



Santa Fe Multimodal Transition Plan: Parking Assessment Existing Conditions

Prepared for: City of Santa Fe

April 16, 2021





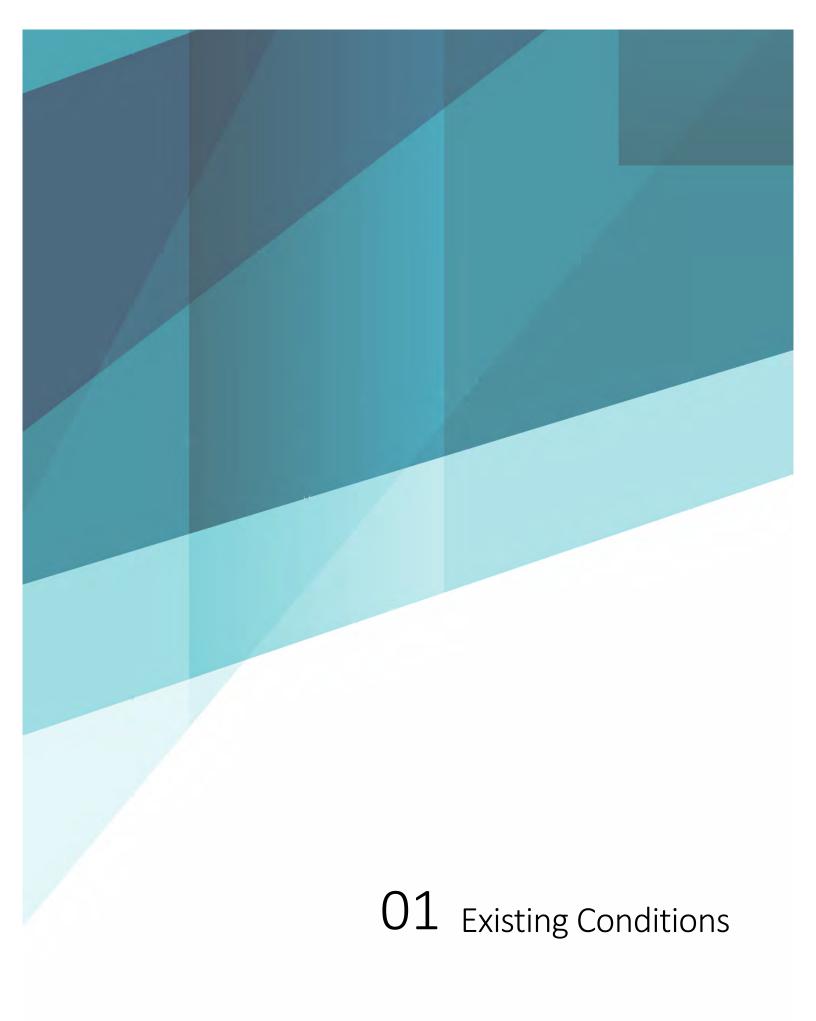
Contents

Existing Conditions	4
Planning Context	4
Supporting Planning Principles	4
The Importance of Managing Parking & Access	5
The Value of the Public Right-of-Way	5
Focus Areas	7
Public Parking Inventory	13
Downtown/Railyard District	13
Midtown and Airport Road Districts	14
Public Parking Demand	16
Midtown and Airport Road Districts	16
Public Parking Resources	17
Parking Enterprise Fund	17
Residential Parking Permit Program (RPP)	17
Off-Street Public Parking	18
On-Street Public Parking	20
Loading Zones	21
PARCS 5.6	21
Enforcement & Citations	22
Minimum Off-Street Parking Requirements	23
Comparing City Requirements with ULI Base Ratios	25
User Behaviors	26
TDM Programming and Initiatives	27
TDM Strategies Implemented	28
More/Improved Parking Management	28
Scooters/Micromobility	28
Paratransit Padused Parking Requirements for Rusinesses that Implement TDM	28 28
Reduced Parking Requirements for Businesses that Implement TDM Mobility Hubs	29
Subsidized Transit Passes for Youth and Older Adults	29
Bike Parking and Incentives	29
Vanpool Incentives	29
Special Events	30
Future Conditions/Influencing Factors	32
New Developments Expected to Change or Affect the Public Parking System	32
External/General Influencing Factors	34
Technology Changes	34
Electric Vehicles	35
Autonomous Vehicles	37
Micro Mobility and Mobility as a Service	40
Demographics & Key Indicators	44
An Aging Population	45
Increasing Population Size	46
Potential Remote Parking Options	47



Figures and Tables

Figure 1. Downtown Railyard District	8
Figure 2. Midtown District	10
Figure 3. Airport Road District	12
Figure 4. Paid Parking Inventory in Downtown/Railyard District by Facility/Parking Type	14
Figure 5. Off-Street Parking Options in the Downtown/Railyard District	15
Figure 6. RPP Districts and Streets/Blocks within Each District Zoned as RPP	18
Figure 7. Off-Street Public (City-Owned) Parking Facilities, Hours, and Rates	19
Figure 8. On-Street Public Parking Permit Zones	20
Figure 9. Schedule of Parking Fines in Santa Fe	22
Figure 10. Minimum Off-Street Parking Requirements by City Code (Selected Land Uses)	24
Figure 11. City Minimums Compared to Recommended Supply per ULI by Selected Common Land Use	25
Figure 12. Special Events in and around Santa Fe in a Typical Year	30
Figure 13. Future Land Use Plan from 2017 Land Use and Urban Design Plan	32
Figure 14. Typical Multi-family Housing Parking Demand Generation for 1,700 Dwelling Units	33
Figure 15. Telework Habits Pre-Pandemic and During Pandemic According to Walker Survey	35
Figure 16. Actual US Electric Vehicle Fleet Size (2010 – 2019) and Projected Fleet Size (2020 – 2030)	37
Figure 17. Levels of Driving Automation According to the Society of Automotive Engineers	38
Figure 18. Licensed Drivers, Vehicle Registrations, and Resident Population, 1961 - 2013	39
Figure 19. E-Scooter Restrictions in State of Oregon and City of Portland	42
Figure 20. Car-Free Households	45
Figure 21. Households by Number of Vehicles Available, Indexed to 2006	46
Figure 22. Remote Parking Candidate Sites and Lots	48
Figure 23. Overview of Potential Remote Parking Sites and Lots	49
Figure 24. Remote Parking Options (Facility Group #1)	50
Figure 25. Remote Parking Options (Facility Group #2)	51
Figure 26. Remote Parking Options (Facility Group #3)	52
Figure 27 Remote Parking Options (Facility Group #4)	53





Existing Conditions

This report includes a high-level assessment of the City of Santa Fe's parking resources and the factors that influence parking and mobility behaviors in Santa Fe and throughout the region.

Planning Context

As historic Santa Fe grows and evolves, City leaders are developing a vision to expand multimodal usage through investments in infrastructure, policies, and programs that support real change. The overarching blueprint to articulate and implement this vision is called the Multimodal Transition Plan. The Plan will also advance goals, policies, and strategies set forth in master planning documents like the Santa Fe Metropolitan Transportation Plan, the Land Use and Urban Design Plan, and others.

The Plan involves three main components: public transit, parking, and active transportation and multimodal integration, including consideration of novel transportation modes like Uber, Lyft, e-scooters and e-bicycles, and more. Of these, parking is, to some extent, the most fraught—any initiative to bolster usage of more sustainable modes of transportation must be coupled with broad-scale behavioral change spurred in part by effective parking management. Typically, people see personal vehicles as the default choice, especially if parking is unenforced, unmanaged, and plentiful. In addition, paid parking presents an opportunity to generate much-needed revenue from the frequently subsidized public right-of-way, and even an opportunity to divert some of these revenues to support other transportation choices, like bicycle and pedestrian amenities and public transit discounts.

> Transportation Demand Management refers to initiatives, programs, and strategies that help reduce travel demand, or shift demand from personal vehicles (cars) to other transportation choices, like walking and biking.

Supporting Planning Principles

This document and its contents are supported by numerous best practice planning principles that guide analysis and future recommendations. This section discusses some of these key principles.



The Importance of Managing Parking & Access

It is important for cities to manage parking resources and access for the entire community. Active parking management can:

- Help distribute parking more effectively across parking resources.
- Promote equity for all users of the city's parking and access resources.
- Preserve the character of neighborhoods by managing how they are accessed.
- Reduce vehicle congestion and excessive vehicle circulation in the busiest areas of the city.
- Improve experience for all travel options by ensuring appropriate accommodation of each travel choice.

The Value of the Public Right-of-Way

The public right of way, including the curb—meaning the area where the street meets the sidewalk—serves many functions. This space operates as a travel way, a pedestrian realm, a community gathering and greening space and a flexible zone for transit access, vehicle storage, passenger pick-up and drop-off and deliveries, among other things. Because the curb provides significant value to the community, many cities seek to find the highest and best use for the curb.





Neighborhood-Specific Parking Solutions

Neighborhood-specific parking solutions, such as resident parking permit programs, are important features of a parking and access strategy that help preserve neighborhood character and promote safety and efficiency. Neighborhood-specific parking solutions can help shape outcomes that meet the unique needs of specific neighborhoods, and can include tailored use and time restrictions, prioritization of certain travel choices and other initiatives.

Parking Pricing as an Access Management Tool

Parking pricing is a key part of any parking and access management strategy. Parking pricing can:

- Help encourage and support travel choices other than the personal vehicle.
- Improve distribution of parking occupancy using variable pricing for parking options with different levels of service for parkers.
- Support sustainability goals by increasing the percentage of people who choose active travel options, like walking and biking, or transit.

Off-Street Parking Requirements as an Access Management Tool

Requirements for new development to provide off-street parking as part of their development program directly influence parking conditions and transportation demand management efforts. Progressive, responsive off-street parking requirements can:

- Reflect the broader context of parking in the City—for example, leaving space for developers to consider an underused garage downtown as a potential source for accommodating new parking demand.
- Encourage "park once" policies and reduce vehicle circulation and congestion.
- Limit the opportunity cost of building parking instead of more active land uses, such as housing and community services



Focus Areas

For this study, three areas of focus, or districts, were identified that are intended to provide examples of how potential strategies to expand multi-modal mobility can be applied within the context of Santa Fe. The boundaries for these districts were defined based on factors such as land use mix, natural boundaries such as arroyos, and contextual boundaries such as streets and city limit boundaries.

The districts are intended to encompass a range of development patterns and land uses that are representative of the city as a whole. Also, these districts each offer a representative mix of multi-modal features, such as current or future transit centers or Rail Runner stations and present their own challenges and opportunities for future multi-modal solutions.

The three districts are described and depicted on the next few pages.

Downtown/Railyard District

The Downtown/Railyard District encompasses the historic downtown core of Santa Fe. It contains the State Capitol building and state government building complex and the emerging Railyard urban infill area and Railyard Arts District. The District also includes some of the oldest residential neighborhoods in the city. The New Mexico Rail Runner commuter rail line runs along the west side of the district from the southwest to northeast, ending at the Rail Yard.

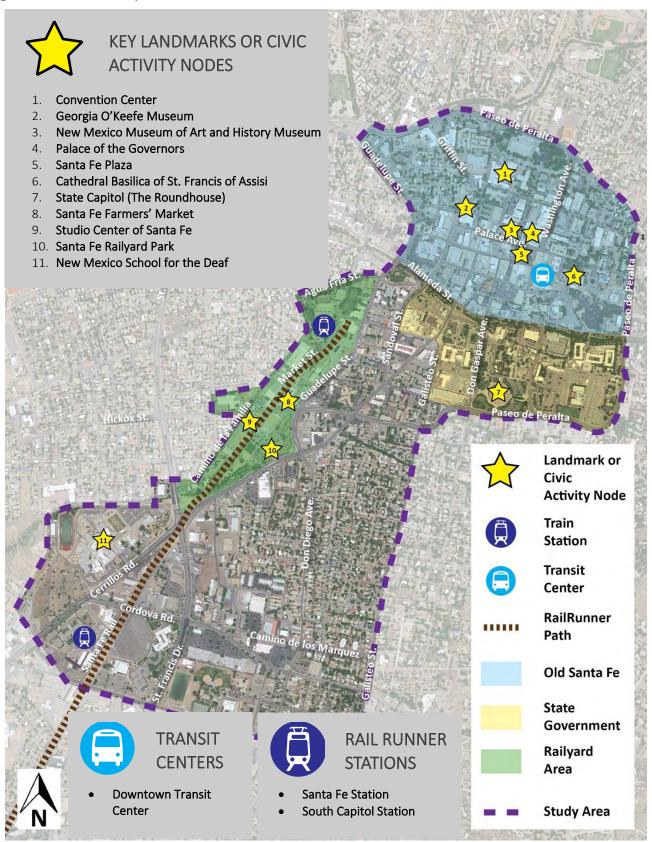
This district presents the most urban density and biggest parking challenges of the three focus areas. This provides an opportunity to test multi-modal strategies that are intended to interface with the historic downtown, an established area, as well as the urban infill areas in the Railyard and older residential neighborhoods that feature a network of low-capacity and narrow streets.

Multi-modal strategies will focus on how to accommodate the needs of visitors, tourists, government employees and legislators, and residents in a manner that is balanced, including during special events.

Figure 1 depicts the district, along with three key sub-areas within the district.



Figure 1. Downtown Railyard District





Midtown District

The Midtown District encompasses an area that, as the name implies, is about halfway between downtown and the airport. The district is orientated around Cerrillos Road between St. Michaels Drive and Richards Avenue.

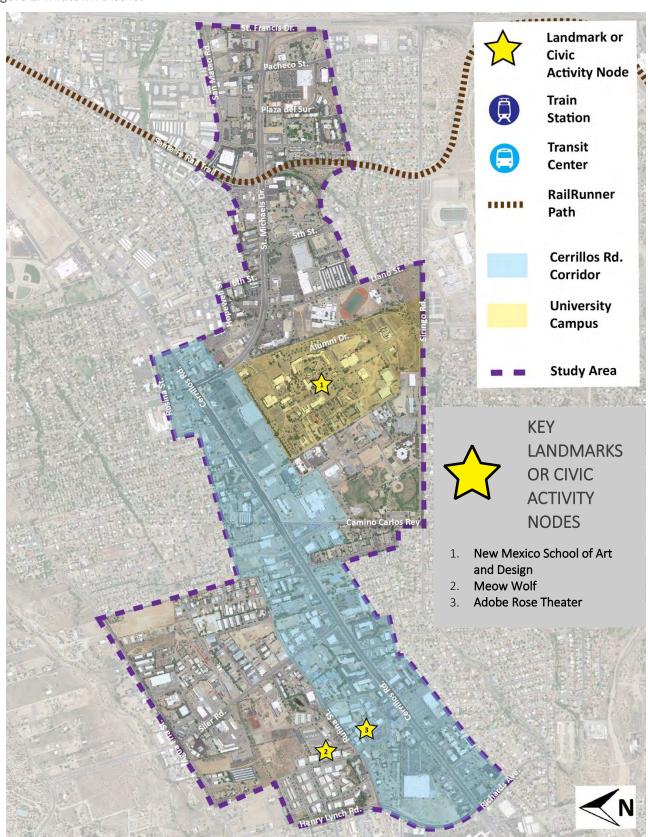
Land uses along Cerrillos Road are generally light industrial and commercial orientated, with some "big box" retail. The area also includes some civic uses and other state governmental buildings. The Midtown District lies outside of the historic core of the city and was developed in the mid-20th century, reflecting a more suburban and auto-orientated development pattern. Cerrillos Road widens in this district to a primary 6-lane arterial.

Multi-modal strategies will focus on how to encourage residents, customers, and employees to use more alternative transit modes other than single-occupant vehicles. They will also focus on how to effectively serve students, employees, and faculty at the New Mexico University of Art and Design and consider options for visitors to the Meow Wolf art and entertainment venue, located in the district.

Figure 2 depicts the district, along with two key sub-areas within the district.



Figure 2. Midtown District





Airport Road District

The Airport Road District is centered around the Airport Road and Cerrillos Road intersection, between St. Michaels Drive and Richards Avenue, and is the furthest south and west of the three districts, extending to San Felipe Road to the west.

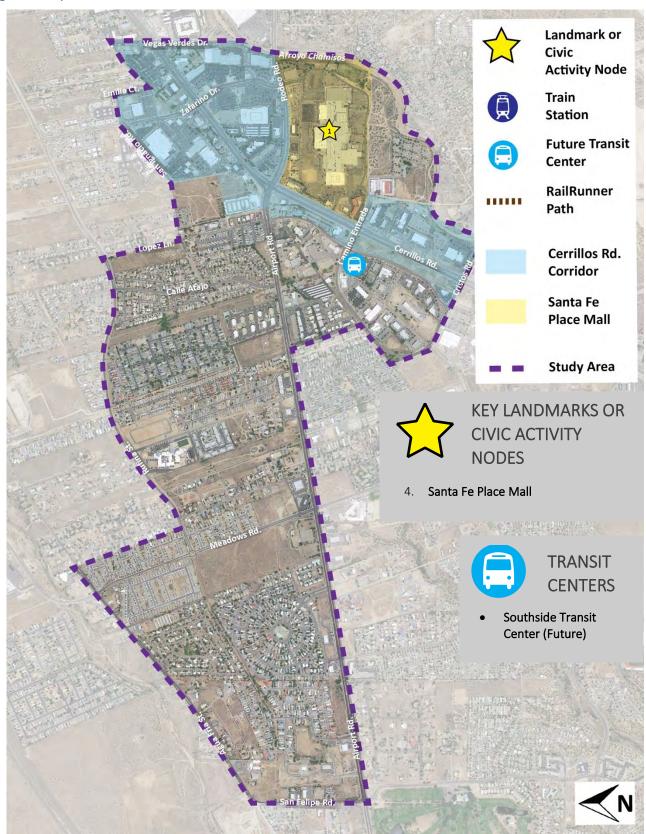
This district encompasses a much wider range of land use mixes than Midtown and is the most recently developed of the three districts. Most of Santa Fe's larger retail stores are within this district, including Lowe's, Target, Sam's Club, and Best Buy, along with the city's only indoor shopping mall, the Santa Fe Place Mall. Also, there are several smaller strip malls, auto dealerships, hotels, and restaurants. More than half of the northwestern portion of the district is residential in nature and is largely made up of single-family homes. The future Southside Transit Center is planned to be located near the southwest corner of Cerrillos Road and Airport Road.

Multi-modal strategies will focus on how to best leverage the future transit center as a mobility hub for the area.

Figure 3 depicts the district, along with three key sub-areas within the district.



Figure 3. Airport Road District





Public Parking Inventory

Downtown/Railyard District

Within the Downtown/Railyard District study area, the City of Santa Fe owns and operates five public parking facilities. One of those facilities, the Railyard Lots, is a collective term for several small surface lots and on-street parking found throughout the Railyard area, such as along Camino de la Familia and Market Street. In addition, it operates a surface lot about a quarter mile to the east of the study area along Canyon Road. No city-operated public parking facilities are located in the Midtown or Airport Road District study areas.

The following set of tables and figures show the inventory of parking available for public use in downtown Santa Fe. This includes all off-street paid public parking and on-street metered parking, as well as some privately owned and managed facilities that also offer paid parking for public use.

The figures do not include unmanaged parking spaces within the Downtown/Railyard study area. Also note that parking inventory figures for one of the privately owned facilities, La Fonda, was estimated based on square footage. Walker has estimated or researched the number of reserved spaces in each private facility and subtracted those figures from the total publicly available parking supplies or estimated supply.

The major downtown or civic activity nodes described in the previous section do not have their own parking lots, but rather rely on general paid public parking. Most other parking within these areas is either public or private reserved parking for exclusive use of the respective land use to which it is tied.



ON-STREET PAID PUBLIC PARKING

1,145 spaces



OFF-STREET PUBLIC PARKING (CITY OWNED)

2,211 spaces



OTHER PARKING AVAILABLE TO PUBLIC

783 spaces

TOTAL PAID CITY-**OWNED PUBLIC** PARKING SUPPLY

3,356 spaces

TOTAL PAID PARKING SUPPLY AVAILABLE FOR PUBLIC USE

4,139 spaces

¹ For off-street state- or private-owned public parking, Walker assumed 15% of spaces were reserved and/or not available for general public use. For La Fonda Garage, Walker estimated supply based on dividing the total estimated square footage of the garage by 350 square feet, an industry rule-of-thumb for estimating the number of parking spaces in a lot or garage.



Figure 4 is an inventory of paid off-street public parking and other off-street parking supply available for public use within the Downtown/Railyard district.

Figure 4. Paid Parking Inventory in Downtown/Railyard District by Facility/Parking Type

Area/Parking Type	Facility ID	Parking Facility Name	Paid Inventory/ Estimated Inventory for General Public Use
	1	Santa Fe Community Convention Center	522
Off Start of Council by Site	2	Sandoval Garage	404
Off-Street Owned by City	3	Water Street Lot	156
(Within Downtown)	4	Railyard Lots	675
	5	Railyard Garage	404
Off-Street Owned by City (Outside Downtown)	6	Canyon Road Lot	50
	7	La Fonda Parking Garage	138
Off-Street State- or Private-	8	Cathedral Basilica Public Parking	296
Owned Public Parking Excluding	9	Lincoln Place	49
Reserved Spaces (Within Downtown)	10	123 Grant (Georgia O'Keefe)	63
Downtown	11	State Capitol Parking Facility	237
On-Street (City Wide)	All Mete	red On-Street	1,145
Total (City-Owned Off-Street Public Parking)			2,211
Total (City-Owned Public Parking, On- and Off-Street)			3,356
Total (Non-City-Owned Public Parking)			783
Total (All)			4,139

Midtown and Airport Road Districts

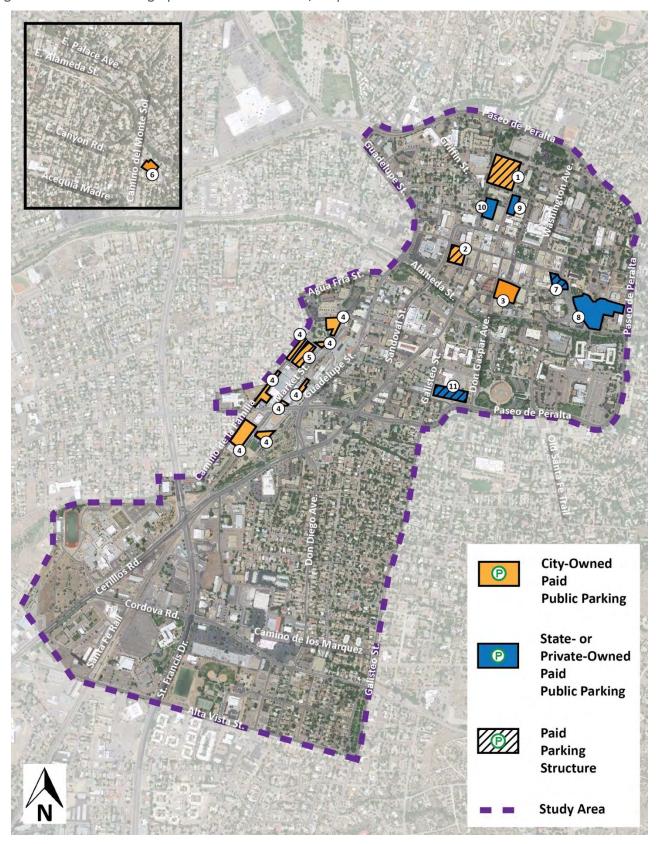
There are no city-owned general paid public parking lots located in the Airport Road District or Midtown District. All private off-street parking is typically reserved for use of the land use(s) to which it is tied. Current plans for the future Southside Transit Center, in the Airport Road District, call for 27 parking spaces to be used for transit users.

The Meow Wolf arts and entertainment group's original venue, located within the Midtown District near Cerrillos Road and Calle del Cielo, has a parking lot with 112 spaces. There are currently about 60 on-street parking spaces along Rufina Circle between Rufina Street and Calle del Cielo, and an additional 9 spaces along Rufina Lane immediately to the west of Meow Wolf.

Figure 5 shows the location of paid off-street public parking and other off-street parking supply available for public use within the Downtown/Railyard district.



Figure 5. Off-Street Parking Options in the Downtown/Railyard District





Public Parking Demand

City staff reports that paid public parking utilization in the Downtown/Railyard District is approximately near or at capacity on-street and at about 40% - 50% occupied in off-street facilities on typical peak non-event days. During events, particularly during the busy summer months, off-street capacity also approaches, and at times, even exceeds capacity. particularly in the public surface lots such as Water Street and the Railyard lots.

Walker has estimated typical, non-event peak demand loads in the Downtown/Railyard district based on an assumption that on-street demand peaks at 90%, surface parking peaks at 75%, and parking garages peak at around 50% capacity.



ON-STREET PAID PUBLIC PARKING

1,031 spaces



OFF-STREET PUBLIC PARKING (CITY OWNED)

1,326 spaces



OTHER PARKING AVAILABLE TO **PUBLIC**

494 spaces

ESTIMATED PEAK NON-**EVENT DEMAND FOR** PAID CITY-OWNED **PUBLIC PARKING**

2,356 spaces

ESTIMATED PEAK NON-EVENT DEMAND FOR PARKING AVAII ABI F FOR PUBLIC USE

2,850 spaces

Midtown and Airport Road Districts

Meow Wolf's 112-space parking lot is typically parked to capacity during most days, with parking demand spilling out onto Rufina Circle and Rufina Lane. Assuming that Meow Wolf's lot is at capacity and 90% of close-in available on-street parking is occupied, total peak demand associated with Meow Wolf is estimated to be approximately 174 spaces.



Public Parking Resources

Parking Enterprise Fund

The City of Santa Fe Parking Division operates as a parking enterprise fund, which means that it is a self-funded entity independent of the general municipal fund in terms of both revenues and costs. Revenue sources for the enterprise include on-street meters, off-street parking pay-and-display stations, and parking violation fines.

In 2018, the year for which the most recent data is available, the Parking Fund generated approximately \$5.5 million in revenue with approximately \$4.5 million in expenses, resulting in net revenue of just under \$1 million. The revenue funds existing parking infrastructure and maintenance, as well as new parking projects and debt service on existing parking projects. The Fund also can also finance, completely or partially, ancillary projects or programs, such as the existing Santa Fe Pick-Up Program or the former Downtown Circulator, a short-lived program in the early 2000s implemented in conjunction with the City's Transit Division.

Residential Parking Permit Program (RPP)

The City's RPP program emerged from recommendations that were outlined in the City's 1995 Downtown Parking Study, which had identified that spillover parking into residential areas from nearby commercial land uses was a problem. The program has been considered successful in mitigating spillover parking demand into residential areas.

Establishing and Amending Zones

When the program was created, nine qualifying districts were created within which residents on a qualifying block or along a segment or entire length of a street can request to have a RPP zone established. Residents wishing to establish an RPP zone may submit a petition to the city that includes the names, addresses, and contact information, along with signatures, of a simple majority of residential property owners on the block or along the street for which the zone would exist. If the City verifies that all signatures are valid, then current code says that the petition shall be approved and an RPP established within 90 days.

The qualifying districts may not be expanded or amended, and petitions must be submitted separately for each block or street. Residents wishing to cancel their existing resident permit designation may seek to do so with a process similar to that for establishing a designation, with a simple majority vote of the property owners.

Obtaining a Permit

To apply for a permit, residents are first encouraged to go online and input their address into an online database to see if their address falls within an existing RPP zone. If eligible, residents may submit a form online with their contact information, address, vehicle information, proof of residency, and proof of vehicle registration to the City for consideration. If approved, the City issues a permit for a duration of one year free of charge. Permits are issued in the form of stickers that must be affixed to the left corner of the vehicle's rear bumper. Permits must be renewed annually according to a renewal schedule that differs by District.



Streets that are designated as RPP zones within each of the nine districts are listed in Figure 6. Note that nonresidential properties along these streets are exempt from the zones.

Figure 6. RPP Districts and Streets/Blocks within Each District Zoned as RPP

District	Corridors that Form District	Renewal Month
1	W Manhattan Ave., Aztec St., W DeVargas St., Defouri St., Romero St., Adolfo St., Amado St., Alarid St., Paseo de Peralta, Ninita St., Rosita St., Camino Sierra Vista	December
2	Rio Grande Ave., Paseo de la Cuma, Rosario St.	June
3	E. Palace Ave., Faithway	June
4	Galisteo St.	June
5	Kearney Rd., Kearney Ave., Otero, Magdalena	June
6	Chapelle St., McKenzie St., Staab St.	September
7	Don Gaspar Ave., E Santa Fe Ave., W Santa Fe Ave., Galisteo, Webber St., Winische Way	March
8	Elena St., W San Francisco St., Don Felix	September
9	Acequia Madre	September

Visitor Permits

Upon request, a RPP holder may receive one visitor permit per year, issued in the form of a placard that must be displayed on the dashboard of a visitor vehicle. A visitor with such a permit is allowed to park for up to 10 days within the same block or along the same street as the RPP district to which it is tied. No more than two visitor permits may be issued to any single household.

Off-Street Public Parking

The City offers both monthly permitted and daily paid parking at all public parking facilities except the Canyon Road Lot, which only offers daily paid parking. The following table shows typical monthly and daily rates, hours of operation, and payment methods accepted at each facility. Note that there is a \$21 new permit application fee for all monthly permits. All monthly permit parking is unreserved, and multi-day parking is not allowed.

Figure 7 shows the rate schedule for each off-street public parking facility.



Figure 7. Off-Street Public (City-Owned) Parking Facilities, Hours, and Rates

Parking Facility Name	Hours of Operation	Monthly Permit Pricing	Daily Rates	Payment Method(s)
Santa Fe Community Convention Center	7 AM - 12 AM		\$1/first hour, \$2/each hour	Pay and display, pay at exit
Sandoval Garage	7 AM - 12 AM	\$68.25	thereafter, \$12 Max (\$24 for 24- hour parking)	Pay and display, pay at exit
Water Street Lot	Parking allowed 24/7 (Pay stations are enforced Mon - Sat, 8 AM - 6 pm)		\$2/hour, \$12 Max (\$24 for 24-hour parking)	Pay and display
Railyard Lots	Parking allowed 24/7 (Pay stations are enforced Mon - Sat, 8 AM - 6 pm)	\$131.25		Pay and display
Railyard Garage	7 AM - 12 AM	\$68.25	\$1/first hour, \$2/each hour thereafter, \$12 Max (\$24 for 24- hour parking)	Pay and display, pay at exit
Canyon Road Lot	Parking allowed 24/7 (Pay stations are enforced Mon - Sat, 8 AM - 6 pm)	N/A		Pay and display

Discounted Permit Types

Downtown business employees qualify for a discounted monthly parking permit rate of \$35 a month, as of 2021. Also, city employees who work downtown at City Hall or Market Station qualify for a permit free of charge at the SFCCC Garage or the Railyard Garage respectively.

Other Solutions Offered

The City offers downtown business owners two options for providing discounted or free parking for customers in public garages and lots. The first option is the "park-n-shop" coupon. These coupons, sold in books of 50 for \$45, enable parkers to receive a 10% discount on parking when redeemed. They are available to frequent parkers for purchase and business owners to issue to their customers.

The second option is the parking validation program. Downtown businesses may offer validated parking for customers for lengths of time determined by the businesses. Validation program terms and monthly billing varies for each participating business. New businesses wishing to participate must provide a refundable security deposit of \$200 to start.

Special Event Parking

The City may, upon request, provide special parking permits for special events, such as festivals, weddings, and graduations. Individuals and entities seeking parking accommodations for special events may fill out a request form online at least 30 days prior to the event. They may specify the number of permits needed and whether they need any reserved parking or if vehicles will need in and out privileges during the event. The cost for special event parking varies based on the size and duration of the event and the level of exclusivity requested.



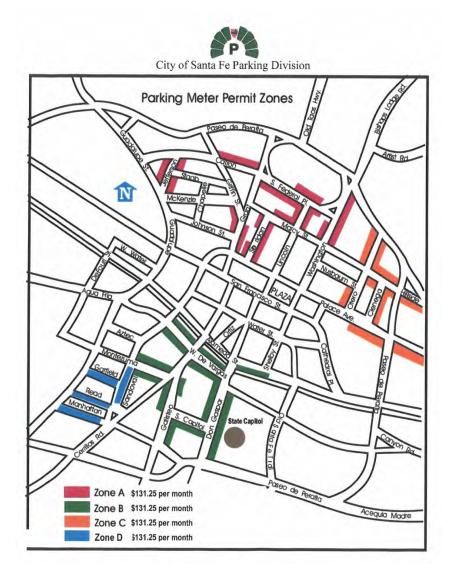
On-Street Public Parking

The City's metered on-street public parking is divided into four zones, as shown in Figure 5. On-street public parking meters are enforced Monday through Saturday from 8 AM to 6 PM (except holidays). The on-street metered parking rate, last adjusted in 2016, is \$2 per hour.

The City also offers monthly on-street parking permits. For \$131.25 per month (not including the \$21 fee for new permits), non-residents can purchase permits that allow them to bypass daily metered rates and park on any street within the applicable metered parking zone to which the permit is linked. Meter permits do not provide exemption from time-limited spaces.

Figure 8 shows the four on-street public parking permit zones.

Figure 8. On-Street Public Parking Permit Zones



Source: City of Santa Fe



Meter Hoods

Businesses and residents may reserve individual on-street meters for a rate of \$30 per day (excluding Sundays and holidays), plus a one-time administrative fee of \$25. Applications to reserve meters may be submitted online with at least 72 hours' notice, along with a detailed site plan or work plan. If an application is approved, the City will place hoods around the reserved meters and vehicles parking in those spaces must display a permit on the right side of the dashboard. Spaces may only be reserved for certain work functions, such as construction, deliveries, or loading/unloading equipment.

Loading Zones

The City requires a permit for use of all onstreet freight loading zones within city limits.

Permits for freight loading are issued for a duration of one year and are currently priced at \$84 for businesses located within city limits and \$99.75 for businesses located outside city limits (excluding a \$21 fee for all new applications). Loading zone permits may be registered to more than one vehicle as long as all vehicles are owned or operated by the business to which the permit is registered. Loading zone permits must be displayed from the rearview mirror facing forward. By code, freight loading and unloading may not exceed 20 minutes. Passenger loading without a permit is allowed in freight loading zones up to five minutes if not obstructing or preventing freight loading.



Example of a freight loading zone on Garfield Street in downtown Santa Fe (Photo: Google StreetView)

Passenger loading zones are designated separately from freight loading zones and do not require a permit. Vehicles, by code, may not park for more than three minutes during the posted loading zone hours or times.

PARCS

Metered on-street spaces are equipped with battery-powered parking meters that accept credit cards. In 2018, the system was upgraded to support the ParkMobile smartphone-based platform, which allows on-street parkers to pay using the ParkMobile app instead of the meter.

Off-street public parking has mostly transitioned to a pay-and-display model, though customers may elect to pay before exit in the garages and at the Water Street Lot, which are gated. Monthly permit holders are issued RFIDenabled access cards for these facilities that allow access.



Enforcement & Citations

Parking enforcement is conducted by dedicated parking enforcement officers, or PEOs, who are employed directly by the City's Parking Division. As of 2021, the process of enforcement is partly automated, using license plate recognition (LPR) equipment, and partly manual. All citations are mailed/delivered to the address of the registered owner of a vehicle to which a citation has been issued. Upon receipt of a violation notice, the registered owner has 15 days to either pay the citation fine or request an administrative hearing through the Parking Division. Rejected appeals may be further appealed to the First Judicial District Court of Santa Fe County.

Schedule of Fines

The following table shows the current schedule of fines associated with various parking infractions, ordered by the amount of the fine. Note that accessible parking violations have a mandatory court appearance associated with them. Fines are shown in Figure 9.

Figure 9. Schedule of Parking Fines in Santa Fe

Parking Infraction	Associated Fine
Abandoned Vehicles on Private Property	\$15
Additional Parking Regulations	\$21
Alleys Prohibited	\$27
All-Night Prohibited	\$27
Certain Purposes Prohibited	\$27
Adjacent to Schools Prohibited	\$27
Narrow Streets	\$27
One-Way Streets	\$27
Divided Streets	\$27
Hazardous Places	\$27
Certain Restricted Streets	\$27
Residential District without Permit	\$27
Bus and Taxicab Stands Restricted	\$27
Stopping, Standing, or Parking Prohibited	\$27
Special Area without Permit	\$32
Interferes with Other Traffic	\$35
Freight Loading Zone without Permit	\$37
Buses and Taxicabs	\$37
Accessible Parking without Placard/Permit	\$250 - \$500 (determined by court)



Minimum Off-Street Parking Requirements

For all new developments within the City of Santa Fe, a minimum number of parking spaces are typically required. Different minimums are provided for land uses found within the City in accordance with the City's zoning code.

Figure 10 shows some of Santa Fe's minimum parking requirements, per Table 14-8.6-1 of the Code of Ordinances (as of April 2021), for common major land use categories and selected specific land uses. A full table showing Santa Fe's parking minimums for all specific land uses can be found in the appendix.

Notably, Santa Fe sets forth specific requirements for short-term rentals, such as VRBO, that differ from the typical parking requirements for attached or detached family housing. Short-term rentals were added to the Code in 2008 and are distinct from requirements for vacation units or timeshares. For multi-family housing, the Code specifically requires that some parking be "assigned" and some parking be "unassigned", which involves the City in operational decision-making for private parking facilities. Finally, the Code identifies parking requirements for accessory dwelling units separately as its own use.



Figure 10. Minimum Off-Street Parking Requirements by City Code (Selected Land Uses)

Selected Major Land Use	Calastad Coasific Land Has	Minimum Bardina Bardina da Bardina			
Category	Selected Specific Land Use	Minimum Parking Requirement by City Code			
RESIDENTIAL					
	Attached dwelling unit (2-5 units):	2 spaces per dwelling unit			
	Attached dwelling unit (over 5 units): Less than 800 square feet of heated floor area	1 assigned space and .25 unassigned space per dwelling unit			
Household Living	Attached dwelling unit (over 5 units): 800-1,200 square feet of heated floor area	1 assigned space and 0.5 unassigned space per dwelling unit			
	Attached dwelling unit (over 5 units): More than 1,200 square feet of heated floor area	1 assigned space and 1 unassigned space per dwelling unit			
Short-term rental unit	One bedroom	One parking space			
(Ord. No. 2008-5 § 4)	Two or more bedrooms	2 parking spaces			
	PUBLIC, INSTITUTION	IAL AND CIVIC			
Libraries, museums (not for profit)	All uses	One space per each 250 square feet of net leasable area			
	COMMERC	CIAL			
5 100	Drive-in eating and drinking establishments	One space per each 30 square feet with a 10 space minimum			
Food & Beverages	Restaurants	One space per each 200 square feet of net leasable area			
0.00	Medical offices	One space per each 200 square feet of net leasable area			
Offices	Non-medical offices	One space per each 350 square feet of net leasable area			
	Hotels and motels	One space per rental unit			
Public Accommodation	Vacation time share project	Same as household living, plus one employee per six units (see page 1 of table for household living)			
Recreation & Entertainment	Recreational and entertainment theater	One space per each three seats			
Art galleries General merchandise and appliance stores Hardware stores		One space per each 200 square feet of net leasable area			
	Shopping centers	5 spaces per 1,000 square feet of net leasable area			
	ACCESSO				
Accessory dwelling units	All	One space per unit if the accessory dwelling unit is less than 1,000 square feet, otherwise, two spaces per unit			



Comparing City Requirements with ULI Base Ratios

Figure 11 illustrates examples of hypothetical land use programming comprised of some selected common land uses found within the three districts and compares the minimum parking requirement for that programming per Code with the projected peak parking demand for that same programming per Urban Land Institute (ULI) base parking ratios. The difference, in percent, between ULI and City Code is shown as well, with the lower calculated number of spaces required/recommended highlighted in vellow. Note that certain assumptions and simplifications were made where necessary to make direct comparison possible.

The ULI base ratio indicates a recommended supply per unit of land use in a stand-alone context with no assumed reductions for people arriving via another transportation option—in other words, the base ratio assumes that all people arriving to the site are using a personal vehicle.

Figure 11. City Minimums Compared to Recommended Supply per ULI by Selected Common Land Use

Selected Major Land Use Category that Occurs in Each District	Selected Example of a Land Use by Size	Minimum Requirement by City Code Assuming No Reductions	Recommended Supply Using ULI Base Ratio	Difference in Percent
	Boutique Retail (1,000 sq ft)	5	5	0%
Commercial	Big Box Retail (100,000 sq ft)	500	475	-5%
Retail	Home Improvement Store (100,000 sq ft)	500	435	-13%
	Shopping Center (300,000 sq ft)	1,500	1,200	-20%
Restaurant	Fast Food Restaurant (3,300 sq ft, 3,000 sq ft serving area)	60	49	-19%
	Typical Restaurant (5,000 sq ft)	25	89	255%
Entertainment	Museum (50,000 sq ft)	200	250	25%
Entertainment	Movie Theater (1,000 Seats)	333	250	-25%
Lodging	Typical Hotel (100 Rooms/Keys)	100	115	15%
Multi-Family Residential	10 Studio Units (< 800 sq ft), 20 1- Bedroom Units (900 sq ft), 10 2- Bedroom Units (1,100 sq ft), 5 3- bedroom units (1,300 sq ft)	68	62	-8%
	Typical Office Space (100,000 sq ft)	286	340	19%
Office	Medical Office Building (100,000 sqft)	500	460	-8%

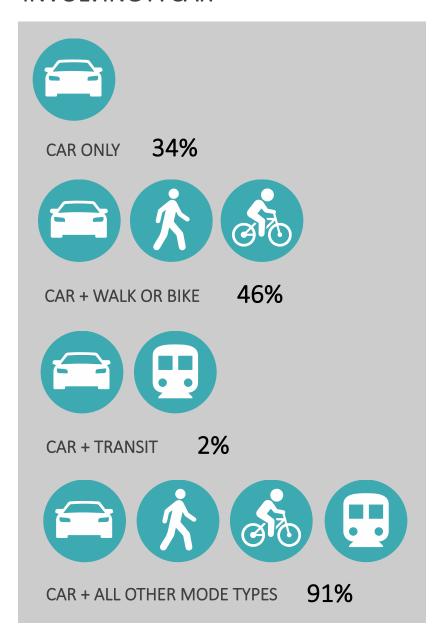
In general, city required parking minimums are within 25% of ULI projected peak demand loads for the hypothetical land use programming examples given above. Cases where the City requirement is greater than the ULI base ratio could indicate an opportunity for possible reduction of parking requirements. In core areas, parking requirements may be reduced even further to reflect and support walkable environments where other forms of travel, like transit, walking, and biking, are used frequently.



User Behaviors

Public engagement conducted and summarized in the Santa Fe MPO 2020 – 2045 Metropolitan Transportation Plan (MTP) yielded the following key facts and figures related to parking in Santa Fe summarized below.

MODE OF TRANSPORTATION INVOLVING A CAR



PERCENTAGE OF **RESIDENTS WHO FEEL** LIKE THE COST OF PARKING IS A **TRANSPORATION** BARRIER

33%

PERCENTAGE OF **RESIDENTS WHO FEEL** THAT TRAVEL BY AUTO MEETS THEIR NEEDS

89%

PERCENTAGE OF **RESIDENTS WHO HAVE** DISABILITY IN SANTA FE **REGION**

13%

PERCENTAGE OF HOUSEHOLDS WITH NO VEHICLE 3.5%



TDM Programming and Initiatives

The Santa Fe MPO 2020 – 2045 MTP, as well as previous versions of the transportation plan, provide a menu of transportation demand management strategies that should be considered for implementation or enhancement in the future. These strategies include the following:





TDM Strategies Implemented

Over the last decade, the City of Santa Fe has worked on implementation of a variety of programs, projects, and other TDM initiatives. These are summarized according to TDM strategy below.

More/Improved Parking Management

- Off- and on-street parking revenue collections systems upgraded with smartphone integration in 2019
- Parking meter rates
 - o Rates were proposed to double from \$1 per hour to \$2 in 2016 for all two-hour time-limited spaces and increase to \$3 per hour after two hours at non-time-limited spaces.
 - o On-street metered parking is now \$2 an hour across all time-limited spaces.
 - o The City experimented with reduced parking meter rates during the busy summer season in

Scooters/Micromobility

- A one-year ban on scooters was imposed in 2019
 - o The City is currently exploring the sustainability of a shared electric scooter program within the
 - o Best practices for a program have been outlined through a study looking at other communities that have implemented or provided the framework for authorized scooter programs.

Paratransit

- The Santa Fe Ride program provides curb-to-curb paratransit service.
 - o Those with disabilities who are unable to use fixed-route transit service or are 60 years of age or
 - o Fare per trip is \$5 for seniors, \$2 for those with disabilities, and free for qualifying veterans.
 - o Rides must be scheduled in advance and may be subject to availability.
 - o Hours of operation are from 5:30 AM to 10 PM on weekdays, from 8 AM to 7:45 PM on Saturdays, and from 8:15 AM to 6:30 PM on Sundays.

Reduced Parking Requirements for Businesses that Implement **TDM**

- Municipal code allows up to a 5% parking requirement reduction if the property owner grants the City the right to use a portion of the property for a transit facility.
- Parking reductions may be granted with no percent limits by the Land Use Board or Director if supported by a parking study in the Business Capitol District and within the Midtown LINC Overlay District.
- On-street parking may count towards fulfilling parking requirements in the Midtown LINC Overlay District.



Mobility Hubs

- The Southside Transit Center is intended to act as a bookend to the Downtown Transit Center on the southwest side of Santa Fe.
 - o The transit center was put out to bid at the end of 2020.

Subsidized Transit Passes for Youth and Older Adults

Persons 60 and older, or those who have a disability, qualify for Santa Fe Trails' Half-Fare Program, which reduces fares by up to 50%.

Bike Parking and Incentives

- Off-street bicycle parking is required for new development or where existing development is altered or intensified by more than 25%.
- In 2013, the City enacted a program that provides a free bus pass with purchase of a bicycle or bike gear, or by providing volunteer service in exchange for a new bike.
 - o Annual free passes are provided to qualifying purchases of \$200 or more.
 - o Monthly free passes are provided to qualifying purchases of \$20 \$199.

Vanpool Incentives

- The Santa Fe Pick-Up was developed to provide Rail Runner commuters assistance in achieving their last mile downtown connection and to provide tourists with loop service to several popular attractions and destinations.
 - o Service is free of charge
 - o Prior to COVID-19, the Santa Fe Pick-Up consisted of three routes:
 - Historic District
 - 19 stops
 - Weekdays 6: 30 AM 5: 30 PM, Saturdays 8:30 AM 5:30 PM, and Sundays 10 AM to 5:30 PM
 - Museum Shuttle
 - 13 stops
 - Weekdays and weekends, 10 AM 5:30 PM
 - Canyon Road Shuttle
 - 8 stops plus the Visitors Info Center
 - Weekdays and weekends, 10 AM 5:30 PM



Special Events

As one of the oldest and an important cultural hub of the State and American Southwest, Santa Fe hosts to a variety of special events throughout the year. The largest events in and around Santa Fe occur during the summer and fall months. One such event, the internationally renowned Albuquerque International Balloon Festival, is held in October.

Many of these events have been growing in attendance and scale over the last few decades, and as such, Santa Fe has experienced some of the highest recorded tourism figures in its recent history. On days when events occur, parking demand in downtown Santa Fe increases significantly, with public parking lots and garages filling nearly to capacity. Throughout the year, there are about 23 notable special events, of which about eight can be considered to be regional events that are known to attract large numbers of visitors from outside Santa Fe and New Mexico.

Figure 12 lists special events held in and around Santa Fe throughout a typical year. Note that this is not intended to represent a comprehensive list of all events.

Figure 12. Special Events in and around Santa Fe in a Typical Year

Event (Regional Events in Bold)	Season or Month
Santa Fe Film Festival	February
Santa Fe Restaurant Week	February
Eldorado Studio Tour	Winter
Santa Fe Bandstand	Summer
Santa Fe Opera	Summer
Santa Fe International Folk Art Market	July
HIPICO Santa Fe	Summer
Santa Fe Chamber Music Festival	Summer
Rodeo de Santa Fe	July
Contemporary Hispanic Market	July
Traditional Spanish Market	July
Santa Fe Indian Market	August
Currents New Media Festival	August
Santa Fe Music Week	Fall
Burning of Zozobra	Fall
GFNY Santa Fe	September
Santa Fe Wine and Chile Fiesta	September
Albuquerque International Balloon Festival	October
Santa Fe Independent Film Festival	October
Holiday Tree Lighting on the Plaza	Winter
Santa Fe Winter Indian Market	Winter
Canyon Road Farolito Walk	Winter
New Year's Eve on the Plaza	December



O2 Future Conditions/ Influencing Factors



Future Conditions/Influencing Factors

New Developments Expected to Change or Affect the Public Parking System

Much of the residential growth outlined in the 2017 Land Use and Urban Design Plan is anticipated to occur in areas outside of the three focus areas of this study—namely in the Tierra Contenta, Las Soleras, and Northwest Quadrant neighborhoods. While the 2017 Plan focuses on other areas of the city, it generally supports denser development with more multi-family housing and less land dedicated to parking. For example, the Airport Road area is envisioned as a mixed-use corridor with retail and employment center anchors, and the Midtown District is similarly imagined as a mixed-use corridor with an employment center near Silar Road. As shown in the plan's Future Land Use Plan map (Figure 13), this largely reflects existing development within these areas.

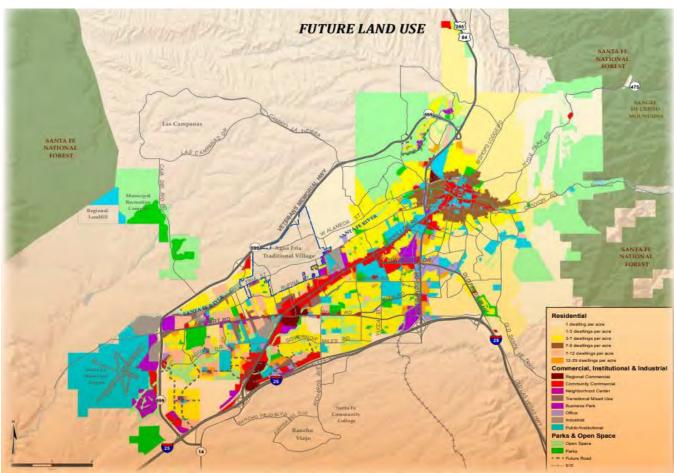


Figure 13. Future Land Use Plan from 2017 Land Use and Urban Design Plan

Source: City of Santa Fe



Based on input from City staff, infill presents the greatest opportunity in the Airport Road and Midtown Districts, with a combined additional 1,100 multifamily residential units anticipated. While the Airport Road District presents additional opportunity for a few hundred single family housing units based on tracts available and zoning of the area, commercial and multifamily growth will likely be limited. Similarly, based on the availability of land and historic distinction of the Downtown area, development opportunities are limited.

The Midtown District is described by City staff as the area with the greatest potential for development and infill. With up to 600 multifamily units anticipated in the area, sites such as the former Kmart store provide opportunity for redevelopment, largely anticipated for mixed-use projects.

Based on the City's existing parking requirements, multifamily housing projects with more than 5 units per development must provide 1 space per dwelling unit plus 0.5 to 1 space per dwelling unit for visitor and overflow parking, depending on unit size. While this is in line with parking supplies observed for similar projects by the Institute of Transportation Engineers (ITE), the parking demand for multifamily residential can vary based on the type of housing project, as summarized in Figure 14.

Figure 14. Typical Multi-family Housing Parking Demand Generation for 1,700 Dwelling Units

Category of Multifamily Housing	Sub-Category of Multifamily Housing	Spaces per Dwelling Unit	Parking Demand
	No nearby rail transit	1.47	2,499
General Suburban Midrise	Within ½ mile of rail transit	1.37	2,329
Affordable Housing	General	1.33	2,261
Affordable Housing	Senior	0.46	782
City Code ²		1.5	2,550

Residential growth of this capacity will be supported by additional retail and service developments. However, with the city's focus on infill and mixed-use opportunities, shared parking plans, as provided for in the city code, should be strongly encouraged in mixed-use developments. This also coincides with the 2017 Land Use and Urban Design Plan's goal to reduce excess parking supplies. Additionally, this supports reduced construction costs related to parking and heat island effects associated with parking lots.

WALKER CONSULTANTS | 33

² Assumes projects of > 5 dwelling units that are 1,200 square feet or less in size



External/General Influencing Factors

Technology Changes

Telecommuting

In July 2020, Walker Consultants conducted an opinion survey of its partners, clients, and contacts in the architecture and engineering, aviation, higher education, healthcare, government, and real estate development and management sectors, to aid in identifying the potential short- and long-term parking demand and transportation impacts of COVID-19.

An overwhelming majority of questionnaire respondents have continued to work from home during the pandemic. These individuals report that they and their colleagues have been and can be productive working remotely, with reports suggesting that remote work will continue post pandemic. While some will continue to work remotely on a largely full-time basis and others will return to the office, there is a

SURVEY RESPONDENTS

Responses received from more than 7 general industries across:

59 Cities 31 States 3 Countries



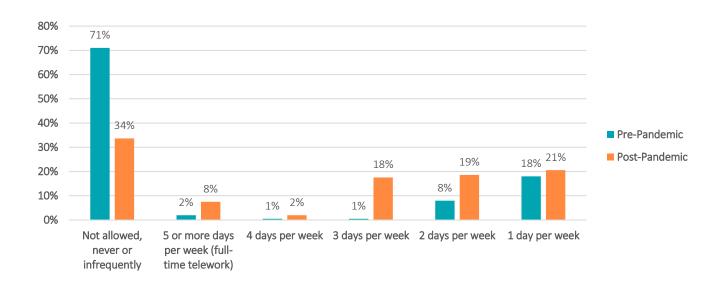
large portion of the professional population that will continue to work remotely at least part-time. Respondents suggest up to a 24% potential reduction in office parking demand due to increased telecommuting.

Telework is not a new concept, however, prior to the pandemic it was not a universally accepted method of work in many industries. The pandemic has provided an opportunity for many to work remotely for whom it had not previously been an option. Walker inquired about respondents' opinions on whether they would continue (or be allowed to continue) teleworking post-pandemic, and the frequency with which they expected it may occur.

Telework habits pre-pandemic and during the pandemic according to Walker's survey are shown in Figure 15.



Figure 15. Telework Habits Pre-Pandemic and During Pandemic According to Walker Survey



Respondents suggests a potential parking demand reduction of up to 24% for office land uses as a result of an anticipated growth of 129% in individuals that telework at least part-time. The parking demand reduction assumes those working remotely are evenly distributed throughout the week. While one workforce survey estimates about 37% of U.S. jobs could be done from home full-time, ³ Global Workplace Analytics projects this group as high as 56% of the U.S. workforce, with up to 30% of the workforce working remotely at least part-time by the end of 2021.⁴ Physical office locations, however, aren't going anywhere as a Salesforce survey of over 3,500 workers indicates 64% of employees report wanting to spend at least some hours at some type of workplace, for instance an office, factory, or store, as opposed to working entirely remotely.⁵

Electric Vehicles

The adoption of electric vehicle (EV) ownership continues to increase as well as the regulatory requirements for such. As auto manufacturers move towards an increased number of available electric vehicles, or in some cases an all-electric fleet⁶, ownership will continue to rise. For these reasons, ensuring that parking supplies are ready to provide more electrical vehicle chargers overtime is a wise community investment.

³ The Kiplinger Letter, August 2020.

⁴ Lister, Kate. Work-at-Home After Covid-19. Global Workplace Analytics. August 2020.

⁵ Afshar, Vala. *The Future of Work is Hybrid*. ZDnet, July 2020.

^{6 &}quot;General Motors to eliminate gasoline and diesel light-duty cars and SUVs by 2035." January 28, 2021 https://www.washingtonpost.com/climateenvironment/2021/01/28/general-motors-electric/.

Santa Fe Multimodal Transition Plan Parking Assessment



On a national level, the number of EVs on the road in 2019 was estimated at roughly 1.37 million light vehicles⁷. As a percentage of the 2019 passenger vehicle fleet (estimated as ±258 million vehicles8) this represents roughly only 0.5% of passenger vehicles on the road. Despite this, many organizations continue to project growth in the EV fleet.

Walker consulted three different EV adoption and growth scenarios, ranging from low growth to high growth, provided by three different industry sources. Then, Walker projected the size of the total vehicle fleet from now through 2030 using annual sales data from Automotive News⁹ and vehicle scrappage rates from the US Bureau of Transportation Statistics¹⁰, and assuming a 1% annual increase in population. Finally, Walker compared the two sets of figures to project the size of the national electric vehicle fleet by 2030, expressed as a percentage of the projected total vehicle fleet.

The high-adoption scenario uses graphical projections from BloombergNEF's Electric Vehicle Outlook 2020 to determine growth in the number of EVs on the road¹¹. Under this scenario, when compared to the projected size of the overall fleet, by 2030, approximately 20 million EVs are projected to be on the road, or 6.76% of the fleet.

The mid-adoption scenario is based upon the Electric Power Research Institute's 2019¹² mid-range projection of 14 million EVs on the road by 2030, representing about 4.68% of the overall projected 2030 fleet. Finally, the lowadoption scenario is based on the US Energy Information Administration's Annual Energy Outlook 2020¹³, which projects only about 8.4 million EVs on the road by 2030, representing about 3.05% of the overall projected 2030 fleet. While these adoption rates are optimistic, the total market penetration rate of EV's will remain low until well into the 2030s. Figure 16 illustrates each of these growth scenarios.

⁷ Electric Drive Transportation Association, http://electricdrive.org.

⁸ EPRI, US Drive Grid Integration Tech Team and Integrated Systems Analysis Tech Team, Summary Report on EVs at Scale and the U.S. Electric Power System, November 2019,

 $[\]frac{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20at\%20Scale\%20Grid\%20Summary\%20Report\%20FINAL\%20Nov2019.pdf.}{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20at%20Scale%20Grid%20Summary\%20Report%20FINAL\%20Nov2019.pdf.}{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20at%20Scale%20Grid%20Summary\%20Report%20FINAL\%20Nov2019.pdf.}{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20Att\%20Scale%20Grid%20Summary\%20Report%20FINAL\%20Nov2019.pdf.}{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20Att\%20Scale%20Grid%20Scale%20Grid%20Scale%20FinAL%20Nov2019.pdf.}{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20Scale%20Grid%20Scale%20FinAL%20Nov2019.pdf.}{\text{https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT\%20EVs\%20Scale%20S$

⁹ Walker Consultants analysis of sales data published by *Automotive News*, December 2019.

¹⁰ Scrappage is the number of vehicles leaving fleet. The rate used is 5.1%, US Bureau of Transportation Statistics.

¹¹ BloomberNEF, Electric Vehicle Outlook 2020, https://bnef.turtl.co/story/evo-2020/page/1?teaser=yes.

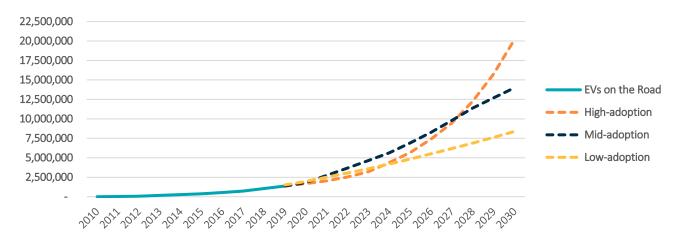
¹² EPRI, US Drive Grid Integration Tech Team and Integrated Systems Analysis Tech Team, Summary Report on EVs at Scale and the U.S. Electric Power System, November 2019.

https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT%20EVs%20at%20Scale%20Grid%20Summary%20Report%20FINAL%20Nov2019.pdf. ¹³ US EIA, Annual Energy Outlook 2020, https://www.eia.gov/outlooks/aeo/data/browser/#/?id=49-AEO2020®ion=0-

 $[\]underline{0\& cases = ref2020\& start = 2019\& end = 2035\& f = A\& line chart = ?ref2020-d112119a.10-49-AEO2020? ref2020-d112119a.11-49-AEO2020? ref2020-d112119a.11-49-AEO2020-d112119a.11-49-AEO2020-d1121190-d1121190-d112190-d1121190-d1121190-d1121190-d1121190-d1121190-d1121190-d1121190-d1121190$ $49-AEO2020 \\ ^{\circ}ref2020-d112119a.13-49-AEO2020 \\ ^{\circ}ref2020-d112119a.14-49-AEO2020 \\ ^{\circ}ref2020-d112119a.16-49-AEO2020 \\ ^{\circ}ref2020-d112119a.4-49-AEO2020 \\ ^{\circ}ref2020-d112119a.16-49-AEO2020 \\ ^{\circ}ref2020-d1121190-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d1120-d11$ $\underline{AEO2020\&map=\&ctype=linechart\&chartindexed=0\&sourcekey=0\%20annual\%20energy\%20outlook\%202020.}$



Figure 16. Actual US Electric Vehicle Fleet Size (2010 – 2019) and Projected Fleet Size (2020 – 2030)



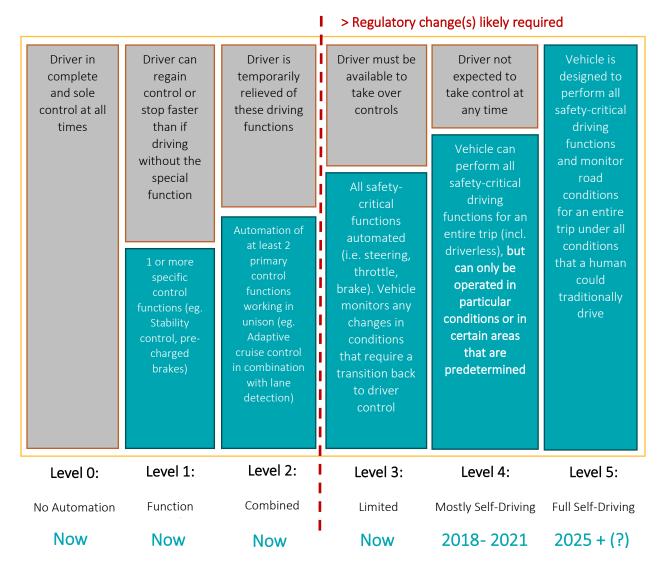
Source: BNEF, EPRI, EIA, Walker Consultants

Autonomous Vehicles

There are several levels of autonomy to consider in planning for the future of autonomous vehicles (AVs). The Society of Automotive Engineers defines six levels of driving automation, ranging from manual at Level 0 to Level 5 and fully autonomous. These levels have been adopted by the U.S. Department of Transportation and are summarized in Figure 17. Vehicles with Level 2 features, such as adaptive cruise control and lane departure warnings, are common in new vehicles sold today. Level 3 vehicles, such as Teslas with Autopilot, are even on the roads today but as we have seen through some headline incidences, the driver must be available and alert in order to assume control and avoid a potential accident. While Level 4 and 5 testing is occurring now, for instance the autonomous shuttle that operated at the Panasonic campus near Denver International Airport, much of the focus for this type of testing is for fixed route shuttles and shared mobility services.



Figure 17. Levels of Driving Automation According to the Society of Automotive Engineers

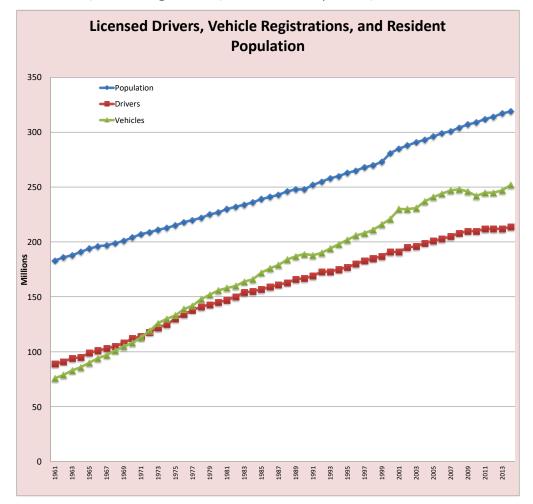


Source: SAE, NHTSA

Car culture has changed. 10 to 15 years ago, Millennials started getting their driver licenses later and the rates of vehicles per drivers were declining, even as Boomers were reaching peak car ownership. However, personal vehicle commuting has not declined, as summarized in Figure 18. Meanwhile, car-free and one-car households have decreased while two-car households have increased, correlating with a growing percentage of Millennials having children and moving to the suburbs.



Figure 18. Licensed Drivers, Vehicle Registrations, and Resident Population, 1961 - 2013



Source: US Department of Transportation Federal Highway Administration

In high disruption scenarios, up to 90% of vehicle sales by 2040 could be Level 4 and Level 5 autonomous. However, the average car is on the road approximately 11 years. So even in a scenario where individuals largely feel safe traveling in and around AVs, leading to them quickly being adopted by the general public, and there is adequate infrastructure to handle them, Walker does not project AVs reaching 33% of vehicles on the road until after 2050.

Without factoring in population growth, this leads to a potential parking demand reduction of 10-40%, however with population growth factored in, even in a high disruption scenario, parking demand may not diminish significantly, and in a low disruption scenario parking demand may even increase once population growth is factored.

In the meantime, there are additional constraints to consider over the next 30 years: land use and land value, economic vitality, and sustainability goals. At this junction, the focus should be on parking and transportation demand management strategies the aim to reduce parking demands and balance transportation systems to mitigate need to build new public parking supplies, however, do not let specter and promise of autonomous



vehicles negatively impact other community goals. It will be a significant time yet before car ownership and operational changes related to AVs impact parking demands, particularly in terms of passenger vehicles.

With the useful life of a parking structure reaching up to 50 years and beyond with proper upkeep and maintenance, there are steps that can be taken in preparation for autonomous vehicles:

- Plan new parking structures for potential adaptive reuse while recognizing that this type of design will come at a significant premium. This includes incorporating a higher live load factor, higher floor to ceiling heights and flat levels, among other design considerations, to support conversion of the structure to a new land use at some point in the future.
- As demand very gradually decreases, decommission and redevelop surface parking lots.
- Consolidate parking into the newest facilities as existing facilities reach the end of their useful life.

Micro Mobility and Mobility as a Service

Micro mobility provides transportation options for short-distance trips, either as standalone trips or to provide first and last-mile connectivity to destinations in combination with other modes such as transit or remote parking of personal vehicles. Micro mobility includes such options as e-scooter and bike sharing, as well car sharing and TNCs. Each of these modes have an optimal distance for targeting user types, and each provides unique challenges and demands on the parking and transportation system.

Not all micro mobility options aim to or should fulfill all transportation needs. Each option has a comfort threshold of typical users both in terms of comfort level in using each option and the comfort of the user while using that option. For instance, car sharing is best used in this sense for trips up to 5 miles or lasting 15 to 30 minutes. Car shares typically charge by the minute but provide climate-controlled comfort and extra storage for users traveling with items that may be difficult to carry while using other options. Car shares typically do not have additional parking or fuel costs more than the base per minute charge, but some do offer monthly or annual memberships for reduced fees. Bike shares, however, vary more widely in pricing options, some offering a per minute charge while others a flat fee for a base time period, or some combination thereof. Bike shares are typically best to accommodate trips of up to 3 miles or lasting 10 to 15 minutes. Scooters have the shortest average comfort distance at 1.5 miles or trips lasting less than 10 minutes. While these are currently very popular, they have presented many communities regulatory challenges, increased rider and pedestrian injuries, and in some circumstances, excessive sidewalk clutter.

Ride-hailing Services

Over the last five years, the emergence of ride-hailing services such as Uber and Lyft has had a profound impact on parking demand loads in certain sectors of the economy. According to the Third Edition of Shared Parking, anecdotal reports of the impact of these services have included up to a 70% decline in business traveler parking demand, an up to 80% reduction in parking demand at restaurants with valet service, a 3% - 10% reduction in sports and event demand, and a 5% - 20% reduction in airport parking demand, mostly from an increase in residents travelling on business who choose ride-hailing services over parking for short trips. 14

¹⁴ Smith, Mary. "Shared Parking: Third Edition (p. 63)." Urban Land Institute, National Parking Association, and ICSC. Published February 2020. ISBN # 9780874204278



However, COVID-19 has resulted in a sudden demand-side shock to the entire ride-hailing industry. A study conducted of aggregated debit and credit card purchases of US consumers by the firm Second Measure found that Uber spending dropped around 83% in March 2020. 15 According to a senior research analyst at the financial firm D.A. Davidson, business for both Uber and Lyft was down between 70% and 80% in March and April.

Though the loss in business was partially offset by an increase in food delivery, the profitability and long-term financial viability of both Uber and Lyft have always been in question. Neither company has returned a quarterly profit since being established¹⁶. The pandemic has now made it increasingly unlikely that either company will become profitable this year or next.

A clear behavioral trend shift has yet to emerge for ride-hailing services as a result of the pandemic. While usage may remain down through the mid-term due to fewer trips being made overall, it is possible that some riders come to view ride-hailing services as a less risky alternative to public transit. On the other hand, other riders may eschew both transit and ride-hailing services and decide to start driving, biking, or walking instead.¹⁷ The business model remains very price elastic, with even modest increases or decrease in fares potentially having large negative or positive effects on the use of ride-hailing services.

Micro Mobility

With micro mobility options, regulations should address where devices can be used, where they can be parked, and their top speed. Not only should these regulations be enforced with riders, but measures can be required of the vendors to protect the community's interest in managing these devices and providing a safer and more enjoyable experience for riders. In the Spring of 2019, the City of Santa Fe put a ban on the use of rented electric scooters on public property due to concerns with parking and appropriate travel ways for the devices, citing communities such as Denver, Colorado that experienced discarded e-scooters on sidewalks and in streets.

Where Micro Mobility Devices Can Be Used

Typically, bikes cannot be ridden on the sidewalk and motorized devices such as e-scooters cannot be used on sidewalks nor in bike lanes. Clarifying regulations for micro mobility devices' permitted use should provide language that is flexible enough to address future options not currently on the market in addition to those in use today. Many communities are adapting their regulations to permit use of motorized micro mobility devices within bicycle lanes, while also requiring vendors of these devices to restrict the top potential speed. Figure 19 summarizes scooter laws for the State of Oregon and the City of Portland. While this summary is not comprehensive of all scooter-related laws under either jurisdiction, is does exemplify how local jurisdictions may have more restrictive regulations in place.

¹⁵ Conger, Kate. "Uber and Lyft Are Searching for Lifelines." The New York Times. April 17, 2020. Accessed June 20, 2020. https://www.nytimes.com/2020/04/17/technology/uber-lift-coronavirus.html

^{16 &}quot;Uber sees profit by end of 2020, but still expects full-year loss" Reuters. February 6, 2020. Accessed June 21, 2020. https://www.reuters.com/article/usuber-results/uber-sees-profit-by-end-of-2020-but-still-expects-full-year-loss-idUSKBN2002UQ

¹⁷ 5 Automotive News. "Pandemic darkens shared-mobility outlook." May 25, 2020. Accessed June 21, 2020. https://www.autonews.com/editorial/pandemic-darkens-shared-mobility-outlook





Figure 19. E-Scooter Restrictions in State of Oregon and City of Portland

Jurisdiction	Driver License Required of Operator	Top Speed	Where E-Scooters Can Operate	Parking	
State of Oregon	Yes	24 mph, Operator may not exceed 15 mph	Scooters have the same rights as any other vehicle operating on a highway.	Not addressed. Scooters may be parked on the sidewalk, close to the curb, or in designated scooter parking areas. If a scooter is parked in a way that prevents access to the sidewalk, curb ramps, bike lanes, or vehicle travel lanes, the Operator may be fined or the City may require the vendor to suspend the Operator's account.	
City of Portland, Oregon	Yes		Using an electric scooter on the sidewalk and in crosswalks is prohibited. People using electric scooters are allowed on Portland city streets, multi-use paths and in bike lanes. Must yield to pedestrians.		

Source: State of Oregon, City of Portland, Oregon

Managing Micro Mobility Parking

Since the emergence of dockless shared devices, finding bicycles left lying in bushes or strewn across sidewalks, and e-scooters with dead batteries abandoned in streets and cluttering pedestrian pathways quickly became an unacceptable norm. Communities responded by confiscating devices, requiring vendors to remove them from the community, and scrambled for ways to corral the mess.

Today, many communities are using a mix of putting the ownness for responsible storage of a device once a user has completed their ride on the vendors with providing vendors guidelines and often specifically marked areas in which devices should be parked. Like geofencing used by ride-hailing mobile applications, some communities have begun requiring micro mobility device vendors to geofence parking for the devices within specified locations.

In these instances, the rider cannot terminate their session and stop charges to their account without parking the device within the geofenced area indicated in the app, often also marked for device parking, as shown in Figure 10. It is essential to identify areas for parking that will not limit accessibility for others, ensuring ADA access is not unduly limited.



Example of micromobility parking (Photo: City of Minneapolis)



Keeping Micro Mobility Devices off the Sidewalk

While micro mobility vendors do summarize regulations related to the usage of their devices within the terms and conditions and typically again in the introductory screens that begin each ride session, according to a survey conducted by Consumer Reports in March 2019, 27% of riders are uncertain of the traffic laws they should follow.¹⁸ Additionally, with 20% of respondents in the survey indicating discomfort with riding these devices in traffic, a common enforcement issue is their presence on sidewalks. While inappropriate and a demonstrated safety concern for pedestrians, without consistent enforcement of requirements to use bike lanes, whether shared in traffic or dedicated space, riders will continue to use the sidewalk.

This was demonstrated by a pilot of e-scooters in Portland, where 8% of riders chose to use the sidewalk when a dedicated bike lane was available, versus 66% of riders who chose to the use the sidewalk when no bike lane was present and the alternative was to ride in traffic. 19 The preference among riders to ride on the sidewalk is not only a reflection of safety concerns in riding in traffic, but also reflects the condition of many curb lanes and the infrastructure to support bikes and micro mobility devices within traffic travel ways, such as narrow roads, potholes and other obstacles in the curb lane that present a physical barrier to safely navigating the roadway.

Micro Mobility Enforcement

The ordinance should describe areas in which micro mobility devices are permissible for use. To ensure these areas are recognized, and prevent riders from going outside the prescribed zone, some communities are requiring vendors to geofence where devices may be operated. This method slows and stops the device's ability to operate as it leaves the geofenced boundary, similar to geofencing to enforce the use of designated parking areas

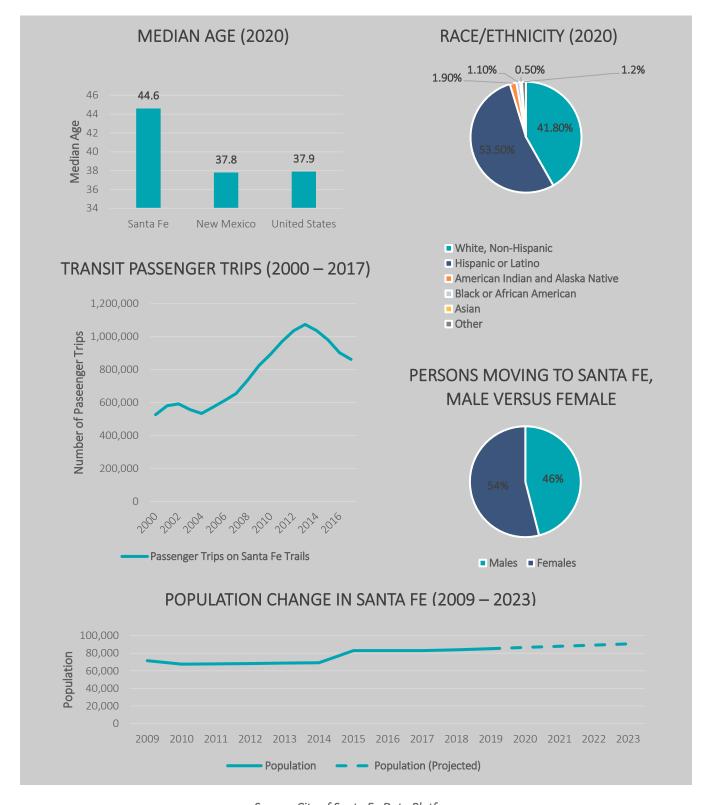
Equipment and operational requirements, such as the maximum speed the device can operate at, can also be used to enforce regulations of micro mobility devices. Operational requirements may also require the vendor to share data of usage patterns and trends.

¹⁸ https://www.consumerreports.org/product-safety/deaths-tied-to-e-scooters/

¹⁹ https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/micro-mobility-is-the-future-of-urban-



Demographics & Key Indicators



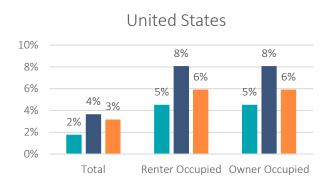
Source: City of Santa Fe Data Platform

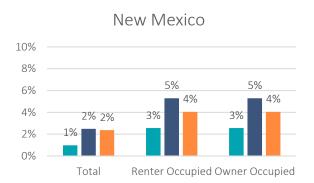


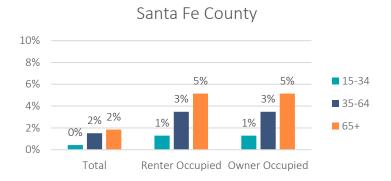
An Aging Population

Nationally, and in many urban areas of the country, vehicle ownership declines among those age 65 and over. This is specifically true among residents that reside in a rental dwelling as opposed to an owner-occupied dwelling. Within Santa Fe County, 5% of senior rental households are car-free, compared to 3% of those aged 35-64 are in car-free rental households. Only 1% of those 15-34 reside in a car-free rental household. For owner occupied households, there is no significant reduction in the number of households with at least 1 vehicle, as summarized in Figure 20. 20

Figure 20. Car-Free Households







Source: U.S. Census

While there is a demonstrated reduction among seniors in non-owner-occupied dwellings within the area, consideration is needed to support alternative transportation usage among seniors. Older residents want fast, frequent, reliable service but prioritize comfort and accessibility slightly higher than those in other age groups. For example, in a survey of 3,014 transit riders, those over 65 years of age indicated they wanted a shelter at the bus stop nearly as much as they wanted more frequent service. As residents age, the prospect of traveling

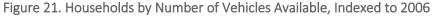
²⁰ https://data.census.gov/cedsci

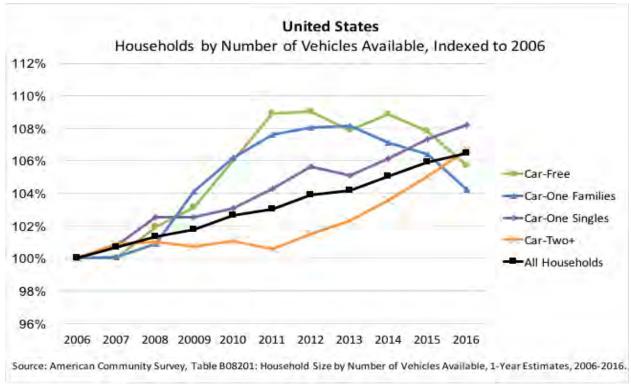


without shelter or a seat was a greater deterrent to transit use than the frequency or speed of service when compared to riders under 65 years of age, though these did remain important.²¹

Increasing Population Size

As the population increases, so does the overall demand for parking. The car-free trend that peaked in 2012 has been declining over the last several years. Since 2011, the number of households with more than one vehicle has been steadily increasing, as summarized in Figure 21.





However, how development occurs will greatly impact the way in which people travel and the need for parking. For example, regulatory frameworks that support and incentivize walkable neighborhoods and transit-oriented development can reduce parking demand and, therefore, needed supply.

²¹ https://transitcenter.org/wp-content/uploads/2017/08/ALL-AGES.pdf



Potential Remote Parking Options

One of the long-term options for addressing parking shortages in the downtown core, particularly during special events, is establishing a remote parking facility served by a shuttle or incorporated as a stop along the route of the existing Santa Fe Pick-Up.

Potentially, any large parking facility within or reasonably close in proximity to the Downtown/Railyard, Midtown, or Airport Road districts could serve as a candidate for a remote parking facility. However, there are several criteria for establishing the feasibility of such an option, including, but are not limited to:

- Willingness of the owner to enter into a suitable agreement with the City
- Distance from downtown
- Distance from a Rail Runner Station or transit center
- Accessibility for vehicles and pedestrians
- Nearby key landmarks or civic activity nodes
- Size of the lot(s)
- Nature of the existing use of the lot(s)
- Land use of the building(s) tied to the lot(s)
- Parking demand patterns and occupancy for the lot(s)

Based on these criteria, Walker has identified the following potential candidates for remote parking:

- 1. The New Mexico Public Regulation Commission complex
- 2. The New Mexico School for the Deaf
- 3. The New Mexico Motor Vehicle, Department of Health, and Department of Transportation complex
- 4. Santa Fe Place Mall

Figure 22 is a table showing estimated inventory for all candidate remote parking lots identified. Figures 23 – 27 outline the locations of these sites relative to downtown and nearby landmarks or transit stations and specific lots within each location that could be candidates for remote parking. The parking inventory in each lot is shown in the table.

Three of the sites are within the Downtown District as established in this study. However, two of the sites (Facility Group #2 and #3 in the table below) could potentially serve as remote parking for the Midtown District as well as the Downtown/Railyard District. Facility group 4, the Santa Fe Place Mall, is nearly 6 miles from downtown Santa Fe along Cerrillos Road and therefore could only effectively serve Airport Road District destinations.

In some cases, the parking supply was estimated based on the square footage of the lot, while in other cases, the spaces were counted based on aerial imagery.



Figure 22. Remote Parking Candidate Sites and Lots

Description of Facility or Facilities	Facility Group ID	Lot ID	Number/ Estimated Number of Spaces
New Maries Dublis Deputation Commission Leave Dublis	1	Α	474
New Mexico Public Regulation Commission, Lamy Building, Lew Wallace Building		В	116
Lew Wallace Bulluling		С	491
New Mexico School for the Deaf	2	Α	210
	3	Α	102
		В	158
South Capitol Station, New Mexico Motor Vehicle, Taxation		С	140
and Revenue, Department of Health, Simms Building, Department of Transportation		D	78
bepartment of Transportation		E	607
		F	198
	4	Α	113
Santa Fe Place Mall		В	120
		С	290

The four locations, or parking facility groups, are sub-divided into multiple contiguous parking lots that could serve as feasible remote parking lots, either separately or together, depending on need and location preference.



Figure 23. Overview of Potential Remote Parking Sites and Lots

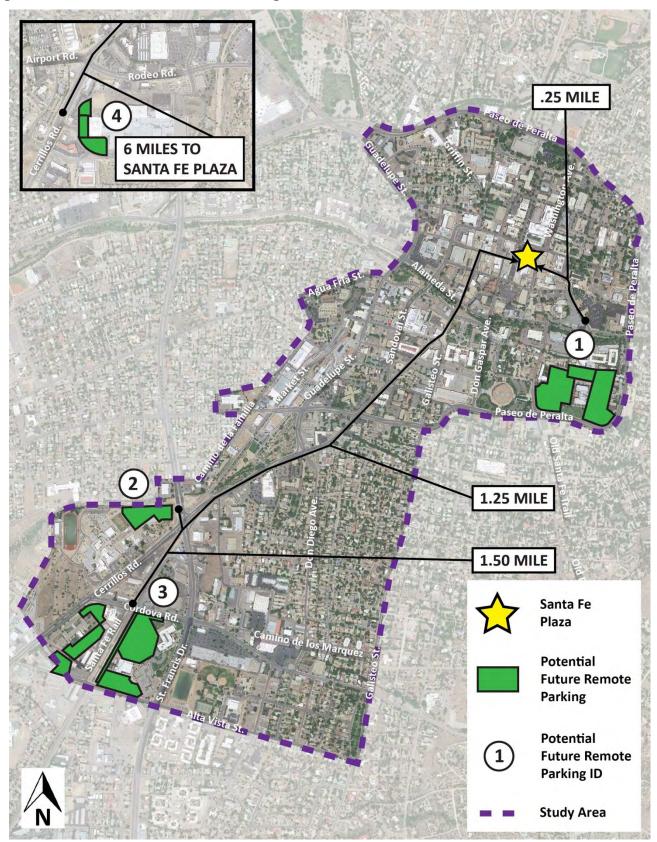




Figure 24. Remote Parking Options (Facility Group #1)

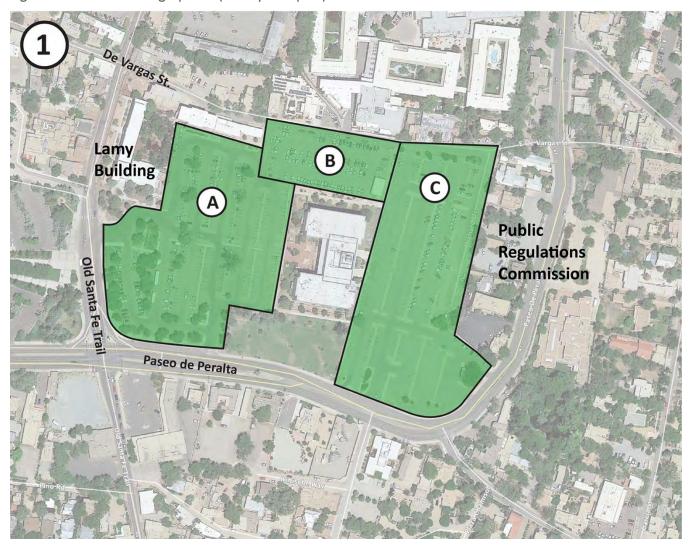




Figure 25. Remote Parking Options (Facility Group #2)





Figure 26. Remote Parking Options (Facility Group #3)

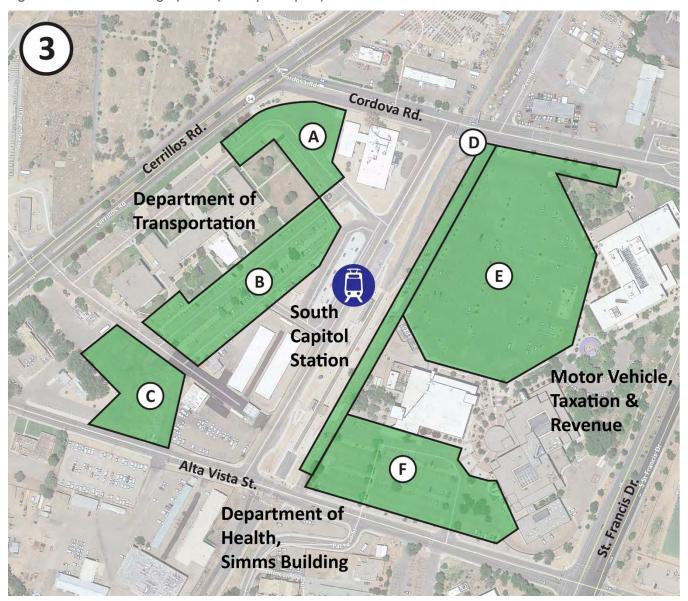




Figure 27. Remote Parking Options (Facility Group #4)

