



**TAHOE
REGIONAL
PLANNING
AGENCY**

ATTACHMENT A:
MOBILITY MITIGATION FEE UPDATE
POLICY PAPER

Background

Mitigation and impact fees ensure that added development contribute their fair share to promote regional mobility and reduce vehicle miles travelled (VMT) but cannot be imposed to address existing deficiencies except where they are worsened by added development.

TRPA is authorized to charge mitigation fees per 65.2.5 (C) Standards for Changes in Operation – Required Offsets in the TRPA Code of Ordinances. Fees are used by the region’s jurisdictions and implementing agencies to leverage larger monies, typically as matching funds for federal grants, to provide the transportation infrastructure necessary to implement the policies and achieve the goals of the TRPA Regional Plan and Regional Transportation Plan (RTP). Those goals include concentrating development in town centers, incentivizing affordable housing in those centers, and promoting mobility, reducing mobile source greenhouse gas emissions, and reducing reliance on private automobiles.

Additionally, mitigation fees abate a project’s environmental impacts through actions identified in an adopted plan’s Environmental Impact Report (EIR), such as the Regional Transportation Plan’s EIR.

Under Federal case law findings, mitigation fees require (a) a nexus between the impact and fee charged (*Nollan v. California Coastal Commission*¹), and (b) rough proportionality between the burden created and the fee charged (*Dolan v. City of Tigard*²).

In California, mitigation fees attributed to added development are subject to the Mitigation Fee Act (Government Code §§ 66000-66025³, commonly referred to as “AB 1600 requirements”). In Nevada, NRS 278B⁴ defines the methodology for charging mitigation fees.

Updating the TRPA mitigation fee requires a revision of the TRPA Code of Ordinances and Rules of Procedure and Governing Board action at a public hearing.

Air Quality Mitigation Fee

The adopted Regional Plan Goals and Policy for the Lake Tahoe Region contains a detailed Implementation Element.

Policy 2 of Goal #4 of the Development and Implementation Priorities Sub-element states:

ALL PROJECTS SHALL OFFSET THE TRANSPORTATION AND AIR QUALITY IMPACTS OF THEIR DEVELOPMENT

The implementing Ordinances for the Regional Plan will define stationary sources of air pollution that may locate in the Region and define what constitutes a significant environmental impact on air quality from stationary sources. Commercial and residential developments both contribute indirect impacts to air quality by increasing the number of vehicle trips in the Region. The cumulative impacts of such trips are significant.

¹ [Nollan v. California Coastal Commission | Case Brief for Law School | LexisNexis](#)

² [Dolan v. City of Tigard | Case Brief for Law School | LexisNexis](#)

³ [Codes Display Text \(ca.gov\)](#)

⁴ [NRS: CHAPTER 278B - IMPACT FEES FOR NEW DEVELOPMENT \(state.nv.us\)](#)

The Ordinances will establish a fee to offset the impacts from minor projects. The fee will be assessed on both commercial and residential development. The ordinances will also define what projects have significant environmental impacts; these projects will be required to complete an EIS and mitigate air quality and traffic impacts with specific projects and programs.

In addition to this, Goal #1 of the Financing sub-element states:

In cooperation with other agencies, provide funds to carry out the capital improvements program and other programs of the Regional Plan, provide for the revenue sources that distribute costs equitably among users of the basin, meet performance objectives, and attain environmental thresholds.

Mitigation of development impacts is often financed through fees imposed at the time of project approval.

TRPA established the Air Quality Mitigation (AQM) fee to address these policies.

Rate Determination

The AQM fee was calculated by estimating the cost of needed improvements over a defined time period and dividing that cost by anticipated growth.

The TRPA EIP estimated that, between fiscal year 2002 and fiscal year 2006, approximately \$94.0 million would be needed to implement transit, bicycle, and pedestrian projects and programs from the EIP project list that provide both transportation and air quality benefits. Vehicle trips for 2006 were forecasted to identify future demand. The growth rate of the proportion of trips that were internal to the TRPA region was then applied to the estimated project costs to determine the total costs attributed to added development.

Charging the Fee

The AQM fee was calculated using the average daily vehicle trip ends (DVTE), determined by multiplying the appropriate ITE Trip Generation Manual land use trip rate by the size of the project (e.g., number of residential units, thousand square feet of commercial floor area, number of bowling lanes, etc.).

Each trip has an origin and a destination. The origin is the production of the trip, and the destination is the attraction of the trip, with each being responsible for a proportional share of the trip's impact to transportation. Since 1987, TRPA has weighted the origin/production of a vehicle trip at 90 percent, and the destination/attraction end of the trip at 10 percent. Within this framework, "beds" account for the origins/productions (e.g., houses, hotel/motel rooms, campgrounds) and commercial, recreation, public service, and other uses as the destinations/attractions.

AQM Fee Rate

The AQM fee rate was last updated in 2007 to \$362.04 per DVTE. It was charged based on a project's land use and calculated DVTE⁵:

- Residential \$325.84 per DVTE
- Commercial \$36.20 per DVTE

⁵ Per the TRPA-Mitigation Fees (03/08).

- Tourist Accommodation Unit \$325.84 per DVTE
- Campsites & RV sites \$325.84 per DVTE
- Other \$36.20 per DVTE

Inflation

Section 93.6 of the Code of Ordinances also states:

As part of the biennial revisions to the Regional Transportation Plan, TRPA shall review the fee schedules in 93.3D and 93.4 D in light of the costs of needed improvements and the funds available to support those improvements, and recommend adjustments to the fee schedules as appropriate.

In 2007, the AQM fee was updated by the TRPA Governing Board using the California Construction Cost Index through 2006 as an inflationary index. However, the fee has not been adjusted for inflation since and so is not indexed to the current RTP constrained project list.

Mobility Mitigation Fee

The Governing Board, at its April 28, 2021, approved changes to the Code of Ordinance project impact assessment process to implement the new VMT Threshold at the project level. The changes included renaming the AQM fee to the Mobility Mitigation Fee (MMF), basing the fee on average daily VMT instead of average daily trip ends, and providing for annual inflation adjustments based on the Consumer Price Index for the San Francisco region⁶.

These updates further the approach of the Regional Plan to concentrate development in town centers and incentivize affordable and achievable housing in those centers; the vision and goals of the RTP for promoting mobility, reducing mobile source greenhouse gas emissions, and reducing reliance on the private automobile through implementing the priority transportation projects from the Bi-State Consultation; and the sustainable revenue planning process that seeks to fill the gap in transportation funding needed to fully implement the RTP vision.

Finally, charging the MMF based on a development project's net generated VMT furthers the land use and transportation connection regulatory intent of executive order and legislation from both California (SB 375⁷ and SB 743⁸) and Nevada (SB 256⁹ and Executive Order 2019-22¹⁰) to address climate change.

What remains is the need to update the MMF to fully align with the new VMT threshold by focusing on VMT mitigating projects from the recently adopted RTP constrained project list and to update the MMF

⁶ 65.2.4.D of the TRPA Code of Ordinances

⁷ [Bill Text - SB-375 Transportation planning: travel demand models: sustainable communities strategy: environmental review. \(ca.gov\)](#)

⁸ [Bill Text - SB-743 Environmental quality: transit-oriented infill projects, judicial review streamlining for environmental leadership development projects, and entertainment and sports center in the City of Sacramento. \(ca.gov\)](#)

⁹ [SB256 Overview \(state.nv.us\)](#)

¹⁰ [Executive Order 2019-22 Directing Executive Branch to Advance Nevada's Climate Goals \(nv.gov\)](#)

to further incentivize deed-restricted affordable, moderate, and achievable housing developed within areas eligible for Residential Bonus Units¹¹ through waiving mitigation fees on these projects.

Mobility Mitigation Fee

There are three elements to the MMF:

1. Fee structure: identifying impacts to transportation that are subject to the fee
2. Fee amount: the fee to be charged based on quantifying the identified impact, and
3. Fee use: identifying projects that are eligible to use fees

The following sections discuss each of these three elements and provides the background and reasoning for the scenario analysis and fee recommendation sections that complete this report.

Fee Structure

The April 2021 Governing Board approved Code of Ordinance updates to the project impact assessment process to implement the VMT per capita threshold at the project level.

The updated process requires all projects mitigate their impacts to transportation through paying the MMF and, for projects that produce significant VMT per defined levels based on a project's land use type(s)¹² and location, do more at the project level.

The project impact assessment process defined deed-restricted affordable, moderate, and achievable housing developed within areas eligible for Residential Bonus Units¹¹ as having a less-than-significant VMT impact absent evidence to the contrary and so exempted these projects from further analysis but did not address waiving payment of the fee.

An applicant determines a project's net generated VMT, and significant VMT if applicable, by conducting a VMT assessment (described in the TRPA Project Impact Assessment Guidelines¹³). For many projects, the online project impact assessment tool¹⁴, developed by TRPA staff, can be used to calculate the net VMT generated by the project and the MMF amount.

Fee Use

TRPA's Mitigation Fund Release Policy Guidelines detail how collected mitigation funds can be used. Updated guidelines stipulate that MMF funds shall be used for VMT mitigating transportation projects.

Use of the fees will continue to require approval by the TRPA Governing Board to ensure funds reduce VMT in the region.

Similar projects to those included in the MMF VMT mitigating project list ([Attachment A](#)), or projects that provide substantial evidence of VMT mitigation benefits, may be eligible for use of collected mobility mitigation funds upon approval of TRPA staff and the TRPA Governing Board. The project list is not exhaustive but is representative of the types of projects that could use mobility mitigation funds.

¹¹ [Residential bonus unit-eligible areas include areas within one-half mile of existing transit stops or designated town centers, or where multi-family dwellings are an allowed or special use \(TRPA Code Subparagraph 52.3.4.F\).](#)

¹² Chapter 65: Air Quality / Transportation of the TRPA Code of Ordinances details the defined levels

¹³ Found at TRPA.gov under Permitting à Applications & Forms à General

¹⁴ https://trpa.shinyapps.io/PIA_Tool/

Fee Amount

There are two steps to determining an updated MMF. The first calculates the MMF amount by selecting the timeframe of VMT mitigating projects and determining the proportional share of future VMT for which development and redevelopment (i.e., added development) is responsible. The second step is setting the MMF, which can be any amount up to, but not over, the calculated fee. The following two sections detail the background and reasoning for each step.

Calculated Fee

VMT Mitigating Projects

The VMT mitigating projects are drawn from the 2020 RTP constrained project list. The projects are part of a larger system of transportation improvements that includes transportation demand management and transportation system management programs. Projects range from construction of sidewalks to micro-transit and are supplemented by travel-demand management programs such as employee shuttles and end of trip facilities to encourage walking and biking to work. Each of these contribute to achieving and maintaining the VMT per capita Threshold and result in fewer VMT in the region from added development.

Where project costs include non-VMT reducing elements, for example relocating existing utility lines underground, the project costs are adjusted to remove those elements. Secured funding and associated project and program operating costs are also not included in the project cost calculations. Further, the MMF will not duplicate costs associated with local jurisdiction VMT mitigation fee(s), transportation improvements required for project mitigations, or those provided as project benefits.

[Attachment A](#) lists the VMT mitigating projects used for calculating the MMF.

Timeframes

VMT mitigating project costs and apportioning development's share of projected future VMT is the 25-year (2045) timeframe of the 2020 RTP and the 2020 RTP 25-year constrained project list. The full-plan approach is the most common used to develop transportation impact or mitigation fees, most equitably distributes costs across development years, and is the most supportive of implementing the VMT per capita threshold, which will largely be achieved through implementation of the 2020 RTP.

Table 1: 25-Year VMT Mitigating Project Costs from the 2020 RTP

	VMT Project Costs Minus Secured Funding
25-year: 2045	\$550,481,043

VMT Reducing Project Types

Table 2 summarizes the VMT mitigating project costs by RTP Focus Areas (Transit, Trails, Technology, and Communities).

Table 2: Project Costs by Type

RTP Focus Area	Project Examples	2045
Transit	Microtransit, Water Taxi, and Mobility Hubs	\$185,651,396
Trails	Multi-Use Paths & Pedestrian Improvements	\$156,761,335
Technology	Smartphone App, Parking Management, Adaptive Traffic Management	\$17,611,931
Communities	Corridor Planning and Implementation	\$190,456,381
Total		\$550,481,043

VMT from Added Development

The same approach to apportioning projected average daily VMT from added development is used, 25-year (2045), which represents 6.8% of all total projected VMT by 2045 (Table 3).

Table 3: Average Daily VMT from Development by 2045

	Total VMT in the Region in 2045	VMT from New Development	Development Share of Projected Future Average Daily VMT
25-year: 2045	1,410,202	95,476	6.8%

Average Daily VMT by Land Use Type

New average daily VMT from added development were quantified by land use type for the 25-year timeframe. (Table 4)

Table 4: Average Daily VMT from Development

Residential Units				
	Base Year (2018)	Average Daily VMT¹⁵ (2018)	Annual Rate of Development	New Units/New VMT
				2045
UNITS	47,655	18.0	172	4,597/ 82,699
Tourist Accommodation Units (TAU)				
	Base Year (2018)	Average Daily VMT¹⁶ (2018)	Annual Rate of Development	New Units/New VMT
				2045
UNITS	11,107	11.3	35	945/ 10,721
Commercial Floor Area (CFA)				
	Base Year (2018)	Average Daily VMT¹⁷ (2018)	Annual Rate of Development	New Units/New VMT
				2045
UNITS	6,327,319	0.01	7,650	206,550/ 2,055
Total Average Daily VMT from Development				95,475

Development Share of Future VMT

To determine added development’s proportional share of VMT mitigating project costs, development’s proportional share of future VMT (6.8%) was applied to the 25-year VMT mitigating project costs from the 2020 RTP (Table 5).

Table 5: Proportional Cost to Mitigate Average Daily VMT of Future Development

Timeframe	VMT Project Costs Minus Secured Funding	Development Share of Projected Future Average Daily VMT	New Development Proportion of VMT Reducing Projects: Timeframe
25-year: 2045	\$550,481,043	6.8%	\$37,432,711

¹⁵ Includes trips from STRs, seasonal residents, and full-time residents. Commercial Trips from Full Time Residents, Seasonal Residents, and Visitors staying in STRs are assigned 90% of the trip length

¹⁶ Commercial Trips from Overnight Visitors Staying in TAUs are assigned 90% of the trip length

¹⁷ Average daily VMT From All Work, Shopping, Eating, Gaming, and Other Trips are assigned 10 % of the trip length

Maximum Fee Rate

The calculated fee rate divides the VMT mitigating project costs by the future average daily VMT from added development. The final step is to revise this calculation to adjust for the standard practice for project level analysis, which assumes full occupancy of all projects (where the regional VMT forecast includes a blend of unoccupied and occupied, similar to current development), and for TRPA's approach to apportioning trips between projects that generate trips and attracts trips (as described in the Charging the Fee section of this document). Adjusting for these differences results in a maximum fee rate of \$218 per VMT. (Table 6).

Table 6: Maximum Fees

Fee Approach	New Development % of VMT Reducing Project Costs	Total Average Daily VMT from Development	Calculated Fee per VMT	Maximum Fee per VMT
25-year: 2045	\$37,432,711	95,476	\$392.06	\$218.00

Setting the Fee

The MMF may be set up to the maximum fee, \$218.00. Several considerations may influence the decision for the fee amount, which are detailed in the next sections

Peer Communities

Similar fees charged within the Region and in nearby communities could be considered when setting the MMF to ensure that the fees are in line with those charged in nearby communities and to address the potential unintended consequence of incentivizing desired development in lower fee jurisdictions.

However, no communities in or near to the region charge a strictly VMT mitigating fee. Rather, all fees considered here also fund roadway improvements. This is important to consider when comparing the fees as the MMF is strictly for mitigating project impacts to transportation, while fees that include roadway improvements are revenue generating to offset the vehicular impacts of a project.

The scenario analysis section evaluates the maximum fee and the fees considered here.

Fees in the Tahoe Region

Placer County

Placer County is the only jurisdiction within the Tahoe region that charges a Traffic Impact fee¹⁸: \$5,440 per dwelling unit equivalent¹⁹ for both residential and commercial development. Placer County is in the process of updating its fee to one based on VMT (the fee will continue to include roadway improvements). Placer County's fee update will be completed over the next several months and is anticipated to be effectively similar in rate to the current fee.

¹⁸ [Traffic Impact Fee Program | Placer County, CA](#)

¹⁹ Dwelling unit equivalency uses the transportation impact of an average single-family residence as the uniform standard of measure of a project's transportation impact.

Fees Outside of the Tahoe Region

El Dorado County

The El Dorado County Traffic Impact Mitigation²⁰ fee uses a dwelling unit equivalent¹⁹ to calculate the fee amount. In El Dorado County, fees vary by three defined zones. Zone A includes all rural areas of El Dorado County including those adjacent to the Tahoe region. Zone B includes Shingle Springs and Cameron Park areas. Zone C includes the El Dorado Hills area. The El Dorado County portion of the Tahoe region is not included in any zone and thus projects in Tahoe do not pay county traffic impact mitigation fees.

The Traffic Impact Mitigation fee varies by project size, with single-family residence ranging from \$7,882 to \$32,675, depending on the size of the residence and the zone, with smaller residences charged less than larger ones. To simplify the analysis, fees for an average single-family residence were calculated, assuming a size of 2,000 and 2,999 square feet. Fees for nonresidential uses range from \$.27 to \$10.18 per square foot depending on the land use type and zone. Fees for Tourist Accommodation Units (TAUs) range from \$302 to \$1,839 per room, depending on the zone. (Table 7)

Table 7: El Dorado County Traffic Impact Mitigation Fee

Land Use	Traffic Impact Mitigation Fee: Zone A (Rural)	Traffic Impact Mitigation Fee: Zone B (Cameron Park & Shingle Springs)	Traffic Impact Mitigation Fee: Zone C (El Dorado Hills)
Single Family Residential ²¹	\$9,697	\$23,343	\$30,333
Multi-Family Residential ²¹	\$5,749	\$13,715	\$16,931
Non-Residential Uses (per square foot)	\$.27 - \$1.69	\$1.18 - \$7.34	\$1.68 - \$10.41
Tourist Accommodation Unit (per room)	\$305	\$1,326	\$1,880

²⁰ [Traffic Impact Fees Schedule \(edcgov.us\)](https://www.edcgov.us/traffic-impact-fees-schedule)

²¹ Not age restricted

Placer County

Outside of the Tahoe Region, Placer County charges a Traffic Impact Fee¹⁸ using a dwelling unit equivalency¹⁹ based on the district where the project is located. Districts directly to the east and north of the Tahoe Region are charged \$3,993 per dwelling unit equivalent for both residential and commercial development (Placer East District) and \$5,393 per dwelling unit equivalent for residential development and \$2,805 per dwelling unit equivalent for commercial development (Foresthill District) (Table 8).

Table 8: Placer County Traffic Impact Fee

Land Use	Traffic Impact Fee	
	Placer East District	Foresthill District
All Types	\$3,993 per dwelling unit equivalent	
Residential		\$5,393 per dwelling unit equivalent
Commercial		\$2,805 per dwelling unit equivalent

RTC Washoe

RTC Washoe, covering Reno, Sparks, and Washoe County outside of Tahoe, charges a Regional Road Impact fee²². The fee is charged to development based on the VMT it generates. The fee is charged per dwelling unit for residential uses, gross floor area for commercial, retail, industrial, and office uses, except for lodging (which is charged per room) and regional recreation facility (which is charged per acre). The per VMT fee is \$328.34 per VMT for the North Service Area and \$320.63 per VMT for the South Service Area. This equates, depending on zone, to a single-family residence being charged \$4,559.36 to \$4,934.95, a multi-family residence being charged \$3,103.70 to \$3,358.92 per dwelling unit, land uses charged based on gross floor area paying from \$1.46 to \$46.90 per 1,000 GFA, depending on use, TAUs being charged \$1,035.63 to \$1,119.64 per room, and regional recreation facilities being charged \$705.39 to \$761.75 per acre (Table 9).

Table 9: RTC Washoe Regional Road Impact Fees

Land Use	Regional Road Impact Fee	
	North Service Area	South Service Area
Single Family Residential	\$4,934.95	\$4,559.36
Multi-Family Residential	\$3,358.92	\$3,103.70
Commercial	From \$1.54 – \$46.90 per gross floor area, depending on use	From \$1.46 - \$44.37 per gross floor area, depending on use

²² [6th-Edition-RRIF-Brochure-Index-Year-1-2020.12.01.pdf \(rtcwashoe.com\)](#)

Land Use	Regional Road Impact Fee	
Tourist Accommodation Unit	\$1,119.64 per room	\$1,035.63 per room
Regional Recreation Facility	\$761.75 per Acre	\$705.39 per Acre

Truckee

The Town of Truckee charges a Traffic Impact Fee²³ on all development. Charges are per square foot for residential, commercial (except gas stations, which are charged per fueling station), industrial, and institutional (except for public parks, which are charged per acre) uses, and a per room fee for TAU. Fees vary by type of land use for all but residential land uses (Table 10).

Table 10: Town of Truckee Traffic Fee

Land Use	Traffic Fee	Exception
Residential (all types)	\$2.60 per square foot	
Commercial	\$9.46 - \$55.7 per square foot	Gas Station: \$11,363 per fueling station
Industrial	\$2.03 - \$6.16 per square foot	
Institutional	\$4.57 - \$12.89 per square foot	Public Park: \$1,270 per Acre
Tourist Accommodation Unit	\$4,444 per room	

Scenario Analysis

Single family residential development is the largest proportion of projected land use development in the Tahoe region (Table 4), and so is used as the example land use type for a fee setting scenario analysis.

The scenario analysis assumes an average single-family residence is 2,500 square feet, is fully occupied, and is represented by the region’s average daily VMT estimate for an occupied single-family residence: 28.9 VMT.

Comparison Fees

The calculated fee as shown in Table 6 in the [Maximum Fee Rate](#) section of this document is compared to per VMT fee equivalents of fees discussed in the [Fee Setting Considerations](#) section of this report (Table 11).

²³ [637511399657500000 \(townoftruckee.com\)](http://637511399657500000.townoftruckee.com)

Table 11: Fee Comparison

Fee Comparison (Average single-family residence: 2,500 square feet, fully occupied, 28.9 VMT)	Fee	Equation	Equivalent Fee per Average Daily VMT
Placer-Placer East	\$3,993	/28.9 VMT	\$138.37
RTC Washoe – South	\$4,559.36	/28.9 VMT	\$157.99
RTC Washoe – North	\$4,934.95	/28.9 VMT	\$171.01
Placer-Foresthill	\$5,393	/28.9 VMT	\$186.88
Placer – in Region	\$5,440	/28.9 VMT	\$188.51
Maximum Fee: 25-year Timeframe			218.00
Truckee	\$2.60 per square foot	* 2,500 square feet & /28.9 VMT	\$224.91
El Dorado - zone A (rural)	\$9,613	/28.9 VMT	\$333.11
El Dorado - zone B (Diamond Springs to Cameron Park)	\$24,062	/28.9 VMT	\$833.80
El Dorado - zone C (El Dorado Hills)	\$29,704	/28.9 VMT	\$1,029.31

Considering peer community fees is valuable and addresses the potential unintended consequence of incentivizing desired development in lower fee jurisdictions. However, fee purpose (e.g., mitigating VMT, offsetting roadway impacts from development, or some combination of the two) and transportation goals differ across jurisdictional and regional boundaries (e.g., peer communities do not have an equivalent VMT per capita threshold). Further, transportation projects and programs, associated costs, and funding available to implement them can vary by jurisdiction.

Setting the MMF to match those of peer communities is prone to overlooking these impactful variations. Therefore, it is not recommended that the MMF be set to match peer communities' fees. However, review of the equivalent fee rates (Table 11) finds the maximum fee to be reasonably close to those of peer communities

Other Considerations

A few additional considerations to peer community fees were analyzed. Those considerations are detailed below.

Matching Fees

For decades, Tahoe's transportation improvements have largely been funded by federal grants and limited jurisdictional and implementing agency funds. Grants, jurisdiction, and agency funds for transportation are becoming more competitive, less reliable, and are on the decline. Using a maximum fee based on matching funds requirements could result in more successful federal transportation grants in the region because applications with larger matching funds are typically more competitive. More successful transportation grants would in turn advance the implementation of the 2020 RTP and attainment of the VMT per capita threshold.

This approach recognizes the importance of mitigation funds to attaining additional funding for the total project costs.

Grant funding match requirements vary by state:

- California requires 11.47% local match
- Nevada requires 5% local match

This approach uses a weighted average of the two state's match requirements, based on the region being one-third in Nevada and two-thirds in California: 9.31%.

Table 12 shows the calculation of a maximum fee using this approach and compares it to the approach determined in the Maximum Fee section:

Table 12: Matching Funds Maximum Fee

Timeframe	VMT Project Costs Minus Secured Funding	Matching Funds Requirement	New Development Proportion of VMT Reducing Projects: Matching Funds	Total Average Daily VMT from Development	Maximum Fee per VMT
Matching Funds: 2045	\$550,481,043	9.31%	\$43,701,504	95,476	\$457.72
Maximum Fee:		6.8%	\$37,432,711		\$218.00

Though this approach links the proportion of VMT mitigating project costs to the role of the mitigation funds to leverage larger funding sources to implement the VMT reducing projects in the region it would increase the share of average daily VMT that added development would mitigate to a proportion greater than its impact, i.e., 9.3% weighted average matching funds requirements versus 6.8% of future VMT.

The TRPA led Transportation Sustainable Funding Initiative²⁴ is being undertaken in recognition of the need for additional transportation funding in the region to deliver the projects and programs of the 2020 RTP. The initiative is the appropriate avenue for identifying additional funding for more successful grant applications and to more fully support jurisdiction and implementing agency implementation of VMT mitigating projects without federal grant funds.

Because of the disproportionate impact this approach would have on added development and the ongoing Transportation Sustainable Funding Initiative, the matching funds maximum fee is not recommended.

Revenue Neutral

A revenue neutral approach to setting the MMF would ensure that the fee approximates the annual revenue received under the AQM fee.

A revenue neutral approach is calculated using the average daily VMT of an occupied single-family residence (28.9) to determine the fee amount. Dividing the average AQM fee paid by single-family residential development since 2007 (\$3,258.00) by 28.9 average daily VMT results in a per VMT fee amount of: \$112.73.

However, the AQM fee rate had not been adjusted for inflation since 2006, as discussed in the [Inflation](#) sub-section of the Air Quality Mitigation Fee section above. Therefore, this approach has significantly less purchasing power than was intended by the 2007 Governing Board’s approval of an annual inflation adjustment and so should not be advanced.

Inflation Adjusted

One approach to fee setting could be to adjust the AQM fee rate for inflation through 2020 using the Consumer Price Index for the San Francisco region²⁵, which equates to a per trip fee amount of \$522.37 (Table 13: Current Fee Rate Adjusted for Inflation).

Table 13: Current Fee Rate Adjusted for Inflation

Year	Inflation Rate	Inflation Adjusted Fee Rate	AQM Fee Rate
2007	3%	\$ 373.89	\$362.04
2008	3%	\$ 381.14	
2009	1%	\$ 397.66	
2010	1%	\$ 395.78	
2011	3%	\$ 425.84	

²⁴ [Sustainable Funding Initiative Tahoe Regional Planning Agency — TRPA](#)

²⁵ CPI San Francisco Source:

https://data.bls.gov/pdg/SurveyOutputServlet?data_tool=dropmap&series_id=CUURS49BSA0,CUUSS49BSA0

Year	Inflation Rate	Inflation Adjusted Fee Rate	AQM Fee Rate
2012	3%	\$ 432.56	
2013	2%	\$ 437.16	
2014	3%	\$ 449.84	
2015	3%	\$ 454.68	
2016	3%	\$ 466.46	
2017	3%	\$ 488.00	
2018	4%	\$ 508.23	
2019	3%	\$ 512.09	
2020	2%	\$ 522.37	

Since 1987, TRPA has weighted the origin/production of a vehicle trip at 90 percent, and the destination/attraction end of the trip at 10 percent. Within this framework, “beds” account for the origins/productions (e.g., houses, hotel/motel rooms, campgrounds) and commercial, recreation, public service, and other uses as the destinations/attractions.

To determine the equivalent fee for an average single family residential development the inflation adjusted fee is multiplied by 90% and then multiplied by the average DVTE in Tahoe for a single-family residential development: 9.98. Multiplying this rate by the inflation adjusted mitigation fee rate produces an equivalent inflation adjusted mitigation fee:

$$\$522.37 * .90 = \$475.11$$

$$\$475.11 \times 9.98 \text{ trips} = \$4,742.70$$

Dividing this fee by the average daily VMT for an occupied single-family residence (28.9) results in a per VMT fee amount of: \$162.43.

However, this approach would continue to be based on a four-year project list from 2002. As a result, the fee would not fully align with implementing the new VMT per Capita Threshold at the project level through implementation of the 2020 RTP and would not represent development’s proportional share for reducing its future average daily VMT. Therefore, it is not advanced for consideration.

Variation Factor by Location

Varying the MMF rate by project location, with projects in lower VMT generating areas such as town and regional centers charged a lower fee rate than projects in more remote locations, could further incentivize development into locations that have a greater mix of land uses and more transportation options.

This incentive is inherent to the project impact assessment process. Recent VMT data from the TRPA model recognizes that fewer vehicle trips and shorter trip distances are made in town and regional centers. This results in lower average daily VMT for projects in those locations. For example, VMT for a single-family residential development in a lower VMT neighborhood, such as Al Tahoe in the City of South Lake Tahoe, generates less than half the VMT of the same development in a higher VMT neighborhood, such as Glenbrook in Douglas County: 23.71 VMT/residential unit versus 58.79 VMT/residential unit, respectively.

This variation would be reflected in the per VMT fees paid by these two developments, meaning the Al Tahoe residential development would pay less and, conversely, the Glenbrook residential development would pay more.

Therefore, a location-based adjustment to the MMF would duplicate the effect of the data and the project impact assessment process and so is not advanced for consideration.

Fee Recommendation

Maximum fees most accurately reflect the proportional share of average daily VMT from added development in the region and so should be the basis for the MMF rate. Therefore, the recommended MMF rate is \$218.00 per VMT. Consistent with the AQM fee, TRPA proposes to attribute 90 percent of the impact to VMT generators (i.e., increases in the bed base via new residential units, tourist accommodation units, campgrounds) and 10 percent to VMT attractors (all other uses). The final proposed per VMT MMF then becomes \$196.20 /VMT for VMT generators and \$21.80/VMT for VMT attractors.

Affordable Housing

The need for more affordable, moderate, and achievable housing in the Tahoe Region has been identified by numerous jurisdictions and independent groups. TRPA and partners have responded to the need with adopted policies and implemented programs to encourage development of these housing types. The Tahoe Living Working Group has identified fees as an impediment to the development of affordable and workforce housing and is exploring numerous options to streamline and reduce costs.

TRPA staff recommends waiving the MMF for deed-restricted affordable, moderate, and achievable housing developed within areas eligible for Residential Bonus Units¹¹. This recommendation is consistent with broad support expressed by stakeholders and governing board members for reducing or waiving the fee during the MMF update consultation process.

The implementation program for the transportation and sustainable communities threshold standard (TSC1) includes specific reporting and evaluation requirements for progress and revenue collection (among other metrics) every two years and makes programmatic adjustment(s) as necessary to attain the threshold standard. This process will evaluate the fee waiver and make recommendations, as needed. Additional supplemental funding may need to be identified and included in the RTP in accordance with the VMT monitoring protocol in order to continue the fee waiver.

Fee Estimation

Average daily VMT generated by single family residential development varies based on the project's location. To estimate fees charged using the fee recommendation, fees were calculated for a single-family residential development in various locations within the region, as projected in the TRPA Travel Demand Model for the 2020 RTP.

Example Project Costs

The average single-family residential AQM fee had been \$3,258. The tables below (Table 14 and Table 15) provide an example of the likely range of fees for residential and TAU projects and illustrate that fees increase marginally for some and significantly for others because: (1) inflation, (2) overall costs of RTP project costs, and most significantly, (3) location.

Table 14: Single Family Residential Fee Estimates

Use: Residential	Old Trip-Based Fee (Inflation Adjusted fee)	Proposed VMT-Based Fee
Low VMT Areas	\$3,258 (\$4,673)	\$3,738
Average VMT Areas		\$6,478
High VMT Areas		\$13,127

The average fee a residential unit would pay increases by 47% from the AQM fee, a third of which is attributable to inflation since 2006. The proposed fee recognizes location matters and so projects in lower VMT areas would pay lower fees and projects in higher VMT areas would pay higher fees.

The following table (Table 15) summarizes the estimated per unit fee for a TAU project and compares the fee to the AQM fee.

Table 15: Tourist Accommodation Unit Fee Estimates

Use: Tourist Accommodation Unit (TAU)	Old Trip-Based Fee (Inflation Adjusted Fee)	VMT-Based Fee
Min (low VMT areas)	\$2,724 (\$3,907)	\$6,020
Average		\$9,597
Max (High VMT areas)		\$15,780

The average fee for a TAU would increase significantly, 17% of which is attributable to inflation since 2006. The higher mobility mitigation fee for TAUs is due to the fee calculation recognizing longer trip lengths (i.e., VMT) associated with these land uses.

Fees paid by commercial development are more difficult to estimate because of the large variation in VMT generated by different types of commercial development (e.g., a high-turnover restaurant has a significantly different impact than an apparel store), project size, and location. With new commercial development representing only 2.2% of projected VMT growth by 2045 and the influence of these variables, an estimate of average costs for commercial development was not undertaken.

Attachment A

RTP Focus Area	EIP Project Number	Project Title	Lead Implementer	Completion Year (per EIP Tracker)	VMT Mitigating Project Costs, Minus Secured/ Expended Funding
Corridors	<u>03.02.01.0025</u>	NDOT Complete Streets Project	NDOT	2022	\$ 1,600,000
Corridors	<u>03.02.01.0017</u>	SR 28 Central Corridor Improvements – Sand Harbor to Spooner State Park	TTD	2022	\$ 67,096,109
Corridors	<u>03.02.01.0052</u>	Meeks Bay Highway Corridor Improvements	USFS	2023	\$ 1,500,000
Corridors	<u>03.01.02.0044</u>	State Route 89 Recreation Corridor Improvements	TRPA/USFS	2023	\$ 19,628,341
Corridors	<u>03.02.01.0041</u>	Tahoe City Downtown Access Improvements	Placer County	2023	\$ 1,200,000
Corridors	<u>03.02.02.0006</u>	Apache Avenue Pedestrian Safety and Connectivity Project	El Dorado County	2025	\$ 378,136
Corridors	<u>01.01.01.0168</u>	Kings Beach Western Approach	Placer County	2025	\$ 5,956,000
Corridors	<u>03.02.01.0007</u>	U.S. 50 South Shore Community Revitalization Project	TTD	2026	\$ 86,208,175
Corridors	<u>03.02.01.0024</u>	Tahoe City Complete Streets Highway Improvements	Placer County	2027	\$ 770,000
Corridors	<u>03.01.02.0017</u>	Tallac Historic Site, Valhalla, and the Visitor Center Improvements	USFS	2027	\$ 5,550,000
Corridors	<u>03.02.02.0087</u>	U.S. 50 Corridor Collision Reduction "Y" to Park Ave, lighting, crossing improvements, green bike lanes	Caltrans	2027	\$ -
Corridors	<u>03.02.01.0026</u>	Meyers Corridor Operational Improvement Project	El Dorado County	2030	\$ 569,620
Corridors	<u>03.02.01.0004</u>	SR 89/Fanny Bridge Community Revitalization Project Complete Street	Placer County	2031	\$ -
Technology	<u>03.02.01.0034</u>	Adaptive Traffic Management on SR 89 and SR 267 Phase 1A and 1B	Placer County	2021	\$ 9,550,000

RTP Focus Area	EIP Project Number	Project Title	Lead Implementer	Completion Year (per EIP Tracker)	VMT Mitigating Project Costs, Minus Secured/ Expended Funding
Technology	<u>04.02.02.0007</u>	Parking Lot Information and Guidance System Integration/Parking Lot Detection System	TTD	2021	\$ 236,931
Technology	<u>03.01.02.0102</u>	Improved Parking Management and Wayfinding in Tahoe City	Placer County	2023	\$ 2,000,000
Technology	<u>04.02.02.0010</u>	Tahoe Basin Smartphone Application Pilot	TTD	2025	\$ 350,000
Technology	<u>03.02.01.0047</u>	Adaptive Traffic Management on US 50	Caltrans	2040	\$ 5,000,000
Technology	<u>04.02.02.0011</u>	Transit Signal Priority Along South Shore	Caltrans	2040	\$ 475,000
Trails	<u>03.02.02.0077</u>	Lake Tahoe Boulevard Class 1 Bicycle Trail (Viking Way to South Wye)	City of South Lake Tahoe	2021	\$ -
Trails	<u>03.02.02.0030</u>	Pope Beach Bike Path	USFS	2021	\$ 500,000
Trails	<u>03.02.02.0075</u>	South Tahoe Greenway Shared Use Trail Phases 1b & 2	El Dorado County	2021	\$ -
Trails	<u>03.02.02.0058</u>	US Highway 50 Sidewalk Construction - Kingsbury Grade to Lake Parkway	Douglas County	2021	\$ 590,000
Trails	<u>03.02.02.0080</u>	Middle School SR2S Project - Rufus Allen Connector	City of South Lake Tahoe	2022	\$ 750,000
Trails	<u>03.02.02.0078</u>	Pioneer Trail Pedestrian Project - Phase II	City of South Lake Tahoe	2022	\$ 2,000,000
Trails	<u>03.02.02.0027</u>	Class I Bike Path: East San Bernardino - West San Bernardino	El Dorado County	2023	\$ 1,395,000
Trails	<u>03.02.02.0088</u>	Highway 89 Corridor Tahoe Trail Feasibility Study	USFS	2023	\$ 44,097
Trails	<u>03.02.01.0055</u>	Kahle Complete Street Project	NTRCD	2023	\$ 784,000
Trails	<u>03.02.02.0055</u>	Nevada Stateline to Stateline Bikeway Laura Drive to Stateline (Phase 1A)	TTD	2023	\$ 2,870,314
Trails	<u>03.02.02.0085</u>	South Tahoe Greenway - Upper Truckee Connector Middle Reaches Pedestrian Bridge	El Dorado County	2023	\$ 6,760,126

RTP Focus Area	EIP Project Number	Project Title	Lead Implementer	Completion Year (per EIP Tracker)	VMT Mitigating Project Costs, Minus Secured/ Expended Funding
Trails	<u>03.02.02.0089</u>	Tahoe City Lakeside Trail Missing Link	Placer County	2023	\$ 800,000
Trails	<u>03.02.02.0022</u>	Class I Bike Trail: Third Street/Tahoe Valley Elementary	City of South Lake Tahoe	2024	\$ 700,000
Trails	<u>01.01.01.0033</u>	Tahoe Valley Stormwater and Greenbelt Improvement Project	City of South Lake Tahoe	2024	\$ 2,420,929
Trails	<u>03.02.02.0072</u>	Class I Bike Trail along State Route 28 from Preston Field to Northwood Blvd.	Washoe County	2025	\$ 600,000
Trails	<u>03.02.02.0066</u>	Upper Truckee River Class I Trail Widening - Tahoe City to Squaw Valley	Placer County	2025	\$ 1,875,000
Trails	<u>03.02.02.0064</u>	Class I Bike Trail - Pine Boulevard to end of Linear Park Path	City of South Lake Tahoe	2026	\$ 120,000
Trails	<u>03.02.02.0065</u>	Class I Bike Trail Along US Highway 50 from City Limits to Sawmill Road	El Dorado County	2026	\$ 2,900,000
Trails	<u>03.02.02.0062</u>	Nevada Stateline to Stateline Bikeway - Crystal Bay to Incline	TTD	2026	\$ 20,000,000
Trails	<u>01.01.01.0124</u>	Camp Richardson Resort & Campground BMPs & Retrofit	USFS	2027	\$ 6,500,000
Trails	<u>03.02.01.0054</u>	Fallen Leaf Road Pavement Rehabilitation and Recreational Access Project	El Dorado County	2028	\$ 3,500,000
Trails	<u>03.02.02.0003</u>	North Tahoe Regional Bike Trail	Placer County	2030	\$ 10,850,000
Trails	<u>03.02.02.0076</u>	South Tahoe Greenway Shared Use Trail Planning and Future Phases	CTC	2031	\$ 6,244,474
Trails	<u>03.02.01.0032</u>	Nevada Stateline to Stateline Corridor Improvements - Glenbrook Entrance to Round Hill Pines Beach	TTD	2033	\$ 32,000,000
Trails	<u>03.02.02.0073</u>	Brockway Vista Multi-Use Trail	Placer County	2035	\$ 3,000,000
Trails		Regional Bicycle and Pedestrian Improvements from the Active Transportation Plan 2026-2035	Various	2035	\$ 20,256,180

RTP Focus Area	EIP Project Number	Project Title	Lead Implementer	Completion Year (per EIP Tracker)	VMT Mitigating Project Costs, Minus Secured/ Expended Funding
Trails		Regional Bicycle and Pedestrian Improvements from the Active Transportation Plan 2036-2045	Various	2045	\$ 29,301,215
Transit		Private community/microtransit	Public-Private	2025	\$ 1,029,350
Transit		TART Phase 2025 Transit Capital Enhancements and Fleet Replacement	Placer County	2025	\$ 4,730,714
Transit	<u>03.02.01.0039</u>	TTD Phase 2025 Transit Capital Enhancements and Fleet Replacement	TTD	2025	\$ 1,669,625
Transit	<u>03.02.01.0043</u>	Mobility Hub and Transit Center Capital	TRPA	2030	\$ 33,161,068
Transit	-	Private community/microtransit	Public-Private	2035	\$ 5,362,820
Transit		TART Phase 2035 Transit Capital Enhancements and Fleet Replacement	Placer County	2035	\$ 2,420,000
Transit	<u>03.02.01.0013</u>	TTD Maintenance & Administration Facility	TTD	2035	\$ 66,161,684
Transit	<u>03.02.01.0050</u>	TTD Phase 2035 Transit Capital Enhancements and Fleet Replacement	TTD	2035	\$ 12,180,265
Transit		Private community/microtransit	Public-Private	2045	\$ 6,665,870
Transit	<u>03.02.01.0046</u>	Regional Water Taxi Service Capital	Public-Private	2045	\$ 6,400,000
Transit	<u>03.02.01.0046</u>	Regional Water Taxi Service Capital - Phase 2035/2045	Public-Private	2045	\$ 7,000,000
Transit		TART Phase 2045 Transit Capital Enhancements and Fleet Replacement	Placer County	2045	\$ 920,000
Transit	<u>03.02.01.0040</u>	TTD Phase 2045 Transit Capital Enhancements and Fleet Replacement	TTD	2045	\$ 37,950,000