Technical Report

Sonoma County Regional Parks Fee and Transportation Mitigation Fee Update

The Economics of Land Use

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Sonoma County

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1. Introduction

Background

This Report provides a technical analysis that supports an update of Sonoma County's parks and transportation/public works impact fee programs. These two updates focus upon a reassessment of the respective costs of parks and transportation infrastructure projects funded by the existing fees and a recalculation of justifiable fees based upon current socioeconomic information and the required rational nexus cost allocation. This Report was developed in close collaboration with County staff, including representatives with the Transportation and Public Works, Regional Parks Departments, the County Administrator, and County Counsel. It is based on the best available information on planned capital improvements, adopted County service standards, and established analytical methods and procedures for allocating proportionate costs to new development and between land uses. The technical analysis is consistent with the requirements of the Mitigation Fee Act (Government Code Section 66000 et seq.) and associated "nexus" requirements.

Transportation Mitigation Fee

The County originally adopted its Transportation Mitigation Impact Fee in 1998 and prepared an update in 2009. The fee requirements are codified in the *Sonoma County Code*, *Section 26, Article 98*. There are two transportation fees, one for "Countywide" projects and applicable throughout the County and a second fee applicable to the unincorporated portion of the Sonoma Valley[1]. The current fee schedule for the Countywide fee and the Sonoma Valley fee was most recently adopted by Board of Supervisors Resolution in 2010. The transportation fees are levied on new residential and commercial development. Revenue from the fee program pays for selected road improvements and public works projects that are required, at least in part, to serve new development and maintain level of service standards. This report concludes the current impact fees are supported by a legal nexus. If there is a desire to lower the impact fee for smaller residential units, this report recommends additional research to document that a smaller unit has a smaller traffic impact.

Regional Parks Fee

The County originally adopted its Parks Impact Fee by ordinance in 1986. As amended, the fee requirement is codified in the *Sonoma County Code*, *Section 20, Article X - Development Fees for Parks and Chapter 25 and Article VI – Public*

[1] The Countywide fee is applicable in all parts of the unincorporated County except the Sonoma Valley area. This is described more clearly on page 3.

Improvements of the Sonoma County Code. The current fee schedule for the County fee was most recently adopted by Board of Supervisors Resolution in April 2009. The parks fee is levied on new residential development and complements required park dedications. Revenue from the fee program complements other funding sources and pays for a broad range of park and bicycle improvements that are required, at least in part, to serve new development and maintain level of service standards. This report concludes the current impact fees are supported by a legal nexus as required by the Mitigation Fee Act. If there is a desire to lower the impact fee for smaller residential units, this report recommends additional research to document that a smaller unit has a smaller impact on regional parks.

Legal Context

This Report provides the necessary technical analysis to support the current schedule of development impact fees up to a calculated justifiable maximum amount.

The County has the authority to levy development impact fees pursuant to the Mitigation Fee Act and Government Code Section 66000 et seq. The Mitigation Fee Act sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that "a reasonable relationship, or nexus, must exist between a governmental exaction and the purpose of the condition." The updated and new fees described in this Report reflect the requirements of the Mitigation Fee Act (Government Code Section 66000 et seq.) and the most recent relevant case law, including:

- Fees can only be used for capital facility and infrastructure improvements. Development impact fee revenue can be collected and used to cover the cost of capital facilities and infrastructure that are required to serve new development. Impact fee revenue generally cannot be used to cover the operation and maintenance costs of these or any other facilities and infrastructure.

- Fees can only be used to fund infrastructure needs created by new development or improvements that benefit existing and new development. Impact fee revenues can only be used to pay for new or expanded capital facilities needed to accommodate growth or make broad-based improvements to service levels. Impact fee revenue cannot be collected or used to cover the cost of existing deficiencies in capital facilities or infrastructure. In other words, the cost of capital projects or facilities that are designed to meet the needs of existing population must be funded through other sources. The costs associated with improvements that serve the needs of both new development and the existing population and employment are split on a “proportional share” basis according to the proportion attributable to each.

- Fee Amount Must Be Based on A Rational Nexus. The amount of an impact fee levied must be based on a “rational nexus”, defined as reasonable

relationship or connection, between new development and the needs and corresponding costs of the capital facilities and improvements need to accommodate it. As such, an impact fee must be supported by specific technically-based findings that explain or demonstrate this relationship. In addition, the impact fee amount must be structured such that the revenue generated does not exceed the cost of providing the facility or improvement for which the fee is imposed.

- Fees cannot be charged for an improvement where other, existing sources fully cover the cost of making the improvement. Improvements that are fully funded by existing federal, State, or local sources (including assessment or special tax districts) cannot be funded through impact fees.

Maximum Potential Residential Fees

The regional parks and transportation and public works fees are both levied upon new residential development. While most residential growth in the unincorporated County is expected to be single-family development, a fee for multi-family housing development is also levied where and when it does occur.

Table 1 shows the maximum justifiable updated fee for parks and bicycle facilities upon new residential development. As shown, the maximum updated fees are higher than the current fees with a 47 percent increase indicated for the parks fee for single family development and a 25 percent increase for multi-family development. The maximum fees on multi-family development are lower than those for Single-Family due to their lower average household size, a key variable in calculating parks fees. Thus, the maximum parks fee on multifamily housing is about 85 percent of the parks single-family fee.

Table 1 Maximum Updated Parks Fee on Residential Development

Residential Land Use	Current Fee	Updated Maximum Fee[1] (per unit)	Percent Increase
Single Family	$3,678	$5,402	47%
Multifamily	$3,678	$4,582	25%

[1] Includes Countywide bicycle facilities. In addition to the impact fee, additional dedication requirements apply.

Sources: Sonoma County; Economic & Planning Systems, Inc.

As documented in **Chapter 2**, the regional parks impact fee covers a subset of the total parks-related obligations of new development. The parks fee funds regional parkland and improvements, community park improvements, and bicycle

facilities (land and improvements) while it does not fund neighborhood or community parkland or the costs of neighborhood park improvements, which are obtained through developer dedications.

Table 2 shows the maximum justifiable updated fee for transportation improvements, including a range of road and public right of way, pedestrian and bike, and public works improvements for capital projects in unincorporated Sonoma County. As noted above, Sonoma County has two independent TIF programs: one program operates in the Sonoma Valley area of the County (called the Sonoma Valley TIF), and the other encompassing the remainder of the County (commonly referred to as the Countywide TIF). The current fee amounts collected in both programs are equal, so all new development pays the same transportation fee regardless of its location within the county. **Table 2** shows the maximum justifiable updated transportation/ public works fees for new residential development. The maximum allowed fees are higher than the current fees by 60 percent for Sonoma County and are 0.8 percent higher than the current fees currently in the Sonoma Valley.

The changes to the maximum justifiable transportation fees are caused by a combination of the increasing cost of improvements (the Transportation Fee was last updated in 2010), a more current forecast of new development, and an updated cost allocation methodology. The range of fee levels across the range of residential types is largely the result of the variation in vehicle trip generation for these different residential types. The technical basis for these changes is documented in **Chapter 3**.

Table 2 Maximum Updated Transportation Fee on Residential Development

Residential Land Use	Current Fee	Updated Maximum Fee Countywide (per unit)	Percent Change	Updated Maximum Fee Sonoma Valley (per unit)	Percent Change
Single Family	$7,920	$12,687	60%	$7,982	0.8%
Multifamily (Low Rise)	$6,141	$9,838	60%	$6,189	0.8%
Multifamily (High Rise)	$4,564	$7,311	60%	$4,600	0.8%
Second Unit (ADU)[1]	$3,734	$5,981	60%	$3,763	0.8%
Mobile Home	$4,195	$6,720	60%	$4,228	0.8%
Senior Adult Housing	$3,583	$5,739	60%	$3,610	0.8%

[1] State law does not allow impact fees on ADUs of 750 square feet or less.

Sources: Sonoma County; Economic & Planning Systems, Inc.

Residential Fee Schedule Options

The updated impact fees presented in **Table 1** and **2** are the "maximum allowable fees" given the results of the analysis conducted for this Update. As such, these fees establish the maximum amount of fees that are linked to the nexus-based share of costs included in the Regional Parks Improvement Program and the two Transportation Improvement Program (Sonoma Valley and Unincorporated County). It is common for local jurisdictions to consider such analysis in the broader context of their existing fee programs, economic conditions, policy considerations, and the full range of funding options available. Thus, the actual structure of the fee schedules applied may differ from the calculated fees in various ways, so long as the maximum fee levels are not exceeded.

In Sonoma County, reflecting technical and policy concerns around the State, there is interest in assuring that impact fees properly reflect the varying impacts of housing units of different sizes. Accordingly, as part of this Impact Fee Update, a set of fee schedule options have been prepared to illustrate such "unit-size" denominated impact fee schedules. It is logical to assume that smaller units may have lesser impacts., If there is a desire to charge a lower impact fee for a smaller unit based on impact data, further research may be conducted to gather this data and establish that a larger home has larger impacts (i.e., an increase in average daily vehicle trips such as Amazon delivery trips, landscape help, home help care, etc.) At this time, the research has not been conducted to support this conclusion that a larger home has a larger impact on average daily trips or park use, but further research is needed. Moreover, there is policy interest in incentivizing (and certainly not disincentivizing) smaller residential units.

Residential Maximum Fees Based on Unit Type and Size

The resulting unit size-denominated fee schedules are presented below as **Table 3** (Regional Parks) and **Tables 4** and **5** (for the Countywide and Sonoma Valley Transportation Fees, respectively). In each of these schedules the first step is to create a set of unit size "ordinals" (size brackets) for fee calculation purposes. The brackets chosen are illustrative – the County could establish more or fewer size categories. In addition to reflecting the existing and newly calculated "maximum allowable fees" the tables also reflect two options for "size-denominating" the respective impact fees – a percentage reduction and a proportional reduction. These two options and the percentages, while technically-based, are also illustrative.

Regional Parks Fee

The Regional Parks Fee schedule options presented in **Table 3** show a maximum allowable fee of $5,402. Under Option 1, a percentage reduction that mirrors smaller household sized is applied. Under Option 2, a "cost per square foot" is established by applying the fee to an average unit size estimate for single family and multifamily units. This amount ($2.25) is then applied to a representative unit size in each unit size category.

Table 3 Parks and Bicycle Facilities - Maximum Fee Schedule and Illustrative Reduction Options with Further Research to Consider Lower Impacts of Smaller Homes

Residential Land Use[1]	Current Fee	Updated Max Fee	Option 1 - Percentage Reduction[2]		Option 2 - Proportional Size Reduction[3]
			Full Fee %	Variable Fee	Variable Fee
Single Family					
≥ 2,400 sq.ft.	$3,678	$5,402	100%	$5,402	$5,402
2,000 to 2,399 sq.ft.	$3,678	$5,402	95%	$5,132	$4,952
1,600 to 1,999 sq.ft.	$3,678	$5,402	90%	$4,862	$4,052
1,200 to 1,599 sq. ft.	$3,678	$5,402	87.5%	$4,727	$3,151
901 to 1,199 sq.ft.	$3,678	$5,402	85%	$4,592	$2,251
≤ 900 sq.ft. (Cottage Court)	$3,678	$5,402	80%	$4,322	$2,026
Multifamily					
≥ 999 sq.ft.	$3,678	$4,582	100%	$4,582	$2,249
800 to 999 sq.ft.	$3,678	$4,582	95%	$4,353	$2,026
600 to 799 sq.ft.	$3,678	$4,582	90%	$4,124	$1,576
≤ 599 sq.ft.	$3,678	$4,582	85%	$3,895	$1,348

[1] State law does not allow impact fees on ADUs of 750 square feet or less.

[2] **Policy Option 1** provides for incremental reductions in fees below maximum (100%) justifiable level. Reductions are set such that low end of single family fee range remains above the maximum/ high end of multi family range.

[3] **Policy Option 2** provides fee levels for all size ranges driven by conversion of a single family maximum fee of $5,402 per unit into a per square foot fee based on a 2,400 square foot home, or $2.25 per square foot. This per square foot fee level is then applied to the mid-point of each of the ranges. At the high end, all units over 2,400 square feet pay the same fee. At the low end, fees are tied to a 900 square foot single family home (cottage court) and a 599 multifamily square foot home respectively.

Source: Sonoma County; Economic & Planning Systems, Inc.

Table 4 Transportation Fee (Countywide) - Maximum Fee Schedule and Illustrative Reduction Options with the Possibility of Further Research to Consider Lower Impacts from Smaller Homes

Residential Land Use[1]	Current Fee	Updated Max Fee	Option 1 - Percentage Reduction[3]		Option 2 - Proportional Size Reduction[4]
			Full Fee %	Variable Fee	Variable Fee
Single Family					
≥ 2,400 sq.ft.	$7,920	$12,687	100%	$12,687	$12,687
2,000 to 2,399 sq.ft.	$7,920	$12,687	95%	$12,053	$11,630
1,600 to 1,999 sq.ft.	$7,920	$12,687	90%	$11,418	$9,515
1,200 to 1,599 sq. ft.	$7,920	$12,687	87.5%	$11,101	$7,401
901 to 1,199 sq.ft.	$7,920	$12,687	85%	$10,784	$5,286
≤ 900 sq.ft. (Cottage Court)	$7,920	$12,687	80%	$10,150	$4,758
Multifamily[2]					
≥ 999 sq.ft.	$6,141	$9,838	100%	$9,838	$5,281
800 to 999 sq.ft.	$6,141	$9,838	95%	$9,346	$4,758
600 to 799 sq.ft.	$6,141	$9,838	90%	$8,854	$3,700
≤ 599 sq.ft.	$6,141	$9,838	85%	$8,362	$3,166

[1] State law does not allow impact fees on ADUs of 750 square feet or less.

[2] Multifamily fee category shows existing and updated fees for low-rise multifamily housing. The County has distinct categories/ fees for mid-rise and high-rise.

[3] **Policy Option 1** provides for incremental reductions in fees below maximum (100%) justifiable level. Reductions are set such that low end of single family fee range remains above the maximum/ high end of multi family range.

[4] **Policy Option 2** provides fee levels for all size ranges driven by conversion of a single family maximum fee of $12,687 per unit into a per square foot fee based on a 2,400 square foot home, or $5.29 per square foot. This per square foot fee level is then applied to the mid-point of each of the ranges. At the high end, all units over 2,400 square feet pay the same fee. At the low end, fees are tied to a 900 square foot single family home (cottage court) and a 599 multi family square foot home respectively.

Source: Sonoma County; Economic & Planning Systems, Inc.

Table 5 Transportation Fee (Sonoma Valley) - Maximum Fee Schedule and Illustrative Reduction Options with the Possibility of Further Research to Consider Lower Impacts Caused by Smaller Homes

Residential Land Use[1]	Current Fee	Updated Max Fee	Option 1 - Percentage Reduction[3]		Option 2 - Proportional Size Reduction[4]
			Full Fee %	Variable Fee	Variable Fee
Single Family					
≥ 2,400 sq.ft.	$7,920	$7,982	100%	$7,982	$7,982
2,000 to 2,399 sq.ft.	$7,920	$7,982	95%	$7,583	$7,317
1,600 to 1,999 sq.ft.	$7,920	$7,982	90%	$7,184	$5,986
1,200 to 1,599 sq. ft.	$7,920	$7,982	87.5%	$6,984	$4,656
901 to 1,199 sq.ft.	$7,920	$7,982	85%	$6,785	$3,326
≤ 900 sq.ft. (Cottage Court)	$7,920	$7,982	80%	$6,385	$2,993
Multifamily[2]					
≥ 999 sq.ft.	$6,141	$6,189	100%	$6,189	$3,322
800 to 999 sq.ft.	$6,141	$6,189	95%	$5,880	$2,993
600 to 799 sq.ft.	$6,141	$6,189	90%	$5,570	$2,328
≤ 599 sq.ft.	$6,141	$6,189	85%	$5,261	$1,992

[1] State law does not allow impact fees on ADUs of 750 square feet or less.

[2] Multifamily fee category shows existing and updated fees for low-rise multifamily housing. The County has distinct categories/ fees for mid-rise and high-rise.

[3] **Policy Option 1** provides for incremental reductions in fees below maximum (100%) justifiable level. Reductions are set such that low end of single family fee range remains above the maximum/ high end of multi family range.

[4] **Policy Option 2** provides fee levels for all size ranges driven by conversion of a single family maximum fee of $7,982 per unit into a per square foot fee based on a 2,400 square foot home, or $3.33 per square foot. This per square foot fee level is then applied to the mid-point of each of the ranges. At the high end, all units over 2,400 square feet pay the same fee. At the low end, fees are tied to a 900 square foot single family home (cottage court) and a 599 multi family square foot home respectively.

Source: Sonoma County; Economic & Planning Systems, Inc.

Transportation Impact Fees

The Transportation Impact Fee schedule options are shown for the Sonoma Valley Fee and the Countywide Fee. The Countywide Fee is presented in **Table 4** shows the maximum allowable fee of $12,687 for single family units $9,838 for multi-family units. Similar to the Regional Parks Fee, under Option 1, a percentage reduction that mirrors smaller household sized is applied. Under Option 2, a "cost per square foot" is established by applying the fee to an average unit size estimate for single family and multifamily units. This amount ($5.29) is then applied to a representative unit size in each unit size category.

The Sonoma Valley Fee shown on **Table 5** shows the maximum allowable fee of $7,982 for single family units $6,189 for multi-family units. Under Option 1, a percentage reduction that mirrors smaller household sized is applied. Under Option 2, a "cost per square foot" is established by applying the fee to an average unit size estimate for single family and multifamily units. This amount ($3.33) is then applied to a representative unit size in each unit size category.

Fees on Nonresidential Development

Regional parks fees are not levied on non-residential development and this approach is assumed to continue.[2] The transportation/public works fee is charged to new non-residential development which includes commercial, industrial, and lodging uses. **Table 6** shows the maximum justifiable updated transportation/public works fee for new non-residential development. At the present time the County determines the transportation fee on non-residential development largely on a case-by-case basis (i.e., individual development applications). Thus, the fee levels indicated in **Table 6** are for illustrative purposes only.

[2] Some jurisdicitons do charge parks fees on non-residential development. This could be explored as part of a future technical exercise if appropriate.

Table 6 Illustrative Maximum Updated Fee on Non-residential Development

Non-Residential Land Use	Updated Maximum Fee Countywide (per sq.ft.)	Updated Maximum Fee Sonoma Valley (per sq.ft.)
Retail Uses	$32.98	$20.75
Office Uses	$13.09	$8.24
Lodging	$11.24	$7.07
Light Industrial/Service	$6.67	$4.19

Sources: Sonoma County; Economic & Planning Systems, Inc.

Fee Program Administration

The Mitigation Fee Act specifies a series of requirements for managing and administering a development impact fee program and at the same time broad experience with impact fee program administration offers "best practices" that can enhance transparency, utility, and funding capacity of the County's impact fee program. Assuring legal compliance as well as following best practices does require ongoing and periodic effort on the part of County staff including the respective departments, the County Administrator, and Finance. Such administrative efforts can be funded with impact fee revenue.

Annual Review

This Report and the technical information contained herein should be maintained and reviewed periodically by the County as necessary to ensure alignment of capital improvement program needs and new development and to enable the adequate programming of funding sources. To the extent that capital improvement needs or costs change over time, the Fee Program may need to be updated. Specifically, AB 1600 (at Gov. Code §§ 66001(c), 66006(b)(1)) stipulates that each local agency that requires payment of a fee make specific information available to the public annually within 180 days of the last day of the fiscal year. This information includes the following:

- A description of the type of fee in the account
- The amount of the fee
- The beginning and ending balance of the fund
- The amount of fees collected and interest earned
- Identification of the improvements constructed
- The total cost of the improvements constructed

- The fees expended to construct the improvement
- The percent of total costs funded by the fee

If sufficient fees have been collected to fund the construction of an improvement, the agency must specify the approximate date for construction of that improvement. Because of the dynamic nature of growth and infrastructure requirements, the County should monitor development activity, the need for improvements, and the adequacy of the fee revenues and other available funding. Formal annual review of the fee program should occur, at which time adjustments should be made.

Surplus Funds

AB 1600 also requires that if any portion of a fee remains unexpended or uncommitted in an account for five years or more after deposit of the fee, the Board of Supervisors shall make findings once each year: (1) to identify the purpose to which the fee is to be put, (2) to demonstrate a reasonable relationship between the fee and the purpose for which it was charged, (3) to identify all sources and amounts of funding anticipated to complete financing of incomplete improvements, and (4) to designate the approximate dates on which the funding identified in (3) is expected to be deposited into the appropriate fund.

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

Credits and Reimbursement

It is common for impact fee ordinances to allow alternative and enhancements to simply paying the required fee in cash, including allowing developers/builders subject to the fee to obtain credits, reimbursements, or exemptions. Such credits, reimbursements, or exemptions are typically not allowed by right but rather are subject to a case-by-case review by County staff and the Board of Supervisors to ensure that such credits or reimbursements are warranted and appropriate, guided by the enabling ordinance which articulate the appropriate circumstances and terms of such consideration including:

- **Fee credit**. The County may elect to offer a fee dollar-for-dollar credit to developers who provide parks and/or transportations improvements included in the respective improvement program.

- **Reimbursements**. Reimbursements could also be offered to developers who build and dedicate infrastructure items that exceed their proportional obligation and that provide broad County benefits. Such reimbursements are

often typically derived from future fee revenue from other developers once it becomes available.

Five-Year Update

This report confirms there is a sufficient nexus to continue to collect the current impact fees. The use of these funds, however, may need to wait until a sufficient fund balance can be accrued. Government Code Section 66006, requires the County to deposit, invest, account for, and expend the fees in a prescribed manner. The fifth fiscal year following the first deposit into the Fee account or fund, and every five years thereafter, the County is required to make all of the following findings with respect to that portion of the account or fund remaining unexpended:

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

Once sufficient funds have been collected to complete the specified projects, the County must commence construction within 180 days. If they fail to do this, the County is required to refund the unexpended portion of the fee and any accrued interest to the then current owner.

Additionally, it is common for jurisdictions to undertake a comprehensive update of the nexus study and associated development impact fee program every five year to account for changes in improvement costs among other factors.

Supplemental Funding

It is commonly the case that the individual capital improvements included in a Capital Improvement Program serve a variety of purposes including meeting the demand caused by new development, addressing existing deficiencies, and providing equal benefits to existing and new residents and businesses and thus can and should be funded in a variety of ways; impact fee revenue is one source of funding in this broader mix.

The County has a history of obtaining significant funding for parks and transportation improvements from non-fee sources and this practice is expected to continue in a manner that provides the necessary funding needed to complement the development impact fees and complete the projects included in the Regional Parks and Transportation and Public Works impact fee programs. Examples of additional funding include:

- **Local (or Countywide) Special Tax or Bond Funds.** Counties are authorized to raise capital improvement funding through a wide variety of voter or landowner approved measures including special tax bonds, general obligation bonds, and special sales tax levies. Similar to the case with 19 other metropolitan counties in California, Sonoma County Transportation Authority (SCTA) has adopted a State-authorized local half-cent sales tax in Sonoma County. In addition to the sales tax revenue SCTA also garners additional regional funding from the Metropolitan Transportation Commission, and other granting agencies. In addition, the Sonoma County Parks Improvement, Water Quality, and Fire Safety Measure was passed by the voters in November 2018. Measure M established a 1/8 cent special transaction and use tax (sales tax) countywide for a ten-year period (April, 1, 2019) to support parks throughout the County.

- **Regional, State or Federal Grant Funds**. The County might seek and obtain grants or matching funds from Regional, State and Federal sources to help fund some of the costs of required capital facilities and improvements. As part of its funding effort, the County should research and monitor these outside revenue sources and apply for funds as appropriate.

- **Other Grants and Contributions.** A variety of grants or contributions from private donors could help fund a number of capital facilities although typically these contributions make up a fraction of the overall capital costs. For example, private foundations and/or charity organizations may provide money for certain park and bicycle facilities.

2. Parks Fee Technical Analysis

This Chapter determines the maximum supportable, updated parks fee that could be charged to new residential development in unincorporated Sonoma County. The current parks fee in the County was first established in 1986, through Chapter 20, Article X – Development Fees for Parks and Chapter 25, Article VI – Public Improvements of the Sonoma County Code. The current fee, as of Fiscal Year 2018, is $3,678.00 per developed unit, applied to both Single-Family and multifamily development. As described below, the updated maximum fee schedule distinguishes between Single-Family and multi-family development and indicates potential increases in fees on both Single-Family and multi-family development. This report confirms there is a sufficient legal nexus to support the current Regional Parks impact fee. If there is a desire to lower the impact fee for a smaller residential unit, the County may wish to conduct further research to document that a smaller unit has a smaller impact on the Regional Park system.

Parks Fee Findings

Table 7 shows the new maximum parks fee as calculated by EPS. The maximum parks fee would provide funding for parks as well as bikeways. Fee funding for regional parks would include funding for the acquisition and improvement of regional parkland. Fee funding for local parks is designed to cover improvement to community park land, though the County would consider dedications in exchange for this fee payment. Rather than pay impacts fees to support the appropriate provision of new neighborhood parkland, new neighborhood park improvements, or new community parkland, developers are required to dedicate this land/ improvements. Fee funding for bikeways would support the development of County bikeway Class 1 trails. As described in subsequent sections of this Chapter, the basis for these fees includes the 2020 General Plan service standards for parks and the 2010 Sonoma County Bicycle and Pedestrian Plan.

Table 7 Maximum Parks Fee Summary

Land Use	Single Family	Multifamily
Parks		
Regional	$2,461	$2,087
Local[1]	$1,910	$1,620
Parks Fee Subtotal	**$4,371**	**$3,708**
Bikeway Facilities Fee	$1,031	$874
Maximum Parks/ Bikeway Facilities Fee[2]	**$5,402**	**$4,582**

[1] Maximum parks fee calculation does not include land and improvement costs for neighborhood parks, or land costs for community parks. These costs are typically met through dedication.
[2] As a point of reference, the existing parks fee is a flat $3,678 per unit.

Source: Sonoma County; Economic & Planning Systems, Inc.

As shown in **Table 7**, the maximum fees are as follows:

- **Single-Family Development**. New Single-Family development would be required to pay a fee of $5,402 per unit in addition to land/improvement dedications associated with neighborhood and community parkland requirements. This would represent a 47 percent increase over the current fee.
- **Multifamily Development**. New multifamily development would be required to pay a fee of $4,582 per unit in addition to land/improvement dedications associated with neighborhood and community parkland requirements. This would represent a 25 percent increase over the current fee.

Parks Fee Calculation

The maximum supportable parks fee is based on a combination of: (1) County park service standards; (2) the specification of which portions of the service standards can be met through fee payments and which are to be met through dedications; (3) planning-level estimates of parkland acquisition and improvement costs; and, (4) average persons per household by type of residential development. These fee determinants and the associated maximum parks fee estimates are described below (the bikeways portion of the parks fee is evaluated in the following section).

Parkland Service Standard

The parks fee calculation is based on Sonoma County's standards for parkland per 1,000 persons. As described in the 2020 General Plan Public Facilities and Services Element, 3.1 Park and Recreation Services, the County has developed standards for several different types of parks, including regional, neighborhood, and community parks (see **Table 8**).

For regional parks, the General Plan specifies a standard of 20 acres per 1,000 persons. The General Plan 2020 Environmental Impact Report Draft further breaks down the regional parks category into two regional park types: regional parks with a service standard of 15 acres per 1,000 persons and regional recreation areas with a service standard of 5 acres per 1,000 persons. For neighborhood parks, the service standard is 2.5 acres per 1,000 persons and for community parks the service standard is 2.5 acres per 1,000 persons.

Table 8 Sonoma County Parkland Service Standards

Parks Type	2020 General Plan Service Standard[1]
Regional	
Regional Parks	15 acres/ 1,000 persons
Regional Recreation Areas	5 acres/ 1,000 persons
Regional Subtotal	20 acres/ 1,000 persons
Local	
Neighborhood Parks	2.5 acres/ 1,000 persons
Community Parks	2.5 acres/ 1,000 persons
Local Subtotal	5.0 acres/ 1,000 persons
Total	25 acres/ 1,000 persons

[1] As stated in the Sonoma County General Plan 2020, Public Facilities and Services Element (Page PF-11), and Sonoma County General Plan 2020 Draft EIR, 4.9 Public Services (Page 53).

Source: Sonoma County General Plan 2020 Draft EIR;
Sonoma County General Plan 2020; Economic & Planning Systems, Inc.

Park Standards Implementation Approach

The County has historically found that it is more practical to require dedication of neighborhood parkland and associated improvements as well as dedication of community parkland. As a result, park impact fees are intended to be used to support the acquisition and improvement of regional parks, regional recreation

areas, and improvements for community parks. The remaining County service standards will continue to be required through direct developer dedication. **Table 9** illustrates the County's approach to the combination of parks fees and park dedication, which is turn has direct bearing of the level of the parks impact fee. More specifically, costs associated with direct developer dedication are not included in the parks fee calculation.

Table 9 Park Standards Implementation Approach

Parks Type	Land	Improvements
Regional		
Regional Parks	Impact Fee	Impact Fee
Regional Recreation Areas	Impact Fee	Impact Fee
Local		
Neighborhood Parks	Dedication Requirement	Dedication Requirement
Community Parks	Dedication Requirement	Impact Fee

Source: Sonoma County; Economic & Planning Systems, Inc.

Cost Estimates

The maximum park fee estimates are driven by planning-level estimates of average per acre land values and parkland improvement costs. The cost of purchasing land and improving parkland will vary on a project-by-project basis. County staff provided examples of recent land acquisitions and parkland improvement investments that form the basis for the average cost estimates applied in this analysis. **Table 10** shows the planning-level per acre values/costs from County staff that were then translated into an average per person cost by multiplying the per acre cost by the relevant per 1,000 resident impact fee parks standard (from **Table 8**) and then by 1,000 (residents). This per person cost factor represents the justified and proportionate allocation of cost to new residents as part of the updated development impact fee program. As shown, the per person parks cost is estimated at $1,620 per acre, including $911 per person for all regional parks investments and $709 per person for community park improvement investments.

Land Values

The value of land varies depending on a number of factors including zoning, surrounding uses, off-site infrastructure, and specific site conditions. Including a land transaction cost, the land acquisition cost is assumed to be $15,400 per acre for both type of regional parks. The base land cost is derived from data provided by County staff. As shown in **Table 11**, the base average planning level land

Table 10 Parkland Acquisition and Development Costs

Parks Type	Cost per Acre			Cost per Person		
	Land[1]	Improvement[2]	Total	Land[1]	Improvement	Total
Regional						
Regional Parks	$15,400	$9,000	$24,400	$231.00	$135.00	$366.00
Regional Recreation Areas	$15,400	$93,700	$109,100	$77.00	$468.50	$545.50
Regional Subtotal				$308.00	$603.50	$911.50
Local[3]						
Neighborhood Parks	N/A	N/A	N/A	N/A	N/A	N/A
Community Parks	N/A	$283,000	$283,000	N/A	$707.50	$707.50
Local Subtotal				N/A	$707.50	$707.50
Total						**$1,619.00**

[1] Includes 5% transaction cost. Regional parks land cost based on preliminary land acquisition cost data provided by Sonoma County
[2] Based on preliminary development cost data provided by Sonoma County.
[3] As shown in Table 6, the land acquisitions required for neighborhood and community parks as well as improvements for community parks are assumed to be provided directly through dedication by developers. As a result, these categories have been excluded from the County Parks Fee calculation.

Source: Sonoma County; Economic & Planning Systems, Inc.

Table 11 Regional Parks Land Cost

Site Name	Acquisition Date	Number of Acres	Acquisition Cost	Purchase Price per Acre
Hood Mt. / Lawson	8/20/2014	247	$1,160,000	$4,696
North Sonoma Mt.	9/22/2014	736	$19,893,000	$27,029
Sonoma Valley RP / Curreri	10/30/2014	29	$1,110,054	$38,317
Hood Mt. / Spaulding	6/30/2016	162	$319,410	$1,972
Tolay Creek Ranch	3/3/2017	1,657	$13,000,000	$7,846
Mark West Creek RP & OSP Fee to Cresta 3	11/16/2018	46	$1,700,000	$36,614
Mark West Creek RP & OSP Fee - Excluding Cresta 3	11/16/2018	1,145	$21,686,500	$18,936
SDC3	N/A	41	$600,000	$14,634
		Weighted Average Cost per Acre		**$14,634**

Source: Sonoma County (Draft Acquisition 11/8/2019); Economic & Planning Systems, Inc.

value for regional parks and regional recreation areas is estimated at $14,600 per acre based on a selection of land transactions over the last five years. When a 5 percent transaction cost is added on, the overall land cost per acre of regional parkland is estimated at $15,400 per acre as shown in **Table 10**. As noted previously, land costs associated with neighborhood parkland and community parkland requirements are not included as they are expected to be dedicated directly by the developers.

Parkland Improvement Costs

Park improvement costs that are necessary to provide the public with safe, high-quality public parks and recreation facilities are also an important component of the overall parks provision costs and the associated fee calculations. The costs of improving regional parks, regional recreation areas, and community parkland all vary due to the types and intensity of improvements required. County staff reviewed recent park improvement investments/costs for the different types of parks to identify the following planning-level average park improvement costs: $9,000 per acre for regional parks; $93,700 per acre for regional recreation areas;[3] and $283,000 per acre for community parks.[4] As noted previously, improvement costs associated with neighborhood parks are not included as they are expected to be dedicated directly by the developers in conjunction with the dedication of the neighborhood parkland.

Parks Fee Calculations

The Mitigation Fee Act maximum parks development impact fee calculations are driven by (1) the parkland service standard per 1,000 persons; (2) the parkland and park improvement cost estimates; and (3) the persons per household by residential development type.

To determine the maximum park improvement development impact fees, the per person cost is applied to the relevant population generation per residential unit type as follows:

- **Single-Family Parks Fee**. U.S. Census data indicates that the average persons per household for Single-Family units in Sonoma County is 2.7. As shown in **Table 12**, applying this population density to the average per person parks cost calculated in **Table 10** indicates a parks fee (excluding bikeway improvements) of $4,371 per unit.

[3] Improvement cost estimates for seven regional parks (6,510 acres) were used to calculate the $9,000 per acre average. Similarly, costs for five regional recreation acres (313 acres) were used to calculate the $93,700 per acre average.

[4] Improvement cost estimates for five community parks (26 acres) were used to calculate the $283,000 per acre average.

Table 12 Single-Family Unit Maximum Parks Fee Calculation

Land Use	Fee Per Single Family Unit		
	Land	Improvements	Total
Persons per Household			2.7
Regional			
Regional Parks	$624	$365	$988
Regional Recreation Areas	$208	$1,265	$1,473
Regional Subtotal	$832	$1,629	$2,461
Local			
Neighborhood Parks	N/A	N/A	N/A
Community Parks	N/A	$1,910	$1,910
Local Subtotal	N/A	$1,910	$1,910
Total	**$832**	**$3,540**	**$4,371**

Source: 2013-2017 5-Year U.S. Census American Community Survey; Sonoma County; Economic & Planning Systems, Inc.

- **Multifamily Parks Fee**. U.S. Census data indicates that the average persons per household for multifamily units in Sonoma County is 2.3. As shown in **Table 13**, applying this population density to the average per person parks cost calculated in **Table 10** indicates a parks fee (excluding bikeway improvements) of $3,708 per unit.

Table 13 Multifamily Unit Maximum Parks Fee Calculation

Land Use	Fee Per Multifamily Unit		
	Land	Improvements	Total
Persons per Household			2.3
Regional			
Regional Parks	$529	$309	$838
Regional Recreation Areas	$176	$1,073	$1,249
Regional Subtotal	$705	$1,382	$2,087
Local			
Neighborhood Parks	N/A	N/A	N/A
Community Parks	N/A	$1,620	$1,620
Local Subtotal	N/A	$1,620	$1,620
Total	**$705**	**$3,002**	**$3,708**

Source: 2013-2017 5-Year U.S. Census American Community Survey; Sonoma County; Economic & Planning Systems, Inc.

Bikeways Fee Calculation

In addition to providing additional regional and local parks as the County's population expand, the County also has particular goals and investments associated with Countywide bikeways. In 2010, the County developed its Sonoma County Bicycle and Pedestrian Plan that identifies a series of Class I bikeways. The parks fee could include the requirement for new development to contribute its fair share payment towards the envisioned Countywide Class I bikeways improvements.

Table 14 provides a list of Class I bikeways along with the latest cost estimated as provided by the County. As shown, the total cost of implementing the bikeways plan is $222.7 million in today's dollars. This is comprised of an estimated $162.1 million in total improvement costs as well as an estimated $60.7 million in costs associated with land acquisition. Improvements include the estimated direct construction costs as well as costs associated with design, engineering, and contingency. The County has reviewed this project list to ensure the land associated with the bikeways is distinct from the expected parkland acquisition requirements and that the list of improvements is distinct from the bike/ped improvements included in the transportation fee calculations.

Table 14 Class I Bikeways Cost Estimates and Cost per Capita

		Trail Details		Cost Estimate[4]			
2010 County Bicycle and Pedestrian Plan[1]	Project Name	Length in Miles	Length in Feet	Construction Cost	Design, Engineering, and Contingency Cost	Land Cost	Total Cost
Yes	Adobe Creek Trail	0.69	3,643	$552,000	$193,200	$140,000	$885,200
Yes	Bellevue Creek Trail[3]	4.74	25,027	$3,792,000	$1,327,200	$1,048,000	$6,167,200
Yes	Bodega Bay Trail[3]	0.71	3,730	$565,182	$197,814	$193,500	$956,495
Yes	Central Sonoma Valley Bikeway	0.26	1,373	$208,000	$72,800	$137,280	$418,080
Yes	Sonoma Valley Trail[3]	12.64	66,739	$18,651,850	$4,476,444	$6,673,920	$29,802,214
Yes	Colgan Creek Trail Extension West	1.79	9,451	$1,432,000	$501,200	N/A	$1,933,200
Yes	Copeland Creek Trail[3]	1.81	9,557	$1,448,000	$506,800	N/A	$1,954,800
Yes	Dutch Bill Creek Trail[3]	5.46	28,829	$4,368,000	$1,528,800	$2,882,880	$8,779,680
Yes	Gossage Creek Trail	1.04	5,491	$832,000	$291,200	N/A	$1,123,200
Yes	Laguna de Santa Rosa Trail	13.67	72,178	$10,936,000	$3,827,600	$5,892,480	$20,656,080
Yes	Mark West Creek Trail[3]	1.39	7,339	$1,112,000	$389,200	$733,920	$2,235,120
Yes	Monte Rio / Willow Creek Trail	7.51	39,653	$6,008,000	$2,102,800	$3,965,280	$12,076,080
Yes	Petaluma / Sebastopol Trail	11.19	59,083	$18,054,000	$4,513,500	$5,908,320	$28,475,820
Yes	Petaluma Marsh Trail	11.05	58,344	$8,840,000	$3,094,000	$5,834,400	$17,768,400
Yes	Petaluma River Trail	0.36	1,901	$288,000	$100,800	$190,080	$578,880
Yes	Peterson Creek Trail	1.41	7,445	$1,128,000	$394,800	N/A	$1,522,800
Yes	Roseland Creek Trail[3]	1.41	7,445	$1,128,000	$394,800	N/A	$1,522,800
Yes	Russian River Trail	22.86	120,701	$18,288,000	$6,400,800	$12,070,080	$36,758,880
No[2]	Russian River Trail	7.6	40,128	$6,080,000	$2,128,000	$4,012,800	$12,220,800
Yes	Santa Rosa Creek / Joe Rodota Trail	1.8	9,504	$1,440,000	$504,000	$950,400	$2,894,400
Yes	Santa Rosa Creek Trail Extension	1.2	6,336	$960,000	$336,000	N/A	$1,296,000
Yes	Sonoma / Schellville Trail[3]	4.79	25,291	$3,832,000	$1,341,200	$1,815,210	$6,988,410
Yes	Sonoma County Bay Trail	14.42	76,138	$11,536,000	$4,037,600	$7,613,760	$23,187,360
Yes	West County Trail Extension[3]	0.67	3,538	$536,000	$187,600	$28,400	$752,000
No[2]	Road[3]	0.26	1,373	$208,000	$72,800	$137,280	$418,080
No[2]	West County Trail - Occidental Road[3]	0.87	4,594	$696,000	$243,600	$459,360	$1,398,960
Total		**131.60**	**694,829**	**$122,919,032**	**$39,164,558**	**$60,687,350**	**$222,770,939**
Cost per Capita[5]				**$211**	**$67**	**$104**	**$382**

[1] Does not include SMART Class 1 Bikeway
[2] In process of being added to the County Bikeways Plan
[3] Indicates bikeways whose total cost is calculated from estimates provided by Sonoma County, rather than having the total cost directly provided.
[4] Cost estimates from feasibility study, CIP, or Engineer's Estimate. The construction cost is based on an $800,000 per mile assumption per Sonoma County. The design, engineering, and contingency costs are assumed to be 35% of construction cost. Land cost is estimated to be $217,800 per acre. An "N/A" indicates cases where property was acquired through a method other than a direct purchase.
[5] Based on Sonoma County's 2040 population of 583,517 persons as projected using data from the CA Department of Finance.

Source: CA Department of Finance; Sonoma County (Draft PMF Study Development 12/20/2019 - Bikeways); Economic & Planning Systems, Inc.

Because the bikeways systems/investments is expected to serve all County residents, the fair/proportionate cost allocation per new County resident is estimated by dividing the total bikeways cost by the total County population forecast by 2040. In this way, new development only pays for its proportionate share with the large majority of the costs associated with existing development. It is important to note that new development in unincorporated County will only represent a small share of the overall County population by 2040. As noted previously, several other non-impact fee revenue sources contribute significantly to this revenue base.

The bikeways cost per capita is used to calculate the maximum fee for bikeways, as shown in **Table 15**. To arrive at a maximum fee for Single-Family dwellings, the bikeways cost per capita is multiplied by the persons per household for each Single-Family unit, approximately 2.7 persons. Likewise, to arrive at a maximum fee for multifamily dwellings, the bikeways cost per capita is multiplied by the persons per household for each multifamily unit, approximately 2.3 persons. The resulting maximum bikeways fee for Single-Family dwellings is $1,031, and the fee for multifamily dwellings is $874 per unit.

Table 15 Bikeways Maximum Fee Calculation

Dwelling Type	Persons per Household	Land Cost	Improvement Cost[1]	Total
Single Family	2.7	$281	$750	**$1,031**
Multifamily	2.3	$238	$636	**$874**

[1] Improvement costs include costs associated with construction, design, engineering, and contingency.

Source: 2013-2017 5-Year U.S. Census American Community Survey; Sonoma County; Economic & Planning Systems, Inc.

3. Transportation Fee Technical Analysis

Sonoma County administers two TIF Programs: one program operates in the Sonoma Valley area of the County (called the Sonoma Valley TIF), and the other operates in the remainder of the County (commonly referred to as the Countywide TIF). Both TIF programs apply only to new development that occurs in the unincorporated areas of Sonoma County, and do not apply within any of the incorporated cities. Fees collected in the Sonoma Valley area accrue to the Sonoma Valley TIF account and can be used only to fund capital improvements within the Sonoma Valley area. Fees collected in the remainder of the unincorporated County area accrue to the Countywide TIF account and can be used to fund capital improvements in the balance of the unincorporated County area. Both of these programs have been in effect for three decades and have generated funds for the construction of important capital improvement projects included in the two areas. This report concludes there is a sufficient legal nexus for the continued collection of those impact fees.

This Chapter documents the technical work completed to update the two TIF programs. This effort includes the following steps:

- Confirm and update the Transportation Improvement Program for each TIF Program: The individual transportation improvement projects included in the two Transportation Improvement Programs were evaluated by the County Transportation and Public Works Department for their current status and new cost estimates were prepared for each individual project (the last cost update occurred in 2010). As a part of this effort, County staff also identified what fraction of each transportation improvement project is providing general improvement of service benefitting both existing residents and businesses and future residents and employees. As an example, many of the transportation projects include bikeway and pedestrian improvements that will result in a general improvement in service for all users.

- Update population and employment forecast: Calculation of the transportation fees utilize a forecast of both population and employment growth in sub-areas of the County as this growth is linked to increased travel demand on County roadways. For this update the existing population and employment forecast, which runs through the year 2040, developed and used by the Sonoma County Transportation Authority has been used.

- Linking travel demand from new population and employment to the need for transportation improvement projects: Using a special application of the Sonoma County Transportation Authority's Travel Demand Model, referred to as "select link analysis", the transportation engineers, Fehr & Peers, determined what portion of future (2040) trips occurring on the road segments included in the two Transportation Improvement Programs derive

from new population and employment growth. This calculation is a key underpinning of establishing "nexus" between new growth and the need for transportation improvements.

- Updating the fee calculation. The combination of the updated transportation costs, the cost allocation attributable to new development, and the growth forecast results in a "cost per new trip" factor. This factor is then applied to the trip generation factors associated with individual land uses, including various housing prototypes and commercial and industrial uses. In Sonoma County, at this time, the fees applicable to commercial and industrial projects are determined on a case-by-case basis (by the Permit and Resource Management Department) using the estimated cost per trip factor and a specific trip generation estimate for the given project.

Transportation Fee Findings

Table 16 shows the maximum transportation impact fees for the County's two TIF Programs based upon the updating of the transportation improvements costs, the 2040 population and employment forecast, and the cost allocation methods applied. The following observations are offered:

- The residential land use categories are those currently used by the Transportation and Public Works Department and PRMD. As noted, current State law exempts residential units below 750 square feet determined to be ADUs from development impact fees.
- Fees on commercial (and "special generators") uses will apply the updated "cost per trip" calculation but the fee will be determined on a "case-by-case" basis (during review of the project application) by the Permit and Resource Management Department, as is the current practice. The "maximum allowable fee" shown for commercial and industrial uses is for illustrative purposes only.
- The "maximum allowable fee" represents a cap on the fee in this update. The County is not obligated to levy fees at this level and thus can choose to leave the fees at their current level or somewhere in between current fee levels and the maximum allowable level.
- The maximum allowable fee in the Sonoma Valley is shown to be 0.8 percent higher the fee currently being charged, while the maximum allowable fee in the Countywide program is 60 percent above the fee currently being charged.

Table 16 Existing and Maximum Transportation Impact Fee

Land Use Category (presently in use)	ITE Code	Unit	Daily Trip Rate (ITE 10th Ed)	Pass-by Factor (3)	Adjusted Daily Trip Rate	Countywide Area			Sonoma Valley Area		
						Maximum Allowable Fee	Existing Fee	Percent Change	Maximum Allowable Fee	Existing Fee	Percent Change
RESIDENTIAL:											
Single-Family Residential (detached)	210	DU	9.44	0%	9.44	$12,687	$7,920	60.2%	$7,982	$ 7,920	0.8%
Multi-Family Residential (low rise)	220	DU	7.32	0%	7.32	$9,838	$6,141	60.2%	$6,189	$ 6,141	0.8%
Multi-Family Residential (high rise)	221	DU	5.44	0%	5.44	$7,311	$4,564	60.2%	$4,600	$ 4,564	0.8%
Second Unit (ADU) (1)		DU	4.45	0%	4.45	$5,981	$3,734	60.2%	$3,763	$ 3,734	0.8%
Mobile Home	240	DU	5.00	0%	5.00	$6,720	$4,195	60.2%	$4,228	$ 4,195	0.8%
Senior Adult Housing	251	DU	4.27	0%	4.27	$5,739	$3,583	60.2%	$3,610	$ 3,583	0.8%
COMMERCIAL USES (2)											
Retail Uses	820	KSF	37.75	-35%	24.54	$32,978	Commercial fee calculation completed on case-by-case basis by PRMD Staff		$20,747	Commercial fee calculation completed on case-by-case basis by PRMD Staff	
Office Uses	710	KSF	9.74	0%	9.74	$13,090			$8,236		
Lodging	310	Room	8.36	0%	8.36	$11,236			$7,069		
INDUSTRIAL USES											
Light Industrial/service uses	110	KSF	4.96	0%	4.96	$6,666			$4,194		
SPECIAL GENERATORS	Uses that are a mix of use types (e.g., wineries) or are otherwise unique (e.g., institutional uses such as schools) will be individually evaluated by TPW staff to determine ADT factor to apply for fee setting purposes.										

Notes:

(1) State law does not allow impact fees on ADUs of 750 square feet or less.

(2) It is recommended that specific commercial use categories be included in the TIF schedule.

(3) The "pass-by adjustment" reflects the fact that retail stops are not all "destinations".

(4) Maximum allowable fees shown for commercial and industrial uses are illustrative only. As noted commerical and industrial fees are currently calculated by PRMD on a case-by-case basis.

(5) Existing fee charged in the Sonoma Valley TIF Program is adjusted downward to reflect the updated cost allocation.

Transportation Improvement Programs

The foundation of the County's two Transportation Impact Fee Programs is the respective Transportation Improvement Programs that constitute their "cost basis". As a part of this update the Transportation Improvement Programs for the Sonoma Valley and the remainder of the County were organized and updated through a collaborative effort between the Consultant Team and the Transportation and Public Works Department staff. The effort encompassed updating each project's current status, its cost (established in 2019 dollars), and its composition (distinguishing between improvements needed to serve additional travel demand and those providing general service improvements). The two Transportation Improvement Programs are documented in **Appendix A**.

The cost updating generally utilized an indexing of the original cost estimates using the Engineering News Record Construction Cost Index for the San Francisco Bay Area; as accumulated over the past decade, construction costs have increased by more than 50 percent.

Sonoma County Transportation Improvement Program

The projects in the Countywide TIF Program encompass the unincorporated area of Sonoma County excluding the Sonoma Valley area. There are 33 projects in the Countywide TIF Program that have not yet been completed. These projects had an estimated total cost as of 2009 (the last update) of $195.7 million. The updated cost estimate (2019 dollars) is $325 million, which includes $23.3 million in improvements to bicycle and pedestrian facilities as part of the individual projects. These bicycle and pedestrian projects are in addition to, and separate from, the bicycle facilities improvements included in the County Regional Parks Fee Program.

Sonoma Valley Transportation Improvement Program

The projects in the Sonoma Valley TIF Program encompass the unincorporated area of the Sonoma Valley between the cities of Santa Rosa and Sonoma. There are 12 projects in the Program all pending completion. These projects had an estimated total cost as of 2009 (the last update) of $36.2. The updated cost estimate (2019 dollars) is $79.9 million, which includes $7.7 million in improvements to bicycle and pedestrian facilities as part of the individual projects. These bicycle and pedestrian projects are in addition to, and distinct from, the bicycle facilities improvements included in the County Regional Parks Fee Program.

Growth Projections

One key element of a nexus analysis is to account for the projections of future residential and non-residential development that are anticipated to occur within the area being studied. In the case of the two Sonoma TIF programs, the relevant information is the amount of growth projected to occur in the unincorporated areas of Sonoma County, since those are the areas subject to the TIFs. The Sonoma County Transportation Authority (SCTA) maintains a set of growth projections for its use in conducting transportation planning studies; these growth projections are routinely aligned with the regional projections prepared by the Association of Bay Area Governments (ABAG) while also incorporating more local detail than the ABAG projections.

The most recent set of growth projections for the unincorporated Sonoma County areas was obtained from SCTA and is shown in **Table 17**. The projections include both the number of residential households and the square footage of non-residential buildings. Of the total population in 2040, approximately 20 percent is projected to be from new development (that is, of the 55,325 total households in 2040, 11,275 (or 20 percent) of them are projected to be new). These projections have been incorporated into the overall fee calculations.

Forecasting Future Travel Demand

A key part of the update process is to establish a relationship between the travel needs generated by new development in unincorporated Sonoma County (in the Sonoma Valley and remainder of the unincorporated County) and the facilities that are proposed to be improved through application of fee revenues. A common practice in transportation facility-related nexus studies is to use a travel demand model for this purpose. See **Appendix A-5** for a brief introduction to travel demand models.

Travel Demand Modeling in Sonoma County

The travel model that is currently used for transportation planning purposes in Sonoma County is developed and maintained by the SCTA. The SCTA has maintained a Sonoma Travel Demand Model (also referred to as the Sonoma Model) for many years and applies industry-standard model development and calibration procedures. The Sonoma Model is updated regularly by SCTA; the most recent update was undertaken in 2019, and the most up-to-date version of the Sonoma Model has been used for this nexus analysis. The horizon year of the Sonoma Model is year 2040, and the model contains the residential and non-residential growth projections.

Table 17 SCTA Growth Projections Summary

Unincorporated Area	Households			Square Footage of Non-Residential (000)		
	2015	2040	Growth	2015	2040	Growth
Coastal-Gualala	3,886	5,935	2,049	833	1,294	461
Rural Healdsburg	2,131	2,410	279	417	893	476
Rural North East	1,944	2,288	344	1,189	2,769	1,580
Rural Petaluma	4,173	4,357	184	1,192	1,645	453
Rural RP-Cotati	1,148	1,160	12	231	242	11
Rural Santa Rosa	9,256	10,080	824	6,396	11,666	5,269
Rural Sebastopol	6,717	6,810	93	1,265	1,594	329
Rural Sonoma Valley	10,716	14,055	3,339	4,276	7,480	3,205
Russian River	4,079	8,230	4,151	1,066	1,496	431
Total	**44,050**	**55,325**	**11,275**	**16,864**	**29,079**	**12,215**

Source: SCTA; Fehr & Peers.

Procedure for Establishing Nexus

For the purposes of a nexus analysis, a model is used to determine the linkage between traffic coming from the geographic areas subject to the TIF and the usage of the specific facilities that are going to be funded with TIF revenues. In a travel demand model, roads and intersections are represented by a network of "links" and "nodes"; in general, each link represents a road segment and each node (i.e., a location where two links are joined) represents an intersection. For each of the projects included in the two Sonoma TIF programs, the links in the model network that represent that project location were identified. Then, "select link" model runs were conducted for each of the proposed TIF projects. The select link analysis identifies the origins and destinations of each vehicle that is projected to use each selected link; with this information, the fair share of cost associated with each project can be allocated to development in Sonoma County and included in the impact fee.

For the fair share calculations for the Sonoma TIF programs, there are four types of trips identified through the select link process:

1. Trips that both start and end in unincorporated Sonoma County;
2. Trips that have an origin in the unincorporated County and a destination elsewhere;
3. Trips that have a destination in the unincorporated County and an origin elsewhere; and,
4. Trips that have neither an origin nor a destination in unincorporated Sonoma County, but are using roads that pass through the County (also referred to as "pass-through" trips).

Trips that fall into the final category, "pass-through" trips, should not be included in the fee program because those trips are not related to the Sonoma County development that is subject to the fee. Trips from the other three categories are attributable to development in unincorporated Sonoma County and thus can be included in the TIF calculations.

Results of Analyzing Future Travel Demand Cost Allocation

The results of this analysis for the two TIF Programs are summarized in **Table 18** and **Table 22**, respectively. These tables show the complete list of transportation projects in the two Programs and the composite results of allocating transportation improvement costs to new development, which include "select link analysis" and the effort to separately allocate the costs that benefit all development (existing and new). These methods are described below.

Table 18 Countywide TIF Cost Allocation

Item #	Transportation Project		Total Cost Estimate (2019 $)	TIF Program Cost Allocation	
	Project Name	Project Elements		Percent Allocation (1)	Dollar Amount
1	Adobe Rd. (Casa Grande)	Intersection left turn lanes, widening	$500,000	50%	$250,000
2	Adobe Rd. (Old Redwood Hwy to Hwy 116)	left turn lanes, widening, intersection, improvements, signalization, railroad crossing, shoulders, bike facilities, drainage improvements	$37,600,000	33%	$12,528,320
3	Airport Blvd. Corridor (Sonoma County Airport entrance to Old Redwood Hwy)	widening, RR crossing, signalization, curb & gutter, sidewalks, storm drainage facilities, US 101 interchange improvements*, turn lanes, intersection improvements, bike improvements. (US 101 interchange improvements have been estimated between $40 million & $52 million)	$18,800,000	63%	$11,761,280
4	Alexander Valley Rd. (Healdsburg Ave. to Hwy 128)	widening, bike improvements, storm drainage facilities, driveways	$6,100,000	25%	$1,500,600
5	Bennett Valley Rd.(Matanza Creek to Enterprise)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements	$11,300,000	35%	$3,945,960
6	Bodega Hwy (Hwy 1 to Barnett Valley to City of Sebastopol)	widening, turn lanes, shoulders, drainage improvements	$36,100,000	27%	$9,804,760
7	Brickway Extension/Laughlin Rd. (River Rd. to Airport Blvd.)	widening, new bridge, signalization or round-about, curb & gutter, sidewalks, storm drainage facilities, turn lanes, intersection improvements, bike improvements	$15,100,000	58%	$8,727,800
8	Dry Creek Rd. (the vicinity of the US 101 interchange)	minor widening, storm drainage facilities, bike improvements	$1,100,000	11%	$118,800
9	East Shiloh Rd Bridge	minor widening, storm drainage facilities	$2,000,000	19%	$386,400

Table 19 Countywide TIF Cost Allocation (Cont.)

Item #	Transportation Project		Total Cost Estimate (2019 $)	TIF Program Cost Allocation	
	Project Name	Project Elements		Percent Allocation (1)	Dollar Amount
11	Faught Rd. (Old Redwood Hwy to East Shiloh Rd.)	widening, storm drainage facilities, pedestrian & bike improvements	$3,100,000	36%	$1,116,000
12	Forestville Bypass (Hwy 116 to Mirabel Intersection)	new alignment, intersection improvements, shoulders, bike & pedestrian facilities, drainage improvements	$15,100,000	84%	$12,684,000
13	Fulton Rd. (Old Redwood Hwy to City of Santa Rosa)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike & pedestrian improvements	$9,800,000	34%	$3,351,600
14	Graton Rd. (Hwy 116 to Brush Street)	widening, shoulders, turn lanes, drainage improvements	$10,000,000	60%	$6,000,000
15	Guerneville Rd. (Laguna de Santa Rosa to City of Santa Rosa)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike & pedestrian improvements	$5,300,000	53%	$2,830,200
16	Hwy 1 (coastal locations - Sea Ranch & Bodega Bay)	new turn lanes	$8,300,000	95%	$7,885,000
17	Hwy 116 (Stagegulch @ Landfill Access Rd.)	widening, new turn lane	$9,100,000	56%	$5,096,000
18	Hwy 116 (Vine Hill)	widening, new turn lane, signalization	$2,000,000	94%	$1,880,000
19	Lakeville Road (Hwy 37 extending 3 miles north)	left turn lanes, drainage improvements, widening	$9,700,000	17%	$1,695,560
20	Llano Rd. (Hwy 12 to Hwy 16)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike & pedestrian improvements	$6,000,000	47%	$2,844,000

Table 20 Countywide TIF Cost Allocation (Cont.)

Item #	Transportation Project		Total Cost Estimate (2019 $)	TIF Program Cost Allocation	
	Project Name	Project Elements		Percent Allocation (1)	Dollar Amount
21	Mark West Springs Rd. Corridor (US 101 interchange/Old Redwood Hwy/Ursuline/end)	widening, storm drainage facilities, pedestrian & bike improvements, turn lanes, intersection improvements	$11,300,000	52%	$5,830,800
22	Mirabel Rd. (Hwy 116 to Davis)	widening, shoulders, bike facilities, drainage improvements, turn lanes	$6,100,000	44%	$2,684,000
23	Old Redwood Hwy Corridor North (Windsor/Healdsburg/Larkfield)	widening; storm drainage facilities, pedestrian & bike improvements, turn lanes, intersection improvements, signalization	$20,000,000	31%	$6,240,000
24	Old Redwood Hwy South (City of Petaluma to Adobe)	widening, intersection improvements, turn lanes, signalization	$11,300,000	20%	$2,305,200
25	Penngrove/Main St. Improvements (Old Redwood Hwy to Adobe)	minor widening, curb & gutter, sidewalks, storm drainage facilities, driveways, pedestrian & bike improvements	$1,000,000	15%	$152,000
26	Petaluma Hill Rd. (Rohnert Park Expressway to Roberts La.)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike improvements	$9,100,000	19%	$1,729,000
27	Porter Creek Rd. (Mark West Spring Rd. to Petrified Forest Rd.)	widening, storm drainage facilities, pedestrian & bike improvements, turn lanes, intersection improvements	$10,000,000	28%	$2,820,000
28	River Rd. (Armstrong Woods Rd. to Laughlin)	widening, turn lanes, intersection improvements, drainage improvements	$21,100,000	59%	$12,533,400

Table 21 Countywide TIF Cost Allocation (Cont.)

Item #	Transportation Project		Total Cost Estimate (2019 $)	TIF Program Cost Allocation	
	Project Name	Project Elements		Percent Allocation (1)	Dollar Amount
29	Santa Rosa Ave. (Todd Rd. to US 101)	sidewalks, left turn lanes, widening, intersection improvements,shoulders, drainage improvements, signalization, bike improvements	$5,600,000	8%	$425,600
30	Stony Point Rd. (Pepper to City of Petaluma & Meacham to Roblar)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike improvements	$5,600,000	41%	$2,284,800
31	Todd Rd. (Stony Point to Llano & Standish)	left turn lanes, widening, intersection improvements, shoulders,drainage improvements, signalization, bike improvements	$7,600,000	29%	$2,234,400
32	Westside Rd. (South of Healdsburg)	widening, storm drainage facilities, bike improvements, turn lanes, intersection improvements	$3,800,000	60%	$2,280,000
33	Western Ave. (Cleveland La. to Chileno Valley Rd.)	left turn lanes, drainage improvements, widening, bike facilities	$2,300,000	42%	$966,000
Total Cost			**$325,000,000**		**$138,811,480**

Notes: 1) Cost Allocation is a composite of two methods, the first based upon a technical analysis of new (2015-2040) trips and the other based on improvements that benefit existing and new residents equally (See **Appendix A-1** for cost allocation calculations)

Table 22 Sonoma Valley TIF Cost Allocation

Item #	Transportation Projects		Total Cost Estimate (2019 $)	TIF Program Cost Allocation (1)	Dollar Amount
	Project Name	Project Elements			
1	Bennett Valley Rd. (Sonoma Mountain Rd. to Warm Spring Rd.)	widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, bike improvements	$ 3,700,000	35%	$ 1,305,360
2	Boyes Boulevard (Arnold Dr. to Hwy 12)	replacement bridge, widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, bike & pedestrian improvements	$ 5,200,000	36%	$ 1,872,000
3	Hwy 12 (Redevelopment area, Agua Caliente to Verano & various intersections)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	$ 20,000,000	56%	$ 11,160,000
4	Hwy 116 (Arnold Dr. - Watmaugh to Hwy 121)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	$ 18,100,000	28%	$ 5,082,480
5	Hwy 121 (@Napa Rd.)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	$ 4,800,000	16%	$ 777,600
6	Napa Rd. (Town of Sonoma to Hwy 12/121)	widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, intersection improvements	$ 5,300,000	16%	$ 858,600
7	Napa Street East (Town of Sonoma to 8th Street East)	widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, bike & pedestrain improvements	$ 8,000,000	44%	$ 3,494,400

Table 23 Sonoma Valley TIF Cost Allocation (Cont.)

Item #	Transportation Projects		Total Cost Estimate (2019 $)	TIF Program Cost Allocation (1)	Dollar Amount
	Project Name	Project Elements			
8	Petaluma Ave. (Arnold to Riverside)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	$ 3,800,000	29%	$ 1,108,080
9	Railroad Ave. (Verano to Boyes)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	$ 3,200,000	60%	$ 1,920,000
10	Watmaugh Rd. (Arnold to Hwy 12)	storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	$ 3,800,000	34%	$ 1,276,800
11	State Route 12 @ Trinity Road	storm drainage facilities, signalization, turn lanes, intersection improvements	$ 2,000,000	46%	$ 912,000
12	State Route 121 @ Millerick Road	storm drainage facilities, signalization, turn lanes, intersection improvements	$ 2,000,000	31%	$ 612,000
Total Cost			**$79,900,000**		**$30,379,320**

Notes: 1) Cost Allocation is a composite of two methods, the first based upon a technical analysis of new (2015-2040) trips and the other based on improvements that benefit existing and new residents equally (See **Appendix A-3** for cost allocation calculations)

Description of the Select Link Analysis

The “Select Link Analysis” methodology combines items 1, 2, and 3 listed above. (i.e., the traffic that is linked to new development in unincorporated Sonoma County). That percentage is then applied to the estimated cost for each project to determine the dollar amount that is attributable to the geographic areas covered by the TIF program. The TIF should include no more than that proportion of each project’s cost; the TIF may include a smaller proportion of a project’s cost depending on other factors described subsequently.

An example may help to further understand the select link methodology. In the Countywide TIF program, project #27 is located on Porter Creek Road between Mark West Springs Road and Petrified Forest Road. This road segment is represented by two links in the Sonoma Model. After running the select link procedure on both links and averaging the results, the results indicated that 47% of the trips using those links fell into the first three trip categories shown above (i.e., trips that have an origin, a destination, or both an origin and destination in unincorporated Sonoma County), and that 53% of the trips using those links were pass-through trips. This result is logical given the location and function of Porter Creek Road. The road is commonly used for travel between communities in northern Napa County and the City of Santa Rosa; this would be an example of a “pass-through” trip in that it uses a road in unincorporated Sonoma County but does not start or end the trip in unincorporated Sonoma. The 53% of the trips on Porter Creek Road that are pass-through trips should not be included in the Countywide TIF, while the 47% of trips that are related to unincorporated Sonoma County can be included in the Countywide TIF. Thus, 47% of the cost of the Porter Creek Road improvement project is attributable to the geographic area covered by the TIF program, meaning that the fee calculations can include up to 47% of the cost of that project. The final fee calculations may include a lower proportion of the project cost depending on other factors described below.

It should be noted that the intent of this analysis is solely for the purposes of the TIF nexus analysis. The primary result is the percentage of trips projected to use each facility that are linked to development in unincorporated Sonoma County. It is not intended for these results to be used to determine the appropriate size or configuration for any particular facility, which requires a broader set of considerations.

Allocation of Project Costs

The determination of the final proportion of each project’s cost that will be included in the TIF program is a composite calculation of two factors.

- The first factor is based on the results of the select link analysis of future travel demand described immediately above, in which the travel model was applied to determine the proportion of traffic using each facility that is linked

to development in unincorporated Sonoma County. The total project cost is first multiplied by this factor.

- The second factor then accounts for the types of physical improvements that will be constructed with each project. The projects encompass a wide range of different types of capital improvements, including elements such as new or wider travel lanes, new turn lanes, intersection upgrades through traffic signals or roundabouts, wider shoulders, drainage improvements, new facilities for bicyclists and pedestrians, and upgraded bridges or railroad crossings. The purpose of an impact fee is to support the construction of new capacity to accommodate the increased demand from future users. All physical improvements to the transportation system will produce benefits for all users, both existing and future; however, some types of improvements (such as new lanes or upgraded intersections) have a primary focus of adding capacity to the system, whereas others (such as upgraded shoulders and drainage or improved bicycle and pedestrian facilities) produce more generalized benefits.

To distinguish between these two types of improvements, County staff estimated the proportion of each project's cost that would construct elements of general benefit, and the proportion that would construct elements of new capacity. The TIF will include all of the project's costs associated with constructing new capacity. For constructing elements of general benefit, the TIF will include only the share of those costs that is associated with new residents. This share is simply the proportion of Sonoma County's total future population that is made up of new residents, which was calculated in the Growth Projections section above at 20%.

Again, an example will help to explain the procedure. As described previously, project #27 in the Countywide TIF program is located on Porter Creek Road between Mark West Springs Road and Petrified Forest Road, and the model results indicated that 47% of the usage on that facility was linked to development in the unincorporated County. Thus, of the project's total estimated cost of $10 million, up to $4.7 million could be included in the Countywide TIF.

This Project involves a wide range of improvements, including new turn lanes, intersection upgrades, drainage improvements, and improved bicycle/pedestrian facilities. County staff estimated that 50% of the project's costs were associated with constructing elements of general benefit and 50% were for new capacity. The Countywide TIF will include all of the costs associated with new capacity (calculated as $4.7 million multiplied by 50% or $2.35 million), and will also include 20% of the costs associated with general benefit (calculated as $4.7 million multiplied by 50% and then multiplied by 20%, or $470,000).

Thus, the final amount included in the Countywide TIF for project #27 is $2.35 million plus $470,000 for a total of $2.82 million. For this project, the final amount included in the Countywide TIF of $2.82 million represents about 28% of its total cost of $10 million. This 28% can be thought of as a "composite" cost allocation factor, which combines the considerations of how much usage on that

facility comes from unincorporated Sonoma County as well as considerations of how much of that project will involve new system capacity as compared to more general benefit. This composite cost allocation factor will be different for each project, because it reflects a project's specific characteristics and usage.

Transportation Fee Calculations

Calculation of Maximum Fee

The maximum transportation impact fee calculations are driven by: (1) the final amount of each project's cost that is included in the TIF program; and (2) the total number of new daily vehicle trips projected to occur in the unincorporated County area by the year 2040.

As shown in **Table 24**, the total amount of project costs included in the Countywide TIF has been calculated at approximately $325 million, while the total amount in the Sonoma Valley TIF has been calculated at approximately $79.9 million. The SCTA travel model produces an estimate of the number of daily vehicle trips associated with development in the unincorporated County areas; the number of new vehicle trips in the Countywide TIF area is estimated at 103,285 and the number of new trips in the Sonoma Valley TIF area is estimated at 35,929. The maximum fee per new daily trip is calculated as the total cost divided by the number of new daily trips; the result is $1,344 in the Countywide TIF and $846 in the Sonoma Valley TIF.

Table 24 Calculation of Cost per Trip

Cost and Trip Data	Countywide Area	Sonoma Valley Area
Total Project Cost	$325,000,000	$79,900,000
Cost Included in TIF Program	$138,811,480	$30,379,320
Total New Daily Trips in Unincorporated Area (2015-2040)	103,285	35,929
Cost per New Daily Trip	$1,344	$846

Allocation of Fee to Land Use Categories

The fees will be charged to new development of all types located in the geographic areas covered by the programs. In order to allocate the fees equitably among different development types, the fee amounts charged to each land use category should reflect the relative effects of each category on the transportation system. A common method is to establish the trip generation characteristics of each basic land use category.

Table 25 contains the land use categories and the daily trip generation rates for each from the most recent version of the ITE *Trip Generation* Manual (10th Edition). As is commonly done, a pass-by factor has been applied to retail trips; this factor comes from the ITE Trip Generation Handbook and reflects the fact that some retail trips are not new solely to that destination but rather are made by patrons who are already traveling and who stop by the retail establishment on their way to a final destination. The result is an "Adjusted Daily Trip Rate" for each land use category.

The maximum fee per new daily trip is then multiplied by the adjusted daily trip rate for each land use category to calculate the maximum fee for each category. For comparison purposes, **Table 16** shows how this new maximum fee for each category compares to the existing fees that are currently charged in both the Countywide and Sonoma Valley TIF programs. In the Countywide TIF, the new maximum fee is about 60 percent higher than the existing fee. In the Sonoma Valley TIF, the new fee is about 0.8 percent higher than the existing fee.

Table 25 Calculation of Maximum Allowable Impact Fee

Land Use Category (presently in use)	ITE Code	Unit	Daily Trip Rate (ITE 10th Ed)	Pass-by Adjustment[3]	Adjusted Daily Trip Rate	Countywide Area	Sonoma Valley Area
RESIDENTIAL:							
Single-Family Residential (detached)	210	DU	9.44	0%	9.44	$12,687	$7,982
Multi-Family Residential (low rise)	220	DU	7.32	0%	7.32	$9,838	$6,189
Multi-Family Residential (high rise)	221	DU	5.44	0%	5.44	$7,311	$4,600
Second Unit (ADU)[1]		DU	4.45	0%	4.45	$5,981	$3,763
Mobile Home	240	DU	5.00	0%	5.00	$6,720	$4,228
Senior Adult Housing	251	DU	4.27	0%	4.27	$5,739	$3,610
COMMERCIAL USES[2]							
Retail Uses	820	KSF	37.75	-35%	24.54	$32,978	$20,747
Office Uses	710	KSF	9.74	0%	9.74	$13,090	$8,236
Lodging	310	Room	8.36	0%	8.36	$11,236	$7,069
INDUSTRIAL USES							
Light Industrial/service uses	110	KSF	4.96	0%	4.96	$6,666	$4,194
SPECIAL GENERATORS	Used that are a mix of use types (wineries) or are otherwise unique (institutional uses) will be individually evaluated by TPW staff to determine ADT factor to apply for fee setting purposes.						

[1] State law does not allow impact fees on ADUs of 750 square feet or less.

[2] It is recommended that specific commercial use categories be included in the TIF schedule.

[3] The "pass-by adjustment" reflects the fact that retail stops are not all "destinations".

Sources: Sonoma County; Fehr & Peers; Economic & Planning Systems, Inc.

4. Impact Fee Comparison and Economic Considerations

This Chapter provides a range of economic considerations for the County's transportation and parks development impact fees. While prior chapters set the maximum nexus-based fee level, policy consideration for the fee actually imposed may fall below that justified in pursuit of various policy objectives including consideration of burden (costs) placed on new development and the related potential impact on financial feasibility of new development. Such sensitivity to feasibility of new development must, of course, must be balanced against the policy objective of new development "paying its own way" by contributing their proportional share to fund the County's transportation and park infrastructure improvement costs.[5] This Chapter provides results of a development impact fee review survey, a burden analysis, and other economic implications.

Comparison with Fees Charged by Nearby or Similar Jurisdictions

One measure of impact fees is to compare existing or proposed fees with those charged by nearby or similar jurisdictions. Such a comparison typically reveals "norms" and also variations reflecting circumstances unique to particular jurisdictions. Such comparison can also reveal "competitive advantage" (or disadvantage) related to attracting desired new development investment.

Fee comparisons are challenging because of a variety of technical factors including the diverse ways in which fees are calculated and levied by local jurisdictions, the regular changes in fees charged by counties and cities and other fee charging entities (e.g., special districts), and the alternative ways that costs are charged to new development ranging from the highly formal (adopted fee ordinances) to use of project specific "exactions" that are difficult to track and document. Moreover, economic conditions vary significantly by geography as expressed by differences in real estate values and rents. Thus, a total development fee burden that may be acceptable in a jurisdiction with high real estate values may be unacceptable (from an economic standpoint) in a jurisdiction with lower real estate values.

Despite these challenges, the review provides information regarding the current levels of the County's development fees and their comparison and assessment of a competitive advantage or disadvantage relative to nearby or comparable jurisdictions. It is based on the current snapshots of the existing development impact fees in surveyed jurisdictions. The resulting fee comparisons for the two fee programs are shown in **Table 26** and **Table 27**, respectively.

[5] Impact fees are based on the logic that new development requires proportional improvements to public facilities and infrastructure; without such investment it is likely that existing service levels will decline over time.

Table 26 Comparison of Existing Transportation Impact Fees Across North Bay Jurisdictions

Land Use	Sonoma County (Countywide)		Solano County	Napa County[1]	City of Petaluma[2]	City of Calistoga	City of Napa[3]	City of Fairfield	City of Vacaville	City of Healdsburg	City of Sebastopol[4]
	Existing	New Max									
Single Family (per Unit)	$7,920	$12,687	$596 - $1,527	$3,515	$4,209 - $15,749	$5,649 - $10,178	$795.58 - $2,150	$10,867 - $14,253	$7,091 - $10,130	$3,108	$2,601 - $4,040
Multifamily Low Rise (per Unit)	n/a	$9,838	$947	$1,989	$9,667	$6,311	n/a	$4,812 - $8,750	$2,533 - $6,281	$3,108	$2,314 - $3,921
Retail (per Sq.Ft.)	n/a	$32.98	$0.09 - $0.43	$2.73 - $175.03	$30.43	$5.39 - $8.84	$1.66	$17.04	$5.48	$0.61	$0.99 - $22.32
Office (per Sq.Ft.)	n/a	$13.09	$0.30 - $1.11	$3.02	$20.80	$4.38	$0.63	$4.14	$4.16	$0.61	$1.26 - $2.71
Industrial (per Sq.Ft.)	n/a	$6.67	$0.03 - $0.13	$1.14 - $3.44	$12.32	$2.42	$0.15	$2.888	$0.76 - $3.60	$0.61	$1.92

[1] Only applies to the Napa Valley Business Park Specific Area Plan. The fee is $3,551 per trip generated based on land use.

[2] The range for single family includes fees for senior dwelling units.

[3] The fees for commercial uses are applicable for the Solano Ave./Orchard Ave. area only and is $215.03 per trip generated based on land use.

[4] Single family and multifamily residence fees vary by number of bedrooms and square footage. These values represent the full fee.

Table 27 Comparison of Existing Parks Impact Fees Across North Bay Jurisdictions

Land Use	Sonoma County		Solano County[2]	Napa County	City of Santa Rosa[3]	City of Petaluma[4]	City of Calistoga[5]	City of Napa	City of Fairfield	City of Vacaville[6]
	Existing	New Max								
Quimby[1]										
Single Family (per Unit)	Calculation	Not Estimated	n/a	n/a	n/a	$1,908	n/a	$4,723 - $6,581	Calculation	n/a
Multifamily (per Unit)	Calculation	Not Estimated	n/a	n/a	n/a	$1,291	n/a	$4,196	Calculation	n/a
Mitigation Act										
Single Family (per Unit)	$3,678	$5,402	$510	n/a	$10,477 - $11,910	$6,757	$6,849	$720 - $1,003	$6,685	$4,824
Multifamily (per Unit)	$3,678	$4,582	$398	n/a	$7,840 - $8,707	$4,549	$5,835	$639	$5,013	$3,317

[1] Fee payment in-lieu of land dedication is calculated by determining the amount of acreage required. The calculation takes into account the total number of approved dwelling units and projected average number of residents per dwelling, as well as the fair market value for appropriate park planning area.

[2] Fee shown is the County Parks portion of the Solano County General Government Facilities Fee, the entirety of which covers a number of additional items.

[3] Fees shown are for single family detached and multifamily. The fee ranges based on four areas.

[4] Fee shown (Mitigation Act) includes Petaluma's open space acquisition fee of $448 per single family unit and $301 per multifamily unit in addition to Petaluma's park land development fee of $6,309 per single family unit and $4,248

[5] Fee shown is Calistoga's Cultural/Recreational Impact Fee, which is intended to fund parks and other recreational facilities.

[6] Fees shown exclude Vacaville's greenbelt preservation fee of $257 per single family unit and $176 per multifamily unit. Fees shown are for all dwellings other than senior homes. Senior housing has discounted fees.

Regarding the transportation fees, **Table 27** reveals quite a wide range of fees in the comparison jurisdictions with cities tending to have the higher fees while county fees tending to be lower. The low fees in neighboring Solano and Napa Counties can partly be explained by their much less expansive county road networks. From a competitive standpoint, Sonoma County does not compete with Solano County in any significant manner and competition with Napa County is relatively low, given their respective small housing and commercial development markets.

The County's existing transportation fee is "in the range" of the fee charged by key Sonoma County cities; however, the currently estimated "maximum allowable fee" would place the fee near the top of the range.

Regarding the parks fee, **Table 27** reveals that the neighboring counties of Solano and Napa charge little or no parks fees. This can be explained by the fact that both counties have, by comparison to Sonoma County, very low unincorporated populations. Moreover, Sonoma County Regional Parks Department functions as a regional park agency, providing parks and recreation facilities to both unincorporated and incorporated populations alike. The existing and estimated "maximum allowable fee" fall below the range charged by the Sonoma County cities surveyed.

Fee Burden Analysis

Impact fees add to the cost of new development. At the same time such impact fees have become a primary means to pay for infrastructure or public facilities that new development requires. Failure to create adequate infrastructure tends to lower service levels for all residents, existing and new, and also, as a result, can affect real estate pricing and related investments as adequate infrastructure and public services support vital real estate markets.

Over time real estate markets have absorbed costs associated with impact fees and exactions. There is little evidence that impact fees that fall within a reasonable range of housing or commercial development pricing affect the market or development feasibility any significant manner. Thus aggregate fees (those charged by all jurisdictions as applied to new development including a city, a county agency, regional agencies, and utility providers) fall within a 12 to 15 percent range for residential development and 8 to 10 percent for commercial development are in most cases absorbed in construction costs and land pricing without significant distortion.

While markets set prices, not costs, it is only when fees, in combination with other development costs exceed reasonable norms and reduce rate of return below a level to attract needed equity and lending that a problem arises. One of the responses to high aggregate fees is for the market to only build larger and more expensive housing, as the fee burden tends to be inversely proportional to price.

The burden measure presented below solves for percentage a fee comprises of unit price. In this instance the existing and new maximum allowable transportation and parks fees are presented as a percentage of an average value for a Single-Family house. As shown in **Table 28**, the newly calculated maximum allowable fees, if levied, would more than double those currently charged, equaling approximately 2.7 percent of an average unit price (and be lower as a percentage for more expensive custom homes being built in unincorporated Sonoma County).

Table 28 Feasibility Range: DIF as Percentage of Development Value

Land Use	Sonoma County	
	Existing	New Max
Single Family Fee		
Transportation	$7,920	$12,687
Parks	$3,678	$5,402
Subtotal	$11,598	$18,089
Single Family Value[1]	$666,250	$666,250
Fee as % of Value	1.7%	2.7%

[1] Based on the median single family county sales over the last 12 months of homes built since 2010.

Given that fact that these two fees represent only a small portion of overall costs associated with obtaining development approvals and building permits it may be worthwhile to consider the full range of these costs and options to lower these costs. In this regard, complexities, risks and time delays in obtaining development approvals and permits in Sonoma County likely dwarf the cost burdens of impact fees. Jurisdictions seeking to incentivize desired development can adopt "use-by-right" zoning regulations (and replacing discretionary review with objective development standards), limit any discretionary review (e.g., design review) to fix time limits, and keeping service charges and fees within reasonable limits (whether or not "full cost recovery" is achieved).

Other Economic Implications

Options for Keeping Fees within Reasonable Limits

The County may consider a variety of implementation options to mitigate the economic implications of transportation and parks development impact fees (along with other fees and charges levied by the County and other agencies as part of development approvals), these options include:

- Limiting the impact fees charged by the County (when added to those levied by other agencies) to fall within a predetermined norm.
- Conduct additional research to determine if a smaller dwelling unit creates a smaller impact, and thus would have a legal nexus to charge a lower impact fee which would also achieve desired public policy objectives to promote affordable housing construction.
- Converting "calculated" fees (on a project-by-project basis as currently done for transportation fees on all commercial development) to schedule-based fees.

In the case of both the respective parks improvement program and the transportation improvement program, the current collection of both sets of impact fees are justified by a legal nexus. As previously noted, both of these programs have historically received substantial funding from other sources, given that improvements, in some measure, benefit existing as well as new development. The Regional Parks Department and Transportation and Public Works Department have been successful at attracting federal, State, regional, and local funding sources.

Other Sources of Funding for Capital Improvements

Development impact fees provide an important source of funding for infrastructure and capital facilities. As such, they support the policy goals of a jurisdiction in terms of providing adequate public facilities and infrastructure, including transportation improvements. These fees mitigate the impact of new development as well as maintain the quality of life desired by residents and employers. Development impact fees can also help overcome infrastructure development obstacles by spreading the cost burden of upfront costs over a broad range of new developments, as opposed to case-by-case exactions. Funding allocation between the transportation impact fees and other funding required is shown in **Table 29**.

Table 29 Funding Allocation of Transportation Improvements

Transportation Impact Fee	Total Impact Fee Program Project Cost	Amount Funded by Transportation Impact Fee		Funding Required from Other Sources	
		Amount Funded	Percentage	Funded Required[3]	Percentage
Countywide Transportation Impact Fee Projects (1)	$325,000,000	$138,811,480	43%	$186,188,520	57%
Sonoma Valley Transportation Impact Fee Projects (2)	$79,900,000	$30,379,320	38%	$49,520,680	62%
Total Transportation Impact Fee Program Funding	$404,900,000	$169,190,800	42%	$235,709,200	58%

[1] See **Appendix A-1 and A-2 f**or project-specific details
[2] See **Appendix A-3 and A-4** for project-specific details
[3] See **Appendix A-1 through A-4** for project specific details; other funding sources include State and federal grants and bond funding, local "self-help" sales tax measure (SCTA), and development project-specific mitigation exactions.

Sources: Sonoma County; Fehr & Peers; Economic & Planning Systems, Inc.

APPENDIX A

Table A-1: Countywide TIF Project Descriptions and Cost Estimates

Transportation Project Description							Project Cost Estimate and 2019 Update		
Item #	Primary Project Type	Project Name	Project Elements	Length (lineal feet)	Construction Schedule	Status 2019	Original Total Cost Estimate (2009 $)	New Cost Estimate (2019 $)	Method of Cost Update or Estimate
1	Capacity Improvement	Adobe Rd. (Casa Grande)	Intersection left turn lanes, widening	0	2012-2013	Not Started	$200,000	$500,000	Department Estimate
2	Capacity Improvement	Adobe Rd. (Old Redwood Hwy to Hwy 116)	left turn lanes, widening, intersection, improvements, signalization, railroad crossing, shoulders, bike facilities, drainage improvements	26,000	2013-2015 the actual construction schedule is dependent on funding & environmental permit approval- it is anticipated that all work in this corridor will be complete or under construction by 2015	Partially Complete	$25,000,000	$37,600,000	ENR- CCI San Francisco June 2019
3	Capacity Improvement / Bike Ped	Airport Blvd. Corridor (Sonoma County Airport entrance to Old Redwood Hwy)	widening, RR crossing, signalization, curb & gutter, sidewalks, storm drainage facilities, US 101 interchange improvements*, turn lanes, intersection improvements, bike improvements. (US 101 interchange improvements have been estimated between $40 million & $52 million)	8,250	2011-2015	Partially Complete	$12,500,000	$18,800,000	ENR- CCI San Francisco June 2019
4	Bike Ped	Alexander Valley Rd. (Healdsburg Ave. to Hwy 128)	widening, bike improvements, storm drainage facilities, driveways	11,500	2013-2015	Not Started	$4,000,000	$6,100,000	ENR- CCI San Francisco June 2019
5	Safety/Bike Ped	Bennett Valley Rd.(Matanza Creek to Enterprise)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements	16,000	2013-2015	Not Started	$7,500,000	$11,300,000	ENR- CCI San Francisco June 2019
6	Safety/Bike Ped	Bodega Hwy (Hwy 1 to Barnett Valley to City of Sebastopol)	widening, turn lanes, shoulders, drainage improvements	26,500	2013-2015	Not Started	$24,000,000	$36,100,000	ENR- CCI San Francisco June 2019
7	Capacity Improvement	Brickway Extension/Laughlin Rd. (River Rd. to Airport Blvd.)	widening, new bridge, signalization or round-about, curb & gutter, sidewalks, storm drainage facilities, turn lanes, intersection improvements, bike improvements	7,000	2009-2014	Not Started	$10,000,000	$15,100,000	ENR- CCI San Francisco June 2019
8	Bike Ped	Dry Creek Rd. (the vicinity of the US 101 interchange)	minor widening, storm drainage facilities, bike improvements	1,500	2010-2011	Not Started	$700,000	$1,100,000	ENR- CCI San Francisco June 2019
9	Bike Ped	East Shiloh Rd Bridge	minor widening, storm drainage facilities	40	2010-2013	Not Started	$300,000	$2,000,000	Department Estimate
10	Capacity Improvement	East Washington Street (Adobe Rd. to City of Petaluma)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization	1,500	2008-2010	Completed 2016	$2,100,000	$3,200,000	ENR- CCI San Francisco June 2019
11	Safety / Bike Ped	Faught Rd. (Old Redwood Hwy to East Shiloh Rd.)	widening, storm drainage facilities, pedestrian & bike improvements	5,280	2013-2015	Not Started	$2,000,000	$3,100,000	ENR- CCI San Francisco June 2019

Table A-1: Countywide TIF Project Descriptions and Cost Estimates (cont.)

Transportation Project Description							Project Cost Estimate and 2019 Update		
Item #	Primary Project Type	Project Name	Project Elements	Length (lineal feet)	Construction Schedule	Status 2019	Original Total Cost Estimate (2009 $)	New Cost Estimate (2019 $)	Method of Cost Update or Estimate
12	Capacity Improvement	Forestville Bypass (Hwy 116 to Mirabel Intersection)	new alignment, intersection improvements, shoulders, bike & pedestrian facilities, drainage improvements	3,000	2008-2015	Not Started	$10,000,000	$15,100,000	ENR- CCI San Francisco June 2019
13	Capacity Imp / Bike Ped	Fulton Rd. (Old Redwood Hwy to City of Santa Rosa)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike & pedestrian improvements	15,000	2009-2013	Partially Complete	$6,500,000	$9,800,000	ENR- CCI San Francisco June 2019
14	Bike Ped	Graton Rd. (Hwy 116 to Brush Street)	widening, shoulders, turn lanes, drainage improvements	2,000	2013-2015	Not Started	$1,500,000	$10,000,000	Department Estimate
15	Capacity Imp / Bike Ped	Guerneville Rd. (Laguna de Santa Rosa to City of Santa Rosa)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike & pedestrian improvements	4,000	2012-2015	Not Started	$3,500,000	$5,300,000	ENR- CCI San Francisco June 2019
16	Enhance Safety	Hwy 1 (coastal locations - Sea Ranch & Bodega Bay)	new turn lanes	2,500	2013-2015 (depends entirely on Caltrans' programming)	Not Started	$5,500,000	$8,300,000	ENR- CCI San Francisco June 2019
17	Enhance Safety	Hwy 116 (Stagegulch @ Landfill Access Rd.)	widening, new turn lane	-	2008-2010	Complete 2015	$6,000,000	$9,100,000	ENR- CCI San Francisco June 2019
18	Enhance Safety	Hwy 116 (Vine Hill)	widening, new turn lane, signalization	-	2009-2011	Not Started	$500,000	$2,000,000	Department Estimate
19	Safety / Bike Ped	Lakeville Road (Hwy 37 extending 3 miles north)	left turn lanes, drainage improvements, widening	16,000	2012-2015	Not Started	$6,400,000	$9,700,000	ENR- CCI San Francisco June 2019
20	Bike Ped / Enhance Safety	Llano Rd. (Hwy 12 to Hwy 16)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike & pedestrian improvements	6,500	2013-2015	Not Started	$3,000,000	$6,000,000	Department Estimate
21	Capacity Improvement	Mark West Springs Rd. Corridor (US 101 interchange/Old Redwood Hwy/Ursuline/end)	widening, storm drainage facilities, pedestrian & bike improvements, turn lanes, intersection improvements	22,000	2012-2015	Completed 2016	$7,500,000	$11,300,000	ENR- CCI San Francisco June 2019

Table A-1: Countywide TIF Project Descriptions and Cost Estimates (cont.)

Transportation Project Description							Project Cost Estimate and 2019 Update		
Item #	Primary Project Type	Project Name	Project Elements	Length (lineal feet)	Construction Schedule	Status 2019	Original Total Cost Estimate (2009 $)	New Cost Estimate (2019 $)	Method of Cost Update or Estimate
22	Bike Ped	Mirabel Rd. (Hwy 116 to Davis)	widening, shoulders, bike facilities, drainage improvements, turn lanes	7,500	2010-2011	Not Started	$4,000,000	$6,100,000	ENR- CCI San Francisco June 2019
23	Bike Ped / Enhance Safety	Old Redwood Hwy Corridor North (Windsor/Healdsburg/ Larkfield)	widening; storm drainage facilities, pedestrian & bike improvements, turn lanes, intersection improvements, signalization	12,000	2012-2015	Not Started	$3,500,000	$20,000,000	Department Estimate
24	Bike Ped / Enhance Safety	Old Redwood Hwy South (City of Petaluma to Adobe)	widening, intersection improvements, turn lanes, signalization	7,600	2012-2015	Not Started	$7,500,000	$11,300,000	ENR- CCI San Francisco June 2019
25	Bike Ped / Enhance Safety	Penngrove/Main St. Improvements (Old Redwood Hwy to Adobe)	minor widening, curb & gutter, sidewalks, storm drainage facilities, driveways, pedestrian & bike improvements	1,500	2009-2010	Partially Complete	$600,000	$1,000,000	ENR- CCI San Francisco June 2019
26	Bike Ped / Enhance Safety	Petaluma Hill Rd. (Rohnert Park Expressway to Roberts La.)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike improvements	6,500	2012-2013	Partially Complete	$6,000,000	$9,100,000	ENR- CCI San Francisco June 2019
27	Bike Ped / Enhance Safety	Porter Creek Rd. (Mark West Spring Rd. to Petrified Forest Rd.)	widening, storm drainage facilities, pedestrian & bike improvements, turn lanes, intersection improvements	20,000	2013-2015	Partially Complete	$5,000,000	$10,000,000	Department Estimate
28	Bike Ped / Enhance Safety	River Rd. (Armstrong Woods Rd. to Laughlin)	widening, turn lanes, intersection improvements, drainage improvements	22,000	2013-2015	Not Started	$14,000,000	$21,100,000	ENR- CCI San Francisco June 2019
29	Capcity Improvement / Bike Ped	Santa Rosa Ave. (Todd Rd. to US 101)	sidewalks, left turn lanes, widening, intersection improvements,shoulders, drainage improvements, signalization, bike improvements	5,000	2012-2015	Partially Complete	$3,700,000	$5,600,000	ENR- CCI San Francisco June 2019
30	Bike Ped / Enhance Safety	Stony Point Rd. (Pepper to City of Petaluma & Meacham to Roblar)	left turn lanes, widening, intersection improvements, shoulders, drainage improvements, signalization, bike improvements	7,000	2012-2015	Partially Complete	$3,700,000	$5,600,000	ENR- CCI San Francisco June 2019
31	Bike Ped / Enhance Safety	Todd Rd. (Stony Point to Llano & Standish)	left turn lanes, widening, intersection improvements, shoulders,drainage improvements, signalization, bike improvements	6,000	2014-2015	Partial Design/ Funded	$5,000,000	$7,600,000	ENR- CCI San Francisco June 2019
32	Bike Ped / Enhance Safety	Westside Rd. (South of Healdsburg)	widening, storm drainage facilities, bike improvements, turn lanes, intersection improvements	5,600	2014-2015	Not Started	$2,500,000	$3,800,000	ENR- CCI San Francisco June 2019
33	Bike Ped / Enhance Safety	Western Ave. (Cleveland La. to Chileno Valley Rd.)	left turn lanes, drainage improvements, widening, bike facilities	3,000	2008-2011	Completed 2016	$1,500,000	$2,300,000	ENR- CCI San Francisco June 2019
Total Cost Original Project List							**$195,700,000**	**$325,000,000**	

Table A-2: Countywide TIF Cost Allocations

Transportation Project Description			Cost Allocation								Other Funding Received and Anticipated	
Item #	Primary Project Type	Project Name	Year 2040 Select Zone, Total Unincorporated Area	Year 2040 Select Zone, Sonoma Valley Only	Year 2040 Select Zone, Non-Sonoma Valley Only	Cost Allocation based on Select Zone % for Total Uninc Area	Percentage of Project Cost for New Service	Cost Allocated to New Service Bike/Ped Projects (20%)	Composite Cost Allocation	Net Amount Included in TIF Program	Net Funding Received and Anticipated from Non-Fee Sources	Source(s) of Other Funding Received and Anticipated
1	Capacity Improvement	Adobe Rd. (Casa Grande)	50%	31%	23%	$250,000	0%	$ -	50%	$250,000	$250,000	safety grants
2	Capacity Improvement	Adobe Rd. (Old Redwood Hwy to Hwy 116)	49%	24%	27%	$18,424,000	40%	$ 1,473,920	33%	$12,528,320	$25,071,680	safety grants
3	Capacity Improvement / Bike Ped	Airport Blvd. Corridor (Sonoma County Airport entrance to Old Redwood Hwy)	92%	0%	92%	$17,296,000	40%	$ 1,383,680	63%	$11,761,280	$7,038,720	Measure "M", safety grants, State Local Partnership Program, Proposition lB, SCTA/Caltrans (US 101 interchange)
4	Bike Ped	Alexander Valley Rd. (Healdsburg Ave. to Hwy 128)	41%	0%	41%	$2,501,000	50%	$ 250,100	25%	$1,500,600	$4,599,400	Tribal moneys, bike & safety grants
5	Safety/Bike Ped	Bennett Valley Rd.(Matanza Creek to Enterprise)	97%	54%	53%	$10,961,000	80%	$ 1,753,760	35%	$3,945,960	$7,354,040	safety grants
6	Safety/Bike Ped	Bodega Hwy (Hwy 1 to Barnett Valley to City of Sebastopol)	97%	0%	97%	$35,017,000	90%	$ 6,303,060	27%	$9,804,760	$26,295,240	safety & bike grants
7	Capacity Improvement	Brickway Extension/Laughlin Rd. (River Rd. to Airport Blvd.)	85%	0%	85%	$12,835,000	40%	$ 1,026,800	58%	$8,727,800	$6,372,200	Measure "M", safety grants, State Local Partnership Program, Proposition 1B
8	Bike Ped	Dry Creek Rd. (the vicinity of the US 101 interchange)	30%	0%	30%	$330,000	80%	$ 52,800	11%	$118,800	$981,200	safety grant
9	Bike Ped	East Shiloh Rd Bridge	23%	0%	23%	$460,000	20%	$ 18,400	19%	$386,400	$1,613,600	safety & bike grants
10	Capacity Improvement	East Washington Street (Adobe Rd. to City of Petaluma)	60%	37%	24%	$1,920,000	0%	$ -	60%	$1,920,000	$1,280,000	safety grant ($900,000)
11	Safety / Bike Ped	Faught Rd. (Old Redwood Hwy to East Shiloh Rd.)	100%	0%	100%	$3,100,000	80%	$ 496,000	36%	$1,116,000	$1,984,000	safety & bike grants

Table A-2: Countywide TIF Cost Allocations (cont.)

Transportation Project Description			Cost Allocation								Other Funding Received and Anticipated	
Item #	Primary Project Type	Project Name	Year 2040 Select Zone, Total Unincorporated Area	Year 2040 Select Zone, Sonoma Valley Only	Year 2040 Select Zone, Non-Sonoma Valley Only	Cost Allocation based on Select Zone % for Total Uninc Area	Percentage of Project Cost for New Service	Cost Allocated to New Service Bike/Ped Projects (20%)	Composite Cost Allocation	Net Amount Included in TIF Program	Net Funding Received and Anticipated from Non-Fee Sources	Source(s) of Other Funding Received and Anticipated
12	Capacity Improvement	Forestville Bypass (Hwy 116 to Mirabel Intersection)	100%	0%	100%	$15,100,000	20%	$ 604,000	84%	$12,684,000	$2,416,000	Measure "M", SLPP, pedestrian & bike safety grants
13	Capacity Imp / Bike Ped	Fulton Rd. (Old Redwood Hwy to City of Santa Rosa)	57%	0%	57%	$5,586,000	50%	$ 558,600	34%	$3,351,600	$6,448,400	safety & bike grants
14	Bike Ped	Graton Rd. (Hwy 116 to Brush Street)	100%	0%	100%	$10,000,000	50%	$ 1,000,000	60%	$6,000,000	$4,000,000	pedestrian & bike safety grants
15	Capacity Imp / Bike Ped	Guerneville Rd. (Laguna de Santa Rosa to City of Santa Rosa)	89%	0%	89%	$4,717,000	50%	$ 471,700	53%	$2,830,200	$2,469,800	safety & bike grants
16	Enhance Safety	Hwy 1 (coastal locations - Sea Ranch & Bodega Bay)	95%	0%	95%	$7,885,000	0%	$ -	95%	$7,885,000	$415,000	Caltrans
17	Enhance Safety	Hwy 116 (Stagegulch @ Landfill Access Rd.)	56%	23%	37%	$5,096,000	0%	$ -	56%	$5,096,000	$4,004,000	Caltrans will cover the balance
18	Enhance Safety	Hwy 116 (Vine Hill)	94%	0%	94%	$1,880,000	0%	$ -	94%	$1,880,000	$120,000	Caltrans will cover the balance
19	Safety / Bike Ped	Lakeville Road (Hwy 37 extending 3 miles north)	23%	0%	23%	$2,231,000	30%	$ 133,860	17%	$1,695,560	$8,004,440	safety grants
20	Bike Ped / Enhance Safety	Llano Rd. (Hwy 12 to Hwy 16)	79%	0%	79%	$4,740,000	50%	$ 474,000	47%	$2,844,000	$3,156,000	safety & bike grants
21	Capacity Improvement	Mark West Springs Rd. Corridor (US 101 interchange/Old Redwood Hwy/Ursuline/end)	86%	0%	86%	$9,718,000	50%	$ 971,800	52%	$5,830,800	$5,469,200	Measure "M", SLPP grant, safety & bike grants

Table A-2: Countywide TIF Cost Allocations (cont.)

Transportation Project Description			Cost Allocation								Other Funding Received and Anticipated	
Item #	Primary Project Type	Project Name	Year 2040 Select Zone, Total Unincorporated Area	Year 2040 Select Zone, Sonoma Valley Only	Year 2040 Select Zone, Non-Sonoma Valley Only	Cost Allocation based on Select Zone % for Total Uninc Area	Percentage of Project Cost for New Service	Cost Allocated to New Service Bike/Ped Projects (20%)	Composite Cost Allocation	Net Amount Included in TIF Program	Net Funding Received and Anticipated from Non-Fee Sources	Source(s) of Other Funding Received and Anticipated
22	Bike Ped	Mirabel Rd. (Hwy 116 to Davis)	100%	0%	100%	$6,100,000	70%	$ 854,000	44%	$2,684,000	$3,416,000	Measure "M", SLPP, bike safety grants
23	Bike Ped / Enhance Safety	Old Redwood Hwy Corridor North (Windsor/Healdsburg/ Larkfield)	52%	0%	52%	$10,400,000	50%	$ 1,040,000	31%	$6,240,000	$13,760,000	safety & bike grants
24	Bike Ped / Enhance Safety	Old Redwood Hwy South (City of Petaluma to Adobe)	34%	1%	34%	$3,842,000	50%	$ 384,200	20%	$2,305,200	$8,994,800	Measure "M", SLPP, bike safety grants
25	Bike Ped / Enhance Safety	Penngrove/Main St. Improvements (Old Redwood Hwy to Adobe)	20%	1%	19%	$200,000	30%	$ 12,000	15%	$152,000	$848,000	community development grant, & Proposition 1B
26	Bike Ped / Enhance Safety	Petaluma Hill Rd. (Rohnert Park Expressway to Roberts La.)	25%	3%	22%	$2,275,000	30%	$ 136,500	19%	$1,729,000	$7,371,000	safety & bike grants
27	Bike Ped / Enhance Safety	Porter Creek Rd. (Mark West Spring Rd. to Petrified Forest Rd.)	47%	1%	46%	$4,700,000	50%	$ 470,000	28%	$2,820,000	$7,180,000	safety & bike grants
28	Bike Ped / Enhance Safety	River Rd. (Armstrong Woods Rd. to Laughlin)	99%	0%	99%	$20,889,000	50%	$ 2,088,900	59%	$12,533,400	$8,566,600	safety grants
29	Capcity Improvement / Bike Ped	Santa Rosa Ave. (Todd Rd. to US 101)	10%	1%	9%	$560,000	30%	$ 33,600	8%	$425,600	$5,174,400	safety & bike grants
30	Bike Ped / Enhance Safety	Stony Point Rd. (Pepper to City of Petaluma & Meacham to Roblar)	68%	1%	68%	$3,808,000	50%	$ 380,800	41%	$2,284,800	$3,315,200	City of Petaluma, safety & bike grants
31	Bike Ped / Enhance Safety	Todd Rd. (Stony Point to Llano & Standish)	49%	1%	48%	$3,724,000	50%	$ 372,400	29%	$2,234,400	$5,365,600	safety & bike grants
32	Bike Ped / Enhance Safety	Westside Rd. (South of Healdsburg)	100%	0%	100%	$3,800,000	50%	$ 380,000	60%	$2,280,000	$1,520,000	safety & bike grants
33	Bike Ped / Enhance Safety	Western Ave. (Cleveland La. to Chileno Valley Rd.)	70%	2%	69%	$1,610,000	50%	$ 161,000	42%	$966,000	$1,334,000	safety & bike grants
	Total Cost Original Project List					**$231,955,000**		**$23,285,880**		**$138,811,480**	**$186,188,520**	**Non-fee funding received and anticipated**

Table A-3: Sonoma Valley TIF Project Descriptions and Cost Estimates

Transportation Project Description							Project Cost Estimate and 2019 Update		
Item #	Primary Project Type	Project Name	Project Elements	Length (lineal feet)	Construction Schedule	Status 2019 (2)	Original Total Cost Estimate (2009 $)	New Cost Estimate (2019 $)	Method of Cost Update or Estimate (3)
1	Bike Ped / Enhance Safety	Bennett Valley Rd. (Sonoma Mountain Rd. to Warm Spring Rd.)	widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, bike improvements	6,400	2013-2015	not started	$2,400,000	$3,700,000	ENR- CCI San Francisco June 2019
2	Bike Ped / Enhance Safety	Boyes Boulevard (Arnold Dr. to Hwy 12)	replacement bridge, widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, bike & pedestrian improvements	4,700	2010-2012	Partial Design/Funding	$3,400,000	$5,200,000	ENR- CCI San Francisco June 2020
3	Bike Ped / Enhance Safety	Hwy 12 (Redevelopment area, Agua Caliente to Verano & various intersections)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	9,200	2008-2012	Partially complete	$6,000,000	$20,000,000	Dept. Estimate
4	Bike Ped / Enhance Safety	Hwy 116 (Arnold Dr. - Watmaugh to Hwy 121)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	300	2013-2015	Partial Design/Funding	$12,000,000	$18,100,000	ENR- CCI San Francisco June 2020
5	Bike Ped / Enhance Safety	Hwy 121 (@Napa Rd.)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	-	2012-2014	not started	$2,500,000	$4,800,000	Dept. Estimate
6	Bike Ped / Enhance Safety	Napa Rd. (Town of Sonoma to Hwy 12/121)	widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, intersection improvements	12,200	2013-2015	not started	$3,500,000	$5,300,000	ENR- CCI San Francisco June 2022
7	Intersection Improvements & Bike Ped / Enhance Safety	Napa Street East (Town of Sonoma to 8th Street East)/Highway 121	widening, shoulders, storm drainage facilities, turn lanes, intersection improvements, bike & pedestrain improvements	2,100	2013-2015	not started	$600,000	$8,000,000	Dept. Estimate
8	Bike Ped / Enhance Safety	Petaluma Ave. (Arnold to Riverside)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	3,300	2012-2014	not started	$1,800,000	$3,800,000	Dept. Estimate
9	Bike Ped / Enhance Safety	Railroad Ave. (Verano to Boyes)	widening, shoulders, storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	1,600	2012-2014	not started	$500,000	$3,200,000	Dept. Estimate
10	Bike Ped / Enhance Safety	Watmaugh Rd. (Arnold to Hwy 12)	storm drainage facilities, signalization, turn lanes, intersection improvements, bike & pedestrain improvements	3,700	2011-2013	not started	$2,500,000	$3,800,000	ENR- CCI San Francisco June 2026
11	Bike Ped / Enhance Safety	State Route 12 @ Trinity Road	storm drainage facilities, signalization, turn lanes, intersection improvements	-	2010-2011	not started	$500,000	$2,000,000	Dept. Estimate
12	Bike Ped / Enhance Safety	State Route 121 @ Millerick Road	storm drainage facilities, signalization, turn lanes, intersection improvements	-	2010-2011	not started	$500,000	$2,000,000	Dept. Estimate
Total Cost Original Project List							**$36,200,000**	**$79,900,000**	

Table A-4: Sonoma Valley TIF Cost Allocations

Transportation Project Description			Cost Allocation								Other Funding Received and Anticipated	
Item #	Primary Project Type	Project Name	Year 2040 Select Zone, Total Unincorporated Area	Year 2040 Select Zone, Sonoma Valley Only	Year 2040 Select Zone, Non-Sonoma Valley Only	Cost Allocation based on Select Zone % for Total Uninc Area	Percentage of Project Cost for Existing Service	Cost Allocated to New Service Bike/Ped Projects (20%)	Composite Cost Allocation	Net Amount Included in TIF Program	Net Funding Received and Anticipated from Non-Fee Sources	Source(s) of Other Funding Received and Anticipated
1	Bike Ped / Enhance Safety	Bennett Valley Rd. (Sonoma Mountain Rd. to Warm Spring Rd.)	98%	42%	61%	$3,626,000	80%	$580,160	35%	$1,305,360	$2,394,640	safety & bike grants
2	Bike Ped / Enhance Safety	Boyes Boulevard (Arnold Dr. to Hwy 12)	100%	100%	5%	$5,200,000	80%	$832,000	36%	$1,872,000	$3,328,000	Federal/Caltrans bridge program, safety & bike grants
3	Bike Ped / Enhance Safety	Hwy 12 (Redevelopment area, Agua Caliente to Verano & various intersections)	93%	90%	5%	$18,600,000	50%	$1,860,000	56%	$11,160,000	$8,840,000	Community Development
4	Bike Ped / Enhance Safety	Hwy 116 (Arnold Dr. - Watmaugh to Hwy 121)	78%	71%	10%	$14,118,000	80%	$2,258,880	28%	$5,082,480	$13,017,520	Caltrans, Measure "M", safety & bike grants
5	Bike Ped / Enhance Safety	Hwy 121 (@Napa Rd.)	45%	38%	7%	$2,160,000	80%	$345,600	16%	$777,600	$4,022,400	Caltrans
6	Bike Ped / Enhance Safety	Napa Rd. (Town of Sonoma to Hwy 12/121)	45%	44%	1%	$2,385,000	80%	$381,600	16%	$858,600	$4,441,400	safety grant
7	Intersection Improvements & Bike Ped / Enhance Safety	Napa Street East (Town of Sonoma to 8th Street East)/Highway 121	52%	51%	1%	$4,160,000	20%	$166,400	44%	$3,494,400	$4,505,600	safety & bike grants
8	Bike Ped / Enhance Safety	Petaluma Ave. (Arnold to Riverside)	81%	78%	9%	$3,078,000	80%	$492,480	29%	$1,108,080	$2,691,920	safety & bike grants
9	Bike Ped / Enhance Safety	Railroad Ave. (Verano to Boyes)	100%	100%	0%	$3,200,000	50%	$320,000	60%	$1,920,000	$1,280,000	safety &. bike grants
10	Bike Ped / Enhance Safety	Watmaugh Rd. (Arnold to Hwy 12)	56%	51%	15%	$2,128,000	50%	$212,800	34%	$1,276,800	$2,523,200	safety & bike grants
11	Bike Ped / Enhance Safety	State Route 12 @ Trinity Road	76%	65%	25%	$1,520,000	50%	$152,000	46%	$912,000	$1,088,000	Caltrans
12	Bike Ped / Enhance Safety	State Route 121 @ Millerick Road	51%	42%	10%	$1,020,000	50%	$102,000	31%	$612,000	$1,388,000	Caltrans
Total Cost Original Project List						**$61,195,000**		**$7,703,920**		**$30,379,320**	**$49,520,680**	**Non-fee funding received and anticipated**

Appendix A-5: Note on Transportation Demand Forecasting

The transportation planning process relies on travel demand forecasting, which involves predicting the impacts that future growth and various policies and programs will have on travel. The forecasting process provides detailed information such as traffic volumes, travel speeds, bus and rail patronage, and other metrics that help engineers and planners design future transportation systems, and that help decision-makers as they select transportation-related policies. Forecasting future travel demand is typically achieved by applying a computerized travel demand model which is first calibrated to replicate existing travel using actual survey data, and is then applied to future scenarios to forecast future travel.

Travel demand models are developed by transportation planners and engineers with specific training in this field. The models are built using specialized software and a wide range of data about the existing transportation system. This data includes Geographic Information Systems (GIS) data about the locations and characteristics of all the streets and highways in the study area, data about the types of land uses (e.g., single-family homes, retail shops, office buildings, etc.) located in the study area, data about the socioeconomic characteristics (such as age, income, and employment status) of the people living in the study area, and survey data about how people with varying characteristics tend to travel. Once the input data is developed and checked, the model is calibrated to reflect existing travel patterns; that is, the mathematical procedures applied within the model are adjusted until the model's outputs (such as traffic volumes and speeds on each road) match reasonably well with actual observations.

At that point, the model is considered ready for use in analyzing future scenarios. Model inputs can be changed to reflect different possible futures, and then the outputs are examined to see how future travel patterns might change in response to those different scenarios. For example, there may be a proposal to build a group of new office and retail buildings on a site that is currently vacant; the model inputs can be adjusted to reflect that proposed new development (size of the new buildings, types of uses, etc.), and then the model will be applied to see how the traffic volumes in that vicinity might be expected to change.