TAHOE REGIONAL PLANNING AGENCY

ATTACHMENT A:

MOBILITY MITIGATION FEE PROGRAM UPDATE POLICY PAPER

OCTOBER 19, 2021

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 §§ 66000-66025[3], commonly referred to as "AB 1600 requirements"). In Nevada, NRS 278B[4] defines the methodology for charging mitigation fees.

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

Air Quality Mitigation Fee Program

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.*
>
> *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*

[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)

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 DVTE[5]:

- Residential $325.84 per DVTE
- Commercial $36.20 per DVTE
- Tourist Accommodation Unit $325.84 per DVTE
- Campsites & RV sites $325.84 per DVTE

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

- 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 program 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 region[6].

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 375[7] and SB 743[8]) and Nevada (SB 256[9] and Executive Order 2019-22[10]) to address climate change.

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

Mobility Mitigation Fee Program

There are three elements to the MMF program:

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

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[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)

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)[11] and location, do more at the project level.

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 Guidelines[12]). For many projects, the online project impact assessment tool[13], 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. These will be updated to stipulate that MMF funds may 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.

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

[11] Chapter 65: Air Quality / Transportation of the TRPA Code of Ordinances details the defined levels
[12] Found at TRPA.gov under Permitting à Applications & Forms à General
[13] https://trpa.shinyapps.io/PIA_Tool/

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 program(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

Only one approach to both VMT mitigating project costs and apportioning development's share of projected future VMT is advanced: the 25-year (2045) timeframe of the 2020 RTP (Table 1). This approach is based on 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 projected VTM from development (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 VMT[14] (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 VMT[15] (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 VMT[16] (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*

[14] 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

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

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

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

Maximum Fee

The calculated fee 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 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 fee programs 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 fee[17]: $5,440 per dwelling unit equivalent[18] 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.

Fees Outside of the Tahoe Region

El Dorado County

The El Dorado County Traffic Impact Mitigation[19] fee uses a dwelling unit equivalent[18] 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[20]	$9,697	$23,343	$30,333
Multi-Family Residential[20]	$5,749	$13,715	$16,931
Non-Residential Uses (per square foot)	$.27 - $1.69	$1.18 - $7.34	$1.68 - $10.41

[17] Traffic Impact Fee Program | Placer County, CA
[18] 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.
[19] Traffic Impact Fees Schedule (edcgov.us)
[20] Not age restricted

Tourist Accommodation Unit (per room)	$305	$1,326	$1,880

Placer County

Outside of the Tahoe Region, Placer County charges a Traffic Impact Fee[17] using a dwelling unit equivalency[18] 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**	
All Types	Placer East District	Foresthill District
	$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 fee[21]. 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

[21] 6th-Edition-RRIF-Brochure-Index-Year-1-2020.12.01.pdf (rtcwashoe.com)

Land Use	Regional Road Impact Fee	
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
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 Fee[22] 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.

[22] 637511399657500000 (townoftruckee.com)

Comparison Fees

The calculated fee as shown in Table 6 in the Maximum Fee 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).

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 Initiative[23] 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 Program 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 region[24], 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	

[23] Sustainable Funding Initiative|Tahoe Regional Planning Agency — TRPA
[24] CPI San Francisco Source: https://data.bls.gov/pdq/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 x 9.88 trips = $4,694.09

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 be 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.

Affordable Housing

Policies and programs are in place to encourage development of affordable and workforce housing, and with the support of those programs affordable and workforce housing units are forecasted to account for 35% of all new units and 30% of new VMT in the Region.

Staff explored options to reduce or waive the MMF for workforce housing but could not advance a recommendation to do so because of the requirements for mitigation fee programs and the lack of replacement funding for any reduced or waived fee amount.

Staff recommends deferring to the Tahoe Living Housing Initiative process, which has identified evaluating mitigation fees as an action item in the "Long-Term" phase. The Tahoe Living Working Group is examining the opportunities and challenges to developing affordable, moderate, and achievable housing, including fees charged to these types of development, and whether existing fees capture VMT reductions tied to size of a unit and to parking. That initiative will make recommendations on fees, and these will inform future updates to the mobility mitigation fee program.

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.

The recommendation results in higher fees for all types of development. The project impact assessment process evaluates a project's net-VMT impact, meaning redevelopment is assessed and charged a fee only when it generates a net increase in VMT. Additionally, the process recognizes and encourages projects located in low-VMT areas, such a town centers, and VMT reducing strategies, such as project design, VMT mitigations, and jurisdiction VMT credit programs, which can further reduce a project's VMT effect. These VMT reductions will be reflected in lower MMF fees.

Fee Revenue 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	03.02.01.0025	NDOT Complete Streets Project	NDOT	2022	$ 1,600,000
Corridors	03.02.01.0017	SR 28 Central Corridor Improvements – Sand Harbor to Spooner State Park	TTD	2022	$ 67,096,109
Corridors	03.02.01.0052	Meeks Bay Highway Corridor Improvements	USFS	2023	$ 1,500,000
Corridors	03.01.02.0044	State Route 89 Recreation Corridor Improvements	TRPA/USFS	2023	$ 19,628,341
Corridors	03.02.01.0041	Tahoe City Downtown Access Improvements	Placer County	2023	$ 1,200,000
Corridors	03.02.02.0006	Apache Avenue Pedestrian Safety and Connectivity Project	El Dorado County	2025	$ 378,136
Corridors	01.01.01.0168	Kings Beach Western Approach	Placer County	2025	$ 5,956,000
Corridors	03.02.01.0007	U.S. 50 South Shore Community Revitalization Project	TTD	2026	$ 86,208,175
Corridors	03.02.01.0024	Tahoe City Complete Streets Highway Improvements	Placer County	2027	$ 770,000
Corridors	03.01.02.0017	Tallac Historic Site, Valhalla, and the Visitor Center Improvements	USFS	2027	$ 5,550,000
Corridors	03.02.02.0087	U.S. 50 Corridor Collision Reduction "Y" to Park Ave, lighting, crossing improvements, green bike lanes	Caltrans	2027	$ -
Corridors	03.02.01.0026	Meyers Corridor Operational Improvement Project	El Dorado County	2030	$ 569,620
Corridors	03.02.01.0004	SR 89/Fanny Bridge Community Revitalization Project Complete Street	Placer County	2031	$ -
Technology	03.02.01.0034	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	04.02.02.0007	Parking Lot Information and Guidance System Integration/Parking Lot Detection System	TTD	2021	$ 236,931
Technology	03.01.02.0102	Improved Parking Management and Wayfinding in Tahoe City	Placer County	2023	$ 2,000,000
Technology	04.02.02.0010	Tahoe Basin Smartphone Application Pilot	TTD	2025	$ 350,000
Technology	03.02.01.0047	Adaptive Traffic Management on US 50	Caltrans	2040	$ 5,000,000
Technology	04.02.02.0011	Transit Signal Priority Along South Shore	Caltrans	2040	$ 475,000
Trails	03.02.02.0077	Lake Tahoe Boulevard Class 1 Bicycle Trail (Viking Way to South Wye)	City of South Lake Tahoe	2021	$ -
Trails	03.02.02.0030	Pope Beach Bike Path	USFS	2021	$ 500,000
Trails	03.02.02.0075	South Tahoe Greenway Shared Use Trail Phases 1b & 2	El Dorado County	2021	$ -
Trails	03.02.02.0058	US Highway 50 Sidewalk Construction - Kingsbury Grade to Lake Parkway	Douglas County	2021	$ 590,000
Trails	03.02.02.0080	Middle School SR2S Project - Rufus Allen Connector	City of South Lake Tahoe	2022	$ 750,000
Trails	03.02.02.0078	Pioneer Trail Pedestrian Project - Phase II	City of South Lake Tahoe	2022	$ 2,000,000
Trails	03.02.02.0027	Class I Bike Path: East San Bernardino - West San Bernardino	El Dorado County	2023	$ 1,395,000
Trails	03.02.02.0088	Highway 89 Corridor Tahoe Trail Feasibility Study	USFS	2023	$ 44,097
Trails	03.02.01.0055	Kahle Complete Street Project	NTRCD	2023	$ 784,000
Trails	03.02.02.0055	Nevada Stateline to Stateline Bikeway Laura Drive to Stateline (Phase 1A)	TTD	2023	$ 2,870,314
Trails	03.02.02.0085	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	03.02.02.0089	Tahoe City Lakeside Trail Missing Link	Placer County	2023	$ 800,000
Trails	03.02.02.0022	Class I Bike Trail: Third Street/Tahoe Valley Elementary	City of South Lake Tahoe	2024	$ 700,000
Trails	01.01.01.0033	Tahoe Valley Stormwater and Greenbelt Improvement Project	City of South Lake Tahoe	2024	$ 2,420,929
Trails	03.02.02.0072	Class I Bike Trail along State Route 28 from Preston Field to Northwood Blvd.	Washoe County	2025	$ 600,000
Trails	03.02.02.0066	Upper Truckee River Class I Trail Widening - Tahoe City to Squaw Valley	Placer County	2025	$ 1,875,000
Trails	03.02.02.0064	Class I Bike Trail - Pine Boulevard to end of Linear Park Path	City of South Lake Tahoe	2026	$ 120,000
Trails	03.02.02.0065	Class I Bike Trail Along US Highway 50 from City Limits to Sawmill Road	El Dorado County	2026	$ 2,900,000
Trails	03.02.02.0062	Nevada Stateline to Stateline Bikeway - Crystal Bay to Incline	TTD	2026	$ 20,000,000
Trails	01.01.01.0124	Camp Richardson Resort & Campground BMPs & Retrofit	USFS	2027	$ 6,500,000
Trails	03.02.01.0054	Fallen Leaf Road Pavement Rehabilitation and Recreational Access Project	El Dorado County	2028	$ 3,500,000
Trails	03.02.02.0003	North Tahoe Regional Bike Trail	Placer County	2030	$ 10,850,000
Trails	03.02.02.0076	South Tahoe Greenway Shared Use Trail Planning and Future Phases	CTC	2031	$ 6,244,474
Trails	03.02.01.0032	Nevada Stateline to Stateline Corridor Improvements - Glenbrook Entrance to Round Hill Pines Beach	TTD	2033	$ 32,000,000
Trails	03.02.02.0073	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	03.02.01.0039	TTD Phase 2025 Transit Capital Enhancements and Fleet Replacement	TTD	2025	$ 1,669,625
Transit	03.02.01.0043	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	03.02.01.0013	TTD Maintenance & Administration Facility	TTD	2035	$ 66,161,684
Transit	03.02.01.0050	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	03.02.01.0046	Regional Water Taxi Service Capital	Public-Private	2045	$ 6,400,000
Transit	03.02.01.0046	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	03.02.01.0040	TTD Phase 2045 Transit Capital Enhancements and Fleet Replacement	TTD	2045	$ 37,950,000