# Fort Collins City Council Work Session Agenda

6:00 p.m., Tuesday, September 9, 2025
300 Laporte Avenue, Fort Collins, CO 80521

## NOTICE:

Work Sessions of the City Council are generally held on the 2nd and 4th Tuesdays of each month. 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.

## How to view this Meeting:

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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*A solicitud, la Ciudad de Fort Collins proporcionará servicios de acceso a idiomas para personas que no dominan el idioma inglés, o ayudas y servicios auxiliares para personas con discapacidad, para que puedan acceder a los servicios, programas y actividades de la Ciudad. Para asistencia, llame al 970.221.6515 (V/TDD: Marque 711 para Relay Colorado). Por favor proporcione 48 horas de aviso previo cuando sea posible.*

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

City of Fort Collins

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# City Council
# Work Session Agenda

**September 9, 2025 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
Melanie Potyondy, District 4
Kelly Ohlson, District 5

Council Information Center (CIC)
300 Laporte Avenue, Fort Collins

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| Carrie Daggett | Kelly DiMartino | Delynn Coldiron |
|---|---|---|
| City Attorney | City Manager | City Clerk |

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

## A) CALL MEETING TO ORDER

## B) ITEMS FOR DISCUSSION

1. **Impact Fee Study Updates**

   The purpose of this item is to propose revisions to the 2023 capital expansion fee studies that align with Council values and priorities. Studies conducted in 2023 for updates of capital expansion fees remain unadopted, with inflationary-only fee adjustments implemented in 2024 and 2025. Staff proposes adoption of revised fees to be effective January 1, 2026.

2. **2024 Building Codes**

   The purpose of this item is to update Council on the adoption of 2024 Building Codes, including Energy Code and Wildland Urban Interface Code (WUI). The 2024 International Codes (2024 I-Codes) represent the most up-to-date, comprehensive, and fully integrated body of codes regulating building construction and systems using prescriptive and performance-related provisions. The purpose of these codes is to establish the minimum construction requirements to safeguard the public health, safety, and general welfare by regulating structural strength and stability, sanitation, light and ventilation, energy conservation, and property protection from hazards attributed to the built environment within the City of Fort Collins.

## C) ANNOUNCEMENTS

## D) ADJOURNMENT

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*A solicitud, la Ciudad de Fort Collins proporcionará servicios de acceso a idiomas para personas que no dominan el idioma inglés, o ayudas y servicios auxiliares para personas con discapacidad, para que puedan acceder a los servicios, programas y actividades de la Ciudad. Para asistencia, llame al*

*970.221.6515 (V/TDD: Marque 711 para Relay Colorado). Por favor proporcione aviso previo. Las solicitudes de interpretación en una reunión deben realizarse antes del mediodía del día anterior.*

**File Attachments for Item:**

## 1. Impact Fee Study Updates

The purpose of this item is to propose revisions to the 2023 capital expansion fee studies that align with Council values and priorities. Studies conducted in 2023 for updates of capital expansion fees remain unadopted, with inflationary-only fee adjustments implemented in 2024 and 2025. Staff proposes adoption of revised fees to be effective January 1, 2026.

**September 9, 2025**

# WORK SESSION AGENDA ITEM SUMMARY

City Council

## STAFF

Josh Birks, Deputy Director, Sustainability Services
Jennifer Poznanovic, Sales Tax & Revenue Director, Financial Services

## SUBJECT FOR DISCUSSION

**Impact Fee Study Updates**

## EXECUTIVE SUMMARY

The purpose of this item is to propose revisions to the 2023 capital expansion fee studies that align with Council values and priorities. Studies conducted in 2023 for updates of capital expansion fees remain unadopted, with inflationary-only fee adjustments implemented in 2024 and 2025. Staff proposes adoption of revised fees to be effective January 1, 2026.

## GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. Does the Council support impact fee study revisions?

2. Does the Council need any additional information ahead of proposed first reading on October 7th?

## BACKGROUND / DISCUSSION

**Fee History and Current State:**

Impact fees (also known as capital expansion fees) are one-time payments imposed on new development that must be used solely to fund growth-related capital projects. An impact fee represents new growth's proportionate share of capital facility needs. Fees cannot be used for improvements which solely benefit adjacent development, existing deficiencies, and/or for maintenance. The City collects capital expansion fees for neighborhood parks, community parks, fire protection, police, general government, and transportation.

In November 2024, staff proposed adoption of capital expansion fees determined by studies conducted by external consultants in 2023. For the comprehensive study and update of fees, the City contracted with Economic & Planning Systems (EPS) to update the Capital Expansion Fees (CEFs) and with TischlerBise to update the Transportation Capital Expansion Fees (TCEFs). In place of adopting the full fees presented by the studies, inflationary adjustments were approved by City Council for both 2024 and 2025. All capital expansion fees have received inflationary-only adjustments since the most recent comprehensive studies conducted in 2017.

Concurrent with the capital expansion fee work of 2023/24, Utilities staff updated impact fee models that were ultimately adopted in full for 2025 implementation. Utilities development fees include Water, Wastewater, and Stormwater Plant Investment Fees (PIFs) and Electric Capacity Fee (ECF). Utilities will continue updating fee models on a bi-annual basis and are not planned for inclusion in the 2025 capital expansion fee review.

**Realignment Objectives:**

The 2023 studies largely relied on an incremental expansion (or level of service) methodology, which bases the fees on the existing levels of service of the City's facilities and capital assets. The incremental expansion method is a common technique and appropriate for the City's capital growth projections due to the limitation of detailed capital improvement plans. This approach catalogs the current level of service in the city and converts it to a value per unit of service demand (e.g. service population or vehicle miles traveled).

Considering discussions from previous Council Work Sessions, staff worked EPS and TischlerBise consultants to evaluate the assumptions and variables included in the level of service approach to understand the maneuverability within the study models to best reflect the City's policy objectives. Throughout the process staff has been committed to maintaining a data-driven and defensible approach provided by the existing models and conducting a legal review of the methodologies used.

**Proposed 2023 Study Revisions:**

The 2023 study revisions used an adjusted methodology to capture household size by product type. In both the EPS and TischlerBise revised 2023 studies, household sizes have been updated using the newer data and household size by type. In general, this has led to a shift in the fee calculations that is more representative of household size based on product type. For CEFs new household sizes drive new fees and for TCEFs new household size factors are used to adjust trip ends by unit size and type.

Three adjustments are recommended in the proposed study revisions. The first adjustment is a wider variety of dwelling unit sizes that better align with Larimer County's categories, a move from five to seven tiers. The current maximum is 2,200 square feet and the proposed maximum is 3,600 square feet.

The second adjustment is a move from one residential dwelling unit category to three categories: single family detached, single family attached and multifamily. The proposed average household size more accurately reflects household size across various housing unit types and sizes. Accessory dwelling units (ADU) fall into the multifamily dwelling unit category. For TCEFs specifically, household size changes increases vehicle trip ends demand from single family detached and decreases demand for single family attached and multifamily. For the vehicle trip ends per unit calculation, both the number of people and number of vehicles at the home are included.

The final proposed adjustment is from seven fee types to eight fee types with general government broken into two types: fleet and facilities. The move more accurately reflects how the funds are used. In the study, the replacement costs did not change but have been split out by type.

In the revised CEF study, parks costs have been updated with development and land costs revised with the most recent data. The cost per residential population shifted replacement cost per acre that increased for neighborhood parks and decreased for community parks. Overall, parks impact fees have gone up for single family detached and have gone down for single family attached and multifamily. Compared to the 2023 study, the total for all three housing types has gone down.

All fees have been adjusted for inflation since the 2023 studies. All capital expansion fees, except for the transportation capital expansion fees, are adjusted according to the Denver-Aurora-Lakewood Consumer Price Index. The transportation capital expansion fees are adjusted according to the Engineering News Record Denver Regional Construction Cost Index.

Study revisions for both CEF and TCEF studies are provided as attachments to this agenda item.

Revenue Comparison:

Using 2024 dwelling until counts, the overall estimate for all impact fees is a 3% increase from current 2025 fees, with a 22% increase for single family detached, a 3% increase from for single family attached and an 16% decrease for multifamily. For CEFs this is a 13% increase from current 2025 fees, with a 29% increase for single family detached, 14% increase for single family attached and a 3% decrease for multifamily. For TCEFs this is a 12% decrease from current 2025 fees, with a 13% increase for single family detached, 14% decrease for single family attached and a 41% decrease for multifamily.

These figures are estimates based on 2024 dwelling unit counts and future fee revenue depends on actual development activity that occurs. For example, if more single family detached homes are built, TCEF revenue could increase. Based on the TCEF study, multifamily has less impact on vehicle miles travelled (VMT) resulting in less impact on transportation expansion demand.

Total Cost of Development:

Impact fees are a small percentage of overall development costs. For a single family detached home in Fort Collins (1,600 sq. ft. unit), impact fees are 3.3% of the total cost of development and would be 3.7% with the proposed fees. For a multifamily unit in Fort Collins (1,000 sq. ft. unit), impact fees are 6.0% of the total cost of development and would be 4.9% with the proposed fees. The proposed fee updates better algin single family and multifamily as a percentage of the total overall cost of development.

Outreach:

For August and September 2025, outreach efforts are planned to include meetings with the Local Legislative Affairs Committee, the Affordable Housing Board, and the Economic Advisory Board.

## NEXT STEPS

The next steps are Council adoption of the revised capital expansion fee studies at the October 7th and October 21st Council Meetings. If adopted, the new fees will be effective starting January 1, 2026.

## ATTACHMENTS

1. EPS Revised Study
2. TischlerBise Revised Study
3. Presentation

Economic & Planning Systems, Inc.
The Economics of Land Use

# 2023 CAPITAL EXPANSION FEE STUDY – 2025 UPDATE

**DRAFT REPORT**

**Prepared for:**
City of Fort Collins, Colorado

**Prepared by:**
Economic & Planning Systems, Inc.

**August 28, 2025**

EPS #233062

# Table of Contents

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# 1. Executive Summary

## Introduction

This Report was prepared by Economic & Planning Systems (EPS) for the City of Fort Collins to update its Capital Expansion Fee (CEF) program. CEFs are the City's term for what are defined as impact fees under State of Colorado law. The Report documents costs and other supporting data to provide the nexus and proportionality requirements needed to adopt impact fees to comply with State of Colorado law and other case law regarding development charges. Capital expansion fee calculations are provided for the following fee categories **currently** levied by the City on new development:

- Neighborhood Parks
- Community Parks
- Police
- Fire Protection
- General Government

## Current Capital Expansion Fee Program

The City collects impact fees or CEFs for neighborhood parks, community parks, fire protection, police, general government, and transportation (**Table 1**). The transportation impact fee is known as the Transportation Capital Expansion Fee or TCEF. The TCEF is currently undergoing an update contained in a separate study conducted by TischlerBise.

Based on the 2017 nexus study, residential capital expansion fees are currently charged per dwelling unit with the fees varying by the size of the dwelling unit, as large units have larger average household sizes than smaller units. The current residential CEFs (including the TCEF) range from a total of $10,108 for dwelling units up to 700 square feet to $20,740 for units over 2,200 square feet. These fees apply to all dwelling unit types (e.g., single family and multifamily) and are applied based on the gross square feet in the building permit application.

In total, nonresidential CEFs are:

- $13,912 per 1,000 square feet ($13.91 per square foot) for commercial buildings;
- $11,046 per 1,000 square feet ($11.04 per square foot) for office and other service buildings;
- $3,299 per 1,000 square feet ($3.30 per square foot) for industrial buildings.

Capital expansion fees are collected typically at the time of building permit for building construction.

**Table 1. Current Capital Expansion Fees**

| Land Use Type | Neighborhood Park | Community Park | Fire | Police | General Government | TCEF (Transportation) | Total |
|---|---|---|---|---|---|---|---|
| **Residential (per dwelling)** | | | | | | | |
| Up to 700 sq. ft. | $2,286 | $3,229 | $560 | $313 | $762 | $2,958 | **$10,108** |
| 700 - 1,200 sq. ft. | $3,060 | $4,322 | $757 | $424 | $1,028 | $5,493 | **$15,084** |
| 1,201 - 1,700 sq. ft. | $3,343 | $4,719 | $824 | $461 | $1,123 | $7,133 | **$17,603** |
| 1,701 - 2,200 sq. ft. | $3,377 | $4,767 | $837 | $467 | $1,140 | $8,341 | **$18,929** |
| Over 2,200 sq. ft. | $3,763 | $5,315 | $931 | $521 | $1,269 | $8,941 | **$20,740** |
| **Nonresidential (per 1,000 sq. ft.)** | | | | | | | |
| Commercial | $0 | $0 | $705 | $394 | $1,928 | $10,885 | **$13,912** |
| Office and Other Services | $0 | $0 | $705 | $394 | $1,928 | $8,019 | **$11,046** |
| Industrial | $0 | $0 | $165 | $92 | $454 | $2,588 | **$3,299** |

Source: City of Fort Collins; Economic & Planning Systems

## Proposed Capital Expansion Fee Program

This report documents the calculations for a new capital expansion fee program with the following proposed changes. Below are three changes that have been made to the calculation for this nexus study.

### New Residential Land Use Categories

To better align impact fees with development impacts, residential was split into three categories:

- Single Family Detached
- Single Family Attached
- Multifamily/Accessory Dwelling Unit (ADU)

Each of the above housing types can have significantly different household sizes—both in relation to the number of people living within the household and its square footage footprint. Therefore, this change will better align with the direct impact of each housing type on the City's services.

In addition to the splitting of residential into three types, new square footage ranges were used to better align with the City code and Larimer County standards. Currently, five square footage ranges are used, as shown below.

- Up to 700 square feet
- 700 square feet to 1,200 square feet
- 1,201 square feet to 1,700 square feet

- 1,701 square feet to 2,200 square feet
- Over 2,200 square feet

The new square footage ranges differ based on product type, with seven categories for both Single Family Detached and Single Family Attached, and three categories for Multifamily/ADU (shown below).

**Single Family Detached & Single Family Attached**

- Up to 900 square feet
- 901 square feet to 1,300 square feet
- 1,301 square feet to 1,800 square feet
- 1,801 square feet to 2,400 square feet
- 2,401 square feet to 3,000 square feet
- 3,001 square feet to 3,600 square feet
- Over 3,601 square feet

**Multifamily/ADU**

- Up to 750 square feet
- 751 to 1,300 square feet
- Over 1,301 square feet

## Redistribution of General Government

A minor change is proposed for the general government category to better differentiate between general government fleet and facility costs. This study proposes that the general government category be split into two categories—General Government Facilities and General Government Fleet. This change does not have any impact on the total amount of inventory within the General Government category but rather splits the calculation into two categories based on associated costs.

## New Nonresidential Land Use Category

A new fee for land use comprised of offices and other services is proposed. Traditionally, office and other services impact fees have been charged at the same rate as retail/commercial developments. However, the TCEF fees have been charging office and other service impact fees at a different rate than retail/commercial developments. To create consistency between the CEF and TCEF fees, EPS is proposing that office and other services impact fees be added to the fee schedule to create more consistency with the TCEF fees.

## Proposed Capital Expansion Fees

This report provides calculations of the maximum capital expansion fees that the City may charge, supported by this nexus and proportionality analysis. The law allows City Council to adopt the full fees determined in this report, or to adopt lower fees for a variety of policy reasons determined to be in the interest of the City. The proposed maximum residential and nonresidential capital expansion fees are shown below in **Table 2**.

Updated residential fees range from $6,780 to $16,801 (**Table 2**). The range in residential fees is based on the average household size in each size category and dwelling unit type. Larger homes tend to have larger household sizes, creating more impact on public facilities. In Fort Collins, this is also true for single family detached homes, which generally have larger household sizes in comparison to single family attached and multifamily units.

For nonresidential fees, each fee varies according to the employment and customer/visitor generation factors for each land use type explained further in Chapter 2. Nonresidential fees range from $1,002 to $3,861 per 1,000 square feet.

## Table 2. Proposed Capital Expansion Fees

| Land Use Type | Parks | | Police | Fire | General Government | | Total |
|---|---|---|---|---|---|---|---|
| | Neighborhood Park | Community Park | | | Facilities | Fleet | |
| **Single Family Detached** | | | | | | | |
| Up to 900 sq. ft. | $5,060 | $2,525 | $671 | $1,061 | $1,089 | $222 | $10,628 |
| 901 - 1,300 sq. ft. | $5,497 | $2,744 | $729 | $1,153 | $1,183 | $241 | $11,547 |
| 1,301 - 1,800 sq. ft. | $6,133 | $3,061 | $813 | $1,286 | $1,320 | $268 | $12,881 |
| 1,801 - 2,400 sq. ft. | $6,695 | $3,342 | $888 | $1,404 | $1,441 | $293 | $14,062 |
| 2,401 - 3,000 sq. ft. | $7,192 | $3,590 | $954 | $1,508 | $1,548 | $314 | $15,106 |
| 3,001 - 3,600 sq. ft. | $7,579 | $3,782 | $1,006 | $1,589 | $1,631 | $331 | $15,917 |
| Over 3,601 sq. ft. | $7,894 | $3,940 | $1,048 | $1,655 | $1,698 | $345 | $16,579 |
| **Single Family Attached** | | | | | | | |
| Up to 900 sq. ft. | $4,010 | $2,001 | $532 | $841 | $863 | $175 | $8,422 |
| 901 - 1,300 sq. ft. | $4,625 | $2,308 | $614 | $970 | $995 | $202 | $9,713 |
| 1,301 - 1,800 sq. ft. | $5,519 | $2,754 | $732 | $1,157 | $1,187 | $242 | $11,592 |
| 1,801 - 2,400 sq. ft. | $6,311 | $3,150 | $838 | $1,323 | $1,358 | $276 | $13,256 |
| 2,401 - 3,000 sq. ft. | $7,012 | $3,499 | $930 | $1,470 | $1,509 | $307 | $14,728 |
| 3,001 - 3,600 sq. ft. | $7,556 | $3,770 | $1,003 | $1,584 | $1,626 | $330 | $15,868 |
| Over 3,601 sq. ft. | $7,999 | $3,992 | $1,061 | $1,677 | $1,721 | $350 | $16,801 |
| **Multifamily / ADU** | | | | | | | |
| Up to 750 sq. ft. | $3,228 | $1,611 | $429 | $677 | $695 | $141 | $6,780 |
| 751 - 1,300 sq. ft | $4,507 | $2,249 | $598 | $945 | $970 | $197 | $9,465 |
| Over 1,301 sq. ft | $4,997 | $2,494 | $663 | $1,048 | $1,075 | $219 | $10,495 |
| **Nonresidential (per 1,000 sq. ft.)** | | | | | | | |
| Retail/Commercial | $0 | $0 | $852 | $1,346 | $1,382 | $281 | $3,861 |
| Office and Other Services | $0 | $0 | $466 | $737 | $756 | $154 | $2,112 |
| Industrial | $0 | $0 | $221 | $349 | $358 | $73 | $1,002 |

Source: City of Fort Collins; Economic & Planning Systems

## Legal Standards for Impact Fees

Impact fees can be charged by local governments on new development to pay for capital facilities needed to serve growth. The State of Colorado has adopted a standard codified as Section 29-20-104 and 104.5 of the Colorado Revised Statutes.

The law requires local governments to "quantify the reasonable impacts of proposed development on existing capital facilities and establish the impact fee or development charge at a level no greater than necessary to defray such impacts directly related to proposed development."[1] The standard that must be met within the State of Colorado requires mitigation to be "directly related" to impacts.

### Summary of Impact Fee Requirements

- **Capital Facilities** – Fees may not be used for operations or maintenance. Fees must be spent on new or expanded capital facilities, which have been further defined as directly related to a government service, with an estimated useful life of at least five years and that are required based on the charter or a general policy.
- **Existing Deficiencies** – Fees are formally collected to mitigate impacts from growth and cannot be used to address existing deficiencies. In the analysis used to establish an impact fee program, the evaluation must distinguish between the impacts of growth and the needs of existing development.
- **Capital Maintenance** – Major "capital maintenance" projects are not typically eligible to be funded with impact fees unless it can be shown that the project increases the capacity of the community to accommodate growth. In that case, only the growth-serving element of the project is eligible to be funded with impact fees.
- **Credits** – In the event a developer must construct off-site infrastructure in conjunction with their project, the local government must provide credits against impact fees for the same infrastructure, provided that the necessary infrastructure serves the larger community. Credits may not apply if a developer is required to construct such a project as a condition of approval due to the direct impact on the capital facility created by the project. Credits are managed on a case-by-case basis.
- **Timing** – The City must hold revenues in accounts dedicated to the specific use. Funds must be expended within a reasonable period or returned to the developer. The State enabling legislation does not specify the maximum length of time to be used as a "reasonable period." This has been generally accepted or interpreted as a 10-year period.

[1] C.R.S. 29-1-203.5.

- **Accounting Practices** – The City must adopt stringent accounting practices as specified in the State enabling legislation. Funds generated by impact fees may not be commingled with any other funds.
- **Affordable Housing** – The law allows impact fees on affordable housing "as defined by the community" to be waived.

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# 2. Methodology

This chapter describes common impact fee calculation techniques, the methodology used to calculate new impact fees, and important estimates and factors used in the calculations.

## Impact Fee Methodologies

There are several methods that can be used to calculate impact fees. The two most common techniques are the Plan-Based Method and the Incremental Expansion Method. The method chosen needs to be appropriate for the local circumstances as described below. Colorado law does not specify the methodology to be used; these methods are commonly used in Colorado and in other states.

### Plan-Based Method

This method uses a community's long-range comprehensive plan, capital improvement plan, or other adopted plan identifying capital facilities and infrastructure needed to serve growth. Projects identified in these plans are costed out and included in the fee program. A growth projection is made over the time period for which the defined projects are needed or planned to be built. The fee calculation is essentially the cost of the planned project(s) divided by the forecasted amount of growth. This method is best used when detailed capital project planning has been done.

The plan-based method has limitations. First, many communities are not able to conduct capital planning with the level of detail needed in an impact fee study. It can be difficult to tie future facility needs with expected growth, and growth can be unpredictable. The fee calculations are highly sensitive to the amount of forecasted growth, as growth is the denominator in the fee calculation.

### Incremental Expansion Method

The Incremental Expansion Method is a more frequently used method for calculating impact fees. This method is also called the "level of service" method. This technique answers the question:

> *What should each new unit (increment) of development pay to maintain the City's current level of service?*

This approach takes a snapshot of the current level of service in the city and converts it typically to a value per unit of service demand (e.g., per capita or per service population). The current level of service is defined as the inventory of the City's existing facilities and capital assets, and the cost to replicate that level of service (replacement cost) as the city grows. The asset inventory or value is then converted to a cost per capita, per dwelling unit, or per nonresidential square foot that is the basis for the fee.

The Incremental Expansion Method was used in this study to calculate impact fees for Parks, Police, Fire, General Government Facilities, and General Government Fleet.

## Level of Service Definition

Using the Incremental Expansion Method, this study defines the level of service (LOS) as the replacement cost of the existing facilities and capital equipment in the City in 2023. The fee calculations document the current inventories of parks facilities and land, police facilities and fleet/equipment, fire facilities and fleet/equipment, general government facilities, and general government fleet. The LOS is converted to a cost or value per service population that is used to calculate the impact fees for each major land use type.

## Cost Allocations by Land Use Type

Many City services and related capital facilities are provided for residential and commercial (nonresidential) development. To ensure that impact fees are proportional to the impact by type of land use, it is necessary to allocate the level of service or facility costs to residential and nonresidential development. For all categories, the City's service population combined with person-occupancy factors are used to allocate costs as described in the next section.

## Service Population

Under the incremental expansion method, the impact fee is based on the cost to maintain the current infrastructure standard expressed as the replacement cost per service population. Under this method, each new increment of development pays a fee that is designed to maintain the current level of service per unit of service population (replacement cost per service population). Service population is a metric that combines the resident population plus in-commuting workers for a total "daily" or "functional" population.

Capital expansion fee calculations use service population and person-occupancy factors by land use type as the basis for allocating costs to residential and nonresidential development (except for parks, which uses residential population). The calculation of service population is shown in **Table 3**.

The City of Fort Collins estimated its population to be 174,445 people in 2023. There are an estimated 107,677 jobs in Fort Collins and an estimated 102,037 employees (workers) after adjusting for people who hold multiple jobs. In-commuters account for 57.8 percent of the job holders and because they are present in the city for only part of a day, they are weighted at 50 percent of the impact of a full-time resident. These adjustments add 29,507 of equivalent population to the population resulting in a service population of 203,952.

**Table 3. Fort Collins Service Population Calculation, 2023**

| Description | Factor | 2023 | Source |
|---|---|---|---|
| **Service Population** | | | |
| Population | ***A*** | 174,445 | City of Fort Collins, 2023 |
| Jobs | | 107,677 | North Front Range MPO TAZ, 2023 |
| Jobs Per Employed Person | | 1.06 | LEHD, 2020 |
| Employees | | 102,037 | Calculation |
| In-Commuters | | 57.8% | LEHD, 2020 |
| Commuting Employee Weight | | 50.0% | EPS Estimate |
| In-Commuting Employee Impact | ***B*** | 29,507 | Calculation |
| **Total Service Population** | **= *A* + *B*** | **203,952** | |

Source: TischlerBise; North Front Range MPO TAZ, 2023; U.S. Census LEHD; Economic & Planning Systems

## Residential Occupancy Factors

Occupancy factors are developed in this section to convert new development into increments of new service population. The occupancy factors also allocate service demand between residential and nonresidential land uses.

Fort Collins residents are estimated to spend approximately 71.3 percent of their day at home, which is equivalent to the residential service demand factor (**Table 4**). The other 29.7 percent of the time spent away from home is accounted for in the nonresidential occupancy factors.

**Table 4. Fort Collins Residential Service Demand Factor Calculation, 2023**

| Description | Factor | 2023 | Source |
|---|---|---|---|
| **Residential Conditions** | | | |
| Population | | 174,445 | City of Fort Collins, 2023 |
| Nonworking Residents | 52.0% | 90,711 | LEHD, 2020 |
| Working Residents | 48.0% | 83,734 | LEHD, 2020 |
| Out Commuter Residents | 50.6% | 42,369 | LEHD, 2020 |
| Work/Live Residents | 49.4% | 41,364 | LEHD, 2020 |
| **Residential Service Demand** | | | |
| Nonworking Residents | 20 hours per day | 1,814,228 | person-hours per day |
| Out Commuter Residents | 14 hours per day | 593,169 | person-hours per day |
| Work/Live Residents | 14 hours per day | 579,102 | person-hours per day |
| Residential Total | ***A*** | 2,986,498 | person-hours per day |
| Total Person-Hours per Day | ***B*** | 4,186,680 | population X 24 hours |
| **Residential Service Demand Factor** | ***=A/B*** | **71.3%** | **percent of day spent at home** *(population's allocation to residential land uses)* |

Source: U.S. Census Longitudinal Employer-Household Dynamics (LEHD); U.S. Census; Economic & Planning Systems

### Household Size by Unit Type

To calibrate household sizes based on unit square footage and unit type, two data sources, both from the U.S. Census Bureau, were used. The 2023 American Housing Survey (AHS) for the Mountain region, as defined by the Census, was first used. This data provides a range of information including household population, occupancy status, unit type, and unit size based on a sample population. Using this information, the average household size by housing unit type and size for the Mountain Region was determined (**Table 5**). The overall averages were as follows: Single Family Detached was 2.64 people per household, Single Family Attached was 2.09 people per household, and Multifamily was 1.85 people per household.

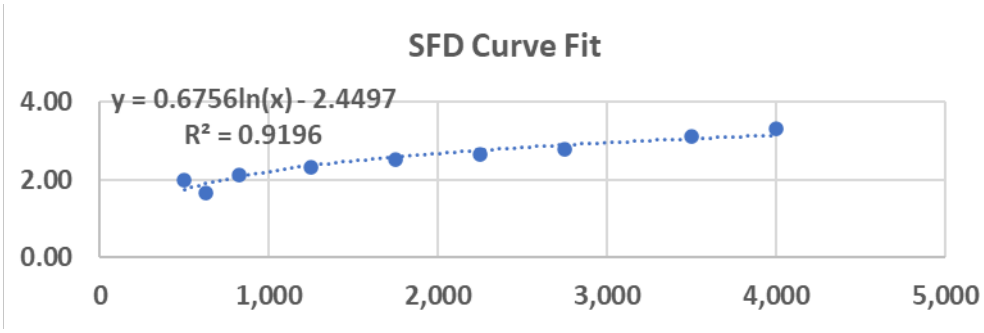
## Table 5. AHS Mountain Region Average Household Size by Type, 2023

| Description | American Housing Survey, Mountain Region (Div. 8) Code | HH Pop | Sample | Avg. HH Size | Avg. Sq. Ft. |
|---|---|---|---|---|---|
| **All Units (Sq. Ft.)** | | | | | |
| Less than 500 | '1' | 118 | 79 | 1.49 | 500 |
| 500 to 749 | '2' | 378 | 256 | 1.48 | 625 |
| 750 to 999 | '3' | 734 | 365 | 2.01 | 825 |
| 1,000 to 1,499 | '4' | 1,602 | 698 | 2.30 | 1,250 |
| 1,500 to 1,999 | '5' | 1,548 | 633 | 2.45 | 1,750 |
| 2,000 to 2,499 | '6' | 1,253 | 479 | 2.62 | 2,250 |
| 2,500 to 2,999 | '7' | 621 | 225 | 2.76 | 2,750 |
| 3,000 to 3,999 | '8' | 721 | 233 | 3.09 | 3,500 |
| 4,000 or more | '9' | 364 | 109 | 3.34 | 4,000 |
| **Total** | | **7,339** | **3,077** | **2.39** | |
| **Single Family Detached** | | | | | |
| Less than 500 | '1' | 6 | 3 | 2.00 | 500 |
| 500 to 749 | '2' | 15 | 9 | 1.67 | 625 |
| 750 to 999 | '3' | 163 | 76 | 2.14 | 825 |
| 1,000 to 1,499 | '4' | 854 | 366 | 2.33 | 1,250 |
| 1,500 to 1,999 | '5' | 1,349 | 532 | 2.54 | 1,750 |
| 2,000 to 2,499 | '6' | 1,160 | 434 | 2.67 | 2,250 |
| 2,500 to 2,999 | '7' | 602 | 217 | 2.77 | 2,750 |
| 3,000 to 3,999 | '8' | 698 | 223 | 3.13 | 3,500 |
| 4,000 or more | '9' | 349 | 105 | 3.32 | 4,000 |
| **Total** | | **5,196** | **1,965** | **2.64** | |
| **Single Family Attached** | | | | | |
| Less than 500 | '1' | 1 | 1 | 1.00 | 500 |
| 500 to 749 | '2' | 29 | 21 | 1.38 | 625 |
| 750 to 999 | '3' | 60 | 27 | 2.22 | 825 |
| 1,000 to 1,499 | '4' | 115 | 55 | 2.09 | 1,250 |
| 1,500 to 1,999 | '5' | 85 | 41 | 2.07 | 1,750 |
| 2,000 to 2,499 | '6' | 59 | 25 | 2.36 | 2,250 |
| 2,500 to 2,999 | '7' | 10 | 4 | 2.50 | 2,750 |
| 3,000 to 3,999 | '8' | 12 | 5 | 2.40 | 3,500 |
| 4,000 or more | '9' | 8 | 2 | 4.00 | 4,000 |
| **Total** | | **379** | **181** | **2.09** | |
| **Multifamily** | | | | | |
| Less than 500 | '1' | 82 | 59 | 1.39 | 500 |
| 500 to 749 | '2' | 288 | 200 | 1.44 | 625 |
| 750 to 999 | '3' | 419 | 220 | 1.90 | 825 |
| 1,000 to 1,499 | '4' | 438 | 195 | 2.25 | 1,250 |
| 1,500 to 1,999 | '5' | 69 | 32 | 2.16 | 1,750 |
| 2,000 to 2,499 | '6' | 14 | 7 | 2.00 | 2,250 |
| 2,500 to 2,999 | '7' | 2 | 1 | 2.00 | 2,750 |
| 3,000 to 3,999 | '8' | 9 | 3 | 3.00 | 3,500 |
| 4,000 or more | '9' | 4 | 1 | 4.00 | 4,000 |
| **Total** | | **1,325** | **718** | **1.85** | |

Source: 2023 American Housing Survey, Divison 8 (Mountain Region), U.S. Census Bureau; Economic & Planning Systems

Next, these average household sizes need to be adjusted to match the square footage ranges used for this nexus study. To do that, a logarithmic formula based on the curve fit of the AHS data is used and then multiplied by the desired square footage. For example, to convert the average household size for Single Family Detached to "Up to 900 sq. ft.," an average square footage of 700 square feet is selected and then included as "x" in a logarithmic formula, shown in **Figure 1**. This results in an average household size of 1.98 people per household.

**Figure 1. Single Family Detached Curve Fit**




This approach is replicated for each housing type and size using three different logrithmic formulas calculated from the AHS sample data in **Table 5**. The resulting table includes average household sizes ranging from 1.98 to 3.08 people per household for Single Family Deatched units, 1.50 to 3.00 people per household for Single Family Attached units, and 1.35 to 2.09 people per household for Multifamily units (**Table 6**).

**Table 6. Household Size Conversion**

| Description | Sq. Ft. | Avg. HH Size |
|---|---|---|
| **Single Family Detached** | | |
| Up to 900 sq. ft. | 700 | 1.98 |
| 901 - 1,300 sq. ft. | 901 | 2.15 |
| 1,301 - 1,800 sq. ft. | 1,301 | 2.39 |
| 1,801 - 2,400 sq. ft. | 1,801 | 2.61 |
| 2,401 - 3,000 sq. ft. | 2,401 | 2.81 |
| 3,001 - 3,600 sq. ft. | 3,001 | 2.96 |
| Over 3,601 sq. ft. | 3,601 | 3.08 |
| **Single Family Attached** | | |
| Up to 900 sq. ft. | 700 | 1.50 |
| 901 - 1,300 sq. ft. | 901 | 1.74 |
| 1,301 - 1,800 sq. ft. | 1,301 | 2.07 |
| 1,801 - 2,400 sq. ft. | 1,801 | 2.37 |
| 2,401 - 3,000 sq. ft. | 2,401 | 2.63 |
| 3,001 - 3,600 sq. ft. | 3,001 | 2.83 |
| Over 3,601 sq. ft. | 3,601 | 3.00 |
| **Multifamily** | | |
| Up to 750 sq. ft. | 550 | 1.35 |
| 751 - 1,300 sq. ft. | 1,025 | 1.89 |
| Over 1,301 sq. ft | 1,301 | 2.09 |

Source: 2023 American Housing Survey, Divison 8 (Mountain Region), U.S. Census Bureau; Economic & Planning Systems

Now that the sample data is in the correct square footage ranges, it needs to be adjusted to align with the local geography—Fort Collins. To do that, U.S. Census Public Use Microdata Sample (PUMS) data is used. Based on 2023 PUMS data, the average household size in the Fort Collins area was 2.77 people per household (**Table 7**). For Single Family Detached units, it was 3.13 people per household; for Single Family Attached units, it was 2.58 people per household; and for Multifamily it was 2.04 people per household.

**Table 7. PUMS Average Household Size by Type, 2023**

| Description | 2023 |
|---|---|
| Single Family Detached | 3.13 |
| Single Family Attached | 2.58 |
| Multifamily | 2.04 |
| **Total** | **2.77** |

Source: U.S. Census PUMS; Economic & Planning Systems

The last step is to convert the AHS household sizes to Fort Collins household sizes by indexing the AHS data and then multiplying it by the average household size by type from the PUMS data. For example, 1.98 people per household is the average household size for Single Family Detached units that are up to 900 square feet in the AHS data (**Table 8**). This average household size is indexed against the average for the housing type (i.e., 1.98 divided by 2.64) to get an index factor of 74.7 percent. This percentage is then multiplied by the average household size for that housing type in Fort Collins (based on the PUMS data), which is 3.13 people per household. This results in an average household size of 2.34 people per household.

Within this study, the average household size is only used for the parks impact fees since it is only charged to residential uses. All other impact fees would use the impact fee factor in **Table 8**, which is calculated by taking the average household size and multiplying it by the residential service demand factor in **Table 4** (71.3 percent).

## Table 8. Index Factors and Household Size Conversion, Fort Collins

| Description | Sq. Ft. | AHS Avg. HH Size | Index | PUMS: PUMA 302 & 303 Fort Collins Avg. HH Size | Fort Collins HH Size | LEHD % of Time in Unit | Impact Fee Factor |
|---|---|---|---|---|---|---|---|
| **Single Family Detached** | | | | | | | |
| Up to 900 sq. ft. | 700 | 1.98 | 74.7% | 3.13 | 2.34 | 71.3% | 1.67 |
| 901 - 1,300 sq. ft. | 901 | 2.15 | 81.2% | 3.13 | 2.54 | 71.3% | 1.81 |
| 1,301 - 1,800 sq. ft. | 1,301 | 2.39 | 90.6% | 3.13 | 2.84 | 71.3% | 2.02 |
| 1,801 - 2,400 sq. ft. | 1,801 | 2.61 | 98.9% | 3.13 | 3.10 | 71.3% | 2.21 |
| 2,401 - 3,000 sq. ft. | 2,401 | 2.81 | 106.2% | 3.13 | 3.33 | 71.3% | 2.37 |
| 3,001 - 3,600 sq. ft. | 3,001 | 2.96 | 111.9% | 3.13 | 3.51 | 71.3% | 2.50 |
| Over 3,601 sq. ft. | 3,601 | 3.08 | 116.6% | 3.13 | 3.65 | 71.3% | 2.61 |
| **All SFD Units** | | **2.64** | | | | | |
| **Single Family Attached** | | | | | | | |
| Up to 900 sq. ft. | 700 | 1.50 | 71.9% | 2.58 | 1.86 | 71.3% | 1.32 |
| 901 - 1,300 sq. ft. | 901 | 1.74 | 82.9% | 2.58 | 2.14 | 71.3% | 1.53 |
| 1,301 - 1,800 sq. ft. | 1,301 | 2.07 | 98.9% | 2.58 | 2.55 | 71.3% | 1.82 |
| 1,801 - 2,400 sq. ft. | 1,801 | 2.37 | 113.1% | 2.58 | 2.92 | 71.3% | 2.08 |
| 2,401 - 3,000 sq. ft. | 2,401 | 2.63 | 125.7% | 2.58 | 3.25 | 71.3% | 2.32 |
| 3,001 - 3,600 sq. ft. | 3,001 | 2.83 | 135.4% | 2.58 | 3.50 | 71.3% | 2.49 |
| Over 3,601 sq. ft. | 3,601 | 3.00 | 143.3% | 2.58 | 3.70 | 71.3% | 2.64 |
| **All SFA Units** | | **2.09** | | | | | |
| **Multifamily** | | | | | | | |
| Up to 750 sq. ft. | 550 | 1.35 | 73.2% | 2.04 | 1.49 | 71.3% | 1.07 |
| 751 - 1,300 sq. ft. | 1,025 | 1.89 | 102.2% | 2.04 | 2.09 | 71.3% | 1.49 |
| Over 1,301 sq. ft | 1,301 | 2.09 | 113.4% | 2.04 | 2.31 | 71.3% | 1.65 |
| **All MF Units** | | **1.85** | | | | | |

Source: 2023 American Housing Survey, Divison 8 (Mountain Region), U.S. Census Bureau; Economic & Planning Systems

## Nonresidential Occupancy Factors

Nonresidential occupancy factors were derived from trip rate factors, vehicle occupancy data, and employment generation factors, as shown in **Table 9**. Daily trip rates are one-half the average daily trip ends during a weekday and are sourced from the Institute of Transportation Engineers (ITE) Trip Generation Manual. Employee density figures were from the TCEF study being prepared by TischlerBise. Using these factors, service population figures were derived for three general land use categories, ranging from 0.55 for industrial uses, to 2.12 for retail and commercial uses. This method accounts for on-site employment and customers or visitors that are comprised of the resident population as well as people coming into the city for shopping, leisure, or business activities.

**Table 9. Fort Collins Nonresidential Occupancy Factors**

| Land Use Category | Unit Sq. Ft. | ITE Code | Daily Trip Ends | Daily Trips[1] (Trip ends / 2) | Persons/ Trip | Persons per 1,000 sq. ft. (8 hours/day) | Employees per 1,000 sq. ft. (8 hours/day) | Employee Hours in Day | Employee Hours |
|---|---|---|---|---|---|---|---|---|---|
| *Factor* | | | | *A* | *B* | *C = A * B* | *D* | | *E* |
| Retail/Commercial | 1,000 | 820 | 37.75 | 18.88 | 1.91 | 36.11 | 2.12 | 8 | 16.98 |
| Office and Other Services | 1,000 | 710 | 9.74 | 4.87 | 1.18 | 5.75 | 3.15 | 8 | 25.17 |
| Industrial | 1,000 | 110 | 4.87 | 2.44 | 1.18 | 2.87 | 1.57 | 8 | 12.56 |

| Land Use Category | Vistors per 1,000 sq. ft. (8 hours/day) | Visitor Hour Factor | Vistor Hours | Total Hours | Total Hours in Day | Service Population per day |
|---|---|---|---|---|---|---|
| *Factor* | *F = C - D* | *G* | *H = F * G* | *I = E + H* | *J* | *= I / J* |
| Retail/Commercial | 33.99 | 1.00 | 33.99 | 50.97 | 24 | 2.12 |
| Office and Other Services | 2.60 | 1.00 | 2.60 | 27.77 | 24 | 1.16 |
| Industrial | 1.30 | 0.50 | 0.65 | 13.21 | 24 | 0.55 |

Source: Economic & Planning Systems

[1]The daily trips are the daily trip ends divided by 2 so that non-residential land uses are not charged for both ends of a trip (origin and destination)

## 2025 Fee Inflationary Factor

Given that much of this study was completed in 2023 and based on 2023 inventory data from each department at the City, an inflationary factor needs to be applied to each fee category to align with 2025 costs. For capital expansion fees, this inflationary factor is based on the Mid-Year Consumer Price Index (CPI) for the Denver-Aurora-Lakewood metro region (**Table 10**). This increase from 2023 to 2025 is applied to each fee category.

**Table 10. Denver-Aurora-Lakewood CPI, 2005 to 2025**

| Description | Mid-Year CPI |
|---|---|
| **Denver-Aurora-Lakewood** | |
| **2025** | **332.865** |
| 2024 | 325.308 |
| **2023** | **316.758** |
| 2022 | 300.002 |
| 2021 | 276.290 |
| 2020 | 271.264 |
| 2019 | 264.147 |
| 2018 | 260.790 |
| 2017 | 252.760 |
| 2016 | 245.191 |
| 2015 | 238.086 |
| 2014 | 235.736 |
| 2013 | 229.142 |
| 2012 | 222.960 |
| 2011 | 219.055 |
| 2010 | 210.978 |
| 2009 | 207.444 |
| 2008 | 208.741 |
| 2007 | 201.258 |
| 2006 | 196.300 |
| 2005 | 189.200 |

Source: U.S. DOL; Bureau of Labor Statistics; Economic & Planning Systems

# 3. Neighborhood and Community Parks Capital Expansion Fees

This chapter documents the level of service, replacement cost estimates, cost allocations, and other calculations used to determine the Parks Capital Expansion Fee for neighborhood parks and community parks. Capital expansion fees are collected to fund facility construction, equipment purchases, and land acquisition. As the city grows, the space needed for these support functions also grows. Capital expansion fees will be used to maintain the current level of service, expressed as the replacement cost of its maintenance facilities, developed parkland, and land cost to replace such parkland. The City currently manages 573 acres of community parks and 422 acres of neighborhood parks.

## Level of Service Definition

The total estimated replacement cost of parks facilities is $359.8 million for neighborhood parks and $179.8 million for community parks (**Table 11**). The replacement cost, which is split into two fee categories, is $2,062 per residential population for neighborhood parks and $1,031 per residential population for community parks. This value includes the replacement cost estimates for all maintenance facilities, all parkland, and the land cost estimates for all parklands.

**Table 11. Parks Cost per Service Unit, 2023**

| Description | | Neighborhood Parks | Community Parks |
|---|---|---|---|
| Total Park Replacement Cost per Acre | ***A*** | $848,776 | $303,196 |
| Developed Acres | ***B*** | 422 | 573 |
| Existing Park Replacement Cost | ***= A x B*** | $358,183,630 | $173,731,317 |
| Maintenance Facility Cost per Acre of Park | ***C*** | $3,765 | $10,558 |
| Developed Acres | ***D*** | 422 | 573 |
| Maintenance Facility Need | ***= C x D*** | $1,589,000 | $6,050,000 |
| **Total Park Replacement Cost** | | **$359,772,630** | **$179,781,317** |
| **Cost per Residential Population** | **174,445** | **$2,062** | **$1,031** |

Source: City of Fort Collins; Economic & Planning Systems

To determine the total park replacement cost per acre for neighborhood parks and community parks, initial total cost of four neighborhood parks and two community parks was collected from the Parks and Recreation Department. These costs were normalized using a total cost per acre and then inflated to 2023 dollars using the Denver-Aurora-Lakewood CPI. This resulted in a total replacement cost per acre for neighborhood parks of $846,151 per acre and a total replacement cost per acre for community parks of $301,815 per acre (**Table 12**).

**Table 12. Parks Replacement Cost per Acre, 2023**

| | Base Cost | | | | | 2023 Inflated Cost | | |
|---|---|---|---|---|---|---|---|---|
| Description | Land & Water Cost | Development Cost | Total Cost | Acres | Total Cost per Acre | Total Cost | Acres | Total Cost per Acre |
| **Neighborhood Parks** | | | | | | | | |
| Dovetail Park (2022) | $550,000 | $4,030,000 | $4,580,000 | 6.1 | $750,820 | $4,835,807 | 6.1 | $792,755 |
| Traverse Park (2020) | $1,330,000 | $3,130,000 | $4,460,000 | 5.6 | $796,429 | $5,207,992 | 5.6 | $929,999 |
| Sugar Beet (2018) | $590,000 | $2,490,000 | $3,080,000 | 5.3 | $581,132 | $3,740,997 | 5.3 | $705,849 |
| Crescent Park (2017) | $1,250,000 | $4,090,000 | $5,340,000 | 7.2 | $741,667 | $6,692,070 | 7.2 | $929,454 |
| **Weighted Average** | **$3,720,000** | **$13,740,000** | **$17,460,000** | **24.2** | **$721,488** | **$20,476,866** | **24.2** | **$846,151** |
| **Community Parks** | | | | | | | | |
| Twin Silo (2016) | $2,110,000 | $14,720,000 | $16,830,000 | 53.6 | $313,875 | $21,742,385 | 53.6 | $405,490 |
| Spring Canyon (2006) | $1,170,000 | $14,650,000 | $15,820,000 | 103.0 | $153,592 | $25,527,823 | 103.0 | $247,843 |
| **Weighted Average** | **$3,280,000** | **$29,370,000** | **$32,650,000** | **156.6** | **$208,466** | **$47,270,208** | **156.6** | **$301,815** |

Note: Total cost includes land and development.
Source: City of Fort Collins; Economic & Planning Systems

To determine the development cost of the maintenance facilities, East Shop maintenance facility development costs were used to estimate a replacement cost per acre based on community and neighborhood park acres served by each facility. These costs were inflated to 2023 dollars using the Denver-Aurora-Lakewood CPI. As previously determined by the City, the cost allocation of maintenance facilities is 80 percent for community parks and 20 percent for neighborhood parks. This results in a community park average cost per acre of $10,595 and a neighborhood park average cost per acre of $3,777 (**Table 13**).

**Table 13. Parks Maintenance Facility per Capita Cost, 2023**

| Description | Base Replacement Cost | 2023 Inflated Replacement Cost |
|---|---|---|
| **Maintenance Facilites** | | |
| **East Shop (2022)** | **$7,260,000** | **$7,665,000** |
| Community Park Allocation (80%) | $5,750,000 | $6,071,000 |
| Community Park Acres | 573 | 573 |
| Maintenance Facility Cost per Acre | $10,035 | $10,595 |
| | | |
| Neighborhood Park Allocation (20%) | $1,510,000 | $1,594,000 |
| Neighborhood Park Acres | 422 | 422 |
| Maintenance Facility Cost per Acre | $3,578 | $3,777 |
| | | |
| **Overall Maintenance Facility Need** | | |
| Community Park Average Cost per Acre | $10,035 | **$10,595** |
| Neighborhood Park Average Cost per Acre | $3,578 | **$3,777** |

Source: City of Fort Collins; Economic & Planning Systems

## Residential Capital Expansion Fee Calculation

The replacement cost per service population is multiplied by the household sizes based on each housing unit size range and housing unit type. Park fees are charged only on residential development and full household size factors are used. This results in a 2023 fee, which is then inflated to 2025 dollars using the Denver-Aurora-Lakewood CPI. For Single Family Detached units, fees range from $5,060 to $7,894 per unit (**Table 14**). For Single Family Attached units, fees range from $4,010 to $7,999 per unit. For Multifamily/ADU, fees range from $3,228 to $4,997 per unit.

**Table 14. Neighborhood Parks Residential Capital Expansion Fee, 2025**

| Description | Avg. HH Size | 2023 Fee *per unit* | 2025 Fee *per unit* |
|---|---|---|---|
| **Cost per Service Population** | **$2,056** | | |
| **Single Family Detached** | | | |
| Up to 900 sq. ft. | 2.34 | $4,815 | $5,060 |
| 901 - 1,300 sq. ft. | 2.54 | $5,231 | $5,497 |
| 1,301 - 1,800 sq. ft. | 2.84 | $5,836 | $6,133 |
| 1,801 - 2,400 sq. ft. | 3.10 | $6,371 | $6,695 |
| 2,401 - 3,000 sq. ft. | 3.33 | $6,844 | $7,192 |
| 3,001 - 3,600 sq. ft. | 3.51 | $7,212 | $7,579 |
| Over 3,601 sq. ft. | 3.65 | $7,512 | $7,894 |
| **Single Family Attached** | | | |
| Up to 900 sq. ft. | 1.86 | $3,816 | $4,010 |
| 901 - 1,300 sq. ft. | 2.14 | $4,401 | $4,625 |
| 1,301 - 1,800 sq. ft. | 2.55 | $5,252 | $5,519 |
| 1,801 - 2,400 sq. ft. | 2.92 | $6,006 | $6,311 |
| 2,401 - 3,000 sq. ft. | 3.25 | $6,673 | $7,012 |
| 3,001 - 3,600 sq. ft. | 3.50 | $7,190 | $7,556 |
| Over 3,601 sq. ft. | 3.70 | $7,612 | $7,999 |
| **Multifamily / ADU** | | | |
| Up to 750 sq. ft. | 1.49 | $3,072 | $3,228 |
| 751 - 1,300 sq. ft. | 2.09 | $4,289 | $4,507 |
| Over 1,301 sq. ft | 2.31 | $4,755 | $4,997 |

Source: Larimer County Assessor; U.S. Census PUMS; Economic & Planning Systems

For the community parks impact fee, the same methodology as neighborhood parks is followed. For Single Family Detached units, fees range from $2,525 to $3,940 per unit (**Table 15**). For Single Family Attached units, fees range from $2,001 to $3,992 per unit. For Multifamily/ADU, fees range from $1,611 to $2,494 per unit.

**Table 15. Community Parks Residential Capital Expansion Fee, 2025**

| Description | Avg. HH Size | 2023 Fee *per unit* | 2025 Fee *per unit* |
|---|---|---|---|
| **Cost per Service Population** | **$1,026** | | |
| **Single Family Detached** | | | |
| Up to 900 sq. ft. | 2.34 | $2,403 | $2,525 |
| 901 - 1,300 sq. ft. | 2.54 | $2,611 | $2,744 |
| 1,301 - 1,800 sq. ft. | 2.84 | $2,913 | $3,061 |
| 1,801 - 2,400 sq. ft. | 3.10 | $3,180 | $3,342 |
| 2,401 - 3,000 sq. ft. | 3.33 | $3,416 | $3,590 |
| 3,001 - 3,600 sq. ft. | 3.51 | $3,599 | $3,782 |
| Over 3,601 sq. ft. | 3.65 | $3,749 | $3,940 |
| **Single Family Attached** | | | |
| Up to 900 sq. ft. | 1.86 | $1,904 | $2,001 |
| 901 - 1,300 sq. ft. | 2.14 | $2,196 | $2,308 |
| 1,301 - 1,800 sq. ft. | 2.55 | $2,621 | $2,754 |
| 1,801 - 2,400 sq. ft. | 2.92 | $2,998 | $3,150 |
| 2,401 - 3,000 sq. ft. | 3.25 | $3,330 | $3,499 |
| 3,001 - 3,600 sq. ft. | 3.50 | $3,588 | $3,770 |
| Over 3,601 sq. ft. | 3.70 | $3,799 | $3,992 |
| **Multifamily / ADU** | | | |
| Up to 750 sq. ft. | 1.49 | $1,533 | $1,611 |
| 751 - 1,300 sq. ft. | 2.09 | $2,140 | $2,249 |
| Over 1,301 sq. ft | 2.31 | $2,373 | $2,494 |

Source: Larimer County Assessor; U.S. Census PUMS; Economic & Planning Systems

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# 4. Police Capital Expansion Fee

This chapter documents the level of service, replacement cost estimates, cost allocations, and other calculations used to determine the Police Capital Expansion Fee. Fees are collected to fund facility expansions, fleet replacement, and equipment replacement. These fees will be used to maintain the current level of service, expressed as the replacement cost of police facilities, fleet, and capital equipment. The police department currently has three primary facilities and 430 fleet vehicles.

## Level of Service Definition

The total replacement cost of police facilities, fleet, and equipment is $78 million, resulting in a replacement cost of $382.40 per service population (**Table 16**). This value accounts for debt owed and an estimated 90 percent capacity factor of police facilities based on current utilization.

**Table 16. Police Inventory and Replacement Cost per Capita, 2023**

| Description | Quantity | Cost Factor | Capacity Factor | Replacement Cost |
|---|---|---|---|---|
| **Police Facilities** | | **Per Sq. Ft.** | | |
| Police Facilities | 3 | $517 | 90% | $58,099,026 |
| IT Capital Equipment | -- | -- | | 18,414,943 |
| **Subtotal** | | **$517** | | **$76,513,969** |
| **Police Fleet Inventory** | | **Per Unit** | | |
| Admin Vehicle | 29 | $33,916 | | $983,559 |
| Drug Task Force | 11 | 31,842 | | 350,258 |
| Equipment | 4 | 209,137 | | 836,549 |
| Investigation | 83 | 37,400 | | 3,104,223 |
| Mobile Command Vehicle | 1 | 440,929 | | 440,929 |
| Patrol | 296 | 41,644 | | 12,326,696 |
| Public Safety | 6 | 97,887 | | 587,323 |
| **Subtotal** | **430** | **$43,325** | | **$18,629,537** |
| **Debt** | | | | **Principal** |
| 2012 COPS | | | | -$7,430,000 |
| 2019 COPS | | | | -6,604,740 |
| Vehicle Equipment | | | | -3,118,078 |
| **Subtotal** | | | | **-$17,152,818** |
| **Total** | | | | **$77,990,689** |
| **Cost per Service Population** | Functional Population: | | 203,952 | **$382.40** |

Source: City of Fort Collins; Economic & Planning Systems

## Residential Capital Expansion Fee Calculation

Capital expansion fees for police were calculated using a cost per service population factor that is then multiplied by a residential occupancy factor based on housing unit size and type. This fee is then inflated to 2025 dollars. For Single Family Detached units, this results in a fee ranging from $671 to $1,048 per unit (**Table 17**). For Single Family Attached units, this results in a fee ranging from $532 to $1,061 per unit. For Multifamily/ADU, this results in a fee ranging from $429 to $663 per unit.

**Table 17. Police Residential Capital Expansion Fee, 2025**

| Description | Factor | 2023 Fee *per unit* | 2025 Fee *per unit* |
|---|---|---|---|
| **Cost per Service Population** | **$382.40** | | |
| **Single Family Detached** | | | |
| Up to 900 sq. ft. | 1.67 | $639 | $671 |
| 901 - 1,300 sq. ft. | 1.81 | $694 | $729 |
| 1,301 - 1,800 sq. ft. | 2.02 | $774 | $813 |
| 1,801 - 2,400 sq. ft. | 2.21 | $845 | $888 |
| 2,401 - 3,000 sq. ft. | 2.37 | $908 | $954 |
| 3,001 - 3,600 sq. ft. | 2.50 | $957 | $1,006 |
| Over 3,601 sq. ft. | 2.61 | $997 | $1,048 |
| **Single Family Attached** | | | |
| Up to 900 sq. ft. | 1.32 | $506 | $532 |
| 901 - 1,300 sq. ft. | 1.53 | $584 | $614 |
| 1,301 - 1,800 sq. ft. | 1.82 | $697 | $732 |
| 1,801 - 2,400 sq. ft. | 2.08 | $797 | $838 |
| 2,401 - 3,000 sq. ft. | 2.32 | $885 | $930 |
| 3,001 - 3,600 sq. ft. | 2.49 | $954 | $1,003 |
| Over 3,601 sq. ft. | 2.64 | $1,010 | $1,061 |
| **Multifamily / ADU** | | | |
| Up to 750 sq. ft. | 1.07 | $408 | $429 |
| 751 - 1,300 sq. ft. | 1.49 | $569 | $598 |
| Over 1,301 sq. ft | 1.65 | $631 | $663 |

Source: Larimer County Assessor; U.S. Census PUMS; Economic & Planning Systems

## Nonresidential Capital Expansion Fee

Using the previously derived service population and occupancy factors, the proposed nonresidential capital expansion fee was calculated for three major land uses. This fee is then inflated to 2025 dollars. Proposed capital expansion fees range from $0.221 per square foot for industrial uses to $0.852 per square foot for retail/commercial uses (**Table 18**).

**Table 18. Police Nonresidential Capital Expansion Fee, 2025**

| Description | Service Pop. *per 1,000 sq. ft.* | 2023 Fee *per 1,000 sq. ft.* | 2025 Fee *per 1,000 sq. ft.* | 2017 Fee *per 1,000 sq. ft.* |
|---|---|---|---|---|
| **Cost per Service Population** | | **$382.40** | | |
| **Nonresidential** | | | | |
| Retail/Commercial | 2.12 | $811 | $852 | $394 |
| Office | 1.16 | $444 | $466 | $394 |
| Industrial | 0.55 | $210 | $221 | $92 |

Source: Economic & Planning Systems

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# 5. Fire Protection Capital Expansion Fee

This chapter documents the current Fire Protection Capital Expansion fee structure, replacement cost estimates, cost allocations, and other factors used to calculate the proposed Fire Protection Capital Expansion Fees. The Poudre Fire Authority (PFA) consists of 11 staffed fire stations, two volunteer fire stations, one headquarters, and one training facility that serves a variety of emergency response needs. These include fire suppression, emergency medical response, hazardous materials response, technical rescue, fire prevention, public outreach and education, and wildland preparedness planning and response. PFA is the overarching authority that serves a large portion of Larimer County including Fort Collins. The Poudre Valley Fire Protection District (PVFPD) collects separate impact fees for its service area outside of the City of Fort Collins.

## Level of Service Definition

The total replacement cost of Fire Protection facilities, fleet, and equipment is $145 million (**Table 19**). The total replacement cost is for the entire PFA district including areas outside of Fort Collins. The asset inventory needs to be allocated to Fort Collins for its CEF calculation, which is shown in **Table 20**.

**Table 19. Fire Protection Inventory and Replacement Cost per Capita, 2023**

| Description | Factor | Cost Factor | Replacement Cost |
|---|---|---|---|
| **Fire Facilities** | **Sq. Ft.** | **Cost per Sq. Ft.** | |
| Burn Building (Training) | 1,560 | $650 | $1,014,000 |
| Fire Stations | 111,630 | 650 | 77,546,966 |
| Vacant Land (Future Station #18) | -- | -- | 675,000 |
| Fit Tower Training | 3,764 | 650 | 2,446,600 |
| Offices | 25,974 | 650 | 17,714,407 |
| Training Center A | 13,970 | 650 | 9,778,798 |
| **Subtotal** | **156,898** | **$650** | **$109,175,771** |
| **Fire Fleet Inventory** | **Units** | **Cost per Unit** | |
| Fleet | 22 | $44,214 | $972,713 |
| Battalion Chiefs | 8 | 41,552 | 332,413 |
| Frontline Apparatus | 45 | 465,978 | 20,968,995 |
| Reserves | 5 | 760,000 | 3,800,000 |
| Training | 13 | 196,521 | 2,554,774 |
| Support | 6 | 28,570 | 171,420 |
| Antiques | 3 | 38,499 | 115,496 |
| Lawn Mowers | 25 | 5,960 | 149,000 |
| Equipment | 92 | 48,541 | 4,465,734 |
| Misc. | 15 | 154,276 | 2,314,139 |
| **Subtotal** | **189** | **$189,654** | **$35,844,684** |
| **Total** | | | **$145,020,455** |

Source: City of Fort Collins; Poudre Fire Authority; Economic & Planning Systems

The City of Fort Collins generates approximately 85 percent of all PFA service calls. The replacement cost attributable to the City is therefore $123.3 million, or $604.32 per service population (**Table 20**).

**Table 20. Fire Protection Asset Cost by Service Area, 2023**

| Description | Call Volume | Total Replacement Cost | Functional Population | Cost per Service Population |
|---|---|---|---|---|
| | | ***A*** | ***B*** | ***= A / B*** |
| Total | 100.00% | $145,020,455 | | |
| **PFA Fort Collins** | **84.99%** | **$123,252,885** | **203,952** | **$604.32** |

Source: City of Fort Collins; Poudre Valley Fire Authority; Economic & Planning Systems

## Residential Capital Expansion Fee Calculation

The capital expansion fee for residential units is calculated using a cost per service population that is then multiplied by a residential occupancy factor based on housing unit size and type. This fee is then inflated to 2025 dollars. For Single Family Detached units, the CEF ranges from $1,061 to $1,655 per unit (**Table 21**). For Single Family Attached units, the CEF ranges from $841 to $1,677 per unit. For Multifamily/ADU, the CEF ranges from $677 to $1,048 per unit.

**Table 21. Fire Residential Capital Expansion Fee, 2025**

| Description | Factor | 2023 Fee *per unit* | 2025 Fee *per unit* |
|---|---|---|---|
| **Cost per Service Population** | **$604.32** | | |
| **Single Family Detached** | | | |
| Up to 900 sq. ft. | 1.67 | $1,010 | $1,061 |
| 901 - 1,300 sq. ft. | 1.81 | $1,097 | $1,153 |
| 1,301 - 1,800 sq. ft. | 2.02 | $1,224 | $1,286 |
| 1,801 - 2,400 sq. ft. | 2.21 | $1,336 | $1,404 |
| 2,401 - 3,000 sq. ft. | 2.37 | $1,435 | $1,508 |
| 3,001 - 3,600 sq. ft. | 2.50 | $1,512 | $1,589 |
| Over 3,601 sq. ft. | 2.61 | $1,575 | $1,655 |
| **Single Family Attached** | | | |
| Up to 900 sq. ft. | 1.32 | $800 | $841 |
| 901 - 1,300 sq. ft. | 1.53 | $923 | $970 |
| 1,301 - 1,800 sq. ft. | 1.82 | $1,101 | $1,157 |
| 1,801 - 2,400 sq. ft. | 2.08 | $1,259 | $1,323 |
| 2,401 - 3,000 sq. ft. | 2.32 | $1,399 | $1,470 |
| 3,001 - 3,600 sq. ft. | 2.49 | $1,507 | $1,584 |
| Over 3,601 sq. ft. | 2.64 | $1,596 | $1,677 |
| **Multifamily / ADU** | | | |
| Up to 750 sq. ft. | 1.07 | $644 | $677 |
| 751 - 1,300 sq. ft. | 1.49 | $899 | $945 |
| Over 1,301 sq. ft | 1.65 | $997 | $1,048 |

Source: Larimer County Assessor; U.S. Census PUMS; Economic & Planning Systems

## Nonresidential Capital Expansion Fee

Using the previously derived service population and occupancy factors, the proposed nonresidential capital expansion fee was calculated for three major land uses. This fee is then inflated to 2025 dollars. Proposed fees range from $0.349 per square foot for industrial uses to $1.346 per square foot for retail/commercial uses (**Table 22**).

**Table 22. Fire Protection Nonresidential Capital Expansion Fee, 2025**

| Description | Service Pop. *per 1,000 sq. ft.* | 2023 Fee *per 1,000 sq. ft.* | 2025 Fee *per 1,000 sq. ft.* | 2017 Fee *per 1,000 sq. ft.* |
|---|---|---|---|---|
| **Cost per Service Population** | | $604.32 | | |
| **Nonresidential** | | | | |
| Retail/Commercial | 2.12 | $1,281 | $1,346 | $705 |
| Office | 1.16 | $701 | $737 | $705 |
| Industrial | 0.55 | $332 | $349 | $165 |

Source: Economic & Planning Systems

# 6. General Government Facilities Capital Expansion Fee

This chapter documents the level of service, replacement cost estimates, cost allocations, and other calculations used to determine the General Government Capital Expansion Fee. These fees are collected to fund facility expansions for general government purposes such as office space for City staff, facilities maintenance buildings, and courts and justice functions. As the city grows, the space needs for these support functions also grows. Capital expansion fees will be used to maintain the current level of service, expressed as the replacement cost of its major facilities.

## Level of Service Definition

The total replacement cost of general government facilities is estimated at $126.5 million (**Table 23**). The replacement cost for general government facilities is $620.23 per service population. This value includes all facilities owned by the City of Fort Collins including City Hall and other administrative buildings, streets and traffic operations, and IT equipment.

**Table 23. General Government Facilities Inventory and Replacement Cost, 2023**

| Description | Factor | Cost Factor | Replacement Cost |
|---|---|---|---|
| **Facilities** | **SF** | **Cost per SF** | |
| 281 North College | 37,603 | $513 | $20,145,339 |
| City Hall | 31,553 | 583 | 19,708,068 |
| 215 N Mason Office | 72,000 | 518 | 38,562,800 |
| 300 LaPorte (OPS Services) | 26,564 | 540 | 14,344,560 |
| Streets Building | 51,314 | 513 | 28,141,722 |
| Traffic Operations Building | 9,500 | 540 | 5,554,440 |
| Fleet / FACs Warehouse - Loomis | 10,122 | 432 | 4,394,754 |
| IT Equipment | -- | -- | 9,706,551 |
| **Subtotal** | **238,656** | **$525** | **$140,558,234** |
| **Debt** | | | **Principal** |
| 2012 COPS | | | -$280,000 |
| 2019 COPS | | | -13,780,260 |
| **Subtotal** | | | **-$14,060,260** |
| **Total** | | | **$126,497,974** |
| **Cost per Service Population** | Functional Population: | 203,952 | **$620.23** |

Source: City of Fort Collins; Economic & Planning Systems

## Residential Capital Expansion Fee Calculation

Residential capital expansion fees for general government facilities are calculated using a cost per service population factor that is then multiplied by a residential occupancy factor based on housing unit size and type. This fee is then inflated to 2025 dollars. For a Single Family Detached unit, this fee ranges from $1,089 to $1,698 per unit (**Table 24**). For a Single Family Attached unit, this fee ranges from $863 to $1,721 per unit. For Multifamily/ADU, this fee ranges from $695 to $1,075 per unit.

**Table 24. General Government Facilities Residential Capital Expansion Fee, 2025**

| Description | Factor | 2023 Fee *per unit* | 2025 Fee *per unit* |
|---|---|---|---|
| **Cost per Service Population** | **$620.23** | | |
| **Single Family Detached** | | | |
| Up to 900 sq. ft. | 1.67 | $1,036 | $1,089 |
| 901 - 1,300 sq. ft. | 1.81 | $1,126 | $1,183 |
| 1,301 - 1,800 sq. ft. | 2.02 | $1,256 | $1,320 |
| 1,801 - 2,400 sq. ft. | 2.21 | $1,371 | $1,441 |
| 2,401 - 3,000 sq. ft. | 2.37 | $1,473 | $1,548 |
| 3,001 - 3,600 sq. ft. | 2.50 | $1,552 | $1,631 |
| Over 3,601 sq. ft. | 2.61 | $1,616 | $1,698 |
| **Single Family Attached** | | | |
| Up to 900 sq. ft. | 1.32 | $821 | $863 |
| 901 - 1,300 sq. ft. | 1.53 | $947 | $995 |
| 1,301 - 1,800 sq. ft. | 1.82 | $1,130 | $1,187 |
| 1,801 - 2,400 sq. ft. | 2.08 | $1,292 | $1,358 |
| 2,401 - 3,000 sq. ft. | 2.32 | $1,436 | $1,509 |
| 3,001 - 3,600 sq. ft. | 2.49 | $1,547 | $1,626 |
| Over 3,601 sq. ft. | 2.64 | $1,638 | $1,721 |
| **Multifamily / ADU** | | | |
| Up to 750 sq. ft. | 1.07 | $661 | $695 |
| 751 - 1,300 sq. ft. | 1.49 | $923 | $970 |
| Over 1,301 sq. ft | 1.65 | $1,023 | $1,075 |

Source: Larimer County Assessor; U.S. Census PUMS; Economic & Planning Systems

## Nonresidential Impact Fee

Using the previously derived service population and occupancy factors, the proposed nonresidential impact fee was calculated for three major land uses. This fee is then inflated to 2025 dollars. Proposed capital expansion fees range from $0.358 per square foot for industrial uses to $1.382 per square foot for retail/ commercial uses (**Table 25**).

**Table 25. General Government Facilities Nonresidential Capital Expansion Fee, 2025**

| Description | Service Pop. *per 1,000 sq. ft.* | 2023 Fee *per 1,000 sq. ft.* | 2025 Fee *per 1,000 sq. ft.* | 2017 Fee *per 1,000 sq. ft.* |
|---|---|---|---|---|
| **Cost per Service Population** | | $620.23 | | |
| **Nonresidential** | | | | |
| Retail/Commercial | 2.12 | $1,315 | $1,382 | $1,928 |
| Office | 1.16 | $719 | $756 | $1,928 |
| Industrial | 0.55 | $341 | $358 | $454 |

Source: Economic & Planning Systems

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# 7. General Government Fleet Capital Expansion Fee

This chapter documents the level of service, replacement cost estimates, cost allocations, and other calculations used to determine the General Government Fleet Capital Expansion Fee. These fees are collected to fund expansions for City fleet and equipment. As the city grows, the need for these support functions also grows. Capital expansion fees will be used to maintain the current level of service, expressed as the replacement cost of its major fleet.

## Level of Service Definition

The total replacement cost of general government fleet is estimated at $25.7 million (**Table 26**). The replacement cost for general government is $126.01 per service population. This value includes general governmental vehicles, miscellaneous maintenance equipment, and heavy equipment.

**Table 26. General Government Fleet Inventory and Replacement Cost, 2023**

| Description | Factor | Cost Factor | Replacement Cost |
|---|---|---|---|
| **Fleet** | **Quantity** | **Cost per Unit** | |
| Heavy Equipment | 180 | $112,554 | $20,259,649 |
| Misc. Maintenance Equipment | 67 | 43,531 | 2,916,571 |
| Vehicles, Trucks, and Trailers | 96 | 52,782 | 5,067,109 |
| **Subtotal** | **343** | **$82,342** | **$28,243,329** |
| **Debt** | | | **Principal** |
| Vehicle Equipment | | | -$2,543,294 |
| **Subtotal** | | | **-$2,543,294** |
| **Total** | | | **$25,700,035** |
| **Cost per Service Population** | Functional Population: | 203,952 | **$126.01** |

Source: City of Fort Collins; Economic & Planning Systems

## Residential Capital Expansion Fee Calculation

Residential capital expansion fees for general government fleet are calculated using a cost per service population factor that is then multiplied by a residential occupancy factor based on housing unit size and type. This fee is then inflated to 2025 dollars. For a Single Family Detached unit, this fee ranges from $222 to $345 per unit (**Table 27**). For a Single Family Attached unit, this fee ranges from $175 to $350 per unit. For Multifamily/ADU, this fee ranges from $141 to $219 per unit.

**Table 27. General Government Fleet Residential Capital Expansion Fee, 2025**

| Description | Factor | 2023 Fee *per unit* | 2025 Fee *per unit* |
|---|---|---|---|
| **Cost per Service Population** | **$126.01** | | |
| **Single Family Detached** | | | |
| Up to 900 sq. ft. | 1.67 | $211 | $222 |
| 901 - 1,300 sq. ft. | 1.81 | $229 | $241 |
| 1,301 - 1,800 sq. ft. | 2.02 | $255 | $268 |
| 1,801 - 2,400 sq. ft. | 2.21 | $279 | $293 |
| 2,401 - 3,000 sq. ft. | 2.37 | $299 | $314 |
| 3,001 - 3,600 sq. ft. | 2.50 | $315 | $331 |
| Over 3,601 sq. ft. | 2.61 | $328 | $345 |
| **Single Family Attached** | | | |
| Up to 900 sq. ft. | 1.32 | $167 | $175 |
| 901 - 1,300 sq. ft. | 1.53 | $192 | $202 |
| 1,301 - 1,800 sq. ft. | 1.82 | $230 | $242 |
| 1,801 - 2,400 sq. ft. | 2.08 | $263 | $276 |
| 2,401 - 3,000 sq. ft. | 2.32 | $292 | $307 |
| 3,001 - 3,600 sq. ft. | 2.49 | $314 | $330 |
| Over 3,601 sq. ft. | 2.64 | $333 | $350 |
| **Multifamily / ADU** | | | |
| Up to 750 sq. ft. | 1.07 | $134 | $141 |
| 751 - 1,300 sq. ft. | 1.49 | $187 | $197 |
| Over 1,301 sq. ft | 1.65 | $208 | $219 |

Source: Larimer County Assessor; U.S. Census PUMS; Economic & Planning Systems

## Nonresidential Impact Fee

Using the previously derived service population and occupancy factors, the proposed nonresidential impact fee was calculated for three major land uses. This fee is then inflated to 2025 dollars. Proposed capital expansion fees range from $0.073 per square foot for industrial uses to $0.281 per square foot for retail/ commercial uses (**Table 28**).

**Table 28. General Government Fleet Nonresidential Capital Expansion Fee, 2025**

| Description | Service Pop. *per 1,000 sq. ft.* | 2023 Fee *per 1,000 sq. ft.* | 2025 Fee *per 1,000 sq. ft.* | 2017 Fee *per 1,000 sq. ft.* |
|---|---|---|---|---|
| **Cost per Service Population** | | $126.01 | | |
| **Nonresidential** | | | | |
| Retail/Commercial | 2.12 | $267 | $281 | $1,928 |
| Office | 1.16 | $146 | $154 | $1,928 |
| Industrial | 0.55 | $69 | $73 | $454 |

Source: Economic & Planning Systems

# Transportation Capital Expansion Fee Study

***Submitted to:***
***City of Fort Collins, Colorado***

**August 21, 2025**

***Prepared by:***

TischlerBise
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# Transportation Capital Expansion Fee Study

# City of Fort Collins, Colorado

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## EXECUTIVE SUMMARY

The City of Fort Collins currently collects Transportation Capital Expansion Fee (TCEF) based on a 2017 study completed by TischlerBise. The City has retained TischlerBise to update its TCEF program.

The updated TCEF study uses a combination of incremental expansion and plan-based methodologies to provide improvements for all modes of travel. Figure 1 provides an overview of the methodology and cost components used in the Fort Collins study.

**Figure 1. TCEF Methods and Cost Components**

| Types of Improvement | Cost Allocation | Service Area | Cost Recovery | Incremental Expansion | Plan-Based |
|---|---|---|---|---|---|
| Capacity Roadway Expansion | Vehicle Miles of Travel (VMT) | Citywide | - | Roadway Capacity | - |
| Active Modes | Person and Jobs | Citywide | - | - | Bike Lanes, Ped/Bike Intersections, Signals |

### Transportation Capital Expansion Fees by Type of Land Use

As documented in this report, the City of Fort Collins has complied with applicable legal precedents and Colorado's Impact Fee enabling legislation (discussed below). The TCEF schedule is proportionate and reasonably related to the cost of capital improvements needed to accommodate new development. Specific costs have been identified using local data and current dollars. With input from City staff, TischlerBise determined demand indicators for transportation capacity and calculated proportionate share factors to allocate costs by type of development. The TCEF methodology also identifies the extent to which new development is entitled to various types of credits to avoid potential double payment of growth-related capital costs.

Figure 2 shows the maximum supportable TCEF schedules. For residential development, updated amounts are based on a revised fee schedule structure. The updated structure adjusts the size groupings to be consistent with the Larimier County TCEF fee schedule and adds three housing types (single family detached, single family attached, and multifamily). Assessing the TCEF by housing type (along with square footage) improves the proportionality and equity of the fee program.

For nonresidential development, TCEFs are stated per thousand square feet of floor area, using three broad categories. The TCEF schedule for nonresidential development is designed to provide a reasonable fee amount for general types of development.

Active modes improvements and expansions were included in the 2017 analysis. There has been further emphasis on active modes and to provide further clarity the maximum supportable fee schedule is broken down by roadway capacity and active modes.

Lastly, given that much of this study was completed in 2023 and based on the inventory of data at that time, an inflationary factor is applied to align with 2025 costs. Consistent with the City's annual inflation adjustment applied during the interim years between TCEF study updates, the inflationary factor applied

to the results is the Engineering News-Record (ENR) Denver Construction Cost Index (CCI). Between August 2023 and August 2025, the CCI has decreased by 1.9 percent. The negative inflation (or deflation) factor has been incorporated to account for the overall decrease in infrastructure construction costs during the study period.

**Figure 2. Maximum Supportable TCEF**

| Square Feet of Finished Living Space | Roadway Capacity | Active Modes | Maximum Supportable Fee | Current Fees | Increase/ Decrease |
|---|---|---|---|---|---|
| **Single Family Detached (per dwelling unit)** | | | | | |
| less than 900 | $3,307 | $729 | **$4,036** | $2,958 | $1,078 |
| 901 to 1,300 | $5,374 | $791 | **$6,165** | $5,493 | $672 |
| 1,301 to 1,800 | $6,934 | $885 | **$7,819** | $7,133 | $686 |
| 1,801 to 2,400 | $8,323 | $965 | **$9,288** | $8,341 | $947 |
| 2,401 to 3,000 | $9,472 | $1,037 | **$10,509** | $8,941 | $1,568 |
| 3,001 to 3,600 | $10,384 | $1,093 | **$11,477** | $8,941 | $2,536 |
| over 3,601 | $11,143 | $1,137 | **$12,280** | $8,941 | $3,339 |
| **Single Family Attached (per dwelling unit)** | | | | | |
| less than 900 | $2,524 | $579 | **$3,103** | $2,958 | $145 |
| 901 to 1,300 | $4,105 | $666 | **$4,771** | $5,493 | ($722) |
| 1,301 to 1,800 | $5,291 | $795 | **$6,086** | $7,133 | ($1,047) |
| 1,801 to 2,400 | $6,351 | $909 | **$7,260** | $8,341 | ($1,081) |
| 2,401 to 3,000 | $7,232 | $1,012 | **$8,244** | $8,941 | ($697) |
| 3,001 to 3,600 | $7,926 | $1,090 | **$9,016** | $8,941 | $75 |
| over 3,601 | $8,509 | $1,153 | **$9,662** | $8,941 | $721 |
| **Multifamily/ADU (per dwelling unit)** | | | | | |
| Up to 750 | $1,559 | $464 | **$2,023** | $2,958 | ($935) |
| 751 to 1,300 | $2,538 | $650 | **$3,188** | $5,493 | ($2,305) |
| Over 1,300 | $3,276 | $719 | **$3,995** | $7,133 | ($3,138) |

| Development Type | Roadway Capacity | Active Modes | Maximum Supportable Fee | Current Fees | Increase/ Decrease |
|---|---|---|---|---|---|
| **Nonresidential (per 1,000 square feet)** | | | | | |
| Commercial | $10,859 | $795 | **$11,654** | $10,885 | $769 |
| Office & Other Services | $6,341 | $1,217 | **$7,558** | $8,019 | ($461) |
| Industrial | $2,849 | $1,068 | **$3,917** | $2,588 | $1,329 |

## GENERAL IMPACT FEE REQUIREMENTS

For local governments, the first step in evaluating funding options for transportation improvements is to determine basic options and requirements established by state law. Some states have more conservative legal parameters that basically restrict local government to specifically authorized actions. In contrast, "home-rule" states grant local governments broader powers that may or may not be precluded or preempted by state statutes depending on the circumstances and on the state's particular laws. Home rule municipalities in Colorado, like Fort Collins, have the authority to impose impact fees based on both their home rule power granted in the Colorado Constitution and the impact fee enabling legislation enacted in 2001 by the Colorado General Assembly.

Impact fees (also known as capital expansion fees) are one-time payments imposed on new development that must be used solely to fund growth-related capital projects, typically called "system improvements". An impact fee represents new growth's proportionate share of capital facility needs. In contrast to project-level improvements, impact fees fund infrastructure that will benefit multiple development projects, or even the entire service area, as long as there is a reasonable relationship between the new development and the need for the growth-related infrastructure. Project-level improvements, typically specified in a development agreement, are usually limited to transportation improvements near a proposed development, such as ingress/egress lanes.

According to Colorado Revised Statute Section 29-20-104.5, impact fees must be legislatively adopted at a level no greater than necessary to defray impacts generally applicable to a broad class of property. The purpose of impact fees is to defray capital costs directly related to proposed development. The statutes of other states allow impact fee schedules to include administrative costs related to impact fees and the preparation of capital improvement plans, but this is not specifically authorized in Colorado's statute. Impact fees do have limitations, and should not be regarded as the total solution for infrastructure funding. Rather, they are one component of a comprehensive portfolio to ensure adequate provision of public facilities. Because system improvements are larger and more costly, they may require bond financing and/or funding from other revenue sources. To be funded by impact fees, Section 29-20-104.5 requires that the capital improvements must have a useful life of at least five years. By law, impact fees can only be used for capital improvements, not operating or maintenance costs. Also, development impact fees cannot be used to repair or correct existing deficiencies in existing infrastructure.

### Impact Fee Methodologies

In contrast to project-level improvements, impact fees fund growth-related infrastructure that will benefit multiple development projects, or the entire jurisdiction (referred to as system improvements). There are three general methods for calculating one-time charges for public facilities needed to accommodate new development. The choice of a particular method depends primarily on the timing of infrastructure construction (past, concurrent, or future) and service characteristics of the facility type being addressed. Each method has advantages and disadvantages in a particular situation, and can be used simultaneously for different cost components.

Reduced to its simplest terms, the process of calculating infrastructure costs for new development involves two main steps: (1) determining the cost of development-related capital improvements and (2) allocating those costs equitably to various types of development. In practice, TCEF calculations can become quite complicated because of many variables involved in defining the relationship between development and the need for facilities within the designated service area. The following sections discuss three basic methods.

### Cost Recovery (past improvements)

The rationale for recoupment, often called cost recovery, is that new development is paying for its share of the useful life and remaining capacity of facilities already built, or land already purchased, from which new growth will benefit. This methodology is often used for utility systems that must provide adequate capacity before new development can take place.

### Incremental Expansion (concurrent improvements)

The incremental expansion method documents current level-of-service (LOS) standards for each type of public facility, using both quantitative and qualitative measures. New development is only paying its proportionate share for growth-related infrastructure needed to maintain current standards. Revenue will be used to expand or provide additional facilities, as needed to keep pace with new development.

### Plan-Based (future improvements)

The plan-based method allocates costs for a specified set of improvements to a specified amount of development. Improvements are typically identified in a capital improvements plan and development potential is identified by land use assumptions. There are two options for determining the cost per service unit: 1) total cost of a public facility can be divided by total service units (average cost), or 2) the growth-share of the capital facility cost can be divided by the net increase in service units over the planning timeframe (marginal cost).

### Credits

Regardless of the methodology, a consideration of "credits" is integral to a legally defensible impact fee study. There are two types of "credits" with specific characteristics, both of which should be addressed in studies and ordinances.

First, a revenue credit might be necessary if there is a double payment situation and other revenues are contributing to the capital costs of infrastructure to be funded by TCEF revenue. This type of credit is integrated into the TCEF calculation, thus reducing the gross amount. In contrast to some studies that only provide general costs, with credits at the back-end of the analysis, Fort Collins's transportation TCEF update uses growth shares to provide an up-front reduction in total costs. Also, the update provides TCEF revenue projections to verify that new development will fully fund the growth cost of future infrastructure (i.e., only TCEF revenue will pay for growth costs).

Second, a site-specific credit or developer reimbursement might be necessary for dedication of land or construction of system improvements to be funded by TCEF revenue. This type of credit is addressed in the administration and implementation of the TCEF program.

## TRANSPORTATION CAPITAL EXPANSION FEE – ROADWAY CAPACITY COMPONENT

The City of Fort Collins Transportation Capital Expansion Fees (TCEF) are calculated using an incremental approach for roadway capacity improvements. Transportation improvements that provide additional vehicular capacity, account for approximately 89 percent of the growth-related cost in the analysis while active modes represent 11 percent.

The roadway capacity component of the TCEF is derived from custom trip generation rates (see Appendix A – Land Use Assumptions), trip rate adjustment factors, and the capital cost per vehicle miles of travel (VMT). The latter is a function of average trip length, trip-length weighting factor by type of development, and the growth cost of transportation improvements.

### Existing Levels of Service for Transportation

There are currently 497 lane miles of arterial streets in the City of Fort Collins. The steps to calculate the current level of service for the City's arterial street network involve calibrating existing development to the system network. To do so, development units by type are multiplied by adjusted vehicle trip ends per development unit. The factors used to calculate the current level of service expressed in vehicle miles of travel (VMT) are discussed below, and shown in Figure 5 after the discussion.

#### VEHICLE MILES OF TRAVEL

VMT is a measurement unit equal to one vehicle traveling one mile[1]. In the aggregate, VMT is the product of vehicle trips multiplied by the average trip length. For the TCEF update, the average trip length is calibrated to lane miles of existing City arterials within Fort Collins.

#### TRIP GENERATION RATES

The TCEF update is based on average weekday vehicle trip ends (AWVTE). For residential development, trip rates are customized using demographic data for Fort Collins, as documented in Appendix A – Land Use Assumptions. For nonresidential development, trip generation rates are from the reference book Trip Generation published by the Institute of Transportation Engineers (ITE 11th Edition, 2021). A vehicle trip end represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). To calculate transportation fees, trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50 percent for industrial, institutional, and office development. As discussed further below, the TCEF methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

[1] Typical VMT calculations for development-specific traffic studies, along with most transportation models of an entire urban area, are derived from traffic counts on particular road segments multiplied by the length of that road segment. For the purpose of the TCEF study, VMT calculations are based on attraction (inbound) trips to development located in the service area, with trip length limited to the road network considered to be system improvements (arterials and collectors). This refinement eliminates pass-through or external- external trips, and travel on roads that are not system improvements (e.g., state highways).

### ADJUSTMENT FOR PASS-BY TRIPS

For retail development, the trip adjustment factor is less than 50 percent because such development attract vehicles as they pass by on arterial roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, ITE indicates that 25 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 75 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 75 percent multiplied by 50 percent, or approximately 38 percent of the trip ends.

### TRIP LENGTH WEIGHTING FACTOR BY TYPE OF LAND USE

The transportation fee methodology includes a percentage adjustment, or weighting factor, to account for trip length variation by type of land use. TischlerBise derived the weighting factors using household survey results provided by North Front Range Metropolitan Planning Organization (NRFMPO, 2010). As shown in Figure 3, trips associated with residential development are approximately 110 percent of the average trip length. Conversely, trips associated with commercial development (i.e., retail and restaurants) are approximately 66 percent of the average trip length while other nonresidential development typically accounts for trips that are 100 percent of the average for all trips.

**Figure 3. Average Trip Length by Trip Purpose in North Front Range**

| Type of Development | Trip Purpose | Trips | Average Miles Per Trip | Weighting Factor | |
|---|---|---|---|---|---|
| 1-Residential | All other at home activities | 4,920 | 5.30 | 3.469 | |
| 1-Residential | Dropped off passenger | 566 | 4.36 | 0.328 | |
| 1-Residential | Picked up passenger | 557 | 3.47 | 0.257 | |
| 1-Residential | Indoor recreation/entertainment | 516 | 4.80 | 0.330 | |
| 1-Residential | Change transportation mode | 354 | 9.37 | 0.441 | |
| 1-Residential | Outdoor recreation/entertainment | 254 | 6.60 | 0.223 | |
| 1-Residential | Service private vehicle | 160 | 5.44 | 0.116 | |
| 1-Residential | Working at home | 127 | 4.06 | 0.069 | |
| 1-Residential | Loop Trip and Other travel related | 55 | 2.71 | 0.020 | |
| 1-Residential | School at home | 7 | 2.03 | 0.002 | |
| ***1-Residential Total*** | | ***7,516*** | | ***5.255*** | ***1.10*** |
| 2-Retail/Restaurant | Routine shopping | 1,236 | 2.76 | 1.571 | |
| 2-Retail/Restaurant | Eat meal outside home | 577 | 3.10 | 0.824 | |
| 2-Retail/Restaurant | Other | 180 | 5.37 | 0.445 | |
| 2-Retail/Restaurant | Major purchase / specialty item | 91 | 6.15 | 0.258 | |
| 2-Retail/Restaurant | Drive through | 88 | 1.80 | 0.073 | |
| ***2-Retail/Restaurant Total*** | | ***2,172*** | | ***3.170*** | ***0.66*** |
| 3-Other Nonresidential | Attend a class | 790 | 2.59 | 0.756 | |
| 3-Other Nonresidential | Work/business related | 618 | 8.48 | 1.937 | |
| 3-Other Nonresidential | Errands (bank, dry cleaning, etc.) | 475 | 2.34 | 0.411 | |
| 3-Other Nonresidential | Personal business (attorney, accountant) | 241 | 5.50 | 0.490 | |
| 3-Other Nonresidential | Health care | 224 | 6.39 | 0.529 | |
| 3-Other Nonresidential | Civic/religious | 196 | 5.13 | 0.372 | |
| 3-Other Nonresidential | Other activities at school | 92 | 3.72 | 0.126 | |
| 3-Other Nonresidential | All other activities at work | 70 | 5.82 | 0.151 | |
| ***3-Other Nonresidential Total*** | | ***2,706*** | | ***4.771*** | ***1.00*** |
| | | TOTAL 12,394 | 4.784 | | |

*Data Source: Table R-27, NFRMPO Household Survey, 2010. Analysis excludes "Visit friends/relatives" because the average distance of 22.43 miles traveled is an outlier, approximately four times the overall average. "Work/job" travel was also excluded because trip origns and destinations can not be allocated between residential and type of nonresidential development.*

### Lane Capacity

The TCEF roadway capacity component is based on established daily per lane capacities for arterial roads. According to City staff, arterial roads were established to have a daily per lane capacity of 7,700, assuming 12 feet travel lanes, with no additional shoulder width, in an urban area.

### Average Vehicle Trip Length

The City of Fort Collins recently completed a travel diary study which surveyed residents on their daily travel including modes, distance, and purpose. Based on the results of the study, the average vehicle trip length in Fort Collins is 4.90 miles.

### Origin & Destination Trip Analysis

Lastly, there is a demand on Fort Collins transportation network that is not associated with any development within city limits. Specifically, there are vehicle trips that originate and end outside of Fort Collins. The nature of these trips means there is a demand that is not Fort Collins growth-related thus not eligible for TCEF funding. Therefore, TischlerBise partnered with transportation engineers at Felsburg Holt & Ullevig to identify the thru-trips (external – external) in Fort Collins. Based on analysis of the Fort Collins travel demand model, seven percent of trips were identified as external – external. As a result, a seven percent reduction is included in the demand calculation.

**Figure 4. Origin & Destination Trip Analysis**

| Origin/Destination | Internal | External |
|---|---|---|
| Internal | 50% | 15% |
| External | 28% | 7% |

Source: Felsburg Holt & Ullevig analysis of Fort Collins travel demand model

## Development Prototypes and Projected Vehicle Miles of Travel

The relationship between the amount of development within Fort Collins and vehicle miles of travel (VMT) is documented in Figure 5. In the table below DU means dwelling unit; KSF means 1,000 square feet of nonresidential development; Institute of Transportation Engineers is abbreviated ITE; VTE means vehicle trip ends. Trip generation rates by bedroom range are documented in Appendix A – Land Use Assumptions.

Projected development over the next ten years and the corresponding need for additional lane miles is shown in the lower section of Figure 5. Fort Collins has a current infrastructure standard of 1.62 arterial lane miles per 10,000 VMT. Based on the detailed demand factors and projected growth, VMT is projected to increase from 3.06 million to 3.5 million over the next ten years (or 14 percent). To accommodate projected development over the next ten years, Fort Collins will need 57.6 additional lane miles of complete streets to maintain current levels of service.

## Figure 5. Projected VMT Increase to Development within Fort Collins

| *Development Type* | *Weekday VTE* | *Development Unit* | *Primary Trip Adjustment* | *Trip Length Wtg Factor* |
|---|---|---|---|---|
| Single Family Units | 9.48 | DU | 58% | 1.10 |
| Multifamily Units | 6.12 | DU | 58% | 1.10 |
| Commercial | 37.01 | KSF | 38% | 0.66 |
| Office & Other Services | 10.84 | KSF | 50% | 1.00 |
| Industrial | 4.87 | KSF | 50% | 1.00 |

Avg Trip Length (miles) [1] 4.90

Vehicle Capacity Per Lane 7,700

| | | *5-Year Increment* | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Fort Collins Travel Model** | **Base Year 2023** | **1 2024** | **2 2025** | **3 2026** | **4 2027** | **5 2028** | **10 2033** | **10-Year Increase** |
| Single Family Units | 47,183 | 47,769 | 48,354 | 49,009 | 49,663 | 50,318 | 54,271 | 7,087 |
| Multifamily Units | 25,406 | 26,087 | 26,768 | 27,529 | 28,291 | 29,052 | 33,649 | 8,243 |
| Commercial KSF | 10,024 | 10,060 | 10,097 | 10,135 | 10,173 | 10,211 | 10,393 | 370 |
| Office & Other Services KSF | 21,999 | 22,215 | 22,430 | 22,627 | 22,823 | 23,019 | 23,950 | 1,951 |
| Industrial KSF | 10,944 | 10,979 | 11,014 | 11,049 | 11,083 | 11,117 | 11,378 | 434 |
| Single Family Trips | 259,433 | 262,651 | 265,870 | 269,469 | 273,068 | 276,667 | 298,402 | 38,969 |
| Multifamily Trips | 90,183 | 92,599 | 95,015 | 97,718 | 100,420 | 103,123 | 119,442 | 29,259 |
| Commercial Trips | 140,970 | 141,485 | 142,000 | 142,535 | 143,071 | 143,607 | 146,169 | 5,199 |
| Office & Other Services Trips | 119,232 | 120,403 | 121,573 | 122,637 | 123,700 | 124,764 | 129,808 | 10,576 |
| Industrial Trips | 26,650 | 26,735 | 26,820 | 26,904 | 26,987 | 27,071 | 27,706 | 1,057 |
| Total Inbound Vehicle Trips | 636,467 | 643,873 | 651,278 | 659,263 | 667,247 | 675,231 | 721,527 | 85,060 |
| Vehicle Miles of Travel (VMT) | 3,055,146 | 3,093,335 | 3,131,525 | 3,172,844 | 3,214,163 | 3,255,483 | 3,496,709 | 441,563 |
| Arterial Lane Miles | 497 | 502.0 | 507.0 | 512.4 | 517.8 | 523.2 | 554.6 | 57.6 |
| | | | | | | **Ten-Year VMT Increase =>** | | **14%** |

## Capital Cost per Vehicle Miles of Travel

As indicated by the travel demand model above, there is a need for 57.6 new lane miles to continue providing the current level of service to projected future demand. Furthermore, seven percent of the demand on the Fort Collins transportation network is from external – external trips. As a result, 53.2 miles is attributed to future growth in Fort Collins (57.6 lane miles x [1 - 0.07] = 53.2 lane miles).

Additionally, Fort Collins staff estimates the construction cost of a new lane mile being $2,000,500. By combining the projected need in lane miles and cost per lane mile results in a growth-related capital cost per $107.5 million. Over the next ten years, there is a projected increase of 441,563 VMT. Comparing the growth-related capital cost and growth in VMT, the study finds a capital cost of $243.38 per VMT ($107,468,000 / 441,563 VMT = $243.38 per VMT, rounded).

**Figure 6. Capital Cost per VMT**

| | |
|---|---|
| 10-Year Need in Roadway Lane Miles | 57.6 |
| Lane Miles Attributed to External - External Trips (7%) | 4.0 |
| **Fort Collins 10-Year Growth-Related Lane Miles** | **53.6** |

| | |
|---|---|
| Construction Cost per Lane Mile | $2,005,000 |
| Fort Collins Growth-Related Construction Cost | $107,468,000 |
| 10-Year Increase in Vehicle Miles Traveled (VMT) | 441,563 |
| **Capital Cost per VMT** | **$243.38** |

## Vehicle Trip Ends by Housing Type and Square Footage of Unit

The TCEF update includes adjusting the size groupings and adding three housing types into the residential fee schedule. The adjustment to size groupings is to be consistent with Larimier County's TCEF program along with improving the demand estimate for smaller and larger sized homes. The City is pursuing assessing the TCEF by housing type as well to further the proportionality of the fee and address equity concerns. Figure 7 summarizes the vehicle trip end rates for single family detached, single family attached, and multifamily development by square footage. Details on the calculations to estimate the vehicle trip ends can be found in Appendix A – Land Use Assumptions.

**Figure 7. Vehicle Trip Ends for Residential Development**

| Vehicle Trip Ends per Unit | | | | |
|---|---|---|---|---|
| Square Feet of Finished Living Space | SF Detached | SF Attached | Square Feet of Finished Living Space | Multifamily |
| less than 900 | 4.43 | 3.38 | Up to 750 | 2.09 |
| 901 to 1,300 | 7.20 | 5.50 | 751 to 1,300 | 3.40 |
| 1,301 to 1,800 | 9.29 | 7.09 | Over 1,300 | 4.39 |
| 1,801 to 2,400 | 11.15 | 8.51 | | |
| 2,401 to 3,000 | 12.69 | 9.69 | | |
| 3,001 to 3,600 | 13.91 | 10.62 | | |
| over 3,601 | 14.93 | 11.40 | | |

Source: American Community Survey, Public Use Microdata; Trip Generation, Institute of Transportation Engineers, 11th Edition (2021); TischlerBise analysis

## Revenue Credit Evaluation

A credit for other revenues is only necessary if there is potential double payment for system improvements. In Fort Collins, Road & Bridge Fund property taxes and gas tax revenue will be used for maintenance of existing facilities, correcting existing deficiencies, and for capital projects that are not TCEF system improvements. As shown later in Figure 9, TCEF revenue over the next ten years mitigates the growth-related share of the roadway capacity needs. Thus, there is no potential double payment from other revenues to fund the growth cost of roadway capacity projects.

Importantly, seven percent of the future need is attributed to external – external trips which represents $8 million. This is not attributed to Fort Collins development, thus, it is not eligible for TCEF funding nor is a credit necessary for the revenue. Fort Collins will have to identify other revenues (i.e., grants) to support this external cost.

## Inflation Adjustment

Lastly, given that much of this study was completed in 2023 and based on the inventory of data at that time, an inflationary factor is applied to align with 2025 costs. Consistent with the City's annual inflation adjustment applied during the interim years between TCEF study updates, the inflationary factor applied to the results is the Engineering News-Record (ENR) Denver Construction Cost Index (CCI). Between August 2023 and August 2025, the CCI has decreased by 1.9 percent. The negative inflation (or deflation) factor has been incorporated to account for the overall change in infrastructure costs during the study period. Details on the CCI index can be found at the end of this report.

## Input Variables for TCEF – Roadway Capacity

A summary of inputs for the roadway capacity component of the TCEF program are detailed in Figure 8. Residential fees are based on the housing type (single family detached, single family attached, and multifamily/ADU) and square footage of the dwelling unit. While there are three nonresidential development types in the fee schedule (consistent with the current Fort Collins TCEF schedule) which are assessed the fee based on 1,000 square feet of development.

Shown in Figure 8, unadjusted TCEF amount is found by multiplying the cost per VMT and VMT demand factor by land use type. The inflation factor (-1.90 percent) is applied to the unadjusted amount to find the maximum supportable fee. For example, the roadway component for a 2,200 square foot single family detached housing unit is $8,323 (34.86 VMT per unit x $243.38 per VMT x [1 - .019] = $8,323 per unit).

The fees represent the highest supportable amount for each type of applicable land use and represent new growth's fair share of the cost for capital facilities. The City may adopt fees that are less than the amounts shown. However, a reduction in TCEF revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

## Figure 8. Maximum Supportable TCEF – Roadway Capacity

| Fee Component | Cost per VMT |
|---|---|
| Roadway Capacity | $243.38 |
| **Gross Total** | **$243.38** |
| **Net Total** | **$243.38** |

| Square Feet of Finished Living Space | VMT per Unit | Unadjusted TCEF (2025) | 2023 Inflation Factor | Maximum Supportable Fee |
|---|---|---|---|---|
| **Single Family Detached (per dwelling unit)** | | | | |
| less than 900 | 13.85 | $3,371 | -1.90% | $3,307 |
| 901 to 1,300 | 22.51 | $5,478 | -1.90% | $5,374 |
| 1,301 to 1,800 | 29.04 | $7,068 | -1.90% | $6,934 |
| 1,801 to 2,400 | 34.86 | $8,484 | -1.90% | $8,323 |
| 2,401 to 3,000 | 39.67 | $9,655 | -1.90% | $9,472 |
| 3,001 to 3,600 | 43.49 | $10,585 | -1.90% | $10,384 |
| over 3,601 | 46.67 | $11,359 | -1.90% | $11,143 |
| **Single Family Attached (per dwelling unit)** | | | | |
| less than 900 | 10.57 | $2,573 | -1.90% | $2,524 |
| 901 to 1,300 | 17.19 | $4,184 | -1.90% | $4,105 |
| 1,301 to 1,800 | 22.16 | $5,393 | -1.90% | $5,291 |
| 1,801 to 2,400 | 26.60 | $6,474 | -1.90% | $6,351 |
| 2,401 to 3,000 | 30.29 | $7,372 | -1.90% | $7,232 |
| 3,001 to 3,600 | 33.20 | $8,080 | -1.90% | $7,926 |
| over 3,601 | 35.64 | $8,674 | -1.90% | $8,509 |
| **Multifamily/ADU (per dwelling unit)** | | | | |
| Up to 750 | 6.53 | $1,589 | -1.90% | $1,559 |
| 751 to 1,300 | 10.63 | $2,587 | -1.90% | $2,538 |
| Over 1,300 | 13.72 | $3,339 | -1.90% | $3,276 |

| Development Type | VMT per KSF | Unadjusted TCEF (2025) | 2023 Inflation Factor | Maximum Supportable Fee |
|---|---|---|---|---|
| **Nonresidential (per 1,000 square feet)** | | | | |
| Commercial | 45.48 | $11,069 | -1.90% | $10,859 |
| Office & Other Services | 26.56 | $6,464 | -1.90% | $6,341 |
| Industrial | 11.93 | $2,904 | -1.90% | $2,849 |

## Revenue Projection from the Maximum Supportable Fee Amounts

This section summarizes the potential cash flow to the City of Fort Collin if the TCEF is implemented at the maximum supportable amounts. The cash flow projections are based on the assumptions detailed in this chapter and the development projections discussed in Appendix A – Land Use Assumptions.

At the top of Figure 9, the cost of growth over the next ten years is listed. The summary provides an indication of the TCEF revenue generated by new development. Since the residential fee schedule structure has been adjusted to account for housing type and square footage, the fee amounts used in the revenue projections are based on VMT averages for single family and multifamily units in Fort Collins. Shown at the bottom of the figure, the maximum supportable TCEF is estimated to generate $106 million in revenue compared to the inflation adjusted growth-related cost of $106 million and a total cost of $115.5 million. The remaining funding gap represents the external – external share of future demand on the transportation network.

### Figure 9. Projected Revenue from Maximum Supportable TCEF – Roadway Capacity

**Infrastructure Costs for Transportation Facilities**

| | Total Cost | Growth Cost | Inflation Adj. Cost |
|---|---|---|---|
| Roadway Capacity | $115,488,000 | $107,468,000 | $105,426,108 |
| **Total Expenditures** | **$115,488,000** | **$107,468,000** | **$105,426,108** |

**Projected Development Impact Fee Revenue**

| Year | | Single Family $9,472 per unit | Multifamily $2,538 per unit | Commercial $10,859 per KSF | Office $6,341 per KSF | Industrial $2,849 per KSF |
|---|---|---|---|---|---|---|
| | | Housing Units | Housing Units | KSF | KSF | KSF |
| Base | 2023 | 47,183 | 25,406 | 10,024 | 21,999 | 10,944 |
| 1 | 2024 | 47,769 | 26,087 | 10,060 | 22,215 | 10,979 |
| 2 | 2025 | 48,354 | 26,768 | 10,097 | 22,430 | 11,014 |
| 3 | 2026 | 49,009 | 27,529 | 10,135 | 22,627 | 11,049 |
| 4 | 2027 | 49,663 | 28,291 | 10,173 | 22,823 | 11,083 |
| 5 | 2028 | 50,318 | 29,052 | 10,211 | 23,019 | 11,117 |
| 6 | 2029 | 50,972 | 29,813 | 10,249 | 23,215 | 11,152 |
| 7 | 2030 | 51,627 | 30,575 | 10,287 | 23,412 | 11,186 |
| 8 | 2031 | 52,508 | 31,599 | 10,323 | 23,591 | 11,250 |
| 9 | 2032 | 53,389 | 32,624 | 10,358 | 23,770 | 11,314 |
| 10 | 2033 | 54,271 | 33,649 | 10,393 | 23,950 | 11,378 |
| Ten-Year Increase | | 7,087 | 8,243 | 370 | 1,951 | 434 |
| Projected Revenue | | $67,131,272 | $20,920,437 | $4,014,456 | $12,373,080 | $1,236,356 |

| | |
|---|---|
| **Projected Revenue** | **$105,676,000** |
| **Total Expenditures** | **$115,488,000** |
| **Non-Impact Fee Funding** | **$9,812,000** |

## TRANSPORTATION CAPITAL EXPANSION FEE – ACTIVE MODES COMPONENT

The City of Fort Collins TCEF are calculated using a plan-based approach for active mode expansions. Transportation improvements that provide additional vehicular capacity, account for approximately 89 percent of the growth-related cost in the analysis while active modes represent 11 percent.

The active modes component of the TCEF is based on the demand from residential and nonresidential development and is allocated based on the percentage of commuters who walk or bike to work. Person per housing unit and employee density factors are then applied to find the proportionate demand from the development types.

### Active Modes Capital Plan

The 2022 Active Modes Plan is the guiding document for the capital expansion plans for bike and pedestrian infrastructure in Fort Collins. The Plan identified High, Medium, and Low priority/readiness projects needed in the coming future to address existing demand and future demand from development. Since the TCEF study examines infrastructure needs over the next ten years, City staff has advised that the high and medium project lists are a realistic plan over that planning horizon. Between the two lists there are 200 projects ranging from small spot treatments addressing signage and side paths to extensive separated bike lane expansion projects. Pages from the Plan listing the projects are provided in the appendix of this report.[2] Overall, the capital plans for active mode expansion totals $93,789,000 (adjusting for inflation) over the next ten years.

### Persons per Housing Unit by Housing Type and Square Footage

The TCEF update includes adjusting the size groupings and adding three housing types into the residential fee schedule. The adjustment to size groupings is to be consistent with Larimier County's TCEF program along with improving the demand estimate for smaller and larger sized homes. The City is pursuing assessing the TCEF by housing type as well to further the proportionality of the fee and address equity concerns. Figure 10 summarizes the persons per housing unit (PPHU) for single family detached, single family attached, and multifamily development by square footage. Details on the calculations to estimate the PPHU can be found in Appendix A – Land Use Assumptions.

**Figure 10. Persons per Housing Unit for Residential Development**

| Persons per Housing Unit | | | | |
|---|---|---|---|---|
| Square Footage per Housing Unit | SF Detached | SF Attached | Square Footage per Housing Unit | Multifamily |
| 900 and less | 2.34 | 1.86 | Up to 750 | 1.49 |
| 901 to 1,300 | 2.54 | 2.14 | 751 to 1,300 | 2.09 |
| 1,301 to 1,800 | 2.84 | 2.55 | Over 1,300 | 2.31 |
| 1,801 to 2,400 | 3.10 | 2.92 | | |
| 2,401 to 3,000 | 3.33 | 3.25 | | |
| 3,001 to 3,600 | 3.51 | 3.50 | | |
| over 3,601 | 3.65 | 3.70 | | |

Source: 2023 American Housing Survey, Division 8 (Mountain Region), U.S. Census Bureau; Economic & Planning Systems

[2] The Active Modes Plan can be found at https://www.fcgov.com/fcmoves/active-modes-plan.

## Active Modes Capital Plan Cost Analysis

Based on the projected growth in demand on the Fort Collins transportation network, 14 percent ($13.1 million) of the total capital cost of the High and Medium priority projects in the Active Modes Plan is attributed to development over the next ten years. As shown in Figure 11, the cost is allocated to residential and nonresidential demand based on the data from the Travel Diary Study Report (2022). From the survey, 22 percent of commuters in Fort Collins use active modes to travel to work. This factor is used to allocate the active modes capital cost to nonresidential demand while the remaining 78 percent is allocated to residential demand. The allocated costs are compared to the 10-year projected increase in population and jobs to find capital cost per unit factors. For example, the capital cost per person is $317.46 ($13,130,508 x 78 percent / 32,262 population increase = $317.46 per person).

**Figure 11. Active Modes Cost Analysis**

| | |
|---|---|
| High and Medium Priority Projects (2022) | $87,554,000 |
| Inflation Since 2022 (ENR CCI) | 7.12% |
| **Current Estimated Cost** | **$93,789,345** |

| | |
|---|---|
| Current Estimated Cost | $93,789,345 |
| Growth-Share of Project List | 14% |
| **Growth-Related Cost of Active Modes Plan** | **$13,130,508** |

| | *Residential* | *Nonresidential* |
|---|---|---|
| Proportionate Share [1] | 78.0% | 22.0% |
| Attributed Capital Cost | $10,241,796 | $2,888,712 |
| 10-Year Population/Jobs Increase | 32,262 | 7,580 |
| **Capital Cost per Person/Job** | **$317.46** | **$381.12** |

[1] Source: Fort Collins Travel Diary Study Report (2022)

## Revenue Credit Evaluation

A credit for other revenues is only necessary if there is potential double payment for system improvements. In Fort Collins, there are general revenues and grants for maintenance of existing facilities and addressing existing demand. However, there are no other revenues available to address future demand on active mode infrastructure. As shown later in Figure 13, TCEF revenue over the next ten years mitigates the growth-related share of the active modes plan. Thus, there is no potential double payment from other revenues to fund the growth cost of active modes projects.

## Inflation Adjustment

Lastly, given that much of this study was completed in 2023 and based on the inventory of data at that time, an inflationary factor is applied to align with 2025 costs. Consistent with the City's annual inflation adjustment applied during the interim years between TCEF study updates, the inflationary factor applied to the results is the Engineering News-Record (ENR) Denver Construction Cost Index (CCI). Between August 2023 and August 2025, the CCI has decreased by 1.9 percent. The negative inflation (or deflation) factor has been incorporated to account for the overall change in infrastructure costs during the study period. Details on the CCI index can be found at the end of this report.

## Input Variables for TCEF – Active Modes

A summary of inputs for the active modes component of the TCEF program is detailed in Figure 12. Residential fees are based on the housing type and the square footage of the dwelling unit. While there are three nonresidential development types in the fee schedule (consistent with the current Fort Collins TCEF schedule).

Shown in Figure 12, the unadjusted TCEF amount is found by multiplying the cost per person/job and demand factor by land use type. The inflation factor (-1.90 percent) is applied to the unadjusted amount to find the maximum supportable fee. For example, the active modes component for a 2,200 square foot single family detached housing unit is $965 (3.10 persons per unit x $317.46 per person x [1 - .019] = $965 per unit).

The fees represent the highest supportable amount for each type of applicable land use and represent new growth's fair share of the cost for capital facilities. The City may adopt fees that are less than the amounts shown. However, a reduction in TCEF revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

## Figure 12. Maximum Supportable TCEF – Active Modes

| Fee Component | Cost per Person | Cost per Job |
|---|---|---|
| Active Modes | $317.46 | $381.12 |
| **Gross Total** | **$317.46** | **$381.12** |
| **Net Total** | **$317.46** | **$381.12** |

| Square Feet of Finished Living Space | Persons per Unit | Unadjusted TCEF (2025) | 2023 Inflation Factor | Maximum Supportable Fee |
|---|---|---|---|---|
| **Single Family Detached (per dwelling unit)** | | | | |
| less than 900 | 2.34 | $743 | -1.90% | $729 |
| 901 to 1,300 | 2.54 | $806 | -1.90% | $791 |
| 1,301 to 1,800 | 2.84 | $902 | -1.90% | $885 |
| 1,801 to 2,400 | 3.10 | $984 | -1.90% | $965 |
| 2,401 to 3,000 | 3.33 | $1,057 | -1.90% | $1,037 |
| 3,001 to 3,600 | 3.51 | $1,114 | -1.90% | $1,093 |
| over 3,601 | 3.65 | $1,159 | -1.90% | $1,137 |
| **Single Family Attached (per dwelling unit)** | | | | |
| less than 900 | 1.86 | $590 | -1.90% | $579 |
| 901 to 1,300 | 2.14 | $679 | -1.90% | $666 |
| 1,301 to 1,800 | 2.55 | $810 | -1.90% | $795 |
| 1,801 to 2,400 | 2.92 | $927 | -1.90% | $909 |
| 2,401 to 3,000 | 3.25 | $1,032 | -1.90% | $1,012 |
| 3,001 to 3,600 | 3.50 | $1,111 | -1.90% | $1,090 |
| over 3,601 | 3.70 | $1,175 | -1.90% | $1,153 |
| **Multifamily/ADU (per dwelling unit)** | | | | |
| Up to 750 | 1.49 | $473 | -1.90% | $464 |
| 751 to 1,300 | 2.09 | $663 | -1.90% | $650 |
| Over 1,300 | 2.31 | $733 | -1.90% | $719 |

| Development Type | Jobs per KSF | Unadjusted TCEF (2025) | 2023 Inflation Factor | Maximum Supportable Fee |
|---|---|---|---|---|
| **Nonresidential (per 1,000 square feet)** | | | | |
| Commercial | 2.12 | $810 | -1.90% | $795 |
| Office & Other Services | 3.26 | $1,241 | -1.90% | $1,217 |
| Industrial | 2.86 | $1,089 | -1.90% | $1,068 |

## Revenue Projection from the Maximum Supportable Fee Amounts

This section summarizes the potential cash flow to the City of Fort Collins if the TCEF is implemented at the maximum supportable amounts. The cash flow projections are based on the assumptions detailed in this chapter and the development projections discussed in Appendix A – Land Use Assumptions.

At the top of Figure 13, the cost of growth over the next ten years is listed. The summary provides an indication of the TCEF revenue generated by new development. Since the residential fee schedule structure has been adjusted to account for housing type and square footage, the fee amounts used in the revenue projections are based on persons per housing unit averages for single family and multifamily units in Fort Collins. Shown at the bottom of the figure, the maximum supportable TCEF is estimated to generate $13 million in revenue while there is a growth-related cost of $13 million, offsetting all growth-related costs. The remaining funding gap represents the existing demand in Fort Collins and will be funded through other revenues.

**Figure 13. Projected Revenue from Maximum Supportable TCEF – Active Modes Component**

| | Total Cost | Growth Cost | Inflation Adj. Cost |
|---|---|---|---|
| Active Modes | $93,789,345 | $13,130,508 | $12,881,029 |
| **Total Expenditures** | **$93,789,345** | **$13,130,508** | **$12,881,029** |

**Projected Development Impact Fee Revenue**

| Year | | Single Family $791 per unit | Multifamily $539 per unit | Commercial $795 per KSF | Office $1,217 per KSF | Industrial $1,068 per KSF |
|---|---|---|---|---|---|---|
| | | Housing Units | Housing Units | KSF | KSF | KSF |
| Base | 2023 | 47,183 | 25,406 | 10,024 | 21,999 | 10,944 |
| 1 | 2024 | 47,769 | 26,087 | 10,060 | 22,215 | 10,979 |
| 2 | 2025 | 48,354 | 26,768 | 10,097 | 22,430 | 11,014 |
| 3 | 2026 | 49,009 | 27,529 | 10,135 | 22,627 | 11,049 |
| 4 | 2027 | 49,663 | 28,291 | 10,173 | 22,823 | 11,083 |
| 5 | 2028 | 50,318 | 29,052 | 10,211 | 23,019 | 11,117 |
| 6 | 2029 | 50,972 | 29,813 | 10,249 | 23,215 | 11,152 |
| 7 | 2030 | 51,627 | 30,575 | 10,287 | 23,412 | 11,186 |
| 8 | 2031 | 52,508 | 31,599 | 10,323 | 23,591 | 11,250 |
| 9 | 2032 | 53,389 | 32,624 | 10,358 | 23,770 | 11,314 |
| 10 | 2033 | 54,271 | 33,649 | 10,393 | 23,950 | 11,378 |
| Ten-Year Increase | | 7,087 | 8,243 | 370 | 1,951 | 434 |
| Projected Revenue | | $5,606,282 | $4,441,025 | $293,903 | $2,374,710 | $463,471 |

| | |
|---|---|
| **Projected Revenue** | **$13,179,000** |
| **Total Expenditures** | **$93,789,000** |
| **Non-Impact Fee Funding** | **$80,610,000** |

## INFLATION ADJUSTMENT FACTOR

The City of Fort Collins annually updates the TCEF fee schedule to account for inflation in construction costs. The inflationary factor used is the Engineering News-Record (ENR) Denver Construction Cost Index (CCI). The CCI compares the historical cost of construction labor, steel, cement, and lumber. Given that much of this study was completed in 2023 and based on the inventory of data at that time, an inflationary factor is applied to align with 2025 costs. Between August 2023 and August 2025, the CCI has decreased by 1.9 percent ( [9,190 / 9,368] – 1 = -0.019). The negative inflation (or deflation) factor has been incorporated to account for the overall change in infrastructure costs during the study period.

**Figure 14. Inflation Adjustment Factor**

| Inflation Factor | August '23 | August '24 | August '25 | Change |
|---|---|---|---|---|
| Denver CCI Index | 9,368 | 9,543 | 9,190 | -1.90% |

Source: Engineering News-Record

## IMPLEMENTATION AND ADMINISTRATION

Development impact fees (in this case TCEF) should be periodically evaluated and updated to reflect recent data. Fort Collins has consistently annually updated the TCEF schedule based on local inflation data. If cost estimates or demand indicators change significantly, the City should redo the fee calculations.

Colorado's enabling legislation allows local governments to "waive an impact fee or other similar development charge on the development of low- or moderate-income housing, or affordable employee housing, as defined by the local government."

### Credits and Reimbursements

A general requirement that is common to impact fee methodologies is the evaluation of credits. A revenue credit may be necessary to avoid potential double payment situations arising from one-time impact fees plus on-going payment of other revenues that may also fund growth-related capital improvements. The determination of revenue credits is dependent upon the impact fee methodology used in the cost analysis and local government policies.

Policies and procedures related to site-specific credits should be addressed in the resolution or ordinance that establishes the impact fees. Project-level improvements, required as part of the development approval process, are not eligible for credits against impact fees. If a developer constructs a system improvement included in the fee calculations, it will be necessary to either reimburse the developer or provide a credit against the fees due from that particular development. The latter option is more difficult to administer because it creates unique fees for specific geographic areas.

Based on national experience, TischlerBise typically recommends reimbursement agreements with developers that construct system improvements. The reimbursement agreement should be limited to a payback period of no more than ten years and the City should not pay interest on the outstanding balance. The developer must provide sufficient documentation of the actual cost incurred for the system improvement. The City should only agree to pay the lesser of the actual construction cost or the estimated cost used in the impact fee analysis. If the City pays more than the cost used in the fee analysis, there will be insufficient fee revenue for other capital improvements. Reimbursement agreements should only obligate the City to reimburse developers annually according to actual fee collections from the applicable Benefit District.

### Citywide Service Area

The TCEF service area is defined as the entire incorporated area within Fort Collins. The infrastructure funded through the TCEF is citywide benefiting and can be attributed to demand throughout the city.

### Expenditure Guidelines

Fort Collins will distinguish system improvements (funded by transportation capital expansion fees) from project-level improvements, such as local streets within a residential subdivision. TischlerBise recommends limiting transportation fee expenditures to arterials and collectors, and should be

consistent with Fort Collins City Code. System improvements that are eligible for transportation fee funding could include:

- Constructing an arterial or collector street.
- A carrying-capacity enhancement to existing arterials or collectors, such reconstruction to add greater street width, including additional vehicular travel lanes, bike lanes, and/or shoulders.
- Adding turn lanes, traffic signals, or roundabouts at the intersection of a State Highway with a City arterial or collector, or a City arterial with another City arterial or collector.

## Development Categories

Proposed transportation fees for residential development are by square feet of finished living space, excluding unfinished basement, attic, and garage floor area. Appendix A provides further documentation of demographic data by size threshold.

The three general nonresidential development categories in the proposed TCEF schedule can be used for all new construction within the Service Area. Nonresidential development categories represent general groups of land uses that share similar average weekday vehicle trip generation rates, as documented in Appendix A.

- "Industrial" includes the processing or production of goods, along with warehousing, transportation, communications, and utilities.
- "Commercial" includes retail development and eating/drinking places, along with entertainment uses often located in a shopping center (i.e., movie theater).
- "Office & Other Services" includes offices, health care and personal services, business services (i.e., banks) and lodging. Public and quasi-public buildings that provide educational, social assistance, or religious services are also included in this category.

# APPENDIX A – LAND USE ASSUMPTIONS

Development-related capital expansion fees often use per capita standards and persons per housing unit or persons per household to derive proportionate share fee amounts. Housing types have varying household sizes and, consequently, a varying demand on City infrastructure and services. Thus, it is important to differentiate between housing types and size.

When persons per housing unit (PPHU) is used in the development impact fee calculations, infrastructure standards are derived using year-round population. In contrast, when persons per household (PPHH) is used in the development impact fee calculations, the fee methodology assumes all housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. Thus, TischlerBise recommends that fees for residential development in Fort Collins be imposed according to persons per housing unit.

Based on housing characteristics, TischlerBise recommends using two housing unit categories for the TCEF study: (1) Single Family and (2) Multifamily. Each housing type has different characteristics which results in a different demand on City facilities and services. Figure 15 shows the US Census American Community Survey 2021 5-Year Estimates data for the City of Fort Collins. Single family units have a household size of 2.54 persons and multifamily units have a household size of 1.73 persons

**Figure 15. Fort Collins Persons per Housing Unit**

| Units in Structure | Persons | House-holds | Persons per Household | Housing Units | Persons per Housing Unit | Housing Mix | Vacancy Rate |
|---|---|---|---|---|---|---|---|
| Single Family | 115,988 | 44,342 | 2.62 | 45,625 | **2.54** | 65% | 3% |
| Multifamily | 42,457 | 22,862 | 1.86 | 24,496 | **1.73** | 35% | 7% |
| Subtotal | 158,445 | 67,204 | 2.36 | 70,121 | 2.26 | | 4% |
| Group Quarters | 8,197 | | | | | | |
| TOTAL | 166,642 | | | | | | |

Source: U.S. Census Bureau, 2021 5-Year Estimate American Community Survey
Single unit includes detached and attached (i.e. townhouse) and mobile homes

## Base Year Population and Housing Units

The City of Fort Collins has provided its own 2023 base year household population estimate which is what will be used to calculate base year housing units.

**Figure 16. Base Year Household Population**

| Fort Collins, CO | Base Year 2023 |
|---|---|
| Household Population [1] | 164,053 |

[1] Source: City of Fort Collins Population Estimate

In 2023, there are an estimated 72,590 housing units in Fort Collins. The housing mix and PPHU factors in Figure 15 are applied to the household population to estimate single family and multifamily units. Overall, single family housing is 65 percent of the total, while multifamily is 35 percent.

**Figure 17. Base Year Housing Units**

| Fort Collins, CO | 2023 Housing Units [1] |
|---|---|
| Single Family | 47,183 |
| Multifamily | 25,406 |
| Total | 72,590 |

[1] Source: City of Fort Collins Population Estimate; PPHU Factors

However, recent trends over the last three years show multifamily housing growing at a greater rate than single family at 54 percent vs 46 percent of total housing growth respectively as shown in Figure 18. This is the trend that will be used for housing and population growth projections.

**Figure 18. Building Permit History**

| Fort Collins, CO | 2020-2023 Building Permits | Percent of Total |
|---|---|---|
| Single Family | 1,104 | 46% |
| Multifamily | 1,284 | 54% |
| Total | 2,388 | |

Source: City of Fort Collins

In 2023, the household population in Fort Collins is estimated to be 164,053. To estimate the total residents, the group quarters population of 10,392 is applied to the household population. As a result, the 2023 population is estimated at 174,445 residents and will be used for housing and population projections.

**Figure 19. Base Year Population**

| Fort Collins, CO | 2023 Household Population | 2023 Group Quarters Population | 2023 Total Population |
|---|---|---|---|
| Population | 164,053 | 10,392 | 174,445 |

Source: City of Fort Collins Population Estimate

## Population and Housing Unit Projections

From the 2023 base year housing unit totals, there is a projected increase of 21 percent in housing stock over the next ten years. Following the trend that there is more multifamily development (54 percent) than single family development (46 percent), there is an estimated 8,243 multifamily units and 7,087 single family units projected. Population growth is assumed to continue with housing development based on the PPHU factors by housing type. As a result, there is a projected increase of 32,262 residents over the next ten years. This is an 18.5 percent increase from the base year, slightly lower than housing development at 21 percent since there is a shift in multifamily development and smaller household sizes.

**Figure 20. Residential Development Projections**

| City of Fort Collins, CO | Base Year 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total Increase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Population [1] | 174,445 | 177,109 | 179,774 | 182,753 | 185,733 | 188,713 | 191,693 | 194,673 | 198,684 | 202,696 | 206,707 | 32,262 |
| *Percent Increase* | | *1.5%* | *1.5%* | *1.7%* | *1.6%* | *1.6%* | *1.6%* | *1.6%* | *2.1%* | *2.0%* | *2.0%* | *18.5%* |
| **Housing Units [2]** | | | | | | | | | | | | |
| Single Family | 47,183 | 47,769 | 48,354 | 49,009 | 49,663 | 50,318 | 50,972 | 51,627 | 52,508 | 53,389 | 54,271 | 7,087 |
| Multifamily | 25,406 | 26,087 | 26,768 | 27,529 | 28,291 | 29,052 | 29,813 | 30,575 | 31,599 | 32,624 | 33,649 | 8,243 |
| Total | 72,590 | 73,856 | 75,122 | 76,538 | 77,954 | 79,370 | 80,786 | 82,202 | 84,108 | 86,014 | 87,920 | 15,330 |

[1] Source: City of Fort Collins Population Estimate; Population growth is projected based on housing development and PPHU factors by type of home

[2] Source: Housing growth is projected based on housing development and PPHU factors

## Current Employment and Nonresidential Floor Area

The impact fee study will include nonresidential development as well. Job estimates are from North Front Range MPO Traffic TAZ database. The model forecasts employment growth for the entire city from 2020 to 2045 in five-year increments. To find the total employment in the base year, 2023, a straight-line approach from 2020 to 2025 was used. Listed in Figure 21, 107,677 jobs are estimated in the City of Fort Collins. Nearly half the employment is in the office industry. However, retail, industrial, and institutional industries have a significant presence as well.

**Figure 21. Base Year Employment by Industry**

| Employment Industries | Base Year 2023 | Percent of Total |
|---|---|---|
| Industrial | 17,181 | 16% |
| Institutional | 17,433 | 16% |
| Retail | 21,282 | 20% |
| Office | 51,782 | 48% |
| Total Jobs | 107,677 | 100% |

Source: North Front Range MPO TAZ employment database

The base year nonresidential floor area for the industry sectors is calculated with the Institution of Transportation Engineers' (ITE) square feet per employee averages, Figure 22. For industrial the Light Industrial factors are used; for institutional the Hospital factors are used; for retail the Shopping Center factors are used; for office the General Office factors are used.

**Figure 22. Institute of Transportation Engineers (ITE) Employment Density Factors**

| Employment Industry | ITE Code | Land Use | Demand Unit | Emp Per Dmd Unit | Sq Ft Per Emp |
|---|---|---|---|---|---|
| Industrial | 110 | Light Industrial | 1,000 Sq Ft | 1.57 | 637 |
| Institutional | 610 | Hospital | 1,000 Sq Ft | 2.86 | 350 |
| Retail | 820 | Shopping Center | 1,000 Sq Ft | 2.12 | 471 |
| Office | 710 | General Office | 1,000 Sq Ft | 3.26 | 307 |

Source: *Trip Generation* , Institute of Transportation Engineers, 11th Edition (2021)

By combining the base year job totals and the ITE square feet per employee factors, the nonresidential floor area is calculated in Figure 23. There is an estimated total of 43 million square feet of nonresidential floor area in Fort Collins. The office and industrial industries account for almost two-thirds of the total floor area at 37 percent and 25 percent respectively, while retail accounts for 23 percent and institutional accounts for 14 percent of the total.

**Figure 23. Base Year Nonresidential Floor Area**

| Employment Industries | Base Year Jobs [1] | Sq. Ft. per Job [2] | Base Year Floor Area (Sq. Ft.) |
|---|---|---|---|
| Industrial | 17,181 | 637 | 10,944,355 |
| Institutional | 17,433 | 350 | 6,101,592 |
| Retail | 21,282 | 471 | 10,023,588 |
| Office | 51,782 | 307 | 15,896,963 |
| Total | 107,677 | | 42,966,498 |

[1] Source: North Front Range MPO TAZ employment database
[2] Source: Trip Generation, Institute of Transportation Engineers, 11th Edition (2021)

## Employment and Nonresidential Floor Area Projections

Based on the TAZ employment database, over the ten-year projection period, it is estimated that there will be an increase of 7,580 jobs. The majority of the increase comes from the office sector (58 percent); however, the institutional sector (23 percent) has a significant impact as well.

The nonresidential floor area projections are calculated by applying the ITE square feet per employee factors to the job growth. In the next ten years, the nonresidential floor area is projected to increase by 2.8 million square feet, a 6 percent increase from the base year. The office and institutional sectors have the greatest increase.

**Figure 24. Employment and Nonresidential Floor Area Projections**

| City of Fort Collins, CO | Base Year 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total Increase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Jobs [1]** | | | | | | | | | | | | |
| Industrial | 17,181 | 17,236 | 17,291 | 17,345 | 17,399 | 17,453 | 17,507 | 17,560 | 17,661 | 17,762 | 17,862 | 681 |
| Institutional | 17,433 | 17,621 | 17,809 | 17,980 | 18,152 | 18,323 | 18,495 | 18,666 | 18,832 | 18,999 | 19,165 | 1,732 |
| Retail | 21,282 | 21,359 | 21,437 | 21,518 | 21,599 | 21,680 | 21,760 | 21,841 | 21,916 | 21,991 | 22,066 | 785 |
| Office | 51,782 | 52,271 | 52,760 | 53,204 | 53,648 | 54,091 | 54,535 | 54,979 | 55,374 | 55,768 | 56,163 | 4,381 |
| Total Jobs | 107,677 | 108,487 | 109,297 | 110,047 | 110,797 | 111,547 | 112,297 | 113,047 | 113,784 | 114,520 | 115,257 | 7,580 |
| **Nonresidential Floor Area (1,000 square feet) [2]** | | | | | | | | | | | | |
| Industrial | 10,944 | 10,979 | 11,014 | 11,049 | 11,083 | 11,117 | 11,152 | 11,186 | 11,250 | 11,314 | 11,378 | 434 |
| Institutional | 6,102 | 6,167 | 6,233 | 6,293 | 6,353 | 6,413 | 6,473 | 6,533 | 6,591 | 6,650 | 6,708 | 606 |
| Retail | 10,024 | 10,060 | 10,097 | 10,135 | 10,173 | 10,211 | 10,249 | 10,287 | 10,323 | 10,358 | 10,393 | 370 |
| Office | 15,897 | 16,047 | 16,197 | 16,334 | 16,470 | 16,606 | 16,742 | 16,879 | 17,000 | 17,121 | 17,242 | 1,345 |
| Total Floor Area | 42,966 | 43,254 | 43,542 | 43,810 | 44,079 | 44,348 | 44,616 | 44,885 | 45,164 | 45,443 | 45,721 | 2,755 |

[1] Source: North Front Range MPO TAZ employment database
[2] Source: Trip Generation, Institute of Transportation Engineers, 11th Edition (2021)

## Vehicle Trip Generation

The following provides details on the vehicle trip generation rates used in the vehicle miles of travel (VMT) rates for development types and projections for needed roadway expansion. Additionally, details on the VMT factors can be found in the body of the report.

### RESIDENTIAL TRIP GENERATION BY HOUSING UNIT SIZE (SQ. FT.)

As an alternative to simply using average trip generation rates for residential development by housing type, TischlerBise has derived custom trip rates using demographic data for Fort Collins. Key inputs needed for the analysis (i.e., average number of persons and vehicles available per housing unit) are available from the U.S. Census Bureau's American Community Survey (ACS).

As previously shown in Figure 15, Fort Collins averages 2.26 residents per housing unit. Single family includes detached and attached dwellings and manufactured housing. Duplexes and apartments are combined as multifamily. The average number of persons per housing unit in Fort Collins will be compared to national averages derived from traffic studies tabulated by the Institute of Transportation Engineers (ITE). Trip generation rates are also dependent upon the average number of vehicles available per dwelling. Figure 25 indicates vehicles available by housing type within Fort Collins. As expected, single family housing has more vehicles available per dwelling (1.95) than multifamily housing (1.67).

**Figure 25. Vehicles Available per Housing Unit**

| Tenure | Vehicles Available [1] | Single Family [2] | Multifamily [2] | Total | Vehicles per Household |
|---|---|---|---|---|---|
| Owner-occupied | 74,579 | 33,116 | 2,493 | 35,609 | 2.09 |
| Renter-occupied | 55,237 | 11,226 | 20,369 | 31,595 | 1.75 |
| Total | 129,816 | 44,342 | 22,862 | 67,204 | 1.93 |

| Housing Type | Vehicles Available | Housing Units [3] | Vehicles per Housing Unit |
|---|---|---|---|
| Single Family | 88,984 | 45,625 | 1.95 |
| Multifamily | 40,832 | 24,496 | 1.67 |
| Total | 129,816 | 70,121 | **1.85** |

[1] Vehicles available by tenure from Table B25046, American Community Survey, 2021
[2] Households by tenure and units in structure from Table B25032, ACS, 2021
[3] Housing units from Table B25024, ACS, 2021

Custom tabulations of demographic data by bedroom range can be created from individual survey responses provided by the U.S. Census Bureau, in files known as Public Use Microdata Samples (PUMS). Because PUMS files are available for areas of roughly 100,000 persons, Fort Collins is included in Public Use Microdata Area (PUMA) 103 that covers the northern portion of Larimer County. At the top of Figure 26 with yellow shading indicates the survey results, which yield the unadjusted number of persons and vehicles available per dwelling. These multipliers are adjusted to match the control totals for Fort Collins, as documented in Figure 15 and Figure 25.

In comparison to the national averages based on ITE traffic studies, Fort Collins has fewer persons per dwelling, but a greater number of vehicles available per dwelling. Rather than rely on one methodology,

the recommended multipliers shown below with grey shading and bold numbers are an average of trip rates based on persons and vehicles available (all types of housing units combined). In Fort Collins, the average housing unit is estimated to yield an 8.40 average weekday vehicle trip ends (AWVTE).

### Figure 26. Average Weekday Vehicle Trips Ends by Bedroom Range

**Fort Collins 2021 Data**

| Bedroom Range | Persons[1] | Vehicles Available[1] | Housing Units[1] | Housing Mix | Unadjusted Persons/HU | Adjusted Persons/HU[2] | Unadjusted VehAvl/HU | Adjusted VehAvl/HU[2] |
|---|---|---|---|---|---|---|---|---|
| 0-1 | 457 | 386 | 388 | 8.6% | 1.18 | 1.17 | 0.99 | 0.97 |
| 2 | 1,885 | 1,678 | 1,117 | 24.6% | 1.69 | 1.68 | 1.50 | 1.47 |
| 3 | 3,585 | 3,217 | 1,542 | 34.0% | 2.32 | 2.30 | 2.09 | 2.05 |
| 4+ | 4,410 | 3,630 | 1,487 | 32.8% | 2.97 | 2.94 | 2.44 | 2.39 |
| Total | 10,337 | 8,911 | 4,534 | | 2.28 | 2.26 | 1.97 | 1.93 |

**National Averages According to ITE (Trip Generation Manual, 11th Edition, 2021)**

| ITE Code | AWVTE per Person | AWVTE per Vehicle Available | AWVTE per Household | Housing Mix | Persons per Household | Veh Avl per Household |
|---|---|---|---|---|---|---|
| 221 Apt | 1.84 | 5.10 | 4.54 | 35% | 2.47 | 0.89 |
| 210 SFD | 2.65 | 6.36 | 9.43 | 65% | 3.56 | 1.48 |
| Wgtd Avg | 2.37 | 5.92 | 7.72 | | 3.18 | 1.27 |

**Recommended AWVTE per Dwelling Unit by Bedroom Range**

| Bedroom Range | AWVTE per HU Based on Persons[3] | AWVTE per HU Based on Vehicles Available[4] | AWVTE per Housing Unit[5] |
|---|---|---|---|
| 0-1 | 2.77 | 5.74 | **4.26** |
| 2 | 3.98 | 8.70 | **6.34** |
| 3 | 5.45 | 12.14 | **8.80** |
| 4+ | 6.97 | 14.15 | **10.56** |
| Total | 5.36 | 11.43 | **8.40** |

1. American Community Survey, Public Use Microdata Sample for CO PUMA 00103 (2017-2021 5-Year).
2. Adjusted multipliers are scaled to make the average PUMS values match control totals for Fort Collins, based on American Community Survey (2017-2021 5-Year).
3. Adjusted persons per housing unit multiplied by national weighted average trip rate per person.
4. Adjusted vehicles available per housing unit multiplied by national weighted average trip rate per vehicle available.
5. Average of trip rates based on persons and vehicles available per housing unit.

**AWVTE per Dwelling by House Type**

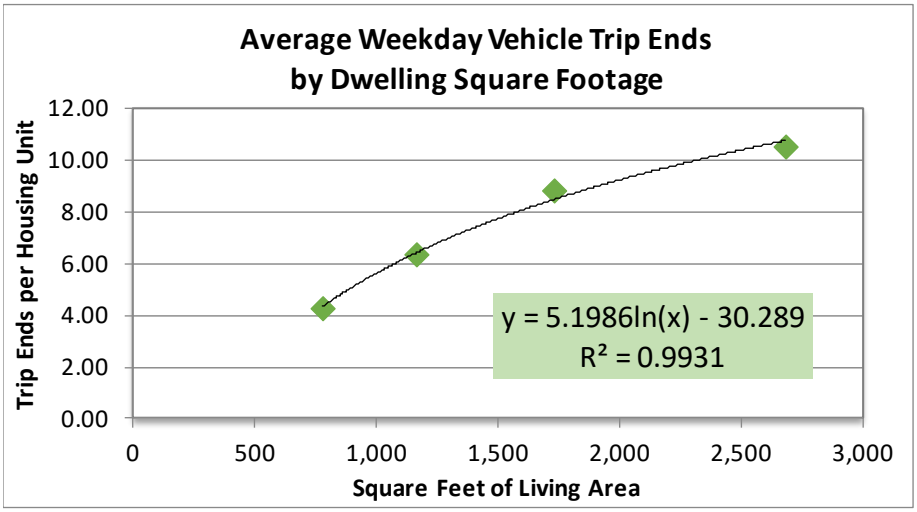
| ITE Code | AWVTE per HU Based on Persons[3] | AWVTE per HU Based on Vehicles Available[4] | AWVTE per Housing Unit[5] | Fort Collins Persons/HU | Fort Collins VehAvl/HU |
|---|---|---|---|---|---|
| 221 Apt | 4.10 | 9.89 | 7.00 | 1.73 | 1.67 |
| 210 SFD | 6.02 | 11.54 | 8.78 | 2.54 | 1.95 |
| All Types | 5.36 | 11.44 | 8.40 | 2.26 | 1.93 |

To derive average weekday vehicle trip ends by dwelling size, TischlerBise matched trip generation rates and average floor area, by bedroom range, as shown in Figure 27. Floor area averages were calculated with certificate of occupancies issued from 2020 through 2022. The logarithmic trend line formula is derived from the four actual averages in Fort Collins. The trend line is then used to derive estimated trip ends by dwelling size thresholds. For example, the vehicle trip ends for a housing unit less than 900 square feet is 3.77.

**Figure 27. Residential Vehicle Trip Ends by Dwelling Size**

| *Actual Averages per Hsg Unit* | | | *Fitted-Curve Values* | |
|---|---|---|---|---|
| *Bedrooms* | *Square Feet* | *Trip Ends* | *Sq Ft Range* | *Trip Ends* |
| 0-1 | 781 | 4.26 | less than 900 | 3.77 |
| 2 | 1,162 | 6.34 | 901 to 1,300 | 6.12 |
| 3 | 1,729 | 8.80 | 1,301 to 1,800 | 7.90 |
| 4+ | 2,684 | 10.56 | 1,801 to 2,400 | 9.48 |
| | | | 2,401 to 3,000 | 10.79 |
| | | | 3,001 to 3,600 | 11.83 |
| | | | over 3,601 | 12.70 |

Unit size ranges are based on current fee schedule and consistent with residential certificates of occupancy issued from 2020-2022. Average weekday vehicle trip ends per housing unit are derived from 2021 ACS PUMS data for the area that includes Fort Collins.




Importantly, the vehicle trip ends in Figure 27 are for all housings units in Fort Collins. The City is pursuing assessing the TCEF by housing types, along with square footage. Thus, further analysis is required and completed below.

Custom vehicle trip end rates for all existing single family and multifamily units in Fort Collins are listed in Figure 28. The calibrating factor for the housing types are found by comparing the trip rates by to the overall average in Fort Collins. As a result, single family housing units are 118 percent of the city average and multifamily housing units are 56 percent of the city average. These calibrating factors are applied to the citywide trip rates size groupings to estimate the trips rates for single family detached and multifamily units.

**Figure 28. Single Family Detached and Multifamily Calibrating Factor**

| Housing Type | Local Trip Ends per Unit [1] | Calibrating Factor |
|---|---|---|
| Single Family | 12.70 | 118% |
| Multifamily | 6.00 | 56% |
| Fort Collins Average | 10.80 | |

[1] Source: US Census American Community Survey; Trip Generation, Institute of Transportation Engineers, 11th Edition (2021); TischlerBise analysis

Furthermore, to calculate the single family attached trip end rates the ITE national averages for single family detached and single family attached are compared. Shown in Figure 29, single family attached units generate 76 percent of the single family detached units. This factor is applied to single family detached trip rates by size to estimate trip rates for single family attached units.

**Figure 29. Single Family Attached Calibrating Factor**

| ITE Code | Land Use Group | Wkdy Trip Ends Per Dmd Unit |
|---|---|---|
| 210 | Single-Family Detached | 9.43 |
| 215 | Single-Family Attached | 7.20 |

*SF Attached Calibrating Factor* ***76%***

Source: Trip Generation, Institute of Transportation Engineers, 11th Edition (2021)

Figure 30 summarizes the vehicle trip ends for single family detached, single family attached, and multifamily units by square footage by multiplying the citywide averages with the calibrating factors.

**Figure 30. Vehicle Trip Ends by Housing Type and Square Footage**

| Vehicle Trip Ends per Unit | | | | |
|---|---|---|---|---|
| Square Feet of Finished Living Space | SF Detached | SF Attached | Square Feet of Finished Living Space | Multifamily |
| less than 900 | 4.43 | 3.38 | Up to 750 | 2.09 |
| 901 to 1,300 | 7.20 | 5.50 | 751 to 1,300 | 3.40 |
| 1,301 to 1,800 | 9.29 | 7.09 | Over 1,300 | 4.39 |
| 1,801 to 2,400 | 11.15 | 8.51 | | |
| 2,401 to 3,000 | 12.69 | 9.69 | | |
| 3,001 to 3,600 | 13.91 | 10.62 | | |
| over 3,601 | 14.93 | 11.40 | | |

Source: American Community Survey, Public Use Microdata; Trip Generation, Institute of Transportation Engineers, 11th Edition (2021); TischlerBise analysis

### Residential Vehicle Trips Adjustment Factors

A vehicle trip end is the out-bound or in-bound leg of a vehicle trip. As a result, so to not double count trips, a standard 50 percent adjustment is applied to trip ends to calculate a vehicle trip. For example, the out-bound trip from a person's home to work is attributed to the housing unit and the trip from work back home is attributed to the employer.

However, an additional adjustment is necessary to capture City residents' work bound trips that are outside of the city. The trip adjustment factor includes two components. According to the National Household Travel Survey (2009), home-based work trips are typically 31 percent of out-bound trips (which are 50 percent of all trip ends). Also, utilizing the most recent data from the Census Bureau's web application "OnTheMap", 51 percent of Fort Collins workers travel outside the city for work. In combination, these factors account for 8 percent of additional production trips (0.31 x 0.50 x 0.51 = 0.08). Shown in Figure 31, the total adjustment factor for residential housing units includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (8 percent of production trips) for a total of 58 percent.

**Figure 31. Residential Trip Adjustment Factor for Commuters**

| | |
|---|---|
| Employed Fort Collins Residents (2019) | 73,469 |
| Residents Working in the City (2019) | 36,223 |
| Residents Commuting Outside of the City for Work | 37,246 |
| Percent Commuting Out of the City | 51% |
| **Additional Production Trips** | **8%** |

| | |
|---|---|
| **Standard Trip Adjustment Factor** | **50%** |
| **Residential Trip Adjustment Factor** | **58%** |

Source: U.S. Census, OnTheMap Application, 2019

### NONRESIDENTIAL VEHICLE TRIPS

Vehicle trip generation for nonresidential land uses are calculated by using ITE's average daily trip end rates and adjustment factors found in their recently published 11th edition of *Trip Generation*. To estimate the trip generation in Fort Colins, the weekday trip end per 1,000 square feet factors highlighted in Figure 32 are used.

**Figure 32. Institute of Transportation Engineers Nonresidential Factors**

| Employment Industry | ITE Code | Land Use | Demand Unit | Wkdy Trip Ends Per Dmd Unit | Wkdy Trip Ends Per Employee |
|---|---|---|---|---|---|
| Industrial | 110 | Light Industrial | 1,000 Sq Ft | 4.87 | 3.10 |
| Retail | 820 | Shopping Center | 1,000 Sq Ft | 37.01 | 17.42 |
| Office | 710 | General Office | 1,000 Sq Ft | 10.84 | 3.33 |

Source: *Trip Generation* , Institute of Transportation Engineers, 11th Edition (2021)

For retail development, the trip adjustment factor is less than 50 percent because such development attracts vehicles as they pass by on arterial roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, ITE indicates that 25 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 75 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 75 percent multiplied by 50 percent, or approximately 38 percent of the trip ends.

## Persons per Housing Unit by Housing Type and Square Footage

In a parallel study, Economic & Planning Systems (EPS) is preparing an update to other capital expansion fees for the City of Fort Collins. In that effort, EPS has estimated the PPHU for the expanded size groupings and housing types based on an analysis of the 2023 American Housing Survey Mountain Region and calibrated it for Fort Collins. Figure 33 summarizes those PPHU factors.

**Figure 33. Persons per Housing Unit by Housing Type and Square Footage**

| Persons per Housing Unit | | | | |
|---|---|---|---|---|
| Square Footage per Housing Unit | SF Detached | SF Attached | Square Footage per Housing Unit | Multifamily |
| 900 and less | 2.34 | 1.86 | Up to 750 | 1.49 |
| 901 to 1,300 | 2.54 | 2.14 | 751 to 1,300 | 2.09 |
| 1,301 to 1,800 | 2.84 | 2.55 | Over 1,300 | 2.31 |
| 1,801 to 2,400 | 3.10 | 2.92 | | |
| 2,401 to 3,000 | 3.33 | 3.25 | | |
| 3,001 to 3,600 | 3.51 | 3.50 | | |
| over 3,601 | 3.65 | 3.70 | | |

Source: 2023 American Housing Survey, Division 8 (Mountain Region), U.S. Census Bureau; Economic & Planning Systems

## APPENDIX B – ACTIVE MODES PROJECT LISTS

Below are pages from the Fort Collins Active Modes Plan (2022) listing the high and medium priority/readiness projects.

## Figure 34. High Priority/Readiness Projects

Fort Collins Active Modes Plan | Chapter 7: Implementing The Vision

### High Priority/Readiness Projects

In the near term, to achieve the goals of improving safety and increasing mode share, the focus is placed on quick wins—projects that can be readily implemented and will have immediate impact.

| Project Focus | PID | Street | Cross-Street or Extents | Treatment | Length (mi) | Outcomes Score | Imple. Score | Cost Opinion (2022) |
|---|---|---|---|---|---|---|---|---|
| Pedestrian | 7 | Drake | Timberline | Signal Operations | Spot | 44 | 8 | $ 206,000 |
| | | | Lemay | Geometric Redesign | Spot | | | |
| | | | Shields | Signal Operations | Spot | | | |
| | | Shields St | Casa Grande | Signal Operations | Spot | | | |
| Pedestrian | 46 | Harmony Rd | Mason | Signal Operations | Spot | 44 | 8 | $ 206,000 |
| | | | Boardwalk | Signal Operations | Spot | | | |
| | | | Lemay | Signal Operations | Spot | | | |
| | | | Starflower | Geometric Redesign | Spot | | | |
| Pedestrian | 1 | College Ave | Willow | Signal Operations | Spot | 44 | 7 | $ 109,000 |
| | | | Laporte | Signal Operations | Spot | | | |
| | | | Mountain | Signal Operations | Spot | | | |
| | | | Olive | Signal Operations | Spot | | | |
| | | | Magnolia | Signal Operations | Spot | | | |
| Pedestrian | 4 | Mulberry St | College | Signal Operations | Spot | 44 | 7 | $ 453,000 |
| | | | Mason | Signal Operations | Spot | | | |
| | | | Loomis | Geometric Redesign | Spot | | | |
| | | | Shields | Signal Operations | Spot | | | |
| | | | Taft Hill | Signal Operations | Spot | | | |
| | | | Whitcomb / Canyon | Geometric Redesign | Spot | | | |
| Pedestrian | 11 | Willow St | Linden | High-Visibility Crosswalk | Spot | 46 | 3 | $ 50,000 |
| | | | Lincoln | Beacon / RRFB | Spot | | | |
| Pedestrian | 29 | Taft Hill Rd | Prospect | Signal Operations | Spot | 40 | 8 | $ 153,000 |
| | | | Valley Forge | Geometric Redesign | Spot | 40 | 8 | |
| Pedestrian | 3 | College Ave | Monroe | Signal Operations | Spot | 42 | 6 | $ 303,000 |
| | | | Rutgers | Geometric Redesign | Spot | | | |
| | | | Columbia | Geometric Redesign | Spot | | | |
| Pedestrian | 9* | Shields St | Plum | Geometric Redesign | Spot | 44 | 4 | $ 600,000 |
| | | Elizabeth St | Shields | Geometric Redesign | Spot | | | |
| | | | Taft Hill | Geometric Redesign | Spot | | | |
| | | | Constitution | Geometric Redesign | Spot | | | |
| Bicycle | 61 | Taft Hill Rd | Glenmoor | Signals | Spot | 45 | 2 | $ 600,000 |
| Pedestrian | 2 | College Ave | Laurel | Signal Operations | Spot | 44 | 3 | $ 343,000 |
| | | | Prospect | Geometric Redesign | Spot | | | |
| | | Mason Trail | Prospect | Geometric Redesign | Spot | | | |
| Pedestrian | 10 | Mason St | Mountain | Signal Operations | Spot | 38 | 7 | $ 6,000 |
| | | | Olive | Signal Operations | Spot | | | |
| Bicycle | 51 | W Prospect Rd | Sheely Dr | Signals | Spot | 40 | 5 | $ 600,000 |
| Bicycle | 33 | E Magnolia St | Remington St | Signs & Markings | Spot | 40 | 4 | $ 3,000 |

*Project includes a partner such as Colorado DOT, Larimer County, or Colorado State University

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## Figure 35. High Priority/Readiness Projects cont.

Fort Collins Active Modes Plan | Chapter 7: Implementing The Vision

| Project Focus | PID | Street | Cross-Street or Extents | Treatment | Length (mi) | Outcomes Score | Imple. Score | Cost Opinion (2022) |
|---|---|---|---|---|---|---|---|---|
| Pedestrian | 5 | Mulberry St | Stover | Beacon / RRFB | Spot | 40 | 4 | $ 1,302,000 |
| | | | Remington | Median / Diverter | Spot | | | |
| | | | Peterson | New Crossing | Spot | | | |
| Bicycle | 30 | Mountain Ave, Lincoln Ave | N Howes St - Willow St | Buffered Bike Lane, Separated Bike Lane | 0.5 | 38 | 6 | $ 193,000 |
| Pedestrian | 31 | Harmony Rd | Corbett | Geometric Redesign | Spot | 37 | 7 | $ 200,000 |
| | | | Timberline | Signal Operations | Spot | | | |
| Bicycle | 52 | W Lake St | S Shields St - S Mason St | Separated Bike Lane | 1.2 | 39 | 5 | $ 251,000 |
| Bicycle | 50 | E Vine Dr | Jerome St | Signals | Spot | 42 | 2 | $ 600,000 |
| Pedestrian | 22 | Lemay Ave | Prospect | Signal Operations | Spot | 36 | 7 | $ 100,000 |
| | | | Stuart | Signal Operations | Spot | | | |
| Bicycle | 39 | S Shields St | W Mulberry St - Davidson Dr | Separated Bike Lane | 1.6 | 38 | 5 | $ 1,489,000 |
| Bicycle | 32 | Magnolia St | S Sherwood St - Whedbee St | Bike Boulevard | 0.8 | 37 | 5 | $ 29,000 |
| Bicycle | 41 | S Shields St | W Lake St | Two-Way Sidepath | Spot | 34 | 8 | $ 29,000 |
| Pedestrian | 21 | Lemay | Mulberry | Geometric Redesign | Spot | 39 | 3 | $ 150,000 |
| Bicycle | 2 | E Elizabeth St | S College Ave | Intersection redesign | Spot | 37 | 4 | $ 585,000 |
| Bicycle | 7 | S Taft Hill Rd | W Elizabeth St - W Horsetooth Rd | Separated Bike Lane | 2.5 | 34 | 7 | $ 707,000 |
| Bicycle | 52 | City Park Ave | W Mulberry St | Signals | Spot | 35 | 6 | $ 600,000 |
| Bicycle | 6 | S Taft Hill Rd | Laporte Ave - W Elizabeth St | Separated Bike Lane | 1.1 | 34 | 6 | $ 279,000 |
| Bicycle | 12 | Birch St | S Shields St | Signs & Markings | Spot | 34 | 6 | $ 3,000 |
| Bicycle | 28 | Jefferson St | N College Ave - E Mountain Ave | Separated Bike Lane | 0.5 | 35 | 5 | $ 116,000 |
| Pedestrian | 40 | Shields | Stuart | Geometric Redesign | Spot | 36 | 4 | $ 150,000 |
| Pedestrian | 15 | Mason | Maple | Geometric Redesign | Spot | 38 | 2 | $ 150,000 |
| Bicycle | 35 | Birch St, Crestmore Pl, Skyline Dr | Orchard Pl - City Park Ave | Bike Boulevard | 1.4 | 32 | 7 | $ 6,000 |
| Bicycle | 36 | Glenmoor Dr, W Plum St | S Taft Hill Rd - Skyline Dr | Bike Boulevard | 1.1 | 32 | 7 | $ 3,000 |
| Bicycle | 50 | Springfield Dr | Castlerock Dr - S Shields St | Bike Boulevard | 0.6 | 32 | 7 | $ 6,000 |
| Bicycle | 12 | S Shields St | W Mountain Ave - W Mulberry St | Separated Bike Lane | 2.2 | 31 | 7 | $ 111,000 |
| Pedestrian | 67 | Horsetooth | Platte | Median / Diverter | Spot | 33 | 6 | $ 234,000 |
| | | | Auntie Stone | Median / Diverter | | | | |
| Bicycle | 47 | Castlerock Dr, Lake St, Skyline Dr, Clearview Ave | S Taft Hill Rd - W Elizabeth St | Bike Boulevard | 3.5 | 34 | 5 | $ 5,000 |
| Bicycle | 58* | Gillette Dr | Phemister Rd - W Drake Rd | Separated Bike Lane | 3.0 | 34 | 5 | $ 135,000 |
| Bicycle | 76 | E Horsetooth Rd | S Lemay Ave - Ziegler Rd | Separated Bike Lane | 0.7 | 34 | 5 | $ 561,000 |
| Bicycle | 11 | Conifer St | N College Ave | Intersection redesign | Spot | 34 | 5 | $ 585,000 |
| Bicycle | 57 | Centre Ave | S Shields St - Phemister Rd | Separated Bike Lane | 1.0 | 35 | 4 | $ 347,000 |
| Bicycle | 40 | S Shields St | Davidson Dr - Hilldale Dr | Separated Bike Lane | 0.1 | 32 | 6 | $ 777,000 |

*Project includes a partner such as Colorado DOT, Larimer County, or Colorado State University

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## Figure 36. High Priority/Readiness Projects cont.

Fort Collins Active Modes Plan | Chapter 7: Implementing The Vision

| Project Focus | PID | Street | Cross-Street or Extents | Treatment | Length (mi) | Outcomes Score | Imple. Score | Cost Opinion (2022) |
|---|---|---|---|---|---|---|---|---|
| Bicycle | 11 | Laporte Ave | Fishback Ave - N Washington Ave | Bike Lane | 1.7 | 33 | 5 | $ 61,000 |
| Bicycle | 104 | Boardwalk Dr | JFK - Harmony | Buffered Bike Lane | 0.3 | 33 | 5 | $ 51,000 |
| Pedestrian | 72 | Riverside Ave | Prospect Rd | Geometric Redesign | Spot | 33 | 5 | $ 150,000 |
| Bicycle | 64 | Drake Rd | S Taft Hill Rd - Tulane Dr | Separated Bike Lane | 0.3 | 34 | 3 | $ 1,312,000 |
| Bicycle | 74 | W Horsetooth Rd | Richmond Dr - S Mason St | Sidepath (both sides) | 0.8 | 34 | 3 | $ 2,594,000 |
| Bicycle | 51* | W Pitkin St | S Shields St - S College Ave | Separated Bike Lane | 0.7 | 33 | 4 | $ 1,314,000 |
| Pedestrian | 13 | Magnolia | Sherwood | Geometric Redesign | Spot | 33 | 3 | $ 903,000 |
| | | | Loomis | Geometric Redesign | Spot | | | |
| | | | Meldrum | Geometric Redesign | Spot | | | |
| | | | Washington | High-Visibility Crosswalk | Spot | | | |
| Pedestrian | 12 | Olive | Remington | Geometric Redesign | Spot | 34 | 2 | $ 300,000 |
| | | | Mathews | Geometric Redesign | Spot | | | |
| Bicycle | 40 | N Roosevelt Ave | Laporte Ave | Signals | Spot | 30 | 5 | $ 600,000 |
| Pedestrian | 60 | Ziegler | Saber Cat | Beacon / RRFB | Spot | 29 | 6 | $ 32,000 |
| Bicycle | 44 | Centre Ave | W Lake St | Intersection redesign | Spot | 35 | 0 | $ 585,000 |
| Bicycle | 59 | Booth Rd | Tietz Dr - Bay Rd | Sidepath (one side) | 0.5 | 32 | 3 | $ 130,000 |
| Bicycle | 62 | S Lemay Ave | E Stuart St - E Horsetooth Rd | Sidepath (both sides) | 0.2 | 32 | 3 | $ 4,439,000 |
| Bicycle | 62 | Spring Creek Trail | Taft Hill Rd | New connection | Spot | 32 | 3 | $ 320,000 |
| Pedestrian | 30 | Taft Hill | Lake | New Crossing | Spot | 32 | 2 | $ 585,000 |
| Bicycle | 7 | E Horsetooth Rd | Kingsley Dr | Signals | Spot | 27 | 6 | $ 600,000 |
| Bicycle | 1 | E Prospect St | Stover St | Two-Way Sidepath | Spot | 27 | 6 | $ 29,000 |
| Bicycle | 48 | S Howes St | W Laurel St | Signs & Markings | Spot | 29 | 4 | $ 3,000 |
| Bicycle | 39 | S College Ave | Rutgers Ave | New connection | Spot | 32 | 1 | $ 320,000 |
| Bicycle | 26 | W Stuart St | S Taft Hill Rd (Project #1) | Two-Way Sidepath | Spot | 26 | 5 | $ 29,000 |
| Bicycle | 34 | Riverside Ave | E Mulberry St | Intersection redesign | Spot | 29 | 2 | $ 585,000 |
| Bicycle | 46 | Jackson Ave | W Mulberry St | Two-Way Sidepath | Spot | 23 | 6 | $ 29,000 |
| Pedestrian | 48 | Cinquefoil | Kechter | Median / Diverter | Spot | 21 | 4 | $ 32,000 |
| Bicycle | 20 | S Timberline Rd | E Lincoln Ave | Intersection redesign | Spot | 21 | 2 | $ 585,000 |
| Pedestrian | 25 | Frey | Laporte | Geometric Redesign | Spot | 21 | 2 | $ 150,000 |
| Pedestrian | 75 | Mason Trail | Prospect Rd | Beacon / RRFB | Spot | 18 | 3 | $ 600,000 |
| Pedestrian | 34 | Timberline | Horsetooth | Geometric Redesign | Spot | 17 | 3 | $ 150,000 |
| Bicycle | 8 | E Horsetooth Rd | Caribou Dr | Signals | Spot | 18 | 2 | $ 600,000 |

**High-Priority/Readiness Phase, Opinion of Probable Cost: $30,400,000 over five years (2022 costs)**

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## Figure 37. Medium Priority/Readiness Projects

Fort Collins Active Modes Plan | Chapter 7: Implementing The Vision

### Medium Priority/Readiness Projects

In the medium priority/readiness phase of implementation, program resources and capacity grow to deliver more and more complex projects.

| Project Type | PID | Street | Cross-Street or Extents | Treatment | Length (mi) | Outcomes Score | Imple. Score | Cost Opinion (2022) |
|---|---|---|---|---|---|---|---|---|
| Bicycle | 24 | Timberline Rd | Annabel Ave - E Prospect Rd | Separated Bike Lane | 1.8 | 31 | 6 | $ 605,000 |
| Bicycle | 65 | E Drake Rd | Tulane Dr - Rigden Pkwy | Sidepath (both sides) | 0.5 | 34 | 2 | $ 5,817,000 |
| Bicycle | 75 | E Horsetooth Rd | Mitchell Dr - S Lemay Ave | Sidepath (both sides) | 0.3 | 34 | 2 | $ 2,941,000 |
| Bicycle | 46 | Clearview Ave | Ponderosa Dr - Skyline Dr | Bike Boulevard | 1.0 | 30 | 6 | $ 4,000 |
| Bicycle | 48 | W Lake St | S Overland Tr - S Taft Hill Rd | Bike Boulevard | 1.1 | 30 | 6 | $ 7,000 |
| Bicycle | 69 | Worthington Ave | W Drake Rd - W Swallow Rd | Bike Boulevard | 1.6 | 30 | 6 | $ 4,000 |
| Pedestrian | 19 | 3rd St | Lincoln | Beacon / RRFB | Spot | 30 | 6 | $ 32,000 |
| Pedestrian | 20 | Riverside | Lemay | Geometric Redesign | Spot | 31 | 5 | $ 150,000 |
| Bicycle | 67 | Water Blossom Ln, Willow Fern Way | W Drake Rd - Marshwood Dr | Bike Boulevard | 1.0 | 28 | 7 | $ 2,000 |
| Bicycle | 56* | Rolland Moore Dr, Phemister Rd | S Shields St - Bay Rd | Separated Bike Lane, Bike Lane | 1.7 | 30 | 5 | $ 331,000 |
| Bicycle | 85 | Harmony Rd | S Taft Hill Rd - S Lemay Ave | Separated Bike Lane | 2.6 | 30 | 5 | $ 1,218,000 |
| Bicycle | 29 | Linden St | Walnut St - Jefferson St | Bike Route | 1.0 | 30 | 5 | $ 7,000 |
| Bicycle | 80 | John F Kennedy Pkwy, E Troutman Pkwy | E Horsetooth Rd - E Harmony Rd | Separated Bike Lane, Buffered Bike Lane | 1.2 | 26 | 8 | $ 383,000 |
| Bicycle | 66 | E Drake Rd, Ziegler Rd | Rigden Pkwy - William Neal Pkwy | Separated Bike Lane | 1.4 | 27 | 7 | $ 195,000 |
| Bicycle | 38 | Laurel St | S Shields St - S Howes St | Separated Bike Lane, Buffered Bike Lane | 0.2 | 28 | 6 | $ 371,000 |
| Bicycle | 42 | Pennock Pl | all | Bike Boulevard | 1.4 | 28 | 6 | $ 1,000 |
| Pedestrian | 65 | Center | Phemister | Beacon / RRFB | Spot | 28 | 6 | $ 32,000 |
| Bicycle | 99 | Howes St | W Mountain Ave - W Laurel St | Buffered Bike Lane | 0.5 | 30 | 4 | $ 58,000 |
| Bicycle | 14 | Mcmurry Ave | E Harmony Rd | Intersection redesign | Spot | 30 | 4 | $ 585,000 |
| Bicycle | 60 | East Spring Creek Trail | Lemay Ave | Two-Way Sidepath | Spot | 30 | 4 | $ 29,000 |
| Bicycle | 54 | E Suniga Rd | Jerome St | Signs & Markings | Spot | 31 | 3 | $ 3,000 |
| Bicycle | 2 | N Shields St | W Willox Ln - W Mountain Ave | Separated Bike Lane | 0.9 | 27 | 6 | $ 433,000 |
| Bicycle | 26 | S Timberline Rd | Vermont Dr - Battlecreek Dr | Separated Bike Lane | 2.0 | 27 | 6 | $ 708,000 |
| Bicycle | 63 | W Drake Rd | S Overland Tr - S Taft Hill Rd | Separated Bike Lane | 1.1 | 27 | 6 | $ 299,000 |
| Bicycle | 27 | Skyline Dr | W Prospect Rd | Signals | Spot | 28 | 5 | $ 600,000 |
| Pedestrian | 16 | College | Myrtle | Geometric Redesign | Spot | 30 | 3 | $ 117,000 |
| Pedestrian | 43 | College | Willox | Signal Operations | Spot | 30 | 3 | $ 50,000 |

*Project includes a partner such as Colorado DOT, Larimer County, or Colorado State University

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## Figure 38. Medium Priority/Readiness Projects cont.

Fort Collins Active Modes Plan | Chapter 7: Implementing The Vision

| Project Type | PID | Street | Cross-Street or Extents | Treatment | Length (mi) | Outcomes Score | Imple. Score | Cost Opinion (2022) |
|---|---|---|---|---|---|---|---|---|
| Bicycle | 25 | S Timberline Rd | E Prospect Rd - Vermont Dr | Separated Bike Lane | 0.4 | 25 | 7 | $ 414,000 |
| Bicycle | 10 | West St, Maple St | N Roosevelt Ave - N Shields St | Bike Boulevard | 0.5 | 26 | 6 | $ 5,000 |
| Bicycle | 21 | Redwood St, Linden St | Conifer St - Linden Center Dr | Buffered Bike Lane | 0.8 | 26 | 6 | $ 41,000 |
| Bicycle | 60 | Purdue Rd, Tulane Dr, Mathews St, Rutgers Ave | S College Ave - E Swallow Rd | Bike Boulevard | 0.6 | 26 | 6 | $ 9,000 |
| Pedestrian | 55 | Redwood | Conifer | High-Visibility Crosswalk | Spot | 27 | 5 | $ 36,000 |
| | | | Suniga | High-Visibility Crosswalk | Spot | | | |
| Bicycle | 37 | W Elizabeth St | S Overland Tr - CSU Transit Center | Separated Bike Lane | 6.8 | 28 | 4 | $ 4,062,000 |
| Bicycle | 28 | Heatheridge Rd | W Prospect Rd | Signals | Spot | 28 | 4 | $ 600,000 |
| Pedestrian | 14 | Sherwood | Cherry | High-Visibility Crosswalk | Spot | 30 | 2 | $ 168,000 |
| | | | Maple | Geometric Redesign | Spot | | | |
| Bicycle | 58 | Willox Ln | Blue Spruce | Signals | Spot | 31 | 1 | $ 600,000 |
| Pedestrian | 41 | Timberline | Mulberry | Geometric Redesign | Spot | 31 | 1 | $ 150,000 |
| Bicycle | 44 | S Lemay Ave | Riverside Ave - E Stuart St | Separated Bike Lane | 1.6 | 25 | 6 | $ 740,000 |
| Bicycle | 45 | E Elizabeth St | S College Ave - S Lemay Ave | Buffered Bike Lane, Bike Lane | 1.9 | 26 | 5 | $ 90,000 |
| Bicycle | 98 | Loomis Ave | Laporte Ave - W Mulberry St | Buffered Bike Lane | 0.6 | 26 | 5 | $ 31,000 |
| Pedestrian | 61 | Timberline | International | New Crossing | Spot | 26 | 5 | $ 632,000 |
| | | | Sykes | Beacon / RRFB | Spot | | | |
| Pedestrian | 56 | Willox | Bramblebush | Beacon / RRFB | Spot | 27 | 4 | $ 32,000 |
| Bicycle | 43* | Phemister Rd | Mason Trail | New connection | Spot | 28 | 3 | $ 320,000 |
| Bicycle | 103 | E Lincoln Ave | Lemay - Timberline | Separated Bike Lane | 0.9 | 30 | 1 | $ 3,019,000 |
| Bicycle | 27 | N Loomis Ave | Cherry St - Laporte Ave | Bike Boulevard | 1.0 | 24 | 6 | $ 2,000 |
| Bicycle | 34 | Ponderosa Dr, Fuqua Dr, Clearview Ave | W Mulberry St - W Prospect Rd | Bike Boulevard | 0.6 | 24 | 6 | $ 8,000 |
| Bicycle | 49 | Underhill Dr, Skyline Dr | Springfield Dr - Westbridge Dr | Bike Boulevard | 1.4 | 24 | 6 | $ 3,000 |
| Bicycle | 53 | Emigh St, McHugh St, Welch St | E Elizabeth St - E Prospect Rd | Bike Boulevard | 1.0 | 24 | 6 | $ 4,000 |
| Bicycle | 61 | Brookwood Dr, Rollingwood Ln, Silverwood Dr, Oxborough Ln | E Stuart St - Centennial Rd | Bike Boulevard | 3.1 | 24 | 6 | $ 10,000 |
| Bicycle | 89 | S Lemay Ave | E Harmony Rd - Carpenter Rd | Separated Bike Lane | 1.1 | 25 | 5 | $ 830,000 |
| Bicycle | 49* | S College Ave | W/E Swallow Rd | Signs & Markings | Spot | 25 | 5 | $ 3,000 |
| Bicycle | 41* | Meridian Ave | W Plum St - Hughes Way | Separated Bike Lane | 2.5 | 26 | 4 | $ 682,000 |

*Project includes a partner such as Colorado DOT, Larimer County, or Colorado State University

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## Figure 39. Medium Priority/Readiness Projects cont.

| Project Type | PID | Street | Cross-Street or Extents | Treatment | Length (mi) | Outcomes Score | Imple. Score | Cost Opinion (2022) |
|---|---|---|---|---|---|---|---|---|
| Pedestrian | 53 | JFK | Monroe | Geometric Redesign | Spot | 26 | 4 | $ 150,000 |
| Pedestrian | 74 | Troutman Pkwy | Boardwalk | Geometric Redesign | Spot | 26 | 4 | $ 150,000 |
| Bicycle | 73 | W Horsetooth Rd | Horsetooth Ct - Richmond Dr | Sidepath (both sides) | 3.6 | 28 | 2 | $ 3,599,000 |
| Bicycle | 20 | Conifer St | N College Ave - N Lemay Ave | Buffered Bike Lane | 0.4 | 24 | 5 | $ 97,000 |
| Bicycle | 18* | Turnberry Rd | Country Club Rd - Mountain Vista Dr | Separated Bike Lane | 0.9 | 25 | 4 | $ 1,254,000 |
| Pedestrian | 63 | Lake | West of Whitcomb | Beacon / RRFB | Spot | 25 | 4 | $ 32,000 |
| Pedestrian | 66 | Prospect | Whedbee | New Crossing | Spot | 25 | 4 | $ 600,000 |
| Bicycle | 23 | E Vine Dr | Linden St - I-25 | Sidepath (one side) | 0.1 | 27 | 2 | $ 4,447,000 |
| Bicycle | 83 | S Lemay Ave | E Horsetooth Rd - E Harmony Rd | Sidepath (both sides) | 3.0 | 27 | 2 | $ 2,689,000 |
| Pedestrian | 44* | College Ave | Palmer | Beacon / RRFB | Spot | 27 | 2 | $ 1,200,000 |
| | | | Saturn | Beacon / RRFB | Spot | | | |
| Bicycle | 45 | Red St | Canal Crossing | New connection | Spot | 28 | 1 | $ 320,000 |
| Bicycle | 56 | Horsetooth | Seneca | Signals | Spot | 24 | 4 | $ 600,000 |
| Pedestrian | 69 | Mason | Boardwalk | High-Visibility Crosswalk | Spot | 24 | 4 | $ 18,000 |
| Bicycle | 81 | W County Road 38E | Red Fox Rd - S Taft Hill Rd | Sidepath (both sides) | 0.4 | 25 | 3 | $ 1,600,000 |
| Bicycle | 97 | Overland Trail | W Vine Dr - W Drake Rd | Separated Bike Lane | 0.3 | 25 | 3 | $ 7,624,000 |
| Pedestrian | 71 | JFK Pkwy | Pavilion | New Crossing | Spot | 23 | 4 | $ 585,000 |
| Pedestrian | 45* | College | Fossil Creek | Geometric Redesign | Spot | 25 | 2 | $ 190,000 |
| Bicycle | 64 | Willox Ln | Lemay Ave | Intersection redesign | Spot | 26 | 1 | $ 585,000 |
| Pedestrian | 62 | Shields | Laurel | Beacon / RRFB | Spot | 21 | 5 | $ 600,000 |
| Pedestrian | 6 | Shields | Laporte | Geometric Redesign | Spot | 17 | 8 | $ 50,000 |
| Pedestrian | 33 | Timberline | Vermont | Geometric Redesign | Spot | 19 | 6 | $ 117,000 |
| Pedestrian | 52 | Harmony | Silvergate | Beacon / RRFB | Spot | 21 | 4 | $ 117,000 |
| Pedestrian | 59 | Laporte | Impala | High-Visibility Crosswalk | Spot | 19 | 5 | $ 32,000 |
| Pedestrian | 42 | Airpark | Lincoln | New Crossing | Spot | 20 | 1 | $ 585,000 |
| Pedestrian | 27 | Overland Trail | Mulberry | Beacon / RRFB | Spot | 16 | 4 | $ 1,185,000 |
| | | | Rampart | New Crossing | Spot | | | |
| Pedestrian | 35 | Miles House | Drake | New Crossing | Spot | 11 | 6 | $ 600,000 |
| Pedestrian | 49 | Lemay | Brittany | New Crossing | Spot | 17 | 2 | $ 632,000 |
| | | Trilby | | Beacon / RRFB | Spot | | | |

**Medium Priority/Readiness Projects, Opinion of Probable Cost: $57,100,000 over five years (2022 costs)**

Sept. 9, 2025

# Impact Fees
# 2025 Study Updates

**Josh Birks**

Sustainability Services, Deputy Director

**Jen Poznanovic**

Financial Services, Sales Tax & Revenue Director

# estions for City Council

- Does City Council support impact fee study revisions?
- Does City Council need any additional information ahead of proposed first reading on Oct. 7?

**Core Objective: Align Impact Fees with the Land Use Code**

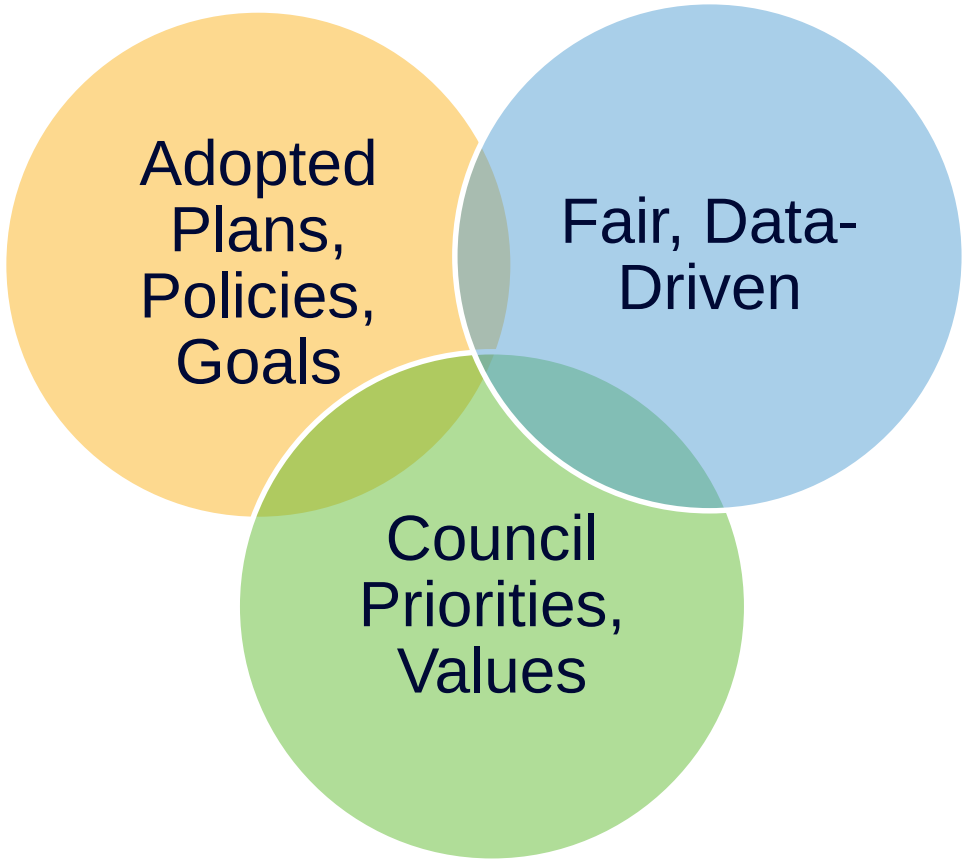
# alignment Scope & Objectives

**Realignment effort focus**:

- Fee ability to affect policy through valid model adjustments
- Fee alignment with adopted policies, Council priorities, values

**Committed to maintain**:

- Data-driven methodologies
- Integrity of studies and fee schedules
- Defensibility and compliance with changing legal environment



# rrent State

- **In January 2025, Capital Expansion Fees (CEFs) were updated with an inflationary factor in lieu of fees proposed by 2023 studies.**

- CEFs have received inflationary-only updates since previous 2017 study adoption.

- Utilities Electric Capacity Fee and three Plant Investment Fees (PIFs) have been fully updated.

# Proposed Adjustments to 2023 Studies – Methodology Update

## General Updates

- Primary driver of fees is household size
- Household size factor update (two studies – EPS & TischlerBise)

  Capital Expansion Fees (CEF)

  - New household sizes drive new fees
  - Household sizes updated using newer data and household size by type
  - New sq. ft. categories used to better align with Larimer County and product type

  Transportation Capital Expansion Fees (TCEF)

  - Household size factor used to adjust trip ends by unit size and type
  - Number of people and number of vehicles at the home

# Proposed 2023 Study Revisions – Adjustment One

- Wider variety of dwelling unit sizes
- Square footage range adjustments to seven tiers:
  - Current maximum 2,200 sq. ft.
  - New maximum aligns with Larimer County at over 3,600 sq. ft.

| Current | Proposed |
|---|---|
| Up to 700 sq. ft. | Up to 900 sq. ft. |
| 700 - 1,200 sq. ft. | 901 - 1,300 sq. ft. |
| 1,201 - 1,700 sq. ft. | 1,301 - 1,800 sq. ft. |
| 1,701 - 2,200 sq. ft. | 1,801 - 2,400 sq. ft. |
| Over 2,200 sq. ft. | 2,401 - 3,000 sq. ft. |
| | 3,001 - 3,600 sq. ft. |
| | Over 3,601 sq. ft. |

# Proposed 2023 Study Revisions – Adjustment Two

- Wider variety of types
- New residential dwelling unit categories:
  - Single Family Attached
  - Single Family Detached
  - Multifamily / ADU

| Current |
|---|
| **Residential (per dwelling)** |
| Up to 700 sq. ft. |
| 700 - 1,200 sq. ft. |
| 1,201 - 1,700 sq. ft. |
| 1,701 - 2,200 sq. ft. |
| Over 2,200 sq. ft. |

| Proposed |
|---|
| **Single Family Detached** |
| Up to 900 sq. ft. |
| 901 - 1,300 sq. ft. |
| 1,301 - 1,800 sq. ft. |
| 1,801 - 2,400 sq. ft. |
| 2,401 - 3,000 sq. ft. |
| 3,001 - 3,600 sq. ft. |
| Over 3,601 sq. ft. |
| |
| **Single Family Attached** |
| Up to 900 sq. ft. |
| 901 - 1,300 sq. ft. |
| 1,301 - 1,800 sq. ft. |
| 1,801 - 2,400 sq. ft. |
| 2,401 - 3,000 sq. ft. |
| 3,001 - 3,600 sq. ft. |
| Over 3,601 sq. ft. |
| |
| **Multifamily / ADU** |
| Up to 750 sq. ft. |
| 751 - 1,300 sq. ft. |
| Over 1,301 sq. ft |

# F Study: Household Size Updates

## Proposed average household size:

- Adjusted methodology used to capture household size by type
- In general, this has led to a shift in the fee calculations that is more representative of the household sizes based on product type



## Current

| Description | Avg. HH Size |
|---|---|
| **Residential (per dwelling)** | |
| Up to 700 sq. ft. | 1.40 |
| 701 - 1,200 sq. ft. | 2.12 |
| 1,201 - 1,700 sq. ft. | 2.38 |
| 1,701 - 2,200 sq. ft. | 2.56 |
| Over 2,200 sq. ft. | 2.91 |

## Proposed

| Description | Sq. Ft. | Avg. HH Size |
|---|---|---|
| **Single Family Detached** | | |
| Up to 900 sq. ft. | 700 | 1.98 |
| 901 - 1,300 sq. ft. | 901 | 2.15 |
| 1,301 - 1,800 sq. ft. | 1,301 | 2.39 |
| 1,801 - 2,400 sq. ft. | 1,801 | 2.61 |
| 2,401 - 3,000 sq. ft. | 2,401 | 2.81 |
| 3,001 - 3,600 sq. ft. | 3,001 | 2.96 |
| Over 3,601 sq. ft. | 3,601 | 3.08 |
| **Single Family Attached** | | |
| Up to 900 sq. ft. | 700 | 1.50 |
| 901 - 1,300 sq. ft. | 901 | 1.74 |
| 1,301 - 1,800 sq. ft. | 1,301 | 2.07 |
| 1,801 - 2,400 sq. ft. | 1,801 | 2.37 |
| 2,401 - 3,000 sq. ft. | 2,401 | 2.63 |
| 3,001 - 3,600 sq. ft. | 3,001 | 2.83 |
| Over 3,601 sq. ft. | 3,601 | 3.00 |
| **Multifamily/ ADU** | | |
| Up to 750 sq. ft. | 550 | 1.35 |
| 751 - 1,300 sq. ft. | 1,025 | 1.89 |
| Over 1,301 sq. ft | 1,301 | 2.09 |

# 24 Dwelling Unit Counts

- Current maximum category is over 2,200 sq. ft.

| Residential per Unit | SF Detached | SF Attached | Multifamily/ ADU |
|---|---|---|---|
| Up to 900 sq. ft. | 0% | 0% | 24% |
| 901 - 1,300 sq. ft. | 6% | 6% | 60% |
| 1,301 - 1,800 sq. ft. | 24% | 65% | 11% |
| 1,801 - 2,400 sq. ft. | 50% | 29% | 5% |
| 2,401 - 3,000 sq. ft. | 18% | 0% | 0% |
| 3,001 - 3,600 sq. ft. | 3% | 0% | 0% |
| Over 3,601 sq. ft. | 0% | 0% | 0% |

**Single Family Detached**

- 92% of units built are in the 1,801 to 3,000 sq. ft. categories

**Single Family Attached**

- All units built are in the 901 to 2,400 sq. ft. categories

**Multifamily/ ADU**

- 84% of units built are less than 1,300 sq. ft.

# EF Study: Household Size Updates

Changes to structure:

- Increases demand from Single Family Detached
- Decreases for Single Family Attached and Multifamily

- Citywide average is a weighted average of all housing stock

| All Housing Comparison | Vehicle Trip Ends per Unit | | | | |
|---|---|---|---|---|---|
| | Square Footage per Housing Unit | SF Detached | SF Attached | Square Footage per Housing Unit | Multifamily ADU |
| 3.77 | less than 900 | 4.43 | 3.38 | less than 701 | 2.09 |
| 6.12 | 901 to 1,300 | 7.20 | 5.50 | 701 to 1,300 | 3.40 |
| 7.90 | 1,301 to 1,800 | 9.29 | 7.09 | over 1,301 | 4.39 |
| 9.48 | 1,801 to 2,400 | 11.15 | 8.51 | | |
| 10.79 | 2,401 to 3,000 | 12.69 | 9.69 | | |
| 11.83 | 3,001 to 3,600 | 13.91 | 10.62 | | |
| 12.70 | over 3,601 | 14.93 | 11.40 | | |

# Proposed 2023 Study Revisions – Adjustment Three

- More accurately reflect how funds are used
- Eight fee types, with General Government now two types:
  - Facilities
  - Fleet

| Fee Types | |
|---|---|
| **Current** | **Proposed** |
| Parks<br>• Neighborhood Park<br>• Community Park | Parks<br>• Neighborhood Park<br>• Community Park |
| Police | Police |
| Fire | Fire |
| General Government | Government<br>• Facilities<br>• Fleet |
| TCEF | TCEF |

# F: Revised Residential Fee Schedule

| Land Use Type | Parks | | Police | Fire | Government | | Total | % Change |
|---|---|---|---|---|---|---|---|---|
| | Neighborhood Park | Community Park | | | Facilities | Fleet | | |
| **Single Family Detached** | | | | | | | | |
| Up to 900 sq. ft. | $5,060 | $2,525 | $671 | $1,061 | $1,089 | $222 | $10,628 | 47% |
| 901 - 1,300 sq. ft. | $5,497 | $2,744 | $729 | $1,153 | $1,183 | $241 | $11,547 | 20% |
| 1,301 - 1,800 sq. ft. | $6,133 | $3,061 | $813 | $1,286 | $1,320 | $268 | $12,881 | 23% |
| 1,801 - 2,400 sq. ft. | $6,695 | $3,342 | $888 | $1,404 | $1,441 | $293 | $14,062 | 33% |
| 2,401 - 3,000 sq. ft. | $7,192 | $3,590 | $954 | $1,508 | $1,548 | $314 | $15,106 | 28% |
| 3,001 - 3,600 sq. ft. | $7,579 | $3,782 | $1,006 | $1,589 | $1,631 | $331 | $15,917 | 35% |
| Over 3,601 sq. ft. | $7,894 | $3,940 | $1,048 | $1,655 | $1,698 | $345 | $16,579 | 41% |
| **Single Family Attached** | | | | | | | | |
| Up to 900 sq. ft. | $4,010 | $2,001 | $532 | $841 | $863 | $175 | $8,422 | 14% |
| 901 - 1,300 sq. ft. | $4,625 | $2,308 | $614 | $970 | $995 | $202 | $9,713 | 1% |
| 1,301 - 1,800 sq. ft. | $5,519 | $2,754 | $732 | $1,157 | $1,187 | $242 | $11,592 | 10% |
| 1,801 - 2,400 sq. ft. | $6,311 | $3,150 | $838 | $1,323 | $1,358 | $276 | $13,256 | 20% |
| 2,401 - 3,000 sq. ft. | $7,012 | $3,499 | $930 | $1,470 | $1,509 | $307 | $14,728 | 20% |
| 3,001 - 3,600 sq. ft. | $7,556 | $3,770 | $1,003 | $1,584 | $1,626 | $330 | $15,868 | 26% |
| Over 3,601 sq. ft. | $7,999 | $3,992 | $1,061 | $1,677 | $1,721 | $350 | $16,801 | 30% |
| **Multifamily / ADU** | | | | | | | | |
| Up to 750 sq. ft. | $3,228 | $1,611 | $429 | $677 | $695 | $141 | $6,780 | -7% |
| 751 - 1,300 sq. ft. | $4,507 | $2,249 | $598 | $945 | $970 | $197 | $9,465 | -1% |
| [illegible]01 sq. ft | $4,997 | $2,494 | $663 | $1,048 | $1,075 | $219 | $10,495 | 0% |

# F: Revenue Comparison

| Residential New Single Family Detached | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| Parks | 1,827,124 | 1,936,284 | 2,317,065 | 20% |
| Fire | 187,427 | 198,629 | 324,115 | 63% |
| Police | 104,757 | 110,992 | 205,012 | 85% |
| Government | 255,312 | 270,578 | 400,240 | 48% |
| **Total** | **2,374,620** | **2,516,483** | **3,246,433** | **29%** |

| Residential New Single Family Attached | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| Parks | 991,667 | 1,045,736 | 1,109,970 | 6% |
| Fire | 101,763 | 107,078 | 155,221 | 45% |
| Police | 56,925 | 59,401 | 97,528 | 64% |
| Government | 138,655 | 145,876 | 191,719 | 31% |
| **Total** | **1,289,010** | **1,358,091** | **1,554,439** | **14%** |

| Multifamily / ADU | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| Parks | 2,023,009 | 2,205,923 | 1,992,300 | -10% |
| Fire | 206,867 | 217,713 | 271,056 | 25% |
| Police | 115,826 | 121,929 | 171,587 | 41% |
| Government | 281,562 | 295,959 | 334,663 | 13% |
| **Total** | **2,627,264** | **2,841,524** | **2,769,606** | **-3%** |

| | | | | |
|---|---|---|---|---|
| **nd Total** | **6,290,894** | **6,716,098** | **7,570,478** | **13%** |



## 2024 Actual

Actual revenue collected in 2024

## 2025 Fee

Revenue estimates for 2025 using current 2025 fees and dwelling unit counts from 2024

## Proposed

Revenue estimates for 2025 using proposed fees and dwelling unit counts from 2024

*Proposed fees include inflation through 2025

# EF: Revised Residential Fee Schedule

**SF Detached**

| Square Feet of Finished Living Space | New Maximum | Old Maximum* | Change |
|---|---|---|---|
| **Residential (per housing unit)** | | | |
| less than 901 | $ 4,036 | $ 3,135 | $ 901 |
| 901 to 1,300 | 6,165 | 5,475 | 690 |
| 1,301 to 1,800 | 7,819 | 6,988 | 831 |
| 1,801 to 2,400 | 9,288 | 8,106 | 1,182 |
| 2,401 to 3,000 | 10,509 | 9,000 | 1,509 |
| 3,001 to 3,600 | 11,477 | 9,000 | 2,477 |
| over 3,601 | 12,280 | 9,000 | 3,280 |

**SF Attached**

| Square Feet of Finished Living Space | New Maximum | Old Maximum* | Change |
|---|---|---|---|
| **Residential (per housing unit)** | | | |
| less than 901 | $ 3,103 | $ 3,135 | $ (32) |
| 901 to 1,300 | 4,771 | 5,475 | (704) |
| 1,301 to 1,800 | 6,086 | 6,988 | (902) |
| 1,801 to 2,400 | 7,260 | 8,106 | (846) |
| 2,401 to 3,000 | 8,244 | 9,000 | (756) |
| 3,001 to 3,600 | 9,016 | 9,000 | 16 |
| over 3,601 | 9,662 | 9,000 | 662 |

**Multifamily**

| Square Feet of Finished Living Space | New Maximum | Old Maximum* | Change |
|---|---|---|---|
| **Residential (per housing unit)** | | | |
| Up to 750 | $ 2,023 | $ 3,135 | $ (1,112) |
| 751 to 1,300 | 3,188 | 5,475 | (2,287) |
| Over 1,300 | 3,995 | 6,988 | (2,993) |

- Change in maximum supportable fee
- Single family about double the fee of a multifamily

*2023 report maximum fee results and presented to City Council. Size groupings have been adjusted so comparisons do not align perfectly.

# TCEF: Revenue Comparison

| Residential New Single Family Detached | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| TCEF | $ 1,808,682 | $ 1,892,764 | $ 2,137,301 | 13% |

| Residential New Single Family Attached | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| TCEF | $ 922,256 | $ 960,074 | $ 825,272 | -14% |

| Multifamily / ADU | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| TCEF | $ 1,478,029 | $ 1,556,726 | $ 918,439 | -41% |
| **Grand Total** | **$ 4,208,967** | **$ 4,409,564** | **$ 3,881,012** | **-12%** |

## 2024 Actual

Actual revenue collected in 2024

## 2025 Fee

Revenue estimates for 2025 using current 2025 fees and dwelling unit counts from 2024

## Proposed

Revenue estimates for 2025 using proposed fees and dwelling unit counts from 2024

*Proposed fees include inflation through 2025.

# F and TCEF Revenue Comparison

Overall, 3% revenue estimate increase across all housing units and sizes

- Single Family Detached 22% increase
- Single Family Attached 3% increase
- Multifamily / ADU 16% decrease

| Residential New Single Family Detached | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| CEFs | 2,374,620 | 2,516,483 | 3,246,433 | 29% |
| TCEF | 1,808,682 | 1,892,764 | 2,137,301 | 13% |
| **Total** | **4,183,302** | **4,409,247** | **5,383,734** | **22%** |

| Residential New Single Family Attached | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| CEFs | 1,289,010 | 1,358,091 | 1,554,439 | 14% |
| TCEF | 922,256 | 960,074 | 825,272 | -14% |
| **Total** | **2,211,266** | **2,318,165** | **2,379,711** | **3%** |

| Multifamily / ADU | 2024 Actual | 2025 Fee | Proposed | % Change |
|---|---|---|---|---|
| CEFs | 2,627,264 | 2,841,524 | 2,769,606 | -3% |
| TCEF | 1,478,029 | 1,556,726 | 918,439 | -41% |
| **Total** | **4,105,293** | **4,398,250** | **3,688,045** | **-16%** |

| | | | | |
|---|---|---|---|---|
| **Grand Total** | **10,499,861** | **11,125,662** | **11,451,490** | **3%** |



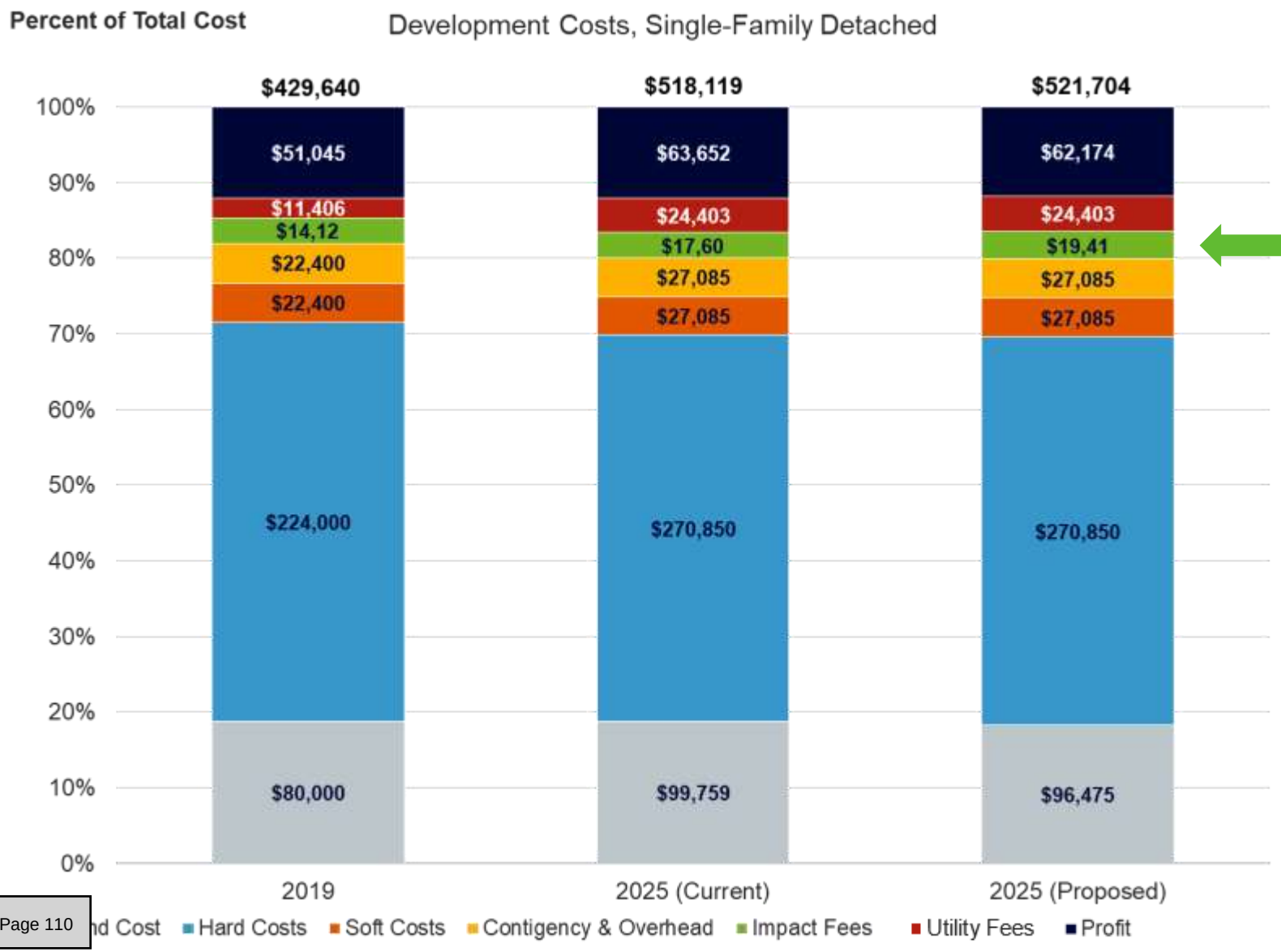
*Proposed fees include inflation through 2025

# rrent & Future Impact Fee Examples

| 2,000 square feet example | | | |
|---|---|---|---|
| **Land Use Type** | **Current** | **Proposed** | **% Change** |
| Single Family Detached | 18,929 | 23,350 | 23% |
| Single Family Attached | 18,929 | 20,516 | 8% |
| Multifamily | 18,929 | 14,490 | -23% |

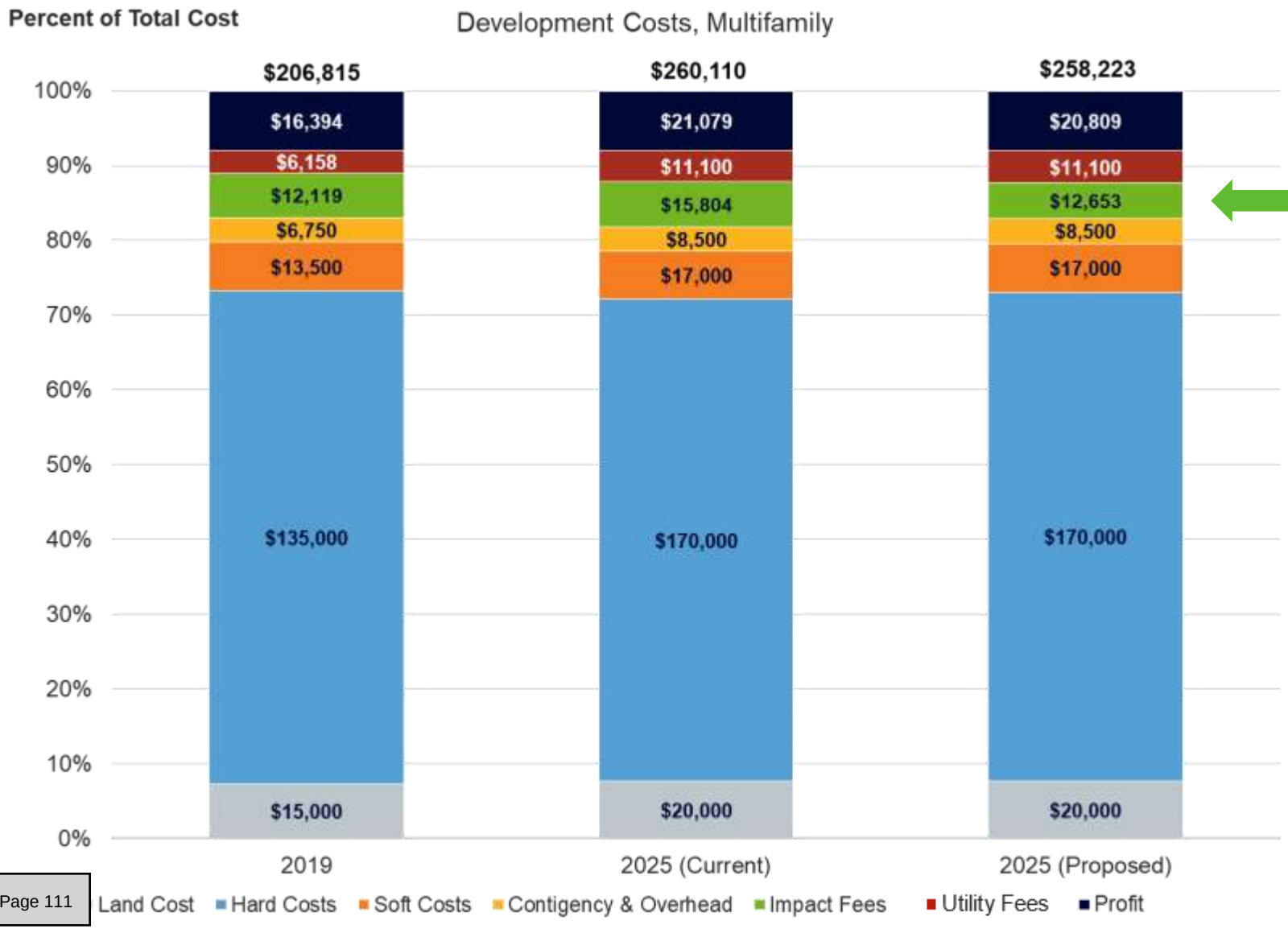
| 750 square feet ADU example | | | |
|---|---|---|---|
| **Land Use Type** | **Current** | **Proposed** | **% Change** |
| Multifamily / ADU | 15,084 | 12,653 | -16% |

# Fort Collins Total Development Cost
# Single Family Detached




- Impact Fees:
  - 3.3% of total in 2019
  - 3.3% in 2025 (current)
  - 3.7% in 2025 (proposed)
- Impact fees are a small percentage of overall development costs

# Fort Collins Total Development Cost Multifamily




- Impact Fees:
  - 5.9% of total in 2019
  - 6.0% in 2025 (current)
  - 4.9% in 2025 (proposed)
- Impact fees are a small percentage of the overall development costs.

# nresidential Fee Updates (per 1000 sq. ft.)

| Commercial | Current | Proposed | % Change |
|---|---|---|---|
| CEFs | 3,027 | 3,861 | 28% |
| TCEF | 10,885 | 11,654 | 7% |
| **Total** | **13,912** | **15,515** | **12%** |

| Office & Other Services | Current | Proposed | % Change |
|---|---|---|---|
| CEFs | 3,027 | 2,113 | -30% |
| TCEF | 8,019 | 7,558 | -6% |
| **Total** | **11,046** | **9,671** | **-12%** |

| Industrial/Warehouse | Current | Proposed | % Change |
|---|---|---|---|
| CEFs | 711 | 1,001 | 41% |
| TCEF | 2,588 | 3,917 | 51% |
| **Total** | **3,299** | **4,918** | **49%** |

- Fees proportionate to the infrastructure demand for the type of development
- New nonresidential land use category for CEFs
  - A new fee for land use comprised of offices and other services
  - Alignment with TCEFs to create consistency between the CEF and TCEF fees based on the Institute of Transportation (ITE) land use code
  - Currently, office and other services impact fees are charged at the same rate as retail/commercial developments

*Proposed fees include inflation through 2025

# 25 Workplan Timeline

## Feb 2025

**Feb. 11**
Council Work Session

## Q1-Q3 2025

**July 3**
Council Finance Committee

**Sept. 9**
Council Work Session

## Fall 2025

**Oct. 7**
City Council Adoption

**Oct. 21**
City Council Adoption

## Jan 2026

**Jan. 1**
Fee Implementation

1) Comprehensive legal review
2) Assess methodological options
3) Propose alignment adjustments to 2023 study assumptions
4) Recommend fee schedules for Jan. 1, 2026 implementation
5) Plan for next cycle of comprehensive study updates

# ture Cadence

| | 2017-2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|---|---|---|---|---|---|
| **Capital Expansion Fees** | Inflation | Update | Inflation | Inflation | Inflation | Update |
| **Transportation CEFs** | Inflation | Update | Inflation | Inflation | Inflation | Update |
| **Electric Capacity Fees** | Updated | Review | Review | Update | Review | Update |
| **Water Supply Requirement** | Updated | Review | Review | Update | Review | Update |
| **Water, Wastewater, Stormwater PIFs** | Updated | Review | Review | Update | Review | Update |

Next capital expansion fee study and detailed update planned for 2030 implementation



ange for utility fees in 2026 due to most recent model updates and current inflation data

# estions for City Council

- **Does City Council support impact fee study revisions?**
- **Does City Council need any additional information ahead of proposed first reading on Oct. 7?**

**File Attachments for Item:**

## 2. 2024 Building Codes

The purpose of this item is to update Council on the adoption of 2024 Building Codes, including Energy Code and Wildland Urban Interface Code (WUI). The 2024 International Codes (2024 I-Codes) represent the most up-to-date, comprehensive, and fully integrated body of codes regulating building construction and systems using prescriptive and performance-related provisions. The purpose of these codes is to establish the minimum construction requirements to safeguard the public health, safety, and general welfare by regulating structural strength and stability, sanitation, light and ventilation, energy conservation, and property protection from hazards attributed to the built environment within the City of Fort Collins.

**September 9, 2025**

# WORK SESSION AGENDA ITEM SUMMARY

City Council

## STAFF

Marcus Coldiron, Chief Building Official

## SUBJECT FOR DISCUSSION

**2024 Building Codes**

## EXECUTIVE SUMMARY

The purpose of this item is to update Council on the adoption of 2024 Building Codes, including Energy Code and Wildland Urban Interface Code (WUI). The 2024 International Codes (2024 I-Codes) represent the most up-to-date, comprehensive, and fully integrated body of codes regulating building construction and systems using prescriptive and performance-related provisions. The purpose of these codes is to establish the minimum construction requirements to safeguard the public health, safety, and general welfare by regulating structural strength and stability, sanitation, light and ventilation, energy conservation, and property protection from hazards attributed to the built environment within the City of Fort Collins.

## GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. What questions does council have related to the proposed package of building codes?
2. Does Council have feedback or suggestions ahead of building code adoption?

## BACKGROUND / DISCUSSION

Since 1924, the City of Fort Collins has periodically reviewed, amended, and adopted the latest nationally recognized building standards available at the time. The City has updated the minimum construction standards 17 times since 1924. Building codes and standards are reviewed and voted on by code officials and construction industry professionals from across the country and published every three years under the oversight of the *International Code Council (ICC)*. These core 2024 I-Codes represent the latest construction publications from ICC.

The code updates include the following scope of work:

1. **2024 International Codes (Adopted April 2022)**: This is a complete replacement of the 2021 editions of:

- International Building Code
- International Residential Code
- International Mechanical Code
- International Fuel Gas Code
- International Energy Conservation Code
- International Existing Building Code
- International Swimming Pool and Spa Code
- International Property Maintenance Code
- Colorado Plumbing Code

**2. State Bills/Laws:**

- Colorado Wildlife Resiliency Code
- HB25-1273 Residential building stair modernization

**3. Local Amendment highlights:**

- Remove redundancies with 2024 International Codes
- Increase Flexibility for EV Charging
- Simplify Accessory Dwelling Units (ADU) Requirements
- Update compliance path using Modeled Energy Code Targets
- Increase Accuracy of Water Demand Estimates
- Improve Visitability (Guest Accessibility)
- Codify Community-Based Shelters & Temporary Emergency Uses

**REVIEW PROCESS**

The implementation of new building standards can impact the construction industry and local economy. To better understand these impacts, a code review committee is convened to review the new codes and all local amendments**.** In addition to representation from several surrounding jurisdictions, the code review committee represents a wide spectrum of volunteers from across the local construction industry including private developers, residential and commercial builders, architects, engineers, representatives from the energy conservation sector, and Poudre Fire Authority.

Starting in March 2025, the code review committee began meeting to discuss new code, proposed amendments, and current amendments. This committee completed their review on July 30, 2025, with support to adopt the 2024 I-Codes and amendments. While this review process requires considerable time and resources, it produces enforceable and effective building codes and amendments that the community and construction industry create and support together while continuing to align with the City's goals and priorities.

Generally, the committee focused on the following themes when considering local amendments:

- Align our regulations with other jurisdictions for consistent quality/safety outcomes and customer experience
- Advance City goals from City Plan, Our Climate Future and other guiding documents with impact
- Improve customer experience through simplicity, consistency and optionality
- Consider short-term and long-term costs and savings implications
- Remove redundancies and overlap where international codes have caught up to local amendments

**KEY UPDATES AND CHANGES**

A handful of new amendments are being proposed, some of which support the City's sustainability and Our Climate Future goals. Part of the focus for this adoption is to simplify our local amendments and achieve greater alignment regionally. There are also several state bills and laws recently approved that have significant impact to building codes throughout the state.

Some current amendments are now represented in the new 2024 code as written (codes have caught up to us) and will be proposed to be deleted, while other amendments that did not have the intended outcomes, have proven to be ineffective or were cumbersome as written will also be proposed to be deleted or modified.

**Mandated State Bills/Laws:**

- HB25-1273: Residential building stair modernization. Signed by the Governor on 5/13/2025, this bill requires any jurisdiction with a population over 100,000 to adopt a building code to allow up to 5 stories of a multifamily residential building that satisfies certain life/safety requirements to be served by a single exit.
- SB23-166: The Colorado wildfire resiliency code bill. Signed into law in 2023, this bill established a Wildfire Resiliency Code Board that was tasked with defining the Wildland Urban Interface (WUI) and adopting rules for jurisdictions in an area within the WUI by July 1, 2025. These rules include a requirement that jurisdictions adopt a code, such as the International Wildland-Urban Interface Code by April 1, 2026.

The code adoption committee strongly recommended, although adopting the Colorado Wildfire Resiliency Code at the same time as the other building codes, to postpone the effective date to allow impacted community members additional time to familiarize themselves with the requirements. It will also give staff the ability to better coordinate and implement as this code impacts multiple departments and their processes.

**Strategic Local Amendments:**

- Increase Flexibility for EV Charging: After introducing EV charging requirements in the 2021 building code adoption, staff has received significant feedback regarding the implementation and impact of these requirements on new and existing developments and buildings. Proposed changes to the amendment will add some flexibility of choice and design in the application of the requirements while still maintaining strong alignment with city plans and Council priorities. This includes some trade-off options for builders and developers that want to install more EV chargers than the minimum required by code. Changes also include reworking language to better align with the recently adopted changes

to the Land Use Code. The Affordable Housing Electric Vehicle Infrastructure Offset Program is ongoing and has provided fee credits to a minimum of three developments to date.

- Simplify Accessory Dwelling Units (ADU) Requirements: Adoption of this appendix allows flexibility in adding an ADU to an existing dwelling. The provisions in the appendix provide tradeoffs that lessen the complexity, construction waste, and financial impacts of the project while maintaining life and safety considerations.
- Update Energy Code Compliance Targets: As part of the energy code process Fort Collins has developed targets for energy use (EUI) and carbon emissions ($CO_2e$) spanning code years 2024, 2027, and 2030. To reach this goal, Fort Collins plans to utilize existing performance modeling code paths that have been adapted to use these EUI and $CO_2e$ targets for corresponding code years. The deliverable is an energy compliance report demonstrating code compliance for the current code year. Establishing targets out to year 2030 will enable the building community to plan years in advance. This continues to move new construction beyond the traditional prescriptive code approach in the International Energy Conservation Code.

  The City's approach would encourage a shift to efficient electric space and water heating that results in improved comfort, health and safety, electric grid resiliency, reduced energy burden, and an intent to improve cost of construction. Once established, EUI and $CO_2e$ targets for new construction will subsequently require higher performance each code cycle through a stepped approach to the 2030 code. Recognized as an innovative approach, the City was awarded a U.S. Department of Energy federal grant in July of 2023 through the Infrastructure Investment and Jobs Act. The grant supported the establishment of a community advisory group, who engaged and advised staff throughout the development and implementation of the modeled performance code path, which was an input into the broader code review committee. More information on this advisory group can be found as an attachment to the AIS.

  The U.S. Department of Energy completed analysis of the economic impacts of updating the 2021 residential energy code to the 2024 code. This analysis indicates an annual energy cost savings of 5.5% and a small reduction in cost of construction, resulting in life cycle cost savings of $2,496 for dwellings in our climate zone. Revised building energy code amendments, and the aforementioned modeled compliance path could result in increased costs to construction of approximately $1,600-$3,500 as builders choose to install high-efficiency electric heating equipment.

  Increase Accuracy of Water Demand Estimates: The Water Demand Calculator (WDC) is a method used to right-size plumbing distribution system in residential buildings, by using a more accurate method to estimate peak flow rate. The proposed code requires the WDC be used for multi-unit residential and allows it as optional for single-unit residential. The current method outlined in the IPC has not been updated in decades to account for greater fixtures' efficiency levels installed in today's buildings. Actual peak flows are much lower today than the current method uses. Right sizing plumbing distribution systems inside a building can save on water development fees and costs before construction, material costs during construction, and energy and water use after occupancy.

- Improve Visitability (Guest Accessibility): A visibility amendment was added and adopted with the 2021 building codes. Visitibility is a common term used in building and accessibility codes. However, the definition and requirements associated with visitibility vary between those codes. For added clarity and ease of understanding, our local amendment will propose changing the nomenclature to "guest accessibility". Additionally, allowing the required main floor guest accessible bathroom to be accessed from a bedroom, in addition to the living, dining or kitchen, will add additional flexibility in design while still providing improved accessibility.
- Codify Community-Based Shelters & Temporary Emergency Uses: As a long-standing program, the permitting process and life/safety requirements associated with community based and seasonal

overflow shelters by way of an alternative means of compliance, will now be proposed to be codified. This allows facilities, after obtaining a building permit and meeting all life/safety requirements, to operate as a community-based shelter for no more than 180 days in a 12-month period and seasonal overflow shelters to operate from the beginning of November through the end of April.

This amended appendix to the International Existing Building Code also provides the ability to extend temporary uses to other existing structures in the case of an emergency event declared by local, state or federal entities.

## NEXT STEPS

Through September and October, staff will present the proposed building codes and local amendments to numerous Boards and Commissions and external community groups, seeking additional feedback and participation prior to bringing them to Council for adoption by the end of the year. The target effective date of the updated codes is January 1, 2026 with the Colorado Wildfire Resiliency code effective as of April 1, 2026.

## ATTACHMENTS

1. 2024 Building Code Adoption Committee summary
2. Community Advisory Group summary for the Zero Carbon Construction Energy Code
3. Presentation

# 2024 Building Code Adoption Committee

**Purpose:**

The building code adoption committee is made up of builders, developers, code consultants, architects, engineers and City staff. This group will review the 2024 ICC Building Codes and amendments to discuss changes, their impact and alignment with community plans and goals.

**Schedule:**

The committee will meet every Wednesday from March 12th- July 30th from 10am to 1pm. Schedule and recordings will be updated as needed below:

Wed 6/5/2024: Introduction Recording

Wed 3/12/2025: Topic - 2024 IBC Recording

Wed 3/19/2025: Topic - 2024 IBC Recording

Wed 3/26/2025: Topic - 2024 IBC Recording

Wed 4/2/2025: Topic - 2024 IBC Recording

Wed 4/9/2025: Topic - 2024 IBC & IFGC Recording

Wed 4/16/2025: Topic - 2024 IMC and IEBC Recording

Wed 4/23/2025: Topic - 2024 IPC and ISPSC Recording

Wed 4/30/2025: Topic - 2024 IPMC and IRC Recording

Wed 5/7/2025: Topic - 2024 IRC Recording

Wed 5/14/2025: Topic - 2024 IRC Recording

Wed 5/21/2025: Topic - 2024 IRC Recording

Wed 5/28/2025: CANCELED

Wed 6/4/2025: Misc. topics from prior meetings: Recording

Wed 6/11/2025: Topic - New State Codes (WUI, Colorado EV &Solar) Recording

Wed 6/18/2025: CANCELED

Wed 6/25/2025: CANCELED

Wed 7/2/2025: CANCELED

Wed 7/9/2025: Topic - 2024 IECC commercial: Recording

Wed 7/16/2025: Topic - 2024 IECC residential Recording

Wed 7/23/2025: Topic - 2024 IECC proposed amendments Recording

Wed 7/30/2025: Topic - 2024 IECC proposed amendments Recording

# 2024 Building Code Adoption Committee

**Members:**

| | |
|---|---|
| Cragon Sims | Project Manager – Landmark Homes |
| Steve Boehme | High Country Construction |
| Adam Hess | Hartford Homes |
| Jason Kersley | [AU] Workshop |
| Jon Tschetter | Hartford Homes |
| Michael Hutsell | MH Design Co |
| Andrew Paulick | Dream Finders Homes |
| Becca Mueller | CSU – Building Department Manager/CBO |
| Mike Doddridge | Doddridge Construction |
| Mike Missimer | MGI Mechanical |
| Jeff Schnieder | Armstead Construction |
| Steve Steinbicker | Architecture West |
| Paul Higman | GS Services LTD |
| Katie Quintana | PFA |
| Eric Fried | Larimer County CBO |
| Theresa Cambell | Loveland CBO |
| Russ Weber | Safebuilt CBO |
| Kelly Dykstra | Wellington CBO |
| Caleb Sulzen | Building Code Guru |

**Staff:**

| | |
|---|---|
| Marcus Coldiron | CBO |
| Russ Hovland | Plan Review Supervisor |
| Damien Wilson | Lead Building Inspector |
| Brad Smith | Sr. Project Manager – Building Energy Code |
| Mariel Miller | Water Conservation Manager |

# Zero Carbon Construction Code (ZC3)

**Community Advisory Group & Stakeholder Summary (Jan–July 2025)**

## Project Overview

The **Zero Carbon Construction Code (ZC3)** project aims to adopt a zero-carbon construction code for **new buildings by 2030**, aligning with the *Our Climate Future* plan and advancing citywide decarbonization goals. This four- and one-half year initiative is supported by a funding award from the U.S. Department of Energy and the Bipartisan Infrastructure Law and led in partnership with national experts from the University of Central Florida – Florida Solar Energy Center, New Buildings Institute, and the International Code Council. The Colorado Energy Office is the supporting state agency.

The code will be **performance-based**, using **Energy Use Intensity (EUI)** and carbon emission metrics to guide compliance. It will offer **flexible pathways** for builders, allowing innovation and choice in how targets are met—**without mandating a gas ban**. The ZC3 will apply to **new construction only**, not retrofits.

- **Target Adoption**: Late 2025
- **Implementation target**: 2026

---

## Stakeholder & Advisory Group Engagement

In early 2025, the city convened a **Community Advisory Group** made up of builders, affordable housing partners, sustainability groups, building code consultants, community members, utilities, and City staff (*full makeup of group at bottom). This group met monthly from January to July 2025 to discuss opportunities, concerns, and strategies related to the new code. Meeting topics included the performance-based code framework, affordability, emissions targets, industry capacity, and education.

**Recurring themes across meetings included**:

- Strong support for reducing emissions and improving long-term housing quality.
- Emphasis on **health, comfort, energy savings**, and **equity**.
- Concerning short-term **costs**, **labor readiness**, and **builder training**.
- Desire for **phased implementation**, **clear compliance options**, and **education** for builders and the public.

## Meeting Schedule and topics:

The advisory group met a total of 7 times in 2025, with the following schedule and focus areas:

- January 23, 2025 – Project kickoff, project definitions, background, and scope
- February 19, 2025 – Compliance pathway approach, requirements and barriers
- March 31, 2025 – Zero carbon definitions, example modeling review
- April 25, 2025 – Impacts on housing costs & affordability

- May 25, 2021 – Housing costs (continued) and Implementation resources
- June 18, 2025 – Review and evaluate established targets and proposed trajectory
- July 23, 2025 – Overview of appendices and final methodology

## Key Technical Insights

**Energy Code Framework**

- Currently allows for multiple compliance paths: Prescriptive, Total UA, and Performance Path (preferred), ERI / ASHRAE 90.1.
- Transitioning to a single path (Performance path) enables real-world energy outcomes, trade-offs, and data-informed decisions for all new buildings and homes.
- Incremental EUI targets (starting in 2026) aim for approximately 11% efficiency improvement per code cycle to meet 2030 goals. Historically, past energy code cycles have seen 5-8% improvements in efficiency but have been as high as 19%.

**Code Scope**

- Focus on operational carbon emissions only (embodied carbon may be addressed in the future).
- Efficient electric homes can likely meet 2024 energy targets without requiring renewables.
- Gas homes will likely need renewables like solar PV or battery storage to comply.

**Electric Grid Readiness**

- Platte River Power Authority (PRPA) is on track for 88% carbon-free electricity by 2030.
- Grid integration studies are ongoing to support renewable expansion.

---

## Affordability & Equity Discussions

Stakeholders expressed concern about potential short-term cost increases due to high-performance materials, rising interest rates, and limited labor availability. Smaller builders in particular highlighted fears of added complexity, permitting delays, and the ability to recover costs.

However, there was also a clear focus on the **long-term benefits** of zero-carbon buildings, including:

- **Lower utility bills** and **improved indoor air quality**
- **Better long-term home value** and durability
- **Healthier homes for all residents**, with all new builds being built to the same standard according to the code.

**Key solutions discussed**:

- Expanded **training and education** for builders, HVAC professionals, and the public.
- Public awareness campaigns to shift expectations and understanding of "better" homes.
- Financial support in the form of **incentives**, **rebates**, and **state/local funding**.

---

## Quotes from the Advisory Group

“Education of builders and the HVAC industry is going to be key.”

“Educate the public that their air could be cleaner and their health better... if realtors and the public understand better houses, the industry will provide better houses.”

“We all want to build the most efficient and healthy homes the market can support.”

“There will be some pushback... demand is high, and labor is not easily trained or replaced.”

“I do not see the value proposition for adding complexity and cost vs. housing affordability.”

“The city should act as a partner rather than a regulator…prefer to see support for our growth and making the economy better.”

“...the code is good BUT, it cannot raise the cost of homes even $1. Every cost increase that occurs eliminates buyers from the possibility of purchasing a home.”

“Energy code changes are needed. The negatives will be short-term. Long-term, we’ll be ahead of the curve in building better homes.”

**Community Advisory Group participants:**

| | |
|---|---|
| Adam Berry | Colorado Energy Office |
| Rusty Buick | EnergyLogic, Inc |
| Sara Coutts | Habitat for Humanity |
| Gabe Dunbar | Saunders Construction |
| Forrest Hancock | Montava Development & Construction, LLC |
| Jason Harrington | Harrington Construction LLC |
| Mark Houdashelt | Fort Collins Sustainability Group |
| Campbell Johnson | NOCO, AeroSeal |
| Carly Johansson | Housing Catalyst |
| Brian Johnston | CO-WY Workforce Development Climate Resilience Engine |
| Tony Mitchell | Citizens for Climate Education |
| Max Moss | Montava Development & Construction, LLC |
| Ken Orgoglioso | Citizens for Climate Education, Colorado Green Latinos |
| Andrew Paulick | Dream Finders Homes |
| Alex Pray | Platte River Power Authority |
| Karen Ramsey | Building Wellness |
| Tarik Simmons | NOCO AeroSeal |
| Caleb Sulzen | Building Code Guru |
| Mark Teplitsky | Peak81 Commercial Construction Consulting |
| Warren Vann | Community Member |
| Dr John Volckens | Colorado State University – Environmental Engineering |
| Kevin VonFeldt | Platte River Power Authority |

**Staff:**

| | |
|---|---|
| Sue Beck-Ferkiss | Fort Collins Social Sustainability |
| Maren Bzdek | Fort Collins Historic Preservation |
| Max Duggan | Fort Collins Utilities |
| Vanessa Fenley | Fort Collins Social Sustainability |
| Peeyoosha Hiremath | Fort Collins Utilities, Light & Power |
| Nicole Koehn | Fort Collins Utilities |
| Cody Snowdon | Fort Collins Utilities, Light & Power |
| Brad Smith | Fort Collins Utilities |
| Kimberly Stein | Fort Collins Utilities |
| Damien Wilson | Fort Collins Building Services |

9/9/2025

# 2024 Building Codes

**Marcus Coldiron**
Chief Building Official



# uncil Questions

- What questions does council have related to the proposed package of building codes?

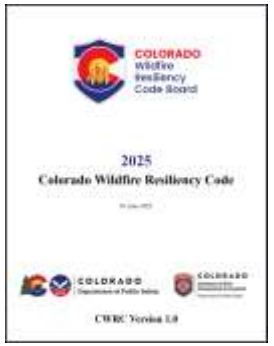
- Does Council have feedback or suggestions ahead of building code adoption?









# ckground

- The International Code Council (ICC) generates new International Building Codes every three years through the ICC Code Development Process.

- The City has reviewed, amended and adopted the latest nationally recognized building standards available every three years, since 2006 and has adopted building codes since 1924.

- Typically, 9 codes + National Electric Code are adopted. Due to recent additions to state law and changing climatic concern in the region, the Colorado Wildfire Resiliency Code will be an addition for the 2024 cycle.

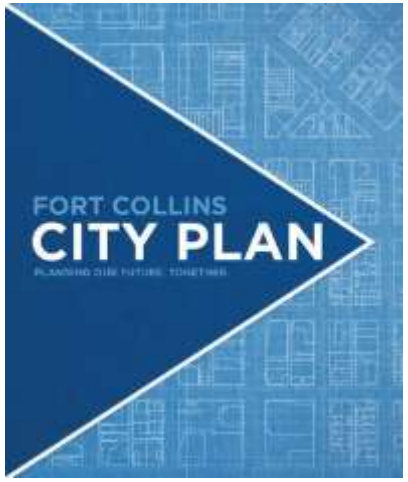
# neline

## Fort Collins steps to building code adoption (January 2025 – January 2026)

- ICC Code Release ✓
- Staff Review ✓
- Code Review Committee ✓
- Council work Session
- Boards and Commissions
- City Council Regular Session

# proach

- Building codes are a critical piece of accomplishing community goals and vison, closely aligning with many City plans.
- Collaboration and alignment regionally, where able to.
- Simplify and clarify existing local amendments.
- Consider the impact to housing affordability.
- Incremental change to support incremental impact and cost




# sidential Building Stair Modernization (IBC)

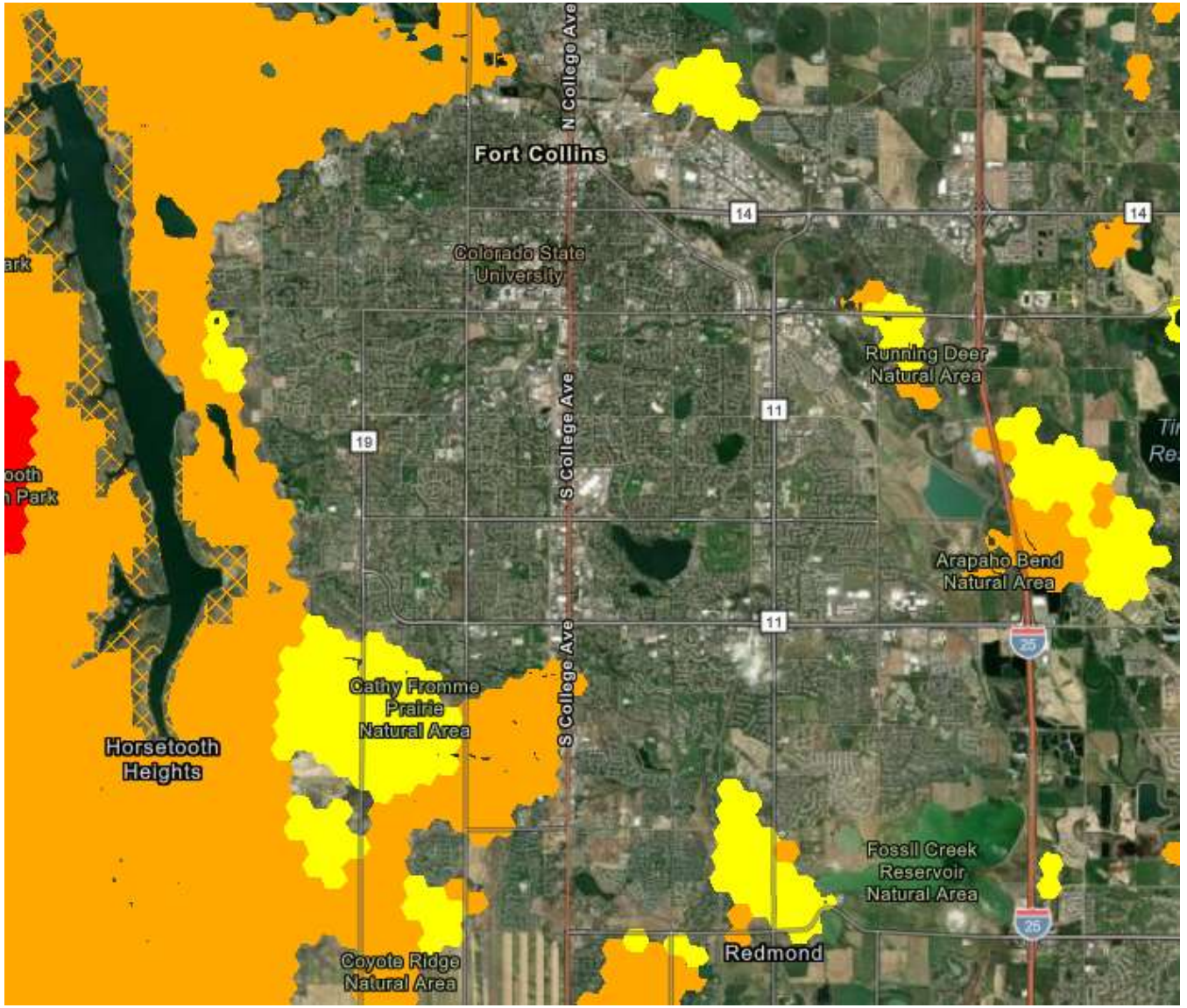
- HB – 1273 requires any jurisdiction with a population over 100k to adopt a building code to allow up to a 5-story multifamily building to be served by a single exit
- Must meet specific life/safety requirements: fire suppression, fire rated stairwell, egress width etc.
- Increases design options and especially useful for infill projects
- Encourages higher density

# lorado Wildfire Resiliency Code

- HB23-166 established a Wildfire Resiliency Code Board tasked with defining the Wildland Urban Interface (WUI) and adopting rules for jurisdictions within the WUI
- Jurisdictions within the WUI must adopt a code by 4/1/2026
- Includes exterior hardening and material requirements, establishes a landscaping buffer area and provides ongoing maintenance requirements
- Proposed to adopt with the larger building code adoption but setting an effective date of **4/1/2026**

# lorado Wildfire Resiliency Code Map

- Most of Fort Collins does not fall within the WUI
- Largest impacts to NW and SW Fort Collins
- Some impact NE and SE Fort Collins




2025 Colorado Wildfire Resiliency Code Map

# Charging (IBC)


- Revised language to align with newest Land Use Code
  - Provided parking spaces vs required parking spaces
- Separated new buildings and additions requirements for clarity.
  - Additions providing new parking must comply with the percentages required for new buildings
  - Additions not providing new parking must provide at least one EVSE installed space
- Design flexibility added
  - Trade offs provided for installing above minimum requirements
  - Encourages additional EV installed and EV Ready installations

# Charging - Example

## New residential project -100 parking spaces provided

| | EVSE Installed | EV Ready (receptacle installed) | EV Capable (conduit only) |
|---|---|---|---|
| Standard compliance path | 10 | 20 | 40 |
| Alternative 1 | 15 | 20 | 10 |
| Alternative 2 | 10 | 30 | 10 |

# cessory Dwelling Unit – Appendix (IRC)

- Provides additional flexibility when adding an ADU to an existing dwelling.
- Requires interconnected smoke and carbon monoxide alarms that alerts occupants in both dwellings simultaneously in lieu of a 1-hour fire rated assembly.
- Prioritizes early alert over fire resistance
- This lessens complexity, construction waste, financial impacts while maintaining life/safety considerations

# ater Demand Calculator (IPC & IRC)

- Water Demand Calculator is a method used to right size plumbing distribution systems in buildings
- Required for multi-unit residential projects and an option for single unit residential projects
- Can result in savings on water development fees (ECLO and FCLWD) and material cost during construction
- This method requires designing to modern peak flows which can save energy, water use after occupancy and improve water quality

# mporary Emergency Uses – Appendix E (IEBC)

Codifies a long-standing program allowing facilities to act as Community-Based Shelters and Seasonal Overflow Shelters without the need to perform a change of occupancy.

Provides the ability to extend temporary uses to other existing structures in the case of an emergency event declared by local, state or federal entities.

| Community Based Shelters | Seasonal Overflow Shelters | Emergency Events |
|---|---|---|
| • Facilities must obtain a building permit and meet minimum life/safety requirements.<br>• Limited to 180 days per 12-month period.<br>• 15 occupants maximum | • Facilities must obtain a building permit and meet minimum life/safety requirements.<br>• Allows operation from November-April<br>• Occupants limited by floor area | • Facilities must obtain a building permit and meet minimum life/safety requirements.<br>• Requires emergency event declaration<br>• Code official authorized to increase number of occupants during an emergency |

# ergy Code: Enhanced compliance using Modeled Performance

- **Meeting Colorado's electric ready and solar ready code.**
- **Developed *"Path to Zero Carbon New Construction by 2030"***
  - Moves from traditional *"Prescriptive"* path to *"Performance"* modeling

## Prescriptive Path

- Follow set rules and checklists
- Component-based (insulation, window, HVAC)
- More familiarity w/ smaller builders
- Limited flexibility

## Modeled Performance Path

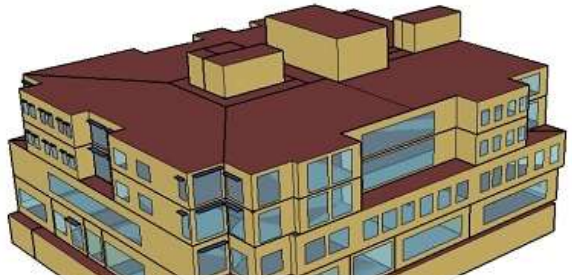
- Utilizes energy modeling / simulations
- Allow trade-offs (e.g. better windows vs less insulation)
- Energy and Carbon targets de-bias code from fossil fuel
- Emphasis on QA and verification

## Benefits of Modeled Performance Path

- Flexibility for designers and builders
- Supports innovation & new technologies
- Optimized energy savings
- Better alignment with community goals

# ergy Code – Setting a Trajectory to Zero Carbon

- **Spans three code cycles: 2024, 2027, and 2030**
  - Building community sees future energy targets years in advance



Building model developed from performance energy modeling

## Commercial

| Building Type | 2024 code EUI target | 2027 code EUI target[b] | 2030 code EUI target[b] |
|---|---|---|---|
| Apartment | 29 | 26 | 24 |
| Medium Office (5k-50k ft2) | 23 | 21 | 20 |
| Strip Mall | 35 | 30 | 25 |

## Residential

| **Energy Rating Index** (ERI) **not including renewable energy* | | | **$CO_2e$ Index** **including adjusted OPP* | | |
|---|---|---|---|---|---|
| **Adopted IECC code year** | | | **Adopted IECC code year** | | |
| **2024** | **2027[b]** | **2030[b]** | **2024** | **2027[b]** | **2030[b]** |
| 50 | 46 | 42 | 50 | 25 | 0 |

b. These are projected ERI and $CO_2e$ targets for buildings constructed under the 2027 and 2030 code cycles. These are not required for the 2024 code cycle.

# st Impact Analysis

- Staff is actively working on a comprehensive cost impact analysis.

- Cost impact analysis to date from:
  - U.S. Department of Energy through Pacific Northwest National Laboratories
  - National Association of Home Builders through Home Innovation Research Labs.

- Preliminary estimates appear to show that the adoption of the 2024 building codes and local amendments will increase the cost of construction less than 1% when compared to the 2021 building codes.

# What questions does council have related to the proposed package of Building Codes?

# Does Council have feedback or suggestions ahead of Building Code adoption?