



School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades early learning to 12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools

Name of Principal: **Ms. Wynne Satterwhite**

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: **Los Altos High School**

(As it should appear on an award)

**Private Schools: If the information requested is not applicable, write N/A in the space*

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Wynne Satterwhite

Date: January 26, 2021

(Principal's Signature)

Name of Superintendent: **Dr. Nellie Meyer**

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: **Mountain View Los Altos Union High School District**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Nellie Meyer

Date: January 26, 2021

(Superintendent's Signature)



Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: **California Department of Education**

Name of Nominating Authority: **State Superintendent of Public Instruction Tony Thurmond**

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.


(Nominating Authority's Signature)

Date: February 18, 2021

SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: December 31, 2023

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



Los Altos High School

California School Nominee to
U.S. Department of Education Green Ribbon Schools



Prepared By:
California Department of Education
School Facilities and Transportation Services Division
[Green Ribbon Schools Award Program](#)
February 2021

PART II – SUMMARY OF ACHIEVEMENTS

Los Altos High School, Los Altos, Calif.

School Partnership with City Empowers Change

Los Altos High School (LAHS) has been a public school leader in environmental actions and initiatives dating back to the establishment of the Mountain View-Los Altos Union High School District's Sustainability Task Force in 2009. The task force sought to develop policies and plans to make the District's environmental impact more sustainable and to enhance environmental education. The group developed goals focused on purchasing, energy conservation, recycling, transportation, and a facilities plan to support the solar panels now on the LAHS campus. This effort built upon and strengthened the activities at the site level, and created momentum for other subsequent efforts around the school. All stakeholders are invited to lead green schools efforts at LAHS. Passionate and well-organized students run the school's Green Team and work in collaboration with parents, teachers, and administrators on the PTSA Go Green Sustainability Committee (GGSC).

In 2017, LAHS built a LEED Gold-certified classroom building to accommodate for enrollment growth and replace old portable buildings. The building is xeriscaped and includes bioswales that limit surface runoff to storm drains and return rainwater to the aquifer. The building has an HVAC automatic shut-off whenever windows and doors are opened. Solar panels on the roof provide all of the building's energy needs. Each year, 180 AP Environmental Science students tour the LEED building to learn about the measures the school has taken to be more sustainable. In the classroom, students study the USGBC guidelines for LEED certification. For the last 11 years, LAHS STEAM Week brings over 1,000 students together to learn from industry experts in STEAM (Science, Technology, Engineering, Art, and Mathematics) fields with one day dedicated to student choice. Since the opening of the LEED building, tours are conducted for all students during the STEAM Week choice day.

Los Altos High has been certified as a Santa Clara County Green Business since 2010. This certification reflects their ongoing progress in reducing energy use, following sustainable and green purchasing policies, reducing water use, reducing transportation greenhouse gas emissions, preventing water and air pollution, implementing green health and safety practices, and excelling in the management and disposal of hazardous and electronic waste.

Clean energy is a priority for LAHS. The school receives 100% clean electricity obtained from wind, solar, and hydroelectric sources from Silicon Valley Clean Energy. Solar canopy panels provide approximately 55% of the electric needs of the campus, and rooftop solar panels supply energy to the school's LEED Gold classroom building. LAHS uses onsite battery storage units to balance load and cut peak energy demands during the day. In the first year of operation, the battery storage system saved \$83,000 in reduced utility bills.

LAHS engages in multiple strategies for reducing their waste, and documents a 60% diversion rate from recycling and composting. The LAHS Green Team brings the school's rolling composter directly to the quad area to collect food scraps from students at lunchtime. The school has also modified many common practices to be conscious of waste. LAHS has removed plastic straws and Styrofoam section plates in the cafeteria, applies green practices to fundraisers, and reuses materials such as caps and gowns, prom dresses, and banners for school functions whenever possible. Additionally, the GGSC provides reusable dinnerware to school groups for large events.

Reducing environmental impacts from transportation is a priority for LAHS. The school installed 29 Level 2 Electric Vehicle (EV) Charging Stations and a Level 3 Fast Charger. Teachers and staff are able to use the chargers at no cost, providing a powerful incentive for their use. The stations are available for public charging after school hours and during school breaks at normal rates. After the successful installation and implementation at LAHS, ten neighboring schools in Los Altos requested information and installed similar systems.

In a complementary effort, LAHS makes multipronged efforts to encourage alternative modes of transportation. LAHS reports 26% of their commuting group rolls (i.e., bike, scooter, skateboard) into school every day. The LAHS Green Team, administration, and student government created a policy that helps to limit the number of students who drive to school. The policy limits student parking permits, based on seniority and how far away a student lives from LAHS. The school provides eight dedicated carpooling parking stalls, as well as several storage options for bicycles and skateboards around campus. Members of the LAHS Green Team met with the city's Complete Streets Commission to lobby for changes to bike and pedestrian routes to school, which led to the first stage of improvement occurring in summer of 2020 and plans for additional changes in the future that would prioritize bike and pedestrian routes over cars and parking. Since 2014, these policy changes and Green Team programs supporting biking and walking to school contribute to an 58% increase of students biking to school, and a 20% reduction in the number of students receiving parking permits.

The Student Services Coordinator at LAHS works with student government and other leadership groups, as well as staff committees and student clubs, to implement programs to increase student and staff wellness. Each quarter, students enjoy activities such as yoga in the quad, service animals on campus during finals week, messaging through social media and on-campus avenues, and support for mindfulness activities during class time. An innovative physical education curriculum emphasizes personal health and fitness and also includes options for yoga and jazz dance. The school's weight room and pool are open to teachers before and after school when there are no athletic events. The Green Team emphasizes wellness activities on Earth Day, and promotes the cafeteria's Meatless Monday weekly.

Several required and elective courses at LAHS focus on environmental issues through the lens of their specific discipline. All science courses at LAHS have significant units that focus on relevant environmental issues and offer hands-on learning opportunities. The Chemistry courses at LAHS have an annual BioDiesel project, in which students

learn about resource conservation and switching to a natural substitute instead of using nonrenewable fuels. In 2017, Biotechnology and AP Environmental Science students went to Stevens Creek Reservoir/Park in San Jose to study water quality. AP Environmental Science students analyze and determine plant species on campus, use solar panels to measure solar energy efficiency, and measure outdoor and indoor air quality using air quality monitors. Other science classes have spent time outdoors during field trips to the tide pools in San Mateo County. From 2015-18 the AP Biology class took a field trip to either Año Nuevo State Park to learn about elephant seals, or to Elkhorn Slough National Estuarine Research Reserve, where students analyze and examine microorganisms and learn about efforts to combat eutrophication and silting. Physics students study topics in energy conservation and systems efficiency. In AP Human Geography, a major theme focuses on current land use patterns vis-a-vis sustainability. Within the Economics course required of all seniors, there is a strong emphasis on those "externalities" of business transactions that impact the environment, such as climate change as a consequence of auto and other emissions, or toxic dumps as a consequence of e-waste generated from obsolete technology.

The LAHS Green Team, the school's environmental sustainability club, was founded in 2003 with a mission to promote environmental responsibility and sustainability to all LAHS students and the local community through projects and events. The Green Team works diligently to educate students on how they can make more sustainable choices in school and at home. The educational topics presented to the student body include composting, proper sorting and recycling, using refillable water bottles, and clean transportation. The Green Team has a unique partnership with the Green Town Los Altos, a citizens' sustainability group. Recent achievements include a school Anti-Idling Campaign and a community E-Waste Collection Event for residents of Los Altos and Mountain View. The LAHS Green Team has organized and hosted an annual Students for Green High Schools Conference since 2013, bringing together over 100 students from 28 schools to share environmental actions on their campuses, learn from highlighted speakers, and work in small groups to plan future actions. Other student-led clubs such as Biomimicry Club, Sustainable Living Club, Bee Club, and Ocean Preservation Club draw attention to environmental issues during weekly meetings.

LAHS advocates for environmentally conscious initiatives within their school, district, and the city of Los Altos. The LAHS Green Team and GGSC lead a collaborative effort with district administration to implement a ban on the sale of single use plastic bottles on all Mountain View-Los Altos Union High School District campuses. In the fall of 2020, all incoming LAHS freshmen were given metal reusable water bottles to encourage the change. Members of the LAHS Green Team co-authored a District Climate Action Resolution with Citizens Climate Lobby, which was adopted by the District Board of Trustees in June 2020. The resolution includes the creation of a district-level Climate Action Committee to ensure ongoing sustainability actions long after the authoring students have graduated. The district has extended efforts in this area by sharing the resolution as a model for others across the state.

PART III – DOCUMENTATION OF STATE EVALUATION OF SCHOOL NOMINEE

Pillar I: Reduce Environmental Impact and Costs

Element IA: Energy

- LAHS obtains all their electricity from non-GHG producing sources. All electricity on campus is from 100% clean power sources, provided by Silicon Valley Clean Energy, a Community Choice Aggregate Company providing electricity from solar, wind, and hydroelectric power, since 2017.
- The school prioritizes their efforts to reduce their environmental impact as listed in their Western Association of Schools and Colleges (WASC) Action Plan. The 2019-2025 plan details their goals to work with the district to develop new facilities with a low carbon footprint; address campus environmental issues around water, waste, and energy; and redesign existing traffic patterns prioritizing pedestrian and bicycle safety and access.
- Since installing electric vehicle (EV) charging stations in 2015, the school's mode share includes an increase of 20 EVs daily. Bicycle ridership also increased from 400 to 600 daily. Together, these efforts resulted in a GHG reduction of 51.5 metric tons annually. The EV installation includes 29 Level 2 chargers and one Level 3 fast charger situated in a parking lot with canopy-style solar panels.
- LAHS Green Team students partnered with the non-profit, Green Town Los Altos, to coordinate an Anti-Idling Campaign to minimize greenhouse gas emissions around the school. They posted signs and handed out pamphlets and decals to drivers, urging them to turn off their engines while waiting in their cars.
- 55% of energy use is provided by on-site solar panel canopies, located in the student parking lot, as well as rooftop solar panels on the school's LEED Gold classroom building. LAHS uses onsite battery storage units that load-balance and cut peak energy demands during the day. In the first year of operation, this storage system saved the district \$83,000 in reduced utility bills.
- A new classroom building completed in 2017 to accommodate growth in enrollment and replace old portable received LEED GOLD certification. The building received highest scores for water efficiency, energy and atmosphere, indoor environmental quality, reduction in the heat island effect, and on-site renewable energy. The building has a xeriscaped roof, bioswales, solar panels on the roof to provide all of the building's energy needs, and HVAC automatic shut-off whenever windows and doors are opened. Current construction projects scheduled for completion in spring 2021 include a new gym, new classrooms, a new engineering lab, and a new PE facility. All will seek LEED Gold Certification. The proposed design is 14.3% better than Title 24 energy use (the code requirement) due to the use of efficient lighting and HVAC equipment.
- To reduce the heat island effect, the roofs of LAHS campus buildings are covered with a light-colored material. The pavement in the quad, between classrooms, is a white cement color. Exterior walls of all classroom buildings are painted a light color.

Many classroom buildings have breezeway coverings or overhanging extensions of the roof to provide shade to interior rooms. Those that do not have a film to reduce solar heat gain. New construction slated for completion in spring 2021 includes additional shade structures, plantings, and roof and wall materials that will reduce the heat island effect. More than 150 fully or partially mature trees across the 29.5 acre campus provide shade and create a healthier, more natural environment.

- The school replaced 70% of outdoor lighting with low-energy LED bulbs and upgraded fixtures. All outdoor lighting is on timers so that lighting is on only when needed. The facilities manager adjusts the timing as natural light changes with the season.
- Approximately 20% of indoor lighting is LED. Classroom overhead light fixtures have fluorescent bulbs and T-8 ballasts. The LAHS theater has replaced over 50% of its incandescent lighting with LED bulbs and the other 50% with fluorescent lighting. There are no incandescent bulbs on campus. Lighting fixtures and lamps are cleaned regularly to improve lighting efficiency.
- Upgraded HVAC systems run on a Syserco Energy Management System (EMS) to maximize efficiency. All buildings are heated or cooled as needed between 5:00am and 8:00am to bring classrooms to a comfortable level. After 8:00am, the EMS allows teachers to adjust the temperature within set limits (e.g., 68 to 72 degrees). Classrooms have an auto-off feature that turns off lights if no motion is detected for ten minutes.
- Staff receive regular education and reminders to turn off lights, and to close windows/doors to reduce HVAC demand. Student-created signs posted above all light switches remind occupants to “Please, Turn Off Lights.”

Element IB: Water and Grounds

- Indoor and outdoor water use is metered separately. LAHS reduced indoor water use by 14% and outdoor water use by 49% from 2016 to 2019.
- LAHS implemented water-reducing measures recommended in a 2009 water survey conducted by WaterWise Consulting Inc. Improvements included low-flow toilets and urinals, auto on-off sinks, and flow restrictors on sinks. Toilets in new construction have automatic flush functions. New locker rooms installed in 2015 feature showers, toilets, and sinks that reduced water usage significantly.
- The LAHS swimming pool has a heavy-duty pool cover to decrease water evaporation, lowering refill requirements to keep the pool at the proper level.
- The GGSC successfully lobbied the District Board to incorporate systems for returning rainwater to the aquifer, such as bioswales, French drains, etc. in all new construction beginning in 2019 and ongoing.
- In 2016, LAHS Green Team students installed a rain harvesting system for demonstration purposes and to inspire home rain harvesting. The Construction Arts class instructor and students contributed to the project.

- An on-campus well provides all irrigation water. Sprinklers and drip irrigation run only in early morning hours, and are turned off following rain. The football field is artificial turf, which does not require watering.
- The school's LEED building is xeriscaped and includes bioswales that return rainwater to the aquifer and prohibit surface runoff to storm drains. Most plant areas are mulched and there are mulched areas on the sides of pathways. Xeriscape plantings replaced grass areas and other foliage between most campus buildings, requiring no irrigation, in an ongoing project over the last five years.

Element IC: Waste

- LAHS reports a recycling rate of 60% from recycling and composting. Waste disposal and recycling are tracked by Recology, the school's waste disposal company.
- More than 20 compost bins are available around campus to collect food and food soiled paper waste. All LAHS students are informed regularly by video announcements about what goes in the compost bins. The Green Team brings the school's rolling composter directly to the quad area to collect food scraps from students at lunchtime. When the scraps become usable compost, Green Team members use the compost material in the school garden. Campus groups are informed about composting practices by in-person presentations by the PTSA Go Green Committee (GGSC), links on the school website, and email messages with instructions for "What Goes in the Compost Bins" and how to buy compostable materials for food events, including bamboo forks and paper plates.
- AP Environmental Science classes analyze both compost and recycling at least once a year. Students assess how accurately waste has been disposed of in the correct bin. The Green Team provided improved labels for compost and recycling bins and developed strategies for providing instruction on waste sorting, including "Trash Talking" and "Cookies for Composting."
- There are two specialized containers for battery recycling, which is tracked and collected along with e-waste by a California state certified e-waste recycling company, Green Mouse Recycling.
- There are several ways LAHS disposes of the hazardous materials that are used on site. All science, STEAM, photography and other art classes all have chemical management systems in place, including proper labeling, storage and disposal according to official protocols using certified companies for disposal. Fume hoods are used when students and staff are working with strong acids or bases or certain biological agents. Flammable and corrosive liquids and toxins are stored in a large steel case. The industrial freezer stores other biological materials that can only be accessed with thick gloves. All science teachers are trained in the proper disposal and usage of this waste.
- LAHS has a posted Environmentally Preferable Purchasing Policy in accordance with Santa Clara County's Green Certification criteria. All office and campus supplies are made from recycled content. The cafeteria uses 100% recycled, unbleached napkins. Student bathrooms have hand dryers instead of paper towels.

- The science department successfully piloted the use of refillable white board markers, which the GGSC will roll out to other departments when COVID-19 conditions allow in-person instruction to resume.
- GGSC provides a demonstration to groups having events on campus on how they can host a zero-waste event. During their presentation they promote a Zero-Waste Example Box containing 100% recycled content paper towels and napkins (when cloth rags are not available), reusable metal utensils, and plates. The committee also assists many large public events by providing reusable porcelain plates, metal utensils, glass drinking glasses, glass pitchers, cloth tablecloths, reusable or compostable centerpieces, and cloth rags for cleanup.
- LAHS recognizes that reusing prior to recycling is a primary strategy for waste reduction. Many graduation caps and gowns are returned by parents for use by next year's grads. Prom dresses are donated by families and selected by students via Princess Project. Event banners are made of durable reusable material with a patch for the current date.
- The Athletic Boosters parent organization sells re-usable items with the school logo as a green fundraiser, including canvas bags, reusable/refillable metal water bottles, hats, and many other items.

Element ID: Alternative Transportation

- In a student survey, 26% of respondents reported rolling (i.e., bike, scooter, skateboard) to school, 11% reported walking, and 3% reported using other public transportation. There are eight dedicated carpooling parking stalls in the lot; however, many more students are observed carpooling with 2 or more students in the car.
- A well-publicized no-idling policy has been implemented for district school busses as well as the school community. District bus drivers never idle, and since 2008, all district buses are CNG-powered. The two school buses for sports teams and field trips were converted to CNG 15 years ago. LAHS administration posted a no-idling message to all parents on the school website at the start of the school year. Green Town Los Altos and the City of Los Altos supported LAHS Green Team students to publicize a program to discourage idling through direct contact with families picking up and dropping off students. No-idling signs have been posted: "Turn your key-Be idle-free." According to surveys by Green Town Los Altos volunteers, this reduced on-campus idling by 80%.
- A grant from the Bay Area Air Quality Management District funded the installation of 29 Level 2 EV charging stations (EVSEs) and one Level 3 Fast Charging Station at LAHS. Prior to installation, LAHS had received two Clipper Creek Level 2 EVSEs simultaneously with a battery storage system paid for via a grant from Green Charge Networks. LAHS also reaches out to encourage others to become green certified and to implement green actions, leading to the implementation of similar EVSE charging systems at Los Altos K-8 Schools, Campbell Unified High School District's five campuses, and Eastside High School District campuses in San Jose.

- Student Parking Permits are limited, based on seniority and how far away a student lives from LAHS. Students within a .75-mile radius must present special circumstances to purchase a parking permit. The LAHS Green Team developed the policy, and site administration and student government approved it. Students whose commute 10+ minutes by foot or 5+ minutes by bike have higher priority for a parking permit.
- Secure storage is provided to encourage human-powered modes of transportation to school. There are two skateboard racks, built by a local Eagle Scout, and many bicycle racks. There are two loaner bikes available for faculty to use during the school day. LAHS has received grants from the local air district to purchase additional bike racks for the past three years.
- Green Team students organize ABC (Anything But Car) Days, when students are encouraged to take alternate modes of transportation to school. They encourage biking and environmental stewardship by publicizing after school events such as Green Town's Summer Solstice Bike Ride and Historic Bike Tours. Safe Routes to School representatives have been invited to quad events, and bicycle safety education instruction is given during freshman PE classes.
- LAHS has partnered with GreenTown Los Altos in their Recycle Bicycle Drive held twice a year, during which local residents donate used bikes. Students, staff, and volunteers spend a day washing, refurbishing, and repairing the bicycles to be given to students in need, students from other local schools, and nonprofit organizations in the greater community.
- Members of the LAHS Green Team met with the to lobby for changes to bike and pedestrian routes to school which led to significant improvements and plans for additional changes in the future that would prioritize bike and pedestrian routes over cars and parking.

Pillar II: Improve the Health and Wellness of Students and Staff

Element IIA: Environmental Health

- In accordance with the Healthy Schools Act, LAHS has adopted the least-toxic approaches to pest management, including the six common components of Integrated Pest Management (IPM). LAHS identifies pests in the cafeteria and culinary kitchens with monthly pest management. Custodial and maintenance staff seal all possible entrances for vermin into and between all buildings. Students, staff, and faculty participate in reporting, monitoring, and assessing pests and damage.
- For pest management, the school uses mechanical and physical means instead of chemicals whenever possible. Pesticides are only used under very limited circumstances. LAHS also uses rat traps when necessary. A committee of Green Team leaders and parents researched alternative herbicides for ten months in 2019. The group met with the Associate Superintendent, who agreed to ban the use of glyphosates and other chemical herbicides and to consider the group's suggested non-toxic alternatives.

- No smoking is allowed on the LAHS school grounds or in public school buses. Custodial and maintenance staff receive annual training in the safe cleanup and disposal of chemicals and other potentially toxic materials. Heavier cleaning that uses chemicals that might be challenging for more sensitive persons, such as for carpeting, is done only during school breaks and summer when students and most staff are not present. There are no lead-based paints or finishing materials on the school campus. LAHS uses Green Seal Certified cleaning products whenever possible.
- All classrooms have sufficient natural light for instruction. With over 150 trees in the instructional areas of the entire 29.5 acres campus, all classrooms have views of trees, plantings, and other natural elements. All classrooms, the gym, and theater have acoustic ceiling tiles. All classrooms exceed minimum outdoor air exchange either via LAHS' HVAC systems or with operable doors and windows.
- LAHS exceeds Title 24 requirement to have air circulated by HVAC every hour; air is re-circulated every 14 minutes. Fume hoods in science classrooms ensure that major airborne contaminant sources are quickly disposed of. Ventilation systems are cleaned regularly and proper operation is monitored by the LAHS Facilities Manager.
- Green Seal has held virtual events such as "Asthma in Schools: Prevention Through Green Cleaning" to explicitly address how their products minimize asthmagens. In addition, the No-Idling campaign around the school seeks to limit greenhouse gasses in the environment.
- Installed HVAC systems at LAHS reduce ambient moisture. Potential external leak areas are inspected and sealed immediately. Kitchen staff ensure that no moisture collects on kitchen surfaces. Custodians ensure that no moisture remains in bathrooms, science labs, locker rooms, etc. Mold hasn't been a problem at LAHS.
- All drinking water at LAHS is provided by the school's local water retailer, Cal Water, which procures its water from the Santa Clara Valley Water District. LAHS has seven Elkay brand bottle filling stations for students and staff, with built-in water purification providing filtered and chilled water.

Element IIB: Nutrition and Fitness

- The LAHS cafeteria provides a vegetarian choice daily and exclusively on no-meat Mondays. The District Food Services Manager buys locally-produced foods from wholesaler Bella Fresca Foods. LAHS also has an outdoor campus Pizza Cart staffed by volunteer parents that serves pizza slices (whole wheat crust, low fat cheese).
- LAHS provides information to staff, parents, and students on nutrition education during health classes (graduation requirement) and on their website. Both the online health program and the in-person health course include instruction on beneficial health practices, including healthy diets and the impact of food on physical and mental health. Physical Education courses also emphasize healthy eating through activities and short lectures.
- Invited guest speakers to LAHS include Kerry Billner, Coordinator, Food & Nutrition (Nor Cal); Caroline Lafleur, co-founder of a plant-based burger startup; and Sneha

Parab, who works with start-ups and CPG leaders of plant-based food products. The Humane Society has provided a table display of healthy vegetarian choices, recipe books, and literature in both Spanish and English.

- The primary garden space at LAHS was consumed by the school's recent construction project. The vegetable garden was tended by several student groups: The Garden Club made salads and pesto from the harvest, for club fundraising. A biology student group tended the garden; a curriculum section focused on sustainable organic gardening and compost creation. UC Extension Master Gardeners helped the group. Green Team students replenished the soil with school-created compost from the onsite barrel composter and planted winter vegetables. Since the displacement of the garden, the principal has supported placing new beds in a separate location at no cost to the students or school. The LAHS Green Team students led a parallel project to turn unused raised beds outside the science building into a native plant school garden. Plans were approved by the principal before operations were stopped by the pandemic. Native plants have been chosen, and project members will start again when COVID-19 restrictions are lifted. The beds are in close proximity to the science building and track for easy access and integration with the school community.
- Freshman are required to take a PE class, totaling 225 minutes of supervised physical education weekly. Sophomores are also required to take physical education, unless they are participating in an afterschool sport. Approximately 50% of all students participate in a JV or varsity sports team. New and unique classes offered at LAHS that provide physical education and PE credits include Jazz Dance, Advanced Jazz Dance, and Yoga. All PE classes teach mindfulness bi-weekly to foster stress management strategies.
- LAHS promotes proper hydration by providing incoming Freshmen with a reusable water bottle. All students are encouraged to bring their own refillable bottles to take advantage of the seven campus Elkay bottle refill water fountains which provide chilled, filtered water. Marching Band students have quart-size reusable water bottles and bring refill containers.
- The GGSC assists athletic team and marching band parents in organizing sports team dinners to reduce waste, compost, and recycle properly. GGSC provides reusable utensils, which are washed and returned by team and band parents.
- The LAHS Student Services Coordinator, the school's Wellness Innovation Team, Student Community Leadership (SCL), and the Associated Student Body (ASB), all develop programs and activities to support student mental, emotional, and physical health, including but not limited to: stress reduction activities, including "therapy" animals on campus before and during finals week; school-wide presentations on consent and respectful sexual behaviors, sleep, hygiene, and anxiety/stress; showing of the film "Angst" with related training/classroom activities; Gifts of Gratitude allow students to send school-facilitated/purchased gifts to one another; Teacher Appreciation, in which students send cards, small gifts, baskets; Student Appreciation, in which teachers bring a nominated student to lunch.
- Clubs at LAHS extend outdoor experiences beyond formal physical education. Clubs like Spikeball Club, Ultimate Frisbee Club, LAHS Bike Club, LAHS Lift Club, and

Yoga Club build a culture of working out and create a space where individuals passionate about sports can play. These clubs meet 1-2 times a week and hold tournaments throughout the school year. LAHS Spikeball hosted a schoolwide tournament. LAHS Lift uses the gym to teach students of all backgrounds how to properly use weight equipment. Yoga Club teaches vinyasa yoga techniques.

- Other athletic and outdoor-related clubs that organize multi-hour events outside of school include Adventure Club, which provides LAHS students the regular opportunity to go hiking and camping together; Astronomy Club, which organizes frequent outings to gain a deeper understanding of the universe through astrophotography; Climate Justice Coalition, which organizes conservation efforts, outdoor activities, and protests to raise awareness about the state of the planet; Community Service Club, which provides LAHS students the various opportunities to give back to their community outside of school; LAHS Green Team, which organizes beach cleanups, habitat restoration events, tree-planting events, and various outdoor recreation activities open to the entire LAHS student body; Martial Arts/Self-Defense Club, which teaches students the art of defense; Rec4Kids, which lead weekend recreational activities to students at underserved schools; and Bicycle Repair Club, which helps repair bicycles in the community to facilitate more outdoor exercise and recreation. The Latino Students Union, the largest club at LAHS, participates in Latino Outdoors sponsored programs and hikes.
- LAHS has coordinated a Color Run since 2014 as an annual fundraising event that encourages students, staff, and community members to run outdoors and near the school. Attendees participate in the 5K Fun Run and outdoor activities that include an obstacle course, bouncy house and slides, hoppy ball races, and bike races.
- The LAHS Associated Student Body (ASB) regularly hosts outdoor activities on the quad, backfield, and turf. Weekly Friday activities are coordinated by the ASB Activities Commissioner, a long-standing part of LAHS tradition (since before 1990s). They often involve a game that incorporates physical activity to build LAHS community and help students take a mental break during the day. Examples include a mini-bike race, powder puff football, quidditch, softball throw, etc. Another regular activity hosted by ASB is Clash of the Classes, where classes compete for points through games and challenges. Nearly 500 students participate in this show of school spirit.
- More than 15 staff participate in the LAHS Staff Wellness Innovation Team. To facilitate conversation and study, the Team created a book club at which participants read and discuss a common text. Group members may volunteer to lead a few yoga postures or a guided meditation, and share other techniques and ideas for bringing mindfulness and well-being into the classroom. They also support the District Wellness team and its district-wide initiatives.
- The LAHS weight room, fitness center, tennis courts, and track are open to faculty and staff. Staff volunteer members lead morning workouts open to all faculty and staff. Two bikes are available for check-out to staff. Two LAHS teachers lead periodic Yoga Sessions and one PE teacher leads periodic HIIT sessions for other staff (since 2018).

- Sixty junior and senior students annually participate in the Positive Psychology elective class, which promotes healthy living, mindfulness, and channeling personal strength through exercise.
- The school's programs meet the eight-components of a Coordinated School Health approach including health education, health services, counseling, psychological and social services, nutrition, physical education/physical activity, school staff wellness, healthy school environment and student/parent/community involvement. Staff and student wellness are core items in the school's WASC Action Plan for 2019-2025, which comprehensively outlines the school's annual focus categories: Learning, Wellness and Community, Equity, Technology, Facilities, and Data. Parents and the community are involved in school health through site councils to review issues related to safety and health. Their efforts unite parents, students, staff, the Assistant Principal and Principal; accomplishments include cameras on-campus, more bike racks, and vape intervention.
- LAHS has partnered with the Community Health Awareness Council (CHAC) since 1995 to provide counseling and mental health support. The school has two full-time psychologists, three therapists, and a CHAC intake therapist. A Stanford psychologist has provided secondary assessments when appropriate for 6-7 years. In 2016, physician and mindfulness coach Dr. Amy Salesman, author of Still Quiet Place, provided a unique 8-week afterschool course on mindfulness to 25 enrolled teachers. LAHS has also partnered with Uplift Family Services since 2005. Services help children and family members recover from trauma such as abuse, severe neglect, addiction, and poverty. LAHS partners with Challenge Success, whose resources turn students' focus to becoming "resilient, ethical, and motivated learners," encouraging well-being and engagement.
- LAHS serves free meals two times a week on campus children 18 and younger. The food truck, Loaves and Fishes Family Kitchen, is available two times a week.
- Since 2017, LAHS works with the organization Challenge Day to host a day of purposeful games and discussion for all 9th graders. The event empowers students and inspires healthy peer-to-peer communication and respect. Topics discussed include discrimination, home life, and bullying, with a focus on inclusion and equity. Grades 10-12 attend similar Challenge Presentations.
- The Athletics department partners with Positive Coaching Alliance, a sports psychology organization focused on creating a positive, character-building youth sports environment. All coaches and athletes participate in annual training sessions.
- The Jumpstart Mentor Program is a peer mentoring program organized and run by Student Community Leadership (SCL). Under the direction of the SCL teacher, a freshman is paired with an upper-class mentor who regularly meets with them to promote an environment of inclusion and safety and help students navigate their transition into high school.

Pillar III: Provide Effective Environmental and Sustainability Education

Element IIIA: Interdisciplinary Learning

- Several courses at LAHS focus on environmental issues through the lens of their specific discipline. AP Environmental Science and Introductory Environmental Science classes direct students to interact with nature in their neighborhoods and on-campus, focusing on human impacts on the environment and solutions to environmental problems. In Biology and Biology Honors, students look at an ecological problem that has abiotic and biotic causes with ties to climate change and other human impacts. Students understand the acronym HIPPCO (Habitat Loss, Invasive Species, Pollution, Human Population, Climate Change and Overharvesting) and how humans can modify their behavior to help avoid the school's impacts on ecosystems. In AP Human Geography, a major theme focuses on current land use patterns vis-a-vis sustainability. Within the Economics course required of all seniors, there is a strong emphasis on those "externalities" of business transactions that impact the environment, e.g. climate change as a consequence of auto and other emissions, toxic dumps as a consequence of e-waste generated by "manufactured obsolescence."
- The Engineering and Design STEAM department is an innovative and unique program that integrates environmental and sustainability concepts across its curriculum. In Physics classes, energy science is taught and analyzed. Students learn about biomes in Environmental Science. Biodiversity and plant science are taught in Biology, and carbon capture is taught in Chemistry classes. All Chemistry teachers adhere to the 12 Principles of Green Chemistry.
- The LAHS PTSA Go Green Committee (GGSC) has hosted speakers during STEAM Week for the past 11 years, including speakers on environmental topics. Over 1,000 students hear scientists, university professors, medical and other experts in large assemblies and in classrooms during Student Choice Day.
- LAHS has a partnership with Canopy, an organization that plants trees in the local community, teaches care of trees, and holds public lectures (now on Zoom), such as tree selection in this time of climate change in their area. Canopy Education has offered Wellness Tree Walks of the LAHS campus to the Health Class, Freshman Environmental Science Classes, and any other interested classes.
- Since 2015, LAHS has partnered with the Surfrider Foundation of San Mateo and Santa Cruz Counties for beach clean ups, and with Grass Roots Ecology Organization for habitat restoration at Arastradero Preserve and Redwood Grove Park.
- LAHS offers several field trips that give real-world examples of environmental issues. The AP Biology class has hosted an annual half-day kayaking field trip to the Elkhorn Slough since 2018. Students kayak in the Elkhorn Slough National Estuarine Research Reserve and hike the trails followed by staff-led sessions in the Reserve's microscopy lab. Staff lead students in analyzing microorganisms and illustrating efforts to combat eutrophication and pollution of the slough. The AP Biology class travels to Año Nuevo, to observe specific elephant seal behaviors,

sexual dimorphism, and genetic bottlenecks that tie in to the natural history of Año Nuevo. Other science classes have spent time outdoors during field trips to the tide pools in San Mateo County, and the AP Environmental Science and Biotech classes have conducted joint field trips to nearby Stevens Creek County Park. There, students study oxygen levels, pH, species and plant diversity, turbidity, and other environmental water qualities. Students collect bugs to later sequence their DNA using a polymerase chain reaction (PCR).

- LAHS Health Class and National Honor Society Club(NHS) fulfil service learning requirements by planting trees with Mountain View Trees, volunteering for habitat restoration with Acterra and Grass Roots Ecology, helping at the Electric Auto Association Silicon Valley booth for National Drive Electric Week at DeAnza College, and volunteering to assist Green Town Los Altos at numerous events, such as Bike Valets, tabling, and environmental talks at the public library.
- The Los Altos NHS club members work on chapter projects. In 2019, the outreach commissioner of NHS incorporated Grassroots Ecology's habitat restorations. 11th and 12th graders in NHS have the opportunity to remove invasive plants and reduce erosion in locations around the Bay Area, including Foothills Park, Arastradero Preserve, and Byrne Preserve.
- LAHS invited the Alliance for Climate Education (A.C.E) to give their presentation on the causes, consequences, and solutions to global warming to all students during History Week 2016.
- PowerFlex Systems, CEO George Lee, Cal Tech PhD, has an ongoing commitment to visit physics, APES, and Engineering and Design classes to teach a unit on the various EV Charging Stations in the Solar Panel Canopy parking lot.
- The AP Environmental Science class uses grounds and buildings on campus to do research and class assignments and learn the actions the school has taken to become more sustainable. This includes a tour of the campus LEED Gold building and studying the United States Green Building Council guidelines for certification.

Element IIIB: STEM Content, Knowledge, and Skills

- In the LAHS Innovative Design Essentials Class, one project researched how to improve composting and recycling practices on campus. In this semester-long project, students applied design thinking to create solutions to a problem. Some students worked on signage and advertising to improve students' understanding of what goes into each bin, and others created solutions to prevent birds from pulling trash out of the bins.
- Sustainability and the environment are used as a context in learning topics in various science courses and other departments. The Chemistry courses at LAHS complete an annual BioDiesel project. Students use various types of used and unused oil to determine the greatest energy yield. They learn about resource conservation and switching to a natural substitute instead of using nonrenewable fuels.
- Each October since 2008, LAHS hosts a STEAM Week, inviting prominent Silicon Valley Company experts and University speakers to address students in each period from Science, Math, Computer Science, and Engineering classes in the school's

auditorium. In addition, a Student Choice Day allows students to attend sessions from between 14 to 18 speakers, many of whom have an environmental or sustainability focus in their careers. Past speakers for STEAM Week include Professor Margot Gerritsen on “Energy from Ocean Waves and Currents,” Professor Mark Z. Jacobson on “Alternative Energy at the Present and for the Future,” and Professor Steve Palumbi on “Effects of Global Warming on Ocean Corals and Solutions.”

- The Advanced Scientific Investigations (ASI) course at LAHS allows students to select and research a very specific topic, with a mentor in academia or private industry. In 2019, one student analyzed aquaponics systems and another studied how to mitigate the red tide algal effect. In 2018, a student chose a battery research topic. Most recently, a student is investigating Cutinase-Hydrophobin Interplay: Mutating cutinase active site to enhance the biodegradation of polyethylene terephthalate (plastic).
- In 2019, Chemistry Honors developed a carbon capture technology lab for classes. For three weeks, 120 students learned about pioneering carbon technology and were able to experiment with it firsthand. Chemistry Honors students explored the chemistry of growing and developing crystal structures that have the capability to capture and release carbon. Students learned about climate change and its environmental consequences, and were able to gain hands-on experience with a possible technological solution to this environmental crisis.

Element IIIC: Civic Knowledge and Skills

- Students founded the LAHS Green Team in 2003 with a mission to promote environmental responsibility and sustainability to all LAHS students and the local community through projects and events. The Green Team has a unique partnership with the Green Town Los Altos, a citizens’ sustainability group. Recent partnership achievements include an anti-idling campaign and an e-waste collection event for residents of Los Altos and Mountain View.
- The Green Team student club works diligently to educate students on how they can be more sustainable in school and at home. Green Team members make weekly audio and video announcements with “Green Tips,” and promote clean transportation by inviting electric vehicle owners to display their cars in the quad and educate students on their benefits. Green Team also sponsors Earth Week activities each April, with environmental, sustainability, and conservation themes.
- Green Team members take leadership in individual projects. For example, the two National Drive Electric Week Chairs created three days of online activities, video and information sessions, and an electric vehicle online Kahoot quiz for sustainable prizes. Past projects include: Buy Better Boba which successfully banned plastic boba straw use for all future school boba fundraisers substituting compostable bamboo straws, the 2019 Herbicide Research Co-Chairs found cancer-causing herbicides included in grounds management guidelines and spent ten months researching alternatives and also partnering with other school districts as well as UCANR Master Gardeners. The co-chairs persuaded a district administrator to ban listed harmful herbicides and consider using one of the alternative products. Green

Team members successfully lobbied the district board to pass a District Climate Resolution.

- The Biomimicry Club, Sustainable Living Club, Bee Club, and Ocean Preservation Club also draw attention to environmental issues through on-campus meetings.
- Officers and members of the LAHS Green Team in grades 9-12 have spoken with PowerPoint presentations at City Council meetings to implement city regulations for banning polystyrene; banning single use plastic bags, while encouraging reusable bag use; banning vehicle idling; adopting all electric new building codes (Reach Codes); and other environmental initiatives.
- The Skip the Straw Program implemented at Los Altos restaurants was started by LAHS student Ananya Venkatraman in conjunction with Margie Suozzo, former Chair, GGSC, and current head of the Waste Reduction Committee for Green Town Los Altos.
- LAHS does not serve straws. The GGSC encourages the elimination of plastic forks and utensils by supplying Music and Athletic Boosters with over 150 sets of metal utensils for student campus and team food events.
- LAHS students study phenology—the study of timing and sequences in biology—and the use of dichotomous keys through outdoor learning in Biology and Biology Honors classes. Students study leaf and tree structures using the diverse trees and plants on campus as their source of study. Students in these classes spend several days examining the plant and tree life on campus.
- LAHS also worked with the Environmental Commission of Los Altos by participating in their Envirothon Competition and winning grants to implement educational units for elementary students. LAHS has partnered with the Bay Area Air Quality Management District (BAAQMD) for over five years, receiving grants for increasing the number of bike racks during three of those years. Bicycle riders now total almost 600 students. LAHS also partners with BAAQMD to post notifications regarding Spare the Air Days and appropriate behaviors to the entire school staff.
- Green Team members have participated in BAAQMD-sponsored Youth for Environment and Sustainability for several years to discuss topics ranging from climate change and public health to transportation and air pollution. Students present their club projects and gather ideas from other conference workshops.
- In 2010, the LAHS GGSC Chair partnered with Los Altos and Mountain View K-12 Schools and Foothill College to host a Green School Summit at the LAHS Eagle Theater featuring presentations spotlight the top environmental actions taken at different campuses. The event was attended by superintendents of neighboring school districts, the general public, parents, teachers, administrators, and students.
- Since 2008, the STEM Committee at LAHS has partnered with local high-tech companies and universities such as Hyundai Research, Google, Stanford University, San Jose State University, Santa Clara University, San Francisco State University, UC Berkeley, and more to provide speakers at the Annual STEAM Week.
- The LAHS Green Team hosts an annual Students for Green High Schools Conference, organized by and for school environmental clubs and organizations from across the San Francisco Bay Area. In 2019, more than 120 students from

nearly 30 schools and organizations participated to discuss, display, share and brainstorm environmental initiatives. Conference partners include Google (2013 to 2017) and Samsung (2019).