



Transportation Utility Fee to Fund Transit in California

Shishir Mathur, PhD Ralph Robinson



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16. Abstract

Public transit is a key tool to reduce greenhouse gas (GHG) emissions to combat climate change; improve safety for pedestrians, cyclists, and drivers; and expand accessibility and mobility for all. However, we can only realize this potential by making sufficient investments to provide transit service levels that attract and retain greater ridership. To help with this needed investment, a handful of local governments have turned to transportation utility fees (TUFs), primarily collected as a monthly charge on customers' utility bills or property tax bill. While more widely used to support street maintenance, this study identifies six case studies where TUF revenues have been used to support transit or active transportation modes. This study closely examines the legal enabling environment for TUFs, the fee calculations methodology, the eligible uses, and other critical details about how these fees work. This study concludes by investigating the feasibility of employing TUFs in California to support public transit and meet the state's GHG emissions reduction goals.

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Executive Summary

Overview

This study assesses the feasibility of adopting transportation utility fees (TUF) to fund transit in California. Expanding the use of transit has been a growing priority of federal, state, and local governments in response to the need to provide transportation mode choices and fight climate change. Reducing vehicle miles traveled (VMT) is critical because tail-pipe emissions are a major source of greenhouse gases (GHGs)—the major climate change contributors. Good quality transit helps get people out of the car, thereby reducing VMT. But public transit systems typically require significant operating and capital subsidies. For example, the local and state governments subsidize approximately half (48%) of these systems' operating and one-third (35%) of the capital expenditures (Federal Transit Authority, 2015). However, both these levels of government are under significant fiscal stress across the nation, especially in states such as California that have stringent statutes that limit local governments' ability to levy new taxes and fees (Waisanen, 2012).

Furthermore, revenue generated from the traditional transportation funding sources such as property, sales, and gas taxes; intergovernmental transfers; and impact fees are increasingly falling short of need. Moreover, some revenue sources, such as those from impact fees, are often used to fund capital infrastructure only, leaving the operating expenses underfunded. Therefore, any new revenue source that can reduce public transit's subsidy requirements is welcome. TUF could be one such source.

Study Objectives and Methodology

A TUF is based on the principle that transportation is a utility like water and electricity (FHWA 2018); therefore, transport users should pay for the cost of using transportation infrastructure and services like they pay water and electricity charges. Scores of jurisdictions across the US are funding a portion of transportation needs through TUFs. Very few are using TUFs to fund transit, however. Furthermore, across the US, fees are politically more acceptable than taxes. Governments can more easily employ a new revenue source if they can prove it is a fee, not a tax. Furthermore, there are constitutional and statutory hurdles for levying taxes in many states. These include extensive public hearing requirements and a simple or super-majority (for example, two-thirds majority) voter approval. On the other hand, jurisdictions can usually institute fees through their legislative body's (for example, a city council) majority approval.

Through a review of extant literature, expert interviews, in-depth case studies of TUF programs, and analyses of TUF-related court cases and California's legal statutes, this study explores the legal, political, and administrative implications of employing TUFs to fund transit in California. Specifically, the study explores the feasibility of employing TUF as one of the following local revenue tools allowed in California: a fee, a special fee, an assessment, a general tax, or a special tax (or a parcel tax, which is a variant of the special tax). The specific study objectives are to examine

the feasibility of a) employing TUF to fund transit infrastructure and services in California and b) leveraging TUF to meet the state's GHG reduction goals by linking the fee with sustainable development practices such as green, transit-oriented developments.

The study employs the following methodology to meet these objectives. First, a wide-sweeping online search was performed to identify TUF programs nationwide. This search identified close to 100 local governments across the US that have adopted or are in the midst of adopting TUF or similar programs. Next, this list was narrowed down to six case study jurisdictions, focusing on those that have utilized, or are planning to employ, these fees to support transit and non-automotive modes. These jurisdictions include Hillsboro, Oregon; Weston, Wisconsin; Helena, Montana; Richland County, South Carolina; Boulder, Colorado; and Corvallis, Oregon.

Major Findings

The review of case studies finds that jurisdictions are more likely to levy TUF as a fee when state laws provide broad leeway to local governments to impose fees. For calculating the fee amount, jurisdictions typically assess the fee using a per trip methodology that multiplies the property's square footage by a trip rate provided by the Institute of Transportation Engineers. Moreover, the fee amount on a per-capita basis varies widely from a low of approximately \$4/year to over \$155/year. Finally, TUF is usually paid monthly as part of the utility bill or annually or semi-annually, along with the property tax payments.

The review of TUF-related court cases finds that the biggest challenge to using a TUF is to prove that it is a fee, not a tax. Jurisdictions have typically tried to levy TUF as a fee rather than as a tax. While determining the legality of TUFs and whether they are a fee or a tax, the courts have considered the context of state law and the intent of the TUF-authorizing statutes. For example, in cases where the statutes primarily focus on revenue generation (Brewster v. City of Pocatello, 1989; Heartland Apartment Association Inc. v. City of Mission, 2017; Covell v. City of Seattle, Washington, 1995), the courts have deemed TUF to be a tax. Finally, while determining whether TUF is a fee for a service, the courts have looked at whether the fee is optional, avoidable, and proportional to the cost of the service (State v. City of Port Orange, 1994; Utah Sage, Inc. v. Pleasant Grove City, 2020).

To demonstrate that the fees are optional and avoidable, the case study TUF programs have pointed to the full exemptions provided for vacant parcels or partial exemptions if the fee payors can show a lower intensity of use of transportation infrastructure than assumed in fee calculation methodology (Hillsboro, OR; Corvallis, OR; and Boulder, CO). To show that the fees are proportional to the cost of funding the transportation service, most of the case study programs have based TUF on ITE trip generation rates (Hillsboro, OR; Corvallis, OR; and Boulder, CO). Furthermore, the courts have upheld the fee if it aims to enhance public safety and welfare (Fort Collins, CO)—that is, serves as a regulatory fee. One of the case study TUF programs (Weston, WI), and many others reviewed as part of this research, highlighted this regulatory role of TUF.

However, in California, Proposition 26 disallows the use of a fee for larger regulatory purposes unless it is for the narrow purpose of funding the activities necessary to regulate the business/activity of the fee payors. Hence, in California, TUF can only be levied as a fee for a service—in our case, to fund transit service. Therefore, it cannot be linked to larger health and safety purposes.

The main findings regarding the feasibility of employing TUF in California as a fee, a special fee, an assessment, a general tax, or a special tax (or a parcel tax, which is a variant of the special tax) are as follows: a) regardless of the option chosen, the legality of the revenue tool will be tested in courts; b) each option has its pros and cons, although employing TUF as a special/parcel tax might be most defensible legally. It will also allow TUF to be used jurisdiction-wide and by special districts as well. Notably, many transit agencies, such as Valley Transportation Authority (VTA), are special districts. However, this option is most onerous from a political/stakeholder support perspective because it requires two-thirds voter approval.

With respect to strategies to leverage TUF to reduce GHG emissions, the study finds that full or partial exemptions from paying TUF for low-income households could help. Indeed, research has shown that this group is more likely to take transit and carpool and less likely to own a car than the higher-income group (PPIC, 2004; AC Transit, 2018). Similar exemptions can be provided for affordable housing developments. Hillsboro, OR is providing such exemptions, and Boulder, CO is considering them. Furthermore, to the extent the cost of providing transit is much higher in sprawled suburban built environments than in compact, in-fill transit oriented developments (TODs), TUF rates could be designed so that payors in the former pay more than those in the in-fill TODs.

Finally, jurisdictions could layer the above two strategies to provide deep exemptions for affordable housing and low-income property owners living in compact, in-fill TODs. In addition, they could offer deeper exemptions to those living in green TODs since such TODs further support the state's GHG reduction goals. Among others, such TODs employ building design and construction practices to provide features to recycle water, reduce heating/cooling requirements, reduce impervious open spaces, and generate solar power (Cervero and Sullivan, 2010).

Concluding Remarks

TUF is often viewed as an additional measure or a fix to reduce the ever-present expenditure-revenue gap. However, TUF also provides an opportunity to think outside the box, to view transit as a level-of-service based utility, and to pay for it as we pay for a merit good (goods that should be consumed in sufficient quantities to maximize social welfare, such as education and health care, and unless subsidized would likely be undersupplied). Viewed from this lens, we have an opportunity to conceptualize transit from a user-centric and broader mobility perspective. We can levy TUF at a rate needed to support transit after it receives the financial support for internalizing all the positive externalities it produces, such as GHG reductions and reduced road congestion. A

few case studies provide glimpses of some aspects of this broad-based thinking. Corvallis, OR, provides a fare-free transit service, where TUF is levied in conjunction with state and federal grants to provide a stable funding source. Boulder, CO, would like to cast its TUF as a mobility fee to be spent on all types of transportation infrastructure—transit, walk/pedestrian ways, and roads—to meet the city's mobility needs. Researchers are also calling for such broad-based use of TUF (see Seggerman et al., 2010). More research is needed to explore the legal, political, and administrative dimensions and broader applicability of such a perspective.

1. Introduction

The federal government has reinforced the need to integrate land use and transportation planning and promote public transit through legislation. These pieces of legislation include ISTEA (Intermodal Surface Transportation Efficiency Act), TEA-21 (Transportation Equity Act for the 21st Century), and more recently, SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users), MAP-21 (Moving Ahead for Progress in the 21st Century Act), and FAST (Fixing America's Surface Transportation Act). In addition, other federal programs like the "Livable and Sustainable Communities Program" and the "New Starts Program" have provided additional impetus to the development of public transit. The last three decades have seen increased calls for public transit at the state and regional levels too. Furthermore, in California, encouraging transit use is vital for reducing vehicles miles traveled (VMT) to meet the greenhouse gas (GHG) emissions reduction targets set out in Senate Bill SB 375. Therefore, regions across the state are trying to achieve these emissions reduction targets through sustainable community strategies and regional plans, such as the Plan Bay Area 2050 for the San Francisco Bay Area Region.

Public transit systems typically require significant operating and capital subsidies. For example, the local and state governments subsidize approximately half (48%) of these systems' operating and one-third (35%) of the capital expenditures (Federal Transit Authority, 2015). However, both these levels of government are under significant fiscal stress across the nation, especially in states such as California that have stringent tax and fee limitation statutes (Waisanen, 2012). Furthermore, revenue generated from the traditional transportation funding sources such as property, sales, and gas taxes; intergovernmental transfers; and impact fees are increasingly falling short of need. Moreover, some revenue sources, such as those from impact fees, are often used to fund capital infrastructure only, leaving the operating expenses underfunded. Therefore, any new revenue source that can reduce public transit's subsidy requirements is welcome. A TUF could be one such source.

A TUF is based on the principle that transportation is a utility like water and electricity (FHWA, 2018); therefore, transport users should pay for the cost of using transportation infrastructure and services like they pay water and electricity charges. A TUF differs from an impact fee and a developer exaction. An impact fee is typically levied one-time on new real estate developments. Real estate developers pay it at the building permit approval stage. A TUF can be imposed directly on transport users who live in or use new *as well as* existing properties and can be payable regularly, for example, monthly (Turley, 2014).

While the use of TUF is still modest, it has grown in the last two decades, from 10 jurisdictions—nine in Oregon and one in Florida—in the early 1990s (Ewing, 1993) to over 30 jurisdictions across five or more states (Arizona, Kansas, Oregon, Texas, and Utah) by the mid-2010s (City of Phoenix, 1994; League of Oregon Cities, 2015; Voulgaris, 2016).

Many more have adopted TUF programs since (for example, Pleasant Grove, UT) or are in the process of adopting them (for example, Oshkosh, WI) (Giles, 2018; Slattery, 2019). Indeed, our research shows that close to 100 jurisdictions are currently using some variant of TUFs. In addition, there is significant interest among local jurisdictions and regional agencies to explore a TUF, as evidenced by the Transportation Agency for Monterey County's interest in supporting local jurisdictions to "develop a local Transportation Utility Fee concept" (TAMC, 2015). See Appendix A for the list of jurisdictions and some fee details such as fee name, fee rate, and eligible uses for expending fee revenues.

Although jurisdictions primarily use TUFs for street pavement maintenance, some—such as Hillsboro, OR, and Phoenix, OR—also use them for bike and pedestrian pathways and sidewalks (Hammill, 2015; City of Phoenix, 1994).

The biggest challenge to using a TUF is to prove that it is a fee, not a tax. Indeed, in four instances, state supreme courts struck down TUFs, ruling that they are a tax (Voulgaris, 2016); and the Florida State Supreme Court ruled TUF unconstitutional because, among other reasons, the state statutes did not authorize it. Therefore, great attention needs to be devoted to a TUF's basis, design, and calculation methodology to ensure it qualifies as a fee and state statutes authorize it.

1.1 Related work and research gaps

The extant research on TUFs is in a very nascent stage and primarily describes how jurisdictions can better design TUFs to fund road infrastructure and qualify as a fee; yield adequate revenues; and be efficient, equitable, and politically and administratively acceptable (Ewing, 1993; Springer and Ghilarducci, 2004; Carlson et al., 2007; Junge and Levinson, 2012; Voulgaris, 2016).

Voulgaris (2016) reviews the fee bases for 34 TUF-charging jurisdictions. The author uses a three-part test to differentiate a fee from a tax, namely, whether a) the beneficiary pays the fee in lieu of a public benefit, b) the fee is voluntary, and c) the fee is levied not to raise revenue but to compensate for the service provided. The study concludes that a TUF program that calculates the fee based on the local trip generation estimates, allows for property owners' inputs and appeals, and provides targeted exemptions best meets this three-part test. The local input is often sought through stakeholder engagement during the fee design process. Exemptions are typically provided to properties that generate fewer than estimated trips, for example, employers that provide free transit passes.

Ewing (1993) notes that basing a TUF on trip generation rates gives it the best chance to qualify as a user fee. This study proposes refinements to the ITE trip generation rates to further strengthen the legal basis for the fee. These refinements include adjusting trip rates by household size, auto ownership, density, pass-by trips, truck volume generated (higher the truck volume, more the wear and tear and higher the cost to maintain the transportation system), and trip length.

Springer and Ghilarducci (2004) provide an example of a local context-driven methodology developed for Clackamas County, Oregon's transportation maintenance fee (TMF). First, all the buildings in the county were inventoried and assigned a land-use category consistent with ITE categories. Then the buildings were grouped into five major land-use groups—residential, industrial, office, institutional and recreational, and retail. Next, the ITE average weekday trip generation rates were assigned to each land-use group, and adjustments were made for pass-by traffic and trip length. After that, the total trips generated were cross-checked with the regional travel model. Next, the cost per vehicle trip was calculated based on the total annual transportation costs to be funded through the TMF. After that, this cost per trip was multiplied by the total daily trips generated by each land use group to arrive at the initial estimates for the monthly fee. Finally, these initial estimates were adjusted downward to make them comparable to those levied by the surrounding communities.

Junge and Levinson (2012) extend this line of inquiry by proposing a fee calculation methodology for three sample jurisdictions in the Minneapolis-St. Paul metropolitan area in Minnesota and doing a hypothetical fee calculation. The study finds that a TUF will shift the burden of transportation funding from commercial to residential property users compared to property taxes. This shift has political implications as commercial property users are often politically active. Furthermore, while a TUF adheres to the beneficiary-to-pay principle of vertical equity, it is likely to be regressive as it will burden lower-income payers more than higher-income payers to the extent the traffic similarly impacts both these groups. Finally, the study calls for enhancing TUF's equity impacts, political and administrative feasibility, and revenue yield and stability. For example, Carlson et al. (2007) point out that while pass-by adjustments, the appeals process, and a ceiling on the fee for properties that would otherwise result in huge bills enhance political acceptability of the TUF, they lead to more administrative work.

While the literature primarily focuses on examining the use of TUFs to fund street systems, there are calls to levy TUFs to serve all transportation infrastructure, including transit, thereby shifting the focus from individual transportation projects to transportation mobility (Seggerman et al., 2010). Going one step further, especially given California's larger goal of reducing GHG emissions, TUFs have the potential to improve air quality and conserve natural resources if it incentivizes TUF-paying users to offset the fee costs by adopting sustainable transportation and natural resource conservation practices.

1.2 Research Methodology

Through the following three-step process, this research project examines the feasibility of employing TUF to fund transit infrastructure and services in California and leveraging TUF to meet the state's GHG reduction goals by linking the fee with sustainable development practices such as green, transit-oriented developments (TODs).

Step 1: Conducted an online search for TUF programs in use nationwide and identified six TUF programs for an in-depth study of where a TUF is or could be used to fund non-auto uses such as active transportation modes and transit. The detailed case study selection methodology is provided in Chapter 2.

Step 2: Since the biggest challenge to a TUF is that it is a tax, under this step, we analyzed the major court cases that have ruled on this topic and identified the key issues to consider while assessing the legal feasibility of employing TUF programs in California.

Step 3: Described the options for levying TUFs in California and discussed their legal, political, and administrative pros and cons. These options include implementing a TUF as a fee, a property-related fee, a special assessment, a general tax, or a special tax. Finally, we explored the kinds of exemptions jurisdictions can provide to TUF payors to help reduce GHG emissions (for example, providing credits to payers living in transit-oriented, green buildings).

1.3 Report Organization

The next chapter, Chapter 2, reviews the TUF programs of the following six cities: Hillsboro, OR; Weston, WI; Helena, MT; Richland County, SC; Boulder, CO; and Corvallis, OR. We selected these cities based on a review of 98 cities and counties across the US that have enacted or proposed fees to pay for the upkeep and improvements to their transportation networks. Of all the fees studied, the six selected case studies contained unique features or language enabling that revenue collected could be used to support active transportation and/or mass transit. We analyzed these case study TUF programs on critical dimensions such as the state-level legal enabling environment, fee calculation methodology, fee amount, fee revenue, eligible uses, fee collection and accounting mechanisms, and exemptions and appeals processes. Chapter 3 synthesizes the case studies on these dimensions.

Chapter 4 reviews the key court cases that have directly ruled whether specific TUF programs can be considered fees. The jurisdictions with these TUF programs include (the associated court cases are in parenthesis), Pocatello, ID (Brewster v. City of Pocatello, ID), Port Orange, FL (State v. City of Port Orange, FL), City of Mission, KS (Heartland Apartment Association v. City of Mission, KS), Seattle, WA (Covell v. City of Seattle, WA), Fort Collins, CO (Bloom v. City of Fort Collins, CO), and Pleasant Grove, UT (Larson v. Pleasant Grove City, UT).

The concluding chapter first reviews the key California state-wide statutes that impact local jurisdictions' ability to levy fees; what can be considered a fee; and the process of imposing general taxes, special taxes, assessments, and fees. Next, this chapter uses the insights from the case studies, court cases, and California-specific statutes to lay out the options for levying TUFs in the state. Finally, it concludes the report by summarizing its key findings and reflecting on future research and policy directions.

2. Transportation Utility Fee Case Studies



Figure 1: TUF Case Study Cities (ArcGIS Online)

2.1 Introduction and Case Study Selection Methodology

Developing alternative funding for non-automotive transportation is challenging for any jurisdiction. This study developed six case studies that provide helpful insights and strategies to consider. These cases were selected after a review of 98 cities and counties across the US that have enacted or proposed fees to pay for upkeep and improvements to their transportation networks. Of all the fees studied, the six selected case studies contained unique features or language enabling, having enabled, or proposing that revenue collected will be used to support active transportation and/or mass transit. The six cases are Hillsboro, OR; Weston, WI; Helena, MT; Richland County, SC; Boulder, CO; and Corvallis, OR.

The six case studies were identified after an exhaustive search for local governments in the US that have adopted TUFs or similar programs. Upon a review of available literature, a list of keywords was prepared to search for these local governments. That list included alternative names for TUF charges, such as street maintenance fees, road utility fees, and pavement maintenance programs. Variants of keywords such as transit maintenance fees, transit usage fees, and transit infrastructure fees were searched to find programs similar to TUFs that fund public transit. Finally, local governments with active and inactive TUFs were identified, as well as those that have taken steps to research or adopt similar programs. These jurisdictions were organized by the state in which they are located to identify commonalities within their regulatory environments.

For each TUF program identified, a list of categories was prepared to collect specific information about each program. This final list included the name of the program, the ordinance establishing

it, the year it was enacted, eligible uses for the fee, the mechanism for collecting it, the specific funds it was dedicated to, and the formula for setting the fee. Having collected these pieces of information for each program, this study was able to identify those TUF programs that made specific reference to transit. Of the 98 programs reviewed, only about a dozen made any reference, either in their ordinance or elsewhere, to transit or non-automotive uses. From this scaled-down list of programs, six TUF programs were selected based on their relevance to the study objectives and the quality of information available.

2.2 Case Study 1: Hillsboro, OR

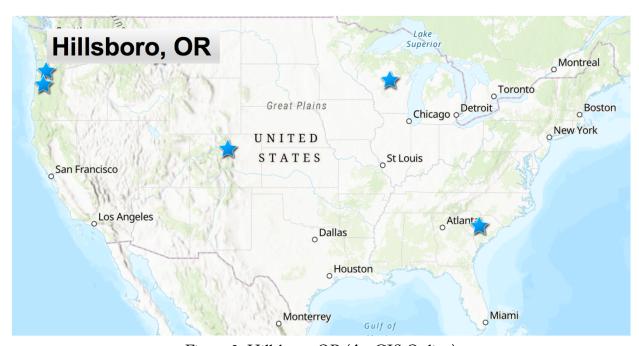


Figure 2: Hillsboro, OR (ArcGIS Online)

Hillsboro is a city in Washington County in northwestern Oregon (Figure 2), 25.7 square miles in size with a population of a little over 108,000 in 2018 (U.S. Census Bureau, 2019a). It is the fifth largest city in Oregon by population, and a part of the Portland metropolitan area. In 2008, the city council adopted a transportation utility fee that went into effect in 2009 (HMC, 2020). The fee was adopted mainly to support street repair and maintenance, with a portion of revenues put aside to fund capital improvements to pedestrian and bicycle infrastructure. The authority to levy the fee is enabled through the "home rule" provisions granted by state law, with such fees not subject to limits on property taxes described in Article XI, Section 11b of the Oregon Constitution. In Oregon, only property taxes are subject to voter approval. A local government's legislative body, such as a city council, may institute other local fees or taxes without a public vote. As this study has noted, jurisdictions with TUFs in other states often undergo additional scrutiny to ensure their TUFs are regarded as fees that do not require voter approval. This scrutiny—which makes the "fee vs. a tax" distinction so critical to protecting the legality of TUFs in other states—is therefore moot in Oregon.

Fee Creation

The development of a TUF program began as early as 1999 with the city's initial exploration of financing alternatives for street improvements. The gas tax had historically provided funding for street repairs. Still, lagging revenues had led to a backlog of over \$9 million worth of projects by 2007 (City of Hillsboro, 2008). A public survey revealed that transportation system improvements, including for bicycles and pedestrians, rated highly among resident priorities (personal communication on January 21, 2020, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR). The city worked with consultants to recommend the adoption of a utility fee to fund transportation system improvements. An advisory committee composed of members of homeowner associations, business groups, city staff, and major local institutions was formed in 2005 to study a potential TUF further. After an 18-month review period and seven meetings, the committee recommended adopting the TUF with a fee structure based on trips generated and separate charges for commercial and residential properties (City of Hillsboro, 2008).

Further public outreach regarding the fee was conducted from April of 2007 through July of 2008. This outreach included three open houses that, per interviews with the city staff, were poorly attended. Initial public concerns were related to the broadness of some of the commercial categories, trip generation as a fee calculation method, and the fee's inability to account for proximity to transit or bicycle and pedestrian facilities.

The TUF was designed from the start with several concessions to strengthen stakeholder support. Commercial properties were exempted from contributing to the bicycle and pedestrian facilities, as it was argued that they did not benefit from these facilities. The city took steps to illustrate how it intended to keep administrative costs for the fee low. As part of the fee creation, the city prepared estimates of project maintenance backlogs in the coming years and illustrated the total amount of maintenance deferred in previous years. The average benefit for each user was estimated based on how the costs would be allocated to specific maintenance needs (Bailey, nd). Advocates also stressed the advantages of having local funding for street projects that would make more improvement projects possible, which has helped demonstrate the program's effectiveness.

With its 2008 adoption, the city implemented a five-year review period to ensure a fair distribution of the fee between all residential and commercial property owners. As noted by city staff, the fee is regularly reviewed more often than every five years, with the most recent adjustment to the fee adopted and put into effect in March 2020. After adoption, there were some individual complaints about the fee's determination in specific cases. Still, no formal or organized challenges were raised (personal communication on January 21, 2021, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR).

Revenues, Expenditures & Dedicated Fund

The TUF was established as a fee on all residential and non-residential customers to support street maintenance. The city used a portion of the fee revenue to improve and maintain bicycle and MINETA TRANSPORTATION INSTITUTE

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pedestrian pathways. For the fiscal year 2018-19, the fee revenue totaled over \$4.7 million (City of Hillsboro, 2021a) and was divided between two funds. The largest share went to the city's Pavement Management Program (PMP), which performs crack sealing, slurry sealing, and overlay maintenance on city roads (Table 1). The remainder went to the city's TUF Pathways Fund, dedicated to capital improvements to pedestrian and bicycle facilities. Table 2 shows the recent allocation of funds between these two programs.

Table 1: Total Hillsboro TUF Revenues, 2017-21 (City of Hillsboro, 2021a)

	Actual 2017-18	Actual 2018-19	Adopted 2019- 20	Adopted 2020- 21	Percentage of Total TUF Revenue (2017- 21)
TUF Pavement Management Fund	3,167,924	3,569,518	3,600,000	3,800,000	75.4%
TUF Pathways Fund	1,108,328	1,144,989	1,150,000	1,200,000	24.6%
TUF Revenues	4,276,252	4,714,507	4,750,000	5,000,000	100%

In recent years, the city has allocated around 75 percent of revenues to the PMP and the remaining 25 to the Pathways fund (City of Hillsboro, 2021a). Revenues for the Pathways Fund result from the difference in residential fees collected and the revenues needed to fund the PMP projected by city staff. That surplus resulted from a recalculation of fees for commercial properties that raised the share of the PMP funds provided by commercial customers without lowering the total amount paid by residential customers. The city allocated the excess amount to a new fund, the Pathways fund. Initially, an even greater share of total TUF revenues was available for the Pathways fund. Over time, however, the share dedicated to PMP has grown as the gap between street maintenance costs and traditional funding sources (i.e., gas taxes) has widened. The TUF was established with the direct aim of closing that funding gap, leaving a declining percentage of revenues remaining for use on pedestrian and bicycle projects (personal communication on January 21, 2021, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR).

Fee Calculation

The TUF is calculated based on the impact of a particular property on the street system. To determine this impact, the city first estimates the share of the street system that serves commercial versus residential properties. In all, residential properties are calculated to represent 77 percent of the total burden on the street system, with commercial properties representing the remaining 23 percent. This determination of burden is updated by the city every few years (Bailey, 2012).

After distinguishing between residential and commercial properties, the city further divides properties into specific categories based on land use. The city designates residential uses as R1 for single-family homes, condos, townhouses, and duplex units; and R2 for other multi-family

residential buildings. As determined when the fee was established, residential properties pay a flat fee for the TUF. The fee for multi-family (R2) units is ten percent lower than that for single-family (R1). These fees are calculated by essentially dividing the city's revenue target by the number of residential units. Table 2 shows current residential fees and the most recent fee share going towards the PMP and Pathways funds (City of Hillsboro, 2020).

Table 2: Summary of Hillsboro Residential Fees (City of Hillsboro, 2020)

Land Use Designation	TUF Fee per Month	PMP Share (%)	Bike + Ped Share (%)		
R1: Single-family detached or Condo/Townhouse/Duplex unit	\$9.11	\$6.48 (71.1%)	\$2.63 (28.9%)		
R2: Multi-family residential	\$8.20*	\$5.83 (71.1%)	\$2.37 (28.9%)		
*Fee multiplied by number of units within multi family residence					

In addition to a base charge of \$8.20 per month, commercial properties pay a fee based on traffic generation patterns. The city roughly groups these properties into seven categories based on the number of trips they are likely to generate and their square footage.

The rate is calculated based on square footage for the first six categories. The first of the categories, NR-1, includes industrial uses, warehouses, wholesale markets, furniture stores, and cemeteries. These uses tend to have large footprints and less frequent trips, requiring a lower rate per 1,000 square feet of just \$0.27. On the other end of the spectrum is the NR-6 category, which includes fast-food restaurants and 24-hour convenience stores, buildings with smaller footprints that generate many trips. That category has the highest rate assigned at \$37.50 per 1,000 square feet.

The final category, NR-7, includes disparate uses such as movie theaters and gas stations. This category has its fee determined by calculating the rate (\$0.06) by the number of trips generated, which the city caps at 1,500 total trips. Rates for all seven commercial categories are provided in Table 3 (City of Hillsboro, 2020). These fees are not divided between the two funds but are committed entirely to the PMP fund. This commitment was a concession made early in the fee creation process to make it more palatable to commercial property owners. As noted in interviews with city staff, the city may revisit this commitment in the future as it explores new methods for calculating trips generated by pedestrians and bicycles (personal communication on January 21, 2021, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR).

Table 3: Summary of Hillsboro Commercial Fees (Bailey, 2021)

Land Use Designation (example uses)	Base Charge	Rate per 1,000 square feet
NR-1 (industrial, wholesale)	\$8.20	\$0.27
NR-2 (schools, churches, hospitals)	\$8.20	\$0.73
NR-3 (fitness clubs, superstores)	\$8.20	\$2.32
NR-4 (movie theaters, supermarkets, drugstores)	\$8.20	\$5.26
NR-5 (banks, bars)	\$8.20	\$14.67
NR-6 (fast food, 24/7 convenience stores)	\$8.20	\$37.50
NR-7 (parks, arenas, golf courses)	\$8.20	\$0.06
*Fee = Rate x square feet/1000 + Base charge		

Eligible Uses & Unique Features

The revenues dedicated to the PMP are intended strictly for maintenance and may not be used to add capacity or new capital projects. That work includes patching and sealing; sidewalk, bike path, and street repair and reconstruction; street tree replacement, and the operation of streetlights (HMC, 2020). Some PMP funds are also available for updating sidewalks and curb cuts per ADA requirements. Revenues within the Pathways fund, on the other hand, are intended for new capital improvements to the pedestrian and bicycle infrastructure. In the 2020-21 budget, such projects included new bike lanes and crossing beacons for pedestrians (City of Hillsboro, 2021a). As noted earlier, only fees collected from residential properties contribute to the Pathways fund. Hillsboro's TUF is unique in its specific inclusion of bicycle and pedestrian improvements and its detailed allocation of funds for these purposes (HMC, 2020).

Specific Programs Funded & Capital Expenditures

The 2020-21 budget for the City of Hillsboro lists 14 separate capital improvement projects to be funded at least in part using TUF revenues. Of these, ten are strictly street maintenance projects drawing funds from the PMP fund. Two are bike and pedestrian improvement projects, and two others draw funds from both the PMP and Pathways funds for joint street maintenance and bike and pedestrian improvements. In terms of budget, the largest project listed is the Pavement Management Program, not to be confused with the TUF PMP fund itself. This program draws \$3 million from the PMP, another \$2 million from the city's Strategic Investment Program (SIP), and \$300,000 from the Pathways fund. Also drawing from both funds is a road improvement project for NE Jackson School Road to add bicycle facilities and make street improvements such as adding a center turn lane and improving curbs and gutters. This project is the most significant expenditure for the Pathways fund, with over \$725,000 of its cost drawn from that source. Other

improvements funded by the pathways fund include ADA ramp upgrades (\$75,000) and additional crossing beacons for pedestrians (\$50,000). None of the 14 projects note improvements to transit infrastructure (City of Hillsboro, 2021a). The TUF is used to make bike and pedestrian connections to transit, but it is not designed to fund any actually transit infrastructure such as buses, light rail, and transit stop improvements due to the fact that TriMet operates the region's transit system (personal communication on November 18, 2021, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR).

Review of Fee & Expiration

The TUF ordinance includes both a cost-of-service adjustment and an inflationary index adjustment. The first is the annual change in the revenue needed to maintain the items designated by the TUF ordinance. The second is an annual accounting for increases in the cost of labor, materials, and other items necessary for carrying out this maintenance (HMC, 2020). The TUF administrator reviews both considerations regularly and suggests modifications to the rate for the council to adopt. This review is required every five years but has often been done on an annual basis to ensure consistency between the rates charged and the methodology prescribed by the ordinance (personal communication on January 21, 2021, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR). The Hillsboro TUF does not stipulate a term or expiration date for the ordinance (HMC, 2020).

Fee Administration

The city collects the TUF as part of the monthly water, sewer, and storm drains bill charged to all developed properties. The city provides these services to most properties, except for one small area serviced by a water district. Properties within this area still receive a bill for sewer service from the city, which includes the TUF (personal communication on January 21, 2021, with Tina Bailey, Assistant Director of Public Works, Hillsboro, OR).

The individual listed as responsible for the water and sewer bill is also responsible for the TUF. If no such person is expressly noted, the fee is the responsibility of the property owner. If the property is not billed for water or sewer services, a separate bill is sent to the property owner. For residential fees not paid in full, the amount received is divided proportionally between the PMP and the Pathways fund. Accounts not paid in full may be subject to the discontinuation of their water service and a fine of up to \$1,000 for each violation (HMC, 2020).

Households may be eligible for a 30% discount on their rate if no vehicle is registered to the household or one member of the household has purchased an annual TriMet pass (Bailey, nd). Employers may earn a 30% discount for non-residential properties if they purchase passes for their employees or participate in the Oregon Department of Environmental Quality Employee Commute Options (ECO) program to reduce vehicle trips. To participate in ECO, businesses in the Portland area with 100 or more employees must provide incentives to reduce commute trips to their workplace by at least 10 percent. These incentives may include allowing more telecommuting,

allowing employees to buy transit passes with pre-tax dollars, or providing preferred parking or financial incentives for carpooling (State of Oregon Department of Environmental Quality, 2020). Moreover, households may have the fee waived if the household income is 60% below the Oregon median. In addition, a six-month waiver may be granted if a household member has become unemployed (HMC, 2020).

Finally, written appeals may be submitted to contest the fee. Such requests must include a study by a licensed professional engineer and be conducted using the methodology laid out by the ITE Manual. The city council then reviews the appeals and makes the final determination (HMC, 2020).

2.3 Case Study 2: Weston, WI



Figure 3: Weston, WI (ArcGIS Online)

Weston is a village in Marathon County within the Wausau Metropolitan Statistical Area in central Wisconsin (Figure 3). It is 25.6 square miles in size with a population of a little over 15,000 as of 2019 (U.S. Census Bureau, 2021). In 2013, it enacted a TUF to address a growing shortfall in transportation funding and was made legally possible due to broad powers granted to villages by the state to create utilities (including transportation utilities) and pay for utility services through fees per state statute (WI Stat § 61.34, 2015). The fee was adopted to broadly support the village's transportation system, including street maintenance, pedestrian and bicycle infrastructure, and public transit. However, the fee was discontinued beginning in the fiscal year 2015 after strong opposition from the residents.

Fee Creation

From 2000-2012, the proportion of Weston's transportation costs paid for by state aid steadily increased. The village kept its own transportation-related taxes and fees steady during this period. Still, it was able to meet increases in transportation spending as the annual amount of aid received more than tripled. However, the state funding began decreasing in 2012 and was projected to decrease by around \$110,000 annually for the next five years (Village of Weston, 2013c). This increasing deficit led the city to explore new financing alternatives.

One source of the village's transportation costs was public transit. The village operated a bus service that was slated to be discontinued, but a direct referendum required it to continue its operation (Village of Weston, 2013d). However, a separate referendum to fund this service was unsuccessful, adding to the village's transportation funding needs (March 12, 2021 email communication from Michael Wodalski, Director of Public Works, Village of Weston, WI).

According to Wisconsin state law, accessing needed funds through tax increases requires a referendum by voters. Villages have broad powers, however, to establish fees to pay for utility services. These powers led the village to consider a TUF to raise needed revenues, and the village board would adopt one for the fiscal year 2013 (Village of Weston, 2013d).

The TUF was discontinued before the fiscal year 2015, following push back from residents. A common complaint, per city staff, was that residents were unable to deduct the fee paid for the TUF from their income taxes. Property tax, by contrast, can be deducted from income taxes, making it a more palatable option for residents. (March 12, 2021 email communication from Michael Wodalski, Director of Public Works, Village of Weston, WI). To address the funding shortfall in the interim, the village board increased its short-term borrowing to cover critical maintenance needs.

Revenues, Expenditures & Dedicated Fund

The fee collected an estimated \$66,403 during the financial year 2013-14 (March 12, 2021 email communication from Michael Wodalski, Director of Public Works, Village of Weston, WI).

All revenue from the TUF was dedicated to the Transportation Utility fund (also noted as Fund 19 in budget documents), a special revenue fund. Transportation expenses were allocated to this fund annually to bring the fund to a net of \$0 annually (Village of Weston, 2013b). This fund was discontinued along with the TUF in November of 2014, with the remaining balance spent in the fiscal year 2014 (Village of Weston, 2015).

Fee Calculation

The fee was determined by the length of a property's street frontage, grouped into three tiers described in Table 4.

Table 4: Weston TUF Rate Tiers (Village of Weston, 2013a)

Rate Tier	Property Frontage	Annual Rate	Quarterly Rate	% of Parcels
1	0 – 200 feet	\$9.20	\$2.30	84.4%
2	200 - 400 feet	\$15.40	\$3.85	11.1%
3	Over 400 feet	\$29.20	\$7.30	4.5%

The TUF rates resulted from a detailed calculation of the total value of the street system, the costs to maintain that system, the existing funding shortfall, and the percentage of those costs for which each property is responsible. The Public Works Department developed the base charges listed in Table 4 based solely on total street frontage. In addition, properties along county highways or state business highways received a 50 percent discount because the village does not pay for the maintenance on those roads (Village of Weston, 2013a).

An alternative was also created, though not utilized, which was to charge an additional fee based on street access, i.e., how much traffic a property generates. For example, farmland has much more frontage than a gas station, but the gas station generates more vehicle trips and causes wear and tear of the street system. However, the village did not impose the access charge. All fees collected from 2013-14 were solely from the base charge (Village of Weston, 2015).

Eligible Uses & Unique Features

Funds from the TUF could be applied to costs throughout the transportation system, including street maintenance and operation of public transit. The ordinance mentions but does not limit funding to patching, crack sealing, seal coating, minor widening, repairing and installing sidewalks or curb cuts, repairing and installing signals, and street reconstruction. The ordinance also mentions that a portion of TUF revenues may go toward public transit costs and pedestrian and bicycle infrastructure improvements (Village of Weston, 2013d). However, the village staff noted that the amount collected by the fee was taken up by general maintenance needs such as crack sealing, chip sealing, and asphalt paving (March 12, 2021 email communication from Michael Wodalski, Director of Public Works, Village of Weston, WI). Finally, funds were limited to transportation spending and could not be used for other government or general needs.

The language of Weston's TUF ordinance was unique in allowing for funds to be used for the operation of public transit. The village documents at the time of the passage of the TUF note public transit costs as comprising approximately 3.5 percent of all transportation spending (Village of Weston, 2013c). As noted above, however, the amount collected by the TUF was insufficient to cover any public transit expenses during its brief lifetime.

Specific Programs Funded & Capital Expenditures

Funds from the TUF were not allocated to specific projects. Instead, projects were assigned as TUF expenditures until the fund reached a net balance of \$0 (March 12, 2021 email communication from Michael Wodalski, Director of Public Works, Village of Weston, WI).

Review of Fee & Expiration

The establishing ordinance noted that the village board may amend the TUF by resolution, though no regular time period was established for doing so (Village of Weston, 2013d). While no expiration date was set for the TUF upon its adoption, the Village of Weston quickly repealed it in less than two years.

Fee Administration

The TUF was included on quarterly utility bills residents received for sewer, water, and stormwater. The party responsible for paying the utility bill was also responsible for the TUF. A late payment could result in a three percent charge after 30 days (Village of Weston, 2013d).

The village discounted those properties that did not front on a street it maintained (Village of Weston, 2013a). The ordinance allowed the village board to create exemptions where it deemed necessary, though none were created in the lifetime of the fee (Village of Weston, 2013d).

The ordinance included an appeals process by which property owners could file a formal complaint that would come before the Public Works and Utility Committee or the Village Board (Village of Weston, 2013d). The village staff noted that few appeals were generated, as the fee was based on an exact measure, street frontage (March 12, 2021 email communication from Michael Wodalski, Director of Public Works, Village of Weston, WI).

2.4 Case Study 3: Helena, MT



Figure 4: Helena, MT (ArcGIS Online)

Helena is a city in Lewis and Clark County in the state of Montana (Figure 4). The city serves as the county seat and state capital. It had a population of a little over 32,000 in 2019 (US Census Bureau, 2019e) and is 16.9 square miles in size (US Census Bureau, 2019f). The city maintains street maintenance districts to raise revenue for its street and traffic fund, an authority granted through state ordinance. Specifically, Chapter 7, section 12, part 44 of the Montana Code describes the requirements for establishing such districts, including that parcels with access to the street system may be assessed a fee to provide for the maintenance of that system (Montana Code Annotated, 2019). The fee supports the annual budget for street maintenance, including capital costs such as new equipment, and non-motorized improvements within street maintenance projects. Districts and fees imposed are reviewed annually by the city commission. For 2020, revenues from these assessments were over \$7 million (City of Helena, 2021, page 67).

Fee Creation

The concept of a street maintenance fee predates the term itself. Dating back to the 19th century, the city had sprinkling districts, which collected fees to pay for watering dirt streets to keep dust down. This precedent of collecting fees to pay for street upkeep carried on until the state of Montana formalized the practice with the street maintenance district standards in the state code. In 2004, the city of Helena passed an ordinance formally establishing these districts per the standards set by the state. This ordinance was amended in 2015 to adjust rates and expand the use of these funds for capital improvements, not simply maintenance (personal communication on April 6, 2021, with Phil Hauck and David Knoepke, City of Helena). Annual review and adoption

of fees is open to public hearings, as noted in news coverage of the most recent budget update (Ambarian, 2019).

Further amendments may be carried out to adjust the fee assessment method. Currently, an entire parcel is charged based on the land use of the developed portion. If, for example, a large parcel only has a small part developed for commercial use, the entire parcel is charged based on the applicable commercial rate. The city has faced pushback from ratepayers on this issue, hence the efforts to revise the methodology (personal communication on April 6, 2021, with Phil Hauck and David Knoepke, City of Helena, MT).

Revenues, Expenditures & Dedicated Fund

Revenues from the street assessments constitute almost the entirety of the Street and Traffic Fund and are accounted under Fund 201 in the city budget. This fund supports street, traffic, and signal maintenance, along with roadway code enforcement. It also provides some revenue for capital improvements, which are also supported through gas tax revenues held in separate funds (City of Helena, 2021, page 67). Table 5 shows total revenues and expenditures for this fund categorized by operating costs.

Table 5: Revenues & Expenditures for Helena Street and Traffic Fund (City of Helena, 2021)

Revenues	2015	2016	2017	2018	2019	2020
Special Assessments	\$3,257,684	\$3,341,204	\$3,659,914	\$4,055,147	\$4,975,628	\$7,113,341
Other Revenues*	\$102,525	\$73,123	\$99,452	\$128,213	\$188,466	\$282,964
Internal Transactions			\$12,876	\$19,695	\$19,545	\$9,894
Total Revenues	\$3,360,209	\$3,414,327	\$3,772,242	\$4,203,055	\$5,183,640	\$7,406,199
Expenditures						
Personnel	\$1,208,579	\$1,184,756	\$1,231,490	\$1,334,818	\$1,322,880	\$1,542,382
Operations & Maintenance	\$1,556,374	\$955,877	\$1,328,792	\$1,725,615	\$1,564,131	\$2,064,854
Internal Transactions	\$443,850	\$477,383	\$480,043	\$464,759	\$519,485	\$637,995
Debt & Capital	\$25,925	\$130,676	\$131,072	\$870,270	\$724,163	\$2,457,323
Total Expenditures	\$3,234,728	\$2,748,692	\$3,171,397	\$4,395,462	\$4,130,659	\$6,702,554
Revenues Less Expenditures	\$125,481	\$665,635	\$600,845	-\$192,407	\$1,052,981	\$703,645
Beginning Balance	\$2,515,716	\$2,641,156	\$3,307,070	\$3,907,780	\$3,715,524	\$476,984
Ending Balance	\$2,641,156	\$3,307,070	\$3,907,780	\$3,715,524	\$476,984	\$5,471,850

^{*}Other funding sources includes licenses and permits, intergovernmental revenue, charges for services, intra-city revenues, fines and forfeitures, and investment earnings

Table 6 shows the spending dedicated to the four categories of streets, traffic maintenance, signal maintenance, and roadway code enforcement.

Table 6: Budget Allocation for Helena Street and Traffic Fund (City of Helena, 2021)

Budget	2018	2019	2020
Streets	\$3,831,988	\$3,544,540	\$6,032,047
Traffic Maintenance	\$421,857	\$461,223	\$441,196
Signal Maintenance	\$141,617	\$124,896	\$69,195
Roadway Code Enforcement			\$160,116
Total	\$4,395,462	\$4,130,659	\$6,702,554

Fee Calculation

The assessment fee is based on a calculation of the city's total maintenance needs. Residential and commercial parcels below 6,000 square feet (Table 7) are assessed at a flat rate. Commercial parcels between 6,000 and one million square feet in size are charged \$0.06 per square foot. Table 7 shows the current rate categories in District 1, which includes all of Helena (personal communication on April 6, 2021, with Phil Hauck and David Knoepke, City of Helena, MT).

Table 7: Helena Street Maintenance District Rates (Hauck, 2021)

Category	Fee per Annum
Vacant or residential	Flat rate: \$206.16 per lot or parcel
Mobile home park	Flat rate: \$82.46 per manufactured or mobile home site
Commercial lots under 6,000 square feet	Flat rate: \$360 per lot or parcel
Commercial lots over 6,000 square feet	\$0.06 per square foot*
*fee assessed for first one million square feet	

Eligible Uses & Unique Features

The street and traffic fund supports street maintenance, signal maintenance, traffic maintenance, and roadway code enforcement. Eligible projects are listed within the annual street maintenance district fund budget or must gain separate approval from the city commission. The city's 2021 budget also lists several items as "Major Capital" within the street and traffic fund description, including expenses for new equipment, turn lanes, sidewalks, and other street projects (City of Helena, 2021, page 67). More detail on these capital expenses is provided in Table 8.

One recent project is the reconstruction of a major collector, Rodney Street, that had long needed improvements. The city is replacing underground utilities along this street in addition to reconstructing surfaces and making sidewalk improvements. The current budget provides \$1,000,000 in funding for both phases I and II of the project in fiscal year 2020.

The fund has also recently been used to pay for new equipment, such as plows. The funding for plows meets a promise the city made to improve snow plowing as a benefit to ratepayers as part of a recent fee increase (personal communication on April 6, 2021, with Phil Hauck and David Knoepke, City of Helena, MT).

Table 8: Capital Expenditures for Helena Street & Traffic Fund, FY 2020 (City of Helena, 2021)

Vehicles & Equipment	\$1,186,000
Rodney Street Phase I	\$1,000,000
Rodney Phase II	\$1,000,000
Lawrence/Warren Sidewalks	\$250,000
Benton Trail	\$75,000
Downtrail Multi Modal Study	\$50,000
Benton Turn Lanes	\$475,000
8th Ave Street with Water	\$100,000
Tow Yard	\$250,000
Total	\$4,386,000

The establishing ordinance notes that ten percent of the cost of each improvement project is to be set aside for non-motorized improvements (City of Helena, 2020). However, this percentage is not kept in a separate fund. The city staff noted that the cost of non-motorized improvements often well exceeds ten percent of the project cost. This percentage of funds supports sidewalk improvements, pedestrian safety improvements (such as bulb-outs), and updating ramps to meet ADA compliance. Another recent project was the addition of a bike lane in one direction on a particularly well-used street (the climbing lane, to assist bikes trying to keep up with traffic speed). The funds do not support transit beyond the maintenance of signage installed by the transit agency. The city's transit system is still developing, only recently moving to a fixed route system in 2017. Previously, the city offered only a dial-a-ride service (personal communication on April 6, 2021, with Phil Hauck and David Knoepke, City of Helena, MT).

Specific Programs Funded & Capital Expenditures

Revenues are intended to fund a myriad of maintenance and improvements described earlier.

Review of Fee & Expiration

The assessment is revisited annually with the preparation of the city budget. During this time, the fee is "determined, listed, and included" within the annual budget (City of Helena, 2020). The assessment has no expiration date, as noted in the ordinance and in interviews with city staff.

Fee Administration

The assessment is collected annually as part of the property tax bill. There are currently no exemptions, though city staff noted that federal properties do not pay it. There has also been some conflict with the airport authority and how they should be assessed (personal communication on April 6, 2021, with Phil Hauck and David Knoepke, City of Helena, MT).

There is no formal exemptions and appeals process, though individual ratepayers have challenged the methodology by which they were assessed. These challenges have led the city to explore changes to the assessment calculation methodology, as noted in the "Fee Creation" section.

2.5 Case Study 4: Richland County, SC



Figure 5: Richland County, SC (ArcGIS Online)

Richland County is the second-most populous county in South Carolina and home to the state capital, Columbia (Figure 5). It had a population in 2019 of little over 415,000 and is 757 square miles in size (U.S. Census Bureau, 2019b). The county imposes or has imposed two different types of TUFs—a road maintenance fee and a mass transit fee. The latter was replaced by revenues from a sales tax measure (called penny tax).

In 2002, the county adopted a \$15 Road Maintenance Fee (RMF) assessed annually on motor vehicle licenses. Revenue from the fee is restricted to maintenance and improvements for the county road system, which previously was paid through the general fund (Richland County, 2017). Richland is one of the 17 counties in South Carolina that imposes such a fee (Hinshaw, 2012). The fee was increased to \$20 in 2007 (Cummins, 2006). Projected revenues from the fee exceeded \$6.6 million for 2019 (Richland County, 2019).

In 2007, the county adopted a mass transit fee of an additional \$16 for private vehicles and \$24 for commercial vehicles (Kuenzie, 2006). This fee was intended as a temporary measure to fund public transit until a more permanent means of funding the county's total transportation needs could be adopted. This additional fee originally expired in 2009 but was extended for another two years at a reduced rate of \$10 on private vehicles and \$15 on commercial vehicles. The fee was extended once more for the 2012 fiscal year at \$5 for private vehicles and \$7.50 for commercial vehicles.

The mass transit fee was eliminated in June of 2012 (Richland County, 2012). The phasing out of the mass transit fee coincided with the creation of the Transportation Penny Tax program. Voters approved a referendum in 2012 for a one percent sales tax to support road, bike, pedestrian, and greenway projects; and county bus service and other transportation services. The penny sales tax is slated to run until 2035, or until it collects the \$1.1 billion it was projected to raise, whichever comes sooner (Richland County, 2019).

Fee Creation

The Richland County Council adopted the RMF in 2002 and the mass transit fee in 2007 (Richland County, 2012). The county derives the power to levy both the fees from section 4-9-30 of the South Carolina Code. This section enables uniform charges to be instituted to fund county operations, including transportation (SC Code § 4-9-30, 2018).

In June of 2001, a motion was proposed to eliminate the RMF from the 2002 budget but was defeated by a 9-2 vote of the council in opposition (Richland County, 2001).

Revenues, Expenditures & Dedicated Fund

Richland County adopts its budget on a biennium basis. For the 2021 fiscal year, projected revenues from the RMF were over \$6.3 million. Those are dwarfed by the projected \$69 million from the Transportation Penny Tax (Richland County, 2019). For comparison, in its last two years, the mass transit fee collected \$2,870,070 and \$1,511,929 in revenue in 2011 and 2012, respectively. These fees, as noted in Table 9, would fund \$2,490,592 in mass transit projects in both the 2012 and 2013 fiscal years, the last two years of mass transit expenditures related to this fee (Richland County, 2012). The remaining interest and fund balances from the mass transit fee were reflected on the road maintenance fee balance sheet through the fiscal year 2018.

The Transportation Penny Tax is intended to fund street improvement projects and the county bus and transportation services for the next two decades. Per the 2020-2021 budget, the total funding goals for the sales tax include a little over \$656 million for road and highway improvements, a little over \$300 million for the operation of mass transit services as provided by the Central Midlands Regional Transit Authority, and about \$81 million for pedestrian, bicycle, and greenway improvements.

Table 9: Richland County Road Maintenance & Mass Transit Fee Revenues & Expenditures (Richland County, 2019)

Revenues	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Adopted 2019	Adopted 2020	Adopted 2021
Road Maintenance Fee	\$5,540, 105	\$7,004,54 2	\$5,711,69 7	\$5,798,75 5	5,925,455	\$6,026,78 7	\$6,070,24 2	\$6,150,01 7	\$6,628,65 0	\$6,305,000	\$6,345,00 0
Mass Transit Fee	\$2,870, 070	\$1,511,92 9	\$54,056	\$6,005	\$4,275	\$2,939	\$2,144	\$1,137			
Expenditures	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Adopted 2019	Adopted 2020	Adopted 2021
Personnel	\$2,419, 839	\$2,597,81 1	\$2,693,93 6	\$2,719,45 7	\$2,845,82 2	\$3,216,90 8	\$3,207,81 1	\$3,158,51 3	\$3,515,18 2	\$3,834,159	\$4,017,99 0
Operating Costs	\$1,437, 294	\$1,512,27 0	\$1,462,07 1	\$1,882,31 8	\$1,758,27 9	\$1,997,50 8	\$1,635,70 9	\$1,835,55 0	\$1,690,37 5	\$1,688,775	\$1,688,37 5
Capital Outlay	\$1,579, 543	\$2,202,57 9	\$1,965,36 8	\$2,563,12 7	\$2,118,78 5	\$821,491	\$861,670	\$1,227,36 7	\$1,067,81 8	\$2,141,000	\$2,213,16 8
Mass Transit Expenditures	\$3,228, 877	\$2,490,59 2	\$2,490,59 2								
Data Processing	\$1,122										
Transfers Out		\$355,275		\$355,275					\$355,275		
Total	\$8,666, 675	\$9,158,52 7	\$8,611,96 7	\$7,520,17 6	\$6,722,88 6	\$6,035,90 7	\$5,705,19 0	\$6,221,43 0	\$6,628,65 0	\$7,663,934	\$7,919,53 3

Table 10: Richland County Penny Tax Revenue & Expenditures (Richland County, 2019)

	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Adopted 2019	Adopted 2020	Adopted 2021
Revenues	\$53,133,4 74	\$58,881,2 91	\$61,524,3 39	\$64,336,7 28	\$65,171,2 86	\$65,100,0 00	\$68,500,0 00	\$69,000,0 00
Total Expendit ures	\$832,959	\$82,975,5 92	52,282,93 4	85,103,34 4	\$91,741,0 78	\$148,978, 756	\$68,500,0 00	\$69,000,0 00

The collected fees are deposited in the Road Maintenance Fee (RMF) fund, which is a special revenue fund (Richland County, 2019). When collected, the mass transit fee was kept in its own dedicated fund. However, after its repeal, the remaining funds from the mass transit fee were moved to the RMF fund (Richland County, 2012).

Fee Calculation

As mentioned earlier, the RMF is a flat fee on annual vehicle registrations set at \$15 per vehicle when instituted in 2002. In 2007, the fee was raised to \$20. In that same year, an additional charge of \$16 for private vehicles and \$24 for commercial vehicles was instituted as a mass transit fee (Cummins, 2006). That fee was renewed in 2009 at a lower rate of \$10 and \$15 for private and commercial vehicles, respectively, then renewed one last time at a rate of \$5 and \$7.50 (Richland County, 2012). These fees were roughly based on meeting county needs for filling funding gaps in the transportation budget, which has been more permanently addressed since 2012 with the institution of a penny sales tax to fund the transportation system.

Eligible Uses & Unique Features

The RMF is assessed on all motorized vehicles licensed in Richland County; restricted to be used specifically for the maintenance and improvement of County roads. Goals for the fee as described in budget documents include reducing the time between service requests and when maintenance is completed, keeping up with routine maintenance of county roads, regular inspection, and maintenance of storm drainage systems, as well as improvements to roads and county drainage systems. The funds may also be used for the paving of dirt roads. Currently, the county has around 600 miles of paved and 220 miles of unpaved roads (personal communication on April 6, 2021, with Michael Maloney, Director of Public Works, Richland County, SC).

The mass transit fee was levied from 2007 to 2012 to provide revenue to support transit services in the county, which is operated through the Central Midlands Regional Transit Authority (Richland County, 2012). That fee ended in 2012 and was followed by the creation of the Penny Transportation tax, which supports street improvements and bike, pedestrian, and transit system updates and services.

Specific Programs Funded & Capital Expenditures

The road maintenance fee is restricted to the RMF fund, with uses limited to maintenance and improvements (personal communication on April 6, 2021, with Michael Maloney, Director of Public Works, Richland County, SC).

Review of Fee & Expiration

The county council may revise the RMF, but it has not been revisited since 2007 when it was increased and in 2012 when the Mass Transit Fee was revoked. The mass transit fee was enacted in 2007 for a two-year period, which expired in 2009. The county council renewed it for another two years after 2009, then again in 2012. The council eliminated the fee that year after the passage of the penny transportation tax.

Fee Administration

The RMF is collected as part of the vehicle licensing process, as was the mass transit fee assessed. The county is responsible for vehicle registrations in South Carolina, which makes it possible for it to collect such fees (personal communication on April 6, 2021, with Michael Maloney, Director of Public Works, Richland County).

In 2006, the council was presented with a proposal to exempt seniors and the disabled. It is unclear if this motion passed (Richland County, 2005). There is no process for appealing the RMF.

2.6 Case Study 5: Boulder, CO



Figure 6: Boulder, CO (ArcGIS Online)

Boulder is a city in Boulder County in northern Colorado (Figure 6), 27 square miles in size with a population of a little over 105,000 in 2019 (U.S. Census Bureau, 2019c and 2019d). It is the 11th most populous city in the state of Colorado and best known as the home of the main campus of the University of Colorado (CU). The city has explored adopting a transportation maintenance/mobility fee (TMF) to fund the capital improvement projects needed to support the city's transportation network that includes streets, pedestrian and bicycle infrastructure, and transit facilities. The city is also considering using such a fee to support transit service, programs, and system enhancements. Currently, the city primarily uses sales tax revenues to fund transportation—for example, a 0.6 percent sales tax, first instituted in 1967, and an additional 0.15 percent sales tax to be dedicated for transportation needs for the years 2020-29 (City of Boulder, 2021).

Revenues from the sales tax have decreased in recent years, while costs to maintain the transportation system have risen. The city had to defer many necessary maintenance projects due to this fiscal imbalance. A recent needs assessment identified \$23 million in annual unmet needs in maintenance, operations, and planning; along with \$21 million of one-time capital improvement needs (City of Boulder, 2020 page 231; personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, the City of Boulder Transportation and Mobility Department). While the city has not determined an exact rate to charge the TMF, a monthly residential fee of \$6.67 is estimated to yield \$5.6 million in revenue (City of Boulder, n.d.).

Similar existing fees in Colorado include the street maintenance fee collected in Loveland, first adopted in the year 2000 (City of Loveland, 2021). Fort Collins, CO adopted such a fee previously, which saw its fee ultimately challenged in the Colorado Supreme Court. In a 1989 decision, that court determined that "where the fee is reasonably designed to defray the cost of the service provided by the municipality, such fee is a valid form of governmental charge within the legislative authority of the municipality" (Bloom v. City of Fort Collins, 1989). Despite this legal backing, Fort Collins discontinued the fee to avoid further litigation. Likewise, other Colorado municipalities have been hesitant to adopt such fees due to the potential for litigation.

Fee Creation

The Boulder City Council first considered a road maintenance fee as early as 2012 because revenue from the sales tax had not kept up with inflation and was insufficient to meet growing needs for everything from roads to transit. In addition, the city has far-reaching goals to address climate issues by improving the mix of active and public transit. There is also a high demand from residents for pedestrian and bicycle infrastructure improvements, including additional protected bike lanes.

To address pedestrian and bike safety concerns, Boulder recently revised its Neighborhood Speed Management program. Revisions included reducing maximum vehicle speeds on select streets from 25 miles per hour to 20 miles per hour and creating a petition process for residents to request additional traffic calming measures and improvements. Unfortunately, this process led to more

requests for projects that the city does not have sufficient funds to implement. This financial gap motivated the city to consider a fee to help support a larger budget for the neighborhood speed management program.

Furthermore, Boulder residents have high expectations for transit service that are not being met. Service is provided primarily by the Regional Transportation District (RTD), but city staff note that service connections between local streets and this regional network are declining. In addition, the RTD has faced financial issues that have led to reductions in service.

In such a scenario, the city staff looked at Loveland, CO, and Corvallis, OR as exemplars. First, they learned that Loveland's street maintenance fee has been used to supplement the transportation budget and is based on right-of-way footage for properties. In addition, the fee was adopted with the promise that every city street will be improved at least every seven years to maintain it to a well-defined quality standard. These conditions were critical, the Loveland staff emphasized, to market the fee to residents. Finally, the staff learned that Corvallis, OR charges two such fees—a transportation utility fee for road maintenance and a transit operations fee (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

In 2018, Boulder established a Funding Working Group (FWG) to explore new funding options for the transportation network. The group included residents, local business leaders, the Boulder Chamber of Commerce, CU Boulder, federal labs, and other key community stakeholders. The group met formally six times from January to May 2019 and ultimately devised a tiered approach to meeting the city's funding needs. Among the funding options explored, a TMF was rated as Tier 1, meaning it earned the greatest consensus and could be implemented in the near term. The group also noted that such a fee would enable needed maintenance of infrastructure and core services and could be designated into two parts, "a base fee for maintenance/core services and a second part devoted to specific, designated enhancements", and free up sales tax revenues for other needs (City of Boulder, 2019, page 2).

The fee idea was brought before the relevant city boards and councils, and a plan was developed to proceed with a nexus study. The COVID-19 pandemic put these plans on hold, however. Budget restrictions due to the pandemic led the city to furlough many staff members, and money was no longer available to fund the study. City staff is hopeful that more funding will become available when the 2022 review of the city's Transportation Master Plan (TMP) is due. Once funds become available, the FWG will likely re-group to help develop the parameters of the study, which will then guide the city on the best way to assess and spend fee revenue. Ultimately, the city council will likely bring any proposed fee to voters, with fall 2024 as a target for the vote (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

Revenues, Expenditures & Dedicated Fund

In 2018, sales tax revenues made up around 80 percent of the city's \$32.8 million transportation budget for that year (City of Boulder, 2020, page 231). Included in those revenues is the CCS TAX—the Community, Culture, and Safety Tax. This sales tax was approved for four years (2017-2021) to fund various city needs, including specific transportation projects. An extension of the CCS tax is being contemplated. If extended, a portion of those tax revenues would most likely fund the city's Vision Zero transportation projects to eliminate major injuries and fatalities (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

The TMF is intended to raise additional revenue to meet current needs for street, pedestrian, bike, and transit maintenance and improvements and possibly help expand the city's HOP bus service. One estimate by city staff projects the TMF could raise an additional \$5.6 million annually to support existing transportation needs at a fee rate that would be reasonable to users (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department). Revenue from a TMF would support the Transportation and Mobility Fund (City of Boulder, n.d.).

Fee Calculation

While the fee has not been determined, one proposal provides the estimated rates for various land uses, such as residential, commercial, office, and research and development. As shown in Table 11, in 2012, the city estimated the fee rates for various funding levels, ranging from the basic where the TMF revenues are only used to meet the unfunded pavement maintenance needs estimated at \$2.5 million, to the most advanced where the TMF revenues meet all unfunded transportation needs including those for pavement maintenance, transportation demand management (TDM), and transit service, estimated at \$5.6 million. The rates go up approximately two-fold between the two scenarios, for example, from \$2.98 to \$5.67 per month for detached single-family houses (City of Boulder, 2012). Furthermore, the rate calculation methodology is designed to gather one-third of the total fee revenue from residential properties, with the rest raised from non-residential properties (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department). The rates are determined based on the vehicle trip generated by various land uses per the Institute of Transportation Engineers (ITE) Trip Generation Rate tables.

Table 11: Estimated Monthly Rates for Boulder TMF Scenarios (City of Boulder, 2012)

		Unfunded Pavement and Routine w/o Transit/TDM	Unfunded Pavement and Routine w/Transit	Unfunded Pavement and Routine w/ Transit/TDM	All current and unfunded Pavement
Category	Fee Calculation	\$2.5 million in Revenue	\$2 million in Revenue	\$3.2 million in Revenue	\$5.6 million in Revenue
Detached Housing Units	per unit	\$2.98	\$3.58	\$3.81	\$6.67
Attached Housing Units	per unit	\$2.03	\$2.44	\$2.60	\$4.56
Mobile Homes	per unit	\$1.94	\$2.33	\$2.49	\$4.35
Commercial/Shopping Center	per sq. ft.	\$0.01	\$0.01	\$0.01	\$0.02
General Office	per sq. ft.	\$0.00	\$0.01	\$0.01	\$0.01
Research and Development	per sq. ft.	\$0.00	\$0.00	\$0.00	\$0.01
Warehouse	per sq. ft.	\$0.00	\$0.00	\$0.00	\$0.00
University of Colorado	per student	\$0.52	\$0.63	\$0.67	\$1.17
Federal Labs	per sq. ft.	\$0.00	\$0.00	\$0.00	\$0.01
City of Boulder	per FTE	\$5.34	\$6.41	\$6.83	\$11.96
BVSD Elementary	per student	\$0.47	\$0.56	\$0.60	\$1.05
BVSD Middle	per student	\$0.59	\$0.70	\$0.75	\$1.31
BVSD High School	per student	\$0.58	\$0.69	\$0.74	\$1.30
Boulder County	per FTE	\$5.34	\$6.41	\$6.83	\$11.96

Eligible Uses & Unique Features

The exploration of a TMF was inspired by a massive backlog of capital projects, the list of which includes street maintenance projects and bicycle and pedestrian improvements, and transit station upgrades (City of Boulder, 2021). Documentation on the proposed TMF also mentions the potential for the TMF to be "designed to maintain transit service and programs, such as the RTD EcoPass program, along with system enhancements" (City of Boulder, n.d.).

There is a divide currently on how best to spend fee revenues. One approach is to commit new revenues to non-automotive uses, directly meeting growing bike, pedestrian, and transit needs. This approach, however, may attract greater legal scrutiny. A more feasible approach may be to

use the funds strictly for street improvements. This approach will open more revenue from existing sources to support active and public transit (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

Review of Fee & Expiration

Per interviews with city staff, the fee, if adopted, would likely be authorized to run for five years initially. The city would assess the fee in year four before deciding to renew it. A public referendum to approve the measure may include a fee range that would enable the city to raise the fee as needed without additional voter approval. A separate proposal to index the fee to inflation has also been considered. However, that approach would likely be considered too volatile to adopt (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

Fee Administration

If adopted, the TMF is proposed to be collected as part of the city's monthly water and stormwater utility bill (City of Boulder, n.d.; personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

In exploring a possible fee, the city is considering several exemptions. These include those for low-income households, non-profits, and schools. Moreover, a lack of affordable housing is a big concern in Boulder, and low-income affordable housing is already exempt from the city's development excise tax. In addition, CU Boulder, the city's largest employer, would be exempt from the fee as a state entity, as would several federal labs in the city. The eventual nexus study will help the city evaluate the impact of any exemptions (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, City of Boulder Transportation and Mobility Department).

As part of the water and storm utility bill, the new fee would likely use the same appeals process currently in place for those fees. In addition, appeals based on challenging parcel specifics and floor area measurements will probably also be possible (personal communication on May 20, 2021, with Chris Hagelin, Acting Transportation Planning Manager, the City of Boulder Transportation and Mobility Department).

2.7 Case Study 6: Corvallis, OR



Figure 7: Corvallis, OR (ArcGIS Online)

Corvallis is a city in Benton County in western Oregon, 28 miles south of the state capital, Salem (Figure 7). The city is 14.4 square miles in area and had a population of close to 59,000 in 2019 (U.S. Census Bureau, 2019g). The city is most widely known as the home of Oregon State University. In 2011, the city adopted a Transit Operations Fee (herein referred to as the TOF), a monthly charge on city utility customers' bills, to support fare-less service on Corvallis Transit System buses and trolleys. This fare-less service made Corvallis among the first transit agencies in the United States to adopt a fare-less model. The city has also collected a Transportation Maintenance Fee (TMF) since 2006 to support pavement maintenance for city streets.

Both the city's TOF and TMF are made possible by the "home rule" provisions granted by Oregon state law, with such fees not subject to limits on property taxes described in Article XI, Section 11b of the Oregon Constitution. As this study has discussed while reviewing the legal basis for Hillsboro's TUF, this provision means these fees can be passed without voter approval. TUFs, or TOFs in the case of Corvallis, could also be passed by a city council vote as a tax. In the case of Corvallis, OR and many other cities in Oregon with TUFs or similar fees, the use of the word "fee" rather than "tax" has more to do with the fact that fees carry less of a negative connotation than taxes, somewhat mitigating public resistance to their adoption (email communication on July 15, 2021, with Greg Gescher, Engineering & Transportation Division Manager, Corvallis, OR).

The Corvallis TOF is unique, even considering the dozens of other Oregon jurisdictions that have adopted TUFs. Our research found just one other city in Oregon (Hillsboro) that makes explicit use of TUF revenue to support non-auto modes. Corvallis's TOF is tied directly to supporting transit service, with the specific objective to provide a stable funding base for the local match to

state and federal grants. The fee also allowed the city to make its bus service fare-free. To date, there have been no legal challenges to the fee. The TOF and fare-less service have enjoyed broad support from a community that prioritizes environmental issues and supporting transit (personal communication on July 9, 2021, with Tim Bates, Transit Coordinator, Corvallis, OR).

Fee Creation

The city council adopted the TOF in February 2011, after several preceding votes on the issue in September and December 2010 (Raskauskas, 2011). The fee was initially included within a list of ideas developed by the Corvallis Sustainability Coalition to advance the city's climate action goals. Primary among those goals is to reduce greenhouse gas emissions by reducing private auto trips. Growing transit ridership was deemed an effective strategy to reduce auto trips. Specifically, a Sustainability Action Plan produced by the coalition in 2008 set a goal of implementing strategies to replace 50 percent of auto trips by 2012 (Corvallis Sustainability Coalition, 2008).

The TOF was proposed to offer a few other key benefits as well. Primarily, it would provide a more stable local funding source, replacing support for transit that had traditionally come from the city's general fund, allowing those funds to go toward other city needs. The city staff noted this benefit as critical to creating greater public support for the fee (personal communication on July 9, 2021, with Tim Bates, Transit Coordinator, Corvallis, OR). In addition, the change to fare-less service led to marked increases in ridership. For example, in the 2009-10 fiscal year, the service had 700,791 riders. By the 2012-13 fiscal year, that figure grew to 1,163,981, a 66 percent increase (personal communication on July 9, 2021, with Tim Bates, Transit Coordinator, Corvallis, OR). Finally, as noted by city staff, an additional benefit is the time savings of not collecting fares as passengers board the buses. The lack of need to collect fares speeds up service, making it more appealing to use.

Revenues, Expenditures & Dedicated Fund

All revenue from the TOF is deposited in the city's Transit Fund, which pays for transit and paratransit services. Revenues from the fee and total revenues and expenditures for the fund are provided in Table 12. Notably, while TOF revenues have remained consistent, Transit Fund revenues and expenditures have spiked rapidly in the last two years thanks to a \$5 million in Federal Coronavirus Aid, Relief, and Economic Security (CARES) grant and a \$2 million increase in funding from the Oregon Statewide Transit Improvement Fund in the last two years (City of Corvallis, 2021, page 181).

The increase in ridership that has resulted since implementing the TOF fee and the fare-less service it supports are responsible in part for making additional federal funding available to the City. The FTA allocates apportionments to Small Transit Intensive Cities (STIC) based on six measures of level of service: passenger miles per vehicle; revenue miles and hours; vehicle revenue miles and hours per capita; and passenger miles and trips per capita. Existing level of service prior to the TOF qualified Corvallis to meet three of the six benchmarks. Increased ridership due to

fare-less service led the city to meet two additional benchmarks, increasing the apportionment the city received (personal communication on July 9, 2021, with Tim Bates, Transit Coordinator, Corvallis, OR). Each additional benchmark is currently worth approximately \$275,000 in additional STIC funding. Furthermore, the one-time CARES grant money is allowing the city to purchase the electric buses (email communication on July 23, 2021, with Greg Gescher, Engineering & Transportation Division Manager, Corvallis, OR).

Table 12: Corvallis Transit Fund Revenues and Expenditures (City of Corvallis, 2021)

	2019 (Actual)	2020 (Actual)	2021 (Projected)
TOF Revenue	\$980,292	\$1,064,400	\$933,100
Total Transit Fund Revenues	\$3,075,303	\$4,646,844	\$9,911,900
Total Transit Fund Expenditures	\$3,190,320	\$4,356,545	\$9,219,100

Fee Calculation

The TOF is assessed on four different classes of customers: single-family residential, multi-family residential, group residential, and non-residential. The fee for single-family customers is indexed to the cost of a gallon of gas. This rate is revisited and set each year by the city engineer, with the fee set at the price for a gallon of gas or \$2.75, whichever is greater. Using this fee, the city then calculates a trip factor (City of Corvallis, 2010). The number of trips for each user category is drawn from trip estimates provided by ITE. For example, a single-family rate of \$2.75 per month, which generates 9.6 trips per day, leads to a trip factor of \$0.287. This trip factor is also used to set the fee for other residential categories. The trip factor for non-residential uses is \$0.043 (Table 13). When the single-family trip factor is raised or lowered each year, the non-residential trip factor is also adjusted by the same proportion.

Table 13: Corvallis 2021 TOF Rates (City of Corvallis, 2010)

Land Use Category	Trip factor	Trips/Day	Rate per Month
Single-Family	\$0.287	9.6	\$2.75
Multi-Family	\$0.287	6.6	\$1.90
Group Residential	\$0.287	Set Based on ITE Category	
Non-Residential	\$0.043	Set Based on ITE Category	

Eligible Uses & Unique Features

The TOF supports the city's transit fund, which pays for transit and paratransit services operated by the Corvallis Transit System (CTS). The TOF is unique among the fees reviewed for this study in its direct support for transit and transit alone. The TOF made up 22 percent of the budget for CTS in the fiscal year 2019-20 (CTS Funding, n.d.). Overall, the city currently operates 15 buses and one trolley as part of this system. The CTS is also in the process of electrifying its vehicle fleet through FTA grants, primarily (City of Corvallis, 2021, page 181).

Specific Programs Funded & Capital Expenditures

For TOF revenues and expenditures, see Table 12. As noted by city staff, these revenues are included in a larger pot that makes up the city's transit fund. The expenditures for the Transit Fund are split in the city's budget between personnel, materials and services, and capital outlay, with almost the entirety of expenditures allocated to materials and services. The city owns its buses but contracts with a third party to provide drivers (City of Corvallis, 2021, page 181).

Review of Fee & Expiration

The fee is adjusted annually based on the methodology described in the Fee Calculation section.

Fee Administration

The TOF is collected as part of the monthly utility bill for water and sewer service, which is city-owned and operated. Undeveloped properties that do not receive a water and sewer bill are not billed separately for the TOF. Otherwise, there are no fees exemptions (personal communication on July 9, 2021, with Greg Gescher, Transportation Division Manager, Corvallis, OR).

City utility customers may appeal the classification of their property with the City Engineer. That decision may be further appealed to the City Manager, who makes the final determination on the appropriate customer group or billing rate for the property (City of Corvallis, 2010).

3. Case Study Summary

This chapter summarizes, compares, and contrasts the six case study TUFs on major dimensions such as enabling legal environment, fee calculation methodology, and support for non-auto uses. Table 14 and Table 15 summarize the case studies.

3.1 Geographic and Demographic Diversity

The six case study jurisdictions represent diverse locales. Five states are represented across several major regions of the country: the Pacific Northwest (Oregon), the Mountain West (Colorado and Montana), the Upper Midwest (Wisconsin), and the Southeast (South Carolina). The cases range in size from small villages like Weston (population 15,110 in 2019) to mid-sized cities like Hillsboro (population 108,389), to larger statistical areas such as Boulder (population 326,196) and Richland County (population 415,759). The cases similarly have a wide range in size, from Corvallis's 14.4 square miles to the sprawling 757 square miles of Richland County.

3.2 Financial Challenges

Despite their diversity of size and population, the case studies shared many of the same issues with accessing adequate funding for their transportation networks. In most cases, falling revenue received from their respective state governments (often due to declines in gas tax revenues) was coupled with rising costs for the transportation system to create a growing burden on the local jurisdiction. These cost escalations are tied to rising wages for employees, increases in material costs, and costs of maintaining or replacing aging transportation infrastructure. For example, before adopting a TUF in 2009, the city of Hillsboro faced a backlog of over \$9 million worth of projects (City of Hillsboro, 2008).

To meet their growing financial challenges, each of the six case studies adopted new fees to pay for transportation costs. Helena's street maintenance district is a relic of a century-old policy to charge property owners for the cost of watering the streets to keep the dust down. Its current fee for street maintenance was more formally codified in 2004. Hillsboro has assessed a TUF since 2004. Weston implemented a short-lived TUF during the 2013-2014 period. Corvallis and Richland County have assessed separate fees to support street maintenance (through Transportation Management Fees, or TMFs) and transit (through Richland's Mass Transit Fee and Corvallis's Transit Operations Fee). Boulder has explored a TMF that would jointly support street maintenance and transit.

Though the fee names vary, they operate similarly by charging property owners for the cost of developing and maintaining a transportation network. In four cases, these fees are collected as an additional charge to the water and sewer utility bill. Helena's fee is collected as part of the property tax bill, while Richland County's is collected with annual vehicle registrations.

3.3 Fee Timelines

The six jurisdictions instituted (or revoked) these fees in the last 21 years. Those with active fees include Helena (2004), Corvallis (2006), Hillsboro (2009), and Richland County's road maintenance fee (2002). Defunct fees include Richland County's mass transit fee (2007-12) and the short-lived TUF in Weston (2013-14). The Richland mass transit fee ended when voters approved an alternative for funding mass transit—a penny sales tax. Weston residents pushed against the TUF, arguing for higher property taxes if necessary to fund transportation costs. Boulder has yet to institute its fee, which was most recently slated to be vetted through a series of public workshops in 2020. Unfortunately, this process was put on hold by budget restrictions brought on by the COVID-19 epidemic.

3.4 Enabling Legal Environment

Different types of fees owe to different legal environments. In Oregon, Corvallis and Hillsboro are among dozens of local jurisdictions that collect a TUF thanks to broad home rule authority granted by the Oregon Constitution. Weston in Wisconsin also enjoys broad authority granted by the state to provide and pay for utility services, including streets. Montana's state code provides a framework for local jurisdictions to establish street maintenance districts to support their transportation systems. The South Carolina Code empowers Richland County to levy uniform charges to fund county operations, such as transportation. Colorado cities and towns are free to enact TUFs, with some restrictions, after a 1989 Colorado Supreme Court decision that upheld a TUF created by the city of Fort Collins. In each case, the fees were adopted through an action of the city or county council.

The definition of these charges as fees rather than taxes is crucial. Typically, a tax requires a public referendum to be enacted. However, because these fees were within the scope of actions local governments were already authorized to take, they could be more seamlessly imposed. Helena, for example, had collected street maintenance fees under a different name for over a century before passing its current street maintenance district ordinance in 2004. In addition, Corvallis and Hillsboro benefit from residing in a state where TUFs are common, and voter approval is not required for fees and non-property taxes. Similarly, Richland is one of 17 South Carolina counties that collects a road maintenance fee on vehicle registration renewals.

3.5 Fee Calculation Methodology

There are key differences in fee methodologies and rates between the case study jurisdictions, but also commonalities. These methodologies are summarized in Table 14. For each of the six cases, a flat rate is assessed for residential properties (or, in the case of Richland County, private vehicles). In the case of Corvallis, this residential fee is indexed to the price of a gallon of gasoline. Residential and commercial properties (or in Richland County, private and commercial vehicles) are typically assessed using a per trip methodology that multiplies the property's square footage by a trip rate provided by the Institute of Transportation Engineers. Among the case study jurisdictions, fee

rates for single-family residences range from \$20-30 per year on the low end (Weston) to over \$100 per year (around \$110 in Hillsboro and \$200 in Helena, for example) on the high end.

For commercial rates, three jurisdictions (Corvallis, Hillsboro, and Helena for commercial properties over 6000 square feet) calculate the fee based on the square footage of the property and the type of land use. The square footage is multiplied by a rate based on the category of land use and the amount of traffic that land use generates. For Corvallis and Hillsboro, these rates are based on the trip generation manual produced by ITE. If enacted, Boulder's TMF is likely to follow a similar methodology. In Helena, commercial properties of less than 6000 square feet are charged a flat rate that is 80 percent higher than the residential rate. Richland County (when its mass transit fee was active) also charged flat fees to commercial customers, just at a higher amount than those imposed on residences (or, again with Richland County, private vehicles).

The differences in fee calculation methodology and fee rates translate into significant differences in the amount of revenue collected. Table 14 provides the most recently available revenue figures for each jurisdiction and a calculation of the amount collected per capita. Not surprisingly, Helena stands out for the amount collected per capita (\$155.77 annually), thanks to its higher annual fees. The long standing of the fee and its fairly broad application for street and pedestrian system maintenance and improvements, as well as snow plowing, justify this higher figure. At the other end, Weston and Richland have very low per capita figures (\$4.39 and \$6.90 annually, respectively). Weston's low amount is explained by the short time the fee was collected and the entire rate structure not being adopted. Richland County relies more on revenues from a penny sales tax, which brings in over \$50 million in annual revenue versus just \$6-7 million for the mass transit fee. Hillsboro performs better at \$43.50 per capita. Corvallis's TOF, which funds only transit services, brings in over \$15 per capita. As the three case studies with the most prototypical TUF structure, they provide a helpful range of roughly \$20-40 per capita for jurisdictions considering a TUF.

3.6 Eligible Uses and Projects Funded

Each of the six case studies uses (or proposes to use) fee revenues for basic street maintenance. These maintenance works include patching, sealing, overlays, striping, and other street surfacing needs. While not every ordinance makes specific mention of pedestrian and bicycle improvements, each city we spoke with discussed using these fees to support sidewalk maintenance and necessary upgrades for ADA compliance. These non-auto uses are discussed in more detail in the proceeding section.

There are differences in how the jurisdictions apply funds for improvements beyond basic maintenance or larger capital projects. Typically, the funds are insufficient to pay for large capital improvements, with their adoption justified by a need to meet an existing maintenance gap not met by state funds. This fund insufficiency was the case for Weston's TUF for the brief period it was collected (March 12, 2021 email communication from Michael Wodalski, Director of Public

Works, Village of Weston). A few jurisdictions can more broadly use fee revenues for capital improvements. Hillsboro's 2020-21 budget lists 14 separate capital improvement projects funded by its TUF fee, including ten focused strictly on street improvements and four others including upgrades for bike and pedestrian facilities (Adopted Budget Fiscal Year 2020-21). In Helena, the ordinance was amended in 2015 to allow the funds to be used for street improvements. An example within a recent budget is a total of \$2 million dedicated to reconstructing a major collector street (City of Helena, 2021, page 67). Richland County amended the use of its Road Maintenance Fee to make funds available to pay for paving dirt roads. Boulder's proposed TMF also explicitly aims to fill a backlog of capital projects. While Corvallis's TOF funds are not sufficient to pay for capital improvements, they have led to improvements in the level of service that have enabled the city to access additional federal and state funding. This outside funding pays for new vehicles and other capital needs.

3.7 Support for Non-auto Uses

While revenues from these fees are used to fund basic street maintenance in each case, the six selected case studies also contain unique language that expands the scope of eligible uses for which these funds can be used. For example, Weston includes the word "transit" within their definition of the street system supported through these fees. Hillsboro and Helena include bicycle, pedestrian, or non-motorized improvements. Richland County's mass transit fee was created explicitly to support transit service, as was Corvallis's TOF. Boulder's proposed TMF is also intended to support non-auto uses, with language stating that TMF revenues would, in part, support transit services and facilities, including transit station improvements and multi-modal path enhancements (City of Boulder, 2021).

Richland County's now-defunct mass transit fee was a stopgap measure to support transit service until a more permanent funding solution could be developed. The fee was adopted in 2007 to offset costs associated with mass transit in the county, which is operated through the Central Midlands Regional Transit Authority. This fee was an additional \$16 fee for private vehicles and \$24 for commercial vehicles on annual vehicle registration renewals. The fee, which collected \$2.87 million in 2011, was repealed in June of 2012. At that time, voters had approved a one percent sales tax to support road, bike, pedestrian, and greenway projects and support bus service and transportation services. This Transportation Penny Tax is intended to raise \$1.1 billion for county transportation needs or expire in 2035, whichever comes sooner. That \$1.1 billion includes approximately \$300 million for the operation of mass transit services and approximately \$81 million for pedestrian, bicycle, and greenway improvements, a dramatic increase from the revenue provided by the mass transit fee.

Helena's ordinance states that 10 percent of the street maintenance district fee revenue is to be used for non-motorized improvements. This amount is not kept in a separate fund from the other revenues and is not formally enforced. The city has found that it easily meets the 10 percent threshold when budgeting for larger street improvement projects. In such projects, this set-aside

for non-motorized improvements has been used for sidewalk repairs, safety improvements like pedestrian bulb-outs, ramp upgrades to meet ADA compliance, and bicycle lanes.

Hillsboro is extremely clear in how TUF funds are divided between auto and non-auto needs. TUF revenue is divided between two funds, with about 75 percent of revenues going to the city's Pavement Management Program (PMP), which performs crack sealing, slurry sealing, and overlay maintenance on city roads. The remaining 25 percent goes to the city's TUF Pathways Fund, dedicated to capital improvements to pedestrian and bicycle facilities. The ordinance does not define this allocation. Instead, the Pathways Fund essentially receives whatever income the TUF raises that is more than the needs of the PMP program. In past years, the revenue split between these two programs was closer to 50-50. As maintenance costs have risen, however, and revenue from gas taxes has declined, the city has had to use more TUF revenues for basic street maintenance.

The issue that Hillsboro faces—growing costs for street maintenance and declining revenue from traditional sources—is common to all six case studies (and local governments in general). TUFs and other fees are needed just to cover funding shortfalls for basic maintenance, making it difficult to allocate more of these funds to non-auto uses. This explains why other case studies that mention transit or non-auto uses within the fee ordinance—such as Weston—could not use any of the collected revenue for this purpose.

Of the six case studies, Corvallis is the most explicit in the use of utility fees to support transit. The city has operated a TMF since 2006 to support basic road maintenance. After seeing the success of the fee in addressing funding shortfalls for street maintenance, the city explored adopting a similar fee focused on transit. It began collecting the current TOF in 2011 with the specific purpose of supporting the city's transit fund. The revenue from the TOF enabled the city to make its transit service fare-free, which led to immediate increases in ridership and level of service. As discussed, this improvement in ridership and service has created a virtuous cycle wherein the city now qualifies for additional federal funding for transit, which allows the city to improve the service even further. Thus, the case of Corvallis provides a fruitful alternative to the transit death cycle that cities more often encounter, wherein falling ridership leads to lower levels of service, which leads to additional decreases in ridership.

Table 14: Summary of TUF Case Studies (Part A)

Jurisdiction	Population (2019)	Area (Square Miles)	Fee	Timeline	Annual Revenue	Annual Revenue per capita	Fee Methodology	Fee Rate (monthly unless noted otherwise)	Dedicated Fund
Hillsboro, OR	10,8389	25.7	Transportation Utility Fee	2009-Present	\$4,714,507 (FY 18-19)	\$43.50	Flat fee for residential. Trip generation for commercial.	Single-Family: \$9.11. Multi-family: \$8.20 per unit. Commercial: \$8.20 base charge + Rate of 0.06 to 37.50 per 1000 square feet based on land use.	Approximately 75% to Pavement Maintenance Program Fund and 25% to TUF Pathways fund.
Weston, WI	15,110	25.6	Transportation Utility Fee	2013-14	\$66,403 (2014)	\$4.39	Flat fee based on street frontage.	0-200 feet: \$2.30 quarterly. 200-400 feet: \$3.85 quarterly. >400 feet: \$7.30 quarterly.	Transportation Utility Fund

Jurisdiction	Population (2019)	Area (Square Miles)	Fee	Timeline	Annual Revenue	Annual Revenue per capita	Fee Methodology	Fee Rate (monthly unless noted otherwise)	Dedicated Fund
Helena, MT	32,024	16.9	Street Maintenance Districts	2004-Present	\$4,975,628 (2019)	\$155.37	Flat rate or rate per square foot for commercial properties >6000 square feet.	Residential: \$206.16 per lot/parcel annually. Commercial <6000 square feet: \$360 per lot/parcel annually. Commercial >6000 square feet: \$0.06 per square foot (up to 1 million square feet).	Street and Traffic Fund
Richland County, SC	415,759	757	Road Maintenance Fee + Mass Transit Fee	Road Maintenance: 2002- Present. Mass Transit: 2007-2012.	Road Maintenance: \$6,150,017 (2018). Mass Transit: \$2,870,070 (2011).	\$6.90	Flat fee on vehicle registration	Road Maintenance: \$20 per vehicle annually. Mass Transit: \$16 per private vehicle or \$24 per commercial vehicle annually.	Road Maintenance Fee Fund

Jurisdiction	Population (2019)	Area (Square Miles)	Fee	Timeline	Annual Revenue	Annual Revenue per capita	Fee Methodology	Fee Rate (monthly unless noted otherwise)	Dedicated Fund
Boulder, CO	326,196	27	Transportation Maintenance Fee	Proposed	Projected \$5.6 million	\$17.17	Flat fee for residential. Trip generation or square footage for commercial.	Residential (proposed): \$6.67	Transportation and Mobility Fund
Corvallis, OR	58,856	14.4	Transit Operations Fee	2011-Present	\$933,100 (Projected 2021)	\$15.85	Indexed to cost of gallon of gas. Flat residential rate divided by trips generated to determine per trip rate for all categories.	\$0.287 per trip for single-family, multi-family, and group residential. \$0.043 per trip for non-residential categories.	Transit Fund

Table 15: Summary of TUF Case Studies (Part B)

Jurisdiction	Non-Auto Uses Funded	Specific Projects	Expiration	Billing Method	Ordinance Number	Enabling State Legislation
Hillsboro, OR	Pathways Fund supports new capital improvements to bike and ped infrastructure	New bike lanes; Pedestrian crossing signals	No	Monthly Utility Bill	Muni Code Subchapter 3.32	Home rule authority, with taxation limits set by Article XI, Section 11b of the Oregon Constitution
Weston, WI	Allows funds to be used to support operation of public transit	Funds insufficient to support transit in brief fee lifetime	Repealed in 2014	Quarterly Utility Bill	Ord. of 10-23-2012; Ord. of 1-16-2013	Broad powers to provide and pay for utility services per state statute 61.34
Helena, MT	10% of the cost of each improvement project is to be set aside for non-motorized improvements	Street reconstruction, new vehicles, and snow plowing	No	Annual property tax bill	Ord. 2993, 6-21-2004; and Ord. 3213, 11-2-2015	Section 7-12-4422 of the Montana Code notes parcels with access to the street system may be assessed a fee to provide for the maintenance of that system.
Richland County, SC	Mass Transit fee created to specifically fund mass transit	RMF: Pavement maintenance, newly paved roads. TMF: County bus system.	No	Collected with annual vehicle registration renewal	Richland County Ordinance Number 043-01HR for the road maintenance fee and Ordinance No. 091-06HR for the mass transit fee.	Section 4-9-30 of the South Carolina Code enables counties to levy uniform charges to provide for county operations.

Jurisdiction	Non-Auto Uses Funded	Specific Projects	Expiration	Billing Method	Ordinance Number	Enabling State Legislation
Boulder, CO	TMF would be used, in addition to street maintenance, to maintain transit service and programs, such as Eco Pass, along with system enhancements	Proposed: EcoPass; Transit Service; Service and facility enhancements	Not applicable as fee not yet instituted	Monthly Utility Bill	Not applicable as fee not yet instituted	Valid form of governmental charge within the legislative authority of the municipality per 1989 Colorado Supreme Court decision.
Corvallis, OR	Fareless city bus service	Corvallis Transit System	No	Monthly Utility Bill	Ord. 2010-31 § 1, 12/20/2010	Home rule authority, with taxation limits set by Article XI, Section 11b of the Oregon Constitution.

4. Analysis of TUF-related court cases

4.1 Background

Determining the legality of TUFs has fallen to state courts in several high-profile cases. Six such cases are summarized below. The first such decision involved Pocatello, ID, which in 1986 passed a street restoration and maintenance fee after the city spent the previous decade attempting to raise needed revenue for streets through levies and other funding alternatives. The Idaho Supreme Court heard a challenge to the fee in the 1988 case of Brewster v. City of Pocatello (Brewster v. City of Pocatello, 1989).

Fort Collins, CO, passed its own TUF ordinance in 1984, also intended to pay for maintenance and upkeep of local streets. The Colorado Supreme Court determined the legitimacy of the fee in 1989 with Bloom v. City of Fort Collins (Bloom v. City of Fort Collins, 1989).

In 1992, Port Orange, FL, passed a TUF to pay for the maintenance and improvement of local roads. The city also passed an ordinance authorizing transportation utility bonds to be paid back by the TUF. The Florida Supreme Court would review this fee in 1994 in State v. City of Port Orange (State v. City of Port Orange, 1994).

Seattle, WA, passed a street utility charge, a flat charge of \$2 per single-family home, and \$1.35 per multi-family unit. Revenues collected were to be used for transportation purposes, including both street maintenance and public transit systems. The Washington Supreme Court rendered the decision in the 1995 case of Covell v. City of Seattle, Washington (Covell v. City of Seattle, Washington, 1995).

Mission, KS, adopted a TUF more recently in 2010, also for the maintenance of streets. The fee used an estimate of vehicle trips generated to develop a charge on three classes of properties: single-family, multi-family, and non-residential. The Kansas Supreme Court decided on the fee in 2017 in Heartland Apartment Association Inc. v. City of Mission (Heartland Apartment Association Inc. v. City of Mission, 2017).

In 2018, Pleasant Grove, UT, adopted a road utility fee, a flat rate charged monthly on four classes of property: single-family, multi-family, and two separate tiers of commercial properties. While many other Utah jurisdictions charge similar fees, Pleasant Grove would become the litmus test for these fees in the state with a 2020 decision by a Utah district court in Utah Sage, Inc. v. City of Pleasant Grove (Utah Sage, Inc. v. Pleasant Grove City, 2020). Pleasant Grove has appealed the district court's decision.

4.2 Enabling Legal Environment

The six utility fees were uniquely tested within the legal environments of their states. Two of the fees were able to point to specific enabling laws of their states—Utah and Washington.

In Utah, Pleasant Grove was among more than a dozen Utah cities that utilized a state law enabling local governments to develop TUFs. Initially, that Utah law gave local jurisdictions discretion to develop TUFs as a fee or a tax. However, that enabling legislation was amended with a 2020 update prohibiting levying TUFs as a tax (Utah State Legislature, 2020). This recent change marks a departure from the state's broad allowances for cities to collect necessary revenues for services.

In Washington State, Seattle's street utility charge was created based on a state-level street utility charge law, which allowed for the creation of such fees with specific limits on the rate and how revenues could be used.

In the other four states, where specific enabling legislation was not present, local jurisdictions defaulted to the home rule authorities granted by state constitutions or other general statutes to support their authority to develop and collect TUFs. States often grant broad power to local governments to impose fees for critical services. These may include water or sewer service and, in the case of TUF jurisdictions, the maintenance of the street system. Pocatello, ID, referred to existing state law that allows taxing districts to impose fees for services that would otherwise be funded through ad valorem tax revenues. Fort Collins and Port Orange argued for the home rule authorities granted by their states. Mission referred to the Fort Collins decision in justifying its TUF as a special fee allowed under state law. The courts have significantly tested these interpretations of state law.

4.3 Issues to Decide

The courts have primarily adjudicated on three issues. First, whether the plaintiffs have standing. Second, whether the jurisdictions have the authority to levy TUFs. Lastly, the most significant test TUFs face is whether they may be classified as fees or taxes. If they are indeed fees, they typically do not require a referendum or other public process (for example, a vote) to become law. Local jurisdictions prefer to classify TUFs as fees to allow them to be created by a simple city council resolution and to avoid the stigma of levying a new tax, avoiding a lengthy and often challenging process of developing sufficient voter support for these charges. However, classifying TUFs as fees also means stricter standards for determining, collecting, and utilizing the charges.

A fee requires a clear connection, or nexus, between the fee and the service it supports. Without this nexus, the fee could be considered a general revenue source, making it a tax by definition. A connection must also be drawn between those paying the fee and those using the service.

It is easy to establish this connection for a service like water by measuring the amount used by each building and charging accordingly or for road services by imposing a toll charge only on those

drivers using a specific road. However, describing all city streets as a service gets a bit more complicated. For example, what is the fairest way of measuring the amount of wear and tear each property contributes to the street system? This challenge, along with the relative novelty of TUFs, leads to a higher degree of legal scrutiny for these fees.

4.4 Court Interpretations

State courts, even those within the same state, have had notable differences in interpreting the legality of TUFs. For example, lower courts first found these charges to be valid in three cases where state supreme courts ultimately invalidated local TUFs—Port Orange, Mission, and Seattle. Inversely, a lower court decision on Fort Collins' TUF found it an invalid property tax, a decision the state Supreme Court reversed in upholding the TUF.

The first determination by a state Supreme Court on the legality of TUFs was rendered in 1988 by the Idaho Supreme Court in the case of Brewster v. City of Pocatello. In 1986, the Pocatello city council adopted a street restoration and maintenance fee. While no specific provision existed in Idaho state law for such fees, the law did allow taxing districts to levy fees for the services they would otherwise fund through ad valorem taxes. The court first determined the plaintiffs' standing, meaning the extent to which the plaintiffs could argue for a special interest in or injury peculiar from the matter. In a lower court decision, the city sought to challenge this standing. Both the lower court and state Supreme Court ultimately recognized the plaintiffs' standing in part because, without this recognition, no judicial review of the fee could take place. The state supreme court also upheld the lower court decision invalidating the fee.

Additional bad news for TUFs followed. A 1994 decision by the Florida Supreme Court reversed a lower court ruling and struck down a TUF adopted by Port Orange. The Washington Supreme Court also reversed a lower court decision in striking down a residential street utility charge in Seattle in 1995. In 2017, an appeal of a lower court decision by the Kansas Supreme Court determined a TUF ordinance passed by the city of Mission was an excise tax, not a fee. Most recently, a 2020 decision by a Utah state district court upended a TUF in Pleasant Grove, determining it to be a tax.

The Colorado Supreme Court made a different determination in a 1989 case involving the city of Fort Collins. It found a TUF enacted by that city was not a tax as defined by Colorado's constitution, differing from a lower court's interpretation, which had nullified the fee. Of the six cases reviewed here, it is the only decision where the final decision asserted the legality of the TUF as a fee and allowed for its continuance.

4.5 Rationale for Judgement

The Tax Test

The greatest legal challenge for TUFs is the question of whether they constitute a fee or a tax. In several cases, state courts found the TUFs in question acted more as a general revenue-generating mechanism (in which case it is a tax) than as a fee for a specific service (in which case it is a service fee) or for meeting the cost of regulating a business, industry, or activity (in which case it is a regulatory fee). In Pocatello specifically, the court determined the fee was enacted to raise revenue, which is not the regulatory purpose required for fees under state law.

Courts have also looked at whether the benefits accrue to only TUF payers (specific benefit) or to all (general benefit) and whether the payers can avoid the fee by not utilizing the fee-funded service. Using the former criterion, the Idaho Supreme Court noted that the fee provided a general benefit—street maintenance—that anyone could enjoy, regardless of whether they paid the fee or not. Using the latter criterion, Florida Supreme Court examined the general benefits of TUFs using the standards of "optionality" and "excludability." To be a fee, there needs to be an option not to use the government service and avoid the fee. In addition, the use of the service needs to be restricted to only those who pay for it. Consider the example of tolls on a highway again. The Florida Supreme Court likened Port Orange's TUF to imposing tolls on every city road that only property owners were responsible for paying. Two previous decisions informed this determination by the court—Klemm v. Davenport (1930) and City of Boca Raton v. State (1992)—that stated that an enforced burden to pay for a sovereign function (i.e., a government service) is by definition a tax.

In Seattle, the court found the charge enacted by the city qualified as a property tax and should be governed as such. The charge did not hold up against several crucial standards. Those included that the charges were not sufficiently linked to improving public welfare; the charges were not clearly allocated for the stated purpose, and there was no clear link between the amount charged and the benefit received. As in other cases, the Washington court found the charge needed to be avoidable and voluntary to be classified as a fee. The court also paid special attention to the wording and intention of the law, finding that it lacked language demonstrating the law's benefits to public welfare, health, and safety. Following this lead, many TUFs since enacted in other states contain language to that effect. The ruling striking down the charge applied both to Seattle's interpretation of the state law and the law itself.

The decision in Pleasant Grove came down strictly to the fee versus tax question. Utah state law at the time authorized local jurisdictions to impose TUFs as either fees or taxes. Pleasant Grove had enacted its TUF as a fee; however, it qualified as a tax per the court's findings. The key reason for this decision is that the benefits of the fee were generalized and could not be confined to only those who pay the charge. The city has appealed the court's decision.

The Supreme Court of Kansas made a similar decision to these preceding cases. The city of Mission's TUF was found to be for a general revenue need, not a specific project, and the benefits were unable to be restricted to only those paying the fee. "Under Kansas law," the court wrote, "a tax is a forced contribution ... Because this fee is a forced payment by all improved landowners which is used for the governmental service of providing for public streets and bridges, used by all, we hold Mission's transportation user fee is a tax (Blom, 2015)."

In defining TUFs in these cases as a tax rather than a fee, the courts imposed a higher bar for these charges' adoption. In the cases of Pocatello, Port Orange, and Pleasant Grove, the courts noted that local jurisdictions were welcome to adopt such charges if they went through the prescribed approval process for taxes. That burden, however, makes the adoption of TUFs less likely. As evidenced by the aftermath of these decisions, the challenge of enacting TUFs as a tax, or proving their validity as a fee, has discouraged their wider adoption.

The Role of State Law

The courts also considered the context of state law in determining the legality of TUFs and the fee versus tax question. In Port Orange, the city likened its TUF to existing stormwater fees. A state circuit court initially accepted that argument, finding the TUF a valid user fee under the city's home rule powers, albeit limiting the use of TUF revenue to capital expenditures. However, the state supreme court later rejected the city's argument because, unlike TUFs, state law expressly allowed stormwater fees. That two courts had different interpretations of the same law in the same state illustrates the difficulty of assessing the legality of TUFs.

The Colorado Supreme Court would make a different determination based on the standards of state law. In that case, the court did not consider the charge a property tax because it was not based on a property's assessed value but its street frontage and traffic generation. Nor was the fee an excise tax or a special assessment. To be the former, the charge would have to be conditioned on the "performance of an act, event, or occurrence." Special assessments are conditioned on the benefit to the property being at least equal to the charge paid. Because the fee did not meet any of these standards, the court judged it to be a special fee of the type allowed by state law. Unlike the interpretation in Port Orange, the Colorado Supreme Court did not deem it necessary that payment or participation in the provided service be voluntary.

Mission, KS, unsuccessfully tried to argue the merits of its TUF using the Fort Collins decision in part as justification. The city argued the TUF was a special fee, not a restricted excise tax as prohibited by state law. In making this determination, the Kansas Supreme Court explicitly mentioned preceding TUF decisions in other states. Ironically, it used the Pocatello, Port Orange, and Seattle court cases to support its decision while noting the decision in Fort Collins did not apply due to the differences between Kansas and Colorado state law. The perspective of the Kansas court may be best explained by the conclusion of the decision, which asserted that, in such cases

involving taxpayer rights, the court's prerogative was, all things being equal, to side with the taxpayer.

4.6 Status of Fees

None of the six fees at the center of these court cases is still in use. Even in the case of a favorable decision in Fort Collins, the city decided to end its TUF to avoid further legal challenges in the future. And these decisions have had repercussions for other cities utilizing or considering TUFs. The Boulder, CO, a case study city for this research, has been extremely cautious in its plans to adopt a similar fee owing to the potential for litigation. Since decisions against TUFs in state supreme courts in Idaho, Florida, and Kansas, jurisdictions in these states have been unable to adopt such fees, even as a tax.

The same goes for Washington, even as neighboring Oregon has seen dozens of local jurisdictions adopt TUFs. The Pleasant Grove decision has raised questions for the dozen other Utah jurisdictions that have enacted TUFs as fees rather than taxes. With the difficulties seen in other states, what is a reasonable prediction for the success of TUFs in California? What state statutes inhibit the adoption of a TUF as a fee in California, and what are the pros and cons of adopting a TUF as a general tax, a special tax, a special assessment, or a fee? We will explore these questions in the next chapter.

The analysis of the TUF-related court cases is summarized in Tables 16 and 17.

Table 16: Analysis of TUF Court Cases (Part A)

Case	Level of court	Date of Judgement	Fee background	Existence of a specific state authorizing legislation
Larson v. Pleasant Grove City, UT	District Court	February 12, 2020	TUF imposed in 2018 through a city ordinance that also created a transportation utility service.	Utah Code section 11-26-301: "an ongoing, regular fee imposed by a municipality for the purpose of maintaining public roads on utility customers within the municipality."
Brewster v. City of Pocatello, ID	Idaho Supreme Court	December 29, 1988	Following over a decade of efforts to raise revenue for city streets (last bond was passed in 1974) through levies and other options, city council passed an ordinance in 1986 to impose street restoration and maintenance fee.	No. City referenced general authority provided to collect fees for services.
Bloom v. City of Fort Collins, CO	Colorado Supreme Court	December 18, 1989	Fort Collins is a home rule city that instituted the TUF through city ordinance. The fee is charged to maintain local streets and related facilities to safeguard health, safety, and welfare of the city and its residents. The fee is based on linear feet of a parcel's street frontage, base rate maintenance cost of each foot of frontage, and parcel use (single family, multi-family, and non-residential) to determine traffic generation factor. Excess fee revenue can be transferred to any other city fund.	No

Case	Level of court	Date of Judgement	Fee background	Existence of a specific state authorizing legislation
Covell v. City of Seattle, WA	Washington Supreme Court	November 2, 1995	State law requires the street utility charge to be imposed on businesses based on the number of employees, and on residential property based on the number of housing units. Charges cannot exceed \$2/housing unit. Charges can be used for transportation purposes only, including construction, operations and maintenance of streets and improvements, and development and implementation of public transit systems. Seattle passed the authorizing legislation for residential street utility charge in 1992. The charge was set at \$2/single-family home and \$1.35/multi-family home.	Yes. RCW 82.80.040 (allows creation of street utility) and RCW 82.80.050 (allows levy of street utility charges).
State v. City of Port Orange, FL	Florida Supreme Court	November 3, 1994	The city enacted authorizing ordinance in 1992 to create a transportation utility for the city to adopt a TUF to operate, maintain, and improve local roads (not collector and arterial roads). The fee is imposed on owners/occupants of developed properties. The circuit court limited its use to capital expenditures only. In a subsequent ordinance the same year, the city also authorized transportation utility bonds to be paid by TUF.	No
Heartland Apartment Association v. City of Mission, KS	Kansas Supreme Court	April 7, 2017	Through a city ordinance, Mission, KS, imposed a TUF and created a transportation utility in 2010. TUF was based on the estimated number of vehicle trips generated by single-family residences, multi-family residences, and non-residential uses at the base rate of 2.076 cents/trip for residential and 1.490 cents/trip for non-residential uses. Revenues are used for operations and maintenance of city streets. Properties exempt from paying property and ad valorem taxes under state statutes are also exempt from paying TUF.	No

Table 17: Analysis of TUF Court Cases (Part B)

Case	Lower court's decision	Issues to decide	Court's judgement	Status of the fee
Larson v. Pleasant Grove City, UT	Not applicable	1. Is Pleasant Grove authorized to charge TUF? 2. Is TUF a fee or a tax?	1. Pleasant Grove is authorized to charge TUF. 2. TUF is a tax, therefore, the city needs to follow procedures to impose a tax.	Since Utah does not allow cities to impose tax for road funding, new collection is suspended. Almost a dozen Utah cities have such fees, so many cities are impacted. Pleasant Grove filed an appeal in September 2020.
Brewster v. City of Pocatello, ID	City's street maintenance fee (SMF) enabling ordinance invalidated and its enforcement prohibited.	1. Whether the plaintiffs have standing? 2. Whether the SMF is a fee authorized under I.C. 63-2201A, or a tax. IC 63-2201A notes "Notwithstanding any other provision of law, the governing board of any taxing district may impose and cause to be collected fees for those services provided by that district which would otherwise be funded by ad valorem tax revenues."	 Plaintiffs have standing. SMF is a tax. 	Rehearing denied March 2, 1989. Fee no longer imposed.
Bloom v. City of Fort Collins, CO	The district court held that the TUF is an invalid property tax that violates the uniformity requirement of Article X, Section 3 of the Colorado's constitution.	Whether TUF is a property tax or a special fee? The court decided to compare TUF with a) an ad valorem tax (tax based on the value of the property subject to tax), b) an excise tax (all taxes that are not ad valorem taxes and are levied on the performance of an act, engaging in an occupation or the enjoyment of a privilege), c) a special assessment (must confer a special benefit to the property assessed), and d) a special fee (not used to pay for general expenses of government, but to pay for the cost of particular government service, such as a sewage service fee).	TUF is a special fee, but the section of the ordinance that allows excess funds to be transferred to any city funds makes it a tax, hence that section of the ordinance should be removed.	Discontinued in 1989.

Case	Lower court's decision	Issues to decide	Court's judgement	Status of the fee
Covell v. City of Seattle, WA	Trail court upheld the charge.	State supreme court decided on: a) whether the charges are a regulatory fee (which cities can impose under general police powers); b) whether the charges are special assessments; c) whether the charges are an excise tax.	The street utility charge is a property tax, not a special assessment or an excise tax. Therefore, they should be imposed according to the laws governing property taxes.	Discontinued.
State v. City of Port Orange, FL	The circuit court ruled that TUF is a valid user fee and under the home rule power, the city is authorized to impose and collect the fee.	Whether the pledge of TUF to pay the bonds is a pledge of tax revenue or of user fees.	Florida Supreme Court decided that the TUF- backed bond is invalid because TUF is a tax that the city is not authorized to levy.	Discontinued.
Heartland Apartment Association v. City of Mission, KS	The district court upheld the fee, but the appeals court struck it down.	Is TUF a tax and if so, is it an impermissible excise tax under the KSA 2016 Supp. 12-194 (the relevant article of the state constitution)?	TUF is not a fee but a tax. Specifically, it is an excise tax that does not meet the exception in the KS constitution for cities to levy excise taxes. Hence Mission is prohibited from levying TUF.	Discontinued.

5. Feasibility of Using TUFs in California and Concluding Remarks

Across the US, fees are politically more acceptable than taxes. Governments can more easily employ a new revenue source if they can prove it is a fee, not a tax. However, there are constitutional and statutory hurdles for levying taxes in many states. These include extensive public hearing requirements and a simple or super-majority (for example, two-thirds majority) voter approval. On the other hand, jurisdictions can usually institute fees through their legislative body's (for example, a city council) majority approval.

The state of California has very restrictive statutory and constitutional requirements for a revenue source to qualify as a fee, imposing a new tax, and raising tax rates. These requirements arise from several voter-approved propositions, especially Propositions 13, 218, and 26. Below, we review these propositions with a particular focus on how they impact what qualifies as a fee in California, what conditions jurisdictions need to meet, and what steps they need to follow to employ a new revenue source. These propositions also determine the characteristics of and differences between the revenue tools available to local governments in California—a fee, a property-related fee, a special assessment, a general tax, and a special tax.

In this chapter, we discuss the potential to levy a TUF as one of the above-noted revenue tools and highlight the legal, political, and administrative pros and cons of each tool—for example, a TUF as a property-related fee and a TUF as a special tax. We do so through a review of Propositions 13, 218, and 26; insights gained from the case studies and the court case analysis; and interviews with the state's legal and policy experts. Next, we explore the kinds of exemptions jurisdictions could provide to TUF payors to help reduce GHG emissions (for example, credits to payers living in transit-oriented, green buildings). Finally, we conclude this chapter and the report by summarizing the key research findings, situating them in the larger ecosystem of local government finance in California and the US, and identifying future research opportunities.

5.1 Legal Enabling Environment and Major Propositions that Impact Taxes and Fees in California

Proposition 13

Before the passage of Proposition 13 in 1978, no rate limit was set on the property tax levied by local governments, and local governments could set property tax rates without seeking voter approval. Instead, the tax was levied ad valorem (in proportion to the value) on the assessed value of the properties. Moreover, properties were assessed periodically to adjust for changes in the market value. Proposition 13 led to significant changes to the state's property tax regime. First, it combined scores of locally imposed property taxes to a single state-wide rate of one percent of the property's assessed value. Second, the property's sale price became its assessed value, which could

not increase by more than two percent annually. Third, the state government was made in charge of allocating property tax revenues to local governments (earlier, these taxes would flow directly to the tax levying jurisdiction). Fourth, a new class of "special taxes" was introduced, and local governments were authorized to levy these taxes if two-thirds of the voters approved.

Proposition 13 and state statutes did not define special taxes. It was left to a subsequent court case. City and County of San Francisco v. Farrell (1982) interpreted a special tax to mean a tax imposed for a specific purpose rather than general government purposes. Taxes to fund general government purposes were defined as "general taxes" (League of California Cities, 2019).

In the litigation that followed Proposition 13, courts ruled that "special assessments" (payments made by properties in-lieu of special benefits received, such as transit provision or street lighting) were neither property taxes (therefore not subject to one percent tax limitation) nor special taxes (hence not subject to two-thirds voter approval) (League of California Cities, 2019).

The court rulings vis-à-vis special taxes and assessments, and the significant decline of property tax revenues, led local governments to pursue alternate revenue sources in the post-Proposition 13 period. These included assessments, parcel taxes (taxes charged as a fixed amount paid by each parcel, or charged based on factors other than parcel value, such as parcel size and use), "Mello Roos taxes" (parcel taxes to fund infrastructure and services in new developments that require two-thirds voter approval for inhabited areas and two-thirds landowner approval for uninhabited areas), "regulatory fees" (fees imposed employing the "police power" to recoup the cost of regulating a business or activity, or to recoup the cost of mitigating the impacts of a business or activity), and "service fees" (fees levied on payors to recover the cost of providing the service, for example, a water charge; the fee should be reasonably related to the cost of the service). The court's deference to the charges-levying jurisdictions enabled widespread use of these assessments, fees, and special taxes. The courts were satisfied if a jurisdiction's official records showed a reasonable relationship between the charges and the cost of charges-funded infrastructure/services (League of California Cities, 2019). However, Propositions 218 and 26 would limit courts' deferential review and other freedoms to levy assessments, fees, and special taxes.

Proposition 218

Proposition 218 passed in 1996 as a reaction to a) courts' interpretation of assessments as not taxes, b) courts' deference to charges-levying jurisdictions while judging the legality of assessments, and c) the increased use of assessments and fees by jurisdictions to bypass the Proposition 13-related limitations on property taxes. Specifically, Proposition 218 adds articles XIIIC and XIID to the California constitution.

Article XIIIC codifies the definitions of general and special taxes and requires 50 percent voter approval for all general taxes and two-thirds for all special taxes, even if the tax revenues go to a jurisdiction's general fund (LAO, 1996). This article also provides voters the power to reduce or repeal any tax, fee, assessment, or charge through a ballot initiative (CSDA, 2013).

Article XIIID creates a new category of fees called property-related fees. It also defines assessments as "any levy or charge upon real property by an agency for a special benefit conferred upon the real property" that should be proportional to this special benefit (California Legislative Information, 1996a). Furthermore, it standardizes the requirements for levying property-based special assessments and creates some new ones. Below, we will first review the impact of Proposition 218 on what counts as special assessments and the process to levy them. Then, we will review property-related fees.

Special assessments

Both charter and general law cities, and counties and special districts need to follow special assessments-related requirements laid out in Article XIIID. These include sending mail notification and ballot to the record owner of each assessment-paying parcel at least 45 days before the public hearing on the assessment. The notice provides information about the total assessment levied, assessments to be paid by the specific parcel; the assessment calculation methodology; and the public hearing's date, time, and location. The ballots are weighted by the assessment to be paid by each property. For example, if property owner "A" would pay \$1,000 annually, and property "B" \$500, then A's vote is weighted two times B's. Jurisdictions can only levy an assessment if a simple majority of such weighted ballots agree to pay the assessment. Before Proposition 218, such voting requirements did not exist (League of California Cities, 2019).

Article XIIID imposes other procedural requirements as well. An assessment-levying jurisdiction needs to identify all the parcels that would receive a special benefit from the assessment-funded infrastructure or service. Jurisdictions should include all such parcels in the assessment district. Furthermore, they need to separate special benefits from general benefits. For example, the methodology to calculate park assessments should discount the general public's use of the parks. The assessments should only fund the benefits that assessment-paying parcels derive from the park.

Benefits that accrue to all properties—those inside and outside the assessment district—count as general benefits. Benefits that accrue to all parcels in the assessment district have been classified as derivative, indirect benefits, especially if the district is very broadly defined. For example, in Silicon Valley Taxpayers Ass'n, Inc. v. Santa Clara County Open Space Authority (2008), the court ruled that expanded access to recreational areas due to acquisition of open spaces in a county-wide open space assessment district is a derivative, indirect benefit. Furthermore, the proposed assessment did not identify specific open spaces to be acquired using the assessment funds. The court deemed it impossible to identify any special benefits received by the assessment-paying parcels. However, the court noted that such a district-wide benefit could be construed as a special benefit in a narrowly drawn district that only includes parcels that directly benefit from the improvements (League of California Cities, 2019).

The proportion of special benefits derived by each parcel should be calculated based on the total project cost. The assessment amount should not exceed the reasonable cost (both capital and operating costs) of the infrastructure/service that leads to the special benefits. The general benefits should be funded through other, non-assessment revenue sources (League of California Cities, 2019). For example, suppose a \$10 million park project accrues \$25 million in total benefits, of which 80 percent (\$20 million) are special benefits, and 20 percent (\$5 million) are general benefits. In that case, assessments should only fund 80 percent of the project cost, or \$8 million. The remaining \$2 million should be funded through other sources. Furthermore, suppose a parcel receives a \$100,000 special benefit (one percent of the total project cost of \$10 million). In that case, that parcel should only pay special assessment equal to one percent of the 80 percent of the project cost, or one percent of \$8 million, which is \$80,000.

Furthermore, assessments need to be levied on all special-benefit-receiving properties, including government and non-profit properties. Before Proposition 218, there was an implied exemption from assessments for publicly owned properties (for example, state and federal properties). Moreover, in Dahms v. Downtown Pomona Property (2010), the court ruled that if jurisdictions exempt such properties from paying assessments, the foregone revenues cannot be filled by over-assessing the rest of the properties. Instead, these funds should come from non-assessment sources (League of California Cities, 2019).

While reviewing the legality of a special assessment, Proposition 218 places the burden of proof on the assessment-levying jurisdiction, thus ending the deference courts hitherto paid to jurisdictions (CSDA, 2013). Proposition 218-related requirements apply to increases in assessments as well. Therefore, it is suggested that while proposing the assessments, jurisdictions clearly identify a schedule of adjustments based on actual costs. Such a schedule could include a cap and allow reduced assessments and carry-over of the excess funds up to a maximum amount (League of California Cities, 2019).

Property-related fees

Article XIIID introduces a new category of fees called property-related fees. These fees are defined as "any levy other than an ad valorem tax, a special tax, or an assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership, including a user fee or charge for a property related service." A property-related service is defined as a "public service having a direct relationship to property ownership." The article notes that "reliance by an agency on any parcel map, including, but not limited to, an assessor's parcel map, may be considered a significant factor in determining whether a fee or charge is imposed as an incident of property ownership for purposes of this article" (California Legislative Information, 1996a). However, the following fees are excluded: any fees levied as a condition of property development, such as permit fees and impact fees, and fees for electrical and gas services. Furthermore, water, sewer, and refuse collection fees are exempt from the voting requirement of Proposition 218 (League of California Cities, 2019).

Subsequent court cases have shed light on what counts as an incident of property ownership. In Apartment Assn. of Los Angeles County, Inc. v. City of Los Angeles (2001), the court noted that a fee is imposed as an incident of property ownership if it is "inextricably intertwined with property ownership." The court ruled that the fee imposed by the City of Los Angeles on landlords to pay for building code enforcement did not fit this category because it was linked to the business use of the property as rental housing, not property ownership itself (Apartment Assn. of Los Angeles County, Inc. v. City of Los Angeles, 2001). Similarly, in Richmond v. Shasta Community Services District (2004), the court opined that such a fee "requires nothing more than the normal ownership and use of property." Thus, any fee that results due to a "voluntary decision regarding property use" is excluded. Therefore, the court ruled that "a fee for ongoing water service through an existing connection is imposed as an incident of property ownership because it requires nothing other than normal ownership and use of a property. However, a fee for making a new connection to the system is not imposed as an incident of property ownership because it results from the owner's voluntary decision to apply for the connection (Richmond v. Shasta Community Services District, 2004)." Furthermore, a fee may count as an incident of property ownership if the property owner has no option to opt out from the service, for example, a required refuse collection fee (League of California Cities, 2019).

The procedural requirement for levying property-related fees is very similar to those for special assessments. Jurisdictions need to identify the fee-paying parcels, calculate the fee amount for each parcel, mail a written notice to the record owner of each parcel (typically the owner or tenant of the parcel), conduct a public hearing, and invite written protests against the fee. They cannot levy the fee if the majority of the owners/tenants of the parcels protest (California Legislative Information, 1996a). Finally, they need to hold an election of the owners of the fee-paying properties and levy the fee if the majority votes for the fee (League of California Cities, 2019) or, "at the option of the agency, by a two-thirds vote of the electorate residing in the affected area" (California Legislative Information, 1996a).

Finally, Article XIII D prohibits levying a fee for general governmental services such as police, fire, ambulance, or library services that are available to the general public and the property owners in "substantially the same manner" (California Legislative Information, 1996a).

Proposition 26

Proposition 26 passed in 2010 with the primary aim to limit regulatory fees and bring many such fees under the ambit of taxes (CSDA, 2013). This aim was motivated by the California Supreme Court's ruling in Sinclair Paint Co. v. State Board of Equalization (1997), where the appellant (Sinclair Paint Company) argued that a state regulatory fee on manufacturers of products containing lead was a tax because the fee did not confer any benefits or privileges on the fee payors. The state argued that it was a regulatory fee imposed using police powers (not taxing powers) to fund the screening of "children at risk for lead poisoning, follow up on their treatment, and identify sources of lead contamination responsible for the poisoning" (LAO, 2010). Therefore, the fee is

not required to provide special benefits or confer privileges on the fee payors. The Supreme Court concurred.

The proposition amended various sections of the California Constitution and required all sources of government revenue to be considered taxes unless they fall within one of the several exceptions listed below. Detailing these exceptions, section 1e of Article XIII C of the California Constitution notes (California Legislative Information, 1996b):

As used in this article, "tax" means any levy, charge, or exaction of any kind imposed by a local government, except the following:

- (1) A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege.
- (2) A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged and which does not exceed the reasonable costs to the local government of providing the service or product.
- (3) A charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.
- (4) A charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property.
- (5) A fine, penalty, or other monetary charge imposed by the judicial branch of government or a local government due to a violation of the law.
- (6) A charge imposed as a condition of property development.
- (7) Assessments and property-related fees imposed in accordance with the provisions of Article XIII D.

The local governments bear the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that how those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity.

All the charges, fees, levies, and exactions that do not fall under one or more of these exceptions must follow the voter approval requirements for levying taxes, that is, majority voter approval for a general tax and two-thirds voter approval for a special tax.

Several keywords, phrases, and exceptions noted in Section 1e of Article XIII C beg attention. First, Proposition 26 only applies to fees "imposed" by local governments. Therefore, fees that payers pay voluntarily (rather than compulsorily) and fees that do not accrue to local governments do not fall under the gambit of Proposition 26 (League of California Cities, 2019; CSDA, 2013). Arguably, public agencies do not "impose" a bus or train fare, and the user pays the fare voluntarily. On the other hand, the voluntariness of the fee can be difficult to prove if competing transportation options to the bus or the train do not exist. In such cases, exception number two may still apply (League of California Cities, 2019).

Second, "specific benefit" noted under exceptions one and two does not mean that a fee is a tax if it provides indirect or incidental benefits to non-payors. For example, even though a water fee helps provide potable water to the entire community, including the non-payor visitors, the benefit to the non-payors does not make such a water fee a tax. Furthermore, "specific benefit" is not the same as "special benefit" required to levy assessments under Proposition 218. Indeed, under exception #7, Proposition 26 exempts assessments and property-related fees (League of California Cities, 2019).

Third, the requirement under exception two that "a charge imposed for a specific government service or product provided *directly to the payor*" (emphasis by authors) does not exclude charges that provide incidental benefit to the non-payors if it is clear what specific benefit, privilege, product or service the fee payors receive (League of California Cities, 2019).

Fourth, the courts have construed the "reasonableness" of a fee broadly. Thus, the fee-imposing agency is not required to calibrate the fee to the specific benefit received by an individual payor. The fee needs to be collectively, not individually, proportional to the cost of providing the benefit (League of California Cities, 2019). However, if a specific class of payors (such as low-income households) is exempt from paying the fee or pay a discounted fee, then the fee rates cannot be increased for other payors to fill the revenue gap. Other funding sources need to fill the gap (CDSA 2013; League of California Cities, 2019).

Fifth, exception #3 limits which regulatory fees are exempt as per Proposition 26. Regulatory fees are generally of two types: a) fee, such as a business license fee, to fund the activities necessary to regulate the business/activity of the fee payors and b) fees to mitigate the negative impacts of fee payors' activities or to fund allied public goals, such as an oil recycling fee to mitigate the environmental hazards of oil consumption or to fund environmental awareness programs. Proposition 26 only allows the first category of regulatory fees (League of California Cities, 2019). The second category will be a tax.

Lastly, exception #6 exempts charges imposed as a condition of property development. This exception covers more than the development impact fees charged under the Mitigation Fee Act. For example, it includes building permit fees and fees to recover the cost of preparing general and

specific plans that apply to the development for which a permit is issued (League of California Cities, 2019).

5.2 Feasibility of Levying a TUF as a Revenue Tool to Fund Transit

Using the insights gained from reviewing the various propositions, case studies, and expert interviews, in this section, we will examine the pros and cons of levying TUF as each of the following revenue tools: a general tax, a special tax, a parcel tax, an assessment, a property-related fee, and a fee. Specifically, we will consider the feasibility along the following dimensions: voting requirement, legal, political (includes stakeholder support), administrative, revenue yield, and equity. We consider two dimensions of equity—horizontal equity and vertical equity. The beneficiary-to-pay (BTP) principle operationalizes horizontal equity in public finance. BTP calls for those benefiting from a public infrastructure or service to pay for it in proportion to the benefit derived. Vertical equity has its roots in welfare economics. It is operationalized through the ability-to-pay (ATP) principle, which calls for the rich to pay more than the poor for government-provided goods and services (Mathur and Smith, 2013).

See Table 18 for the summary of findings. Key findings are further discussed below.

Table 18: Feasibility of Levying a TUF in California

Options	Voting Requirement	Legal Feasibility	Administrative Feasibility	Political feasibility (stakeholder support)	Revenue Yield	Equity (Horizontal)	Equity (Vertical)
TUF as a general tax	Simple majority of voters	As a simple general tax combined with a non-binding advisory measure.	Easiest among the options to design and administer, but cannot be levied by a special district although could be levied by a multi-purpose district. Could be added to property tax bill.	Overall opposition to taxes. However, those supporting TUF would likely vote for it. Non-binding advisory measure, also needs 50% voter approval.	Could be high if stakeholder support exists. Could be levied over large area.	Not applicable, because taxes do not need to adhere to BTP principle.	Could be levied at the time of real estate transfer and made proportional to sale price. Lower- valued properties could be exempt.
TUF as a special tax	2/3rd majority of voters	Potentially legally most feasible among the options.	Could be levied both by special districts and general-purpose local governments. Could be added to property tax bill.	Overall opposition to taxes; higher bar for voter approval than a general tax.	Perhaps not as high as a general tax because jurisdictions might keep tax amount low to garner 2/3rd voter approval.	Expectation of adherence to BTP principle, even though a tax.	Could be levied at the time of real estate transactions and made proportional to sale price. Lower- valued properties could be exempt.
TUF as a parcel tax	2/3rd majority of voters	Potentially legally most	Could be levied both by special districts and	Overall opposition to taxes; high bar	Perhaps not as high as a general tax	Expectation of adherence to BTP principle,	Could be high on ATP as possible to

Options	Voting Requirement	Legal Feasibility	Administrative Feasibility	Political feasibility (stakeholder support)	Revenue Yield	Equity (Horizontal)	Equity (Vertical)
(a variant of special tax)		feasible among the options.	general-purpose local governments. Could be added to property tax bill.	for voter approval.	because jurisdictions might keep tax amount low to garner 2/3rd voter approval.	even though a tax. Could base the tax on parcel characteristics such as size and use that are proportional to transit use.	exempt senior citizens and low-income households, such as those on Supplemental Security Income (SSI) or Social Security Disability Insurance Benefits (SSDI).
TUF as a special assessment	Simple majority of ballots weighted by assessed value of the property	Could be challenged as a special tax if large, city-wide districts are established. Could be challenged as property-related fee.	Fee design and calculation methodology more challenging than for a tax since need to identify a) parcels that receive special benefit and b) the amount of special benefit. Burden of proof is on the assessment-levying government.	Could be less challenging to adopt if owners of highly valued properties support.	Would vary depending on a) how large a district can be created and b) stakeholder support.	Very strong on BTP because special benefit needs to be identified and the assessment should be proportional to the special benefit received and the cost to provide that benefit.	Low on ATP because exemptions are not allowed even for public and non-profitowned properties.
			To not count as property-related fee, need to show that use of transit,				

Options	Voting Requirement	Legal Feasibility	Administrative Feasibility	Political feasibility (stakeholder support)	Revenue Yield	Equity (Horizontal)	Equity (Vertical)
			and hence payment of TUF, is optional for the fee payor. Could be added to property tax bill.				
TUF as a property-related fee	Less than majority protest by property owners and approval by simple majority of voters	Could be challenged as a special tax. Need to prove transit is not a general government service.	Need to establish that transit use has a direct relationship to property ownership. Fee design and calculation methodology needs to show specific benefit or privilege enjoyed by the payor and the reasonableness of the fee.	Very likely to be challenged as a special tax.	Could be high if stakeholder support exists. However, jurisdiction might keep the fee rate low to mitigate stakeholder opposition.	Very strong on BTP because special benefit needs to be identified, and the fee should be proportional to the benefit received and the cost to provide that benefit.	Fee waivers possible. For example, to low-income households.
TUF as a fee	Approval by a majority of legislative body's members	Most challenging among the options to prove TUF is a fee. Could point to exceptions # 1,	Administrative feasibility similar to an assessment. Fee design and calculation methodology need to show specific	Very likely to be challenged as a special tax.	Could be high if stakeholder support exists. However, jurisdiction might keep the fee rate low to	Very strong on BTP because special benefit needs to be identified and the fee should be proportional to	Fee waivers possible. For example, to low-income households

Options	Voting Requirement	Legal Feasibility	Administrative Feasibility	Political feasibility (stakeholder support)	Revenue Yield	Equity (Horizontal)	Equity (Vertical)
		2, and 6 of Prop 26. Could prove voluntariness so that it is out of gambit of Prop 26.	benefit or privilege enjoyed by the payor and the reasonableness of the fee. Work needed to show voluntariness of the fee. Could be added to property tax bill.		mitigate stakeholder opposition. Yield likely to be low if levied as a condition of property development in already urbanized areas.	the benefit received and the cost to provide that benefit.	

The main findings of the review of TUF-related court cases are as follows:

- a) Jurisdictions have typically tried to levy a TUF as a fee.
- b) While determining the legality of TUFs and whether they are a fee or a tax, the courts have considered the context of state law and the intent of the TUF-authorizing statutes. For example, in cases where the statutes primarily focus on revenue generation (Brewster v. City of Pocatello, 1989; Heartland Apartment Association Inc. v. City of Mission, 2017; Covell v. City of Seattle, Washington, 1995), the courts have deemed TUFs to be taxes.
- c) While determining whether a TUF is a fee for a service, the courts have looked at whether the fee is optional, avoidable, and proportional to the cost of the service (State v. City of Port Orange, 1994; Utah Sage, Inc. v. Pleasant Grove City, 2020).

To demonstrate that the fees are optional and avoidable, the case study TUF programs have pointed to the full exemptions provided for vacant parcels or partial exemptions if the fee payors can show a lower intensity of use of transportation infrastructure than assumed in fee calculation methodology (Hillsboro, OR; Corvallis, OR; and Boulder, CO). To show that the fees are proportional to the cost of funding the transportation service, most of the case study programs have based their TUF on ITE trip generation rates (Hillsboro, OR; Corvallis, OR; and Boulder, CO); and d) the courts have typically looked positively if the fee aims to enhance public safety and welfare (Fort Collins, CO)—that is, serves as a regulatory fee. One of the case study TUF programs (Weston, WI), and several others reviewed as part of this research, highlighted this role of TUF. However, in California, Proposition 26 disallows the use of fees for larger regulatory purposes unless it is for the narrow purpose of funding the activities necessary to regulate the business/activity of the fee payors. Hence, in California, a TUF can only be levied as a fee for a service, in our case, to fund transit service. It cannot be linked to broader health and safety purposes.

Pros and cons of various options

The study team held in-depth discussions with legal and policy experts about the feasibility of employing a TUF as a fee, a special fee, an assessment, a general tax, or a special tax (or a parcel tax, which is a variant of the special tax). Expert #1) serves as legal counsel for a local government. Expert #2 works for a state-level transportation agency, and the third, David Taussig, is a municipal finance expert. The experts were interviewed over the phone or through online video software on June 23, 2021, June 17, 2021, and July 9, 2021, respectively. The experts opined that whatever form a TUF takes, the legality of the revenue tool will likely be tested in courts.

TUF as a special/parcel tax

These discussions highlighted that each option has its pros and cons, although employing a TUF as a special/parcel tax might be most defensible legally. This method would also allow a TUF to

be used jurisdiction-wide and by special districts as well. Notably, many transit agencies, such as Valley Transportation Authority (VTA), are special districts. However, the special/parcel tax option is most onerous from a political/stakeholder support perspective because it requires two-thirds voter approval.

TUF as a general tax

The option to levy a TUF as a general tax could be politically easier than imposing it as a special tax because the former only requires a simple majority of votes. Furthermore, along with a TUF ballot measure, jurisdictions could also have a companion, non-binding, advisory measure that identifies the uses for which the tax revenues would be employed (for example, transit). This course would perhaps increase interest in voting positively for the tax to the extent the voting population supports a TUF (online video interview with Expert #1 on June 23, 2021). On the one hand, such a companion pledge would allow jurisdictions to levy general taxes with a pledge to go toward TUF purposes with a simple majority of voter approval. However, the risk is that as a general tax, the taxing jurisdiction could change its mind and violate the non-binding pledge by using the funds for other purposes. This change of mind could negatively affect the programs the TUFs are intended to support (email communication with Expert #1 on October 01, 2021).

TUF as a special assessment

Among the non-tax options, jurisdictions could levy a TUF as a special assessment. From a stakeholder support perspective, these assessments could be easier to implement if owners of highly valued properties support a TUF since special assessments cannot be levied if a majority of property owners protest. In such a protest, the votes are weighted by the value of the property. Therefore, the support for a TUF as a special assessment is likely to be high if such property owners see a robust link between a TUF and the transit service. For example, if the owners of retail and office properties in downtowns or major office-commercial hubs or owners of large tracts of land in soon-to-be-developed vacant urban land are promised new transit service or significant service upgrades if TUF measures pass.

Levying a TUF as a special assessment has challenges too. A narrowly defined assessment district boundary could be easier to defend legally than a more broadly defined city or county-wide boundary because of the difficulty separating special benefits from the general benefits in the latter. However, the revenue yield is likely to be lower than with a broadly defined boundary. There is some precedence for large special assessment districts, such as the city-wide park assessment district, to maintain and improve the City of Moorpark, CA parks. The city general fund pays for the general benefits accrued from the parks (City of Moorpark, 2021). Outside California, Helena, MT, (one of the case studies reviewed in this report) also levies a TUF as an assessment.

Another model comes from Santa Clara County, CA. In the year 2000, property owners approved the creation of the County Lighting Service Area (CLSA) assessment district with 12 unique benefit zones. The County delineated these zones based on the degree of street lighting benefit MINETA TRANSPORTATION INSTITUTE

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received by the parcels (County of Santa Clara, 2021; online video interview with Expert #1 on June 23, 2021). Such a benefit-zone approach could be considered for levying a TUF as an assessment. Finally, opponents could challenge a TUF as a special tax if special benefits are comingled with general benefits or as a property-related fee by arguing that property owners need to pay it as an incident of property ownership. To counter the latter argument, jurisdictions would have to prove that using transit is optional and not intrinsically tied to property ownership, and that the assessment district excludes parcels that do not benefit from the transit service.

TUF as a property-related fee

Levying a TUF as a property-related fee is another option. This option is less onerous than the special tax option that requires two-thirds voter approval in terms of stakeholder support. But it requires greater stakeholder support than levying a TUF as an assessment because the TUF must secure majority voter approval in addition to surviving the majority property owner protest. Furthermore, under Proposition 26, jurisdictions cannot levy property-related fees to fund general government services such as police and fire protection. Thus, jurisdictions need to demonstrate that transit is not such a service, perhaps by pointing out the difference between roads (that are ubiquitous and essential) and transit service (which not all jurisdictions provide).

TUF as a fee

Levying a TUF as a fee is perhaps politically the easiest option since it only requires a simple majority of the jurisdiction's legislative body's approval; however, it is fraught with legal peril as opponents would likely challenge it as a special tax or a property-related fee. TUF-levying jurisdictions would need to meticulously demonstrate that the fee meets one or more of the Proposition 26 exceptions. They could point to exceptions number one, two, and six (the exceptions are described above in this chapter).

For exceptions one and two, the jurisdictions would need to demonstrate that the fee confers a specific benefit or privilege on the payor that is not provided to those not charged, and the fee does not exceed the reasonable costs to the local government for conferring the benefit. To address the free-rider problem highlighted in court cases (State v. City of Port Orange, 1994; Utah Sage, Inc. v. Pleasant Grove City, 2020), the jurisdictions could demonstrate that the fee funds only the part of the transit service needed to serve the fee payors (that too not fully) and a sizable portion of the transit service would continue to be funded through other revenue sources such as the jurisdictions' general fund or state and federal grants. Furthermore, jurisdictions would need to tie the fee to the payors' likely use of transit service and set it at a rate needed to fund transit service. For example, the case study jurisdictions do that by basing a TUF on ITE trip generation rates. For funding transit with a TUF, the jurisdictions could apportion the total trips generated by each land use type between automobile, transit, and other modes (for example, walk and bike trips) and charge a TUF to meet the cost of transit trips.

Exception six is provided for charges that are levied as a condition of property development. California jurisdictions levy a host of fees at the time of permit approval or building construction under this exception. These include impact fees and building permit fees. These fees are levied one-time, not periodically. However, precedent exists for continuous fee collection, albeit outside California. For example, Phoenix, OR, imposes a TUF to fund infrastructure and services not covered under their impact fee program (City of Phoenix, 1994).

Finally, Proposition 26 only applies to fees "imposed" by the jurisdictions. Fees that consumers pay voluntarily (for example, a fee to use public tennis courts) do not fall under the gambit of this proposition. Therefore, jurisdictions could employ a TUF to fund transit if they can prove its voluntariness. Case study jurisdictions have demonstrated such voluntariness through exemptions for vacant parcels or for payors that do not use transportation services (for example, Hillsboro, OR, exempts payors from paying a TUF that largely goes toward funding roads if they do not own an automobile).

Feasibility by development and property owner type

Apart from the legal and political considerations noted above, the feasibility could also vary due to the following two factors: first, whether jurisdictions levy TUFs on new greenfield developments or in-fill developments; and second, whether only owners of newly developed properties pay the fees or all—existing and new—property owners pay. This variation in feasibility is because, compared to in-fill developments, it is easier to identify the amount of transit infrastructure needed to serve greenfield developments and estimate the TUF charges required to recoup the cost of transit provision.

Furthermore, all the owners of greenfield properties are likely to be new property owners who would be buying into a set of taxes and fees, including the TUF, as is the case currently with urban development funded with Mello Roos taxes. A TUF is likely to face most opposition if levied on existing properties, especially if transit service is not significantly enhanced and the benefit from the TUF-funded transit service is not clearly identified.

The owners of new in-fill properties are also likely to oppose a TUF if they pay the fee but not the existing property owners, especially if the TUF revenues also benefit the latter. Finally, both sets of property owners are likely to oppose a TUF if they feel the non-payors benefit from the TUF-funded improvements.

Other design considerations

Equity

Horizontal equity: Among the revenue options, the non-tax options (assessment, property-related fee, and fee) firmly adhere to horizontal equity because assessments and fees, by statute, have to be linked to the benefits received. A TUF as a tax would be most inequitable as taxes are a general

revenue-raising tool and do not need to follow the BTP. However, special and parcel taxes are expected to meet the BTP since payors expect specific benefits in lieu of paying these taxes. Jurisdictions could do so by basing the special and parcel taxes on parcel and property features such as the size of the parcel, street frontage, and property use.

Vertical equity: All the options could be designed in ways that enhance ATP. For example, a TUF as a general tax could be levied on highly valued properties only. Precedents exist. For example, the City of San Jose, CA, imposes a property transfer tax on transactions valued at \$2 million or more (City of San Jose, 2021a). Cupertino, CA, exempts seniors from paying user utility tax (City of Cupertino, 2021). Valley Water, a Santa Clara County, CA, water district, exempts low-income seniors from paying parcel tax (Valley Water, 2021). Los Angeles County, CA, provides building fee waivers for affordable housing (County of Los Angeles, 2021).

Some case study TUF programs provide similar exemptions. For example, Hillsboro, OR, provides employers a 30 percent discount for non-residential properties if they purchase transit passes for their employees or participate in the Oregon Department of Environmental Quality Employee Commute Options (ECO) program to reduce vehicle trips. The fee could be waived for households with income 60 percent below the Oregon median, and a six-month waiver may be granted if a household member has become unemployed. Boulder, CO, is considering several possible exemptions, including those for low-income households, non-profits, schools, and affordable housing.

TUF collection mechanism

Most case study programs (Boulder, CO; Corvallis, OR; Hillsboro, OR; and Weston, WI) collect, have collected, or plan to collect TUFs through the utility bill. Such a collection arrangement is simple to affect when the TUF-levying jurisdiction provides the utility. In such cases, non-payment of the TUF could lead to the discontinuance of utility services in the case study jurisdictions.

However, in many cases, the utilities are provided by special districts, requiring more formal arrangements. In a couple of instances, jurisdictions collect the fees through other means—such as the property tax bill (Helena, MT) and annual vehicle registration renewal (Richland County, SC).

Schedule of adjustments

While the case study jurisdictions allow periodic review of their TUF programs, such a practice has serious legal implications in California since a review of taxes, fees, and assessments (especially an upward revision in the rate upon such a review) would likely trigger the same approval process as required for levying a new TUF. Therefore, it is advisable to include a schedule of adjustments in the TUF authorizing statute. For example, such a schedule could include an inflation-adjustment provision if the TUF is levied as a tax or a cost escalation factor if the TUF is imposed as a fee (League of California Cities, 2019).

Leveraging TUF to meet state's GHG reduction goals

One of the objectives of this research is to explore how a TUF can be leveraged to help achieve California's GHG reduction goals. Tailpipe emissions are a significant source of GHG emissions in California. Policies that promote transit ridership help reduce GHG emissions and their rate of growth. To the extent any new funding source for transit, such as TUF, promotes transit, it helps reduce GHG emissions by taking automobiles off the street. A review of case studies provides some advice on how TUFs can be designed to help achieve this goal.

First, full or partial exemptions for low-income households could help. Research has shown that this group is more likely to take transit and carpool and less likely to own a car than the higher-income group (PPIC, 2004; AC Transit, 2018). Similar exemptions can be provided for affordable housing developments. Hillsboro is providing such exemptions, and Boulder is considering them.

Second, suppose jurisdictions can show that the cost of providing transit is much higher in sprawled suburban built environments than in compact, in-fill TODs. In that case, TUF rates could be designed so that payors in the former pay more than those in the latter built environments. Precedents for this zone-based approach exist in impact fee and user fees programs. For example, El Dorado County, CA, has created three zones for levying transportation impact fees (El Dorado County, 2020). Similarly, water rates vary in San Jose by zones (City of San Jose, 2021b)

Third, jurisdictions could layer the above two strategies to provide deep exemptions for affordable housing and low-income property owners living in compact, in-fill TODs. Even deeper exemptions could be offered to those living in green TODs since such TODs further support the state's GHG reduction goals. Among others, such TODs employ building design and construction practices to provide features to recycle water, reduce heating/cooling requirements, reduce impervious open spaces, and generate solar power (Cervero and Sullivan, 2010).

5.3 Concluding Remarks and Future Research Opportunities

This research project explores the feasibility of employing TUFs to fund transit in California and to meet the state's GHG reduction goals. Through in-depth case studies of the TUF programs nationwide, an analysis of court cases that examine the legality of TUFs, and an examination of various constitutional limitations on imposing any new revenue tool, this research concluded that several options—from a general tax to a fee—exist for levying TUFs. All the options have pros and cons and most likely will be litigated in courts.

On a larger note, we realize that TUFs are one cog in the complex transit finance wheel. They are often viewed as an additional measure or a fix to reduce the ever-present expenditure-revenue gap. However, TUFs also provide an opportunity to think outside the box—transit as a level-of-service based utility (phone interview with Expert #2 on June 17, 2021) and to pay for it as we pay for a merit good (goods that should be consumed in sufficient quantities to maximize social welfare, such as education and health care, and unless subsidized would likely be undersupplied). Viewed

from this lens, we have an opportunity to conceptualize transit from a user-centric and broader mobility perspective and levy a TUF at a rate needed to support transit after it receives the financial support needed for internalizing all the positive externalities it produces, such as GHG reductions and reduced road congestion. A couple case studies provide glimpses of some aspects of this broad-based thinking. Corvallis, OR, provides a fare-free transit service, where the TUF is levied in conjunction with state and federal grants to provide a stable funding source. Boulder, CO, would like to cast its TUF as a mobility fee to be spent on all types of transportation infrastructure—transit, walk/pedestrian ways, and roads—to meet the city's mobility needs. Researchers are also calling for such broad-based use of TUFs (see Seggerman et al., 2010). More research is needed to explore the legal, political, and administrative dimensions and broader applicability of such a perspective.

Finally, while this research has examined the various options of levying TUFs, it has not gone indepth into each option's details. For example, if a TUF is deemed feasible as a special assessment, future research can suggest a detailed assessment design and calculation methodology.

6. Bibliography

- AC Transit. (2018). 2017–18 Onboard Survey Summary of Findings. Retrieved September 16, 2021, from https://www.actransit.org/website/uploads/board_memos/17-231a%20Rider%20Survey%20Atch%20-Red%20Folder.pdf.
- Ambarian, Jonathon. (2019, August 21). Helena City Commission to set service rates, assessments for next year. KTVH. Retrieved June 1, 2021, from https://www.ktvh.com/news/helena-news/helena-city-commission-to-set-service-rates-assessments-for-next-year.
- Apartment Assn. of Los Angeles County, Inc. v. City of Los Angeles, No. S082645 (California 2001). https://law.justia.com/cases/california/supreme-court/4th/24/830.html.
- Bailey, Tina. (2012). Transportation Utility Fee 4 Years Later. NPWMA 2012 Conference. Retrieved January 24, 2021, from http://nwpma-online.com/presentations/2012/14 tinabailey transportationutilityfee.pdf
- Bailey, Tina. (n.d). *Transportation Utility Fee*. FHWA Presentation. Retrieved January 24, 2021, from https://drive.google.com/file/d/1TeBfoIsxwReNGBPHMshzS3uOsBsEsQqC/view?usp=sharing.
- Blom, Dan. (July 2, 2015). Kansas Court of Appeals rules Mission Transportation fee (driveway tax) is illegal; would remove \$800,000 in city funding. *Shawnee Mission Post*. Retrieved February 8, 2021, from https://shawneemissionpost.com/2015/07/02/kansas-court-of-appeals-rules-mission-transportation-fee-driveway-tax-is-illegal-would-remove-800000-in-city-funding-40575/.
- Bloom v. City of Fort Collins, No. 88SA162, 784 P.2d 304 (Colorado 1989). https://law.justia.com/cases/colorado/supreme-court/1990/88sa162-0.html.
- Brewster v. City of Pocatello, 115 Idaho 502, 768 P.2d 765 (Idaho 1989). https://casetext.com/case/brewster-v-city-of-pocatello.
- Burnquist, Margaret. (2019, September 30). *How South Carolina funds road and bridge maintenance*. Fox Carolina. Retrieved March 1, 2021, from https://www.foxcarolina.com/news/how-south-carolina-funds-road-and-bridge-maintenance/article_acc8aa76-e3b3-11e9-8a55-93595b03d921.html.
- California Legislative Information. (1996a). California Constitution Article XIII D [Assessment and Property-Related Fee Reform [Section 1 Sec. 6]. Retrieved September 7, 2021, from https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=CONS&article=XIII%20D.

- California Legislative Information. (1996b). California Constitution Article XIII C [Voter Approval for Local Tax Levies] [Section 1 Sec. 3]. Retrieved September 3, 2021, from
- https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=CONS&article=XIII %20C
- California Special Districts Association (CSDA). (2013). *Proposition 218 Guide for Special Districts*. Retrieved September 7, 2021, from https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/pricing/docs/csda_guide_proposition_218.pdf.
- Carlson, D., Duckwitz, B., Kurowski, K, and Smith, L. (2007). *Transportation utility fees: Possibilities for the City of Milwaukee*. Technical report, University of Wisconsin–Madison Robert M. LaFollette School of Public Affairs. Retrieved September 7, 2021, from https://lafollette.wisc.edu/images/publications/workshops/2007-tuf.pdf.
- Cervero, Robert and Cathleen Sullivan. (2010). *Toward Green TODs*. UC Berkeley Center for Future Urban Transport. Retrieved September 7, 2021, from https://escholarship.org/uc/item/20q8993s.
- City and County of San Francisco v. Farrell, S.F. No. 24177 (California 1982). https://law.justia.com/cases/california/supreme-court/3d/32/47.html.
- City of Boca Raton v. State, No. 77468, 595 So. 2d 25 (Florida 1992). https://law.justia.com/cases/florida/supreme-court/1992/77468-0.html.
- City of Boulder. (2012). City of Boulder City Council Agenda Item: Meeting Date: December 18, 2012.
- City of Boulder. (2019). Transportation Funding Working Group Meeting #6 Summary. Retrieved August 12, 2021, from https://www-static.bouldercolorado.gov/docs/FundingWG6 Mtg Summary-1-201906060947.pdf?.
- City of Boulder. (2020). *Fiscal Year 2021 Approved Budget*. Retrieved August 12, 2021, from https://www-static.bouldercolorado.gov/docs/2021_Budget_Book_Approved-1-202012281515.pdf?ga=2.117299012.39983870.1620914228-585741940.1620914228.
- City of Boulder. (2021). *Transportation Funding*. Retrieved February 18, 2021, from https://bouldercolorado.gov/transportation/transportation-funding.
- City of Boulder. (n.d.). *Transportation Maintenance Fee FAQ*. Retrieved February 18, 2021, from https://bouldercolorado.gov/transportation/transportation-maintenance-fee-faq. (PAGE INACTIVE)
- City of Corvallis. (2021, February 1). Corvallis Transit System Celebrates 10 Years of Fareless Bus Service. Retrieved July 5, 2021, from https://www.corvallisoregon.gov/cts/page/corvallistransit-system-celebrates-10-years-fareless-bus-service.

- City of Corvallis. (n.d.). *CTS Funding*. Retrieved July 5, 2021, from https://www.corvallisoregon.gov/cts/page/cts-funding.
- City of Corvallis. (2021). FY 2021–22 Proposed Budget. Retrieved August 9, 2021, from https://archives.corvallisoregon.gov/public/ElectronicFile.aspx?dbid=0&docid=2081241.
- City of Corvallis. (2010, December 10). Section 3.08.030 Transit operations fee. Retrieved August 9, 2021, from https://library.municode.com/or/corvallis/codes/code of ordinances?nodeId=TIT3UTP URI-W CH3.08TROPFE S3.08.030TROPFE
- City of Corvallis. (2021). *Transit Operations Fee.* Retrieved August 9, 2021, from https://archives.corvallisoregon.gov/public/ElectronicFile.aspx?dbid=0&docid=964633.
- City of Cupertino. (2021). *Tax Exemption*. Retrieved September 1, 2021, from https://www.cupertino.org/our-city/departments/parks-recreation/cupertino-senior-center/services-for-seniors/tax-exemption.
- City of Helena. (2016). Resolution No. 20293. Retrieved June 21, 2021, from https://www.helenamt.gov/fileadmin/user_upload/Commission/Resolutions/2016/Res_20293 Street Maintenance Assessment FY17.pdf.
- City of Helena. (2020). *Code of Ordinances*. 7–1–8: Street Maintenance and Improvements. Retrieved June 21, 2021, from https://codelibrary.amlegal.com/codes/helenamt/latest/helenamt/0-0-0-3384.
- City of Helena. (2021). Fiscal Year 2021 Full Budget. Retrieved June 21, 2021, from https://www.helenamt.gov/fileadmin/user_upload/Finance/Documents/1FY21_Full_Budget_Document.pdf.
- City of Hillsboro. (2008). Ad Hoc Committee on Transportation Finance. Report to the Transportation Committee Proposed Hillsboro Transportation Utility. Retrieved January 20, 2021, from https://www.hillsboro-oregon.gov/home/showpublisheddocument?id=990.
- City of Hillsboro. (2020, March 1). *Transportation Utility Fee Rates*. Retrieved January 20, 2021, from https://www.hillsboro-oregon.gov/home/showdocument?id=1051.
- City of Hillsboro. (2021a). *Adopted Budget Fiscal Year 2020–21*. Retrieved January 20, 2021, from https://www.hillsboro-oregon.gov/home/showpublisheddocument?id=26027.
- City of Hillsboro. (2021b). *Transportation Utility Fee.* Retrieved February 1, 2021, from https://www.hillsboro-oregon.gov/our-city/departments/public-works/transportation/street-and-road-maintenance/transportation-utility-fee.
- City of Loveland. (n.d.). *Street/Alley Maintenance*. Retrieved February 18, 2021, from https://www.lovgov.org/services/public-works/streets.

- City of Missoula. (2021). *Special Districts*. Retrieved June 10, 2021, from <a href="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-Q--A-1000826?bidId="http://www.ci.missoula.mt.us/DocumentCenter/View/4479/Special-Districts-District
- City of Moorpark. (2021). *Park Maintenance/Improvement*. Retrieved September 1, 2021, from http://www.moorparkca.gov/218/Park-Maintenance-Improvement.
- City of Phoenix. (1994). *Chapter 13.28: Transportation Utility Fee.* Retrieved January 15, 2021, from https://www.codepublishing.com/OR/Phoenix/html/Phoenix13/Phoenix1328.html.
- City of San Jose. (2021a). *Measure E Real Property Tax Transfer*. Retrieved September 1, 2021, from https://www.sanjoseca.gov/your-government/departments-offices/housing/resource-library/housing-investment-plans-and-policy/measure-e.
- City of San Jose. (2021b). *Drinking Water Rates*. Retrieved September 1, 2021, from https://www.sanjoseca.gov/your-government/environment/water-utilities/drinking-water/customer-service/drinking-water-rates.
- Cleveland, Christina. (2016, August 14). Vehicle maintenance fee resolution on agenda. *Aiken Standard*. Retrieved February 1, 2021, from https://www.postandcourier.com/aikenstandard/news/vehicle-maintenance-fee-resolution-on-agenda/article_cd421e1d-661e-5b41-afed-1bf64ad30fb0.htm.
- Corvallis Sustainability Coalition. (December 15, 2008). *Community Sustainability Final Action Plan*. Retrieved August 1, 2021, from https://sustainability Final Action PlanFinal12_15_0.pdf.
- County of Los Angeles. (2021). 107.19 Fee Exemption Affordable Housing. Retrieved September 1, 2021, from https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId= TIT26BUCO_CH1AD_107.19FEEXFFHO.
- County of Santa Clara. (2001). *County Lighting Service Area*. Retrieved September 1, 2021, from https://countyroads.sccgov.org/services/county-lighting-service-area-faqs.
- Covell v. City of Seattle, 905 P.2d 324, 127 Wn.2d 874 (Washington 1995). https://law.justia.com/cases/washington/supreme-court/1995/61178-5-1.html.
- Cummins, Sydney. (2006, October 3). *Council Passes Tax Increase*. WLTX. Retrieved February 1, 2021, from https://www.wltx.com/article/news/council-passes-tax-increase/101-382758493.
- Dahms v. Downtown Pomona Property & Business Improvement Dist., 174 Cal.App.4th 708, 173 Cal.App.4th 1201, 96 Cal. Rptr. 3d 10 (Cal. Ct. App. 2009). https://casetext.com/case/dahms-v-downtown-pomona-property.

- Day, Jim. (2021, February 5). The Corvallis bus gamble: Fareless city transit service celebrates 10th year. *Corvallis Gazette-Times*. Retrieved August 1, 2021, from https://www.gazettetimes.com/news/local/the-corvallis-bus-gamble-fareless-city-transit-service-celebrates-10th-year/article_ff28b30a-0531-5c4c-a376-d91cbabdf340.html.
- El Dorado County. (2020). *Resolution 196–2020*. Retrieved September 1, 2021, from https://www.edcgov.us/Government/dot/Documents/Transportation%20Planning/Resolution%20196-2020.pdf.
- Ewing, R. (1993). Transportation Utility Fees. ITE Journal June: 34–38.
- Federal Highway Administration. (2018). Value Capture: Transportation Utility Fees. FHWA: Washington, DC.
- Federal Highway Administration. (2020a). *Transportation Maintenance Fee, City of Boulder, Colorado*. Office of Innovative Program Delivery. Retrieved August 1, 2021, from https://www.fhwa.dot.gov/ipd/pdfs/value-capture/strategies-in-practice/boulder-co-transportation_utility_fee.pdf.
- Federal Highway Administration. (2020b). *Transportation Utility Fee, City of Hillsboro, Oregon.*Retrieved March 1, 2021, from https://www.fhwa.dot.gov/ipd/pdfs/value_capture/strategies_in_practice/hillsboro_or_transportation_utility_fee.pdf.
- Federal Highway Administration. (2021a). Project Profile: City of Hillsboro Fund Bicycle & Pedestrian Capital Improvement Program (BPCIP), Oregon. Retrieved March 1, 2021, from https://www.fhwa.dot.gov/ipd/project-profiles/or-city-hillsboro-fund-bic-ped-capital-i-mprovement-program.aspx.
- Federal Highway Administration. (2021b). Project Profile: Jackson School Road Project, Hillsboro, Oregon. Retrieved March 1, 2021, from https://www.fhwa.dot.gov/ipd/project_profiles/or_jackson_school_road_project.aspx.
- Federal Transit Authority (FTA). (2015). *National Transit Summary and Trends*. Retrieved September 1, 2021, from https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/2015%20NTST.pdf.
- Giles, L. (2018, April 12). Pleasant Grove to Implement Road Fee. *Herald Extra*. Retrieved June 1, 2021, from https://www.heraldextra.com/news/2018/apr/12/pleasant-grove-to-implement-road-fee/.
- Hammill, Luke. (2019, January 9). Hillsboro's street, utility fees rising as city's discretionary money spent elsewhere. *The Oregonian*. Retrieved February 1, 2021, from https://www.oregonlive.com/hillsboro/2015/02/hillsboros_street_utility_fees.html.
- Heartland Apartment Association v. City of Mission, No. 111,521 (Kansas 2017). https://caselaw.findlaw.com/ks-supreme-court/1856062.html.

- Hillsboro Municipal Code. (2020). *Subchapter 3.32 Transportation Utility Fee.* Retrieved February 1, 2021, from http://qcode.us/codes/hillsboro/view.php?topic=3-3_32&frames=off.
- Hinshaw, Dawn. (2012, October 18). "Richland's road fee: 'Double-dipping'?" *The State*. Retrieved February 1, 2021, from https://www.thestate.com/latest-news/article14412548.html.
- Junge, J., and Levinson, D. (2012). Prospects for transportation utility fees. *Journal of Transport and Land Use* 5(1): 33-47.
- Klemm v. Davenport, 100 Fla. 627, 129 So. 904 (Fla. 1930). https://casetext.com/case/klemm-v-davenport-et-al.
- Kuenzie, Jack. (2006, July 12). Council looks to raise vehicle registration fees to fund buses. WIS News. Retrieved July 1, 2021, from https://www.wistv.com/story/5141071/council-looks-to-raise-vehicle-registration-fees-to-fund-buses/.
- League of California Cities. (2019). *Propositions 26 and 218 Implementation Guide*. Retrieved September 1, 2021, from https://www.cacities.org/Prop218andProp26.
- League of Oregon Cities. (2015). *Gas Tax & Transportation Utility Fee Survey Results*. Retrieved February 1, 2021, from https://www.bendoregon.gov/home/showdocument?id=40379.
- League of Oregon Cities. (2021). *TUF Solutions for Local Street Funding*. Retrieved February 1, 2021, from https://www.orcities.org/application/files/3015/7481/0598/TUFReport2011.pdf.
- Legislative Analyst's Office (LAO). (1996). *Understanding Proposition 218*. Retrieved September 1, 2021, from https://lao.ca.gov/1996/120196_prop_218/understanding_prop218_1296.html.
- Legislative Analyst's Office (LAO). (2001). *California's Tax System: A Primer*. Retrieved September 1, 2021, from https://lao.ca.gov/2001/tax_primer/0101_taxprimer_chapter6.html.
- Legislative Analyst's Office (LAO). (2010, July 15). *Proposition 26*. Retrieved September 1, 2021, from https://lao.ca.gov/ballot/2010/26_11_2010.aspx.
- Lewis and Clark County. (2021). *Rural Improvement Districts*. Retrieved June 1, 2021, from https://www.lccountymt.gov/public-works/special-districts/rural-improvement-districts.html.
- Lounsberry, S. (2020, February 5). Boulder to study new local transportation fee. *Colorado Daily*. Retrieved August 1, 2021, from https://www.coloradodaily.com/2020/02/05/boulder-to-study-new-local-transportation-fee/.

- Mathur, Shishir and Adam Smith. 2013. Transit Impact Fee: Enabling Statutes and Equity Concerns. *Transportation Research Record* 2346(2):13–22.
- Meltzer, E. (2012, December 5). Boulder City Council mulls roads maintenance fee to pay for repaving. *Daily Camera*. Retrieved August 1, 2021, from https://www.dailycamera.com/2012/12/15/boulder-city-council-mulls-roads-maintenance-fee-to-pay-for-repaying/.
- Meltzer, E. (2013, February 21). Boulder seeks public feedback on proposed transportation maintenance fee. *Daily Camera*. Retrieved August 1, 2021, from https://www.dailycamera.com/2013/02/21/boulder-seeks-public-feedback-on-proposed-transportation-maintenance-fee/.
- Montana Code Annotated. (2019). Part 44. Special Provisions for Street Maintenance Districts.

 Retrieved June 1, 2021, from https://leg.mt.gov/bills/mca/title_0070/chapter_0120/part_0440/section_0220/0070-0120-0440-0220.html.
- Public Policy Institute of California (PPIC). (2004, July). *How Much do California's Low-Income Households Spend on Transportation*. Retrieved September 1, 2021, from https://www.ppic.org/wp-content/uploads/rs_archive/pubs/rb/RB_704LRRB.pdf.
- Raskauskas, Nancy. (2011, February 1). Corvallis Transit System drops bus fares. *Corvallis Gazette-Times*. Retrieved August 1, 2021, from https://www.gazettetimes.com/news/local/corvallis-transit-system-drops-bus-fares/article-e6ae31e0-2e8e-11e0-9a07-001cc4c002e0.html.
- Richland County. (2001). *County Council Meetings*. Retrieved July 1, 2021, from http://www.richlandcountysc.gov/Government/County-Council/Agenda-Minutes-Actions-Prior-Years/Agendas-Minutes-Actions-2001.
- Richland County. (2005, December 20). County Council Administration and Finance Committee Minutes.

 http://www.richlandcountysc.gov/Portals/0/Departments/CountyCouncil/Committees/Administration%20and%20Finance%20Committee/minutes/20051220.pdf.
- Richland County. (2011, July 1). *Annual Operations and Funding Guide Fiscal Year 2012–2013*. Retrieved February 1, 2021, from https://www.richlandcountysc.gov/Portals/0/Departments/BudgetBudgetFY2013/FY13BudgetBook.pdf.
- Richland County. (2012, July 1). *Annual Operations and Funding Guide Fiscal Year 2013–2014*. Retrieved February 1, 2021, from http://www.richlandcountysc.gov/Portals/0/Departments/Finance/Annual%20Budget%20Reports/FY14BudgetBook.pdf.

- Richland County. (2017, July 1). *Biennium Budget FY 2018–19*. Retrieved February 1, 2021, from http://www.richlandcountysc.gov/Portals/0/Departments/Finance/Annual%20Budget%20Reports/RC_FY2018_FY2019_BienniumBudget.pdf.
- Richland County. (2019, July 1). *Biennium Budget FY 2020-21*. Retrieved February 1, 2021, from http://www.richlandcountysc.gov/Portals/0/Departments/Budget%20and%20Grants%20.
- Richmond v. Shasta Community Services District, No. S105078 (California 2004). https://caselaw.findlaw.com/ca-supreme-court/1258746.html.
- SC Code § 4-9-30. (2018). 2018 South Carolina Code of Laws, Title 4 Counties, CHAPTER 9 COUNTY GOVERNMENT, Section 4-9-30. Retrieved February 1, 2021, from https://law.justia.com/codes/south-carolina/2018/title-4/chapter-9/section-4-9-30/
- Seggerman, K., Nelson, A., Nicholas, J., Williams, K., Lin, P-S, and Fabregas, A. (2010). *The Transportation Utility Fee.* ITE 2010 Technical Conference and Exhibit, Savannah, GA. Retrieved September 1, 2021, from https://www.researchgate.net/publication/283707889_The_Transportation_Utility_Fee.
- Silicon Valley Taxpayers Ass'n, Inc. v. Santa Clara County Open Space Authority, No. S136468, 44 Cal. 4th 431 (California 2008). https://cite.case.law/cal-4th/44/431/.
- Sinclair Paint Co. v. State Board of Equalization, No. S054115 (California 1997). https://law.justia.com/cases/california/supreme-court/4th/15/866.html.
- Slattery, Lydia. (2019, June 25). Oshkosh Chamber of Commerce Opposes Common Council's Public Works Projects Proposal. *Oshkosh Northwestern*. Retrieved October 1, 2021, from https://www.thenorthwestern.com/story/news/local/oshkosh/2019/06/25/oshkosh-chamber-commerce-opposes-city-council-transportation-utility-fee-plan-businesses-road-work/1548565001/
- Springer, C. and J. Ghilarducci. (2004). Transportation Utility Fee: Oregon Experience. Transportation Research Record 1895:15–24.
- State v. City of Port Orange, No. 83103, 650 So. 2d 1 (Florida 1994). https://law.justia.com/cases/florida/supreme-court/1994/83103-0.html.
- State of Oregon Department of Environmental Quality. (2020). *Employee Commute Options*. Retrieved February 1, 2021, from https://www.oregon.gov/deq/FilterDocs/ECOcommuteFS.pdf.
- State of South Carolina. (2011). Opinion memo from the State of South Carolina Office of Attorney General. Retrieved February 1, 2021, from http://2hsvz0l74ah31vgcm16peuy12tz.wpengine.netdna-cdn.com/wp-content/uploads/2011/03/cotty-b-bales-j-2-16-07-os-8316-richland-ordina.pdf

- State of Utah. (2020). Transportation Utility Fees & Related Litigation. Utah Office of Legislative Research and General Counsel. Retrieved August 1, 2021, from https://le.utah.gov/interim/2020/pdf/00004260.pdf.
- State of Wisconsin. (2015). Section 61.34 Powers of village board. Wis. Stat. § 61.34. Retrieved March 1, 2021, from https://casetext.com/statute/wisconsin-statutes/functions-and-government-of-municipalities/chapter-61-villages/section-6134-powers-of-village-board.
- Swearingen, D. (2021, February 15). Boulder City Council OKs exploring capital infrastructure tax extension. *Daily Camera*. Retrieved July 1, 2021, from https://www.dailycamera.com/2021/02/15/boulder-city-council-oks-exploring-capital-infrastructure-tax-extension/.
- TischlerBise. (n.d.) *Boulder*, *CO*. Retrieved February 18, 2021, from https://tischlerbise.com/impact-fees/boulder-colorado/.
- Transportation Agency for Monterey County (TAMC). (2015). Final Overall Work Program: July 1, 2015 to June 30, 2016. https://www.tamcmonterey.org/wp-content/uploads/2015/09/TAMC-FY-15-16-OWP.pdf.
- Turley, Carole. (2014). *Promises and Pitfalls of Transportation Utility Fees*. Transportation Research Board's Fifth International Conference on Transportation Finance, July 2014.
- U.S. Census Bureau. (2019a). *Gazetteer 2019*. Retrieved February 18, 2021, from https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2019_Gazetteer/2019_gaz_place_41.txt.
- U.S. Census Bureau. (2019b). *Gazetteer 2019*. Retrieved March 31, 2021, from https://www2.census.gov/geo/docs/maps-data/data/gazetteer/counties_list_45.txt.
- U.S. Census Bureau. (2019c). *Quick Facts: Boulder, CO.* Retrieved February 18, 2021, from https://www.census.gov/quickfacts/fact/table/bouldercitycolorado,bouldercountycolorado/PST045219.
- U.S. Census Bureau. (2019d). *Gazetteer 2019*. Retrieved March 31, 2021, from https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2019 Gazetteer/2019 gaz place 08.txt.
- U.S. Census Bureau. (2019e). *American Community Survey*. Retrieved March 31, 2021, from https://data.census.gov/cedsci/table?q=helena,%20mt&tid=ACSDT5Y2019.B01003&hidePreview=false.
- U.S. Census Bureau. (2019f). *Gazetteer 2019*. Retrieved March 31, 2021, from https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2019 Gazetteer/2019 gaz place 30.txt.

- U.S. Census Bureau. (2019g). *Gazetteer 2019*. Retrieved July 1, 2021 from https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2019 Gazetteer/2019 gaz place 41.txt.
- U.S. Census Bureau. (2021). *QuickFacts: Weston Village, Wisconsin*. Retrieved March 31, 2021, from https://www.census.gov/quickfacts/fact/table/westonvillagewisconsin/AGE295219
- *Utah* Sage, Inc. v. Pleasant Grove City, No. 190300164 (Utah 2020). https://www.utcourts.gov/utc/appellate-briefs/wp-content/uploads/sites/46/2021/03/Larson-v.-PG-XAEB.pdf
- Utah State Legislature. (May 12, 2020). S.B. 169 Transportation Utility Fee Amendments. Retrieved August 1, 2021, from https://le.utah.gov/~2020/bills/static/SB0169.html.
- Valley Water. (2021). Low Income Senior Parcel Tax Exemption. Retrieved September 30, 2021, https://www.valleywater.org/safe-clean-water-and-natural-flood-protection-program/low-income-senior-parcel-tax-exemption.
- Village of Weston. (2013a). *Memo: Transportation Utility Structure*. Retrieved March 1, 2021, from https://westonwi.gov/DocumentCenter/View/6112/TUF-Memorandum-DPW.
- Village of Weston. (2013b). Transportation Network Utility Fees, Talking Points Memo. Retrieved March 1, 2021, from <a href="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="http://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/View/383/Transportation-Utility-Fee?bidId="https://westonwi.gov/DocumentCenter/V
- Village of Weston. (2013c). Financial Challenges & Transportation Utility Fee Proposal. Retrieved March 1, 2021, from https://westonwi.gov/DocumentCenter/View/6111/TUF-Open-Letter-Guild.
- Village of Weston. (2013d). *Chapter 63: Public Transportation*. Retrieved March 1, 2021, from https://westonwi.gov/DocumentCenter/View/6109/63public-transportation-Ordinance.
- Village of Weston. (2015). Special Revenue Funds. Retrieved March 1, 2021, from <a href="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds?bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/View/2110/2015-Special-Revenue-Funds.bidId="https://westonwi.gov/DocumentCenter/V
- Village of Weston. (2020). *Fee Schedule*. Retrieved March 1, 2021, from <a href="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820?bidId="https://westonwi.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/Document-102820.gov/DocumentCenter/View/931/Fee-Schedule-102820.gov/Doc
- Village of Weston. (2021). *Transportation Network Utility Fees, FAQs*. Retrieved March 31, 2021, from http://westonwi.gov/FAQ/Topic?topic=21&mobile=ON.
- Voulgairs, C. (2016). A TUF Sell: Transportation Utility Fees as User Fees for Local Roads and Streets. *Public Works Management and Policy* 21(4): 305–323.
- Waisanen, B. (2012). *State Tax and Expenditure Limits—2010*. Retrieved July 1, 2021, from https://www.ncsl.org/research/fiscal-policy/state-tax-and-expenditure-limits-2010.aspx.

- Wilks, Avery. (August 3, 2020). "SC orders Richland County to repay \$32M in alleged misspending by transportation program." *The Post and Courier*. Retrieved February 1, 2021, from https://www.postandcourier.com/columbia/sc-orders-richland-county-to-repay-32m-in-alleged-misspending-by-transportation-program/article_d204ac2e-d5b4-11ea-a73f-57dadd5882f6.html.
- WI Stat § 61.34. (2015). 2015 Wisconsin Statutes & Annotations. 61. Villages. 61.34 Powers of village board. Retrieved April 1, 2021, from https://law.justia.com/codes/wisconsin/2015/chapter-61/section-61.34/.
- Woodel, Michael. (2019, May 15). Helena city officials wrap discussion of preliminary budget prior to Monday presentation. *Independent Record*. Retrieved March 1, 2021, from https://helenair.com/news/local/helena-city-officials-wrap-discussion-of-preliminary-budget-prior-to-monday-presentation/article_632566d0-29d4-594c-aca3-a4fffe334369.html.

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Dr. Shishir Mathur is an MTI Research Associate and a Professor of Urban and Regional Planning at San Jose State University. He served as Associate Dean of Research (College of Social Sciences) during 2016-2019 and the Director of the Certificate in Real Estate Development during 2016-2020. His research interests include transportation finance, urban and real estate economics, affordable housing, international development, infrastructure and development finance, and growth management. His research has been published in top-tier journals such as Transportation Research Part A, Transport Policy, Journal of Planning Education and Research, Urban Studies, Land Use Policy, Cities, and Habitat International. He is the author of two books: Understanding India's New Approach to Spatial Planning and Development: A Salient Shift? (Oxford University Press) and Innovation in Public Transport Finance: Property Value Capture (Routledge). He is currently working on his third book, Development Charges to Fund India's Urban Development (Cambridge University Press). Dr. Mathur has advised several international and national organizations. United Nations Human Settlements Programme (UN-HABITAT) sought his input on ways to encourage land-based financing in Africa, Asia, and South America. He advised Federal Transit Administration on ways to promote land value capture to fund transit-oriented developments and transit infrastructure.

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Ralph Robinson is an Assistant Planner with Good City Company. He completed his Master's in Urban Planning at San José State University (SJSU), where he was recognized with an American Planning Association (APA) Outstanding Planning Student Award and a department service award. Furthermore, he received an honors designation for original research on the benefits of municipal energy utilities in California. He has worked on various projects through the Mineta Transportation Institute related to transportation financing, walkability, and sustainability in the Bay Area. While at SJSU, he also worked as a project coordinator with CommUniverCity on a robust assessment of a historically underserved Eastside San José community, a project that was recognized with both a 2020 San Francisco Bay Area Planning and Urban Research Association (SPUR) Impact Award and an Award of Excellence by the APA California Chapter Northern Section. He previously earned his bachelor's in Geography from the University of Richmond in Virginia.

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