

Fort Collins City Council Work Session Agenda

6:00 p.m. Tuesday, August 23, 2022

Colorado Room, 222 Laporte Ave, Fort Collins, CO 80521

NOTICE:

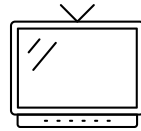
Work Sessions of the City Council are held on the 2nd and 4th Tuesdays of each month in the Colorado Room of the 222 Building. Meetings are conducted in a hybrid format, however there is no public participation permitted in a work session.

City Council members may participate in this meeting via electronic means pursuant to their adopted policies and protocol.

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Meetings are open to the public and can be attended in person by anyone.



Meetings are televised live on Channels 14 & 881 on cable television.



Meetings are livestreamed on the City's website, fcgov.com/fctv

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While work sessions do not include public comment, mail comments about any item on the agenda to cityleaders@fcgov.com





August 23, 2022 at 6:00 PM

Jeni Arndt, Mayor
Emily Francis, District 6, Mayor Pro Tem
Susan Gutowsky, District 1
Julie Pignataro, District 2
Tricia Canonico, District 3
Shirley Peel, District 4
Kelly Ohlson, District 5

Colorado River Community Room
222 Laporte Avenue, Fort Collins

Cablecast on FCTV
Channel 14 on Connexion
Channel 14 and 881 on Comcast

Carrie Daggett
City Attorney

Kelly DiMartino
City Manager

Anissa Hollingshead
City Clerk

**CITY COUNCIL WORK SESSION
6:00 PM**

A) CALL MEETING TO ORDER

B) ITEMS FOR DISCUSSION

1. Housing Strategic Plan Implementation: Rental Housing Strategies.

(staff: Caryn Champine, Marcy Yoder, Meaghan Overton; 15 minute presentation; 45 minute discussion)

The purpose of this item is to provide updates about public engagement to date and present options for potential next steps to implement three interrelated Housing Strategic Plan (HSP) strategies:

- Rental licensing/registration (Strategy 20)
- Occupancy ordinance revisions (Strategy 21)
- Small Landlord Incentives (Strategy 26)

2. Potential Stormwater Property Partnership on North Mason.

(staff: Matt Fater; 10 minute presentation; 30 minute discussion)

The purpose of this item is to seek Council feedback related to a potential land partnership between the stormwater utility and Bohemian Foundation.

The stormwater utility and Bohemian Foundation own adjacent parcels of land along North Mason Street. The stormwater utility intends to construct a stormwater detention pond on its parcel, while Bohemian Foundation intends to partner with Fort Collins Rescue Mission for a 24/7 shelter for people experiencing homelessness. The site evaluation process for the 24/7 shelter identified potential opportunities to partner with the stormwater property such that the two properties are optimized for a greater community benefit.

3. Wireless Telecommunications Code Update.

(staff: Will Lindsey; 10 minute presentation; 30 minute discussion)

The purpose of this work session item is to obtain feedback and direction from Council on potential changes to the Land Use Code to ensure they align with the objectives of the recently adopted Wireless Telecommunication Master Plan and address feedback received from Council at the January 25 work session. This information will help guide the development of the draft Land Use Code updates for wireless telecommunication projects that are anticipated to come to Council for adoption in Fall 2022.

C) ANNOUNCEMENTS

D) ADJOURNMENT

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August 23, 2022



WORK SESSION AGENDA ITEM SUMMARY

City Council

STAFF

Marcy Yoder, Neighborhood Services Manager
 Meaghan Overton, Housing Manager
 Josh Birks, Deputy Sustainability Officer
 Caryn Champine, Director of PDT

SUBJECT FOR DISCUSSION

Housing Strategic Plan Implementation: Rental Housing Strategies.

EXECUTIVE SUMMARY

The purpose of this item is to provide updates about public engagement to date and present options for potential next steps to implement three interrelated Housing Strategic Plan (HSP) strategies:

- Rental licensing/registration (Strategy 20)
- Occupancy ordinance revisions (Strategy 21)
- Small Landlord Incentives (Strategy 26)

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. Which potential next steps do Councilmembers support for rental licensing/registration?
2. Which potential next steps do Councilmembers support for occupancy ordinance revisions?

BACKGROUND / DISCUSSION

Since 2005, Council has had several in-depth conversations about rental registration/licensing, occupancy, and nuisance regulation as part of the community dialogue about neighborhood livability. Council has also reviewed regular evaluations of the occupancy ordinance and its impacts. A list of relevant Council work sessions and hearings is included as an Attachment for reference.

At the October 26, 2021 work session, staff updated Council about the history of rental housing strategies, findings from recent demographic and market analysis, a summary of peer cities research, and an outline of a proposed roadmap to implement rental housing strategies. Several Councilmembers supported additional community engagement in early 2022 to further explore potential design of a rental registration/licensing program, revisions to the occupancy ordinance, and development of small landlord incentives.

Updates to share with Council at this work session focus on providing a **community engagement overview** of activities to date and outlining potential next steps for **rental licensing/registration** and **occupancy ordinance revisions**. Key topics for each strategy include a brief overview of existing conditions, outcomes and themes from community engagement, a summary of recommendations and best practices, and potential next steps toward implementation of these HSP strategies. Future work on small landlord incentives is dependent on Council direction for rental licensing/registration and occupancy ordinance revisions and will not be covered at this work session.

Community Engagement Overview

Fort Collins has had a long-standing community dialogue about the best way(s) to ensure safe, healthy housing for renters, efficiently use existing housing stock, and address nuisance issues. During development of the HSP in 2020, extensive community engagement continued to highlight a need to explore rental registration/licensing and occupancy ordinance revisions. Over the last year, staff has built on the HSP community dialogue by engaging with a range of community members to ensure that multiple perspectives are included in the current exploration of rental housing strategies.

Group Engaged	Engagement Activities Conducted
Renters, neighborhood groups, HOAs	Housing Strategic Plan engagement, 2020-2021 Community Questionnaire, Aug. 2022 Pop-up Engagement, Aug. 2022 Rental Housing Task Force
Landlords, realtors, property managers	Presentation to Northern CO Rental Housing Association, Feb. 2022 Presentation to Board of Realtors, Feb. 2022 Rental Industry Questionnaire, Feb./March 2022 Rental Housing Task Force
City Departments	Convening of Rental Housing and Occupancy Core Team Conversations with IT, Building Services, Communications and Public Involvement Office, City Attorney’s Office
Council	Ad Hoc Housing Committee discussion, Dec. 2020 Rental Strategies Work Session, Oct. 2021

Summary of Key Engagement Activities

Rental Industry Questionnaire, February/March 2022: This online questionnaire was primarily focused on soliciting feedback from rental owners, property managers, and landlords to better understand how potential rental programs (e.g., registry and occupancy regulations) might impact the industry, and to explore specific elements of program design. Assessor’s data was used to identify and mail flyers to nearly 9,000 likely owners of rental property within Fort Collins to ensure wide awareness of the questionnaire. A total of 1,912 people responded to the questionnaire: 68% identified themselves as rental owners, managers, or landlords, 20% were residents who live or work in Fort Collins but do not own or manage rental property.

**Figure 1.
Sample Size
of Survey
Respondents**

Source:
Fort Collins Rental
Strategy Industry
Survey, 2019 5-year
American Community
Survey, and Root Policy
Research.

	Number	Share		
Total Responses	1,912	100%		
Rental owner, manager, or landlord	1,293	68%		
Live or work in Fort Collins	384	20%		
Other (e.g., landowners, realtors, 2nd homeowners)	16	1%		
Total units owned or managed	1,293	100%		
1 unit	577	45%	Distribution of Fort Collins Rentals by Units in Structure (2019 ACS data)	
2 to 5 units	498	39%		
5 to 10 units	108	8%		
10 to 50 units	61	5%		
50 to 100 units	7	1%		
More than 100 units	34	3%		
Type of housing units owned or managed	1,293	100%		
Detached single-unit home	932	72%		21%
Attached single-unit home/duplex/triplex	399	31%	15%	
Condo/Apartment/rental unit in a multiunit building	336	26%	58%	
Accessory dwelling unit (ADU)	25	2%	n/a	
Mobile home/trailer	10	1%	0%	
Retirement community/independent or ssisted living	3	0%	n/a	
Group home (unrelated occupants who are disabled)	3	0%	n/a	

¹ Addresses were selected if their mailing address differed from the physical address with the assumption that the residential unit was rented out or not owner occupied if the addresses were different.

² Program structure questions were reserved for those in the industry directly impacted (i.e., rental owners, managers, and landlords). All respondents were asked general questions about the licensing program and occupancy restrictions.

Rental Housing Task Force, March-August 2022: In early 2022, the City convened a Task Force to support deeper exploration of the three strategies and to work collaboratively to propose modifications to current rental housing policy for consideration by staff, the broader public, and Council. A total of 76 people applied for 20 spots, and applications were reviewed by a committee of staff. The top scoring applications for landlord/property managers, renters, and others were invited to participate. Staff consulted with the City Attorney’s Office on the criteria utilized for selection and the information shared with the selection team. Demographic information was collected from applicants but was not used in the selection process; it was considered in aggregate for the entire application pool to evaluate the task force’s representativeness.

A panel of applicants was selected to represent a diversity of perspectives, including rental housing tenants, property owners/landlords and property managers, and people who fit neither category. Fort Collins residents Jack Armstrong, Jade Beaty, Julia Berger, Lisa Cunningham, Brannan Davis, Adam Eggleston, Emily Gallichotte, Carrie Gillis, Cecilia Granby, Sean Haines, Nicole Hanson, Mike Herder, Torey Lench, Robert Long, Lindsay Mason, Amy Pezzani, Jose Luis Ramos, Carolyn J. Rasley, and Isabella Zapata served as task force members for the duration of ten meetings. One task force member withdrew from participation due to other commitments. The total composition of the group was 19 members, and all meetings were facilitated by a professional third-party facilitator.

The task force members shared multiple perspectives and affiliations. They are listed below:

Renter	Industry Representative	Other
Currently renting	Realtor	Non-profit executive
Single parent	Large landlord	Immigrant to US
Experienced homelessness	Small landlord	HOA Board representative
Affordable housing tenant	Real estate appraiser	Fifth generation Fort Collins resident
Seeking home ownership	Contractor	CSU Off-Campus Life
Parent of renters	Property Manager	
Former CSU student	Former Housing authority employee	

The Task Force met a total of ten times between March 30 and August 3, 2022. The 19 Task Force members attended an average of 8.5 meetings each. Each meeting had an average of 16 Task Force members present. Task Force members completed homework assignments between meetings to ensure they were well informed. Early meetings were primarily informational as the Task Force members received presentations from staff as well as a panel including Paul Anderson, Lloyd Walker, David Roy, and Benton Roesler to explore opinions about the City's U+2 Policy.

Community Questionnaire, August 2022: This questionnaire sought opinions about how much the City's approach to rental housing regulation and occupancy should change, if at all. The questionnaire also asked respondents their opinions about a range of potential next steps for rental registration/licensing and occupancy ordinance revisions. Additional "pop-up" engagement utilizing the Neighborhood Services lemonade stand was conducted to increase awareness of the community questionnaire and encourage participation; particularly in areas where changes to occupancy and extra occupancy have been raised as a concern. A total of 1,739 responded to the questionnaire: 64% indicated that they owned their home, 31% of respondents indicated that they rented their home, 19% of respondents were landlords. The charts below show respondents by Council District and housing tenure (rent/own):

Council District	Total	Owners	%Owners	Renters	%Renters
District 1	226	138	61%	82	36%
District 2	223	150	67%	62	27%
District 3	143	94	65%	46	32%
District 4	227	154	68%	63	28%
District 5	373	249	67%	113	30%
District 6	264	144	55%	111	42%

Additional details, including summary reports from the Rental Industry Questionnaire, Rental Housing Task Force Recommendations, and Community Questionnaire, have been included as attachments. Key findings from these engagement activities have been incorporated into the next two sections, which discuss rental licensing/registration and occupancy ordinance revisions.

Rental Licensing/Registration

In November 2005, alongside changes to enforcement of the occupancy ordinance, Council also considered several options for rental registration and licensing. However, a formal rental registration or licensing program was not pursued at that time. The most recent community discussion about occupancy and rental housing strategies occurred in 2020 as part of the development of the Housing Strategic Plan. In December 2020, the Council Ad Hoc Housing Committee expressed interest in exploring rental licensing

to support healthy, stable housing for people who rent their homes. The Committee encouraged consideration of a pilot program for rental registration or licensing.

Existing Conditions

More than 40% of all housing in Fort Collins is renter-occupied. Census data indicates that 46.9% of housing units in Fort Collins are renter-occupied, and City Utilities data estimates that 43% of housing units (about 38,000 homes) in Fort Collins are rental properties.

	Estimated Number of homes*	Estimated Percentage of all housing
Total (citywide)	87,863	100%
Owned Units	49,775	57%
Rental Units	38,088	43%
<i>Single-Household, detached rentals</i>	14,419	16% <i>(38% of all rentals)</i>
<i>Multi-household, mixed-use or manufactured housing rentals</i>	23,669	27% <i>(62% of all rentals)</i>

**Note: This data is the best available information at present but should be interpreted as an estimate because of potential data gaps or lags in reporting property information.*

To further understand ownership patterns of rental properties in Fort Collins, staff worked with Root Policy Research to conduct an Investor Ownership Analysis in April 2022 (attached). This analysis focused specifically on investor ownership of single family, du-/tri-plex, and townhome units, as traditional rental units in multi-family buildings have always been “investor” properties. Investor presence in the single family, townhome, and condo markets has increased nationwide since the Great Recession, when many such homes fell into foreclosure. Staff sought to explore the degree to which Fort Collins is experiencing this trend. The analysis found that more than 99% of single, duplex, triplex, and townhome units are owned by landlords who own fewer than 5 properties, and about 90% of these landlords own only 1 property in addition to their residence. In addition, the analysis found that most landlords (85%) are entities based in Colorado, while approximately 15% of landlords are out of state entities.

Number of Investment Properties Owned	All Investors		Rental Units Represented	
	Num.	Pct	Num.	Pct
1 property	11,113	90.3%	11,113	74.6%
2 properties	776	6.3%	1,552	10.4%
3 to 5 properties	335	2.7%	1,211	8.1%
6 to 10 properties	54	0.4%	395	2.7%
More than 10 properties	24	0.2%	626	4.2%
Total	12,302	100%	14,897	100%

Community Engagement Findings

Overall, findings from community engagement indicated that many people support some degree of change to the way the City regulates rental housing. Community comments during HSP engagement indicated a range of concerns with the City’s current level of regulation: a need to proactively ensure healthy, safe units; fear of retaliation or loss of housing if renters report substandard or unsafe units; and concerns about

discrimination. Rental registration/licensing and rental inspections were common suggestions for addressing these concerns. Sixty percent of all respondents to the Community Questionnaire supported either tweaks to the City’s regulations or significant changes.

In addition, most respondents to the Community Questionnaire indicated that they “agree” or “strongly agree” with implementing rental registration (56%), implementing rental licensing (50%), and maintaining the current complaint-based inspection program (56%).

However, the Community Questionnaire results highlighted clear differences in opinion between people who are renting their homes and people who identify themselves as landlords/property managers. The only potential next step where many of both renters and landlords agreed was on maintaining the City’s current complaint-based inspection program. (Note: “Neutral” or “No Opinion” responses are not included in the tabulation below.)

RENTAL STRATEGIES Agree or disagree with the following statements:	All Respondents		Renters		Homeowners		Landlords	
	Yes	No	Yes	No	Yes	No	Yes	No
Should Fort Collins rental strategies stay as they are?	40%	60%	25%	75%	46%	54%	53%	47%
Require that all landlords obtain a license to rent property in the City	50%	40%	63%	21%	45%	48%	13%	78%
Require that all landlords register their rental properties with the City	56%	34%	69%	17%	52%	40%	21%	69%
Proactively inspect rental properties on a regular basis for health and safety violations	47%	37%	62%	20%	42%	44%	15%	72%
Inspect rental properties only when a complaint is filed	56%	26%	60%	22%	53%	28%	56%	23%

The Rental Industry Questionnaire further highlighted the concerns of landlords/property managers:

- Potential costs were identified as a drawback to a licensing and inspection program, and most rental landlords/managers indicated they would pass costs on to tenants.
- Respondents indicated concern that the City was not clearly defining the problem and that rental registration/licensing was not an effective way to address the minority of units that might be substandard.
- Respondents preferred that inspections occur only if a complaint is received and that inspections focus narrowly on health and safety issues.
- Fair treatment of small and large landlords was identified as a challenge.
- Participants expressed a lack of trust with the City of Fort Collins. Specific concerns included that the City would move forward without further consideration from stakeholders, and that City lacked the ability and capacity to scale-up a pilot program for all rentals.

Task Force Recommendations

- **Implement Rental Registration:** By a vote of 12 in favor and four opposed, the Task Force approved a recommendation that the City of Fort Collins establish a mandatory rental housing registration program to create an up-to-date and complete listing of all rental housing units and who owns them within the City. The recommendation suggests that registration should include a nominal one-time fee for each rental unit and that landlords who fail to register their rental properties should be assessed a fine. To incentivize participation, the Task Force recommends that the City should consider establishing a landlord/tenant portal to provide resources and marketing connections. When a property is sold, the recommendation suggests that the new owner should be required to register the property in their own

name. Further, the Task Force recommends that registration information should include a designated responsible party listed for each rental unit and that contact information for the property owner should not be provided publicly unless the designated responsible party has granted permission.

- Do Not Implement Rental Licensing: By consensus, the Task Force agreed not to recommend the City establish a rental housing licensing program at this time.
- Maintain Complaint-Based Rental Inspections: The Task Force recommends against proactive inspections for the rental housing program in favor of an inspection program that is initiated only after a complaint has been filed.

Peer Cities and Best Practices

Though the Task Force did not recommend rental licensing and proactive inspections, Peer Cities research suggests that the best practice for proactively addressing the health and safety of rental housing is to design a rental licensing program that requires periodic inspections. Additionally, best practices include a fee structure designed to cover program costs, training for staff, landlords, and tenants, and a collaborative approach to designing a licensing program that involves both landlords and tenants.

Potential Next Steps

Bold font denotes potential next steps that have demonstrated both community and Rental Housing Task Force support. Rental Housing Task Force recommendations are noted with an asterisk (*). In addition to rental registration, staff also recommends an inspection program be implemented to address health and safety of rental housing. An inspection program was also outlined as a best practice.

- No change to rental regulations
- **Establish a mandatory rental registration program (*)**
- **Continue complaint-based rental inspections with a focus on habitability (health and safety) (*)**
- Establish a mandatory rental licensing program
- Require periodic proactive inspection of rental units, particularly single-unit, duplex, triplex, townhome, and units 10+ years old – *staff recommendation*
- Require inspections for extra occupancy rentals – *staff recommendation*

Occupancy Ordinance Revisions

The City has had an adopted occupancy ordinance since 1963. Active enforcement of the ordinance (also called U+2) began in 2005 with the establishment of an occupancy enforcement program. In December 2020, the Council Ad Hoc Housing Committee expressed a range of opinions about the City's occupancy ordinance. Discussion included whether the occupancy ordinance should be rescinded in favor of rental registration, or whether it should be amended and "right-sized" to better meet community needs. Some suggested that revisions to the definition of "family" and the process for approval of extra occupancy rental housing could be two "quick wins" to pursue. However, all Committee members supported further exploration of potential revisions to the occupancy ordinance.

Existing Conditions

- Currently, enforcement is managed with a complaint-based system that investigates reports of suspected over occupancy, typically based on parking, noise, or rubbish issues. In the last several years, cases have ranged from 160 to just over 200 annually. Typically, 35-50% of complaints are sustained, and the balance are unfounded or unproven.
- The demographic characteristics of households in violation of U+2 and the impact of U+2 on the housing market have been studied regularly to evaluate the effectiveness of the occupancy ordinance. The City partnered with Corona Insights to conduct the most recent of these evaluations in 2018, which was presented to Council at a work session in January 2019.

- Compared to the previous survey in 2005, the 2018 study reported a dramatic shift in the demographics of households in violation of U+2. These demographic shifts suggest that, compared to 2005, a wider cross-section of households are bringing in roommates in violation of the occupancy ordinance, likely to defray high housing costs.

	2005	2018
Total (est) households in violation	1,238	1,234
Percentage college students	71%	47%
Percentage children under 18	Negligible	13%

Community Engagement Findings

During the HSP engagement there was not a clear consensus about the best path forward for the City’s occupancy ordinance. Some participants supported repealing or modifying U+2. This was seen as a potential benefit for people of all ages living on single incomes, and an opportunity to “free up” additional homes for rental or purchase. Others credited U+2 with positively impacting their neighborhoods and controlling nuisance issues.

Many comments brought up concerns about the definition of a “family” in the current occupancy ordinance, pointing to changes in community demographics and household configurations as reasons to reevaluate the ordinance. Several participants shared stories about the impact of high housing costs that led them to “double up” with other households in violation of the occupancy limits. Suggestions for potential solutions included limiting occupancy to the number of bedrooms in a home or to a certain amount of space for each person, rather than an ordinance based on peoples’ relationships to each other.

The Rental Industry Questionnaire supported increasing U+2 if the property was suitable.

The Community Questionnaire indicated that most respondents were in favor of changing the occupancy code in some way (69%). Overall, there was support to allow extra occupancy citywide (62%), to make the extra occupancy rental process easier (59%), to have occupancy match the number of bedrooms in a house (51%), and to increase occupancy limits to more than three unrelated people (56%). There was also support for focusing on regulating nuisance issues rather than limiting occupancy (56%). However, people who identified themselves as homeowners who were not part of the rental industry (landlord, real estate, etc.) disagreed with all potential policy options and were split evenly regarding nuisance. (Note: “Neutral” or “No Opinion” responses are not included in the tabulation below.)

OCCUPANCY Agree or disagree with the following statements:	All Respondents		Renters		Homeowners		Non Industry homeowners	
	Yes	No	Yes	No	Yes	No	Yes	No
Should Fort Collins occupancy limit stay as they are?	31%	69%	22%	78%	36%	64%	45%	55%
Allow extra occupancy rentals in more places around the city	62%	35%	72%	23%	50%	41%	43%	49%
Make the process to approve extra occupancy easier	59%	33%	74%	21%	51%	39%	43%	46%
Adjust occupancy limit to match number of bedrooms in a home	51%	50%	59%	33%	47%	44%	38%	51%

Regulate occupancy based on household function, not family relatedness	48%	41%	51%	31%	21%	47%	28%	52%
Regulate occupancy based on number of parking spaces	22%	61%	12%	69%	27%	57%	24%	63%
Focus on regulating nuisances instead of occupancy	56%	32%	61%	26%	54%	36%	44%	44%
Increase occupancy limits to more than 3 unrelated residents	56%	37%	73%	23%	47%	45%	39%	52%
Eliminate occupancy limits completely	36%	54%	52%	36%	27%	63%	24%	67%

Task Force Recommendations

The following recommendations were approved by a vote of 16 in favor and one opposed. The primary recommendation is to change the City's occupancy ordinance. If the occupancy ordinance is not changed, the Task Force recommends adjustments to the extra occupancy process.

- Regulate by number of bedrooms: The Task Force recommends that the definition of family be removed from occupancy regulations. Instead, the Task Force recommends that current occupancy code be replaced with one that is based on the number of bedrooms to utilize the City's existing home inventory more fully; OR
- Make extra occupancy easier: The Task Force recommends considering the following as a new occupancy code is established:
 - Removing the U+2 policy from zoning law and that the policy be replaced with occupancy regulations that are enforced through administrative processes;
 - Making it easier for property owners to obtain exemptions to occupancy regulations and increasing the regions of the city where extra-occupancy permits are allowed;
 - Requiring properties with extra occupancy designations to renew permits every five years; and
 - Removing extra occupancy designations when property ownership changes and/or when a property violates public nuisance ordinances.

Recommendations and Best Practices

Peer Cities research recommendations for implementation were varied. Common approaches to regulating occupancy included identifying a specific number of unrelated adults permitted, regulating based on number of bedrooms or square footage, or regulating based on household functionality rather than familial relatedness.

Potential Next Steps

Bold font notes potential next steps that have both community and Rental Housing Task Force support. Rental Housing Task Force recommendations are noted with an asterisk (*).

- No change to occupancy ordinance
- **Change occupancy code to align with number of bedrooms rather than the number of unrelated adults (*)**; OR
- **Allow extra occupancy rentals citywide (*) and evaluate extra occupancy rental applications through an administrative permit process, not a land use approval (*)**
- Increase the number of unrelated adults permitted
- Regulate based on household functionality rather than familial relatedness

NEXT STEPS

To implement the rental housing HSP strategies in a thoughtful way that aligns with best practices and peer cities research, responds to community input, and respects the diversity of perspectives around rental housing strategies, staff has outlined several next steps for Council to consider. Bold font notes potential next steps that have demonstrated both community and Rental Housing Task Force support. Rental Housing Task Force recommendations are noted with an asterisk (*).

Rental Registration/Licensing	Occupancy
<ul style="list-style-type: none"> • No change to rental regulations • Establish a mandatory rental registration program (*) • Continue complaint-based rental inspections with a focus on habitability (health and safety) (*) • Establish a mandatory rental licensing program • Require periodic proactive inspection of rental units, particularly single-unit, duplex, triplex, townhome, and units 10+ years old – <i>staff recommendation</i> • Require inspections for extra occupancy rentals – <i>staff recommendation</i> 	<ul style="list-style-type: none"> • No change to occupancy ordinance • Change occupancy code to align with number of bedrooms rather than the number of unrelated adults (*) OR • Allow extra occupancy rentals citywide (*) and evaluate extra occupancy rental applications through an administrative permit process, not a land use approval (*) • Increase the number of unrelated adults permitted • Regulate based on household functionality rather than familial relatedness

ATTACHMENTS

- Summary of Previous Council Action
- Rental Industry Questionnaire
- Investor Ownership Analysis
- Rental Housing Task Force
- Community Questionnaire
- Literature Review - Health Impacts of Rental Housing Regulations
- Powerpoint Presentation

Summary of Previous Council Action

Item 1.

- [December 2020 Ad-Hoc Housing Committee](#) - Discussion of Occupancy and Rental Regulations
- [February 2019 Work Session](#) - Occupancy Limit Enforcement and Chronic Nuisance Properties Update
- [January 2019 Work Session](#) - Occupancy Study 10 Year Review (results)
- [December 2016 Work Session](#) - Occupancy Study 10 Year Review (scope of study)
- [February 2016 Work Session Summary](#) - Rental Licensing (decision to pursue options outside of rental licensing)
- [February 2016 Work Session](#) - Rental Licensing
- [November 2014 Work Session](#) - Housing Affordability Policy Study (evaluated U+2 and recommended modifications to extra occupancy processes)
- [October 2009 Work Session](#) - Occupancy Ordinance Two-Year Review and Policy Discussion
- [August 2009 Work Session](#) - Occupancy Ordinance “Economic and Market Impact Study”
- [August 2007 Work Session](#) - Review and update of the Over-Occupancy Enforcement Program
- [November 2005 Hearing \(Second Reading\)](#) - Items Relating to Occupancy Regulations and Other Neighborhood Quality of Life Issues
- [November 2005 Hearing \(First Reading\)](#) - Items Relating to Occupancy Regulations and Other Neighborhood Quality of Life Issues
- [August 2005 Work Session](#) - Occupancy Ordinance
- [October 2004 Work Session](#) - Rental Licensing Alternatives



Root Policy Research

6741 E Colfax Ave, Denver, CO 80220

www.rootpolicy.com

970.880.1415

City of Fort Collins Rental Strategies Industry Survey

This report summarizes the responses to the Fort Collins Rental Strategies Industry Survey. The survey was fielded online in February and March of 2022 and was primarily focused on soliciting feedback from rental owners, property managers, and landlords to better understand how potential rental programs (e.g., registry and occupancy regulations) might impact the industry, and to explore specific elements of program design. The survey builds on community engagement conducted as part of the broader [Fort Collins Housing Strategic Plan](#), which includes substantial engagement from the community and resident renters.

PREPARED FOR:

City of Fort Collins
www.fcgov.com

CREATED

5/13/2022



Root Policy Research

6741 E Colfax Ave, Denver, CO 80220

www.rootpolicy.com

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PREPARED FOR:

City of Fort Collins

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5/13/2022

INTRODUCTION

The Fort Collins Rental Strategies Industry Survey was fielded online from February 3rd, 2022 to March 17th, 2022 and was primarily focused on soliciting feedback from rental owners, property managers, and landlords. The primary objective of the survey was to better understand how potential rental programs (e.g., registry and occupancy regulations) might impact the industry, and to explore specific elements of program design.

The survey was circulated through industry distribution lists, including the NoCo Rental Association; and survey flyers were mailed to nearly 9,000 mailing addresses within the Larimer County Assessor's data who are owners of rental property within Fort Collins.¹ The survey received 1,912 total responses, and 68% were rental owners, managers, or landlords; 20% were residents who live or work in Fort Collins.² As shown, in Figure 1, the majority of survey respondents have five or fewer rental units (83%) and owners/managers of small-structure rentals (single unit, duplex, triplex) are overrepresented in the survey relative to the distribution of rental units by structure type.

Figure 1.
Sample Size
of Survey
Respondents

Source:
Fort Collins Rental
Strategy Industry
Survey, 2019 5-year
American Community
Survey, and Root Policy
Research.

	Number	Share	
Total Responses	1,912	100%	
Rental owner, manager, or landlord	1,293	68%	
Live or work in Fort Collins	384	20%	
Other (e.g., landowners, realtors, 2nd homeowners)	16	1%	
Total units owned or managed	1,293	100%	
1 unit	577	45%	
2 to 5 units	498	39%	
5 to 10 units	108	8%	
10 to 50 units	61	5%	
50 to 100 units	7	1%	
More than 100 units	34	3%	
Type of housing units owned or managed	1,293	100%	
Detached single-unit home	932	72%	21%
Attached single-unit home/duplex/triplex	399	31%	15%
Condo/Apartment/rental unit in a multiunit building	336	26%	58%
Accessory dwelling unit (ADU)	25	2%	n/a
Mobile home/trailer	10	1%	0%
Retirement community/independent or ssisted living	3	0%	n/a
Group home (unrelated occupants who are disabled)	3	0%	n/a

Distribution
of Fort Collins
Rentals by
Units in
Structure
(2019 ACS data)

¹ Addresses were selected if their mailing address differed from the physical address with the assumption that the residential unit was rented out or not owner occupied if the addresses were different.

² Program structure questions were reserved for those in the industry directly impacted (i.e., rental owners, managers, and landlords). All respondents were asked general questions about the licensing program and occupancy restrictions.

PRIMARY FINDINGS

Broadly speaking, respondents expressed a high level of concern regarding the impact of potential rental registry policies. Even so, the survey yields constructive input on potential program design and pilot implementation. It is clear from the survey responses that successful program implementation would require continued communication with stakeholders to address and alleviate concerns.

- **Potential costs were identified as a drawback to a licensing and inspection program though most rental landlords/owners/managers indicated they would pass costs on to tenants.** Most landlords/owners/managers expressed concern about potential costs of a licensing and inspection program, emphasizing the expected costs of inspection compliance (i.e., staff time and repairs), particularly if inspectors require upgrades not related to acute health and safety concerns). Program fees were less of a concern. Respondents did note that any program costs (fees and inspection-related costs) could have an indirect impact on rents in Fort Collins, as owners are likely to pass all costs to renters.
- **Respondents expressed competing sentiments to treat all rentals equally in some instances and to offer preferential treatment under in other instances.** The ability of new properties or properties inspected under another program to be covered under safe harbor regulations was desirable for some respondents. However, some participants felt the opposite—that all rental units should be charged with the same regulations and requirements with no special treatment. Similar tensions were identified in responses to fee discounts or waivers and targeting bad actors with more frequent inspections. Generally, most participants were in favor of offering safe harbors, fee waivers, and tiered inspections for a subset of properties.
- **Large landlords (50+ units) indicated different preferences compared to small landlords (less than 5 units) on the following program components:**
 - Large landlords expressed a strong preference for city inspectors (as opposed to 3rd party inspectors) compared to small landlords.
 - Large landlords were less likely to support safe harbors, except for properties developed or remodeled in the past five years.
 - Large landlords prefer a fee structure based on the number of *properties* while small landlords prefer a fee structure based on the number of *units*.
 - Large landlords prefer affirmative marketing incentives. Small landlords prefer incentives through lease templates and security deposit insurance.

- **Respondents prefer that inspections occur only if a complaint is received and that inspections focus on health and safety issues** (to minimize subjective and/or seemingly trivial requirements).
 - Many respondents were not in favor of mandatory inspections for all properties. Rental owners/managers/landlords perceive the current complaint-based system to be effective.
 - A vital element to the success of this program cited throughout the survey is the need for **clear, concise, objective, and limited criteria for inspections**. In order to avoid variation between inspectors and to ensure that each property is treated fairly, the inspection checklist should be transparent. Participants expressed the need for the program to focus on health and safety and not include arbitrary requirements, bringing rentals up to current code, or energy efficiency standards.
- **Fair treatment of small and large landlords was identified as a challenge**. There were many conflicting responses regarding how to treat larger property management companies and smaller landlords with one or two properties. In general, property management companies expressed they are already regulated and should not be subjected to new regulations. On the other hand, smaller landlords expressed the concern that these regulations are designed to be advantageous for and reward larger owners. Respondents generally indicated that poor condition and/or management of rentals is limited to relatively few “bad actors;” however there was not consistent feedback on who constitutes “bad actors” (landlords of large properties were more likely to implicate small landlords and vis-versa).
- **Landlords/managers/owners identified incentives to help offset the burden of new regulations**. Monetary incentives (i.e., cash or property tax incentives) were the most common. However, other incentives that were suggested by owners, managers, and landlords included certification they could use for marketing, maintaining a preferred rentals list, fast track permitting for improvements, grants for improvement, perks for renters like Wi-Fi and gift cards, ability to meaningfully impact program rules, legal consultation, and increased occupancy (changes to U+2).
- **Participants are open to increasing U+2 if the property is suitable for increased occupancy**. Some respondents were against increasing occupancy to preserve single family neighborhoods and prevent nuisance violations that the ordinance is meant to protect against. However, most participants were open to increased occupancy if parking, number of bedrooms, and the size of the unit were considered. Others stated that regulating occupancy is not in the city’s purview.
- **Participants expressed a lack of trust with the City of Fort Collins**. Respondents indicated the city would move forward without further consideration from stakeholders and that the survey was just to placate them, not collect meaningful input. Additionally, respondents expressed concern for the City’s

ability and capacity to scale-up a pilot program for all rentals in the city due to labor shortages and a lack of technical expertise.

APPENDIX A. RENTAL REGISTRY RESPONSES

General Sentiments

Survey participants were asked a series of open-ended questions to identify their overall assumptions and sentiments toward implementing a pilot rental licensing programs in Fort Collins. Comments were largely negative and were more likely to highlight potential challenges than identify potential benefits. The biggest concern cited by respondents was **cost and the need to pass the costs of the program onto tenants**. Cost concerns were primarily related to concerns that inspections would yield a number of expensive repairs and/or code upgrades not related to health and safety issues. Additional themes included government overreach and privacy concerns, enforcement of the program, compliance, administrative capacity needed to implement, unpredictable inspection standards, and a blanket approach to all landlords instead of bad actors.

Experience with Similar Programs

Participants were asked “Do you have experience with these types of regulations in other communities? If so, what have you seen work well and what have you seen not work well?” Relatively few participants had experience, but those who did offered their perspectives:

Colorado:

- “**Boulder** is very restrictive, and it is difficult to navigate the system. In my opinion it is too restrictive. Seems like once you start down this road, it keeps growing into more and more restrictions and regulation by government.”
- “I have a rental in **Boulder** which has had a licensing program for years. It works well. I have not had any problems with it, other than the cost, about \$50 per year now, plus the cost of inspections every 4 years.”
- “Yes we have property in **Boulder**. Boulder's program requires a high level of energy efficiency which can be expensive and difficult in older structures. Boulder program requires a new license every four years which we believe is adequate. However, we fully support rental licensing and inspections, like Boulder's for safety, tenant quality-of-life and neighborhood quality maintenance.”
- “I think the health and safety inspection is a great idea. Ensuring smoke detectors, CO detectors work. What has not worked is what is happening in **Boulder**, where the oversight is causing rental properties to be boarded up due to grandfathered issues prior to ownership. This strips rental units away from the community making existing units more expensive for tenants.”

- “**Westminster**, great tax incentives for Landlords- however the gentrification is concerning.”
- “Yes I managed a large community in **Westminster, CO** - The amount of time, money, and resources dedicated to this program was overwhelming.”
- “**Breckenridge**, this year’s bill from the city was over \$500.”

Oregon

- “Yes - I have watched **Portland** get over run with policy and regulations, only to let tenants have unreasonable rights over a landlords investment.”
- “Yes. **Corvallis OR** charges \$15 a year. I don’t think they do property inspections unless there’s a cause for it. The supports they provide seem positive for renters and property owners alike.”

Minnesota

- “I own properties in **Minneapolis**. It has turned into a giant money grab for the City as well as a burdensome waste of time.”
- “If the goal is to hold owners/landlords accountable to code compliance it may be helpful to have multiple Tiers (like **Minneapolis** has) that are less expensive and inspected less often for Tier 1 properties that have earned that standing, than Tier 3 properties that have ongoing issues that cost more and need to be inspected at least once a year, for example.”

California

- “Yes, a similar program was implemented in the town I used to live in, **San Luis Obispo, CA**, and eventually repealed a few years later. It was a failure.”
- “Yes, I own one rental property in the San Francisco Bay Area (**City of San Leandro**), and I have been very pleased with how that city runs its program. An annual licensing fee funds their department to communicate and collaborate with landlords. The tone of the department is non-confrontational and education-based.”
- “Yes. There is an active program in **Santa Cruz, CA**. It is expensive to run and most annual inspections are unnecessary since the vast majority of rentals comply with the regulations.”
- “Yes. We own a triplex in **Los Angeles, CA**, and inspections are common. The system works fine and, even though we have a good property manager, we have been notified of issues we were unaware of and fixed them. All recommendations were reasonable.”

Other States

- “I lived in **Burlington Vt** when Bernie was mayor. I owned rentals there and I had tenants who stopped paying their rent it took me 8 months to get them evicted! The system needs to be balanced and fair. Everybody thinks that landlords a bad rich

people many of us are regular folks just trying to get by, so a program that is setup based on charging Landlords for unnecessary inspections is not a good idea.”

- “In **Indianapolis Indiana** there is a rental license program that is only \$5 per household. I think the low cost makes it makes it easy to manage for landlords and it simply provides an email list for proper upkeep of the rental units. There is no ongoing inspection program unless there are complaints are complaints...which also helps keep the costs low.”
- “**North Liberty, IA**: Automated license renewal reminders, responsive to questions”
- “Yes. **Waterloo, IA** has a \$50 per year rental licensing fee. The fire marshal does a property inspection every 1-3 years to check for working smoke detectors, bedroom egress, and no mold in bathrooms and under every sink. Minimal burden to landlords or tenants. Unknown whether this helps the city meet their goals.”
- “We have regulations like these in **Independence, MO and Kansas City, MO**, but those communities have significantly greater problems and MUCH rougher properties. The issues or complaints we get here are nominal and shouldn't warrant a whole new program and licensing.”

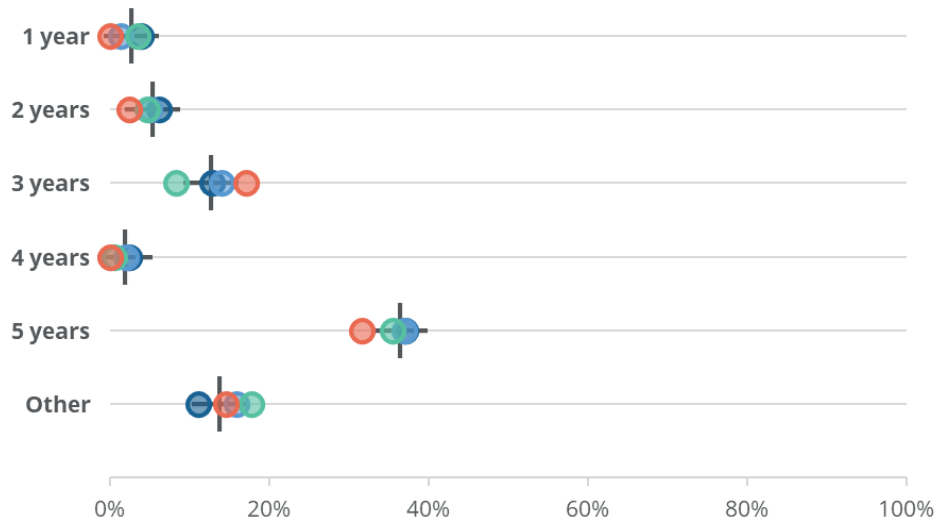
Pilot Program Structure

Many of the survey questions solicited feedback on a potential pilot program structure. Participants were asked about specific program elements including the ramp up period, enforcement and inspections, and fee structure. The following figures highlight responses for respondents overall and by the number of units owner/managed by the respondents.

Figure A-1. What do you think is a reasonable timeframe for

implementing a licensing program?

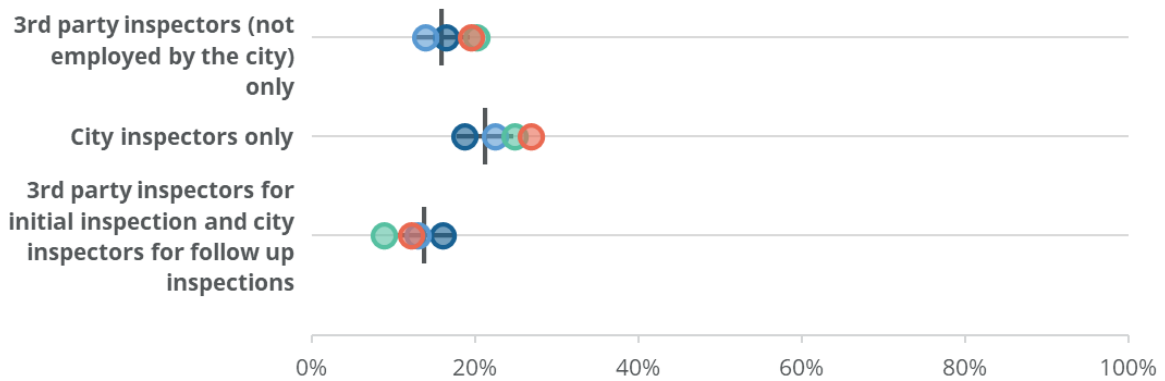
- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure A-2. Which of the following would be most appropriate in the City of Fort Collins for rental licensing inspections?

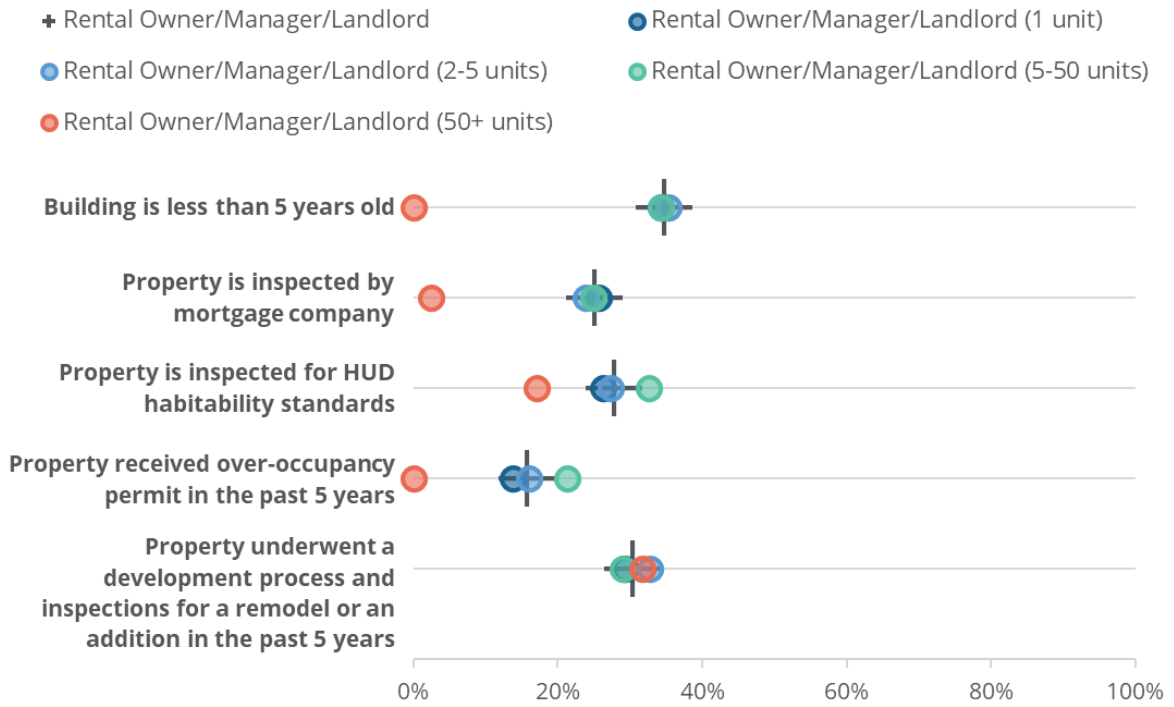
- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure A-3. Which of the following are appropriate safe harbors

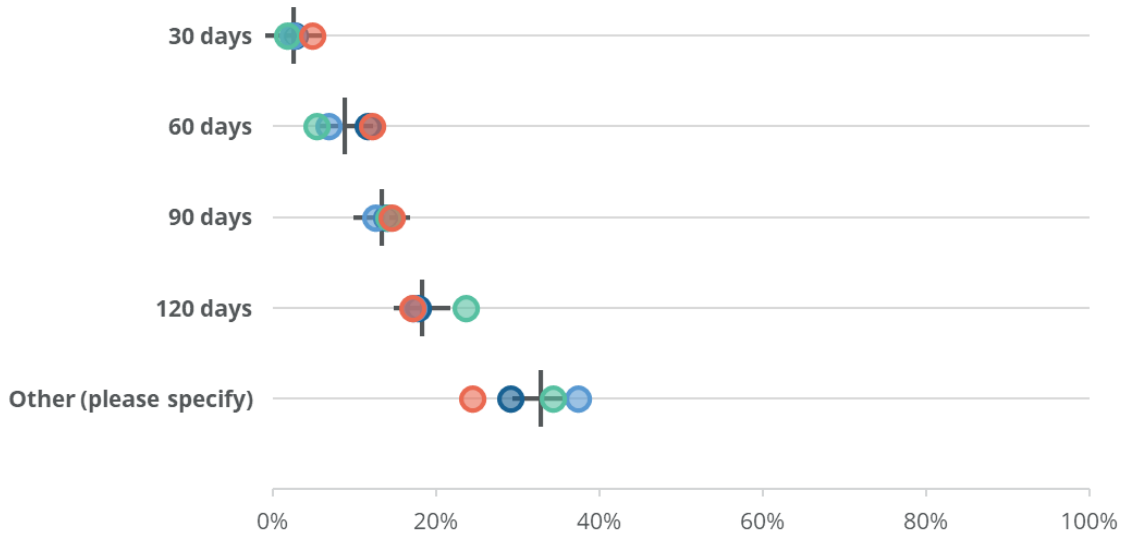
in the city?



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure A-4. If a property fails inspection, what is a reasonable timeframe for the property to come into compliance for reinspection?

- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)

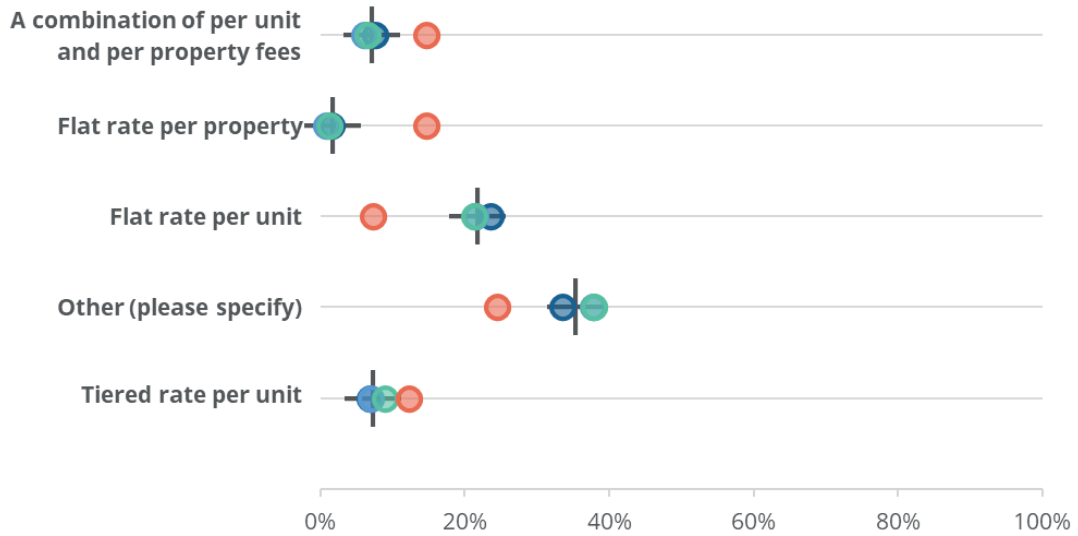


Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure A-5. From your perspective, which of the following is the

most equitable way to structure licensing and inspection fees?

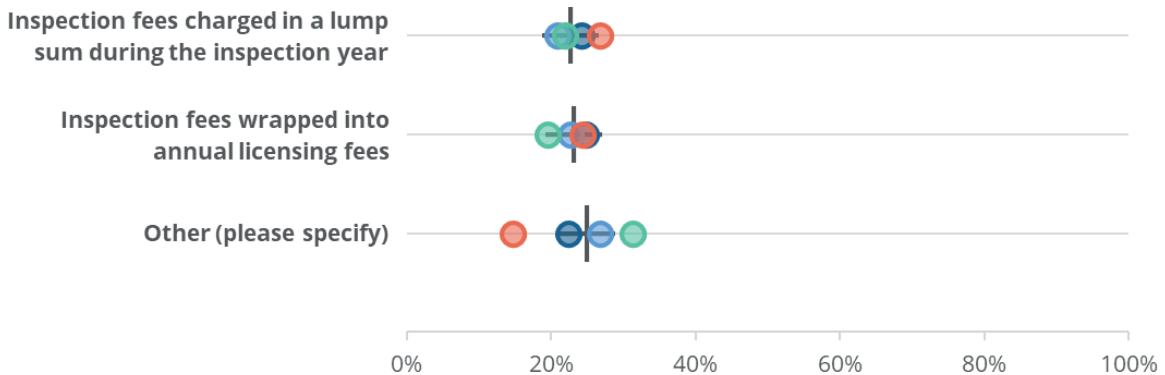
- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure A-6. Which timeframe do you prefer for inspection fees?

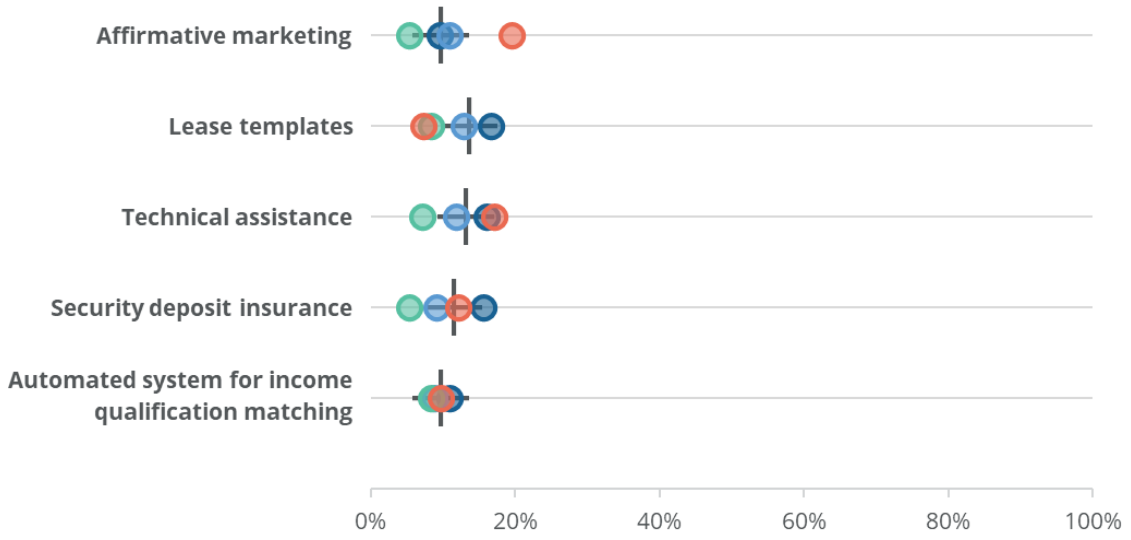
- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure A-7. What incentives or programs could the city offer to offset the costs and other impacts of a licensing and inspection program? Select all that apply.

- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)



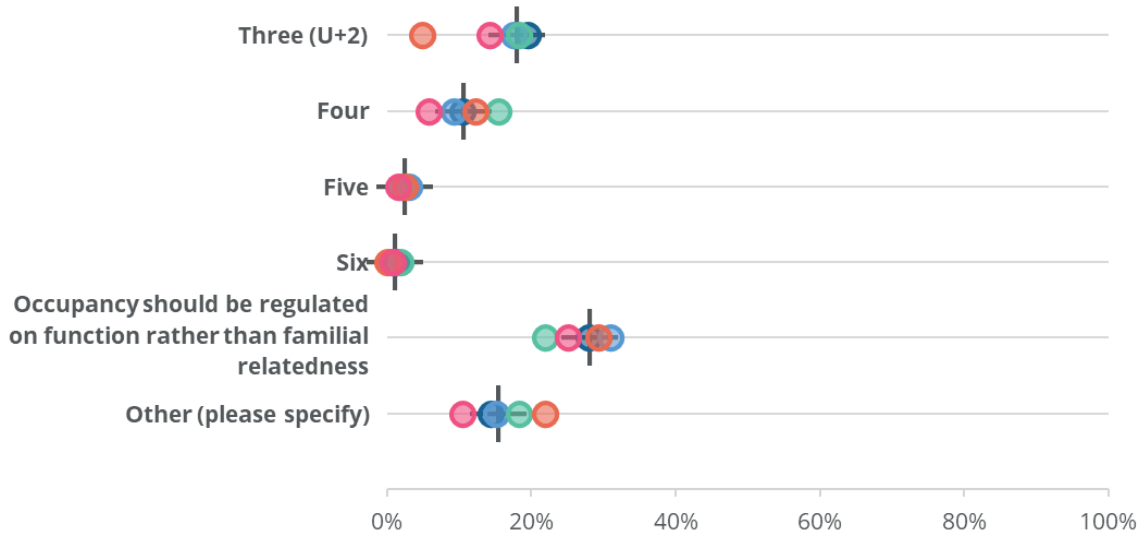
Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

APPENIDIX B. OCCUPANCY REGULATION RESPONSES

The following figures highlight responses on occupancy regulations; figures show responses overall and by the number of units owned/managed by the respondents.

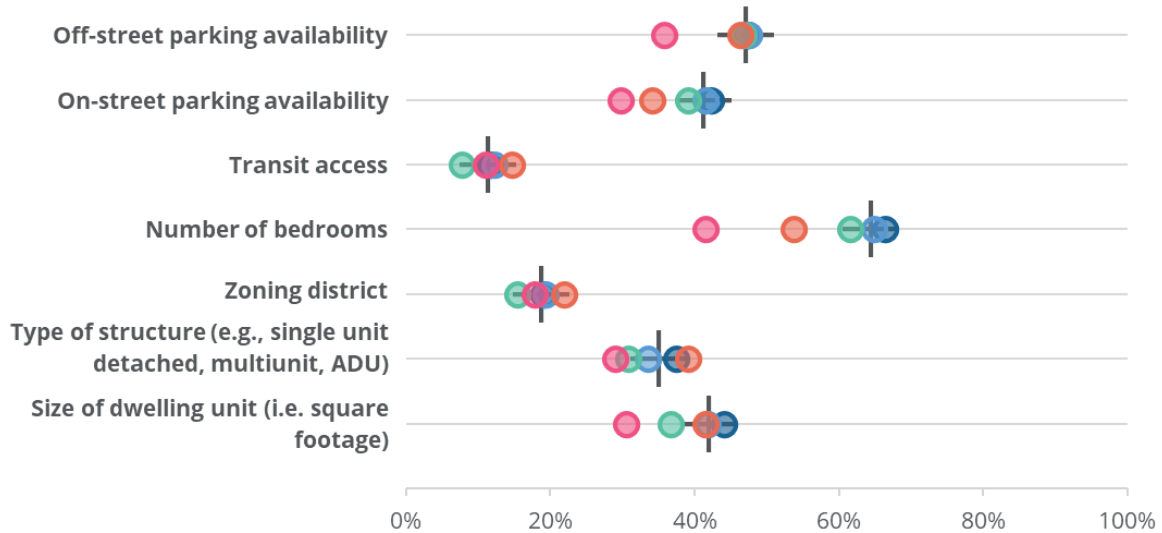
- + Rental Owner/Manager/Landlord
- Rental Owner/Manager/Landlord (1 unit)
- Rental Owner/Manager/Landlord (2-5 units)
- Rental Owner/Manager/Landlord (5-50 units)
- Rental Owner/Manager/Landlord (50+ units)
- Residents and Other Stakeholders

Figure B-1. From your perspective, how many unrelated adults should be allowed to live together in the City of Fort Collins?



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

Figure B-2. From your perspective, which of the following factors is an important consideration in determining occupancy allowances in the city?



Source: Fort Collins Rental Strategy Industry Survey, Root Policy Research.

MEMORANDUM

To: Fort Collins Housing Strategic Plan Implementation Team
From: Root Policy Research
Re: Investor Ownership Analysis
Date: April 12, 2022

This memo outlines Root Policy Research’s analysis of investor presence in the Fort Collins rental market. Traditional rental units in multi-family buildings have always been “investor” properties; however, investor presence in the single family, townhome, and condo markets has increased nationwide since the Great Recession, when many such homes fell into foreclosure. Currently, the strong rental market in Fort Collins (and Northern Colorado more broadly) may contribute to additional interest in acquiring residential properties as investment opportunities.

The analysis contained in this memo focuses specifically on investor ownership of single family, du-/tri-plex, and townhome units.

Data sources and Methodology

Root utilized several data sources to inform the analysis:

- For a current profile of investor-owned properties, Root relied on data from the Larimer County Assessor (geocoded to the City of Fort Collins). Investors are defined as owners not occupying the specified residential unit (excluding multi-unit apartments). Investors can be individuals or companies and are identified by matching owner and site addresses in the assessor data (where site and owner addresses match, the property is assumed to be owner occupied; where site and owner addresses do not match, the property is assumed to be investor owned).
- Due to data limitations of historical Larimer County Assessor data, Root relied on two different sources to evaluate historical trends in investor ownership. The first is Census and American Community survey data on tenure (renter v owner) of housing units by structure type (e.g., single family, duplex, etc.). In addition, Root was able to access ATTOM Data¹ on national, state, and local trends of company vs individual ownership of residential properties between 2016 and 2020.

¹ ATTOM data solutions aggregates assessor data across geographies; data are only available back to 2016 and individual properties are not available so Root was not able to conduct an owner occupancy analysis on the data.

Trends Over Time

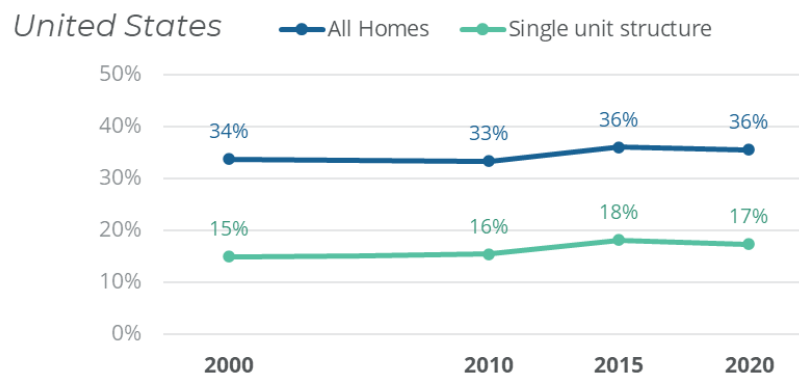
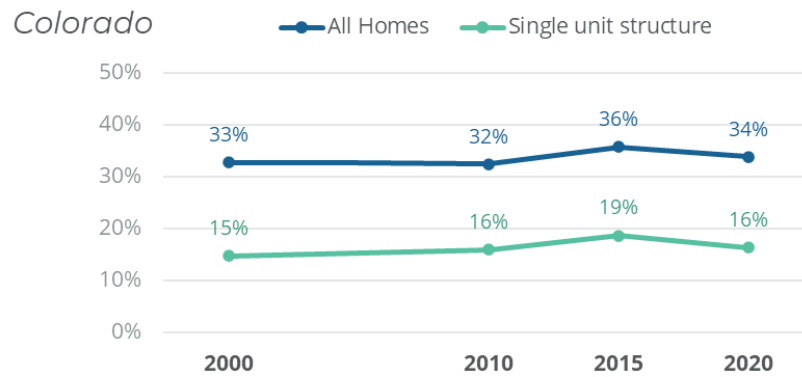
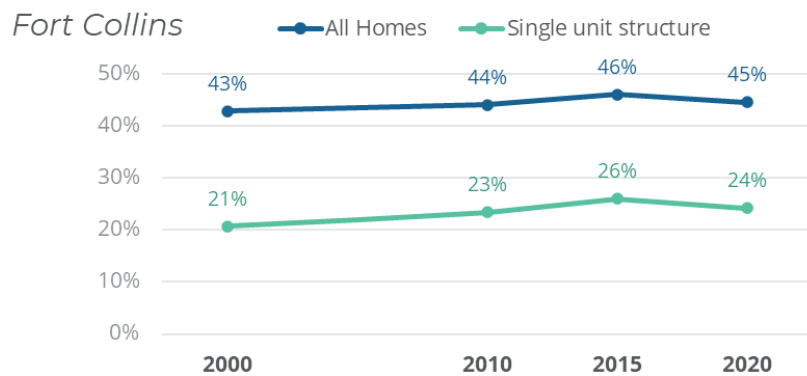
According to the American Community Survey 2020 5-year sample, there are 61,526 occupied households in the City of Fort Collins. Overall, 55% (34,046) units are owner occupied. Owner occupancy is substantially higher when focusing specifically on single-unit structures—76% of such units are owner occupied.

As noted in the introduction, national trends show a rise in investor ownership of single family properties over the past decade, particularly in the wake of the Great Recession (2007-2009). Figure 1 illustrates this trend by showing rentership rates by structure type of occupied households in the country, the state, and in Fort Collins from 2000 to 2020.

Figure 1. Rentership Rates by Units in Structure, 2000-2020

Note:
Rentership rate is the % of households in each structure type that are renters (as opposed to owners).

Source:
2000 Decennial Census; 5-year ACS estimates from 2010, 2015, and 2020; and Root Policy Research.



As shown in the previous figure, the proportion of homes occupied by renters in Fort Collins rose from 43% to 45% between 2000 and 2020 (peaking at 46% around 2015). The proportion of single family homes occupied by renters in Fort Collins rose from 21% in 2000 to 26% in 2015, moderating back to 24% by 2020. Similar trends are evident in the state overall and the country.

Though a 3-percentage point change may seem minimal, this shift combined with overall housing unit growth reflects a 3,800-unit increase in renter occupied single family units:

- In 2000, a total 6,092 single family units were renter occupied (out of 29,405 total single family units).
- In 2020 (based on 5-year ACS data), 9,848 single family units were renter occupied (out of 40,572 single family units).

Figure 2 shows the proportion of residential properties (excluding multi-family apartment properties) that are owned by companies (as opposed to individuals) in Fort Collins, Colorado, and the United States. It is important to note that not all rental units are company owned, but this does provide another indicator of investor presence in the market. Company ownership has increased nationally since 2016 (except in 2020); statewide trends are similar with steady increases since 2016, despite a slight drop in 2020. In Fort Collins, the increase in company ownership is slightly more pronounced and continues through 2020. Currently 11.5% of residential properties are owned by a company.

Figure 2.
Company
Ownership of
Residential
Properties,
2016-2020

Source:

Attom Data Solutions
aggregation of local
assessor data, and Root
Policy Research.

% Residential Properties with a Company as a Primary Owner (excludes commercial multifamily rental properties)			
Year	Fort Collins	Colorado	United States
2016	9.0%	7.9%	8.3%
2017	9.7%	8.1%	8.6%
2018	10.7%	8.5%	8.9%
2019	11.2%	8.8%	9.3%
2020	11.5%	8.4%	7.6%

Profile of Investor-Owned Properties

The remainder of this memo uses Larimer County Assessor data to evaluate the current profile of investor-owned properties in the Fort Collins single-family, townhome, and duplex market. Of these types of properties, about 33% are investor owned and 77% are owner occupied (investor ownership is defined as properties for which site and owner addresses do not match).

Investor ownership as a percentage of total units is substantially higher for townhomes (80%) and duplex/triplex properties (86%) than for single-family units (23%). However,

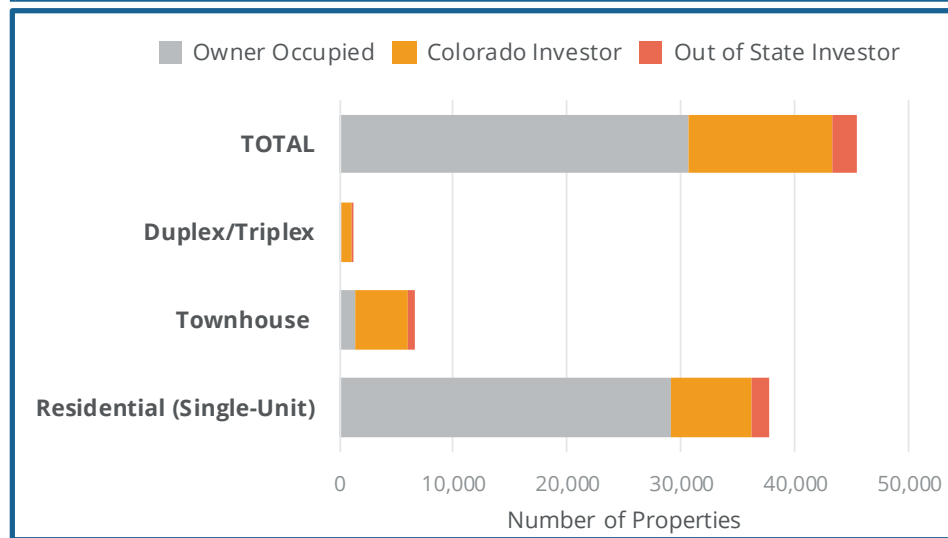
the sheer number of single family investment properties exceeds the other types, simply due to the dominance of this housing structure type.

Figure 3 shows the number and proportion of investor-owned properties by structure type. It also shows the number of investors who are “local” (have a Colorado address) versus out of state investors. Overall, about 15% of investors are out of state entities.

Figure 3. Investor Ownership by Property Type, Fort Collins, 2021

	Owner Occupied	Investor Owned		% Investor Owned
		Colorado Investor	Out of State Investor	
Residential (Single-Unit)	29,148	7,117	1,464	23%
Townhouse	1,329	4,714	601	80%
Duplex/Triplex	164	866	115	86%
TOTAL	30,641	12,667	2,210	33%

Source:
Larimer County Assessor and Root Policy Research.



The vast majority of investors own just 1 property (in addition to their residence). Fewer than 1% of investors own 10 or more properties. (See Figure 4).

Figure 4. Number of Properties per Investor

Number of Investment Properties Owned	Investors with Single Family Properties	Investors with Townhouse Properties	Investors with Duplex/Triplex Properties	All Investors
1 property	87.6%	94.8%	87.1%	90.3%
2 properties	8.0%	3.3%	9.7%	6.3%
3 to 5 properties	3.7%	1.5%	2.0%	2.7%
6 to 10 properties	0.6%	0.3%	0.5%	0.4%
More than 10 properties	0.2%	0.1%	0.7%	0.2%

Source:
Larimer County Assessor and Root Policy Research.

Investor-owned properties tend to be smaller, older, and have lower market value than owner-occupied properties of the same type. This is an indicator that investors are more likely to compete in the entry-level ownership market.

At the median single family residential units that are investor owned are 1,475 square feet, built in 1979, and valued at \$367,700. Single family owner occupied units at the median are 1,836 square feet, built in 1991, and valued at \$428,600.

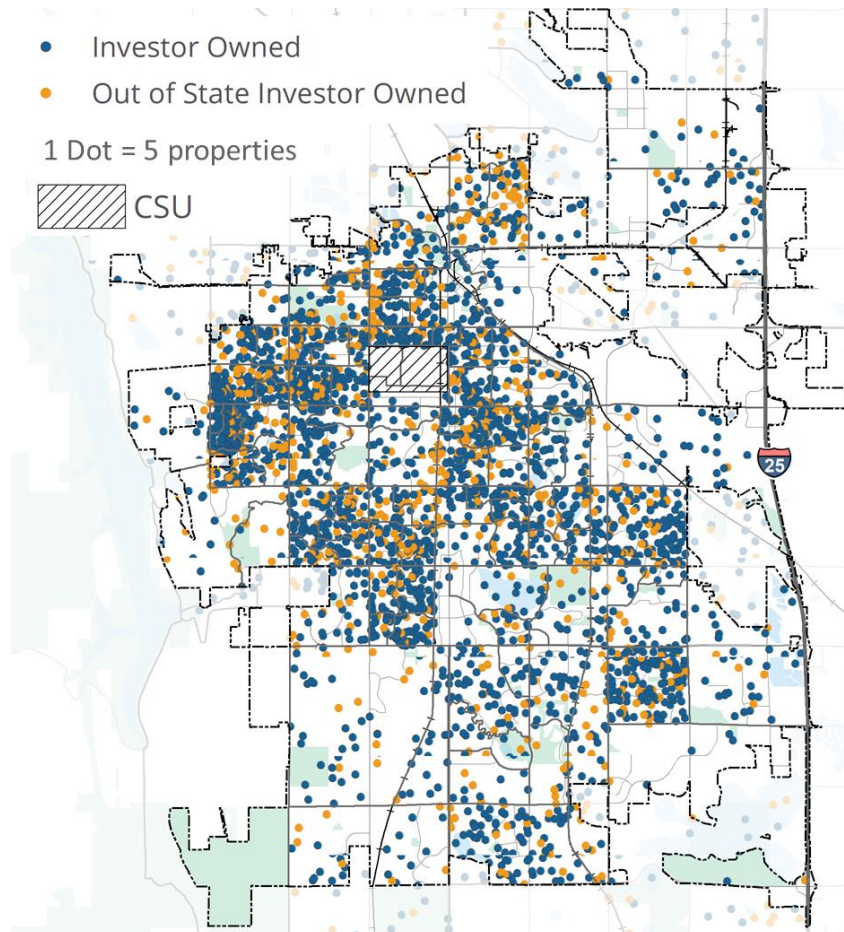
**Figure 5.
Median
Characteristics of
Investor Owned
Properties and
Owner Occupied
Properties**

	Square Footage	Bedrooms / Bathrooms	Year Built	Market Value
Residential Properties				
Investor Owned	1,475	3 / 2	1979	\$367,700
Owner Occupied	1,836	3 / 2.5	1991	\$428,600
Townhouse Properties				
Investor Owned	1,258	2 / 2.5	1998	\$297,000
Owner Occupied	1,395	3 / 2.5	1997	\$346,200
Duplex Properties				
Investor Owned	1,671	4 / 2	1966	\$472,300
Owner Occupied	1,361	4 / 2	1948	\$515,000

Source:
Larimer County Assessor and Root Policy Research..

As shown in Figure 6, investor properties are prevalent throughout the city with clusters around the University and central neighborhoods (where rentership is highest).

**Figure 6.
Geographic
Distribution of
Investor-Owned
Single Family,
Townhouse,
Duplex and Triplex
Properties**



Note:
Each dot represents 5 properties; dot locations are approximate.

Source:
Larimer County Assessor and Root Policy Research..

Fort Collins Rental Housing Task Force Final Recommendations

Fort Collins residents Jack Armstrong, Jade Beaty, Julia Berger, Lisa Cunningham, Brannan Davis, Adam Eggleston, Emily Gallichotte, Carrie Gillis, Cecilia Granby, Sean Haines, Nicole Hanson, Mike Herder, Torey Lenocho, Robert Long, Lindsay Mason, Amy Pezzani, Jose Luis Ramos, Carolyn J. Rasley, and Isabella Zapata served as Rental Housing Task Force members for the duration of ten meetings. The Task Force met ten times between March 30 and August 3, 2022. The Task Force recommendations follow below; some recommendations were approved through consensus and others through a majority vote.

Introduction

The Task Force acknowledges that housing policy is complicated and controversial. It is inextricably linked to the availability and affordability of housing in the City of Fort Collins. Both issues are of concern to the members of the Task Force and consequently, discussions often touched on housing policy and related trade-offs. The Task Force recommends that the City of Fort Collins consider housing policy options carefully before adding any new rental housing program components that could place pressure on landlords to raise rents.

City Council is urged to consider the potential for unintended consequences of any policy changes, and in particular, the impact of occupancy limits on the affordability of housing. The City's goals related to sustainability, density, and energy efficiency are closely related to the rental housing supply.

The Task Force noted that rental housing is disproportionately occupied by low-income families and minority populations. It was noted that enforcement of occupancy limits could potentially conflict with the City's diversity and equity principles. Housing policy should avoid unintentionally discriminating against any renters.

In addition, the Task Force hopes the City will consider how occupancy limits affect incentives for developers and turnover of property ownership. Another consideration is how housing policy accommodates life cycle changes. Finally, the Task Force suggests the City consider increasing funding to all affordable housing providers to allow access to their programs for more tenants.

Recommendations to City Council

Rental Housing Program

By a vote of 12 in favor and 4 opposed, the Task Force approved a recommendation that the City establish a mandatory rental housing registration program to create a database of all rental housing units by owner. Registration should include a nominal one-time fee for each rental unit and owners who fail to register their rental properties should be assessed a fine. To incentivize participation, the City should establish a landlord/tenant portal to provide resources and marketing connections. When a property is sold, the new owner should be required to register the property in their own name. Registration information should include a designated local

responsible party listed for each rental unit. Contact information for the property owner should not be provided publicly unless the designated responsible party has granted permission.

By consensus, the Task Force agreed that the City should not establish a rental housing licensing program at this time.

Occupancy Regulations

The following recommendations were approved by a vote of 16 in favor and 1 opposed.

The Task Force recommends that the definition of family be removed from occupancy regulations. Instead, the Task Force recommends that current occupancy code be replaced with one that is based on the number of bedrooms to utilize the City's existing home inventory more fully.

The Task Force recommends considering the following as a new occupancy code is established:

- Remove the U+2 policy from zoning law. Replace the policy with occupancy regulations that are enforced through administrative processes;
- Make it easier for property owners to obtain exemptions to occupancy regulations and increase the regions of the City where extra-occupancy permits are allowed;
- Require properties with extra occupancy designations to renew permits every five years;
- Remove extra occupancy designations when property ownership changes and/or when a property violates public nuisance ordinances.

Rental Housing Inspection Program

The Task Force reached consensus on recommendations related to the City's Rental Housing Inspection Program.

The Task Force recommends against proactive inspections for the rental housing program in favor of an inspection program that is initiated only after a complaint has been filed. Ideally, any tenant filing a complaint will attempt to resolve concerns with the landlord before filing a complaint. Inspections should be restricted to specific complaints.

The Task Force recommends that the rental housing inspection program be administered using clear and consistent standards for all types of units. Additionally, all inspectors should use the same standards, processes, and protocols. It should be made clear what each inspection includes - inside the walls, the exterior, or the property as a whole.

The Task Force recommends that all inspection program requirements be based on objective standards for established health and safety requirements only and include no cosmetic considerations. Inspections should take the age of unit into consideration. Inspection reports would ideally include suggestions for how the property could be brought into compliance.

Finally, the Task Force recommends that the City only conduct full inspections for repeat offenders and/or properties with complaints comprised of multiple infractions.

To support the program, the City of Fort Collins should provide education about the "Warrant of Habitability" and the City's inspection process.

Small Landlord Incentives

Consensus was reached that there is no need for a small landlord incentive program beyond what is already available at this time.

Task Force Recommendations to City staff

Regardless of any changes in Housing Policy made by Fort Collins City Council, the Task Force agreed to the following recommendations for actions to be taken by City staff in implementing the City's housing policies.

Education and Communication

The Task Force approved the following recommendations by consensus.

The Task Force recommends that the City of Fort Collins develop educational resources and opportunities for all participants in the rental housing program, including both tenants and landlords. The City should make all information about rental housing easier to find on the City website. Educational materials should include an explanation of all necessary disclosures for rental properties. In addition, the Task Force recommends the City consider establishment of a landlord/tenant portal to provide resources for both landlords and renters.

To support renters, the City should consider developing a "top ten" issues list to provide as a handout for renters and/or post on the City's website. Additionally, educational materials focused on renters should include information about the complaint process and the conflict resolution process as well as legal resources that are available to renters. The City should provide extra outreach for new landlords and for landlords or tenants with repeated violations.

The Task Force recommends that the City encourage landlords to have their leases reviewed by an attorney on an annual basis. To support new and small landlords without their own attorneys, the City should develop standardized (sample or model) leases for various types of properties with the assistance of a qualified attorney and make those standard leases available to landlords. Additionally, the standard leases should list all required steps in the move-out process (i.e., full cleaning) along with the charges for failing to meet those requirements as well as how to include documentation related to cleaning/damage deposits.

Conflict Resolution Process

The Task Force approved the following recommendations by consensus.

The Task Force recommends that the City review the existing conflict resolution process to offer protections for both landlords and tenants. Mediation should be available for all parties and the conflict resolution process should be adequately funded. It is further recommended that the process include provisions for translation services for parties whose first language is not English.

Background

The Fort Collins City Council approved a Housing Strategic Plan in March 2021 with a vision that "Everyone has healthy, stable housing that they can afford." The Housing Strategic Plan identified seven "Greatest Challenges" to achieving that vision, including #7 "Housing policies

have not consistently addressed housing stability and healthy housing, especially for people who rent."

The Housing Strategic Plan identified three strategies to address challenge #7:

- Strategy 20. Explore the option of a mandated rental license/registry program for long-term rentals and pair with best practice rental regulations.
- Strategy 21. Explore revisions to occupancy limits and family definitions in order to streamline processes and calibrate the policy to support stable, healthy, and affordable housing Citywide.
- Strategy 26. Develop Small Landlord Incentives.

In early 2022, the City convened a Task Force to support deeper exploration of the three strategies and to work collaboratively to propose modifications to current housing policy for consideration by City staff, the broader public, and City Council moving forward.

The City invited applications from the public to serve on the Task Force. A total of 76 people applied. Members from the Housing Team and the Rental Housing Occupancy Committee reviewed the applications. The top scores in categories landlord/property manager, renter, and other were invited based on date availability for the most participation. City Attorney Office approved the criteria utilized for selection and the information shared with the selection team. Demographic information was collected on applicants but was not used in the selection process; it was considered in aggregate for the entire application pool.

A panel of applicants was selected to represent a diversity of perspectives, including rental housing tenants, property owners and property managers, and people who fit neither category. Fort Collins residents Jack Armstrong, Jade Beaty, Julia Berger, Lisa Cunningham, Brannan Davis, Adam Eggleston, Emily Gallichotte, Carrie Gillis, Cecilia Granby, Sean Haines, Nicole Hanson, Mike Herder, Torey Lenocho, Robert Long, Lindsay Mason, Amy Pezzani, Jose Luis Ramos, Carolyn J. Rasley, and Isabella Zapata served as Task Force members for the duration of ten meetings.¹ City staff members Marcy Yoder (Neighborhood Services Manager), Meaghan Overton (Housing Manager) and Kory T. Katsimpalis (Customer Support, Community Development & Neighborhood Services) supported the Task Force. Wendy Green Lowe (P2 Solutions) facilitated all meetings.

The Task Force met a total of ten times between March 30 and August 3, 2022. The 19 Task Force members attended an average of 8.5 meetings each. Each meeting had an average of 16 Task Force members present. Task Force members completed homework assignments between meetings to ensure they were well informed

Early meetings were primarily informational as the Task Force members received presentations from City staff as well as a panel including Paul Anderson, Lloyd Walker, David Roy, and Benton Roesler to explore opinions about the City's U+2 Policy. The following documents were provided to members for their consideration:

¹ One Task Force member resigned after the second meeting due to an unforeseen personal commitment that prevented further participation.

- City of Fort Collins Housing Strategic Plan, Landlord/Tenant Handbook, and Rental Housing Minimum Requirements
- Results of research done for the City of Fort Collins looking at peer cities and their rental regulations,
- registration and occupancy regulations, household definitions, and occupancy restrictions
- Materials on the City's website related to occupancy:
<https://www.fcgov.com/neighborhoodservices/occupancy>
- Corona Insights Rental Market Report 2019
- Occupancy Study Presentation to City Council
- Memo from Root Policy on occupancy data
- Investor Ownership Analysis from Root Policy
- Initial results of Community Questionnaire
- Results from Landlord questionnaire conducted by Root Policy

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8 August 2022

Rental Housing Strategies Community Engagement

Executive Summary

Background

With nearly half of all housing in Fort Collins occupied by renters (*Housing Strategic Plan, 2021*), the City must support both renter and homeowners living next door to each other, even when their values may have tensions between them. Nowhere is this discrepancy starker than on the issue of occupancy limits. The City of Fort Collins has been enforcing rental occupancy since the 1960's and the ordinance known as U+2 since 2007. The language of the ordinance is in Article 3, Division 8.16 of the City's Municipal Code (*City of Fort Collin Municipal Code, 2006*). The City's website describes the purpose of occupancy limits as "to help ensure health and safety of residents, and to help protect the quality and character of neighborhoods" ("Occupancy"). Historically, occupancy limits have been a space where residents are often polarized.

The City has also had multiple conversations about how to support both renters and landlords through rental licensing and/or registration over more than 10 years. The goal of these strategies would be to make it easier to both rent and landlord in the city, with health and safety protections for tenants and support for small landlords. In October

2021, the City Council reviewed an evaluation of rental strategies and directed staff to conduct community engagement on the topic.

In March 2021, the City released its new *Housing Strategic Plan*, a document which used expert analysis and public input to define the challenges in housing facing Fort Collin and outline strategies to combat them and help housing become more healthy, stable and affordable for all residents. The seventh challenge listed in the *Plan* is that “Housing policies have not consistently addressed housing stability and healthy housing, especially for those who rent.” Seven strategies are listed under this challenge as tools the City would like to use to help renters and others. Strategy 20 is related to a rental licensing and/or registration program and Strategy 21 concerns revisions to the current occupancy limits (Image 1).

<p>20. Explore the option of a mandated rental license/ registry program for long-term rentals and pair with best practice rental regulations (New)</p>	<p>Potential components include landlord education (fair housing or other), standardized lease agreements in English and Spanish, requirements for reasonable application fees, a more defined path for conflict resolution, and rental inspections focused on health, safety, stability and efficiency.</p>	<p>Improve renter protections, housing quality, housing stability and landlord access to information; Improves housing equity</p>	<ul style="list-style-type: none"> • Explore rental licensing to promote safe and healthy housing • Increase equity in existing programs and services 	<p>Transformational (2+ years)</p>
<p>21. Explore revisions to occupancy limits and family definitions in order to streamline processes and calibrate the policy to support stable, healthy, and affordable housing citywide (Expand)</p>	<p>Occupancy limits and narrow family definitions often create unintended constraints on housing choice and options, including cooperative housing opportunities for seniors, people with disabilities, and low-income renters desiring to live with unrelated adults in a single family home setting, as well as non-traditional household arrangements.</p>	<p>Diversify housing options / Increase housing choice; Improves housing equity; Increases stability / renter protections</p>	<ul style="list-style-type: none"> • Remove or relax occupancy restrictions • Increase equity in existing programs and services 	<p>Transitional (1-2 years)</p>

Image 1: Strategies 20 and 21 (*Housing Strategic Plan, 2021*).

Community Engagement

In order to get direction and better understand the public’s tolerance of changes to occupancy limits and rental regulations, Neighborhood Services staff began a public

engagement campaign which included convening a resident taskforce and deploying a community questionnaire.

Rental Housing Advisory Taskforce

In March, 2022, a Taskforce of 19 residents including housing tenants, property owners, property managers and more was selected by staff and convened to discuss occupancy and rental strategies. “The Rental Housing Task Force was convened to support deeper exploration of the three strategies and work collaboratively to propose modifications to current housing policy over the course of ten biweekly meetings. Modifications proposed by the Task Force will be considered by City staff, the broader public, and City Council moving forward” (*Fort Collins Rental Housing Task Force July 6, 2022 Agenda*). The taskforce met monthly for ten months, overseen by City staff and a third-party facilitator. Participants worked to diverge and then reconverge on recommendations to present to City Council.

Community Questionnaire

In order to better support the Taskforce and help them expand their viewpoint to the broader Fort Collins population, staff also conducted a Rental Housing Strategies Community Questionnaire. The results were presented to the Taskforce and will also be included in the report to City Council along with the Taskforce’s recommendations. The survey was deployed online and sent to staff contacts at Colorado State University, *The Coloradoan*, and *The Collegian*. Staff also used the Neighborhood Services pop up lemonade stand to table at strategic neighborhoods. These neighborhoods were chosen

because of their high quantity of both renters and homeowners living next door to one another. The survey was also available in Spanish.

Demographics

Overall, the survey had 1,739 responses. 64.8% said they own their home and 30.8% said they rented. The survey also asked respondents to self-identify as a renter, homeowner, student, real estate agent, homeowners' association member, property manager, landlord or other, with the option to select multiple to capture the intersectionality of identities at play. On average, renters reported lower household income, age, and length of residency in Fort Collin than owners, although some of the demographic questions such as household income also had larger numbers of participants refuse to answer so the trends may be skewed. The survey captured representative percentages of most racial identities except that only 4.3% of respondents identified as Hispanic/Latinx while the larger population has a higher percentage of people in this category.

Results

The results are presented through various cross-sections of the respondents. All the questions will show how the entire pool of respondents answered, and then a comparison of only renters and only homeowners. The occupancy questions were further filtered by respondents who identified as homeowners but NOT rental housing industry professionals such as landlords, property managers or real estate agents. The rental occupancy questions were filtered for respondents who identified as an industry professional. This shows an interesting impact of working in the rental housing industry.

Occupancy	All Respondents		Renters		Homeowners		Non Industry Professionals	
	Yes	No	Yes	No	Yes	No	Yes	No
	Agree or disagree to the following statements:							
Should Fort Collins occupancy limit stay as they are?	31%	69%	22%	78%	36%	64%	45%	55%
Allow extra occupancy rentals in more places around the city	62%	35%	72%	23%	50%	41%	43%	49%
Make the process to approve extra occupancy easier	59%	33%	74%	21%	51%	39%	43%	46%
Adjust occupancy limit to match number of bedrooms in a home	51%	50%	59%	33%	47%	44%	38%	51%
Regulate occupancy based on household function, not family relatedness	48%	41%	51%	31%	21%	47%	28%	52%
Regulate occupancy based on number of parking spaces	22%	61%	12%	69%	27%	57%	24%	63%
Focus on regulating nuisances instead of occupancy	56%	32%	61%	26%	54%	36%	44%	44%
Increase occupancy limits to more than 3 unrelated residents	56%	37%	73%	23%	47%	45%	39%	52%
Eliminate occupancy limits completely	36%	54%	52%	36%	27%	63%	24%	67%
Rental Strategies	All Respondents		Renters		Homeowners		Landlords	
Agree or disagree with the following statements:	Yes	No	Yes	No	Yes	No	Yes	No
Should Fort Collins rental strategies stay as they are?	40%	60%	25%	75%	46%	54%	53%	47%
Require that all landlords obtain a license to rent property in the City	50%	40%	63%	21%	45%	48%	13%	78%
Require that all landlords register their rental properties with the City	56%	34%	69%	17%	52%	40%	21%	69%
Proactively inspect rental properties on a regular basis for health and safety violations	47%	37%	62%	20%	42%	44%	15%	72%
Inspect rental properties only when a complaint is filed	56%	26%	60%	22%	53%	28%	56%	23%

Analysis

The results show divides in opinions between subgroups of the population. Overall, renters were more likely to say that they wanted to see changes in both occupancy and rental strategies. Homeowners as a single group without filtration of profession were

more moderate or split more evenly between those who disagreed with strategies and those who agreed. It was helpful then to filter out subsections of the homeowners by profession in the rental housing industry. Homeowners who were NOT industry professionals were less likely to approve of changes to U+2. However, Homeowners who WERE in the industry themselves were less likely to approve of rental strategies which would regulate their business. An interesting pattern to point out is the dual inspection questions. Many respondents disagreed with one type of inspection and agreed with the other, but there were also many respondents who agreed with both types, indicating that inspections in general are needed, but there were differing opinions on whether to perform them preemptively or case-by-case.

Conclusions and Next Steps

However divided individual groups were in the questionnaire, the majority of respondents said they would tolerate or even welcome changes in both U+2 and rental strategies. There are some other clear directives from the survey, including that most people thought restricting occupancy based on parking spaces is a bad idea, or that offering increased landlord/tenant mediation services would be a good one. The survey was presented to the Rental Housing Advisory Taskforce, and after discussion they agreed to recommend rental registration over licensing and case-by-case inspections over preemptive ones. For occupancy, the Taskforce recommended basing occupancy limits on the number of bedrooms in a house, removing the definitions of family from the ordinance language, as well as making the extra occupancy application process easier by removing occupancy from the Land Use Code.

The survey results and Taskforce recommendation will go to City Council on August 26, 2022 where staff will receive direction on which of the recommendations to implement. The next steps will be deciding on the many small details of the new policies and determining how they will be enforced and administrated. As the City progresses, it should continue to engage the public in order to build rental strategies which successfully address the greatest challenges in the *Housing Strategic Plan*.

Resources

City of Fort Collin Municipal Code, 3.8.16, 2006.

https://library.municode.com/co/fort_collins/codes/land_use?nodeId=ART3GEDEST_DIV3.8SURE_3.8.16OCLIINNUPEAL

Fort Collins Rental Housing Task Force August 3, 2022 Agenda. (n.d.). City of Fort Collins. https://www.fcgov.com/housing/files/august-3-agenda_website-edits.pdf?1659717450

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Occupancy. (n.d.). Fcgov.Com.

<https://www.fcgov.com/neighborhoodservices/occupancy>

Impacts of rental policy on social determinants of health: a framework approach

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Key Messages

1. Studies showed a strong link between rental housing and health, with health outcomes improving when intervention was offered.
2. A variety of policies can benefit a community's renter health including warrants of fitness, inspections, healthy housing programs, rental assistance.
3. A robust policy plan is the most comprehensive way to address the various social determinants of health for renters.
4. Multiple cities worldwide are implementing rental licensing and registration programs. Gray literature exists to provide insight on program structure and implementation strategies.

Abstract

Renters face unique challenges when it comes to health and housing. Policies can be considered to protect the renter community, which makes up almost 50% of Fort Collins' population. In fall 2021, the City of Fort Collins expressed desire to further understand the impacts of a proposed rental licensing and registration policy, including health impacts. The purpose of this project was to describe the relationship between rental policy and health outcomes through a social determinants framework and make recommendations to the City of Fort Collins based on the findings.

A scoping literature review was employed as a method to describe the relationship between rental policy and health outcomes. Next, a framework analysis was conducted to analyze the findings and create informed recommendations. The literature review produced 15 articles from PubMed and Web of Science databases that were then analyzed. Recommendations were provided to the city in addition to the results of the literature review. It is recommended that the City of Fort Collins adopt policy to address the three main social determinants of health related to rental housing: built environment, affordability, and physical living conditions. A rental licensing and registration program is a good candidate and if adopted, a thorough evaluation should be completed and made available for future research. The findings from the review and analysis, as well as the recommendations will be used by city staff in the policy advocacy and review process with City Council.

Keywords: renter health, social determinants of health, rental policy, renter licensing and registration

Literature Review

Introduction

Well-established knowledge among public health experts is that housing is a longtime predictor of health outcomes. There is a robust evidence base for this which covers everything from mental to physical health. For example, substandard housing can lead to chronic disease such as respiratory illness, communicable disease, or psychological distress as well as acute health concerns like injury or heart attacks (Healthy People 2030, n.d.-a; Health Affairs, 2018). Beyond physical housing conditions and the direct links to health outcomes, housing affects various social determinants of health, especially in the realms of the built environment and affordability. Many studies have looked at these causal pathways (Rolfe et al., 2020) and established a knowledge base that addresses the multifaceted links. When considering the larger picture of population health, one cannot ignore renter health, as renters make up over a third of the households in the United States (DeSilver, 2021).

The City of Fort Collins was interested in exploring the links between rental policy and health outcomes – understanding what links, if any, exist and if so, what they are. Almost 50% of Fort Collins’ population rents their homes (City of Fort Collins, 2021). Therefore, if positive links exist between rental policy and health outcomes, the benefits of implementing such policy could be of high benefit to the City. This literature review conducted from January to April 2022 focused on rental policy as an intervention, analyzing the links between health outcomes of renters and policy decisions.

The aim of this study is to review which national and worldwide policies are implemented as an intervention of renter health and how these interventions affect health outcomes. The goal is to determine if the City of Fort Collins should consider introducing a

rental licensing and registration policy as a strategy to improve community health. Rental registration is when landlords register properties with a governing authority, such as a city, for tracking and data collection purposes. Rental licensing is implemented when landlords pay a modest fee to obtain a license to operate their rental properties. Such a license is provided oftentimes once an inspection is completed, which ensures properties have appropriate minimum quality and pass habitability standards. Inspections are often recurrent upon a pre-determined timeframe as a part of licensing. Rental policy is described throughout the review and is speaking specifically to strategies that center the needs of people who rent and the renting experience, such as renter health. However, it is important to note that landlords and other stakeholders must also be considered in the creation of renter-centric policy.

Methods

Scoping Literature Review

The methods included in this study are a literature review and a framework analysis. The scoping literature review format was designed to capture studies that linked rental policy to health outcomes in all ages of the rental population. Two scientific databases were searched, PubMed and Web of Science. Inclusion criteria consisted of children or adults in long-term renting situations and captured various aspects of housing quality, social determinants of health, significant health impacts (positive or negative), and intervention of rental regulatory policy with preference given to licensing and registration. There were no geographic or timeframe limitations to scaffold the search criteria, as any policy that impacted health would be deemed relevant agnostic of when and where it took place.

Articles were excluded if they focused only on eviction assistance, due to this already being a policy tool utilized by the City of Fort Collins. The other policy exclusion was rent

control as a broad requirement to cap rental prices which is not legally permitted within the state of Colorado. Articles that only established further linkage between health and housing were also excluded from the scope of this review.

Once a strong base of articles was established through the search strategy provided, articles were reviewed and narrowed first by a match of titles to the subject, followed by a review of abstracts, and finally a thorough review of articles that remained. To narrow the literature in the final stages, a spreadsheet was utilized to ensure the articles included and met various aspects of the inclusion criteria, with the strongest articles touching each point of inclusion.

Framework Analysis

The framework analysis was completed through a systematic approach once the literature was identified through the process above. After articles were reviewed, they underwent a process of theming and indexing which was used to name key takeaways, based on relevance to the inclusion criteria and questions posed. This process was executed using Excel to organize the articles and name content themes. Once indexed, the literature was grouped using a more built-out matrix in Excel. This included creating columns that attached to each code given in the theming process. The themes and groups were then interpreted for key takeaways to answer the question asked by the City of Fort Collins.

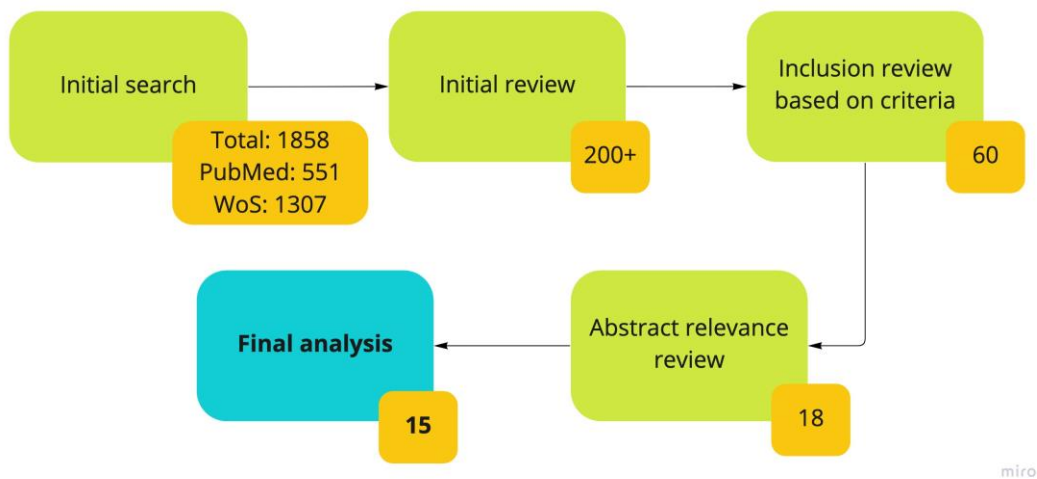
After the literature was interpreted and summarized into key takeaways, Miro was used to create a visual depiction of the social determinants of health that were addressed throughout the review and analysis. The primary social determinants – built environment, affordability, and physical living conditions – each had four inputs identified that describe how renter health outcomes are uniquely affected. See Figure 2.

Results

As described above, a thorough review process took place from initial search to final selection of literature. Once search terms were input into both databases, there were 1858 initial results. The first 100-150 articles in each database were scanned, and relevant titles were kept in the review. Of these 200-300 articles, 60 were chosen for abstract review. Comparing the abstracts to the inclusion criteria, 18 of the 60 articles were selected as most relevant. Once a thorough review of each article was complete and content was compared to the main inclusion criteria, 15 articles remained for final analysis. See Table 1 for more details.

Figure 1.

Methods & Results Flowchart.



The final literature reviewed included studies completed worldwide. Five were completed internationally ranging from Europe to New Zealand and 10 studies were based only in the United States, both nationally focused and targeting specific cities or states. Though no limitations were set to narrow results to a particular timeframe, all articles were published between 2011 and 2021. The data included in the articles were gathered between 1975 and 2020.

The results included various study designs with a focus on qualitative cross-sectional studies that leveraged surveys and interviews. There were also other literature reviews as well as longitudinal data analyses utilizing external data sources, such as various sources of federal or state data. The population covered renters throughout the lifespan, with most looking at ages 18+. One study looked at birth outcomes, multiple studies considered child health, and one study focused on older adults. Health outcomes examined by the literature included various specific mental and physical outcomes to general wellbeing. The most common specific outcomes included asthma and respiratory illnesses, injury, and depression.

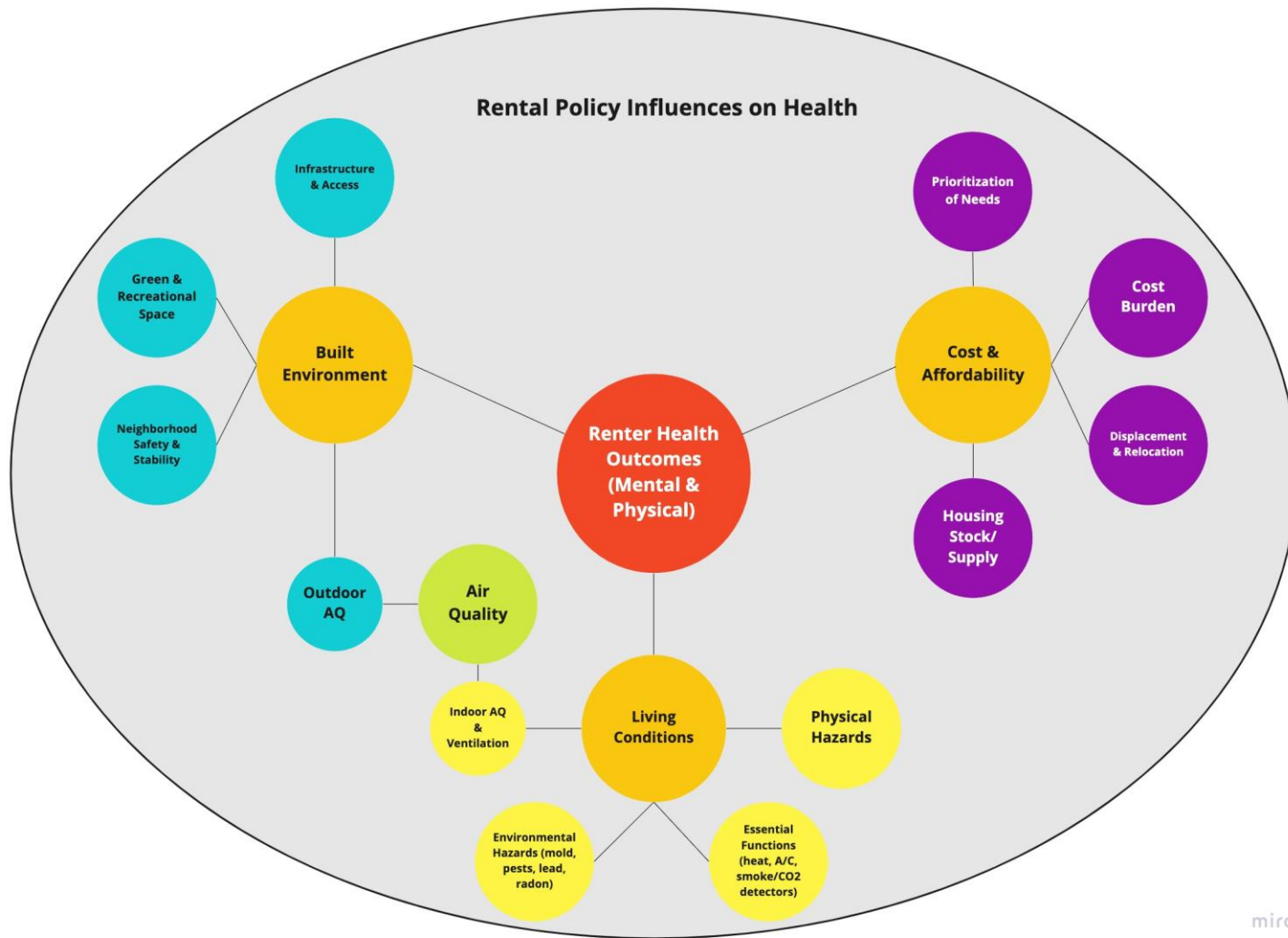
Table 1.*Literature Review Results*

Author	Year Published	Policies Studied/Proposed	Results
Denary et al.	2021	Rental assistance to reduce rent burden to no more than 30% of income	Participants receiving rental assistance had better mental health outcomes than those not receiving rental assistance.
Samuel et al.	2020	Rental licensing	Impacts of licensing and registration programs on a city's rental market is a complex issue that should be assessed on a city-by-city basis. There is an ambiguous relationship between regulation (e.g., fines) and rent prices. Some cities have a higher quality benefit than affordability effect.
Chisholm et a.	2020	Tenancy rights, inspections, random audits, etc.	Lack of assertion of tenant rights due to various tenant-landlord power structures.
Marquez et al.	2019	N/A	Renters who cannot access public assistance must choose between affordability, quality, or face homelessness.
Horwitz-Willis	2016	Implied warranty of habitability	Tenants are unlikely to report landlords when having trouble getting necessary repairs made. This is exacerbated in specific social groups.
Reddy et al.	2017	Healthy homes program	Healthy homes programs are effective tools for improving housing quality.
Meltzer & Schwartz	2015	Policies to relieve cost burden.	There is a meaningful relationship between cost burden and health.
Ferguson & Yates	2016	Federal healthy homes legislation	Federal healthy home policy is an effective tool to reduce exposure to harmful housing conditions that lead to diminished health and wellbeing.
Desmond et al.	2015	Intervene with policies to avoid forced relocation (free legal counsel for evictions, increase affordable housing supply).	Forced relocation is associated with both residential and community instability and choosing low-quality dwellings.
Fenelon et al.	2021	HUD rental assistance (public subsidized housing or housing choice vouchers)	Children receiving rental assistance miss school less often due to illness.
Miranda et al.	2012	N/A	Poor birth outcomes are associated with five built environment indices, with statistically significant associations with housing damage.

Author	Year Published	Policies Studied/Proposed	Results
Van Ommeren & Koopman	2011	Rent-controlled public housing	Non-profit housing associations play an important role in offering high-quality housing in rent-controlled markets, such as in the Netherlands.
Telfar-Barnard et al.	2017	Warrant of fitness (local) requirement	Study overview only
Park & Seo	2019	Multi-factor policy approaches to benefit housing tenure and conditions	Housing affordability and conditions are risk factors for poor mental health outcomes (depression & anxiety).
Pledger et al.	2019	Supportive policies for renters and aging in place	Older adults in New Zealand renting their homes were more likely to report poorer health and economic outcomes.

Figure 2.

Social Determinants and Renter Health Outcomes.



miro

Discussion

Findings

Social determinants of health include external environmental factors such as access to education and healthcare, community context, built environment, among others (Healthy People 2030, n.d.-b). The literature highlighted a clear link between rental policy interventions and positive renter health outcomes. Policy focused on benefitting renters impacts multiple social determinants of health, including the built environment, cost and affordability, and physical living conditions, as renters have unique challenges in each of these areas.

Throughout the literature, health was defined in both broad and specific terms. Rental policy affected health outcomes from general wellbeing (Denary et al., 2021) to mental health outcomes like depression (Meltzer & Schwartz, 2015; Park & Seo, 2019). It also had a heavy focus on physical illness from asthma to cardiovascular disease, developmental and neurological disorders in children, injury, diabetes, and chronic or autoimmune disease (Pledger et al., 2019). Policies that were implemented in the studies analyzed had a positive impact on these health outcomes, showing that renter-focused policy is an effective tool to impact health.

Renting conditions affect health outcomes when cost of housing is too high making it unaffordable, as defined as spending more than 30% of income on rent (HealthAffairs, 2018). This leads to stress, the de-prioritization of treatment seeking behavior (Meltzer & Schwartz, 2015), poor mental health outcomes (Park & Seo, 2019), and forced relocation which affects education attainability in children and neighborhood stability (Desmond et al., 2015). As of the 2020 Housing Strategic Plan, 3 in 5 renters in Fort Collins were cost burdened (City of Fort Collins, 2021).

Another social determinant of health that affects renter health outcomes is that of the built environment. The built environment encompasses outdoor air quality, transportation access, green space, recreational opportunities, access to services and basic needs, and neighborhood safety. When the built environment surrounding an individual is not well-constructed, it can have devastating health impacts. These can include depression and poor mental health outcomes (Denary et al., 2021), poor birth outcomes for infants (Miranda et al., 2012), and a variety of physical ailments (Pledger et al., 2019).

Lastly, analyzed in this literature review was the importance of good physical housing conditions among renters as a social determinant of health. When standards of habitability are met such as good ventilation and air quality, an absence of injury-causing hazards such as broken railings or warped floors, working essential appliances such as heat, and an absence of pests or mold, health outcomes overall trend positive (Reddy et al., 2017). Ensuring a proactive approach to keeping living conditions up to standards is a good strategy to improve and maintain good population health in the community.

Implications for the City of Fort Collins

Table 2.

Recommendations

Recommendations
1. Implement rental policy to improve physical conditions of rental housing. A specific policy that addresses living conditions of renters is a licensing & registration program.
2. Make the policy process collaborative. <ol style="list-style-type: none"> a. Connect with cities in Colorado (Denver, Boulder) implementing renter licensing & registration programs to hear expert advice, assess lessons learned, and gather potential evaluation data. b. Connect with residents and landlords to discuss desires, goals, concerns.
3. Create a robust evaluation plan to add to the body of evidence, should policy be implemented.
4. Weigh the unintended consequences and consider ways to mitigate ahead of time.

Recommendation 1. Renters are greatly impacted by multiple social determinants of health. According to the literature, this primarily includes cost and affordability, built environment, and physical housing conditions (See Figure 2 above). The City is currently building upon its policies and programs to support renters in the realms of affordability and built environment. Examples of this include expanding the MAX transit line to North College to increase transit access, building a gentrification index to understand development trends, supporting partners to increase affordable housing stock to increase access to housing, and updating the Land Use Code. However, to look more fully at renter health, it also should have policy to address current physical living conditions. Habitability standards as outlined by Fort Collins include baseline standards for physical conditions such as proper heating, plumbing, smoke detectors, and other features (City of Fort Collins, n.d.).

The literature included in this review reports that renters are unlikely to report their landlords when there are unsafe or unhealthy living conditions due to power dynamics, fear of retaliation coupled with a lack of legal protection, or language barriers (Chisholm et al., 2020; Horowitz-Willis, 2016). Currently, there is no inspection program for long-term rentals, relying on renters to report issues to their landlord or to the city (City of Fort Collins, n.d.). The data makes clear that this is not a realistic solution.

The other main benefit, besides taking a proactive approach to improve physical living conditions, is to gather data. At a minimum, it is recommended that the City enroll long-term rentals in a registration program to collect data. This data can be useful in multiple avenues including to inform future policy implementation and service expansion. To further the City's impact, licensing and inspections would confirm that housing conditions are habitable for the renter community. Data from this expanded policy could also benefit the City's future policy and

service offerings. For example, if data show a cluster of ongoing failed inspections and poor living conditions, the City can choose to improve green spaces or transit access to address additional facets of the social determinants and take a multi-faceted approach to renter health as immediate housing conditions are undergoing improvement.

Recommendation 2. It is important to make the policy process collaborative from inception to implementation. The first way to do this is with peer cities in Colorado that have implemented, or are in the process of implementing, renter licensing and registration programs. Denver and Boulder are two recommended cities that have recently adopted licensing and registration policies and are in various stages of implementation. Throughout this process, it is important to gather lessons learned, evaluation data, and expert advice. While these policies are relatively new and long-term outcome data will not be available, there may be initial outcomes and other data the cities have gathered and are ready to share and discuss. Secondly, it is recommended to engage thoroughly with the community of both renters and landlords in Fort Collins. Hearing first-hand experiences and perspectives as well as concerns, ideas, and considerations is a process that is beneficial and effective for all parties involved. A current example of this in Fort Collins is the Rental Housing Advisory Group. Both collaborative processes remove historical silos and avoid duplication or rework down the road.

Recommendation 3. When considering a data-driven policy, it is critical to prioritize the evaluation process. It is recommended to create a robust evaluation plan to add to the body of evidence, as there is a gap in the literature specifically geared toward licensing and registration programs. The data gathered should be public and easily accessible for other municipalities, especially of similar size, to review upon consideration of future policies and programs that

reflect these goals. This data should incorporate health outcomes, effects on affordability, and lessons learned throughout implementation.

Recommendation 4. As is standard for any policy implementation plan, it is critical to consider the unintended consequences a new policy may have on the community. In this case, examples of unintended consequences could be the creation or reinforcement of off-market rentals passing along program costs to renters, or the displacement of individuals and families. Each of these consequences could appear in a unique context and are often cited as reasons not to implement this policy. Ultimately, there will be consequences in either direction when considering new policy. Consequences of not implementing renter policy aimed at improving living conditions could be continued poor renter health outcomes and costs or a lack of data to understand the rental landscape within the City. These outcomes must be weighed against each other and mitigated for in advance.

A “shadow rental market” refers to the unofficial, unregulated market in which landlords advertise and rent properties outside of the legal means. This can appear when a market is heavily regulated without incentive, among other circumstances. Samuel et al. (2021) discusses this as a common reason that cities choose not to adopt licensing and registration policy, but ultimately may not be as large a concern, dependent upon factors within the city’s current market.

The concern over passing costs of the program to renters must be considered as well. Ideally, the monetary cost of taking part in the program should be minimal. Existing programs are minimal in licensing cost. Therefore, the cost that landlords would be passing along to renters is more likely to be that of maintenance and repairs. To mitigate this cost in advance, the City could choose to pair a pilot landlord incentive program that provides repair funds to eligible

landlords. It is also important to understand the effects on small landlords, ensuring that this policy does not push them out of the property management market. Again, small landlord incentives could be a mitigation strategy, as well as including many stakeholders in the policy creation process.

A third, but not final, example of an unintended consequence is that of the potential displacement of tenants. Should a routine inspection uncover unlivable conditions that require in-depth repairs that take time, this could lead to displacement of individuals or families. Alternatively, inspections could show that an impermissible number of people are living under the same roof, causing displacement. City staff should consider additional renter protections to potentially pair with the licensing and registration policy to mitigate for this situation ahead of time.

Strengths and Limitations

A strength of this literature review is that it searched across journals and scientific disciplines. It cast a wide net over policy implications and health outcomes. It also was not limiting in time or geographic factors and was inclusive of various innovative policies across the world. The health outcomes discussed throughout the literature were robust and the articles reviewed many aspects of health associated to various social determinants.

A limitation of this review is that it only focused on two databases in total, leaving out possible helpful research in fields such as law, urban planning, and other housing-related disciplines that were not included in the scientific research evaluated. Another limitation is that the evidence base specific to the policy in question from the City of Fort Collins is not robust, making it difficult to find literature that applied directly to the situation.

Conclusion

The literature review accomplished the goal in question and analyzed the clear link between renter policy and renter health outcomes. While there is more work to be done specific to licensing and registration programs, municipalities should have a robust portfolio of renter policy to benefit population health. This is particularly important in communities with a high volume of renters, such as Fort Collins, where renter health is inextricably linked to population health. City staff and leadership should consider designing and implementing strategic rental policies across multiple social determinants, to boost community health and protect the rights of renters in the city.

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Council Work Session: Housing Strategic Plan Implementation

Rental Housing Strategies

Marcy Yoder, Neighborhood Services Manager
Meaghan Overton, Housing Manager

1. Which of the potential next steps do Councilmembers support for **rental licensing/registration**?
2. Which of the potential next steps do Councilmembers support for **occupancy ordinance revisions**?





- **Strategy 20** - Explore the option of a mandated rental license/registry program and pair with best practice rental regulations.
- **Strategy 21** - Explore revisions to occupancy limits and family definitions in order to streamline processes and calibrate the policy to support stable, healthy, and affordable housing citywide.
- **Strategy 26** – Develop small landlord incentives.



Big Move 7: Healthy, Affordable Housing

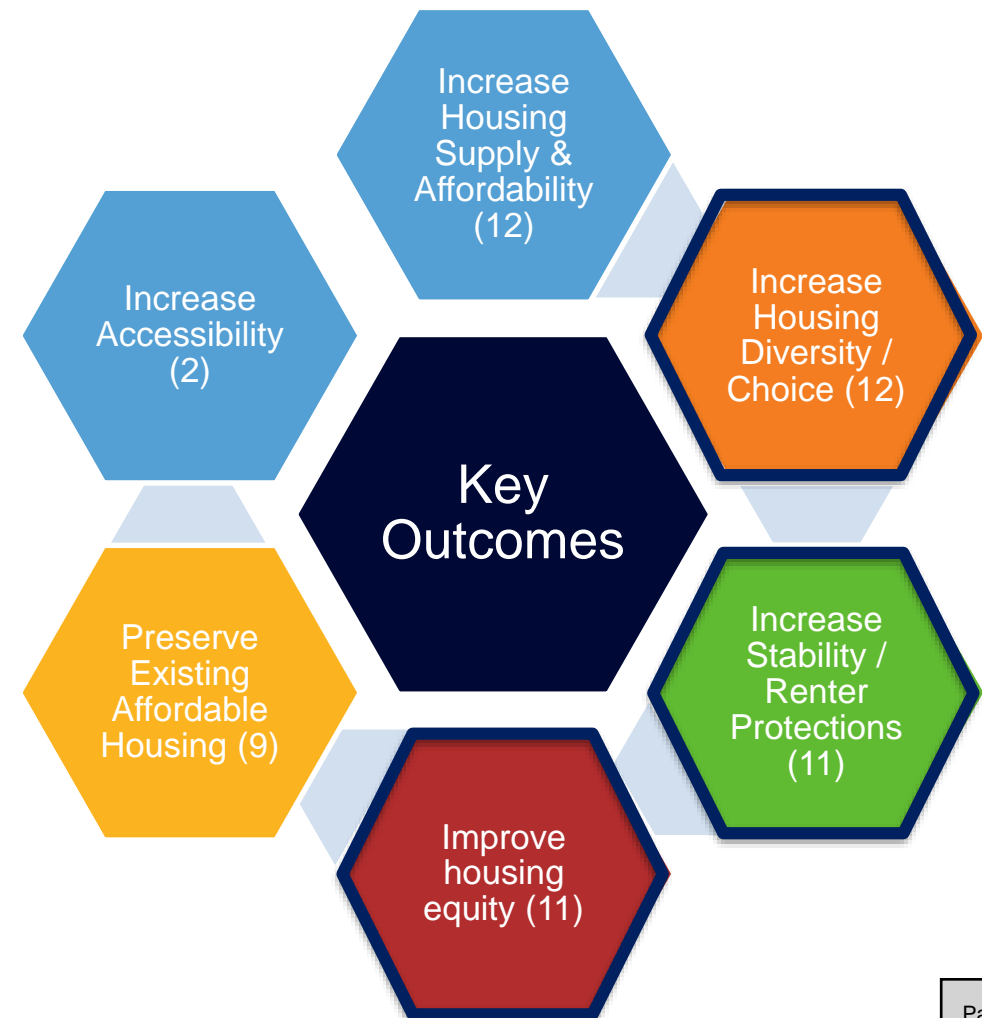
- **HAH2:** Explore revisions to the City's occupancy ordinance
- **HAH6:** Explore mandated rental license/rental registry



- **LIV 5:** Create more opportunities for housing choices
- **LIV 6:** Improve access to housing ...regardless of their race, ethnicity, income, age, ability, or background
- **LIV 6.7:** Encourage the private development of affordable housing by offering incentives...for the construction and rehabilitation of long-term affordable housing units

Why are we looking at rental licensing, occupancy, and small landlord incentives?

- *Greatest Challenge #7:* Housing policies have not consistently addressed housing stability and healthy housing, especially for people who rent
- *Community engagement:* a desire to proactively ensure **healthy, safe units** and maintain neighborhood **quality of life**
 - Fear of retaliation or loss of housing if renters report substandard or unsafe units
 - Concerns about discrimination
 - Lack of choices and affordable options attributed to current occupancy restrictions
 - Many opinions about the best approach to “right-sizing” the City’s occupancy ordinance



Previous Council Direction and Research

- Key Policy Decisions
 - 1963 – Adoption of Occupancy Ordinance (U+2)
 - 2005 – Decriminalization of occupancy violations, beginning of enforcement
 - 2016 – Decision to pursue options outside of rental licensing
- Research
 - Corona Insights Economic and Impact Studies completed in 2005, 2009, 2019
- Recent Council Direction
 - December 2020: Ad Hoc Housing Committee; direction for further work on rental licensing/registration, occupancy, and landlord incentives
 - October 2021: Full Council Work Session; support for community engagement to explore potential design of rental licensing/registration, revisions to occupancy, and small landlord incentives

Group	Engagement Activities Conducted
Renters, neighborhood groups, HOAs	Housing Strategic Plan engagement, 2020-2021 Community Questionnaire, Aug. 2022 Pop-up Engagement, Aug. 2022 Rental Housing Taskforce
Landlords, realtors, property managers	Presentation to Northern CO Rental Housing Association, Feb. 2022 Presentation to Board of Realtors, Feb. 2022 Rental Industry Questionnaire, Feb./March 2022 Rental Housing Taskforce
City Departments	Convening of Rental Housing and Occupancy Core Team Conversations with IT, Building Services, Communications and Public Involvement Office, City Attorney’s Office
Council	Ad Hoc Housing Committee discussion, Dec. 2020 Rental Strategies Work Session, Oct. 2021

Community task force was formed to support deeper exploration of strategies related to rental housing and occupancy and bring recommendations forward for staff and Council consideration.

- 76 applicants for 20 spots
- Selection process sought to include perspectives of landlords, property managers, renters, and others
- Third-party neutral facilitator
- 10 meetings, March-August 2022



Affiliations Shared

Renter

- Currently renting
- Single parent
- Experienced homelessness
- Affordable housing tenant
- Seeking homeownership
- Parent of renters
- Former CSU student

Industry representative

- Realtor
- Large landlord
- Small landlord
- Real estate appraiser
- Contractor
- Property manager
- Former housing authority employee

Other

- Non-profit executive
- Immigrant to US
- HOA Board representative
- Fifth generation Fort Collins resident
- CSU off-campus life

Note: Task Force members shared multiple perspectives and affiliations.

Existing Conditions

- Over 40% of all housing in Fort Collins is renter-occupied

	Estimated # of homes*	Estimated % of all housing
Total (citywide)	87,863	100%
Owned Units	49,775	57%
Rental Units	38,088	43%
<i>Single-Household, detached rentals</i>	14,419	16% (38% of all rentals)
<i>Multi-household, mixed-use or manufactured housing rentals</i>	23,669	27% (62% of all rentals)

**Note: This data is the best available information at present but should be interpreted as an estimate because of potential data gaps or lags in reporting property information.*

Existing Conditions

- About 90% of landlords/property owners who own single-unit, townhome, or duplex/triplex properties own only 1 property in addition to their residence. Fewer than 1% own more than 10 properties.

Number of Investment Properties Owned	All Investors		Rental Units Represented	
	Num.	Pct	Num.	Pct
1 property	11,113	90.3%	11,113	74.6%
2 properties	776	6.3%	1,552	10.4%
3 to 5 properties	335	2.7%	1,211	8.1%
6 to 10 properties	54	0.4%	395	2.7%
More than 10 properties	24	0.2%	626	4.2%
Total	12,302	100%	14,897	100%

Community Engagement Findings

<i>Rental Strategies</i>	All Respondents		Renters		Homeowners		Landlords	
	Yes	No	Yes	No	Yes	No	Yes	No
Agree or disagree with the following statements:								
Should Fort Collins rental strategies stay as they are?	40%	60%	25%	75%	46%	54%	53%	47%
Require that all landlords obtain a license to rent property in the City	50%	40%	63%	21%	45%	48%	13%	78%
Require that all landlords register their rental properties with the City	56%	34%	69%	17%	52%	40%	21%	69%
Proactively inspect rental properties on a regular basis for health and safety violations	47%	37%	62%	20%	42%	44%	15%	72%
Inspect rental properties only when a complaint is filed	56%	26%	60%	22%	53%	28%	56%	23%

Rental Industry Questionnaire

- Potential costs were identified as a drawback to a licensing and inspection program, and most rental landlords/managers indicated they would pass costs on to tenants.
- Respondents indicated concern that the City was not clearly defining the problem and that rental registration/licensing was not an effective way to address the minority of units that might be substandard.
- Respondents preferred that inspections occur only if a complaint is received and that inspections focus narrowly on health and safety issues.
- Participants expressed a lack of trust with the City of Fort Collins. Specific concerns included that the City would move forward without further consideration from stakeholders, and that City lacked the ability and capacity to scale-up a pilot program for all rentals

Recommendations and Best Practices

Rental Housing Taskforce Recommendations:

- Implement a mandatory rental registration program
 - Continue complaint-based rental inspections, focus on habitability
 - No proactive inspection of units
 - Nominal fee

Best Practices from peer cities research (40+ cities, 22 in Colorado):

- Implement a mandatory rental licensing program that includes:
 - Proactive inspection of units
 - A fee structure designed to cover program costs
 - Training for staff, landlords, and tenants
 - Involve landlords and tenants in program design and implementation

Potential Next Steps

- No change to rental regulations
- **Establish a mandatory rental registration program (*)**
- **Continue complaint-based rental inspections with a focus on habitability (health and safety) (*)**
- Establish a mandatory rental licensing program
- Require periodic proactive inspection of rental units, particularly single-unit, duplex, triplex, townhome, and units 10+ years old – *staff recommendation*
- Require inspections for extra occupancy rentals – *staff recommendation*

Existing Conditions

- Significant demographic shifts since 2005 in households violating U+2:

	2005	2018
Total (est) households in violation	1,238	1,234
Percentage college students	71%	47%
Percentage children under 18	Negligible	13%

- Price escalation (78% rent increase between 2005-2018) and low rental vacancy rates (under 5%) are likely resulting in “doubling up” to afford housing for a wide range of household configurations

Community Engagement Findings

Occupancy	All Respondents		Renters		Homeowners		Non Industry homeowners	
	Yes	No	Yes	No	Yes	No	Yes	No
Agree or disagree with the following statements:								
Should Fort Collins occupancy limit stay as they are?	31%	69%	22%	78%	36%	64%	45%	55%
Allow extra occupancy rentals in more places around the city	62%	35%	72%	23%	50%	41%	43%	49%
Make the process to approve extra occupancy easier	59%	33%	74%	21%	51%	39%	43%	46%
Adjust occupancy limit to match number of bedrooms in a home	51%	50%	59%	33%	47%	44%	38%	51%
Regulate occupancy based on household function, not family relatedness	48%	41%	51%	31%	21%	47%	28%	52%
Regulate occupancy based on number of parking spaces	22%	61%	12%	69%	27%	57%	24%	63%
Focus on regulating nuisances instead of occupancy	56%	32%	61%	26%	54%	36%	44%	44%
Increase occupancy limits to more than 3 unrelated residents	56%	37%	73%	23%	47%	45%	39%	52%
Eliminate occupancy limits completely	36%	54%	52%	36%	27%	63%	24%	67%

Recommendations and Best Practices

Rental Housing Taskforce Recommendations:

- Revise the current occupancy ordinance
 - Regulate based on number of bedrooms rather than the number of unrelated adults;
OR
 - Allow extra occupancy rentals citywide
 - Evaluate extra occupancy rental applications through an administrative permit process, not a land use approval

Best Practices from peer cities research (40+ cities, 22 in Colorado):

- Revise the current occupancy ordinance - multiple approaches
 - Regulate based on household functionality rather than familial relatedness.
 - Increase the number of unrelated adults permitted.
 - Regulate based on number of bedrooms or square footage

Potential Next Steps

- No change to occupancy ordinance
- **Change occupancy code to align with number of bedrooms rather than the number of unrelated adults (*) OR**
- **Allow extra occupancy rentals citywide (*) and evaluate extra occupancy rental applications through an administrative permit process, not a land use approval (*)**
- Increase the number of unrelated adults permitted
- Regulate based on household functionality rather than familial relatedness

Rental Registration/Licensing	Occupancy
<ul style="list-style-type: none"> • No change to rental regulations • Establish a mandatory rental registration program (*) • Continue complaint-based rental inspections with a focus on habitability (health and safety) (*) • Establish a mandatory rental licensing program • Require periodic proactive inspection of rental units, particularly single-unit, duplex, triplex, townhome, and units 10+ years old – <i>staff recommendation</i> • Require inspections for extra occupancy rentals – <i>staff recommendation</i> 	<ul style="list-style-type: none"> • No change to occupancy ordinance • Change occupancy code to align with number of bedrooms rather than the number of unrelated adults (*) OR • Allow extra occupancy rentals citywide (*) and evaluate extra occupancy rental applications through an administrative permit process, not a land use approval (*) • Increase the number of unrelated adults permitted • Regulate based on household functionality rather than familial relatedness

1. Which of the potential next steps do Councilmembers support for **rental licensing/registration?**
2. Which of the potential next steps do Councilmembers support for **occupancy ordinance revisions?**



August 23, 2022



WORK SESSION

AGENDA ITEM SUMMARY

City Council

STAFF

Matt Fater, Director, Civil Engineering

SUBJECT FOR DISCUSSION

Potential Stormwater Property Partnership on North Mason.

EXECUTIVE SUMMARY

The purpose of this item is to seek Council feedback related to a potential land partnership between the stormwater utility and Bohemian Foundation.

The stormwater utility and Bohemian Foundation own adjacent parcels of land along North Mason Street. The stormwater utility intends to construct a stormwater detention pond on its parcel, while Bohemian Foundation intends to partner with Fort Collins Rescue Mission for a 24/7 shelter for people experiencing homelessness. The site evaluation process for the 24/7 shelter identified potential opportunities to partner with the stormwater property such that the two properties are optimized for a greater community benefit.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. Does Council support a possible land partnership between the stormwater utility and Bohemian Foundation for the construction of the Hickory stormwater detention pond?
2. If so, does Council support staff's recommendation to achieve this partnership through a land exchange?

BACKGROUND / DISCUSSION

North Mason Stormwater Project

The North Mason area west of North College Avenue was not originally developed with adequate stormwater infrastructure because it was developed prior to stormwater criteria. As a result, stormwater does not have dedicated conveyance to the Poudre River, causing flood hazards and drainage nuisances. In addition to existing stormwater issues, the area lacks sufficient stormwater service to support new and redevelopment in the area.

The stormwater utility identified the North Mason Stormwater Project to improve stormwater conveyance and treatment for both existing and future development. The project, as proposed, consists of a water

quality treatment pond near the outlet to the Poudre River, 2,350 feet of new storm sewer along the future North Mason right of way, and the Hickory Stormwater Detention Pond (Hickory Pond). Figure 1 shows the extent of the project. The North College Urban Renewal Authority (URA) identified the project as a top priority for investment in the area. The costs of the project are planned to be shared between the URA, the stormwater capital fund and future development. The project is at a preliminary design level and is pending right of way acquisition and coordination near the Poudre River.

Hickory Pond is the northern-most component of the project. Stormwater draining from existing properties to the north and west will be stored in the detention pond and released to the proposed storm sewer in future North Mason Street. The stormwater utility purchased the 7.5-acre parcel shown in Figure 2 in 2010 for this future capital project. As with many detention pond projects, the site will be designed to create an amenity for the neighborhood to achieve benefits beyond stormwater functions such as: trails, wildlife habitat and non-programmed recreation. The surrounding neighborhoods would be engaged during the design process to achieve a project that is beneficial to and compatible with the area. This multi-beneficial approach would be a project goal regardless of a land partnership.

Bohemian Foundation Adjacent Property

The Fort Collins Rescue Mission selected a location owned by Bohemian Foundation to build a new 24/7 shelter for people experiencing homelessness. This property is adjacent to the stormwater-owned property. The parcel is shown on Figure 2.

Site analysis confirmed that the shelter can be built on Bohemian Foundation property without a City partnership. Figure 3 shows the orientation of the proposed development and the Hickory Pond under this scenario. However, a land partnership would benefit both projects, as well as additional potential commercial and housing uses by optimizing the configuration of both parcels for their proposed uses. The Fort Collins Rescue Mission plans to begin the design of the 24/7 shelter in September. A general indication from Council on support for a land partnership is important so the 24/7 shelter project can proceed with design.

Potential Land Partnership

During the site evaluation for the 24/7 shelter, City staff recognized the potential for a land partnership between the stormwater utility and Bohemian Foundation. An initial evaluation of the two properties indicates aligning the 24/7 shelter to the east and Hickory Pond to the west, would create potential for a greater community benefit. Figure 4 identifies the general orientation of the two projects if a land partnership proceeded.

Hickory Pond Opportunities

- More efficient capture of stormwater draining from the north
- Potential to integrate existing tree grove into detention pond

24/7 Shelter Opportunities

- More frontage along North Mason
- Buffer provided between the property and existing neighborhood to the west
- Protection of the existing tree grove
- Fewer access roads needed
- Improved fire access
- Area for up to an additional 10,000 sq. ft. of building space

Approach to Partnership

The reconfiguration of the proposed uses on the two properties could be achieved through a variety of approaches. Staff’s key goals for the partnership include:

- Equitable for both parties
- Meets existing and future needs
- Provides long-term use
- Mutual benefits

The land partnership could be achieved either by exchanging some combination of interests in property (fee title, easements, or leasing) or creating a development partnership.

If Council supports a land partnership with Bohemian Foundation, then staff’s recommendation is to work with Bohemian Foundation on a land exchange where the City would exchange a portion of the stormwater parcel for a portion of Bohemian property. This approach allows for the boundaries of the two parcels to be redefined so that each property can function independently of the other into the future and defines a way to determine an equitable transaction. Staff believes this approach is the most straightforward way to achieve a greater community benefit on both properties.

NEXT STEPS

If Council supports moving forward with a land exchange, then staff will begin negotiating an agreement with Bohemian Foundation. An estimated timeline is show below:

Milestones	Completed by
Site Investigations	October 1, 2022
Legal Descriptions	November 1, 2022
Negotiate Purchase and Sale Agreements	November 1, 2022
Council Action on Agreements	January 1, 2023
Closing	February 1, 2023

Bohemian Foundation and the Fort Collins Rescue Mission plan to begin the site design process in September with a goal of submitting to the City’s development review process by second quarter of 2023. The 24/7 shelter project could begin the development review process prior to the finalizing the agreement for the land exchange. However, the closing of the land exchange would need to be finalized before recording of the plat for the proposed development.

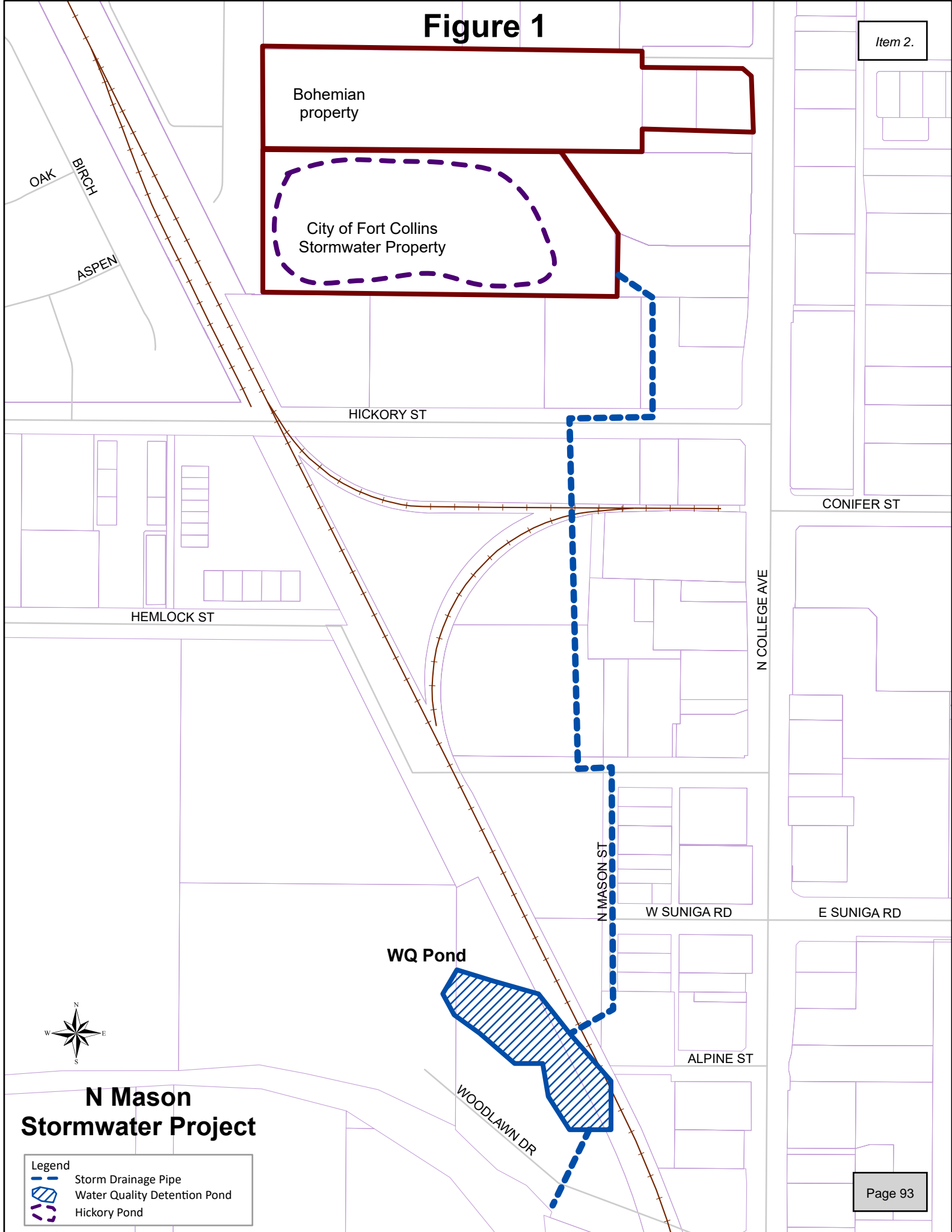
In addition, whether to construct Hickory Pond and the 24/7 shelter jointly will need to be decided in the future. While there could be some advantages to a construction partnership, the land exchange and the construction of both projects could move forward independently.

ATTACHMENTS

- Figure 1 – North Mason Stormwater Project
- Figure 2 – Parcel Map
- Figure 3 – Hickory Pond without Partnership
- Figure 4 – Hickory Pond with Partnership

Figure 1

Item 2.



N Mason Stormwater Project

Legend

- Storm Drainage Pipe
- Water Quality Detention Pond
- Hickory Pond

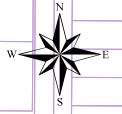
Figure 2



HICKORY ST

N COLLEGE AVE

CONIFER ST



Parcel Ownership

Figure 3

Bohemian property

City of Fort Collins Stormwater Property



BIRCH
ASPEN

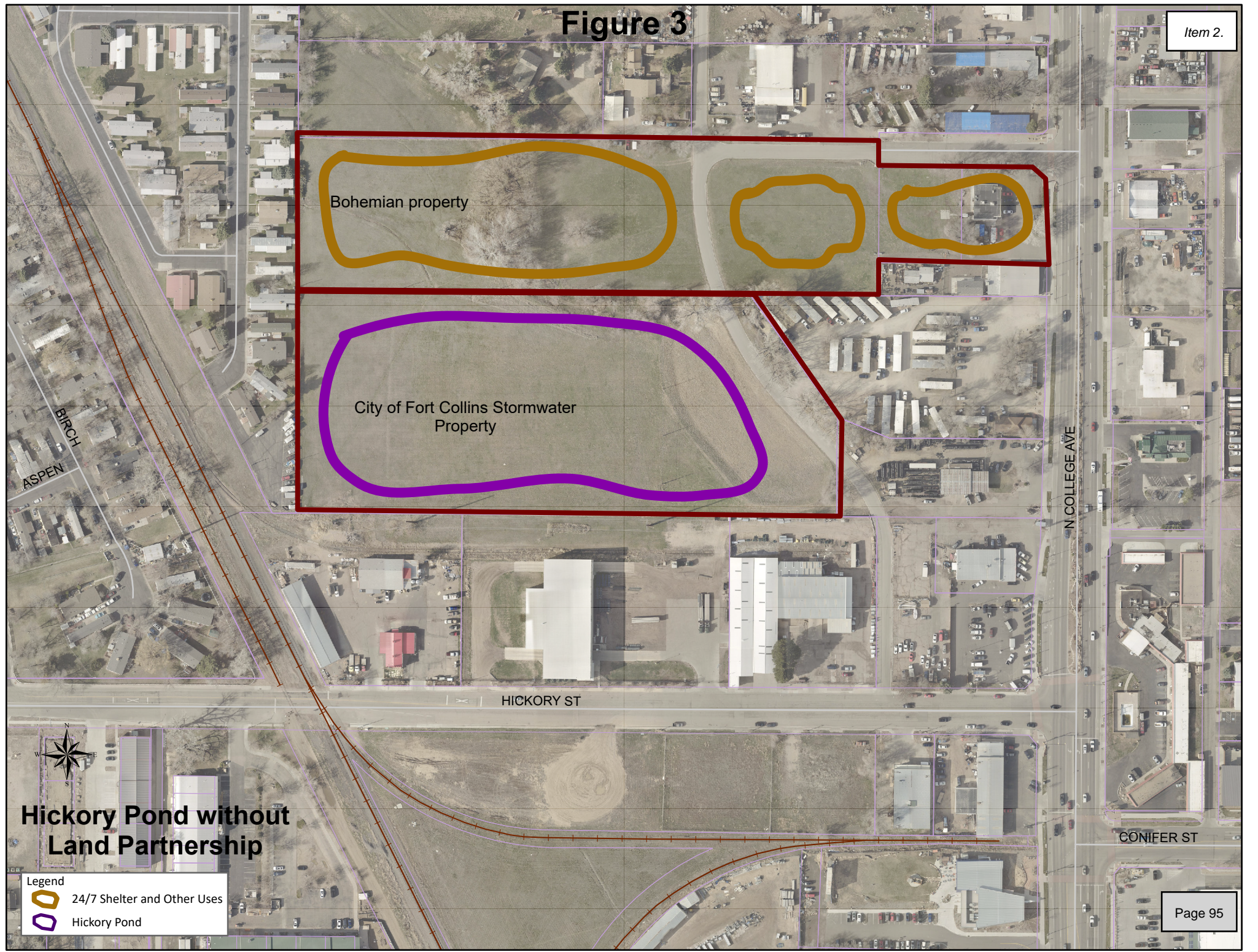
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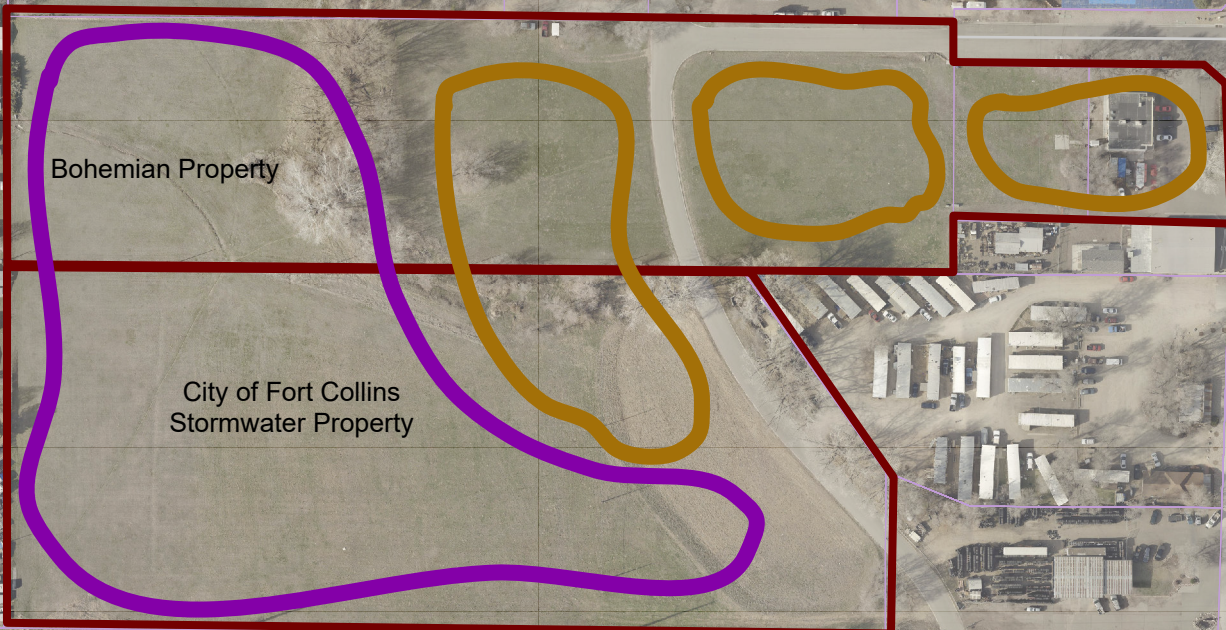
HICKORY ST

CONIFER ST

Hickory Pond without Land Partnership

- Legend
-  24/7 Shelter and Other Uses
 -  Hickory Pond





Bohemian Property

City of Fort Collins
Stormwater Property

BIRCH

ASPEN

HICKORY ST



N COLLEGE AVE

CONIFER ST



Hickory Pond with Land Partnership

Legend

-  24/7 Shelter and Other Uses
-  Hickory Pond



08-23-2022

Item 2.

Potential Land Partnership Between the Stormwater Utility and Bohemian Foundation

Matt Fater

Director of Engineering
Fort Collins Utilities



1. Does Council support a possible land partnership between the stormwater utility and the Bohemian Foundation for the construction of the Hickory stormwater detention pond?
2. If so, does Council support staff's recommendation to achieve this partnership through a land exchange?









Hickory Pond Opportunities

- More efficient capture of stormwater from the north
- Potential to integrate existing tree grove into the detention pond

24/7 Shelter Opportunities

- More frontage along North Mason
- Buffer provided between the property and existing neighborhood
- Protection of existing tree grove
- Fewer access roads needed
- Improved fire access
- Area for up to an additional 10,000 sq. ft. of building space

Milestones	Completed by
Site Investigations	October 1, 2022
Legal Descriptions	November 1, 2022
Negotiate Purchase and Sale Agreements	November 1, 2022
Council Action on Agreements	January 1, 2023
Closing	February 1, 2023

- Does Council support a possible land partnership between the stormwater utility and the Bohemian Foundation for the construction of the Hickory stormwater detention pond?
- If so, does Council support staff's recommendation to achieve this partnership through a land exchange?

THANK YOU!



August 23, 2022



WORK SESSION AGENDA ITEM SUMMARY

City Council

STAFF

Will Lindsey, City Planner

SUBJECT FOR DISCUSSION

Wireless Telecommunications Code Update.

EXECUTIVE SUMMARY

The purpose of this work session item is to obtain feedback and direction from Council on potential changes to the Land Use Code to ensure they align with the objectives of the recently adopted Wireless Telecommunication Master Plan and address feedback received from Council at the January 25 work session. This information will help guide the development of the draft Land Use Code updates for wireless telecommunication projects that are anticipated to come to Council for adoption in Fall 2022.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. Should wireless facilities be permitted on non-residential properties in residential zone districts?
2. Should certain City-owned properties be available for the siting of wireless telecommunication facilities?
3. Does Council support staff's recommendation for context-based standards to regulate facility design?

BACKGROUND / DISCUSSION

In 2018, Council appropriated \$50,000 as part of the 2019-2020 biennial budget to fund the completion of the City's first Wireless Telecommunications Master Plan. Cityscape Consultants, Inc., an independent wireless consultant that specifically works with local government on wireless policy, was hired to assist staff with analysis and creation of the Plan. Additionally, an Advisory Committee consisting of City staff and community members met periodically throughout the process to review planning materials and provide feedback on various stages of the Plan. The City began the Plan process in Spring 2020. The Plan was conducted in three phases:

Phase I - Research and Assessment of Existing Conditions

To initiate the Wireless Master Plan and explore key issues, the first phase of the planning process took into consideration previous neighborhood concerns and asked participants to confirm feedback received through several contentious neighborhood meetings. All wireless facilities were researched, cataloged, and assessed by visiting each site.

Phase II - Choices and Strategies

The second planning phase documented existing wireless conditions and developed simulated coverage and capacity maps. The resulting analysis identified gaps that are assumed to be filled one day by wireless infrastructure. With this information, City staff developed a targeted outreach strategy to engage the public from areas that might expect future development. Staff conducted facilitated conversations, surveys and one-on-one meetings with stakeholders to discuss the trade-offs that may be faced when developing wireless sites in areas of the community that may lack strong wireless coverage and capacity.

Phase III - Plan Development

During the development of the Plan, content was developed by Cityscape along with staff and curated through review by a technical advisory committee, City Boards and Commissions, community members and other wireless stakeholders.

The Plan identifies several opportunities and challenges the City will face as the community grows, wireless technology progresses, and wireless subscribers consume more data. This Plan will serve as the basis for the City to implement targeted Land Use Code amendments that address the design, location, and an updated development process for constructing wireless telecommunication facilities. The vision for the future is based on feedback received from various community members, technical experts, boards and commissions and summarized in the following vision statements:

- Provide context-sensitive concealment elements that are compatible with surrounding natural and architectural environments.
- Use limited public lands, such as parks, civic buildings and golf courses in an effort to allow greater community control over placement and design, protect the community from visual impacts and improve coverage in hard-to-reach residential areas.
- Promote greater transparency from the wireless industry by requiring applicants to demonstrate radio frequency emission compliance with any new or existing wireless development.
- Maintain cohesive small wireless facility design standards which require undergrounding of equipment to protect the community's visual quality.
- Continually monitor, update, and publish the City's database of existing wireless communication facilities as a tool to promote collocation.

PREVIOUS BOARD/COMMISSION/COUNCIL ACTIONS

The progression of the Plan was presented at the March 26, May 14, and June 11, 2021 Planning & Zoning Commission work sessions. Additionally, the Plan progress and draft strategies were presented to the Golf Board on April 14, and the Parks & Recreation Board on April 28 and May 26, both of which expressed support for the Plan.

On September 16, 2021, the Planning & Zoning Commission unanimously recommended that Council adopt the Wireless Telecommunications Master Plan. The Plan was unanimously recommended for adoption by Council upon First Reading at the October 5, 2021 Regular meeting and officially adopted upon Second Reading at the October 19, 2021 Regular meeting.

Staff presented on the key strategies of the Plan at the January 25 Council work session to seek feedback on which of the strategies Council wanted to prioritize. Direction given at that work session was that staff should explore options to revise/refine the existing design standards for wireless facilities as that component of the Code update had implications for other policy items such as the possibility of permitting facilities in residential zone districts or on City-owned properties. Since the work session earlier this year, staff has worked with outside counsel to review the Land Use Code standards for compliance with FCC regulations as well as to explore potential changes that will align with Council's direction and the policies of the Wireless Telecommunication Master Plan adopted in September 2021.

KEY QUESTIONS

Below are the questions staff for which staff is seeking Council input. Each section includes the related findings from the Wireless Telecommunications Master Plan for the topics, potential actions to address the issues identified, and the related tradeoffs. These items were identified in the Plan as key ways to fulfill the community vision for wireless telecommunication infrastructure and were chosen for discussion due to the interrelated impacts they have on one another.

1. Should wireless facilities be permitted on non-residential properties in residential zone districts?

- a. **Plan Findings:** Currently, wireless telecommunication applicants seeking to place facilities in residential zone districts (such as the RL, LMN, MMN, and HMN districts) can only do so through the Addition of Permitted Use process. This existing process discourages many applicants from pursuing such an approval due to the timeline and uncertainty of the outcome. This zoning limitation has resulted in fewer new facilities, which has impacted cellular coverage and capacity in certain geographic areas of the City, notably SW, SE, and NW Fort Collins.

i. Potential Actions

1. Permit facilities on private non-residential properties (e.g., schools, places of worship, businesses) in zone districts where they are currently prohibited (RL, LMN, MMN, HMN).
2. Maintain public hearing and notification requirements for projects in these areas where the zoning would require a Planning & Zoning Commission hearing.
3. Require new residential projects that will develop over a certain number of dwelling units, or commercial projects of a certain size, to set aside area for a potential future facility.

ii. Trade-off

1. While permitting the use in areas where it hasn't previously been allowed would facilitate additional deployment options, the City cannot guarantee that providers will locate in those areas. The high level of discretion (Planning & Zoning Commission approval) and/or lack of non-residential sites may still discourage providers from locating in residential areas.

2. Should certain City-owned properties be available for the siting of wireless telecommunication facilities?

- a. **Plan Findings:** The analysis of the coverage and capacity gaps identified that placing wireless telecommunication facilities on select City-owned properties, specifically parks and golf courses, could be an effective strategy to address some of the cellular service gaps that exist throughout the community.

i. Potential Actions

1. Explore ways to encourage providers to consider siting facilities on City-owned property in addition to private property alternatives.
2. Develop a clear administrative policy regarding siting facilities on City-owned property that will remain flexible in its application.

ii. Trade-off

1. If Council does not support allowing facilities on private non-residential properties in residential zoning districts, then the option for only allowing them on City-owned properties in those zone districts may be an appropriate alternative. However, this introduces complexities related to negotiating leases with providers and the transparency of that process. If Council does support changes in residential zone districts and does not support the use of City property, it is less likely that existing or future coverage gaps in some residential areas can be addressed.

3. Does Council support staff's recommendation for context-based standards to regulate facility design?

- a. **Plan Findings:** Currently, the Land Use Code requirements for the use of "stealth technology" to conceal wireless telecommunication infrastructure are somewhat vague and unpredictable for applicants as well as staff. Revising the City's existing standards for large wireless infrastructure would clearly communicate the City's preferences for the design and placement of future facilities to applicants, thereby reducing the need for protracted negotiation related to aesthetics and site planning.

i. Recommended Action

1. Expand on the existing context-based approach with additional design standards in the code. The updated standards could be modeled after Area of Adjacency standards that currently exist for Historic Preservation.
2. This approach would give gives applicants and staff the ability to tailor design requirements to each site and the surrounding context based on a buffer area from the facility, such as 200 feet. Design considerations would be related to height, massing, material, color, and land use of the surrounding area.

ii. Trade-off

1. Stricter or more specific design standards could ensure a more predictable outcome. However, that approach would lack the flexibility to tailor design and appropriateness to the surrounding context, meaning modifications to standards may be requested by applicants more frequently. Additionally, prescriptive standards would require the Code to be updated more frequently as facility design and the related technology continues to change in the years ahead.

CITY FINANCIAL IMPACTS

Funding has already been allocated for the Land Use Code update. That work is currently being performed by outside regulatory counsel during Q2-Q3 2022.

- Prior Appropriated Funds - \$50,000
 - Cityscape Consultants, Inc. - \$40,100 (for the Wireless Master Plan)
 - Outside Counsel (Ken Fellman) - \$9,900 (for the Land Use Code update)

Additionally, staff has submitted a BFO offer for the 2023-2024 budget cycle to seek \$20,000 in funding to develop a design guidelines document for wireless facilities. That document would supplement the new design standards in the Code to help guide the design of future facilities. If funded, it is anticipated that that document would be completed in 2023.

NEXT STEPS

- Q1 2022: Work Session (January 25), review existing standards with consultant
- Q2 2022: Draft recommended amendments to Land Use Code
- Q3 2022: Refine recommended amendment, seek additional guidance from Boards, Commissions, and Council
- Q4 2022: Bring proposed Land Use Code amendments to Planning & Zoning Commission and Council for consideration

ATTACHMENTS

1. Wireless Telecommunications Master Plan
2. Powerpoint Presentation

City of Fort Collins



September 22, 2021

PREPARED BY
CityScape
CONSULTANTS, I
www.CityScapeGov.com

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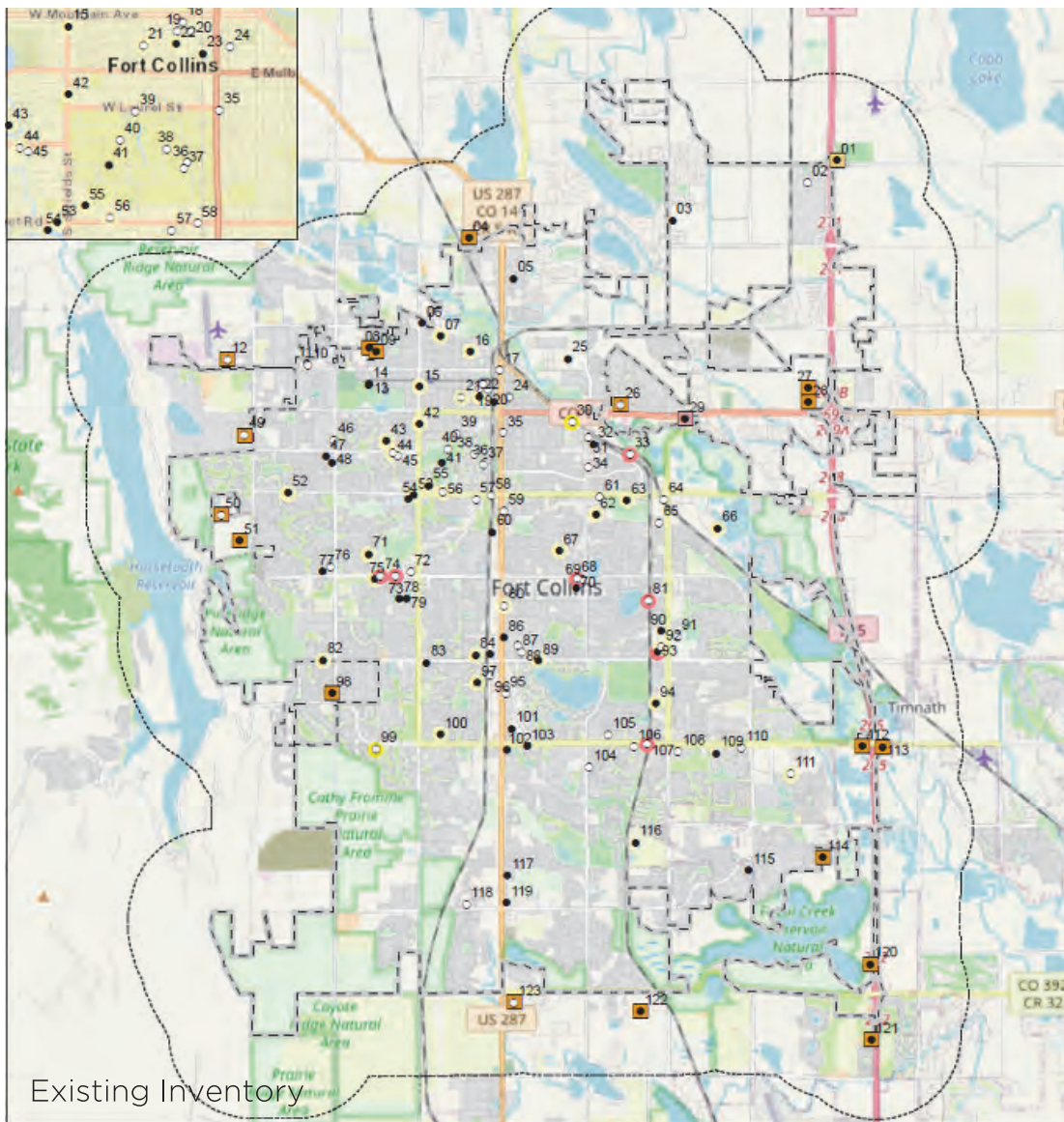
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EXECUTIVE SUMMARY

The Wireless Telecommunication Master Plan (Plan) is a resource to address the need for better wireless services in the community and to modernize local regulations that control the placement, design and other related impacts that result from wireless deployment. This is incredibly important for the City as it is anticipated that in the future, wireless providers will need to expand the existing network of the one-hundred twenty three (123) existing wireless facilities in order to effectively serve the Fort Collins community. The research and analysis provided by CityScape Consultants, Inc. (CityScape) is compiled into the Plan and will inform and direct City Staff to make future changes to the City’s administrative policies and Land Use Code. Ultimately this allows the community to become more strategic in the review of future wireless communications infrastructure.



PLAN DEVELOPMENT

Phase I - Research and Assessment of Existing Conditions

To initiate the Wireless Master Plan and explore key issues, the first phase of the planning process took into consideration previous neighborhood concerns and asked participants to confirm feedback received through several contentious neighborhood meetings. All wireless facilities were researched, assessed by visiting each site and cataloged.

Phase II - Choices and Strategies

The second planning phase documented existing wireless conditions and developed simulated coverage and capacity maps. The resulting analysis identified gaps that are assumed to be filled one day by wireless infrastructure. With this information, City Staff developed a targeted outreach strategy to engage the public from areas that might expect future development. Facilitated conversation, surveys and one-on-one meetings to discuss the trade-offs that are often faced when developing wireless sites, were topics of discussion.

Phase III - Plan Development

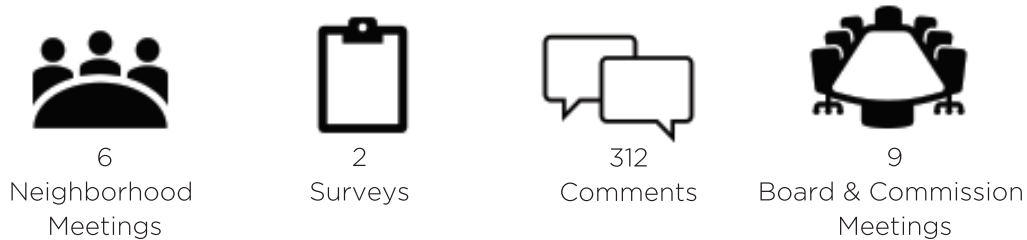
During the development of the Plan, content was developed by CityScape along with staff and curated through review by a technical advisory committee, City Boards and Commissions, community members and other wireless stakeholders reviewed the analysis and materials.

Phase IV - Implementation

From the guidance of the Plan, future land use code policy changes will be made to unify the City’s development standards for wireless telecommunication infrastructure.

Community Engagement and Technical Advisory Committee

Public outreach collaborated between City Staff and the Consultant team included:



PROPOSED POLICIES AND GOALS

The Plan identifies a number of opportunities and challenges the City will face as the City grows, the wireless technology progresses and wireless subscribers consume more data. Gaps in wireless services are identified and strategies to fill these gaps are outlined.



The community has a strong preference for improved services in residential neighborhoods, therefore the policies and goals of the Wireless Master Plan are identified as follows:

- Existing and concealed facilities should be utilized as a preference where possible.
- Community aesthetics should continue to be protected by planning for well sited, well designed, concealed facilities so that the infrastructure fits seamlessly into the community.
- City owned and other publicly owned properties should be used to allow the City to have greater control over placement of wireless infrastructure, provide opportunities to improve coverage in hard-to-reach residential areas, and potentially create revenue.
- Create an efficient and transparent process between the wireless communication service industries deployment of infrastructure, residents and community.
- Maintain an inventory and monitor existing wireless infrastructure in the community.
- Address safety of telecommunication facilities to minimize possible risk to residents.

SUMMARY

CityScape and City Staff have presented to the public, industry, appointed and elected officials the finding of the analysis of the existing wireless facilities and the previous deployment patterns. Understanding these practices and planning for future deployment allows for improvements to the City's wireless communications network needed by the community for day-to-day business and domestic activities.

To achieve this, City Staff is proposing the attached Draft Wireless Telecommunications Master Plan, providing a better understanding of the desires of the public as it relates to updating the City's standards for wireless communications facilities while minimizing impacts to the community.

CHAPTER 1

INTRODUCTION AND BACKGROUND



Site #120

INTRODUCTION



The City of Fort Collins embarked upon the Wireless Telecommunications Master Plan in the spring of 2020 in response to a series of events. In recent years, the City has seen several controversial wireless tower applications which generated significant community concern around tower siting, design, wireless connectivity to emergency services, radio frequency exposure and cell coverage. These matters prompted City Council to act in 2018 and fund the City’s first Wireless Telecommunication Master Plan. The Plan and Ordinance for wireless communications facilities will position the City to benefit from coming changes as well as guard against unwanted impacts.

CityScope Consultants, Inc., an engineering and consulting firm specializing in radio frequency (RF) design, developed this Wireless Telecommunications Master Plan to optimize the wireless telecommunications environment promoting efficient network deployment practices within the City.

According to CTIA, in 2019 the average person checked their wireless phone 58 times daily, while millennials checked their phone 150 times daily. Wireless devices are an integral part of communications for residents, students, businesses, and emergency services throughout the City. Nationally, residents continue to remove their landline and rely solely upon wireless devices for communication.

The City’s wireless communications network and the underlying regulations need to be updated to better serve the community. This coincides with a time when the wireless communications industry is expanding their network services. The purpose of the Plan is intended to address these conditions by developing a framework for the efficient deployment of wireless communications facilities, to support the community’s day-to-day domestic, commercial, and institutional activities. To achieve this, CityScope worked with the City developing this Plan to facilitate future wireless communications infrastructure to improve services and protect community interests.

The study area of the Plan is defined as the City’s jurisdictional boundary plus a one mile perimeter and includes all known infrastructure providing wireless services into the City. All existing wireless facilities have been assessed, studied, cataloged and used as the baseline in CityScape’s mapping and analysis.

Propagation maps include all identified antenna locations revealing geographic areas lacking wireless coverage. Latest population data, traffic considerations and network capacity driven variables are considered and shown on heat maps to illustrate gaps caused by network capacity issues. The City can use this information to strategize solutions to add infrastructure in identified areas void of wireless facilities, to plan for a robust wireless network throughout the City over the next ten years.

Overall the Plan empowers the City to be proactive in maintaining a beautifully planned community while managing new wireless infrastructure necessary for ongoing technological advancements.



CityScape Assessment Vehicle

PLANNING PROCESS

An Advisory Committee consisting of City staff and community members met periodically throughout the process to review planning materials and provide feedback on various stages of the Plan. The Advisory Committee also reviewed and commented on the final Plan document. The Advisory Committee included representatives from the community and government representing different points of view and interests as they pertain to wireless telecommunication infrastructure.

The planning process was conducted in three phases.

Phase One included a review of existing infrastructure and an evaluation of community conditions related to the deployment of wireless facilities in Fort Collins. Two public initiation meetings were held on March 10 and 11 to initiate the project, obtain input on priorities, address wireless conditions and review existing infrastructure in the City. The Plan process was paused due to the rapid growth of COVID-19 infections in the community and the subsequent lockdown that went into effect in March 2020. The Plan hiatus lasted until August 2020 when work resumed and public outreach strategy changed to take place virtually for the remainder of the project.

Phase Two included a public outreach meeting in late September 2020 to discuss simulated coverage mapping identifying areas within the City that have gaps in services. These maps were updated again November 2020 with the City's most current data set of existing and proposed facilities.

Phase Three involved analysis to identify potential solutions to address gaps in wireless coverage and capacity. This involved analysis of existing zoning regulations and the identification of City owned properties that could be utilized for wireless deployment.

An online public survey of potential solutions was conducted from mid-March to mid-April 2021. Additionally, work session presentations were made in Spring 2021 to the Planning and Zoning Commission and other City Advisory Boards. The draft Plan progressed through a staff and public review period June-July 2021 and proceeded to the Planning and Zoning Commission for recommendation in August 2021.

The overall steps in the process to develop the Plan are as indicated:

- Inventory of existing wireless infrastructure throughout City;
- Public initiation meetings;
- Public poll to identify priorities;
- Theoretical propagation mapping;
- Virtual update and status report to the public;
- Propagation maps of potential future network deployment patterns;
- Identification of City owned properties that could potentially be part of a network deployment solution for the community and wireless industry;
- Recommendations designed to meet ten-year network deployment objectives;
- Public poll of recommendations;
- Planning Commission work sessions and recommendation;
- City Council work sessions;
- City Council adoption; and
- Council enactment of Wireless Telecommunication Master Plan.

VISION FOR THE FUTURE

This Plan will serve as the basis for the City to implement targeted Land Use Code amendments that address the design, location and new development process for constructing wireless telecommunication facilities. The vision for the future is based on feedback received from various community members, technical experts, boards and commissions and summarized in the following vision statements:

- Provide context-sensitive concealment elements that are compatible with surrounding natural and architectural environments.
- Use limited public lands, such as parks, civic buildings and golf courses in an effort to allow greater community control over placement and design, protect the community from visual impacts and improve coverage in hard to reach residential areas.
- Promote greater transparency from the wireless industry by requiring applicants to demonstrate radio frequency emission compliance with any new or existing wireless development.
- Maintain cohesive small wireless facility design standards which require undergrounding of equipment to protect the community's visual quality.
- Continually monitor, update, and publish the City's database of existing wireless communication facilities to promote collocation.

STRATEGIES AND POLICIES

The following Table 1 are the short term, long term and ongoing strategies and policies of the City as it relates to the siting of wireless infrastructure.

STRATEGY	DESCRIPTION	CONSIDERATIONS	TIMELINE
Further incentivize roof or wall mounted installations.	Recalibrate or develop process incentives in Land Use Code when wall or roof mounted equipment is proposed on existing structures. Examples may include expedited review times or final approval by the CDNS director without a public hearing.	Prioritizing the use of existing buildings may limit the need for new towers in the same vicinity.	Short Term (1-3 Years)
Create a conditional use process for reviewing wireless proposals in residential zone districts.	Create a process that requires more stringent set of baseline standards that control the location, design, height, and placement of wireless facilities.	Maintains the allowable control protecting residents and their properties.	Short Term (1-3 Years)
Consider the use of certain city-owned properties.	Pre-designed concealed towers to increase coverage and capacity throughout the City would give the City the most control over infrastructure siting.	Allows more control as property owner, sets precedents for design type of infrastructure, creates revenue for the City.	Short Term (1-3 Years)
Update the City's Land Use Code to comply with Federal and State timing requirements.	Decision timelines and required rules concerning local government's review and decision processes for macro cell and small wireless facilities should be included in the City's Code.	Protects the City from unwanted lawsuits.	Short Term (1-3 Years)
Amend zoning standards to match federal definitions.	Rules and application approval timelines would reduce the number of inconsistencies that exist in the current zoning policies and allow for streamlined staff processing.	Concise process for the wireless industry to follow allowing for the types and design the City prefers.	Short Term (1-3 Years)

STRATEGIES AND POLICIES continued

STRATEGY	DESCRIPTION	CONSIDERATIONS	TIMELINE
Require wireless providers to demonstrate RF emission compliance for new and existing facilities.	For new and proposed modifications to existing facilities require providers to submit a RF emission report.	Wireless providers must follow FCC regulations as it relates to RF emissions.	Long Term (3+ Years)
Explore a City RF monitoring program.	While radio frequency limits are determined by the FCC, the City could implement periodic monitoring to ensure sites are operating within federal limits.	Radio frequency monitoring requires specialized equipment and skills. Additional funding resources would be required to implement ongoing or periodic monitoring.	Long Term (3+ Years)
Publish and update a wireless inventory map for the City.	The City should build on the inventory included in the Plan by adding facilities to the map as they submit for development review. The inventory should be publicly accessible.	Promotes collocation of existing infrastructure over new facilities.	Ongoing
Develop design standards and expectations for wireless facilities.	Explore the use of a design guidelines document for large wireless facilities, similar to the what currently exists for small cell facilities.	Design guidelines provide a resource that clearly states City preferences for the design and placement of facilities.	Short Term (1-3 Years)
Encourage the use of art as a concealment method for deployment of future wireless communication facilities	Explore ways to incentivize the provision of public and/or private art pieces as a means of effectively disguising wireless infrastructure.	What constitutes art requires extra consideration but can also create a facility that is unique to the community.	Short Term (1-3 Years)

Table 1: Short and Long Term Strategies and Policies

COMMUNITY AND HISTORY

Home to 175,000 people, a large student population and growing tourism and business sectors, Fort Collins faces similar global and national trends for increasing demand for wireless connectivity, coverage, and bandwidth.

Community characteristics, state and federal legislation, and numerous other geographic, demographic and natural or built environment factors all contribute to the pattern, location, and distribution of wireless facilities in Fort Collins. These same factors will also influence where and how future wireless deployments in the community may be proposed by the wireless industry.

While the community may be unable to change or influence variables such as terrain, climate and federal legislation, other local factors should be considered for their impacts on how wireless service has developed in the community and how it may shape future deployments. Land use and zoning regulations, the pattern and location of future growth and development, changing demographics and even new mobility options are important considerations as the community identifies a vision and strategies for the future of wireless connectivity and service in Fort Collins.

The following are several key local factors and how they influence wireless service and deployment strategies:

Population and Density:

Growing population, high density locations in the community and growing demand for wireless service all impact wireless service levels in a given area and the need for additional wireless equipment and facilities. Even temporary gatherings such as Colorado State University (CSU) football games and Downtown festivals are considered by the industry when developing their local network and deployment strategies.

Terrain:

Topography is both a challenge and opportunity for wireless services. Hills and areas of higher elevation can block wireless signals or extend their range if placed at a higher elevation. While the City of Fort Collins is generally flat, localized areas of higher elevation are often sought by wireless providers to help extend the range of their wireless facilities and equipment.

Vegetation & Building Height:

Similar to topography, variations in the height of surrounding buildings and vegetation can block or limit wireless signals. Multistory buildings can make excellent locations for roof-mounted equipment to extend wireless signals above smaller structures and tree canopies. However, such structures are unlikely to be available in areas of the community with more open space, parks, and single-family residential developments.

LEGAL FRAMEWORK

FEDERAL REGULATIONS

Local government agencies are allowed to regulate personal wireless service facilities (PWSF) as a permitted land use provided local code aligns and does not exceed federal regulations already in place for the industry to follow.

Local codes and land development standards can address concerns related to: location and proximity of infrastructure to other land uses, zones and scenic viewsheds; visual concerns related to location, height and pedestrian views of a structure's height and ground equipment; setbacks outside rights-of-way; fencing; signage; parking, and certain lighting types.

The Telecommunication Act of 1996 preserves local siting authority but contains a handful of specific provisions that require localities to follow federal restrictions. These limitations of local authority must be taken into account when drafting local regulations. Subsequent congressional legislation and federal regulations adopted by the Federal Communications Commission (FCC) provide the definitions and timelines referenced as "shot clocks" that state and local governments must follow when regulating the wireless industry.

Telecommunication Act 1996 Section 704(a) (47 U.S.C. § 332(c) (7))

The Federal Telecommunications Act of 1996 includes Section 704(a) (47 U.S.C. § 332(c) (7)) and preserves local governments the authority to regulate wireless infrastructure. Section 704 states in relevant part that:

- Land use development standards may not unreasonably discriminate among the wireless providers and may not prohibit or have the effect of prohibiting the deployment of wireless infrastructure.
- Local governments must act on applications for new wireless infrastructure within a "reasonable" amount of time but did not specify what "reasonable" meant.
- Land use policies may be adopted to promote the location and siting of telecommunications facilities in certain designated areas.
- Encourages the use of third-party professional review of site applications.
- Prohibits local government from denying an application for a new wireless facility or the expansion of an existing facility on the grounds that radio frequency emissions are harmful to human health provided the wireless service provider met federal standards.

(47 USC § 1455) Section 6409(a) Middle Class Tax Relief and Job Creation Act of 2012

Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, referenced as the “Spectrum Act” was enacted by Congress to promote wireless deployments of broadband for public safety and commercial purposes. As stated in the Spectrum Act,

“...a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.”

After much debate between the wireless industry and local government the FCC issued a response clarifying definitions and meaning to the Spectrum Act in a Report and Order released October 21, 2014 in W.T. Docket 13-238.

The 2014 Report and Order, clarified the Spectrum Act stating:

“[n]otwithstanding section 704 of the Telecommunications Act of 1996 or any other provision of law, a state or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.”

Several other subsequent Report and Orders have since been vetted and approved by the FCC and the regularity definitions² and shot clocks are provided in the Code of Federal Regulations: Title 47, Chapter I, Subchapter A, Part 1, Subpart U Titled State and Local Government Regulation of the Placement, Construction and Modification of Personal Wireless Service Facilities.³

Code of Federal Regulations Reasonable Periods of Time to Act on Siting Applications

When an applicant requests a modification, a state or local government may require the applicant to provide documentation or information only to the extent reasonably related to determining whether the request meets and does not exceed the definitions and requirements for collocation or modification. A state or local government may not require an applicant to submit any other documentation, including but not limited to documentation intended to illustrate the need for such wireless facilities or to justify the business decision to modify such wireless facility.

The shot clock date for a siting application is determined by counting forward, beginning on the day after the date when the application was submitted, by the number of calendar days of the shot clock period and including any pre-application period asserted by the siting authority, provided, that if, the date calculated in this

manner is a “holiday” or a legal holiday within the relevant state or local jurisdiction, the shot clock date is the next business day after such date.

The presumptively reasonable periods of time for PWSF applications is as follows in Table 2 unless mutually agreed upon in writing.

INSTALLATION TYPE	TIME PERIOD FOR DECISION	REVIEW AND INITIAL PROCESS	RESUBMISSION PROCESS FOLLOWING NOTICE OF DEFICIENCY
SMALL WIRELESS FACILITIES			
New Structure	90 Days*	10 days after submission to determine incomplete. Must clearly identify, in writing, specific regulation along with missing information and documentation needed to complete the application.	If incomplete, <u>shot clock date restarts at zero</u> . Tolling process repeats until application is complete.
Collocation	60 Days ⁵ *		
MACRO WIRELESS FACILITIES			
New Structure	150 Days**	30 days after submission to determine incomplete. Must clearly identify, in writing specific regulation along with missing information and documentation needed to complete the application.	If incomplete, <u>shot clock date calculations resume the day after the applicant resubmission (e.g. if originally tolled on day 20, resume day 21)</u> . However, if an <u>applicant’s resubmission was not sufficient to render the application complete and siting authority gives notice of incompleteness of resubmission on or before 10th day after resubmission, then tolling continues and shot clock does not resume</u> . Tolling process continues until application is complete.
Collocation	90 Days**		
ELIGIBLE FACILITIES REQUEST (EFRs)			
EFRs can be either macro or small wireless facilities	60 Days*	Within 30 days of receipt of the application the shot clock may be tolled by notifying the applicant of incompleteness and requiring additional information related to the determining whether the application qualifies as an EFR.	Once additional information is provided, the shot clock resumes at the point where it was tolled.

*In the event the reviewing state or local government fails to approve or deny a request seeking approval, under the shot clock stipulations for a modification to an existing antenna, the request shall be deemed granted. The deemed grant does not become effective until the applicant notifies the applicable reviewing authority, in writing, after the review period has expired (accounting for any tolling) that the application has been deemed granted.

** In the event of expiry of the FCC’s shot clock for a new macro facility or macro collocation on an existing PWSF, the applicant is entitled to bring action in court seeking to compel the jurisdiction to grant the permit, which the court is supposed to hear on an expedited basis and the community faces a rebuttable presumption that it violated 47 USC §332 by failing to timely adjudicate the application. The community can then defend and explain why it was unable to do so within allowable timeframes.

***Local governments may not continue to toll the shot clock by requesting additional information from providers unrelated to the initial request. If a provider responds to an initial notice of incompleteness but fails to include the information requested, then local government may only toll the shot clock again to alert the provider that it has not provided the information but may not request further information as grounds for a subsequent tolling.

Table 2: PWSF Process and Timelines

COLORADO STATE LAW



House Bill 17-1193 mandated that the siting, mounting, placement, construction and operation of small cell facilities and small cell networks is a permitted use by right in any zone district. It also gave telecommunication companies the right to locate telecommunication facilities, including small wireless facilities, on municipal light poles, light standards, traffic signals and utility poles within a city right-of way. Further, it mandated a 90-day review period by which municipalities have to process applications for small wireless facilities and 150 days to process new structure or new wireless service facilities other than small wireless facilities.

The State of Colorado has imposed different timelines than the Federal Government through the FCC's regulations for various types of wireless infrastructure. When navigating different federal and state timelines it is always recommended to follow the shorter timeline for each applicable type of application to avoid creating a conflict with compliance amongst the competing timelines. It should be noted that some of the state and federal definitions are different and that unless and until challenged, the City's policy is to follow state law definitions where conflicts exist when the City determines that it benefits the City's regulatory program.

Because of limitations imposed by state and federal legislation, the City has very little flexibility in its ability to regulate the presence of telecommunication facilities. In the existing code the City can and has addressed design aspects to minimize the visual impact that these wireless facilities can have on the community.



Inside concealed silo

CHAPTER 2

WIRELESS INFRASTRUCTURE



WIRELESS OVERVIEW

Approximately
.....
280 million
smartphone
users
in 2020⁶

The current evolution of personal wireless technology is benchmarked by the underlying network platforms and referenced as first, second, third, fourth and fifth generations of wireless deployment (1G, 2G, 3G, 4G and 5G respectively). First and second generations provided the initial launch of personal wireless services. Third generation improved data transfer with the addition of multimedia messaging services and provided some simple applications and games. Fourth generation substantially increased download speeds allowing interactive services incorporating broadband technology to enable applications like global positioning services (i.e. Google Maps, Waze Navigation etc.), banking, weather, educational, public safety services and more. This platform continues to evolve as we transition into the fifth generation of technology. The concept of fifth generation and beyond is to use existing bandwidth to get more simultaneous reuse of the same channel by either time share, antenna polarization and other to-be-invented processes.

Wireless telecommunication networks operate using radio bands and frequencies on the wireless spectrum dashboard. Bands and frequencies are the radio signals sent out by service providers that connect with wireless devices to make phone calls and access and share data. Antennas mounted on wireless towers and base stations create these man-made radio waves which provide the signal that interacts with the wireless device within a designated geographic area. This interaction enables the use of all the applications on smart devices.

Radio frequency refers to a subset of electromagnetic energy, generally transmitted through an antenna, creating waves with a desired frequency and length. Frequency represents the number of waves passing by each second, while length is the distance traveled per second.⁷ Electromagnetic energy is all about electrical and magnetic energy that moves through the air at the speed of light.

Initially service providers designed wireless networks for intermittent voice services and low data rate transfers focusing on covering large areas of land within the defined service areas. To accomplish this, wireless service providers erected what is referred to as macro facilities. Macro towers are high powered sites intended to cover sizeable geographic areas to service the largest number of network subscribers. These taller facilities require a strong structure and have large antennas

with coaxial cables connecting the antenna to the ground equipment. Each wireless network provider (currently AT&T, T-Mobile, Verizon, Dish) deploys, operates and maintains their own individualized infrastructure network for their subscribing customers.

As wireless data usage continues to escalate, consumers require more speed and high-data-rate transfers that often exceed existing network capability. One way to address the capacity demand is by deploying small wireless facilities.

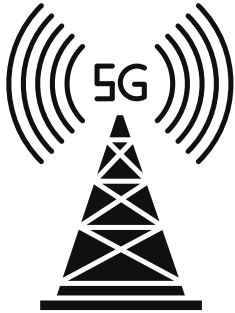
Small wireless facilities, a type of wireless technology for broadband infrastructure, have smaller antennas, are shorter in height and operate at less power than the traditional macro facilities. Small wireless facilities have a smaller coverage footprint and are typically placed between macro facility sites to be used to “fill-in” high capacity areas. Small facilities can be attached to buildings, rooftops, utility poles, traffic signals or free standing structures in public rights-of-way. These sites are routinely deployed in areas with large concentrations of network subscribers.



The wireless industry is currently deploying variations of 5G ready infrastructure and upgrading 4G to evolve into the next generation. The planned 5G standard is intended for true high-speed data meaning download speeds well in excess of today’s standard 25-megabit per second standard. Testing of the originally conceived 5G networks has been inconclusive with coverage and data speeds below anticipated expectations.

The current personal wireless services use radio spectrum that is divided into three distinct bands: 1) Band 71 600 megahertz (MHZ) 2) Cellular 700-999 MHz and 3) PCS/AWS 1,700-2500 MHz. Fifth generation wireless services are currently categorized into three distinct bands: 1) Low-band spectrum including everything below 1 gigahertz (GHz) (1-999 MHz); 2) Mid-band spectrum consisting of all frequencies between 1 GHz and 6 GHz (1000-6000 MHz); and 3) High-band spectrum generally including all frequencies above 6 GHz, with the current focus between 24 GHz and 40 GHz (24000-40000 MHz). High-band spectrum is also referred to as millimeter-wave (mmWave) spectrum which includes all frequencies above 6 GHz.

The FCC continues to reallocate frequencies from other radio services to accommodate the evolving 5G services. Previously thought unusable frequencies are being tested and utilized for consumer wireless.



The growth of fifth generation wireless services is well underway and deployed in many locations. The newer evolving 5G service promises to bring even higher data-rate speeds to greatly improve wireless service functionalities and to compete with most home wi-fi internet services.

The intention is to bring wireless broadband to the general population to open the door for streaming services virtually anywhere and intended to be the backbone for innovative technologies such as autonomous vehicles.



Radio Equipment on Small Wireless Facility

EXISTING FACILITIES ANALYSIS

WIRELESS INFRASTRUCTURE INVENTORY

The wireless infrastructure inventory is an integral part of the analysis and establishes the baseline for determining and understanding the industry deployment patterns within the City. The existing facilities are analyzed and used as the foundation for all mapping.

An assessment of each tower and base station was completed to verify the following information: 1) exact location; 2) ownership; 3) providers; and 4) notable identification. Detailed site information is cataloged in Appendix A.

After the inventory is analyzed it is categorized and mapped in the following ways for analytical purposes:

- Structure Type: Towers and Base Stations
- Antenna Type: Macro, Small, Broadcast, Public Safety
- Location: Private Property, Public Property, Utility Easements, Rights-of-Way
- Design Type: Concealed, Non-Concealed, Semi-Concealed, Dual Purpose

As of May, 2021 there are one hundred twenty-three (123) facilities verified in the designated study area of which eighteen (18) are located outside the City's jurisdiction. All but four (4) are providing personal wireless services to the subscribers in Fort Collins.

The licensed personal wireless service providers verified on infrastructure throughout the study area include: AT&T, CenturyLink, Cricket, Sprint, T-Mobile and Verizon. T-Mobile has purchased Sprint and are combining these networks on the infrastructure. Cricket will turn into AT&T's main prepaid brand on the AT&T network, so most likely the equipment will be or has been upgraded or modified to accommodate both brands. Currently the biggest three service providers across the country are AT&T, T-Mobile and Verizon. Dish Wireless has stated that Colorado will be among the first ten states planned for deployment of its 5G broadband services by 2023. CenturyLink is an internet service provider that is found on existing infrastructure offering broadband services.

The wireless infrastructure owner stakeholders who own and lease vertical real estate throughout the study area, include but are not limited to: American Tower Corporation (ATC), AT&T, Atlas Tower Holding, LLC, CenturyLink, Crown Castle International (CCI), Poudre River Power Authority, SBA Communications, Skyway Towers and Verizon Wireless.

The deployment pattern located inside the City's boundary are not evenly dispersed. Most of the towers and base stations are located in clusters and along the major corridors. The deployment patterns outside the City's zoning jurisdiction are more evenly spaced around the perimeter of the City and are designed to provide service into the City.

The largest concentration of wireless infrastructure is located in and around the largest population density areas of the Downtown District, Colorado State University campus, parallel to East Harmony Road and the intersection of Horsetooth Road and College Avenue.

STRUCTURE TYPE

There are a total of one hundred and twenty-three (123) facilities comprising of sixty-seven (67) towers and fifty six (56) base stations in the study area and included in the catalog. There are a total of one hundred and four (104) facilities in the City's zoning jurisdiction; fifty-three (53) towers and fifty-one (51) base stations. Of the fifty-three (53) towers inside the City, thirty-five (35) are existing and eighteen (18) are proposed small wireless facility towers. Comparatively, of the fifty-one (51) base stations, forty-one (41) are existing, two (2) are approved but not yet built and eight (8) are proposed and under review.

The City has a large number of base station deployments considering the characteristics of the community. Typically base stations (existing structures) are used in highly urbanized cities where there are large populations and sparse land areas. Towers need adequate ground space to accommodate equipment shelters, cabinets and other ancillary equipment. The antennas need to be located above rooftops, ambient tree heights or other obstructions for effective data transmission. CityScape theorizes the zoning ordinance promotes this type of deployment pattern due to the limitations of the height of towers permitted in each respective zoning district. Antennas placed on rooftops are allowed to be fifteen (15) feet above the roofline. Installing antennas above the building optimizes functionality of the antenna as it allows for more height. For this reason, it appears that the wireless industry is utilizing rooftops as its first choice for deployment.

Platte River Power Authority (PRPA), the electricity provider for Fort Collins previously allowed and negotiated space for the installation of wireless antennas on certain high rise utility structures. The PRPA is only allowing collocations that are below the power lines and not renewing leases for any infrastructure that is currently above the power lines. The existing above power line installations will have to be removed at the end of their subsequent lease agreement. The following table and figure identifies seven (7) PRPA facilities scheduled for removal including an existing tower on PRPA property.

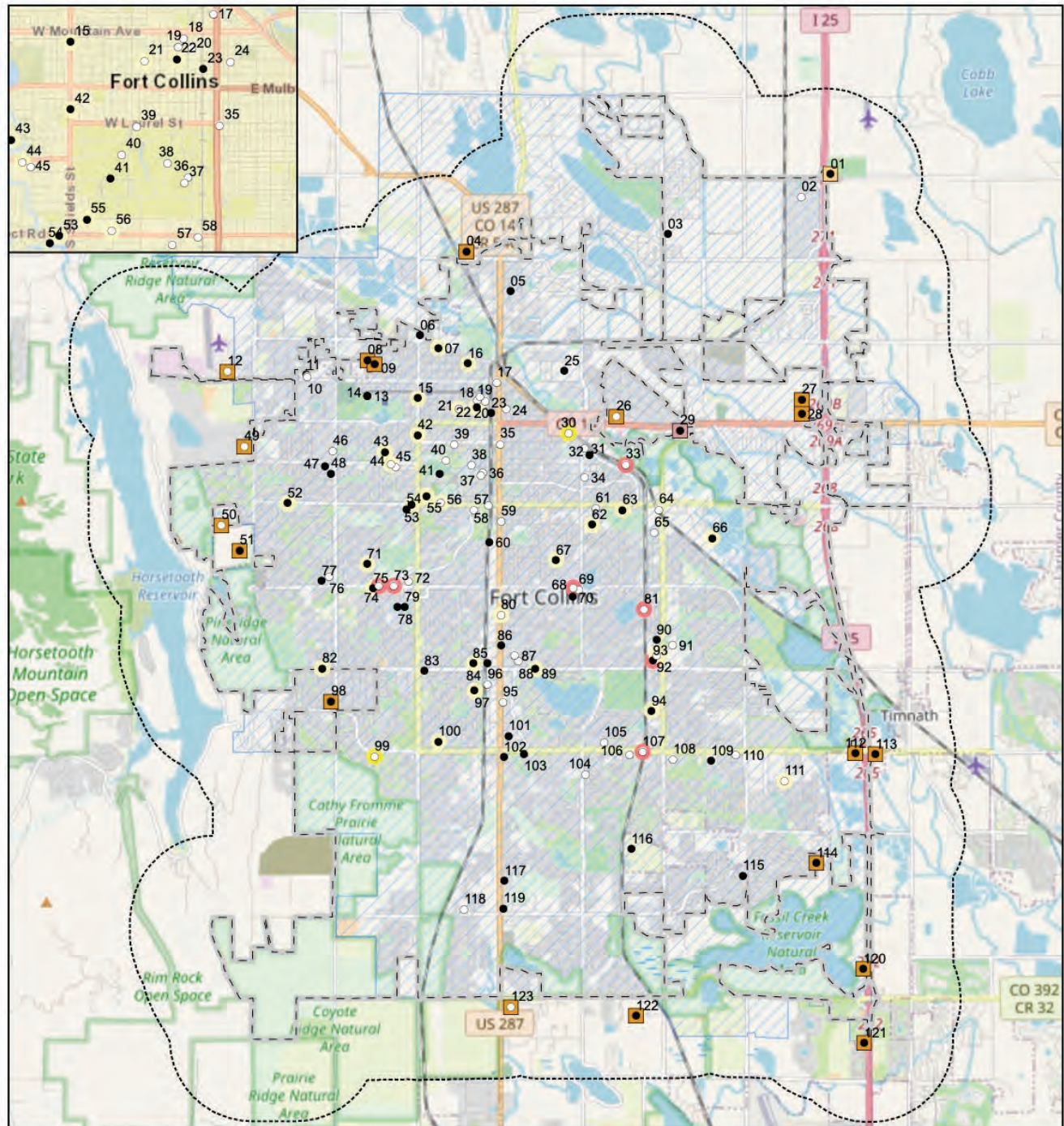
The following **Table 3** summarizes and identifies the inventory by type of structure, either tower or base station.

STRUCTURE TYPE	SITE NUMBERS INSIDE CITY	SITE NUMBERS OUTSIDE CITY	TOTAL
Towers	03, 04, 05, 06, 07, 11, 13, 14, 15, 16, 22, 23, 25, 32, 41, 42, 43, 47, 48, 52, 53, 54, 55, 60, 62, 63, 66, 67, 70, 71, 75, 77, 78, 79, 82, 83, 84, 85, 86, 89, 90, 93, 94, 97, 100, 101, 102, 103, 109, 115, 116, 117, 119	01, 08, 09, 27, 28, 29, 51, 98, 112, 113, 114, 120, 121, 122	
	53 Inside City (Site 93 to be removed)	14 Outside City	67
Base Stations	02, 10, 17, 18, 19, 20, 21, 24, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 44, 45, 46, 56, 57, 58, 59, 61, 64, 65, 68, 69, 72, 73, 74, 76, 80, 81, 87, 88, 91, 92, 95, 96, 99, 104, 105, 106, 107, 108, 110, 111, 118	12, 26, 49, 50, 123	
	51 Inside City (Sites 68, 73, 74, 81, 107 to be removed)	5 Outside City	56
TOTAL	104	19	123

Table 3: Inventory Summary by Structure Type

The structure types are further depicted in **Figure 1** and represented by the following colored dots:

- Towers
- Base Stations



Fort Collins Inventory by

Cataloged Structure Type

- Tower (67)
- Base Station (56)

- TO BE REMOVED (7)
- Approved But Not Built Inside Zoning Limits (2)
- Proposed Under Review Inside Zoning Limits (27)
- Existing Outside Zoning Limits (18)
- Approved But Not Built Outside Zoning Limits (1)
- Proposed Under Review Outside Zoning Limits (1)

- ▭ City Boundary
- ▭ 1 Mile Buffer
- ▭ Growth Management Area

Sources: US Census Bureau, Cityscape Consultants, Inc, USGS

Map Created by Cityscape Consultants, Inc. on

Date: 3/2/2021

0 0.5 1 2 Miles



Figure 1: Map of Existing Inventory by Structure Type

PERSONAL WIRELESS SERVICE FACILITIES ANTENNA TYPE

Personal wireless service facilities (PWSF) are facilities including infrastructure for either macro or small cell antennas that provide commercial wireless services. The traditional wireless facility installations that we have become accustomed to seeing are referred to as macro cells, macro antennas or macro wireless facilities. The reference is because these antennas are typically larger in size, higher powered and are mostly the backbone of all wireless networks. There are seventy-eight (78) macro facilities in the City and eighteen (18) located outside the City jurisdiction but are included the study area of the Plan. Small wireless facilities are the newest in wireless technology and have been developed mostly to help network densification. This means adding more cell sites in high density areas to increase the amount of available capacity where there is a higher demand for wireless services. The City has four (4) existing small wireless facilities and nineteen (19) proposed small wireless facilities. These small wireless facilities are proposed in strategic locations in the rights-of-way of capacity strained areas in an effort to offload wireless traffic from existing macro sites. The small wireless facilities are also proposed in areas that would be difficult to site a larger macro facility. The proposed small wireless facilities in the City are mostly located north of Harmony Road and east and west of North College Avenue.

There are four (4) sites in the study area that do not have personal wireless service equipment on the infrastructure, therefore they are not integrated in the following table or figure. The facilities that are not included are site numbers 8, 9, 18 and 64. These antenna types do not contribute to commercial wireless services for the City.



Site #8



Site #9



Site #18



Site #64

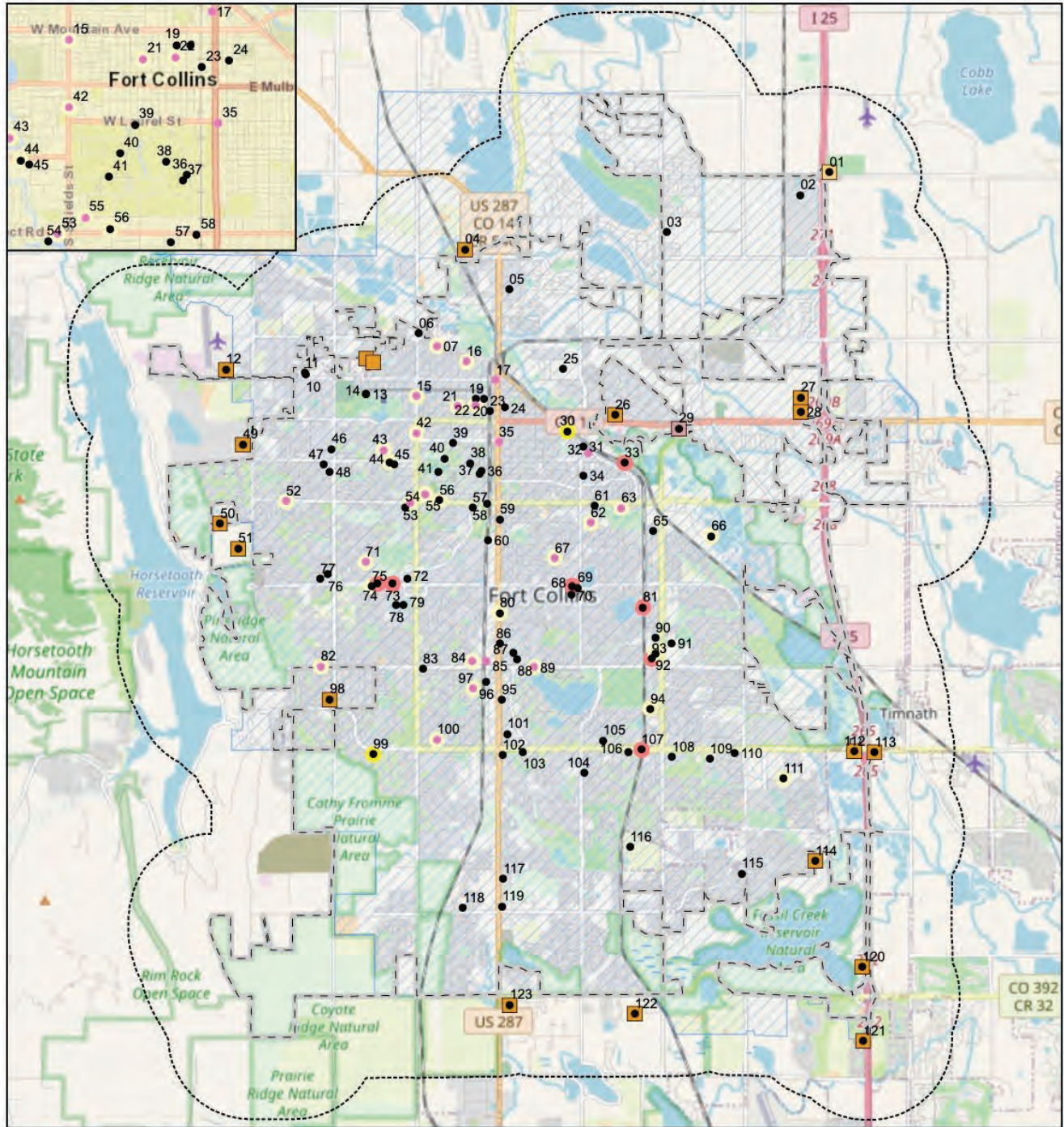
The following **Table 4** is a summary of PWSF sites summarized by antenna type, either macro or small wireless.

ANTENNA TYPE	SITE NUMBERS INSIDE CITY	SITE NUMBERS OUTSIDE CITY	TOTAL
Macro	02, 03, 05, 06, 10, 11, 13, 14,19, 20, 23, 24, 25, 30, 31, 33, 34, 36, 37, 38, 39, 40, 41, 44, 45, 46, 47, 48, 54, 56, 57, 58, 59, 60, 61, 65, 66, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, 99, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 115, 116, 117, 118, 119	01, 04, 12, 26, 27, 28, 29, 49, 50, 51, 98, 112, 113, 114, 120, 121, 122, 123	
	78 Inside City (Sites 33, 68, 73, 74, 81, 93, 107 to be removed)	18 Outside City	96
Small Wireless Facilities	07, 15, 16, 17, 21, 22, 32, 35, 42, 43, 52, 53, 55, 62, 63, 67, 71, 82, 84, 85, 89, 97, 100		
	23 Inside City	0 Outside City	23
TOTAL	101	18	119

Table 4: Inventory Summary by PWSF Antenna Type

The PWSF antenna types are further depicted in **Figure 2** and represented by the following colored dots:

- Macro
- Small Wireless Facilities



Fort Collins Inventory by

Cataloged PWSF Antenna Type

- Macro Cell (96)
- Small Wireless Facility (23)

- TO BE REMOVED (7)
- Approved But Not Built Inside Zoning Limits (2)
- Proposed Under Review Inside Zoning Limits (27)
- Existing Outside Zoning Limits (18)
- Approved But Not Built Outside Zoning Limits (1)
- Proposed Under Review Outside Zoning Limits (1)
- ▭ City Boundary
- ▭ 1 Mile Buffer
- ▭ Growth Management Area

Sources: US Census Bureau, Cityscape Consultants, Inc, USGS

Map Created by Cityscape Consultants, Inc. on

Date: 3/2/2021

0 0.5 1 2 Miles



Figure 2: Map of Existing Inventory by PWSF Antenna Type

Location

Wireless antennas on towers and base stations are located on either private or public property, inside street rights-of-way or in public utility easements. The siting of wireless infrastructure can be complex and the wireless industry will look for the path of least resistance when determining a location for infrastructure. History has demonstrated that the wireless industry typically seeks to install macro cell sites on private property first since land lease negotiations are usually easier. Infrastructure builders want to own the towers and pay a minimal land lease rate and there is usually more private property available for these types of negotiations. In the study area there are eighty three (83) sites on private property.

Recent federal and state legislative changes encourage and promote the use of public rights-of-way for small wireless facility deployment. The City can expect a plethora of right-of-way use applications by each service provider over the next several years for this type of deployment. This trend is already underway as demonstrated by the nineteen (19) proposed small wireless applications presently under review by the City.

The use of tall power distribution poles and towers on public utility easements offer great solutions for macro cells and small wireless facilities. Adding antennas to existing utility poles and structures is less visually intrusive to the mountain and vista viewsheds than adding a new tower in the same vicinity. As noted previously, PRPA is declining to renew existing lease options for the existing sites in their utility easements for any antennas above the power lines, see picture of site #81 as an example.

There are fifteen (15) facilities on publicly owned properties within the study area. Colorado State University has nine (9) facilities between the local and remote campuses. There are two (2) sites on light poles at City Park Ball Field, three (3) sites on Poudre School District (PSD) property, and one (1) site is located on Poudre Fire Authority property. The sites on public property are as follows:

- Colorado State University: Sites 12, 13, 14, 49, 51
- City of Fort Collins: Sites 36, 37, 38, 39, 40, 41,
- Poudre School District: Sites 78, 79, 91
- Poudre Fire Authority: Site 103



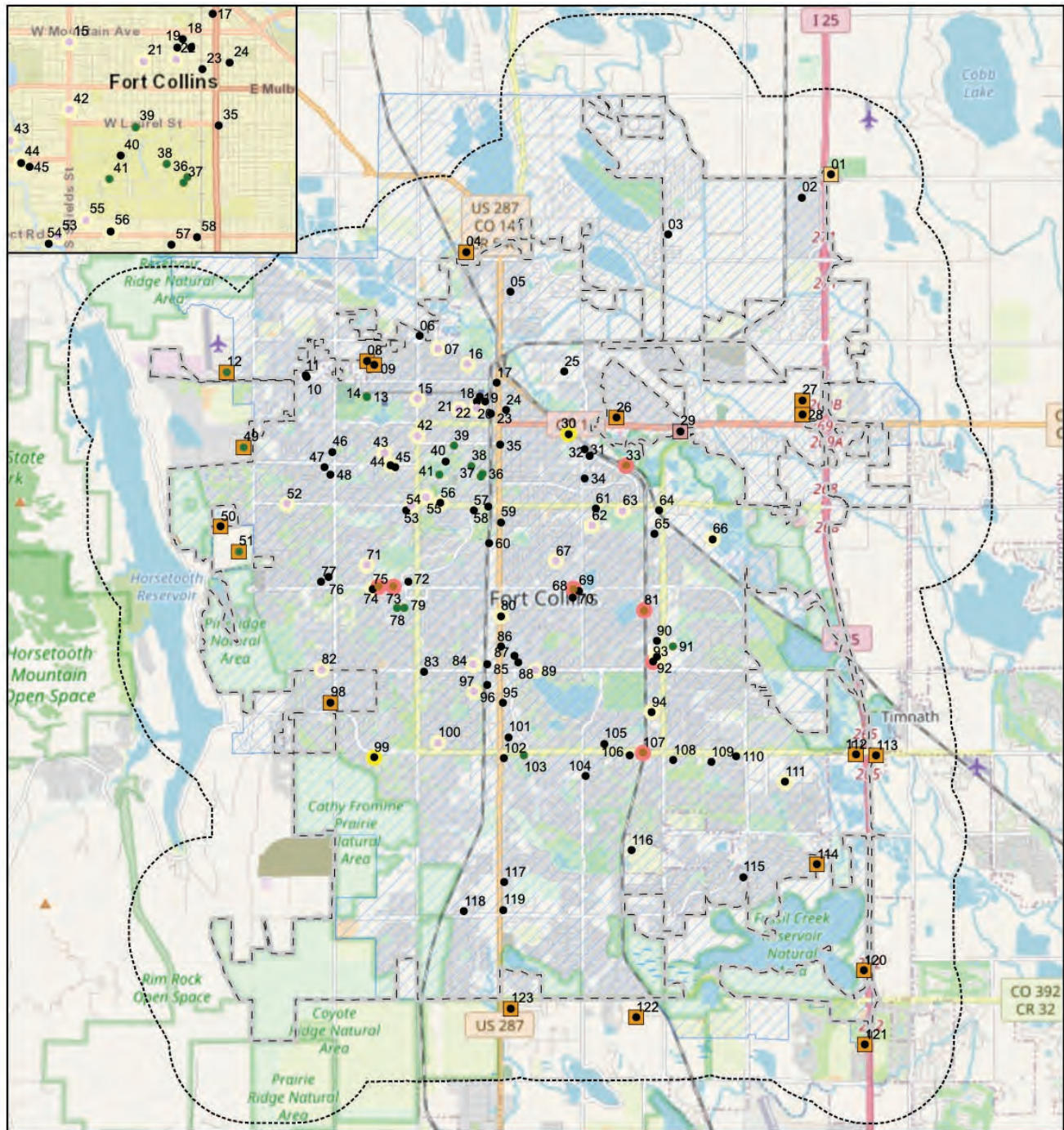
The following **Table 5** summarizes and identifies the location of all facilities by location in the study area.

LOCATION	SITE NUMBERS INSIDE CITY	SITE NUMBERS OUTSIDE CITY	TOTAL
Private Property	02, 03, 05, 06, 10, 11, 17, 18, 19, 20, 23, 24, 25, 29, 30, 31, 32, 34, 35, 44, 45, 46, 47, 48, 54, 56, 57, 58, 59, 60, 61, 64, 65, 66, 69, 70, 72, 75, 76, 77, 80, 83, 85, 86, 87, 88, 90, 92, 93, 94, 95, 96, 98, 101, 102, 104, 105, 106, 108, 109, 110, 111, 115, 116, 117, 118, 119	01, 04, 08, 09, 26, 27, 28, 50, 98, 112, 113, 114, 120, 121, 122, 123	
	67 Inside City (Site 93 to be removed)	16 Outside City	83
Public Property	13, 14, 36, 37, 38, 39, 40, 41, 78, 79, 91, 103	12, 51, 49	
	12 Inside City	3 Outside City	15
Utility Easement	33, 68, 73, 74, 81, 107		
	6 Inside City (All to be removed)	0 Outside City	6
ROW	07, 15, 16, 21, 22, 42, 43, 52, 53, 55, 62, 63, 67, 71, 82, 84, 89, 97, 100		
	19 (Proposed) Inside City	0 Outside City	19
TOTAL	104	19	123

Table 5: Inventory Summary by Location

The locations are further depicted in **Figure 3** and represented by the following colored dots:

- Private Property
- Rights-of-way
- Public Property
- Utility Easement



Fort Collins Inventory by

Cataloged Location

- Private Property (84)
- Inside Right-of-Way (19)
- Publicly Owned (14)
- Utility Easement (6)

- TO BE REMOVED (7)
- Approved But Not Built Inside Zoning Limits (2)
- Proposed Under Review Inside Zoning Limits (27)
- Existing Outside Zoning Limits (18)
- Approved But Not Built Outside Zoning Limits (1)
- Proposed Under Review Outside Zoning Limits (1)

- ▭ City Boundary
- ▭ 1 Mile Buffer
- ▭ Growth Management Area

Sources: US Census Bureau, Cityscape Consultants, Inc, USGS

Map Created by Cityscape Consultants, Inc. on

Date: 3/2/2021

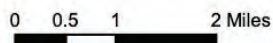


Figure 3: Map of Existing Inventory by Location

Design Type

The City's zoning standards require concealed towers and base stations over non-concealed designs. Concealed towers and base stations are designed to look like something other than a communication facility and/or disguised to fit in with its surroundings. All antenna and ancillary equipment are hidden from sight. A semi-concealed design is defined as painted to blend with the surrounding environment but antenna and cables are still visible. Antennas, cables and ancillary equipment are clearly visible on non-concealed towers and base stations. There are many different design types throughout the study area. Each non-concealed tower type represented are monopole, guy and lattice. The concealed towers represented are faux trees or monopines, faux silos, unipoles and three-legged poles, see [Figure 4](#). There are many non-concealed or semi-concealed base stations in the way of rooftops, utility poles and chimney stacks. The non-concealed base stations are disguised very well on rooftops with faux dormers, faux chimneys or designed as if there is another story on the building, see [Figure 5](#).



Figure 4: Concealed Tower Examples



Figure 5: Concealed and Semi-Concealed Base Stations

In the City’s zoning jurisdiction there are a total of sixty-four (64) concealed facilities of which forty (40) are towers and twenty-four (24) base stations. All eleven (11) semi-concealed facilities are base stations. There are twenty-nine (29) non-concealed facilities which consist of twelve (12) towers (one scheduled to be removed) and seventeen (17) base stations (six scheduled to be removed).

The following **Table 6** identifies and summarizes the design types of the cataloged sites in the study area.

DESIGN TYPE	SITE NUMBERS INSIDE CITY	SITE NUMBERS OUTSIDE CITY	TOTAL
Concealed	03, 06, 07, 10, 11, 15, 16, 17,19, 21, 22, 25, 30, 32, 35, 39, 42, 43, 44, 45, 46, 47, 48, 52, 53, 54, 55, 56, 58, 60, 62, 63, 65, 66, 67, 70, 71, 72, 75, 76, 77, 80, 82, 83, 84, 85, 86, 89, 90, 92, 94, 95, 97, 99, 100, 104, 105, 106, 109, 110, 111, 115, 116, 117	01,12, 98, 114, 122	
	64 Inside City	5 Outside City	69
Semi-Concealed	24, 31, 36, 37, 38, 40, 61, 69, 88, 96, 108	49, 121	
	11 Inside City	2 Outside City	13
Non-Concealed	02, 05, 13, 14, 18, 20, 23, 33, 34, 41, 50, 57, 59, 64, 68, 73, 74, 78, 79, 81, 87, 91, 93, 101, 102, 103, 107, 118, 119	04, 08, 09, 26, 27, 28, 29, 51, 112, 113, 120, 123	
	29 Inside City (Sites 33, 68, 73, 74, 81, 107 to be removed)	12 Outside City	41
TOTAL	104	19	123

Table 6: Inventory Summary by Design Type

The types of concealment are further depicted in **Figure 6** and represented by the following colored dots:

- Concealed
- Semi-Concealed
- Non-Concealed
- Dual Purpose

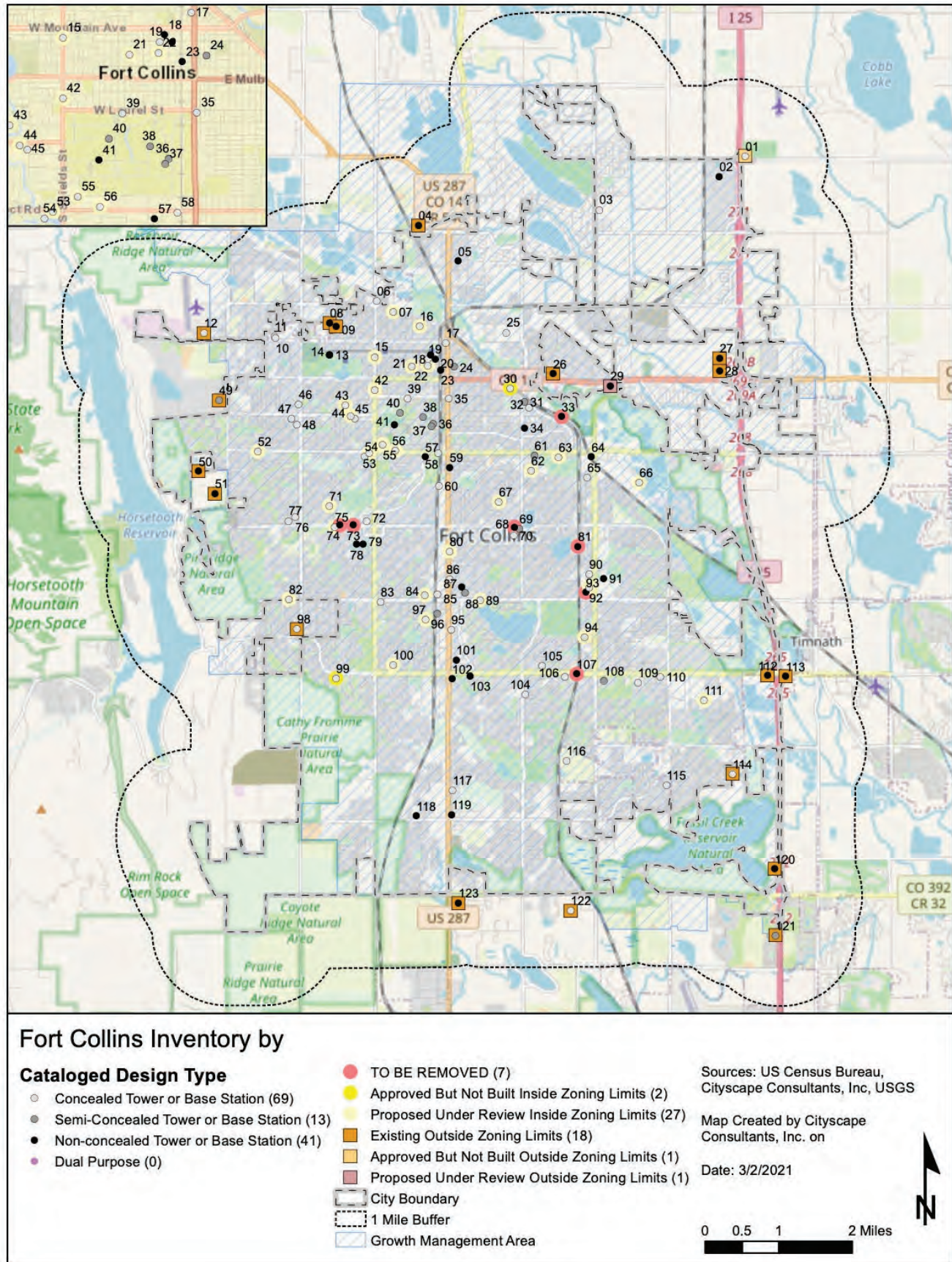
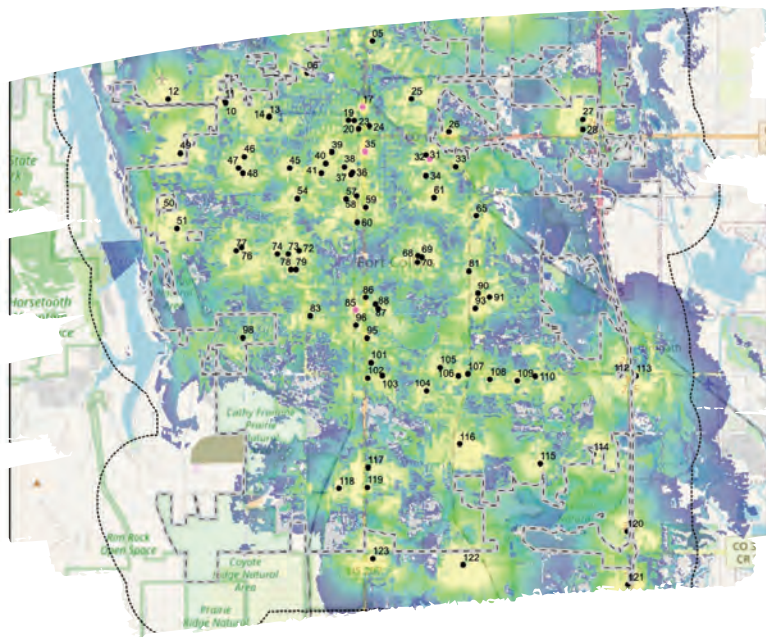


Figure 6: Map of Existing Inventory by Design Type

CHAPTER 3

MAPPING ANALYSIS



PROPAGATION MAPPING

Modern and advancing technologies continue to transform how the wireless industry is electronically providing their services. Presently in the evolution of wireless communications, smartphones still use technologies known as fourth generation (4G). This platform incorporates broadband technology to enable applications like games, global positioning services (i.e. Google Maps, Waze Navigation) banking, weather, educational, public safety services and much more to function on the network. These applications require more information to be sent and received within the same radio signal envelope that was used in the previous deployment stages of personal wireless services. The abundance of data contained and being transmitted within the radio frequency envelope makes it more important than ever to have as much signal densification as possible. Increasing signal density requires more wireless facilities.

While cities are being tested with fifth generation (5G) technologies, the wireless industry is still deploying variations of 5G ready infrastructure and upgrading 4G to evolve into this next generation. The planned 5G will implement true high-speed data with download speeds well in excess of today's standard 25-megabit per second speeds. Testing of the originally conceived 5G networks has been inconclusive with coverage and data speeds below anticipated expectations. Fifth generation was planned to utilize extremely high frequencies (EHF), which in the past has only been used experimentally and has no proven operational record. The current 5G deployment is using frequencies substantially lower than what was initially planned and generally close to the current spectrum being used for this service. These current 5G deployment frequencies are being reallocated from other radio services and do not necessarily have the amount of frequencies and bandwidth requisite for the anticipated "true" 5G services.



Propagation mapping is a process that illustrates theoretical predicted coverage from an individual antenna site. Illustrating the service area coverage based on propagation signal strength modeling is of value when trying to determine gaps in network coverage. Signal strength, in this exercise, is a term used to describe the level and

operability of a wireless device. The stronger the signal between the elevated antenna and the wireless handset device the more likely the device and all the built-in features will work as expected.

A reduced signal causes unsatisfactory service and results in slow download or upload speeds and can cause dropped calls. The distance between the elevated antennas and the physical location of the person using the wireless device is one factor determining the signal strength. Other factors affecting signal strength are any natural or man-made obstructions such as location of buildings, type of building materials, vegetation, humidity or weather that comes between antenna and devices. The use of devices indoors or outdoors is also a factor.

The level of propagation signal strength is shown through the gradation of colors from yellow to blue. The geographic areas in yellow identify areas where signal strength can penetrate indoors. The areas in green equates to areas with average signal strength typically for outdoor and in vehicle service. Areas shaded in blue symbolize signal strength that is considered for mostly outdoor use only and gray shaded areas indicate where there is marginal, spotty or no signal. To further explain; the closer the proximity to the antenna the brighter shades of yellow appear indicating better quality of wireless services. As the subscriber approaches the outer edge of the yellow or into the blue area, the signal strength becomes more prone to degradation, particularly as usage in the area increases or environmental conditions worsen. A quick reference of the shades and descriptions are as follows in [Table 7](#).

SIGNAL STRENGTH COLOR	SIGNAL STRENGTH DESCRIPTION
Yellow	In Building
Green	In Vehicle
Blue	Outdoor
Gray	Marginal or No Service

Table 7: Signal Strength Description

The following maps simulate predicted coverage for providers operating in the high frequency band from each of the towers or base stations that currently contain personal wireless services. This simulated RF modeling considers a generic antenna model similar to those used by the wireless service providers and assumes the same provider is located at the highest mounting height on each tower and base station represented. This assumption is for modeling purposes to give an estimation of the predicted wireless coverage in the City if each facility was used by each service provider. It is noted that not all service providers are on every tower or base station but the idea typically is that the infrastructure is already in place to possibly accommodate future collocations. This may not be the case in Fort Collins as discussed further in the Plan.

Network Coverage

Figure 7 illustrates high frequency spectrum (1700-2400 MHz) and includes propagation from the existing macro and small personal wireless facilities. Existing antenna height, ambient tree height, building density and subscriber density variables are considered across the City. The lack of continuous shades of yellow means that network coverage is spotty in areas and there is marginal handoff from one site to another. In order to have seamless wireless coverage throughout the City the map would ideally show more yellow and far less blue with gray holes between each tower and base station.

Due to the nature of the deployment pattern in the City and being only one provider on the majority of sites it is important to illustrate a more realistic representation of the actual coverages. Figures 8 and 9 are simulated propagation maps for two different wireless service providers from their known locations on towers and base stations. These two maps look very different from the map in Figure 7 because the sites turned on for propagation purposes are only the sites for the individual service providers representing their simulated coverages. Both service providers have significant gaps in their individual coverage areas. The only remedy would be to add more wireless infrastructure in these areas.

Overall observations of Figures 7 through 9 indicates the following:

- Fort Collins has a unique deployment pattern, as theorized previously, to the height limitations within the ordinance creating a great number of the facilities that have only one provider.
- Eighteen (18) facilities located just outside the City limits are generally evenly spaced around the city's perimeter but provide wireless services into the City. This deployment pattern typically indicates an attempt to circumvent the jurisdiction's wireless regulations or siting policies. This was most likely the intent of the wireless industry in an effort to provide service to the residential zoning communities that lack tall structures to place antennas.
- The City is underserved especially in neighborhoods and along every major corridor in the City.
- Towers and base stations are widely spread out throughout the City but are spaced too far apart, which prevents adequate handoff between sites resulting in poor coverage throughout the City.
- The City is more likely to need new facilities in areas that already have infrastructure since collocation may not be an option due to the height limitations.

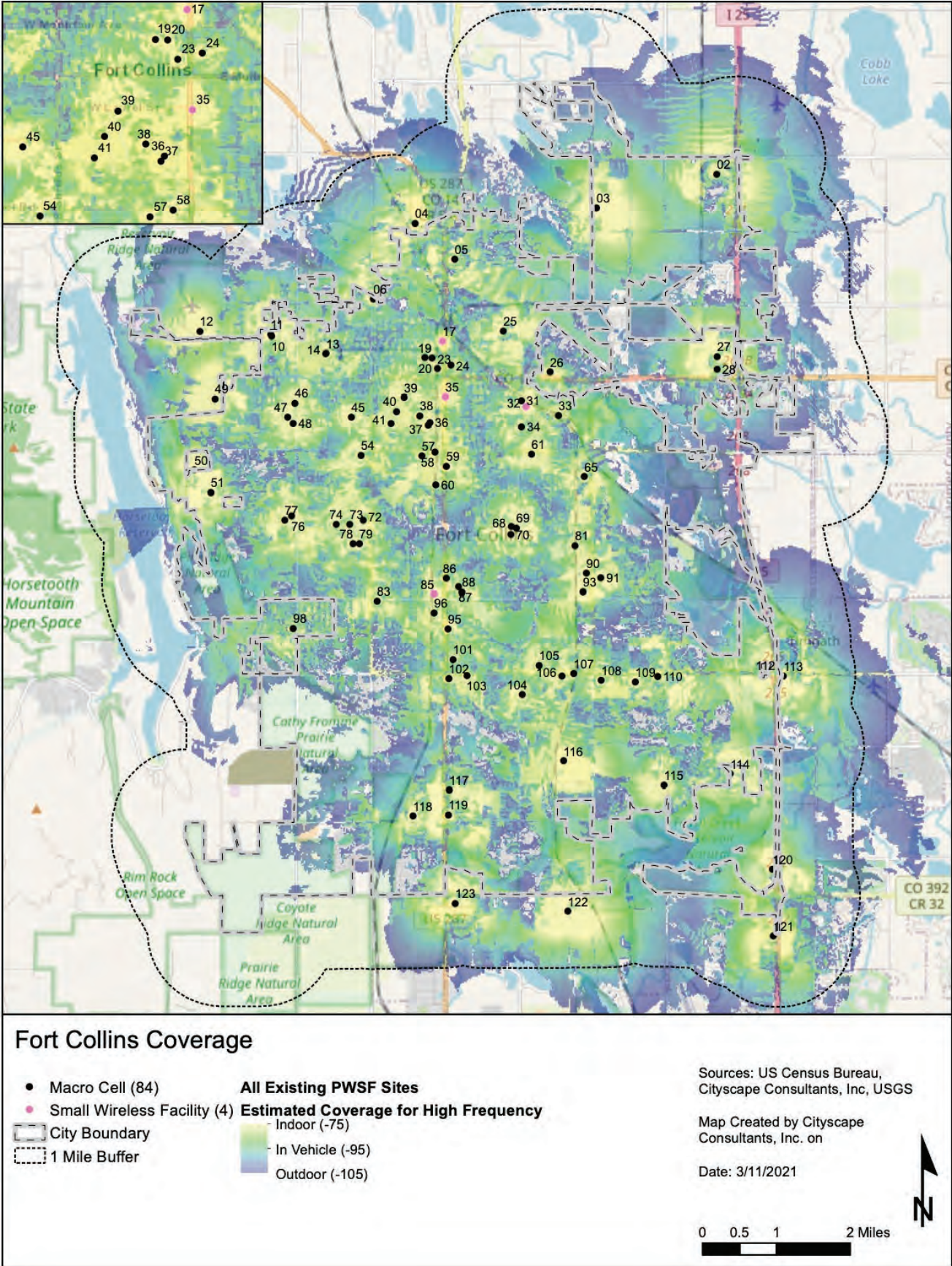


Figure 7: PWSF Wireless Coverage Map

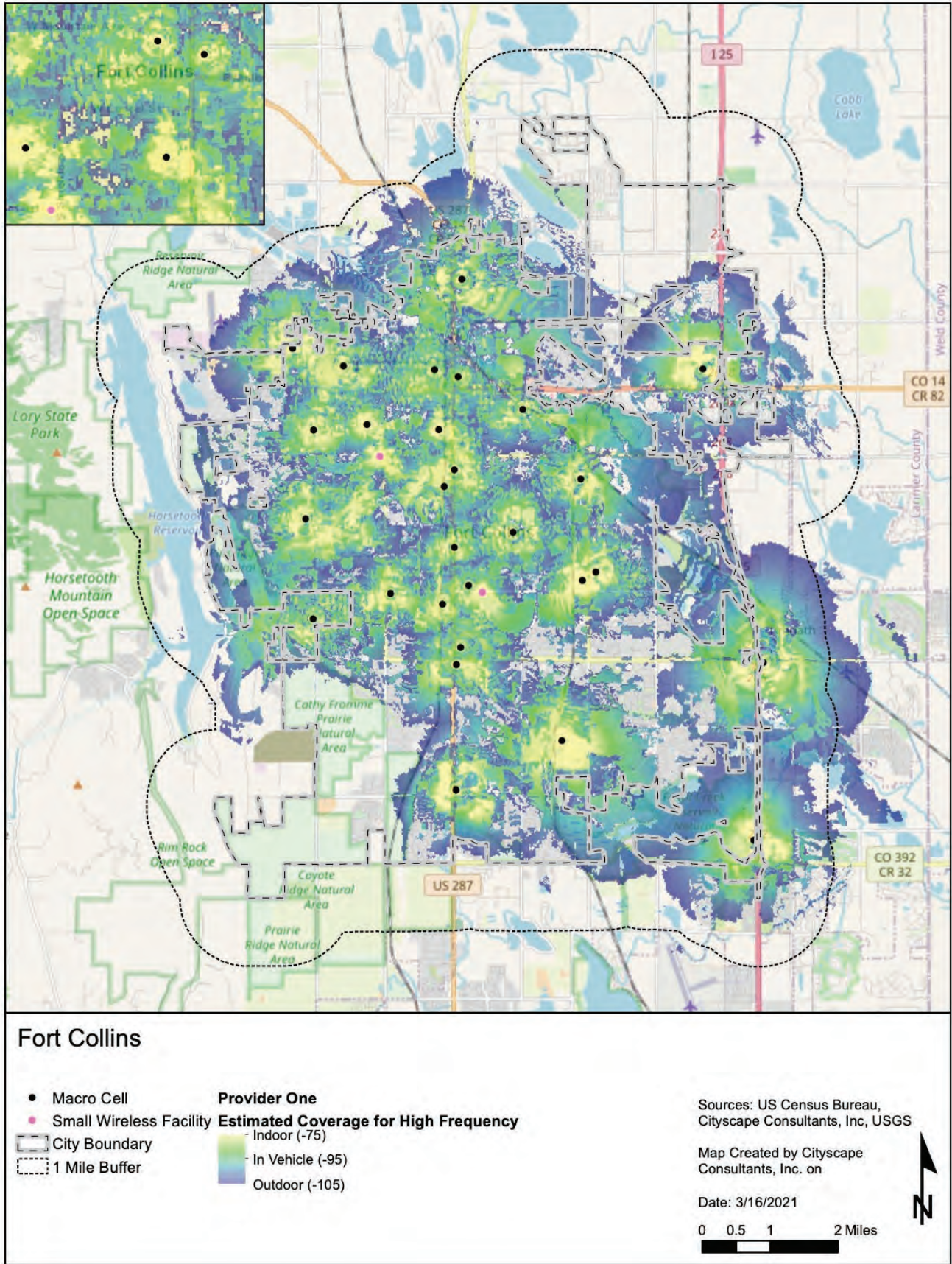


Figure 8: Wireless Coverage Map: Provider One Example

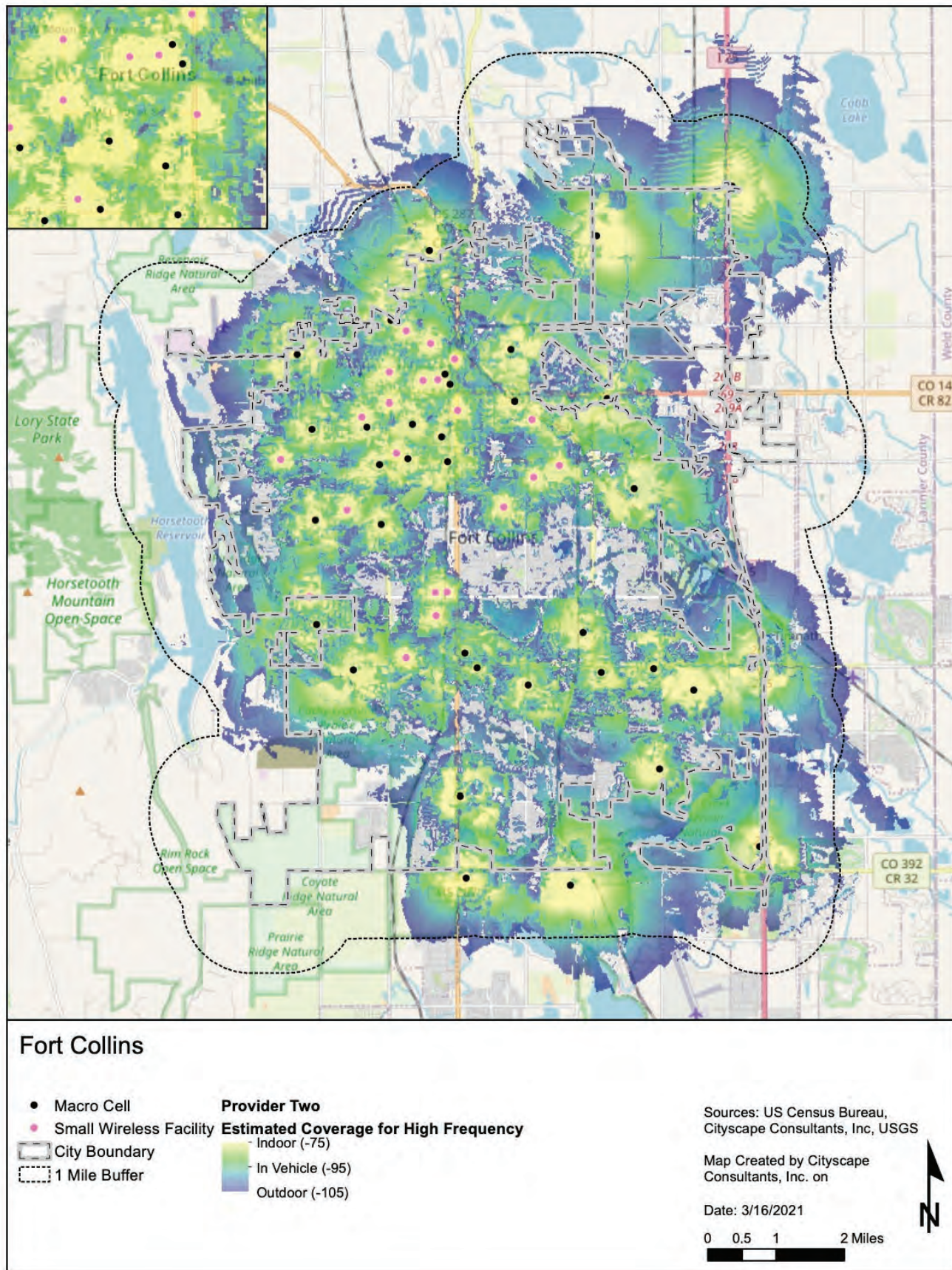


Figure 9: Wireless Coverage Map: Provider Two Example

Network Capacity

Network capacity is the amount of wireless traffic that a service provider's network can handle at any given time within a specific location. Capacity takes into account the amount of bandwidth being used simultaneously by way of voice calls, and data usage. In order to estimate network capacity, consideration and analysis of the distinct characteristics of the community is studied and portrayed.

Population density is one of the characteristics considered in determining network capacity. Wireless service providers want to deploy as close to their subscriber base as possible which is why residential areas, employment centers, recreational facilities and along major highways and thoroughfares are important considerations.

The map in [Figure 10](#) illustrates the existing PWSF facilities as an overlay on top of the City's population density by US Census Block Group.

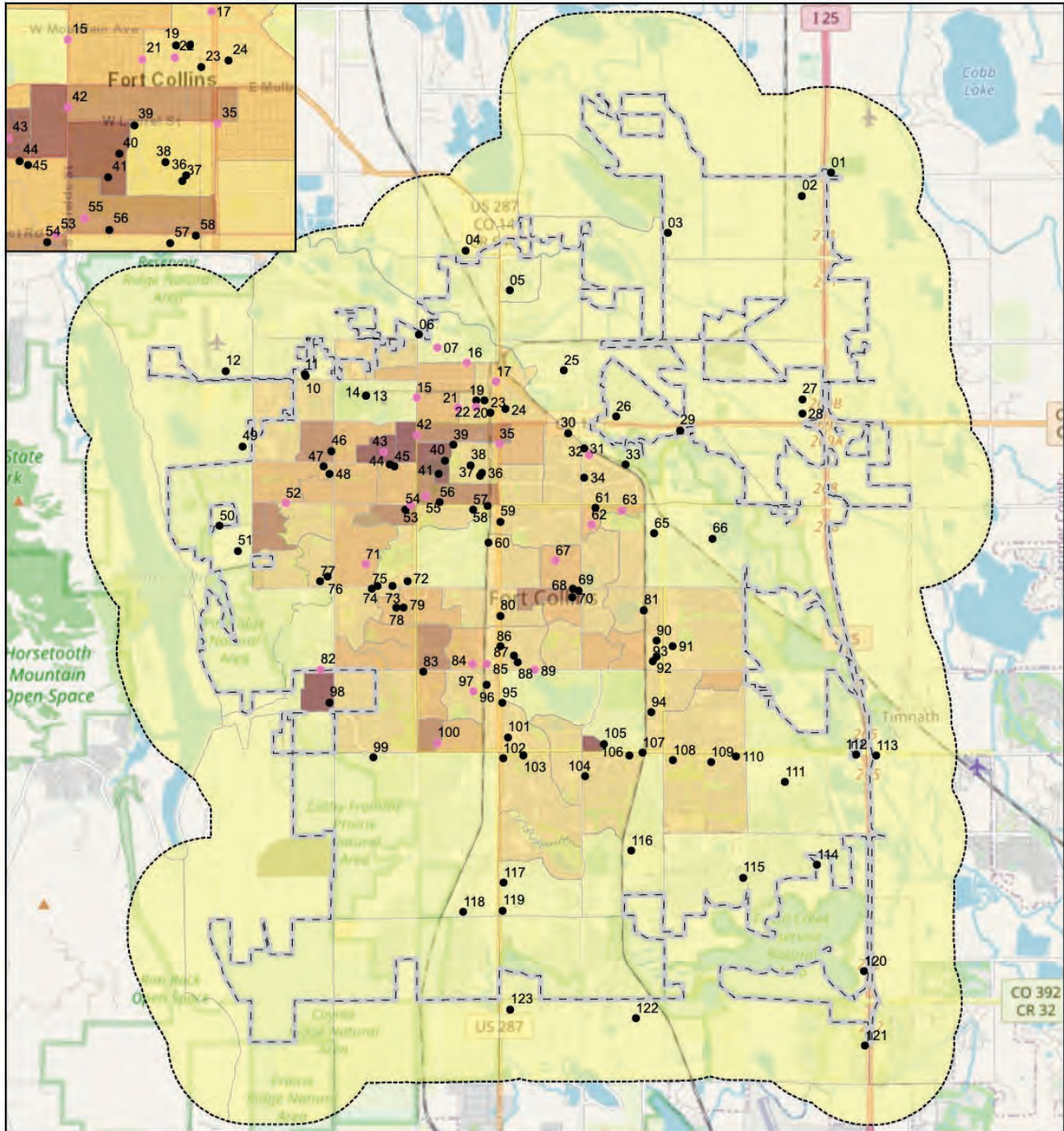


The darkest shades of brown represent US Census Block Groups with over 10,000 people per square mile and are the highest population densities in the City.

All but one census block containing between 10,000 and 16,833 people per square mile are located west of North College Avenue and north of West Harmony Road. Comparing the inventory locational maps to the census block data illustrates the Downtown District, CSU College District and the Urban Mixed-Use Districts west and south of CSU each have clusters of wireless facilities to serve these areas.

Although there is infrastructure in the area to cover this high density population block there is only one provider on each facility. This would indicate that there is coverage in the area but from field experience we know there are significant gaps in service for the other providers not in the area. Additionally, as the usage of wireless data grows the systems will become overloaded and capacity concerns arise.

Because so many of these sites are single provider facilities, the number of sites in this same area will need to double or perhaps triple since there are so few existing wireless facilities that could even accommodate collocations for the other two or three service providers.



Fort Collins Coverage

Cataloged PWSF Antenna Type Population per sq mi

● Macrocell (96)	52 - 2500
● Small Wireless Facility (23)	2501 - 5000
▭ City Boundary	5001 - 7500
▭ 1 Mile Buffer	7501 - 10000
	10001 - 16833

Sources: US Census Bureau, Cityscape Consultants, Inc, USGS

Map Created by Cityscape Consultants, Inc. on

Date: 3/11/2021

0 0.5 1 2 Miles

Figure 10: Map of Population Density with Existing PWSF Inventory Overlay

Vehicular traffic volumes are another important unit of measurement to consider for network capacity since service providers want to provide seamless coverage for their subscribers as they move throughout the City. Eliminating gaps along major transportation corridors and thoroughfares are goals of the wireless service providers and are necessary as we move into 5G and advancing technological uses of wireless services.

Figure 11 shows the traffic counts for the major north south and east west corridors that were provided by the City and used as an overlay on the PWSF coverage map used in Figure 7. This map shows that East Harmony Road and North College Avenue have the greatest traffic volumes (between 40,000 and 58,000 trips per day) and the ROW along both these thoroughfares are dotted with wireless infrastructure.

The approximate 4.48 mile stretch of East Harmony Road west of I-25 to North College Avenue has ten (10) macro cell facilities of which six (6) are single provider facilities. The summary of sites along this stretch are as follows:

- Site 102: tower with one provider at height of 75'
- Site 104: tower with one wireless provider on public safety tower at height of 120'
- Site 105: base station with one provider at height of 42'
- Site 106: base station with one provider at height of 38'
- Site 107: base station with one provider at height of 110' (site to be removed)
- Site 108: base station with two providers at height of 49'
- Site 109: tower with no providers at time of assessment with height of 63'
- Site 110: base station with one provider at height of 65'
- Site 111: tower with one provider at height of 117'
- Site 112: tower with two providers at height of 84'



Similarly, North College Avenue has seven (7) wireless facilities parallel the four and a half mile North College Avenue ROW north of Harmony Road and south of Maple Street. Three (3) of these sites are small wireless facilities, four (4) are macro cells and all are single provider facilities. The summary of sites along this corridor are as follows:

- Site 17: base station with one provider at height of 45'
- Site 35: base station with one provider at height of 48'
- Site 59: base station with one provider at height of 48'
- Site 80: base station with one provider at height of 50' (proposed and under review)
- Site 96: tower with one provider at height of 60'
- Site 95: base station with one provider at height of 45'
- Site 102: tower with one provider at height of 75'

Should the City desire to see fewer sites along the roadway segments with less than in-vehicle coverage, then considerations should be given to allow taller towers along these corridors. Taller towers offer more collocation opportunities to the industry. The City should continue the existing strategy of requiring collocation on existing structures as a priority before seeking an application for a new tower or new base station. Sections of roadways shown in blue will need additional infrastructure to increase in-vehicle coverage.



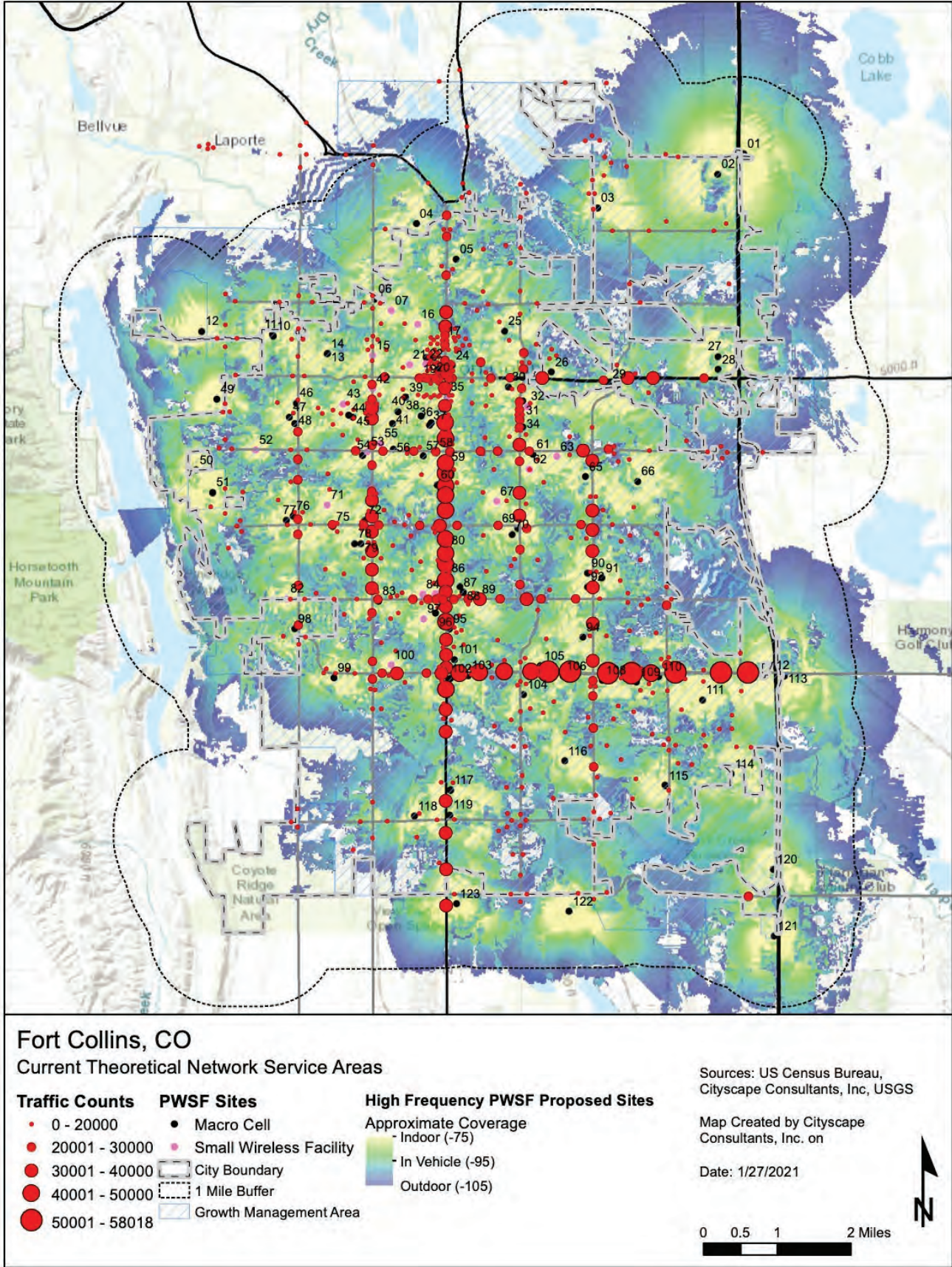


Figure 11: Current Traffic Count Over Wireless Coverage Map

With nearly all Americans owning a mobile phone, wireless communication plays a key role in keeping Americans safe during emergencies and natural disasters like hurricanes, wildfires, snow and ice storms, flooding and tornadoes.

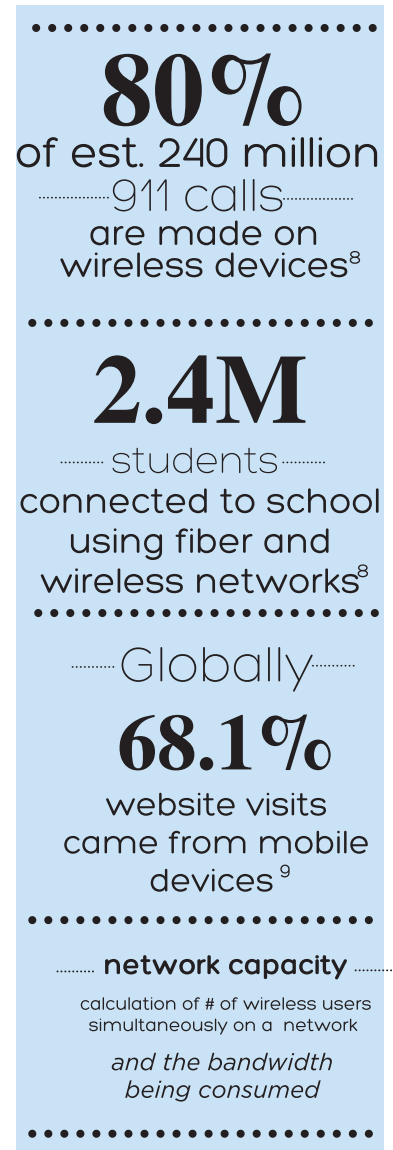
Due to increasing wireless communication usage, network capacity is a crucial element for consideration in the overall wireless Plan.

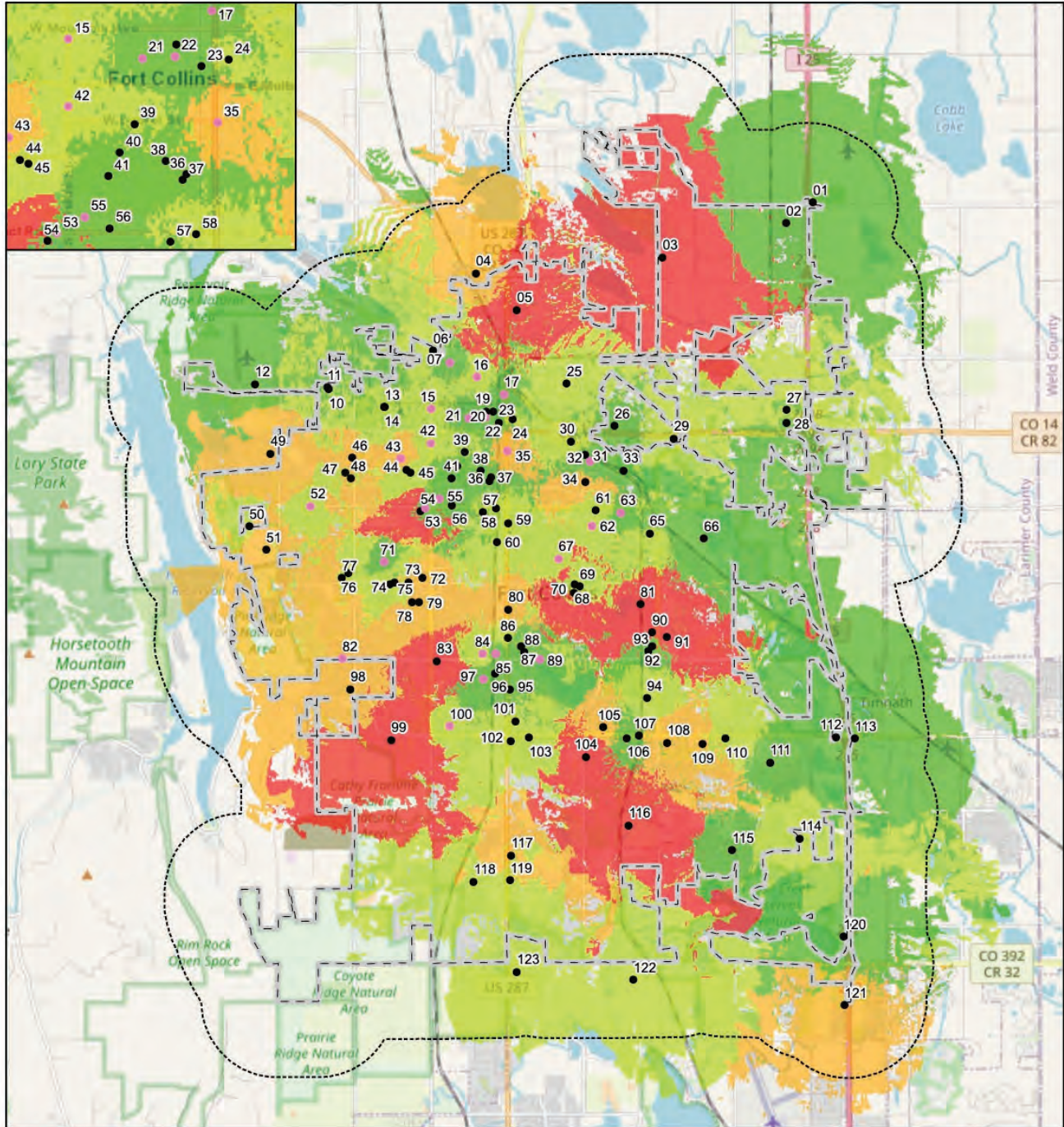
It is difficult to accurately illustrate network capacity since each provider has their own usages and numbers as well as this is considering all providers. In order to best calculate network capacity we analyze the people per household data from the US Census and the City’s traffic counts, compare those totals to the number of wireless facilities in the same geographic area and create a heat map demonstrating approximate network capacity anticipated for 5G bandwidth. It is noted that each wireless service provider’s needs are different but the following map is provided for illustration purposes to showcase the capacity issues in different areas of the City.

As indicated in Figure 12, dark green shades are geographic areas with acceptable capacity and red shades symbolize poor capacity.

Over the next ten years it is predicted that the wireless service providers will need to add macro facilities along with small wireless facilities in the pale green, orange and red shaded areas to further develop their network for their subscriber base.

As 5G technology continues to evolve and the wireless usage continues to increase the City can expect a minimum of a tripling of the current number of sites over the next ten years and should strategize ways to accommodate the anticipated number of facilities throughout the City.





Fort Collins

Cataloged PWSF Antenna Type Households and Traffic

- Macrocell (96)
- Small Wireless Facility (23)
- ▭ City Boundary
- ▭ 1 Mile Buffer
- < 500 (Acceptable Capacity) (46)
- 501 - 1000 (40)
- 1001 - 1500 (20)
- > 1501 (Poor Capacity) (10)

Sources: US Census Bureau, Cityscape Consultants, Inc, USGS

Map Created by Cityscape Consultants, Inc. on

Date: 3/15/2021

0 0.5 1 2 Miles



Figure 12: Map of Predicted Network Capacity

CHAPTER 4

ZONING AND FUTURE WIRELESS INFRASTRUCTURE



Site #54

ZONING ANALYSIS

The City's current wireless telecommunication regulations permit wireless telecommunications equipment to be attached or mounted on any existing building or structure including residential buildings containing five (5) or more dwellings units. If the equipment is mounted to the wall of the building, the antenna must be flush mounted and cannot project above the wall on which it is mounted. If the equipment is located on the roof, equipment shall: 1) be screened by a wall or parapet; 2) not exceed more than fifteen (15) feet over the height of the building; and 3) be located as far from the edge of the roof as possible. All equipment is required to be the same color as the building or structure and concealed as much as possible. New ground-mounted wireless telecommunication facilities are required to be concealed and camouflaged as much as possible and heights are limited to the maximum height allowed for structures in the underlying zone district.

These development standards have been effective in preserving the aesthetics of the City because the City has very few non-concealed towers and base stations. The sites are so nicely concealed they are difficult to find in the field. The maximum heights permitted for new towers and antennas on structures is very low in elevation so they are less noticeable amongst existing buildings and trees.

The existing height limitations do not allow for collocations on the majority of structures for various reasons, see [Table 8](#). Antennas working in unison in a service provider's network must have clear line-of-site between all antenna locations for optimal performance. Transmitting radio signals from antennas installed at the top of towers, constructed at the same height of all other buildings in the underlying zoning district, do not have the line-of-site necessary because rooftops of existing buildings block the signals between the elevated antennas. Similarly, antennas mounted on the wall of a building are unable to transmit 360° thereby reducing the coverage area by fifty percent which eliminates line-of-site to other antennas in the network outside the 180° angle. By the same token, requiring the industry to locate as far from the edge of the roof as possible presents a comparable network problem. The further the antenna signals have to transmit horizontally across the roof line, the greater the vertical elevation needed for the signals to reach subscribers at ground level. Limiting antenna mounting heights to fifteen (15) feet above the rooftop while requiring the arrays to be placed as far from the roof's edge as possible, diminishes the coverage area for that facility.

Additionally, this standard limits the number of service providers that can occupy the same rooftop because each provider will need the same general location on the rooftop, making it difficult if not impossible for more than one or two providers to occupy a single rooftop.

ZONE	ZONE NAME	BUILDING HEIGHTS
CG	General Commercial District	4 stories 56'
D	Downtown District	3-12 stories 35-150' *
HMN	High Density Mixed-Use Neighborhood District	5 stories 75'
LMN	Low Density Mixed-Use Neighborhood District	3 stories 35'
MMN	Medium Density Mixed-Use Neighborhood District	3 stories 35'
NCB	Neighborhood Conservation - Buffer District	2.5 stories 28'
NCL	Neighborhood Conservation - Low Density District	2.5 stories 28'
NCM	Neighborhood Conservation - Medium Density District	2.5 stories 28'
RF	Residential Foothills District	3 stories 35'
RUL	Rural Lands District	3 stories 35'
UE	Urban Estates District	3 stories 35'

*dependent on map in Div. 4.16

Table 8: Building Heights by Zoning District Permitting Wireless Facilities

While these development standards are intended to control the aesthetic aspects of wireless infrastructure deployment they consequently have a negative effect on wireless network design resulting in a larger number of sites necessary to provide full service to the City. This is demonstrated by the large percentage of single provider sites throughout the City. Of the seventy six (76) existing towers and base stations inside the City’s limits, only thirteen (13) have more than one provider on the structure. Eleven (11) of these facilities have two providers and only two (2) have three total providers. Sites with collocation on existing facilities inside the City are listed below:

- Sites 20, 24, 31, 57, 87, 91 and 108 are base stations with two providers
- Sites 47, 70, 77 and 119: are towers with two providers
- Sites 5 and 101 are towers with three providers

Consequently, these regulations create a clustering of multiple sites in the same geographic area when potentially one tower could have been constructed for all providers. Notable examples include:

- Site 76 is a Verizon base station on a building at Drake Crossing Shopping Center and Site 77 is an AT&T and T-Mobile tower on the back of the property. If future providers such as DISH or Google decide to need services in this area they may need to construct a new site at this same vicinity because the existing facilities cannot accommodate additional collocations.
- Site 10 is a concealed steeple and Site 11 is a concealed three-legged tower, both located on Calvary Baptist Temple property. It is unlikely that the three-legged tower can be used for collocation since it is only fifty (50) feet tall, see picture below.
- Site 68 is a base station, Site 69 and Site 70 are towers on East Drake Road and South Lemay Avenue. All are likely to have been within the same search area for the different providers.

This type of deployment pattern will continue unless the City decides to increase the heights of free standing towers and lessen the distance of the rooftop antenna setback requirements.

Providing wireless coverage and capacity to subscribers in neighborhood districts will grow in importance as more residents continue to rely on their mobile devices for communication, employment, education and commerce. While the City's zoning code permits attached or mounted on any existing building or structure, including residential buildings containing five (5) or more dwellings units, not all residential neighborhood districts have structures meeting that criteria. Consequently low density residential areas are without coverage because the signal from antennas on existing towers and base stations around the periphery of those districts cannot reach the dwelling units.



Table 9 below lists all the zoning districts that allow wireless communications equipment attached to existing structures and the cumulative land area in square miles for each zone.

ZONE	ZONE NAME	AREA SQ MILE
CG	General Commercial District	1.866
D	Downtown District	0.188
HMN	High Density Mixed-Use Neighborhood District	0.087
LMN	Low Density Mixed-Use Neighborhood District	10.229
MMN	Medium Density Mixed-Use Neighborhood District	2.930
NCB	Neighborhood Conservation - Buffer District	0.247
NCL	Neighborhood Conservation - Low Density District	0.842
NCM	Neighborhood Conservation - Medium Density District	0.853
RF	Residential Foothills District	0.695
RUL	Rural Lands District	0.450
UE	Urban Estates District	4.299

Table 9: Area Square Mile by Zoning Districts Permitting Wireless Facilities

These represented zoning districts are shown on the coverage and capacity maps in Figures 13 and 14 respectively. The shaded brown areas symbolize the zoning districts found throughout the City where new towers are not currently permitted and where new wireless antenna installations are only permitted on most structures if used for residential purposes and contain at least five (5) dwelling units.



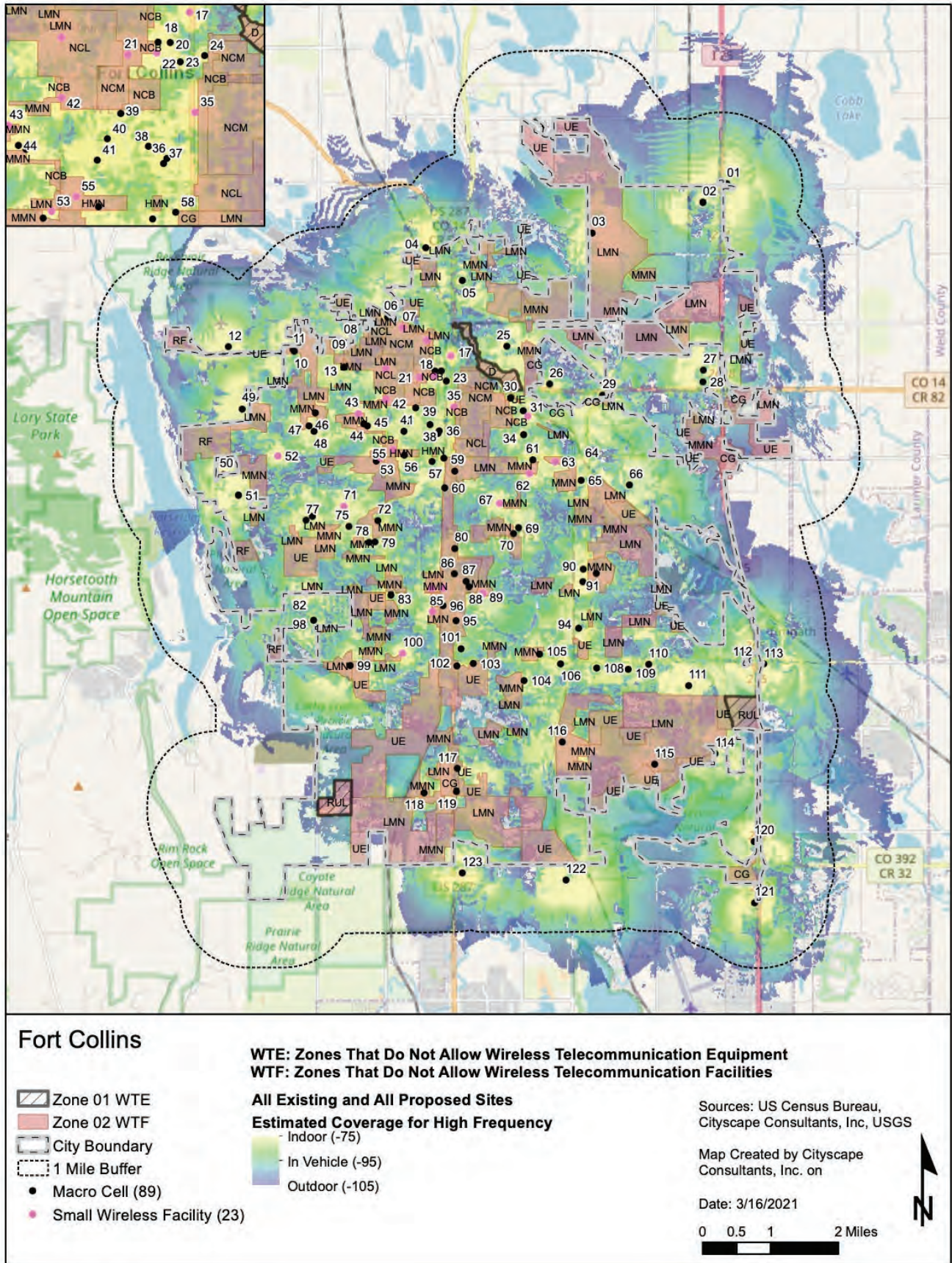


Figure 13: Wireless Communication Coverage Simulation by Zoning District

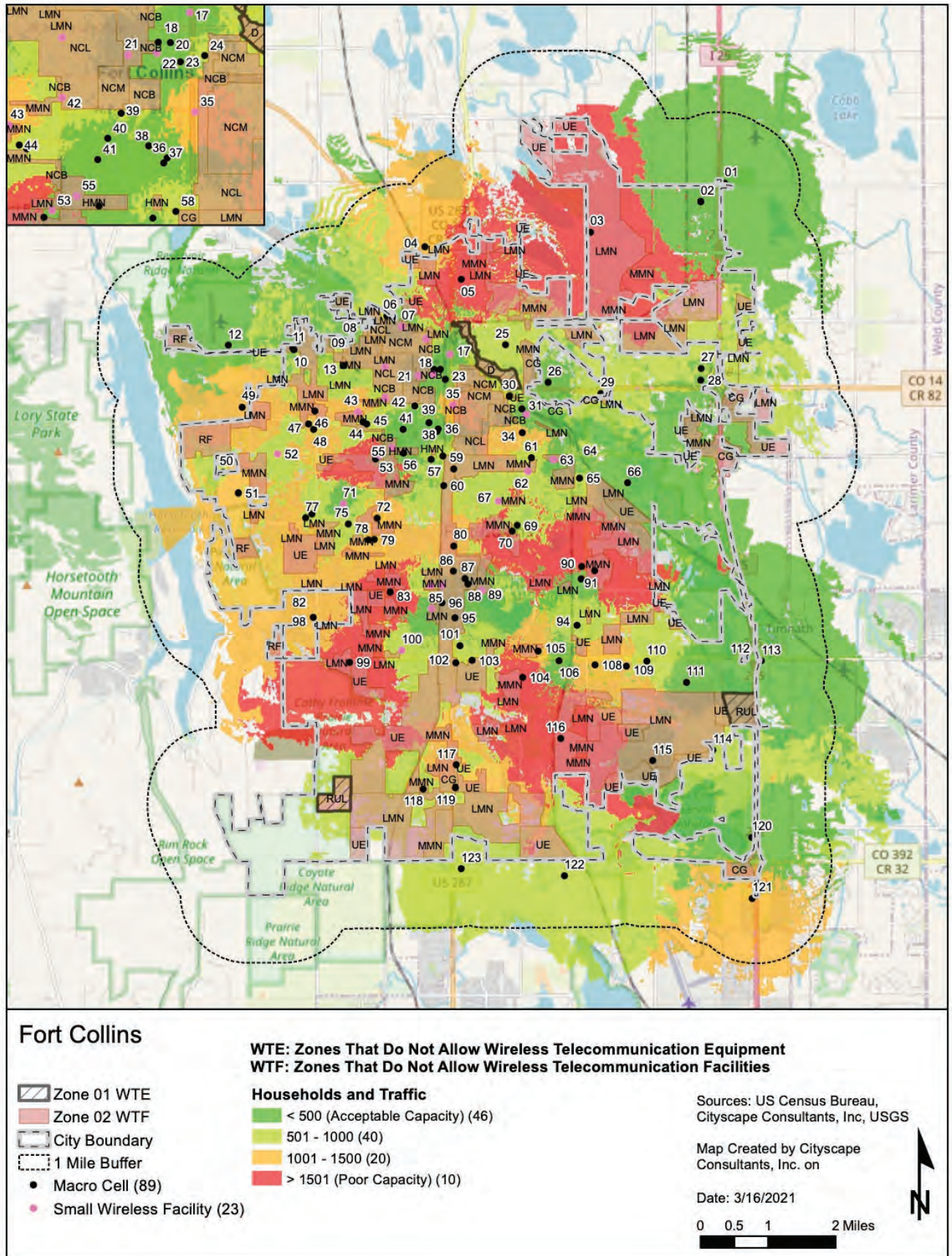


Figure 14: Wireless Communication Capacity Simulation by Zoning District

SUMMARY

Expanding transportation and mobility options are discussed in the current Fort Collins City Plan. The “Then, Now and Future” tables on page 31 of the City Plan identify how current mobile phone apps help residents and visitors make mode of transportation choices and how future mobile devices will be a tool to provide a seamless service of booking and paying for public and private sector transportation options. A complete wireless network will be required to accomplish these goals and the effects of current zoning standards on the wireless deployment are counterintuitive to building a seamless network. The City has a long way to go to achieve this goal because the current network of installed sites is significantly inadequate for existing and future network coverage and capacity needs of the community.

The City posted an on-line Wireless Master Plan Survey for interested stakeholders to offer experiences and opinions about the current state of wireless connectivity and aesthetics of the infrastructure in the City. The survey was open from April 6 through April 26, 2021 and nearly 250 people participated in the poll. The entire survey results and comments received is provided in Appendix B. Poll results and commentary from participants affirm the gap and capacity analysis. An abbreviated summary of the survey results are listed below:

- 198 (81.5%) of respondents live and work in Fort Collins year-round.
- 209 (85.3%) recorded the quality of wireless service is important to them.
- 238 rely on their mobile device for personal use/entertainment; 177 also rely on it for work and 41 of those polled rely on it for school.
- 105 (42.9%) indicated their network coverage at home is poor; 26 (10.6%) indicated it was excellent.
- Aesthetics in terms of height, color and appearance remains of great importance.
- 160 (67.8%) indicated they would prefer taller facilities with multiple collocation possibilities opposed to shorter and potential more towers.
- 229 (93.9%) indicated they support locating concealed cell towers on City owned property.

Preferred type of concealed tower structures are as follows:

- 159 preferred flagpoles
- 158 preferred monopines
- 96 preferred faux water towers
- 93 preferred unipoles
- 88 preferred bell towers
- 73 preferred faux silos
- 9 preferred other options

Preferred type of concealed base stations are as follows:

- 203 preferred concealed
- 203 preferred semi-concealed
- 180 preferred non-concealed
- 178 preferred utility attachments
- 115 preferred water tank attachments



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS



CONCLUSIONS

Densifying the network with small wireless facilities is a trend across the nation as it prepares for true 5G function. Antenna sites added in capacity-strained areas increase wireless services where it is most needed and helps offload data traffic from surrounding facilities. The need for network capacity will continue to increase as more wireless devices are added by the subscriber base to the network and wireless phones, tablets and laptops utilize data demanding applications. Urban areas like much of Fort Collins and large public venues like the university, parks and museums are strong candidates for network densification because of the highly concentrated areas of mobile subscribers.

Macro cell facilities still provide the greatest flexibility for coverage with the service provider network. To address the public safety concerns and demand for faster download speeds, uninterrupted streaming, and further network reliability the wireless industry will continue to deploy more and more small wireless facilities. These sites work with the macro cell sites to increase network capacity and take the pressure off already overloaded systems.

Based on the study of all the mapping and the characteristics of the community, the following can be concluded:

- Each service provider has gaps in their network.
- Each service provider is required through their license agreement with the FCC to provide comprehensive wireless services to the areas they are licensed to build their network.
- Every local government must allow the wireless industry to build out their networks and local codes and decisions cannot have the effect of prohibiting services.
- Local governments public policies cannot supersede the FCC's rules and regulations.
- Existing towers and base stations in the City do not provide complete coverage and network capacity throughout the City needs improvement to meet Fort Collins' City Plan goals of a robust network for the public.
- Only thirteen (13) of the existing seventy-three (73) towers and base stations are multi provider facilities with sixty (60) facilities that are single provider sites.
- There are more base stations than towers.

- Tower heights are limited to permitted heights in underlying zoning districts which prohibits line-of-site between antennas at other site locations. This standard makes it impractical for the industry to build multiple provider towers with additional collocation opportunities.
- Rooftop antennas can be 15 feet above the roofline which allows line-of-site between other antennas in the network.
- Zoning requires maximum distance possible from the wireless antennas to the edge of the roof. This spatial requirement limits the distance the antenna signal can transmit and it makes it difficult for more than one service provider to use the same roof unless the footprint of the building is large enough to support more providers.
- Zoning requires concealment of rooftop wireless facilities. It is difficult for some buildings to support more than one architectural change to the rooftop.
- Some building owners may limit the number of rooftop providers they desire on their rooftops since service providers require 24/7 access to their equipment.
- The City can expect to have requests for dozens of macro cell sites and hundreds of small wireless facilities over the next ten years. Most of the new macro facilities will be in areas needing initial wireless coverage.
- The Code of Federal Regulations (CFR) indicates that a state or local government may not deny and shall approve any eligible facilities request for a modification of an eligible support structure that does not substantially change the physical dimensions of such structure. Because of this, the City can expect the wireless industry to seek height increases on existing wireless facilities to gain more height for additional collocations.
- It would be in the best interest of the City to amend existing codes to include the definition of substantial change and other policies in the CFR.
- Seven (7) existing macro facilities currently inside the PRPA easements will be removed as their leases expire and substitute locations will be necessary in the same search ring of each existing location to maintain existing levels of network coverage and capacity. The City should consider planning how best to relocate these seven sites and design the new facilities with enough height and structural integrity for additional collocations.
- Over half the City is deficient in network capacity and some geographic areas that already have infrastructure will need three or four new macro facilities (one for each service provider) and a multitude of small wireless facilities to increase network capacity unless the City decides to make changes to the zoning ordinance to favor and promote collocation.
- Should the public support taller and fewer wireless facilities which would decrease the number of new sites needed in the future.

RECOMMENDATIONS

- Considerations to further incentivize the use of roof or wall mounted collation for wireless telecommunication equipment.
- Considerations to allow wireless equipment facilities (towers) in more zoning districts would give the City more choices for deployment.
- Considerations for maximizing the use of city owned properties with pre-designed concealed towers to increase coverage and capacity throughout the City would give the City the most control over infrastructure siting.
- Federal definitions, approval timelines and required rules concerning local government's review and approval processes for macro cell and small wireless facilities should be included in the City's Code.
- Considerations to amend and harmonize zoning standards to match federal definitions, rules and application approval timelines would reduce the number of inconsistencies that exist in the current zoning policies and allow for streamlined staff processing.
- The City may consider options that will allow facilities into single-family residential areas. One solution is to promote the use of city owned property. The City currently has two wireless facilities at the City Ball Park and as learned through the wireless survey, community members support the use of public properties for wireless infrastructure.

The following [Figure 15](#) identifies public properties on the coverage map that could be considered to fill in network gaps. As landlord, the City can be assured each site on city owned property will be well maintained and the City can collect a monthly or annual revenue stream through negotiated lease agreements.

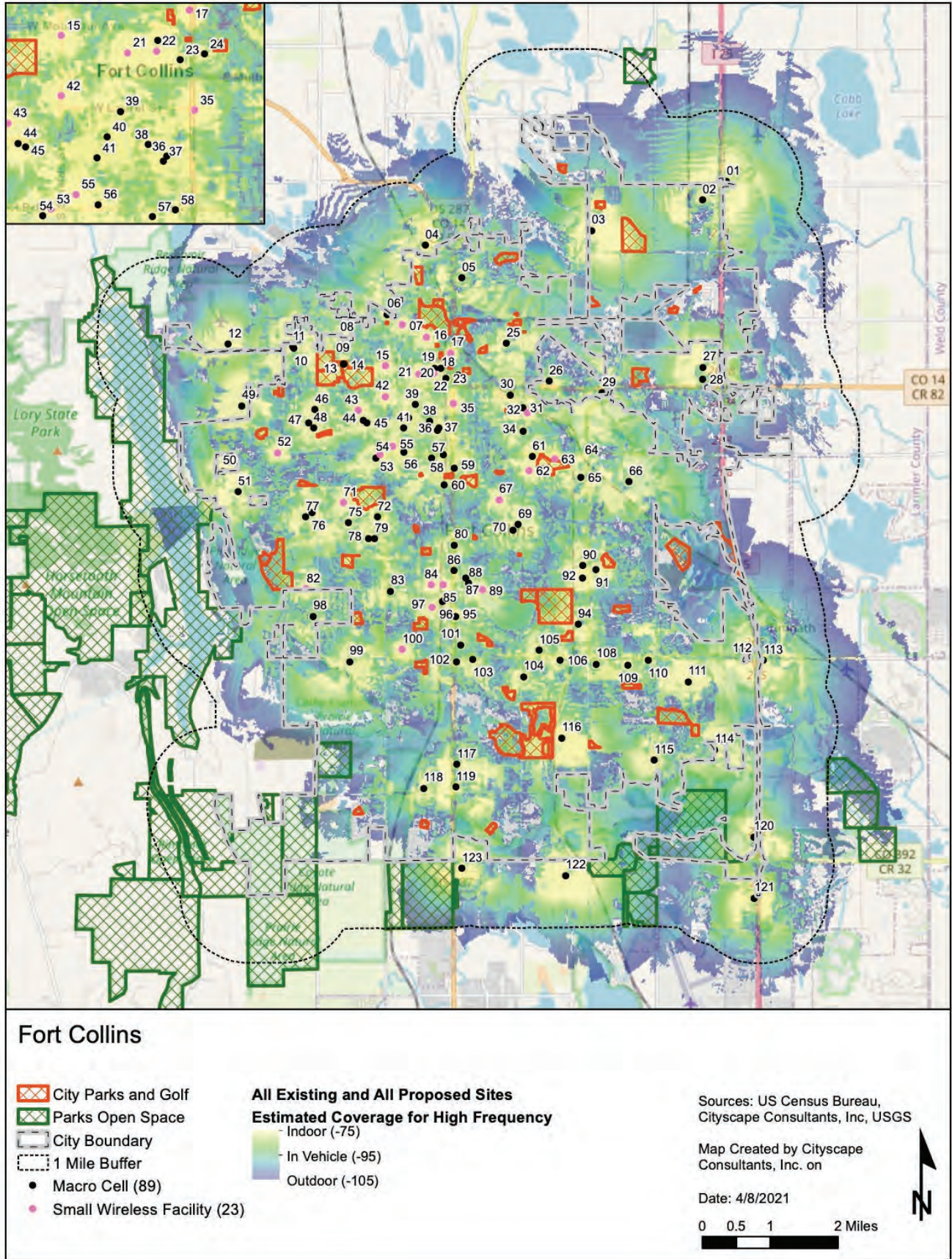


Figure 15: Service Gap Map With Potential Fill-in Sites

GLOSSARY



Site #77

DEFINITIONS

For purposes of the Plan the following terms are used throughout and provided as reference as follows:

Bandwidth - A range of frequencies used to transmit a signal. The channel width (bandwidth) affects how much data can transmit per unit time. Each service provider has their own designated finite amount allocated to them by the Federal Communications Commission (FCC).

Base Station - Equipment and non-tower supporting structure at a fixed location that enables wireless telecommunications between user equipment and a communications network. Examples include transmission equipment mounted on a rooftop, water tank, silo or other above ground structure other than a tower. The term does not encompass a tower as defined herein or any equipment associated with a tower. "Base Station" includes, but is not limited to:

- Any structure other than a tower that supports or houses radio transceivers, antennas, coaxial or fiber optic cable, regular and back-up power supplies and comparable equipment, regardless of technological configuration; and
- Equipment associated with wireless telecommunications services such as private, broadcast, and public safety services, as well as license-free wireless services and fixed wireless services such as microwave backhaul and broadband.

Concealment - A tower, base station or utility pole that is not readily identifiable as a wireless communication facility and that is designed to be aesthetically compatible with existing and proposed building(s) and uses on a site or in the neighborhood or area. Some of the types of concealment found in the City are faux dormers, faux facades, parapets, steeples, faux chimneys and unipoles.

Macro Wireless Facilities - Traditional support structures for personal wireless service facilities (PWSF) identified as macro cell facilities consist of multiple provider use towers and base stations. Macro facilities are taller infrastructure usually between 50 and 100 feet in height and have been the most commonly utilized infrastructure over the last thirty years. Macro facilities are considered the backbone of the network and allow service providers the most flexible options when deploying their usable spectrum and providing signal over the greatest area. It also allows the flexibility to target the desired signal to a specific location.

Personal Wireless Service Facilities (PWSE) - Facilities for the provision of personal wireless services. Personal wireless service facilities include transmitters, antennas, structures supporting antennas and electronic equipment that is typically installed in close proximity to a transmitter that provides commercial wireless services.

Radio Frequency (RF) - A range of frequencies that are allocated to be transmitted/received through the air without wires, with the use of transmitters/receivers and associated antennas. Radio waves are generated for fixed and/or mobile communication. A frequency or band of frequencies suitable for use in telecommunications.

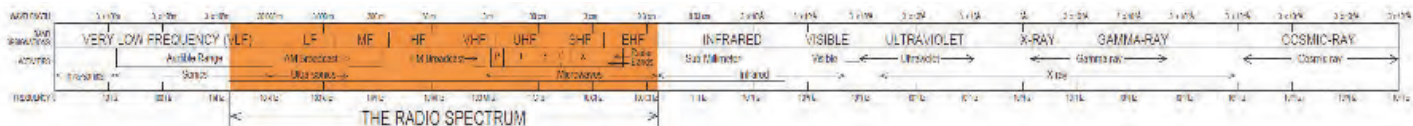
Small Wireless Facilities - Small wireless facilities have antennas mounted at lower heights, generally the height of a utility pole. The equipment is mounted on or inside these smaller poles and are interconnected with fiber optic cables which allows for greater bandwidth and faster transmission speeds. For a single service provider, the small wireless facilities are typically spaced every 650 feet, although there are many variations, creating a densification of the transmitting signals for the network. The ideal service area for a small cell is a specified corridor or neighborhood. According to Colorado Revised Statutes a small wireless facility must meet the following criteria:

- Each antenna associated with the facility must be located inside an enclosure of no more than three (3) cubic feet in volume, or in the case of antenna that have exposed elements, each antenna and all of its exposed elements must be able to fit within an enclosure of not more than three (3) cubic feet in volume; and
- All other wireless equipment associated with the facility is cumulatively no more than seventeen (17) cubic feet in volume. The following ancillary equipment is not included in this calculation: electric meters, concealment elements, telecommunications demarcation boxes, ground-based enclosures, grounding equipment, power transfer switches, cutoff switches, vertical cable runs for the connection of power and other services, and utility poles or other support structures.

Tower - Any support structure built for the primary purpose of supporting antennas and associated facilities for commercial, private, broadcast, microwave, broadband, public, public safety, licensed or unlicensed, and/or fixed or wireless services. A tower may be concealed or non-concealed.

Utility Pole - Any pole or structure designed to maintain, or used for the purpose of lines, cables, or wires for communications, cable, electricity, street lighting, other lighting standards, or comparable standards.

Wireless Spectrum - Consists of electromagnetic radiation and frequency bands. The wireless spectrum frequencies used in communication are regulated by national organizations, which specify which frequency ranges can be used by whom and for which purpose. Spectrum refers to the invisible radio frequencies that wireless signals travel over. These signals enable the use of wireless devices. The frequencies used by the wireless service providers are only a portion of what is considered electromagnetic spectrum. An invisible electro-magnetic transmitting and receiving resource determined and defined by wavelengths and found between the audible hearing range and light. The frequencies referenced for this purpose are located in spectrum used for personal wireless services and are only a small portion of what is called the electromagnetic spectrum.



APPENDIX A

INVENTORY CATALOG

SERVICE PROVIDERS: Verizon
LATITUDE/LONGITUDE: 40.6148239; -105.0375598
FACILITY OWNER/ID: Atlas Tower Holdings, LLC
FACILITY SITE NAME: FTC Long Pond
FCC ASR: 1308850
HEIGHT: 44'
NOTES:



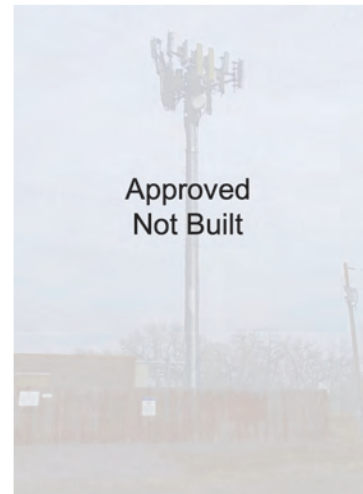
Site ID: 4 **1800 N Whitcomb Street**

LOCATION: Private Property
CATEGORY: Tower
FACILITY TYPE: Monopole
ANTENNA TYPE: Macro Cell
ZONING: County
SERVICE PROVIDERS: Verizon
LATITUDE/LONGITUDE: 40.6119052; -105.0843311
OWNER/ID: American Tower



Site #1 2808 NE Frontage Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.6252050; -104.9997494
FACILITY OWNER/ID:	Atlas Tower Holdings, LLC
FACILITY SITE NAME:	Odell Golf Course
FCC ASR:	
HEIGHT:	80'
NOTES:	Approved but not built - outside City



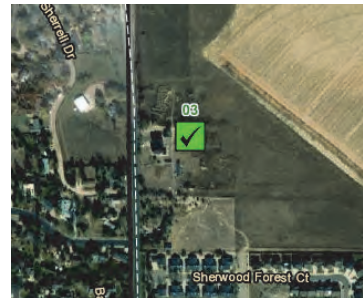
Site ID: 2 2351 Busch Drive

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Other
ANTENNA TYPE:	Macro Cell
ZONING:	I
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.6212288; -105.0064799
FACILITY OWNER/ID:	35-02
FACILITY SITE NAME:	City of Fort Collins Project/Bar/Barley Research
FCC ASR:	
HEIGHT:	112'
NOTES:	



Site ID: 3 2008 Turnberry Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Silo
ANTENNA TYPE:	Macro Cell
ZONING:	LMN
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.6148239; -105.0375598
FACILITY OWNER/ID:	Atlas Tower Holdings, LLC
FACILITY SITE NAME:	FTC Long Pond
FCC ASR:	1306850
HEIGHT:	44'
NOTES:	



Site ID: 4 1800 N Whitcomb Street

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.6119052; -105.0843311
FACILITY OWNER/ID:	American Tower Corporation, 414553
FACILITY SITE NAME:	Terry Lake 4 Co
FCC ASR:	
HEIGHT:	60'
NOTES:	



Site #5 1314 Red Cedar Circle

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	I
SERVICE PROVIDERS:	AT&T (Cricket), Sprint, T-Mobile
LATITUDE/LONGITUDE:	40.6048564; -105.0741160
FACILITY OWNER/ID:	American Tower Corporation, 302435
FACILITY SITE NAME:	Josh Ames/Wilcox & College
FCC ASR:	1225956
HEIGHT:	90'
NOTES:	



Site #6 1052 W Vine Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
ZONING:	CL
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5971174; -105.0950998
FACILITY OWNER/ID:	American Tower Corporation, CO-420055
FACILITY SITE NAME:	Fat Tire CO
FCC ASR:	
HEIGHT:	75'
NOTES:	



Site #7 833 Elm Street

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.593, -105.115
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 001
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #8 1612 Laporte Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Guy
ANTENNA TYPE:	Broadcast
ZONING:	County
SERVICE PROVIDERS:	
LATITUDE/LONGITUDE:	40.5927839; -105.1073966
FACILITY OWNER/ID:	JACOR Broadcasting of Colorado
FACILITY SITE NAME:	KCOL
FCC ASR:	1036223
HEIGHT:	203'
NOTES:	



Site #9 1612 Laporte Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Guy
ANTENNA TYPE:	Broadcast
ZONING:	County
SERVICE PROVIDERS:	
LATITUDE/LONGITUDE:	40.5921275; -105.1057214
FACILITY OWNER/ID:	JACOR Broadcasting of Colorado
FACILITY SITE NAME:	KCOL
FCC ASR:	1036224
HEIGHT:	203'
NOTES:	



Site #10 2420 Laporte Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	LMN
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5901908; -105.1216263
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Impala
FCC ASR:	
HEIGHT:	60'
NOTES:	



Site #11 2420 Laporte Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Other
ANTENNA TYPE:	Macro Cell
ZONING:	LMN
SERVICE PROVIDERS:	AT&T, Verizon
LATITUDE/LONGITUDE:	40.5901908; -105.1216263
FACILITY OWNER/ID:	Crown Castle International, 856480
FACILITY SITE NAME:	Taft and Vine/ Calvary Baptist Temple
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #12 3915 Laporte Avenue

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5901874; -105.1402496
FACILITY OWNER/ID:	
FACILITY SITE NAME:	CSU/Atmospheric Simulation Lab
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #13 137 S Bryan Avenue

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	POL
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5864537; -105.1073504
FACILITY OWNER/ID:	Sprint - DN13XC324
FACILITY SITE NAME:	City Park Ball Field
FCC ASR:	1231305
HEIGHT:	90'
NOTES:	



Site #14 139 S Bryan Avenue

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	POL
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5864251; -105.1074684
FACILITY OWNER/ID:	AT&T, DN3060
FACILITY SITE NAME:	City Park Ball Field
FCC ASR:	
HEIGHT:	90'
NOTES:	



Site #15**1058 S Shields Street**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.586, -105.097
FACILITY OWNER/ID:	Verizon/ES1416
FACILITY SITE NAME:	F ROW E City Park SC 1
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review

**Site #16****31 Cherry Street**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.591, -105.127
FACILITY OWNER/ID:	Verizon/ES983
FACILITY SITE NAME:	FTC Civic Center SC6
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



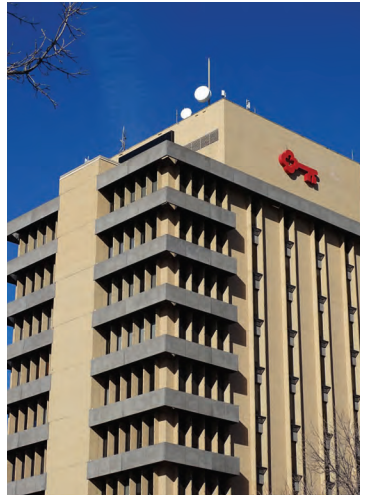
Site #17 185 N College Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Small Cell
ZONING:	D
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5887677; -105.0773825
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Unify SC 01
FCC ASR:	
HEIGHT:	45'
NOTES:	



Site #18 125 S Howes Street

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Other
ZONING:	D
SERVICE PROVIDERS:	Open Range
LATITUDE/LONGITUDE:	40.5863219; -105.0812680
FACILITY OWNER/ID:	CO0048
FACILITY SITE NAME:	Key Bank
FCC ASR:	1209072
HEIGHT:	159'
NOTES:	

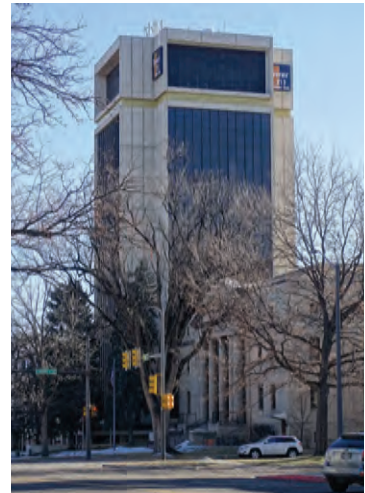


Site #19**315 W Oak Street**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	D
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5855153; -105.0819281
FACILITY OWNER/ID:	COU 3022
FACILITY SITE NAME:	Fort Collins 850/GSM/Rocky Mountain Bank
FCC ASR:	1252806 - Terminated
HEIGHT:	87'
NOTES:	

**Site #20****215 W Oak Street**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	D
SERVICE PROVIDERS:	T-Mobile, Verizon
LATITUDE/LONGITUDE:	40.5854827; -105.0801632
FACILITY OWNER/ID:	DNO1085A
FACILITY SITE NAME:	First National Bank
FCC ASR:	
HEIGHT:	197'
NOTES:	



Site #21**301 S Whitcomb Street**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.584, -105.088
FACILITY OWNER/ID:	Verizon/ES1398
FACILITY SITE NAME:	FTC Keybank SC3
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review

**Site #22****320 W Olive Street**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.584, -105.084
FACILITY OWNER/ID:	Verizon/ES1156
FACILITY SITE NAME:	Otter Box SC
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #23 124 W Magnolia Street

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Macro Cell
ZONING:	D
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5833615; -105.0787424
FACILITY OWNER/ID:	Century Link
FACILITY SITE NAME:	FTC-Ft Collins Main
FCC ASR:	1028388
HEIGHT:	140'
NOTES:	



Site #24 300 Remington Street

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	D
SERVICE PROVIDERS:	AT&T (Cricket), Sprint
LATITUDE/LONGITUDE:	40.5840067; -105.0752530
FACILITY OWNER/ID:	Sprint - DN13XC320
FACILITY SITE NAME:	DMA Plaza
FCC ASR:	
HEIGHT:	115'
NOTES:	



Site #25 903 Buckingham Street

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Silo
ANTENNA TYPE:	Macro Cell
ZONING:	I
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5907261; -105.0616884
FACILITY OWNER/ID:	Atlas Tower Holdings, LLC
FACILITY SITE NAME:	Alta Vista
FCC ASR:	1301604
HEIGHT:	67'
NOTES:	



Site #26 428 S Link Lane

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5825937; -105.0497089
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	30'
NOTES:	



Site #27 3730 Harvester Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	ATT, T-Mobile
LATITUDE/LONGITUDE:	40.5854465; -105.0066074
FACILITY OWNER/ID:	American Tower Corporation, CO-83356
FACILITY SITE NAME:	HWY-14 & I-25 1B CO/Crossroad - Northwest CMRS
FCC ASR:	1231217
HEIGHT:	80'
NOTES:	



Site #28 3801 Weiker Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	
LATITUDE/LONGITUDE:	40.5829322; -105.0066862
FACILITY OWNER/ID:	Crown Castle International, 877020
FACILITY SITE NAME:	USWW Cleary Building
FCC ASR:	1032039
HEIGHT:	80'
NOTES:	

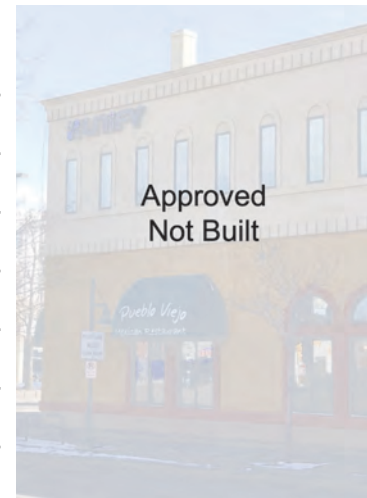


Site #29**2317 E Mulberry Street**

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.580, -105.038
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC Charco
FCC ASR:	
HEIGHT:	60'
NOTES:	Proposed Under Review

**Site #30****901 Riverside Avenue**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CL
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5796779; -105.06076236
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC East Dale
FCC ASR:	
HEIGHT:	40'
NOTES:	Approved but not built in City



Site #31 1133 Riverside Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Smokestack
ANTENNA TYPE:	Macro Cell
ZONING:	E
SERVICE PROVIDERS:	AT&T, T-Mobile
LATITUDE/LONGITUDE:	40.5770315; -105.0571753
FACILITY OWNER/ID:	American Tower Corporation, 276549
FACILITY SITE NAME:	Fries Enterprises Co
FCC ASR:	
HEIGHT:	80'
NOTES:	



Site #32 1201 Riverside Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Small Cell
ZONING:	E
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5758502; -105.0559587
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC Eastside Park SC
FCC ASR:	
HEIGHT:	35'
NOTES:	



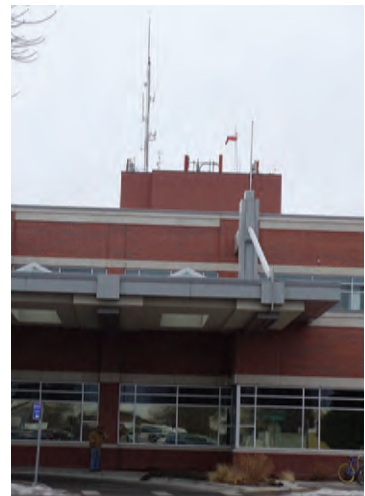
Site #33 1101 Academy Court

LOCATION:	Utility Easement
CATEGORY:	Base Station
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Macro Cell
ZONING:	I
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5741079; -105.0476228
FACILITY OWNER/ID:	PRPA, 8
FACILITY SITE NAME:	Linden-Timberline 115kV
FCC ASR:	
HEIGHT:	92'
NOTES:	To Be Removed



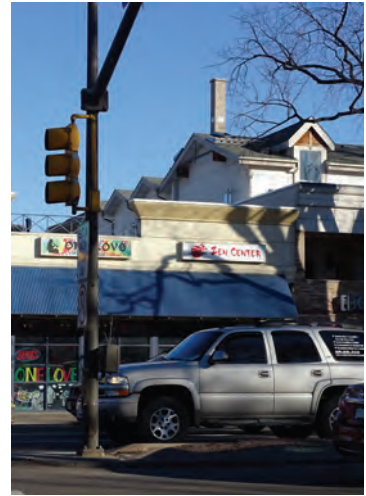
Site #34 1024 S Lemay Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	E
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5718672; -105.0571737
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Poudre Valley Hospital
FCC ASR:	1224850
HEIGHT:	66'
NOTES:	



Site #35 714 S College Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Small Cell
ZONING:	CC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5778573; -105.0766692
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Mugs Coffee SC
FCC ASR:	
HEIGHT:	48'
NOTES:	



Site #36 1231 Libbie Coy Way

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CSU
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5728078; -105.0807667
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Natural & Environmental Sciences Building
FCC ASR:	
HEIGHT:	30'
NOTES:	



Site #37 1231 Libbie Coy Way

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CSU
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5722618; -105.0811959
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Natural & Environmental Sciences Building
FCC ASR:	
HEIGHT:	40'
NOTES:	



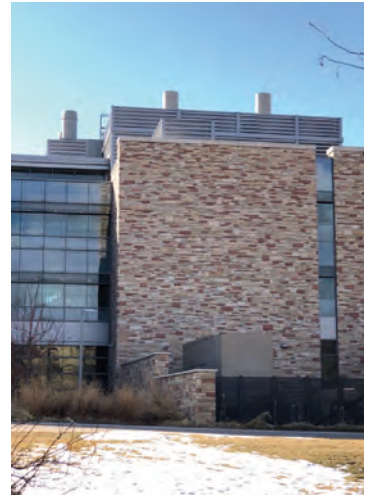
Site #38 1100 Center Avenue Mall

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CSU
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5741525; -105.0833739
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Computer Science Building
FCC ASR:	
HEIGHT:	40'
NOTES:	



Site #39 700 Meridian Avenue

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CSU
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5777625; -105.0873435
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Scott Bioengineering
FCC ASR:	
HEIGHT:	50'
NOTES:	



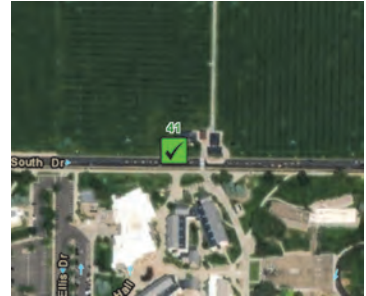
Site #40 951 Meridian Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CSU
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5749949; -105.0892734
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Student Recreation Center
FCC ASR:	
HEIGHT:	40'
NOTES:	



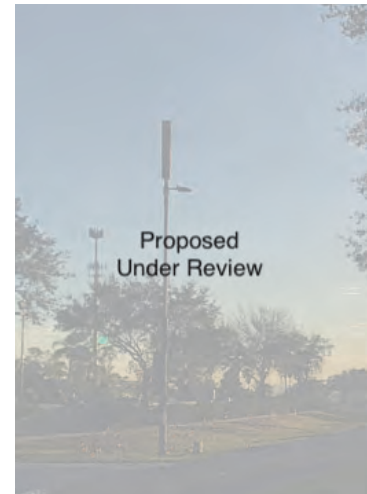
Site #41 CSU IM Field, South Drive

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	CSU
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5726899; -105.0907051
FACILITY OWNER/ID:	Crown Castle International, 823526
FACILITY SITE NAME:	CSU Intramural Field
FCC ASR:	1250189
HEIGHT:	64'
NOTES:	



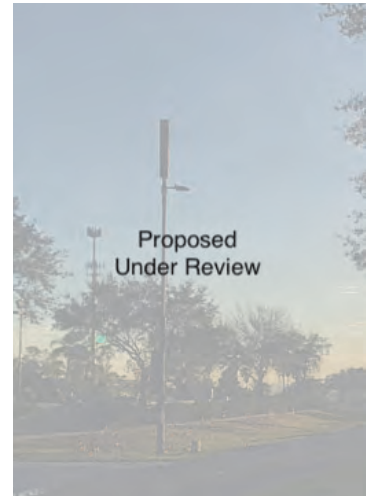
Site #42 620 S Shields Street

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.576, -105.157
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 032
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #43**1613 W Plum Street**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.576, -105.107
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 049
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review

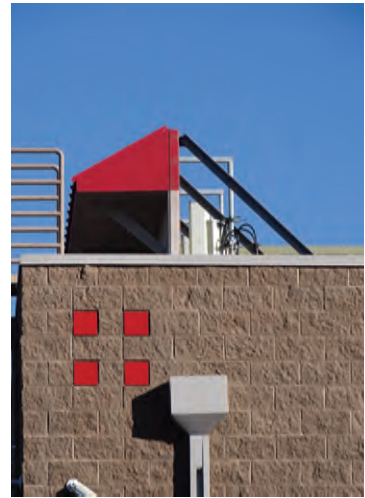
**Site #44****1409 W Elizabeth Street**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5743432; -105.1020012
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Mo Jeux SC
FCC ASR:	
HEIGHT:	47'
NOTES:	Proposed under City review



Site #45 1107 City Park Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CC
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5739286; -105.1008914
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Campus West Liquor
FCC ASR:	
HEIGHT:	32'
NOTES:	



Site #46 833 South Taft Hill Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	MMN
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.57674641; -105.1155320
FACILITY OWNER/ID:	Bethel Baptist Church
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	40'
NOTES:	



Site #47 1015 S Taft Hill Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	T-Mobile, Verizon
LATITUDE/LONGITUDE:	40.5739751; -105.1173368
FACILITY OWNER/ID:	Crown Castle International, 828344
FACILITY SITE NAME:	Taft Hill & Elizabeth
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #48 1015 S Taft Hill Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5727658; -105.1159266
FACILITY OWNER/ID:	Crown Castle International, 856479
FACILITY SITE NAME:	Taft & Elizabeth
FCC ASR:	
HEIGHT:	47'
NOTES:	

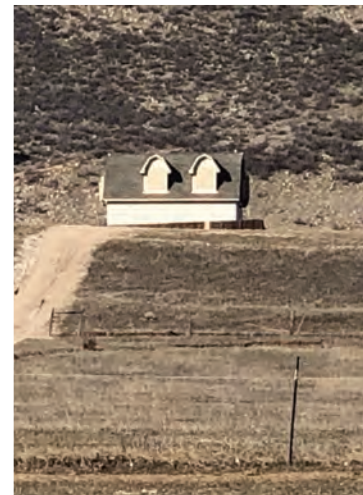


Site #49**735 S Overland Trail**

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5776025; -105.1359825
FACILITY OWNER/ID:	
FACILITY SITE NAME:	BW Pickett Equine Center
FCC ASR:	
HEIGHT:	35'
NOTES:	

**Site #50**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CO
SERVICE PROVIDERS:	Unknown
LATITUDE/LONGITUDE:	40.5636701; -105.1414095
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Rex Miller Barn
FCC ASR:	
HEIGHT:	30'
NOTES:	



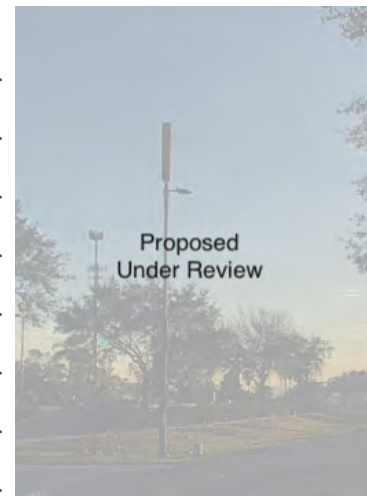
Site #51 Overland Trail, North of Drake

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	T
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5592483; -105.1372082
FACILITY OWNER/ID:	Crown Castle International, 877100
FACILITY SITE NAME:	Fill-In/Fort Collins/FTC235
FCC ASR:	
HEIGHT:	61'
NOTES:	



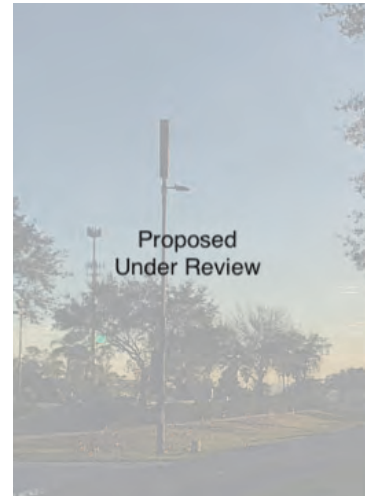
Site #52 2621 W Prospect Road

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.568, -105.127
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 084
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #53 1115 W Prospect Road

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.567, -105.099
FACILITY OWNER/ID:	AT&T/CRAN_RUTH_FTCOL_004
FACILITY SITE NAME:	COL06898F_R03_FTCOL_004
FCC ASR:	
HEIGHT:	35'
NOTES:	Proposed Under Review



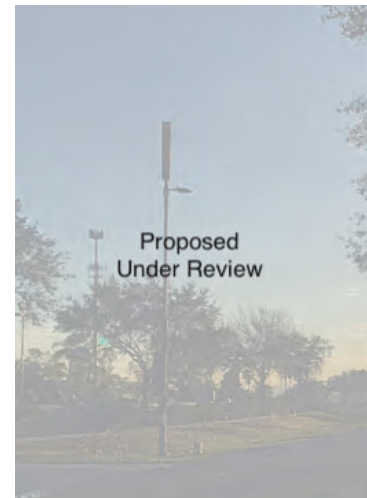
Site #54 1127 W Prospect Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5664058; -105.0985081
FACILITY OWNER/ID:	Atlas Tower Holdings, LLC
FACILITY SITE NAME:	Loose Leaf
FCC ASR:	1300635
HEIGHT:	69'
NOTES:	



Site #55**928 W Lake Street**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.569, -105.094
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 079
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review

**Site #56****808 W Prospect Road**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HMN
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5676099; -105.0905787
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Rams Crossing
FCC ASR:	
HEIGHT:	45'
NOTES:	Proposed under City review



Site #57 425 W Prospect Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	E
SERVICE PROVIDERS:	Sprint, T-Mobile
LATITUDE/LONGITUDE:	40.5662367; -105.0828021
FACILITY OWNER/ID:	T-Mobile - DN03052C
FACILITY SITE NAME:	Hilton Fort Collins
FCC ASR:	
HEIGHT:	107'
NOTES:	



Site #58 221 W Prospect Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5669664; -105.0795213
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC CSU South
FCC ASR:	
HEIGHT:	51'
NOTES:	



Site #59 1730 S College Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5641543; -105.0765343
FACILITY OWNER/ID:	CO-3010
FACILITY SITE NAME:	Prospect & College
FCC ASR:	
HEIGHT:	48'
NOTES:	



Site #60 2121 S College Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T (Cricket)
LATITUDE/LONGITUDE:	40.5605440; -105.0793007
FACILITY OWNER/ID:	Crown Castle International, 839479
FACILITY SITE NAME:	South College Avenue/Big A Self Storage
FCC ASR:	1232618
HEIGHT:	85'
NOTES:	



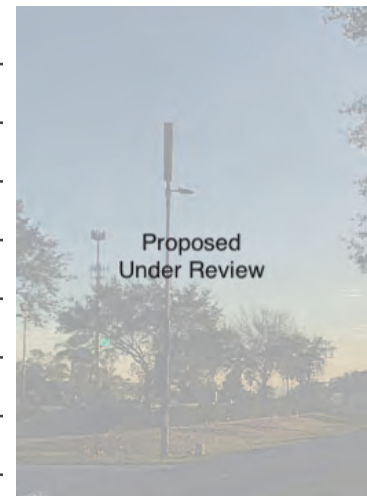
Site #61 1307 E Prospect Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5664960; -105.0545429
FACILITY OWNER/ID:	Fort Collins Club/Genesis Health Club
FACILITY SITE NAME:	Sprint - DN40XC961D
FCC ASR:	
HEIGHT:	48'
NOTES:	



Site #62 E Stuart Street

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.564, -105.062
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 102
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #63**1500 Edora Road**

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.566, -105.050
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 091
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review

**Site #64****1609 S Timberline Road**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Other
ANTENNA TYPE:	Other
ZONING:	E
SERVICE PROVIDERS:	Century Link
LATITUDE/LONGITUDE:	40.5661252; -105.0398813
FACILITY OWNER/ID:	Century Link, DN 1238-B
FACILITY SITE NAME:	Calvin Johnson
FCC ASR:	
HEIGHT:	125'
NOTES:	



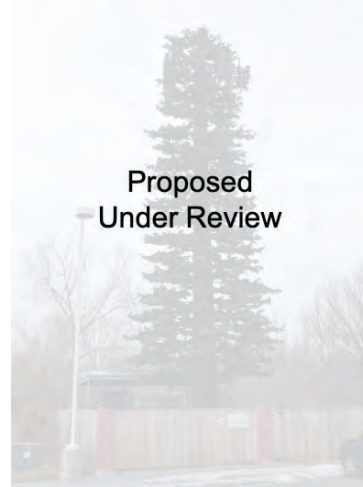
Site #65 1925 S Timberline Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	I
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5620093; -105.0410508
FACILITY OWNER/ID:	COU3154 Edora Park
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #66 2025 Sharp Point Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
ZONING:	I
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.56100246; -105.027540
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	65'
NOTES:	



Site #67

Columbia Road and Shawnee Court

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.558, -105.065
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 123
FCC ASR:	
HEIGHT:	37'
NOTES:	FTC SC 123



Site #68

E Drake Road

LOCATION:	Utility Easement
CATEGORY:	Base Station
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5523383; -105.0599473
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Drake-Timberline 115kV Line
FCC ASR:	
HEIGHT:	90'
NOTES:	To Be Removed by PRPA



Site #69 2601 S Lemay Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5519896; -105.0586480
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Scotch Pines Village
FCC ASR:	1222568
HEIGHT:	36'
NOTES:	



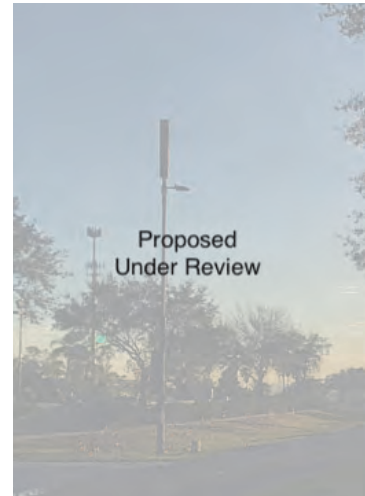
Site #70 2601 S Lemay Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	AT&T, T-Mobile
LATITUDE/LONGITUDE:	40.5507504; -105.0600488
FACILITY OWNER/ID:	Crown Castle International, 839481
FACILITY SITE NAME:	South Lemay
FCC ASR:	1250576
HEIGHT:	80'
NOTES:	



Site #71 Scarborough Drive and Constitution Ave

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.555, 105.109
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 119
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #72 2555 S Shields Street

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5537153; -105.0980590
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Wolf Pup
FCC ASR:	
HEIGHT:	38'
NOTES:	



Site #73**1212 Raintree Drive**

LOCATION:	Utility Easement
CATEGORY:	Base Station
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Macro Cell
ZONING:	MMN
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5529058; -105.1015044
FACILITY OWNER/ID:	PRPA
FACILITY SITE NAME:	Drake- Dixon Creek 115kV Line
FCC ASR:	1222569
HEIGHT:	89'
NOTES:	To Be Removed by PRPA

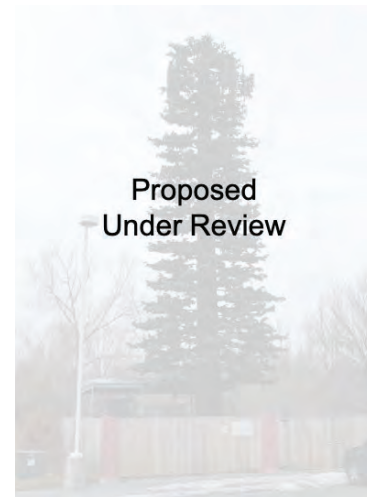
**Site #74****1600 W Drake Road**

LOCATION:	Utility Easement
CATEGORY:	Base Station
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Macro Cell
ZONING:	POL
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5529342; -105.1050515
FACILITY OWNER/ID:	PRPA DN3018 USID43096
FACILITY SITE NAME:	PRPA Drake-Dixon Creek 115kV Line
FCC ASR:	
HEIGHT:	86'
NOTES:	To Be Removed by PRPA

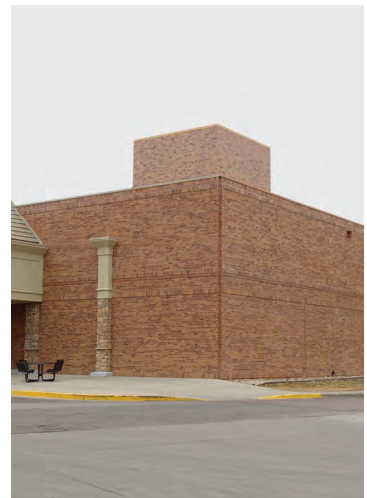


Site #75**1601 W Drake Road**

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
ZONING:	RL
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5524692; -105.1062652
FACILITY OWNER/ID:	Mobilite, DN04198D
FACILITY SITE NAME:	Summitview Church
FCC ASR:	
HEIGHT:	75'
NOTES:	Proposed under City review

**Site #76****2160 W Drake Road**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5546338; -105.1165207
FACILITY OWNER/ID:	FTC Drake Crossing
FACILITY SITE NAME:	Verizon Wireless
FCC ASR:	
HEIGHT:	35'
NOTES:	



Site #77 2170 W Drake Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	AT&T, T-Mobile
LATITUDE/LONGITUDE:	40.5538176; -105.1182682
FACILITY OWNER/ID:	Crown Castle International, 822100
FACILITY SITE NAME:	Drake Crossing Shopping Center
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #78 1300 W Swallow Road

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Macro Cell
ZONING:	RL
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5490421; -105.1006591
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	70'
NOTES:	



Site #79 1300 W Swallow Road

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Macro Cell
ZONING:	RL
SERVICE PROVIDERS:	None
LATITUDE/LONGITUDE:	40.5490687; -105.0989817
FACILITY OWNER/ID:	Sprint, DN54XC125
FACILITY SITE NAME:	Stadium Light Tower
FCC ASR:	
HEIGHT:	110'
NOTES:	



Site #80 2900 S College Avenue

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5476003; -105.0766042
FACILITY OWNER/ID:	COL03242
FACILITY SITE NAME:	College & Drake
FCC ASR:	
HEIGHT:	50'
NOTES:	Proposed under City review



Site #81 2842 Parklake Drive

LOCATION:	Utility Easement
CATEGORY:	Base Station
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Macro Cell
ZONING:	RL
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5484776; -105.0435512
FACILITY OWNER/ID:	PRPA Sprint - DN54XC126F
FACILITY SITE NAME:	Utility Pole #312/Timberline-Harmon 230kV Line
FCC ASR:	
HEIGHT:	90'
NOTES:	To Be Removed by PRPA



Site #82 2300 Horsetooth Road

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.539, -105.120
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 195
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #83 1005 W Horsetooth Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	NC
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5377587; -105.0944934
FACILITY OWNER/ID:	Crown Castle International, 857499
FACILITY SITE NAME:	Horsetooth & Taft/Poudre Valley Plaza
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #84 345 Riva Ridge Drive

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.537, -105.123
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 187
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



Site #85 3517 S Mason Street

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Small Cell
ZONING:	CG
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5392315; -105.0793567
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Chippers SC
FCC ASR:	
HEIGHT:	35'
NOTES:	



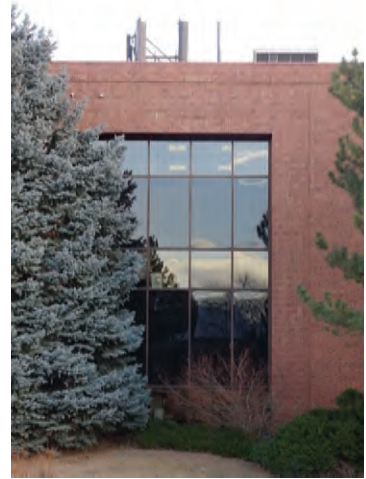
Site #86 3300 S College Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5421633; -105.0767086
FACILITY OWNER/ID:	Crown Castle International, 826600
FACILITY SITE NAME:	Perkins
FCC ASR:	
HEIGHT:	60'
NOTES:	



Site #87**3500 JFK Parkway**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	Sprint, Century Link
LATITUDE/LONGITUDE:	40.5405673; -105.0734980
FACILITY OWNER/ID:	FTC-196A
FACILITY SITE NAME:	Norwest Bank
FCC ASR:	
HEIGHT:	45'
NOTES:	

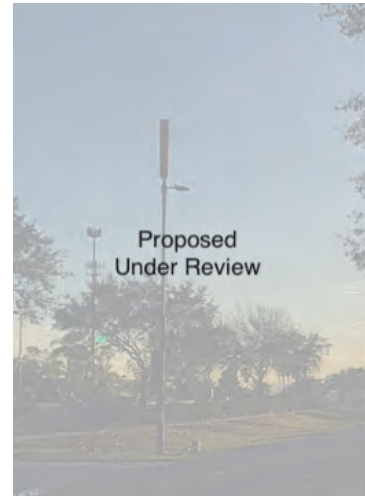
**Site #88****350 E Horsetooth Road**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T (Cricket)
LATITUDE/LONGITUDE:	40.5394503; -105.0726826
FACILITY OWNER/ID:	FNL-011A
FACILITY SITE NAME:	Marriott Hotel
FCC ASR:	
HEIGHT:	61'
NOTES:	



Site #89 500 E Horsetooth Road

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5358, -105.072
FACILITY OWNER/ID:	AT&T/COL06896F_R01(FTCOL_009)
FACILITY SITE NAME:	CRAN_RUTH_FTCOL/257167 (Node)
FCC ASR:	
HEIGHT:	35'
NOTES:	Proposed Under Review



Site #90 2057 Vermont Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	E
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5430560; -105.0405908
FACILITY OWNER/ID:	SBA Communications, CO40865
FACILITY SITE NAME:	Mister Money
FCC ASR:	1273951
HEIGHT:	60'
NOTES:	



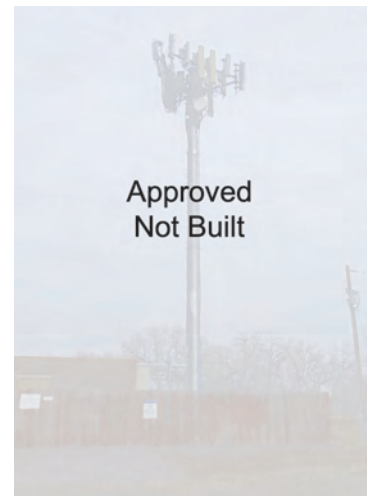
Site #91 3400 Timberline Road

LOCATION:	Public Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	MMN
SERVICE PROVIDERS:	AT&T (Cricket), Century Link
LATITUDE/LONGITUDE:	40.5421103; -105.0369207
FACILITY OWNER/ID:	FNL-010A
FACILITY SITE NAME:	Fort Collins High School
FCC ASR:	
HEIGHT:	70'
NOTES:	



Site #92 3405 S Timberline Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Rooftop
ANTENNA TYPE:	Macro
ZONING:	
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.540, -105.046
FACILITY OWNER/ID:	AT&T
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	35'
NOTES:	This will replace Site #93



Site #93 2000 E Horsetooth Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	E
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5394376; -105.0415171
FACILITY OWNER/ID:	CO-0179
FACILITY SITE NAME:	Platt River Headquarters
FCC ASR:	
HEIGHT:	135'
NOTES:	Unipole to be removed and new site across the street will become Site #67 as a rooftop



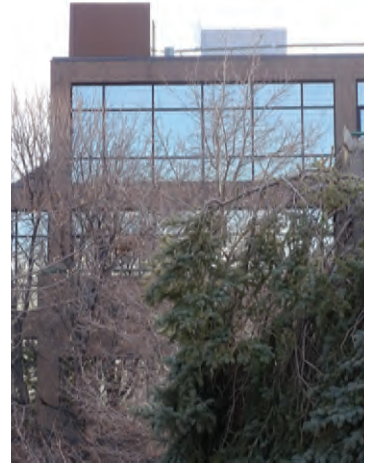
Site #94 1961 Caribou Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Other
ANTENNA TYPE:	Macro Cell
ZONING:	E
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5305273; -105.0419365
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Foxstone
FCC ASR:	
HEIGHT:	40'
NOTES:	Proposed under City review



Site #95**155 Boardwalk Drive**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5322219; -105.0762982
FACILITY OWNER/ID:	
FACILITY SITE NAME:	First National Bank
FCC ASR:	
HEIGHT:	45'
NOTES:	

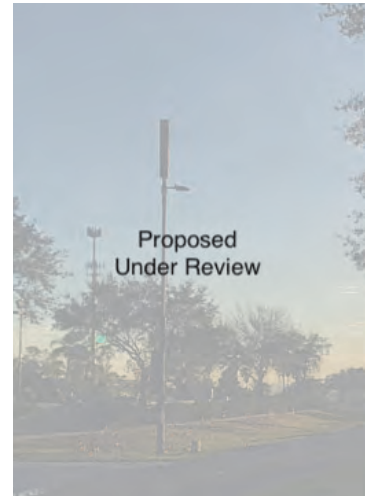
**Site #96****3761 South Mason Street**

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5354427; -105.0799192
FACILITY OWNER/ID:	COL03016-LTE 3C
FACILITY SITE NAME:	Horsetooth & College/Creager Park
FCC ASR:	10093602
HEIGHT:	40'
NOTES:	



Site #97 Manhattan Ave and Fir Court

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.534, -105.089
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 200
FCC ASR:	
HEIGHT:	37'
NOTES:	Proposed Under Review



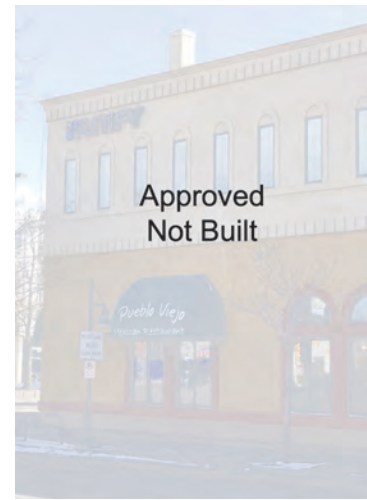
Site #98 4001B S Taft Rd

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	AT&T (Cricket), Verizon
LATITUDE/LONGITUDE:	40.5324665; -105.1162149
FACILITY OWNER/ID:	Crown Castle International, 877015
FACILITY SITE NAME:	Boats Unlimited
FCC ASR:	
HEIGHT:	100'
NOTES:	



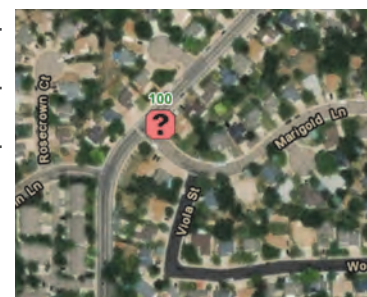
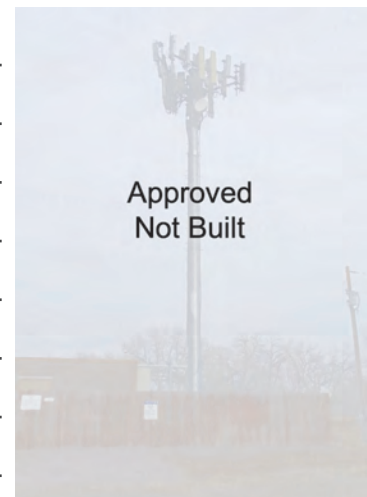
Site #99 1621 W Harmony Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Other
ANTENNA TYPE:	Macro Cell
ZONING:	LMN
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5227607; -105.1060815
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Westbury
FCC ASR:	
HEIGHT:	40'
NOTES:	Approved not built in City



Site #100 Starflower Drive and Marigold Lane

LOCATION:	ROW
CATEGORY:	Tower
FACILITY TYPE:	Utility Light
ANTENNA TYPE:	Small Cell
ZONING:	
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.526, -105.093
FACILITY OWNER/ID:	Verizon
FACILITY SITE NAME:	FTC SC 209
FCC ASR:	
HEIGHT:	37'
NOTES:	



Site #101 4356 S College Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	AT&T (Cricket), Sprint, Verizon
LATITUDE/LONGITUDE:	40.5262322; -105.0750092
FACILITY OWNER/ID:	American Tower Corporation, 302437
FACILITY SITE NAME:	Warren Lake
FCC ASR:	
HEIGHT:	85'
NOTES:	



Site #102 4620 S College Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5224932; -105.0761229
FACILITY OWNER/ID:	Crown Castle International, 856958
FACILITY SITE NAME:	Harmony & College
FCC ASR:	
HEIGHT:	75'
NOTES:	



Site #103 4615 Hogan Drive

LOCATION:	Public Property
CATEGORY:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Macro and Public Safety
ZONING:	UE
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5230484; -105.0715425
FACILITY OWNER/ID:	Poudare Fire, Ft. Collins 7
FACILITY SITE NAME:	CO0052
FCC ASR:	
HEIGHT:	120'
NOTES:	



Site #104 4824 S Lemay Avenue

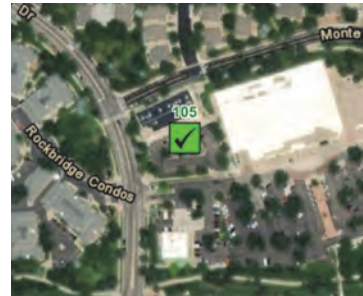
LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5193067; -105.0573035
FACILITY OWNER/ID:	
FACILITY SITE NAME:	FTC Collindale
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #105

1414-B E Harmony Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5249478; -105.0529308
FACILITY OWNER/ID:	DN60XC083-A
FACILITY SITE NAME:	Harmony Market Place
FCC ASR:	
HEIGHT:	42'
NOTES:	



Site #106

1620 Oakridge Drive

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.5228959; -105.0471029
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Hampton Inn
FCC ASR:	
HEIGHT:	38'
NOTES:	



Site #107 1805 E Harmony Road

LOCATION:	Utility Easement
CATEGORY:	Base Station
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5233179; -105.0440015
FACILITY OWNER/ID:	DN03292D
FACILITY SITE NAME:	PRPA Timberline
FCC ASR:	
HEIGHT:	110'
NOTES:	To Be Removed by PRPA



Site #108 2121 E Harmony Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Century Link, Verizon
LATITUDE/LONGITUDE:	40.5219588; -105.0369717
FACILITY OWNER/ID:	FTC-233B
FACILITY SITE NAME:	Poudre Valley Health System
FCC ASR:	
HEIGHT:	49'
NOTES:	



Site #109 4601 Corbett Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Empty
LATITUDE/LONGITUDE:	40.5216349; -105.0281368
FACILITY OWNER/ID:	Crown Castle International, 839226
FACILITY SITE NAME:	Corbett Drive
FCC ASR:	
HEIGHT:	63'
NOTES:	



Site #110 3003 E Harmony Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5226643; -105.0223751
FACILITY OWNER/ID:	230
FACILITY SITE NAME:	FTC Peloton
FCC ASR:	
HEIGHT:	65'
NOTES:	



Site #111 35287 Precision Drive

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	HC
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.518096189 -105.0112003
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
FCC ASR:	
HEIGHT:	39'
NOTES:	



Site #112 4305 E Harmony Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	T-Mobile, Verizon
LATITUDE/LONGITUDE:	40.5228437; -104.9947376
FACILITY OWNER/ID:	American Tower Corporation, CO-82108
FACILITY SITE NAME:	Harmony
FCC ASR:	
HEIGHT:	84'
NOTES:	



Site #113 4651 Weitzel Street

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5225959; -104.9900651
FACILITY OWNER/ID:	Crown Castle International, 877017
FACILITY SITE NAME:	USWW Graham Land
FCC ASR:	
HEIGHT:	117'
NOTES:	



Site #114 6101 S CO Road 7

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	T-Mobile
LATITUDE/LONGITUDE:	40.5034636; -105.0038983
FACILITY OWNER/ID:	Skyway Towers, CO-04029
FACILITY SITE NAME:	Harmony Rd
FCC ASR:	
HEIGHT:	100'
NOTES:	



Site #115**6131 Ziegler Road**

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Silo
ANTENNA TYPE:	Macro Cell
ZONING:	LMN
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.5012902; -105.0208970
FACILITY OWNER/ID:	Atlas Tower Holdings, LLC
FACILITY SITE NAME:	Epic Park
FCC ASR:	1299189
HEIGHT:	40'
NOTES:	

**Site #116****6015 S Timberline Road**

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Silo
ANTENNA TYPE:	Macro Cell
ZONING:	LMN
SERVICE PROVIDERS:	AT&T
LATITUDE/LONGITUDE:	40.5061923; -105.0467733
FACILITY OWNER/ID:	American Tower Corporation, CO-283557
FACILITY SITE NAME:	Timberline/Kechter
FCC ASR:	1282360
HEIGHT:	55'
NOTES:	



Site #117

6132 S College Avenue

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	Empty
LATITUDE/LONGITUDE:	40.5005621; -105.0761475
FACILITY OWNER/ID:	Crown Castle International, 839274
FACILITY SITE NAME:	Fort Collins
FCC ASR:	
HEIGHT:	86'
NOTES:	



Site #118

508 W Trilby Road

LOCATION:	Private Property
CATEGORY:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
ZONING:	MMN
SERVICE PROVIDERS:	Sprint
LATITUDE/LONGITUDE:	40.4955417; -105.0855572
FACILITY OWNER/ID:	CO-0701A
FACILITY SITE NAME:	Good Samaritan Center
FCC ASR:	
HEIGHT:	50'
NOTES:	



Site #119

6520 S College Avenue

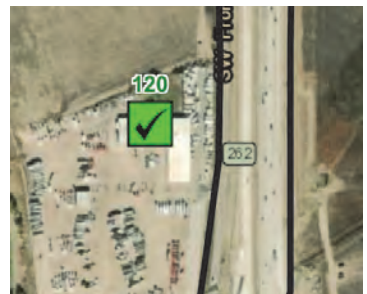
LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	CG
SERVICE PROVIDERS:	AT&T, Verizon
LATITUDE/LONGITUDE:	40.4957451; -105.0764375
FACILITY OWNER/ID:	Crown Castle International, 855731
FACILITY SITE NAME:	N Loveland and 287
FCC ASR:	10093693
HEIGHT:	60'
NOTES:	



Site #120

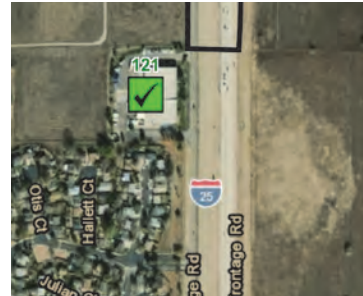
7301 SW Frontage Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	AT&T, Verizon
LATITUDE/LONGITUDE:	40.4847229; -104.9931361
FACILITY OWNER/ID:	Crown Castle International, 855728
FACILITY SITE NAME:	I25 & 392
FCC ASR:	
HEIGHT:	75'
NOTES:	



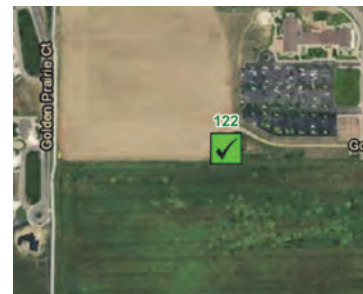
Site #121 8101 SW Frontage Road

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	Unknown
LATITUDE/LONGITUDE:	40.4715817; -104.9930380
FACILITY OWNER/ID:	Crown Castle International, 877016
FACILITY SITE NAME:	Gardner Signs
FCC ASR:	
HEIGHT:	59'
NOTES:	



Site #122 1898 Good Shepherd Drive

LOCATION:	Private Property
CATEGORY:	Tower
FACILITY TYPE:	Silo
ANTENNA TYPE:	Macro Cell
ZONING:	County
SERVICE PROVIDERS:	Verizon
LATITUDE/LONGITUDE:	40.4766757; -105.0457979
FACILITY OWNER/ID:	American Tower Corporation, 414271
FACILITY SITE NAME:	Trilby CO
FCC ASR:	1285063
HEIGHT:	40'
NOTES:	



Site #123**205 Collard Avenue**

LOCATION: Private Property

CATEGORY: Base Station

FACILITY TYPE: Roof

ANTENNA TYPE: Macro Cell

ZONING: County

SERVICE PROVIDERS: Verizon

LATITUDE/LONGITUDE: 40.4783058; -105.0748570

FACILITY OWNER/ID: Verizon

FACILITY SITE NAME: FTC Carpenter

FCC ASR:

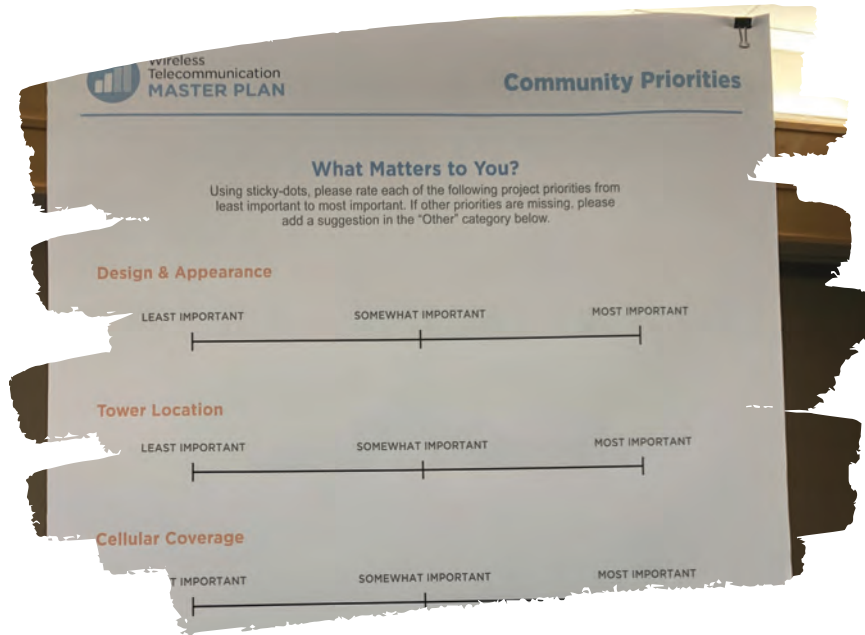
HEIGHT: 35'

NOTES:



APPENDIX B

WIRELESS SURVEY



Fort Collins Wireless Master Plan Survey

SURVEY RESPONSE REPORT

26 April 2017 - 20 April 2021

PROJECT NAME:

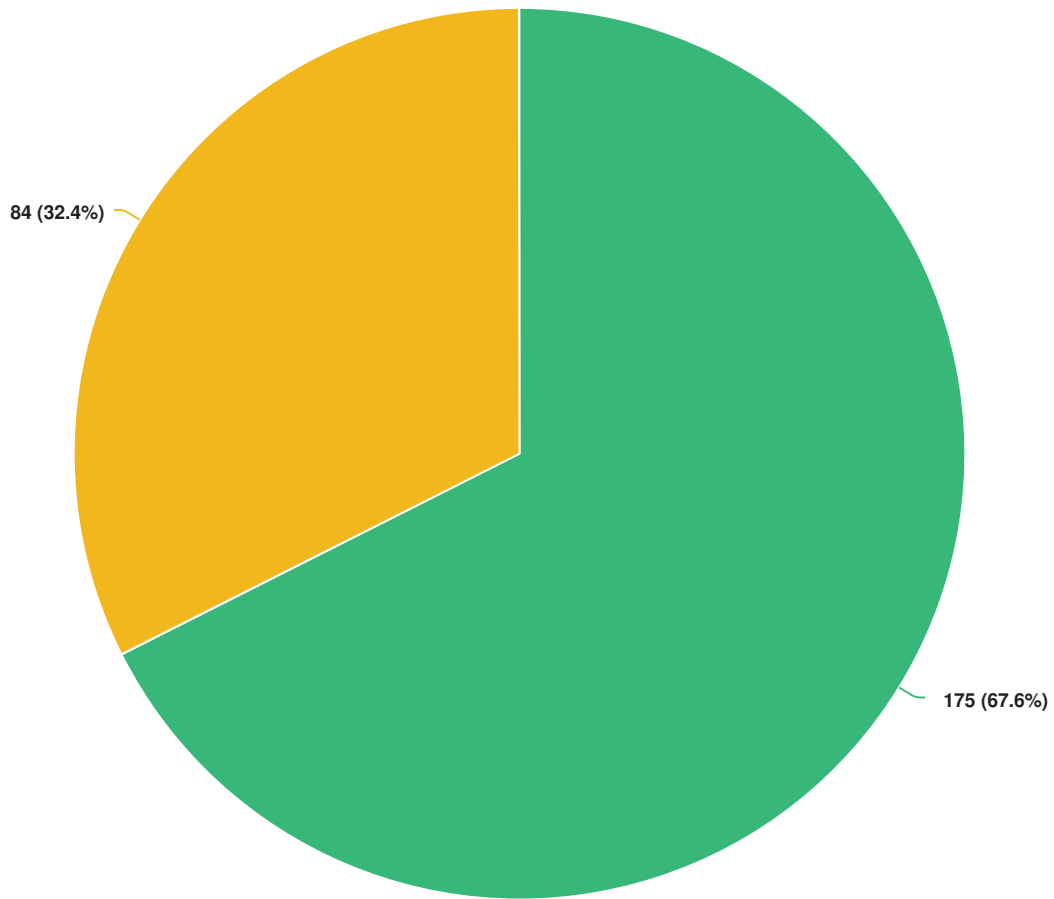
Wireless Master Plan





Q1 In the future, would you prefer fewer but taller towers or additional short facilities?

Analysis has shown that the City's existing regulations for wireless infrastructure has resulted in a higher number of facilities that are shorter. While this ha...



Question options

- Taller facilities with multiple collocation possibilities
- Shorter facilities but potentially more of them

Optional question (259 response(s), 12 skipped)
Question type: Radio Button Question

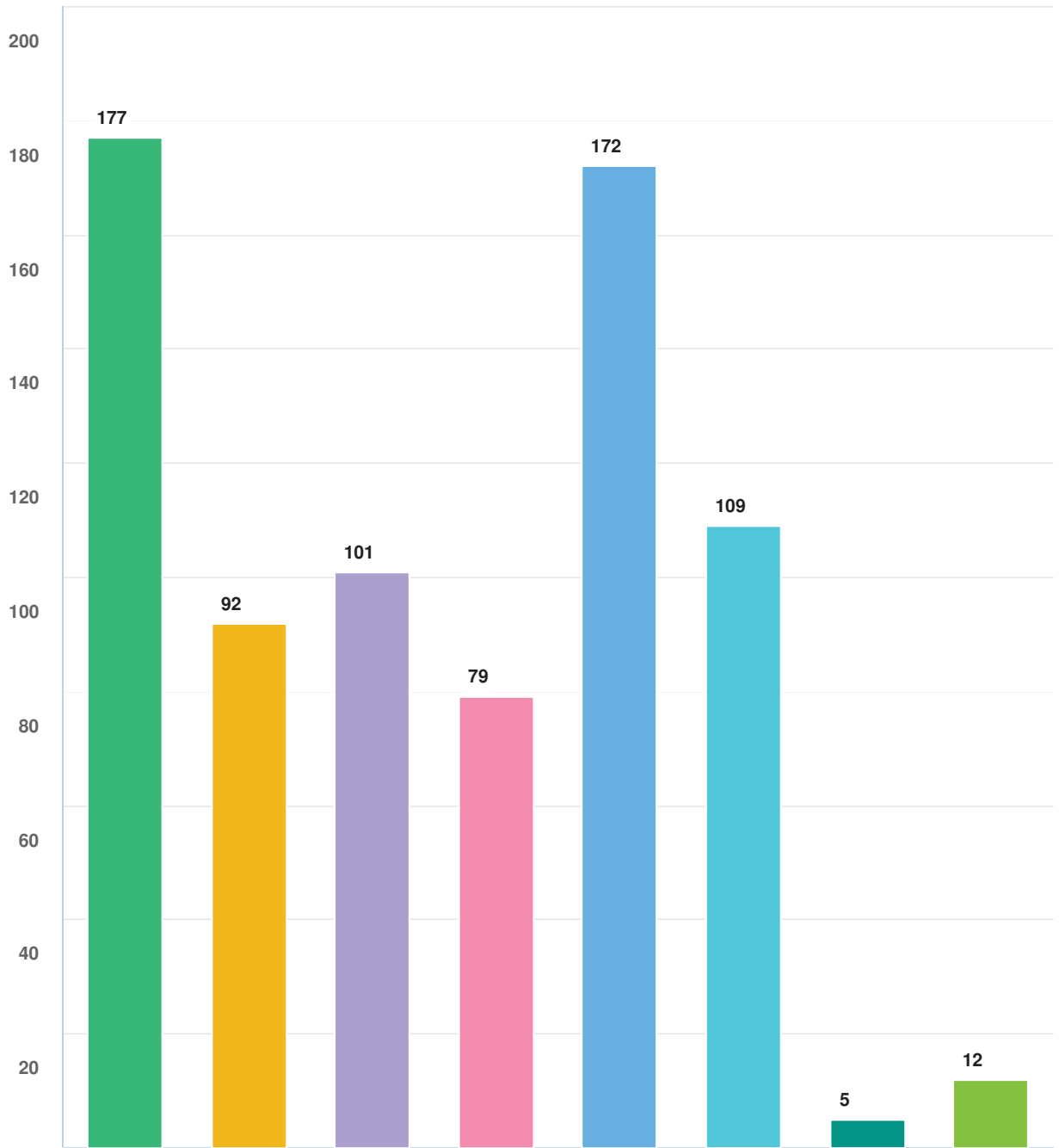
Q2 Please rank the following in order of importance to you concerning cell towers on private property.

OPTIONS	AVG. RANK
Coverage/Capacity (ability to provide service and for other providers to collocate on the tower)	1.34
Location (for example, properties where height is less impactful due to the surrounding context)	2.10
Aesthetics (height, color, appearance of cell tower)	2.54

Optional question (266 response(s), 5 skipped)

Question type: Ranking Question

Q3 Which type of concealed cell tower do you think is appropriate in Fort Collins? Check all that apply.

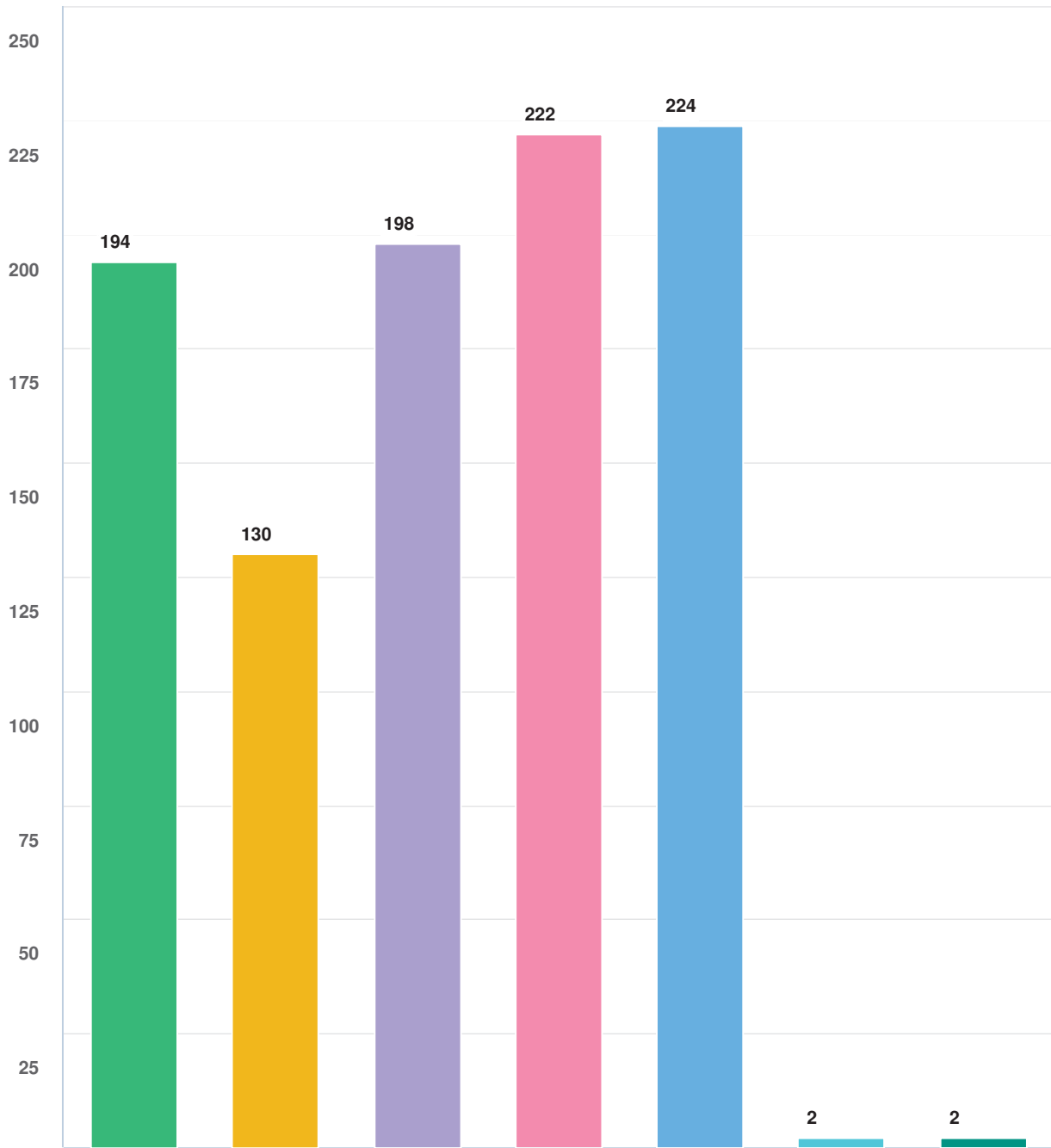


Question options

- Monopine
- Bell Tower
- Unipole
- Faux Silo
- Flag Pole
- Faux Water Tower
- None of these
- Other (please specify)

Optional question (267 response(s), 4 skipped)
Question type: Checkbox Question

Q4 Which type of cell equipment colocation do you think is appropriate in Fort Collins?
 Check all that apply.

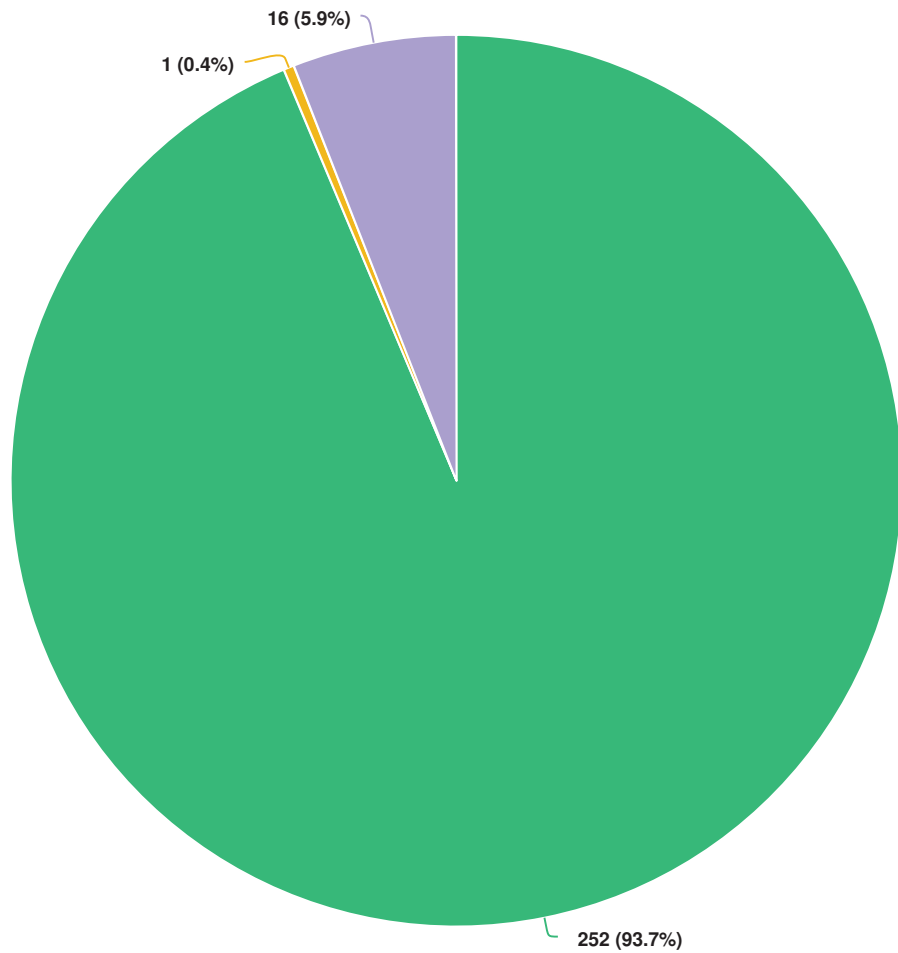


Question options

- Utility Attachments
- Water Tanks
- Rooftop Non-Concealed
- Rooftop Semi-Concealed
- Rooftop Concealed
- None of these
- Other (please specify)

Optional question (268 response(s), 3 skipped)
 Question type: Checkbox Question

Q5 Would you support locating concealed cell towers on City-owned property? Analysis has shown that locating facilities on publicly-owned property, such as City parks and golf-courses, could address coverage and capacity shortages in residential areas....



Question options

- Yes
- No
- Maybe/Depends

Optional question (269 response(s), 2 skipped)
Question type: Radio Button Question

Q6 If you answered "No" or "Maybe/Depends" to the previous question, please explain why:

Anonymous

3/18/2021 12:20 PM

I feel strongly that you should guide location away from residential areas so if you can put it in city owned properties to reduce the need for residential location that is great. These should all be placed in more commercial related areas. Additionally, these should never be in play grounds or anywhere close to children's activities.

Anonymous

3/22/2021 09:59 AM

I am not especially keen on mixing public and private interests. It has been my experience (govt. Contracting) that the private business comes away with the better deal in these situations.

<p>Anonymous 3/26/2021 01:11 PM</p>	<p>If the location was aesthetically appropriate I would support</p>
<p>Anonymous 4/01/2021 10:56 AM</p>	<p>https://childrenshealthdefense.org/defender/5g-wireless-antennas-private-property/</p>
<p>Anonymous 4/01/2021 10:59 AM</p>	<p>Not on golf courses or parks</p>
<p>Anonymous 4/01/2021 11:21 AM</p>	<p>Would it cost citizens to do this? Would the city collect any fees from cell service providers? Would city maintenance employees be needed to maintain these towers? Does this cause more tax money to be needed?</p>
<p>Anonymous 4/01/2021 12:37 PM</p>	<p>As long as two conditions were met. First, granting of use of City property is offered equally to all providers without bias. Second, the City receives some reasonable compensation for the use of the property, so City assets are not indirectly subsidizing infrastructure for some carriers, nor is there an incentive to locate on public property vs. leasing from private property owners.</p>
<p>Anonymous 4/01/2021 12:50 PM</p>	<p>Wouldn't want them to look obnoxious.</p>
<p>Anonymous 4/01/2021 08:35 PM</p>	<p>Depends upon where on the property the cell tower is located as well as its ability to blend in with the ascetics of the property</p>
<p>Anonymous 4/02/2021 08:01 AM</p>	<p>How they look</p>
<p>Anonymous 4/02/2021 08:55 PM</p>	<p>As long as it doesn't take away from the function of the city owned property for the public's use</p>
<p>Anonymous 4/06/2021 01:28 PM</p>	<p>due to aesthetics</p>

Anonymous

4/06/2021 04:10 PM

It depends on if the limitations are equal to those imposed on private companies.

Anonymous

4/08/2021 07:27 PM

Less emf exposure to humans is top priority

Anonymous

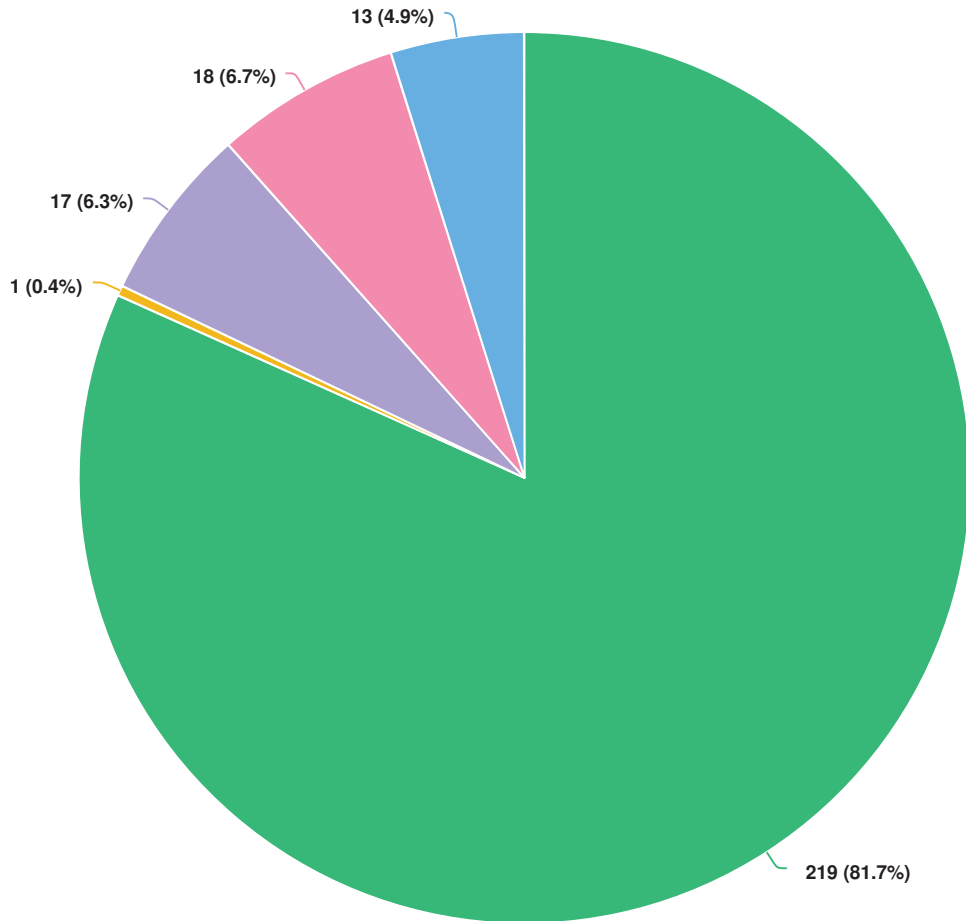
4/09/2021 02:54 PM

It needs to be practical in cost for businesses too. Fort Collins has a history of having unrealistic expectations that impact businesses and drives them away. Good job losing In N Out! They would have brought in some much needed revenues.

Optional question (15 response(s), 256 skipped)

Question type: Essay Question

Q7 Choose which best describes you:

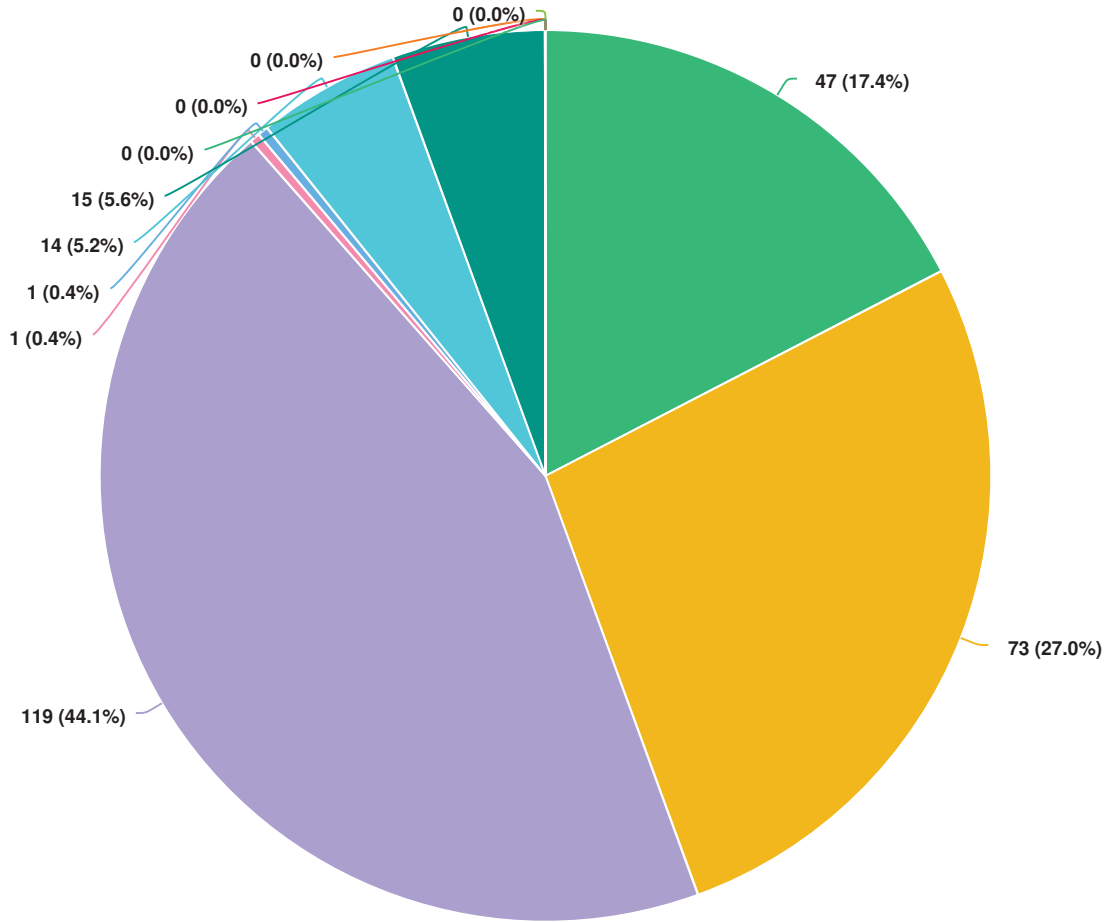


Question options

- I live and work in Fort Collins year-round
- I live and work in Fort Collins seasonally
- I live outside of Fort Collins but work in the City
- I live in Fort Collins but work outside of the City
- Other (please specify)

Optional question (268 response(s), 3 skipped)
Question type: Radio Button Question

Q8 My Wireless Service Provider is:

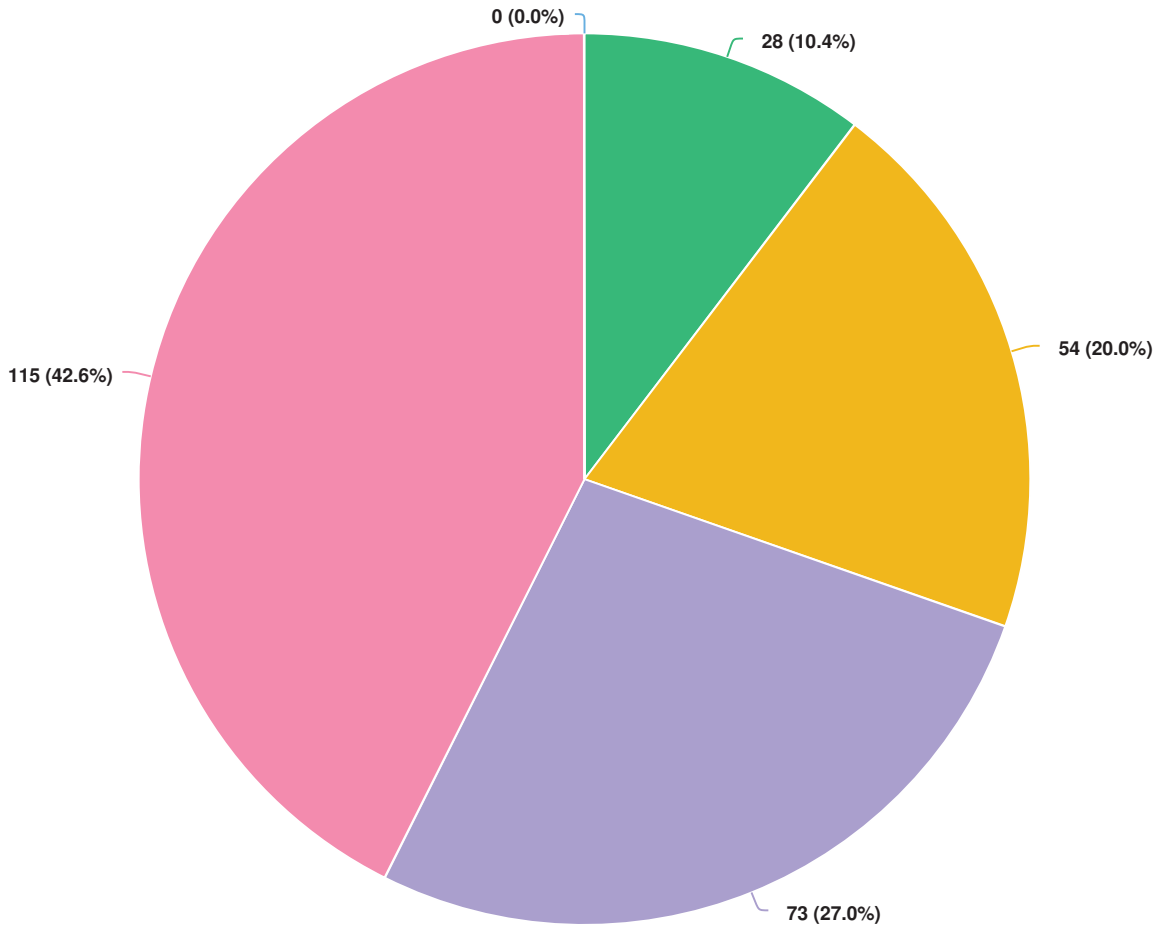


Question options

- AT&T
- T-Mobile/Sprint
- Verizon
- Cricket
- Metro by T-Mobile
- Xfinity Mobile
- Other (please specify)
- Boost
- Straight Talk
- Mint Mobile
- Not Applicable/I don't own a wireless device

Optional question (270 response(s), 1 skipped)
 Question type: Radio Button Question

Q9 At home my network coverage is:



Question options

- Excellent
- Good
- Acceptable
- Poor
- N/A

Optional question (270 response(s), 1 skipped)
Question type: Radio Button Question

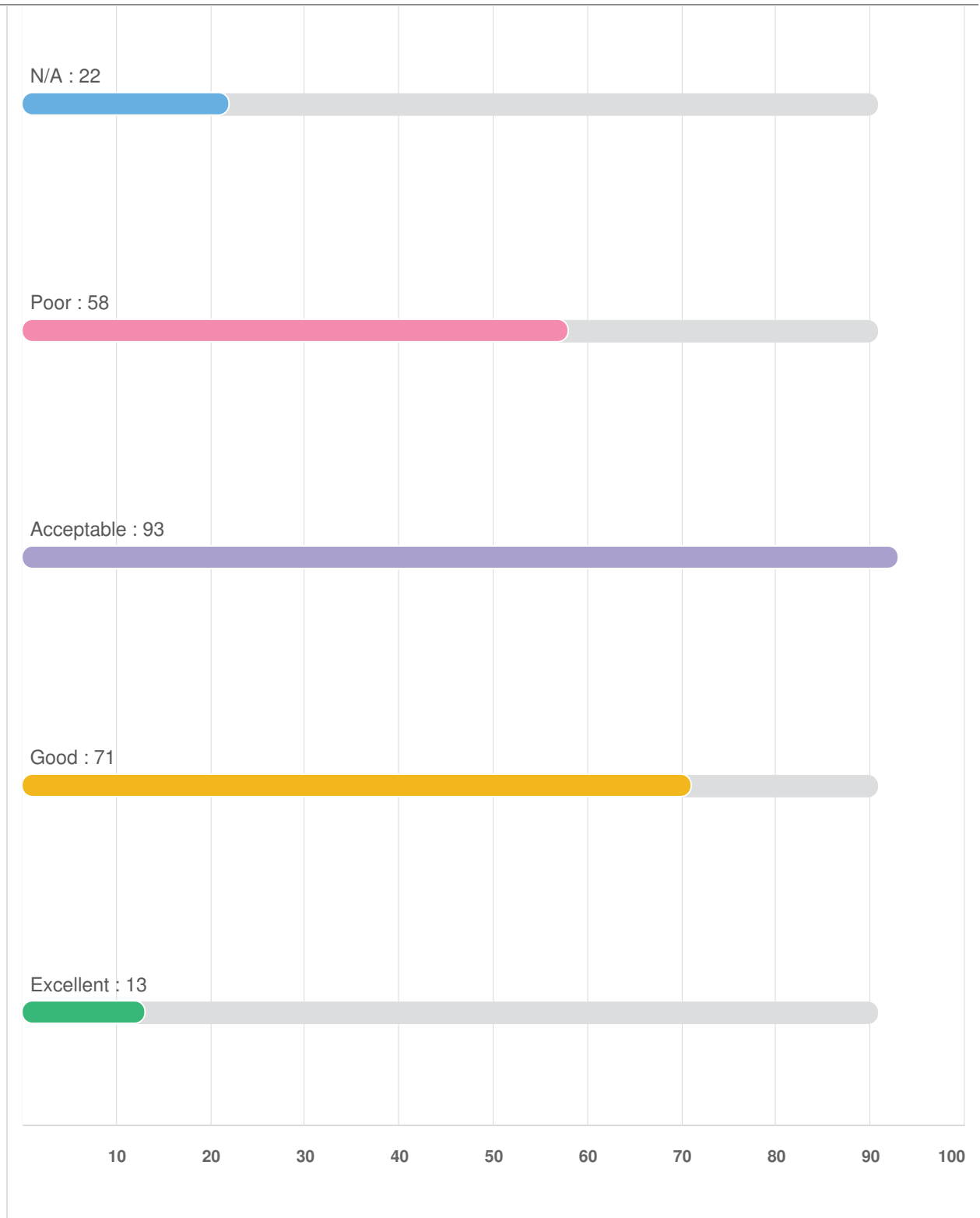
Q10 Please rate your network coverage as you travel around or work in Fort Collins (see map below for reference):

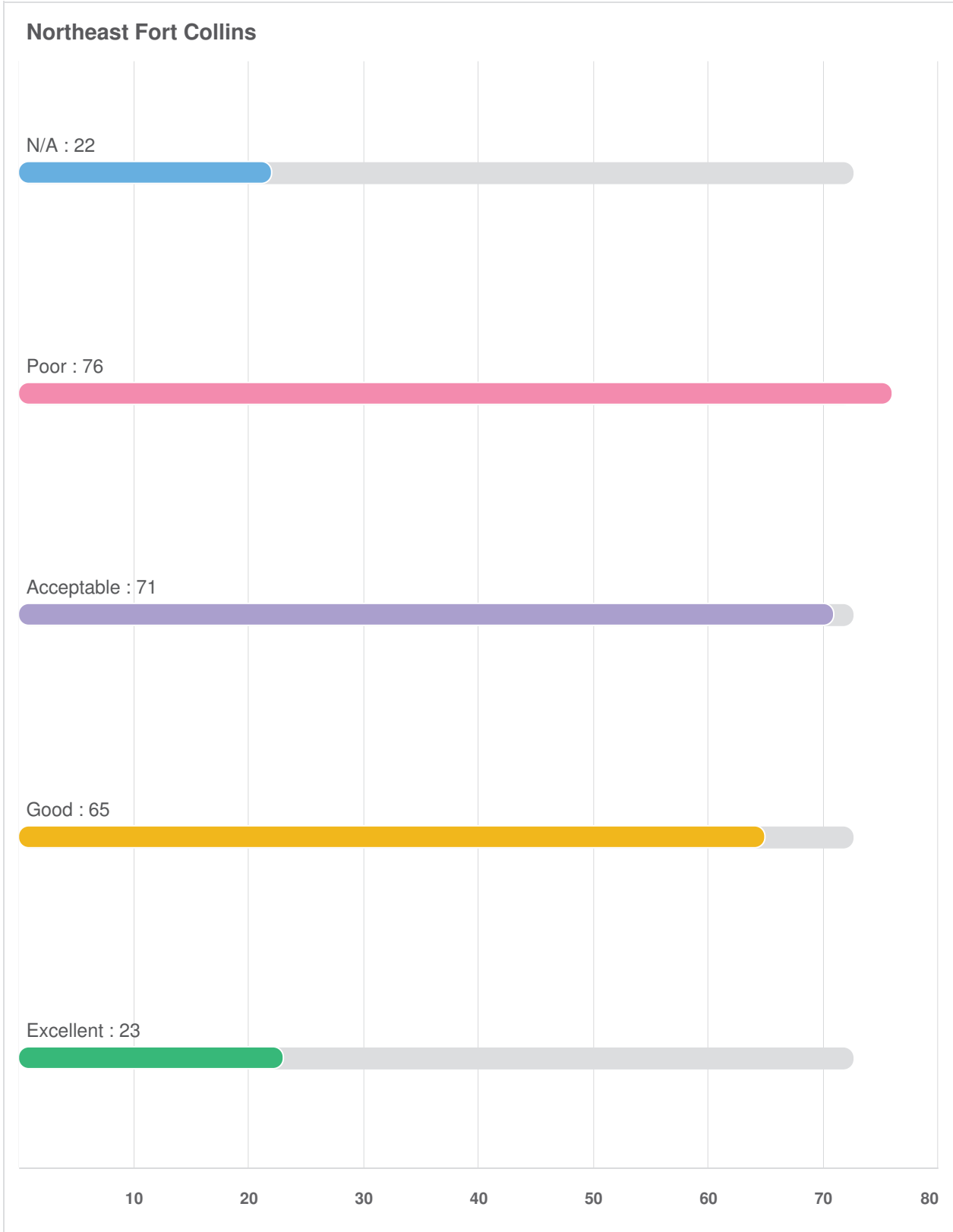


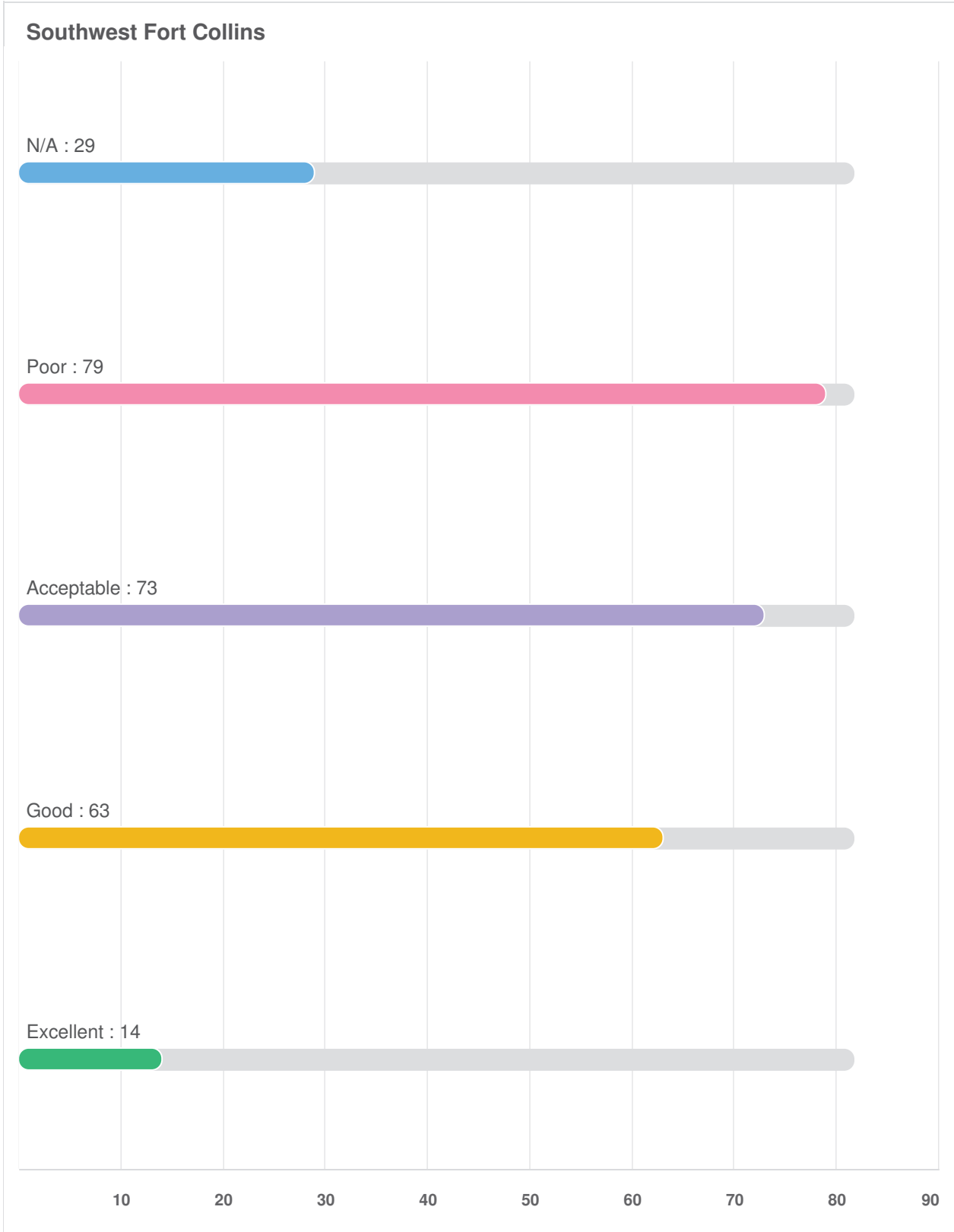
Optional question (263 response(s), 8 skipped)
Question type: Likert Question

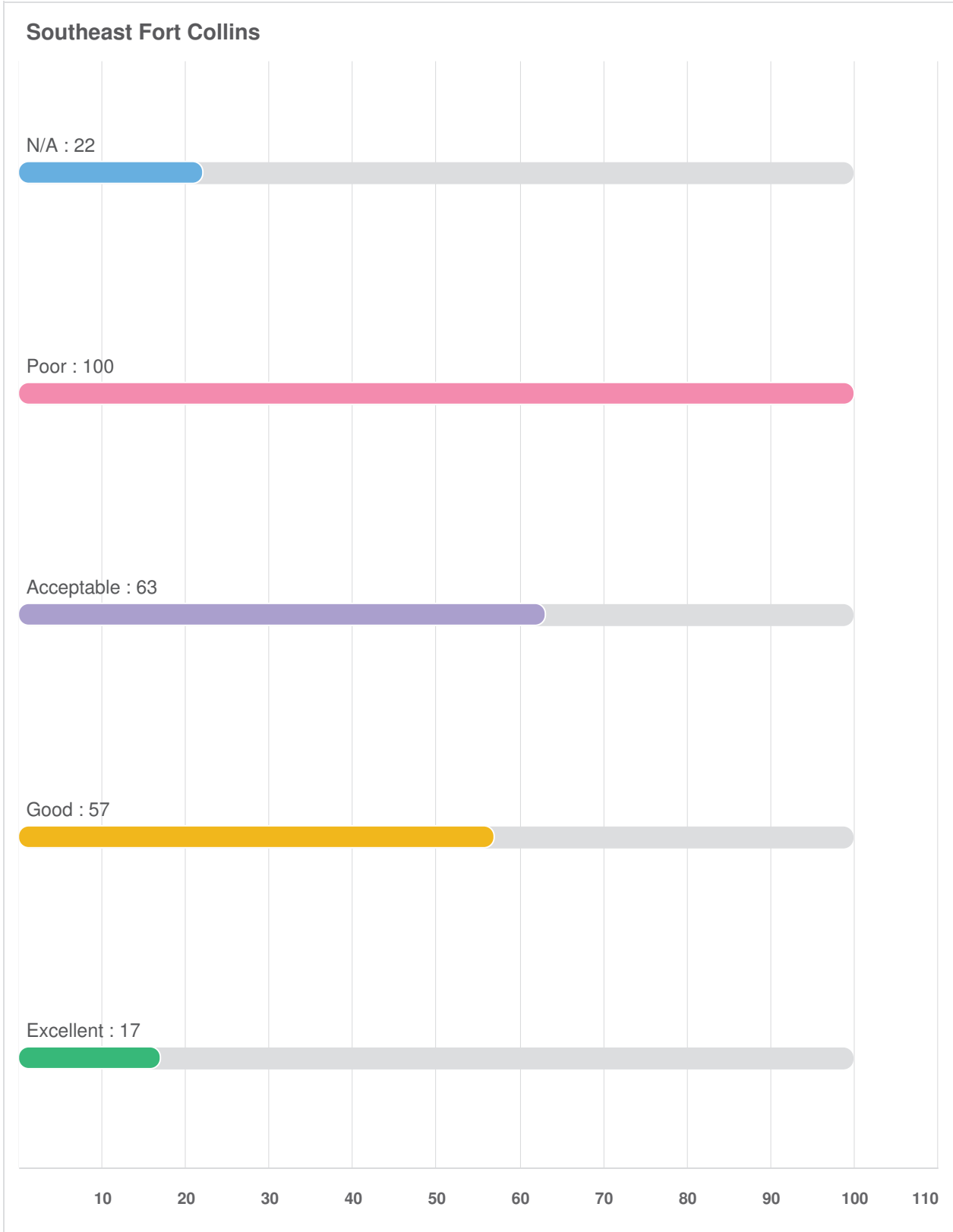
Q10 | Please rate your network coverage as you travel around or work in Fort Collins (see map below for reference):

Northwest Fort Collins









Q11 Are there specific areas of town where your service is poor? Please explain below. Example: "I work close to the intersection of Horsetooth and College, and the cell

service inside my office building is bad."

Anonymous

3/18/2021 11:47 AM

As you go north from my house on Turnberry and especially in the Maple Hill neighborhood, coverage is bad.

Anonymous

3/18/2021 12:20 PM

I am more concerned about areas that people can rely will not have wireless. Who is monitoring the EMF's. Nobody. With all these additions of cells what about the cumulative effect. We are all just "trusting" that it is below the federal requirements but really no one is watching that. We should require the cellular companies to pay for regular monitoring that the City administers. Other cities are doing this and we should be on the front end of that kind of accountability as well.

Anonymous

3/18/2021 03:00 PM

The intersection of Horsetooth and Shields heading west is terrible. It's a dead zone. My mom lived off of Casa Blanca and my phone would not work in her home nor would internet very well

Anonymous

3/19/2021 01:14 PM

My house in Westchase

Anonymous

3/19/2021 02:02 PM

I live on Homer Drive, southwest of City Park. Coverage for Sprint is highly variable on our property.

wu1836

3/19/2021 03:15 PM

Cell service is terrible near the intersection of Harmony and Shields (by Front Range), on Seneca near Webber Middle School, on Shields in front of Rocky Mountain High School, at the intersection of Taft and Horsetooth and near Super Target/The Group offices, etc on Harmony. We live near the intersection of Taft and Harmony and had such poor coverage on ATT we had to switch carriers. That improved coverage somewhat, but I feel like

	this area of town is really lacking for coverage in general.
Anonymous 3/19/2021 03:28 PM	Turnberry, Country Club Road, Richards Lake, Maple Hill, the complete Northeast section of Fort Collins that is continually neglected by all services.
Anonymous 3/19/2021 03:58 PM	Anywhere around miramont is 1 bar at best
Anonymous 3/19/2021 04:21 PM	Near the Hearthfire neighborhood on Douglas Road it is poor. South of Harmony on the east side of town it is spotty. Some days are good and some really bad. Inside my office building in Old Town, service is bad.
Anonymous 3/19/2021 06:39 PM	Maple Hill subdivision has very bad service!
Anonymous 3/20/2021 09:32 AM	Cell coverage is bad in the Maple Hill subdivision and in the office at 700 Wood St.
Anonymous 3/22/2021 11:16 AM	I've not had any losses or significant drops of service anywhere within the city limits.
Anonymous 3/22/2021 02:22 PM	Verizon coverage near Maple/Howes is terrible, as are areas to the west.
Anonymous 3/22/2021 06:33 PM	Zigler and Harmony is the worst for T-Mobile. Lemay and Harmony doesn't have good coverage in buildings.
Anonymous 3/23/2021 11:38 AM	Stoney Hill & Niagra (my house) is poor unless I'm upstairs.
Anonymous 3/23/2021 01:18 PM	My house on Sioux Blvd. I actually had to purchase a personal network extender
Anonymous 3/24/2021 12:41 PM	My house is located in the Maple Hill subdivision. If I want to talk on my cell phone, I have to go to a specific corner of the house, otherwise the call will drop. Even then, sometimes I

simply can't use the phone

Anonymous

3/25/2021 08:55 PM

Harmony and County Rd 7, Front Range Village

Anonymous

3/29/2021 01:48 PM

Old Town coverage is abysmal. I live right by PVH and it is even worse.

Anonymous

3/29/2021 02:26 PM

Kechter and lady moon service is very poor. (Oberservatory Village area near Fossil High)

Anonymous

4/01/2021 08:07 AM

Harmony and Ziegler, the area around HP, Target, etc is a major dead spot. I've had three different carriers in town and all have had that same area as a problem. Verizon was the worst, sprint/t-mobile second. AT&T is a little better, and who I am using now.

Anonymous

4/01/2021 08:08 AM

I live on Vanderbilt Ct by Drake and Lemay and coverage is pretty poor in that area. The shopping area by King Soopers on Drake and College has poor T-Mobile reception.

Anonymous

4/01/2021 08:11 AM

No. I have coverage everywhere. Don't think we need anymore towers.

Anonymous

4/01/2021 08:12 AM

I live in Parkwood East and service with all providers we've tried is very spotty here. The area just north of Trilby and College always drops calls when I'm picking my son up from school (Coyote Ridge Elementary).

Anonymous

4/01/2021 08:12 AM

No, fine everywhere

Anonymous

4/01/2021 08:14 AM

Front Range Village (Harmony/Ziegler) is terrible. I have tried AT&T, Verizon, and T-Mobile. Have not noticed issues elsewhere in town.

Anonymous

4/01/2021 08:14 AM

Horse tooth and shields

Anonymous

4/01/2021 08:16 AM

Our neighborhood (Parkwood East) and the Riffenburgh/ Edora Park areas has very poor Verizon coverage. We used to have AT&T but that had bad coverage at my workplace in the center of town. Please considering enhancing Verizon coverage in Parkwood East/Riffenburgh school areas.

Anonymous

4/01/2021 08:19 AM

I live SW of Harmony and Shields intersection, and my coverage is usually 1 bar -- 2 at most on occasion. Also the area of Harmony between College and Timberline is surprisingly bad. In some spots, 0-1 bar is the best you will get with AT&T.

Anonymous

4/01/2021 08:22 AM

Just west of Nancy Gray and Timberline

Anonymous

4/01/2021 08:25 AM

I live at Drake and Timberline. Any cell coverage within several miles is close to poor at best. I use wifi calling to use my cell at home.

Anonymous

4/01/2021 08:32 AM

Cell service in my house, and especially my basement can be sketchy at times. I live near the intersection of Lemay and Trilby.

Anonymous

4/01/2021 08:38 AM

I live near Timberline and Carpenter and my cell service is poor. It's none existent at Corbett and Harmony (Front Range Village Mall).

Anonymous

4/01/2021 08:41 AM

Only one or two bars at me home near Warren Lake.

Anonymous

4/01/2021 08:51 AM

At harmony and Zeigler coverage is non existent. At my home near Trilby and shields I need a micro tower for any reception.

Anonymous

4/01/2021 08:52 AM

Lady Moon and Muskrat Creek Drive

Anonymous

4/01/2021 09:02 AM

I get really frustrated by the cell service in my home. Sometimes it's

great. Other times its so bad it's ridiculous.

Anonymous
4/01/2021 09:03 AM
2bars in POET *seems poor

Anonymous
4/01/2021 09:08 AM
I live near Timberline & Vine and my service at home is adequate. I work near Mason & LaPorte and my service is good. When I visit southern Fort Collins - anything on Harmony Rd. is horrible service.

Anonymous
4/01/2021 09:10 AM
I work in the field and there are areas where there is zero cell service. The worst is NE, near the Budweiser plant.

Anonymous
4/01/2021 09:20 AM
North Wood in Pateros Creek subdivision.

Anonymous
4/01/2021 09:26 AM
Just off north wood street north side Pateros Creek housing development on Poudre trail close to rural and so poor coverage

Anonymous
4/01/2021 09:53 AM
Trilby and shields (registry ridge neighborhood) Harmony and Ziegler (woodland park estates)

Anonymous
4/01/2021 09:53 AM
Council Tree complex

Anonymous
4/01/2021 10:29 AM
Service in my neighborhood is poor for most carriers. Registry ridge

Anonymous
4/01/2021 10:42 AM
I live and work in Registry Ridge (Trilby and Shields) and our coverage has always been awful.

Anonymous
4/01/2021 10:56 AM
Super target/Sprouts on Harmony no service.

Anonymous
4/01/2021 11:02 AM
around trilby and timberline needs additional coverage. Also around the target on Harmony.

Anonymous
4/01/2021 11:05 AM
The area around Harmony and Ziegler has little or no reception for T-Mobile customers. And there is

	even a T-Mobile store near there.
<p>Anonymous 4/01/2021 11:06 AM</p>	<p>College near drake and Lemay down to around prospect. My family calls it the Lemay curse because our calls always drop there and we lose data</p>
<p>Anonymous 4/01/2021 11:18 AM</p>	<p>I have to look at the huge ugly pine tree tower from my home in McClellands Creek (Ziegler/Kechter), but my cell coverage is poor!</p>
<p>Anonymous 4/01/2021 11:39 AM</p>	<p>I often experience dropped calls at the intersection of Horsetooth and Shields.</p>
<p>Anonymous 4/01/2021 11:51 AM</p>	<p>There is an AT&T dead zone at Mountain and Shields. I live a block away, and the service isn't good in my home.</p>
<p>Anonymous 4/01/2021 12:17 PM</p>	<p>Old Town and points north east</p>
<p>Anonymous 4/01/2021 12:37 PM</p>	<p>I can't think of any inside City limits.</p>
<p>Anonymous 4/01/2021 01:05 PM</p>	<p>Trailby and shields (near my home) UCHealth Harmony campus. (Work)</p>
<p>Anonymous 4/01/2021 01:29 PM</p>	<p>My son has no coverage in Parkwood just west of intersection of drake and Timberline. We have poor coverage on our house near intersection of Shields and Rolland Moore.</p>
<p>Anonymous 4/01/2021 02:06 PM</p>	<p>I live in McLellans creek off Kechter, east of Twin Silo Park. Our cell service at home is really bad</p>
<p>Anonymous 4/01/2021 02:12 PM</p>	<p>There are spots where coverage drops all over town.</p>
<p>Anonymous 4/01/2021 02:57 PM</p>	<p>At our house it is terrible. We live in Registry Ridge.</p>
<p>Anonymous 4/01/2021 03:29 PM</p>	<p>On shields st between Horsetooth rd and Swallow always drops calls.</p>

<p>Anonymous 4/01/2021 03:31 PM</p>	<p>Live 1 block south of martinez park with 2-3 bars consistently</p>
<p>Anonymous 4/01/2021 03:48 PM</p>	<p>Neighborhoods off the main streets between Drake, Lemay, Horsetooth, and Timberline. Anywhere you get off the main streets it can be bad.</p>
<p>Anonymous 4/01/2021 03:50 PM</p>	<p>I live near Horsetooth and Shields, and have very poor cell service.</p>
<p>Anonymous 4/01/2021 04:40 PM</p>	<p>Fiona's Deli on Harmony - the general area around there (including inside the store) is a Cricket dead spot.</p>
<p>Anonymous 4/01/2021 06:10 PM</p>	<p>Along harmony road from college to Ziegler. Also at my home and in the registry ridge subdivision. It's not bad in shields but once you turn into subdivision on bon homme Richard it goes to very poor service</p>
<p>Anonymous 4/01/2021 06:44 PM</p>	<p>I live in Registry Ridge near Shields and Trilby and the cell service throughout the neighborhood is awful.</p>
<p>Anonymous 4/01/2021 07:07 PM</p>	<p>Intersection of Lemay and Prospect, especially south east corner in shopping area.</p>
<p>Anonymous 4/01/2021 07:35 PM</p>	<p>I live in Parkwood East (Creekwood Drive), and cell coverage is HORRIBLE due to our slightly lower elevation.</p>
<p>Anonymous 4/01/2021 07:53 PM</p>	<p>It's bad everywhere</p>
<p>Anonymous 4/01/2021 07:56 PM</p>	<p>I live near Trilby and Shields and the coverage is poor for AT&T. Verizon is better</p>
<p>Anonymous 4/01/2021 08:18 PM</p>	<p>I wish the coverage was better in the foothills west of Fort Collins. I realize this is out of city limits, but just want to make the issue known.</p>
<p>Anonymous 4/01/2021 08:35 PM</p>	<p>I live just east of Shields at 1207 Wooded Creek Court. Some days I</p>

have fair reception in my house,
other times I must go outside to be
able to use the cell phone.

Anonymous

4/01/2021 09:01 PM

I live in SW FC and service is poor.

Anonymous

4/01/2021 09:27 PM

Registry ridge neighborhood On
shields near Kathy framm prairie
Shields and harmony Huntington hills
Carpenter and east of Lemay
Carpenter and east of college

Anonymous

4/01/2021 09:46 PM

Harmony road from I-25 to College
ave. Trilby & Shields isn't great
where we live either.

Anonymous

4/01/2021 10:49 PM

I have trouble along Harmony
between about Timberline and
Boardwalk. Calls don't go through
and texts don't get delivered.

Anonymous

4/02/2021 05:06 AM

Shields and Horse tooth / over by
Sprouts

Anonymous

4/02/2021 07:24 AM

Cell service is generally fine. Internet
access, however is super spotty and
particularly dreadful at my house.

Anonymous

4/02/2021 07:48 AM

Anywhere west of Shields is sketchy
with my iPhone

Anonymous

4/02/2021 08:04 AM

We live just southeast of Timberline
and Harmony behind the PVH South
campus. Our service is terrible. PVH
apparently causes some type of cell
service dead zone. This needs to be
rectified to benefit those of us living
nearby.

Anonymous

4/02/2021 08:15 AM

I live in Brightwater off of Turnberry,
and my service drops every time I
pull into my neighborhood, and also
in my house. I have no service off of
Corbett near the Target on East
Harmony.

Anonymous

4/02/2021 12:56 PM

We live in Maple Hill by Budweiser
and without Wi Fi calling have no
service in our house.

<p>Anonymous 4/02/2021 08:55 PM</p>	<p>I live in registry ridge and the cell phone reception is ok. Most of the time we have 2-3 bars.</p>
<p>Anonymous 4/03/2021 07:27 AM</p>	<p>Shields and horsetooth. I almost always cut out or drop calls on my way to work everyday</p>
<p>Anonymous 4/03/2021 07:32 AM</p>	<p>I live near Leshar Middle School and my service at home is poor - generally 1 bar of service.</p>
<p>Anonymous 4/03/2021 08:56 PM</p>	<p>Driving Harmony between Shields and Taft Hill is the worst coverage I get in Fort Collins. I often lose the call.</p>
<p>Anonymous 4/03/2021 10:12 PM</p>	<p>Between Lemay and Timberline around Harmony road (and Horsetooth). Also south of Harmony between Lemay and Timberline - I have horrible reception anywhere in there.</p>
<p>Anonymous 4/04/2021 01:18 AM</p>	<p>Not that I've noticed. But I don't live on my phone.</p>
<p>Anonymous 4/04/2021 10:28 AM</p>	<p>tribly and shields. As soon as I drive in to Registry Ridge, my call is dropped. People park in the side of the road to finish their call. It is a hazard.</p>
<p>Anonymous 4/04/2021 01:58 PM</p>	<p>Front Range Village is very poor for T-Mobile</p>
<p>Anonymous 4/05/2021 08:35 AM</p>	<p>Rigden farm Chase Drive and Exmoor Ln inside my home and outside</p>
<p>Anonymous 4/05/2021 12:56 PM</p>	<p>I work and live close to Tribly and Shields - Registry Ridge. Once I enter my neighborhood my calls are dropped. I have to get to my house and sometimes I can connect but most times I have to switch to wifi in order to make a call. Reception is unbelievably poor at best. It has been a tremendous challenge this past year with working from home. Also, I pray</p>

	I don't have an emergency. Im not sure I would be able to get 911. I used to live 5 miles south on Shields in Loveland and Did Not have this problem! This needs to be addressed and adequately resolved so we can get service here in Registry Ridge!
Anonymous 4/05/2021 04:49 PM	Harmony between College and Timberline
Anonymous 4/05/2021 06:39 PM	Coverage around Lopez Elementary is poor. Cell coverage around Council Tree is poor.
Anonymous 4/05/2021 06:41 PM	I work near the intersection of Harmony and Corbett and the cell service is bad. Also at the whole Council Tree/ Shopping center.
Anonymous 4/05/2021 06:41 PM	SW FoCo, Trilby and Shields is terrible. Also no service at Webber Middle School or surrounding neighborhood.
Anonymous 4/05/2021 06:45 PM	We live off Harmony and Lemay and can't get more than 3 bars inside our apartment.
Anonymous 4/05/2021 06:50 PM	Harmony and timberline area
Anonymous 4/05/2021 06:50 PM	Calls are constantly dropped or paused as I walk through the Parkwood neighborhood. Coverage is extremely poor at EPIC.
Anonymous 4/05/2021 06:52 PM	Ugh...forgot the name of the shopping center off of Harmony where Target, sprouts, the library, world market, etc is.... But I have NO service right there!
Anonymous 4/05/2021 06:53 PM	Everywhere. Worst cell service I've had in a decade.
Anonymous 4/05/2021 06:53 PM	Council Tree Village and near my sister's home around Shields and Harmony always give me troubles.
Anonymous	Trilby and college. Service is poor. I

4/05/2021 07:06 PM

live and work at home for now.

Kristenlocke

4/05/2021 07:15 PM

Along harmony road all the way through town

Anonymous

4/05/2021 07:09 PM

Ziegler and Harmony...Harmony east of College. Lemay and Drake area

Anonymous

4/05/2021 07:11 PM

Near Super Target, Ziegler between harmony and Horsetooth.

Anonymous

4/05/2021 07:16 PM

I live at shields and trilby and have no to very poor service depending on where I am in the neighborhood

Anonymous

4/05/2021 07:16 PM

Old Town

Anonymous

4/05/2021 07:23 PM

Lemay and horse tooth at warren park as well as shields and horse tooth have no Verizon cell service.

Anonymous

4/05/2021 07:25 PM

I used to live near Horsetooth and Shields and cell coverage is non existent. Couldn't use my phone at all without being connected to WiFi

Anonymous

4/05/2021 07:34 PM

Some areas around Rigden Farm neighborhood have dead zones. Edora Park has no coverage most of the time and Lemay and Prospect and the surrounding area is a dead zone. Note: this is time and season dependent. Late afternoon seems to drop data services in these spots even more problematic as the season gets warmer.

Anonymous

4/05/2021 07:35 PM

I live in Bucking Horse and our signal is poor.

Anonymous

4/05/2021 07:41 PM

Corner of Willox and college is a dead zone. Have tried to cal 911 from there and got no connection

Anonymous

4/05/2021 07:43 PM

.1 mile east of I 25 and Mulberry.

Anonymous

4/05/2021 07:45 PM

Front Range Center, Foothills Mall
area & Costco area are awful.

Anonymous

4/05/2021 07:47 PM

Near the court house is bad, near the
sheriff's office has no coverage, near
liberty common high school has poor
service.

Anonymous

4/05/2021 07:58 PM

Outside Rocky Mtn High and the
intersection of Horsetooth and
Shields. My calls drop everytime. It's
especially frustrating if you have a
child that attends school in the
Seneca area or at Rocky because
you can't call ahead to let them know
you are on your way of you are in the
area.

Anonymous

4/05/2021 08:07 PM

We never have service when at the
breweries (New Belgium, ODell's,
Horse and Dragon)

Anonymous

4/05/2021 08:17 PM

Live in Richard's Lake and have calls
drop in my front yard and
neighborhood and around Long
Pond. Also have little to no reception
at Twin Silo Park and Council Tree
shopping center.

Anonymous

4/05/2021 08:20 PM

I always have good signal but
performance is very bad on Shields,
Home Depot areas on Lemay and
most parts of town.

Anonymous

4/05/2021 08:35 PM

Maple hill, Hearthfire

Anonymous

4/05/2021 08:39 PM

Driving down college by the mall
makes my call drop

Anonymous

4/05/2021 08:41 PM

SE Fort Collins east of about Kohls it
gets a lot worse. But it's worse in
general all over town the last few
months.

Anonymous

4/05/2021 08:42 PM

We have lived off of
Mountain/Laporte and Shields
(Bungalow CT) and service is
horrible with both Verizon and ATT,
multiple dead spots

Anonymous

4/05/2021 08:44 PM

I live in Quail Hollow (Overland and Drake). I have had AT&T and Verizon. Neither has good coverage at home. Verizon has gotten worse over the past year or so.

Anonymous

4/05/2021 08:47 PM

The area by Council Tree is horrible, it's a complete dead zone.

Anonymous

4/05/2021 08:56 PM

Lemay All the way across

Anonymous

4/05/2021 08:57 PM

I deliver on harmony a lot and majority of the time, I can't mark my orders as delivered because I have zero cell service.

Anonymous

4/05/2021 08:58 PM

Service around Beattie elementary is bad. Service all along Horsetooth is awful. I have no service around council tree. Service at and around Harmony Surgery Center is terrible and that's a problem in an emergency.

Anonymous

4/05/2021 08:58 PM

All along Overland between Drake and Mulberry, CSU Foothills campus, Drake and College, Shields and Mulberry, Harmony and Ziegler, Webber Middle School, Beattie Elementry School, Drake and Shields

Anonymous

4/05/2021 08:58 PM

Horsetooth and shields is a dead zone and most of west field park has really bad service

Anonymous

4/05/2021 09:05 PM

I live in the SW part of town. I commonly drive east on Horsetooth from Taft to Shields then head south on Shields. I always lose service near the intersection of Horsetooth and Shields and it doesn't pick back up until I'm near Shields and Harmony.

Anonymous

4/05/2021 09:14 PM

Harmony & Stover has a Sprint blackout zone. Same at JFK home depot. This is why we switched from Republic to Google Fi

echinonny 4/05/2021 10:15 PM	I live at the Sunflower Active Adult Community (Mulberry and Sunchase Drive). Cell phone coverage is extremely poor.
Anonymous 4/05/2021 09:14 PM	East of lemay from prospect to horsetooth is bad
Anonymous 4/05/2021 09:17 PM	Lemay
Anonymous 4/05/2021 09:20 PM	I work off of 54G at the elementary school and service at the school is really bad.
Anonymous 4/05/2021 09:23 PM	My neighborhood, brown farm, has very spotty service
Anonymous 4/05/2021 09:34 PM	Shields between laporte and CSU, shields @ harmony are dead zones. Laporte at overland is ok but could be better, my calls cut out sometimes
LEP 4/05/2021 10:15 PM	I live near Co Rd 15 and Co Rd 94 and the cell service is horrible.
Anonymous 4/05/2021 09:37 PM	At sheilds and Horestooth rd and around the spring field area. The speed with T-Mobile is liw for d/l and u/l is non existence.
Anonymous 4/05/2021 09:39 PM	Mulberry and CR 5
Anonymous 4/05/2021 09:41 PM	Lots of places at CSU. Parkwood East neighborhood.
Anonymous 4/05/2021 09:47 PM	Stonehenge/Parkwood neighborhood has terrible coverage. Same with area along Lemay between Riverside and Drake.
Anonymous 4/05/2021 09:50 PM	Near PVH it's a dead zone
Anonymous 4/05/2021 09:56 PM	South of Harmony near I-25 seems particularly spotty. In my neighborhood (Rigden Farm) service

with Verizon is sometimes weak on my upstairs floor...with AT&T it was even worse with many dropped calls.

Anonymous

4/05/2021 10:00 PM

I live at battlecreek & Timberline and my AT&T serves is poor both inside & outside

Anonymous

4/05/2021 10:01 PM

I live near the intersection of Lemay and Harmony and I have very poor cell service.

Anonymous

4/05/2021 10:09 PM

I live southwest of Trilby & Shields and had to ditch Verizon (in favor of TMobile) because Verizon's service/coverage deteriorated significantly last year.

Anonymous

4/05/2021 10:10 PM

I live in Maple Hill and the cell service is horrible - almost no service is some areas with several dead spots. Poor to very poor

Anonymous

4/05/2021 10:11 PM

By edora park!! Absolutely horrible when we lived in the apartments off riverside and prospect.

Anonymous

4/05/2021 10:14 PM

Harmony/Ziegler has been a bandwidth issue for years and years. Coverage is fine but there aren't enough towers to help the bandwidth/through-put for the number of people concentrated in that area.

Anonymous

4/05/2021 10:18 PM

Very spotty on i25, airports, near hospitals, no service around Horsetooth res, poor service NW of town near Laporte, no service near super target

Anonymous

4/05/2021 10:19 PM

The entire square mile of timberline and harmony is extremely poor to no signal at all. And the old town area completely crashes on the weekends and during large events. That's unacceptable and potentially dangerous if there was ever an emergency.

Anonymous

Shields from mulberry to harmony

4/05/2021 10:28 PM

never gives me a usable connection.

Ah234

4/05/2021 11:15 PM

Along Harmony. Around Fossil Creek Park

Anonymous

4/05/2021 10:35 PM

I work near Prospect & Lemay and the Verizon cell coverage is almost non existent. I used to live at Prospect & Riverside and had the same problem there and in Edora Park. Other carriers seemed to do fine there but Verizon was terrible. That being said I haven't encountered any cell service that is good near the Lemay Prospect intersection area.

Anonymous

4/05/2021 10:40 PM

Bucking Horse bw jail and police station is a dead zone. I have VZw and ATT. Limited coverage with VZ and spotty with ATT. Downtown and Front range village can be super saturated at times as we

Anonymous

4/05/2021 10:49 PM

Lemay, Harmony and college

Anonymous

4/05/2021 11:06 PM

Stuart and Lemay is where I work. Service is awful

Anonymous

4/05/2021 11:08 PM

SW Fort Collins terrible cell service, especially in the Registry Ridge neighborhood, Trilby/Shields. Multiple disconnections, cannot call out. It is so bad, it is almost impossible to make calls and if do get a call I have to go to a corner of house to stay connected.

Anonymous

4/05/2021 11:10 PM

Cell service along Timberline from Prospect to Horsetooth is terrible during business hours

Anonymous

4/05/2021 11:32 PM

Verizon service is terrible in our neighborhood, between Horsetooth and Harmony along and near Shields (both east and west sides).

Anonymous

I lived in Harmony Village near Front

4/06/2021 12:42 AM	Range mall. The service is slow and spotty especially any where in the front range mall.
Anonymous 4/06/2021 01:32 AM	The intersection of Harmony and Taft Hill, the intersection of Drake and Taft Hill. Taft Hill from Harmony to Trilby. Overland Trail from Horsetooth all the way up to Laporte. (basically most of Taft Hill throughout the City, and Overland Trail)
Anonymous 4/06/2021 05:59 AM	Harmony and Lemay is very poor service
Anonymous 4/06/2021 06:09 AM	Anywhere north of Harmony up through Old Town between Shields and Timberline has unacceptably poor service. I work near Phemeister and Centre and while the service was never good, it has noticeably declined over the past few months. All of my coworkers with Verizon have noticed, too. An additional location is on Summit View Rd between Mulberry and Prospect. There's a dead zone in SW Fort Collins on both Taft Hill and Shields. Coworkers depend on a Verizon hotspot to work on their computers in the truck while being driven to client locations and service will often drop.
Heather Mayotte 4/06/2021 07:15 AM	I live near the corner of Horsetooth and Seneca. My family's cell service is so bad we have to use the WiFi call feature and even then Calls don't always go through or they are dropped. I am concerned that if we had to dial 911 it may not go through.
Anonymous 4/06/2021 06:20 AM	North side near campus is poor.
Anonymous 4/06/2021 06:21 AM	Baseball fields at Edora and Fossil Creek Park; Intersection of Mulberry & Riverside

Anonymous

4/06/2021 07:15 AM

Pretty much anywhere I go, my new TMobile service is subpar, but I can make calls. Seems 5G service is not as fast as I thought it would be. In FOCO, my Sprint coverage and 4G was better. Once the merger and I think they started shutting the Sprint Towers down, my service started to go down. Was told it was phone, have the latest, but is still not that good. I live and currently work between Drake and Lemay off Centennial Rd.

Anonymous

4/06/2021 07:34 AM

Taft Hill near the landfill

Anonymous

4/06/2021 08:01 AM

Service down in the shopping center by horsetooth and Ziegler is basically non existant. Additionally, service at my home is awful (near Mulberry/Timberline)

Anonymous

4/06/2021 08:21 AM

I live in the apartments to the South of the police station and my coverage is terrible. It fluctuates during the day which I assume is an impact of police radio signals.

Anonymous

4/06/2021 08:24 AM

Norther FoCo to Wellington is poor.

Anonymous

4/06/2021 09:00 AM

Stonehenge subdivision has terrible coverage on all providers

Anonymous

4/06/2021 09:03 AM

T-Mobile coverage in the Lowe's and Target stores & parking lots by Harmony and Ziegler is non-existent. Once you get to Harmony it picks up again.

Anonymous

4/06/2021 09:12 AM

Kechter and Ziegler in fossil lake the cell service is awful. We have to have a booster in our house for t-mobile. None of our friends with att get service in our house.

Anonymous

4/06/2021 09:59 AM

Prospect/Lemay

Anonymous 4/06/2021 10:19 AM	Prospect and Lemay All of North East Fort Collins Bucking Horse
Anonymous 4/06/2021 10:25 AM	Along I-25, I work in Cheyenne and my calls drop constantly even on my exit to my house (Mountain)
Anonymous 4/06/2021 10:33 AM	Along Horsetooth Road (Taft to College), very spotty/low signal in Old Town (W of Stover, North of Prospect), poor signal around my neighborhood (1 to 2 bars in Brown Farm)
Anonymous 4/06/2021 10:38 AM	T-Mobile is poor to acceptable in most areas. Downtown is usually good.
Anonymous 4/06/2021 10:44 AM	Driving west on Drake from College toward Shields, then north north on Shields, coverage drops off. Inside City Hall is often bad. Seems that my carrier was bad in the past couple of years (i.e. no coverage inside my home at Drake/Lemay at all, but it got better within the past 2 years). Various providers seem to rotate who has good coverage and who does not.
Anonymous 4/06/2021 10:48 AM	I worked, and will soon work again, at the government buildings on Centre south of Prospect. The east side of the building has significantly better coverage than the west side.
Anonymous 4/06/2021 11:14 AM	I work off of Trilby between College and Shields, reception is terrible there.
Anonymous 4/06/2021 11:25 AM	I lived at the intersection of West Stuart and Corriedale Dr. and the cell service inside my home was bad. I live at the intersection of Mathews St. and Laurel and the cell service inside my apartment is bad.
Anonymous 4/06/2021 11:29 AM	Prospect/Stuart and Prospect/Pitkin by Leshner

Anonymous 4/06/2021 12:09 PM	South of Ketcher, the coverage is almost non existent. Anything near the harmony corridor is spotty at best.
jared_smartt_92 4/06/2021 01:16 PM	Near Harmony and Ziegler! Inside or even outside of buildings in that entire area.
Anonymous 4/06/2021 01:22 PM	The corner of Harmony and Zeigler and harmony and front range village is awful
Anonymous 4/06/2021 01:50 PM	The intersection of Shields and Horsetooth where my kids go to school has almost no service whatsoever
Anonymous 4/06/2021 04:10 PM	I am west of Anhiser Buche. A cell tower Was installed a half mile to my north and never turned on. There are alot of police living in the community north of us. They need cell support.
Anonymous 4/06/2021 04:13 PM	I work at Front Range Community College and we get basically no service at all inside any of the buildings. The service by my home near Timberline and Harmony is also pretty bad with a lot of dead spots.
Anonymous 4/06/2021 05:05 PM	Horsetooth/shields area is almost nonexistent signal. Lemay/harmony area near hotels is very weak signal.
Anonymous 4/06/2021 06:17 PM	Fossil Lake Ranch/Lady Moon Drive. Outside EVERY school. Council Tree area.
Anonymous 4/06/2021 06:26 PM	Shields and casa grande, shields and horsetooth
Anonymous 4/06/2021 06:28 PM	Mosaic community (Vine & Timberline areas) have to rely on home wifi to use cell phone
Anonymous 4/06/2021 06:52 PM	Horsetooth and Shields area is horrible
Anonymous 4/06/2021 09:52 PM	Prospect and overland at&t is non existent. Harmony road is very poor,

	driving in town, I always get dropped calls.
<p>Anonymous 4/06/2021 10:02 PM</p>	<p>My cell signal is bad in my apartment on Yearling Dr. I also have bad coverage at work and the entire Frontrange shopping area. There seem to be many dead spots on Prospect east of College. Finally, cell towers were overloaded during Taste of Fort Collins in 2018 where someone had to drive all the way to Lemay to send a text.</p>
<p>Anonymous 4/06/2021 10:39 PM</p>	<p>Old Town AT&T is poor.</p>
<p>Anonymous 4/06/2021 11:02 PM</p>	<p>The outdoor mall at Harmony and Ziegler, specifically around the target but really in the whole complex has terrible service for multiple providers. I also feel like there is a lot of locations in town that T-Mobile says it has 5G service but it takes forever to load anything</p>
<p>Anonymous 4/06/2021 11:46 PM</p>	<p>Seems to be dead areas around Lemay and Swallow. Inadequate service northeast around Mountain Vista/Turnberry and surrounding neighborhoods. Without WiFi calling we couldn't make calls.</p>
<p>Anonymous 4/07/2021 03:50 AM</p>	<p>I go to Home Depot on Mulberry and can't get service for GPS until I start driving east on Mulberry.</p>
<p>Anonymous 4/07/2021 08:36 AM</p>	<p>The cell coverage in my neighborhood (northeast of Timberline and College) is so bad that I can barely make phone calls unless I use wifi-calling on my internet connection. The coverage in the EPIC/Prospect and Lemay area is similarly terrible.</p>
<p>Anonymous 4/07/2021 08:43 AM</p>	<p>Drake and Eastwood Drive is poor with Comcast service.</p>
<p>Anonymous</p>	<p>Mosaic neighborhood at Sykes and</p>

4/07/2021 09:22 AM

timberline.

Anonymous

4/07/2021 09:43 AM

The area surrounded by Shields, Drake, College and Prospect is really bad. I have no service at Centre and Shields.

Anonymous

4/07/2021 02:10 PM

Ever since moving here to Northeast Fort Collins over 13 years ago my cell reception has been poor to non-existent! AT&T sent me a microcell to boost my service at home about 10+ years ago which has helped a lot. However, if I want to go out and take a walk, or the microcell is off for some reason there's little to no service. My neighborhood (Maple Hill) has many residents who have reported great to little to no service depending on where they live here with many different providers. There was even a case of a resident dying in his yard because the spouse and a neighbor had no cell reception to call 911! The neighbor had to run to her home to call, and by the time first responders got here it was too late! How'd you like that to happen to you or one of your own relatives?! I've even tried different providers to see if they can give me better service to no avail. I lived on North College (the west side in a trailer court) for several years and had no issues until moving to Maple Hill neighborhood. I feel strongly it's due to lack of towers in this area (or the severely degraded one serving our area) and have had multiple calls with AT&T, been to their stores multiple times to try and remedy the situation to no avail. All I want is good coverage here without the use of wifi! In October 2020 things got even worse (AT&T told me it was because they're reprogramming the towers in preparation for 5G) and I can't even

get pictures and some text messages without having to press "download" which takes time, and some of those never even get through! It's been extremely frustrating for over 13 years living here, I feel like I'm in a 3rd world country. Just fix it!

Anonymous

4/07/2021 02:53 PM

Rampart Road reception is terrible.

Anonymous

4/07/2021 05:01 PM

Maple Hill neighborhood has extremely terrible reception. Our phones need to be on wifi in order to make any calls whatsoever.

Anonymous

4/07/2021 10:32 PM

Everywhere at Horsetooth Lake or near the hospital is terrible! Coverage when parked by RMHS is also very bad (and a bit unsafe IMO). Anywhere east of I-25/south of Harmony can be spotty. It's probably not within the city's purview but the reception in Poudre Canyon is non-existent (also dangerous).

Anonymous

4/08/2021 07:27 PM

Super target area I have no signal

Anonymous

4/08/2021 09:29 PM

Old Town is the worst. The farther you get from Old Town the better the coverage.

Anonymous

4/08/2021 10:12 PM

Norther Fort Collins, my service is horrible. I live in Maple Hill neighborhood and I don't even get reception at my home or in my neighborhood.

Anonymous

4/09/2021 06:48 AM

Taft Hill Road and Horsetooth. I have to walk around outside of Olander to try to find a signal.

Anonymous

4/09/2021 02:54 PM

The entire East half of Fort Collins is awful! I get better coverage in the ski towns than in Fort Collins. Coverage was fine decades ago when I was in college, obviously you have massively failed somewhere along the lines in the last two decades!

Anonymous

4/10/2021 12:52 PM

My sister lives on Shields and Horsetooth, and the reception at her place is terrible. Driving on Harmony and Shields, going to her place the cell service drops out too.

Anonymous

4/10/2021 12:57 PM

I live on Horsetooth and Shields and have the worst reception. I have to rely on Wifi and use other platforms rather than cell service. To be honest, all of Horsetooth is pretty horrible. I work for TransFort as an operator, Portner is pretty horrible too. There are a lot of places in town that are spotty at best.

Anonymous

4/10/2021 06:23 PM

PSD admin buildings in NW FC is bad, and the council tree area is really bad

Anonymous

4/11/2021 08:43 PM

Fossil ridge high school Area

Anonymous

4/12/2021 01:08 PM

Coverage in Old Town used to be poor (not sure if it's better now) and by the Target in NE Fort Collins is non-existent for T-Mobile.

Anonymous

4/12/2021 01:32 PM

Cell service doesn't work in Poudre High School. My kids are all graduated now, but it was a problem when I needed to alert them of something when they were attending (like that I was outside waiting for them... and they'd never get the message).

Anonymous

4/12/2021 02:25 PM

Work on West Elizabeth corridor, service is very spotty in the area.

Anonymous

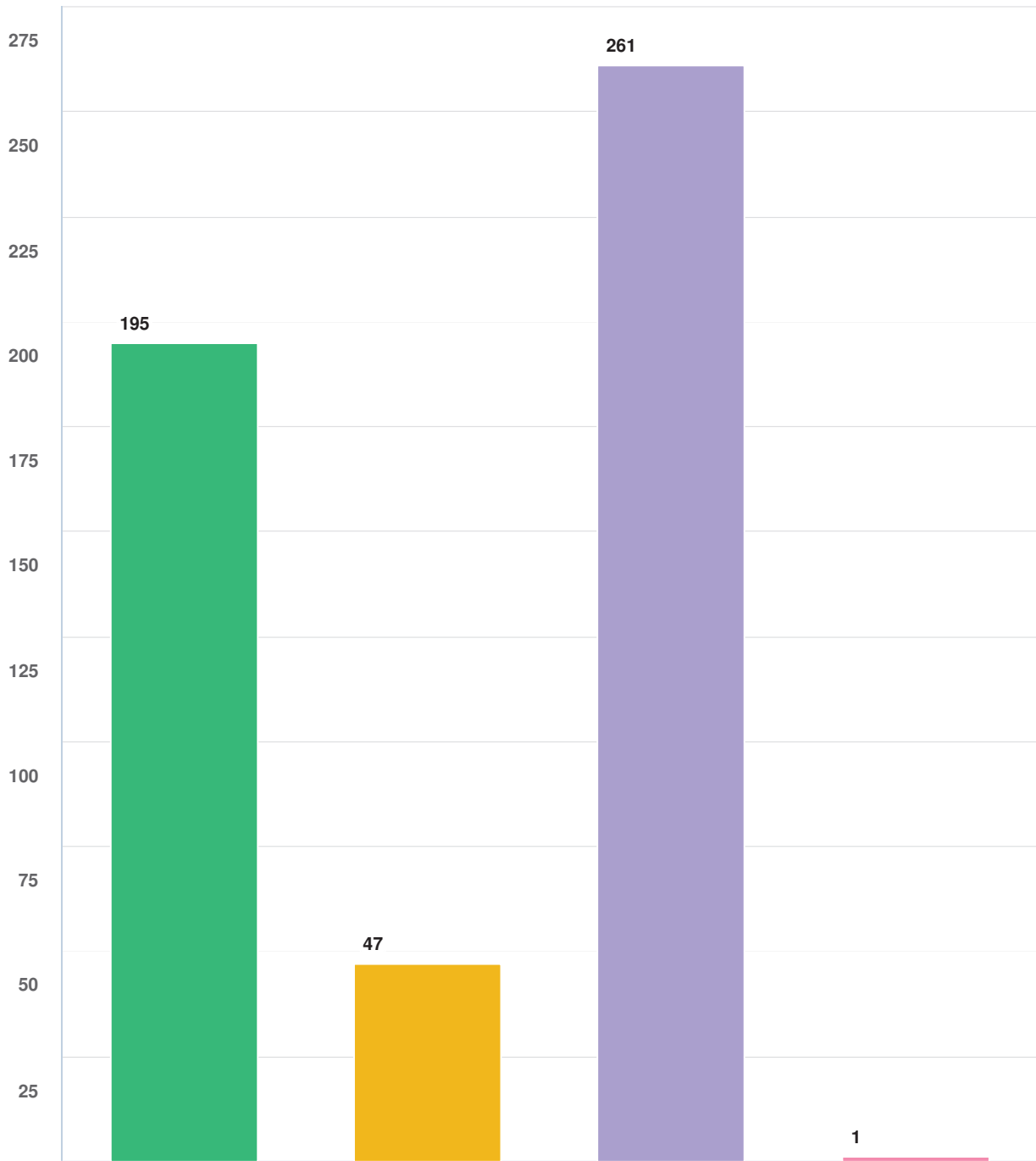
4/13/2021 07:20 AM

The intersection of Horsetooth and Shields is a near dead spot. East of Lady Moon on Ketcher is usually dead. The far south west corner of town (almost in Laporte) is close to dead as well.

Optional question (227 response(s), 44 skipped)

Question type: Essay Question

Q12 I rely primarily on my mobile device and corresponding service for the following (check all that apply):

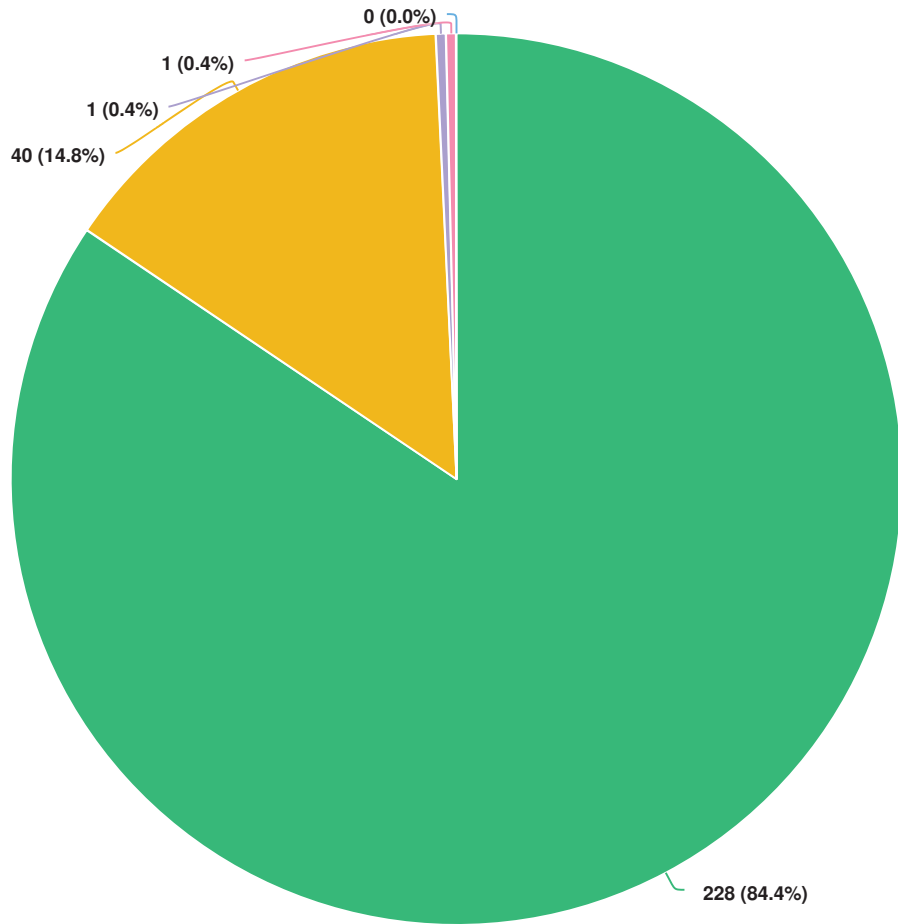


Question options

- N/A
- Personal Use/Entertainment
- School
- Work

Optional question (270 response(s), 1 skipped)
Question type: Checkbox Question

Q13 The quality of wireless service is important to me:



Question options

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Optional question (270 response(s), 1 skipped)

Question type: Radio Button Question

Q14 Please rate the following aspects of Wireless Infrastructure from the most to least important to you:

OPTIONS	AVG. RANK
Excellent Connectivity	1.36
Balance of Connectivity and Aesthetics	2.01
Aesthetics	2.98
Fewer Towers	3.61

*Optional question (267 response(s), 4 skipped)
Question type: Ranking Question*

Q15 Any other comments or suggestions?

Anonymous

3/18/2021 11:47 AM

There was no mention here about broadband services through Connexion or others. For those of us with poor wireless service for whatever reason, fiber-delivered internet provides reliable fast service in our homes. Wifi calling works in our homes. There needs to be a balance between connectivity and the way this technology affects people who are electromagnetically sensitive.

Anonymous

3/18/2021 12:20 PM

I would have been interested to see questions not just about connectivity and aesthetics. There are some areas of town that these simple should not be allowed. Residential. Additionally, the allowing of cells regardless if you can see them or not should not be allowed every 150'. That isn't needed and it litters our town up visually and electronically. You have room to increase that

without having an issue at the Federal level. Provide stronger local controls so that you can protect our community. Fiber-you are investing all this money into fiber but then are pushing the wireless. You should rethink you marketing to show the benefits of fiber (many) and this would help that utility and reduce the need fir so much wireless. Educate. Don't just let the wireless companies dictate what our City is going to do.

Anonymous

3/19/2021 01:14 PM

It is so frustrating to see television ads pushing 5G service - at my house, in town, in SE FoCo, I just wish I had 1G service. If I lived up in the mountains somewhere I guess I might expect marginal service, but not in the middle of a modern medium-sized city!

Anonymous

3/19/2021 03:28 PM

The city can not continue to pass development projects in the Northeast area of Fort Collins and continue to neglect the area, i.e. lack of all services in this area.

Anonymous

3/19/2021 03:58 PM

We need a tower in fossil park / miramont coverage is horrible

Anonymous

3/22/2021 09:59 AM

In general I have not experienced issues with connectivity in fort collins. In general when a private business needs/wants govt. support I would like the govt entity to get the best outcome for the citizens. I don't forsee costs going down, so stand strong on asthetics.

Anonymous

3/22/2021 11:16 AM

No suggestions. As mentioned before, though it isn't a problem I've ran into often here, I'm both excited and pleased that the city is taking steps to reinforce this service and make it a priority.

Anonymous

3/23/2021 11:38 AM

I didn't know that there were concealed and semi-concealed

towers. Excellent idea! I'm all for more of those, since they solve esthetics issues and are already nice and tall. They would also seem cheaper to install.

Anonymous

3/23/2021 01:18 PM

Why not provide wireless access to the CONNEXION network for subscribers so that wifi calling could be used city wide?

Anonymous

3/29/2021 02:26 PM

We desperately need better cell service. From what I understand the service is poor all around town, although I experienced it primarily in the southeast part of town, near Fossil ridge high.

Anonymous

4/01/2021 08:07 AM

The tower that was installed in southeast Fort Collins, by McClellands Creek and Fossil Lake is atrocious. Not only is it huge, but the fake tree look is totally out of place. It severely detract from nearby property values. Would much rather see a normal tower, which would blend in way better. Realize that is probably county land and not in the city, but if you're looking for an example of what not to do, look no further.

Anonymous

4/01/2021 08:11 AM

I don't think we need any more towers. My service is great! I'm sure some are having problems though.

Anonymous

4/01/2021 08:16 AM

Na

Anonymous

4/01/2021 08:19 AM

I like the idea of having greater site density on existing structures and minimizing tall standalone towers. I really don't care about aesthetics if it's on an existing structure. But I'd rather not see a lot of tall dedicated towers.

Anonymous

4/01/2021 08:25 AM

I know this is difficult. Even Police Services suffers from these issues. We no longer live in a land line world.

Thanks for asking for our feedback!!!

Anonymous

4/01/2021 08:38 AM

I appreciate what you are doing. The future of communication is wireless, so a master plan makes sense.

Anonymous

4/01/2021 09:02 AM

Thank you for looking into this for us.

Anonymous

4/01/2021 09:03 AM

Cel service is my only tether to others and thus truly necessary for my tech life. While I use a MIFI device for most other areas, this should(?) be unnecessary within the city.

Anonymous

4/01/2021 10:56 AM

<http://www.sammilham.com/index.shtm>
<https://childrenshealthdefense.org/defender/landmark-study-highlights-health-threats-5g-people-planet/>

Anonymous

4/01/2021 11:51 AM

Network testing should be done while driving around town by service provider to determine what areas need most attention based on population density.

fingersfly

4/01/2021 01:15 PM

I do not favor hiding towers because I am concerned about health effects, which this survey does not acknowledge one bit. EMFs are real and will affect children and weaker people. This is why I want fewer towers, and I want them to be obvious so that anyone can avoid them if they are sensitive. Discreet, not hidden. We should not conspire to keep people in the dark about the potential health impacts. You can't even pay \$15 a month (like the wireless metering) to escape this network.

Anonymous

4/01/2021 01:05 PM

Connectivity and wireless speed is what is most important to me.

Anonymous

4/01/2021 02:06 PM

N/A

Anonymous

4/01/2021 02:12 PM

Cell phones are our only communication devices. It is silly to pay for a land line in addition. And while a cell tower shouldn't be an eyesore it is less important than providing communication with no interruption.

Anonymous

4/01/2021 03:48 PM

When we moved here we had ATT. We live near Drake and Lemay. We were surprised how bad cell coverage was in FC since it's not a rural community. We moved from Oregon and never experienced the issues we had here. Needless to say we switched to Verizon and our coverage issues only moved places so it's obviously not specific to carriers.

Anonymous

4/01/2021 04:05 PM

Question 13 doesn't make sense. Amazing to me there can be dead zones in Fort Collins especially in the south west horsetooth and shields area. I can't believe broadband is being installed but we need a survey for better cell service? And you want to be a connected city?

Anonymous

4/01/2021 07:53 PM

Service is embarrassingly bad in Fort Collins. Cell phones are vital today and to have calls dropped or service unavailable in the middle of town is an extreme safety concern

Anonymous

4/01/2021 08:18 PM

I would like to see strong 5G connectivity through out Fort Collins. I realize that for some aesthetics are an issue for some, however wireless connectivity is becoming essential and is a public safety issue. I feel aesthetics should be a minor consideration,

Anonymous

4/02/2021 05:06 AM

none

Anonymous

4/02/2021 07:24 AM

Towers should interfere as little as possible with wildlife needs, so

	<p>smaller towers attached to pre-existing buildings is by far the safer and less-obtrusive option.</p>
<p>Anonymous 4/02/2021 07:48 AM</p>	<p>In newer residential areas, developers/builders/contractors should be required to install/guarantee excellent infrastructure that works in any part of a home/apartment. Can this be addressed in a policy that is enforceable?</p>
<p>Anonymous 4/02/2021 08:04 AM</p>	<p>Thanks for the opportunity to provide information.</p>
<p>Anonymous 4/02/2021 09:36 AM</p>	<p>In the end, why do we need 5G? Do we really need faster internet? 5G is the internet for things. And I don't think we have any idea of the health risks associated with radiating our air waves with it. I am completely against the infrastructure, and I hope that the city chooses NOT to place any 5g towers inside the city limit. And I think long term the city is setting itself up for major health lawsuits for adding this infrastructure.</p>
<p>Anonymous 4/02/2021 12:15 PM</p>	<p>Great that you are doing this survey. Wish there was more participation.</p>
<p>Anonymous 4/04/2021 01:18 AM</p>	<p>I'd rather the city get paid rent for cell sites than religious organizations that don't pay taxes.</p>
<p>Anonymous 4/04/2021 10:28 AM</p>	<p>We have lived here for 17 years with horrible coverage. It is way overdue.</p>
<p>Anonymous 4/05/2021 12:56 PM</p>	<p>This needs to be addressed. Registry Ridge is a great community in Fort Collins, however we have been forgotten regarding cell towers and cell service in this community. We need action and resolution so that we can obtain cell service.</p>
<p>Anonymous 4/05/2021 04:49 PM</p>	<p>Excellent coverage adds to the value of living in Ft. Collins - we joke that</p>

	we can't consider buying a vacation home because of poor cell service! Excellent coverage is VERY important to me.
Anonymous 4/05/2021 06:53 PM	We as a city go nuts with this stuff. Just place them where needed and as unobtrusively as you can. The end.
Anonymous 4/05/2021 06:53 PM	Thanks for asking about this! It's nice you would like our opinions.
Anonymous 4/05/2021 07:16 PM	Add towers as part of the urban sprawl and planning of these developments towards I25
Anonymous 4/05/2021 08:56 PM	Between timberline and Lemay is a dead zone
Anonymous 4/05/2021 08:58 PM	Better service for all providers.
LEP 4/05/2021 10:15 PM	Excellent connectivity is very important to me but I really don't want ugly towers everywhere.
Anonymous 4/05/2021 09:37 PM	5G with T-Mobile needs to be strong all over fort collins with the same speed for upload and d/l.
Anonymous 4/05/2021 10:10 PM	Please improve the coverage in Northeast Fort Collins
Anonymous 4/05/2021 10:11 PM	Please add more towers, especially great if they're attached to an already-standing structure. Cell service is worse here than in the middle of Iowa.
Anonymous 4/05/2021 10:14 PM	I work with telecom vendors daily for a service for my company, and they've said for years they also know about the bandwidth issues in southeast Fort Collins but say they have limits from the city so they aren't able to improve anything. Finger pointing everywhere.
Anonymous	More towers widely spread is needed

4/05/2021 10:19 PM

over all especially in black spots and heavy trafficked areas. The 5G coverage is supposed to shine considerably over 4G and yet its nearly just as slow is not worse than the 4G coverage.

Anonymous

4/05/2021 10:35 PM

If anything get some more Verizon towers on the East side.

Anonymous

4/05/2021 10:40 PM

With cell phones being our only mode of voice communication (no home phone) it is hugely important to have it work at home.

Anonymous

4/05/2021 11:08 PM

Please consider this Registry Ridge neighborhood area for cell structure nearby, thank you.

Anonymous

4/06/2021 05:59 AM

Verizon service is poor throughout most of town

Anonymous

4/06/2021 06:09 AM

Cell service has been an issue for several years and there has been an even worse decline in service over the past six months. I feel less safe at work late at night, because I'm usually alone and have close to no service where I'm located.

Anonymous

4/06/2021 07:15 AM

I really like the idea of concealed or camouflaged towers. An example is the Scotch Pines Village picture; I had no idea there was a tower there and I shop there all the time. It nicely disappears.

Anonymous

4/06/2021 09:00 AM

Thank you for trying to make this better. Question #9 not fine grained enough to matter to me - some spots in the city are good, some are terrible.

Anonymous

4/06/2021 10:19 AM

This is a dangerous safety issue. Choose your response speed accordingly.

Anonymous

4/06/2021 10:33 AM

I have had pretty bad Verizon coverage in Colorado in general, but it's bad all along the front range -

mostly because it shows I have signal but it does not work, times out, never loads, etc. It's rare that I have exceptionally fast or great signal with one of the biggest providers in the US. Rarely, if ever, have a problem with signal in other parts of the country.

Anonymous

4/06/2021 11:25 AM

The city of Fort Collins should use its taxes to fund a basic cellphone for FC citizens without a cellphone.

Anonymous

4/06/2021 12:09 PM

I have contemplated moving out of south FC strictly because the coverage is soo bad. Even those that say its not a priority or concern, do not deal with bad connection issues.

Anonymous

4/06/2021 04:10 PM

I just wonder if not turning on the Turnberry cell tower had anything to do with this proposal. I can't find any information as to why this tower was not turned on.

Anonymous

4/06/2021 09:37 PM

I don't want all sorts of little towers in neighborhoods and on private property. Our connectivity is fine.and sometimes less is more. We have too many forced "services" affecting our health. We need to think about the long term effects before we jump into more.

Anonymous

4/06/2021 10:02 PM

Frequent updates on the progress of this infrastructure would be good to know.

Anonymous

4/07/2021 08:43 AM

Please keep it reasonably priced, another words below Comcast monthly charges. Offer a minimal service without bells and whistles that provides solid reliable service.

Anonymous

4/07/2021 02:10 PM

I like the idea of disguising cell towers to be more aesthetic.

Anonymous

4/08/2021 07:27 PM

I feel towers should not be close to offices or homes because of EMF exposure

Anonymous

4/08/2021 10:12 PM

Please add towers to northern Fort Collins.

Anonymous

4/10/2021 12:57 PM

Adding more towers for our city that is ever-growing is very important. The growth is not just in population but technology as well. I would love to see more enforcement on use of cell phones while operating a vehicle.

Anonymous

4/12/2021 01:32 PM

People know that faux stuff is faux stuff. And it feels yucky or absurd. But art is art. And if it conceals equipment, all the better. I'd love to see the Art in Public Places take this on as part of their program, just like the transformer boxes. They could find local welders/sculptures/etc. who could make unique art pieces that conceal equipment and beautify our neighborhoods rather than faux-ize them.

Anonymous

4/13/2021 07:20 AM

Overall, coverage is pretty good. But it would be nice to have a nice new blanket of good to excellent coverage across the city as a whole.

Optional question (70 response(s), 201 skipped)

Question type: Essay Question

Q16 Please provide your name.(Your name will not be shared with any outside party. Answers to thequestionnaire will only be used to inform the drafting of the WirelessTelecommunications Master Plan).



Wireless Telecommunication Code Update



City Council Work Session

Will Lindsey, City Planner

08-23-22

1. Should wireless facilities be permitted on non-residential properties in residential zone districts?
2. Should certain City-owned properties be available for the siting of wireless telecommunication facilities?
3. Does Council support staff's recommendation for context-based standards to regulate facility design?

STRATEGIC OBJECTIVES

NLSH 1.6 – Protect and preserve quality of life in neighborhoods.
HPG 7.1 – Provide world-class municipal services to residents and businesses.

CITY PLAN

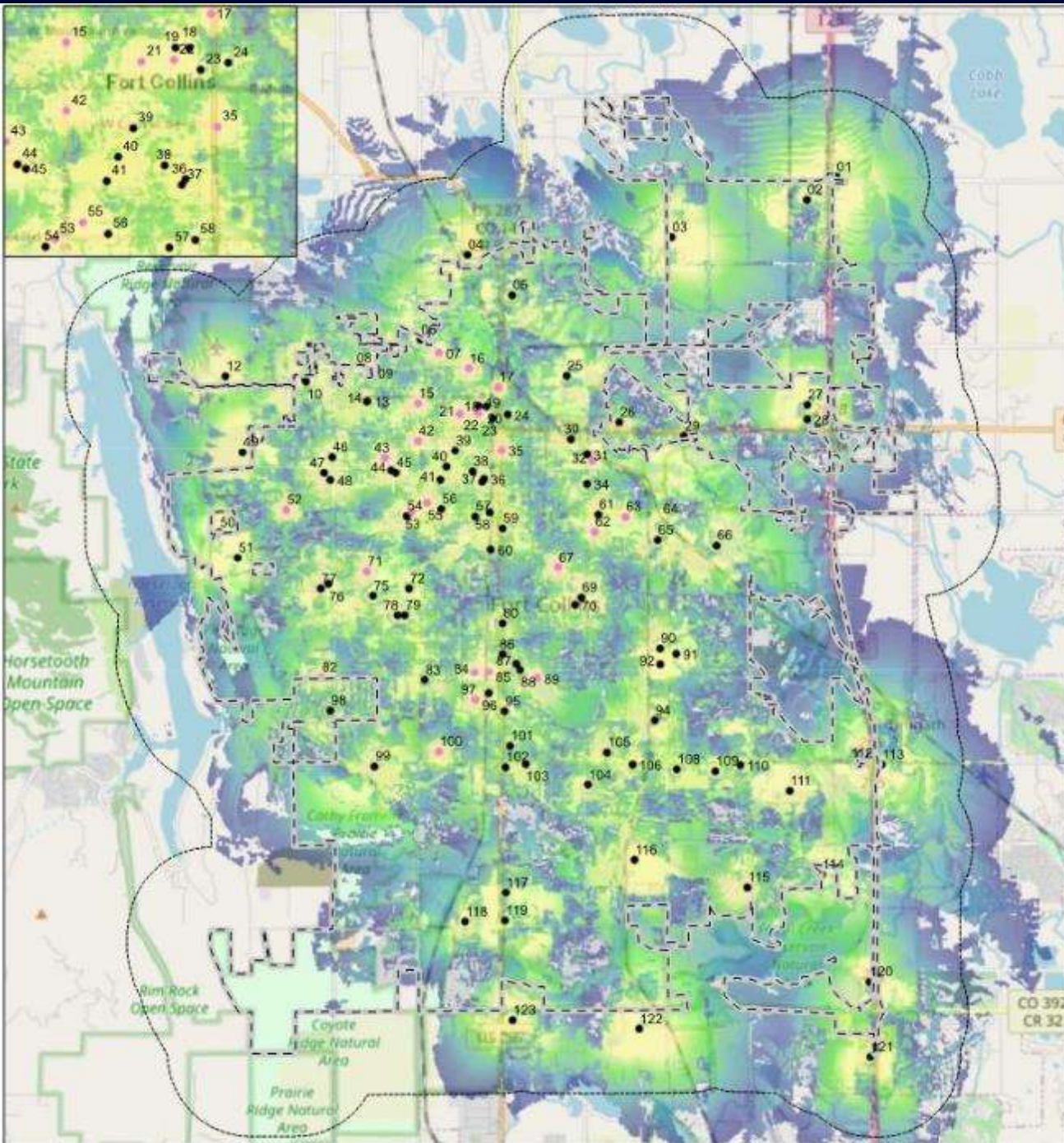
Safe Community SC-2b – Complete a Wireless Communications Plan and implement targeted Land Use Code amendments.

Plan Findings

Item 3.

- City has more co-located equipment than free standing towers
- 13 out of 73 towers and base stations are multi provider facilities
- 60 are single provider sites

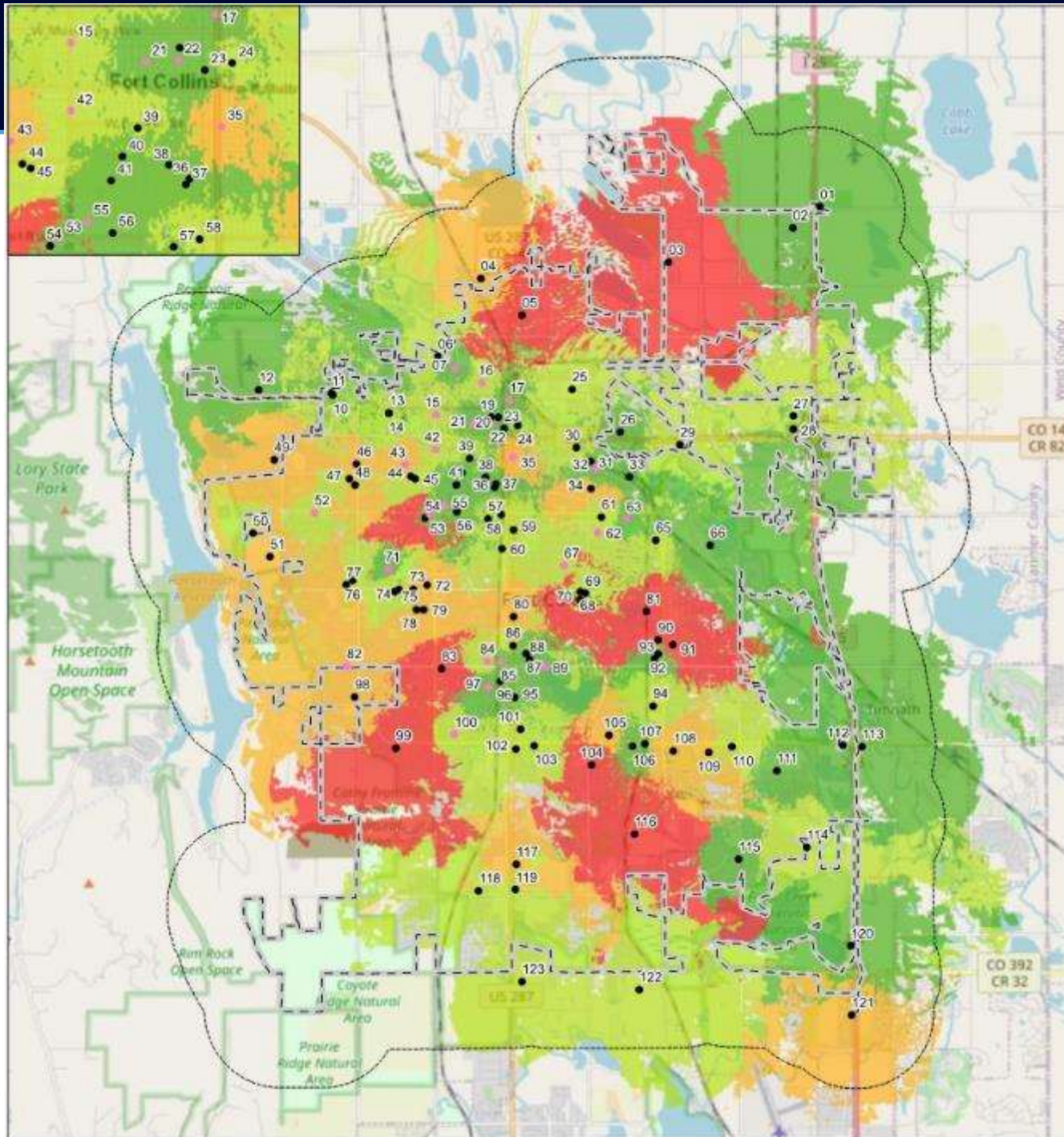
Color	Signal Strength	Signal Strength Description
Yellow	Superior	Strong enough to operate within most buildings
Green	Average	Strong enough to operate in vehicle but not inside most buildings
Blue	Acceptable	Strong enough to operate outside but not in a vehicle building



Plan Findings

Heat Capacity Map For A Single Provider

- Over 1/2 of the City is deficient in wireless coverage and network capacity



Color	Potential Capacity	Signal Strength Description
Green	Good	Ratio of number of sites to subscriber base should support a robust network
Orange	Average	Ratio of number of sites to subscriber base is problematic to support a robust network
Red	Poor	Ratio of number of sites to subscriber base is poor likely cannot support a robust network

Timeline:

- Q1 2022: City Council Work Session (01/25)
- Q2 2022: Review existing standards with consultant, draft recommended amendments to Land Use Code
- **Q3 2022: Refine recommended amendments, seek additional guidance from Boards, Commissions, and Council**
- Q4 2022: Bring proposed Land Use Code amendments to Commission and Council for consideration

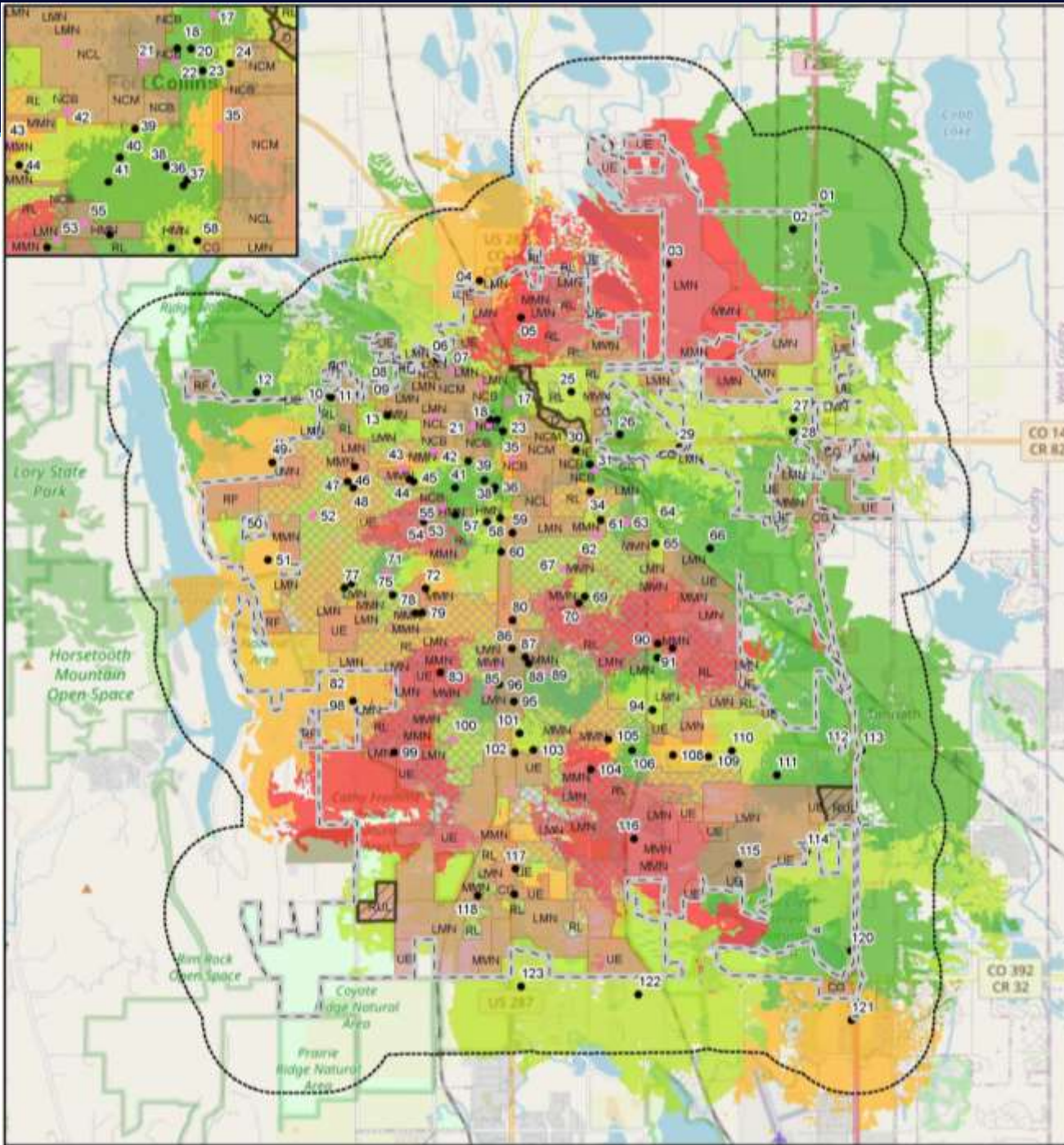
Question 1

Item 3.

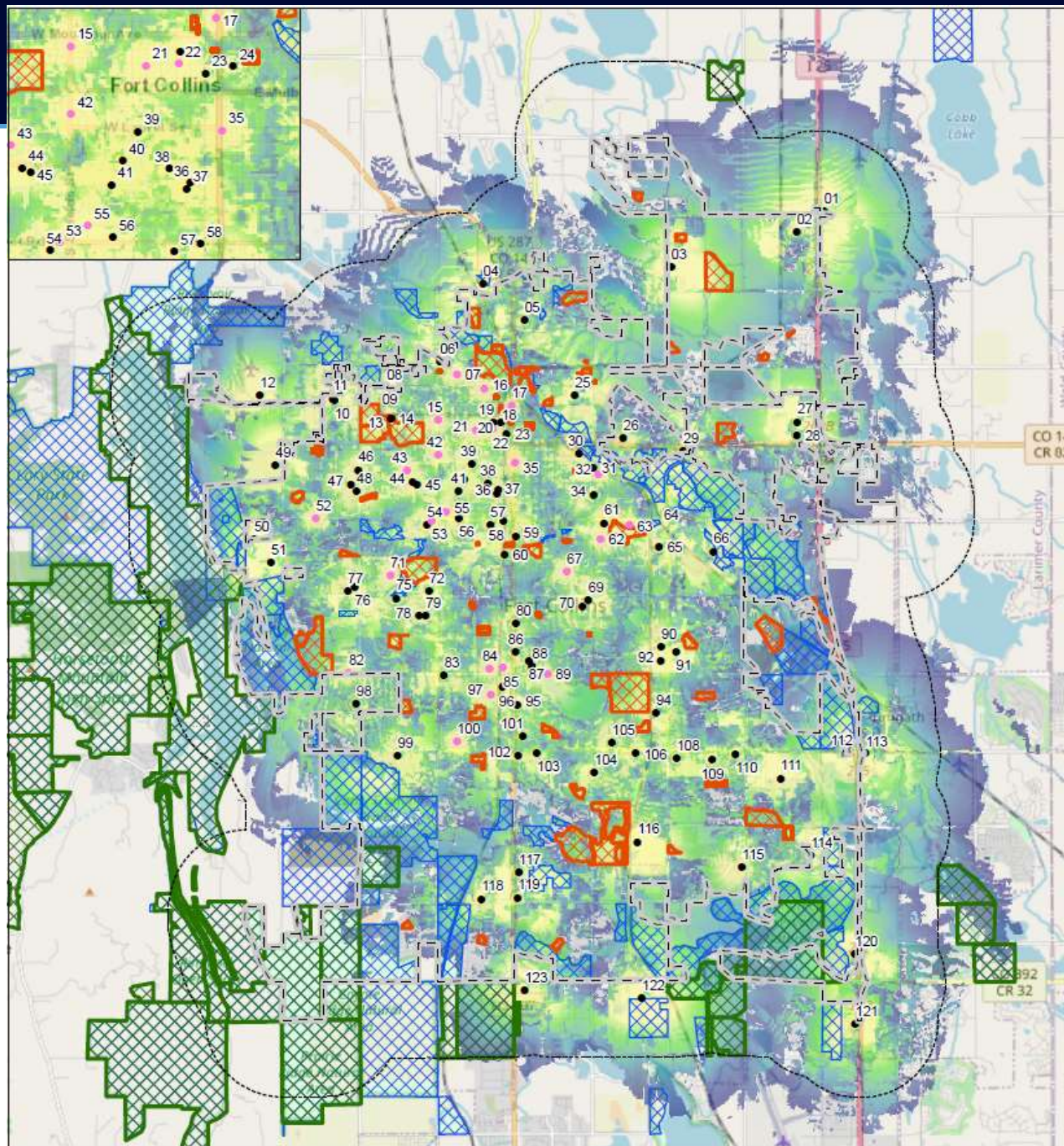
Should wireless facilities be permitted on non-residential properties in residential zone districts?

Zone District Area Calculations:

ZONE	Area Sq Mi
CG	1.866
D	0.188
HMN	0.087
LMN	10.229
MMN	2.930
NCB	0.247
NCL	0.842
NCM	0.853
RF	0.695
RUL	0.450
UE	4.299



Should certain City-owned properties be available for the siting of wireless telecommunication facilities?



Does Council support staff's recommendation for context-based standards to regulate facility design?



1. Should wireless facilities be permitted on non-residential properties in residential zone districts?
2. Should certain City-owned properties be available for the siting of wireless telecommunication facilities?
3. Does Council support staff's recommendation for context-based standards to regulate facility design?

THANK YOU!

For Questions or Comments, Please Contact:

Will Lindsey, City Planner

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