enrollment is 496 students Pre-K -6th grade.

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NMPSFA Guidelines for Utilization and Capacity

As part of the utilization and capacity analysis the following criteria was established by NMPSFA and was used to identify and categorize the instructional spaces available. A study for all educational facilities (including the Pre-K program) identifies all of the available instructional spaces at each school facility and whether or not the current spaces meet the existing and projected classroom needs. Existing floor plans and space usage charts for each school identifies how the facility is being utilized. From that information, utilization and capacity of each facility was analyzed as it relates to the State’s Adequacy Standards.

Elementary Level (Grades PK DD thru 5th or 6th)		
Space	Notes	Space
Pre-K Classroom	3/4 YO or 4 YO, 650 sf, 16-20 students maximum (36nsf per Student)	U&C
Kindergarten Classroom	Graded, 1000 sf, 20 students maximum (50nsf per Student)	U&C
Regular (Standard) Classroom	Graded, 672 -768 sf, 22-24 students maximum (32nsf per Student)	U&C
Special Ed. Classroom (C & D)	If Std. Or 1/2 CR size - and if for C or D level pull-out	U&C
1/2 Classroom	450 sf - 12 students maximum	U&C
Special Ed Resource Room (A & B, Gifted)	If Std. or 1/2 CR size	U&C
Federal/Categorical	Includes ESL, SLP, OT/PT etc. - count if minimum 1/2 classroom size	U&C
Program Management Space	If Std. or 1/2 CR size - Parent Room, Hosts, etc.	U
Music Room	If Std. CR size - Includes Art, Science Lab - Program Space	NC
Computer Lab	Including Title I labs - Program Space; Not counted if in Media Center	NC
Lounge, etc. in Classroom Space*	Classified as Non-instruction / non-program Space see (*) to determine inclusion or exclusion	NC
Media Center	Not counted	NC
Gymnasium	Not counted	NC
Multipurpose Room	Not counted	NC

Key:
 U&C Counted as part of utilization/capacity analysis.
 U Counted for utilization analysis, but not for capacity Analysis.
 NC..... Not Counted for Utilization/Capacity.

Utilization refers to the actual placement of students within the classroom measured against the NMPED maximum or in the case of a charter school - the maximum class size identified and approved in the school’s charter. In general, typical elementary schools do not utilize each classroom to 100% because of the uneven number of students per grade level (i.e., enrollment is not equally divisible by 22, 24, etc.). The NMPSFA guidelines indicate a maximum efficiency for typical elementary school to be 90-95% depending on the type of educational model being used by the school. For this analysis, the Turquoise Trail Charter School currently utilizes its facilities efficiently at 90% with an enrollment of 496 students Pre-K-6th grade which leaves minimal flexibility to accommodate new or additional programs or increased enrollment in the future.

The charts on page 21 identifies TTCS’s number of available classrooms, maximum and functional capacity as well as the actual needed demand for classrooms in the future. The subsequent chart on page 23 demonstrates the schools “actual” utilization of the facility based on how the school is scheduled and used on a daily basis.

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SECTION 2.0 - EXISTING & PROJECTED CONDITIONS

Table 2.4.1.B Current Utilization Chart - Turquoise Trail Charter School

The Utilization Table below is for the schools 2017/18 enrollment, based on current enrollment and program demands, the school has sufficient available classrooms to meet its average PTR of 22:1. On average the general classrooms average 830 - 840 SF (excluding Kindergarten) which is above the minimum NMAS for elementary classrooms. The school currently has a 90% utilization rate and uses its facilities effectively.

DISTRICT:	NM State Charter School
SCHOOL:	Turquoise Trail Elementary
DATE:	October 23, 2017

ALL CLASSROOMS (General, Art, PE, Computer Lab SPED, Title1, PT/OT, Etc.)											DAYS AND HOURS SPACE IS USED					UTILIZATION		
ROOM NUMBER	TEACHERS NAME	EXISTING CLASSROOM USE	ORIGINAL INTENDED USE	GRADE LEVEL	CURRENT STUDENT ENROLLMENT COUNT	CLASSRM SQUARE FOOTAGE	Max. Number of Students per Adequacy Standards Sq. Ft.	PED Max. PTR per Classroom	% Classroom Occupancy	DOES CLASSROOM MEET ADEQUACY	MONDAY HOURS USED PER DAY	TUESDAY HOURS USED PER DAY	WEDNESDAY HOURS USED PER DAY	THURSDAY HOURS USED PER DAY	FRIDAY HOURS USED PER DAY	TOTAL HOURS CLASSROOM IS USED DURING SCHOOL WEEK	TOTAL HOURS CLASSROOM AVAILABLE DURING SCHOOL WEEK	UTILIZATION RATE PERCENT (%)
A1	Brown, Samantha	Kindergarten Classroom	Kindergarten	K	21	943	19	20	111%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
A2	Graham, Penny	Kindergarten Classroom	Kindergarten	K	21	938	19	20	112%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
A3	Griffin, Haley	Kindergarten Classroom	Kindergarten	K	21	927	19	20	113%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
A4	Contractor- Kids Cook	Home Econ.	Home Ec	Pre-K - 3rd	Varies	570	11	15	120%	Y	0.00	0.00	5.00	5.00	0.00	10.0	33.1	30%
A5	Contreras, Johnathan	Pre-K	Pre-K	Pre-K	20	996	28	20	72%	Y	5.00	5.00	5.00	5.00	0.00	20.0	33.1	60%
A6	Jacobs, Sonya	Pre-K	Pre-K	Pre-K	20	967	27	20	74%	Y	5.00	5.00	5.00	5.00	0.00	20.0	33.1	60%
B1-A	Crow, Tamara	SPED	Part of Old Library	4-6	Varies	380	8	8	100%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B1-B	McMahon, John	SPED	Part of Old Library	Pre-K - 5th	Varies	322	6	8	100%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B2	Tucker, Linda	SPED	SPED	4th-5th	Varies	555	11	8	100%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B3	Check-Out by Teacher	Computer Lab	General Classroom	K-3rd	Varies	804	25	22	100%	Y	5.00	5.00	5.00	5.00	3.00	23.0	33.1	69%
B4	Aranda, Gina	Gifted Reading Intervention Room	General Classroom	1st-6th	Varies	710	22	24	100%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B5	Varies by Teacher	Reading Intervention Room	Part of General CR	Pre-K-6th	Varies	491	15	15	100%	Y	3.00	4.00	3.00	4.00	3.00	17.0	33.1	51%
B6	Maze, Molly	General Classroom Tutor - Reading Interventionist	Kindergarten	1st	22	1031	32	22	68%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B7	Perez, Kendall	General Classroom	Part of General CR	2nd-6th	Varies	447	14	15	100%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B8	Solock, Sonya	General Classroom	Kindergarten	1st	21	1054	33	22	64%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
B9	Oler, Amy	General Classroom	General Classroom	1st	21	831	26	22	81%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
C1	Rothschild, Charles	Music Room	Music	K-6th	Varies	1081	34	24	100%	Y	5.00	5.00	5.00	5.00	2.00	22.0	33.1	66%
C2	Alexander, Jennifer	Art Room	General Classroom	K-6th	Varies	1144	36	24	100%	Y	5.00	5.00	5.00	5.00	2.00	22.0	33.1	66%
C3	Hamilton, Mariah	General Classroom	General Classroom	2nd	21	861	27	22	78%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
C4	Miyagawa, Jill	General Classroom	General Classroom	2nd	22	842	26	22	84%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
C5	Griffin, Shawna	General Classroom	General Classroom	3rd	20	841	26	22	76%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
C6	Diaz, Linda	General Classroom	General Classroom	3rd	20	841	26	22	76%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
C7	Hart, Debbie	General Classroom	General Classroom	3rd	18	833	26	22	69%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
C8	Chavez, Jo Dee	General Classroom	General Classroom	2nd	21	832	26	22	81%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D1	Headley, Sara	General Classroom	General Classroom	4th	23	829	26	24	89%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D2-A	Contract Service Provider	SPED - Social Work	Part of General CR	K-6th	Varies	231	5	5	100%	Y	0.00	4.00	0.00	4.00	0.00	8.0	33.1	24%
D2-B	Contract Service Provider	SPED - OT	Part of General CR	K-5th	Varies	216	4	4	100%	Y	0.00	4.00	4.00	4.00	0.00	12.0	33.1	36%
D2-C	Contract Service Provider	SPED - PT	Part of General CR	Pre-K - 4th	Varies	179	4	4	100%	Y	4.00	0.00	4.00	0.00	4.00	12.0	33.1	36%
D3	Conboy, Diane	General Classroom	General Classroom	4th	22	828	26	24	85%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D4	Weigle, Karen	Bilingual Classroom	General Classroom	K-6th	Varies	828	26	24	100%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D5	Farquhar, Mathew	General Classroom	General Classroom	4th	22	828	26	24	85%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D6	Lindauer, Jennifer	General Classroom	General Classroom	5th	24	828	26	24	93%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D7	Phillips, Harry	General Classroom	General Classroom	6th	23	829	30	24	78%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D8	Garcia, Leticia	General Classroom	General Classroom	5th	24	829	26	24	93%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D9	Davis, Jeff	Science Flex/Classroom	General Classroom	6th	22	1211	43	24	51%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D10	Herd, Heather	General Classroom	General Classroom	5th	24	828	26	24	93%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D11	Gray, Sharyn	General Classroom	General Classroom	6th	23	818	29	24	79%	Y	7.00	7.00	7.00	7.00	5.10	33.1	33.1	100%
D12	Varies by Teacher	Computer/Mac Lab	General Classroom	4th-6th	Varies	818	26	24	100%	Y	5.00	5.00	5.00	5.00	3.00	23.0	33.1	69%
None	Martino, Melanie	Gymnasium	Gym	K-6th	Varies	5059	158	24	100%	Y	5.00	5.00	5.00	5.00	0.00	20.0	33.1	60%
TOTALS:					496	34400	1,022		90%		231	236	240	241	155	1103	1225	90%

GRADE LEVEL	CURRENT STUDENT COUNT (40-Day)	DD/SPECIAL NEEDS STUDENTS PER GRADE	CURRENT NUMBER OF TEACHERS	NUMBER OF CLASSRMS
Pre-K*	40	2	2	2
K	63	7	3	3
1st	64	10	3	3
2nd	64	4	3	3
3rd	58	11	3	3
4th	67	8	3	3
5th	72	16	3	3
6th	68	11	3	3
TOTALS	496	69	23	23

SCHOOL HOURS	M-TH	F
School Start Time:	7:50 AM	7:50 AM
School End Time:	2:50 PM	1:00 PM
Total Hours in School Day	7:00	5:10
Number of School Days per Week:	4	1

NOTES:

Count general classrooms as being used while students are attending recess, lunch, library time, and PE activities.

Utilization Rate Calculation: Total number of hours classroom is actually used per week / (divided by) the maximum possible classroom hours per week = (equals) total classroom utilization.

* Minimum Square Footage Per Adequacy Standards x Max class size per PED

Kindergarten	50nsf per student x 20 students max = 1,000 SF
Grades 1 - 3	32nsf per student x 22 students max = 704 SF
Grades 4 - 5	32nsf per student x 24 students max = 768 SF
Grade 6	28nsf per student x 24 students max = 672 SF

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SECTION 2.0 - PROJECTED CONDITIONS

2.5 Facility Maintenance

2.5.1 - Maintenance Projects

Currently, TTCS does utilize “School Dude” to log its maintenance needs, however the school does not have the financial resources available to address all of the maintenance needs at one time and will have to prioritize the most critical needs, as is typical of most charter schools without GO Bond capacity. As major facility maintenance needs arise, requests are made to the school’s Business Manager, who then contacts the appropriate on-call contractor to make any repairs that cannot be completed by the on-site facility maintenance person. TTCS has completed its Preventative Maintenance Plan which was approved by the school’s Governing Council in September 2017. As part of the Facility Master Plan process, the facility assessment identified several minor maintenance projects that should be addressed over the Summer of 2018.

- Install additional wood chips at all playground equipment
- Reseal/ caulk all building perimeter and control joints.
- Tighten all fasteners on all flashings and metal copings around building perimeter and reseal.
- Re-caulk/ seal interior expansion joint near reception desk in lobby area

SECTION 2.0 - PROJECTED CONDITIONS

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SECTION 3.0 - PROPOSED FACILITY REQUIREMENTS

3.1 Facility Goals and Concepts

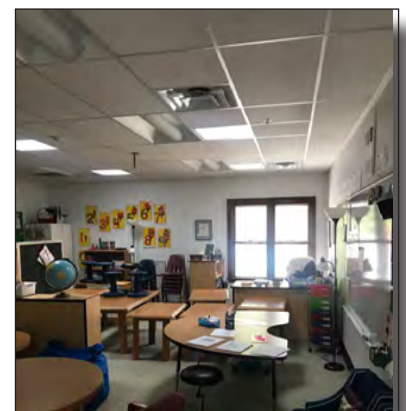
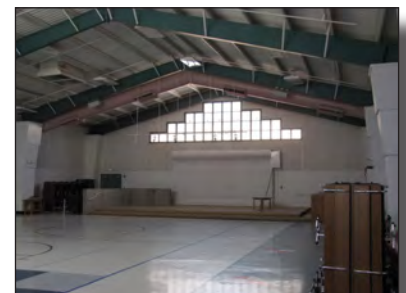
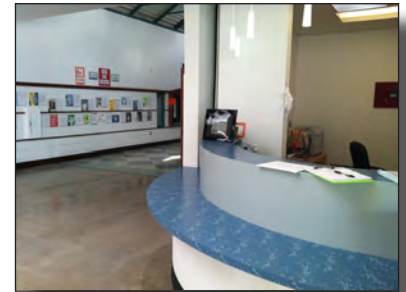
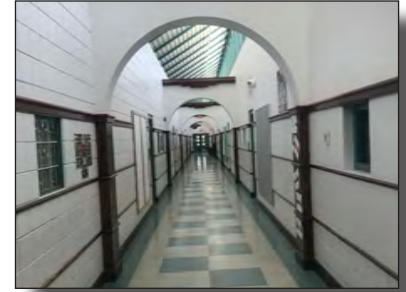
3.1.1 - Facility Goals

The established goal of TTCS is to continue to provide a high quality educational environment to serve the needs of students in the greater Santa Fe area. The facilities that TTCS currently occupies comply with NMSA 1978, §22-8B-4.2. According to statute, TTCS is required to be housed in facilities that meet educational occupancy standards on or before its next renewal date, which is in July 1, 2019. The location in which TTCS resides was constructed as a public elementary school and meets the requirements that are applicable to it under NMSA 1978, §22-8B-4.2(D), by entering into a lease agreement with a school district or non-profit landlord for a facility that meets adequacy standards. TTCS currently leases its current facilities from the Santa Fe Public School District and has been in its current location since its inception as a charter school in the 1990's.

The school site is approximately 24 acres, which will allow the school the opportunity to reconfigure and expand its facility in the future as changes occur or are needed. Based on the educational programmatic requirements and potential future facility improvements that may be needed to meet TTCS goals, the following long-term facility goals have been identified:

- Continue to maintain existing lease-facilities through performing required maintenance to the facility as needed,
- Utilize SB-9 and HB-33 funding where possible to complete capital improvements and repair and extend the life of existing building systems,
- Improve outdoor physical education areas such as track and play-fields areas,
- Continue to provide for future changes in technology equipment and infrastructure needs,
- Continue to improve upon facility safety and site security as needed;
- Construct 2-classroom addition or provide 2 portables to meet increased enrollment to the schools cap.

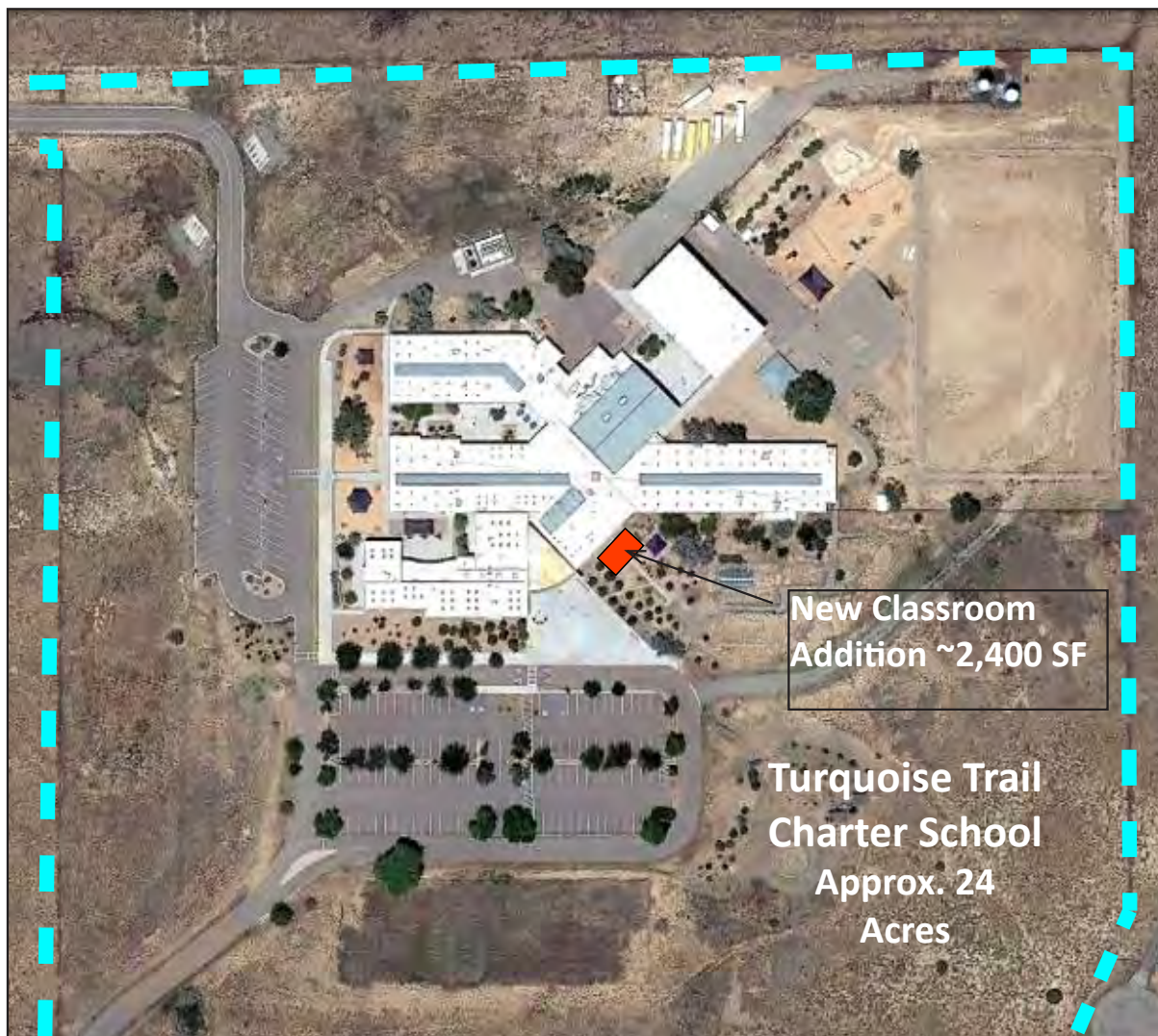
Any major changes to the campus and/ or facilities would require approval from Santa Fe Public Schools as the school's current lease holder.



SECTION 3.0 - PROPOSED FACILITY REQUIREMENTS

Facility Space Needs (Existing Facility)

TTCS's existing facility consists of 34.5 general and specialty classrooms, all of which meet or exceed NMAS square footage requirements for general classrooms. The school underwent a partial renovation and classroom addition in 2011, which gave the school expanded capacity to accommodate it's current enrollment including Pre-K. If enrollment in grades K-6th does increase to 490 students two additional classrooms would be needed, which would require an addition of approximately 2,400 SF including TARE (2 classrooms @ 835 SF + storage to match existing classroom sizes). The school was originally designed to accommodate a classroom addition to the south of Classroom Wing D and could be considered as a potential location for the new classrooms.



SECTION 3.0 - PROPOSED FACILITY REQUIREMENTS



3.1.2 - Concepts

The future classroom addition at TTCS should include floor materials that be comfortable, durable, easy to clean and maintain. Furniture should be easily movable by students, allowing reconfiguration of the space with minimal effort. The walls of the classrooms should easily accept tacks or staples for display. Ceilings in these spaces should be a maximum of nine feet high, to help dispel feelings of crowding when many students are using the space and to enhance natural light and air distribution. Fresh air and daylight are important support elements. All classrooms should have operable windows and means to control daylight.

The following overall design concepts for the new classroom addition would also include the following:

Safety & Security - Any new classroom addition would be designed to keep in mind current and acceptable methods of providing safety and security to students and staff from within the school as well as from the outside, taking into consideration the various forms of security problems schools are facing at this point in time. The proposed building should be designed to follow Crime Prevention Through Environmental Design (CPTED) principles.

Sustainability & Utilities - Efficient and mindful use of energy resources is important to the culture of social awareness at TTCS.

SECTION 3.0 - PROPOSED FACILITY REQUIREMENTS

- Provide daylight and views to the outdoors to enhance learning
- Reduce energy use through installation of energy-efficient systems and devices, and through conservation policies that govern energy-using behaviors
- Track and monitor utility usage the Utility Direct feature of “School Dude”

Flexible Space - It is the desire of TTCS to create future learning spaces that can “flow and adapt” as necessary. The overall design concept for the classroom addition is to continue to provide a “safe small school” feel with its own unique identity that is TTCS. The design shall take into consideration the need for flexibility as the classrooms could be used for a variety of educational grade levels/programs and will need to be adaptable to accommodate future changes in education without major modification to the facility.

Emphasis on Sustainable, High Performance Facilities

Sustainable building includes design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants.

- Environmental site planning
- Safeguarding water and water efficiency
- Energy efficiency and renewable energy
- Conservation of materials and resources
- Indoor environmental quality
- Benefits of sustainable, high-performance buildings
- Environmental: reduce impacts of natural resource consumption
 - Health and safety: enhance occupant comfort and health
 - Community: improve quality of educational experience, through improved air quality, better acoustics and increased access to natural light
 - 20-26% faster learning rate in well daylit classrooms and 7% faster learning rate in classrooms with operable windows

Technology

While the school currently has two dedicated computer labs for technology instruction and testing, any future classroom will have a teacher computer workstation with that can wirelessly connect to a digital document camera, voice-assist speaker system, or an interactive display surface (i.e. ACTIVboard or LED wall surface system and interactive feedback devices for the interactive display).

Each future classroom will have at least 4-6 computers for use by all students, provide sufficient data and power outlets and wireless connectivity to allow flexibility in the location of these devices. These guidelines should be confirmed at the beginning of design and through the course of development of each project to accommodate changes in technology.

SECTION 4.0 - CAPITAL PLAN

4.1 Capital Improvement Funding

4.1.1 - Capital Improvement Funding

Historic and Current Funding Sources

Over the past ten years, TTCS has steadily maintained a steady enrollment at or near its previous enrollment cap of 465 students, and as of May 2017, the Public Education Commission approved an increase in the enrollment cap to 490 students. The school offers a Pre-K program for up to 40 students that are excluded from the enrollment cap that the school receives annual grant funding for separately. The school currently has a lease agreement with Santa Fe Public Schools and requests annual lease reimbursement assistance through the PSCOC, which is subject to change annually, as the lease reimbursement is based on the MEM enrollment and if enrollment increases or decreases so does the lease reimbursement.



For the 2017/18 academic year, the amount of lease assistance monies the school will receive is expected to be \$307,570 which covers approximately 95.2% of the school's annual lease cost for 2017/18 of \$323,098. The school receives a portion of SB-9 funds from Santa Fe Public Schools (SFPS) in the amount of \$340,311 which includes State of NM matching funds annually. As SFPS also has an HB-33 mill levy in place, TTCS receives \$ 266,575 annually from the district from this funding source, as well as \$335,068 from the district's ED Tech Bonds. TTCS *does not* receive any funding for facilities from the local SFPS GO Bond as the school is a State Charter School, and is no longer an SFPS District Charter School. While TTCS is eligible for either Standards Based or Systems Based Funding through the PSCOC as it has successfully renewed its Charter multiple times, the school's facilities are currently not ranked high enough (552) to qualify for matching funding through either funding option; and as the school is located in the SFPS district, TTCS would only be eligible for a 10% match in PSCOC funds.

Turquoise Trail Charter School is currently supporting Santa Fe Public Schools in its upcoming quest for the successful passage of the February 2018 SB-9 Mill Levy election, which will provide the school with nearly \$2M over the course of six years that can be used towards facility improvement and to help extend the life of the existing building systems over the coming years.

4.1.2 - Anticipated Preventative Maintenance Needs

Currently the TTCS facilities are leased and most of the preventative maintenance needs are not currently covered under the current lease agreement. If maintenance needs arise that are not covered under the schools lease agreement, the school utilizes local job order contractors for repairs which are paid for from SB-9 funds. TTCS at this time does not have any major preventative maintenance needs outstanding. However, the school has identified several minor maintenance projects that will be addressed over the 2017/18 School Year and Summer of 2018 and includes:

- Install additional wood chips at all playground equipment
- Reseal/ caulk all building perimeter and control joints.
- Tighten all fasteners on all flashings and metal copings around building perimeter and reseal.
- Re-caulk/ seal interior expansion joint near reception desk in lobby area

SECTION 4.0 - CAPITAL PLAN

4.2 Capital Improvement Plan

4.2.1 Five Year Plan

Capital Improvement Plan for Turquoise Trail Charter School

Currently, Turquoise Trail Charter School’s SB-9 and HB-33 Mill Levy funds from SFPS and future proceeds will be the primary source of funding for the majority of the identified Capital Improvement Projects the school undertakes and funding for technology improvements will utilize funds from the ED Tech Funds that the school receives annually. Additional funding sources that the school may consider to help supplement capital improvement funds may also include: direct legislative appropriations, CERB’s - Clean Energy Revenue Bonds (if eligible), and through the Lease Purchase Act - if necessary.



Turquoise Trail Charter School has developed a Capital Improvement Plan to address the identified facility needs over the next five years and beyond. With the school’s limited annual budget, priorities were identified and were grouped so as to complete a work “type” and/or complete systems replacement so that the work could be phased and would be the least costly and disruptive as possible . Depending on how projects are completed, there is the potential for cost savings for the school in the area of soft cost depending on how the work is to be completed. The chart on the following page identifies TTCS’s strategy in addressing the Capital Improvement Needs over the next five years and allows for reordering of the priorities by the Governing Council as funding changes.

SECTION 4.0 - CAPITAL PLAN

Five Year Capital Improvement Plan				
2017/18	Security & Interior Improvements	Total Project Budget	Funding Source	
Year 1	Refinish Interior Doors & Upgrade Door Hardware	\$ 84,695.00	SB-9/HB-33	
	Replace Casework -Wing D & Add Electrical Outlets/ Marker Boards	\$ 48,979.17	SB-9/HB-33	
	Renovate Nurses Office	\$ 17,033.33	SB-9/HB-33	
	Replace VCT Flooring & Walk-Off Mats	\$ 153,999.66	SB-9/HB-33	
	Refinish Interior Wood Trim	\$ 44,775.00	SB-9/HB-33	
	Repaint Cafeteria	\$ 19,548.96	SB-9/HB-33	
	Upgrade Security System & Add Camera's	\$ 102,096.76	SB-9/HB-33	
	Site Signage	\$ 49,444.44	SB-9/HB-33	
	Annual Miscellaneous Maintenance	\$ 50,000.00	SB-9/HB-33	
SUBTOTAL		\$ 570,572.32		
2018/19	Exterior Building Envelope Improvements	Total Project Budget	Funding Source	
Year 2	Stucco Repairs inc areas of concrete apron replacement and trim painting	\$ 233,515.28	SB-9/HB-33	
	Exterior Windows - Original building & includes clerestory	\$ 270,527.78	SB-9/HB-33	
	Annual Miscellaneous Maintenance	\$ 50,000.00	SB-9/HB-33	
SUBTOTAL		\$ 554,043.06		
2019/20	Building Addition	Total Project Budget	Funding Source	
Year 3	Classroom Addition	\$ 829,333.33	SB-9/HB-33	
	Annual Miscellaneous Maintenance	\$ 50,000.00	SB-9/HB-33	
SUBTOTAL		\$ 879,333.33		
2020/21	Restroom & ADA Improvements	Total Project Budget	Funding Source	
Year 4	Restroom Renovations & ADA Improvements	\$ 539,018.19	SB-9/HB-33	
	Annual Miscellaneous Maintenance	\$ 50,000.00	SB-9/HB-33	
SUBTOTAL		\$ 589,018.19		
2021 +	Roofing, Site & Sustainability Improvements	Total Project Budget	Funding Source	
Year 5 & Beyond	Replace Metal Roofing & Misc Roof Repairs	\$ 340,984.04	SB-9/HB-33	
	Upgrade Lighting to LED (Interior & Exterior)	\$ 374,695.56	SB-9/HB-33	
	Grading & Drainage - Playfield Improvements & Track	\$ 231,543.40	SB-9/HB-33	
	Rain Collection System	\$ 808,888.89	SB-9/HB-33	
	Solar Panels	\$ 866,666.67	CERB's	
	Annual Miscellaneous Maintenance	\$ 50,000.00	SB-9/HB-33	
SUBTOTAL		\$ 1,957,098.96		
TOTAL ALL CAPITAL IMPROVEMENTS		\$ 4,550,065.86		

The costs in the chart above include the Total Maximum Allowable Construction Cost (MACC), Soft Costs such as architect/ engineering fee's, specialty consultants, testing and surveys, furnishings/ equipment, contingency and NMGR. Both of these costs (MACC+Soft Costs) combined, result in the Total Project Budget (TPB).

SECTION 4.0 - CAPITAL PLAN

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SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

5.1 Site and Facilities Data

Turquoise Trail Charter School

Date Opened: 1990 (School became State Charter as part of 2014 Renewal)

Site Acreage: 24

Constructed: 1990 (54,880 SF) Addition: 2011 (19,939 SF)

Permanent SF: 74,819 GSF (148.75 GSF per student)

Portable Building Qty: 0

NMCI: 7.45%

PSCOC Ranking: 552

Serves Grades: PK-6th

2017/18 Enrollment: 456 (Grades K-6th) 496 Including Pre-K

Enrollment Cap Per Charter: 490

Functional Capacity: 492

Utilization: 90%

Executive Summary:

The Turquoise Trail Charter School’s campus is located at 13A San Marcos Loop, approximately 15 miles south of downtown Santa Fe and is accessed from NM HWY 14. The school is approximately 2 miles from police and fire stations, and the New Mexico State Penitentiary. The school currently has a lease agreement in place for the property and facilities with Santa Fe Public School District, which is paid for through the school’s annual Lease Payment Assistance Award from the Public Schools Capital Outlay Council.

TTCS campus consists of a permanent facility with 74,819 square feet used for educational use. The main school facility building was constructed in 1990 (54,880 SF). In 2011, when the school was still a “district charter” and part of the Santa Fe Public Schools, the school was expanded to include a classroom and library addition to the south and a new gym was constructed on the northeast side of the cafeteria (19,939 SF), multiple site improvements were made and three portables were removed from the site.

Site: The existing school site is surrounded by undeveloped real estate on all sides and is close to low density residential development to the south and east. The location consists of approximately 24 acres is located on the east-side of NM HWY 14 and has two access points to the north and south of the site. The north entrance is used for buses and staff parking, the south entrance at San Marcos Loop is for parent drop-off and pick-up before and after school and visitor parking. TTCS contracts with Herrera Bus Transportation for bus services, approximately 294 students utilize the transportation services on five buses.

The main parking area is located on the south side of the campus near



SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

the main entrance contains 113 paved parking spaces and the west parking area for staff contains another 61 parking spaces for a total of 174 parking spaces including 6 ADA compliant parking spaces. Parking lot improvements and installation of storm drain culverts for the existing drainage flow were completed as part of Phase 1 Renovations at the school in 2011 that were funded from the SFPS 2009 GO Bond.



There are no paved walkways that lead to the school from the main road or adjacent residential area. Pedestrians walk along the unpaved shoulder along the roadway. Once on site, paved walkways from the parking lots to sidewalks that surround the building.



Due to the openness of the site, winds pick up speed, especially across the east playground area. Strategically placed barrier walls, landscape and dense plant materials provide protection from winds at the main entrance and around the west-side playgrounds. Landscaping along the north, east and the south sides of the building near the main entrance includes planted borders with dense conifer and water-wise shrubs, and deciduous and ornamental trees. Irrigation systems are in need of repair and do not worked properly for several years; consequently, mature landscaping is stressed and losing effectiveness to reduce the speed of wind across the site.



Planting turf at the field which is overgrown with weeds would help control erosion and the effects of dust from wind across the playground. The walking path/ track area has a concrete curb border with a dirt pathway that needs to be properly maintained and cleared. The location of the baseball backstop conflicts with the walkway, and the concrete curbs could become a tripping hazard for students. Playground equipment is in good condition and has been recently replaced including the installation of a new shade structure.



TTCS is located outside the Santa Fe City limits and is not hooked up to the SF County sewer system. As part of the 2011 renovation project, the school was connected to the water system serving the NM State Penitentiary and septic system was upgraded with a new 15,000 gallon tank in along with the installation of a new leach field for the kitchen and four monitoring wells.



Structural/Exterior Closure: The original portion building constructed in 1990 appears to be constructed with concrete slab-on-grade with concrete footings and foundation walls. There are some areas of settlement occurring at the south sides of classroom wing B and classroom wing D that should be monitored. The exterior wall structure

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

consists of CMU and/or metal stud framing with 5/8” exterior gypsum board that has been covered in a cementitious stucco system that is in need of significant repairs and areas of complete replacement.



The new classroom addition and new gym constructed in 2011 consist of concrete slab-on-grade with concrete footings and foundation walls. The exterior wall structure consists of CMU and/or metal stud framing with an Exterior Insulation and Finish System (EFIS) that is in good condition.



There are two roof systems in place: standing-seam metal roofing over the corridors in each classroom wing B,C, D the entry corridor and a white TPO system that is mechanically fastened that covers the remainder of the building including the new classroom additions. The TPO roofing areas were replaced as part of the facility upgrades and additions in 2011, however the metal roofing was not replaced and is the original since 1990 and should be replaced as part of the schools next major capital improvement project. There are numerous locations where roof to wall terminations, parapets meet adjacent parapets where the flashing is insufficient, installed improperly, or sealant is deteriorated. Roof maintenance is needed to correct these deficiencies as well as to clean debris from roof drains/ scupper areas.



The exterior doors are hollow metal and are comprised of either solid panel or have glazed vision panels; and the door frames throughout the facility are hollow metal. The exterior doors, frames and hardware classroom wing B are in need of replacement. The exterior windows are a combination of hollow metal or aluminum units that are fixed double pane or operable units that are double pane, many of which have broken seals and condensation visible. Only the window units that are part of the original 1990 construction need to be replaced and should be completed in conjunction with the stucco repairs.



Interiors: Partition wall types include painted gypsum board walls and painted concrete block in some locations. The interior wall finishes are in good condition overall, however there are several areas that are in need of repainting such as the cafeteria and some corridors. There is wood trim installed throughout the corridors of the 1990 portion of the building that needs to be refinished/ stained or painted. The ceilings consist of 2’x4’ suspended acoustical panels in the classrooms, and painted gypsum board in the restrooms and storage rooms.



Flooring throughout the facility is in good to fair condition and consists of: VCT in the corridors and portions of classrooms in classroom wings B, C, and D, cafeteria; polished concrete in the corridors and portions of

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

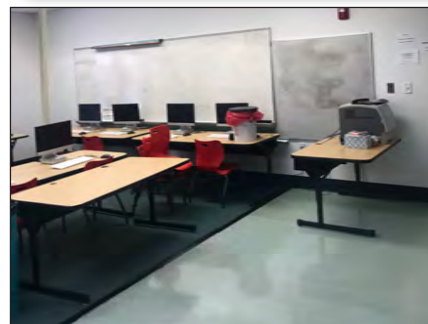
classrooms in classroom wing A and main entry lobby area, and carpet tile in a portion of all classrooms, offices, and library. All restrooms have ceramic tile floors and wainscots. The interior door systems are hollow metal frames with solid wood doors with some having vision panels, all are in good condition, however do need to be refinished and the door hardware in classroom wings B, C, and D needs to be upgraded to be ADA compliant.



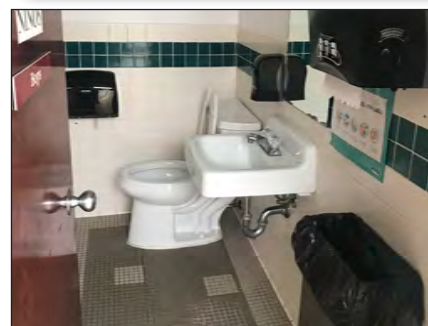
Mechanical/Plumbing: The HVAC system serving the school is comprised of gas fired boilers for heating and a chiller system that provides refrigerated air and is managed with DDC controls. Heating and cooling is distributed through individual thermostat controlled fan coils above the ceiling located in the ductwork system. The chiller system is located on the north side of the building in a separate secure enclosure. The HVAC system was upgraded in 2011 as part of the schools renovation and classroom addition project.



Restrooms in the new classroom wing A, near the administration area, and in the gym, are either new or have were renovated in 2011 and are ADA compliant. The restrooms located in classroom wings B, C and D are in need of renovation and need to be made ADA compliant.



Electrical: The campus is fed from a pad-mounted transformer that delivers 500A 240/120 V., 3-phase power that was also upgraded in 2011. Lighting is comprised 2nd generation T-8' fluorescent throughout, and illumination appears to be adequate, but should be upgraded to LED in the future to improve energy efficiency. The exterior building lighting is in need of upgrading to LED as the existing fixtures are original. Emergency lighting with battery back-up is located in all classrooms, interior corridors, and emergency exit signs are illuminated.



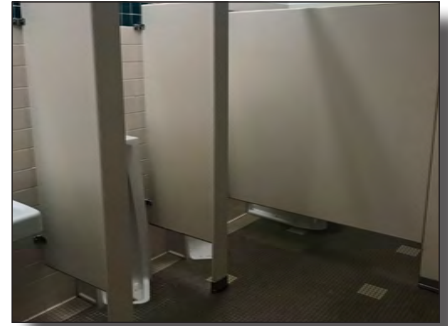
Fire Protection/Life Safety Systems/Accessibility: The fire alarm system was upgraded in 2011 and consists of annunciators throughout and is activated by pull stations, and is centrally monitored. The building is sprinklered and egress is directly to the exterior from the corridors. A new 200,000 gallon fire tank and dedicated well were installed at the northeast side of the property as part of the 2011 renovation project. There are four fire hydrants located on the site. The school does have a security alarms in place and a security camera system is planned to be installed in the upcoming school year.



Overall, the facility meets the majority of ADA requirements but will need to be upgraded to meet current requirements as part of upcoming facility improvements. Specifically some areas that need to be evaluated include:

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

Classroom doors in Wing “D” do not swing in the direction of egress travel and each space has only one means of egress. A code analysis is needed to verify safe exiting from these classroom spaces. Classroom doors are aligned across the corridors. New door openings may be required to maintain the effective width of exit corridors, and door openings may have to be recessed into classrooms.

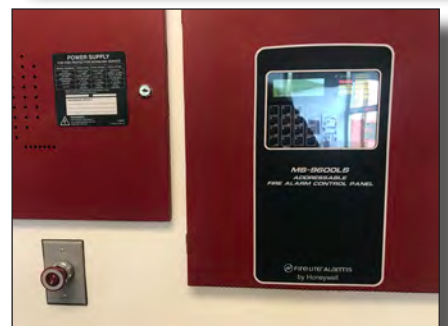


Accessibility issues in the larger restrooms include dispensers and fixtures at adult reach ranges instead of child reach ranges and grab bars that are too short and clearance issues in ADA identified stalls. As restrooms are renovated, height adjustments should be set for age groups in the general area. Classroom Wings “B & C” have individual restrooms located adjacent to classrooms that are very small and do not meet ADA. A code analysis will need to be completed to determine the number of fixtures required for the facility and potential options in meeting these requirements due to limited space.



Educational Adequacy

The school recently underwent a partial renovation and classroom addition that was completed in 2011 and was funded as part of the SPFS 2009 GO Bond Election. The school primarily functions as a “traditional” elementary school and the facility meets or exceeds all NMAS requirements for all required spaces within the facility. In order to meet enrollment needs if they increase to the enrollment cap of 490 students in grades K-6th either a 2 classroom addition will be needed or portables will be needed.



SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

BUILDING EVALUATION SUMMARY				Date of Evaluation	8/4/2017
District	State Charter School			Enrollment	503
School Name	Turquoise Trail Charter School			Grades	PreK-6th
Square Footage	74,819	Acreage	24	Capacity	492
Original Construction (Year)	1990	Additions (Year)	2011		
Definitions					
3 Points	Good: Facility building systems are within their identified life-cycle and do not exhibit signs of deterioration or need for replacement/ rehabilitation.				
2 Points	Fair: Demonstrating signs of need and improvement / replacement (life-cycle is almost at term).				
1 Points	Poor: Demonstrating problems, deterioration of systems (expiration of component life cycle), health & safety conditions, mission critical items that if not corrected could cause additional damage to the facility.				
Overall Building Condition					81.9%

SITE	Current Condition			91%	Combined Score
	Good	Fair	Poor	Const. Type/ Note	
Drainage	X			Some G&D Needed	2.5
Pavement	X			Asphalt	3
Sidewalks	X			Concrete	3
Fencing		X			2
Athletic Fields		X			2
Parent Drop-Off / Pick-Up	X			Redesigned 2011	3
Bus Drop-Off / Pick-Up	X			Redesigned 2011	3
Playground Equipment	X				3
Site Utilities	X			Upgraded 2011	3
Overall ADA Compliance - Exterior	X				3
Site					24.5
Total Points Possible					27

Building Envelope	Current Condition			53%	Combined Score
	Good	Fair	Poor	Building System Type	
Exterior Wall Type			X	Stucco/ EIFS	1
Exterior Doors	X			Hollow Metal	3
Exterior Windows		X		Operable/ Storefront	2
Roofing	X	X		TPO (2011) Metal (1990)	2
Envelope / Structure					8
Total Points Possible					15

INTERIOR SPACES	Current Condition			78%	Combined Score
	Good	Fair	Poor		
Interior Finishes	X			Some areas need repaint	2.5
Kitchen		X		Kitchen	2
General Classrooms	X			Some areas need repaint	2.5
Cafeteria/ Multi-Purpose		X		Need paint/ flooring	2
Art Room	X			Clay traps need replcement.	2.5
Music Room		X		Add. Power needed.	2
Gymnasium	X				3
Overall Restrooms		X		Steam clean tile surfaces	2.5
Overall ADA Compliance - Interior		X		Restrooms need upgrade	2
Interiors					21
Total Points Possible					27

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

BUILDING EVALUATION SUMMARY				Date of Evaluation	8/4/2017	
District	State Charter School			Enrollment	503	
School Name	Turquoise Trail Charter School			Grades	PreK-6th	
SPECIAL SYSTEMS		Current Condition			96%	Combined Score
Systems	Good	Fair	Poor	Building System Type	Score	
Fire Alarm	X				3	
2-Way Communication	X				3	
Security	X			Add additional cameras	2.5	
Technology	X				3	
Special Systems					11.5	
Total Points Possible					12	
MECHANICAL / ELECTRICAL		Current Condition			92%	Combined Score
Systems	Good	Fair	Poor	Building System Type	Score	
Boilers / Chiller	X			New 2011	3	
Lighting		X		Upgrade older areas	2	
Electrical Service	X			Upgraded 2011	3	
Electrical Systems	X				3	
Mechanical / Electrical					11	
Total Points Possible					12	
500 KVA 208/ 3-Phase						

NOTES:

Site:

The main parking area is located on the south side of the campus near the main entrance contains 113 paved parking spaces and the west parking area for staff contains another 61 parking spaces for a total of 174 parking spaces including 6 ADA compliant parking spaces. There are no paved walkways that lead to the school from the main road or adjacent residential area. Pedestrians walk along the unpaved shoulder along the roadway. Once on site, paved walkways from the parking lots to sidewalks that surround the building.

Landscaping along the north, east and the south sides of the building near the main entrance includes planted borders with dense conifer and water-wise shrubs, and deciduous and ornamental trees. Irrigation systems are in need of repair and do not worked properly for several years; consequently, mature landscaping is stressed and loosing effectiveness to reduce the speed of wind across the site. Playground equipment is in good condition and has been recently replaced including the installation of a new shade structure.

TTCS is located outside the Santa Fe City limits and is not hooked up to the SF County sewer system. As part of the 2011 renovation project, the school was connected to the water system serving the NM State Penitentiary and septic system was upgraded with a new 15,000 gallon tank in along with the installation of a new leach field for the kitchen and four monitoring wells.

Exterior:

The original portion building constructed- in 1990 appears to be constructed with concrete slab-on-grade with concrete footings and foundation walls. There are some areas of settlement occurring at the south sides of classroom wing B and classroom wing D that should be monitored. The exterior wall structure consists of CMU and/or metal stud framing with 5/8" exterior gypsum board that has been covered in a cementitious stucco system that is in need of significant repairs and areas of complete replacement.

The new classroom addition and new gym constructed in 2011 consist of concrete slab-on-grade with concrete footings and foundation walls. The exterior wall structure consists of CMU and/or metal stud framing with an Exterior Insulation and Finish System (EFIS) that is in good condition.

There are two roof systems in place: standing seam metal roofing over the corridors in each classroom wing B,C, D the entry corridor and a white TPO system that is mechanically fastened that covers the remainder of the building including the new classroom additions. The TPO roofing areas were replaced as part of the facility upgrades and additions in 2011, however the metal roofing was not replaced and is the original since 1990 and should be replaced as part of the schools next major capital improvement project.

The exterior doors are hollow metal and are comprised of either solid panel or have glazed vision panels; and the door frames throughout the facility are hollow metal. The exterior windows are a combination of hollow metal or aluminum units that are fixed double pane or operable units that are double pane, many of which have broken seals and condensation visible.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

BUILDING EVALUATION SUMMARY

BUILDING EVALUATION SUMMARY		Date of Evaluation	8/4/2017
District	State Charter School	Enrollment	503
School Name	Turquoise Trail Charter School	Grades	PreK-6th

Interiors:

Partition wall types include painted gypsum board walls and painted concrete block in some locations. The interior wall finishes are in good condition overall, however there are several areas that are in need of repainting such as the cafeteria and some corridors. There is wood trim installed throughout the corridors of the 1990 portion of the building that needs to be refinished/ stained or painted. The ceilings consist of 2'x4' suspended acoustical panels in the classrooms, and painted gypsum board in the restrooms and storage rooms.

Flooring throughout the facility is in good to fair condition and consists of: VCT in the corridors and portions of classrooms in classroom wings B, C, and D, cafeteria; polished concrete in the corridors and portions of classrooms in classroom wing A and main entry lobby area, and carpet tile in a portion of all classrooms, offices, and library. All restrooms have ceramic tile floors and wainscots. The interior door systems are hollow metal frames with solid wood doors with some having vision panels, all are in good condition, however do need to be refinished and the door hardware in classroom wings B, C, and D needs to be upgraded to be ADA compliant.

Mechanical/ Electrical/ Special Systems:

The HVAC system serving the school is comprised of gas fired boilers for heating and a chiller system that provides refrigerated air and is managed with DDC controls. Heating and cooling is distributed through individual thermostat controlled fan coils above the ceiling located in the ductwork system. The chiller system is located on the north side of the building in a separate secure enclosure. The HVAC system was upgraded in 2011 as part of the schools renovation and classroom addition project.

Restrooms in the new classroom wing A, near the administration area, and in the gym, are either new or have were renovated in 2011 and are ADA compliant. The restrooms located in classroom wings B, C and D are in need of renovation and need to be made ADA compliant.

The campus is fed from a pad-mounted transformer that delivers 500A 240/120 V., 3-phase power that was also upgraded in 2011. Lighting is comprised 2nd generation T-8's fluorescent throughout, and illumination appears to be adequate. The exterior building lighting however, is in need of upgrading to LED fixtures and needs to comply with night sky requirements. Emergency lighting with battery back-up is located in all classrooms, interior corridors, and emergency exit signs are illuminated.

The fire alarm system was upgraded in 2011 and consists of annunciators throughout and is activated by pull stations, and is centrally monitored. The building is sprinklered and egress is directly to the exterior from the corridors. A new 200,000 gallon fire tank and dedicated well were installed at the northeast side of the property as part of the 2011 renovation project. There are four fire hydrants located on the site. The school does have a security alarm and camera system in place, however additional cameras may be needed.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

School Facility/ Building	Maintenance Work Order	SB-9, HB 33 & Other Funding Sources			FY 2020 & Beyond	Facility Deficiencies & Needs
		FY 2017/18	FY 2018/19	FY 2019/20		
Turquoise Trail Charter School	X					Install additional wood chips at all playground equipment
Turquoise Trail Charter School	X					Reseal/ caulk all building perimeter and control joints.
Turquoise Trail Charter School	X					Tighten all fasteners on all flashings and metal copings around building perimeter and reseal.
Turquoise Trail Charter School	X					Recaulk/ seal interior expansion joint near reception desk in lobby area
Turquoise Trail Charter School		X				Refinish or paint wood trim in the corridors of Classroom Wings B, C and D and corridor area around the cafeteria.
Turquoise Trail Charter School		X				Refinish interior doors in Classroom Wings B, C & D and replace door hardware with ADA compliant hardware.
Turquoise Trail Charter School		X				Repaint cafeteria and replace flooring including wall base
Turquoise Trail Charter School		X				Upgrade Security System / Camera's
Turquoise Trail Charter School		X				Site Signage - Install new digital sign along Hwy 14
Turquoise Trail Charter School		X				Replace VCT flooring in B, C, and D wings, and in corridor near cafeteria.
Turquoise Trail Charter School		X				Renovate Nurse's office to improve function and to provide adequate space for cots as the existing restroom and casework do not meet ADA requirements, and there is insufficient storage. Due to existing space constraints, the school may consider removal of the restroom as there is an ADA compliant restroom directly across the hall. Installation of new ADA compliant lockable casework with sink to provide additional storage and new resilient non-slip flooring.
Turquoise Trail Charter School		X				Add additional power outlets in the music room for keyboards to reduce the number of power strips needed.
Turquoise Trail Charter School		X				Replace casework in Classroom Wing D (except Classroom D9) and sinks to meet ADA requirements. Provide GFCI receptacles to replace unprotected power strips mounted immediately above sinks.
Turquoise Trail Charter School		X				Replace walk-off mats in vestibule next to cafeteria, at east end of Classroom Wing D and west ends of Classroom Wings B & C
Turquoise Trail Charter School		X				Replace white boards that have been installed on top of chalkboards in the D Classroom Wing.
Turquoise Trail Charter School			X			Grading and drainage improvements needed around Classroom Wing D and north side of Classroom Wing C. Consider replacement of some areas of the existing concrete apron to ensure that they slope away from the building to provide positive drainage.
Turquoise Trail Charter School			X			STUCCO REPAIRS REQUIRED: Replace deteriorated exterior sheathing, especially at base of wall decorative detailing, may require rebuilding base of wall to include weep screed and correct clearance from grade. Apply new stucco color coat and base coat with fiber mesh reinforcement to classroom wings B, C, D, administration area and cafeteria to match the newer addition. (From 6/5/17 report by Avocet Design & Consulting, VIP, Inc. concurs with these findings as they were previously present during the 2012 Facility Assessment completed by VIP, Inc. when the school was part of SFPS)
Turquoise Trail Charter School			X			Replace Exterior doors, frame and hardware at Classroom Wing B due to deterioration of existing materials.
Turquoise Trail Charter School			X			Replace all exterior windows, blinds and screen, including clerestory/ dormer windows in Classroom wings B, C, and D; main corridor to the cafeteria from the administration area, in the administration office area and cafeteria. Consider use of translucent insulated panel system to improve energy efficiency at derestory areas - cost for replacement is similar.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

School Facility/ Building	Maintenance Work Order	SB-9, HB 33 & Other Funding Sources			FY 2020 & Beyond	Facility Deficiencies & Needs
		FY 2017/18	FY 2018/19	FY 2019/20		
Turquoise Trail Charter School				X	X	Classroom addition (2,400 SF) or 2 classroom portables to meet enrollment needs for up to 490 students in grades K-6th. Replace all damaged downspouts and provide splashblocks around the building where missing or broken. Some areas may require additional drainage improvements.
Turquoise Trail Charter School					X	EXISTING ROOFING/FLASHING REPAIRS NEEDED: Roof to wall terminations, where parapets or low walls meet adjacent perpendicular walls, are poorly detailed with surface or butt terminations, no flashing counterflashing, and no saddle flashing at the substrate. As part of the stucco repairs and metal roofing replacement, repairs to the flashing/counterflashing are needed for the TPO roof system. (From 6/5/17 report by Avocet Design & Consulting, VIP, Inc, concurs with these findings as they were previously present during the 2012 Facility Assessment completed by VIP, Inc, when the school was part of SFPS) ANY REPAIRS TO THE TPO ROOFING SHOULD BE COVERED BY WARRANTY
Turquoise Trail Charter School					X	Upgrade interior lighting from T-8's to LED throughout.
Turquoise Trail Charter School					X	Replace exterior globe fixtures along parapet with night sky compliant LED light fixtures and all other remaining exterior building lighting.
Turquoise Trail Charter School					X	Replace metal roof system including all flashings, trim and copings as required - 11,768 SF
Turquoise Trail Charter School					X	Install sod and irrigation system at existing playfields, current area is dirt. School may consider artificial turf in the future.
Turquoise Trail Charter School					X	Pave track around playfield area, current area is uneven and overgrown with weeds.
Turquoise Trail Charter School					X	Relocate baseball backstop at playfield area so that concrete curbs are not a tripping hazard.
Turquoise Trail Charter School					X	Renovate gang restrooms at the east end of D wing and near cafeteria in their entirety (flooring, finishes, plumbing, fixtures, lighting, partitions, accessories and ventilation) and comply with all ADA requirements.
Turquoise Trail Charter School					X	Renovate single occupant restrooms in B and C Classroom Wings as they are NON-ADA compliant. May require reduction of quantity of restrooms to meet ADA requirements.
Turquoise Trail Charter School					X	Install Solar Panels to help reduce energy usage and provide covered parking for staff and possibly visitors
Turquoise Trail Charter School					X	Four New Hoop Houses, 3 water catchment tanks (Cisterns)

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

State Charter School		9/25/2017	MACC	\$	3,611,337
Turquoise Trail Charter School	Building SF:	74,819	Soft Costs*	\$	1,404,409
Renovation/ Site Improvements	Total Cost/PSF:	\$ 48.27	Total Project Budget	\$	5,015,745

LEVEL	CAPITAL IMPROVEMENTS	TOTAL MACC	Soft Costs	Total Project Budget	COMMENTS
B-2010	Exterior Painting - Metals/ Wood/ Trim	\$ 7,072.00	\$ 2,750.22	\$ 9,822.22	
B-2010	Exterior Control Joint Maintenance	\$ 8,320.00	\$ 3,235.56	\$ 11,555.56	
B-2010	Stucco Misc Location Repair & New Color Coat	\$ 148,608.00	\$ 57,792.00	\$ 206,400.00	<i>Includes areas that may require replacement sheathing.</i>
B-2020	Window Clerestory (Insulated fixed) Custom Size	\$ 119,808.00	\$ 46,592.00	\$ 166,400.00	<i>All Clerestory & Dormers.</i>
B-2020	Window HM (Insulated fixed) Custom Size	\$ 2,060.00	\$ 801.11	\$ 2,861.11	<i>Near Classroom Wing "C"</i>
B-2020	Window Replacement Insulated - Remove/ Replace	\$ 72,912.00	\$ 28,354.67	\$ 101,266.67	<i>Classroom Wings "B, C, D & Admin Area"</i>
B-1020	Roofing - Metal standing seam with Kynar coating	\$ 217,519.71	\$ 84,591.00	\$ 302,110.71	
B-1020	Roofing Repairs (Inc. soffit, dnspt, flashing, coping replacement/ repairs)	\$ 27,988.80	\$ 10,884.53	\$ 38,873.33	
B-1012	General Classroom Addition	\$ 597,120.00	\$ 232,213.33	\$ 829,333.33	<i>2 General Classroom Addition and Admin where door hardware was not upgraded in 2011</i>
B-2020	Door Hardware - Interior	\$ 43,025.40	\$ 16,732.10	\$ 59,757.50	
B-2020	Refinish Interior Wood Doors	\$ 17,955.00	\$ 6,982.50	\$ 24,937.50	<i>Classroom Doors Only</i>
C-1030	Casework-LF	\$ 19,293.00	\$ 7,502.83	\$ 26,795.83	<i>Classroom Wing "D" only</i>
	Renovate Admin Area -	\$ 12,264.00	\$ 4,769.33	\$ 17,033.33	
C-2000	Repaint Interior	\$ 14,075.25	\$ 5,473.71	\$ 19,548.96	<i>Cafeteria</i>
C-2050	Entrance Mats (recessed)	\$ 3,948.00	\$ 1,535.33	\$ 5,483.33	
C-3010	Remove and Replace VCT flooring inc. Wall Base	\$ 106,931.76	\$ 41,584.57	\$ 148,516.33	
C-3010	Refinish interior wood trim	\$ 32,238.00	\$ 12,537.00	\$ 44,775.00	
D-2011	Renovate multi-stall Restroom - Demo & New (Women)	\$ 137,319.60	\$ 53,402.07	\$ 190,721.67	
D-2011	Renovate multi-stall Restroom - Demo & New (Men)	\$ 132,488.90	\$ 51,523.46	\$ 184,012.36	
D-2011	Renovate single occupant restroom & comply with ADA (Demo, new finishes & fixtures)	\$ 118,284.60	\$ 45,999.57	\$ 164,284.17	<i>Classroom Wings "B&C" 2 restrooms to be converted into one in order to meet ADA</i>
D-3010	Add Four (4) Additional Outlets per Classroom	\$ 9,252.00	\$ 3,598.00	\$ 12,850.00	<i>Music Classroom & D Wing</i>
D-5030	Upgrade Lighting (T12/T8 to LED) Existing Fixtures	\$ 226,928.80	\$ 88,250.09	\$ 315,178.89	
D-5030	Exterior Building Lighting (LED/Photo cell)	\$ 42,852.00	\$ 16,664.67	\$ 59,516.67	
D-5030	Upgrade Security System w/camera's at critical locations: inc alarm	\$ 73,509.67	\$ 28,587.09	\$ 102,096.76	
E-2010	Classroom Marker Boards (4x12)	\$ 6,720.00	\$ 2,613.33	\$ 9,333.33	<i>Classroom Wing "D" only</i>
F-1010	Rain Collection and Containment System	\$ 582,400.00	\$ 226,488.89	\$ 808,888.89	
F-1030	Solar Panels - Parking Lot	\$ 624,000.00	\$ 242,666.67	\$ 866,666.67	<i>Consider Alternative Funding</i>
G-1040	Sod with Irrigation	\$ 66,121.25	\$ 25,713.82	\$ 91,835.07	<i>Playfield area on east side of campus</i>
G-1040	Grading & Drainage (Minor)	\$ 20,790.00	\$ 8,085.00	\$ 28,875.00	<i>Inc relocation of baseball backstop</i>
G-2020	Track (graded and asphalt surface material - non competition)	\$ 79,800.00	\$ 31,033.33	\$ 110,833.33	
G-2030	Remove concrete apron, correct slope, install new concrete	\$ 4,131.00	\$ 1,606.50	\$ 5,737.50	
G-2040	Site signage - Main Entry (inc power and IT connection)	\$ 35,600.00	\$ 13,844.44	\$ 49,444.44	
Total		\$ 3,611,337	\$ 1,404,409	\$ 5,015,745	

Soft Costs for this project include: Contingency - 10%, A/E Fee's 6.5%, Specialty Consultant Fee's - .5%, Equipment & Furnishings - 1.7%, Surveys and Soils Tests - 1.0% and NMGR 8.3125%. **TOTAL SOFT COSTS: ~28.0%**

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

District/ School		Facility Inventory Data																						
Turquoise Trail Charter School																								
Today's Date		Year of Report																						
9/22/2017		2017																						
Original Entry																								
8/31/2017																								
INFORMATION							PROFILE							ENROLLMENT			CLASSROOMS							
Facility Name	District ID	Building ID	Address	ZIP	Phone	Principal / Site Manager	Open Date	Age (Years)	Construction Dates	NMCI	Site Acreage	Owned or Leased?	Total Perm Bldg Area	Total Port Bldg Area	Total Bldg Area (GSF)	Grades	2017/18 Enrollment	# Perm. CLRMS	# Port. CLRMS	Total CLRMS	Port CR % of Total	GSF Per Student		
Elementary																								
Turquoise Trail Charter School	566	001	13A San Marcos Loop Sa	87508	505-986-4000	Jenny Crysler	1990	27	2011	7.45%	24.0	Lease (SFPS)	74,819	0	74,819	PK to 6th	496	34.50	0.0	34.5	0.00%	150.8		
											Charter Totals													
													24.0		74,819	0	74,819		496	34.50	0.0	34.5	N/A	150.8

SECTION 4.0 - SUPPORT INFORMATION

5.2 Site Plan



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SECTION 4.0 - SUPPORT INFORMATION

5.3 Floor Plan

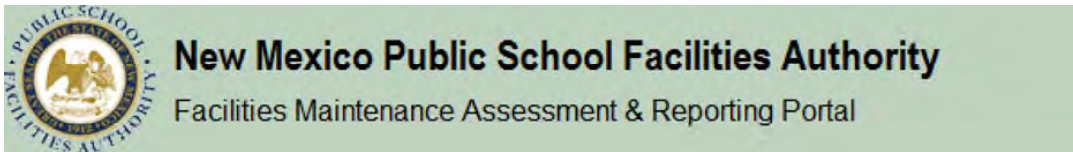


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SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

5.4 FMAR/ FAD Reports

Turquoise Trail Charter School does have a recently completed FMAR Report and the findings reflect that the school overall has done a good job of maintaining it's facilities. There are some areas that are in need of improvement and the school is working to improve these areas.



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- STAFFING ≡
- DISTRICT
- FACILITY
- PUBLISH
- ADMIN ≡

[Print FMAR](#)

Facility Maintenance Assessment Report

Assessment Status
Active

FUID
5660012017

District ID
566

Year: 2017
District: TURQUOISE TRAIL CHARTER SCHOOL DO

School: TURQUOISE TRAIL CHARTER SCHOOL
School ID: 566001

FMA Date: 10/11/2017
Weather: Cool and sunny 50 degrees

PSFA Reps: tlevesque
District Reps:

Overall School Maintenance Rating	
Outstanding	90.1% to 100%
Good	80.1% to 90%
Satisfactory	70.1% to 80%
Marginal	60.1% to 70%
Poor	Less than 60%
Deficiency Factors	
Life Safety, Health or Property Loss Exposure Multipliers	
Minor Deficiency	1.5 Potential Threat and No Work Order
Major Deficiency	3.5 Immediate Threat and No Work Order

Overall Rating
73.919 %

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

Roadway/Parking	Site Utilities	Playgnd/Fields	Site Drainage	Sidewalks	Grounds
Weight 3	Weight 5	Weight 5	Weight 8	Weight 2	Weight 2
Perf. Level Outstanding	Perf. Level Good	Perf. Level Satisfactory	Perf. Level Good	Perf. Level Good	Perf. Level Good
Performance 0	Performance -0.95	Performance -1.89	Performance -0.95	Performance -0.95	Performance -0.95
Score 0	Deficiency Factors None	Deficiency Factors None	Deficiency Factors None	Deficiency Factors None	Deficiency Factors None
	Score -4.75	Score -9.45	Score -7.6	Score -1.9	Score -1.9

Comments Roadway/Parking

Asphalt drive lanes are in good condition with visible striping throughout all areas. Handicap accessible lanes contain signage and are also visible along with fire lanes. Minor cracking in asphalt, recommend sealing cracks to prevent further damage to roadways. Outstanding performance level with recommendation for sealing cracks in asphalt.

Comments Site Utilities

Site utilities are secure, marked and physically protected. Bollards in place where needed. Areas are clean and maintained. Good performance level given.

Comments Playgrounds/Fields

Playground equipment in good working condition. Boarders in place along with impact surface material. Areas under swings and slides needs to be better maintained by raking impact surface back into high impact areas where impact surface has been moved from active use. Athletic field needs grass or some kind of surface to prevent injury, the athletic field appears to be part of the natural terrain. Satisfactory performance with recommendations for needed improvements.

Comments Site Drainage

Site drainage appears to work per design and move water away from buildings. Site drains are clean and free of debris. Splash blocks are in place. Run off containment tank on gym building to provide water to landscaping. Good performance level.

Comments Sidewalks

Observed sidewalks in good maintained condition. 1 area of concern is Northwest courtyard where concrete has lifted at expansion joint causing a trip hazard. Recommendation is identifying with yellow paint or blocking off until proper repairs can be made. All other walkways observed contained even transitions with no lifting. Walkways were clean and free of debris. Good performance with recommendation for correction.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

Comments Grounds

Grounds are clean and well maintained with landscaping secure and in place. Bushes and shrubs are groomed. Observed two trees growing over building onto roof and rubbing exterior wall finishes. Recommend trimming trees away from buildings to prevent damage to exterior wall finishes and TPO roof. No trash or debris observed throughout site. Good performance with recommendations for corrections.

Exterior

View Media	View Media	View Media	View Media
Windows/Caulking	Walls/Finishes	Entry/Exterior Doors	Roof/Flashing/Gutters
Weight 3	Weight 5	Weight 7	Weight 10
Perf. Level Satisfactory	Perf. Level Marginal	Perf. Level Good	Perf. Level Good
Performance -1.89	Performance -2.83	Performance -0.95	Performance -0.95
Deficiency Factors None	Deficiency Factors None	Deficiency Factors None	Deficiency Factors None
Score -5.67	Score -14.15	Score -6.65	Score -9.5

Comments Windows/Caulking

Observed windows complete and sealed. With screens in place on Southeast 1990 building, but torn and damaged in multiple areas. Recommend replacing screens where needed. Windows observed were operational and in good working condition. Some minor staining on glass in a couple of areas. Satisfactory condition with recommendations for corrections.

Comments Walls / Finishes

Exterior wall finish on 1990 buildings is in marginal condition with cracking and deterioration of stucco at base of walls around stairs and on pillars in multiple areas. 2011 building has some minor stucco damage also. These issues with stucco areas are prone to ongoing deterioration until corrections/repairs are completed. CMU was found in good condition. Bids are being collected for repair to be done in stages. Marginal performance level given.

Comments Entry / Exterior Doors

Majority of Entry/Exterior doors are in good working condition with complete hardware. Handicap access in place and operational. 1 area of concern is Southwest 1990 building with Entry/exterior door facing West has rusting and deterioration of door frame which does not affect door operation but is in need of replacement. Good performance level with recommendation for correction.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

Comments Roof / Flashing /Gutters

TPO roofs throughout all buildings which was installed in 2011 with some metal roofs. Drains are clean and free of debris. Flashing is secure and sealed. Gutters in place and operate as designed. Roof does have a few leaks at transitions and metal to stucco seals. Roofing consultant has been contacted to assess leak issues. Good performance level given.

Interior

View Media	View Media	View Media	View Media
Walls/Floors/Ceilings/Stairs	Interior Doors	Restrooms	Housekeeping
Weight 3	Weight 3	Weight 3	Weight 4
Perf. Level Satisfactory	Perf. Level Satisfactory	Perf. Level Good	Perf. Level Good
Performance -1.89	Performance -1.89	Performance -0.95	Performance -0.95
Deficiency Factors None	Deficiency Factors None	Deficiency Factors None	Deficiency Factors None
Score -5.67	Score -5.67	Score -2.85	Score -3.8

Comments Walls / Floors / Ceilings / Stairs

Walls are clean and maintained. Wood trim on interior 1990 walls is a little aged, recommend sanding and sealing wood trim. Painted walls are clean with no damage observed. Floors are exposed concrete VCT tile and carpet which is well maintained throughout all areas. Carpet has some minor wear and staining in high traffic areas. Minor water damage on a window at ceiling height from roof leak, which has been noted for repair when leak is fixed. Majority of ceilings are in good condition. Satisfactory performance level given.

Comments Interior Doors

Interior doors are in good operating condition with complete hardware. Fire ratings and smoke seals in place. Observed some doors propped open with wood shims, recommend removing all shims to allow doors to operate correctly be compliant and prevent damage to doors. Satisfactory performance level given.

Comments Restrooms

Observed very clean restrooms with faucets and fixtures in good condition. Hot water available. Restrooms are stocked with appropriate toiletries, complete partitions, no graffiti observed. High dusting being performed on all vents and light fixtures and ADA compliant. Good performance level.

Comments Housekeeping

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

Housekeeping is being performed in classrooms, hallways, and offices. Majority of mechanical rooms, janitor closets are clean maintained. High dusting is being performed as needed. Good performance level. Storage of roofing tar in electrical closet needs to be relocated, product is flammable and areas need to maintain a 3' required access to panels at all times. Good performance level with recommendation for correction.

Systems

View Media	View Media	View Media	View Media	View Media	View Media	View Media	View Media
Elect. Dist.	Lighting	Fire Protect	Equip. Rooms	HVAC	Air Filters	Kit. Equip/Refill	Plumb/Water
Weight 3	Weight 5	Weight 10	Weight 2	Weight 10	Weight 5	Weight 2	Weight 6
Perf. Level Poor	Perf. Level Good	Perf. Level Good	Perf. Level Good	Perf. Level Good	Perf. Level Outstanding	Perf. Level Outstanding	Perf. Level Good
Performance -3.77	Performance -0.95	Performance -0.95	Performance -0.95	Performance -0.95	Performance 0	Performance 0	Performance -0.95
Deficiency Factors Major x 3.5	Deficiency Factors None	Deficiency Factors Minor x 1.5	Deficiency Factors None	Deficiency Factors None	Score 0	Score 0	Deficiency Factors None
Score -39.59	Score -4.75	Score -14.25	Score -1.9	Score -9.5			Score -5.7

Comments Electrical Distribution

Observed multiple electrical panels with missing blank breaker covers. Multiple electrical panels are incomplete missing metal covers which makes wiring accessible to live wiring this is a major safety concern. Flammable roofing tar stored in an electrical closet. Recommend Corrections to these issues in a timely manner. Poor performance with a major deficiency.

Comments Lighting

Exterior lighting in place and operational. Parking lot solar lighting in place and in good working condition. Interior lighting in all classrooms, hallways and offices is adequate and well lit. Maintenance being performed as needed. Good performance level.

Comments Fire Protection Systems

Fire monitoring system in place with no trouble or advisory codes. Annual inspection review on fire extinguishers is current and in place. No monthly inspection reviews being performed. Recommend implementing a PM protocol on in house monthly fire extinguisher inspection reviews and document on tag provided. Refer to NFPA 10 Code for requirements. Hood system in place and current with

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

semiannual inspection review. Fire risers contain inspection reviews which are current. Exits and emergency lighting in place and operational. Good performance with a minor deficiency.

Comments Equipment Rooms

Equipment rooms are clean and well maintained. Equipment in good working condition with equipment being accessible. Recommend sweeping floors on a more regular basis. Electrical room contain inappropriate storage roofing tar. Recommend removal relocate to a proper fire cabinet. Good performance with recommendations for correction.

Comments HVAC

HVAC equipment is well maintained with filters being changed and service being provided through a PM plan. Equipment upgrades been performed on 80% of HVAC equipment in 2011. Good performance level.

Comments Air Filters

Air filters observed clean with correct types and sizes installed. A company is contracted out to perform service. 1 recommendation is to date filters upon install to better track and document filter changes. Outstanding performance level, with a recommendation for improvement.

Comments Kitchen / Refrigeration

Kitchen was found to be very clean and well maintained. No trash or debris in drains on counter tops. Equipment was clean and in good working condition. Lighting was adequate with clean return air vents and hood system. Hood system inspection review was current and in place. Outstanding performance level.

Comments Plumbing / Water Heaters

Water heaters in good working condition and are accessible with no inappropriate storage observed. Water fountains are clean well maintained with slip mats in place at all water fountains. Water fountains are operational. Janitor sinks are clean and free of debris. Good performance level.

Calculation

-155.25

Maintenance Management

Performance Items	Performance Level	Weight	Calculated Score
PM Plan =	-3.77 Poor	10	-37.70
Staff Development =	-3.77 Poor	5	-18.85
Maintenance Safety =	-3.77 Poor	5	-18.85
Maint. Contractor Oversight =	-3.77 Poor	5	-18.85
Facilities Master Plan (Renewal) =	-3.77 Poor	3	-11.31
There are no FIMS assessments to show. Create a FIMS Report			
Total Performance Deficiencies	Total Score	Overall Rating	
-260.81	739.19	73.919	

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL



Executive Summary Report

Turquoise Trail Elementary Charter School
 District: **State Chartered Schools** School: **Turquoise Trail Elementary Charter School** School ID: **566001**

High Level Overview

General Information

Location: Santa Fe, NM 87508 Ed. Adequacy Model: Charter School Educational Adequacy
 School Type: Elementary Ed. Adequacy CCI: 100.00%
 School Category: Charter School CCI City: RSMANS2017:US_NM_ALBUQUERQ, UE

NMCI Statistics

Number of Students: ~~459~~ **456** **496 (w/ park)** Number of Buildings: 2
 Growth Factor: 1.00 Number of Portables: 0
 Total Gross Square Feet: 74,819 Building Square Feet: 74,819
 Site Size (Acres): 24.00 Portable Square Feet: 0

NMCI School Metrics

Replacement Cost: \$12,810,099 Unweighted Repair Cost: \$1,590,092
 Weighted Repair Cost: \$1,067,158 Unweighted Educational Adequacy Cost: \$0
 Weighted Educational Adequacy Cost: \$0 Total Unweighted Cost: \$1,590,092
 Total Weighted Cost: \$1,067,158 Unweighted NMCI Score: 12.41
 Weighted NMCI Score: 8.33

NMCI Facility History

Last Assessment Date: 09-09-2014 Previous Award, Yes or No, Year if Yes: No
 Closed: No

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL



Executive Summary Report

Turquoise Trail Elementary Charter School
 District: **State Chartered Schools** School: **Turquoise Trail Elementary Charter School** School ID: **566001**

Facility Description

Turquoise Trail Charter School sits on 13 A San Marcos Loop in Santa Fe, New Mexico and is part of the state chartered District. The campus consists of permanent and portable space.

Site: The site is approximately 24 acres and includes an athletic field, a playground, and a hard surface play area. The parking capacity of 177 (6 are handicap spaces) is sufficient. All paved areas are in fair condition. The access road is too narrow for two vehicles to pass; increasing the width of the road is recommended. There is only one means of ingress/egress to the site; an additional route should be considered. The dirt service road on site requires upgrades. Concrete sidewalks are in good condition and pose no hazard. Asphalt paving to the portables requires upgrades. Buses access the main entrance, which has a covered waiting area. Site drainage is generally adequate.

Structural/Exterior Clature: The buildings rest on a slab on grade foundation that is showing signs of damage or settlement. A study should be performed to determine if further settlement will occur and will cause serious damage. The main structures are brick over concrete block bearing walls. Replacement of roofing to the A, B, C wings and the metal roofs of the school is recommended in a district-wide roofing study. The exterior doors are steel and windows are sliding double units with steel frames.

Interiors: Partition wall types are both brick and painted drywall. The facility was repainted in 1995, and all interior wall finishes are in good condition. Most ceilings have 2x2 acoustical ceiling tiles, but some spaces use drywall. The gym has no finished ceiling. Flooring in high use areas is vinyl composite tile. Most other flooring is a combination of vinyl composition tile and carpet. Interior doors consist of solid wood, and are fire rated.

Mechanical/Plumbing: Gas fired boilers provide heat to the permanent buildings of the complex. Evaporative coolers provide air conditioning to the complex. The heating distribution system is a 2-pipe system. Fresh air is supplied by air dampers and is distributed by insulated steel ductwork. The primary complaint by teachers and administration is the heating and cooling system. Bathroom ventilation is adequate. The plumbing fixtures and piping are in good condition; minor repairs are needed.

Electrical: The electrical system is fed from a pad-mounted transformer that delivers 120/208V, 3-phase, 4-wire power via a 400 amp main panel. Lighting is fluorescent and illumination is mostly adequate. Emergency lighting (with battery back-up) is in corridors and emergency exit signs are typically illuminated. The school has no emergency generator.

Fire Protection/Life Safety Systems/Accessibility: The fire alarm system consists of audible alarms in classrooms, and audible and strobe annunciators in corridors, offices, and other common spaces. The system is activated by pull stations, and is centrally monitored. Strobes are needed in the classrooms. The building does not have a fire sprinkler system. Interior doors on escape corridors have fire ratings. The security system is comprised of interior motion detectors, door contacts. The complex is generally handicap compliant.

2003 Update: the Turquoise Trail Charter Elementary School serves 474 PK-6 students with a staff of 58. No PSFA, Capital Outlay or Direct Appropriation funding has been allocated and/or spent at this school. However, recommend changing out the current Computer Room Air Conditioning (CRAC) Unit in the computer lab for one that is less noisy, more efficient and takes less space.

Alternative Programs: N/A

2008 Update: The facility is owned by the District and is now leased back to Turquoise Trail Charter School. The district approved a pre-school and kindergarten classroom addition, expansion of the library and minor classroom renovations. Funds are available through the 2009 GO Bond; total project cost \$10,403,600.00.

Updated Current Grades PreK-6th

Update: Major renovation and addition- only 1/2 of facility assessed due to construction. Need to Re-Assess when construction is completed.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL



Executive Summary Report

State Chartered Schools **Turquoise Trail Elementary Charter School** **School ID: 566001**

Asset Level Summary

Building Name	Cost Model	Repair Cost (Unweighted)	Repair Cost (Weighted)	Year Built	Size	Type	Use
Gymnasium Building (2011)	Elementary School Building	\$57,687	\$14,287	2011	6,842	Building	Educational
Main Building (1990)	Elementary School Building	\$1,307,795	\$424,841	1990	67,977 54,880	Building	Educational
Site	Elementary School Site	\$224,610	\$628,031	1990	74,819	Building	Site
Building Totals		\$1,590,092	\$1,067,158				
Educational Adequacy Need	Charter School Educational Adequacy	\$0	\$0				
School Totals		\$1,590,092	\$1,067,158				

Original 1990 construction is: 54,880 SF
Add: Classroom Addition (Prek/Kindergarten & Library) 2011: 13,142 SF

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL



Turquoise Trail Elementary Charter School
 District: **State Chartered Schools** School: **Turquoise Trail Elementary Charter School** School ID: **566001**

Building Name: **Gymnasium Building (2011)** Cost Model: **Elementary School Building** Size: **6,842**

Asset Detail

Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent	Factor	Repair Cost (Unweighted)	Category Number	Weight	Repair Cost (Weighted)	Comments
Air/Ventilation Equipment	\$3.05	20	110%	2011	2031	9%	33.25%	\$2,069	9	.25	\$517	
Ceiling Finishes	\$5.94	30	110%	2011	2041	4%	33.25%	\$1,789	9	.25	\$447	
Communications and Security	\$2.17	15	90%	2011	2026	16%	33.25%	\$2,134	9	.25	\$534	
Emergency Light and Power	\$0.44	20	90%	2011	2031	9%	33.25%	\$246	9	.25	\$62	
Exterior Doors and Windows	\$5.62	30	110%	2011	2041	4%	33.25%	\$1,692	9	.25	\$423	
Exterior Walls	\$11.29	100	100%	2011	2111	0%	33.25%	\$278	9	.25	\$70	
Fire Detection/Alarm	\$2.11	15	90%	2011	2026	16%	33.25%	\$2,082	9	.25	\$520	
Floor Finishes	\$5.79	12	110%	2011	2023	25%	33.25%	\$10,894	9	.25	\$2,723	
Foundation/Slab/Structure	\$16.71	100	100%	2011	2111	0%	33.25%	\$412	9	.25	\$103	
HVAC	\$23.36	30	100%	2011	2041	4%	33.25%	\$6,393	9	.25	\$1,598	
Interior Doors and Partitions	\$9.03	50	90%	2011	2061	1%	33.25%	\$801	9	.25	\$200	
Interior Walls	\$8.59	60	90%	2011	2071	1%	33.25%	\$529	9	.25	\$132	
Lighting/Branch Circuits	\$11.62	30	90%	2011	2041	4%	33.25%	\$2,863	9	.25	\$716	
Main Power/Emergency	\$1.41	30	90%	2011	2041	4%	33.25%	\$346	9	.25	\$87	
Other Equipment	\$7.18	60	110%	2011	2071	1%	33.25%	\$540	0	0	\$0	
Plumbing	\$17.77	30	100%	2011	2041	4%	33.25%	\$4,864	9	.25	\$1,216	
Roof	\$16.08	20	120%	2011	2031	9%	33.25%	\$11,878	9	.25	\$2,970	
Sprinklers and Standpipes	\$3.85	50	130%	2011	2061	1%	33.25%	\$493	9	.25	\$123	
Wall Finishes	\$4.32	12	100%	2011	2023	25%	33.25%	\$7,382	9	.25	\$1,846	
Total:								\$57,687			\$14,287	

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL



Executive Summary Report

State Chartered School: **Turquoise Trail Elementary Charter School**
District: Schools School ID: **566001**

Asset Detail

Building Name: Main Building (1990) Cost Model: Elementary School Building Size: ~~67,977~~ **54,880**

Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent	Factor	Repair Cost (Unweighted)	Category Number	Category Weight	Repair Cost (Weighted)	Comments
Air/Ventilation Equipment	\$3.05	20	110%	2011	2031	9%	33.25%	\$20,555	9	.25	\$5,139	9/18/2014 BAJ: All new instrumentation and controls throughout as part of HVAC system replacement in 2011. ✓
Ceiling Finishes	\$5.94	30	110%	2011	2041	4%	33.25%	\$17,775	9	.25	\$4,444	9/18/2014 BAJ: New Clg. grid and acoustical panels throughout as part of 2011 renovation. ✓
Communications and Security	\$2.17	15	90%	2011	2026	16%	33.25%	\$21,205	9	.25	\$5,301	9/18/2014 BAJ: New intercom system and alarm installed throughout facility as part of 2011 renovation ✓
Emergency Light and Power	\$0.44	20	90%	1990	2010	100%	33.25%	\$27,203	9	.25	\$6,801	
Exterior Doors and Windows	\$5.62	30	110%	1990	2020	81%	33.25%	\$340,465	9	.25	\$85,116	
Exterior Walls	\$11.29	100	100%	1990	2090	7%	33.25%	\$55,938	3	2	\$111,877	...d Changed to Type 3 due to cracking in stucco that requires repair to prevent additional damage (TD-3/25/08). in stucco is in poor cond. report
Fire Detection/Alarm	\$2.11	15	90%	2011	2026	16%	33.25%	\$20,684	9	.25	\$5,171	9/18/2014 BAJ: Completely new fire detection system installed throughout as part of 2011 renovation. ✓
Floor Finishes	\$5.79	12	110%	2011	2023	25%	33.25%	\$108,231	9	.25	\$27,058	9/18/2014 BAJ: New flooring throughout as part of 2011 renovation. (Informed)
Foundation/Slab/Structure	\$16.71	100	100%	1990	2090	7%	33.25%	\$82,816	9	.25	\$20,704	
HVAC	\$23.36	30	100%	2011	2041	4%	33.25%	\$63,518	9	.25	\$15,880	...AJ: Complete HVAC system installed throughout including boiler and hydronic piping as part of 2011 renovation. Door Hardware Low ADA
Interior Doors and Partitions	\$9.03	50	90%	1990	2040	29%	33.25%	\$161,138	9	.25	\$40,285	
Interior Walls	\$8.59	60	90%	1990	2050	20%	33.25%	\$106,425	9	.25	\$26,606	
Lighting/Branch Circuits	\$11.62	30	90%	2011	2041	4%	33.25%	\$28,448	9	.25	\$7,112	9/18/2014 BAJ: All new lighting fixtures installed throughout as part of 2011 renovation. - Interior Only (Exterior still needs upgrade) 5 New flooring is still needed. upgrade Bring in wing & Dining Corridors Cafeteria, and Dining Classrooms

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Executive Summary Report

Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent	Factor	Repair Cost (Unweighted)	Category Number	Weight	Repair Cost (Weighted)	Comments
Main Power/Emergency	\$1,41	30	90%	2011	2041	4%	33.25%	\$3,442	9	.25	\$861	9/18/2014 BAJ: Completely new electrical service and transformer installed as part of 2011 renovation.
Other Equipment	\$7.18	60	110%	2011	2071	1%	33.25%	\$5,366	9	.25	\$1,341	9/18/2011 BAJ: Complete kitchen renovation as part of 2011 renovation.
Plumbing	\$17.77	30	100%	2011	2041	4%	33.25%	\$48,326	9	.25	\$12,082	...distribution piping throughout. New septic system and drain waste s system installed as part of 2011 renovation.
Roof	\$16.08	20	120%	2011	2031	9%	33.25%	\$118,015	9	.25	\$29,504	...ace built-up roof system (JJ 12/29/09) Update 9/23/11 AM, Per Plan Review Am. New TPO roofing with insulation
Sprinklers and Standpipes	\$3.85	50	130%	2011	2061	1%	33.25%	\$4,897	9	.25	\$1,224	9/18/2014 BAJ: Fire suppression system installed throughout facility as part of 2011 renovation.
Wall Finishes	\$4.32	12	100%	2011	2023	25%	33.25%	\$73,347	9	.25	\$18,337	9/18/2014 BAJ: Painted throughout as part of 2011 renovation.
Total:								\$1,307,795			\$424,841	

↓
Metal Roofing was not Replaced and is still Original From 1990

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

Executive Summary Report



Turquoise Trail Elementary Charter School
 District: **State Chartered Schools** School ID: **566001**

Asset Detail

Building Name:	Site	Cost Model:	Elementary School Site	Size:							
				74,819							
Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent Factor	Repair Cost (Unweighted)	Category Number	Category Weight	Repair Cost (Weighted)	Comments
Athletic Fields	\$0.94	30	90%	2011	2041	4%	\$2,544	9	.25	\$636	9/18/2014 BAJ: Playing field renovated as part of 2011 renovation.
Fencing	\$0.32	100	110%	1990	2090	7%	\$1,909	9	.25	\$477	
Landscaping	\$1.91	30	110%	2011	2041	4%	\$6,285	9	.25	\$1,571	9/18/2014 BAJ: New landscaping installed as part of 2011 renovation.
Parking Lots	\$3.44	20	80%	2011	2031	9%	\$18,518	9	.25	\$4,629	8/2014 BAJ: Parking lot completely re-paved, resriped and drop off loops improved as part of 2011 renovation. ✓
Playground Equipment	\$0.53	15	100%	2011	2026	16%	\$6,345	9	.25	\$1,586	9/18/2014 BAJ: New playground equipment installed as part of 2011 renovation. ✓
Site Lighting	\$2.95	40	100%	2011	2051	2%	\$4,966	9	.25	\$1,242	9/18/2014 BAJ: Site lighting upgraded throughout facility site as part of 2011 renovation. ✓
Site Specialties	\$0.15	40	100%	1990	2030	46%	\$5,113	0	0	\$0	
Site Utilities	\$1.99	50	120%	2011	2061	1%	\$2,575	9	.25	\$644	9/18/2014 BAJ: New water service installed when switched from well to city water as part of 2011 renovation. ✓
Walkways	\$2.65	30	110%	1990	2020	81%	\$176,356	1	3.5	\$617,246	...er recent survey dated 3/18/08; changed to type 1 safety concerns. Walkways are a tripping hazard (TD-3/25/08). ✓
Total:							\$224,610			\$628,031	

Handwritten notes:
 Playfield was not improved
 Track area is dirt
 Playgrounds and basketball areas improved
 Near cafeteria and classroom wing D

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL



Executive Summary Report

District: **State Chartered Schools** School: **Turquoise Trail Elementary Charter School** School ID: **566001**

Educational Adequacy Detail

Population

Growth Factor: 1
 Number of Staff: ~~60~~ **52**
 Number of Students: ~~459~~ **456** *K-6th*
 Number of Special Education Students: 0

*Prek 40 * Full time*
 -59 **63**
 -335 **325**
 -65 **68**
 0

Square Footage

Permanent GSF: 74,819
 Portable GSF: 0
 Admin NSF: ~~4,497~~ **2,112**
 Art/Music NSF: ~~2,475~~ **2,540**
 Assembly NSF: 4,522
 Career Ed NSF: 0
 Computer Lab NSF: ~~933~~ **1,622**
 Faculty Work Area NSF: ~~884~~ **1,132**
 Food Service NSF: ~~6,940~~ **6,979**
 General Classroom NSF: ~~18,061~~ **20,717**

General Storage NSF: 900 **2,264**
 Maintenance or Janitorial Space NSF: ~~212~~ **333**
 Media Center NSF: ~~2,846~~ **2,112**
 Parent Work Space NSF: ~~436~~ **372**
 Physical Ed NSF: ~~5,256~~ **5,029**
 Science Classroom NSF: ~~944~~ **1,211**
 Science Storage NSF: ~~20~~ **20**
 Special Education Classroom NSF: ~~3,160~~ **3,041**
 Student Health NSF: ~~334~~ **292**

Classrooms

Number of Classrooms: ~~31~~ **345**

Number of Special Education Classrooms: **225**

Parking

Number of Paved Parking Spaces: ~~171~~ **174**
 Number of Handicap Parking Spaces: ~~10~~ **6**
 Number of Gravel Parking Spaces: 0

Number of Bus Drop Offs: 1
 Number of Student Drop Offs: 1

Miscellaneous

Number of Chemical Storage Rooms: 0
 Playground Equipment: Yes

Number of Multi-Use Playgrounds: 2

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

5.5 Detailed Space & Room Criteria

In order to meet the TTCS’s enrollment needs in the future as well as comply with NMAS requirements, the school may need to consider either the construction of a two classroom addition or the purchase of two portable classrooms. The school intends to utilize proceeds from either SB-9 or HB-33 funding sources towards debt service for lease/ purchase of a classroom addition or new portables.

If the school determines that a permanent classroom addition is required. The 2017-2022 Facility Master Plan/ Ed Spec will be updated to reflect the spaces needs and room criteria required.

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SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

5.6 Additional Facility Information

STUCCO ASSESSMENT AND EVALUATION

Turquoise Trail Charter School

Prepared for:
Joseph Maes, General Operations Manager
Turquoise Trail Charter School
13A San Marcos Loop
Santa Fe New Mexico 87508

Prepared by:
Sara Rain Stewart, R.A.
Avocet Design & Consulting, LLC

Report date: June 5, 2017
Site visits: May 5th, May 17th & June 2nd



This assessment report addresses concerns with cracking and delaminating of existing stucco, flashing details, and documented locations of leakage. After a summary of recommendations, existing construction issues are detailed. The second part of the report offers recommendations for remediation. Photos, referenced throughout, are at the end of this document.

It should be noted that repairs may require multiple phases. Recommendations are offered for least-cost repairs as well as for more comprehensive work that would address root causes of the issues. As some of the recommendations may be more costly and time-intensive, it is recommended that TTCS maintain a detailed log of reported areas of leakage, including date, recent ‘weather’ events, and extent of damage. Additionally, TTCS should review and evaluate recommendations based internal goals for life span of the building, available budget, tolerance for leakage, and aesthetic considerations.

Avocet is available to discuss and review these recommendations with TTCS, and to assist with decisions, with contractor selection and provide limited oversight of remediation work at the request of TTCS.

RECOMMENDATIONS OVERVIEW

- 1- **DRAINAGE:** Provide positive drainage at hardscape and finished grade around original building.
Hose bibs: Fix leaks and improve methods of use.
Downspouts: Ensure no holes in downspout body. Provide positive slope at splash pads.
- 2- **STUCCO:** Replace deteriorated exterior sheathing, especially at base of wall decorative detailing.
Consider rebuilding base of wall to include weep screed and correct clearance from grade.
Apply new stucco color coat and base coat with fiber mesh reinforcement.
- 3- **DORMER WINDOW LEAK:** Monitor. Comprehensive fix requires greater investment.
- 4- **CURTAIN WALL LEAK:** Further investigate and verify with simple hose test per AAMA 501.2.
- 5- **ROOF FLASHING:** Consider improving detailing, especially at parapet to sidewall, in conjunction with roof repairs and stucco work.
- 6- **NORTHEAST EXTERIOR HALLWAY:** Repair obvious potential sources detailed below. Further investigate leak source.

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

EXISTING CONDITIONS

STUCCO

The Turquoise Trail school building was original designed and constructed circa 1990. As-built drawings indicate that exterior wall construction consists of CMU and/or metal stud framing with 5/8" exterior gypsum board with 7/8" cementitious stucco system comprised of stucco, metal lath and one layer 15# felt. (DETAIL #2) No weep screed is installed and stucco extends below grade or hard scape.



A protruding, decorative color band at grade to approx. 16 inches above grade is formed with rigid insulation with a 45° angle and covered with the stucco assembly. The assembly continues below grade. It does not appear that the water resistive barrier or metal lath maintained any continuity from the wall above over this detail, allowing the stucco to crack at the 45° joint. The base of the rigid insulation is exposed to the earth and not wrapped by the stucco finish coat. The cracking and the exposed rigid insulation allow water to enter the system. (PHOTOS #5 & #7)

Lack of uniform and adequate slope away from the building at the concrete apron, sidewalk, and finished grade also contributes to a build up of water at the base of the wall, allowing moisture to migrate into the wall and contributing to the failing stucco. (PHOTOS #12 & #13)

The lower portion ('wainscot') of the original wall received a new finish coat during a 2010 addition. This finish coat is uniformly delaminating at areas of water intrusion. This is most evident at north facing locations where drying takes longer and freeze/thaw is more likely. (PHOTOS #1, #3 & #4)

Vertical stucco reveal as originally installed does not allow for expansion/ contraction of the stucco system. As a result the stucco exhibits cracking adjacent to the metal reveal. (PHOTO #2)

Existing punched windows; sill pans are evident at some windows, but lack adequate positive slope, causing degradation of the stucco at the corners. (PHOTO #6)

At 'New Music' pop-out addition at north side, no provision was made for movement where the new construction attaches to the existing, stucco has cracked and pulled away from substrate as a result. (PHOTOS #10 & #11)

WINDOW LEAKS

Leaks were reported prior to May 5th 2017 visit at the Entry curtain wall, and prior to May 17th visit, in the main entry hallway at the middle west dormer window.

Leakage was reported in the Entry Hallway at dormer windows on northwest side. Existing construction is metal skin / roof system over wood frame. No underlayment is evident. Wood is exposed and visible



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avocet DESIGN & CONSULTING, LLC

Albuquerque NM 87102 505.242.7627 sara@avocetdesign.com

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

in some areas. (PHOTOS #14 THRU #19)

ROOF

Roof to wall terminations, where parapets or low walls meet adjacent perpendicular walls, are poorly detailed with surface or butt terminations, no flashing / counterflashing, and no saddle flashing at the substrate. (PHOTOS #20 THRU #23)

Sealant at the roof appears slapdash with multiple kinds of sealant in use and typically globbed on without attempt at a proper two-sided sealant joint. (PHOTO #22)

Northeast Exterior Hallway on northeast side of building (at concrete cover toward Gym), leaking is evident on the stucco. See below for observations, may require additional review. (PHOTOS #25 THRU #27)

RECOMMENDATIONS IN DETAIL

STUCCO

Recommend a new acrylic color coat over a polymer modified, cementitious base coat. The mesh and polymer-modified base coat allow for more movement, and will patch and help bridge existing cracks. Recommend stucco system comprised of: polymer-modified cement basecoat with added fibers, supplied bagged with aggregate, fibers, etc. included, and acrylic textured finish, also provided bagged with integral color. Use fiber mesh at problem areas embedded into base coat. Provide new water resistive barrier (2 layers Grade D building paper) and weep screed where possible, integrated weather-board fashion with existing layers.

- Prepare existing surface by water-blasting to clean surface and remove any loose surface materials including delaminating finish coat at wainscoting.
- Remove existing sealant between stucco and metal flashing and window frames at perimeter joints.
- At areas where stucco system is pulling away from substrate, remove failing stucco. Re-build system with water resistive barrier ship-lapped as possible with existing felt material, lath and 3-coat stucco system, including fiber mesh and color coat as elsewhere. Consider including expansion joint where movement is evident (e.g. New Music room pop-out) (PHOTOS #19 & #11)
- Apply leveling / base coat embedded with mesh and then color coat.
- Follow manufacturer's installation instructions and ASTM C926 requirements including for wet curing.
- Ensure all penetrations through stucco are sealed to the weather resistive barrier. Refer to note below regarding downspout attachments. (PHOTO #9)
- Decorative stucco detail at base of wall is seriously compromised. (PHOTO #5 & #7) Recommend removing this detailing with one of the following approaches:
 - 1) Rebuild as is with weep screed at 4" above finished grade and 2" above hardscape, or
 - 2) Rebuild flush with rest of wall with weep screed as above.In either case, provide 22 gauge galvanized sheet metal strip behind weep screed to extend minimum 2" below grade. Provide slope away from building as discussed below.
Avocet can provide a sketch for this detailing if requested.
- At window sills that are stuccoed, ensure new system slopes to drain.
- Consider re-installing metal sill pans to slope to exterior. (PHOTO #6)

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- At Loading Dock stairs and column, remove failing assembly, install new sheathing with separation from concrete, and new assembly with weep screed as described above. (PHOTO #8)

DRAINAGE, HOSE BIBS & DOWNSPOUTS

- Improve drainage: All concrete aprons, sidewalks and finish grade should slope away from the building. Recommend minimum 5% slope for 10 feet for finished grade and minimum 2% slope at hardscape or as is acceptable per ADA requirements. Verify that run-off is directed away from the building and has somewhere to go, either to storm drains or swales that allow infiltration of water ten feet minimum away from building. (PHOTOS #12 & #13)
- Verify fastening of downspouts into stucco; use straps around downspout and verify that there are no penetrations into body of downspout. (PHOTO #13)
- Ensure all fasteners through stucco are installed in pre-drilled holes that are filled with non-curing, butyl sealant before fastener installation.
- Verify that all splash blocks slope away from the building and that water has somewhere to go, either to storm drains or swales that allow infiltration of water ten feet minimum away from building. Consider controlling run-off with longer leaders on the downspouts, larger downspouts or other methods to accommodate peak flows.
- Verify that hose bibs do not leak. Train facility maintenance and landscape crews in use of hoses to limit spray onto stucco while hoses are in use. (PHOTO #4)

METAL ROOF / DORMER WINDOWS

Leakage was reported in Entry Hallway at dormer windows on northwest side. Existing construction is metal skin / roof system over wood frame. No underlayment is evident. Wood is exposed and visible in some areas. Surface joints between metal pieces were unsealed. (PHOTOS #14 THRU #19)



METAL ROOF / DORMER WINDOWS RECOMMENDATIONS

Correct installation would include a high-temperature, waterproof membrane installed over the wood framing and under the metal system. To do this would require complete removal of the existing metal, installation of the underlayment and reinstallation of the metal system. Tolerance for leaks, available funds and intended lifespan of the building should be considered. Recommend maintaining a log of leaks with regular monitoring of existing condition. Should TTCS and SFPS elect to make comprehensive repairs, detailing and additional material information could be developed at that point.

NOTE: It is not recommended that sealant or other surface material be applied over wood currently exposed to the exterior (Photo #). Visual examinations indicates that multiple leaks have likely occurred, however affected materials appear to have dried within a reasonable time and do not show signs of degradation or growth. Applying a surface treatment at exposed wood may change existing the wetting / drying cycle. Moisture may currently enter the assembly at multiple locations and the exposed areas may assist in the drying. Changing that dynamic in a slap-dash manner may introduce greater potential for moisture to accumulate and cause damage. Therefore, if there is not budget nor appetite to correct it

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avocet DESIGN & CONSULTING, LLC

Albuquerque NM 87102 505.242.7627 sara@avocetdesign.com

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

properly, I would recommend simply monitoring the condition with detailed records as noted above. If leakage as recorded (over the course of a year say) is great than tolerated, then the recommendation would be to bit the bullet and install the underlayment.

EXISTING ROOFING / FLASHING:

Roof to wall terminations, where parapets or low walls meet adjacent perpendicular walls, are poorly detailed with surface or butt terminations, no flashing / counterflashing, and no saddle flashing at the substrate.



RECOMMENDATIONS

At parapet to sidewall intersections, create ‘saddle flashing’ with single-ply membrane, vertical extension 8 inches up wall and 16 inches onto parapet. Terminate all edges of single-ply with termination bar and counterflashing to cover termination bar. Ensure sealant between term bar and stucco. If concurrent with stucco repairs, new metal saddle flashing at substrate could be properly integrated with stucco. *Avocet can provide a sketch for this detail if requested.*

At cast-in-place concrete fin wall, remove all existing ‘sky-facing’ stucco at roof termination to concrete. Clean and apply new sealant. Consider counterflashing set into 1.5 inch deep kerf cut into concrete and filled with sealant before installing flashing; counterflashing to cover roofing termination at concrete. *(PHOTO #14)*

Exterior hallway on northeast side of building (at concrete cover toward Gym), leaking is evident on the stucco. Examination at Roof above reveals: Abandoned dish may have created puncture; At parapet to sidewall, corner piece is unsealed and may leak. Roof above has metal roofing; evaluate for lack of underlayment or other possibility for leakage that may enter the wall and migrate down wall to stucco below. Visual review interior conditions inside of Cafeteria at shared Hallway wall, showed not evidence of leakage. *(PHOTOS #25 THRU #27)*

CURTAIN WALL

New main entry has curved curtain wall. As-built drawings show top frame terminates against formed metal gutter with sealant joint as only barrier to water entry. *(DETAIL #1)* Leakage was documented at southwest corner of curtain wall after recent heavy spring snow event. *(PHOTO #28)*

Recommend further investigation of this area beginning with simple hose test per AAMA 501.2. The most cost-effective remedy for this may be new silicone sealant joint properly installed with backer rod, with regularly scheduled inspections and allowance for maintenance of this joint as necessary.

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REPORT PHOTOS - STUCCO EXISTING CONDITIONS

Project Title	TURQUOISE TRAIL CHARTER SCHOOL		
Project Address	13A San Marcos Loop, Santa Fe New Mexico 87508		

	
<p>PHOTO #1- Stucco condition overall with new color coat 'wainscot'</p>	<p>PHOTO #2- Vertical reveal close up, cracks exposed</p>
	
<p>PHOTO #3- 'New' color coat delaminating at downspout</p>	<p>PHOTO #4- Hose bib; color coat failure</p>
	
<p>PHOTO #5- Base of wall detailing with failing stucco</p>	<p>PHOTO #6- Poorly sloped metal sill cap, directs water to corner and stucco.</p>

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

REPORT PHOTOS - EXISTING STUCCO AND HARDSCAPE CONDITIONS

Project Title	TURQUOISE TRAIL CHARTER SCHOOL		
Project Address	13A San Marcos Loop, Santa Fe New Mexico 87508		

	
<p>PHOTO #7- Base of wall detail</p>	<p>PHOTO #8- Degrading stucco at stairs at Loading Dock</p>
	
<p>PHOTO #9- Unsealed penetrations thru stucco a bolts</p>	<p>PHOTO #10- New Music Room pop-out attaches to existing building</p>
	
<p>PHOTO #11- Close-up of Photo 10, significant cracking at new/old joint</p>	<p>PHOTO #12- Concrete sidewalk with poor slope at East side</p>

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

REPORT PHOTOS - EXISTING DRAINAGE AND DORMER WINDOW LEAK CONDITIONS

Project Title	TURQUOISE TRAIL CHARTER SCHOOL		
Project Address	13A San Marcos Loop, Santa Fe New Mexico 87508		

	
<p>PHOTO #13- Concrete apron at north side of East Wing slopes toward building</p>	<p>PHOTO #14- Metal skin & roof at Dormer Window</p>
	
<p>PHOTO #15- Exposed wood around window; no underlayment</p>	<p>PHOTO #16- Exposed wood around window; no underlayment</p>
	
<p>PHOTO #17- Interior view of leaking Dormer Window</p>	<p>PHOTO #18- Peeling paint evidences leak at inside of Dormer Window</p>

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

REPORT PHOTOS -DORMER LEAK AND EXISTING PARAPET CONDITIONS

Project Title	TURQUOISE TRAIL CHARTER SCHOOL		
Project Address	13A San Marcos Loop, Santa Fe New Mexico 87508		

	
<p>PHOTO #19- Evidence of leak at wood and steel structure</p>	<p>PHOTO #20- Poorly detailed parapet to sidewall, typical</p>
	
<p>PHOTO #21- Parapet to sidewall, continue roof membrane as saddle</p>	<p>PHOTO #22- Close-up of Photo 21; poor detailing</p>
	
<p>PHOTO #23- Parapet to sidewall, continue roof membrane as saddle</p>	<p>PHOTO #24- Sky-facing sealant at concrete fin wall / roof termination: New silicone sealant by J3 Systems, June 2017</p>

SECTION 5.0 - MASTER PLAN SUPPORT MATERIAL

REPORT PHOTOS - EXISTING ROOF / CURTAIN WALL PHOTOS

Project Title	TURQUOISE TRAIL CHARTER SCHOOL		
Project Address	13A San Marcos Loop, Santa Fe New Mexico 87508		

	
<p>PHOTO #25-Roof/wall area above leak in hallway</p>	<p>PHOTO #26- Roof membrane corner at parapet wall poorly sealed</p>
	
<p>PHOTO #27- Hallway; evidence of leak at stucco</p>	<p>PHOTO #28- Entry curtainwall from above at corner where leak was reported</p>
 <p>CURTAINWALL HEAD DETAIL @ GUTTER SCALE: 3" = 1'-0"</p>	 <p>DETAIL SCALE: 3" = 1'-0"</p>
<p>DETAIL #1- GSL Architect as-built; entry curtain wall at gutter. Sealant joint is only barrier to water entry.</p>	<p>DETAIL #2- Original as-builts Bernabe Romero Architects; base of wall decorative detail.</p>