

Casper Transportation Impact Fee Feasibility Study Final Report

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Introduction

Study Background

Impact fees are a one-time charge on new development intended to defray a city's costs directly related to that development. Many cities and counties around the United States have implemented impact fee programs related to funding of roads, other transportation facilities, parks, open space, public safety facilities, libraries, and other capital investments.

The City of Casper completed a Development Impact Fees study in 2004, which proposed development impact fees to help fund parks, fire/emergency services, and arterial streets. However, City Council did not adopt impact fees proposed in that study.

Consideration of impact fees has surfaced more recently in the *City of Casper Comprehensive Plan* and in the Casper Area Metropolitan Planning Organization (MPO) *Connecting Crossroads Long Range Transportation Plan*. Following on those recommendations, the MPO obtained funding through the Federal Highway Administration and Wyoming Department of Transportation (WYDOT) for this impact fee study, focused specifically on transportation.

From *Connecting Crossroads Long Range Transportation Plan*:

*Impact fees are a financing mechanism assessed on developers to fund improvements that will mitigate project impacts on the transportation system. While the feasibility of impact fees has been studied, none of the municipalities in the Casper Area have adopted such a policy, as there is concern that such a fee would deter development or encourage developers to move projects to jurisdictions where fees are not assessed. **Implementation of a "reasonable impact fee on building permits for adequate construction of future roadways" is a strategy recommendation in the City of Casper Comprehensive Plan.***

Study Process

The MPO, in coordination with the City of Casper, initiated the Transportation Impact Fee Feasibility Study in November 2022. The study focuses on the potential for a transportation impact fee for the City of Casper. A project management team consisting of MPO and city staff has guided the study. A consulting team was engaged to complete the analysis and included Felsburg Holt & Ullevig (FHU) leading the study and performing transportation planning tasks, assisted by Economic and Planning Systems (EPS) performing demographic and economic analysis.

The scope of work for the study consisted of six principal tasks, including:

- Task 1 - Project Meetings and Coordination
- Task 2 - Summary of Existing Fees and Funding
- Task 3 – Develop Impact Fee Program Options
- Task 4 – Develop Impact Fee and Documentation
- Task 5 – Impact Fee and Ordinance Package
- Task 6 – Stakeholder Involvement

As the primary stakeholder involvement activity, a January 12, 2023 “Coffee Talk” Session engaged city and MPO staff, elected and appointed officials, and local real estate industry and other businesspeople. The outcome of this stakeholder meeting, project team meetings, and other coordination meetings with senior city staff members resulted in an adjustment to the study scope. It was decided that it was premature to complete the implementation ordinance package originally envisioned as part of Task 5. Instead, Tasks 4 and 5 were modified resulting in the structuring of the final product of the project being this Transportation Impact Fee Feasibility Study.

This study report presents two alternative methods to calculate defensible transportation impact fees. It then summarizes conditions that would be more conducive to future refinement and implementation of a transportation impact fee.

Transportation Impact Fees

Impact fees are charges that are assessed on new development based on a standard formula applied to all new development rather than an individualized assessment on development projects. The fees are one-time, up-front charges, with the payment usually made at the time a building permit is issued. Essentially, impact fees require that each new residential or commercial project pay its pro-rata share of the cost of new infrastructure facilities required to serve that development. A “nexus study” is needed to establish the basis for the fees and demonstrate that the fee is proportional to the cost of mitigating a development’s impact.

Transportation impact fees focus on capital projects that increase capacity in the city’s transportation system. Impact fees should be used on projects that are of citywide benefit. Types of eligible projects include roadway capacity projects, completing the roadway network, new multimodal facilities, and other growth and capacity-related projects. Impact fee funds must be spent within a reasonable time period. Maintenance projects or in-kind reconstruction of existing infrastructure are not eligible for impact fee funding. Impact fees should not be used on projects that serve a single property or development, such as a required turn lane or signal or creating access to a property.

The City of Casper currently applies project-specific assessments on new development, negotiating specific transportation system improvements that a development is required to construct or contribute to. A citywide impact fee would instead use a standard formula applied to the number of trips or miles of travel expected to be generated by a new development.

It is important to understand that facilities that are within a development and are not part of the citywide major roadway and multimodal transportation system would remain the developer’s responsibility if an impact fee were to be implemented. This includes interior local streets and turn lanes providing access to an individual development. The citywide impact fee would replace current requirements for developer contributions to the major (non-local) transportation system.

Key advantages of transportation impact fees that spur many jurisdictions to implement those programs to replace case-by-case negotiated requirements include:

- **Equity** – Fees are proportional to development size and trip generation
- **Predictability** – Fee is known by developers in advance
- **Flexibility** – City can use funds based on needs and priority
- **Timing** – Fee is typically assessed at building permit stage, not all at once for a large multi-phase project.
- **Streamlining** – May be easier to administer than individual assessments

Conversely, there can be drawbacks or challenges associated with a shift to transportation impact fees for a community in some circumstances. These are discussed in the **Conclusions** section of the report where there is a discussion of conditions that would be more conducive to future implementation of a transportation impact fee in Casper.

Growth Trends and Forecasts

This Chapter presents the analysis of the growth trends and projections used to make the preliminary impact fee calculations and to inform recommendations on the practicality of an impact fee program in Casper.

Population and Housing Trends

Residential and non-residential growth trends were reviewed to inform projections of future growth and transportation demand.

Natrona County has a population of 81,000, including Casper, the largest city, with a population estimated at just under 60,000 (**Table 1**). From 2010 through 2022, Natrona County added 5,581 people at an annual rate of 0.6 percent. The City of Casper added 3,782 people during this time period, with an annual growth rate of 0.5 percent. This is a fairly slow growth rate and less than the 1.3 percent annual growth that occurred from 2000 through 2010.

Table 1. Population and Household Trends, Natrona County, 2000-2022

Area	2000	2010	2022	2000-2010			2010-2022		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
Population									
Bar Nunn Town	1,044	2,253	2,988	1,209	121	8.0%	735	61	2.4%
Casper City	50,817	56,168	59,950	5,351	535	1.0%	3,782	315	0.5%
Edgerton Town	110	161	153	51	5	3.9%	-8	-1	-0.4%
Evansville Town	2,236	2,530	2,749	294	29	1.2%	219	18	0.7%
Midwest Town	205	300	286	95	10	3.9%	-14	-1	-0.4%
Mills Town	3,772	4,002	4,232	230	23	0.6%	230	19	0.5%
Remainder/Unincorporated	<u>8,349</u>	<u>10,036</u>	<u>10,673</u>	<u>1,687</u>	<u>169</u>	<u>1.9%</u>	<u>637</u>	<u>53</u>	<u>0.5%</u>
Natrona County	66,533	75,450	81,031	8,917	892	1.3%	5,581	465	0.6%
Households									
Bar Nunn Town	363	772	995	409	41	7.8%	223	19	2.1%
Casper City	20,751	23,148	24,926	2,397	240	1.1%	1,778	148	0.6%
Edgerton Town	53	76	75	23	2	3.7%	-1	0	-0.1%
Evansville Town	847	967	1,076	120	12	1.3%	109	9	0.9%
Midwest Town	89	128	127	39	4	3.7%	-1	0	-0.1%
Mills Town	1,602	1,668	1,816	66	7	0.4%	148	12	0.7%
Remainder/Unincorporated	<u>3,114</u>	<u>3,857</u>	<u>4,159</u>	<u>743</u>	<u>74</u>	<u>2.2%</u>	<u>302</u>	<u>25</u>	<u>0.6%</u>
Natrona County	26,819	30,616	33,174	3,797	380	1.3%	2,558	213	0.7%

Source: U.S. Census; ESRI Business Analyst; Economic & Planning Systems

Residential construction in Casper has supported the population growth. The City's building permit database shows approximately 700 new housing units constructed from 2015 through 2022 (**Table 2**). This equates to an annual pace of approximately 90 new housing units per year.

Table 2. New Residential Construction Permits, Casper, 2015-2022

Description	2015	2016	2017	2018	2019	2020	2021	2022	2015-2022	
									Total	Ann. #
Single Unit	98	66	61	61	62	64	66	75	553	69
Multi Unit	<u>14</u>	<u>2</u>	<u>0</u>	<u>4</u>	<u>10</u>	<u>4</u>	<u>60</u>	<u>59</u>	<u>153</u>	<u>19</u>
Total	112	68	61	65	72	68	126	134	706	88

Source: City of Casper

The Economic Analysis Division of the Wyoming Department of Administration & Information prepares population projections for each city and county in the State. Their projections were consulted to inform the growth estimates used in this study. As shown in **Table 3**, the State forecasts that Natrona County will grow at a slow 0.26 percent annual rate for about the next 20 years. The City of Casper would absorb most of this population growth, adding 3,100 people.

Table 3. Population Projection, 2020-2040, Wyoming and Natrona County Cities

	2020	2025	2030	2035	2040	Change	Ann. #	Ann. %
WYOMING	579,280	586,950	597,260	606,390	614,820	35,540	1,777	0.30%
Natrona County	67,378	67,840	68,960	70,045	71,037	3,659	183	0.26%
Bar Nunn	2,668	2,686	2,730	2,773	2,812	145	7	0.26%
Casper	57,502	57,896	58,852	59,778	60,625	3,123	156	0.26%
Edgerton	200	202	205	208	211	11	1	0.26%
Evansville	2,869	2,889	2,937	2,983	3,025	156	8	0.26%
Midwest	398	401	407	414	420	22	1	0.26%
Mills	3,741	3,766	3,829	3,889	3,944	203	10	0.26%
Casper Equiv. Households at 2.40 pop. per household	23,959	24,123	24,521	24,908	25,260	1,301	65	0.26%

Source: WY Dept. of Administration & Information, Economic Analysis Division (<http://eadiv.state.wy.us>), August 2019

Non-residential development also generates travel demand. Employment has declined slightly in Natrona County since 2010, largely due to job losses in the resource extraction sectors, which has lost 1,300 jobs (**Table 4**). Gains in trade (largely retail), hotels and restaurants, and education and health care offset some of these losses. The overall job trend, however, was a 0.1 percent annual loss of jobs.

Table 4. Employment Trends by Major Industry, Natrona County, 2010-2022

Description	2010 Q3	2015 Q3	2021 Q3	2022 Q2	2010-2022	
					Total	Ann. %
101 Goods-producing	7,886	8,531	6,267	6,585	-1,301	-1.5%
1011 Natural resources and mining	3,464	3,454	1,646	1,972	-1,492	-4.6%
1012 Construction	2,819	3,444	2,956	2,868	49	0.1%
1013 Manufacturing	1,603	1,634	1,665	1,746	142	0.7%
102 Service-providing	24,961	27,438	25,505	25,806	845	0.3%
1021 Trade, transportation, and utilities	8,052	9,300	8,305	8,446	394	0.4%
1022 Information	495	426	322	334	-160	-3.2%
1023 Financial activities	1,891	2,015	1,883	1,971	80	0.3%
1024 Professional and business services	2,994	3,133	2,803	2,851	-142	-0.4%
1025 Education and health services	5,631	6,120	5,970	6,023	392	0.6%
1026 Leisure and hospitality	4,153	4,866	4,908	4,822	669	1.3%
1027 Other services	1,745	1,578	1,288	1,348	-397	-2.1%
1029 Unclassified	---	---	25	10	---	---
Undisclosed	5,433	5,474	5,471	5,646	213	0.3%
10 Total, all industries	38,280	41,443	37,242	38,037	-243	-0.1%

Source: Felsburg, Holt & Ulevig; Economic & Planning Systems

While there were job losses, there was still a small net increase in commercial real estate (non-residential real estate), mainly in industrial buildings with 57,000 square feet added since 2012. These data come from CoStar, a national commercial real estate data subscription service. Overall square footage grew at 0.2 to 0.5 percent per year (**Table 5**).

Table 5. Non-residential Real Estate Construction Trends

Building Type	2012	2022	2023 YTD	2012-2023 YTD		
				Total	Ann. #	Ann. %
Retail						
Buildings	237	251	251	14	1	0.52%
Sf.	4,383,298	4,590,892	4,590,892	251	23	0.42%
Office						
Buildings	128	129	129	1	0	0.07%
Sf.	1,804,307	1,849,444	1,849,444	129	12	0.22%
Industrial						
Buildings	100	107	107	7	1	0.62%
Sf.	1,234,599	1,291,604	1,291,604	57,005	5,182	0.41%

Source: Economic & Planning Systems

Growth Projections

EPS prepared residential and non-residential growth and travel demand projections through 2040 using the data shown previously. First, a population projection was made by converting projected housing construction to population. Assuming that the pace of 90 new dwelling units per year continues, the city would add just over 1,600 new housing units through 2040 (**Table 6**). At an average household size of 2.42, the new construction equates to just over 3,900 new people in the city. After applying trip generation rates from the *ITE Trip Generation Manual*, new residential development generates an estimated 14,530 new daily trip ends.

Table 6. Residential Construction and Population Projection, Casper, 2023–2040

Description		2023	2025	2030	2035	2040	2022 (year end) - 2040		
							Total	Ann. #	Ann. %
Annual Construction	<u>Units</u>								
Single Unit	70	70	140	350	350	350	1,260	70	
Multi Unit	20	20	40	100	100	100	360	20	
Total	90	90	180	450	450	450	1,620	90	
New Population	<u>HH Size</u>								
Single Unit	2.60	182	364	910	910	910	3,276	182	
Multi Unit	1.80	36	72	180	180	180	648	36	
Total	2.42	218	436	1,090	1,090	1,090	3,924	218	
Cumulative Population	<u>2022</u> 59,950	60,168	60,604	61,694	62,784	63,874	3,924	218	0.37%
New Daily Trip Ends	<u>Trip Ends per Unit</u>								
Single Unit	9.44						11,894		
Multi Unit	7.32						2,635		
Total							14,530		

Source: Felsburg, Holt & Ulevig; Economic & Planning Systems

Non-residential development is projected at 0.50 percent per year growth in retail and office space and 0.25 percent per year in industrial space (**Table 7**). These assumptions represent a modest economic recovery, but slower growth in the energy and extractive sectors than in other service-based sectors. Through 2040, the city is projected to add over 600,000 square feet of commercial real estate. After applying the trip generation rates, this growth equates to 17,118 new daily trip ends.

This projection of non-residential space may be optimistic given the declines in employment. If these projections are not met, there will be less demand on the transportation system and less potential fee revenue from new development.

Table 7. Non-residential Development Projection, Casper, 2023–2040

Land Use	Factors	2023	2025	2030	2035	2040	2022-2040		
							Change	Ann. #	Ann. %
Sq. Ft. of Development	<u>Growth</u>								
Retail	0.50%	4,590,892	4,636,916	4,754,004	4,874,048	4,997,124	406,232	23,896	0.50%
Office	0.50%	1,849,444	1,867,985	1,915,154	1,963,514	2,013,095	163,651	9,627	0.50%
Industrial	0.25%	1,291,604	1,298,070	1,314,377	1,330,889	1,347,609	56,005	3,294	0.25%
Total		7,731,940	7,802,970	7,983,535	8,168,451	8,357,828	625,888	36,817	0.46%
New Daily Trip Ends	<u>Trip Rate</u>								
Retail	37.75	173,306	175,044	179,464	183,995	188,641	15,335		
Office	9.74	18,014	18,194	18,654	19,125	19,608	1,594		
Industrial	3.37	4,353	4,374	4,429	4,485	4,541	189		
Total		195,672	197,612	202,547	207,605	212,790	17,118		

Source: Economic & Planning Systems

Trip End Projection

The impact fee calculations use daily trip ends as the demand unit and express the fee in a cost per trip end. A trip end is defined as the origin or destination of a vehicle trip; for example, a commuting trip from a home to a job would represent two trip ends. It is, therefore, necessary to develop a projection of total and new daily trip ends in 2040 for the fee calculations. Existing trip ends are estimated by major land use type by tabulating housing units and non-residential development in 2022 and then multiplying those figures by the ITE Trip Generation rates. In 2022, there are an estimated 268,659 residential trip ends and 195,672 non-residential trip ends (**Table 8**).

Table 8. Estimated 2022 Trip Ends

Land Use	2021 ACS 5-Yr Est.	2022 Bldg. Permits	2022 Total	Daily Trip Ends	ITE Code	2022 Daily Trip Ends
Residential				<u>Per Unit</u>		
Single Unit	22,166	75	22,241	9.44	210	209,955
Multi Unit	6,818	59	6,877	7.32	220	50,340
Mobile Home and Other	<u>886</u>	<u>0</u>	<u>886</u>	9.44	210	<u>8,364</u>
Total	29,870	134	30,004			268,659
Non-Residential				<u>per 1K Sq. Ft.</u>		
Retail			4,590,892	37.75	820	173,306
Office			1,849,444	9.74	710	18,014
Industrial			<u>1,291,604</u>	3.37	130	<u>4,353</u>
Total			7,731,940			195,672
Total						464,331

Source: Felsburg, Holt & Ulevig; Economic & Planning Systems

The next step adds the projected new trip ends from the development projections to the existing trips. New development is estimated to add 32,700 new daily trip ends, resulting in 497,301 total trip ends in 2040 (**Table 9**). In 2040, new trips would represent growth of 7.04 percent above existing trips. This means that new development contributes only about 7 percent of the demand on the transportation system in 2040, while existing development contributes the other 93 percent.

Table 9. Projected 2040 Trip Ends and New Trip Ends in 2040 as Percent of Total Trip Ends

Land Use	Existing Trip Ends	New Trip Ends 2022-2040	2040 Total Trip Ends	New as % Existing
Non-Residential Trip Ends	195,672	18,171	213,843	9.29%
Residential Trip Ends	268,659	14,530	283,188	5.41%
Total Daily Trip Ends	464,331	32,700	497,031	7.04%
Source: Felsburg, Holt & Ulevig; Economic & Planning Systems				

Impact Fee Calculations

This Chapter shows the preliminary impact fee calculations using the inputs derived in the previous chapter on growth and development. Two calculation methods are shown:

- **Plan-based method** – The plan-based method uses a selection of projects from the 2040 long range transportation plan and calculates the share of those projects that are eligible to be funded with impact fees.
- **Consumption-based method** – The fee in this method represents the typical cost to add capacity to the transportation system, expressed as a cost per new trip end. Each unit of new development pays for the amount of capacity it uses.

Plan-Based Method

The basic formula for the plan-based method fee calculation is:

$$\frac{(\text{Project cost X Portion attributed to growth})}{\text{New Trips 2022-2040}}$$

This formula results in a cost per new daily trip end, which is multiplied by the appropriate trip generation rate for the land use paying the fee.

FHU reviewed the *Connecting Crossroads Long Range Transportation Plan* (LRTP) and identified projects that could be candidates for impact fees. The LRTP presents recommended transportation improvements for the Casper metropolitan area, including near-term, mid-term, and long-range needs. Projects were selected for inclusion in the impact fee calculation by first identifying the subset of projects that are within the city of Casper. Near-term and mid-term projects were selected as being an appropriate project subset for the 2023–2040 timeframe used for the impact fee study.

The identified near-term and mid-term projects within the city of Casper are shown in **Table 10**, along with the project Type and estimated Project Cost. Since only projects that expand capacity of the system are eligible for impact fees, an Estimated Expansion Share column is included, showing 0 percent for projects that are solely replacement of existing infrastructure and 25 percent for projects that are largely replacement but also include a capacity expansion element.

Each project in the LRTP would serve both existing and new development in 2040. Impact fees can be levied on only the portion of the cost attributed to growth; therefore, the costs were multiplied by 7.04 percent (new trips in 2040 as a percentage of total trips). This adjustment reduces the project list costs from \$174 million to \$6.4 million, which is the portion eligible for impact fee funding.

Table 10. Connecting Crossroads LRTP Capacity and Transportation Network Projects*

Project Name *	Type	Project Cost	Estimated Expansion Share	Percent Growth In VMT**	Impact Fee Eligible Cost
Midwest Ave Reconstruction	CS	\$6,350,000	25%	7.04%	\$111,798
Poplar/1st Reconstr & Bridge Widening	CS	18,316,000	25%	7.04%	322,473
Poplar & 1st Sidewalk & Landscaping	MM	790,000	100%	7.04%	55,635
Western Ave Sidewalk Imps	MM	109,000	100%	7.04%	7,676
Metro Rd Extension	RC	566,000	100%	7.04%	39,860
1-25 Casper Marginal Recon/Bridge Replace	Bridge	13,221,000	0%	7.04%	0
Hat 6 Rd Signals	Int	162,000	100%	7.04%	11,409
Wyoming Blvd Sidepath	MM	9,111,000	100%	7.04%	641,635
CY & Poplar Int Safety Imps	Int	323,000	100%	7.04%	22,747
Central St Underpass Imps	MM	551,000	100%	7.04%	38,804
Trail System Ped Bridges	MM	661,000	100%	7.04%	46,550
Midwest Ave Bike Lane	MM	60,000	100%	7.04%	4,225
Durbin St Bike Lane Ext	MM	38,000	100%	7.04%	2,676
Yellowtone Hwy Int Imps	Int	804,000	100%	7.04%	56,621
Blackmore Rd Bike Lanes	MM	63,000	100%	7.04%	4,437
Hat 6 Rd Bike Lanes	MM	67,000	100%	7.04%	4,718
E. 2nd St Bike Lanes	MM	308,000	100%	7.04%	21,691
College Dr Bike Lanes & Int Treatments	MM	56,000	100%	7.04%	3,944
College Dr Mixed Use Path	MM	441,000	100%	7.04%	31,057
I-25 Casper Marginal Reconstr / Bridge Replace	Bridge	25,366,000	0%	7.04%	0
13th St Platte River Pkwy Ext	MM	154,000	100%	7.04%	10,845
Brian Stock Trail Sidepath	MM	119,000	100%	7.04%	8,380
E 14th St & Farnum St Bike Blvd	MM	336,000	100%	7.04%	23,663
Beech St Bike Lanes / Bike Blvd	MM	116,000	100%	7.04%	8,169
Wocott St 2-way Conversion & Streetscape	CS	426,000	100%	7.04%	30,001
Durbin St 2-way Conversion & Bike Lane Ext	CS	402,000	100%	7.04%	28,311
Reconstruct I-25 Marginal Struct	Bridge	25,600,000	0%	7.04%	0
CY/Wyoming Blvd Int and Approach Redesign	Int	39,238,000	100%	7.04%	2,763,306
SE Wyoming Blvd Widening NB	RC	2,011,000	100%	7.04%	141,623
SE Wyoming Widening	RC	12,210,000	100%	7.04%	859,880
Legion Lane Ext	RC	1,224,000	100%	7.04%	86,199
N Center St RR Underpass Widening	RC	14,827,000	100%	7.04%	1,044,180
Total		\$174,026,000			\$6,432,514
Source: Felsburg, Holt & Ulevig; Economic & Planning Systems					

* Project Types: BR = Bridge Projects, CS = Complete Streets Projects, IN = Intersection Improvements, MM = Multimodal Improvements, RC = Roadway Construction

Next, the impact fee eligible costs are converted to a cost per new daily trip end. Dividing the \$6.4 million in project costs by the 32,700 new trips (2022–2040) results in a cost per new trip of \$197 (Table 11). Applying \$197 per new trip to the trip generation rates for each major land use type gives the maximum impact fee that can be charged.

The fees are proportional to the number of daily trips generated by different types of development. The impact fee for a single-family dwelling unit would be \$1,857 and the fee for a multi-family dwelling unit would be \$1,440. Retail has both the highest trip generation rates and the highest impact fee at \$7.43 per square foot.

Table II. Plan-based Impact Fee Calculation

Description	Cost per Trip	Daily Trip Rate	ITE Code	Impact Fee	
Growth Eligible Cost	\$6,432,514				
New Daily Trip Ends	32,700				
Cost per Trip	\$197				
Residential		<u>Per Dwelling Unit</u>			
Single Unit	\$197	9.44	210	\$1,857	
Multi Unit	\$197	7.32	220	\$1,440	
Non-Residential		<u>Per 1K Sq. Ft.</u>		<u>Per 1K Sq. Ft.</u>	<u>Per Sq. Ft</u>
Retail/Commercial	\$197	37.75	820	\$7,425.88	\$7.43
Office	\$197	9.74	710	\$1,915.98	\$1.92
Industrial	\$197	3.37	130	\$662.92	\$0.66
Warehouse	\$197	1.74	150	\$342.28	\$0.34
Mini Warehouse	\$197	1.51	151	\$297.04	\$0.30
Institutional/Nursing Home	\$197	6.64	620	\$1,306.17	\$1.31
Source: Economic & Planning Systems					

Consumption-Based Method

The consumption-based method is another way to calculate a transportation impact fee. The advantages of the consumption-based method are that it does not rely on a specific set of projects and use of impact fee funds is not limited to those specific projects. The fee in the consumption-based method represents the typical cost to add capacity to the transportation system, expressed as a cost per new trip end. Each unit of new development pays for the amount of capacity it uses.

The fee calculation requires estimation of the new lane-miles that will be needed over the 2022–2040 forecast period and the estimated cost of constructing those lane-miles.

The first step is identifying the road network that will be the basis of the consumption-based impact fee. **Figure 1** shows the major road network that was identified. The Major Roadways, Arterials, and Collectors shown on Figure 1 that are within the Casper city boundary forms the designated impact fee network. State highways, US highways, and local streets that are shown with different shades of grey would not be included.

KEY

- Major Roadways
- Collectors
- Arterials
- State Highways
- US Highway
- Casper

0 1 2 3 Miles

NOT TO SCALE

Casper, Natrona County International Airport

W YELLOWSTONE HWY

SEVEN MILE RD

ZERO RD

B ROBERTSON RD

W POISON SPIDER RD

INDIAN PAINT BRUSH

S ROBERTSON RD

SW WYOMING BLVD

W 13TH ST

CY AVE

S POPLAR ST

SW WYOMING BLVD

CASPER MOUNTAIN RD

N SALT CREEK HWY

AMOCO RD

N POPLAR ST

BRYAN STOCK TRL

E 2ND ST

E 12TH ST

E YELLOWSTONE HWY

LATHROP RD

E 2ND ST

I-25

I-26

The next step is to estimate the growth in vehicle miles traveled (VMT) and daily trip ends. From the city's traffic count database, there are an estimated 457,460 daily vehicle-miles of travel on the major roadway network. Per previous sections, there is estimated to be 7.04 percent growth in travel demand. This growth generates an additional 32,216 miles of VMT in the transportation system (**Table 12**). Arterials and collectors comprising the major roadway network have an average capacity per lane-mile of an estimated 6,600 vehicles per day. Dividing the growth in VMT by the capacity per lane-mile results in demand for 4.88 new lane miles of capacity.

The average cost to construct a new lane-mile of major roads was estimated by Casper engineers at \$3.0 million based on recent construction projects. Using this cost estimate, 4.88 new lane miles would cost \$14.6 million. Dividing this cost by 32,700 new trips (2022–2040) equates to a cost per new trip end of \$448.

Table 12. Road Capacity Demand Calculations

Road Expansion Needs 2022-2040		
Existing lane miles	197.6	
Daily VMT	457,463	
VMT Growth	7.04%	
New VMT	32,216	<i>a</i>
Capacity per lane mile	6,600	<i>b</i>
Lane miles needed	4.88	= <i>a</i> / <i>b</i>
Cost of Road Expansion		
Cost per lane mile	\$3,000,000	
Lane miles needed	4.88	
Cost	\$14,643,854	
New trip ends	32,700	
Cost per new trip end	\$448	
Source: FHU; Economic & Planning Systems		

The consumption-based impact fee takes the cost per new trip end and multiplies it by the trip generation rates for each major land use type (**Table 13**). At \$448 per new trip end, the impact fee for a single-family dwelling unit would be \$4,229 and the fee for a multi-family dwelling unit would be \$3,279. The impact fees for non-residential developments range from \$0.68 per square foot for miniwarehouse/storage uses to \$1.51 for industrial buildings, \$4.36 for office, and \$10.82 for retail/commercial.

Table 13. Consumption-based Impact Fee Calculation

Description	Cost per Trip	Daily Trip Rate	% New Trips	ITE Code	Impact Fee	
Growth Eligible Cost	\$14,643,854					
New Daily Trip Ends	32,700					
Cost per Trip	\$448					
Residential		<u>Per Dwelling Unit</u>				
Single Unit	\$448	9.44	100%	210	\$4,229	
Multi Unit	\$448	7.32	100%	220	\$3,279	
Non-Residential		<u>Per 1K Sq. Ft.</u>			<u>Per 1K Sq. Ft.</u>	<u>Per Sq. Ft.</u>
Retail/Commercial	\$448	37.75	64%	820	\$10,823.68	\$10.82
Office	\$448	9.74	100%	710	\$4,363.52	\$4.36
Industrial	\$448	3.37	100%	130	\$1,509.76	\$1.51
Warehouse	\$448	1.74	100%	150	\$779.52	\$0.78
Mini Warehouse	\$448	1.51	100%	151	\$676.48	\$0.68
Institutional/Nursing Home	\$448	6.64	100%	620	\$2,974.72	\$2.97
Source: Economic & Planning Systems						

Revenue Projections

Revenue projections from impact fees were prepared to help City management and policymakers decide if they may be a good funding source. Under the plan-based approach, impact fees would generate approximately \$370,000 per year or \$5.5 million over 15 years (**Table 14**). The consumption-based method yielded a higher impact fee and would generate roughly \$680,000 per year or \$10.2 million over 15 years.

Table 14. Impact Fee Revenue Projection

Land use type		2025-2030	2031-2035	2036-2040	2025-2040	Annual
Development Projection	<u>Units/Yr</u>					
Single Family Residential Units	70	350	350	350	1,050	70
Multifamily Residential Units	<u>20</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>300</u>	<u>20</u>
Total	90	450	450	450	1,350	90
Retail	25,000	125,000	125,000	125,000	375,000	25,000
Office	10,000	50,000	50,000	50,000	150,000	10,000
Industrial	<u>5,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>75,000</u>	<u>5,000</u>
Total Sq. Ft.	40,000	200,000	200,000	200,000	600,000	40,000
Impact Fee Revenue: Plan-Based						
Single Family Residential Units	\$1,857	\$649,937	\$649,937	\$649,937	\$1,949,810	\$129,987
Multifamily Residential Units	\$1,440	<u>143,993</u>	<u>143,993</u>	<u>143,993</u>	<u>431,980</u>	<u>28,799</u>
Residential Subtotal		\$793,930	\$793,930	\$793,930	\$2,381,790	\$158,786
Retail	\$7.43	\$928,235	\$928,235	\$928,235	\$2,784,705	\$185,647
Office	\$1.92	95,799	95,799	95,799	287,396	19,160
Industrial	\$0.66	<u>16,573</u>	<u>16,573</u>	<u>16,573</u>	<u>49,719</u>	<u>3,315</u>
Non-residential subtotal		\$1,040,607	\$1,040,607	\$1,040,607	\$3,121,820	\$208,121
Total Impact Fee Revenue		\$1,834,537	\$1,834,537	\$1,834,537	\$5,503,610	\$366,907
Impact Fee Revenue: Consumption-Based						
Single Family Residential Units	\$4,229	\$1,480,192	\$1,480,192	\$1,480,192	\$4,440,576	\$296,038
Multifamily Residential Units	\$3,279	<u>327,936</u>	<u>327,936</u>	<u>327,936</u>	<u>983,808</u>	<u>65,587</u>
Residential Subtotal		\$1,808,128	\$1,808,128	\$1,808,128	\$5,424,384	\$361,626
Retail	\$10.82	\$1,352,960	\$1,352,960	\$1,352,960	\$4,058,880	\$270,592
Office	\$4.36	218,176	218,176	218,176	654,528	43,635
Industrial	\$1.51	<u>37,744</u>	<u>37,744</u>	<u>37,744</u>	<u>113,232</u>	<u>7,549</u>
Non-residential subtotal		\$1,608,880	\$1,608,880	\$1,608,880	\$4,826,640	\$321,776
Total Impact Fee Revenue		\$3,417,008	\$3,417,008	\$3,417,008	\$10,251,024	\$683,402

Source: Economic & Planning Systems

Conclusions

Transportation Impact Fee Evaluation

Impact fees are charges that are assessed on new development based on a standard formula applied citywide rather than an individualized assessment. This study looks at the potential for the City of Casper to implement an impact fee focused on transportation improvements. The citywide impact fee would replace current requirements for developer contributions to the major (non-local) transportation system.

Many jurisdictions implement transportation impact fees to replace case-by-case negotiated individual assessments due to several potential advantages, including:

- **Equity** – Fees are proportional to development size and trip generation
- **Predictability** – Fee is known by developers in advance
- **Flexibility** – City can use funds based on needs and priority
- **Timing** – Fee is typically assessed at building permit stage, not all at once for a large multi-phase project
- **Streamlining** – May be easier to administer than individual assessments

Based on the analysis performed for this study and discussion among city and MPO staff and stakeholders, it was recognized that transportation impact fees represent a promising assessment method and revenue source but Casper is not ready to implement a transportation impact fee program.

A primary reason for this conclusion involves the currently forecasted level of development and scale of resulting potential impact fee revenue. The estimated revenue is based on current growth projections and the transportation impact fee levels described in the previous chapter. The anticipated impact fee revenue would be in the range of \$350,000 to \$680,000 per year. With this revenue level, it would take several years to accumulate sufficient revenue to implement meaningful projects with those funds.

Additionally, at this time the city does not have a defined plan with identified high-priority transportation system expansion projects. If such a plan were in place with other funding sources identified, transportation impact fees could be a valuable supplemental source for implementation of high-priority projects.

Finally, there is not a strong set of precedents for development impact fees in Casper or other communities in Wyoming. The presence of these precedents would help facilitate the acceptance and implementation process for a focused City of Casper transportation impact fee.

For those reasons, the project management team has concluded that a transportation impact fee is not recommended for immediate implementation and that the existing case-by-case exactions directly tied to needs of new development is more effective in the short term.

However, the study concludes that impact fees do represent a promising tool for future consideration. The next section describes future conditions that could spur a decision to reconsider impact fees in Casper.

Future Implementation

The previous section described some of the reasons for concluding that conditions are not ripe in Casper for implementing a transportation impact fee at this time. Following are discussions of circumstances that could change that conclusion and be more conducive for future implementation.

Higher Growth Expectations

Transportation impact fees are most common in cities and counties that are experiencing substantial growth. With high growth comes increased travel demand and widespread need for transportation system expansion. With high growth and widespread transportation expansion needs, a citywide impact fee can be a valuable tool to help a city plan and implement system expansions in the most logical and efficient way to serve growing travel demands. Since recent and currently forecasted growth in Casper has been relatively moderate, the anticipated revenues would make it difficult to accumulate sufficient funds to implement expansion projects of citywide significance.

Defined Capacity Expansion Plan

The City of Casper does not currently have a well-defined set of transportation expansion projects to form the basis for a focused, especially a plan-based, transportation impact fee. The transportation projects that are part of the city's current capital improvements plan are primarily rehabilitation and maintenance projects, not capacity expansion projects that would form the basis of an impact fee program. The LRTP presents an extensive plan of transportation system expansion recommendations, but it is a regional plan that includes an extensive and expensive set of projects that are not tied directly to established growth forecasts. A city plan identifying a specific set of transportation system expansion projects needed to accommodate forecasted growth would form a sounder basis for a future transportation impact fee program.

Broader Impact Fee Program

Since a transportation impact fee would be a new program for Casper, it would require a significant new regulatory and administrative process for the city. If the city were to tackle that new process, it may make sense to apply the process to other growth needs at the same time in addition to transportation. Parks, open space, public safety facilities, wastewater, and libraries are examples of other growth-related capital facilities that could be part of a broader impact fee program.

Regional Approach

This study focused only on the City of Casper, but a substantial part of the potential growth in the Casper area may occur in unincorporated Natrona County or in other municipalities in the area. If the county and other communities were to join with the City of Casper in a regional impact fee program, that program could include important interjurisdictional transportation projects and generate higher revenues. In addition, a regional approach would mitigate concerns that have been expressed about an impact fee in deterring development in that jurisdiction.