Transportation Impact Fee 2022

City of Fountain

City of Fountain Transportation Master Plan
Fountain, CO

January 2022

Adopted
5/24/2022

RESOLUTION 22-027

A RESOLUTION ADOPTING A TRAFFIC IMPACT FEE SCHEDULE

WHEREAS, the City of Fountain is responsible for maintaining the streets and public rights-of way throughout the City; and

WHEREAS, it is a strategic priority to improve the conditions of City-wide transportation infrastructure in order to support enhanced road safety, encourage economic development and improve traffic flow, focused principally on major City transportation corridors, then residential areas; and

WHEREAS, the City of Fountain has and continues to experience significant growth;

WHEREAS, the City of Fountain has adopted Ordinance 1776, establishing Chapter 3.17 Transportation Impact Fees which provides criteria and usage of the traffic impact fees; and

WHEREAS, the Traffic Impact Fee Study (2022) prepared by Wilson & Company determined the precise figures needed to determine the maximum allowable fee amounts for transportation for the current and future needs of the City.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Fountain, Colorado:

1. The recitals set forth in this resolution are adopted by the City Council as findings in support of this resolution.

2. The Traffic Impact Fee for residential and nonresidential uses as provided for with Ordinance 1776 shall be as follows:

Land Use	Trip Demand Factor	Unit	Raw Fee	Administrative Charge	Total TIF per Unit
Residential Units					
Single Family (Detached)	0.98	Dwelling	$3,541	2%	$3,612
Multifamily (Low-Rise)	0.55	Dwelling	$1,987	2%	$2,027
Non-Residential Units					
Hotel/Motel	0.61	1,000 sf	$2,412	2%	$2,460
General	3.81	1,000 sf	$4,266	2%	$4,353

Commercial					
Convenience Commercial	49.11	1,000 sf	$7,572	2%	$7,726
Office	1.42	1,000 sf	$7,762	2%	$7,920
Light Industrial	0.81	1,000 sf	$2,930	2%	$2,990

This calculation will be required for any new submittal or any non-residential change in use. If the change in use results in a decrease in traffic, no new fee will be required. If, however, a change in use results in an increase to traffic, the fee payer must pay the difference between the previous use calculation and the new calculation.

3. The fees established hereto shall be recomputed annually based upon the Consumer Price Index, consistent with Ordinance 1776. City Council shall reassess the amount of the fees at least once every five (5) years.

4. These fees become effective upon the effective date of the passage of this resolution.

Done this 24th day of May 2022.

Sharon Thompson

Sharon Thompson, Mayor

ATTEST:

Silvia Huffman

Silvia Huffman, City Clerk

CITY OF FOUNTAIN EL PASO SEAL COUNTY COLORADO

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1. STUDY OVERVIEW AND RESULTS

1.1 INTRODUCTION

This Transportation Impact Fee Study (Study) provides the City of Fountain (City) and surrounding region with the necessary technical documentation to support the adoption of a City or Fountain Region Transportation Impact Fee Program (TIF Program). Impact fees are one-time charges on new development collected and used by the local government to cover the cost of capital facilities and infrastructure that are required to serve new growth.[1] The fees are typically collected upon issuance of a building permit or certificate of occupancy.

The City adopted an amended Transportation Master Plan known as "Transportation Master Plan 2021" (The TMP) in January of 2022. The TMP specifically identifies the need to implement a TIF to fund transportation improvements necessary to accommodate and mitigate the impacts of future development in the City and Fountain Region. To support the TIF program, the local government must prepare a study that provides a legal basis for requiring development impact fees consistent with State enabling legislation (Sections 29-20-102 through 204 Colorado Revised Statutes).

The Fee Program described in this Study is based on growth projections and transportation infrastructure requirements identified in the TMP and supporting models and documents (e.g., Fountain TMP Subarea Transportation Model developed using the PPACG Tour-Based Travel Demand Model as a platform, PPACG 2045 Long Range Transportation Plan, PPACG 2021-2024 Transportation Improvement Program, El Paso County (2040/2060) 2016 Major Transportation Corridors Plan). This Study quantifies the potential allocation of the proposed transportation improvements to new growth in the City and Fountain Region and calculates the maximum allowable transportation impact fee schedule by land use category. When adopting the TIF, the local governments within the Fountain Region may adopt fees below the maximum supportable level based on economic or policy considerations. Such fee reductions should be considered in conjunction with the availability of alternative sources of capital improvement funding.

1.2 LEGAL CONTEXT

This Study is designed to provide the necessary technical analysis to support a schedule of transportation impact fees to be established by an Impact Fee Ordinance and/or Resolution depending on the local government type. The Sections 29-20-102 through 204 Colorado Revised Statutes allows local governments to adopt, by ordinance or resolution, a transportation impact fee consistent with the supporting technical analysis and findings provided in this Study. The ordinance or resolution can be designed to allow for periodic adjustments of the fee amount that may be necessary over time, without amending the enabling ordinance.

Impact fee revenue can be collected and used to cover the cost of constructing capital and infrastructure improvements required to serve new development and growth in the City or Fountain Region. As such impact fees must be based on a reasonable nexus (i.e., connection) between new growth and development and the need for a new facility or improvement. Impact fee revenue cannot be used to cover the operation and maintenance costs of

[1] New development includes any construction activity that requires a building permit and creates additional impacts on the region's transportation infrastructure once completed (e.g., through additional travel demand or "trips").

these or any other facilities and infrastructure. In addition, impact fee revenue cannot be collected or used to cover the cost of existing needs or infrastructure deficiencies.

By law, the impact fee legislation has several requirements, which are:

- Impact fees must be legislatively adopted and apply to a broad class of properties.
- Impact fees must be related to the impacts of the proposed development.
- Impact fees may only be used to fund capital facilities, meaning facilities with a useful life of five years or longer, that are required by local ordinance, resolution, or policy. They cannot be used to repair infrastructure or correct an existing deficiency.
- Impact fees may only be used to fund existing and future capital improvements and may not be used to remedy any deficiency in capital facilities that exists without regard to the proposed development.
- Developers may not be charged impact fees to fund facilities to which they have already contributed fees through another mechanism and no individual landowner can be required to provide any site-specific dedication of improvement to meet the same need for capital facilities for which the impact or similar development charge is imposed (unless a credit is given for any duplicate costs). This Study addresses certain City and Fountain Regional roads that are required to service new development. The Study does not address internal road networks that are part of servicing individual lots or homes within a development such as minor collectors and local streets which remain the responsibility of the developer, and the required dedication and construction of such facilities do not represent a duplication of costs, fees or exactions with the City and Fountain Regional networks addressed by this Study also required to support new development.
- The accounting for impact fees must be the same as for all other development charges (i.e., they must comply with the requirements of C.R.S. 29-1-801 through 804).
- Impact fees may be waived for affordable housing or employee housing developments.

These statutory requirements have been followed in preparing this Study, as documented in subsequent chapters. **Chapter 4** summarizes the specific findings that explain and demonstrate the necessary nexus.

If the transportation impact fee is adopted, this Study and the technical information it contains should be maintained and reviewed periodically by the local government to ensure impact fee accuracy and to enable the adequate programming of funding sources. To the extent that transportation improvement requirements, costs, and development potential changes over time, the fee program will need to be updated. Further information on the implementation and administration of the TIF program is provided in **Chapter 5**.

1.3 Maximum Allowable Fee Schedule

Table 1 shows the Fountain Region's maximum transportation impact fee schedule by land use consistent with nexus requirements and the associated analysis contained in this Study if the transportation impact fees are implemented concurrently and managed by all local governments within the Study area as a Regional program. These transportation impact fees apply to new residential and nonresidential development and cover the transportation improvement costs required to support new development after existing deficiencies and known other funding sources have been considered. The fee estimates also include a 2 percent program administration

fee, consistent with State law.[2] The fees apply to all new development, except those exempted by the Ordinance, Resolution, or other means, such as approved under the terms of a Development Agreement.[3]

The adoption of the maximum fee schedule would result in fee revenues of about $155.6 million in today's dollars assuming 2045 build-out requirements of the TMP consistent with current TMP projections. An additional $38.1 million in funding will be required from other sources to cover the full cost of the transportation facilities included in the TIF calculations. In other words, the maximum fee schedule is estimated to generate about 80.3 percent of the revenue needed to cover the future transportation improvements and facilities costs identified to mitigate growth impacts associated with the 2045 build-out conditions of the TMP.

Table 1. Maximum Allowable Regional Transportation Impact Fee

Land Use	Total TIF
Residential Uses	
Single Family (Detached)	$5334/unit
Multifamily (Attached)	$2994/unit
Non-Residential Uses	
Retail	$8.93/sf
Office	$11.70/sf
Light Industrial	$4.41/sf

1.4 KEY ISSUES AND ASSUMPTIONS

The results of this analysis are based on a variety of conditions and assumptions about facility costs, service standards, growth projections, and facility demand through 2045. Assumptions are covered in detail in later chapters, though some of the key issues are summarized below:

- **Future Development and Trips.** The fee calculations were based on residential and nonresidential development projections, and the associated trip generation. The most recently approved TMP was the starting source for this information. In addition, the Fountain TMP Subarea Transportation Model developed by Wilson & Company was utilized to conduct travel demand analysis.

[2] The 2 percent administration cost is designed to cover expenses for preparation of the development impact fee study and subsequent updates as well as the required reporting, auditing, collection and other annual administrative costs involved in overseeing the program.

[3] These individual Development Agreements specify the specific transportation improvements/contributions to be made by these individual developments.

- **Capital Improvement Program.** The list of transportation improvements included in the TIF Program focus on projects identified in TMP.
- **Cost Estimates.** Wilson & Company has developed or verified cost estimates for all the transportation improvement projects identified herein as part of the TMP. The cost estimates were based on assumptions about the planned right-of-way, roadway typical sections, and landscaping treatments for each corridor. Assumptions were based on similar existing corridors within the City, El Paso County, and the City's roadway design criteria and typical sections, and have been reviewed and confirmed by City staff. Appendix A details the cost estimates.
- **Cost Allocation.** Transportation analysis conducted by Wilson & Company was used to determine the portion of transportation improvements costs to be included in the fee program. Only transportation improvement costs specifically required to support new development through 2045 are included in the transportation impact fee calculation. In addition, funding for the identified transportation improvement projects from other sources was subtracted from the gross cost estimates. The cost estimates developed do not include right-of-way costs. Right-of-way costs are a component of the overall impacts of new development and are handled as part of the development agreement and platting/development process. They have been excluded from the costs within the TIF to limit the complexity of trying to establish values and reimbursements outside those associated directly with construction. This Study does separately address the need for right-of-dedications in **Chapter 4** and establishes right-of-way allocations by land use type using the same methodology as was used to prepare the transportation impact fees. Using these allocations, where required right-of-way dedications appear to unreasonably impact certain developers, the local government can adjust densities and other exactions to reasonably ensure a balance is struck between the impacts of new development and the value of right-of way dedications.

1.5 WHY A REGIONAL APPROACH

The City is located within a region that could be impacted by new development particularly as it relates to the use of the City's transportation network. Recognizing the interest of landowners to develop lands within the immediate area around City through annexation to the City or City of Colorado Springs or to develop within unincorporated El Paso County, the City initiated work on the TMP to study the transportation needs associated with new development in the City and the surrounding region. Both the City and City of Colorado Springs have the ability and right to work with landowners to annex land within the study area under the laws of the State of Colorado or to allow the development to occur within the unincorporated area.

Through the process of analyzing potential growth and development of the Fountain Region and establishing a logical future transportation network to support new development, it has become clear the City's existing transportation network will be significantly impacted by new development. The City will be required to develop new and expanded transportation facilities that significantly exceed the transportation demands that will occur through new development within the City alone and the City transportation facilities are critical to serving regional growth.

This Study has assessed those impacts from a municipal and regional cost perspective and determined that a regional approach is not only the most equitable approach to use to establish a TIF but also represents the best way to ensure funding is available to establish the overall transportation network necessary to support anticipated development within the Fountain Region. This approach is discussed and justified in more detail in Appendix B. Appendix B also details how the City may establish a supplemental access fee program to try to recover the cost impacts to the City of development occurring outside the City but taking access to a City road if a regional TIF

cannot be established or until such time as a regional TIF is established. While this access fee approach is limited in scope since it can only be applied to direct access to City roads, and therefore cannot reasonably capture the impacts of all development in the Fountain Region having an impact on City roads, it can provide a reasonable source of revenue to the City to help overcome some of the road funding deficit created by development occurring outside the City.

As stated above, a regional approach not only benefits the City, but also benefits the City of Colorado Springs and El Paso County since the regional approach is the only way of ensuring that the road network needed to service new development will be funded and put in place. Lacking this regional funding mechanism, the road network in the City will be significantly impacted and could constrain growth within Fountain Region.

2. LAND USE AND GROWTH ASSUMPTIONS

This chapter documents the land use and growth assumptions and forecasts that underlie the TIF calculations. These factors drive the traffic generation and attraction in the Fountain Region and, in turn, are critical factors in determining how to allocate new transportation improvement costs between existing and new development and between different land uses.

2.1 LAND USE ASSUMPTIONS AND FORECASTS

The existing and future land use estimates used in the TIF are based on the TMP which was approved by the City in January 2022. The TMP went through numerous iterations with input from local government and developers to establish anticipated land uses and development densities within the Study area. These were used to derive population forecasts for each TMZ. Specifically, the land use assumptions summarized in **Table 2** were derived from the Fountain TMP Subarea Transportation Model and ITE Manual and are categorized as follows:

Table 2. Land Use Assumptions and Forecasts

Land Use	Year		Growth
	2020	2045	(2020-2045)
Residential Uses			
Single Family (Detached)	10,224	26,863	16,639
Multifamily (Low-Rise)	4,593	12,069	7,476
Total	14,818	38,932	24,114
Non-Residential Uses			
Retail (1000 sf)	912	4,999	4,087
Office (1000 sf)	1,061	1,783	722
Light Industrial (1000 sf)	219	523	304

- **Single-Family Residential:** This category refers to detached single-family homes. Traffic impact fees for new single-family residential development are applied on a per unit basis.
- **Multifamily Residential:** This category covers apartments, townhomes, condos, duplexes, and other multifamily housing in which walls are shared among units. Traffic impact fees for new construction of this type of residential development are applied on a per unit basis.
- **Retail: General r**etail development can include shopping centers, discount stores, nurseries, factory outlets, car sales lots, and specialty stores. Traffic impact fees for new construction of this type of development are applied on a square footage basis.
- **Office:** This category covers general offices, including professional and medical office development, government offices, and post offices. Traffic impact fees for this type of development are applied on a square footage basis.
- **Light Industrial:** This category includes all free standing and single use processing and manufacturing uses focused on consumer goods generally. Typical uses include automotive body repair and paint shops, commercial manufacturing and research facilities, printing plants, material testing laboratories, data

processing. Traffic impact fees for new construction of this type of development are applied on a square footage basis.

2.2 TRAVEL DEMAND ASSUMPTIONS AND FORECASTS

The land use forecasts documented above are used to estimate future travel demand, or trips, based on assumptions related to trip rates and lengths by land use category. These assumptions are summarized in **Table 3**.

Table 3. Trip Generation Assumptions

Land Use	Units	Daily Trip Rate[2]	AM Trip Rate[2]	PM Trip Rate[2]	Adjustment Factor[1]
Residential Uses					
Single Family (Detached)	DU	9.44	0.74	0.99	0.99
Multifamily (Low-Rise)	DU	7.32	0.46	0.56	0.99
Non-Residential Use					
General Retail	GFA	37.75	0.94	3.81	0.43
Office	GFA	9.74	1.16	1.15	1.87
Light Industrial	GFA	4.96	0.7	0.63	1.29

[1] The adjustment factor equals the percent of non-pass-by trips (Pass-by trips are links that do not add more than one mile to the total trip) multiplied by the average trip length and divided by the systemwide average trip length.
[2] The trip generation rates from Institute of Traffic Engineers, Trip Generation Manual 9th Addition ("ITE Manual") utilized by the Fountain TMP Subarea Transportation Model on a dwelling unit or per 1000 sf of non-residential space basis.

Table 4. Trip Generation Projections

Land Use	Trip Demand Factor[1]	PM Trip Rate[2]	2020 PM Trips[3]	2045 PM Trips[3]	Trip Growth
Residential Units					
Single Family (Detached)	0.98	0.99	10,122	26,594	16,472
Multifamily (Low-Rise)	0.55	0.56	2,572	6,759	4,186
Non-Residential Units					
General Retail	1.64	3.81	1495	8,198	6,703
Office	2.15	1.15	2282	3,833	1,551
Light Industrial	0.81	0.63	178	423	245
Total			**16,649**	**45,807**	**29,158**

[1] The trip demand factor is the product of the trip adjustment factor in Table 3 the average PM trips as generated by the Fountain TMP Subarea Transportation Model.
[2] The trip generation rates from ITE Manual utilized by the Fountain TMP Subarea Transportation Model on a dwelling unit or per 1000 sf basis.
[3] Trips are equal to the Trip Demand factor times multiplied by the Land Use assumptions in Table 2.

Table 4 combines the travel demand assumptions presented in **Table 3** with the growth estimates summarized in **Table 2** to estimate the total growth in trips through 2045. As shown, this approach results in an estimated growth of 29,158 PM peak-hour trips per day in the Fountain Region, which represents a 175% percent increase over existing levels.

3. TRANSPORTATION IMPROVEMENTS AND COSTS

This chapter describes the major roadway improvement projects required in the Fountain Region as identified in the TMP along with their estimated cost. The following chapter discusses the nexus-based cost allocations.

3.1 PROJECT SELECTION CRITERIA

Development impact fees needs to be derived from a list of specific capital improvement projects and associated costs that are needed in part or in full to accommodate new growth. Consequently, the capital improvements included in the fee program need to be described in sufficient detail to generate cost estimates. However, impact fee programs do not, in themselves, represent actual approval of a capital project. To be funded for construction, the capital improvement needs to be approved by the governing body as a capital project within the governing body's budget.

Given the above considerations, Wilson & Company recommended in the TMP that as a baseline criterion, all transportation projects identified in TMP be included in the fee program. The list was then further-refined as follows:

- The TIF program excludes any projects that are located outside the region except those located within projected annexation areas.
- The TIF program excludes any projects that have been identified by the State, PPACG or the County as regional projects.
- The TIF program excludes any projects where secured and dedicated funding sources have already been established to cover the full cost or potential sources of funding have been identified.
- The TIF program excludes projects that are intended to serve single development areas or developments.
- The TIF program excludes projects determined to have a larger extraterritorial benefit exceeding those benefits derived by the Fountain Region alone and where more significant regional cooperation and participation, including State and Federal funding, is required to build the facility. However, right-of-way dedication is assumed to be the responsibility of the Fountain Region including the City, City of Colorado Springs, or El Paso County.

3.2 PROJECT LIST

As part of the TMP, Wilson & Company has identified the necessary roadway improvement list, as listed in **Table 5** and identified on **Figure 1**. The improvements included in the list cover the intersections/interchanges/road segments where demand associated with regional growth were identified in the TMP.

Some of the projects included in the TIF address existing deficiencies. The deficiency must be determined, and the portion of the project that addresses the deficiency must be removed from the TIF costing such that the projects and project costs included in the TIF strictly represent a response to new development. This includes required roads that either do not exist and would be induced by new development or existing roads currently operating at a level of service (LOS) within acceptable standards but are expected to deteriorate to LOS's below acceptable standards with anticipated new development. The list in the TMP includes larger regional (extraterritorial) facilities that are funded and the construction of which are a basis for the TMP's identified transportation system improvements include Mesa Ridge Parkway, Meridian Road, and Link Road. Additionally, the TMP identifies Powers Boulevard as a key regional (extraterritorial) facility that serves as a parallel north-south corridor to I-25.

The proposed facility is also the basis of the TMP, and the improvements identified therein and has been determined to primarily provide larger County-wide benefits while also benefiting development of the Fountain Region. Various regional, State and Federal sources of funding have been identified for building this facility. The City, City of Colorado Springs, and El Paso County would participate through the acquisition of right-of-way during the development process to ensure the facility can be constructed as planned. The acquisition of right-of-way through dedications at the time of development is a contribution consistent with the nexus associated with new development as discussed in **Chapter 4** as part of additional right-of-way exactions to support new development.

The cost estimates shown in **Table 5** above are based on assumptions about the planned roadway typical sections, ancillary facilities, and landscaping treatments for each corridor. The costs have been reviewed and confirmed by City staff. Detailed cost estimate sheets for each project are attached to this report as **Appendix A**.

Table 5. Summary of Transportation Projects and Costs[1]

Road Segment	Segment Description	# of Lanes	Facility Type	Project Cost[2]
Mesa Ridge Parkway (1)	Powers Blvd. to Marksheffel Rd	4	Major Arterial	$22,780,000
	Marksheffel Rd. to Meridian Rd.	2	Minor Arterial	$5,216,000
Meridian Road (2)	Bradley Rd. to Mesa Ridge Pkwy.	2	Minor Arterial	$11,312,000
El Paso County 2040 MTCP – Funded Total				**$39,308,000**
Mesa Ridge Parkway (3)	SH 16/Sneffels St. Intersection	4	Expressway	$1,385,500
Various (4)	Bus Pads/ADA Curb Ramps		Transit/Ped	$150,000
Link Road (5)	South of Squirrel Creek Road	2	Minor Arterial	$2,069,225
PPACG FY 2021-FY2024 TIP – Funded Total				**$3,604,725**
Mesa Ridge Parkway (6)	Marksheffel Rd. to Amara N-S Loop	4	Major Arterial	$12,750,000
	Bridges over Jimmy Camp Creek	4	Bridges	$16,800,000
Mesa Ridge Parkway (7)	N-S Loop to E-W Spine	4	Major Arterial	$15,300,000
	E-W Spine to Meridian Rd.	4	Major Arterial	$22,100,000
E-W Spine (8)	Link Rd. to N-S Loop	2	Collector	$14,000,000
E-W Spine (9)	N-S Loop to Mesa Ridge Pkwy.	2	Minor Arterial	$19,600,000
Bandley Road (10)[1]	North of SH 16 to US 85/Santa Fe Ave.	3	Minor Arterial	$12,250,000
	Bridge(s) over Fountain Creek	4	Bridge	$8,400,000

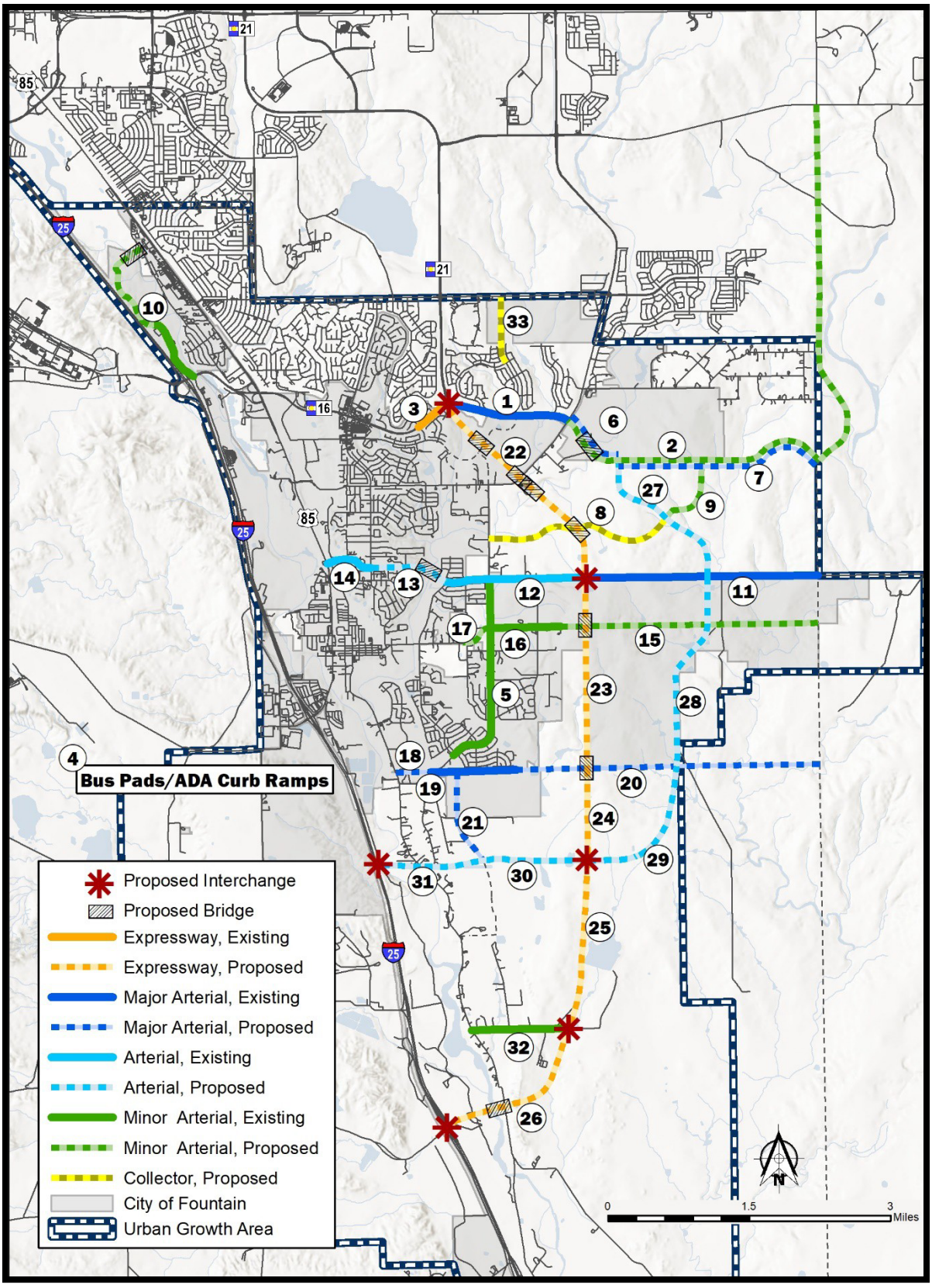
Road Segment	Segment Description	# of Lanes	Facility Type	Project Cost[2]
Squirrel Creek Road (11a)	Meridian to Landfill Entrance	4	Major Arterial	$17,680,000
Squirrel Creek Road (11b)[1]	Landfill Entrance to Powers Blvd	4	Major Arterial	$28,220,000
Squirrel Creek Road (12)[1]	Powers Blvd. to Jimmy Camp Rd	4	Arterial	$15,375,000
Squirrel Creek Road (13)[1]	Jimmy Camp Rd. to Fountain Mesa Rd.	4	Arterial	$9,840,000
	Bridges over Jimmy Camp Creek	4	Bridges	$16,800,000
Comanche Village Drive (14)[1]	Fountain Mesa Rd. to US 85/Santa Fe Ave.	4	Arterial	$6,150,000
Kane Road (15)[1]	Shumway Rd. to Meridian Rd.	2	Minor Arterial	$29,400,000
Kane Road (16)[1]	Link Road to Shumway Rd.	2	Minor Arterial	$4,900,000
Kane/Ohio Connection (17)[1]	Link Rd. to REA Rd.	2	Minor Arterial	$3,430,000
Wilson Road (18)[1]	Old Pueblo Rd. to Orleans Rd.	4	Major Arterial	$4,920,000
Wilson Road (19)[1]	Orleans Rd. to Progress Dr.	4	Major Arterial	$6,150,000
Wilson Road (20a)	Progress Dr.to Powers Blvd.	4	Major Arterial	$14,268,000
Wilson Road (20b)	Powers Blvd.to Meridian Rd.	4	Major Arterial	$39,606,000
Jimmy Camp Road (21a)[1]	Wilson Rd. to N-S Loop	4	Major Arterial	$6,300,000
Jimmy Camp Road (21b)	Wilson Rd. to N-S Loop	4	Major Arterial	$6,300,000
Powers Boulevard (22)	Mesa Ridge Pkwy. to Squirrel Creek Rd.	4	Expressway	$49,000,000

Road Segment	Segment Description	# of Lanes	Facility Type	Project Cost[2]
Powers Boulevard (22) (Cont.)	Mesa Ridge Parkway Interchange	NA	Interchange	$40,000,000
	Bridges over Cross Creek Parkway	4	Bridges	$8,400,000
	Bridges over Marksheffel Road	4	Bridges	$8,400,000
	Bridges over Jimmy Camp Creek/N_S Loop	4	Bridges	$8,400,000
	Bridges over E-W Spine Road	4	Bridges	$8,400,000
	Squirrel Creek Road Interchange	NA	Interchange	$40,000,000
Powers Boulevard (23)	Squirrel Creek Rd. to Wilson Rd.	4	Expressway	$39,200,000
	Bridges over Kane Road	4	Bridges	$40,000,000
	Bridges over Wilson Road	4	Bridges	$40,000,000
Powers Boulevard (24)	Wilson Rd. to N-S Loop	4	Expressway	$58,800,000
	N-S Loop Roadway Interchange	NA	Interchange	$40,000,000
Powers Boulevard (25)	N-S Loop to Birdsall Rd.	4	Expressway	$35,280,000
	Birdsall Road Interchange	NA	Interchange	$40,000,000
Powers Boulevard (26)	Birdsall Rd. to I-25	4	Expressway	$35,280,000
	Overpass	NA	Bridge	$8,400,000
	Bridges over Fountain Creek	4	Bridges	$16,800,000

Road Segment	Segment Description	# of Lanes	Facility Type	Project Cost[2]
	I-25 Interchange	NA	Interchange	$70,000,000
N-S Loop (27)	Mesa Ridge Pkwy. to Squirrel Creek Rd.	4	Arterial	$20,910,000
N-S Loop (28)	Squirrel Creek Rd. to Wilson Rd.	4	Arterial	$25,830,000
N-S Loop (29)	Wilson Rd. to Powers Blvd.	4	Arterial	$22,140,000
N-S Loop (30)	Powers Blvd. to Old Pueblo Rd.	4	Arterial	$20,910,000
N-S Loop (31)	Old Pueblo Rd. to I-25	4	Arterial	$4,920,000
	I-25 Interchange including bridges	NA	Interchange	$50,000,000
Birdsall Road (32)	Powers Blvd. To Old Pueblos Rd.	4	Minor Arterial	$9,310,000
Autumn Glen Ave. (33)[1]	Fountain City Limit to Fontaine Blvd	2	Collector	$1,540,000
Previously Identified Fountain Region Transportation Improvements – Total				**$196,587,725**
Total Fountain Region Transportation Improvements – Total				**$1,072,459,000**
Non-City of Fountain Regional Transportation Improvements - Total				**$918,784,000**
City of Fountain Transportation Improvements – Total				**$153,675,000**

[1] City of Fountain roadway/project.
[2] See Appendix A for detailed project cost estimates.
[3] Source: City of Fountain Transportation Master Plan 2021 Project Cost Summary

Figure 1 Location of Transportation Projects



3.3 FACILITIES INCLUDED IN TIF CALCULATION

The TMP determined that certain improvements that are already funded or are larger regional (extraterritorial) facilities that are minimally impacted by Fountain Region growth are not eligible for inclusion in the TIF. Additionally, the TMP identifies certain facilities as development area specific facilities that primarily serve a specific development and provided limited benefit to the surrounding community. As a result, the TMP has identified the intersection/interchange/road segment improvements list that are not considered Fountain Region facilities and necessary to support Fountain Region growth and development that can reasonably be included in the TIF, these facilities are shown in **Table 6**.

Table 6. Summary of Eligible TIF Projects and Costs

Road Segment	Segment Description	# of Lanes	Facility Type	Project Cost[2]
Bandley Road (10	North of SH 16 to US 85/Santa Fe Ave.	3	Minor Arterial	$12,250,000
	Bridge(s) over Fountain Creek	4	Bridge	$8,400,000
Squirrel Creek Road (11a)	Meridian to Landfill Entrance	4	Major Arterial	$17,680,000
Squirrel Creek Road (11b)[1]	Landfill Entrance to Powers Blvd	4	Major Arterial	$28,220,000
Squirrel Creek Road (12)[1]	Powers Blvd. to Jimmy Camp Rd	4	Arterial	$15,375,000
Squirrel Creek Road (13)[1]	Jimmy Camp Rd. to Fountain Mesa Rd.	4	Arterial	$9,840,000
	Bridges over Jimmy Camp Creek	4	Bridges	$16,800,000
Comanche Village Drive (14)[1]	Fountain Mesa Rd. to US 85/Santa Fe Ave.	4	Arterial	$6,150,000
Kane Road (15)[1]	Shumway Rd. to Meridian Rd.	2	Minor Arterial	$29,400,000
Kane Road (16)[1]	Link Road to Shumway Rd.	2	Minor Arterial	$4,900,000
Kane/Ohio Connection (17)[1]	Link Rd. to REA Rd.	2	Minor Arterial	$3,430,000
Wilson Road (18)[1]	Old Pueblo Rd. to Orleans Rd.	4	Major Arterial	$4,920,000

Road Segment	Segment Description	# of Lanes	Facility Type	Project Cost[2]
Wilson Road (19)[1]	Orleans Rd. to Progress Dr.	4	Major Arterial	$6,150,000
Wilson Road (20a)	Progress Dr.to Powers Blvd.	4	Major Arterial	$14,268,000
Wilson Road (20b)	Powers Blvd.to Meridian Rd.	4	Major Arterial	$39,606,000
Jimmy Camp Road (21a)[1]	Wilson Rd. to N-S Loop	4	Major Arterial	$6,300,000
Jimmy Camp Road (21b)	Wilson Rd. to N-S Loop	4	Major Arterial	$6,300,000
N-S Loop (29)	Wilson Rd. to Powers Blvd.	4	Arterial	$22,140,000
N-S Loop (30)	Powers Blvd. to Old Pueblo Rd.	4	Arterial	$20,910,000
N-S Loop (31)	Old Pueblo Rd. to I-25	4	Arterial	$4,920,000
	I-25 Interchange including bridges	NA	Interchange	$50,000,000
Birdsall Road (32)	Powers Blvd. To Old Pueblos Rd.	4	Minor Arterial	$9,310,000
Autumn Glen Ave. (33)[1]	Fountain City Limit to Fontaine Blvd	2	Collector	$1,540,000
TIF Eligible Projects – Total				**$338,809,000**
Non-City of Fountain Regional TIF Eligible Projects - Total				**$185,134,000**
City of Fountain TIF Eligible Projects – Total				**$153,675,000**

[1] City of Fountain roadway/project.
[2] See Appendix A for detailed project cost estimates.

3.4 EXISTING DEFICIENCIES

While many of the roads identified in the TIF are new and needed entirely to serve new development, existing roadways serve both existing and new development. The existing roadways identified for improvement or expansion in the TMP and included in the TIF were assessed to determine whether they are currently deficient and need upgrades. The roadways assessed are shown in **Table 7**. In each case capacity and existing volumes were

assessed to determine if the roadway was operating at less than the desired LOS. To arrive at the resulting cost of construction due to new development, the minimal cross section necessary to meet current traffic demand was identified. Cost estimates for these lesser sections were developed using the same costing methodology. These deficiencies were subtracted from the overall costs of the required transportation system improvements in the 2045 build out to arrive at the costs induced by growth. **Table 7** lists all existing roads and identifies the current costs to overcome any existing deficiencies. Generally, due the discontinuity or lack of connectivity of the network in relationship to these local facilities, only one roadway appears to have any current deficiencies based on traffic volumes. Several of the current facilities have geometric or safety issues, but the geometric and safety issues, due to the low volumes, do not significantly impact capacity or overall performance. Therefore, while the road sections, geometry and safety standards do not meet TMP objectives, the roadway is not considered deficient since it meets performance LOS objectives and without growth only maintenance work would likely continue rather than initiation of improvements to bring the road to current standards.

Table 7. TIF Project Costs Adjusted for Existing Deficiencies

Road Segment	Existing Facility Type	Existing Capacity	2020 ADT	2045 Proposed Capacity	Upgrades Currently Required	Project Cost to Meet Current Demand
Squirrel Creek Road (11b)[1]	Minor Collector	1,000	600	15,000	None	$0
Comanche Village Drive (14)[1]	Collector	2,000	1900	13,000	Upgrade to Minor Arterial	$6,150,000
Kane Road (16)[1]	Minor Collector	1,000	700	4,500	None	$0
Wilson Road (19)[1]	Minor Collector	1,000	200	1,000	None	$0
Birdsall Road (25)	Minor Collector.	1,000	100	200	None	$0
TIF Existing Deficiency – Total						**$6,150,000**
Non-City of Fountain Regional TIF Existing Deficiency - Total						**$0**
City of Fountain TIF Existing Deficiency – Total						**$6,150,000**

[1] City of Fountain roadway/project.

3.5 EXCESS CAPACITY

Some of the road and interchange improvements included in the TIF are costed based on a proposed final roadway functional classification and associated design criteria and typical sections. In some cases, the functional classification may be more than is needed to meet 2045 demand. Narrower road sections may be built within the

full right-of-way to accommodate the traffic in 2045 thereby reducing construction costs. Each roadway was assessed to determine, based on the traffic projections and roadway capacities, which roadway section would meet the LOS objectives of the TMP in 2045. Since new development should only be assessed the impacts for what is needed to meet the requirements to serve new development, these lessor interim cross-sections which may be phased components of the desired final cross-section in the TMP, were used to develop the 2045 project costs associated with new development utilizing the same methodology as applied to the TMP roadway cross sections. The proposed 2045 roadway cross sections for each road segment are shown and costed in **Table 8**. The governing entity may still choose to build them to the full cross-section if funding is available and recover the governing entity's investment as TIFs are paid going forward, but this should not be done using TIF monies except if associated with additional growth outside the growth presented in the TMP.

Table 8. TIF Project Costs Adjusted to 2045 Traffic Demand

Road Segment	Programmed Facility Type to Meet 2045 Demand (Lanes)	Required Facility Type to Meet 2045 Demand (Lanes)	Project Cost to Meet 2045 Demand with Lessor Section[2]
Bandley Road (10)[1]	Minor Arterial (3)	Collector (2)	$8,750,000
	Bridges	Bridges	$8,400,000
Squirrel Creek Road (11a)	Major Arterial (4)	Arterial (4)	$11,797,067
Squirrel Creek Road (11b)[1]	Major Arterial (4)	Arterial (4)	$18,829,933
Squirrel Creek Road (12)[1]	Arterial (4)	Collector (2)	$10,500,000
Squirrel Creek Road (13)[1]	Arterial (4)	Collector (2)	$5,600,000
	Bridges	Bridges	$16,800,000
Kane Road (15)[1]	Minor Arterial (3)	Collector (3)	$21,000,000
Kane Road (16)[1]	Minor Arterial (3)	Collector (3)	$3,500,000
Kane/Ohio Connection (17)[1]	Minor Arterial (4)	Minor Arterial (4)	$2,450,000
Wilson Road (18)[1]	Arterial (2)	Collector (2)	$2,800,000

Road Segment	Programmed Facility Type to Meet 2045 Demand (Lanes)	Required Facility Type to Meet 2045 Demand (Lanes)	Project Cost to Meet 2045 Demand with Lessor Section[2]
Wilson Road (19)[1]	Arterial (2)	Collector (2)	$3,500,000
Wilson Road (20a)	Arterial (2)	Collector (2)	$6,711,050
Wilson Road (20b)	Arterial (2)	Collector (2)	$18,628,950
Jimmy Camp Road (21a)[1]	Collector (2)	Collector (2)	$6,300,000
Jimmy Camp Road (21b)	Collector (2)	Collector (2)	$6,300,000
N-S Loop (29)	Arterial (2)	Collector (2)	$12,600,000
N-S Loop (30)	Arterial (2)	Collector (2)	$11,900,000
N-S Loop (31)	Arterial (2)	Collector (2)	$2,800,000
	Bridges	Collector (2)	$8,400,000
	I-25 Interchange	Not Required	$0
Birdsall Road (32)	Collector (2)	Not Required	$0
Autumn Glen Ave. (33)[1]	Fountain City Limit to Fontaine Blvd	Not Required	$0
TIF Eligible Project Cost without Excess Capacity - Total			**$187,567,000**
Non-City of Fountain Regional TIF Eligible Project Costs without Excess Capacity - Total			**$79,137,067**
City of Fountain TIF Eligible Project Cost without Excess Capacity - Total			**$108,429,933**

[1] City of Fountain roadway/project.
[2] See Appendix A for detailed project cost estimates.

3.6 NET TIF ALLOCATED COSTS TO NEW DEVELOPMENT

After taking the required deductions for existing deficiencies and excess capacity, the total cost subject to the Regional TIF that can be assessed against new development, before accounting for the reductions associated with through-trips is shown in **Table 9**.

Table 9. Summary of Net Costs Allocated to New Development

	Total Project Costs
All Project Costs Potentially Subject to TIF	$338,809,000
Less Costs of Rectifying Existing Deficiencies	($6,150,000)
Less Costs of Excess 2045 Capacity	($145,092,000)
Total Eligible Costs Subject to TIF	**$187,567,000**

4. ANALYSIS AND MAXIMUM FEE

This chapter presents the nexus analysis and calculations for the maximum allowable TIF based on the land use projections and transportation improvements described previously.

4.1 OVERVIEW OF FINDINGS

A "nexus" or relationship between new development in Fountain Region and transportation improvements and their costs must be established before incorporating transportation improvement costs into a TIF calculation. To determine the appropriate costs to include in the new transportation fee calculation, it is necessary to conduct a series of steps:

- **Identify Total Costs of Transportation Improvements.** The identification of the required transportation improvement projects and their associated costs is the first step (conducted in the prior chapter)
- **Remove Existing Deficiencies.** Next, it is necessary to evaluate whether there is an existing deficiency at any of the project locations, and if so, the magnitude of that deficiency. Existing deficiencies are accounted for by reducing the project cost that is included in the TIF Program and identifying the funding that must be provided from other sources (conducted in the prior chapter).
- **Account for Excess Capacity.** As with most transportation plans and roadway network designs, the TMP has identified not only the necessary but desired roadway classifications and ultimate cross sections to serve a growing community. In some cases, the excess capacity provided by the proposed roadway cross section is needed to serve future development beyond the 2045 period on which the TMP and this Study is based. This excess capacity is not necessary to support the new development identified in the TMP and must be accounted for by reducing the roadway cross-sections to those roadway cross sections necessary to service new development. The project cost that is included in the TIF Program should only include the level of construction necessary to meet demand induced by new development through the 2045 planning horizon (conducted in the prior chapter).
- **Determine Proportionate Allocation to New Development.** Once existing deficiencies and excess capacities are identified, it is necessary to determine the proportion of the remaining project cost that is attributable to new development in the Fountain Region, and therefore can be the subject of a fee program.
- **Identify Known Funding.** To the extent there is dedicated funding for any of the transportation improvements, this portion of costs should not be included in the transportation fee calculation. For this TIF calculation, no funding for the transportation improvements remaining eligible TIF projects has been identified since it is not anticipated that any of the remaining projects in **Table 8** would meet Regional, State or Federal funding criteria.

The technical calculations described above and further detailed in previous sections establish the following nexus findings.

- **Purpose:** The fee will help maintain adequate levels of transportation service in Fountain.
- **Use of Fee:** Fee revenue will be used to fund regional transportation improvements, including roadway, intersection, interchange, and traffic signal improvements, as well as the reimbursement of upfront investments from other government funds for transportation improvements required to serve future growth. The list of eligible transportation projects and costs are summarized in **Chapter 3** and detailed in the **Appendix A**.

- **Relationship:** New development in the Fountain Region will increase demands for and travel on the Region's transportation network. Transportation fee revenue will be used to fund additional transportation capacity necessary to accommodate growth. New development will benefit from the increased transportation capacity.
- **Need:** Each new development project will add to the incremental need for transportation capacity and improvements. The transportation improvements considered in this Study are considered necessary to meet the Fountain Region's future transportation needs.
- **Proportionality:** The fee levels are tied to fair share cost allocations to new Regionwide development based on the Fountain TMP Subarea Transportation Model.

4.2 TRANSPORTATION MODEL AND COST ALLOCATION

4.2.1 Travel Demand Assumptions and Methodology

To allocate TIF program costs equitably, the Fountain TMP Subarea Transportation Model was applied to this Study. The Fountain TMP Subarea Transportation Model was developed using the PPACG Tour-Based Travel Demand Model as a platform and refined land use estimates and road networks for the City of Fountain. The PPACG model is a mathematical representation of travel demand based on the buildout of the cities and unincorporated areas within Teller and El Paso Counties, including Fountain. The model uses socioeconomic data, such as number of jobs and households, for different geographic areas (transportation analysis zones) to predict the expected travel between places in the future.

The Fountain TMP Subarea Transportation Model is validated for the current socioeconomic data to predict current traffic volume, matched with the actual existing counts to calibrate the model. The calibrated model is then utilized to forecast future travel conditions based on the expected changes in the socioeconomic conditions. The Fountain TMP Subarea Transportation Model includes the two-county area but is refined within an area that includes 40 transportation analysis zones (TAZs) that represent the Fountain Region. Updates to the 2045 socioeconomic data for the 40 Fountain TAZs were generated by Wilson & Company based on input from the regional entities. In this Study, Wilson & Company has used this model to derive characteristics of vehicle travel demand including the following:

- Internal (trips that start and end in the Fountain Region)
- Internal/External (trips that have one end either beginning or ending in the Fountain Region)
- Through (trips that pass completely through the Fountain Region without stopping)

Only the trips starting or ending in the Fountain Region (i.e., Internal trips and Internal/External trips) are responsible for the TIF program costs.

Table 10 illustrates the characteristics of vehicle travel demand. These methodologies are applied to determine the percentage of the project costs that could be funded through the TIF program. Generally, two allocation methodologies were applied as follows:

- **Regionwide:** The cost allocation would be based on the average regionwide characteristics of vehicle travel demand, which were determined for all the roadway segments within the Fountain Regional boundary as an average. The Regionwide average is used where the traffic model does not provide sufficient detailed to estimate the origin and destination of trips associated with a particular transportation facility or improvement or the facilities identified are distributed throughout the Region. None of these types of facilities remained after the analysis in Chapter 3.

- **Select Link:** The cost allocation would be based on link-specific characteristics of vehicle travel demand for the project-related links (I.e., all the approaching and departure roadway segments of the intersection). This methodology is applied where the traffic model can be used to estimate specific travel demand characteristics associated with transportation facilities and improvements. As shown in **Table 10**, this method is applied for all the roadway projects.

Table 10. TIF Travel Demand Assumptions

Project Name	Cost Allocation Methodology	Trip Type [1]			Share Allocated to New Development
		I-I	I-X/X-I	X-X	
Bandley Dr. (10)	Select Link	25%	75%	0%	100%
Squirrel Creek Rd. (11)	Select Link	7%	86%	7%	93%
Squirrel Creek Rd. (12)	Select Link	60%	34%	5%	94%
Squirrel Creek Rd. (13)	Select Link	18%	77%	5%	95%
Kane Rd. (15)	Select Link	28%	72%	0%	100%
Kane Rd. (16)	Select Link	36%	64%	0%	100%
Kane/Ohio Connection (17)	Select Link	74%	26%	0%	100%
Wilson Rd. (18)	Select Link	94%	6%	0%	100%
Wilson Rd. (19)	Select Link	85%	15%	0%	100%
Wilson Rd. (20)	Select Link	100%	0%	0%	100%
Jimmy Camp Rd. (21)	Select Link	82%	18%	0%	100%
N-S Loop (29)	Select Link	16%	6%	78%	22%
N-S Loop (30)	Select Link	16%	6%	78%	22%
N-S Loop (31)	Select Link	14%	6%	78%	20%
Birdsall Rd. (32)	Select Link	78%	22%	0%	100%
Autumn Glen Ave. (33)	Select Link	78%	22%	0%	100%

[1] I-I = trips that start and end in the Fountain Region, I-X/X-I = trips that originate in the Fountain Region and end somewhere else or originate somewhere else and end in the Fountain Region, X-X = trips that pass-through Fountain but do not end or originate there.

As shown, fewer than 2.0 percent of the trips using Fountain Regional roadway facilities would pass through the Fountain Region completely without stopping. Therefore, approximately 98.0 percent of the project costs would be funded through the TIF using a Regionwide average approach described above.

As shown, for the Select Link analysis, the proportion of transportation improvement costs allocated to new development varies by facility or improvement. Generally, most trips through 2045 are development-related, but as many as 7% of the trips using the identified approaching or departure roadway segments would pass through the Fountain Region without stopping. The only exception is in the case of the N-S Loop where approximately 78% of the trips using the approaching or departure roadway segments of the road segments would pass through the Fountain Region without stopping. Therefore, the N-S Loop while important to overall system performance provides only limited benefit to new development.

4.2.2 TIF Cost Allocation

The TIF nexus analysis allocates costs based on: (1) the amount attributable to new versus existing development; (2) the proportion of trips with at least one trip end in the Fountain Region (i.e., excludes through trips); and (3) the amount covered by secured funding sources. As described in **Chapter 3**, none of the projects included in the TIF addresses existing deficiencies. Rather, they are a response to new development and transportation facilities currently operating at a level of service (LOS) within acceptable standards but are expected to deteriorate to levels below acceptable standards with proposed new developments. Consequently, the TIF project list was selected to only include improvements attributable to new development.

The cost allocated to new development is based on the analysis described above and summarized in **Table 10**. In addition, the analysis assumes that certain other larger regional and development-focused projects will be funded by Federal, State, Regional, County, municipal and private developer funding. Consequently, the costs of these improvements, estimated to be about $733.65 million, have been excluded from the TIF calculation. It is anticipated that detailed analysis of these facilities would indicate marginal benefit to new development verses the overall larger regional benefit they offer. However, these facilities are critical components of the future transportation system and must be established for the other roadways in the TMP to function adequately at both the reduced cross sections established for 2045 in **Table 8** and at build-out.

Table 11 illustrates the net impact of the cost allocations described above. As shown, this Study allocates approximately $338.8 million in transportation improvement costs to the TIF of which approximately $155.6 million is associated with the period through 2045. The amount represents about 45.9 percent of the approximately $338.8 million in future transportation infrastructure costs considered in this analysis. The additional 54.1% would be secured through other sources which might include fees assessed to additional development (outside the development identified in the TMP) beyond the 2045 horizon.

Table 11. TIF Cost Allocation Assumptions and Calculations

Road Segment	Total Project Costs Less Adjustments	Share Allocation to New Development	Cost Allocated to TIF Program
Bandley Road (10)[1]	$8,750,000	100%	$8,750,000
	$8,400,000	100%	$8,400,000
Squirrel Creek Road (11a)	$11,797,067	93%	$10,971,272
Squirrel Creek Road (11b)[1]	$18,829,933	93%	$17,511,838
Squirrel Creek Road (12)[1]	$10,500,000	94%	$9,870,000
Squirrel Creek Road (13)[1]	$5,600,000	95%	$5,320,000
	$16,800,000	95%	$15,960,000
Kane Road (15)[1]	$21,000,000	100%	$21,000,000
Kane Road (16)[1]	$3,500,000	100%	$3,500,000
Kane/Ohio Connection (17)[1]	$2,450,000	100%	$2,450,000
Wilson Road (18)[1]	$2,800,000	100%	$2,800,000
Wilson Road (19)[1]	$3,500,000	100%	$3,500,000
Wilson Road (20a)	$6,711,050	100%	$6,711,050
Wilson Road (20b)	$18,628,950	100%	$18,628,950
Jimmy Camp Road (21a)[1]	$6,300,000	100%	$6,300,000
Jimmy Camp Road (21b)	$6,300,000	100%	$6,300,000
N-S Loop (29)	$12,600,000	22%	$2,772,000
N-S Loop (30)	$11,900,000	22%	$2,618,000
N-S Loop (31)	$2,800,000	20%	$560,000
	$8,400,000	20%	$1,680,000
Eligible Regional Transportation Projects – Total			**$155,603,110**
Non-City of Fountain Regional TIF Eligible Project Costs – Total			**$50,241,272**
City of Fountain TIF Eligible Project Costs – Total			**$105,361,838**

[1] City of Fountain roadway/project.

4.3 MAXIMUM FEE CALCULATION

Table 12 shows the maximum supportable transportation impact fee per trip. The maximum fee per trip is calculated by dividing the aggregate fee program cost of $155.6 million (see **Table 11**) by the total number of trips generated by new development, or 29,158 (see **Table 4**). The results in an average Regional TIF per peak hour trip of $5,337.

Table 12. Maximum Fee per Trip

	Fountain Region
Fee Program Share of Transportation Facility Costs	$155,603,110
Growth in PM Trips	29,158
Cost per Trip	**$5,337**

Finally, **Table 13** calculates the maximum Regional TIF for each land use category specified in the TMP. The maximum allowable fee by land use includes a 2 percent charge needed to cover the cost of administering the Regional TIF program. The 2% would generate approximately $3.1 million through 2045 or about $150k annually to fund administration of the program. The maximum supportable fees are the fee levels that would generate sufficient fee revenues to cover the full TIF cost allocation of $155.6 million. As discussed below, decisions to charge fees below the maximum fee will result in funding gaps that would need to be covered by other funding sources.

Table 13. Maximum TIF Schedule

Land Use	Trip Demand Factor	Cost per Trip	Raw Fee	Administrative Charge	Total TIFper Unit
Residential Units					
Single Family (Detached)	0.98	$5,337	$5,230	2%	$5334/unit
Multifamily (Low-Rise)	0.55	$5,337	$2,935	2%	$2994/unit
Non-Residential Units					
Hotel/Motel	0.61			2%	
General Retail	3.81	$5,337	$8.75	2%	$8.93/sf
Convenience Retail	49.11			2%	
Office	1.42	$5,337	$11.47	2%	$11.70/sf
Light Industrial	0.81	$5,337	$4.32	2%	$4.41/sf

4.4 REGIONAL FUNDING REQUIRED

As noted in **Table 11**, the aggregate funding from new development from the maximum TIF is $155.6 million, but the required improvement costs for the TIF projects is $193.7 million as identified in **Table 8**. This leaves the Fountain Region with approximately $38.1 million in local transportation improvements to fund through 2045 and an additional $145.1 million to fund after 2045 to fully implement the TMP. The $145.1 million will need to be funded by new development occurring after 2045 and the government entities in the Fountain Region through various potential sources. Assuming the government entities in the Fountain Region adopted the Maximum TIF schedule, the government entities in the Fountain Region would need to contribute approximately $1.6M a year, in addition to any of the additional participation in larger regional (extraterritorial) facilities, to fund the TIF program.

While it is generally assumed by many jurisdictions that tax revenue associated with new development should help to make up at least a portion of the jurisdiction's contribution to a TIF program, it is not always the case that the jurisdiction will be able to fund their share with development-induced tax revenues. The actual conditions are much more dependent on the tax situation in a particular locality. Some jurisdictions determine that additional taxes (e.g., special sales tax) or increased tax rates are necessary to fund the jurisdiction's required contribution to the TIF program. To understand how or if the jurisdictions can fund its share of the TMP and TIF identified transportation system improvements from existing sources of revenue, it is necessary to look at the jurisdiction's current revenue structure and analyze that structure under the growth projected in the TMP.

4.5 RIGHT-OF-WAY ACQUISITION

In addition to the construction costs associated with the transportation facilities identified in this Study, ROW will need to be acquired as part of the development approval or otherwise secured through purchases. All ROW acquisition for the transportation facilities included in this Study are a direct response to new development except for the ROW required to overcome existing deficiencies. ROW acquisition costs were not included in the cost estimates in Appendix A and are not included in the Maximum TIF Schedule detail in the previous sections.

To determine the amount of ROW that needs to be acquired to support the construction of the Eligible TIF facilities, the ROW width associated with each road's proposed cross section, as identified in the TMP, for all Eligible TIF facilities was multiplied by the length of the facility in the TMP. These calculations are shown in **Table 14**. Where ROW already exists, only the extra ROW required was included in the calculation. This results in a total of 260.3 acres of ROW that must be dedicated to construct the proposed TIF transportation facilities. As with the TIF Cost allocation, these were adjusted based on the share of allocation associated with new development. This results in a total of 208.7 acres allocated to new development or a Trip Share component of 311.8 sf per trip (i.e., 208.7 acres/29,158 new development trips). The City would be responsible for securing 51.6 acres of ROW at an estimated cost of approximately $4.5M.

Table 15 calculates the required dedication for each land use category specified in the TMP. Applying this total dedication rate would result in equity between developments. As discussed below, decisions on new development land dedications could be balanced using these allocations and ROW values to ensure consistent dedication rates among all required dedications.

Table 14. Eligible TIF Road ROW Allocation Assumptions and Calculations

Road Segment	Required ROW Width (ft)	Existing ROW Width (ft)	Road Length (miles)	ROW Required (Acres)	Share Allocation to New Development	ROW Allocated to TIF Program (Acres)
Bandley Road (10)[1]	110	0-95	1.25	8.2	100%	8.2
Squirrel Creek Road (11a)	170	60	0.96	12.8	93%	11.9
Squirrel Creek Road (11b)[1]	170	60	1.53	20.4	93%	19.0
Squirrel Creek Road (12)[1]	130	40-120	1.5	10.3	94%	9.7
Squirrel Creek Road (13)[1]	130	0	0.8	9.6	95%	9.1
Comanche Village Dr. (14)[1]	130	70	0.5	3.6	95%	3.5
Kane Road (15)[1]	110	0-40	3	37.0	100%	37.0
Kane Road (16)[1]	110	40	0.5	4.2	100%	4.2
Kane/Ohio Connection (17)[1]	110	0	0.35	4.0	100%	4.0
Wilson Road (18)[1]	130	100	0.4	1.5	100%	1.5
Wilson Road (19)[1]	130	60	0.5	4.2	100%	4.2
Wilson Road (20a)	130	0	0.96	15.1	100%	15.1
Wilson Road (20b)	130	0	2.66	41.9	100%	41.9
Jimmy Camp Road (21)[1]	80	0	0.9	8.8	100%	8.8
Jimmy Camp Road (21)[1]	80	0	0.8	8.7	100%	8.7
N-S Loop (29)	130	0	1.8	28.4	22%	6.2
N-S Loop (30)	130	0	1.7	26.8	22%	5.9
N-S Loop (31)	130	0	0.4	6.3	20%	1.3
Birdsall Road (32)	110	60	0.95	5.8	100%	5.8
Autumn Glen Ave. (33)[1]	110	0	0.22	2.9	100%	2.9
Total ROW – Eligible Regional Projects				**260.4**		
Total ROW – Allocated to New Development						**208.7 acres**
Total ROW – Allocated to New City of Fountain Development						**104.6 acres**
Total ROW – Allocated to New Non-City of Fountain Development						**104.1 acres**

[1] City of Fountain roadway/project.

Table 15. TIF Road ROW Schedule

Land Use	Trip Demand Factor	Cost per Trip (Acres)	Dedication (sf) per Unit or 1000 SF	ROW Value per Unit or SF($)
Residential Units				
Single Family (Detached)	0.98	0.007	305.63	$611/unit
Multifamily (Low-Rise)	0.55	0.007	171.53	$343/unit
Non-Residential Units				
Retail	1.64	0.007	0.511	$1.02/sf
General Office Building	2.15	0.007	0.671	$1.34/sf
Light Industrial	0.81	0.007	0.253	$0.51/sf

In addition to the Eligible TIF Road ROW dedication needs, the larger regional (extraterritorial) facilities identified in the TMP also require ROW dedication to service new development. While the costs of these facilities were determined to be most appropriately funded by the larger region, an I-I/I-X/X-X analysis shows that approximately 22% of the trips are I-I/I-X trips generated by new development in the Fountain Region. Based on that analysis, new development has some responsibility for the cost of the facility in the form of ROW dedications. The larger regional facilities were analyzed to determine the required dedications. **Table 16 and 17** summarize this analysis.

Table 16. Regional Road ROW Allocation Assumptions and Calculations

Road Segment	Required ROW Width (ft)	Existing ROW Width (ft)	Road Length (miles)	ROW Required (Acres)	Share Allocation to New Development	ROW Allocated to TIF Program (Acres)
Mesa Ridge Parkway (6)	170	0-160	0.9	4.8	100%	4.8
Mesa Ridge Parkway (7)	170	0	1.3	26.8	100%	26.8
Powers Boulevard (22)	300	0	2.5	90.9	100%	90.9
Powers Boulevard (23)	300	0	2	72.7	100%	72.7
Powers Boulevard (24)	300	0	3	109.1	100%	109.1
Powers Boulevard (25)	300	0	1.8	65.5	100%	65.5
Powers Boulevard (26)	300	0	1.8	65.5	100%	65.5
Total ROW – Allocated to New Development						435.2 acres

Table 17. Regional Road ROW Schedule

Land Use	Trip Demand Factor	Unit	Raw Fee	Administrative Charge	Total TIFper Unit
Residential Units					
Single Family (Detached)	0.98	Dwelling	$3,541	2%	$3,612
Multifamily (Low-Rise)	0.55	Dwelling	$1,987	2%	$2,027
Non-Residential Units					
Hotel/Motel	0.61	1,000 sf	$2,412	2%	$2,460
General Retail	3.81	1,000 sf	$4,266	2%	$4,353
Convenience Retail	49.11	1,000 sf	$7,572	2%	$7,726
Office	1.42	1,000 sf	$7,762	2%	$7,920
Light Industrial	0.81	1,000 sf	$2,930	2%	$2,990

The Fountain Region governments should use these ROW dedication schedules to establish an equitable land dedication requirement for all developments within the Fountain Region going forward balancing the need for land dedications and the dollar value of ROW dedications on a per unit or per sf basis. It is particularly important to consider equity in transportation facility dedications since transportation facility dedications can easily result in dedication inequities between different development tracts. This can be specifically addressed in the ordinance/resolution implementing the TIF program or by separate ordinance. As with the TIF, a regional dedication program would be the most appropriate approach in helping to ensure equity and that necessary ROW dedications are established for the network.

5. TIF IMPLEMENTATION AND ADMINISTRATION

This chapter describes implementation and administrative issues and procedures to be addressed in the TIF Ordinance, Resolution and Study. It addresses matters related to TIF approval, program administration (e.g., fee amount, collection and accounting procedures, exemptions, etc.), and securing supplemental funding.

5.1 APPROVAL PROCESS

The TIF and corresponding fee schedule will need to be adopted by Resolution and/or Ordinance. The TIF Ordinance/Resolution will allow the City Council/Board of County Commissioners to adopt a fee schedule consistent with supporting technical analysis and findings provided in this Study. The Ordinance/Resolution approach to setting the TIF fee will allows periodic adjustments of the fee amount that may be necessary over time, without amending the enabling Ordinance.

The TIF Ordinance/Resolution will clearly define the TIF program policies and procedures as discussed further below. The TIF program policies and procedures may differ from other County and municipal development impact fees.

5.2 FEE AMOUNT AND COLLECTION

As noted, the actual fee levels by land use will need to be approved by the City Council/Board of County Commissioners but cannot exceed the maximum allowable fees calculated herein. Other fee collection considerations are described below.

5.2.1 Applicable Land Uses

All new development that occurs within the Fountain Region, except as specifically exempted by the TIF Ordinance, shall pay the TIF based on an approved Fee Schedule made available by the local government and updated periodically. The amount will vary by land use, as described in the Study. While the maximum fee amount is determined by this Study, the governing body may elect to charge less for a variety of reasons.

It is possible that certain projects may not fit neatly into the land use categories defined in the fee schedule (see **Table 9**). In cases where such ambiguity exists, the City Manager or an authorized representative will need to determine as to the applicable fees. The Fee Ordinance can articulate guidelines for resolving discrepancies and/or disputes. For example, it may include the option for applicants to furnish information or analysis that will justify their project's inclusion in a particular land use category and/or a lower fee based on verifiable trip generation rates or other factors.

5.2.2 Fee Escalation

The Fee Ordinance/Resolution will allow for an automatic adjustment of the TIF to keep pace with inflation adjusted increases in construction cost. This allows the fee level to keep pace with inflation without requiring an annual approval process. This adjustment is based on cost indices published by the Engineering News Record (ENR), a source widely used in the construction industry, and by many jurisdictions as a basis for making annual inflation adjustments to their development impact fees. ENR's CCI has been published consistently every month since 1913 for 20 U.S. cities and a national average of the 20 cities. As such it is one of the most reliable and consistent indices that track trends in construction costs.

5.2.3 Timing of Payment

While the TIF Ordinance/Resolution will specify the timing for TIF payments, the generally accepted practice in Fountain, and most other Colorado cities and counties, is to have the fee payment due upon issuance of a building permit, unless otherwise indicated or allowed.

5.3 Fee Credits, Reimbursements and Exemptions

Impact fee programs frequently allow developers subject to the fee to obtain fee credits, reimbursements, and/or adjustments under certain and limited circumstances as determined by the Impact Fee Ordinance/Resolution. Fee credits, reimbursements, or adjustments are generally not allowed by right but rather should be subject to discretionary review and approval by the governing body thus ensuring that they are warranted and appropriate.

5.3.1 Fee Credits

Impact fee ordinances or resolutions frequently allow for fee credits if a developer provides a particular facility or improvement that replaces facilities that would have otherwise been funded in whole or in part by the TIF. For example, the local government may elect to offer a fee credit to developers who provide transportation related improvements, consistent with those specified in the current TIF program. The fee credit is usually equal to the most current cost estimate of the infrastructure item (as defined by annual cost review or other recent evaluation of cost) regardless of the actual cost to construct. The ordinances or resolutions implementing the TIF should allow for fee credits under specific terms.

5.3.2 Fee Reimbursements

Fee reimbursements are typically considered for developers who contribute more funding and/or build and dedicate infrastructure items that exceed their proportional obligation, especially if the project funded is a priority project. Such reimbursements should be provided as fee revenue becomes available and should include a reasonable factor for interest earned on the reimbursable amount. It should not compromise the implementation of other priority capital projects. A provision for including such interest payments as additional costs in subsequent fees can also be included in the Ordinance.

5.3.3 Fee Exemptions and Other Adjustments

The local government may elect not to impose fees for certain categories of development or on project-by-project basis, though alternative funding sources to offset a loss in fee revenue should be considered in this context. Likewise, the local government may enter into a Development Agreement that specifically exempts or adjusts all or a portion of the fees, including its application.

Local governments may consider waiving all or portions of a fee if it can be determined that a proposed project will have minimal or no impact on the improvements or facilities for which the fee is collected. Additionally, local governments sometimes allow for fee exemptions for certain types of uses such as projects developed for use by not-for-profit organizations or other public benefits (e.g., affordable housing). By way of example, jurisdictions often exempt or adjust fees for the following types of projects, subject to local government review and approval.

1. Any internal or external alteration or addition to an existing structure that increases total floor area (including outside storage) by more than a specified percent (e.g., 10%). This exemption may not apply when the alteration or addition facilitates a change to more intensive use (e.g., one that generates additional vehicle trip). Some jurisdictions have further specified the number of expansions permitted under this exemption (e.g., no more than one expansion may qualify for this exemption in any ten (10) year period).

2. Any replacement or reconstruction of any structure that is damaged or destroyed by fire, flood, explosion, wind, earthquake, riot, or other calamity or act of God. This exemption would not apply to the portion of a building replaced or reconstructed that exceeds the documented total floor area or change the use at the time of its destruction.
3. Any structure has been vacant for less than a specified period (e.g., one to three years), assuming the new tenant(s) are of a similar nature in terms of their impact on capital facilities.
4. New development that replaces existing development may be eligible for a Fee adjustment to the extent that the facilities to be funded by the new development are already provided to the existing development provided the existing development has not been removed more than one year. For example, a 20,000 square foot office building that is replaced by a 40,000 square foot office building could receive up to a 50 percent credit in the Fee (20/40 =50%). Local government staff will determine the amount of the fee credit at the time a site plan is submitted to the local government. If a structure is replaced with a denser land use, such as replacing single family residences with a commercial building, an incremental fee will generally apply.
5. Any replacement of a structure and use, in kind, providing that the property owner can document that the structure was legally in existence at the time the Fee was adopted.
6. Residential accessory structures, as defined by local government regulations or code.
7. Public facilities, as defined by local government regulations or code.
8. Any temporary structure approved in accordance with the FMC for a period not to exceed a specified period (e.g., thirty (30) days in any calendar year). In some cases, temporary buildings that are authorized for more than thirty (30) days in any calendar year shall be required to pay the Fee. But later when the building is removed, the fee, or a portion thereof, may be refunded or credited to a permanent structure in the Project Area. All refunds are subject to a deduction of appropriate administration fees.
9. Upon approval by the governing body, a portion of the fee may be reduced for housing development approved for very low-income occupants.

The following are examples of times that the fee may be collected for land uses that could be classified as exempt from the fees.

1. Any project listed as exempt but which nonetheless, in the opinion of the local government, increases the demand upon facilities funded by the Fee. The local government may pro-rate the amount of the fee based upon the project's anticipated impact upon the subject facility or facilities.
2. Illegal facilities and buildings, constructed prior to the adoption of the fee, which consequently obtain a building permit to legitimize the facility or building, shall pay the applicable fee.
3. Accessory residential structures that are converted to a separate residential dwelling unit shall pay the fee for multifamily development as long the primary residence remains on the property.

5.4 Annual Review, Accounting and Updates

5.4.1 Annual Review

The technical information this Study contains should be maintained and reviewed periodically by the local government as necessary to ensure TIF accuracy and to enable the adequate programming of funding sources. To the extent that improvement requirements, costs, or development potential changes over time, the TIF will need to be updated.

If sufficient fees have been collected to fund the construction of an improvement, the local government must specify the approximate date for construction of that improvement. Because of the dynamic nature of growth and infrastructure requirements, the local government should monitor development activity, the need for infrastructure improvements, and the adequacy of the fee revenues and other available funding. Formal annual

review of the Fee Program should occur, at which time adjustments should be made. Costs associated with this monitoring and updating effort are included in the Impact Fee as an administrative charge.

5.4.2 Surplus Funds

If any portion of a fee remains unexpended or uncommitted in an account for five years or more after deposit of the fee, the local government shall make findings once each year: (1) to identify the purpose to which the fee is to be put, (2) to demonstrate a reasonable relationship between the fee and the purpose for which it was charged, (3) to identify all sources and amounts of funding anticipated to complete financing of incomplete improvements, and (4) to designate the approximate dates on which the funding identified in (3) is expected to be deposited into the appropriate fund.

If adequate funding has been collected for a certain improvement, an approximate date should be specified as to when construction on the improvement will begin. If the findings show no need for the unspent funds, or if the conditions discussed above are not met, and the administrative costs of the refund do not exceed the refund itself, the local government that has collected the funds must refund them.

5.4.3 Internal Loaning of Funds

Inter-fund loans may be used from time to time to facilitate the construction of TIF facilities. Any such loan shall be made in accordance with applicable law, as interpreted by the local government Attorney, and all funds shall be placed in separate accounts on either a facility or geographic basis. The additional following requirements are also placed on inter-fund loans:

- Funds may be transferred between accounts to expedite the construction of critical projects/facilities.
- A mechanism to repay accounts shall be established.
- Inter-fund loan repayments shall take precedence over reimbursements to developers.

5.4.4 Five-Year Update

Fees will be collected from new development within the jurisdiction immediately; however, use of these funds may need to wait until a sufficient fund balance can be accrued. The local government is required to deposit, invest, account for, and expend the fees in a prescribed manner. The fifth fiscal year following the first deposit into the Fee account or fund, and every five years thereafter, the local government should make all the following findings with respect to that portion of the account or fund remaining unexpended:

- Identify the purpose for which the fee is to be used;
- Demonstrate a reasonable relationship between the fee and the purpose for which it is charged;
- Identify all sources and amounts of funding anticipated to complete financing in incomplete improvements; and
- Designate the approximate dates on that the funding referred to in the above paragraph is expected to be deposited in the appropriate account or fund.

Once sufficient funds have been collected to complete the specified projects, the local government must commence construction as soon as reasonably practicable. If they fail to do this, the local government is required to refund the unexpended portion of the fee and any accrued interest to the then current owner.

5.5 SECURING SUPPLEMENTAL FUNDING

The Impact Fee is not appropriate for funding the full amount of all capital costs identified in this Study. The local government will have to identify funding and pay for improvements related to existing and new developments and improvements not funded by the Fee Program or any other established funding source. Indeed, as part of the adoption of the fee, the local government is likely to adopt a finding that it will obtain and allocate funding from various other sources for the fair share of the costs of improvements identified in this Study that are not funded by the Fee Program examples of such sources include the following:

- **Assessments and Special Taxes**. The local government could fund a portion of capital facilities costs using assessments and special taxes. For example, the establishment of a Special District would allow the local government to levy a special tax to pay debt service on bonds sold to fund construction of capital facilities or to directly fund capital facilities.
- **Federal, State or Reginal Funds**. The local government might seek and obtain grant of matching funds from Federal, State and/or regional sources to help offset the costs of required capital facilities and improvements. As part of its funding effort, the local government should research and monitor these outside revenue sources and apply for funds as appropriate.
- **General Fund Revenues**. In any given year, the local government could allocate a portion of its General Fund revenues for discretionary expenditures. Depending on the revenues generated relative to costs and government priorities, the local government may allocate General Fund revenues to fund capital facilities costs not covered by the Fee Program or other funding sources.
- **Other Grants and Contributions.** A variety of grants or contributions from private donors could help fund a number of capital facilities. For example, private foundations and/or charity organizations may provide money for certain bicycle and pedestrian facilities.

APPENDIX A: Detailed TIF Project List and Costs Estimates

The construction costs used in the TMP were developed using unit cost methodologies typically applied in preliminary feasibility level design analysis. All costs assume full reconstruction of existing roads. Typical cross-section costs were developed on a per mile basis and applied to each road segment to obtain total costs estimates for each road segment. The worksheets are included in this appendix.

Engineers Opinion of Probably Cost: 1-Mile Typical	Alternative:	Expressway
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	146,667	$ 4,400,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	30,976	$ 3,407,400.00
4					$ -
5	ABC[2]	CY	$ 70.00	13,037	$ 912,600.00
6					$ -
9	C&G	LF	$ 25.00	0	$ -
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	0	$ -
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	0	$ -
16					$ -
				Total Core Items:	$ 8,720,000.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	2.0%	$ 174,400.00
Water Quality and Revegetation	8.0%	$ 697,600.00
Drainage (General)	20.0%	$ 1,744,000.00
Signing, Striping, Lighting	10.0%	$ 872,000.00
Construction Traffic Control	5.0%	$ 436,000.00
Utilities	5.0%	$ 436,000.00
Total Miscellaneous Items		$ 4,360,000.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 150.00		$ -
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Wetlands Mitigation				$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ -
			Subtotal of Construction Costs	$ 13,080,000.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 1,308,000.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 2,616,000.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 3,924,000.00
Total Construction Costs		$ 17,004,000.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 1,308,000.00
Construction Engineering/Administration	10.0%	$ 1,308,000.00
Total Engineering Costs		$ 2,616,000.00

Other Items

Right of Way	Project Dependent	
Total Project Cost (2021 Dollars)		$ 19,620,000.00

[1] Assumed a full re-construct with 12" of asphalt

[2] Assumed a full re-construct with 10" of ABC

[3] 6" Concrete

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Total Project Cost (2021 Dollars)

Engineers Opinion of Probably Cost: 1-Mile Typical	Alternative:	Major Arterial
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	6,000	$ 180,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	22,716	$ 2,498,700.00
4					$ -
5	ABC[2]	CY	$ 70.00	14,341	$ 1,003,900.00
6					$ -
9	C&G	LF	$ 25.00	21,120	$ 528,000.00
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	9,387	$ 469,300.00
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	110,880	$ 1,663,200.00
16					$ -
				Total Core Items:	$ 6,343,100.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	15.0%	$ 951,500.00
Water Quality and Revegetation	8.0%	$ 507,400.00
Drainage (General)	20.0%	$ 1,268,600.00
Signing, Striping, Lighting	10.0%	$ 634,300.00
Construction Traffic Control	15.0%	$ 951,500.00
Utilities	10.0%	$ 634,300.00
Total Miscellaneous Items		$ 4,947,600.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 150.00		$ -
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Wetlands Mitigation				$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ -
			Subtotal of Construction Costs	$ 11,290,700.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 1,129,100.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 2,258,100.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 3,387,200.00
Total Construction Costs		$ 14,677,900.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 1,129,100.00
Construction Engineering/Administration	10.0%	$ 1,129,100.00
Total Engineering Costs		$ 2,258,200.00

Other Items

Right of Way	Project Dependent	
Total Project Cost (2021 Dollars)		$ 16,936,100.00

[1] Assumed a full re-construct with 8" of asphalt

[2] Assumed a full re-construct with 10" of ABC

[3] 6" Concrete

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Total Project Cost (2012 Dollars)

Engineers Opinion of Probably Cost: 1-Mile Typical	Alternative:	Arterial
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	6,000	$ 180,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	16,004	$ 1,760,500.00
4					$ -
5	ABC[2]	CY	$ 70.00	10,104	$ 707,300.00
6					$ -
9	C&G	LF	$ 25.00	21,120	$ 528,000.00
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	9,387	$ 469,300.00
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	63,360	$ 950,400.00
16					$ -
				Total Core Items:	$ 4,595,500.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	15.0%	$ 689,300.00
Water Quality and Revegetation	8.0%	$ 367,600.00
Drainage (General)	20.0%	$ 919,100.00
Signing, Striping, Lighting	10.0%	$ 459,600.00
Construction Traffic Control	15.0%	$ 689,300.00
Utilities	10.0%	$ 459,600.00
Total Miscellaneous Items		$ 3,584,500.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 150.00		$ -
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Wetlands Mitigation				$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ -
			Subtotal of Construction Costs	$ 8,180,000.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 818,000.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 1,636,000.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 2,454,000.00
Total Construction Costs		$ 10,634,000.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 818,000.00
Construction Engineering/Administration	10.0%	$ 818,000.00
Total Engineering Costs		$ 1,636,000.00

Other Items

Right of Way	Project Dependent	
Total Project Cost (2021 Dollars)		$ 12,270,000.00

[1] Assumed a full re-construct with 8" of asphalt

[2] Assumed a full re-construct with 10" of ABC

[3] 6" Concrete

05/27/21 12:35:26
Total Project Cost (2012 Dollars)

Engineers Opinion of Probably Cost: 1-Mile Typical	Alternative:	Minor Arterial
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	6,000	$ 180,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	18,586	$ 2,044,400.00
4					$ -
5	ABC[2]	CY	$ 70.00	11,733	$ 821,300.00
6					$ -
9	C&G	LF	$ 25.00	10,560	$ 264,000.00
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	7,040	$ 352,000.00
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	0	$ -
16					$ -
				Total Core Items:	$ 3,661,700.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	15.0%	$ 549,300.00
Water Quality and Revegetation	8.0%	$ 292,900.00
Drainage (General)	20.0%	$ 732,300.00
Signing, Striping, Lighting	10.0%	$ 366,200.00
Construction Traffic Control	15.0%	$ 549,300.00
Utilities	10.0%	$ 366,200.00
Total Miscellaneous Items		$ 2,856,200.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 150.00		$ -
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Wetlands Mitigation				$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ -
			Subtotal of Construction Costs	$ 6,517,900.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 651,800.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 1,303,600.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 1,955,400.00
Total Construction Costs		$ 8,473,300.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 651,800.00
Construction Engineering/Administration	10.0%	$ 651,800.00
Total Engineering Costs		$ 1,303,600.00

Other Items

Right of Way	Project Dependent	
Total Project Cost (2021 Dollars)		$ 9,776,900.00

[1]Assumed a full re-construct with 8" of asphalt

[2]Assumed a full re-construct with 10" of ABC

[3]6" Concrete

05/27/21 12:35:26
Total Project Cost (2012 Dollars)

Engineers Opinion of Probably Cost: 1-Mile Typical	Alternative:	Collector
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	6,000	$ 180,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	11,874	$ 1,306,200.00
4					$ -
5	ABC[2]	CY	$ 70.00	7,496	$ 524,700.00
6					$ -
9	C&G	LF	$ 25.00	10,560	$ 264,000.00
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	7,040	$ 352,000.00
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	0	$ -
16					$ -
				Total Core Items:	$ 2,626,900.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	15.0%	$ 394,000.00
Water Quality and Revegetation	8.0%	$ 210,200.00
Drainage (General)	20.0%	$ 525,400.00
Signing, Striping, Lighting	10.0%	$ 262,700.00
Construction Traffic Control	15.0%	$ 394,000.00
Utilities	10.0%	$ 262,700.00
Total Miscellaneous Items		$ 2,049,000.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 150.00		$ -
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Wetlands Mitigation				$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ -
			Subtotal of Construction Costs	$ 4,675,900.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 467,600.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 935,200.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 1,402,800.00
Total Construction Costs		$ 6,078,700.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 467,600.00
Construction Engineering/Administration	10.0%	$ 467,600.00
Total Engineering Costs		$ 935,200.00

Other Items

Right of Way	Project Dependent	

Total Project Cost (2021 Dollars)	$ 7,013,900.00

[1] Assumed a full re-construct with 8" of asphalt

[2] Assumed a full re-construct with 10" of ABC

[3] 6" Concrete

05/27/21 12:35:26
Total Project Cost (2012 Dollars)

Engineers Opinion of Probably Cost: 1-Mile Typical	Alternative:	Minor Collector
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	6,000	$ 180,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	11,874	$ 1,306,200.00
4					$ -
5	ABC[2]	CY	$ 70.00	7,496	$ 524,700.00
6					$ -
9	C&G	LF	$ 25.00	10,560	$ 264,000.00
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	7,040	$ 352,000.00
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	0	$ -
16					$ -
				Total Core Items:	$ 2,626,900.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	15.0%	$ 394,000.00
Water Quality and Revegetation	8.0%	$ 210,200.00
Drainage (General)	20.0%	$ 525,400.00
Signing, Striping, Lighting	10.0%	$ 262,700.00
Construction Traffic Control	15.0%	$ 394,000.00
Utilities	10.0%	$ 262,700.00
Total Miscellaneous Items		$ 2,049,000.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 150.00		$ -
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Wetlands Mitigation				$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ -
			Subtotal of Construction Costs	$ 4,675,900.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 467,600.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 935,200.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 1,402,800.00
Total Construction Costs		$ 6,078,700.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 467,600.00
Construction Engineering/Administration	10.0%	$ 467,600.00
Total Engineering Costs		$ 935,200.00

Other Items

Right of Way	Project Dependent	

Total Project Cost (2021 Dollars)	$ 7,013,900.00

[1] Assumed a full re-construct with 8" of asphalt

[2] Assumed a full re-construct with 10" of ABC

[3] 6" Concrete

05/27/21 12:35:26
Total Project Cost (2012 Dollars)

Engineers Opinion of Probably Cost: Bridge 200'	Alternative:	Bridge
	Prepared By:	S. Asher
	Date Prepared:	03/15/21

Core Items

	Item	Unit	Unit Cost	Quantity	Extended Cost
1	Earthwork (Embankment)	CY	$ 30.00	6,000	$ 180,000.00
2					$ -
3	HBP[1]	TON	$ 110.00	2,078	$ 228,600.00
4					$ -
5	ABC[2]	CY	$ 70.00	1,312	$ 91,800.00
6					$ -
9	C&G	LF	$ 25.00	2,000	$ 50,000.00
10					$ -
11	Concrete Sidewalk/Trail[3]	SY	$ 50.00	667	$ 33,300.00
12					$ -
13	Guardrail	LF	$ -		$ -
14					$ -
15	Median Cover Material	SF	$ 15.00	0	$ -
16					$ -
				Total Core Items:	$ 583,700.00

Miscellaneous Items	% of Core Items	Cost
Removals, Resets & Adjustments	15.0%	$ 87,600.00
Water Quality and Revegetation	8.0%	$ 46,700.00
Drainage (General)	10.0%	$ 58,400.00
Signing, Striping, Lighting	10.0%	$ 58,400.00
Construction Traffic Control	10.0%	$ 58,400.00
Utilities	10.0%	$ 58,400.00
Total Miscellaneous Items		$ 367,900.00

Major Items (Project Dependent)

Item	Unit	Unit Cost	Quantity	Extended Cost
Bridges	SF	$ 250.00	18,400.00	$ 4,600,000.00
Retaining Walls	SF	$ 90.00		$ -
Box Culverts	LF	$ 200.00		$ -
Major Channel Improvements	SF			$ -
Sound and Visual Barriers	SF	$ 30.00		$ -
Traffic Signal	EA	$ 400,000.00	-	$ -
Landscape Enhancement	LS	$ -	1.00	$ -
			Total Major Items	$ 4,600,000.00
			Subtotal of Construction Costs	$ 5,551,600.00

Other Construction Items (% of Subtotal of Construction Costs)

Mobilization	10.0%	$ 555,200.00
Contaminated Soils and Hazardous Materials Mitigation	0.0%	$ -
Contingency/Force Account	20.0%	$ 1,110,300.00
Railroad Flagging	Project Dependent	
Total Other Construction Items		$ 1,665,500.00
Total Construction Costs		$ 7,217,100.00

Engineering Costs (% of Subtotal of Construction Costs)

Design Engineering	10.0%	$ 555,200.00
Construction Engineering/Administration	10.0%	$ 555,200.00
Total Engineering Costs		$ 1,110,400.00

Other Items

Right of Way	Project Dependent	
Total Project Cost (2021 Dollars)		$ 8,327,500.00

[1] Assumed a full re-construct with 8" of asphalt

[2] Assumed a full re-construct with 10" of ABC

[3] 6" Concrete

05/27/21 12:35:26
Total Project Cost (2012 Dollars)

Road Segment	Improvement Type	From	To	Length (miles)	Lanes	Functional Class	Unit Cost/Mile	Cost
Regional Facilities								
Mesa Ridge Parkway	Mesa Ridge Parkway	Marksheffel Rd.	N-S loop	0.75	4	Major Arterial	$ 17,000,000.00	$12,750,000
	Bridge over Jimmy Camp Creek			2.00			$ 8,400,000.00	$16,800,000
Mesa Ridge Parkway	New Roadway	N-S Loop	E-W Spine	0.90	4	Major Arterial	$ 17,000,000.00	$15,300,000
Mesa Ridge Parkway	New Roadway	Unnamed E-W Roadway	Meridian Rd.	1.30	4	Major Arterial	$ 17,000,000.00	$22,100,000
Powers Boulevard	New Roadway	Mesa Ridge Pkwy.	Squirrel Creek Rd.	2.50	4	Expressway	$ 19,600,000.00	$49,000,000
	Mesa Ridge Parkway Interchange			1.00			$ 40,000,000.00	$40,000,000
	Bridge over Cross Creek Parkway			1.00			$ 8,400,000.00	$8,400,000
	Bridge over Marksheffel Road			1.00			$ 8,400,000.00	$8,400,000
	Bridge over Jimmy Camp Creek/Amara Roadway			1.00			$ 8,400,000.00	$8,400,000
	Bridge over Amara E-W Spine Road			1.00			$ 8,400,000.00	$8,400,000
	Squirrel Creek Road Interchange			1.00			$ 40,000,000.00	$40,000,000
Powers Boulevard	New Roadway	Squirrel Creek Rd.	Wilson Rd.	2.00	4	Expressway	$ 19,600,000.00	$39,200,000
	Bridge over Kane Road			1.00			$ 40,000,000.00	$40,000,000
	Bridge over Wilson Road			1.00			$ 40,000,000.00	$40,000,000
Powers Boulevard	New Roadway	Wilson Rd.	N-S Loop	3.00	4	Expressway	$ 19,600,000.00	$58,800,000
	Amara N-S Loop Roadway Interchange			1.00			$ 40,000,000.00	$40,000,000
Powers Boulevard	New Roadway	N-S Loop	Birdsall Rd	1.80	4	Expressway	$ 19,600,000.00	$35,280,000
	Birdsall Road Interchange			1.00			$ 40,000,000.00	$40,000,000
Powers Boulevard	New Roadway	Birdsall Rd.	I-25	1.80	4	Expressway	$ 19,600,000.00	$35,280,000
	Overpass			1.00			$ 8,400,000.00	$8,400,000
	Bridge over Fountain Creek			2.00			$ 8,400,000.00	$16,800,000
	I-25 Interchange			1.00			$ 70,000,000.00	$70,000,000
Sub-Total								**$653,310,000**
Fountain Facilities								
Squirrel Creek Road	Widening/Upgrades	Meridian	Powers Blvd	2.49	4	Major Arterial	$ 17,000,000.00	$42,330,000
Squirrel Creek Road	Widening/Upgrades	Powers Blvd.	Jimmy Camp Rd.	1.50	4	Arterial	$ 12,300,000.00	$18,450,000
Squirrel Creek Road	New Roadway	Jimmy Camp Rd.	Fountain Mesa Rd.	0.80	4	Arterial	$ 12,300,000.00	$9,840,000
	Bridge over Jimmy Camp Creek			2.00			$ 8,400,000.00	$16,800,000
Comanche Village Drive	Widening/Upgrades	Fountain Mesa Rd.	US 85/Santa Fe Ave.	0.50	4	Arterial	$ 12,300,000.00	$6,150,000
Kane Road	New Roadway	Shumway Rd.	Meridian Rd.	3.00	2	Minor Arterial	$ 9,800,000.00	$29,400,000
Kane Road	Widening/Upgrades	Link Road	Shumway Rd.	0.50	2	Minor Arterial	$ 9,800,000.00	$4,900,000
Kane Road/Ohio Avenue Connection	New Roadway	Link Rd.	REA Rd.	0.35	2	Minor Arterial	$ 9,800,000.00	$3,430,000
Wilson Road	New Roadway	Old Pueblo Rd.	Orleans Rd	0.40	4	Arterial	$ 12,300,000.00	$4,920,000
Wilson Road	Widening/Upgrade	Orleans Rd.	Progress Dr.	0.50	4	Arterial	$ 12,300,000.00	$6,150,000
Wilson Road	New Roadway	Progress Dr.	Meridian Rd.	3.62	4	Arterial	$ 12,300,000.00	$44,526,000
Birdsall Road	Widening/Upgrade	Powers Blvd.	Old Pueblo Rd.	0.95	4	Minor Arterial	$ 9,800,000.00	$9,310,000
Bandley Road	New Roadway	Terminus north of SH 16	US 85/Santa Fe Ave.	1.25	3	Minor Arterial	$ 9,800,000.00	$12,250,000
	Bridge			1.00			$ 8,400,000.00	$8,400,000
Jimmy Camp Road	New Roadway	Wilson Rd.	Ruebenson Pkwy.	1.80	2	Collector	$ 7,000,000.00	$12,600,000
N-S Loop	New Roadway	Wilson Rd.	Powers Blvd.	1.80	4	Arterial	$ 12,300,000.00	$22,140,000
N-S Loop	New Roadway	Powers Blvd.	Old Pueblo Rd.	1.70	4	Arterial	$ 12,300,000.00	$20,910,000
N-S Loop	New Roadway	Old Pueblo Rd.	I-25	0.40	4	Arterial	$ 12,300,000.00	$4,920,000
	I-25 Interchange and Bridges			1.00			$ 50,000,000.00	$50,000,000
Sub-Total								**$327,426,000**
Privately Funded								
E-W Spine	New Roadway	Link Rd.	N-S Loop	2.00	2	Collector	$ 7,000,000.00	$14,000,000
E-W Spine	New Roadway	N-S Loop	Mesa Ridge Pkwy.	2.00	2	Minor Arterial	$ 9,800,000.00	$19,600,000
N-S Loop	New Roadway	Mesa Ridge Pkwy.	Squirrel Creek Rd.	1.70	4	Arterial	$ 12,300,000.00	$20,910,000
N-S Loop	New Roadway	Squirrel Creek Rd.	Wilson Rd.	2.10	4	Arterial	$ 12,300,000.00	$25,830,000
Sub-Total								**$80,340,000**
Total								**$1,061,076,000**

APPENDIX B: Non-Regional TIF Program

1. CITY OF FOUNTAIN TIF ANALYSIS (NON-REGIONAL)

This Appendix describes an alternative non-regional approach to establishing a TIF to support funding the growth-induced transportation improvements within the City. The proposed funding program would involve the establishment of a TIF within the City and an access fee program for development outside the City when accessing City roads. The program basis remains the same as described in Chapter 1-3 of this Study. The overall methodology to arrive at the maximum TIF also follows the same approach. Under this approach the Projects within the City and outside the City within the Study Area are not regionalized for funding purposes.

1.1 PROJECTS AND GROWTH

Table 8 in Chapter 3 details the list of Projects that are eligible for inclusion in the TIF in both the City and outside the City as adjusted for projected traffic demands in 2045. Excess capacity has been removed and would need to be funded through other mechanisms or by growth beyond 2045. **Table 8** identifies $75,226,016 in Project costs in the areas outside the City and $118,490,984 within the City.

The ability of the City to support new development is limited by current and future water supply. According to the 2021 City of Fountain Water Master Plan, a comprehensive assessment of City water supply, treatment, storage, demand, distribution, and maintenance concluded that the City could serve additional 7,000 dwelling units and commercial development with new taps. City staff mapped approved development within the current municipal boundaries. Developments were categorized based on timing (under construction, 1-3 years, 3-6 years, and 7+ years), as well as the priority/commitment of the City to supply water to the development. The intent was to determine how much additional development could be supported by the City's water supply. New development within the City boundaries were classified as (1) infill, in-progress; (2) served by Security-Widefield Wastewater Sanitation District(WWSD)/Security Water; or (3) outlier development. The analysis yielded an estimated 7,000 dwelling units that could be accommodated within the current municipal boundaries supplied by Fountain and Security-Widefield water, and an additional 25,000 dwelling units that could not be supplied with water by the City and therefore could not be annexed into the City. The outlier developments that had been slated for annexation into the City arelocated along the eastern boundary of the City within unincorporated El Paso County.

To model the relative contributions of new development and establish the need for transportation infrastructure improvements, the TAZs in which outlier development would be located were evaluated as fully external or partially external TAZs. Because an initiative to de-annex of the Kane Ranch parcel from the City is underway, most of that TAZ was also modeled as an external TAZ. Using this approach, the City and outside of City growth projections were established to assign trips and determine the applicable TIF within the City. These boundaries were also used to assign the Projects to City or outside of City jurisdiction as depicted on **Figure 1** in Chapter 3.

As shown in **Tables A and B**, the growth in the City is approximately 30.7% of the growth outside the City through 2045. When translated into PM trips (**Tables C and D**), the growth in the City represents approximately 35.5% of the total growth in the Fountain Region. This would mean that the raw cost per trip by City development to fund necessary City road improvements would be approximately $14,662 per trip while the cost for development outside the City would be less than $3500 per trip.

Table A. City of Fountain Land Use Assumptions and Forecasts

Land Use	Year		Growth
	2020	2045	(2020-2045)
Residential Uses			
Single Family (Detached)	7,477	11,180	3,703
Multifamily (Low-Rise)	3,359	5,023	1,664
Total	10,835	16,203	5,367
Non-Residential Uses			
Retail (1000 sf)	821	2,251	1,431
Office (1000 sf)	1,008	1,297	289
Light Industrial (1000 sf)	202	293	91

Table B. Outside City of Fountain Land Use Assumptions and Forecasts

Land Use	Year		Growth
	2020	2045	(2020-2045)
Residential Uses			
Single Family (Detached)	2,748	15,683	12,935
Multifamily (Low-Rise)	1,234	7,046	5,812
Total	3,982	22,729	18,747
Non-Residential Uses			
Retail (1000 sf)	91	2,748	2,657
Office (1000 sf)	53	486	433
Light Industrial (1000 sf)	18	230	212

Table C. City of Fountain Trip Generation Projections

Land Use	Trip Demand Factor[1]	PM Trip Rate[2]	2020 PM Trips[3]	2045 PM Trips[3]	Trip Growth
Residential Units					
Single Family (Detached)	0.98	0.99	7,402	11,068	3,666
Multifamily (Low-Rise)	0.55	0.56	1,881	2,813	932
Non-Residential Units					
Retail	1.64	3.81	1346	3,692	2,346
General Office Building	2.15	1.15	2168	2,788	620
Light Industrial	0.81	0.63	163	237	74
Total			**12,960**	**20,598**	**7,638**

Table D. Outside City of Fountain Trip Generation Projections

Land Use	Trip Demand Factor[1]	PM Trip Rate[2]	2020 PM Trips[3]	2045 PM Trips[3]	Trip Growth
Residential Units					
Single Family (Detached)	0.98	0.99	2,720	15,526	12,806
Multifamily (Low-Rise)	0.55	0.56	691	3,946	3,254
Non-Residential Units					
Retail	1.64	3.81	150	4,506	4,357
General Office Building	2.15	1.15	114	1,045	931
Light Industrial	0.81	0.63	14	186	172
Total			**3,690**	**25,209**	**21,520**

So why is there such a dramatic difference in infrastructure demands between the City and outside the City? Are the City roads built to substandard conditions? Does the City currently have roads that are failing to meet capacity requirements? **Table 7** in Chapter 3 documents that only one road within the Fountain Region, including the City, requires capacity improvements at the present time and the TMP shows that all other roads in the City are not only operating at adequate levels of service but have the capacity to accommodate the City's projected growth through 2045 with minor connectivity improvements if no growth occurred outside the City.

The City sits in a unique position relative to the identified development areas and the regional economic centers and transportation corridors. Therefore, the TMP shows that a vast majority of the necessary City road

improvements required by the TMP to meet expected Fountain Region growth are driven by growth in the areas surrounding the City and by through-trips.

1.2 TRAVEL DEMAND, COST ALLOCATION, AND CITY TIF

As stated in Chapter 4, the calibrated Fountain TMP Subarea Transportation Model can be used to derive characteristics of vehicle travel demand including the following:

- Internal (trips that start and end in the Fountain Region)
- Internal/External (trips that have one end either beginning or ending in the Fountain Region)
- Through (trips that pass completely through the Fountain Region without stopping)

Only the trips starting or ending in the Fountain Region (i.e., Internal trips and Internal/External trips) are responsible for the TIF program costs. So also, only the trips starting or ending in the City (i.e., Internal trips and Internal/External trips) can be used to allocate costs to new development within the City.

Table 10 illustrates the characteristics of vehicle travel demand in the Fountain Region. However, because the proposed transportation network reallocates existing trips to new routes, it becomes impractical to use the same Select Link methodology to determine allocations of new City development trips on a segment-by-segment basis. As a result, a Regionwide approach must be utilized to allocate growth-related City vs. outside of-City development trips to the transportation network to determine the cost allocation of City and outside of City development. Using a Regionwide allocation of new development trips, the allocation attributes 26.2% of the new development trips to the growth within the City and 73.8% to areas outside the City.

The Regionwide-allocation approach, however, fails to capture the impact of the connectivity improvements in the TMP which remove and reallocate existing trips from existing facilities and create capacity outside the City so likely overestimates the cost share of trips from new City development. Even though this methodology likely results in overestimating the share of cost allocated to new development within the City, as shown in **Table E**, the City facilities would be significantly underfunded by a City TIF. As shown in **Table E**, the City would not only be required to fund future improvements beyond 2045 but would be left with a deficit of approximately $87M, or $3.8M annually to fund through other methods if the City adopted the maximum TIF rate schedule shown in **Table G** (based on the Maximum Fee per Trip in **Table F)** and would only generate $27.6M in TIF revenue. This results in a TIF that would fund approximately 26% of the necessary transportation system improvements in comparison to the Fountain Region TIF presented in Chapter 4 which would fund nearly 82% of the TIF eligible projects through 2045.

Table E. City of Fountain Cost Allocation Assumptions

Road Segment	Total Project Costs Less Adjustments	Share Allocation to New City Development	Cost Allocated to City TIF Program
Bandley Road (10)	$8,750,000	26%	$2,292,500
	$8,400,000	26%	$2,200,800
Squirrel Creek Road (11b)	$17,511,838	26%	$4,588,102
Squirrel Creek Road (12)	$9,870,000	26%	$2,585,940
Squirrel Creek Road (13)	$5,320,000	26%	$1,393,840
	$15,960,000	26%	$4,181,520
Kane Road (15)	$21,000,000	26%	$5,502,000
Kane Road (16)	$3,500,000	26%	$917,000
Kane/Ohio Connection (17)	$2,450,000	26%	$641,900
Wilson Road (18)	$2,800,000	26%	$733,600
Wilson Road (19)	$3,500,000	26%	$917,000
Jimmy Camp Road (21a)	$6,300,000	26%	$1,650,600
Autumn Glen Ave. (33)1	$0	26%	$0
Eligible Regional Transportation Projects – Total			**$114,579,933**
Adjusted Cost Allocation for X-X Trips (from Table 11)			**$105,361,838**
City of Fountain TIF Eligible Project Costs – Total			**$27,604,802**
City of Fountain Funding Required through 2045			**$86,975,132**

Table F. Maximum Fee per Trip City of Fountain Non-Regional

	Fountain Region
Fee Program Share of Transportation Facility Costs	$27,604,802
Growth in PM Trips	7,638
Cost per Trip	**$3,614**

Table G. Maximum TIF Schedule City of Fountain

Land Use	Trip Demand Factor	Unit	Raw Fee	Administrative Charge	Total TIF per Unit
Residential Units					
Single Family (Detached)	0.98	Dwelling	$3,541	2%	$3,612
Multifamily (Low-Rise)	0.55	Dwelling	$1,987	2%	$2,027
Non-Residential Units					
Hotel/Motel	0.61	1,000 sf	$2,412	2%	$2,460
General Retail	3.81	1,000 sf	$4,266	2%	$4,353
Convenience Retail	49.11	1,000 sf	$7,572	2%	$7,726
Office	1.42	1,000 sf	$7,762	2%	$7,920
Light Industrial	0.81	1,000 sf	$2,930	2%	$2,990

- **Single-Family Residential:** This category refers to detached single-family homes. Traffic impact fees for newsingle-family residential development are applied on a per unit basis.
- **Multifamily Residential:** This category covers apartments, townhomes, condos, duplexes, and other multifamily housing in which walls are shared among units. Traffic impact fees for new construction of thistype of residential development are applied on a per unit basis.
- **Hotel/Motel:** This category covers places of lodging that provide sleeping accommodations and supporting facilities such as restaurants, meeting rooms and limited recreational facilities.
- **General Retail: General r**etail development can include shopping centers, discount stores, nurseries, factory outlets, car sales lots, and specialty stores. Traffic impact fees for new construction of this type of development are applied on a square footage basis.
- **Convenience Retail:** This retail category includes convenience retail businesses that are characterized by fast turn-over and typically include either drive-through windows and/or vehicle fueling stations.
- **Office:** This category covers general offices, including professional and medical office development, government offices, and post offices. Traffic impact fees for this type of development are applied on a squarefootage basis.
- **Light Industrial:** This category includes all free standing and single use processing and manufacturing usesfocused on consumer goods generally. Typical uses include automotive body repair and paint shops, commercial manufacturing and research facilities, printing plants, material testing laboratories, data processing. Traffic impact fees for new construction of this type of development are applied on a square footage basis.

1.3 FUNDING FROM DEVELOPMENT IMPACTS OUTSIDE THE CITY

The City has limited options for funding transportation impacts from development occurring within the Fountain Region outside the City. State, regional, and intergovernmental cost sharing may be sought; special taxes may be proposed to the electorate; or the City may reallocate existing general fund resources. Each of these funding options is beyond the solitary control of the municipal government or, as in the case of general fund revenues, may require making other municipal government spending cuts to free revenue. The City could also seek to become part of the Pike Peak Region Transportation Authority (PPRTA) and to have some of the identified projects included within the PPRTA capital program. This could help to fill some of the gap in funding of the City's road network improvements. City residents and businesses currently generate approximately $1.2M annually in sales tax revenue to PPRTA due to sales leakage from the City to the larger region and would likely generate an additional $3.5M annually in revenue if the City were to become part of the PPRTA.

Finally, to help fill the gap created under a non-regional TIF, the City may also establish access fees, as a form of impact fee, for access to City roads from developments outside the City when the development takes direct access to a City road. Of the $87M funding deficit, approximately $77.7M is associated with development impacts from outside the City. The City could base an access fee on trying to recover this cost from development outside the City. Based on the overall development within the TCP, the fees would be broken down as shown in **Table H**. These should be collected at the time of access approval based on the maximum development approved within the development project and all adjacent development having access to the City road through the proposed development based on a build-out traffic analysis conducted by the City. The collections should be established pursuant to a Development Agreement.

Table H. Maximum Access Fee per Trip for Development Outside

	Fountain Region
Fee Program Share of Transportation Facility Costs	$77,757,036
Growth in PM Trips	21,520
Cost per Trip	**$3,613**

The access fee does not consider the costs of transportation system improvements outside the City. Further, just as the TIF for the City likely overestimates the cost allocated to development in the City using the Regionwide cost allocation, the access fee not only likely underestimates the cost allocated with development outside the City but will also generate significantly less revenue than would be generated by establishing a Regional TIF for the entire Fountain Region. Since the access fee can only be applied to developments taking direct access to City streets, it will not be applied to most of the development occurring outside the City. It is difficult to estimate with any certainty how much revenue an access fee would produce to offset transportation system impacts in the City.

1.4 REGIONAL SOLUTION NEEDED

This Appendix provides an alternative for the City to fund transportation system impacts associated with development if regional cooperation cannot be achieved. A non-Regional approach has numerous flaws. The most important of which is that it significantly under funds necessary City transportation system improvements and places the regional financial burdens and direct transportation system impacts on the City and its taxpayers. This is a significant $60-80M consequence to the City. The City can overcome some of that burden through participation in the PPRTA. Although City taxpayers are currently paying a PPRTA tax on some of their goods and services, joining the PPRTA does have an additional tax consequence to municipal taxpayers.

The non-Regional approach also leaves the areas outside the City without a plan to fund necessary transportation infrastructure within the Fountain Region. Without actions by the governments with jurisdiction in these areas, the impacts to the City will be even more significant since major facilities need to be built outside the City to funnel traffic away from existing roads which traverse the City.

It would appear regional cooperation is essential to ensure equity, the development of a transportation network that functions and limits impacts to the existing community, and limit tax consequences to existing taxpayers in the City and Fountain Region. However, the City of Fountain should not wait until a regional funding strategy is adopted to enact a City TIF program based on the Regional and/or City TIF models to begin to address the transportation impacts associated with growth. The City may adopt the Regional TIF schedule with the intent of establishing a Regional TIF program with other local governments including access fees. If a Regional TIF cannot be established within 2 years, the City would revert to the City TIF program and refund excess TIF collected in the interim period. If a Regional TIF program is established the Region would credit development for access fees paid.