BOCC

**RESOLUTION NO. 16 - 454**

**BOARD OF COUNTY COMMISSIONERS**
**COUNTY OF EL PASO, STATE OF COLORADO**

**RESOLUTION AMENDING THE EL PASO COUNTY ROAD IMPACT FEE PROGRAM**

**WHEREAS,** on November 15, 2012 and pursuant to Resolution No. 12-382, the Board of County Commissioners of El Paso County, Colorado ("Board" or "County") adopted the El Paso County Road Impact Fee Program ("Fee Program"); and

**WHEREAS,** the Fee Program identifies specific improvements to El Paso County's major transportation system necessitated by new development using the Major Transportation Corridors Plan, 2010-2040; and

**WHEREAS,** the Fee Program then establishes a fee structure for new development by calculating a cost per trip based upon standardized unit costs for road construction and new vehicle trips generated by such development, which results a fee amount proportional to new development's impact on the major transportation system; and

**WHEREAS,** the Road Impact Fee Advisory Committee, which is made up of representatives from the development community and El Paso County, was created by the Board to make recommendations regarding administration of and modifications to the Fee Program; and

**WHEREAS,** the Highway Advisory Commission and the Road Impact Fee Advisory Committee recommended approval of the update to the Road Impact Fee Program on November 16, 2016; and

**WHEREAS,** the Board has determined that the methodologies, definitions and unit costs set forth in the Fee Program are sufficiently predictable and specific to grant such administrative authority to the Impact Fee Administrator; and

**WHEREAS,** the Board has further determined imposing an impact fee that is as accurate and equitable as possible, is in the public's best interest.

**NOW, THEREFORE, BE IT RESOLVED** that the El Paso County Board of County Commissioners hereby amends the El Paso County Road Impact Fee Program effective January 1, 2017. The Program shall consist of the updated Fee Study attached hereto as Exhibit A and updated Implementation Document attached hereto as Exhibit B and shall be implemented and administered according to the provisions therein.

**DONE THIS** 15th day of December, 2014 at Colorado Springs, Colorado.

Chuck Broerman
12/15/2016 04:00:10 PM
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El Paso County, CO
216145945

Attest:

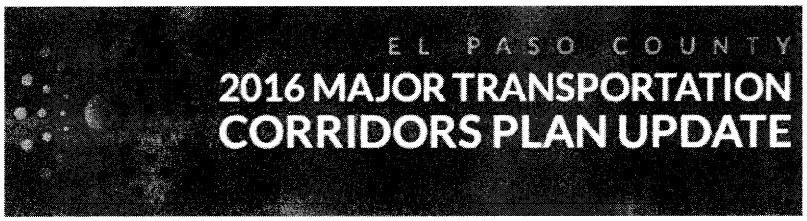
Chuck Broerman,
County Clerk & Recorder

Board of County Commissioners
of El Paso County, Colorado

By: _____
Sallie Clark,
Chair

Resolution 16-454
Exhibit A

# Road Impact Fee Study Update




duncan associates

FELSBURG HOLT & ULLEVIG

**November 16, 2016**

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# INTRODUCTION AND SUMMARY

El Paso County's road impact fee program was adopted in 2012 to create a more equitable method of establishing a fair-share contribution than the previous system of individually-negotiated developer exactions and small-area fees. The program identifies transportation improvements needed to accommodate growth, fairly allocates the costs of transportation improvements among affected developments, and ensures the proper and timely accounting of improvements and funds. The fee program includes options for developers to join a Public Improvement District that covers a portion of the fee obligation with district taxes, allowing for reduced up-front impact fee payment at time of building permit.

## Fee Program Summary

**Types of Improvements.** The road impact fee program covers major corridors that accommodate regional travel. The program does not include all roads, only higher traffic and longer-distance roads (arterials and major rural collectors) within unincorporated El Paso County. Improvements currently included in the fee program have been identified in the current update of the *Major Transportation Corridors Plan* (MTCP). This transportation plan identifies improvements needed to accommodate anticipated growth in the unincorporated area by the year 2040 based on small-area growth forecasts. Only capacity-expanding improvements to County arterials, County rural collectors and selected State roads ("major roads") within the unincorporated area are included. The improvements that are eligible for funding with road impact fees are those identified in the Appendix, although this list may be modified between periodic MTCP/fee study updates with input from the stakeholder committee and approval by the Board of County Commissioners.

**Standardized Unit Costs.** The costs of improvements included in the fee program have been estimated based on standardized unit costs, developed in consultation with a stakeholder committee – the Oversight and Reimbursement Committee. The unit costs developed by the stakeholders are intended to be conservative and are not intended to fully cover all actual costs. The amount of developer credits or reimbursements for improvements identified in the MTCP will be based on the same unit costs. A 5% contingency has been added to address unexpected situations and cases in which the County will need to make improvements and pay higher actual costs. For this update, the unit costs developed in 2012 have been increased by 9.4% based on the recommendation of the stakeholder committee.

**Non-Growth-Related Costs Excluded.** The costs included in the fee calculations exclude any portions of project costs that are attributable to remedying existing deficiencies or accommodating future pass-through traffic.

**Revenue Credits**. The fees are reduced to account for future sales tax and gas tax revenue that new development will generate that will be used to remedy existing deficiencies and fund the planned improvements.

**Developer Credits/Reimbursements.** Colorado law requires that developers who construct improvements for which impact fees are charged receive a credit against their impact fees or be reimbursed. The road impact fee program provides the options of reduced fees and/or reimbursement to the developer in return for developer provision of eligible improvements.

**Public Improvement Districts**. In conjunction with the fee program, the County formed three Public Improvement Districts (PIDs) as an option to supplement the fee program. PID #1 is the controlling PID where all the money is transferred to and disbursed from. PID #2 collects a 10-mill property tax. PID #3 collects a 5-mill property tax. The two different mill levies are designed to give developers more choice of how to pay for the fee obligation. It allows developers to pick the mill levy and upfront fee that is best for their situation.

The PIDs issue bonds that are used to reimburse developers for a portion of their eligible improvement costs. Developers have the option of joining the PID at time of final plat. Developments within the PID are subject to a lower fee at building permit than developments that do not belong to the PID. If a development chooses to join the PID, then the property is subject to a mill levy of either 5 or 10 mills. Currently, there are 876 acres in PID #2 (10 mills) and 184 acres in PID #3 (5 mills).

For properties that join the PID, PID taxes cover a percentage of the impact fee costs. For example, for a single-family home in the 10-mill PID, the present value of future PID taxes equals roughly 81% of the fee obligation for a single-family home, so the fee paid at time of building permit is only about 19% of the full fee amount paid by a single-family home not in the PID. Current road impact fees for each of the PID options are shown in Table 1.

**Table 1. Current Road Impact Fees**

| | | Fee per Unit by PID Option | | |
|---|---|---|---|---|
| Land Use | Unit | Not in PID | PID #3 (5 Mills) | PID #2 (10 Mills) |
| Single-Family | Dwelling | $3,218 | $1,915 | $609 |
| Multi-Family | Dwelling | $2,010 | $1,537 | $1,061 |
| Hotel/Motel | Room | $2,346 | $1,639 | $1,038 |
| General Commercial | 1,000 sf | $4,166 | $3,059 | $1,953 |
| Convenience Comm. | 1,000 sf | $7,355 | $3,826 | $304 |
| Office | 1,000 sf | $2,657 | $997 | $71 |
| Public/Institutional | 1,000 sf | $2,818 | $1,091 | $76 |
| Industrial | 1,000 sf | $3,050 | $1,771 | $492 |
| Warehouse | 1,000 sf | $1,559 | $816 | $72 |
| Mini Warehouse | 1,000 sf | $604 | $122 | $16 |

*Source:* El Paso County, "2015 Road Impact Fee Schedule," from County's web site.

The courts have generally held that PID bond authorizations only last for so long, perhaps 20 or 30 years. After that, the original authorization is held to be "stale," and a new election must be held. If there were only a single PID that new developments are continually joining, it would likely be difficult after 20-30 years to persuade voters within the PID to approve new bond authorizations. For this reason, the concept is to create multiple PIDs that sunset after the initial bond issues have been retired. It is estimated that a new PID would be created approximately every eight years.

## Updated Fee Schedule

The updated fees for properties not located in a PID are compared to the current fees in Table 2. The updated fees are about 10% higher than current fees.

**Table 2. Updated Road Impact Fee Comparison (Not in PID)**

| Land Use | Unit | Current Fee | Updated Fee | Percent Change |
|---|---|---|---|---|
| Single-Family | Dwelling | $3,218 | $3,532 | 9.8% |
| Multi-Family | Dwelling | $2,010 | $2,220 | 10.4% |
| Hotel/Motel | Room | $2,346 | $2,587 | 10.3% |
| General Commercial | 1,000 sf | $4,166 | $4,572 | 9.7% |
| Convenience Comm. | 1,000 sf | $7,355 | $8,114 | 10.3% |
| Office | 1,000 sf | $2,657 | $2,933 | 10.4% |
| Public/Institutional | 1,000 sf | $2,818 | $3,109 | 10.3% |
| Industrial | 1,000 sf | $3,050 | $3,366 | 10.4% |
| Warehouse | 1,000 sf | $1,559 | $1,720 | 10.3% |
| Mini Warehouse | 1,000 sf | $604 | $669 | 10.8% |

*Source:* Current fees for developments not in a PID from Table 1; updated fees from Table 16.

The total fee amounts due are the same for projects in a PID, but the upfront fee portion is less. The upfront fees for properties located in the 5-mill or 10-mill PID are based on average assessed values and the estimated portion of the fee for each land use type that will be generated by the PID taxes. Updated upfront fees for properties located in a PID are compared with current upfront fees in Table 3. In general,[1] the upfront fees are increasing by a larger percentage than the total fee amounts. This is because estimated values and the present value of future PID taxes are assumed to be unchanged, so the increase is all reflected in the upfront fee.

**Table 3. Updated Upfront Road Impact Fee Comparison (In PID)**

| | | 5-Mill PID Upfront Fee | | | 10-Mill PID Upfront Fee | | |
|---|---|---|---|---|---|---|---|
| Land Use | Unit | Current | Updated | % Incr. | Current | Updated | % Incr. |
| Single-Family | Dwelling | $1,915 | $2,229 | 16.4% | $609 | $923 | 52% |
| Multi-Family | Dwelling | $1,537 | $1,747 | 13.7% | $1,061 | $1,271 | 20% |
| Hotel/Motel | Room | $1,639 | $1,934 | 18.0% | $1,038 | $1,279 | 23% |
| General Commercial | 1,000 sf | $3,059 | $3,465 | 13.3% | $1,953 | $2,359 | 21% |
| Convenience Comm. | 1,000 sf | $3,826 | $4,585 | 19.8% | $304 | $1,063 | 250% |
| Office | 1,000 sf | $997 | $1,273 | 27.7% | $71 | $0 | -100% |
| Public/Institutional | 1,000 sf | $1,091 | $1,382 | 26.7% | $76 | $0 | -100% |
| Industrial | 1,000 sf | $1,771 | $2,087 | 17.8% | $492 | $808 | 64% |
| Warehouse | 1,000 sf | $816 | $977 | 19.7% | $72 | $233 | 224% |
| Mini Warehouse | 1,000 sf | $122 | $187 | 53.3% | $16 | $0 | -100% |

*Source:* Current fees from Table 1; updated fees from Table 17.

[1] For three land use categories in the 10-mill PID, the upfront fee is going to $0. This corrects an error that was made in the 2015 fee adjustment. These upfront fees were $0 in the 2012 resolution, but the present values of future PID taxes were higher than the total fee amounts for these land uses. The error in the 2015 adjustment was to assume that PID taxes exactly covered the total fee amount, and that any increase in the total fee should be reflected in the upfront fee for the 10-mill PID. No developments of this kind have occurred in the 10-mill PID since the fees were implemented.

# LEGAL FRAMEWORK

Impact fees are a way for local governments to require new developments to pay a proportionate share of the infrastructure costs they impose on the community. In contrast to "negotiated" developer exactions, impact fees are charges assessed on new development using a standard formula based on objective characteristics, such as the number and type of dwelling units constructed. The fees are a one-time, up-front charge, with the payment made at the time of building permit issuance. Impact fees require that each new development project pay a pro-rata share of the cost of new capital facilities required to serve that development.

Since impact fees were pioneered in states that lacked specific enabling legislation, such fees have generally been legally defended as an exercise of local government's broad "police power" to regulate land development in order to protect the health, safety and welfare of the community. The courts have developed guidelines for constitutionally-valid impact fees, based on the "dual rational nexus" standard. The standard essentially requires that fees must be proportional to the need for additional infrastructure created by the new development, and the fees must be spent to provide that same type of infrastructure to benefit the new development.

## State Statutes

Prior to 2001, the authority of counties in Colorado to impose impact fees was not entirely clear. Several counties had adopted impact fees, which they felt were authorized under counties' implied powers. This uncertainty was removed with the passage of SB 15 by the Legislature and its signature by the governor on November 16, 2001. Among other things, this bill created a new Section 104.5: Impact Fees, in Article 20 of Title 29, Colorado Revised Statutes, which specifically provides that:

> *Pursuant to the authority granted in section 29-20-104 (1) (g) and as a condition of issuance of a development permit, a local government may impose an impact fee or other similar development charge to fund expenditures by such local government on capital facilities needed to serve new development.*

Section 29-20-104.5(1) requires that impact fees be based on a schedule of fees that is legislatively adopted, applies to development generally, as opposed to an individual development project, and only covers the cost of capital improvements needed to serve new development:

> *No impact fee or other similar development charge shall be imposed except pursuant to a schedule that is:*
>
> *(a) legislatively adopted;*
> *(b) generally applicable to a broad class of property; and*
> *(c) intended to defray the project impacts on capital facilities caused by proposed development.*

Section 29-20-104.5(2) requires the preparation of a report that quantifies the cost attributable to new development and ensures that new development is not charged for the cost to remedy existing deficiencies:

> *A local government shall quantify the reasonable impacts of proposed development on existing capital facilities and establish the impact fee or development charge at a level no greater than necessary to defray such impacts directly related to proposed development. No impact fee or other similar development charge shall be imposed to remedy any deficiency in capital facilities that exists without regard to the proposed development.*

Section 29-20-104.5(3) provides that credit against impact fees must be given for required developer contributions of land or improvements for the same facilities for which the impact fees are charged:

> *Any schedule of impact fees or other similar development charges adopted by a local government pursuant to this section shall include provisions to ensure that no individual landowner is required to provide any site specific dedication or improvement to meet the same need for capital facilities for which the impact fee or other similar development charge is imposed.*

Impact fees may be imposed for a broad range of facilities. Section 29-20-104.5(4) provides that impact fees can be imposed to "defray the projected impacts on capital facilities caused by proposed development." It defines "capital facility" to mean any improvement or facility that:

> *(a) is directly related to any service that a local government is authorized to provide;*
> *(b) has an estimated useful life of five years or longer; and*
> *(c) is required by the charter or general policy of a local government pursuant to a resolution or ordinance.*

Section 29-20-104.5(5) requires that impact fees collected must be earmarked and spent for the same types of improvements for which they were collected, and also authorizes waivers for affordable housing:

> *Any impact fee or other similar development charge shall be collected and accounted for in accordance with part 8 of Article 1 of this title. Notwithstanding the provisions of this section, a local government may waive an impact fee or other similar development charge on the development of low- or moderate-income housing or affordable employee housing as defined by the local government.*

The statutory provision referenced above (Section 29-1-803) requires separate accounting for each type of fee, and requires that interest earned on each account be retained in that account:

> *Except as otherwise provided in this section, all moneys from land development charges collected, including any such moneys collected but not expended prior to January 1, 1991, shall be deposited or, if collected for another local government, transmitted for deposit, in an interest-bearing account which clearly identifies the category, account, or fund of capital expenditure for which such charge was imposed. Each such category, account, or fund shall be accounted for separately. The determination as to whether the accounting requirement shall be by category, account, or fund and by aggregate or individual land development shall be within the discretion of the local government. Any interest or other income earned on moneys deposited in said interest-bearing account shall be credited to the account.*

## Constitutional Requirements

While State law provides a broad grant of authority, impact fees must also comply with constitutional standards that have been developed by the courts to ensure that local governments do not abuse their power to regulate the development of land. The courts have gradually developed guidelines for constitutionally-valid impact fees, based on a "rational nexus" that must exist between the regulatory fee or exaction and the activity that is being regulated. The standards set by court cases generally require that an impact fee meet a two-part test:

1) The fees must be proportional to the need for new facilities created by new development (the "needs test"); and

2) The expenditure of impact fee revenues must provide benefit to the fee-paying development (the "benefit test").

The "needs test" requires that impact fees for various types of developments should be proportional to the impact of each development on the need to construct additional or expanded facilities. The fees do not have to recover the full cost, but if the fees are reduced by a percentage from the full cost, the percentage reduction should apply evenly to all types of developments. This requirement is echoed in the requirements in the Colorado act that impact fees be "intended to defray the projected impacts on capital facilities caused by proposed development" and "be generally applicable to a broad class of property."

The "benefit test" requires that impact fees be spent to provide benefit to new development. Benefit is ensured by providing that the funds be earmarked for capacity-expanding improvements of the type for which the fees are collected. The Colorado act requires this type of earmarking. Additional methods of ensuring benefit are to require that the fees be refunded if they have not been used within a reasonable period of time, or to earmark the funds collected within a geographic subarea be spent within the same geographic subarea.

A fundamental principle of impact fees, rooted in both case law and norms of equity, is that impact fees should not charge new development for a higher level of service than is provided to existing development. This principle, which is a critical part of the "needs test," is reflected in the Colorado impact fee statute's prohibition against using impact fee funds to remedy existing deficiencies (Section 29-20-104.5(2)). In addition, impact fees must generally be reduced to ensure that new development does not pay twice for the same level of service, once through impact fees and again through general taxes that are used to remedy the capacity deficiency for existing development.

A corollary principle is that new development should not have to pay twice for the same level of service. As noted above, the fees should be reduced by a credit that accounts for the contribution of new development toward remedying the existing deficiencies. A similar situation arises when the existing level of service has not been fully paid for. Outstanding debt on existing facilities that are counted in the existing level of service will be retired, in part, by revenues generated from new development. To avoid requiring new development to pay more than its proportional share, impact fees should be reduced to account for future tax payments that will retire outstanding debt on existing facilities.

In addition, new development should receive reimbursement or credit against the fees for developer contributions of right-of-way, actual construction, or monetary payments related to the completion of the improvements on which the impact fees are based. The fees should also be reduced to account for future dedicated revenues, such as sales taxes or motor fuel taxes, that will be used to fund a portion of the cost of the improvements. However, credit is not required for discretionary County funding that may be used to help pay for growth-related, capacity-expanding improvements. While new development may contribute toward such funding, so does existing development, and both existing and new development benefit from the higher level of service that the additional funding makes possible.

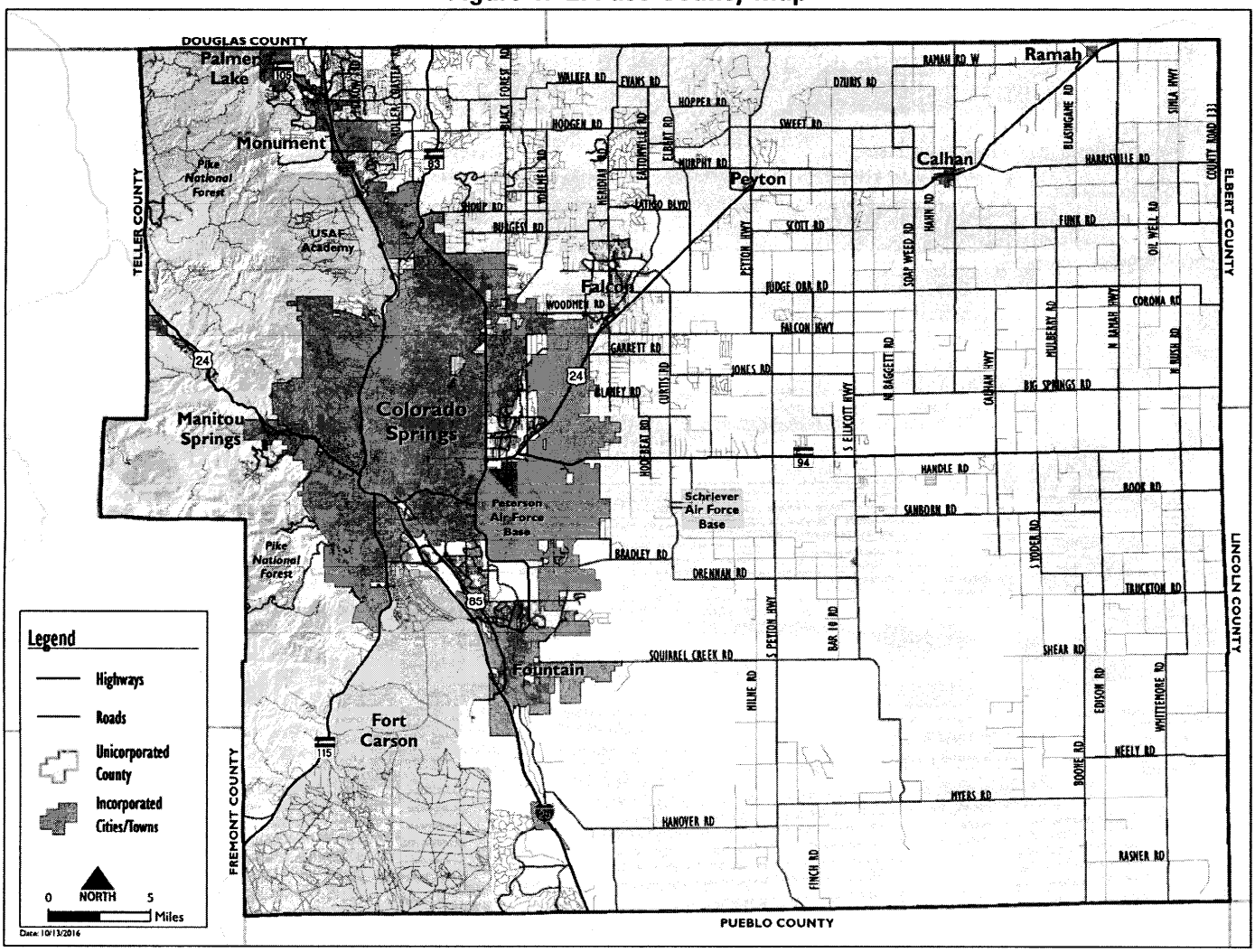
# ASSESSMENT AND BENEFIT DISTRICTS

In an impact fee system, it is important to clearly define the geographic areas within which impact fees will be collected and spent. There are two types of geographic areas that serve different functions in an impact fee system: assessment districts and benefit districts. An assessment district is a geographic area that is subject to a uniform fee schedule. Benefit districts, on the other hand, represent areas within which the collected fees must be spent. Benefit districts ensure that improvements funded by impact fees are constructed within reasonable proximity of the fee-paying developments.

## Assessment Districts

The County's road impact fee is charged to new development in the unincorporated areas of the county. The County currently uses a single fee schedule that applies uniformly throughout the unincorporated area, which is illustrated in Figure 1.

**Figure 1. El Paso County Map**



## Benefit Districts

The fee revenues can be spent anywhere in the unincorporated area. While the County had initially considered dividing the unincorporated area into several benefit districts, the County has opted for a single benefit district encompassing the entire unincorporated area. There were several reasons for this decision.

First, the fee program is focused primarily on arterial roadways, which account for 84% of net program improvement costs. The function of arterials is to move traffic long distances. The arterial road system forms an integrated network, and any attempt to draw lines to divide it into subareas would inevitably be somewhat artificial. Larimer County, for example, which is somewhat larger than El Paso County, has a single county-wide benefit district for regional roads, which are comparable to the types of roads covered by El Paso County's fee program.

Second, the creation of multiple benefit districts would increase the complexity of the system. For example, it would likely necessitate establishing a separate Public Improvement District (PID) for each benefit district. It would also increase the administrative burden of tracking and accounting fee collections and expenditures.

Third, a county-wide benefit district would essentially be self-regulating in terms of matching the geographic location of need and benefit. Because the fee program primarily functions to reimburse those who make needed improvements, the expenditures will tend to go to the areas were development is occurring.

Fourth, multiple benefit districts would unnecessarily restrict the use of impact fee funds, making it more difficult to accumulate sufficient funds to make improvements or provide reimbursements.

# METHODOLOGY

This section describes the methodology used to develop and update El Paso County's road impact fees.

## Plan-Based Approach

The road impact fees are calculated using a "plan-based" methodology. The plan-based approach uses a travel demand model to forecast future traffic volumes, which are then compared to existing roadway capacities to identify needed improvements. The portion of the total cost of those improvements that is attributable to growth (after deductions for adjacent developer responsibility, through trips and existing deficiencies) is divided by the number of new trips over the planning period to determine a cost per trip.

Improvements included in the fee program have been identified in the most recently adopted Major Transportation Corridors Plan (MTCP). This transportation plan identifies improvements needed to accommodate anticipated growth in the unincorporated area over the 2016-2040 period based on small-area growth forecasts.

### Types of Improvements

This program covers major corridors that provide regional travel. The program does not include all roads, only County arterials and major rural collectors, as well as a few selected State roads ("major roads") within unincorporated El Paso County. Only capacity-expanding improvements to major roads identified in the MTCP are included. Types of eligible improvements include construction of new roads, widening existing roads, paving gravel roads, intersection improvements and signalization, as well as acquisition of additional rights-of-way (ROW) required for such improvements. Intersection improvements and signalization improvements included in the program are limited to the intersection of two major roads. The specific improvements that can be funded by the fee program, or for which credits or reimbursements may be provided, are identified in Table 20 and Table 21 in the Appendix. The list of eligible projects, costs and fee amounts will be updated over time with input from the stakeholder committee and approval by the Board of County Commissioners.

### Standardized Unit Costs

The fee program uses a standardized unit cost approach. The same costs used to calculate the fees are also used to determine the amount of credit or reimbursement due for eligible improvements. In order for an eligible road to qualify for a credit or a reimbursement, all aspects of the road must be constructed to County standards and be accepted by the County. The standardized unit costs are summarized in Table 4 below.

The construction costs for segment and intersection improvements are estimated using standard costs per linear foot of segment or per intersection leg, based on unit costs for a limited number of components, including asphalt, curb & gutter/shoulders, earthwork and construction management. The component unit costs developed by the stakeholders are intended to be conservative and are not intended to fully cover all actual costs. Certain cost components, such as utility relocation, were purposely omitted because they are extremely variable. Intersection costs are calculated as the

additional cost beyond the cost of the standard road segment. Intersection costs include both additional construction and additional right-of-way.

Right-of-way (ROW) costs are estimated based on the number of acres required and a standard, county-wide cost per acre. While construction and ROW costs are lumped together in the segment and intersection unit costs shown below, developers will receive credit separately for linear feet constructed and ROW dedicated. Signal costs (for State road intersections only) are estimated and credited based on the number of needed signals and a standard cost per signal based on the Colorado Department of Transportation's (CDOT) escrow requirement.

**Table 4. Summary of Standardized Unit Costs**

| Improvement Type | Unit | Unit Cost |
|---|---|---|
| **Segment Improvements:** | | |
| Rural Road Paving | Linear Foot | $62.16 |
| Rural Road Upgrade | Linear Foot | $188.30 |
| Rural Minor Collector | Linear Foot | $173.34 |
| Rural Minor Arterial | Linear Foot | $230.49 |
| Urban Nonresidential Collector | Linear Foot | $247.56 |
| Urban Minor Arterial | Linear Foot | $341.82 |
| Urban Principal Arterial (4 lane) | Linear Foot | $495.84 |
| Urban Principal Arterial (6 lane) | Linear Foot | $674.34 |
| Urban Expressway (4 lane) | Linear Foot | $538.85 |
| Urban Expressway (6 lane) | Linear Foot | $674.34 |
| Rural Principal Arterial (4 lane) | Linear Foot | $484.02 |
| Rural Principal Arterial (6 lane) | Linear Foot | $746.66 |
| Rural Expressway (4 lane) | Linear Foot | $504.46 |
| Rural Expressway (6 lane) | Linear Foot | $688.94 |
| State Road, Type A (4 lane divided) | Linear Foot | $437.67 |
| State Road, Type AA (6 lane divided) | Linear Foot | $700.23 |
| **Intersection Improvements:** | | |
| Urban Minor Arterial (4 lane) | Intersection Leg | $15,032 |
| Urban Principal Arterial (4 lane) | Intersection Leg | $76,355 |
| Urban Principal Arterial (6 lane) | Intersection Leg | $121,030 |
| Traffic Signal on State Road | Each | $350,000 |

*Note:* Costs shown include ROW costs

*Source:* Segment improvement cost per linear foot from Table 18 in Appendix; intersection costs per leg from Table 19 in Appendix; unit costs for rural road paving and upgrades from Duncan Associates/LSA Associates, *Major Transportation Corridors Plan: Road Impact Fee Study*, November 2012, Table 2, increased by a cost inflation factor of 9.4%, as recommended by the Oversizing and Reimbursement Committee, June 7, 2016; signal cost is CDOT signal escrow requirement.

## Excluded Costs

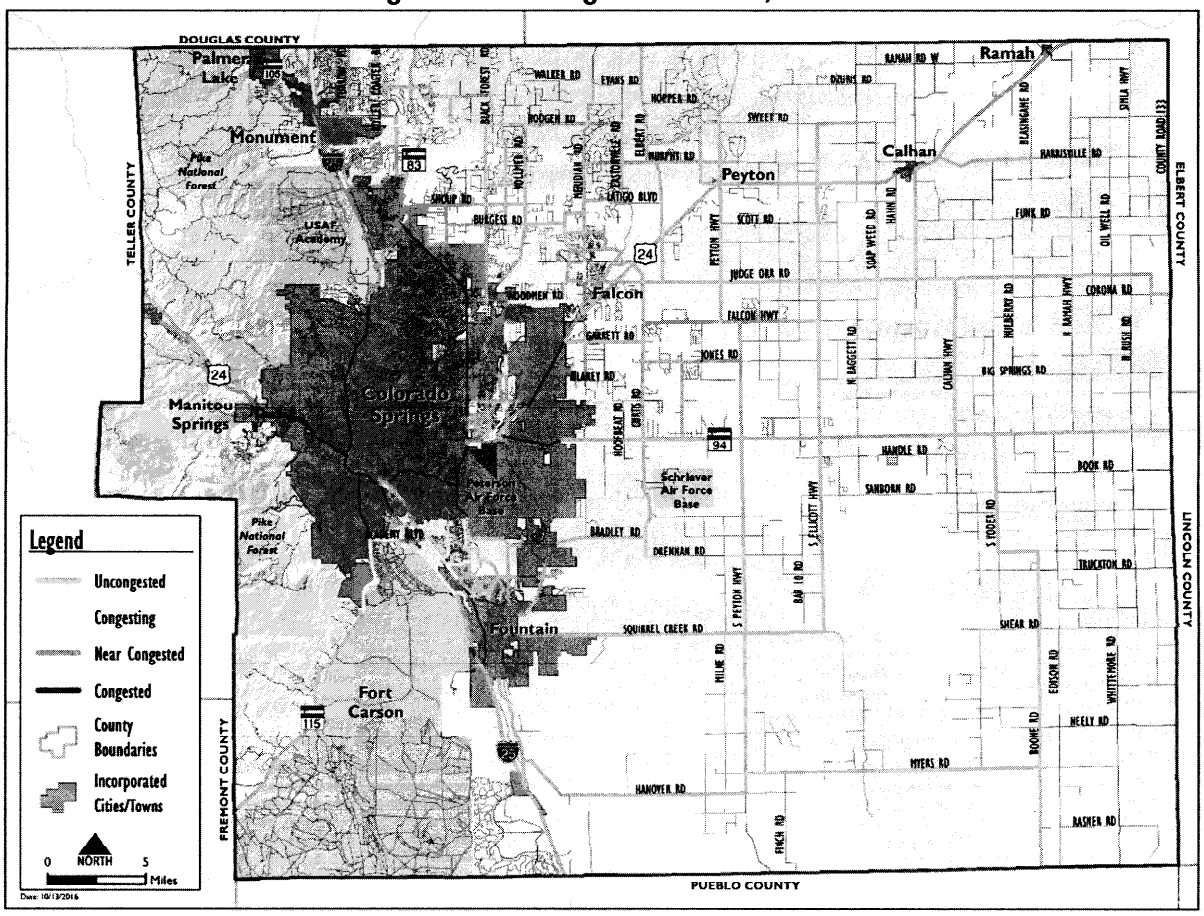
The costs included in the fee calculations are less than the total costs of the needed improvements. As noted above, only certain cost components will be included in the fee calculations, and those costs will be based be based on standardized costs that will likely understate the actual costs of improvements. In addition, any portions of project costs that are attributable to remedying existing deficiencies, or accommodating future pass-through traffic that is unrelated to development in the unincorporated area, are excluded from the fee calculations.

## Travel Demand Model

One of the key technical tools in preparing the *2040 Major Transportation Corridors Plan* (MTCP) on which the updated fees are based is the travel demand forecasting model. The model predicts future travel patterns and volumes based on travel demand (i.e., trip-making) generated by socioeconomic data on the number of households and employees for small areas. The resulting travel is assigned to the roadway network to project future traffic volumes on each roadway segment. These growth scenarios are based on the official Small Area Forecasts developed by the Pikes Peak Area Council of Governments (PPACG) in 2013 for the *2040 Moving Forward Plan*, the regional transportation plan approved in 2015. These base forecasts, which were recently completed and involved an extensive input process from regional planning entities, were adjusted and refined through additional data gathering and review for the MTCP, while still maintaining base year (2010) and 2040 control totals at the regional level.

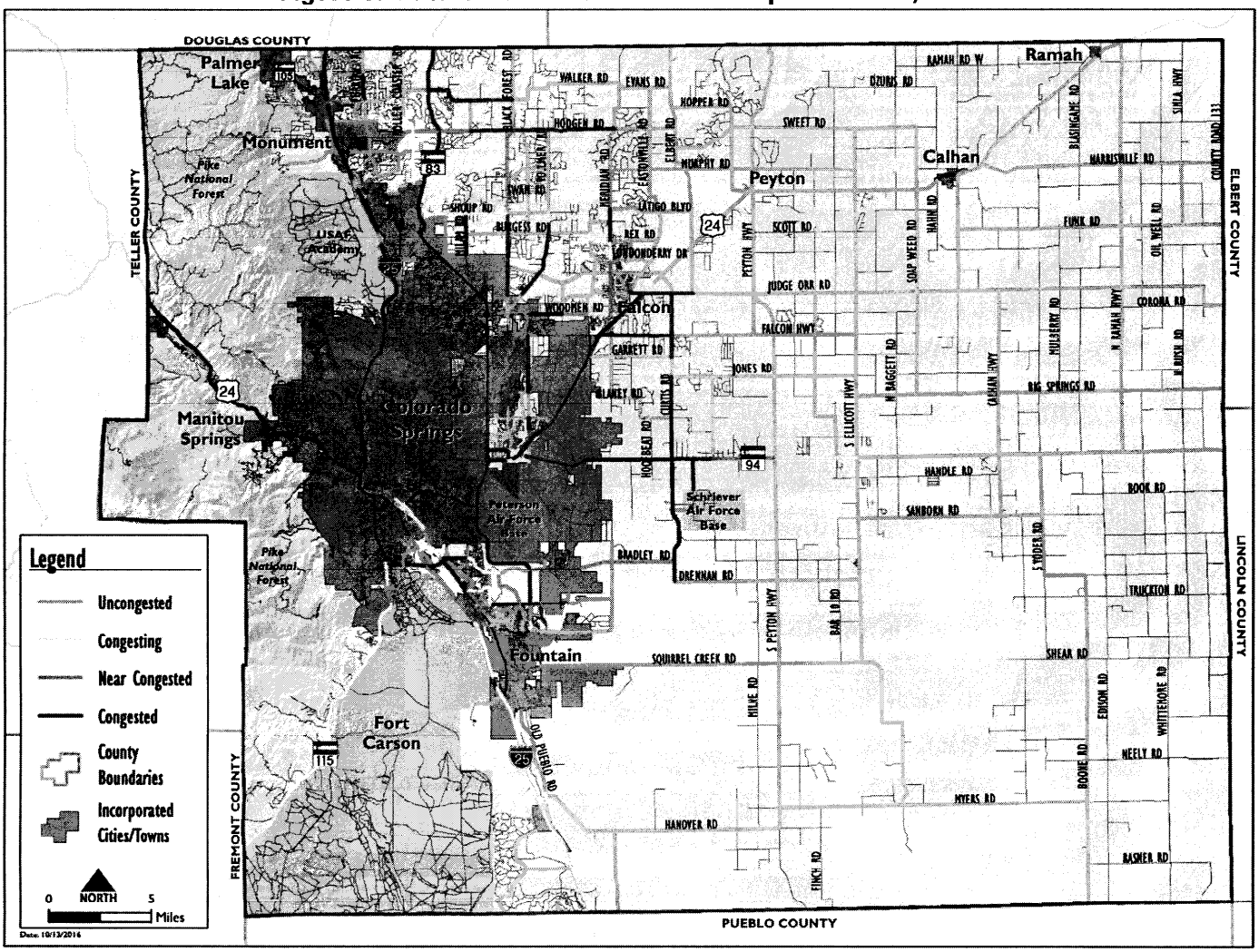
Using the model, analysis was performed to determine where future traffic volumes will exceed available roadway capacity, and several alternative transportation improvements were tested to evaluate the benefits of adding roadway capacity. Modeling of the existing major road network, including improvements that have committed funding but are not yet completed, reveals the existence of some existing capacity deficiencies. These are shown as "congested" in Figure 2.

**Figure 2. Existing Deficiencies, 2016**



Modeling of future 2040 volumes based on the socioeconomic forecasts and the existing and committed network reveals a substantial increase in congestion in the absence of additional road improvements. The future levels of service are illustrated in Figure 3.

**Figure 3. Future Deficiencies without Improvements, 2040**



# COST PER TRIP

Using a planned-based methodology as described in the previous section, the portion of the total cost of planned improvements needed over the planning horizon (2016-2040) that is attributable to growth within the unincorporated county is divided by the total trip ends that will be generated by new development in the unincorporated county to determine the cost per trip. The costs used in the fee calculations are not estimated actual costs, but rather standardized unit costs for various types of improvements that exclude some components

The costs that are attributable to new development in the unincorporated area exclude (1) costs attributed to existing deficiencies, and (2) costs attributable to pass-through traffic. Existing deficiency costs were identified for projects where existing traffic volumes exceed existing roadway capacities. The deficiency is determined to be a percentage of the project cost, based on the following formula: (2016 volume – 2016 capacity) ÷ (2040 volume – 2016 capacity). In addition, some costs are attributable to growth in trips that is unrelated to new development in the unincorporated area. Modeling was performed to determine the number of existing and future trips that are "pass-through" – that is, they do not have an origin or destination in the unincorporated area. The percentage of project costs attributable to pass-through traffic was based on model analysis of 2040 conditions.

## Planned Improvement Costs

Based on the modeling described in the previous section, as well as public and stakeholder input, a set of roadway improvement projects was identified as necessary to accommodate anticipated growth over the 2016-2040 planning horizon. The locations of the improvements are illustrated in Figure 4 below.

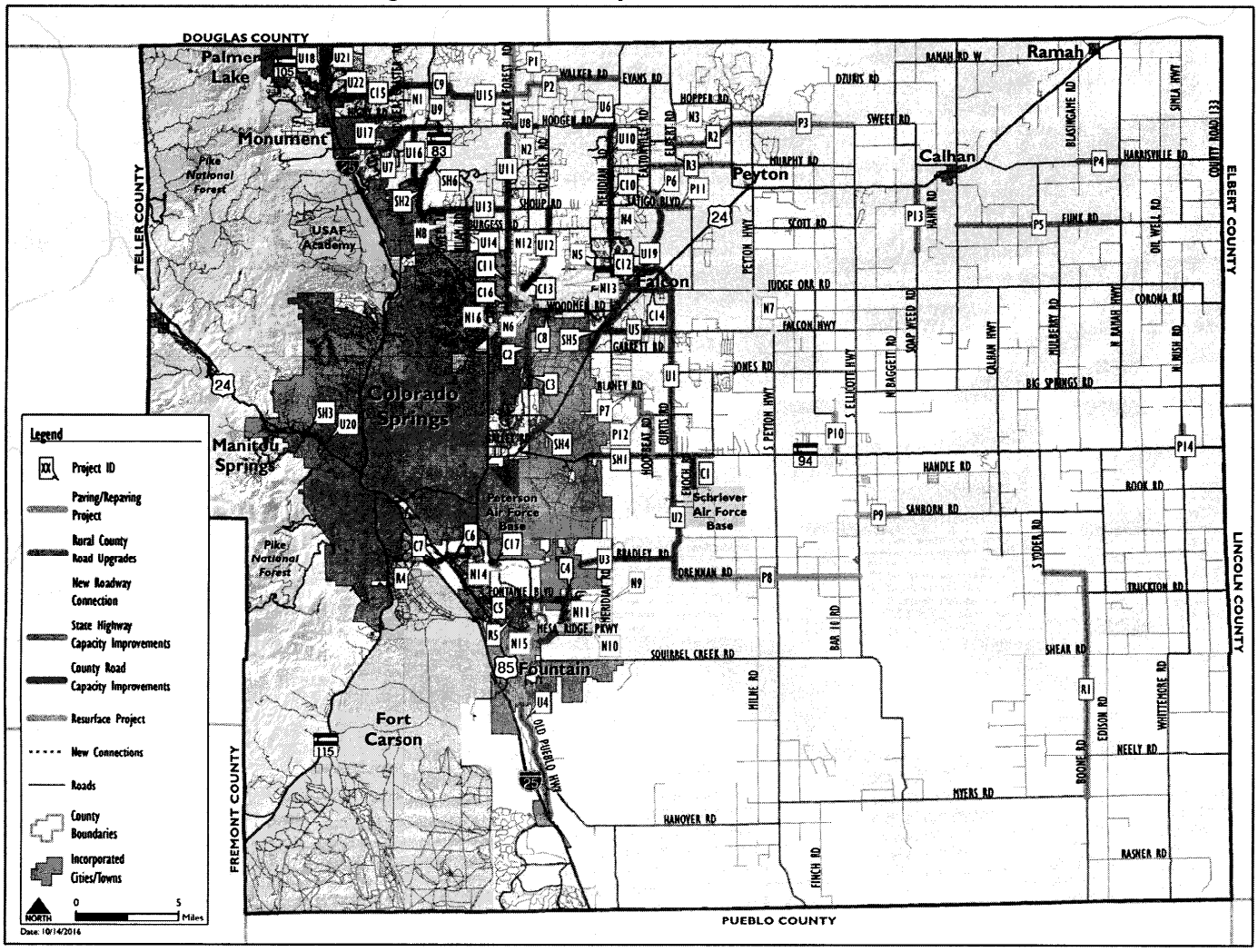
Improvement project costs include roadway segment improvements, intersection improvements associated with those segments, and signals that will need to be installed at intersections of State roads associated with those improvements. The costs of the planned improvements are summarized in Table 5, based on detailed information for each improvement and standardized unit costs included in the Appendix. Intersection and signal costs are included, and non-growth-related costs attributable to existing deficiencies and pass-through traffic are excluded. Total net improvement costs also include outstanding credit reimbursements for improvements constructed prior to the ordinance that will be reimbursed through the fee program, as well as the cost of transportation plan and fee study updates that will need to be done over the next 24 years to keep the program abreast of changing conditions.

**Table 5. Summary of Planned Improvement Costs, 2016-2040**

| Improvement Type | Miles | Segment Cost | Intersect./ Signals | Less Deficiencies | Less Through Trips | Net Program Costs |
|---|---|---|---|---|---|---|
| County Arterials | 37.39 | $102,416,675 | $2,404,442 | -$1,055,985 | -$10,417,757 | $93,347,375 |
| New County Road Connections | 24.58 | $50,858,865 | $943,934 | $0 | -$2,266,866 | $49,535,933 |
| County Rural Road Upgrades | 71.61 | $71,199,012 | $1,273,443 | $0 | -$3,884,850 | $68,587,605 |
| County Rural Road Paving | 49.82 | $16,349,850 | $0 | -$921,505 | -$1,904,760 | $13,523,585 |
| Subtotal, County Road Projects | 183.39 | $240,824,402 | $4,621,819 | -$1,977,490 | -$18,474,233 | $224,994,498 |
| State Road Projects | 15.08 | $42,147,756 | $3,934,230 | -$614,121 | -$6,264,824 | $39,203,041 |
| Total Planned Improvements | 198.47 | $282,972,158 | $8,556,049 | -$2,591,611 | -$24,739,057 | $264,197,539 |
| Outstanding Pre-Ordinance Reimbursements | | | | | | $8,693,554 |
| Cost of Transportation Plan and Fee Study Updates Every 5 Years | | | | | | $1,920,000 |
| Total Improvement Costs | | | | | | $274,811,093 |

*Source:* Miles from Table 20 in Appendix; costs, deficiencies and through trip reductions from Table 22; outstanding reimbursement credits from Table 24; plan/study update costs based on 4.8 (24 years ÷ 5 years between updates) at $400,000 each.

**Figure 4. Planned Improvements, 2016-2040**



## New Trips

In a plan-based impact fee methodology, the total cost of planned improvements attributed to growth over the planning horizon is divided by new trips anticipated to occur over the same period. Since costs attributed to pass-through traffic have been excluded from the program costs, only new trips generated by development in the unincorporated area are considered. Each trip has two trip ends – an origin and a destination. While this report sometimes uses the term "trips," generally what is meant by that is trip ends. The trip generation data provided by the Institute for Transportation Engineers *Trip Generation Manual* are trip ends. Trips with both an origin and destination in the unincorporated area have two trip ends in the unincorporated area, while other types of trips related to development in the unincorporated area only have one trip end in the unincorporated area.

Ideally, the fee calculations would divide needed improvements over the 2016-2040 period by new trips over the same 24-year period. However, estimating total trips attributable to development in the entire unincorporated area requires reliance on the travel demand model, and the base year for the model is 2010. Consequently, the fee calculations will divide the cost of improvements needed over 24 years by the new trips generated over 30 years, resulting in somewhat lower fees than would be the case if the model base year was more current.

The new trip ends that will be generated by development in the unincorporated area over the 2010-2040 period total 824,255, as shown in Table 6. However, some of those trips will be generated by development in the Woodmen Road, Central Marksheffel, Constitution and Lorson Ranch developments, which have been deemed to have satisfied their fee obligations. Deducting future trip ends from these developments results in 709,868 net new trip ends.

**Table 6. Growth in Unincorporated Area Trips, 2010-2040**

| | | Trip Ends/ | 2010 | | 2040 | | Growth | |
|---|---|---|---|---|---|---|---|---|
| From | To | Trip | Trips | Trip Ends | Trips | Trip Ends | Trips | Trip Ends |
| Unincorp | Unincorp | 2 | 185,223 | 370,446 | 420,898 | 841,796 | 235,675 | 471,350 |
| Unincorp | Incorp | 1 | 186,858 | 186,858 | 351,469 | 351,469 | 164,611 | 164,611 |
| Unincorp | Teller | 1 | 2,760 | 2,760 | 5,732 | 5,732 | 2,972 | 2,972 |
| Unincorp | External | 1 | 5,873 | 5,873 | 14,712 | 14,712 | 8,839 | 8,839 |
| Incorp | Unincorp | 1 | 186,901 | 186,901 | 351,575 | 351,575 | 164,674 | 164,674 |
| Teller | Unincorp | 1 | 2,759 | 2,759 | 5,729 | 5,729 | 2,970 | 2,970 |
| External | Unincorp | 1 | 5,873 | 5,873 | 14,712 | 14,712 | 8,839 | 8,839 |
| Total Unincorporated Area | | | 576,247 | 761,470 | 1,164,827 | 1,585,725 | 588,580 | 824,255 |
| – New Trip Ends from Developments with Satisfied Fee Obligations | | | | | | | | -114,387 |
| Net New Trip Ends, 2010-2040 | | | | | | | | 709,868 |

*Source:* Felsburg Holt & Ullevig, data from *Major Transportation Corridors Plan* analysis, October 4, 2016.

## Cost per Trip

Dividing total growth-related costs by the growth in trip ends from new development in the unincorporated area yields a cost of $387.13 per trip end, as shown in Table 7. In addition, the steering committee agreed during the 2012 study that a 5% contingency should be added to program costs to address unexpected situations as well as the difference between fee program unit costs and actual costs that will be incurred by the County in constructing improvements where no developer is available to make a needed improvement. With the addition of those contingency costs, the total cost is $406.49 per trip end.

**Table 7. Cost per Trip**

| | |
|---|---|
| Total Growth-Related Costs, 2016-2040 | $274,811,093 |
| ÷ Total New Trip Ends, 2010-2040 | 709,868 |
| Cost per Trip End | $387.13 |
| Plus 5% Contingency for Actual County Costs | $19.36 |
| Total Cost per Trip End | $406.49 |

*Source:* Total costs from Table 5; new trip ends from Table 6; contingencies added based on 2012 recommendation of steering committee.

# REVENUE CREDITS

As discussed in the legal framework section, credit against the road impact fees should be provided for future revenue that will be generated by new development and used to help pay for outstanding debt on existing facilities or to remedy existing capacity deficiencies. In addition, credit can be provided for future dedicated funding or anticipated outside funding that can be used to fund roadway capacity improvements. These are referred to as "revenue credits," and are the focus of this section. Credits or reimbursements should also be provided to those who construct eligible improvements that are included in the list of planned improvements on which the fees are based. These are referred to as "developer credits," and are calculated on a case-by-case basis.

El Paso County has not historically used bonding to pay for roadway improvements, and does not have any outstanding debt from past roadway improvements. Some outside funding is anticipated to be available to help fund some of the improvements identified in this report, and a credit for such funding is provided in this section.

It should be noted that costs attributable to remedying existing capacity deficiencies have been excluded from the fee calculations. However, a credit for deficiencies is still warranted, because new development will help fund the deficiency correction. A relatively simple approach to calculating an appropriate credit is to divide the total cost of existing deficiencies by the number of existing trips to determine a credit per trip. This puts new development on equal footing with existing development. Dividing the total cost to remedy existing deficiencies by total existing trip ends in El Paso County yields a deficiency credit of $3.40 per trip end.

**Table 8. Deficiency Credit per Trip**

| Corridor | From | To | Program Cost | % Defic. | Deficiency Cost |
|---|---|---|---|---|---|
| Academy Blvd | I-25 | Bradley Rd | $2,823,489 | 37.4% | $1,055,985 |
| Black Forest Rd | Walker Rd | County Line Rd | $804,430 | 100.0% | $804,430 |
| Harrisville Rd | Blasingame Rd | Ramah Hwy | $659,035 | 11.1% | $73,153 |
| Blaney Rd S | Meridan Rd | Hoofbeat Rd | $463,097 | 0.8% | $3,705 |
| Log Rd | 90 degree bend | SH 94 | $638,358 | 6.3% | $40,217 |
| US 24 | 31st St | Manitou Interchg | $2,456,484 | 25.0% | $614,121 |
| Total Deficiency Cost | | | | | $2,591,611 |
| ÷ Existing Unincorporated Area Trip Ends | | | | | 761,470 |
| Deficiency Credit per Trip End | | | | | $3.40 |

*Source:* Program costs and deficiency percentages from Table 21 and Table 22 in the Appendix; existing unincorporated area trip ends (for 2010 base year) from Table 6.

As noted above, credit should also be provided for anticipated outside funding. Some funding from the county-wide Pikes Peak Rural Transportation Authority sales tax and from State and Federal highway funds is anticipated to be programmed for some of the major road capacity improvements identified in this study. Fee program projects included in the "A" list in the fiscally-constrained project list of the Pikes Peak Area Council of Governments (PPACG)'s 2040 Regional Transportation Plan are identified in Table 9 below, along with one typical "B" list project. In recent years no projects from the "B" list have received funding, but some funding was assumed to be conservative. The credit is calculated as the net present value of revenue generated per unincorporated area trip end over the next 25 years (the period covered by the regional plan).

**Table 9. Outside Funding Credit**

| Road Name | From | To | Category | Fee Program Net Cost |
|---|---|---|---|---|
| Hwy 105 | Knollwood Rd | US 83 | County Arterial | $12,778,258 |
| Monument Hill | Woodmoor | County Line Road | Rural Road Upgrade | $566,575 |
| Deer Creek | Monument Hill | Woodmoor | Rural Road Upgrade | $96,996 |
| Eastonville | McLaughlin | Latigo | Rural Road Upgrade | $5,556,198 |
| Beacon Lite | Hwy 105 | County Line Road | Rural Road Upgrade | $1,779,247 |
| Mesa Ridge | Powers | Marksheffel | New County Connection | $2,146,004 |
| Acadmemy | I 15 | Bradley Rd | County Arterial | $1,146,336 |
| US 24 | Garrett Rd | Woodmen | State Road | $8,912,033 |
| Intersection Projects Overlapping with Fee Program | | | | $1,512,488 |
| PPRTA "B" List Average Project | | | | $6,720,000 |
| Total Fee Program Net Cost with PPRTA/CDOT Funding | | | | $41,214,135 |
| ÷ Years Covered by 2040 Regional Transportation Plan | | | | 25 |
| Annual PPRTA/CDOT Funding for Fee Program Projects | | | | $1,648,565 |
| ÷ Existing Unincorporated Area Trip Ends | | | | 761,470 |
| Annual PPRTA/CDOT Funding for Fee Program Projects per Trip End | | | | $2.16 |
| x Present Value Factor (25 Years) | | | | 16.48 |
| Outside Funding Credit per Trip End | | | | $35.60 |

* the fee program cost has been multiplied by a factor of 2.2 miles/3.358 miles, which is the portion of the fee program project that is addressed by the PPRTA project

*Source:* Fee program net costs from Table 22 in the Appendix for planned projects that have anticipated outside funding in the PPACG 2040 Regional Transportation Plan fiscally-constrained project list; existing unincorporated area trip ends from Table 6; net present value factor based on discount rate of 3.5%, the average bank prime loan interest rate in September 2016 from the Federal Reserve.

Subtracting the deficiency and outside funding credits from the cost results in a net cost of $367.49 per trip end, as shown in Table 10.

**Table 10. Net Cost per Trip**

| | |
|---|---|
| Cost per Trip End | $406.49 |
| – Deficiency Credit per Trip End | -$3.40 |
| – Outside Funding Credit per Trip End | -$35.60 |
| Net Cost per Trip End | $367.49 |

*Source:* Cost per trip end from Table 7; deficiency credit from Table 8; outside funding credit from Table 9.

# TRAVEL DEMAND

To determine road impact fees for individual land use categories, the travel demand associated with a unit of development (dwelling unit, 1,000 square feet of nonresidential development, etc.) must be determined. For this study, travel demand is expressed in terms of daily trip ends, adjusted to account for pass-by and diverted-linked trips, as well as average trip length by trip purpose. Trip characteristics are drawn from national data, and calibrated to ensure that they reflect local travel demand.

## Trip Characteristics

The travel demand generated by specific land use types in El Paso County is a product of four factors: 1) trip generation, 2) percent new trips, 3) average trip length and 4) a local adjustment factor to calibrate national travel characteristics to reflect local travel demand.

### Trip Generation

Trip generation rates are based on information published in the most recent edition of the Institute of Transportation Engineers' (ITE) *Trip Generation* manual. Trip generation rates represent trip ends, or driveway crossings at the site of a land use. Thus, a single one-way trip from home to work counts as one trip end for the residence and one trip end for the work place, for a total of two trip ends.

### New Trip Factor

Trip rates must be adjusted by a "new trip factor" to exclude pass-by and diverted-linked trips. This adjustment is intended to reduce the possibility of over-counting by only including primary trips generated by the development. Pass-by trips are those trips that are already on a route for a different primary purpose and simply stop at a development on that route. For example, a stop at a convenience store on the way home from the office is a pass-by trip for the convenience store. A pass by trip does not create an additional burden on the street system and therefore should not be counted in the assessment of impact fees. A diverted-linked trip is similar to a pass-by trip, but a diversion is made from the regular route to make an interim stop. The reduction for pass-by and diverted-linked trips was drawn from ITE and other published information.

The trip generation rates for general commercial and convenience commercial categories are reduced to account for pass-by and diverted trips. General commercial trip rates are based on shopping centers, and new trip data for shopping centers are quite robust. Of the 100 shopping center studies listed in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 60 have information on both pass-by and diverted trips. The average new trip percentage is 42%, excluding all pass-by and diverted trips. Convenience commercial uses are discussed below.

## Trip Length Factors

In addition to the number of new trips generated, the length of those trips also affects the impact of a trip, and trip lengths vary between land uses. Average trip lengths are not used directly, but instead are used to develop trip length adjustment factors. The trip length factors are derived from the U.S. Department of Transportation's 2009 National Household Travel Survey (NHTS), and are shown in Table 11.

**Table 11. Trip Length Adjustment Factors**

| Fee Program Land Use Category | NHTS Trip Purpose | Avg. Trip Length (mi.) | Adjustment Factor |
|---|---|---|---|
| Single-Family | Single-Family | 9.16 | 0.99 |
| Multi-Family | Multi-Family | 8.30 | 0.89 |
| Hotel/Motel | Average | 9.28 | 1.00 |
| Commercial/Retail | Shopping | 6.27 | 0.68 |
| Convenience Commercial | n/a* | 1.52 | 0.16 |
| Office | Family/Personal | 6.61 | 0.71 |
| Public/Institutional | School/Church | 8.47 | 0.91 |
| Industrial | To or From Work | 11.98 | 1.29 |
| Warehouse | To or From Work | 11.98 | 1.29 |
| Mini Warehouse | Family/Personal | 6.61 | 0.71 |
| Average | Average | 9.28 | 1.00 |

* average trip length from Table 13

*Source:* National average trip lengths from U.S. Department of Transportation, 2009 National Household Travel Survey; adjustment factor is ratio of trip length for the land use category to the average trip length;

## Convenience Commercial Category

The convenience commercial category requires some additional analysis. Average daily trip generation data per 1,000 square feet are available for the following three land use categories: Fast Food with Drive-Through (ITE 934), Convenience Market (Open 24 Hours) (ITE 851) and Convenience Market with Gasoline Pumps (ITE 853). Average daily trip generation data are also available per fueling position for Convenience Market with Gasoline Pumps (ITE 853), Gasoline/Service Station (ITE 944), and Gasoline/Service Station with Convenience Market (ITE 945). However, since convenience stores with and without gas pumps tend to have very similar trip generation, it would seem to make more sense to base the fees on building square footage.

Data on pass-by and diverted-linked trips are also available for the same three land use categories. Using the same procedure recommended for general commercial, the new trip percentage excludes both pass-by and diverted trips. The number of new trips that would be generated by each of these three land uses is shown in Table 12. Note that all three land uses have reasonably similar new trip generation. To be conservative, the fee will be based on the lowest of the three.

**Table 12. Convenience Commercial Trip Generation Characteristics**

| ITE Code | Land Use Description | Daily Trip Rate | % New | New Trips | No. of Studies Trips | No. of Studies % New |
|---|---|---|---|---|---|---|
| 934 | Fast Food w/Drive Thru (1,000 sf) | 496.12 | 29.9% | 148.34 | 21 | 7 |
| 853 | Convenience Market w/Gasoline Pumps (1,000 sf | 845.60 | 16.2% | 136.99 | 10 | 15 |
| 851 | Convenience Market (Open 24 Hours) (1,000 sf) | 737.99 | 23.9% | 176.38 | 8 | 11 |

*Source:* Trips are average daily trip ends on a weekday from ITE, *Trip Generation*, 2012; percent new trips from ITE, *Trip Generation Handbook*, 2004 (excludes pass-by and ½ of diverted-linked trips)

While there are reasonably good national data on trip generation for these uses, there are more limited data on average trip length. However, extensive studies have been done in Florida, and these are summarized in Table 13. Again, to be conservative, the shortest of these average trip lengths will be used.

**Table 13. Convenience Commercial Trip Length Characteristics**

| ITE Code | Land Use Description | Avg. Trip Length (mi.) | No. of Studies |
|---|---|---|---|
| 934 | Fast Food w/Drive Thru | 2.42 | 16 |
| 945 | Service Station with Convenience Market | 1.57 | 9 |
| 851 | Convenience Market (Open 24 Hours) | 1.52 | 9 |

*Source*: Tindale-Oliver & Associates, *Collier County Transportation Impact Fee Update*, February 2009.

Based on the foregoing, a "convenience commercial" use, defined as consisting of fast food restaurants with drive-through windows, convenience stores and gasoline service station (with or without convenience retail sales), has been included in the travel demand schedule.

## Travel Demand Schedule

The recommended travel demand schedule for the consolidated land use categories is based on national data, calibrated to local conditions. Average daily trip rates and the reduction for commercial retail uses to account for pass-by and diverted-linked trips are multiplied by new trip and trip length factors to determine "adjusted trips." The "adjusted" trip rates are then multiplied by a calibration factor (described on the following page), to determine "calibrated" trips used in the fee calculations. The recommended travel demand schedule is presented in Table 14.

**Table 14. Recommended Travel Demand Schedule**

| Land Use | Unit | Trip Rate | % New | Length Factor | Adj. Trips | Calibration Factor | Calibrated Trips |
|---|---|---|---|---|---|---|---|
| Single-Family | Dwelling | 9.52 | 100% | 0.99 | 9.42 | 1.02 | 9.61 |
| Multi-Family | Dwelling | 6.65 | 100% | 0.89 | 5.92 | 1.02 | 6.04 |
| Hotel/Motel | Room | 6.90 | 100% | 1.00 | 6.90 | 1.02 | 7.04 |
| General Commercial | 1,000 sf | 42.70 | 42% | 0.68 | 12.20 | 1.02 | 12.44 |
| Convenience Comm. | 1,000 sf | 845.60 | 16% | 0.16 | 21.65 | 1.02 | 22.08 |
| Office | 1,000 sf | 11.01 | 100% | 0.71 | 7.82 | 1.02 | 7.98 |
| Public/Institutional | 1,000 sf | 9.11 | 100% | 0.91 | 8.29 | 1.02 | 8.46 |
| Industrial | 1,000 sf | 6.96 | 100% | 1.29 | 8.98 | 1.02 | 9.16 |
| Warehouse | 1,000 sf | 3.56 | 100% | 1.29 | 4.59 | 1.02 | 4.68 |
| Mini Warehouse | 1,000 sf | 2.50 | 100% | 0.71 | 1.78 | 1.02 | 1.82 |

*Source:* Trip rate (average daily trip ends on a weekday), and percent new trips for shopping centers, from ITE, *Trip Generation Manual*, 2012; trip length adjustment factor from Table 11; convenience commercial factors from Table 12 and Table 13; adjusted trips is product of trip rate, percent new trips and trip length factor; calibration factor from Table 15; calibrated trips is product of adjusted trips and calibration factor.

## Calibration Factor

To calibrate the travel demand schedule, the "expected" number of trips that would be generated using the adjusted trip rates and the model base year (2010) and 2040 socioeconomic forecasts for the unincorporated area are compared to base year and 2040 modeled trips that are attributable to the unincorporated area (i.e., excluding trips that do not have an origin or destination in the unincorporated area). The results are summarized in Table 15.

The first step is to convert retail, service and basic employees to 1,000 sq. ft., using employee density factors. A weighted average of single-family detached and multi-family trip rates is used for the residential trip rate. The general commercial rate is used for retail, office for service, and the average of industrial and warehouse is used for basic land uses.

The calibration factor is the ratio of modeled to expected trips. Calibration factors were developed for 2010, 2040 and new trips expected over the 2010-2040 period. For 2010 and 2040, expected trips derived from "adjusted" trip rates in the travel demand schedule under-predict modeled trips attributed to the unincorporated area. For new trips expected over the 2010-2040 period, the unadjusted travel demand schedule also under-predicts model trips. Consequently, the 2010-2040 calibration factor is applied to the adjusted trips in the travel demand schedule, resulting in a 2% across-the-board increase from the adjusted trip rates in Table 14 above.

**Table 15. Calibration Factor**

| | Residential | Retail | Service | Basic | Total |
|---|---|---|---|---|---|
| 2010 Units/Employees | 54,552 | 5,390 | 34,158 | 7,161 | na |
| 2040 Units/Employees | 110,325 | 13,277 | 74,423 | 14,541 | na |
| New Units/Employees | 55,773 | 7,887 | 40,265 | 7,380 | na |
| Employees/1,000 sq. ft. | na | 0.90 | 2.31 | 0.74 | na |
| 2010 Units/1,000 sq. ft. | 54,552 | 5,989 | 14,787 | 9,677 | na |
| 2040 Units/1,000 sq. ft. | 110,325 | 14,752 | 32,218 | 19,650 | na |
| New Units/1,000 sq. ft. | 55,773 | 8,763 | 17,431 | 9,973 | na |
| Adjusted Trip Rates | 8.95 | 12.20 | 7.82 | 6.79 | na |
| Expected 2010 Trip Ends | 488,240 | 73,066 | 115,634 | 65,707 | 742,647 |
| Expected 2040 Trip Ends | 987,409 | 179,974 | 251,945 | 133,424 | 1,552,752 |
| Expected New Trip Ends | 499,169 | 106,909 | 136,310 | 67,717 | 810,105 |
| Modeled 2010 Trip Ends | na | na | na | na | 761,470 |
| Modeled 2040 Trip Ends | na | na | na | na | 1,585,725 |
| Modeled New Trip Ends | na | na | na | na | 824,255 |
| 2010 Calibration Factor | na | na | na | na | 1.03 |
| 2040 Calibration Factor | na | na | na | na | 1.02 |
| 2010-2040 Calibration Factor | na | na | na | na | 1.02 |

*Source:* 2010 and 2040 residential units and employees from Felsburg Holt & Ullevig, data from *Major Transportation Corridors Plan* analysis, September 13, 2016; employees per 1,000 sq. ft. from U.S. Department of Energy, *Commercial Buildings Energy Consumption Survey*, 2003 (retail includes mall and non-mall, basic is average of industrial and warehouse); adjusted trip rates from Table 14 (residential is weighted 86.6% single-family detached and 13.4% multi-family based on 2010-2014 5-year sample data from the U.S, Census Bureau for unincorporated El Paso County, basic is average of industrial and warehouse); expected trips is product of units/1,000 sq. ft. and adjusted trip rates; modeled trips from Felsburg Holt & Ullevig; calibration factor is ratio of modeled to expected trips.

# FEE SCHEDULES

The updated road impact fees for the recommended land use categories calculated in this study are presented in Table 16 for properties not located in a PID. The impact fee calculation for each land use category is the product of daily trip ends per development unit and the net cost per trip end.

**Table 16. Road Impact Fee Schedule (Not in PID)**

| Land Use | Unit | Trips | Net Cost per Trip | Fee per Unit |
|---|---|---|---|---|
| Single-Family | Dwelling | 9.61 | $367.49 | $3,532 |
| Multi-Family | Dwelling | 6.04 | $367.49 | $2,220 |
| Hotel/Motel | Room | 7.04 | $367.49 | $2,587 |
| General Commercial | 1,000 sf | 12.44 | $367.49 | $4,572 |
| Convenience Comm. | 1,000 sf | 22.08 | $367.49 | $8,114 |
| Office | 1,000 sf | 7.98 | $367.49 | $2,933 |
| Public/Institutional | 1,000 sf | 8.46 | $367.49 | $3,109 |
| Industrial | 1,000 sf | 9.16 | $367.49 | $3,366 |
| Warehouse | 1,000 sf | 4.68 | $367.49 | $1,720 |
| Mini Warehouse | 1,000 sf | 1.82 | $367.49 | $669 |

*Source:* Trips per unit are calibrated trips ends from Table 14; net cost per trip end from Table 10.

For properties located in a PID, the total fee amount is the same, but it is split between the upfront (or net) fee collected at time of building permit and the portion that will be paid by future PID taxes. Future PID taxes are based on average assessed property values per unit and the relevant millage rate, and the future stream of property tax payments is converted to an equivalent present value. The upfront fee is the difference between the total fee and the present value of future PID taxes, as shown in Table 17.

**Table 17. Upfront Road Impact Fee Schedule (In PID)**

| | | Total Fee | 5-Mill PID | | 10-Mill PID | |
|---|---|---|---|---|---|---|
| Land Use | Unit | per Unit | PID Tax | Net Fee | PID Tax | Net Fee |
| Single-Family | Dwelling | $3,532 | $1,303 | $2,229 | $2,609 | $923 |
| Multi-Family | Dwelling | $2,220 | $473 | $1,747 | $949 | $1,271 |
| Hotel/Motel | Room | $2,587 | $653 | $1,934 | $1,308 | $1,279 |
| General Commercial | 1,000 sf | $4,572 | $1,107 | $3,465 | $2,213 | $2,359 |
| Convenience Comm. | 1,000 sf | $8,114 | $3,529 | $4,585 | $7,051 | $1,063 |
| Office | 1,000 sf | $2,933 | $1,660 | $1,273 | $3,321 | $0 |
| Public/Institutional | 1,000 sf | $3,109 | $1,727 | $1,382 | $3,459 | $0 |
| Industrial | 1,000 sf | $3,366 | $1,279 | $2,087 | $2,558 | $808 |
| Warehouse | 1,000 sf | $1,720 | $743 | $977 | $1,487 | $233 |
| Mini Warehouse | 1,000 sf | $669 | $482 | $187 | $968 | $0 |

*Source:* Gross fee per unit from Table 16; PID tax is net present value of PID taxes over the life of a bond issue from Gregory K. Baum & Company, October 11 and 15, 2012; net fee is difference between total fee and PID tax.

# APPENDIX

## Table 18. Standardized Unit Costs – Segments

| Component | Unit | Quantity | Unit Cost | Cost | Source and Notes |
|---|---|---|---|---|---|
| **Rural Minor Collector** | | | | | **EPC Engineering Criteria Manual Figure 2-7** |
| Asphalt | ft. | 32 | $2.92 | $93.35 | Assumed 6" depth |
| Shoulder | ea. | 2 | $13.13 | $26.26 | Gravel, 6' each side equivalent |
| Earthwork | cy. | 1.204 | $2.19 | $2.63 | 5 ft. of cut/fill times 65 ft. |
| Subtotal | | | | $122.24 | |
| Const. Mgmt. | | 6% | | $7.33 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 80 | $0.55 | $43.76 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $173.34 | |
| | | | | | |
| **Rural Minor Arterial** | | | | | **EPC Engineering Criteria Manual Figure 2-5** |
| Asphalt | ft. | 40 | $3.40 | $136.14 | Assumed 7" depth |
| Shoulder | ea. | 2 | $13.13 | $26.26 | Gravel, 6' each side equivalent |
| Earthwork | cy. | 1.574 | $2.19 | $3.44 | 00.5 ft. of cut/fill times 85 ft. |
| Subtotal | | | | $165.84 | |
| Const. Mgmt. | | 6% | | $9.95 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 100 | $0.55 | $54.70 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $230.49 | |
| | | | | | |
| **Urban Non-residential Collector** | | | | | **EPC Engineering Criteria Manual Figure 2-14** |
| Asphalt | ft. | 48 | $3.40 | $163.37 | Assumed 7" depth |
| Shoulder | ea. | 2 | $13.13 | $26.26 | Machine pour, Type 1, prep. and backfill |
| Earthwork | cy. | 1.204 | $2.19 | $2.63 | 00.5 ft. of cut/fill times 65 ft. |
| Subtotal | | | | $192.26 | |
| Const. Mgmt. | | 6% | | $11.54 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 80 | $0.55 | $43.76 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $247.56 | |
| | | | | | |
| **Urban Minor Arterial** | | | | | **EPC Engineering Criteria Manual Figure 2-13** |
| Asphalt | ft. | 62 | $3.89 | $241.17 | Assumed 8" depth |
| Shoulder | ea. | 2 | $13.13 | $26.26 | Machine pour, Type 1, prep. and backfill |
| Earthwork | cy. | 1.574 | $2.19 | $3.44 | 00.5 ft. of cut/fill times 85 ft. |
| Subtotal | | | | $270.87 | |
| Const. Mgmt. | | 6% | | $16.25 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 100 | $0.55 | $54.70 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $341.82 | |
| | | | | | |
| **Urban Principal Arterial (4 lanes)** | | | | | **EPC Engineering Criteria Manual Figure 2-12** |
| Asphalt | ft. | 72 | $4.38 | $315.07 | Assumed 9" depth |
| Shoulder | ea. | 4 | $20.24 | $80.96 | Type 1 curb with 2 4' aprons |
| Earthwork | cy. | 2.130 | $2.19 | $4.66 | 0.5 ft. of cut/fill times 115 ft. |
| Subtotal | | | | $400.69 | |
| Const. Mgmt. | | 6% | | $24.04 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 130 | $0.55 | $71.11 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $495.84 | |

Continued on next page.

**Table 18. Standardized Unit Costs – Segments, continued**

| Component | Unit | Quantity | Unit Cost | Cost | Source and Notes |
|---|---|---|---|---|---|
| **Urban Principal Arterial (6 lanes)** | | | | | **EPC Engineering Criteria Manual Figure 2-11** |
| Asphalt | ft. | 96 | $4.86 | $466.77 | Assumed 10" depth |
| Shoulder | ea. | 4 | $20.24 | $80.96 | Type 1 curb with 2 4' aprons |
| Earthwork | cy. | 2.685 | $2.19 | $5.88 | 0.5 ft. of cut/fill times 145 ft. |
| Subtotal | | | | $553.60 | |
| Const. Mgmt. | | 6% | | $33.22 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 160 | $0.55 | $87.52 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $674.34 | |
| | | | | | |
| **Urban Expressway (4 lanes)** | | | | | **EPC Engineering Criteria Manual Figure 2-10** |
| Asphalt | ft. | 72 | $4.86 | $350.08 | Assumed 10" depth |
| Shoulder | ea. | 4 | $20.24 | $80.96 | Type 1 curb with 2 4' aprons |
| Earthwork | cy. | 2.315 | $2.19 | $5.06 | 0.5 ft. of cut/fill times 125 ft. |
| Subtotal | | | | $436.10 | |
| Const. Mgmt. | | 6% | | $26.17 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 140 | $0.55 | $76.58 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $538.85 | |
| | | | | | |
| **Urban Expressway (6 lanes)** | | | | | **EPC Engineering Criteria Manual Figure 2-9** |
| Asphalt | ft. | 96 | $4.86 | $466.77 | Assumed 10" depth |
| Shoulder | ea. | 4 | $20.24 | $80.96 | Type 1 curb with 2 4' aprons |
| Earthwork | cy. | 2.7 | $2.19 | $5.88 | 0.5 ft. of cut/fill times 145 ft. |
| Subtotal | | | | $553.60 | |
| Const. Mgmt. | | 6% | | $33.22 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 160 | $0.55 | $87.52 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $674.34 | |
| | | | | | |
| **Rural Principal Arterial (4 lane)** | | | | | **EPC Engineering Criteria Manual Figure 2-4** |
| Asphalt | ft. | 76 | $4.13 | $314.10 | Assumed 8.5" depth |
| Shoulder | ea. | 4 | $10.94 | $43.76 | 4' X 10" shoulder tapered to nothing at 4' |
| Earthwork | cy. | 2.685 | $2.19 | $5.88 | 0.5 ft. of cut/fill times 145 ft. |
| Subtotal | | | | $363.73 | |
| Const. Mgmt. | | 6% | | $21.82 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 180 | $0.55 | $98.46 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $484.02 | |
| | | | | | |
| **Rural Principal Arterial (6 lane)** | | | | | **EPC Engineering Criteria Manual Figure 2-3** |
| Asphalt | ft. | 112 | $4.86 | $544.57 | Assumed 10" depth |
| Shoulder | ea. | 4 | $10.94 | $43.76 | 4' X 10" shoulder tapered to nothing at 4' |
| Earthwork | cy. | 3.519 | $2.19 | $7.70 | 0.5 ft. of cut/fill times 190 ft. |
| Subtotal | | | | $596.03 | |
| Const. Mgmt. | | 6% | | $35.76 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 210 | $0.55 | $114.87 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $746.66 | |

Continued on next page.

## Table 18. Standardized Unit Costs – Segments, continued

| Component | Unit | Quantity | Unit Cost | Cost | Source and Notes |
|---|---|---|---|---|---|
| **Rural Expressway (4 lane)** | | | | | **EPC Engineering Criteria Manual Figure 2-2** |
| Asphalt | ft. | 76 | $4.38 | $332.58 | Assumed 9" depth |
| Shoulder | ea. | 4 | $10.94 | $43.76 | 4' X 10" shoulder tapered to nothing at 4' |
| Earthwork | cy. | 3.1 | $2.19 | $6.69 | 0.5 ft. of cut/fill times 165 ft. |
| Subtotal | | | | $383.02 | |
| Const. Mgmt. | | 6% | | $22.98 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 180 | $0.55 | $98.46 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $504.46 | |
| **Rural Expressway (6 lane)** | | | | | **EPC Engineering Criteria Manual Figure 2-1** |
| Asphalt | ft. | 112 | $4.38 | $490.11 | Assumed 9" depth |
| Shoulder | ea. | 4 | $10.94 | $43.76 | 4' X 10" shoulder tapered to nothing at 4' |
| Earthwork | cy. | 3.519 | $2.19 | $7.70 | 0.5 ft. of cut/fill times 190 ft. |
| Subtotal | | | | $541.57 | |
| Const. Mgmt. | | 6% | | $32.49 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 210 | $0.55 | $114.87 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $688.94 | |
| **State Road, Type A (4 lane divided)** | | | | | **CDOT Standard Plans Figure 4-1** |
| Asphalt | ft. | 76 | $4.13 | $314.10 | Assumed 8.5" depth |
| Shoulder | ea. | 0 | $0.00 | $0.00 | Not used by CDOT |
| Earthwork | cy. | 2.7 | $2.19 | $5.91 | 0.5 ft. of cut/fill times 145 ft. |
| Subtotal | | | | $320.01 | |
| Const. Mgmt. | | 6% | | $19.20 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 180 | $0.55 | $98.46 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $437.67 | |
| **State Road, Type AA (6 lane divided)** | | | | | **CDOT Standard Plans Figure 4-1** |
| Asphalt | ft. | 112 | $4.86 | $544.57 | Assumed 10" depth |
| Shoulder | ea. | 0 | $0.00 | $0.00 | Not used by CDOT |
| Earthwork | cy. | 3.500 | $2.19 | $7.66 | 0.5 ft. of cut/fill times 190 ft. |
| Subtotal | | | | $552.23 | |
| Const. Mgmt. | | 6% | | $33.13 | Includes engineering, surveying, soils work |
| R.O.W. | ft. | 210 | $0.55 | $114.87 | Based on EPC school/park fee |
| Total Cost per Linear Foot | | | | $700.23 | |

*Source:* Components, units, quantities and notes from Table 16 in Duncan Associates/LSA Associates, *Major Transportation Corridors Plan: Road Impact Fee Study*, November 2012, unit costs increased by a cost inflation factor of 9.4%, as recommended by the Oversizing and Reimbursement Committee, June 7, 2016.

The standardized unit cost for intersections used in the fee calculations are shown in Table 19. These costs are per intersection leg. A standard four-way intersection will have four intersection legs.

**Table 19. Standardized Unit Costs – Intersection Legs**

| Component | Unit | Quantity | Unit Cost | Cost | Source and Notes |
|---|---|---|---|---|---|
| **Urban Minor Arterial** | | | | | |
| Asphalt | cu. yards | 752 | $157.54 | $118,483 | Assumed 8" depth |
| Curb | linear feet | 880 | $13.13 | $11,553 | Machine pour, Type 1, prep. and backfill |
| Earthwork | cu. yards | 771 | $2.19 | $1,687 | Used 0.5 ft. of cut/fill times 85 ft. |
| Subtotal | | | | $131,722 | |
| Const. Mgmt. | | 6% | | $7,903 | Includes engineering, surveying, soils work |
| R.O.W. | sq. feet | 47,180 | $0.55 | $25,807 | Based on EPC school/park fee |
| Total Cost of Intersection Leg | | | | $165,433 | |
| – Base Cost | feet | 440 | $341.82 | -$150,401 | From Appendix A: Standardized Unit Costs |
| Additional Cost of Intersection Leg | | | | $15,032 | |
| **Urban Principal Arterial (4 Lanes), 1 Left Turn Lane** | | | | | |
| Asphalt | cu. yards | 1,451 | $157.54 | $228,537 | Assumed 8" depth |
| Curb | linear feet | 2,060 | $20.24 | $41,692 | Machine pour, Type 1, prep. and backfill |
| Earthwork | cu. yards | 1,288 | $2.19 | $2,818 | Used 0.5 ft. of cut/fill times 85 ft. |
| Subtotal | | | | $273,047 | |
| Const. Mgmt. | | 6% | | $16,383 | Includes engineering, surveying, soils work |
| R.O.W. | sq. feet | 77,300 | $0.55 | $42,283 | Based on EPC school/park fee |
| Total Cost of Intersection Leg | | | | $331,713 | |
| – Base Cost | feet | 515 | $495.84 | -$255,358 | From Appendix A: Standardized Unit Costs |
| Additional Cost of Intersection Leg | | | | $76,355 | |
| **Urban Principal Arterial (4 Lanes), 2 Left Turn Lanes** | | | | | |
| Asphalt | cu. yards | 2,152 | $157.54 | $338,987 | Assumed 8" depth |
| Curb | linear feet | 3,020 | $20.24 | $61,122 | Machine pour, Type 1, prep. and backfill |
| Earthwork | cu. yards | 1,984 | $2.19 | $4,341 | Used 0.5 ft. of cut/fill times 85 ft. |
| Subtotal | | | | $404,450 | |
| Const. Mgmt. | | 6% | | $24,267 | Includes engineering, surveying, soils work |
| R.O.W. | sq. feet | 118,150 | $0.55 | $64,628 | Based on EPC school/park fee |
| Total Cost of Intersection Leg | | | | $493,345 | |
| – Base Cost | feet | 755 | $495.84 | -$374,359 | From Appendix A: Standardized Unit Costs |
| Additional Cost of Intersection Leg | | | | $118,986 | |
| **Urban Principal Arterial (6 Lanes)** | | | | | |
| Asphalt | cu. yards | 2,389 | $157.54 | $376,346 | Assumed 8" depth |
| Curb | linear feet | 2,300 | $20.24 | $46,550 | Machine pour, Type 1, prep. and backfill |
| Earthwork | cu. yards | 1,751 | $2.19 | $3,831 | Used 0.5 ft. of cut/fill times 85 ft. |
| Subtotal | | | | $426,727 | |
| Const. Mgmt. | | 6% | | $25,604 | Includes engineering, surveying, soils work |
| R.O.W. | sq. feet | 103,190 | $0.55 | $56,445 | Based on EPC school/park fee |
| Total Cost of Intersection Leg | | | | $508,776 | |
| – Base Cost | feet | 575 | $674.34 | -$387,746 | From Appendix A: Standardized Unit Costs |
| Additional Cost of Intersection Leg | | | | $121,030 | |

*Source:* Components, units, quantities and notes from Table 17 in Duncan Associates/LSA Associates, *Major Transportation Corridors Plan: Road Impact Fee Study*, November 2012; unit costs from 2012 study, inflated by 9.4% per the recommendation of the Oversizing and Reimbursement Committee, June 7, 2016.

## Table 20. Planned Improvement Descriptions and Traffic Volumes

| Corridor | From | To | Mi. | Lanes Ex | Lanes Fut | Type | Class Ex | Class Fut | 2016 Cap. | 2016 Trips | 2040 Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Enoch Rd | SH 94 | Schriever | 1.459 | 2 | 4 | Rural | C | PA | 8,000 | 4,500 | 27,800 |
| Marksheffel Rd | Stetson Hills | 2000 ft north | 0.379 | 2 | 4 | Urban | PA | PA | 18,000 | 11,000 | 21,000 |
| Marksheffel Rd | Barnes Rd | Carefree Cir N | 0.952 | 2 | 4 | Urban | PA | PA | 18,000 | 17,600 | 34,000 |
| Marksheffel Rd | 0.5 mi. N/of Fontaine | Link Rd | 3.101 | 2 | 4 | Rural | MA | MA | 14,000 | 14,600 | 19,300 |
| Fontaine | Marksheffel Rd | Easy St | 4.739 | 2 | 4 | Urban | MA | MA | 14,000 | 3,000 | 20,500 |
| Bradley Rd | Academy Blvd | Hancock Expy | 0.978 | 2 | 4 | Urban | PA | PA | 18,000 | 12,000 | 19,800 |
| Academy Blvd | I-25 | Bradley Rd | 0.793 | 4 | 6 | Urban | EX | EX | 48,000 | 61,100 | 96,100 |
| Woodmen Rd | Marksheffel | Banning Lewis | 1.305 | 4 | 6 | Urban | PA | EX | 36,000 | 22,000 | 39,000 |
| Walker Rd | SH 83 | Steppler Rd | 2.325 | 2 | 4 | Rural | C | MA | 8,000 | 2,300 | 17,900 |
| Meridan Rd | Murphy Rd | Rex Rd | 3.399 | 2 | 4 | Rural | C | MA | 8,000 | 4,800 | 16,100 |
| Black Forest Rd | Stapleton Dr | Research | 0.739 | 2 | 4 | Urban | MA | MA | 14,000 | 6,500 | 18,200 |
| Stapleton Dr | Towner | US 24 | 4.257 | 2 | 4 | Urban | PA | PA | 18,000 | 2,000 | 17,000 |
| Vollmer Rd | Marksheffel | Stapleton Dr | 1.255 | 2 | 4 | Rural | C | MA | 8,000 | 2,500 | 8,700 |
| Judge Orr Rd | Eastonville Rd | Peyton Hwy | 6.038 | 2 | 4 | Rural | MA | MA | 12,000 | 2,700 | 13,600 |
| Hwy 105 | Knollwood Blvd | SH83 | 5.059 | 2 | 4 | Rural | PA | PA | 18,000 | 5,900 | 16,500 |
| Grinnell Blvd | Powers Blvd | Bradley Rd | 0.608 | 2 | 4 | Rural | MA | MA | 12,000 | 10,700 | 18,000 |
| Subtotal, County Arterials | | | 37.386 | | | | | | | | |
| Roller Coaster Rd | Eliminate jog in alignment | | 0.823 | 0 | 2 | Rural | 0 | MA | 0 | 0 | 6,700 |
| Black Forest Rd | Eliminate jog in alignment | | 0.535 | 0 | 2 | Rural | 0 | MA | 0 | 0 | 13,800 |
| Hodgen Rd | Eastonville Rd | Elbert Rd | 1.246 | 0 | 2 | Rural | 0 | C | 0 | 0 | 5,200 |
| Rex Rd | Terminus | Eastonville Rd | 1.200 | 0 | 2 | Urban | 0 | C | 0 | 0 | 600 |
| Stapleton Dr | Towner Rd | Black Forest Rd | 4.040 | 0 | 4 | Urban | 0 | PA | 0 | 0 | 22,500 |
| Woodmen Hills Rd | Stapleton | Raygor Rd | 2.522 | 0 | 2 | Urban | 0 | C | 0 | 0 | 200 |
| Peyton Hwy | Judge Orr | Falcon Hwy | 2.368 | 0 | 2 | Rural | 0 | C | 0 | 0 | 4,100 |
| Howell Lane | Bridge at Kettle Crk | | 0.714 | 0 | 2 | Rural | 0 | C | 0 | 0 | 1,200 |
| Meridan Rd | Bradley Rd | Mesa Ridge Pky | 3.250 | 0 | 2 | Rural | 0 | MA | 0 | 0 | 3,000 |
| Mesa Ridge Pkwy | Marksheffel | Meridian Rd ext | 1.537 | 0 | 2 | Rural | 0 | MA | 0 | 0 | 7,100 |
| Fontaine Blvd | Terminus | Meridian Rd ext | 1.209 | 0 | 2 | Urban | 0 | MA | 0 | 0 | 2,700 |
| Marksheffel Rd | Woodmen Rd | Research Pkwy | 1.016 | 0 | 4 | Urban | 0 | PA | 0 | 0 | 7,500 |
| Banning Lewis | Woodmen Rd | Stapleton | 0.793 | 0 | 4 | Urban | 0 | PA | 0 | 0 | 15,000 |
| Mesa Ridge Pkwy | Powers Blvd | Marksheffel Rd | 1.298 | 0 | 2 | Urban | 0 | PA | 0 | 0 | 12,000 |
| Tutt Blvd Ext | Dublin Blvd | Templeton Gap | 0.332 | 0 | 4 | Urban | 0 | PA | 0 | 0 | 8,000 |
| Furrow Rd Ext | Lamplighter Dr | Higby Rd | 0.301 | 0 | 2 | Urban | 0 | C | 0 | 0 | 5,200 |
| Bradley Rd | Grinnell Blvd | Powers Blvd | 1.391 | 0 | 2 | Urban | 0 | MA | 0 | 0 | 9,100 |
| Subtotal, New County Connections | | | 24.575 | | | | | | | | |
| Curtis Rd | US 24 | SH 94 | 8.025 | 2 | 2 | Rural | U | PA | 6,000 | 3,900 | 15,500 |
| Curtis Rd | SH 94 | Drennan Rd | 6.091 | 2 | 2 | Rural | U | MA | 6,000 | 2,700 | 11,500 |
| Bradley Rd | COS City Limit | Curtis Rd | 4.587 | 2 | 2 | Rural | U | MA | 6,000 | 2,100 | 11,200 |
| Old Pueblo Rd | Fountain City Lmts | I-25 | 5.725 | 2 | 2 | Rural | U | C | 6,000 | 420 | 6,600 |
| Falcon Hwy | US 24 | 1 mi E/of Curtis | 4.529 | 2 | 2 | Rural | U | MA | 6,000 | 4,800 | 12,100 |
| Hodgen Rd | Goshawk Rd | Eastonville Rd | 3.521 | 2 | 2 | Rural | U | PA | 6,000 | 2,500 | 10,400 |
| Baptist Rd | Desiree Dr | Roller Coaster Rd | 1.943 | 2 | 2 | Rural | U | C | 6,000 | 1,100 | 7,200 |
| Hodgen Rd | Black Forest Rd | Bar X Rd | 1.112 | 2 | 2 | Rural | U | MA | 6,000 | 4,000 | 12,000 |
| Hodgen Rd | Roller Coaster | SH 83 | 1.082 | 2 | 2 | Rural | U | MA | 6,000 | 5,500 | 7,200 |
| Meridian Rd | Hodgen Rd | Murphy Rd | 2.192 | 2 | 2 | Rural | U | MA | 6,000 | 2,400 | 7,000 |
| Black Forest Rd | Hodgen Rd | Stapleton Dr | 6.352 | 2 | 2 | Rural | U | MA | 6,000 | 4,800 | 13,400 |

Continued on next page.

**Table 20. Planned Improvement Descriptions and Traffic Volumes, continued**

| Corridor | From | To | Mi. | Lanes Ex | Lanes Fut | Type | Class Ex | Class Fut | LOS D Cap. | 2016 Trips | 2040 Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vollmer Rd | Stapleton Dr | Shoup Rd | 3.236 | 2 | 2 | Rural | U | MA | 6,000 | 2,500 | 8,700 |
| Shoup Rd | SH 83 | Black Forest Rd | 4.216 | 2 | 2 | Rural | U | MA | 6,000 | 4,200 | 10,800 |
| Milam Rd | Shoup Rd | Old Ranch Rd | 1.961 | 2 | 2 | Rural | U | MA | 6,000 | 2,400 | 11,300 |
| Walker Rd | Steppler Rd | Black Forest Rd | 2.006 | 2 | 2 | Rural | U | MA | 6,000 | 1,100 | 9,000 |
| Roller Coaster Rd | Hodgen Rd | Old Northgate Rd | 3.521 | 2 | 2 | Rural | U | MA | 6,000 | 1,500 | 7,000 |
| Higby Rd | Cloverleaf Rd | Rollarcoaster Rd | 1.831 | 2 | 2 | Urban | U | MA | 6,000 | 1,600 | 6,100 |
| Beacon Lite Rd | SH 105 | County Line Rd | 1.790 | 2 | 2 | Rural | U | C | 6,000 | 3,300 | 8,200 |
| Eastonville Rd | Mclaughlin Rd | Latigo Blvd | 5.528 | 2 | 2 | Rural | U | MA | 6,000 | 2,600 | 4,800 |
| Monument Hill | Woodmoor Dr | County Line Rd | 2.005 | 2 | 2 | Rural | U | C | 6,000 | 4,900 | 8,800 |
| Deer Creek Rd | Monument Hill | Woodmen Dr | 0.360 | 2 | 2 | Rural | U | C | 6,000 | 2,300 | 5,000 |
| Subtotal, Rural Road Upgrades | | | 71.613 | | | | | | | | |
| Black Forest Rd | Walker Rd | County Line Rd | 2.451 | 2 | 2 | Rural | G | U | 300 | 380 | 400 |
| Walker Rd | Black Forest Rd | Meridian Rd | 5.896 | 2 | 2 | Rural | G | U | 300 | 60 | 2,200 |
| Sweet Rd | Peyton Hwy | Ellicott Hwy | 8.014 | 2 | 2 | Rural | G | U | 300 | 140 | 600 |
| Harrisville Rd | Blasingame Rd | Ramah Hwy | 2.008 | 2 | 2 | Rural | G | U | 300 | 320 | 500 |
| Funk Rd | Calhan Hwy | Ramah Hwy | 7.954 | 2 | 2 | Rural | G | U | 300 | 250 | 2,000 |
| Eastonville Rd | Eastonville Loop | Londonderry Dr | 0.995 | 2 | 2 | Rural | G | U | 300 | 200 | 5,400 |
| Blaney Rd S | Meridan Rd | Hoofbeat Rd | 1.411 | 2 | 2 | Rural | G | U | 300 | 325 | 3,600 |
| Drennan Rd | Curtis Rd | Ellicott Hwy | 8.966 | 2 | 2 | Rural | G | U | 300 | 100 | 3,500 |
| Sanborn Rd | Ellicott Hwy | Baggett Rd | 1.964 | 2 | 2 | Rural | G | U | 300 | 100 | 1,400 |
| Log Rd | 90 degree bend | SH 94 | 1.945 | 2 | 2 | Rural | G | U | 300 | 365 | 1,400 |
| Latigo Blvd | Eastonville Rd | Elbert Rd | 1.626 | 2 | 2 | Rural | G | U | 300 | 80 | 400 |
| Hoofbeat | Blaney Rd S | SH 94 | 3.456 | 2 | 2 | Rural | G | U | 300 | 160 | 2,700 |
| Soap Weed Rd | South of US 24 | Beg. of paving | 3.130 | 2 | 2 | Rural | G | U | 300 | 150 | 800 |
| Subtotal, Rural Road Paving | | | 49.816 | | | | | | | | |
| Total, County Road Improvements | | | 183.390 | | | | | | | | |
| SH 94 | City Limits | Slocum Rd | 6.143 | 2 | 4 | Rural | PA | PA | 18,000 | 8,600 | 30,500 |
| US 83 | Shoup Rd | Northgate Rd | 1.656 | 4 | 6 | Rural | PA | PA | 36,000 | 16,000 | 54,000 |
| US 24 | 31st St | Manitou Interchg | 1.063 | 4 | 4 | Urban | PA | FW | 36,000 | 40,500 | 58,500 |
| US 24 | Marksheffel | Constitution | 1.277 | 4 | 6 | Urban | PA | EX | 36,000 | 6,897 | 40,000 |
| US 24 | Garrett Rd | Woodmen Rd | 2.329 | 4 | 6 | Rural | PA | PA | 36,000 | 13,000 | 39,000 |
| US 83 | Northgate | Hodgen Rd | 2.614 | 2 | 4 | Rural | PA | PA | 18,000 | 6,800 | 36,000 |
| Total, State Roads | | | 15.082 | | | | | | | | |
| Grand Total, All Improvements | | | 198.472 | | | | | | | | |

*Notes:* Classifications are Freeway (FW), Expressway (EX), Principal Arterial (PA), Minor Arterial (MA), Collector (C), Unimproved (U), and Gravel (G)
*Source:* Felsburg Holt & Ullevig, November 14, 2016.

## Table 21. Planned Improvement Project Data

| Corridor | From | To | Cost/ Lin. Foot | Intersections Cost/Leg | Legs | No. of Signals | % Defic. | % Thru |
|---|---|---|---|---|---|---|---|---|
| Enoch Rd | SH 94 | Schriever | $484.02 | $15,032 | 1 | 0 | 0.0% | 0.0% |
| Marksheffel Rd | Stetson Hills | 2000 ft north | $495.84 | $76,355 | 4 | 0 | 0.0% | 45.0% |
| Marksheffel Rd | Barnes Rd | Carefree Cir N | $495.84 | $76,355 | 4 | 0 | 0.0% | 48.0% |
| Marksheffel Rd | 0.5 mi. N/of Fontaine | Link Rd | $484.02 | $15,032 | 2 | 0 | 0.0% | 27.0% |
| Fontaine | Marksheffel Rd | Easy St | $495.84 | $76,355 | 4 | 0 | 0.0% | 24.0% |
| Bradley Rd | Academy Blvd | Hancock Expy | $495.84 | $76,355 | 2 | 0 | 0.0% | 3.0% |
| Academy Blvd | I-25 | Bradley Rd | $674.34 | $121,030 | 0 | 0 | 37.4% | 22.0% |
| Woodmen Rd | Marksheffel | Banning Lewis | $674.34 | $121,030 | 4 | 0 | 0.0% | 2.0% |
| Walker Rd | SH 83 | Steppler Rd | $484.02 | $15,032 | 3 | 0 | 0.0% | 14.0% |
| Meridan Rd | Murphy Rd | Rex Rd | $484.02 | $15,032 | 0 | 0 | 0.0% | 0.0% |
| Black Forest Rd | Stapleton Dr | Research | $495.84 | $15,032 | 4 | 0 | 0.0% | 9.0% |
| Stapleton Dr | Towner | US 24 | $674.34 | $76,355 | 3 | 0 | 0.0% | 3.0% |
| Vollmer Rd | Marksheffel | Stapleton Dr | $484.02 | $15,032 | 2 | 0 | 0.0% | 0.0% |
| Judge Orr Rd | Eastonville Rd | Peyton Hwy | $484.02 | $15,032 | 2 | 0 | 0.0% | 0.0% |
| Hwy 105 | Knollwood Blvd | SH83 | $484.02 | $76,355 | 5 | 0 | 0.0% | 4.0% |
| Grinnell Blvd | Powers Blvd | Bradley Rd | $484.02 | $15,032 | 2 | 0 | 0.0% | 30.0% |
| Subtotal, County Arterials | | | | | 42 | 0 | | |
| | | | | | | | | |
| Roller Coaster Rd | Eliminate jog in alignment* | | n/a | $15,032 | 2 | 0 | 0.0% | 4.0% |
| Black Forest Rd | Eliminate jog in alignment* | | n/a | $15,032 | 1 | 0 | 0.0% | 12.0% |
| Hodgen Rd | Eastonville Rd | Elbert Rd | $173.34 | $15,032 | 0 | 0 | 0.0% | 14.0% |
| Rex Rd | Terminus | Eastonville Rd | $247.56 | $15,032 | 0 | 0 | 0.0% | 0.0% |
| Stapleton Dr | Towner Rd | Black Forest Rd | $495.84 | $76,355 | 0 | 0 | 0.0% | 3.0% |
| Woodmen Hills Rd | Stapleton | Raygor Rd | $247.56 | $15,032 | 0 | 0 | 0.0% | 0.0% |
| Peyton Hwy | Judge Orr | Falcon Hwy | $247.56 | $15,032 | 0 | 0 | 0.0% | 1.0% |
| Howell Lane | Bridge at Kettle Crk* | | n/a | $15,032 | 0 | 0 | 0.0% | 0.0% |
| Meridan Rd | Bradley Rd | Mesa Ridge Pky | $230.49 | $15,032 | 4 | 0 | 0.0% | 0.0% |
| Mesa Ridge Pkwy | Marksheffel | Meridian Rd ext | $230.49 | $15,032 | 4 | 0 | 0.0% | 0.0% |
| Fontaine Blvd | Terminus | Meridian Rd ext | $341.82 | $15,032 | 1 | 0 | 0.0% | 0.0% |
| Marksheffel Rd | Woodmen Rd | Research Pkwy | $495.84 | $76,355 | 4 | 0 | 0.0% | 26.0% |
| Banning Lewis | Woodmen Rd | Stapleton | $495.84 | $76,355 | 3 | 0 | 0.0% | 0.0% |
| Mesa Ridge Pkwy | Powers Blvd | Marksheffel Rd | $341.82 | $76,355 | 2 | 0 | 0.0% | 14.0% |
| Tutt Blvd Ext | Dublin Blvd | Templeton Gap | $495.84 | $76,355 | 1 | 0 | 0.0% | 17.0% |
| Furrow Rd Ext | Lamplighter Dr | Higby Rd | $247.56 | $15,032 | 0 | 0 | 0.0% | 0.0% |
| Bradley Rd | Grinnell Blvd | Powers Blvd | $341.82 | $15,032 | 0 | 0 | 0.0% | 4.0% |
| Subtotal, New County Connections | | | | | 22 | 0 | | |
| | | | | | | | | |
| Curtis Rd | US 24 | SH 94 | $188.30 | $76,355 | 5 | 0 | 0.0% | 0.0% |
| Curtis Rd | SH 94 | Drennan Rd | $188.30 | $15,032 | 3 | 0 | 0.0% | 0.0% |
| Bradley Rd | COS City Limit | Curtis Rd | $188.30 | $15,032 | 3 | 0 | 0.0% | 0.0% |
| Old Pueblo Rd | Fountain City Lmts | I-25 | $188.30 | $15,032 | 0 | 0 | 0.0% | 1.0% |
| Falcon Hwy | US 24 | 1 mi E/of Curtis | $188.30 | $76,355 | 2 | 0 | 0.0% | 0.0% |
| Hodgen Rd | Goshawk Rd | Eastonville Rd | $188.30 | $76,355 | 2 | 0 | 0.0% | 0.0% |
| Baptist Rd | Desiree Dr | Roller Coaster Rd | $188.30 | $15,032 | 1 | 0 | 0.0% | 10.0% |
| Hodgen Rd | Black Forest Rd | Bar X Rd | $188.30 | $15,032 | 3 | 0 | 0.0% | 5.0% |
| Hodgen Rd | Roller Coaster | SH 83 | $188.30 | $15,032 | 2 | 0 | 0.0% | 10.0% |
| Meridian Rd | Hodgen Rd | Murphy Rd | $188.30 | $15,032 | 3 | 0 | 0.0% | 0.0% |
| Black Forest Rd | Hodgen Rd | Stapleton Dr | $188.30 | $15,032 | 3 | 0 | 0.0% | 12.0% |

Continued on next page.

**Table 21. Planned Improvement Project Data, continued**

| Corridor | From | To | Cost/ Lin. Foot | Intersections Cost/Leg | Intersections Legs | No. of Signals | % Defic. | % Thru |
|---|---|---|---|---|---|---|---|---|
| Vollmer Rd | Stapleton Dr | Shoup Rd | $188.30 | $15,032 | 5 | 0 | 0.0% | 0.0% |
| Shoup Rd | SH 83 | Black Forest Rd | $188.30 | $15,032 | 4 | 0 | 0.0% | 0.0% |
| Milam Rd | Shoup Rd | Old Ranch Rd | $188.30 | $15,032 | 1 | 0 | 0.0% | 0.0% |
| Walker Rd | Steppler Rd | Black Forest Rd | $188.30 | $15,032 | 2 | 0 | 0.0% | 14.0% |
| Roller Coaster Rd | Hodgen Rd | Old Northgate Rd | $188.30 | $15,032 | 1 | 0 | 0.0% | 17.0% |
| Higby Rd | Cloverleaf Rd | Rollarcoaster Rd | $188.30 | $15,032 | 0 | 0 | 0.0% | 4.0% |
| Beacon Lite Rd | SH 105 | County Line Rd | $188.30 | $15,032 | 0 | 0 | 0.0% | 0.0% |
| Eastonville Rd | Mclaughlin Rd | Latigo Blvd | $188.30 | $15,032 | 4 | 0 | 0.0% | 0.0% |
| Monument Hill | Woodmoor Dr | County Line Rd | $188.30 | $15,032 | 2 | 0 | 0.0% | 72.0% |
| Deer Creek Rd | Monument Hill | Woodmen Dr | $188.30 | $15,032 | 2 | 0 | 0.0% | 75.0% |
| Subtotal, Rural Road Upgrades | | | | | 48 | 0 | | |
| Black Forest Rd | Walker Rd | County Line Rd | $62.16 | n/a | 0 | 0 | 100.0% | 14.0% |
| Walker Rd | Black Forest Rd | Meridian Rd | $62.16 | n/a | 0 | 0 | 0.0% | 1.0% |
| Sweet Rd | Peyton Hwy | Ellicott Hwy | $62.16 | n/a | 0 | 0 | 0.0% | 71.0% |
| Harrisville Rd | Blasingame Rd | Ramah Hwy | $62.16 | n/a | 0 | 0 | 11.1% | 0.0% |
| Funk Rd | Calhan Hwy | Ramah Hwy | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Eastonville Rd | Eastonville Loop | Londonderry Dr | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Blaney Rd S | Meridan Rd | Hoofbeat Rd | $62.16 | n/a | 0 | 0 | 0.8% | 0.0% |
| Drennan Rd | Curtis Rd | Ellicott Hwy | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Sanborn Rd | Ellicott Hwy | Baggett Rd | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Log Rd | 90 degree bend | SH 94 | $62.16 | n/a | 0 | 0 | 6.3% | 3.0% |
| Latigo Blvd | Eastonville Rd | Elbert Rd | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Hoofbeat | Blaney Rd S | SH 94 | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Soap Weed Rd | South of US 24 | Beg. of paving | $62.16 | n/a | 0 | 0 | 0.0% | 0.0% |
| Subtotal, Rural Road Paving | | | | | 0 | 0 | | |
| Subtotal, County Road Improvements | | | | | 112 | 0 | | |
| SH 94 | City Limits | Slocum Rd | $437.67 | $76,355 | 5 | 2 | 0.0% | 0.0% |
| US 83 | Shoup Rd | Northgate Rd | $700.23 | $121,030 | 3 | 1 | 0.0% | 29.0% |
| US 24 | 31st St | Manitou Interchg | $437.67 | $76,355 | 0 | 0 | 25.0% | 75.0% |
| US 24 | Marksheffel | Constitution | $700.23 | $121,030 | 4 | 0 | 0.0% | 18.0% |
| US 24 | Garrett Rd | Woodmen Rd | $700.23 | $121,030 | 6 | 1 | 0.0% | 8.0% |
| US 83 | Northgate | Hodgen Rd | $437.67 | $76,355 | 3 | 1 | 0.0% | 11.0% |
| Subtotal, State Roads | | | | | 21 | 5 | | |
| Total, All Improvements | | | | | 133 | 5 | | |

* no unit cost available

*Source:* Costs per linear foot from Table 18; costs per intersection leg from Table 19; number of needed legs and signals and percent pass-through traffic from Felsburg Holt & Ullevig, data from *Major Transportation Corridors Plan* analysis, November 14, 2016; percent deficiency based volume and capacity data from Table 20; planned State road signals are at SH 94/Curtis, SH 94/Enoch, US 83/Shoup, US 24/Falcon Highway, and US 83/Hodgen.

## Table 22. Planned Improvement Costs

| Corridor | From | To | Segment Cost | Intersecs/ Signals | Less Deficiencies | Less Thru Trips | Total Net Cost |
|---|---|---|---|---|---|---|---|
| Enoch Rd | SH 94 | Schriever | $3,728,658 | $15,032 | $0 | $0 | $3,743,690 |
| Marksheffel Rd | Stetson Hills | 2000 ft north | $992,235 | $305,420 | $0 | -$583,945 | $713,710 |
| Marksheffel Rd | Barnes Rd | Carefree Cir N | $2,492,370 | $305,420 | $0 | -$1,342,939 | $1,454,851 |
| Marksheffel Rd | 0.5 mi. N/of Fontaine | Link Rd | $7,924,995 | $30,064 | $0 | -$2,147,866 | $5,807,193 |
| Fontaine | Marksheffel Rd | Easy St | $12,406,869 | $305,420 | $0 | -$3,050,949 | $9,661,340 |
| Bradley Rd | Academy Blvd | Hancock Expy | $2,560,438 | $152,710 | $0 | -$81,394 | $2,631,754 |
| Academy Blvd | I-25 | Bradley Rd | $2,823,489 | $0 | -$1,055,985 | -$621,168 | $1,146,336 |
| Woodmen Rd | Marksheffel | Banning Lewis | $4,646,472 | $484,120 | $0 | -$102,612 | $5,027,980 |
| Walker Rd | SH 83 | Steppler Rd | $5,941,830 | $45,096 | $0 | -$838,170 | $5,148,756 |
| Meridan Rd | Murphy Rd | Rex Rd | $8,686,571 | $0 | $0 | $0 | $8,686,571 |
| Black Forest Rd | Stapleton Dr | Research | $1,934,728 | $60,128 | $0 | -$179,537 | $1,815,319 |
| Stapleton Dr | Towner | US 24 | $15,157,113 | $229,065 | $0 | -$461,585 | $14,924,593 |
| Vollmer Rd | Marksheffel | Stapleton Dr | $3,207,310 | $30,064 | $0 | $0 | $3,237,374 |
| Judge Orr Rd | Eastonville Rd | Peyton Hwy | $15,430,867 | $30,064 | $0 | $0 | $15,460,931 |
| Hwy 105 | Knollwood Blvd | SH83 | $12,928,910 | $381,775 | $0 | -$532,427 | $12,778,258 |
| Grinnell Blvd | Powers Blvd | Bradley Rd | $1,553,820 | $30,064 | $0 | -$475,165 | $1,108,719 |
| Subtotal, County Arterials | | | $102,416,675 | $2,404,442 | -$1,055,985 | -$10,417,757 | $93,347,375 |
| | | | | | | | |
| Roller Coaster Rd | Eliminate jog in alignment* | | $4,117,667 | $30,064 | $0 | -$165,909 | $3,981,822 |
| Black Forest Rd | Eliminate jog in alignment* | | $2,584,670 | $15,032 | $0 | -$311,964 | $2,287,738 |
| Hodgen Rd | Eastonville Rd | Elbert Rd | $1,140,383 | $0 | $0 | -$159,654 | $980,729 |
| Rex Rd | Terminus | Eastonville Rd | $1,568,540 | $0 | $0 | $0 | $1,568,540 |
| Stapleton Dr | Towner Rd | Black Forest Rd | $10,576,862 | $0 | $0 | -$317,306 | $10,259,556 |
| Woodmen Hills Rd | Stapleton | Raygor Rd | $3,296,549 | $0 | $0 | $0 | $3,296,549 |
| Peyton Hwy | Judge Orr | Falcon Hwy | $3,095,253 | $0 | $0 | -$30,953 | $3,064,300 |
| Howell Lane | Bridge at Kettle Crk* | | $8,129,910 | $0 | $0 | $0 | $8,129,910 |
| Meridan Rd | Bradley Rd | Mesa Ridge Pky | $3,955,208 | $60,128 | $0 | $0 | $4,015,336 |
| Mesa Ridge Pkwy | Marksheffel | Meridian Rd ext | $1,870,509 | $60,128 | $0 | $0 | $1,930,637 |
| Fontaine Blvd | Terminus | Meridian Rd ext | $2,182,015 | $15,032 | $0 | $0 | $2,197,047 |
| Marksheffel Rd | Woodmen Rd | Research Pkwy | $2,659,924 | $305,420 | $0 | -$770,989 | $2,194,355 |
| Banning Lewis | Woodmen Rd | Stapleton | $2,076,102 | $229,065 | $0 | $0 | $2,305,167 |
| Mesa Ridge Pkwy | Powers Blvd | Marksheffel Rd | $2,342,643 | $152,710 | $0 | -$349,349 | $2,146,004 |
| Tutt Blvd Ext | Dublin Blvd | Templeton Gap | $869,188 | $76,355 | $0 | -$160,742 | $784,801 |
| Furrow Rd Ext | Lamplighter Dr | Higby Rd | $393,442 | $0 | $0 | $0 | $393,442 |
| Bradley Rd | Grinnell Blvd | Powers Blvd | | | | | |
| Subtotal, New County Connections | | | $50,858,865 | $943,934 | $0 | -$2,266,866 | $49,535,933 |
| | | | | | | | |
| Curtis Rd | US 24 | SH 94 | $7,978,648 | $381,775 | $0 | $0 | $8,360,423 |
| Curtis Rd | SH 94 | Drennan Rd | $6,056,105 | $45,096 | $0 | $0 | $6,101,201 |
| Bradley Rd | COS City Limit | Curtis Rd | $4,560,779 | $45,096 | $0 | $0 | $4,605,875 |
| Old Pueblo Rd | Fountain City Lmts | I-25 | $5,691,641 | $0 | $0 | -$56,916 | $5,634,725 |
| Falcon Hwy | US 24 | 1 mi E/of Curtis | $4,502,840 | $152,710 | $0 | $0 | $4,655,550 |
| Hodgen Rd | Goshawk Rd | Eastonville Rd | $3,500,663 | $152,710 | $0 | $0 | $3,653,373 |
| Baptist Rd | Desiree Dr | Roller Coaster Rd | $1,931,393 | $15,032 | $0 | -$194,643 | $1,751,782 |
| Hodgen Rd | Black Forest Rd | Bar X Rd | $1,105,509 | $45,096 | $0 | -$57,530 | $1,093,075 |
| Hodgen Rd | Roller Coaster | SH 83 | $1,076,082 | $30,064 | $0 | -$110,615 | $995,531 |
| Meridian Rd | Hodgen Rd | Murphy Rd | $2,178,857 | $45,096 | $0 | $0 | $2,223,953 |
| Black Forest Rd | Hodgen Rd | Stapleton Dr | $6,315,450 | $45,096 | $0 | -$763,266 | $5,597,280 |

Continued on next page.

**Table 22. Planned Improvement Costs, continued**

| Corridor | From | To | Segment Cost | Intersecs/ Signals | Less Deficiencies | Less Thru Trips | Total Net Cost |
|---|---|---|---|---|---|---|---|
| Vollmer Rd | Stapleton Dr | Shoup Rd | $3,217,106 | $75,160 | $0 | $0 | $3,292,266 |
| Shoup Rd | SH 83 | Black Forest Rd | $4,191,513 | $60,128 | $0 | $0 | $4,251,641 |
| Milam Rd | Shoup Rd | Old Ranch Rd | $1,949,457 | $15,032 | $0 | $0 | $1,964,489 |
| Walker Rd | Steppler Rd | Black Forest Rd | $1,994,801 | $30,064 | $0 | -$283,481 | $1,741,384 |
| Roller Coaster Rd | Hodgen Rd | Old Northgate Rd | $3,500,663 | $15,032 | $0 | -$597,668 | $2,918,027 |
| Higby Rd | Cloverleaf Rd | Rollarcoaster Rd | $1,820,848 | $0 | $0 | -$72,834 | $1,748,014 |
| Beacon Lite Rd | SH 105 | County Line Rd | $1,779,247 | $0 | $0 | $0 | $1,779,247 |
| Eastonville Rd | Mclaughlin Rd | Latigo Blvd | $5,496,070 | $60,128 | $0 | $0 | $5,556,198 |
| Monument Hill | Woodmoor Dr | County Line Rd | $1,993,419 | $30,064 | $0 | -$1,456,908 | $566,575 |
| Deer Creek Rd | Monument Hill | Woodmen Dr | $357,921 | $30,064 | $0 | -$290,989 | $96,996 |
| Subtotal, Rural Road Upgrades | | | $71,199,012 | $1,273,443 | $0 | -$3,884,850 | $68,587,605 |
| | | | | | | | |
| Black Forest Rd | Walker Rd | County Line Rd | $804,430 | $0 | -$804,430 | $0 | $0 |
| Walker Rd | Black Forest Rd | Meridian Rd | $1,935,096 | $0 | $0 | -$19,351 | $1,915,745 |
| Sweet Rd | Peyton Hwy | Ellicott Hwy | $2,630,233 | $0 | $0 | -$1,867,465 | $762,768 |
| Harrisville Rd | Blasingame Rd | Ramah Hwy | $659,035 | $0 | -$73,153 | $0 | $585,882 |
| Funk Rd | Calhan Hwy | Ramah Hwy | $2,610,541 | $0 | $0 | $0 | $2,610,541 |
| Eastonville Rd | Eastonville Loop | Londonderry Dr | $326,564 | $0 | $0 | $0 | $326,564 |
| Blaney Rd S | Meridan Rd | Hoofbeat Rd | $463,097 | $0 | -$3,705 | $0 | $459,392 |
| Drennan Rd | Curtis Rd | Ellicott Hwy | $2,942,684 | $0 | $0 | $0 | $2,942,684 |
| Sanborn Rd | Ellicott Hwy | Baggett Rd | $644,594 | $0 | $0 | $0 | $644,594 |
| Log Rd | 90 degree bend | SH 94 | $638,358 | $0 | -$40,217 | -$17,944 | $580,197 |
| Latigo Blvd | Eastonville Rd | Elbert Rd | $533,661 | $0 | $0 | $0 | $533,661 |
| Hoofbeat | Blaney Rd S | SH 94 | $1,134,276 | $0 | $0 | $0 | $1,134,276 |
| Soap Weed Rd | South of US 24 | Beg. of paving | $1,027,281 | $0 | $0 | $0 | $1,027,281 |
| Subtotal, Rural Road Paving | | | $16,349,850 | $0 | -$921,505 | -$1,904,760 | $13,523,585 |
| | | | | | | | |
| Subtotal, County Road Improvements | | | $240,824,402 | $3,677,885 | -$1,977,490 | -$16,207,367 | $224,994,498 |
| | | | | | | | |
| SH 94 | City Limits | Slocum Rd | $14,195,844 | $1,081,775 | $0 | $0 | $15,277,619 |
| US 83 | Shoup Rd | Northgate Rd | $6,122,587 | $713,090 | $0 | -$1,982,346 | $4,853,331 |
| US 24 | 31st St | Manitou Interchg | $2,456,484 | $0 | -$614,121 | -$1,842,363 | $0 |
| US 24 | Marksheffel | Constitution | $4,721,343 | $484,120 | $0 | -$936,983 | $4,268,480 |
| US 24 | Garrett Rd | Woodmen Rd | $8,610,812 | $1,076,180 | $0 | -$774,959 | $8,912,033 |
| US 83 | Northgate | Hodgen Rd | $6,040,686 | $579,065 | $0 | -$728,173 | $5,891,578 |
| Subtotal, State Roads | | | $42,147,756 | $3,934,230 | -$614,121 | -$6,264,824 | $39,203,041 |
| | | | | | | | |
| Total, All Improvements | | | $282,972,158 | $7,612,115 | -$2,591,611 | -$22,472,191 | $264,197,539 |

* segment cost based on estimated cost from 2016 *Major Transportation Corridors Plan*

*Source:* Segment cost based on segment length from Table 20 and cost per foot from Table 18; intersection and signal cost is number of needed intersection legs times cost per leg from Table 19 plus number of signals from Table 21 times cost per signal from Table 4; pass-through and deficiency costs are based on total project cost (sum of segment and intersection/signal costs) and deficiency and pass-through percentages from Table 22.

## Table 23. Planned Signals

| |
|---|
| SH 94 at Curtis Road |
| SH 94 at Enoch Road |
| US 83 at Shoup Road |
| US 83 at Hodgen Road |
| US 24 at Falcon Highway |

## Table 24. Outstanding Pre-Ordinance Credits

| Credit Holder/Area | Remaining Credits |
|---|---|
| Central Marksheffel | $2,654,742 |
| Lorson Ranch | $2,626,512 |
| Meridian Service | $175,317 |
| Sand Creek Investments | $2,956,601 |
| Eastbrook | $142,744 |
| 4 Way Ranch | $102,508 |
| Journey Homes C S, LLC | $426 |
| Campbell Homes | $34,704 |
| Total | $8,693,554 |

*Source:* Reimbursement credits outstanding as of September 27, 2016 from El Paso County Public Services Department, October 11, 2016

Resolution 16-454
Exhibit B

**El Paso County Colorado**
**Road Impact Fee Implementation Document**
DRAFT 2016

## INTRODUCTION

New development in unincorporated El Paso County has been subject to an Interim Unincorporated Countywide Transportation Improvement Fee since March 1, 2010. This Interim Fee replaced a similar fee program for the Falcon area that had been in place since 2001 and was adopted instead of a second small-area fee program. The Housing and Building Association of Colorado Springs (HBA) and other stakeholders supported the establishment of a countywide fee system in 2010 and have worked with the County to create such a program.

The basis for the fee system is not new. This Road Impact Fee is simply a method of more fairly and equitably allocating the impact of new development and recovering the cost than individually negotiated developer agreements. The purpose of the program is to develop a process to identify transportation improvements needed to accommodate growth, to allocate fairly the costs of transportation improvements among new developments, and to ensure the proper and timely accounting of improvements and funds. The program does not include all roads in the unincorporated County, only higher traffic roads that provide for regional travel.

**Goal Statements:**

- To accurately identify transportation improvements to county and state roads needed to accommodate growth.
- To accurately assess appropriate fees for the transportation improvements and ensure that costs and fees are updated regularly.
- To ensure that either the identified transportation projects are built or that fees are paid.
- To ensure accurate and reliable accounting of fees, credits and reimbursements for eligible improvements.
- To ensure that identified transportation project costs are fairly and equitably distributed.

**Program Principles:**

- Ensure that needed roads are built and that the costs of road projects are fairly and equitably distributed by spreading the cost of major collectors and arterials to all new development on a cost per trip basis.
- The fee program is based on the premise that all new development (large and small) should pay a fair share either by building improvements or by paying a fee.
- The fee program is a credit and reimbursement program that would credit (pay back) applicants that build regional transportation improvements.
- The fee program is a program for future development to fund a portion of necessary transportation improvements to accommodate future growth.
- The funds are all held in accounts that are completely separate from county funds.
- The program does not change the current improvement obligation process. Developers will still be responsible for improvements necessary to make their subdivisions work pursuant to the engineering criteria manual and applicable laws.

- Buyer Beware: Developments requiring expensive transportation improvements will not be able to recover the full costs of those improvements. Credits and reimbursements will be on a unit cost basis, not actual costs, to keep fees lower and fairer.
- More predictable, saves time and levels the playing field for all landowners who develop.

## A. DEFINITIONS

For the purpose of this implementation document, the Fee Study and the Road Impact Fee Program, the following definitions shall apply unless the context clearly indicates or requires a different meaning. To the extent that any of the following definitions conflict with definitions of the same term in Land Development Code, then for the purposes of this program, these definitions apply.

Advisory Committee: A committee appointed by the BoCC to provide recommendations on the operation of the Road Impact Fee Program and associated Public Improvement Districts.

Applicant: The person or entity making a formal request for credit for building an Eligible Improvement.

Building Permit: a permit for a classification of use that generates trips issued by the Pikes Peak Regional Building Department for construction of a structure; or, in the case of public schools, a driveway permit issued by El Paso County related to the construction of a new school.

Capacity Improvement: An improvement that expands traffic volume capacity by increasing the number of trips that can safely travel on the Major Transportation System, including but not limited to the construction of new roads, intersection improvements or highway interchanges, the widening of existing roads, the installation of traffic signals, and the acquisition or dedication of right-of-way needed for any of the above.

Convenience Commercial: A Fast Food Restaurant or Gas Station/Convenience Store, as defined herein.

Developer: The owner of a parcel of real property applying for a Development Permit or Building Permit or the person or entity submitting such application on the owner's behalf.

Development Permit: Final Plat or Zoning Action approval.

Dwelling Unit: One or more connected rooms and a single kitchen designed for and occupied by no more than one household unit for living and sleeping purposes.

Eligible Improvement: A Capacity Improvement to the Major Transportation System identified in the Road Impact Fee Study and the current update of the Major Transportation Corridors Plan (MTCP), which identify improvements needed to accommodate anticipated growth in the unincorporated area over a period of 20 years or more. Eligible Improvements include any warranted signalization or intersection improvements at the intersection of two major roads that are part of the Major Transportation System, or at the intersection of a major road that is part of the

Major Transportation System and a state highway that is not part of the Major Transportation System.

Eligible Plat: A final plat that may be recorded in phases pursuant to the provisions of BoCC Resolution No. 12-48.

Fast Food Restaurant: An establishment providing quick meals for in-store dining or take-out that also has a drive-through window or offers service to patrons in their vehicles.

Gas Station/Convenience Store: An establishment where motor fuel is offered for sale, at retail, to the motoring public, and which may also include a retail store carrying primarily convenience items such as prepackaged foods and beverages, household items, notions and personal products.

General Commercial: A shopping center, excluding outparcels for Convenience Commercial uses, or a free-standing establishment engaged in the selling or rental of goods, services or entertainment to the general public, excluding Convenience Commercial uses. Such uses include, but are not limited to, shopping centers, restaurants other than Fast Food Restaurants, discount stores, supermarkets, home improvement stores, pharmacies, automobile sales and service, banks, movie theaters, amusement arcades, bowling alleys, barber shops, laundromats, funeral homes, vocational or technical schools, dance studios, health clubs and golf courses.

Governing Body: The El Paso County Board of County Commissioners (BoCC).

Gross Floor Area: The total floor area, including basements, mezzanines, and upper floors, if any, expressed in square feet measured from the outside surface of outside walls, but excluding enclosed vehicle parking areas.

Hotel/Motel: An establishment that provides paid lodging in rooms or suites that do not meet the definition of single or multifamily dwelling units.

Impact Fee or Road Impact Fee: The fee charged upon issuance of a Development Permit or Building Permit based on growth-driven generated trips.

Industrial: An establishment primarily engaged in the fabrication, assembly or processing of goods. Typical uses include manufacturing plants, welding shops, wholesale bakeries, dry cleaning plants, and bottling works.

Institutional: A governmental, quasi-public or institutional use, or a non-profit recreational use, not located in a shopping center. Typical uses include elementary, secondary or higher educational establishments, day care centers, hospitals, mental institutions, nursing homes, assisted living facilities, fire stations, city halls, courthouses, post offices, jails, libraries, museums, places of religious worship, military bases, airports, bus stations, fraternal lodges, parks and playgrounds.

Major Transportation System: County arterials and major collectors, including intersections with state highways, within unincorporated El Paso County, as well as selected state highways within unincorporated El Paso County, as identified in the most current version of the Major Transportation Corridors Plan and the Road Impact Fee Study.

Mini Warehouse: An enclosed storage facility containing independent, fully enclosed bays that are leased to persons for storage of their household goods or personal property.

Multi-Family: A dwelling unit that is connected to two or more other dwelling units.

Office: A building not located in a shopping center and exclusively containing establishments providing executive, management, administrative or professional services, and which may include ancillary services for office workers, such as a restaurant, coffee shop, newspaper or candy stand, or child care facilities. Typical uses include real estate, insurance, property management, investment, employment, travel, advertising, secretarial, data processing, telephone answering, telephone marketing, music, radio and television recording and broadcasting studios; professional or consulting services in the fields of law, architecture, design, engineering, accounting and similar professions; interior decorating consulting services; medical and dental offices and clinics, including veterinarian clinics and kennels; and business offices of private companies, utility companies, trade associations, unions and nonprofit organizations.

PID District Manager/Administrator: The professional hired to manage the PID funds and to coordinate with the Road Impact Fee Administrator, if the County chooses. These duties may or may not be performed by the Road Impact Fee Administrator.

Final Plat: A map and supporting materials and documentation of certain described land prepared in accordance with the Land Development Code and C.R.S. §38-51-106 as an instrument for recording of real estate interests with the Clerk and Recorder and providing a permanent and accurate record of the legal description, dedications, exact size, shape, and location of lots, blocks, roads, easements, and parcels of land. The plat, when recorded by the Clerk and Recorder, becomes the legal instrument whereby the location and boundaries of separate parcels of land within a subdivision or subdivision exemption are identified. The term includes final plats for subdivisions, subdivision exemptions, and vacation and replats.

Potentially eligible improvement: A road on the MTCP that is a major collector classification or above and is owned by or will be dedicated to or maintained by El Paso County.

Public Improvement District (PID): A public improvement district or districts created for the purposes of collecting Road Impact Fees, funding Eligible Improvements, or reimbursing those who make Eligible Improvements for the cost of construction or dedication of Eligible Improvements.

Road Impact Fee Administrator: The El Paso County employee primarily responsible for administering the provisions of the Road Impact Fee Resolution, or his or her designee.

Road Impact Fee Study: The *Major Transportation Corridors Plan: Road Impact Fee Study*, prepared in September 2012 or a subsequent similar report.

Road Impact Fee Resolution: The resolution approved by the BoCC creating a permanent countywide road impact fee and subsequent amendments.

Single-Family Detached: A dwelling unit not connected to any other dwelling unit or connected to only one additional dwelling unit.

Warehouse: An establishment primarily engaged in the display, storage and sale of goods to other firms for resale, as well as activities involving significant movement and storage of products or equipment. Typical uses include wholesale distributors, storage warehouses, moving and storage firms, trucking and shipping operations and major mail processing centers.

Zoning Action: a rezone, special use, or variance of use that results in an increase of at least 100 more daily vehicle trips than the property would be expected to generate under the previous zoning in the opinion of the County Engineer, whether or not subdivision, platting or a building permit is required.

## B. IMPOSITION OF FEES

1. Effective until December 31, 2019, property in the unincorporated area of the county meeting any of the following criteria is subject to the payment of Road Impact Fees:

a. Property that receives Final Plat approval on or after February 11, 2010, either in a public hearing or administratively; or

b. Property that received Final Plat approval prior to February 11, 2010 with a condition of approval or resolution of approval, or any extended or expired Final Plats subject to Resolution 11-146, that require participation in a transportation improvement or Road Impact Fee program; or

c. Property that received Final Plat approval prior to February 11, 2010 but that is no longer eligible for recording due to the expiration of time and for which the only extension of time arises by approval of the BoCC in an open and public meeting (hereinafter referred to as an "Expired Final Plat"), regardless whether such Expired Final Plat contains a condition of approval or resolution of approval that requires participation in a transportation improvement or road impact fee program;

d. Property which was rezoned on or after February 11, 2010 and included a condition of approval to participate in a fee program, or property that receives administrative or BoCC approval for a Zoning Action on or after December 1, 2012. In this case, the fee would be based on the additional trips generated; or

e. In the event the Final Plat action is a vacation and replat or an amended plat, the Road Impact Fee would only apply to any additional lot(s) created, and then only if additional traffic would be generated from the additional lot(s).

2. Effective on and after January 1, 2020, property in the unincorporated area of the county that receives a Building Permit either in a public hearing or administratively, is subject to the payment of Road Impact Fees.

a. If the property applying for the Building Permit has already paid its Road Impact Fee obligation through application of the provisions in Section B.1 above, then it shall not have to pay again at the time of Building Permit.

3. Timing and Payment of Obligation.

a. Effective until December 31, 2019, the obligation to pay Road Impact Fees is triggered by issuance of a Development Permit.

i. For Single-Family-Detached or Multi-Family residential land uses, the Developer may elect to pay the Road Impact Fees prior to recording the Final Plat or within 90 days of approval of the Zoning Action, or to defer payment until the time of Building Permit application.

ii. For all other Development Permits, the Developer must defer payment until the time of Building Permit application.

b. Effective on and after January 1, 2020, the obligation to pay Road Impact Fees is triggered by issuance of a Building Permit.

i. Notwithstanding the foregoing, for Single-Family-Detached or Multi-Family residential Final Plats submitted on or after January 1, 2020, the Developer may elect to pay the Road Impact Fees prior to recording the Final Plat or to defer payment until the time of Building Permit application.

4. Option to Join the PID. Developers who receive Final Plat approval and elect or are required to defer payment of the Road Impact Fees to the time of Building Permit application may elect to include their plat or the property subject to zoning action in a Public Improvement District. The Developer must make such election prior to or contemporaneous with plat or zoning action approval. In the event that there are multiple PIDs with different millage rates, all of the lots within a Final Plat must be placed in the same PID. Plats or property to be included in the PID shall be submitted to the El Paso County Assessor for review and approval before plat or zoning action approval. In the case of an expired or extended final plat, the property owner shall declare whether he or she wishes to join the PID prior to an action to record the expired or extended Final Plat. No Final Plat for property to be included in the PID shall be recorded until the inclusion has been approved. Fee obligations for tax-exempt entities shall be due in full at the time of building permit application regardless of whether they are located in the PID.

a. Exception for Eligible Plats. The election to join a PID must be made for each individual phase at the time that phase is platted. If a Developer elects to include a phase of an Eligible Plat in a PID, the entire phase shall be so included, but the remaining undeveloped tracts in the subdivision shall not be so included. Except as otherwise provided herein, all provisions of Section B.3 above shall apply to Eligible Plats.

5. Amount of Fees. A Developer's Road Impact Fee obligation shall be in accordance with the following schedule or any amended schedule in effect at the time of fee payment. Road impact fee obligations shall be paid with cash or offset with credits. The County may allow alternative methods of fee payment subject to a development agreement, approval of appropriate guarantees by the County Attorney and approval by the BoCC. Under no circumstances shall Road Impact Fee payment obligations be satisfied by posting of letters of credit or other collateral to guarantee payment at a future date. The cash portion of fees applicable to development in the PID may be adjusted through legislative action of the BoCC without an update of the Road Impact Fee Study,

based on an analysis of PID property tax rates, average property values, present value discount rates and other factors.

**Road Impact Fee Schedule**

| Land Use | Unit | Full Fee | Upfront Fee in 5 Mill PID | Upfront Fee in 10 Mill PID |
|---|---|---|---|---|
| **Single-Family** | **Dwelling** | **$3,532** | **$2,229** | **$923** |
| **Multi-Family** | **Dwelling** | **$2,220** | **$1,747** | **$1,271** |
| **Hotel/Motel** | **Room** | **$2,587** | **$1,934** | **$1,279** |
| **General Commercial** | **1,000 sf** | **$4,572** | **$3,465** | **$2,359** |
| **Convenience Comm.** | **1,000 sf** | **$8,114** | **$4,585** | **$1,063** |
| **Office** | **1,000 sf** | **$2,933** | **$1,273** | **$0** |
| **Public/Institutional** | **1,000 sf** | **$3,109** | **$1,382** | **$0** |
| **Industrial** | **1,000 sf** | **$3,366** | **$2,087** | **$808** |
| **Warehouse** | **1,000 sf** | **$1,720** | **$977** | **$233** |
| **Mini Warehouse** | **1,000 sf** | **$669** | **$187** | **$0** |

PID fees based on analysis by George K. Baum & Company, 10/11/12 and 10/15/12

a. With the exception of hotel/motel, nonresidential fees shown in the above fee schedule are per 1,000 square feet of Gross Floor Area, as herein defined.

b. If the type of development for which a Development or Building Permit is requested is not clearly specified in the above fee schedule, the Road Impact Fee Administrator shall determine the fee on the basis of the fee applicable to the most nearly comparable type of land use on the fee schedule. The Road Impact Fee Administrator shall first use the definitions set forth in Section A to make this determination. If the appropriate category is still not clear, the Road Impact Fee Administrator shall use the most current edition of the *Trip Generation Manual*, prepared by the Institute of Transportation Engineers (ITE), or articles or reports appearing in the ITE Journal, as a guide to select a comparable type of land use based on trip generation rates. The developer or the Road Impact Fee Administrator may request an independent fee study if the use is not contained in the *Trip Generation Manual*. The fee for submission and review of an independent study will be a minimum of $2,000 per study. See Appendix 1 for the standards for preparing an independent study.

c. In many instances, a particular structure may include accessory uses associated with the primary land use. For example, in addition to the actual production of goods, manufacturing facilities often also have office, warehouse, research, and other associated functions. The Road Impact Fees should generally be assessed based on the primary land use. If the applicant can document that an accessory land use accounts for over 25% of the

gross floor area of the structure, and that the accessory use is not assumed in the trip generation or other impact data for the primary use, then the Road Impact Fees may be assessed based on the individual square footage of the primary and accessory land uses.

d. If the type of development for which a Building Permit is requested is for a change of land use type, the fee shall be based on the net increase in the fee for the new land use type as compared to the previous land use type. In the event that the proposed change of land use type results in a net decrease in the fee for the new use or development as compared to the previous use or development, there shall be no refund of Road Impact Fees previously paid.

e. If any credits are to be applied in lieu of Road Impact Fee payment pursuant to Section E, the amount of such credit shall be deducted from the amount of the fee to be paid.

6. Waivers. The BoCC may waive fees on the development of low- or moderate- income housing or affordable employee housing as it may define such development, provided that the County appropriates non-impact fee funds to be deposited into the Road Impact Fee Account to replace the foregone Road Impact Fee revenue.

## C. USE OF ROAD IMPACT FEES AND PID TAX REVENUES

1. Accounting. All Road Impact Fees received and tax revenues collected from associated Public Improvement Districts will be deposited into one or more interest-bearing accounts to be known collectively as the Road Impact Fee Account. Any interest that may accrue on such amounts shall be retained in the Road Impact Fee Account.

2. Use of Funds. Disbursement of monies from the Road Impact Fee Account shall be only for the following, and shall be prioritized in the following order:

a. Debt Service. To pay debt service, including principal, interest, and any fees associated with obtaining financing and servicing such debt, on any bond issued by the associated Public Improvement Districts and used to finance Eligible Improvements.

b. Payment of fees. To pay fees from the assessor's or treasurer's office as required by statute.

c. Payment of costs to update the MTCP and Fee Study. To pay for the costs of consultants, materials and equipment associated with updating the MTCP and Fee Program Study at a frequency no more often than once every five years.

d. Reimbursements. To provide reimbursements to persons or entities that have constructed Eligible Improvements, as described in Section E, Credits and Reimbursements.

e. Construction. To construct Eligible Improvements. Notwithstanding the position of this category in the priority order, no more than twenty percent (20%) of the monies from the Road Impact Fee Account may be obligated and utilized for this purpose.

f. Refunds. To pay refunds, as described in Section F, Refunds.

3. Appropriations. At least once each year, as determined by the Advisory Committee, the Advisory Committee shall propose disbursements from the Road Impact Fee Account for approval by the Board of County Commissioners. After review of the Advisory Committee's recommendation, the Board of County Commissioners shall either approve or modify the recommended disbursement of the monies, subject to the restrictions of Section C.2. Any amounts not appropriated from the Road Impact Fee Account together with any interest earnings shall be carried over to the following fiscal period.

4. Prohibited Uses. Road Impact fees shall not be used to pay for that portion of the cost of any improvement identified in the Road Impact Fee Study as attributable to an existing deficiency.

## D. USE OF PID BOND PROCEEDS

1. Expenditures. The expenditure of Public Improvement District bond proceeds shall be only for the following, and shall be prioritized in the following order:

a. To provide reimbursements to Applicants who have constructed Eligible Improvements.

b. To construct Eligible Improvements, including acquisition of right-of-way, needed to improve gaps in the Major Transportation Corridor Plan System. Notwithstanding the position of this category in the priority order, no more than twenty percent (20%) of the proceeds of any bond issue may be obligated and utilized for this purpose.

2. Appropriations. Prior to the expenditure of Public Improvement District bond proceeds, the Advisory Committee shall propose improvements to be funded from the portion of bond proceeds earmarked for constructing Eligible Improvements. After review of the Advisory Committee's recommendation, the Board of County Commissioners shall either approve or modify the recommended expenditures of the monies, subject to the restrictions of Section D.1. Any bond proceeds not utilized for this purpose shall be used for Applicant reimbursements.

## E. CREDITS AND REIMBURSEMENTS

1. Credits Generally. Any person or entity may apply for a credit for any contribution, payment, construction, Colorado Department of Transportation (CDOT) signal escrow payment, or dedication of land accepted and received by El Paso County for any Eligible Improvement based on unit costs. After subtracting any Road Impact Fees currently due, credits shall be eligible for reimbursement from funds in the Road Impact Fee Account or from bond proceeds. Credits may also be utilized, at the credit holder's discretion, to offset future Road Impact Fees that would otherwise be due. Applicants shall not be eligible for Road Impact Fee credits for improvements for which they are being reimbursed by some other entity or funding source.

2. Credit Agreement. Prior to initiation of construction, dedication of ROW or CDOT escrow payment, the Applicant shall enter into a credit agreement with the County. The agreement will provide an estimate of credits based on construction plans, ROW plans, or CDOT escrow

agreement and is a prerequisite for any future creation of credits. Construction shall be in accordance with the standards found in the El Paso County Engineering Criteria Manual and Land Development Code for the functional classification of the particular street or road. In the event staff and the Applicant cannot reach an agreement on the credit amount, the matter may be forwarded to the Advisory Committee for a recommendation and a subsequent final decision by the Board of County Commissioners. Estimated credits will be finalized after construction and acceptance of the road or ROW by the County, based on as-built drawings or actual square feet dedicated. If credits are for CDOT escrow payment for improvements in the future, then the Applicant will assign any potential return of the unused escrow to the Road Impact Fee Account with interest.

3. Creation of Credits. Credits will be created when the Eligible Improvement is approved by the BoCC for preliminary acceptance by the County for maintenance and a completed application is submitted pursuant to 6a. The final determination of credits will be made by the BoCC at the request of the Road Impact Fee Administrator. Following approval of credit creation by the BoCC, the County will create a credit account in the name of the Applicant that constructed, dedicated, or contributed to the Eligible Improvement.

4. Use of Credits. Credits may be utilized in the following manner.

a. Fee Offsets. Credits may be utilized, at the credit holder's discretion, to offset future Road Impact Fees that would otherwise be due. A Developer seeking to use credits to offset Road Impact Fees otherwise due shall present authorization from the credit holder for such use. The credit holder's account shall be reduced by the amount of any fee offset provided.

b. Reimbursement. Reimbursement of credits shall be made as funds become available from the Road Impact Fee Account or from PID bond proceeds. Reimbursements from the Road Impact Fee Account will be made at least annually following the approval of each year's annual budget by the Board of County Commissioners. Reimbursements from PID bond proceeds will be made following the issuance of each bond. Reimbursements will be made to credit holders in the chronological order in which the credits were created, provided that credits for improvements or dedications made prior to the effective date of the Road Impact Fee Resolution will be considered created on the date of preliminary acceptance by the County for maintenance for the purpose of determining reimbursement order. Credit holders will be notified of the availability of funds to reimburse them. A credit holder may waive or defer all or a portion of any available reimbursement by filing a letter with the Road Impact Fee Administrator to that effect.

c. Transfer or Assignment. All or a portion of the credits in a credit holder's account may be transferred or assigned to another person or entity upon filing written notice of such transfer, signed by the transferor and transferee, with the Road Impact Fee Administrator. The Road Impact Fee Administrator shall approve the transfer provided there are adequate funds in the credit holder's account and sufficient information has been provided to create a new account for the transferee.

5. Determining Credit Amounts. The amount of the credit shall be calculated based on standardized unit costs. The unit costs are intended to be conservative and are not intended to fully cover all actual costs. The same costs used to calculate the fees will be used to determine the

amount of credit due to an Applicant. A detailed description of standardized unit costs can be found in the Road Impact Fee Study.

a. Interim Improvements. Eligible Improvements may be constructed in phases with the prior approval of the County Engineer. Phasing will occur based on the needs of the transportation system, the impacts from the development, or for project efficiencies. Interim improvements will be allowed and eligible as long as they will be utilized as part of the overall facility in the future (not throwaway sections) as certified by El Paso County, are built to the ultimate standards, and are not constructed only to serve an individual development for a short time. One example of an ineligible improvement would be an auxiliary lane constructed in the interim only to provide access to a single development, but that would be required to be removed when the roadway is expanded. An example of an eligible interim improvement would be building two lanes of four-lane arterial that are built to arterial standards.

6. Credit Application Process.

a. Credits generally. The Applicant shall submit a cover letter summarizing the following information to the Road Impact Fee Administrator to establish credit for eligible roads constructed. In order to establish the credit amount, the Applicant must submit all required information to the Fee Administrator. Information provided must include:

1. Applicant name and subdivision name and filing or Planning and Community Development Department (PCD) file number for zoning action.
2. Name, location and functional class of the road.
3. Certification by a Professional Engineer of construction according to approved plans and followed Engineering Criteria Manual (ECM) Standards.
4. Certification by signed affidavit that all conditions of approval were met, including following of County's Land Development Code (LDC), and that all materials and subcontractors were paid in full.
5. Formal request summarizing the type of improvement or ROW dedication, the linear feet constructed minus any bridges or drainage structures, the number of signalized intersections by type installed and a calculation of the amount of credit that is being requested using the unit costs.
6. Proof of payment of the CDOT signal escrow and assignment of returned escrow funds to the Public Improvement District.

b. Pre-Program Credits. Effective January 1, 2020, a Developer applying for a Building Permit for property platted prior to February 11, 2010 and for which capital improvements or land dedication had been made may be eligible for offsets against the Road Impact Fees obligation pursuant to the provisions of this section. Pre-program credits shall only be available for capital improvements that had been included in the County's adopted MTCP at the time they were made. The application for credit consists of an independent credit request to include the following information.

1. Applicants for pre-program credits must file a request with the Road Impact Fee Administrator. The value of the capital improvement shall be determined by multiplying the unit cost of the improvement as identified in the most recent Fee

Study by the linear feet of road. Once the value of the capital improvement has been determined, the amount of the offset shall be calculated by dividing the value of the capital improvement by the number of lots in the platted subdivision.

2. The offset amount calculated above shall be applied against the Road Impact Fees obligation for the Applicant's Building Permits. No additional credits shall be created if the offset amount is greater than the Road Impact Fees obligation.

3. Applicants must submit all supporting documentation to the Road Impact Fee Administrator along with a cover letter to apply for pre-program credit. Review of the information submitted will be by the Road Impact Fee Administrator, who may request additional needed information. When the information provided is determined to be complete by the Road Impact Fee Administrator, the request will be submitted to the Advisory Committee for recommendation to the Board of County Commissioners. Information to be submitted includes:

   a. Subdivision name and Filing
   b. Developed number of lots and /or total area developed per land use to date or number of traffic/trips generated
   c. Total number of lots and/or total area per land use to be developed at expected build out.
   d. Public road improvements constructed including date of preliminary acceptance and proof that the road was identified in the MTCP in effect at the time of construction. Include linear feet constructed. Identify roadway type/classification.
   e. Preliminary acceptance date
   f. Certification that all conditions of approval were met
   g. Cover letter summarizing the type of improvement or ROW dedication, the linear feet constructed, number of signalized intersections, and a calculation of the amount of credit that is being requested
   h. The Fee Administrator may consider other methodologies with sufficient documentation and dedications that are roughly equivalent to the fee amount.

c. Credits will not be issued unless all of the following conditions are met:

1. Prior to construction, the Applicant must submit construction plans to the County Engineer for approval.
2. Construction of the eligible improvements will follow all the requirements of the El Paso County Engineering Criteria Manual (ECM).
3. The Applicant proceeds with construction according to the approved plans. Any changes during construction shall be approved by the County Engineer.
4. Upon completion of the construction, the Applicant shall obtain a certification from a Colorado registered Professional Engineer that the facilities inspected are constructed in accordance with the approved plans and all county requirements. A written request for the County inspection of the facilities must be submitted to the County Engineer.

5. Inspections of constructed improvements are the same as for any public improvements and are as described in the ECM. Upon successful completion of any punch list items, the BoCC schedules the projects for preliminary acceptance approval. This approval initiates the two-year warranty period, and construction surety is released and replaced by warranty collateral.
6. Proof of payment to the CDOT escrow and assignment of returned funds with interest to the Public Improvement District (if applicable).

7. Reimbursements. Construction of eligible improvements must be in accordance with the County's Engineering Criteria Manual (ECM) and Land Development Code (LDC) in order to be reimbursed. All review, permit, inspection, collateral and acceptance procedures including applicable review fees are the same as for any other public improvements project in the County. In order for an Applicant to obtain reimbursement for road improvement costs, the applicant must submit a letter to the Road Impact Fee Administrator noting the request for reimbursement of credit, including the amount of reimbursement and the subdivision and filing (or properties) for which the credit was established.

a. Review of the information submitted will be by the Road Impact Fee Administrator, who may request additional needed information. When the information provided is determined to be complete by the Fee Administrator, the reimbursement request will be submitted to the Advisory Committee for recommendation to the Board of County Commissioners.

8. Unit Cost Schedules. The schedules of unit costs and related diagrams for the Road Impact Fee Program can be found in the Road Impact Fee Study.

## F. REFUNDS

The current owner of record of property for which a Road Impact Fee has been paid shall be entitled to a refund of such fee if all or a portion of the Road Impact Fees paid are not spent within ten (10) years after the date of payment. The determination of whether the Road Impact Fees paid have been spent shall be determined using a first-in, first-out accounting standard. The Road Impact Fee Administrator, on determining the need for a refund, shall notify the current owner of the property.

Within 30 days after receipt of a written request for a refund, the Road Impact Fee Administrator must provide a written decision on the refund request including the reasons for the decision. If a refund is due the applicant, the County shall issue a refund payment to the applicant within 30 days of the Road Impact Fee Administrator's written decision on the refund request.

## G. ADVISORY COMMITTEE

1. The functions of the Advisory Committee shall include the following.

a. Monitor and evaluate implementation of the Road Impact Fee and associated Public Improvement Districts, file annual written reports regarding same, and report to the BoCC any perceived inequities regarding same.

b. Advise the BoCC of the need to update or revise the Major Transportation Corridor Plan, the Road Impact Fee Study, or the unit costs.

c. Make recommendations to the BoCC regarding the establishment of credits, the disbursement of Road Impact Fee funds or PID bond proceeds, and the appeal of decision regarding independent fee studies.

d. Any other tasks the BoCC may direct the Advisory Committee to perform.

2. The Advisory Committee will consider the following Capital Spending Criteria Policy when making recommendations on the use of funds to the Board of County Commissioners.

**a.** Capital Spending Criteria Policy Statement: The following factors shall be considered when prioritizing projects:

- Projects should be constructed near in time and distance to where the fee moneys were collected.
- Safety
- Roadway classification / number of people benefited
- Traffic demand
- Gaps in system (addressing areas where no development is available to construct the frontage, bottlenecks, etc.)
- Funding or project efficiencies (joint project, available match or grant funding, project savings due to economies of scale, etc.)
- Planned schedule of the MTCP.

## H. UPDATES

1. The Major Transportation Corridor Plan, including projects identified as eligible for the fee program, will be updated at least every six (6) years or as funds are available.

2. The unit costs specified in the Fee Study may be updated periodically, as determined necessary by the Advisory Committee. The update of the unit costs will be prepared by the Road Impact Fee Administrator based on inflation, recent construction bids and updated land costs for the County's park dedication in-lieu fees, and will be reviewed by the Advisory Committee. The updated unit costs will be effective for determining the amount of future credits following the update of the Road Impact Fee study to incorporate the updated unit costs into the fee calculation and the adoption of the updated Road Impact Fees by the BoCC. Updates may also be performed to incorporate decisions by the BoCC on potentially eligible projects, pre-program credits, credit agreements, or other necessary updates or program changes.

a. The Road Impact Fee Administrator shall have the authority to administratively approve any increase or decrease in the cost per trip set forth in the Fee Study resulting from pre-program credits or the inclusion or deletion of Eligible Improvements into or from the Road Impact Fee Program, provided that the Advisory Committee approves each such update and the total net increase or

decrease to the cost per trip resulting from such updates does not exceed 5% per calendar year.

## I. APPEALS

Any person or entity that believes that the provisions of the Road Impact Fee Program have been erroneously interpreted or applied must first raise in writing and attempt to resolve the issue with the Road Impact Fee Administrator. The appealing party shall timely provide any information requested by the Road Impact Fee Administrator related to the alleged error or the request will be deemed abandoned. The Road Impact Fee Administrator shall issue a written decision within twenty (20) days of receiving written notice of the alleged error. If the issue cannot be resolved, the alleged erroneous interpretation or application may be appealed to the BoCC within twenty (20) days of the Road Impact Fee Administrator's written decision. All appeals shall first be heard by the Advisory Committee, who shall make recommendations to the BoCC regarding the appeal. The appealing party shall timely provide any information requested by the Advisory Committee and shall attend any hearing on the issue scheduled by the Advisory Committee or the appeal shall be deemed abandoned. The BoCC is the ultimate interpreter of the meaning and application of the Road Impact Fee Program. Neither the Road Impact Fee Administrator nor the BoCC has the authority to grant individual variances from the provisions of the Road Impact Fee Program except through consideration of an independent fee study.

## Appendix 1 Independent Study Standard

An independent fee study may be performed by the applicant if the proposed development does not clearly fit within one of the established fee categories. See Section B.4(b) for more information. Generally, an independent study will not be considered if based on trips not using county roads, as all development occurring in unincorporated El Paso County will, at some point, utilize county roads. Independent studies shall consider the long-term impacts of the building or structure based on its structural characteristics, rather than the short-term impacts of the proposed initial occupant of the building or structure.

1. The preparation of the independent fee study shall be responsibility of the applicant.
2. Any person who requests to perform an independent fee study shall pay an application fee for administrative costs associated with the review and decision on such independent fee calculation study.
3. Formula: The independent fee study shall be by the use of the following formula:

| | |
|---|---|
| FEE | = VMT x Cost Per Trip |
| WHERE: | |
| VMT | = ADT x %NEW x ATL /2 |
| ADT | = Number of average daily trips generated |
| %NEW | = Percent new trips |
| ATL | = Average trip length in miles on the regional road system |
| 2 | = For the portion of the trip allocated to the new development (one trip end) |
| Cost Per Trip | = The cost per trip as adopted by the Board of County Commissioners. |

i. *Standards*: The fee calculation shall be based on data, information or assumptions contained in the fee program or in independent sources. Independent sources may be used if all relevant information and data is provided to and accepted by the County and only if:

a. The independent source is an accepted standard source of transportation engineering or planning data or information;

b. The independent source is a local study on trip characteristics carried out by a qualified traffic planner or engineer pursuant to an accepted methodology of transportation planning or engineering; or

c. The percent new trips factor used in the independent fee calculation study is based on actual surveys prepared in El Paso County.

d. Meets the requirements of the EL Paso County Engineering Criteria Manual.

ii. Procedure. Within ten (10) working days of receipt of an independent fee study, the Road Impact Fee Administrator shall determine if the study is complete. If the Road Impact Fee Administrator determines that the study is not complete, a written statement specifying the deficiencies shall be sent by mail to the person submitting the study. The application shall be deemed complete if no deficiencies are specified. The Road Impact Fee Administrator shall take no further action on the application until it is deemed complete. When the Road Impact Fee Administrator determines the application is complete, the application shall be reviewed, and the Road Impact Fee Administrator shall render a written decision in twenty (20) working days on whether the fee should be modified, and if so, what the amount should be, based on the standards in the following section.

iii. Appeal of Independent Fee Study Decision. A fee payer affected by the administrative decision of the Road Impact Fee Administrator on an independent fee study may appeal such decision to the Board pursuant to the appeals procedure set forth in Section I of the Implementation Document. If the Board reverses the decision of the Road Impact Fee Administrator, the Board shall direct that the fee be recalculated in accordance with its findings.