LEED FOR CITIES CERTIFICATION

A Report on Sustainability

June 2020

City of Santa Fe
Environmental Services Division

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EXECUTIVE SUMMARY

In 2020, the U.S. Green Building Council (USGBC) awarded the City of Santa Fe with LEED® Gold Certification for its exceptional performance in fostering a sustainable, resilient city. LEED (Leadership in Energy and Environmental Design) is the most widely used rating system in the world for sustainability achievement and leadership. Santa Fe joins a global network of more than 100 LEED certified cities and communities. This certification recognizes the hard work of the people of Santa Fe, City of Santa Fe employees, businesses, and nonprofit organizations to make Santa Fe one of the best places in the world to live.

Santa Fe was rated on its performance under LEED v4.1 in key sustainability metrics that include energy, water, waste, transportation, education, health, safety, prosperity and equitability and was awarded 62 out of 110 possible points. The rating applies to everything within city limits, not only City operations. The City of Santa Fe demonstrated exceptional performance in the Natural Systems and Ecology and Energy and Greenhouse Gas Emissions categories, achieving all possible points in the Energy and Greenhouse Gas Performance prerequisite. All possible points were also awarded for innovative practices and focusing on actions that are a priority in the Southwest such as water conservation.

The LEED certification provides a gap analysis to enable improved implementation of the Sustainable Santa Fe 25-Year Plan. It provides specific, quantifiable goals, to complement the broad, visionary goals of the plan. As the City continues implementation of the plan, it will see an increase in its LEED certification level. This enables the City to track its progress in implementation of its sustainability goals.

This project was managed by the Environmental Services Division under the direction of Katherine Mortimer, Sustainability Supervisor, and Neal Denton, Sustainability Planner. Project support was provided the Land Use Department, Metropolitan Planning Organization, Office of Affordable Housing, Office of Economic Development, Office of Emergency Management, Office of Water Conservation, Parks and Recreation Department, and Public Works Department. Data and other information were submitted by the Public Service Company of New Mexico (PNM), New Mexico Gas Company, New Mexico Motor Vehicle Division, Mid-Region Council of Governments, Santa Fe Solid Waste Management Agency, and Santa Fe Public Schools. The certification was made possible by a 2019 grant from Bank of America that was awarded by USGBC to fifteen cities and communities. The grant provided financial assistance, educational resources, and technical support.

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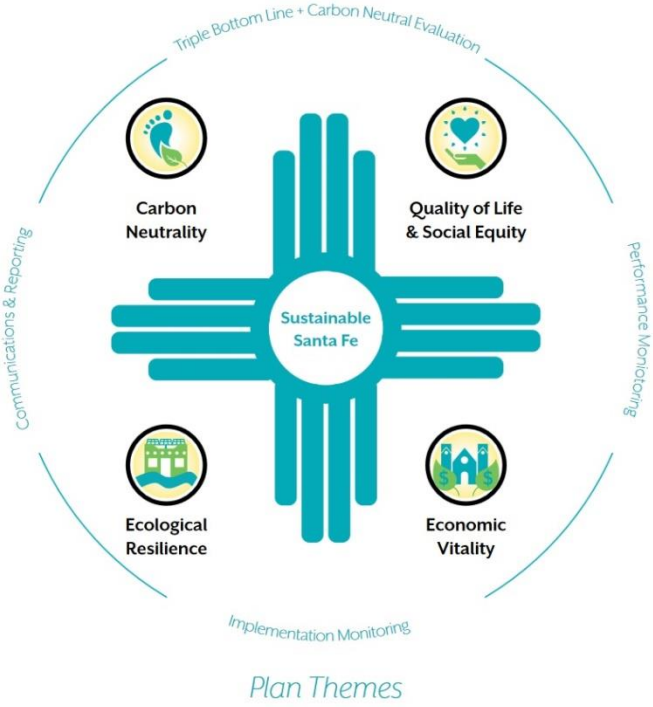
INTRODUCTION

The City of Santa Fe was one of 15 cities and communities selected for the 2019 LEED for Cities and Communities Grant Program, created by USGBC and Bank of America. The grant provides financial assistance, educational resources and technical support throughout the certification process. The participants are the first to test LEED v4.1 and are providing valuable feedback to USGBC on the rating system. The City of Santa Fe joins more than 100 cities and communities globally that have already been certified. In 2018, STAR (Sustainability, Tracking, Assessment, and Rating) Communities was merged with USGBC to form the LEED for Cities and Communities Program. STAR certified communities were allowed to pre-certify under LEED.

LEED for Cities and Communities is a new way forward for resilient, green, inclusive, and smart cities. It provides a globally consistent way to measure and communicate performance. The rating system encompasses sustainability and much more—quality of life, health, prosperity, equity, education, resilience, infrastructure, and energy—and helps a city demonstrate its commitment to its citizens. Cities are scored on their performance in six categories: Natural Systems and Ecology, Transportation and Land Use, Water Efficiency, Energy and Greenhouse Gas Emissions, Materials and Resources and Quality of Life. Additional points are awarded by achieving credits in each category with ten points available for innovative approaches and projects that are a priority for the region such as drought mitigation in the southwest. One of four levels of certification is achieved: LEED Certified (40-49 points), Silver (50-59 points), Gold (60-79 points), and Platinum (80+ points).

SUSTAINABLE SANTA FE 25-YEAR PLAN

The Sustainable Santa Fe 25-Year Plan, approved by the City of Santa Fe Governing Body in 2018, established strategies for a thriving community where climate impacts are neutralized, natural resources are abundant and clean, and sustainable economic activity is generated through enhancing social equity and the regenerative capacity of the environment. The plan; developed by a citizen-led commission, City staff, and other community members; established 91 strategies to achieve carbon neutrality, improve quality of life and social equity, enhance ecological resilience, and strengthen the economy.



The LEED for Cities and Communities metrics closely mirror the strategies in the plan. The certification provides a gap analysis to improve implementation of the plan and specific, quantifiable goals, to complement the broad, visionary goals of the plan. It tells us where we are, so we can better understand where we should go.

Providing a numeric score for sustainability efforts enables the City to better track its progress in implementation of its sustainability goals. The metrics included in the LEED certification were developed by subject-matter-experts around the world who have seen these strategies result in meaningful change in communities. Using the LEED certification also shows that the Sustainable Santa Fe 25-Year Plan strategies are aligned with best practices worldwide.

The City expects to apply for recertification in 2025. As the City continues implementation of the plan, it hopes to increase to a LEED Platinum certification. Throughout this report, the reader will find a “Roadmap for Recertification” section. This roadmap details what is needed to obtain more points and how those tasks overlap with the Sustainable Santa Fe 25-Year Plan.

LEED PROJECT TEAM

This project was managed by the City of Santa Fe Environmental Services Division under the direction of Katherine Mortimer, Sustainability Supervisor, and Neal Denton, Sustainability Planner. Project support was provided by the City of Santa Fe CORE 40 Team (Carbon Offset, Reduction, and Elimination by 2040). The CORE 40 Teams served as the LEED Project Team.

The CORE 40 Team consists of City employees across departments who have contributed to development of the Sustainable Santa Fe 25-Year Plan and continue to collaborate on interdepartmental sustainability initiatives. These individuals have contributed greatly to the LEED for Cities certification. The CORE 40 Team assessed the existing status of the City against the LEED prerequisite and credit requirements to develop a gap analysis report and a strategic roadmap for the City to achieve the goals set out under the LEED for Cities and Communities Rating System. Project support was also provided by John Romero, Traffic Engineering Division Director; David Silver, former Emergency Management Director; Kyle Mason, current Emergency Management Director; and Porfirio Chavarria, Wildland-Urban Interface Specialist.

CORE 40 TEAM	
Erick Aune	Metropolitan Planning Organization Officer
Dalinda Bangert	Green Building Code Specialist
Jacqueline Beam	Affordable Housing Planner (former)
Elizabeth Camacho	Economic Development and Communications Administrator
Christine Chavez	Water Conservation Manager
Neal Denton	Sustainability Planner
Andrew Erdmann	Water Resource Coordinator
Carlos Gemora	Land Use Planner
Caryn Grosse	Facilities Project Administrator
Katherine Mortimer	Sustainability Supervisor
Melissa McDonald	River and Watershed Coordinator
Julie Sanchez	Interim Director of Youth and Family Services Division
Shirlene Sitton	Environmental Services Division Director
Richard Thompson	Parks Division Director
Regina Wheeler	Public Works Department Director
Keith Wilson	Santa Fe Trails Division Director of Administration and Grants

Table 1: City of Santa Fe Carbon Offset, Reduction, and Elimination by 2040 (CORE 40) Team

CERTIFICATION SCORECARD

The City of Santa Fe has achieved LEED Gold certification for achieving 62 out of 110 possible points. The highest scoring categories are Natural Systems and Ecology and Energy and Greenhouse Gas Emissions. The City received a perfect score in the energy and greenhouse gas emissions prerequisite, and all possible points were awarded for innovative practices and focusing on actions that are a priority in the Southwest such as water conservation. A description of points awarded for each category follows.

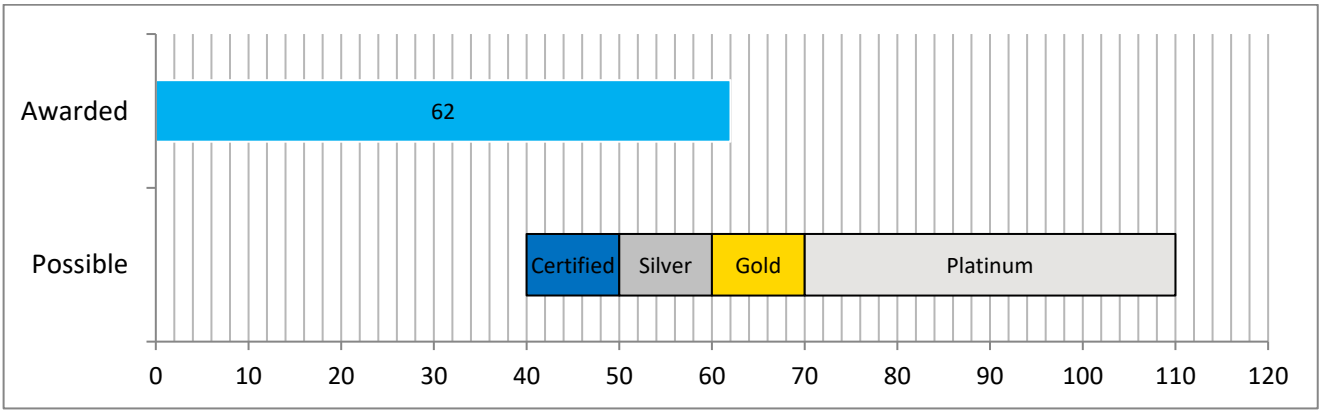


Figure 1: Awarded and Possible Points

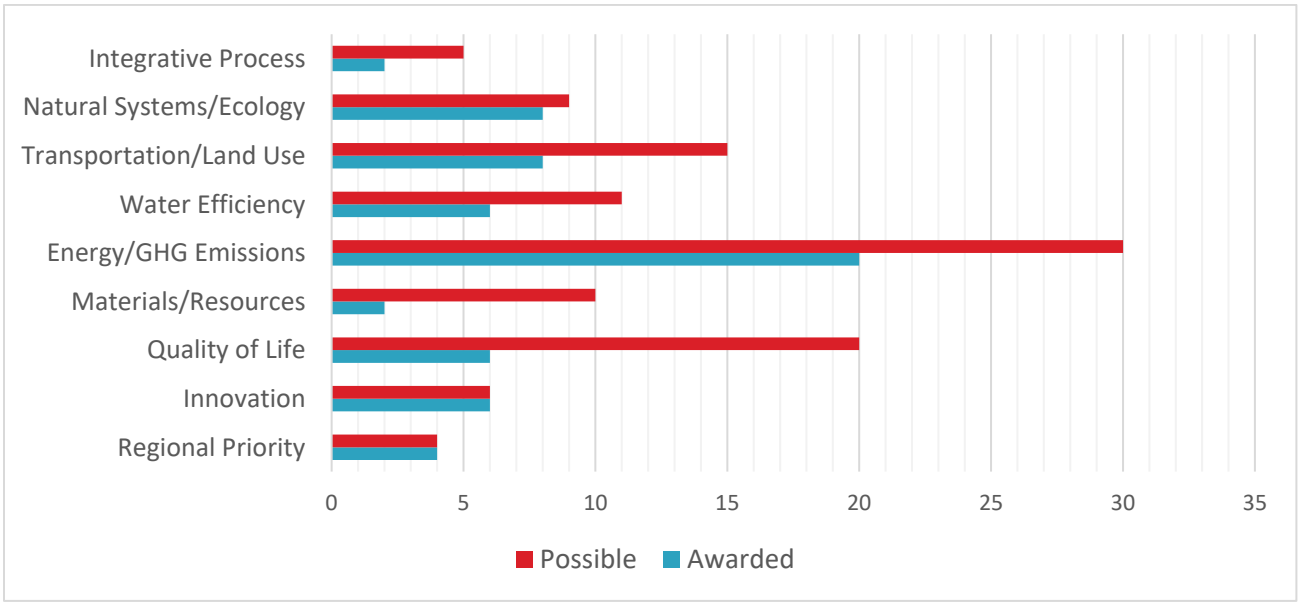


Figure 2: Possible and Awarded Points by Credit Category

CERTIFICATION SCORECARD		Awarded	Possible
INTEGRATIVE PROCESS			
Credit	Integrative Planning and Leadership	1	1
Credit	Green Building Policy and Incentives	1	4
	TOTAL	2	5
NATURAL SYSTEMS AND ECOLOGY			
Prerequisite	Ecosystem Assessment		REQUIRED
Credit	Green Spaces	2	2
Credit	Natural Resources Conservation and Restoration	2	2
Credit	Light Pollution Reduction	0	1
Credit	Resilience Planning	4	4
	TOTAL	8	9
TRANSPORTATION AND LAND USE			
Prerequisite	Transportation Performance	5	6
Credit	Compact, Mixed Use and Transit Oriented Development	0	2
Credit	Access to Quality Transit	1	1
Credit	Alternative Fuel Vehicles	0	2
Credit	Smart Mobility and Transportation Policy	0	2
Credit	High-Priority Site	2	2
	TOTAL	8	15
WATER EFFICIENCY			
Prerequisite	Water Access and Quality		REQUIRED
Prerequisite	Water Performance	3	6
Credit	Integrated Water Management	0	1
Credit	Stormwater Management	2	2
Credit	Smart Water Systems	1	2
	TOTAL	6	11
ENERGY AND GREENHOUSE GAS EMISSIONS			
Prerequisite	Power Access, Reliability and Resiliency		REQUIRED
Prerequisite	Energy and Greenhouse Gas Emissions Performance	14	14
Credit	Energy Efficiency	0	4
Credit	Renewable Energy	0	6
Credit	Low Carbon Economy	4	4
Credit	Grid Harmonization	2	2
	TOTAL	20	30

MATERIALS AND RESOURCES			
Prerequisite	Solid Waste Management		REQUIRED
Prerequisite	Waste Performance	1	5
Credit	Special Waste Streams Management	1	1
Credit	Responsible Sourcing for Infrastructure	0	2
Credit	Material Recovery	0	1
Credit	Smart Waste Management Systems	0	2
	TOTAL	2	10

QUALITY OF LIFE			
Prerequisite	Demographic Assessment		REQUIRED
Prerequisite	Quality of Life Performance	4	6
Credit	Trend Improvements	1	4
Credit	Distributional Equity	1	4
Credit	Environmental Justice	0	1
Credit	Housing and Transportation Affordability	0	2
Credit	Civic and Community Engagement	0	2
Credit	Civil and Human Rights	0	1
	TOTAL	6	20

INNOVATION			
Credit	Innovation	6	6

REGIONAL PRIORITY			
Credit	Regional Priority	4	4

TOTAL		62	110

Performance Score

The City's performance was evaluated using Arc Skoru, a product of Green Business Certification Inc. used to measure performance, make improvements, and benchmark against other projects. The platform scores users on a scale of 0-90 across five categories - energy, water, waste, transportation, and human experience - and then provides users with an overall performance score. The scoring calculation is based on the performance of dozens of cities.

Most of the performance metrics are correlated to population. Information was submitted for 2015 through 2017. The 2017 American Community Survey was the most up-to-date information at the time of the certification application. The influx of workforce, tourists, and students were included in population counts.

The LEED for Cities and Communities program provided a population calculator to determine the total daily population based on the permanent population and daily visitors. For example, in 2017, an estimated 1,290,329 tourists visited Santa Fe. The population calculator makes this 3,535 people per day. As a result, the total population for 2015 was 90,531, compared to a permanent population of 83,395. The total population for 2016 was 90,794, compared to a permanent population of 83,811. The total population for 2017 was 91,178, compared to a permanent population of 84,256.

Figure 3: Performance Score in Arc Skoru

Category	Performance Reported to Arc Skoru
Transportation	Vehicle Miles Traveled: 25.5 miles/day/person
Water	Domestic Water Consumption: 75.55 gallons/person/day
Energy & GHG	Greenhouse Gas Emissions: 10.03 lbs CO_2e/person/ year
Waste	Municipal solid waste generated: 0.55 tons/person/year Municipal solid waste diverted: 23.21%
Human Experience / Quality of Life Category	
• Education	• Population with (at least) a High School Degree: 89.3% • Population with (at least) a Bachelor's Degree: 40.4%
• Equitability	• Median Gross Rent as % of Household Income: 30.9% • Gini Coefficient: 0.46
• Prosperity	• Median Household Income: $57,022/year • Unemployment Rate: 4.9%
• Health & Safety	• Median Air Quality Index (AQI): 44 • Air Quality Days Unhealthy for Sensitive Groups: 0 • Violent Crime: 0.0035/person/year

Table 2: Performance Reported to Ark Skoru

INTEGRATIVE PROCESS

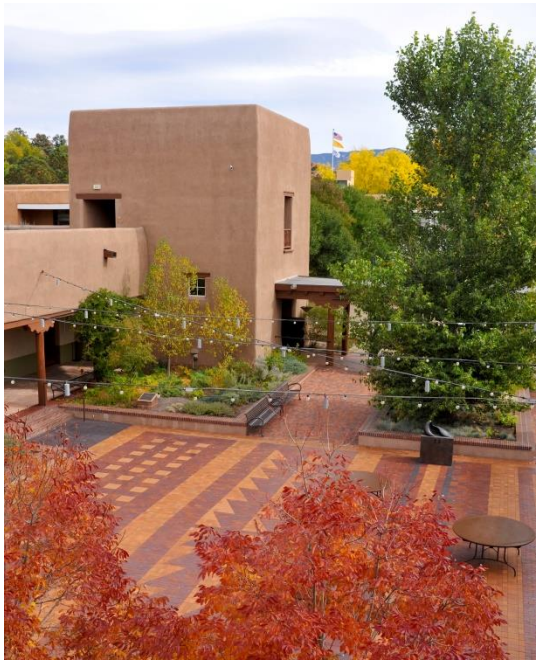
This rating system has two credits for integrative process in the context of green buildings. The first one intends to drive an inclusive process in city planning, while the other ensures that a majority of buildings in the city are green and sustainable by design.

Credit: Integrative Planning and Leadership *Awarded*

This credit supports high-performance, cost-effective outcomes through an early analysis of the interrelationships among city systems. It facilitates teamwork for early analysis of city systems to derive cost effective, high performance outcomes. The City of Santa Fe achieved this credit by forming a LEED for Cities Project Team, developing a LEED for Cities certification roadmap, and having a comprehensive plan that includes a vision, mission, key goals, and objectives for the City: The Sustainable Santa Fe 25-Year Plan

Credit: Green Building Policy and Incentives *Awarded*

This credit encourages the design, construction, and retrofit of buildings using green building practices. Buildings are primary constituents of any city that can contribute to higher energy and water consumption, and higher waste generation, which could lead to environmental degradation, if not designed and operated sustainably. The design and operation of green buildings support environmental, social and economic goals of a city. This credit thus encourages cities to introduce policies, incentives and programs to encourage design construction and operation of green buildings certified to LEED, or any other equivalent green building rating system, as an overarching credit.



The City of Santa Fe was awarded one point for tracking energy usage in its significant buildings with Energy Star Portfolio Manager. These 35 buildings comprise 84% of city-owned buildings over 5,000 square feet. This building performance disclosure began in 2016 when the City of Santa Fe was awarded a US Department of Energy Better Buildings Challenge grant. Data are updated monthly as bills are received.

Roadmap to Recertification

- *An additional two points may be achieved for certifying more than 50% of City owned/operated buildings larger than 5,000 ft^2 with LEED or an equivalent green building system and adopting a policy for all new City buildings to achieve such a certification. One point may be achieved for certifying more than 25%.*
    - *Strategy BE3 of the Sustainable Santa Fe 25-Year Plan calls for supporting the development of a commercial green building code and retrofit program by extending its application to City buildings.*
- *An additional two points may be achieved by providing a minimum of two incentives for LEED or an equivalent green building rating system in the City.*
    - *Strategy BE2 of the Sustainable Santa Fe 25-Year Plan calls for expanding the City's green building code to other building types and developing incentives to transition to net zero emission buildings.*

- *An additional point may be achieved by adopting a program that requires disclosure of energy data from all privately owned nonresidential or multi-family buildings with a gross area of more than 20,000 ft^2, excluding parking.*
    - *Strategy BE4 of the Sustainable Santa Fe 25-Year Plan calls for developing a building performance reporting pilot project.*

NATURAL SYSTEMS AND ECOLOGY

Cities depend on nature and ecosystem services to not only sustain life, but also to enhance the quality of life. Healthy ecosystems enhance community resilience and improve a city's ability to withstand and recover from episodic floods, droughts, wildfires, and other catastrophic events.

Prerequisite: Ecosystem Assessment

This prerequisite assesses existing ecosystem conditions and services provided by ecosystems, built landscapes, and other open spaces to inform the city development along with conservation and restoration efforts. The City achieved this prerequisite by developing an ecosystem assessment report, below, and describing how the findings of the ecosystem assessment have informed planning and design. The assessment includes topography, soils, vegetation, habitat, hydrology, and aquatic ecosystems.

<u>Ecosystem Assessment Report</u>

At an elevation of 7,000 feet, Santa Fe is located at the bottom of the Sangre de Cristo mountain chain within the valley of the Santa Fe River. The city's topography slopes from the highest points near the mountains on the northeast to the lower elevations on the southwest end of town. Santa Fe is mostly semi-arid steppe. The majority of Santa Fe is classified as "Developed and Other Human Use." Other ecosystems in Santa Fe are "Forest and Woodland" and "Desert," and "Semi-Desert."

The four predominant soil groups are characterized as Groups A-D. Group A is sand, loamy sand or sandy loam types of soils. It has low runoff potential and high infiltration rates even when thoroughly wetted. It consists chiefly of deep, well to excessively well-drained sands or gravels, and have a high rate of water transmission. Group B is silt loam or loam. It has a moderate infiltration rate when thoroughly wetted and consists chiefly or moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. Group C soils are sandy clay loam. They have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine structure. Group D soils are clay loam, silty clay loam, sandy clay, silty clay or clay. This soil group has the highest runoff potential. It has very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high-water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material.

Santa Fe contains over 5,000 acres of parks and open spaces. Primary vegetation types include Blue Grama, Pinon Pine, Juniper, Ponderosa Pine, and mixed conifers. The top three threatened species are Holy Ghost ipomopsis, *Ipomopsis sancti-spiritus,* Santa Fe cholla, *Cylindropunti viridiflora,* and wood lily, *Lilium philadelphicum.* The top invasive plant species are Russian olive, *Elaeagnus angustifolia,* salt cedar, *Tamarix spp.* and Siberian elm, *Ulmus pumila*. The cedar, or tamarisk, is a riparian species that has taken hold along rivers and creeks all over the southwest. The olive and elm are spread throughout the city, both in urban plantings and invading natural settings. No endangered or threatened animal species are known to exist in Santa Fe.

The rivers, arroyos, and acequias (ancient human-made irrigation system ditches) are mostly ephemeral, carrying water only when there is a significant precipitation event or very heavy snow melt from the Sangre de Cristo mountains to the north. Lastly, we have three main sources of drinking water: the Rio Grande River, through the Buckman Direct Diversion Water Treatment Plant; groundwater, through water wells; and fresh surface water from the Sangre de Christos. We have two reservoirs, Nichols and McClure, and that water is treated at the Canyon Road Water Treatment Plant.

Credit: Green Spaces *Awarded*

This credit is awarded for providing accessible green spaces to positively impact physical, mental and psychological health and well-being of the community while also enhancing the environmental quality of the city. Cities must offer at least 145 ft^2 of green space per person, have at least 7,212 ft^2 of total green space, and have green space within half a mile of 75% of residences. Green space is defined as land that is partly or completely covered with trees, shrubs, grass or other vegetation. It includes urban parks, trails and community gardens. It does not include schoolyards, playgrounds, public seating areas, public plazas, or vacant lots. The City of Santa Fe has 2,645 ft^2 of green space per person and 219,847,992 ft^2 of total green space. Ninety percent of residences are within half a mile of green spaces.

Credit: Natural Resource Conservation and Restoration *Awarded*

This credit is awarded for conserving and restoring the natural resources within a city. Cities must offer at least 861 ft^2 of natural resources per person. Natural resource areas include but are not limited to critical aquifer recharge areas; deserts and arid lands; fish or wildlife habitat, natural deltas or floodplains, steep slopes, natural parkland, forests, geologically hazardous areas, grasslands and prairies, habitats of endangered and threatened species, shorelines and their buffers, streams and their buffers and wetlands. Green spaces are included. The City of Santa Fe offers 1,186 ft^2 per person.

Credit: Light Pollution Reduction *Denied*

The credit is awarded for minimizing and managing ambient light levels to protect public health and the integrity of ecological systems and increase the night sky access, improve nighttime visibility, and reduce the consequences of development for wildlife and people.

Roadmap to Recertification

- *One point may be achieved by demonstrating a minimum of 70% of street lighting meets the requirements of the Glare and Sky Glow requirements of ANSI/IESNA RP-8-14 Roadway Lighting and adopting a lighting ordinance that conforms to Section II to VI of the Model Lighting Ordinance 2011 developed by the International Dark Sky Association and the Illuminating Engineering Society. Santa Fe City Code Section 14-8.9 complies with this ordinance, and the City is in the process of upgrading its street lights to comply with these requirements. The work must be completed for the credit to be awarded.*

Credit: Resilience Planning *Awarded*

This credit is awarded for strengthening the resilience of communities to climate change risks, natural and man-made hazards, and extreme events. Resilience planning requires the city to generate awareness about climate risks and build strategies to effectively tolerate disturbances when faced with shocks and stresses. It also encourages cities to carry out comprehensive climate risk assessments and prepare resilience plans. The City of Santa Fe was awarded this credit due to resilience elements of the Hazard Mitigation Plan, Sustainable Santa Fe 25-Year Plan, and the Stormwater Management Strategic Plan.

TRANSPORTATION AND LAND USE

Transportation is responsible for 40% of the greenhouse gas emissions in Santa Fe. Land use is the key driver of mobility in a city, and rapid urbanization has disrupted land use patterns, resulting in urban sprawl and increased dependency on personal, motorized vehicles. This credit category encourages cities to adopt an integrated approach towards urban planning through mixed-use development, efficient transportation, better connectivity, and engagement with stakeholders.

Credit: Compact, Mixed Use, and Transit Oriented Development *Not Attempted*

This credit is awarded for encouraging compact and mixed-use development with a high level of connectivity that encourages walking, biking, and transit use to discourage urban sprawl and improve public health.

Roadmap to Recertification:

- *Two points may be achieved if 70% of Santa Fe's population resides within a half mile walking distance of a central point that represents the strong mix of uses, public transit availability, density, and walkability. One point may be achieved if 40% of the population resides within such an area.*
    - *Strategy BE7 of the Sustainable Santa Fe 25-Year Plan calls for encouraging, incentivizing, and piloting development practices that result in higher residential densities, support a mix of uses and mixed incomes, provide access to education and wellness amenities, and prioritize location along major transportation corridors and development nodes.*

Credit: Access to Quality Transit *Awarded*

This credit is awarded for encouraging use of diverse transportation modes and offering strategies for comfort and safety of commuters in order to reduce the reliance on personal vehicles. It addresses intermodal connectivity for easy access and transition from one mode of transport to another. Although Santa Fe is largely car-dependent with the majority of the population driving alone to work, the City provides high quality intermodal connectivity at the Santa Fe Depot (Railyard), the Downtown Transit Center (Sheridan St.), and the South Capital Transit Center. This credit was awarded because these transit stations are connected to three or more modes of transportation.

Credit: Alternative Fuel Vehicles *Not Attempted*

This credit is awarded for reducing pollution by encouraging a shift to alternative fuel vehicles with infrastructure such as charging stations and through policies and incentives.

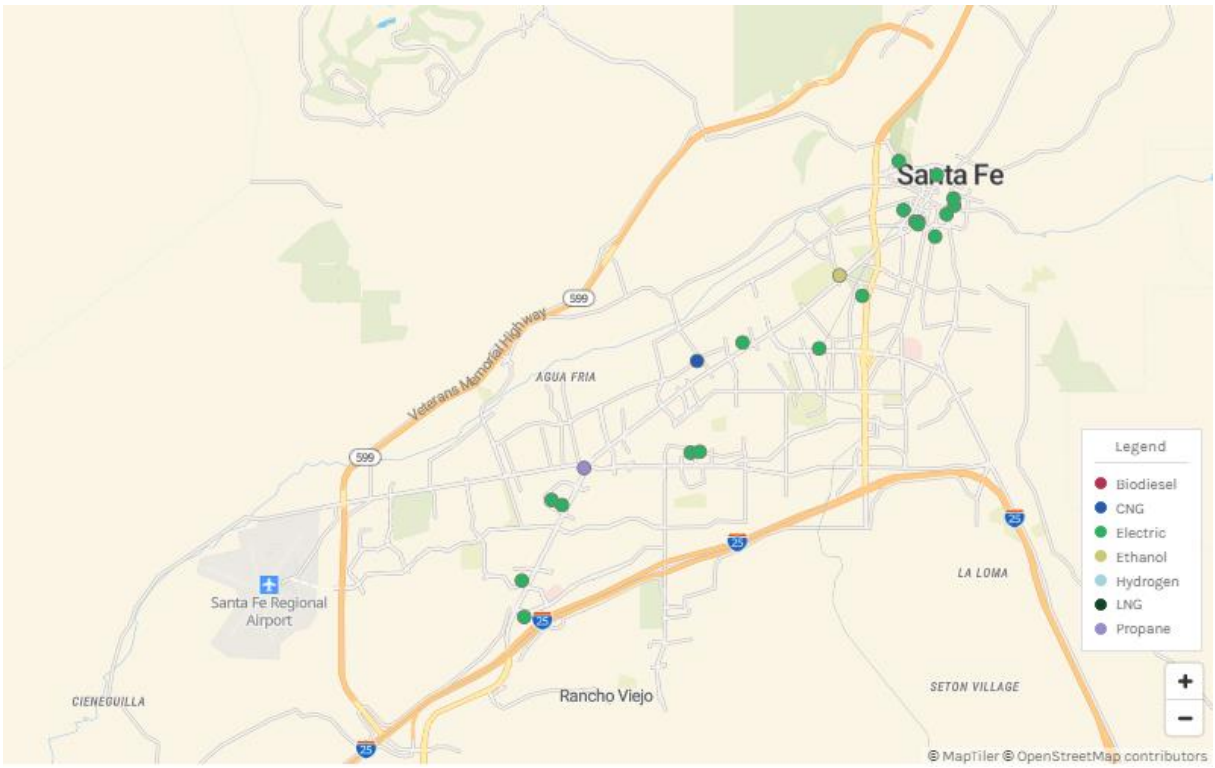


Figure 4: Alternative Fuel Stations in Santa Fe (Source: USDOE Alternative Fuels Data Center)

Roadmap to Recertification:

- *One point may be achieved for providing Level 2 electric vehicle charging stations in two percent of public parking spaces and demonstrating that the number of total charging stations exceeds 1.07 per 10,000 residents.*
    - *The total number of charging stations is 2.41 per 10,000 residents, but two percent of public parking spaces do not have Level 2 electric vehicle charging stations.*
    - *Strategy EN5 of the Sustainable Santa Fe 25-Year Plan calls for implementing the infrastructure needed to encourage an increase in electric vehicles through coordination and investment to install public charging stations.*
- *One point may be achieved for demonstrating that the total number of government and privately owned alternative fuel stations exceeds 1.51 per 10,000 residents or demonstrating compliance with a local or national policy for providing alternative fuel stations for all vehicles. Alternative fuel refers to hydrogen, propane, compressed natural gas, liquid natural gas, methanol, and ethanol.*
    - *The total number of government and privately owned alternative fuel stations is 0.22 per 10,000 residents. There are two in Santa Fe.*
    - *There is not a local or national policy for providing alternative fuel stations.*

Credit: Smart Mobility and Transportation Policy *Not Attempted*

This credit is awarded for promoting the efficient operation of transport systems, user facilitation, behavior change, and reduced environmental impacts through smart technologies and transportation policies.

Roadmap to Recertification:

- *Two points may be achieved by adopting any two of the following:*
  - *Passenger information system for 80% of all transit stations*
  - *Automated speed enforcement on 80% of roads*
  - *Traffic surveillance for 80% of the transit stations*
  - *Global position systems or general packet radio service in all public transit vehicles*
  - *Synchronization or prioritization of all signals on major roads to address varying traffic*
  - *Automated ticketing system for 80% of public transit systems and subsystems*
  - *Real-time parking management system for 80% of public and multi-level parking*
  - *Electronic toll collection system for all tolls booths and plazas*
  - *RFID technology for public transportation system*
    - *Strategies T7 and T9 in the Sustainable Santa Fe 25-Year Plan call for implementing technology service solutions for mobility and transportation and developing a "Smart Cities" plan to improve the transportation system.*

Credit: High Priority Site *Awarded*

This credit is awarded for preserving historic structures and sites and focusing growth and redevelopment to infill and other priority locations. A City promotes engagement, community development, and social and mental well-being by preserving and reviving its urban fabric. The City of Santa Fe achieved this credit because it maintains building inventories of historic and landmark buildings and requires approval for all exterior changes, ground disturbances, new construction, alterations, and demolition of structures within the historic districts.

WATER EFFICIENCY

Water is the lifeline of any city. However, equity and access have been a major challenge in many cities. Water demand has been constantly increasing in urban areas and is stressing freshwater reserves, creating a perennial shortage of water in these cities. This credit category addresses water at multiple levels – meeting demand, maintaining water quality, reducing water losses, capturing stormwater, and managing urban floods.

Prerequisite: Water Access and Quality

This prerequisite requires the implementation of policies and infrastructure for the equitable supply of clean and safe water to all members of society, along with the treatment of wastewater and stormwater before it is released into the environment. Ninety-seven percent of buildings in Santa Fe are connected to water and sanitation service, and the remainder have permitted wells and septic systems. The City is in compliance with federal regulations at its drinking water and wastewater facilities, and the Santa Fe City Code complies with federal regulations regarding stormwater pollution prevention.

Credit: Integrated Water Management *Not Attempted*

This credit is awarded for reducing freshwater consumption and encouraging the shift to a net zero water city, which means balancing the consumption of water resources and returning the same quantity back to the watershed so as not to deplete the resources of that region in quantity or quality.

Roadmap to Recertification:

- *One point may be achieved by demonstrating that the ratio of water withdrawals for human use to the total freshwater resources is less than 0.2.*
    - *The strategies in the Water Section of the Sustainable Santa Fe 25-Year Plan are designed to reduce water demand and increase groundwater infiltration. Implementation of these strategies will help achieve this credit.*

Credit: Stormwater Management — *Awarded*

This credit is awarded for reducing runoff volume, preventing erosion and flooding, and recharging groundwater by minimizing disturbed areas, preserving pre-development runoff conditions, limiting the amount of impervious cover, and infiltrating, storing, evaporating, or detaining rainwater runoff. The City of Santa Fe achieved this credit by demonstrating than more than 35% of the City drains to detention ponds sized to accommodate 100% of the 100-year storm for 24 hours and infiltrate within 24 hours. This has been required for all new impervious surfaces since the early 1990s.

Credit: Smart Water Systems — *Awarded*

The credit is awarded for improving operational efficiency, reducing water losses, and monitoring water flow through use of smart technologies such as smart meters. Considering many of the common challenges faced by utilities, including leak management, regulatory compliance, and customer service, utilities can improve performance by integrating systems in a manner that tracks and highlights specific problem areas. The City of Santa Fe achieved this point for completing a water audit that addresses smart metering; measures the amount of municipal water available and total water utilized from both municipal water supply and other sources; analyses causes for water losses, leaks, and infiltration; and identifies strategies for improving efficiency. Water audits must be performed annually for this credit to be achieved at recertification.

Roadmap to Recertification:

- *One point may be achieved for adopting strategies for automation of the water supply system for efficient operation and management by data collection, tracking, and monitoring of water supply network and conducting regular water audits.*

ENERGY AND GREENHOUSE GAS EMISSIONS

Cities consume over two-thirds of the world's energy and account for more than 70% of global CO_2 emissions. City energy systems can play a huge role in combating climate change. In addition, access to energy is critical in determining the quality of life of residents. This credit category encourages cities to provide equitable access to reliable power while simultaneously reducing the adverse impacts of energy use on environment.

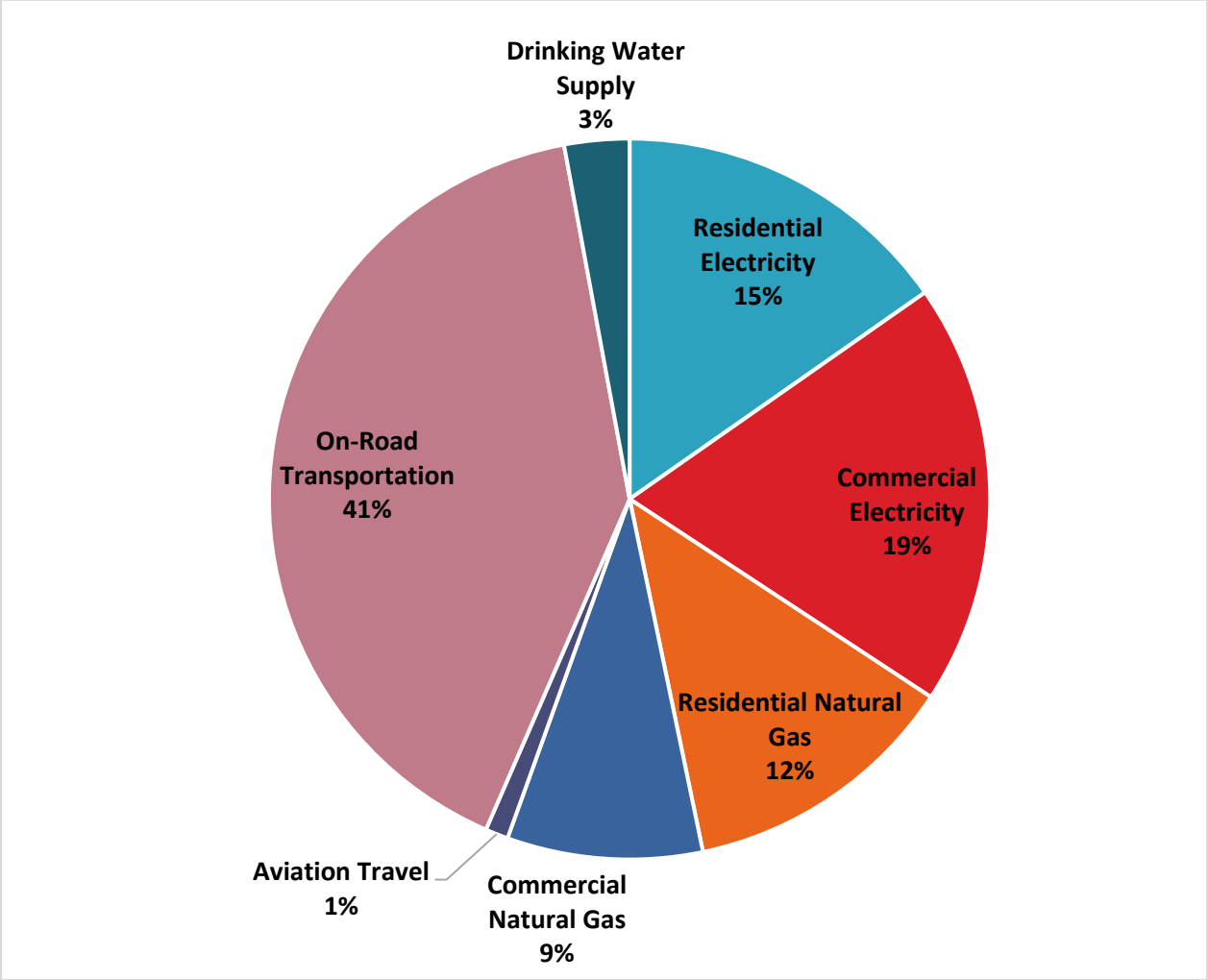


Figure 5: Santa Fe 2017 Greenhouse Gas Emissions

Prerequisite: Power Access, Reliability, and Resiliency

This prerequisite is achieved by providing a safe, secure, reliable, resilient, and equitable access to power supply that can withstand shocks and stresses. Along with access, reliable delivery is a fundamental goal for energy system operators as it directly impacts livability of a city. Careful design of the power system can reduce the likelihood of equipment failures. The City of Santa Fe demonstrated that the population of Santa Fe has access to electricity, that the Public Service Company of New Mexico (PNM) conducts reliability performance monitoring, and that the City can supply power to emergency facilities and essential services for at least one week. The citywide electrical supply was only offline for 0.02% of the time from 2016 to 2018.

Credit: Energy Efficiency *Denied*

This credit is awarded for improving demand-side efficiency in water and wastewater services, public lighting, and district energy systems. Energy efficiency in buildings is addressed through the Green Building Policy and Incentives credit. Transportation-related strategies such as use of alternative fuel vehicles are included under the Transportation and Land Use credit category.

Roadmap to Recertification:

- *Two points may be achieved for converting at least 70% of the street lighting to meet the efficiency related requirements of ANSI/IESNA RP-8-14 Roadway Lighting and to have a minimum luminous efficacy of 100 lumens per watt. The City in the process of upgrading its street lights to comply with these requirements. The work must be completed for the credit to be awarded.*
- *Two points may be achieved for upgrading water and wastewater pumps to meet the requirements of the Pump Energy Index listed in Table I.1 - Proposed Energy Conservation Standards for Pumps, 10 CFR Parts 429 and 431 of DOE standards Federal Register final rule Energy Conservation Program: Energy Conservation Standards for Pumps or international equivalent standard.*
    - *Strategy EN1 of the Sustainable Santa Fe 25-Year Plan calls for implementation of energy efficient equipment at City facilities where practical and cost-effective.*

- *Two points may be achieved by supplying 160% of the citywide heating, cooling, and electrical load from all buildings except single family residential buildings with a district energy system (DES). For the purposes of this credit, a DES is a heating and/or cooling system that produces steam, hot water, and/or chilled water in a centralized plant using cogeneration or tri-generation and distributes this energy to multiple buildings. This is calculated by adding the percent heating load supplied by DES, the percent cooling load supplied by DES, and the percent electrical load supplied by DES. Community-scale DES does not qualify for this credit. One point is awarded for supplying 80% of the citywide load.*

Credit: Renewable Energy *Denied*

This credit is awarded for reducing environmental and economic harms associated with fossil fuel energy by increasing self-supply of renewable energy and the use of grid-source renewable energy technologies and carbon mitigation projects. A collaborative approach between the cities and utilities or service providers is critical to the success of implementing upstream and downstream renewable energy solutions.

Roadmap to Recertification:

- *Six points may be achieved in accordance with the table below. The renewable energy generation is calculated as a percentage of total energy use within the city, which includes electricity, natural gas and transportation and freight fuels.*
    - *Many strategies in the Sustainability Santa Fe 25-Year Plan designed to achieve carbon neutrality by 2040 will increase renewable energy production in Santa Fe, and the electric utility is transitioning to 100% carbon-free energy as required by the New Mexico Energy Transition Act.*

Points	On-Site Renewables	New Off-Site Renewables	Existing Off-Site Renewables	Green-e Certified: RECs and Carbon Offsets	RECs and Carbon Offsets
2	2 %	20 %	60 %	100%	150%
3	6 %	40 %	80 %	200%	
4	15 %	60 %	100 %	300%	
5	35 %	80 %			
6	60 %	100 %			

Table 3: LEED points Awarded for Renewable Energy Generation

- *On-site renewables refers to any distributed renewable energy sources on any property within the city.*
- *New off-site renewables refers to a large-scale renewable energy plant with a minimum capacity of 1 MW such as a "solar farm." It does not need to be within city limits. A Power Purchase Agreement or Virtual Power Purchase Agreement between the city, utility, and/or renewable energy provider is acceptable.*
- *Existing off-site renewables refers to renewable energy procured from an existing renewable energy provider or utility.*
- *Green-e Certified Renewable Energy Certificates (RECs) and Carbon Offsets must be purchased within the USA and must come from resources that have come online or have been built within the last fifteen years, and the contract must be for fifteen years to be delivered annually. If RECs or carbon offsets are purchased by the utility serving multiple cities, these must be prorated as per the city's annual energy share in the utility's generation.*
- *RECs and Carbon Offsets refer to those that are not Green-E Certified.*

Credit: Low Carbon Economy *Awarded*

As greenhouse gas emissions are driven by a city's economic activity, this credit encourages the city to measure and lower the carbon intensity of its economy. As cities are the engines of economic growth, they are required to estimate the greenhouse gas intensity of the economy and devise effective strategies to decouple greenhouse gas emissions and economic growth. The City of Santa Fe was awarded this credit for demonstrating a downward trend in its greenhouse gas intensity as a measure of greenhouse gases divided by gross domestic product.

Credit: Grid Harmonization *Awarded*

This credit is awarded for improving operational efficiency of the energy system and encouraging participation in energy use optimization through advanced technologies and the Internet of Things. It requires the City to collaborate with the utility or service provider to deploy advanced technologies and provide a modernized grid with low environmental impact. This credit was awarded because PNM offers time-of-use rates, on-peak and off-peak rates, and demand charges to motivate customers to shift loads to times that cause less stress for the electrical grid.

MATERIALS AND RESOURCES

Cities are large aggregators and consumers of materials, accounting for the highest natural resource consumption affecting the environment and human health. The intent behind this category is to eliminate waste from mainstream operations and utilize it as a resource. The development of cities, with their high concentration of resources, capital, data, and skills over a small geographic territory, provides opportunities to uniquely drive a global transition from a linear to a circular economy.

The City of Santa Fe's participating in the 2019 LEED for Cities and Communities Grant Program involved providing feedback to USGBC on the rating system. City staff served on a committee revising the Materials and Resources section to more closely align with best practices for cities and communities in the United States. As the credits are revised, the City will achieve more credits in this category.

Prerequisite: Solid Waste Management

This prerequisite is achieved for providing solid waste management services to the entire city population in a safe, efficient manner. It requires diversion of recyclables, compostables, electronic waste, and construction and demolition debris. The City of Santa Fe achieved this prerequisite by demonstrating the City Code requires recycling,

the Santa Fe Solid Waste Management Agency Ordinances require recycling, all solid waste facilities are in compliance with federal regulations, and it diverts all of its construction and demolition debris from infrastructure works for reuse and recycling.

Credit: Special Waste Streams Management *Awarded*

This credit is awarded for diverting special waste from landfills and incineration. Special waste is any solid waste that requires special handling and disposal due to its quantity, concentration, physical or chemical characteristics, or biological processes, such as electronic waste, household hazardous waste, and tires. This credit was awarded because the City of Santa Fe composts its wastewater treatment waste products and the Santa Fe Solid Waste Management Agency diverts household hazardous waste, appliances, electronic waste, and tires for beneficial use and recycling.

Credit: Responsible Sourcing for Infrastructure *Not Attempted*

This credit is awarded for encouraging the use of products and materials that have been extracted and sourced in a responsible manner and have life-cycle information available. Raw material extraction and sourcing has a direct environmental impact on ecosystems. Extended producer responsibility (EPR) programs can close the material loop through a circular economy and promote take-back programs.

Roadmap to Recertification:

- *Two points may be achieved by complying with one of the following criteria for a minimum of 40% by cost of the total value of permanently installed top five materials used in infrastructure. Strategy WS7 of the Sustainable Santa Fe 25-Year Plan calls for reducing construction and demolition waste. The City must supply documentation of product claims and measure the use of these materials to achieve this credit.*
    - *Purchase products from a manufacturer that participates in an EPR program or is directly responsible for EPR*
    - *Using salvaged, refurbished, or reused materials/products*
    - *Using materials with recycled content*
    - *Another U.S. Green Building Council approved program meeting responsible sourcing and extraction criteria*

Credit: Material Recovery *Not Attempted*

This credit is awarded for moving towards a circular economy by providing a mechanism for collection and channelization of high-value materials from the waste streams back to producers, thereby moving towards a circular economy.

Roadmap to Recertification:

- *One point may be achieved by creating a policy that requires manufacturers within the city encourage refurbish, remanufacture, and recycle their products. The policy must address electronics and packaging or metal cans; include specific guidelines for collections, transportation, and processing; and must require companies to collect at least 10% of total waste generated. Collections centers must also be provided for these products. However, the City expects this credit to be revised to more closely align with best practices and expects to receive these credits due to that revision at the time of recertification.*
- *One point may be achieved by conducting a waste audit and initiating a dialogue with producers of the top five non-recyclable items for redesigning and taking back those products for recycling or reuse.*
    - *Strategy WS4 of the Sustainable Santa Fe 25-Year Plan calls for encouraging state and federal regulation supporting EPR to shift the burden of handling products at the end of their life from governments back to manufacturers and retailers. This action must be taken on the state or federal level, so manufacturers have an understandable regulatory landscape in which to operate. Such policies are not passed on a local level. The City expects this credit to be revised to more closely align with best practices and expects to receive these credits due to that revision at the time of recertification.*

Credit: Smart Waste Management Systems *Denied*

This credit is awarded for improving the operational efficiency of the waste management systems through comprehensive smart technologies such as pneumatic transport systems, cloud-based software connected to Internet of Things smart sensors, and smart bin technology.

Roadmap to Recertification:

- *Two points may be achieved by utilizing pneumatic transport systems or sensor bins for 20% of the waste generated in the city. The City of Santa Fe utilizes cutting edge technology for improving the operational efficiency of solid waste management. However, this technology was not approved. The City expects this credit to be revised to more closely align with best practices and expects to receive these credits due to that revision at the time of recertification.*

QUALITY OF LIFE

Quality of life and a higher living standard for residents is key to success and livability in a city. Cities must equitably address the needs of all people, irrespective of gender, ethnicity, socio-cultural and economic status.

Prerequisite: Demographic Assessment

A comprehensive assessment of demographics is needed to understand localized needs. A fundamental attribute of urban sustainability is the ongoing reduction in unevenness in the distribution of foundational assets such as health, education, and transportation. The City of Santa Fe achieved this prerequisite by providing the following description of history of development, age cohorts, racial/ethnic composition, other prominent sociocultural groups, and the housing market.

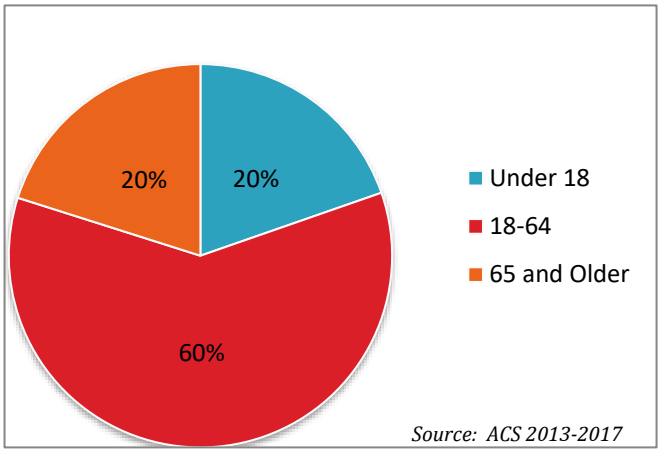


Figure 6: Age Cohorts of Santa Fe

Demographic Assessment

Historically, the City of Santa Fe's development has followed the water with the limits of the Sangre de Cristo Mountain Range and Hyde Park, a well-known ski destination, stunting development toward the northeast. The majority of new construction has taken place over the years on either side of the Santa Fe River. The origin of the City dates back to the indigenous groups of the Tano as far back as 1050-1150 A.D. The early Spanish Conquistadors colonized the area and claimed Santa Fe in 1607. It is the second oldest city in the nation.

The urban design layout follows traditional building patterns, featuring a traditional town plaza, surrounded by adobe structures of significant historical value which are fiercely protected from changes or additional development. Though once representing the center of the city, and historically Hispanic, the main plaza is now, hundreds of years later, rather far northeast of the rest of the city limits, which has grown to meander southwest along the river and is less densely built than the original and designated historic district of the plaza. A magnet for artists, the unique area has drawn a creative host of residents and thus, a strong economy in the arts. In 1957, the

city, recognizing the untapped potential for tourism, established a policy of zoning which required uniformity in architecture mimicking pueblo or Spanish Revival style structures.

Ecosystem services such as water have suffered over the years. Dammed in the 1800's, the Santa Fe River had become an eyesore subject to many uncomplimentary references such as "The Big Ugly." Fortunately, with numerous organizational and public outcry and support, the Living River ordinance was executed in 2012, which has provided for a return to flow throughout the year when water levels allow. Planting, landscaping, and lush vegetation along a bike and pedestrian river trail serve to strengthen the original spine of the City as a result. The transforming landscape and return of vibrancy in the water's path has attracted media attention worldwide and is a favorite walking and biking trail of Santa Fe residential housing areas.

The demographics have shifted toward an older, majority white retirement or second home owner population in the northeast sector surrounding the plaza. The population density is approximately 1,927 per square mile according to the latest American Community Survey (ACS) with housing costs higher in the northeast. Since the 1970's, the Hispanic population, though relatively evenly interspersed, has migrated throughout the remainder of the city limits with a larger concentration in the southwest.

The City, recognizing this migration pattern, is focused on creating more affordable housing developments in the now true center of the city, as well as intentional communities connected to transportation, biking trails, and equitable economic opportunity. The migration toward the southwest where housing is more attainable and affordable due to lower land cost is creating a city at risk for sprawl. In an effort to stem the tide, nodes of economic opportunities and neighborhoods are forming on either side of the river as the focus turns toward housing, connectivity and livability.

Some of the more notable neighborhoods that are forming and are close to transportation currently are the Midtown LINC innovation center on the site of the vacant Santa Fe University of Art and Design, Siler Yard, and Las Soleras, which includes a new hospital. The linkage opportunities are increasing for a large-scale affordable neighborhood development that took place in the late 1990's and continue to grow in a more livability focused intention throughout this sector. At a less than 2% vacancy rate, affordable housing remains a challenge that the City is focused on solving.

Tourism waves exacerbate the crunch, yet provide a great deal of income to the City. Recent tightening of the short-term rental market regulations as well as the loosening of accessory dwelling unit construction requirements are expected to assist in adding more infill housing inventory throughout the city. Organizations have banded together to form The Housing Action Coalition whose focus is moving the policy dial to end the housing crisis.

The population of Santa Fe is steadily growing and considering the low housing inventory, infill development and increased density becomes imperative. Currently the population is 82,980 (2013-2017 ACS Estimates) and sharply increased by 14,166 residents between 2011 and 2014, mainly due to annexation of nearly 12,500 residents. Population growth has averaged anywhere from 0.20-0.48% annually. Hispanics comprise a majority of the population at 54.7% (2013-2017 ACS Estimates).

Hispanics comprise a majority of the population at 54.7% (2013-2017 ACS Estimates). Native Americans comprise a little over two percent of the population within the city limits. However, surrounding the city are a number of long established Native American Pueblos which have been in existence for hundreds of years prior to the Spanish Colonialist's takeover of the area. The Pueblo culture contributes a great deal to the political, architectural, and creative pulse of the city.

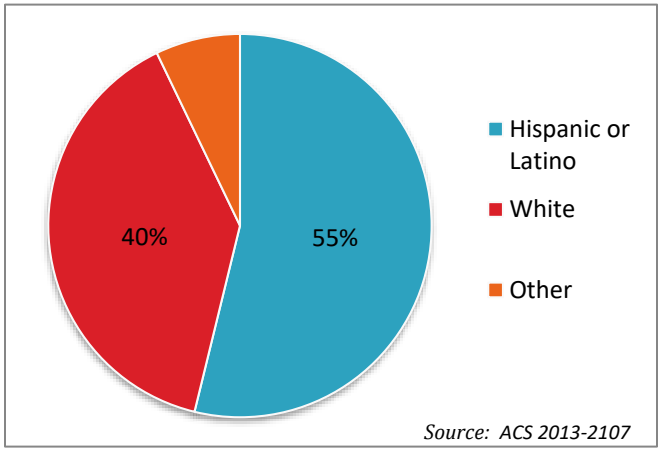


Figure 7: Racial Composition of Santa Fe

According to the 2013-2017 ACS, there are 41,484 housing units in the City of Santa Fe. Most of these (57%) are detached single-family homes. 2.9% are duplexes, 6% are three or four units, while 5.8% are five to nine units, and 4.6% are 10-19 units. Only six percent are in large multifamily structures (20 or more units).

Rental units are most likely to have two bedrooms and owner-occupied units are most likely to have three or more bedrooms. An estimated number of 85 units are constructed each year. Median values of owner-occupied units are $265,000. Median monthly owner costs are $1,467 and median rent is $1,004.

Credit: Trend Improvements *Awarded*

This credit is awarded for demonstrating performance on education, equitability, prosperity, and health and safety of its citizens over time. Given the scale of cities and the variation in their history, culture, and economic condition, understanding how improvement is being made in key indicators is valuable for reflecting on the effectiveness of actions. The City of Santa Fe achieved this credit by demonstrating a reduction in the amount of violent crimes over five years.

Roadmap to Recertification:

- *An additional three points may be achieved by demonstrating annual improving trends in up to three of the following categories over five years: population with high school degree, graduation rate, number of small businesses, or the percentage of household incomes meeting the living wage standard or demonstrating an annual reducing trend in the unemployment rate, poverty rate, asthma rate, percentage of people diagnosed with hypertension, or obesity rate. The City did demonstrate an improving trend in the population with a high school degree, the graduation rate, and a reducing trend in the unemployment rate. However, these were denied because they did not show a year over year increase/decrease. USGBC may be revising this credit to award credits when applicants demonstrate an upward/downward trend as opposed to a year-over-year increase/decrease, which should enable the City to obtain these points when applying for recertification.*

Credit: Distributional Equity *Awarded*

This credit is awarded for fostering equitable economic prosperity and expanding access to community services to all. It considers both access and proximity to foundational assets as well as intergenerational equity that has resulted from past decision-making. Addressing these issues now will strengthen quality of life for future generations and their ability to thrive. The City of Santa Fe achieved this credit by demonstrating that the unemployment rate for different genders and sociocultural groups does not significantly different than the overall unemployment rate.

Roadmap for Recertification:

- *An additional point may be achieved by demonstrating that median earnings for different genders and sociocultural groups is not less than five percentage points of the total median earnings and that the disparity of income per capita amongst sociocultural groups is not greater than five percentage points.*
- *An additional point may be achieved by demonstrating that the post-secondary educational attainment of the population aged 25 and older for different genders and sociocultural groups is not less than five percentage points of the overall post-secondary educational attainment.*

- *An additional point may be achieved by demonstrating that the high school graduation rate for different genders and sociocultural groups is not less than five percentage points of the overall graduation rate for the district.*
- *An additional point may be achieved by demonstrating that community facilities such as parks, libraries, recreation centers, schools, and healthy retail food outlets are as accessible to low-income residents as they are to the broader community.*

Credit: Environmental Justice *Not Attempted*

This credit is awarded for addressing conditions that lead to neighborhoods and populations being overburdened by pollution. It focuses on the unequal spatial allocation of environmental burdens across a community, resulting in lasting negative social, environmental, economic, and public health impacts in certain neighborhoods or communities and not others.

Roadmap for Recertification:

- *One point may be achieved by demonstrating progress in reducing the risks and exposure for conditions such as illness, water pollution, or soil contaminations in areas that have the highest percentage of historically overburdened people, the highest concentration of pollutants, or are in violation of environmental regulations.*

Credit: Housing and Transportation Affordability *Denied*

This credit is awarded for providing an adequate and diverse supply of location-efficient and affordable housing options for all, including addressing the needs of people who are lower-income or experiencing homeless. Without targeted strategies, affordable areas become too expensive for low- and moderate-income households, potentially forcing them to seek less expensive housing on the urban fringe. This leads to much higher transportation costs for individuals and families, as well as worsening traffic, air pollution, climate change, and negative impacts to public health and quality of life.

Roadmap for Recertification:

- *One point may be achieved by demonstrating high quality homelessness services related to short-term emergency shelter options and permanent housing solutions in coordination with non-governmental service providers and adopting a comprehensive housing policy that addresses certain elements in the LEED for Cities guide.*

- *The City demonstrated high quality homelessness services, but Santa Fe's housing policy, Goals and Priorities Section of the 2017 Assessment of Fair Housing, does not address one of the required elements: 12 density units per acre within ¼ mile of walking distance to transit stations.*

- *One point may be achieved by demonstrating that 60% of households would spend less than 45% of their income on housing and transportation.*
  - *Strategy CD6 of the Sustainable Santa Fe 25-Year Plan calls for increasing affordable and workforce housing.*

Credit: Civic and Community Engagement *Not Attempted*

This credit is awarded for facilitating a cohesive and socially-connected community and participation in local decision-making. For this credit, applicants must demonstrate a combination of high-tech (digital) and high-touch (direct engagement) techniques utilized to engage all residents. Points are credited based on diverse community representation, sense of empowerment, cohesion and connectedness, and volunteerism rate.

Roadmap for Recertification:

- *Two points may be achieved by using both high-tech and high-touch, ongoing, engagement techniques that engage all residents and empower the public in shaping the future of the community and demonstrating two of the following:*
  - *Appointments to local advisory boards and commissions reflect the gender, racial, and ethnic diversity of the area.*
    - *Strategy SE1 of the Sustainable Santa Fe 25-Year Plan calls for ensuring low-income residents, people of color, and underserved community members have a voice and leadership presence in all City of Santa Fe boards and committees.*
  - *At least 51% of residents believe they are able to have a positive impact on their community, based on a local survey.*
  - *At least 80% of residents report positive levels of neighborhood cohesion, based on a local survey.*
  - *At least 35% of residents volunteered in the past year.*

Credit: Civil and Human Rights *Not Attempted*

This credit is awarded for promoting respect, protection, and fulfillment of civil and human rights by and for all members of the community. It requires implementation of all four actions: adoption of a local comprehensive equal opportunity policy applicable to employment, housing, and public accommodations; activities to ensure voting rights; community policing and procedural justice initiatives; and an entity responsible for accountability for human rights.

Roadmap for Recertification:

- *One point may be achieved by complying with all of the following:*
    - *Adopting a policy-based mission statement to promote a discrimination free quality of life for all relating to employment, housing, and public accommodations on the basis of race, sex, color, religion, national origin, disability, age, sexual orientation, marital status, family status, and gender identify or expression*
    - *Adopting initiatives and policies that protect the voting rights of all*
    - *Integrating community policing and procedural justice into police department operations*
    - *Employing a Human Rights Officer or establishing a Commission on Human Rights*

INNOVATION

Sustainable design is spurred forward by innovative strategies, as well as exceptional efforts that go beyond minimum thresholds. When cities innovate and go beyond LEED requirements, they not only achieve measurable environmental benefits beyond those specified by the LEED rating system, but also have the opportunity to explore cutting-edge pilot credits and contribute to the development of future LEED credits. When cities can demonstrate that they exceed the standard level of performance associated with one or more LEED credits, their innovation can inspire and motivate other teams in the future. The City of Santa Fe achieved all possible innovation points with the following submittals.

Modeled-Performance in New Residential Buildings for Energy, Water, and Indoor Air Quality *Awarded*

The City achieved one innovation point because the City Code requires new single-family residential buildings to comply with modeled-performance requirements for energy and water conservation as well as indoor air quality. The City allows builders flexibility in meeting a home energy rating score (HERS), thermal transmittance (U-

value), a water energy rating score (WERS), and ventilation rates per ASHRAE 62.2. This flexibility lowered the cost of compliance over a previous point-based green building requirement, while achieving additional energy and water savings.

Pedestrian Improvement Technology *Awarded*

One innovation point was achieved for the Santa Fe Metropolitan Planning Organization improving equitable multi-modal transportation through the use of a scoring criteria and evaluation matrix developed by Sites Southwest that accounts for demographic and safety conditions to ensure areas with elderly, youth, and low-income residents are priorities. This information informed the inclusion of projects in the Capital Improvement Plan to establish funding.

Sanctuary and Support of Immigrants *Awarded*

One innovation point was achieved because the City of Santa Fe supports community members who are facing impacts due to their legal status in the country. The City of Santa Fe has established the policy that police will not ask about immigration status while conducting their work, which ensures public safety for all. Immigrants also receive community support through organizations such as the La Familia Medical Center, the Santa Fe Dreamers Project, and Somos un Pueblo Unido.

Bicycle Friendly Community *Awarded*

One innovation point was achieved because the City of Santa Fe has been recognized by the League of American Cyclists as a Silver-rated Bicycle Friendly Community. This program provides a roadmap to improving conditions for bicycling and guidance to help make a community's vision for a better, bikeable community a reality.
Santa Fe was evaluated in the fields of enforcement, education, engineering, key outcomes, evaluation, and encouragement to achieve this rating.

Cogeneration at Wastewater Treatment Facility *Awarded*

One innovation point was achieved because the City of Santa Fe utilizes its wastewater byproducts as energy-generating resources at its wastewater treatment facility. A combined heat and power generation plant will come online in summer 2020 that will add to the existing onsite 1.2 MW solar power generation to produce 94% of the facility's energy use with onsite renewable sources. It will reduce carbon dioxide emissions by 3,099 metric tons per year compared to the current grid electricity mix.

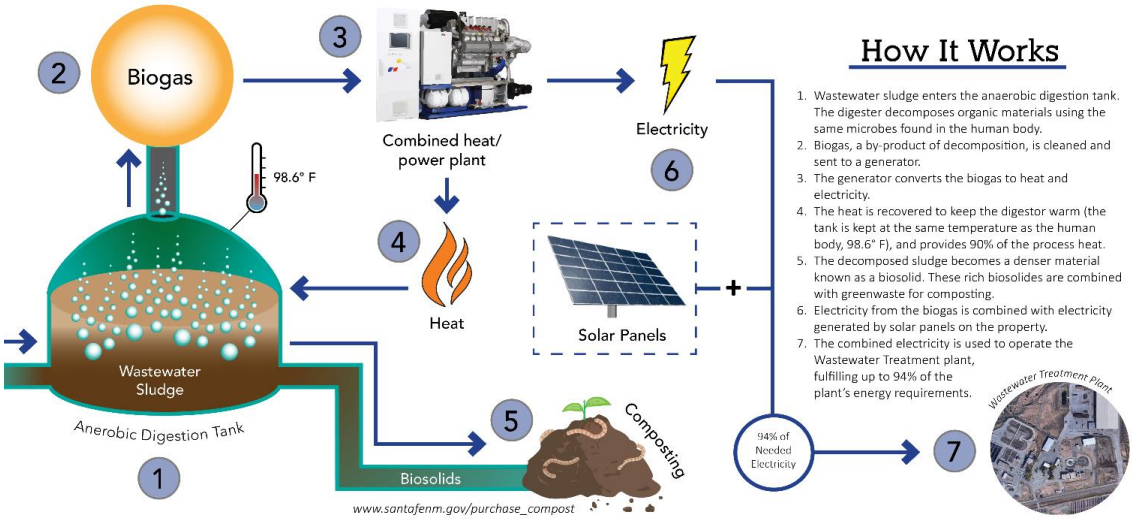


Figure 8: Diagram of Santa Fe Wastewater Treatment Plant Cogeneration Facility

Public School Programs *Awarded*

One innovation point was achieved because Santa Fe Public Schools (SFPS) offers sustainability programs at school facilities and incorporates sustainability operations into the students' daily experience. SFPS excels at improving energy efficiency, installation renewable energy, conserving water, and other sustainability efforts such as food scrap composting and onsite gardens. SFPS is also developing curricula to enhance learning opportunities.

REGIONAL PRIORITY

LEED projects are designed, built, and operated in many different contexts. Climate, population density, and local environmental conditions can differ significantly from one location to another, making certain environmental issues more critical than others. Examples include water conservation in arid climates versus rainwater management in wet climates. LEED projects can be more transformative if teams recognize their location's priority environmental issues and address them through design, construction, and operation choices. LEED encourages a focus on regional issues through Regional Priority credits—existing LEED credits that USGBC volunteers around the world have determined to be especially important in a given area and result in a bonus point if achieved. The City of Santa Fe achieved all possible regional priority points with the following submittals.

Historic Buildings and Materials *Awarded*

One regional priority point was achieved because the Santa Fe City Code requires maintenance of existing buildings and building materials within the historic area of the city in most cases, unless it is infeasible. Requiring preservation of existing materials rather than replacement with new materials reduces the embedded greenhouse gas footprint of those buildings, reducing the overall embedded greenhouse gases of building materials in general in the city.

Water Bank Program *Awarded*

One regional priority point was achieved for the City's Water Bank, which ensures unallocated capacity exists in the water system to meet increased demands associated with new construction projects. All new development replaces or buys credit for water from the Water Bank, reducing demand on the Rio Grande in proportion to the reduction in supply due to groundwater pumping and ensuring that adequate rights to water supplies exist for increases in demand associated with development.

Water Outreach – Tours and Fiesta *Awarded*

One regional priority point was achieved for the outreach programs of the City of Santa Fe Water Conservation Office. The Water Conservation Office offers the "Passport Program," which provides in-class presentations to 4th-6th grade students about water, waste, and energy issues; an annual water fiesta where local 4th graders rotate through short presentations on water quality and quantity; and Santa Fe River watershed tours including our reservoirs, watershed, and drinking water treatment plant. These educational opportunities are designed to help people understand the sources of their water.

Wildland Urban Interface Program *Awarded*

One regional priority point was achieved for the City's proactive wildfire risk reduction. The Wildland Urban Interface (WUI) Program provides information, assistance, and recommendations to homeowners and landowners with property in the areas where forest fires are a danger and fuel management in the WUI. The Santa Fe Fire Department is one of the only fire departments in New Mexico to have two full-time positions dedicated to WUI issues and wildfire prevention.

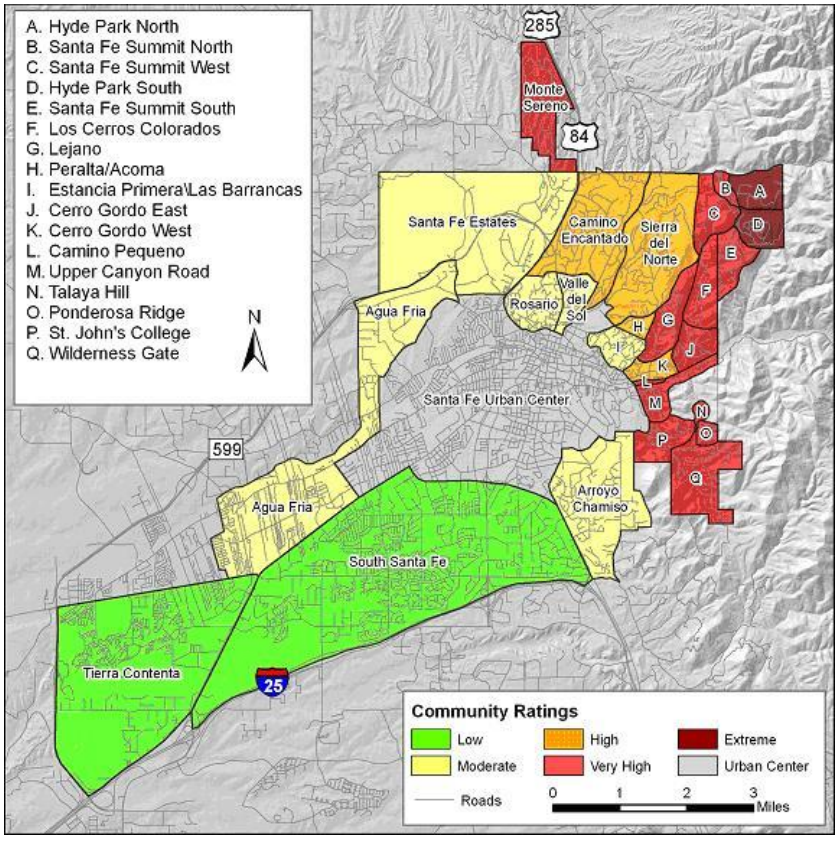


Figure 9: Santa Fe Wildland Fire Hazard and Risk Community Ratings


City of Santa Fe
Environmental Services