

Town of Castle Rock

DEVELOPMENT IMPACT FEE STUDY

FINAL REPORT

August 2016



DEVELOPMENT IMPACT FEE STUDY

Final Report

Prepared for:

Town of Castle Rock

Prepared by:

Arcadis U.S., Inc.

600 S. Cherry Street

Suite 600

Denver

Colorado 80246

Tel 303 316 6500

Fax 303 316 6599

Our Ref.:

05860027.0000

Date:

August 2016

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

CONTENTS

Acronyms and Abbreviations	vi
Executive Summary	ES-1
1 Introduction	1-3
1.1 Purpose and Scope	1-3
1.2 Legal Requirements	1-3
1.3 Existing Impact Fees	1-3
1.4 Methodology	1-5
1.4.1 Existing Level of Service and Level of Service Standards	1-5
1.4.2 Incremental Approach vs. Equity Buy-In Approach	1-5
1.4.3 Impact Fee Survey	1-5
1.4.4 Population	1-5
1.4.5 Impact Fee Unit of Service	1-6
1.5 Financing Costs	1-6
1.6 Report Organization	1-6
1.7 Reliance on Data Provided by the Town of Castle Rock	1-6
1.8 Acknowledgements	1-7
2 Police Department Impact Fee	2-8
2.1 Description	2-8
2.2 Methodology	2-8
2.3 Facility Inventory	2-8
2.4 Analysis	2-9
2.5 Impact Fee Schedule	2-10
3 Fire and Rescue Department Impact Fee	3-12
3.1 Description	3-12
3.2 Methodology	3-12
3.3 Future Expenditures	3-12
3.4 Analysis	3-13
3.5 Impact Fee Schedule	3-14
4 Parks and Recreation Department Impact Fee	4-16

Town of Castle Rock –Development Impact Fee Study

4.1	Description	4-16
4.2	Methodology	4-16
4.3	Future Expenditures.....	4-16
4.4	Analysis.....	4-17
4.5	Impact Fee Schedule	4-18
5	Municipal Facilities Impact Fee.....	5-20
5.1	Description	5-20
5.2	Methodology	5-20
5.3	Facility Inventory	5-20
5.4	Analysis.....	5-21
5.5	Impact Fee Schedule	5-22
6	Transportation Impact Fee.....	6-24
6.1	Description	6-24
6.2	Methodology	6-24
6.2.1	Step 1: Trip Generation, Capacity and Cost Inputs.....	6-25
6.2.2	Step 2: Development Forecast.....	6-28
6.2.3	Step 3: Vehicle and Road Need Forecast.....	6-28
6.2.4	Step 4: Public Works Vehicles and Facilities Forecast	6-28
6.2.5	Step 5: Transportation Impact Fees	6-28
6.3	Facility Inventory	6-29
6.4	Level of Service	6-29
6.5	Analysis.....	6-30
6.6	Impact Fee Schedule	6-32
7	Non-Capital Development Fees.....	7-33
7.1	Description	7-33
7.2	Methodology	7-33
7.3	Building Permit Fees Analysis	7-33
7.4	Site Development Fee Analysis.....	7-34
7.5	Site Development Fee Recommendation.....	7-37
8	Conclusion and Recommendations	8-38

TABLES

Table ES-1 Summary of Calculated Maximum Impact Fees and Current Fees	ES-1
Table 1-1 Existing Impact Fees	1-4
Table 2-1 Summary of Police Department Facilities Asset Values	2-9
Table 2-2 Calculation of Police Department Services per Unit	2-10
Table 2-3 Police Department Impact Fee Schedule	2-11
Table 3-1 Summary of Fire and Rescue Department Future Expenditures	3-13
Table 3-2 Calculation of Fire and Rescue Department Services per Unit	3-14
Table 3-3 Fire and Rescue Department Impact Fee Schedule	3-15
Table 4-1 Summary of Parks and Recreation Department Future Capital Infrastructure Needs.....	4-16
Table 4-2 Summary of Parks and Recreation Department Future Expenditures.....	4-17
Table 4-3 Calculation of Parks and Recreation Department Services per Unit	4-18
Table 4-4 Parks and Recreation Department Impact Fee Schedule	4-19
Table 5-1 Summary of Municipal Facilities Asset Values	5-21
Table 5-2 Calculation of Municipal Facilities Services per Unit.....	5-22
Table 5-3 Municipal Facilities Impact Fee Schedule	5-23
Table 6-1 Trip Generation, Capacity, and Cost Input Descriptions.....	6-25
Table 6-2 Transportation Impact Fee Descriptions	6-29
Table 6-3 Transportation Impact Fee Schedule	6-31
Table 6-4 Transportation Impact Fee Schedule	6-32
Table 7-1 Building Permit Fee Survey.....	7-34
Table 7-2 Non-Capital Development Fee Schedule.....	7-34
Table 8-1 Summary of Maximum Supportable Impact Fees	8-38
Table 8-2 Summary of Maximum Supportable Transportation Impact Fees for Single-Family Residential Land Use Types	8-38
Table 8-3 Summary of Existing Development Fees for a 3,000 sf Single-Family Residential Home	8-39
Table 8-4 Summary of Existing Development Fees for a 3,000 sf Single-Family Residential Home	8-40

APPENDICES

Non-Utility Development Fee Survey Results

Summary Inputs, Assumptions, and Supporting Tables

Police Department Impact Fee

Fire and Rescue Department Impact Fee

Parks and Recreation Department Impact Fee

Municipal Facilities Impact Fee

Transportation Impact Fee

Single-Family Residential Fee Survey Results

ACRONYMS AND ABBREVIATIONS

Act	Development Impact Fee Act
DOT	Department of Transportation
ITE	Institute of Transportation Engineers
LOS	Level of Service
SDP	Site Development Plan
sf	Square feet
Town	Town of Castle Rock
VMT	Vehicle Miles Traveled

EXECUTIVE SUMMARY

Arcadis was retained by the Town of Castle Rock (Town) to complete a Non-Utility Development Impact Fee Update (Study). The purpose of this study was to evaluate and update the existing development fees. The Town currently has five (5) non-utility development impact fees:

- Police
- Fire & Rescue
- Parks and Recreation
- Municipal Facilities
- Transportation

The development fees for the above five (5) categories were calculated using either the equity buy-in method or the incremental method. These methods are based on either the existing assets or the funding and capital improvement plans specific to each category.

The maximum supportable impact fees are shown in Table ES-1 compared to the current fees. For the comparison of residential fees, a 3,000 sf development was utilized.

Many of the calculated fees are high than those of similar municipalities in Colorado. However, it should be noted that the impact fees calculated as a part of this report represent the maximum allowable fees for each category with explanations of the methodologies and calculations used to determine the fees. Therefore, the Town Council may choose to adopt the calculated fees, or a subset of the fees at their calculated amounts, or at amounts less than those presented. The calculated fees represent the maximum amount that the Town may adopt and impose under the Colorado statutes and using generally accepted industry methods.

The Town should review these calculated impact fees and consider revising the existing fees. In addition, due to the significant increase in the calculated impact fees as compared to the existing fees, the Town could consider a gradual phase-in of these fees to allow the development community to plan for the higher impact fees. One such phase-in plan could be to establish and increase the impact fees equally over a three-year period until the cost-justified levels are achieved.

Town of Castle Rock –Development Impact Fee Study

Table ES-1 Summary of Calculated Maximum Impact Fees and Current Fees

Land Use Type	Unit of service	Police		Fire and Rescue		Parks and Recreation		Municipal Facilities		Transportation (See Below)	
		Maximum Calculated	Current	Maximum Calculated	Current	Maximum Calculated	Current	Maximum Calculated	Current	Maximum Calculated	Current
Single-Family	Dwelling Unit	\$570	\$381	\$1,917	\$731	\$7,789	\$3,546	\$466	\$670	See below	\$3,153
Multi-Family	Dwelling Unit	\$370	\$241	\$1,245	\$463	\$5,058	\$2,245	\$303	\$424	\$8,042	\$1,990
Commercial / Shopping Center	1,000 sf	\$386	\$73	\$1,299	\$126	--	--	\$316	\$34	\$15,320	\$671
Office	1,000 sf	\$245	\$25	\$824	\$138	--	--	\$200	\$57	\$6,613	\$482
Industrial	1,000 sf	\$215	\$11	\$722	\$146	--	--	\$175	\$33	\$4,179	\$763
Warehousing	1,000 sf	\$109	\$8	\$367	\$82	--	--	\$89	\$20	2,134	\$529
Hotel (per room)	Room	\$79	\$9	\$264	\$57	--	--	\$64	\$16	4,898	\$437

Land Use Type	Size (sf)	Trip Unit	Transportation Impact Fee
Single-Family	Less than 2100	Dwelling Unit	\$8,332
Single-Family	2100 – 2399	Dwelling Unit	\$9,155
Single-Family	2400 - 2699	Dwelling Unit	\$10,437
Single-Family	2700 – 2999	Dwelling Unit	\$11,501
Single-Family	3000 – 3299	Dwelling Unit	\$12,432
Single-Family	3300 – 3699	Dwelling Unit	\$13,375
Single-Family	3700 or more	Dwelling Unit	\$14,077

1 INTRODUCTION

1.1 Purpose and Scope

The purpose of this Development Impact Fee Study is to calculate the maximum justifiable impact fees to help the Town of Castle Rock (Town) recoup the cost of community facilities and infrastructure and pay for their expansion. The Town's existing impact fees for police, fire and rescue, parks and recreation, municipal facilities, and transportation are evaluated as part of this study. In addition, the Town also requested their existing non-capital development fees be assessed.

This report presents the calculated maximum supportable fees for each category, alongside explanations of the methodologies and calculations used to determine the fees. Town policymakers may choose to implement the calculated fees at the maximum calculated, at a subset of the fees at their calculated amounts, or at amounts less than those presented. The following fees represent the maximum amounts that the Town may impose under Colorado statutes calculated using generally accepted industry methods.

1.2 Legal Requirements

In 2001, the Colorado legislature enacted the "Development Impact Fee Act" (Act). This Act recognizes the use of impact fees for funding local government or capital facilities needed to serve new development, and places some restrictions on the use of the impact fees. Provisions of the Act include the following:

- Specifies that the no impact fee shall be imposed unless it is:
 - Legislatively adopted;
 - Generally applicable to a broad class of property; and
 - Intended to defray the projected impacts on capital facilities caused by proposed development.
- Specifies that a capital facility means any improvement or facility that:
 - Is directly related to any service that a local government is authorized to provide;
 - Has an estimate useful life of five years or longer; and
 - Is required by the charter or general policy of a local government pursuant to a resolution or ordinance.

1.3 Existing Impact Fees

A summary of the Town's existing impact fees is provided in Table 1-1.

Town of Castle Rock –Development Impact Fee Study

Table 1-1 Existing Impact Fees

Residential: Parks and Recreation, Municipal Facilities, Fire, Police and Transportation Impact Fees							
Unit Type	Square Footage	Impact Fee					
		Parks and Recreation	Municipal Facilities	Fire	Police	Transportation	Subtotal:
Single Family Detached and Attached	< 2,099	\$2,009	\$379	\$414	\$216	\$2,173	\$5,191
	2,100 – 2,199	\$2,245	\$424	\$463	\$241	\$2,296	\$5,669
	2,200 – 2,299	\$2,364	\$446	\$487	\$254	\$2,388	\$5,939
	2,300 – 2,399	\$2,600	\$491	\$536	\$279	\$2,510	\$6,416
	2,400 – 2,499	\$2,718	\$513	\$560	\$292	\$2,602	\$6,685
	2,500 – 2,599	\$2,836	\$536	\$585	\$305	\$2,725	\$6,987
	2,600 – 2,699	\$3,073	\$580	\$633	\$330	\$2,816	\$7,432
	2,700 – 2,799	\$3,191	\$603	\$658	\$343	\$2,908	\$7,703
	2,800 – 2,899	\$3,309	\$625	\$682	\$355	\$3,000	\$7,971
	2,900 – 2,999	\$3,427	\$647	\$707	\$368	\$3,092	\$8,241
	3,000 – 3,099	\$3,546	\$670	\$731	\$381	\$3,153	\$8,481
	3,100 – 3,199	\$3,664	\$692	\$755	\$393	\$3,245	\$8,749
	3,200 – 3,299	\$3,782	\$714	\$780	\$406	\$3,337	\$9,019
	3,300 – 3,399	\$3,900	\$737	\$804	\$419	\$3,398	\$9,258
	3,400 – 3,499	\$4,018	\$759	\$829	\$432	\$3,490	\$9,528
	3,500 – 3,599	\$4,137	\$781	\$853	\$444	\$3,551	\$9,766
	3,600 – 3,699	\$4,255	\$804	\$877	\$457	\$3,613	\$10,006
	> 3,700	\$4,373	\$826	\$902	\$470	\$3,674	\$10,245
Multi-Family, per unit	All sizes	2,245	\$424	\$463	\$241	\$1,990	\$5,363
Non-Residential: Municipal Facilities, Fire, Police and Transportation Impact Fees							
Unit Type	Square Footage	Impact Fee (per 1,000 sq. ft.)					
		Municipal Facilities	Fire	Police	Transportation	Subtotal	
Commercial / Shopping Center	50,000 or less	\$41	\$146	\$87	\$763	\$1,037	
	50,001 – 100,000	\$34	\$126	\$73	\$671	\$904	
	100,001 – 200,000	\$31	\$110	\$62	\$587	\$790	
	Over 200,000	\$28	\$98	\$53	\$507	\$686	
Office	25,000 or less	\$60	\$146	\$30	\$763	\$999	
	25,001 – 50,000	\$57	\$138	\$25	\$482	\$702	
	50,001 – 100,000	\$54	\$130	\$22	\$340	\$546	
	Over 100,000	\$50	\$120	\$18	\$269	\$457	
Industrial		\$33	\$146	\$11	\$763	\$953	
Warehousing		\$20	\$82	\$8	\$529	\$639	
Hotel (per room)		\$16	\$57	\$9	\$437	\$519	

1.4 Methodology

1.4.1 Existing Level of Service and Level of Service Standards

Typically, local governments establish level of service (LOS) standards for each service area. When developing impact fees, the existing LOS should equal the planned LOS for new growth. If a higher LOS is established for new growth as compared to the existing LOS, the difference should be funded with revenue sources other than impact fees.

For each of the department impact fees calculated through this study, the LOS of service was defined as the current LOS being provided to the Town. This LOS was then utilized to develop the capital expenditures required to maintain that LOS for future Town development.

1.4.2 Incremental Approach vs. Equity Buy-In Approach

In general, impact fees are calculated based on an equity buy-in or incremental approach. Under an incremental approach, specific facilities are planned to be constructed at a specific point in time in the future in order to maintain an appropriate LOS. The expected cost of these facilities is then assessed on the new growth expected to be served by the facilities. This incremental approach charges new development based on the expected unit cost of a defined set of capital projects the Town is planning to build. However, the equity buy-in method charges new development for its use of Town facilities and infrastructure based on the current replacement unit cost of existing facilities. For the purposes of this project, both of these methods were employed to calculate the Town's maximum allowable impact fees.

1.4.3 Impact Fee Survey

A survey of regional municipality's development impact fees (not including utility impact fees) was conducted to gain perspective on the fees calculated in this report and to provide a baseline for the Town's fees compared to other municipalities. This survey compared the following land types:

- 3,000 sf detached single-family residential development
- 50,000 sf commercial development
- 100,000 sf commercial development
- 50,000 sf industrial development
- 100,000 industrial development

Appendix A presents the results of this survey and provides the sources for all information collected.

1.4.4 Population

A daily functional population for the Town was calculated and used in the following impact fee calculations. In 2013, the US Census Bureau determined the population of the Town to be 55,747 residents. This figure was then compared to the 2015 Town population of 59,100, provided by the Town of Castle Rock, to determine the percent growth between these years. This six (6) percent growth factor was then applied to 2013 US Census Bureau data on working and non-working residential populations in the Town to determine the daily population in 2015. This population was added to the daily short term

visitor's population, provided by the Town, to define the estimated total functional population as 56,260 persons for use in the following impact fee calculations. Appendix B provides a detailed calculation of the functional population.

1.4.5 Impact Fee Unit of Service

Currently, residential impact fees are divided into eighteen (18) unit-based fees based on the size of the households, ranging from less than 2,099 to greater than 3,700 square feet (sf). Similarly, non-residential impact fees for Commercial/Shopping and Office units are subdivided into four (4) fee groups based on square footage. As a part of this development fee study, Arcadis recommends simplifying the fee structure to improve both the equity and defensibility of these impact fees.

The recommended unit of service for residential land use is a single dwelling unit, whereas the recommended unit of service for non-residential land use is 1,000 sf, with the exception of hotels where the recommended unit of service is a hotel room. These recommendations are employed in the following impact fee calculations. Additionally, for the purpose of comparison, the maximum impact fees calculated through this study were compared to a 3,000 sf single-family residential development.

1.5 Financing Costs

A key dimension to capital infrastructure financing relates to the timing of revenue inflow and capital project outlay. The collection of development fees will be largely depended on the timing of development. Major capital facilities or infrastructure often require several years to design, develop and construct. For this reason, capital costs tend to be concentrated around various points in time rather than distributed evenly over an entire planning period. If capital facilities or infrastructure are delayed until sufficient impact fee revenues have accumulated to cash finance those facilities, service levels to all customers will deteriorate since needed capacity is delayed.

To accommodate cash flow shortfalls, municipalities may need to issue debt and or borrow from other internal funds, and repay the debt and/or loans using the impact fee revenue. Impact fees generate revenues to fund growth-related capital improvements; however, there will naturally be periods of time where other revenues or other financing mechanisms will be necessary to meet cash flow requirements.

1.6 Report Organization

The remainder of this report contains seven (7) sections. Sections 2 through 6 document the calculation of the impact fees for each category identified above. These sections of the report are organized similarly; each begins with a review of the current operations and service standards, identifies the methodology employed, summarizes the fee calculations, and concludes with the calculated impact fee amounts. Section 7 provides a review of the non-capital fees evaluated as part of this study. Section 8 provides a summary of the conclusions and recommendations of the study.

1.7 Reliance on Data Provided by the Town of Castle Rock

During the course of this project, the Town provided Arcadis with a variety of data and information, including capital improvement plans, demographics, growth projections and projected costs. We have

relied on this data in the formulation of our findings, recommendations, and in preparation of this report. We hold our conclusions and recommendations contained in this report to a reasonable degree of certainty within our profession. However, as often is the case, there will be differences between actual and projected results, and these differences may be significant. Therefore, we are not responsible for the accuracy or the data or projection information provided by others, nor do we have responsibility for updating this report with additional information that may become available or future events occurring, after the date of this report.

1.8 Acknowledgements

The successful completion of this study depended upon a collaborative effort between Arcadis and Town management and staff. In particular, the study team would like to thank Ms. Nicole Carner, Mr. Michael Tempel, Ms. Trish Muller, Mr. Tom Reiff, Mr. Fritz Sprague, Mr. David Corliss, Mr. Bill Detweiler, Mr. Jeff Brauer, Mr. Jack Cauley, Mr. Art Morales and Mr. Bob Goebel.

2 POLICE DEPARTMENT IMPACT FEE

2.1 Description

This section describes the methodology utilized and the analysis completed to calculate the maximum allowable police department impact fee. Appendix C provides a detailed calculation of the police department impact fee.

2.2 Methodology

The police department impact fee was calculated using the equity buy-in approach and the following formula:

$$\text{Impact Fee per Capita} = (\text{Net Value} - \text{Debt} - \text{Grants}) / \text{Functional Population}$$

Net Value	The adjusted net value of assets associated with police facilities. The net value is the value of the land provided by the Town plus the replacement cost of the facilities.
Debt	The amount of outstanding debt associated with the police land and facilities.
Grants	The value of Federal, State and local grants received by the Town’s in connection with police facilities as reported by the Town.
Functional Population	The Town’s estimated functional population.

2.3 Facility Inventory

Based on the asset data provided by the Town, police facilities include land, buildings, building components, fleet and equipment. The estimated replacement value of each asset type is shown in Table 2-1.

Table 2-1 Summary of Police Department Facilities Asset Values

Description	Replacement Value¹
Land	\$ 847,672
Buildings	6,893,100
Other Items:	
Building Components	\$ 207,640
Fleet	2,418,031
Equipment	1,218,107
Subtotal	\$ 3,843,777
Total Police Facilities	\$ 11,584,549

¹Based on data provided by the Town

2.4 Analysis

The calculation of the maximum allowable police department impact fee per person is shown in Table 2-2.

Table 2-2 Calculation of Police Department Services per Unit

Description		Replacement Value
Asset Value:		
Land	\$	847,672
Buildings		6,893,100
Equipment		3,843,777
Total Asset Value	\$	11,584,549
Less: Outstanding Debt		(1,167,047)
Less: Capital Contributions		-
Less: Grant Funding Used		-
Net Value	\$	10,417,502
Functional Population	persons	56,260
Impact Fee per Capita	\$	185.17

The analysis shows the total replacement cost of land, building and equipment. The Town's functional population was used in the calculation, as opposed to its permanent population, in order to reflect both the residential and business activities which contribute to the demand for police service. Outstanding debt, capital contributions, and grant funding used to obtain land, building or equipment items were subtracted from the total value of facilities to arrive at the net value of police department facilities. The Town reported that there were no developer contributions or grant funding used to fund assets purchased. The net value was divided by the Town's functional population estimate to determine the maximum allowable police department impact fee per person of \$185.17.

2.5 Impact Fee Schedule

The calculated maximum allowable police impact fee for each land use type is shown in Table 2-3 and is based on the calculated maximum allowable police department impact fee of \$185.17 per person. The impact fee per person was scaled to derive the impact fee for each land use type. The residential land use types include single and multi-family housing, while the non-residential land use types include commercial, shopping centers, offices, industrial, warehousing, and hotels. As previously described in Section 1.4.4, the recommended unit of service for residential land uses is a dwelling unit, and the recommended unit of service for non-residential land use types is 1,000 sf, with the exception of hotels where the recommended unit of service is a hotel room.

In order to compare the calculated police department impact fee to the existing impact fee schedule, specifically for residential land use types, we have compared the maximum allowable impact fee to the existing impact fee for a 3,000 to 3,099 square foot residential single family home. This size home has been selected as it matches the resident coefficient of 3.08 persons per single-family home.

Table 2-3 Police Department Impact Fee Schedule

Land Use Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Maximum Impact Fee	Current Adopted Fee	(\$) Difference
Single-Family	Dwelling Unit	3.08	\$185	\$570	\$381 ¹	\$189
Multi-Family	Dwelling Unit	2.00	\$185	\$370	\$241	\$129
Commercial / Shopping Center	1,000 sf	2.09	\$185	\$386	\$73 ²	\$313
Office	1,000 sf	1.32	\$185	\$245	\$25 ³	\$220
Industrial	1,000 sf	1.16	\$185	\$215	\$11	\$204
Warehousing	1,000 sf	0.59	\$185	\$109	\$8	\$101
Hotel (per room)	Room	0.43	\$185	\$79	\$9	\$70

¹3,000 sf

²50,001 – 100,000 sf

³25,001 – 50,000 sf

Data provided by the Town were used to define resident coefficients for the residential land use types. Resident coefficients for non-residential property types were calculated based on trip count data from the Institute of Transportation Engineers (ITE) Trip Generation Manual, the number of persons per trip from the United States Department of Transportation's (DOT's) 2009 National Household Travel Survey, and assumptions regarding trip duration.

As shown in Table 2-3, the maximum allowable impact fee for a single-family and multi-family dwelling unit was calculated to be \$570 and \$370, respectively, while the maximum allowable impact fee for non-residential development ranged from \$109 (Warehousing) to \$286 (Commercial/Shopping Center) per 1,000 sf of proposed space. The maximum allowable impact fee for hotel/motel was calculated to be \$79 per room.

3 FIRE AND RESCUE DEPARTMENT IMPACT FEE

3.1 Description

This section describes the methodology utilized and the analysis completed to calculate the maximum allowable fire and rescue department impact fee. Appendix D provides a detailed calculation of the fire and rescue department impact fee.

3.2 Methodology

The fire and rescue department impact fee was calculated using the incremental approach and the following formula:

$$\text{Impact Fee per Capita} = (\text{Cost of Future Capital} - \text{Funding}) / \text{Projected Growth in Functional Population}$$

Cost of Future Capital	The subtotal of future capital expenditures by the Town to maintain existing LOS for the fire and rescue department.
Funding	The value of Federal, State, local grants and developer contributions in connection with fire and rescue department facilities as reported by the Town.
Projected Growth in Functional Population	The Town’s estimated increase in functional population over 10 years.

3.3 Future Expenditures

Based on the estimated population growth in the Town over the next ten (10) years, the Town’s future expenditures include the addition of two new fire stations and associated equipment. The estimated future expenditures are shown in Table 3-1.

Table 3-1 Summary of Fire and Rescue Department Future Expenditures

Description	Future Expenditures¹
Crystal Valley Station	\$ 5,400,000
Crystal Valley Equipment	1,300,000
Castle Oaks Station	5,400,000
Castle Oaks Equipment	1,300,000
Fire/Police Training Center ²	1,200,000
Subtotal	\$ 14,600,000

¹Based on data provided by the Town

²Accounts for half of total Training Center cost (\$4,000,000) and assumes a factor of 60% for new growth

3.4 Analysis

The calculation of the maximum allowable fire and rescue department impact fee per person is shown in Table 3-2.

Table 3-2 Calculation of Fire and Rescue Department Services per Unit

Description		Replacement Value ¹
Future Expenditures:		
Buildings	\$	12,000,000
Equipment		2,600,000
Total Asset Value	\$	14,600,000
Less: Funding		-
Net Cost	\$	14,600,000
Projected Growth in Functional Population ¹	persons	23,456
Impact Fee per Capita	\$	622.44

¹Represents an estimate of the Town's 10 year growth in functional population

The analysis shows the total future expenditures for the fire and rescue department required to maintain the current LOS for the Town. Any additional expected funding (if applicable) used to obtain land, building or equipment items was subtracted from the total value of facilities to arrive at the net value of fire and rescue facilities. The Town reported that there will be no developer contributions or grant funding used to fund assets purchased. The net value was divided by the Town's estimated increase in ten-year functional population to determine the maximum allowable fire and rescue department impact fee per person of \$622.44.

Although the Town has set aside funds for the construction of the Crystal Valley Fire Station/Equipment, we have not reduced the future capital expenditures by this amount. The impact fee calculation is based on a unit cost to provide one resident with fire and rescue services. If we reduce the future capital expenditures by the cash available, the impact fee would be discounted for development that occurs later. Development that occurs early would pay a higher impact fee for the same service than development that occurs later. As long as the future capital expenditures amount reflects the cost to provide service to the growth that is expected during the 10-year study period, the amount of cash that has been set aside for the development is irrelevant.

3.5 Impact Fee Schedule

The calculated maximum allowable impact fee for each land use type is shown in Table 3-3 based on the calculated maximum allowable fire and rescue department impact fee of \$622.44 per person. The impact fee per person was scaled to derive the impact fee for each land use type. The residential land use types include single and multi-family housing, while the non-residential land use types include commercial, shopping centers, offices, industrial, warehousing, and hotels. As previously described in Section 1.4.4,

the recommended unit of service for residential land uses is a dwelling unit, and the recommended unit of service for non-residential land uses is 1,000 sf, with the exception of hotels where the recommended unit of service is a hotel room.

In order to compare the calculated fire and rescue department impact fee to the existing impact fee schedule, specifically for residential land use types, we have compared the maximum calculated fee to the existing impact fee for a 3,000 to 3,099 square foot residential single-family home. This size home has been selected as it matches the resident coefficient of 3.08 persons per single-family home.

Table 3-3 Fire and Rescue Department Impact Fee Schedule

Land Use Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Maximum Impact Fee	Current Adopted Fee	(\$) Difference
Single-Family	Dwelling Unit	3.08	\$622	\$1,917	\$731 ¹	\$1,186
Multi-Family	Dwelling Unit	2.00	\$622	\$1,245	\$463	\$782
Commercial / Shopping Center	1,000 sf	2.09	\$622	\$1,299	\$126 ²	\$1,173
Office	1,000 sf	1.32	\$622	\$824	\$138 ³	\$686
Industrial	1,000 sf	1.16	\$622	\$722	\$146	\$576
Warehousing	1,000 sf	0.59	\$622	\$367	\$82	\$285
Hotel (per room)	Room	0.43	\$622	\$264	\$57	\$207

¹3,000 sf

²50,001 – 100,000 sf

³25,001 – 50,000 sf

Data provided by the Town were used to define resident coefficients for the residential land use types. Resident coefficients for non-residential property types were calculated based on trip count data from the ITE's Trip Generation Manual, the number of persons per trip from the U.S. DOT's 2009 National Household Travel Survey, and assumptions regarding trip duration.

As shown in Table 3-3, the maximum allowable impact fee for a single-family and multi-family dwelling unit was calculated to be \$1,917 and \$1,245, respectively, while the maximum allowable impact fee for non-residential development ranged from \$367 (Warehousing) to \$1,299 (Commercial/Shopping Center) per 1,000 sf of proposed space. The maximum allowable impact fee for hotel/motel was calculated to be \$264 per room.

4 PARKS AND RECREATION DEPARTMENT IMPACT FEE

4.1 Description

This section describes the methodology utilized and the analysis completed to calculate the maximum allowable parks and recreation department impact fee. Appendix E provides a detailed calculation of the parks and recreation department impact fee.

4.2 Methodology

The parks and recreation department impact fee was calculated using the incremental approach and the following formula:

$$\text{Impact Fee per Capita} = (\text{Cost of Future Capital} - \text{Funding}) / \text{Projected Growth in Functional Population}$$

Cost of Future Capital The subtotal of future capital expenditures by the Town to maintain existing LOS for parks and recreation department.

Funding The value of Federal, State, local grants and developer contributions in connection with parks and recreation department facilities as reported by the Town.

Projected Growth in Functional Population The Town's estimated increase in functional population over 10 years.

4.3 Future Expenditures

Based on the estimated population growth in the Town over the next ten (10) years, the Town's future expenditures include the expansion of recreation facilities, parks, trails and outdoor pools.

Table 4-1 below presents a summary of the future capital infrastructure needs required by the Town to meet their existing LOS over the next ten (10) years.

Table 4-1 Summary of Parks and Recreation Department Future Capital Infrastructure Needs

Description	Current Capacity	10-year Growth Requirement
Park Needs	352 acres	140 acres
Recreation Needs	155,750 sf	61,815 sf
Trail Needs	33 miles	13 miles
Side-path Needs	40 miles	16 miles
Outdoor Pools	2	1

The estimated future expenditures based on these capital infrastructure needs are shown in Table 4-2.

Table 4-2 Summary of Parks and Recreation Department Future Expenditures

Description	Future Expenditures¹
Parks	\$ 36,641,153
Recreation Facilities	16,999,189
Paved Trails	2,106,436
Side-Path	1,391,824
Outdoor Pools	2,182,881
Subtotal	\$ 59,321,483

¹Based on data provided by the Town

4.4 Analysis

The calculation of the maximum allowable parks and recreation department impact fee per person is shown in Table 4-3.

Table 4-3 Calculation of Parks and Recreation Department Services per Unit

Description		Replacement Value¹
Future Expenditures:		
Parks	\$	36,641,153
Recreation		16,999,189
Paved Trails		2,106,436
Side-Path Trails		1,391,824
Swimming Pools		2,182,881
Total Cost	\$	59,321,483
Less: Funding ¹		-
Net Cost	\$	59,321,483
Projected Growth in Functional Population ²	persons	23,456
Impact Fee per Capita	\$	2,529.05

¹No funding is shown as total cost represents Town expenditures only

²Represents an estimate of the Town's 10 year growth in functional population

The analysis shows the total future expenditures for the parks and recreation department. Any additional expected funding (if applicable) used to obtain land, building or equipment items was subtracted from the total value of facilities to arrive at the net value of parks and recreation facilities. The Town provided costs for parks and recreation facilities that represent Town-only expenditures, and as such, no funding has been included in the impact fee calculation. Cost for paved trails and side paths were also furnished by the Town. The net value was divided by the Town's estimated ten-year increase in functional population to determine the maximum allowable parks and recreation department impact fee per person of \$2,529.05.

4.5 Impact Fee Schedule

The calculated maximum allowable impact fee for each land use type is shown in Table 4-4 and is based on the maximum allowable parks and recreation department impact fee of \$2,529.05 per person. The maximum allowable impact fees for a single-family and multi-family dwelling unit were calculated to be \$7,789.47 and \$5,058.10, respectively. No parks and recreation impact fees were calculated for non-residential development.

In order to compare the calculated parks and recreation department impact fee to the existing impact fee schedule, specifically for residential land types, we have compared the maximum calculated fee to the

Town of Castle Rock –Development Impact Fee Study

existing impact fee for a 3,000 to 3,099 square foot residential single-family home. This size home has been selected as it matches the resident coefficient of 3.08 persons per single-family home.

Table 4-4 Parks and Recreation Department Impact Fee Schedule

Land Use Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Maximum Impact Fee	Current Adopted Fee	(\$) Difference
Single-Family	Dwelling Unit	3.08	\$2,529	\$7,789	\$3,546 ¹	\$4,243
Multi-Family	Dwelling Unit	2.00	\$2,529	\$5,058	\$2,245	\$2,813

¹3,000 sf

Data provided by the Town were used to define resident coefficients for the residential land use types.

5 MUNICIPAL FACILITIES IMPACT FEE

5.1 Description

This section describes the methodology utilized and the analysis completed to calculate the maximum allowable municipal facilities impact fee. Appendix F provides a detailed calculation of the municipal facilities department impact fee.

5.2 Methodology

The municipal facilities impact fee was calculated using the equity buy-in approach and the following formula:

$$\text{Impact Fee per Capita} = (\text{Net Value} - \text{Debt} - \text{Grants}) / \text{Permanent Population}$$

Net Value	The adjusted net value of assets associated with municipal facilities. The net value is the value of the land provided by the Town plus the replacement cost of the facilities
Debt	The amount of outstanding debt associated with the municipal land and facilities
Grants	The value of Federal, State and local grants received by the Town in connection with municipal facilities as reported by the Town
Permanent Population	The Town’s estimated permanent population

5.3 Facility Inventory

Based on the asset data provided by the Town, municipal facilities include land, buildings, building components, fleet, and equipment associated with the Town Hall. The estimated replacement value of each asset type is shown in Table 5-1.

Table 5-1 Summary of Municipal Facilities Asset Values

Description	Replacement Value¹
Land	\$ 588,486
Buildings	6,486,200
Other Items:	
Building Components	\$ 1,478,044
Fleet	386,469
Subtotal	\$ 1,864,573
Total Municipal Facilities	\$ 8,939,199

¹Based on data provided by the Town

5.4 Analysis

The calculation of the maximum allowable municipal facilities impact fee per person is shown in Table 5-2.

Table 5-2 Calculation of Municipal Facilities Services per Unit

Description	Replacement Value
Asset Value:	
Land	\$ 588,486
Buildings	6,486,200
Equipment	1,864,513
Total Asset Value	\$ 8,939,199
Less: Outstanding Debt	-
Less: Capital Contributions	-
Less: Grant Funding Used	-
Net Value	\$ 8,939,199
Functional Population	59,100
Impact Fee per Capita	\$ 151.26

The analysis shows the total replacement cost of land, building and equipment. Outstanding debt, capital contributions, and grant funding used to obtain land, building or equipment items were subtracted from the total value of facilities to arrive at the net value of municipal facilities. The Town reported that there were no developer contributions or grant funding used to fund assets purchased. The net value was divided by the Town's permanent population estimate to determine the maximum allowable municipal facilities impact fee per person of \$151.26.

The Town's permanent population was used in the calculation as opposed to its functional population to reflect that resident activity places demand on the municipal facilities.

5.5 Impact Fee Schedule

The calculated maximum allowable impact fee for each land use type is shown in Table 5-3 and is based on the calculated maximum allowable municipal facilities impact fee of \$151.26 per person. The impact fee per person was then scaled to derive the impact fee for each land use type. The residential land use types include single and multi-family housing, which the non-residential land use types include commercial, shopping centers, offices, industrial, warehousing, and hotels. As previously described in Section 1.4.4, the recommended unit of service for residential land uses is a dwelling unit, and the recommended unit of service for non-residential land use types is 1,000 sf, with the exception of hotels where the unit of service is a hotel room.

In order to compare the calculated municipal facilities impact fee to the existing impact fee schedule, specifically for residential land use types, we have compared the maximum calculated fee to the existing

Town of Castle Rock –Development Impact Fee Study

impact fee for a 3,000 to 3,099 square foot residential single-family home. This size home has been selected as it matches the resident coefficient of 3.08 persons per single-family home.

Table 5-3 Municipal Facilities Impact Fee Schedule

Land Use Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Maximum Impact Fee	Current Adopted Fee	(\$) Difference
Single-Family	Dwelling Unit	3.08	\$151	\$466	\$670 ¹	(\$204)
Multi-Family	Dwelling Unit	2.00	\$151	\$303	\$424	(\$121)
Commercial / Shopping Center	1,000 sf	2.09	\$151	\$316	\$34 ²	\$282
Office	1,000 sf	1.32	\$151	\$200	\$57 ³	\$143
Industrial	1,000 sf	1.16	\$151	\$175	\$33	\$142
Warehousing	1,000 sf	0.59	\$151	\$89	\$20	\$69
Hotel (per room)	Room	0.43	\$151	\$64	\$16	\$48

¹3,000 sf

²50,001 – 100,000 sf

³25,001 – 50,000 sf

Data provided by the Town were used to define resident coefficients for the residential land use types. Resident coefficients for non-residential property types were calculated based on trip count data from the ITE Trip Generation Manual, the number of persons per trip from the United States DOT's 2009 National Household Travel Survey, and assumptions regarding trip duration.

As shown in Table 5-3, the maximum allowable impact fee for a single-family and multi-family dwelling unit was calculated to be \$466 and \$303, respectively, while the maximum allowable impact fee for non-residential development ranged from \$175 (Industrial) to \$316 (Commercial/Shopping Center) per 1,000 sf of proposed space. The maximum allowable impact fee for hotel/motel was calculated to be \$64 per room.

6 TRANSPORTATION IMPACT FEE

6.1 Description

This section describes the methodology utilized and analysis completed to update the existing transportation impact fee. The transportation impact fee utilizes an incremental approach (forward looking) and incorporates the most recent Institute of Transportation Engineers (ITE) data to update vehicle trip generation rates. Additionally, specific Town projects and growth rates were utilized to update roadway average construction costs and population and development forecasts. Simply stated, this methodology allocates the impact of anticipated growth to the cost of providing a specific list of transportation improvement necessary to accommodate that growth. Appendix G provides the detailed calculations of the transportation impact fee.

6.2 Methodology

The transportation impact fee was calculated using the incremental approach and utilizes the following steps and information:

- Step 1: Trip Generation, Capacity, and Cost Inputs
 - Development Trip Rates
 - Trip Adjustment Factor
 - Trip Length Factor
 - Lane capacity (vehicles per day)
 - Capacity Expansion Costs (from Town Capital Improvements Plan)
 - Cost per lane-mile of new capacity
- Step 2: Development Forecast
 - Projected development growth from Town
- Step 3: Vehicle and Road Need Forecast
 - Vehicle trips per land use
 - Total vehicle trips
 - Change in vehicle trips
 - Additional lane-miles needed for development
 - Forecasted Annual Lane-Miles Cost
- Step 4: Public Works Vehicles and Facilities Forecast
- Step 5: Transportation Impact Fees
 - Total road costs
 - Net new Vehicle Miles Traveled (VMT)
 - Cost per new VMT
 - Proposed Impact Fee

Table 6-1 below provides a detailed description/definition of each of the bullets above, as well as their use in developing the final transportation impact fees.

6.2.1 Step 1: Trip Generation, Capacity and Cost Inputs

The first step of the transportation impact fee calculation is to develop key factors associated with the calculation. Table 6-1 below provides a detailed description/definition of each component and how they are calculated and utilized to develop the transportation impact fee.

Table 6-1 Trip Generation, Capacity, and Cost Input Descriptions

Component	Description	Calculation
Development Trip Rate	The average number of weekday vehicle trips per unit of development from the ITE Trip generation Manual	These rates come from the ITE Trip Generation Manual, 9 th Edition, specific to each land use category – Single Family Residential (land use code 210), Multi-Family Residential (land use code 220), Retail (land use code 820), Office (land use code 710), Light Industrial (land use code 110), Warehousing (land use code 150), and Hotel (land use code 310).
Trip Adjustment Factor	Factor applied to each type of development to account for the different number of trips each type of development paces of the impact fee eligible roadways. This takes into account a “pass-by” reduction as per the ITE Trip Generation Manual.	<p>1) Residential Development –</p> <ul style="list-style-type: none"> a. Basic trip adjustment factor is 50%. b. 2009 National Household Travel Survey (Federal Highway Administration publication dated June 2011) – home-based weekday work trips are typically 30.99% of production trips. c. US Census Bureau’s web application OnTheMap4 indicates that 82.3% of Castle Rock workers travel outside the Town for work. d. Trip Adjustment Factor = $.50 + (0.3099 \times 0.50 \times 0.823 = .1275) = .6275$ (rounded to 63%) <p>2) Commercial Shopping Center</p> <ul style="list-style-type: none"> a. ITE data (9th Edition) indicates that 34% of the vehicles that enter shopping centers are passing by on their way home (same as previous study). The remaining 66% of attraction trips have the commercial site as their primary destination. b. Multiplied together, these factors give us $(0.66 \times 0.50 = 0.33)$ or 33% trip adjustment factor. <p>3) Office/Industrial/Warehousing/Hotel – use the basic 50% trip</p>

Town of Castle Rock –Development Impact Fee Study

Component	Description	Calculation
		adjustment factor (so as not to double count trips generated by one use and attracted to a second use in the Town).
Trip Length Factor	Adjustment factor to the average vehicle trip length specific to different development types.	<p>Source data for these factors comes from Federal Highway Administration and US Bureau of Census Household Travel Surveys. Trip factor indicates for each land use that land use's typical trip length with respect to the average length of all trips as follows:</p> <p>Single Family – 122%</p> <p>Multi-Family – 122%</p> <p>Commercial/Shopping Center – 68%</p> <p>Office – 75%</p> <p>Industrial – 75%</p> <p>Warehousing – 75%</p> <p>Hotel – 75%</p>
Average Trip Length	The average length of vehicle trips on impact fee eligible roadways	The Town's Transportation Master Plan includes detailed analyses of the impacts of new development and identifies a necessary list of improvements to accommodate that growth. That list includes approximately 30.7 lane miles of capacity. Through an iterative process, the impact fee spreadsheet calculations are validated to that number of lane miles, yielding an average trip length of 2.64 miles.
Lane Capacity (vehicles per day)	The average daily capacity of one vehicle lane	<p>This value is calculated using the following inputs:</p> <ul style="list-style-type: none"> • Peak hour/direction capacity (typical maximum capacity for an arterial from the Highway Capacity Manual) = 1900 • Typical green time (based on local observations and input from Public Works staff) = 60% • Typical directional factor (based on local observations and input from Public Works staff) = 60% • Typical peak-to-daily ratio (based on local observation and input from Public Works staff) = 15%

Town of Castle Rock –Development Impact Fee Study

Component	Description	Calculation
		The calculation is as follows: Peak hour/direction capacity x typical green time / typical directional factor / peak-to-daily ratio / 2 = Daily Lane Capacity
Capacity Expansion Costs	Town specific cost for the list of roadway projects planned to accommodate the anticipated growth	Costs provide by the Town of Castle Rock
Cost per lane-mile new capacity	Average cost per lane estimated to construct the specific list of roadway projects planned to accommodate the anticipated growth.	Calculated as the total capacity expansion costs divided by the number of lane-miles for those projects

6.2.2 Step 2: Development Forecast

The second step to determine the transportation impact fee is the calculation of the development forecast. This forecast starts with the total current units of different development types (i.e. Single Family Dwelling Units) and projects what the 10-year change will be for those development types based on yearly estimated growth for each of the development types (i.e., 800 single family units per year).

6.2.3 Step 3: Vehicle and Road Need Forecast

Step 3 of the transportation impact fee develops the forecast for the specific development type (i.e. Single Family Dwelling Unit) yearly vehicle trips. This forecast takes into account the development forecast calculated in Step 2. The calculation for calculating a specific yearly vehicle trips is as follows:

$$\begin{aligned} &\textit{Development Vehicle Trip} \\ &= \textit{Number of total units} \times \textit{trip rate} \times \textit{trip adjustment factor} \times \textit{average trip length} \end{aligned}$$

This forecast is projected over the 10-year change, and a total vehicle miles traveled (VMT) is calculated which corresponds to the total VMT for new growth over the 10 years.

Following the vehicle trips forecast, a specific road need (total number of miles required for growth) forecast is developed for the new growth over the 10-year period. This value is calculated on a yearly basis for the 10-year period and is a division of the increase in VMT per year due to growth divided by the total lane capacity (see section 6.2.1). The individual annual lane-miles required for the 10-year study period are summed to calculate a total 10-year lane-miles needed for development value.

6.2.4 Step 4: Public Works Vehicles and Facilities Forecast

The transportation impact fee also needs to incorporate the cost of additional public works vehicles and facilities required to provide the same LOS to the Town of Castle Rock population. For both vehicles and facilities, a baseline level of service is calculated and then forecasted over the 10-year period to determine the increased number of public works vehicles and facilities square footage required.

6.2.5 Step 5: Transportation Impact Fees

Incorporating all of the values calculated through Steps 1 through 4, the transportation impact fees can be developed for each of the development types. Table 6-2 below provides a detailed description of the components and calculations associated with Step 5.

Table 6-2 Transportation Impact Fee Descriptions

Component	Description	Calculation
Total Transportation Costs	Summation of all costs associated with the projected growth of the Town over 10 years	Summation of the cost for additional lane-miles, public works vehicles, and facilities
Net New VMT	Total new VMT associated with the projected growth of the Town over 10 years	Summation of 2015 to 2025 VMT associated with new growth only
Cost per new VMT	Total cost per new growth-related VMT	Calculated as Total Transportation costs divided by the total Net New VMT
Proposed Impact Fees	Proposed impact fees based on specific development types	Calculated as the product of: <ul style="list-style-type: none"> • Trip Rate (see section 2.2.1) • Trip Adjustment Factor (see section 2.2.1) • Trip Length Factor (see section 2.2.1) • Cost per new VMT (see above)

6.3 Facility Inventory

Facilities relevant in the transportation calculation include the existing fleet vehicles for roadway maintenance and building infrastructure. Only the twenty largest and most complex maintenance vehicles were considered in this analysis, and that number was increased proportionately with the number of lane-miles of roads which the Town will have to maintain. Existing buildings associated with roadway maintenance total 38,962 sf and this was increased proportionately with growth in population and roads as necessary to expand the maintenance capabilities.

6.4 Level of Service

The Town has defined their minimum acceptable LOS for all roads and intersections in the Town as a Level D.

The LOS functional classification includes six different levels. Each level is assigned a letter A through F and represents a range of operating conditions and the driver's perception of those conditions. A description of each level is included below.

- LOS A: Generally describes free-flow traffic operations where motorists are completely unimpeded in their ability to maneuver within the traffic stream. Drivers are able to travel at their desired speed and delays at intersections are minimal.

- LOS B: Free-flow traffic conditions exist, although the presence of other vehicles within the traffic stream is noticeable. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not significant.
- LOS C: Traffic flow is generally stable, although the driver's choice of speeds and ability to maneuver are increasingly restricted. Longer queues at signalized intersections exist.
- LOS D: Traffic flow is generally unstable where minor increases in flow result in substantial delay. Driver speeds are tolerable for short periods, but are subject to sudden variance. The ability to maneuver and select travel speed is severely restricted.
- LOS E: Larger traffic volumes and significant delays exist. Traffic flow is unstable and is generally maintained by a low speed. Driver comfort is low due to limited space between vehicles and rapidly changing speeds, and extensive delays are typically experienced at critical intersections
- LOS F: Traffic flow is characterized by extremely low speeds. Driving comfort is low and motorists incur significant delays. Substantial queuing also occurs at critical intersections.

The impact fee analysis focused on the capacity improvements associated with Town-maintained roads.

As described above, the LOS for public works vehicles and buildings in this analysis was assumed to be the current operating levels.

6.5 Analysis

The calculation of the maximum allowable transportation impact fee for each land use type is shown in Table 6-3. The impact fee was calculated on a per unit basis for single and multi-family dwellings and on a per room basis for hotels and motels. The impact fee for non-residential land use types, which include commercial, shopping centers, offices, industrial, warehousing, and hotels, was calculated on the basis of 1,000 sf of proposed space. Additionally, Appendix G contains the complete list of transportation capital projects included in the transportation impact fee cost development.

Town of Castle Rock –Development Impact Fee Study

Table 6-3 Transportation Impact Fee Schedule

			(1)	(2)	(3)	(4)	(5)
Land Use Type	Size (sf)	Trip Unit	Trip Rate	Trip Adjustment Factor	Trip Length Factor	Cost per New VMT	Maximum Impact Fee
Single-Family	Less than 2100	Unit	6.89	63%	122%	\$699	\$9,774
Single-Family	2100 – 2399	Unit	7.57	63%	122%	\$699	\$10,739
Single-Family	2400 - 2699	Unit	8.63	63%	122%	\$699	\$12,243
Single-Family	2700 – 2999	Unit	9.51	63%	122%	\$699	\$13,491
Single-Family	3000 – 3299	Unit	10.28	63%	122%	\$699	\$14,584
Single-Family	3300 – 3699	Unit	11.06	63%	122%	\$699	\$15,690
Single-Family	3700 or more	Unit	11.64	63%	122%	\$699	\$16,513
Multi-Family	All	Unit	6.65	63%	122%	\$1,596	\$9,434
Commercial / Shopping Center	All	1,000 sf	42.70	33%	68%	\$1,596	\$17,686
Office	All	1,000 sf	11.03	50%	75%	\$1,596	\$7,635
Industrial	All	1,000 sf	6.97	50%	75%	\$1,596	\$4,824
Warehousing	All	1,000 sf	3.56	50%	75%	\$1,596	\$2,464
Hotel (per room)	All	Room	8.17	50%	75%	\$1,596	\$5,655

6.6 Impact Fee Schedule

The transportation impact fee for each land use type was calculated as shown in Table 6-4.

Table 6-4 Transportation Impact Fee Schedule

Land Use Type	Size (sf)	Trip Unit	Maximum Impact Fee	Current Adopted Fee ¹
Single-Family	Less than 2100	Dwelling Unit	\$9,774	\$2,173
Single-Family	2100 – 2399	Dwelling Unit	\$10,739	\$2,388
Single-Family	2400 - 2699	Dwelling Unit	\$12,243	\$2,725
Single-Family	2700 – 2999	Dwelling Unit	\$13,491	\$3,000
Single-Family	3000 – 3299	Dwelling Unit	\$14,584	\$3,245
Single-Family	3300 – 3699	Dwelling Unit	\$15,690	\$3,551
Single-Family	3700 or more	Dwelling Unit	\$16,513	\$3,674
Multi-Family	All	Dwelling Unit	\$9,434	\$1,990
Commercial / Shopping Center	All	1,000 sf	\$17,686	\$671 ²
Office	All	1,000 sf	\$7,635	\$340 ²
Industrial	All	1,000 sf	\$4,824	\$953 ²
Warehousing	All	1,000 sf	\$2,464	\$639 ²
Hotel (per room)	All	Room	\$5,655	\$519 ²

¹The current adopted fee for the median of each single-family square footage range list above was used for comparison.

²Fee is per every 1,000 sf.

As shown in Table 6-4, the impact fees calculated range from \$9,774 to \$16,513 for single family dwelling units, \$9,434 for multi-family dwelling units, and from \$2,464 (Warehousing) to \$17,686 (Commercial/Shopping Center) per 1,000 sf for nonresidential development.

7 NON-CAPITAL DEVELOPMENT FEES

7.1 Description

This section describes the methodology utilized and analysis completed to evaluate the cost-based non-capital development fees.

7.2 Methodology

The non-capital development fees were evaluated to determine whether or not the Town is recouping internal Town costs associated with conducting non-capital development fee activities. These include:

- Building Permit Fees
- Site Development Fees

The Town staff provided the following information:

- Building Permit Fees
 - Updated Town of Castle Rock Building Valuation Data
 - Original 2003 Castle Rock Building Valuation Table
- Site Development Fees
 - Staff required to conduct non-capital development fee activities (e.g. plan reviews)
 - Low, median and high labor hours for Town staff to complete each review
 - Cost rates for Town staff including
 - Base rates for each employee involved in the reviews
 - Benefits equivalent to 32.5% of the employee's base salary
 - \$7,740 annually per employee in cost allocations and overhead charges
 - \$1,897 annually per employee in vehicle contributions and maintenance

These components were then utilized to calculate total building permit fees and the low, median and high costs to conduct non-capital fee activities.

7.3 Building Permit Fees Analysis

Components included in building permit fees and plan review fees differ from municipality to municipality. Currently the Town calculates the

- Building Permit Fee based on valuation,
- Plan Review Fee – 65% of Building Permit Fee,
- Use Tax – 1/2 Valuation x 5% (4% Castle Rock, 1% Douglas County), and
- Administrative Cost Allocation Recovery Fee – \$1,571.56.

The Town's Building Valuation Data Table has not been updated since 2003 and values a residential home at \$76.99 per square foot and a moderate hazard industrial facility at \$46.45 per square foot. The Town has expressed the desire to transition from the old valuation table to a newer version which would increase the construction costs for residential and moderate hazard industrial facility to, \$112.65 per square foot and \$65.44 per square foot, respectively. To assist in this endeavor, Arcadis conducted a

Town of Castle Rock –Development Impact Fee Study

survey of existing building permit fees in comparable municipalities in Colorado. Table 7-1 below presents a summary of the difference in building permit fees, plan review fees, and additional associated fees among local municipalities.

Table 7-1 Building Permit Fee Survey

City/Town	Building Permit	Plan Review	Use Tax	Admin or Additional	Total Cost
Aurora	\$2,914.55	\$2,914.55	\$6,336.56	--	\$12,165.66
Boulder	\$2,474.80	\$618.70	6,522.44	\$621.00	\$10,236.94
Fort Collins	\$2,384.51	1,148.10	\$6,505.54	\$867.75	\$10,905.89
Greeley	\$2,326.27	\$1,046.82	6,944.87	--	\$10,317.96
Littleton	\$2,558.82	\$1,663.23	\$5,322.71	\$333.75	\$9,878.52
Longmont	\$2,674.95	\$1,337.47	\$7,198.34	--	\$11,210.76
Louisville	\$2,427.70	\$1,578.01	\$7,578.53	--	\$11,584.23
Parker	\$2,663.19	\$1,771.07	\$6,759.00	\$4,506.00	\$15,699.26
Loveland	\$2,326.27	\$1,512.08	\$6,083.10	--	\$9,921.45
Town of Castle Rock	\$1,727.18	\$1,122.67	\$5,774.25	\$1,571.56	\$10,195.66
Average w/o Town of Castle Rock	\$2,527.89	\$1,510.00	\$6,583.45	\$1,582.13	\$11,324.52

7.4 Site Development Fee Analysis

Table 7-2 below presents a summary of the non-capital development fees compared to the costs to the Town to complete each review. These costs were calculated using the information summarized in Section 7.2 which was provided by the Town.

Table 7-2 Non-Capital Development Fee Schedule

Fee Description	Current Adopted Fee	Low Cost to Town	Median Cost to Town	High Cost to Town
Annexation and Zoning				
Annexation	\$1,000 Fee included up to 10 acres, \$50 per each additional acre	\$8,737	\$12,952	\$17,166
Disconnection	\$500	--	--	--
Development Agreement – Initial Agreement	\$5,380	\$1,552	\$4,252	\$14,564

Town of Castle Rock –Development Impact Fee Study

Fee Description	Current Adopted Fee	Low Cost to Town	Median Cost to Town	High Cost to Town
Development Agreement - Amendment	\$1,345	\$952	\$3,952	\$14,564
Rezoning (Straight Zone)	\$1,200	\$2,947	\$3,314	\$3,639
Planned Development Plan (> 10 Acres)	\$4,500 Over 10 acres or over 100 units (single family)	\$577	\$4,190	\$15,076
Planned Development Plan (<10 Acres)	\$3,500 Up to 10 acres or up to 100 units (single family)	\$577	\$4,190	\$15,076
Minor PD Plan Amendment	\$500	\$784	\$1,458	\$2,743
PD Zoning Text change	\$1,500	--	\$870	--
Site Development Plans				
Site Development Plan (>10 Acres)	\$4,000	\$880	\$4,496	\$19,012
Site Development Plan (<10 Acres)	\$2,500			
Site Development Plan – Major Amendment	\$1,500			
Site Development Plan – Minor Amendment	\$500			
Use by Special Review - SDP (>10 Acres)	\$4,000	\$484	\$1,536	\$3,486
Use by Special Review - SDP (<10 Acres)	\$2,500			
Use by Special Review - SDP (Site/Building Improvements)	\$1,500			
Use by Special Review - SDP (Tenant Finish)	\$600			
Use by Special Review - SDP (Single Family Home)	\$250			
Variances				
Board of Adjustment Variance	\$500	--	--	--
Administrative Variance	\$250	--	--	--
Downtown Variance	\$50	--	--	--
Skyline/Ridgeline Variance	\$500	--	\$1,426	--

Town of Castle Rock –Development Impact Fee Study

Fee Description	Current Adopted Fee	Low Cost to Town	Median Cost to Town	High Cost to Town
Technical Criteria Variance	\$0	--	--	--
Platting				
Plat (>10 Acres/50 lots)	\$2,000	\$788	\$1,958	\$6,201
Plat (<10 Acres/5-50 lots)	\$1,000			
Plat (<4 lots)	\$500			
Improvement Agreement	\$1,200	\$957	\$2,551	\$10,625
Improvement Agreement Amendment	\$600			
Plat Modification - lot line adjustment/vacation	\$200	\$382	\$481	\$649
Plat Modification - plat correction	\$150	\$110	\$274	\$504
Recognize County Plat	\$150	--	--	--
Vacation of ROW and Easement Abandonment	\$250	\$512	\$1,323	\$3,500
ROW Encroachment	\$100	\$540	\$845	\$1,146
Plat Extension	\$250	--	\$100	--
Platting Exemption	\$500	--	\$148	--
Site Construction/GESC Reviews				
Construction Document Review - Residential	\$2,690 Fee includes up to 10 lots, plus \$15 per additional lot	\$799	\$3,906	\$16,088
Construction Document Review - Commercial/Industrial and large Multifamily	\$2,500 Fee includes up to 5 acres, plus \$350 per additional acre			
Construction Document Review - Small Scope	\$250			
GESC Review - Residential	\$500	--	\$1,149	--
GESC Review - Commercial/Multifamily	\$435	--	\$1,149	--
Field Change Order - Major	\$1,255	\$458	\$1,383	\$5,947
Field Change Order - Minor	\$265			
Pavement Design Report	\$300	--	\$206	--
Site Construction, GESC, and DESC Permits				

Town of Castle Rock –Development Impact Fee Study

Fee Description	Current Adopted Fee	Low Cost to Town	Median Cost to Town	High Cost to Town
Right of Way Permits	\$385.00	--	\$439.07	--
Driveway Curb Cut Permit	\$130.00	--	\$219.54	--
Construction Inspection - Extension	\$500.00	--	\$311.86	--
GESC Permit (>5 Acres)	\$2,750.00	--	\$4,596	--
GESC Permit (<5 Acres)	\$1,200.00	--	\$2,654	--
GESC Transfer Fee	\$250.00	--	\$200	--
GEESC Permit Renewal	TBD	--	\$133.44	--
Low Impact GESC Permit	\$250.00	--	\$408	--
Per-Inspection or RE-Inspection	\$65.00	--	\$182	--
DESC Inspection	\$250.00	--	\$168	--
DESC Re-Inspection	\$65.00	--		--
Surety Adjustment	\$100.00	--	\$67	--
Historic Preservation	\$250.00	\$3,541	\$6,971	\$49,085
Temporary Use Permit	\$250.00	--	\$262	--
Sign Permit	\$50.00	--	\$260	--
Temporary Banner Permit	\$10.00	--	\$166	--
Special Permit Request for Sign Plaza's, Subdivision, Neighborhood/Village Identification Signs	\$525.00	--	\$857	--

7.5 Site Development Fee Recommendation

Based on the review and development of the cost based-based non-capital development fees presented in 7-2, Arcadis recommends that the Town select a fee range for each category between the low and high cost to town estimate. The selection of a fee will vary based on the specific fee category, but this will allow the Town to better recoup the costs to the town in the future. Additionally, Arcadis recommends that the town re-evaluate the fee charged for the administrative cost allocation recovery fee. This is another viable option to better recoup the costs to the town. It is recommended that the Town further analyze this fee based on future growth projections and develop a method to annually update the administrative cost allocation recovery fee in order to better characterize the costs required to recoup costs to the Town.

8 CONCLUSION AND RECOMMENDATIONS

A summary of the maximum allowable impact fees for police, fire and rescue, parks and recreation, municipal facilities and transportation are shown in Tables 8-1 and 8-2 for various land use types.

Table 8-1 Summary of Maximum Supportable Impact Fees

Land Use Type	Impact Unit	Police Department	Fire and Rescue	Parks and Recreation	Municipal Facilities	Transportation
Single-Family	Unit	\$570	\$1,917	\$7,789	\$466	See Below
Multi-Family	Unit	\$370	\$1,245	\$5,058	\$303	\$9,434
Commercial / Shopping Center	1,000 sf	\$386	\$1,299	--	\$316	\$17,686
Office	1,000 sf	\$245	\$824	--	\$200	\$7,635
Industrial	1,000 sf	\$215	\$722	--	\$175	\$4,824
Warehousing	1,000 sf	\$109	\$367	--	\$89	\$2,464
Hotel (per room)	Room	\$79	\$264	--	\$64	\$5,655

Table 8-2 Summary of Maximum Supportable Transportation Impact Fees for Single-Family Residential Land Use Types

Land Use Type	Size (sf)	Trip Unit	Maximum Transportation Impact Fee
Single-Family	Less than 2100	Dwelling Unit	\$9,774
Single-Family	2100 – 2399	Dwelling Unit	\$10,739
Single-Family	2400 - 2699	Dwelling Unit	\$12,243
Single-Family	2700 – 2999	Dwelling Unit	\$13,491
Single-Family	3000 – 3299	Dwelling Unit	\$14,584
Single-Family	3300 – 3699	Dwelling Unit	\$15,690
Single-Family	3700 or more	Dwelling Unit	\$16,513

Given the Town's existing impact fees and valuation values (2003), a typical 3,000 sf single-family residential home would be assessed a building permit fee and police, fire and rescue, parks and recreation, municipal facilities, transportation, water, water resources, wastewater, and storm water impact fees totaling \$41,489. Table 8-3 provides a detailed breakdown of each of the specific fees.

Table 8-3 Summary of Existing Development Fees for a 3,000 sf Single-Family Residential Home

Fee Component	Fee
Building Permit Fee (2003 valuation)	\$1,727
Plan Review Fee (2003 valuation)	\$1,112
Use Tax (2003)	\$5,774
Administrative Cost Allocation Recovery Fee	\$1,572
Police Department	\$381
Fire and Rescue	\$731
Parks and Recreation	\$3,546
Municipal Facilities	\$670
Transportation	\$14,584
Water	\$3,237
Water Resources	\$15,218
Wastewater	\$3,243
Storm Water	\$1,125
Subtotal	\$41,489

Based on the calculated maximum allowable impact fees and the updated building valuation values (2015) in Tables 8-1 and 8-2, if the Town Council adopted each of the impact fees at the maximum allowable amount, a typical 3,000 sf single family residential home would be charged \$59,856. This represents an increase of \$18,367 or 44 percent. Table 8-4 provides a detailed breakdown of each of the specific fees. It should be noted that the water, water resources, wastewater and storm water fees have not been updated from the existing impact fees table, as the utility based impact fees are currently under evaluation for the Town.

Table 8-4 Summary of Existing Development Fees for a 3,000 sf Single-Family Residential Home

Fee Component	Fee
Building Permit Fee (2016 valuation)	\$2,326
Plan Review Fee (2016 valuation)	\$1,512
Use Tax	\$8,449
Administrative Cost Allocation Recovery Fee ¹	\$1,572
Police Department	\$570
Fire and Rescue	\$1,917
Parks and Recreation	\$7,789
Municipal Facilities	\$466
Transportation	\$12,432
Water	\$3,237
Water Resources	\$15,218
Wastewater	\$3,243
Storm Water	\$1,125
Subtotal	\$59,856

¹Administrative Cost Allocation Recovery Fee to be further evaluated by the Town

Additionally, a survey was conducted of regional municipalities to provide a comparison to the Towns fees assed to a typical single-family residential home. These findings are located in Appendix H.

As shown in Table 1-2 of this report, many of the calculated fees are high than those of similar municipalities in Colorado. However, it should be noted that the impact fees calculated as a part of this report represent the maximum allowable fees for each category with explanations of the methodologies and calculations used to determine the fees. Therefore, the Town Council may choose to adopt the calculated fees, or a subset of the fees at their calculated amounts, or at amounts less than those presented. The calculated fees represent the maximum amount that the Town may adopt and impose under the Colorado statutes and using generally accepted industry methods.

The Town should review these calculated impact fees and consider revising the existing fees. In addition, due to the significant increase in the calculated impact fees as compared to the existing fees, the Town could consider a gradual phase-in of these fees to allow the development community to plan for the higher impact fees. One such phase-in plan could be to establish and increase the impact fees equally over a three-year period until the cost-justified levels are achieved.

APPENDIX A

Non-Utility Development Fee Survey Results



Non-Utility Development Fee Survey Results

Table 1 Residential Non-Utility Impact Fee Survey Results

City/Town	Police	Transportation	Parks and Recreation	Fire and Rescue	Library	Municipal Facilities	Cultural Facilities	Human Resources	Total
Aurora ^{1,2}	\$111	\$574	\$294	\$108	--	\$223	--	--	\$1,310
Arvada ¹	--	--	\$1,516	--	--	--	--	--	\$1,516
Boulder ¹	\$283	--	\$3,022	\$201	\$441	\$269	--	\$142	\$4,358
Fort Collins ^{2,3}	\$163	--	\$4,161	\$236	\$658	\$298	--	--	\$5,516
Greeley ^{1,4}	\$117	\$3,645	\$3,098	\$524	--	--	--	--	\$7,384
Littleton ^{5,6}	\$319	\$317	--	\$453	\$542	\$1,550	\$515	--	\$3,696
Longmont	--	\$901	--	--		\$1,121	--	--	\$2,022
Louisville ⁴	--	\$225	\$4,423	--	\$475	\$604	--	--	\$5,727
Monument ¹	--	\$3,191	\$3,066	\$700	--	--	--	--	\$6,957
Woodland Park ⁷	--	\$732	\$1,236	--	--	--	--	--	\$1,968
Town of Castle Rock ⁸	\$305	\$2,725	\$2,836	\$585	--	\$536	--	--	\$6,987
Average w/o Town of Castle Rock	\$199	\$1,369	\$2,602	\$370	\$529	\$677	\$515	\$142	\$4,045

¹Single family detached residential

²Municipal Facilities fees are labelled for "General Government" allocation

³Residential units over 2,200 square feet

⁴Parks and Recreation include Open Space

⁵Residential fee applies to new single or multi-family dwelling units

⁶Cultural Facility funds are labelled for "Museum" allocation

⁷Tier 2 (medium home) residential units

⁸Residential units 2,500 to 2,599 square feet

Non-Utility Development Fee Survey Results

Table 2 Commercial Non-Utility Impact Fee Survey Results

City/Town	General Government	Law Enforcement	Transportation	Fire	Municipal Facilities	Total all Categories
Aurora						
50,000 SQ FT	--	--	--	--	--	\$0
100,000 SQ FT	--	--	--	--	--	\$0
Arvada						
50,000 SQ FT	--	--	--	--	--	\$0
100,000 SQ FT	--	--	--	--	--	\$0
Boulder						
50,000 SQ FT	--	\$22,000	--	\$17,500	\$6,500	\$46,000
100,000 SQ FT	--	\$44,000	--	\$35,000	\$13,000	\$92,000
Fort Collins						
50,000 SQ FT	\$11,550	\$7,200	--	\$10,350	--	\$29,100
100,000 SQ FT	\$23,100	\$14,400	--	\$20,700	--	\$58,200
Greeley						
50,000 SQ FT	--	\$7,150	\$241,250	\$32,050	--	\$280,450
100,000 SQ FT	--	\$14,300	\$482,500	\$64,100	--	\$560,900
Littleton						
50,000 SQ FT	--	\$8,000	\$39,200	\$11,350	\$38,750	\$97,300
100,000 SQ FT	--	\$16,000	\$78,400	\$22,700	\$77,500	\$194,600
Longmont						
50,000 SQ FT	--	--	\$171,150	--	\$20,050	\$191,200
100,000 SQ FT	--	--	\$342,300	--	\$40,100	\$382,400
Louisville						
50,000 SQ FT	--	--	\$21,500	--	\$13,500	\$35,000
100,000 SQ FT	--	--	\$38,000	--	\$24,000	\$62,000
Monument¹						
50,000 SQ FT	--	--	\$221,154	\$17,500	--	\$238,654
100,000 SQ FT	--	--	\$442,308	\$35,000	--	\$477,308
Woodland Park ²						
50,000 SQ FT	--	--	\$124,685	--	--	\$124,685
100,000 SQ FT	--	--	\$249,369	--	--	\$249,369
Castle Rock						
50,000 SQ FT	--	\$4,350	\$38,150	\$7,300	\$2,050	\$51,850
100,000 SQ FT	--	\$7,300	\$67,100	\$12,600	\$3,400	\$90,400
Average (Excluding CR)						
50,000 SQ FT	\$11,550	\$11,088	\$136,490	\$17,750	\$19,700	\$104,239
100,000 SQ FT	\$23,100	\$22,175	\$272,146	\$35,500	\$38,650	\$207,678

¹High trip generation retail

²Retail/service

Non-Utility Development Fee Survey Results

Table 3 Industrial Non-Utility Impact Fee Survey Results

City/Town	General Government	Law Enforcement	Transportation	Fire	Municipal Facilities	Total all Categories
Aurora						
50,000 SQ FT	--	--	--	--	--	\$0
100,000 SQ FT	--	--	--	--	--	\$0
Arvada						
50,000 SQ FT	--	--	--	--	--	\$0
100,000 SQ FT	--	--	--	--	--	\$0
Boulder						
50,000 SQ FT	--	\$2,500	--	\$3,500	\$5,500	\$11,500
100,000 SQ FT	--	\$5,000	--	\$7,000	\$11,000	\$23,000
Fort Collins						
50,000 SQ FT	\$3,200	\$1,950	--	\$2,850	--	\$8,000
100,000 SQ FT	\$6,400	\$3,900	--	\$5,700	--	\$16,000
Greeley						
50,000 SQ FT	--	\$1,350	\$73,800	\$5,950	--	\$81,100
100,000 SQ FT	--	\$2,700	\$147,600	\$11,900	--	\$162,200
Littleton						
50,000 SQ FT	--	\$8,000	\$39,200	\$11,350	\$38,750	\$97,300
100,000 SQ FT	--	\$16,000	\$78,400	\$22,700	\$77,500	\$194,600
Longmont						
50,000 SQ FT	--	--	\$89,900	--	\$20,050	\$109,950
100,000 SQ FT	--	--	\$179,800	--	\$40,100	\$219,900
Louisville¹						
50,000 SQ FT	--	--	\$5,000	--	\$11,000	\$16,000
100,000 SQ FT	--	--	\$10,000	--	\$22,000	\$32,000
Monument						
50,000 SQ FT	--	--	\$25,762	\$17,500	--	\$43,262
100,000 SQ FT	--	--	\$51,523	\$35,000	--	\$86,523
Woodland Park						
50,000 SQ FT	--	--	\$0	--	--	\$0
100,000 SQ FT	--	--	\$0	--	--	\$0
Castle Rock						
50,000 SQ FT	--	\$550	\$38,150	\$7,300	\$1,650	\$47,650
100,000 SQ FT	--	\$1,100	\$76,300	\$14,600	\$3,300	\$95,300
Average (Excluding CR)						
50,000 SQ FT	\$3,200	\$3,450	\$38,944	\$8,230	\$18,825	\$36,711
100,000 SQ FT	\$6,400	\$6,900	\$77,887	\$16,460	\$37,650	\$73,422

¹Light Industrial

Development Impact Fee Survey Sources

Aurora, CO

<https://www.auroragov.org/DoingBusiness/TaxesandFees/Fees/DevelopmentFees/>

Arvada, CO

<http://arvada.org/business/permits-and-applications/application-and-development-fees>

Boulder, CO

https://www-static.bouldercolorado.gov/docs/PDS/forms/1504_schedule_of_fees.pdf

For Collins, CO

http://www.fcgov.com/building/pdf/2016_Building_Permit_Fee_Schedule.pdf

http://www.fcgov.com/building/pdf/cie_fees_2016.pdf

Greeley, CO

<https://greeleygov.com/docs/default-source/community-development/building-inspection/fee-schedules/2015-development-impact-fees.pdf?sfvrsn=8>

Littleton, CO

<https://www.littletongov.org/index.aspx?page=884>

<https://www.littletongov.org/index.aspx?page=140>

Longmont, CO

<http://longmontcolorado.gov/departments/departments-a-d/building-inspection/permit-and-licensing-fees#feeschedule>

Loveland, CO

<http://www.ci.loveland.co.us/index.aspx?page=684>

<http://www.ci.loveland.co.us/index.aspx?page=204>

Louisville, CO

<http://www.louisvilleco.gov/home/showdocument?id=48>

<http://www.louisvilleco.gov/residents/building-safety-division/building-permits-and-fees>

Monument, CO

<https://www.google.com/search?q=City+of+Monument+Development+Impact+Fees&ie=utf-8&oe=utf-8>

<http://www.townofmonument.org/forms-licenses-fees/fee-schedule/>

Parker, CO

<http://www.parkeronline.org/459/Fees>

Development Impact Fee Survey Sources

Woodland Park, CO

<http://city-woodlandpark.org/home/planning-building-department/2016-development-fees-878/>

APPENDIX B

Summary Inputs, Assumptions, and Supporting Tables



Summary Inputs, Assumptions, and Supporting Tables

Table 1 Town of Castle Rock Functional Population Calculation

Daily Population	Population	Hours	Person Hours	Notes
Total 2015 Population	59,100			
Total 2013 Population	55,747			
Population Growth (2013 to 2015)	3,353			
Percent Growth of Current Population	6%			
Growth Factor	1.06			
Town of CR Residents - Not Working	30,080	24	721919	
Town of CR Residents - Working	29,020			
Town of CR Residents Working in City	4,540	15	68096	2013 US Census Bureau - OnTheMap4 Web Application
Town of CR Residents Working Outside the City	24,480	14	342724	2013 US Census Bureau - OnTheMap4 Web Application
Residential sub	1132739			
Residential %	86%			
Residents Working in City	4,540	9	40858	2013 US Census Bureau - OnTheMap4 Web Application
Non-Resident Works	15,670	9	141033	2013 US Census Bureau - OnTheMap4 Web Application
Jobs Located in City	20,210			
Nonresidential sub	181890			
Nonresidential %	14%			
TOTAL Person Hours	1,314,630			
Daily Population Based on Total Person Hours	54,776			

Short Term Visitors	
Total Visitors Regional Shopping	6,500,000
Days per Year	365
Visitors Per Day	17,808
Hours in Castle Rock Per Day	2
Hours per Day	24
Short Term Visitors	1484

TOTAL FUNCTIONAL POPULATION	56,260
------------------------------------	---------------

APPENDIX C

Police Department Impact Fee



Police Department Impact Fee – Equity Buy-in Method

General Inputs	Value	Notes
Population - Permanent	59100	Population Estimates
Population - Functional	56260	See Functional Estimates Tab
Asset Inputs	Value	Notes
Building Land	\$ 847,672.00	County Assessor's Office
Building Structure	\$ 6,893,100.00	Castle Rock Property Schedule 2016
Building Components	\$ 207,639.85	Castle Rock Property Schedule 2016
Fleet	\$ 2,418,031.00	Fleet Spreadsheet
Equipment	\$ 1,218,106.60	2015 CRPD Equipment Replacement Schedule - Includes all equipment with greater than or equal to 5 years of useful life
Debt Inputs	Value	Notes
Construction of Police Station (General Fund)	\$ 897,047.00	Interfund Loan Schedules
Police Station Basement Remodel (Municipal Facilities Capital Fund)	\$ 270,000.00	Interfund Loan Schedules
Grants Inputs	Value	Notes
	\$ -	
	\$ -	
Capital Contributions	Value	Notes
None	\$ -	

Description	Replacement Value
Total Assets	\$ 11,584,549.45
Less Debt, Contributions, Grants	\$ (1,167,047.00)
Adjusted Total	\$ 10,417,502.45
Population	56260
Impact Fee Per Capita	\$ 185.17
Previous Study	\$ 127.09

Unit Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Impact Fee			
Single-Family	Unit	3.08	\$ 185.17	\$ 570.31	393	\$ 177.31	45%
Multi-Family	Unit	2	\$ 185.17	\$ 370.33	241	\$ 129.33	54%
Commercial/Shopping Center	1,000 sf	2.09	\$ 185.17	\$ 386.42	73	\$ 313.42	429%
Office	1,000 sf	1.32	\$ 185.17	\$ 245.10	25	\$ 220.10	880%
Industrial	1,000 sf	1.16	\$ 185.17	\$ 214.79	11	\$ 203.79	1853%
Warehousing	1,000 sf	0.59	\$ 185.17	\$ 109.25	8	\$ 101.25	1266%
Hotel	Room	0.425	\$ 185.17	\$ 78.70	9	\$ 69.70	774%

APPENDIX D

Fire and Rescue Department Impact Fee



Fire and Rescue Department Impact Fee – Incremental Approach

General Inputs	Value	Notes
Population - Permanent	59,100	Population Estimates
Population - Functional	56,260	See Functional Population Tab
Population Increase	24,640	Extrapolated from Population Estimates
Percentage of Current Population	42%	
Functional Population Growth	23,456	Percentage of Current Pop x Functional Population

Future Expenses	Value	Notes
Crystal Valley Station	\$ 5,400,000.00	2015 Costs
Crystal Valley Equipment	\$ 1,300,000.00	2015 Costs
Castle Oaks Station	\$ 5,400,000.00	2015 Costs
Castle Oaks Equipment	\$ 1,300,000.00	2015 Costs
Fire/Police Training Center	\$ 1,200,000.00	60% associated with growth

Funding	Value	Notes
None		

Description	Replacement Value
CIP	\$ 14,600,000.00
Non-Impact Fee Funding	\$ -
Adjusted Total	\$ 14,600,000.00
Population	23456
Impact Fee Per Capita	\$ 622.44
Previous Study	\$ 243.83

Unit Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Impact Fee
Single-Family	Unit	3.08	\$ 622.44	\$ 1,917.12
Multi-Family	Unit	2	\$ 622.44	\$ 1,244.88
Commercial/Shopping Center	1,000 sf	2.09	\$ 622.44	\$ 1,298.96
Office	1,000 sf	1.32	\$ 622.44	\$ 823.92
Industrial	1,000 sf	1.16	\$ 622.44	\$ 722.03
Warehousing	1,000 sf	0.59	\$ 622.44	\$ 367.24
Hotel	Room	0.425	\$ 622.44	\$ 264.54

APPENDIX E

Parks and Recreation Department Impact Fee



Parks and Recreation Department Impact Fee – Incremental Approach

General Inputs	Value	Notes
Population - Permanent	59,100	Population Estimates
Population - Functional	56,260	Functional Population Estimate
Population Increase	23,456	Population Estimates
Current LOS for Parks	0.005950931	Acres/person
Current LOS for Recreation	2.64	SF/person
Current LOS for Paved Trails	0.000558376	Miles/person
Current LOS for Unpaved Trails	0.000678849	Miles/person
Current LOS for Outdoor Pools	3.3840948E-05	Pools/person
Acres of Parks	139.5853456	Current LOS for Parks x Population Increase
SF of Recreation Buildings	61815	Current LOS for Recreation x Population Increase
Miles of Paved Trails	13	Current LOS for Paved Trails x Population Increase
Miles of Unpaved Trails	16	Current LOS for Unpaved Trails x Population Increase
Number of Pools	1	Current LOS for Outdoor Pools x Population Increase
Cost Per Acre of Park	\$ 262,500.00	Average of 4 most recent parks
Cost per SF of Recreation	\$ 275.00	2015 Costs
Cost per Mile of Paved Trail	\$ 750,000.00	10' wide concrete trail
Cost per Mile of Unpaved Trail	\$ 31,000.00	3' wide unpaved trail
Cost per Pool	\$ 2,750,000.00	

Capital Costs	Value	Notes
Parks	\$ 36,641,153.23	
Recreation	\$ 16,999,189.18	
Paved Trails	\$ 2,106,436.07	
Unpaved Trails	\$ 1,391,823.56	
Outdoor Pools	\$ 2,182,881.44	

Description	Replacement Value
CIP	\$ 53,321,483.48
Non-Impact Fee Funding	\$ -
Adjusted Total	\$ 53,321,483.48
Population	23456
Impact Fee Per Capita	\$ 2,529.05
Previous Study	\$ 1,182.00

Unit Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Impact Fee
Single-Family	Unit	3.08	\$ 2,529.05	\$ 7,789.47
Multi-Family	Unit	2	\$ 2,529.05	\$ 5,058.10

APPENDIX F

Municipal Facilities Impact Fee



Municipal Facilities Impact Fee – Equity Buy-in Method

General Inputs	Value	Notes
Population - Permanent	59100	Population Estimates
Population - Functional	56260	Functional Population Estimate
Population Increase	23456.05325	
Current LOS for Municipal Facilities	0.423265651	SF/Person
Replacement Value of Existing Building	\$ 8,939,198.68	
Square Footage of Existing Building	25015	
Cost per SF	\$ 357.35	

Capital Costs	Value	Notes
Municipal Facilities	\$ 3,547,856.52	Population Increase x Current LOS x Cost per SF

Funding	Value	Notes
None		

Description	Replacement Value
CIP	\$ 3,547,856.52
Non Impact Fee Funding	\$ -
Adjusted Total	\$ 3,547,856.52
Population	23456
Impact Fee Per Capita	\$ 151.26
Previous Study	\$ 223.39

Unit Type	Impact Unit	Resident Coefficient	Net Cost per Resident	Impact Fee
Single-Family	Unit	3.08	\$ 151.26	\$ 465.87
Multi-Family	Unit	2	\$ 151.26	\$ 302.51
Commercial/Shopping Center	1,000 sf	2.09	\$ 151.26	\$ 315.65
Office	1,000 sf	1.32	\$ 151.26	\$ 200.22
Industrial	1,000 sf	1.16	\$ 151.26	\$ 175.46
Warehousing	1,000 sf	0.59	\$ 151.26	\$ 89.24
Hotel	Room	0.425	\$ 151.26	\$ 64.28

APPENDIX G

Transportation Impact Fee



Project Title	Type	Cost to Town	Lane Miles	Congestion Priority Ranking	2020 Volume/Capacity
Crowfoot Valley Road Widening	Major Arterial	6,725,000	3.0	1	1.58
Ridge Road Widening	Major Arterial	3,300,000	2.0	2	1.08
Founders Pkwy./Ridge Rd./5th St. - Intersection Improvements	Arterial	2,478,000	0.5	3	1
Prairie Hawk Extension to Wolfensberger to Plum Creek Pkwy	Minor Arterial	3,200,000	2.0	4	0.99
Crystal Valley / Dawson Ridge / I-25 Interchange	Arterial	38,000,000	6.3	5	0.95
West Frontage Road Relocation	Arterial	12,000,000	4.4	5	0.95
Fifth Street Improvements - Gilbert to Founders Pkwy	Major Arterial	5,500,000	2.0	7	0.84
North Meadows Widening - Meadows Blvd to US 85)	Major Arterial	23,900,000	2.0	8	0.79
Wolfensberger Road / Plum Creek / Coachline Roundabout	Arterial	1,100,000	-		NA
Prairie Hawk Dr Widening - Wolfensberger to CRDC South Property Boundry	Arterial	2,600,000	1.0		0.58
I-25 & Founders Pkwy - 2nd NB On Ramp Lane	Arterial	771,000	0.3		NA
Transportation Action Plan (TAP) Revenue Bonds - Series 2013	Debt	13,020,634	-		NA
Plum Creek Pkwy Widening (east of Gilbert Street to Ridge Road)	Major Arterial	6,100,000	2.6		0.36
Plum Creek Pkwy Widening (west of I-25 to Wolfensberger)	Major Arterial	4,900,000	2.6		0.22
Wolfensberger Road Widening (Prairie Hawk to Park Entrance)	Major arterial	9,300,000	2.0		0.26
		132,894,634	30.7		

Town of Castle Rock
Transportation Impact Fee

Trip Generation, Capacity and Cost Inputs						
Development Type	ITE Code	Trip Rate*	Units	Trip Adj	Trip Length Factor	
Single Family Dwelling Units	210	9.52	DU	62%	122%	Average trip length (miles) 2.678
Multi Family Dwelling Units	220	6.65	DU	62%	122%	Lane capacity (vpd) 6,333
Commercial/Shopping Center	820	42.7	1000 sf	33%	68%	Cost per lane-mile new capacity \$ 4,328,815
Office	710	11.03	1000 sf	50%	75%	Existing Public Works vehicles 20
Industrial	110	6.97	1000 sf	50%	75%	Avg. Public Works vehicle cost \$ 158,000.00
Warehousing	150	3.56	1000 sf	50%	75%	
Hotel	310	8.17	rooms	50%	75%	

* From ITE Trip Generation, 9th Edition

Development Forecast												
Development Type	Units	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Single Family Dwelling Units	DU	18,071	18,871	19,671	20,471	21,271	22,071	22,871	23,671	24,471	25,271	26,071
Multi Family Dwelling Units	DU	3,105	3,155	3,205	3,255	3,305	3,355	3,405	3,455	3,505	3,555	3,605
Commercial/Shopping Center	1000 sf	3,586,836	3,731,503	3,876,170	4,020,837	4,165,504	4,202,504	4,239,504	4,276,504	4,313,504	4,350,504	4,387,504
Office	1000 sf	935,255	974,755	1,014,255	1,053,755	1,093,255	1,183,619	1,273,983	1,364,347	1,454,711	1,545,075	1,635,439
Industrial	1000 sf	1,198,549	1,240,216	1,281,883	1,323,550	1,365,217	1,439,308	1,513,399	1,587,490	1,661,581	1,735,672	1,809,763
Warehousing	1000 sf	108,500	115,010	121,911	129,226	136,980	145,199	153,911	163,146	172,935	183,311	194,310
Hotel	rooms	84	89	94	100	106	112	119	126	134	142	151

Vehicle and Road Need Forecast												
Net VMT by land use:	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-year % change
SF vehicle trips	348,483	363,910	379,337	394,765	410,192	425,619	441,046	456,474	471,901	487,328	502,755	154,272
MF vehicle trips	41,826	42,499	43,173	43,846	44,520	45,194	45,867	46,541	47,214	47,888	48,561	6,735
Commercial/Shopping Center trips	92,039	95,751	99,464	103,176	106,888	107,837	108,787	109,736	110,686	111,635	112,585	20,546
Office vehicle trips	10,360	10,797	11,235	11,672	12,110	13,111	14,112	15,113	16,114	17,115	18,116	7,756
Industrial vehicle trips	8,389	8,681	8,973	9,264	9,556	10,075	10,593	11,112	11,630	12,149	12,668	4,279
Warehousing vehicle trips	388	411	436	462	490	519	550	583	618	655	695	307
Hotel vehicle trips	689	730	771	820	870	919	976	1,034	1,099	1,165	1,239	550
Total VMT	502,174	522,779	543,389	564,005	584,626	603,274	621,931	640,593	659,262	677,935	696,619	194,445
Change in VMT		20,605	20,610	20,616	20,621	18,648	18,657	18,662	18,669	18,673	18,684	
Additional Lane Miles Needed for Development		3.3	3.3	3.3	3.3	2.9	3.0	3.0	3.0	3.0	3.0	30.71
Annual Lane Miles Cost		\$ 14,068,649	\$ 14,068,649	\$ 14,111,937	\$ 14,111,937	\$ 12,726,716	\$ 12,770,004	\$ 12,770,004	\$ 12,770,004	\$ 12,770,004	\$ 12,770,004	\$ 132,937,908

Public Works Vehicles Forecast												
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-year % change
Total public works vehicle demand	20	20.8	21.6	22.5	23.3	24.0	24.8	25.5	26.3	27.0	27.7	7.7
Additional public works vehicle costs												\$ 1,216,600

Transportation Facilities Forecast												
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-year % change
Population	59,100	61,446	63,792	66,138	68,484	70,830	73,176	75,522	77,868	80,214	82,556	23,456
Facilities (sf)	38,962	40,511	42,058	43,605	45,152	46,698	48,245	49,792	51,338	52,885	54,429	15,467
Level of service (sf / person)	0.6593											
Additional facilities cost (@ \$117/sf)												\$ 1,809,639

Table - Proposed Transportation Impact Fees	
Additional lane miles cost	\$ 132,937,908
Additional public works vehicle costs	\$ 1,216,600
Additional infrastructure cost	\$ 1,809,639
Total roads costs	\$ 135,964,147
Net new VMT	194,445
Cost per new VMT	\$ 699.24

Development Type	Size (sf)	Trip Rate	Per Unit	Trip Adj	Trip Length Factor	Proposed Impact Fee
Multi Family Dwelling Units	All	6.65	DU	62%	122%	\$ 9,419
Single Family Dwelling Units	less than 2100	6.89	DU	62%	122%	\$ 9,759
Single Family Dwelling Units	2100 - 2399	7.57	DU	62%	122%	\$ 10,722
Single Family Dwelling Units	2400 - 2699	8.63	DU	62%	122%	\$ 12,224
Single Family Dwelling Units	2700 - 2999	9.51	DU	62%	122%	\$ 13,470
Single Family Dwelling Units	3000 - 3299	10.28	DU	62%	122%	\$ 14,561
Single Family Dwelling Units	3300 - 3699	11.06	DU	62%	122%	\$ 15,665
Single Family Dwelling Units	3700 or more	11.64	DU	62%	122%	\$ 16,487
Commercial/Shopping Center	All	42.70	1000 sf	33%	68%	\$ 17,943
Office	All	11.03	1000 sf	50%	75%	\$ 7,745
Industrial	All	6.97	1000 sf	50%	75%	\$ 4,894
Warehousing	All	3.56	1000 sf	50%	75%	\$ 2,500
Hotel	All	8.17	rooms	50%	75%	\$ 5,737

QC Check - Proposed Fees x Development Forecast:

Development Type	10-Year Growth	Impact Fee per unit	Estimated Collection:
Multi Family Dwelling Units	500	\$ 9,419	\$ 4,709,555
Single Family Dwelling Units	8,000	\$ 13,470	\$ 107,760,320
Commercial/Shopping Center	800,668	\$ 17,943	\$ 14,366,138
Office	700,184	\$ 7,745	\$ 5,423,205
Industrial	611,214	\$ 4,894	\$ 2,991,538
Warehousing	85,810	\$ 2,500	\$ 214,514
Hotel	67	\$ 5,737	\$ 384,384

Total: \$ 135,849,653

Capacity Expansion Costs: (from City CIP)		
Total Town costs*	lane miles	Average cost per mile
\$ 132,894,634	30.7	\$ 4,328,815

* Total Town costs, excludes funding from other sources

Lane Capacity (vpd), for a two-lane major arterial	
Calculation of Capacity (Service Volume at LOS D), based on HCM method.	
peak hour/direction capacity	1,900
typical green time	60%
directional factor	60%
peak hour two-way capacity	1,900
peak-to-daily ratio	15%
Lane Capacity (vpd)	6,333

Transportation Facilities, existing	
Service Center	20,512
Salt Storage	8,624
Warm Shelter	4,400
Vehicle Storage	2,400
Storage Shed	1,586
Serice Center Modulatr	1,440
Total	38,962

APPENDIX H

Single-Family Residential Fee Survey Results



Single-Family Residential Fee Survey

Municipality	Building Permit Fee	Police	Fire	Parks and Rec	Municipal Facilities	Transportation	Other	Water	Wastewater	Renewable Water	Stormwater	Total Cost
Town of Castle Rock (2003 Valuation Table & Existing Impact Fees)	\$ 10,196	\$ 381	\$ 731	\$ 3,546	\$ 670	\$ 3,153	\$ -	\$ 3,237	\$ 3,243	\$ 15,218	\$ 1,125	\$ 41,500
Town of Castle Rock (2015 Valuation Table & Maximum Allowable Impact Fees)	\$ 12,287	\$ 570	\$ 1,917	\$ 7,789	\$ 466	\$ 12,432	\$ -	\$ 3,237	\$ 3,243	\$ 15,218	\$ 1,125	\$ 58,285
Aurora	\$ 12,166	\$ 111	\$ 108	\$ 294	\$ 223	\$ 574		\$ 19,252	\$ 10,840	\$ -	\$ -	\$ 43,568
Boulder	\$ 10,237	\$ 283	\$ 201	\$ 4,078	\$ 363	\$ -	\$ 583	\$ 31,820	\$ 4,473		\$ 4,120	\$ 56,158
Fort Collins	\$ 10,906	\$ 382	\$ 271	\$ 4,161	\$ 298	\$ -	\$ 786	\$ 9,860	\$ 3,500		\$ 1,038	\$ 31,201
Greeley	\$ 10,318	\$ 117	\$ 524	\$ 3,098	\$ -	\$ 3,645		\$ 11,000	\$ 5,150			\$ 33,852
Littleton	\$ 9,879	\$ 319	\$ 453	\$ -	\$ 1,550	\$ 317	\$ 1,057		\$ 5,000			\$ 18,575
Longmont	\$ 11,211	\$ -	\$ -	\$ -	\$ 1,121	\$ 901		\$ 11,900	\$ 6,590			\$ 31,723
Louisville	\$ 11,584	\$ -	\$ -	\$ 4,423	\$ 604	\$ 225	\$ 475	\$ 25,900	\$ 4,500			\$ 47,711
Parker	\$ 15,699	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,830	\$ 3,510	\$ 17,040	\$ -	\$ 46,079
Loveland	\$ 9,921	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,886	\$ 2,550			\$ 18,357

Arcadis U.S., Inc.

600 S. Cherry Street

Suite 600

Denver, Colorado 80246

Tel 303 316 6500

Fax 303 316 6599

www.arcadis.com