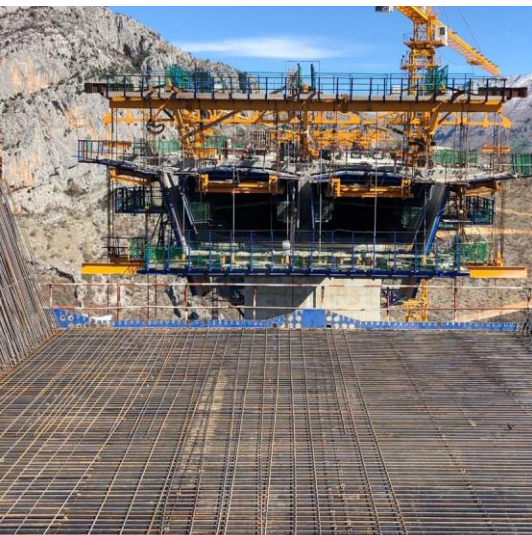


Transportation Utility Fees:

Maintaining Local Roads, Trails, and Other Transportation



Primer
Everyday Counts
Innovation Initiative
November 2020



U.S. Department of Transportation
Federal Highway Administration



FOREWORD

State and local governments often struggle to mobilize the necessary funds to maintain, rebuild, and expand their local transportation networks. Planned projects often face funding or financing hurdles that may result in projects being delayed for years, if not indefinitely, leaving important safety and mobility objectives unmet.

Value capture refers to a set of techniques that generally takes a share of increases in property tax revenues, economic activity, and growth linked to infrastructure investments to help fund current or future improvements. Under the right circumstances, this may allow practitioners to help close funding gaps and accelerate project delivery, as well as provide key to economic development/redevelopment to provide livable communities, create jobs, and environmental stewardship benefits. It is possible to share a portion of this increased value and benefits to fund the improvements to the infrastructure through what are known as “value capture techniques,” which include transportation utility fees (TUFs) (the subject of this primer).

This primer was developed by the FHWA EDC-5 Value Capture Implementation Team and is based on interviews, case studies, and lessons learned from practicing agencies. It introduces the concept of TUFs and how they can provide a gap funding source to help maintain and improve road networks. It also provides several cases to illustrate how cities have approached instituting and managing TUFs.

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EXECUTIVE SUMMARY

There is broad agreement that poor infrastructure leads to diminished mobility and thus inhibits economic activity. Unfortunately, especially at the municipal government level, it can be difficult for governments to find adequate resources to keep the infrastructure under management in good repair. Municipal governments have often relied on revenues from State gas taxes and property taxes to pay for road and highway construction and maintenance. Yet, the income from gas taxes declined in both percentage and absolute terms starting in the 1990s as fuel-efficient vehicles reduced effective gas tax receipts and governments failed to index taxes sufficiently to adjust for inflation. The prospect of raising taxes is often politically difficult.

However, when transportation networks are improved, it is often the case that the value of the urban land those networks serve is increased. These improvements directly and indirectly benefit the users of the system—for example, citizens gain improved access to jobs and services, and businesses gain easier access to intermediate goods and markets. It is possible to capture a portion of this increased value and benefits to fund the improvements to the infrastructure through what are known as “value capture techniques,” which include transportation utility fees (TUFs) (the subject of this primer).

Summaries of each chapter of this primer are found below. A summary of common TUFs practices can be found in table 1.

Chapter 1. Introduction: Summary of Purpose and Primer Background

This primer introduces the concept of TUFs and how they can provide an alternative source of funding to help maintain and improve road networks. TUFs can also provide a source of funding to upgrade sidewalks and add or improve pedestrian safety features and curbs, as well as comply with the Americans with Disabilities Act of 1990. Over nine chapters, the primer provides practical information on what TUFs are and examples of how municipalities use them. It also provides points for consideration when thinking about instituting a TUFs program, such as the favorability of the legal and regulatory environment for TUFs, as well as whether and how TUFs can be used for financing. The final chapter offers examples detailing several ongoing TUFs programs in Texas, Utah, and Oregon.

Chapter 2. Defining TUFs

Chapter 2 defines TUFs—they treat the transportation system like a utility, charging property owners or occupants for their share of transportation costs based on system use—as well as highlights the benefits of levying TUFs to pay for street maintenance as opposed to other mechanisms such as gas or property taxes.

Chapter 3. Establishing a TUFs Program

Establishing a TUFs program typically involves a municipality taking several steps: (1) determining objectives, (2) determining cost and budget, (3) defining streets and boundaries, (4) setting rates, (5) informing the public, (6) adopting an ordinance, and (7) notifying the public and implementing and adjusting the TUFs as needed. This chapter discusses these steps and presents them in approximate chronological order of how they usually occur.

Chapter 4. Applications of TUFs

TUFs can be primarily, if not exclusively, applied to the maintenance of local transportation facilities. This includes street maintenance and pavement preservation. In some communities, they can also fund other street infrastructure, such as storm drains, curbs, and signs. In other communities, TUFs monies can be spent on street lights, sidewalk maintenance, landscaping, and correcting street deficiencies. This chapter illustrates the various ways the revenues collected from a TUFs program can be applied.

Chapter 5. Calculating TUFs

Many TUFs programs have commonalities in the way that they assess TUFs, including differentiating between land uses such as residential and nonresidential properties, using the Institute of Transportation Engineers (ITE) *Trip Generation Manual* to determine trip generation by property type, enforcement mechanisms, and a variety of exceptions. TUFs programs differ, however, in some small and large ways, based on the size of the municipality, cities' maintenance needs and goals, and other public policy considerations. This chapter provides an overview of how TUFs are commonly calculated.

Chapter 6. Administering TUFs

Administering TUFs involves some considerations regarding accounting, enforcement, and addressing exemptions and waivers. This chapter provides an overview of the many aspects related to administering a TUFs program.

Chapter 7. TUFs Legal and Regulatory Issues

TUFs are authorized under State and local law, and the legal and regulatory environment in a municipality may not always allow for TUFs. Thus, municipalities considering establishing TUFs programs generally ensure that their State allows for TUFs, understand any legal issues under State law, and anticipate possible local legislative opposition. This chapter provides points for consideration with regard to the legal and regulatory environment surrounding TUFs.

Chapter 8. TUFs and Financing

TUFs are intended to be used for the maintenance of municipal transportation infrastructure, as well as for upgrades to sidewalks and improvements to pedestrian safety, among others. They can extend the lives of existing assets for a period of 5 to 10 years. Because of uncertainties in measuring how long maintenance extends the life of the asset, securing long-term financing may be problematic for municipal TUFs programs. Municipalities could secure short-term financing by leveraging TUFs monies, however, based on conservative assumptions that the TUFs funding increases asset lives by at least 5 years. Most TUFs programs, however, do not use financing and stick to “pay as you go” (pay-go) programs, in which the monies collected in any given year are used to fund the street maintenance program over the next 1 to 5 years. Even if TUFs are not used to secure financing, they can free up other sources that can be used for financing.

Chapter 9. Where TUFs Are Used

TUFs are primarily used in the southwest and northwest United States. This chapter profiles TUFs programs in five cities across Texas, Utah, and Oregon.

Table 1. TUFs common practices.¹

TUFs Characteristics	Common Practice
Definition	▪ This is a value capture technique. ▪ Treats transportation system like a utility, charging property owners or occupants for their share of transportation costs based on system use.
Use	▪ Used by municipal governments to help pay for street maintenance and sometimes for related street infrastructure, such as sidewalks, signs, signals, and bike paths.
Key Implementation Steps	▪ Determines program objectives, cost and budget, streets and boundaries, rates to be charged, and the enabling authority. ▪ Informs the public about the program. ▪ Develops and adopts the ordinance.
Calculation	▪ Differs by municipality, although most construct rates based on property type (residential and nonresidential) and number of trips, per the standards set by the ITE <i>Trip Generation Manual</i>.
Management	▪ Holds revenues in an account separate from the general fund and monies are only used for their intended purpose.
Funding and Finance	▪ Primarily used for pay-go funding. ▪ Helps free up gas and other tax revenues that can be used to finance new street infrastructure.
Examples	▪ City of Hillsboro, OR ▪ Lake Oswego, OR ▪ Corpus Christi, Texas

¹ Summary of research conducted for this primer.

CHAPTER 1. INTRODUCTION: SUMMARY OF PURPOSE AND PRIMER BACKGROUND

This primer introduces the concept of transportation utility fees (TUFs) and how they can provide an alternative source of funding to help maintain and improve road networks. TUFs can also provide a source of funding to upgrade sidewalks and add or improve pedestrian safety features and curbs, as well as comply with the Americans with Disabilities Act of 1990.

1.1 Challenges in Finding Resources for Road Maintenance

Practitioners agree that eroding infrastructure “diminishes mobility, public safety, and quality of life.”² However, often at the local level, governments struggle to have sufficient funds to maintain transportation infrastructure in good condition. Historically, many States have relied on gas taxes to fund road maintenance. However, as both Lake Oswego³ and Hillsboro,⁴ OR, document as reasons for creating their respective TUFs programs, gas tax revenues available for local road maintenance have not kept pace with road maintenance needs. In addition, local roads are not eligible for Federal-aid Highway Program (FAHP) funding, nor can FAHP funding be used for routine maintenance.⁵

This led to a situation in many cities, such as Corpus Christi, TX, and Hillsboro, OR (see chapter 9), where road maintenance costs outpaced the revenues available to pay for them. Local governments needed to find funding to operate and maintain roads, as well as eliminate congestion.

1.2 Role for Transportation Utility Fees

TUFs are typically used to fund local road maintenance, rehabilitation, and/or preservation, especially for those roads that are ineligible to receive Federal-aid highway funding. In rare cases, they have also been used to fund operations and maintenance (O&M) expenses along transit corridors. In using TUFs, cities can help close their funding gap in an equitable manner as fees are levied on all properties (there are no exemptions for schools or religious institutions) in proportion to their use of the road network, rather than their value, as would be done with property taxes. In this way, the cost of maintaining the infrastructure is equitably distributed, as well as directly linked to the benefits derived. This primer provides an overview of TUFs, when and how they are used, and considerations regarding their use. It also provides several cases to illustrate how cities have approached instituting TUFs and managing their TUFs program.

² D'Angelo, Daniel, Applied Research Associates, Inc.; Tayo Edun, Pauline Hovy, Herb Ladley, and Sasha Page, IMG Rebel Advisory, Inc.; Thay Bishop and Stefan Natzke, Federal Highway Administration. August 2019. Value Capture: Capitalizing on the Value Created by Transportation. FHWA-HIN-19-004. Federal Highway Administration (FHWA).

³ Lake Oswego, OR, Public Works. Street Fee Questions, question 3. <https://www.ci.oswego.or.us/publicworks/street-fee-questions>

⁴ Ad Hoc Committee on Transportation Finance. April 2008. City of Hillsboro: Report to the Transportation Committee, Proposed Hillsboro Transportation Utility, p. 1. <https://www.hillsboro-oregon.gov/home/showdocument?id=990>

⁵ Federal Highway Administration. Federal-aid Essentials for Local Public Agencies. <https://www.fhwa.dot.gov/federal-aidessentials/federalaid.cfm>

CHAPTER 2. DEFINING TUFs

2.1 Definition and Authority

Transportation utility fees are periodic fees paid by a property owner or a building occupant to a municipality based on use of the local transportation system, the latter which can include local streets and bridges, arterials, sidewalks, bike lanes, and other public paths. TUFs treat the transportation system similar to a public utility, charging property owners or occupants for their share of transportation costs based on system use. “Use” is usually defined as the generation of trips, estimated by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, and fees are based on an estimated number of trips generated by different land uses.

TUFs ordinances are enacted by municipal governments under the explicit or implicit authority granted to them by State legislation in their respective States.

TUFs are often used to fund local road maintenance, especially for roads that are ineligible for Federal-aid highway funding. For example, the City of Newberg, OR, adopted a TUFs program in 2017 to close a \$1.9 million annual funding gap to maintain its streets.⁶ In May 2017, Highland City, UT, created a transportation utility fund dedicated to the operation, improvement, maintenance, and rehabilitation of roads.⁷

In rare cases, TUFs have been used to fund transit O&M expenses. Corvallis, OR, imposes a transit operations fee, adding a monthly \$2.75 to single-family residential customers' bills, thereby eliminating bus fares.⁸

2.2 Alternative Terms

TUFs are also referred to as transportation maintenance fees, street maintenance fees, road use fees, pavement maintenance utility fees, street restoration and maintenance fees, or street utility fees.

2.3 Efficiency and Equity Benefits

Raising money for street maintenance through TUFs is arguably more economically efficient and equitable than other means such as property taxes or gas taxes. This is because TUFs better link the collection of monies for road maintenance to those who generate trips that create maintenance needs. By linking fees to transportation system use, TUFs may avoid property market distortions, which can occur if property taxes are used to fund transportation.⁹ Furthermore, the administration of TUFs is relatively

⁶ Federal Highway Administration. Transportation Utility Fees. https://www.fhwa.dot.gov/ipd/value_capture/defined/transportation_utility_fees.aspx

⁷ For more information, refer to the Highland City, UT, website at <https://www.highlandcity.org/index.aspx?NID=399>.

⁸ National Academies of Sciences, Engineering, and Medicine. 2012. Implementation and Outcomes of Fare-Free Transit Systems. Washington, DC: Transportation Research Board, <https://doi.org/10.17226/22753>.

⁹ Carlon, Deven, et al. Spring 2007. “Transportation Utility Fees: Possibilities for the City of Milwaukee.” Public Affairs Workshop, Domestic Issues, Public Affairs 869. The use of property taxes to fund transportation is often seen as creating a market distortion by not linking the tax paid with actual use of the system. In cities where residential properties account for the vast majority of all properties, residents may pay a greater share of transportation funding via property taxes than warranted by their infrastructure use, which could discourage home ownership in the city.

efficient, since the majority of TUFs are collected with other municipal utility fees, including water, thus minimizing administration costs.

TUFs may also lead to a more equitable allocation of maintenance costs, as they more fairly allocate the burden of street maintenance to those who benefit from streets. For example, some municipal TUFs are lowered for those homeowners who do not own cars or if the home is vacant. Furthermore, many municipal TUFs programs address financial burdens by providing discounts to homeowners who are unemployed, have income below the local median income, and/or are elderly.

Furthermore, TUFs can provide greater transparency on how public monies are spent on local infrastructure. For municipalities that have TUFs, street maintenance programs usually are made up of only a handful of funding sources of which TUFs are often a major component. This transparency regarding how the funds are spent helps to build trust with local stakeholders who are affected by the fee.

CHAPTER 3. ESTABLISHING A TUFFS PROGRAM

When establishing a TUFFs program, a municipality commonly takes several steps, including determining objectives, setting rates, and adopting an ordinance. This chapter discusses these steps and presents them in approximate chronological order of how they usually occur. These steps depend on applicable State and local laws, and vary from municipality to municipality.

3.1 Determining Municipality Objectives

3.1.1 Street Maintenance Programs

Most municipalities have ongoing street maintenance programs funded through several sources, including gas, sales, and property taxes. These usually consist of maintenance or master plans that set out the maintenance program over a short- or medium-term period, usually 1 to 5 years. Municipal staff, sometimes in conjunction with outside specialists, develop these plans, which include a list of maintenance projects based on the city's maintenance policy. In turn, this policy is often based on the city's pavement condition index (PCI) goals (see section 0 below), which is a common measure of the physical condition of street pavement.

The street maintenance program may also be established to repair streets along one road, adjacent streets, or an entire neighborhood at one time. It may be further adjusted by the relative pavement deterioration curve (see figure 1, for example). Because cities' roads are in varying conditions, cities make several strategic decisions in spending their limited street maintenance monies. They may ignore one road in bad repair because maintenance is not cost-effective and simply leave it to be rebuilt, yet resurface another that, by appearances, is in good shape because that overlay can result in a much higher return on investment over the asset's life. Explaining this trade-off to policymakers and the public is an important task of staff who are implementing a TUFFs program.

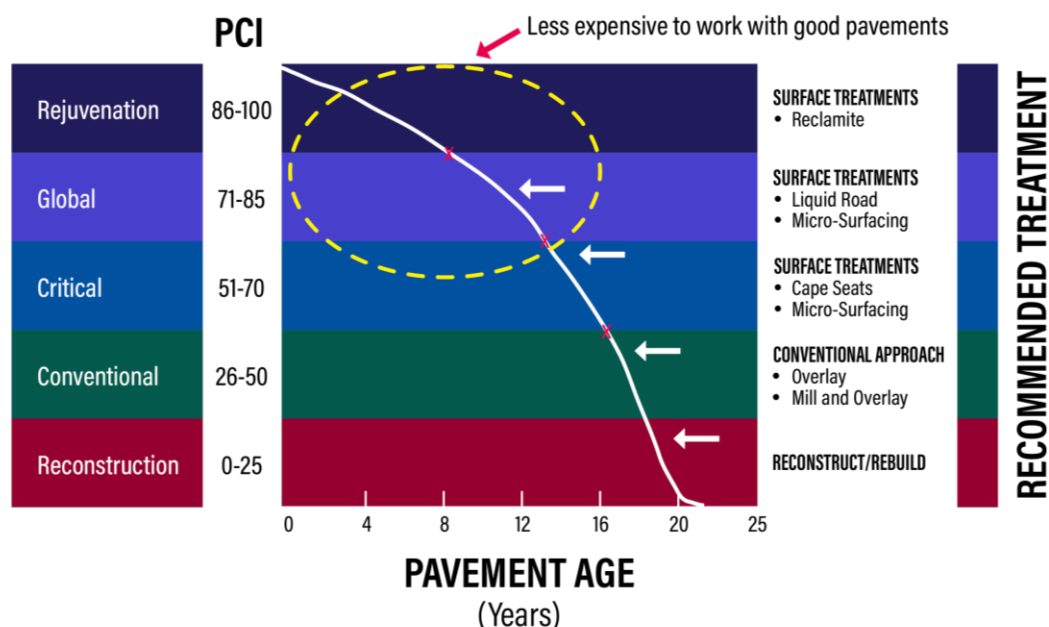
A final consideration in the maintenance plan is coordinating with other utilities, which often are buried in roads' rights-of-way and require access to streets to repair or install new water, wastewater, electric, telephone, and internet infrastructure. To reduce travel disruptions and reduce the frequency of street repairs, some cities coordinate their maintenance plans with other municipal and private utilities. This coordination may reprioritize some maintenance projects based on a consensus with other utilities. In the case of Loveland, CO, a project in that municipality's 5-year plan may shift by 1 or 2 years based on coordination with other utilities.¹⁰ Hillsboro, OR, has a similar approach.¹¹

¹⁰ Klockeman, Dave, City of Loveland, CO, interview, June 30, 2020.

¹¹ Bailey, Tina, Hillsboro, OR, interview, May 5, 2020.

Figure 1 provides an example that the City of Killeen, TX, used to demonstrate the financial benefit of maintenance as part of a presentation on establishing a TUFs program. This curve, which formally or informally is used by many city maintenance programs, identifies those street pavements for which repair can cost-effectively prolong the life of the asset, for example, by increasing the asset's life by up to 50 percent. This compares with other road segments which are in such poor condition that they require reconstruction and therefore do not benefit from maintenance repair.

Figure 1. Pavement deterioration curve example, Killeen, TX, TUFs presentation.¹²



3.1.2. Pavement Condition Index

Municipalities often base their street maintenance programs on a set of principles, including a goal to achieve an expected pavement condition index (PCI), which is a standardized scale of pavement condition from 1 (worst) to 100 (best).¹³ Many communities seek a PCI between 70 and 80, which is considered “very good” on the ASTM scale, which is commonly used but not required under Federal

¹² City of Killeen, TX. Street Maintenance Funding, DS-18-088, October 23, 2018, <https://www.killeentexas.gov/DocumentCenter/View/1084/2018-10-23---Street-Maintenance-Presentation?bidId=>.

¹³ “The PCI is a numerical indicator that rates the surface condition of the pavement. The PCI provides a measure of the present condition of the pavement based on the distress observed on the surface of the pavement, which also indicates the structural integrity and surface operational condition (localized roughness and safety).” ASTM International. Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys, ASTM D6433 – 18. <http://www.astm.org/cgi-bin/resolver.cgi?D6433-18>

regulations.¹⁴ For example, the City of Loveland, CO, seeks a PCI in the “high 70s.”¹⁵ Corpus Christi, TX, seeks to use revenues from its street maintenance fund to improve roads classified as “good” (PCI 61–80) or “fair” (PCI 41–60).¹⁶ By doing so, they focus their funding on “preventative maintenance” that extends the life of the roads and thereby minimize road reconstruction.

3.2 Determining Cost and Budget

Municipalities approach setting their cost and budget for their TUFs programs in different ways. Some have an iterative planning process to arrive at the best plan for TUFs receipts, given cost and budget constraints like Oregon City, OR, while others set a target.

Due to the city’s increased population and a reduction in traditional funding sources, including gas taxes, Oregon City, OR, established a TUFs program in 2007 to address a backlog of street maintenance needs. This plan has an associated budget. In Oregon City’s case, the 5-year plan grew out of a process that began with project lists stemming from two budget scenarios: an “unconstrained” budget and a “constrained” budget. The former, in the amount of \$31.8 million, was the amount of preventative maintenance that needed to occur to achieve a “Very Good” PCI condition for the city’s roads and was used as a reference throughout the planning process. The constrained budget scenario, in the amount of \$10.3 million, represented the amount of preventative maintenance that the municipality could afford based on funds available from the TUFs and other sources. These two scenarios, which were translated into maps for easier viewing, served as exhibits for discussion in the municipality’s planning process to determine which projects to fund through TUFs receipts.¹⁷

As street maintenance budget will vary by the availability of all funding sources, including gas taxes, sales taxes, property taxes, and TUFs, in several TUFs programs, TUFs fund, or are targeted to fund, a substantial portion of municipalities’ street maintenance programs, in the range of 40 percent to 50 percent. For example, Loveland, CO, sets its TUFs to fund 40 percent of their program and is hoping to reach 50 percent. Hillsboro is at around 60 percent of its program.¹⁸ Corpus Christi funds 36 percent of their maintenance program with its TUFs.¹⁹

¹⁴ Karim, Dr. Fareed M.A., Dr. Khaled Abdul Haleem Rubasi, & Dr. Ali Abdo Saleh. 2016. The Road Pavement Condition Index (PCI) Evaluation and Maintenance: A Case Study of Yemen, *Organization, Technology and Management in Construction*, 8(1), 1448.

¹⁵ Klockeman, Dave. City of Loveland, CO, interview, June 30, 2020.

¹⁶ Martinez, Richard. Street Maintenance Fee City of Corpus Christi Use Transportation Utility Fee (TUF) to Fund Roadway Maintenance & Enhance Safety. FHWA Virtual Peer Exchange, May 14, 2020.

¹⁷ City of Oregon, City Five Year Maintenance Plan (2020-2024) June 2019 p10, https://www.orcity.org/sites/default/files/fileattachments/public_works/page/4356/five_year_pavement_maintenance_plan_tech_memo.pdf

¹⁸ Bailey, Tina, City of Hillsboro, OR, interview, May 5, 2020.

¹⁹ Martinez, Richard. Street Maintenance Fee City of Corpus Christi Use Transportation Utility Fee (TUF) to Fund Roadway Maintenance & Enhance Safety, FHWA Virtual Peer Exchange, May 14, 2020.

Most TUFs are designed to fund street maintenance and related infrastructure maintained by the municipality. Roads and other transportation facilities that are the responsibility of State or other agencies are usually excluded from TUFs funding. Usually, private roads are excluded from TUFs funding as well. Furthermore, many municipal TUFs ordinances explicitly exclude parking lots from receiving TUFs funding.

Most TUFs are established by municipal governments and so TUFs monies are expended in that respective jurisdiction. While it is rare that counties initiate TUFs, Clackamas County, OR, did consider establishing TUFs and invested considerable resources to study how to establish accurate TUFs. Due to individual municipalities' unhappiness with a centralized management system, the county abandoned its effort and instead individual municipalities within the county established their own TUFs programs.²⁰

Defining the streets which will benefit from TUFs proceeds depends, in part, on the city's maintenance plan, the city's objectives for PCI, and its available budget. The Oregon City, OR, 2019 5-year pavement maintenance plan provides a good example of a typical street maintenance plan heavily funded by TUFs with a clear approach to determining the streets applicable for funding.²¹ All TUFs receipts are deposited in the city's Pavement Maintenance Utility Fund (PMUF) and are dedicated to funding street maintenance.²²

From establishment of the PMUF, the city prepared three 5-year Pavement Maintenance Plans to prioritize the streets for annual pavement maintenance. The final document includes a list of projects organized by year, street segment, and anticipated treatment type, which can be expected to be completed with the available funding during the period of the plan.²³ The plan describes how the city reached its goal of increasing its PCI to over 70, or "very good," for its average in the past decade due to the PMUF funding, as well as an increase in new streets (with higher PCIs) in the system (table 2). However, the large jump in PCI seen between 2015 and 2016 can be attributed to new development in the city.²⁴

²⁰ Springer, Carl, & John Ghilarducci. January 2004. Transportation Utility Fee: Oregon Experience. *Transportation Research Record: Journal of the Transportation Research Board*, 1895(1), pp. 15–24.

²¹ City of Oregon City, OR. June 2019. Five-Year Pavement Maintenance Plan (2020–2024). City Project #PS18-026.

https://www.orcity.org/sites/default/files/fileattachments/public_works/page/4356/five_year_pavement_maintenance_plan_tech_memo.pdf

²² Ibid, p. 2.

²³ Ibid, p. 3.

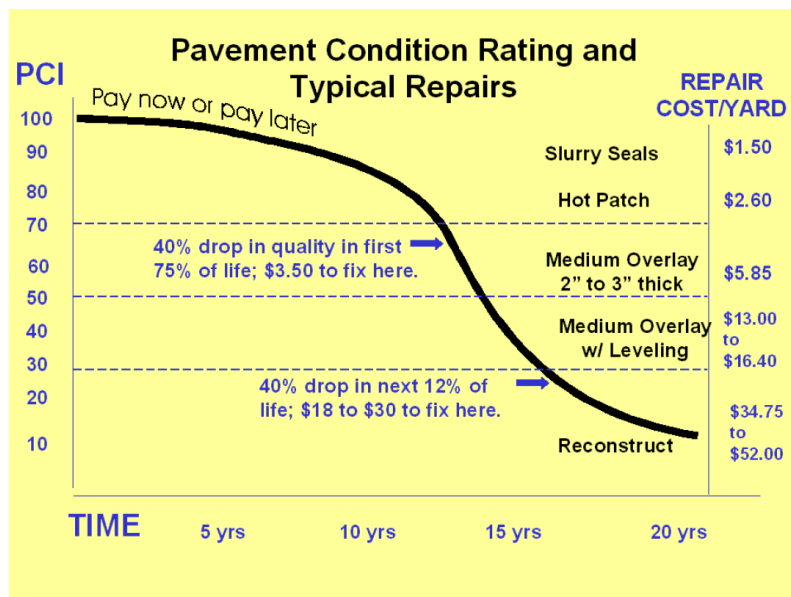
²⁴ Ibid, p. 4.

Table 2. Oregon City PCI over time.²⁵

Year	PCI
2011	60
2012	61
2013	68
2014	67
2015	66
2016	76
2017	76
2018	75

Oregon City's recent plan (2020–2024) focuses on two categories: (1) preventative maintenance and (2) rehabilitation. To develop project lists, the city uses a pavement management model/database, provided by StreetSaver, and an outside consultant. The software applies an algorithm based on existing pavement conditions, street classification, yearly maintenance budget, time period, treatment types, and treatment costs. This is then adjusted by several factors, including up-to-date construction costs, inflation, and inclusion of curb ramp replacements as required to meet the requirements of the Americans with Disabilities Act of 1990. It also translates the data into street maps that allow it to understand the actual traffic conditions that may affect the construction program and construction costs, identify other streets that can be easily grouped with the target streets, seek input from public and private utilities that need to make street cuts during the 5-year period, and assemble a street list that can fit the budget limitations. Like Killeen, TX, Oregon City presents a pavement deterioration curve showing how the typical costs to repair a yard of pavement increase as the pavement becomes more deteriorated (figure 2).

²⁵ Ibid, p. 12.

Figure 2. Oregon City pavement deterioration rating and repair costs.²⁶

3.3 Study Fee Methodology and Rate Setting

Municipalities often conduct studies on whether and how to implement a TUFs program. These studies are initiated and/or carried out by municipal staff, by the respective legislative body, and/or by an ad hoc citizen's group. In most cases, they are made public and used in legislative considerations of implementing TUFs.

For example, in 2008, the Ad Hoc Committee on Transportation Finance conducted a TUFs study on behalf of Hillsboro, OR, as part of that city's consideration to implement a TUFs program. The committee, aided by outside consultants who prepared a variety of issue papers, conducted nine meetings covering a variety of considerations, including how much revenue the TUFs should raise, how to assess the funding burden between residential and nonresidential customers, waivers and credits, and program oversight.²⁷ The study came up with the following recommendations:

²⁶ Utility Fee Annual Report, 2012. October 6, 2014. p. 12.

https://www.orcity.org/sites/default/files/fileattachments/public_works/page/4356/five_year_pavement_maintenance_plan_tech_memo.pdf

²⁷ Ad Hoc Committee on Transportation Finance. April 2008. City of Hillsboro: Report to the Transportation Committee, Proposed Hillsboro Transportation Utility. <https://www.hillsboro-oregon.gov/home/showdocument?id=990>

- The TUFs program should be set to gradually eliminate the deferred maintenance backlog.
- Revenue should be split 52 percent/48 percent between revenue raised from residential and commercial properties, respectively, as determined by road use studies.
- Allocate cost by residential category (by type of residential property) and commercial category (by land use category and development size).
- The appointment of an oversight committee.
- The possibility of indexing TUFs rates.²⁸
- Gas taxes, which had funded street maintenance, should, for the next decade, be devoted to street upgrade capital projects. When those are completed, they could then fund maintenance, reducing future TUFs increases.²⁹
- Rate calculations should be kept as simple as possible to keep administrative costs low. This was the objective even though doing so could mean less focus on making the program as equitable as possible since focusing on issues of equity could lead to more complicated calculations and, as a result, higher administrative costs.³⁰

3.4 Informing the Public

Many TUFs implementation initiatives devote resources to informing the public about the nature of the proposed program and soliciting feedback. Because TUFs involve the establishment of new fees, applicable laws often require municipalities to hold public hearings and publicize the new fee. This may include the following:

- Presentations by ad hoc committee representatives, staff, and/or consultants at public meetings and/or legislative sessions. For example, Killeen, TX, prepared a 16-page presentation summarizing the city's rationale for its proposed TUFs program, including pavement preservation needs, historical street maintenance funding, alternative funding options, cost issues, land use designations, and calculation methodology.³¹ Killeen developed a decision matrix to describe the available policy options (figure 3).
- Informational materials that summarize the TUFs program.
- Websites that make available study reports and other supporting documents, such as the Hillsboro, OR, website that has current and past information on their TUFs.³²

²⁸ Ibid, p. b–c.

²⁹ Ibid, p. 2.

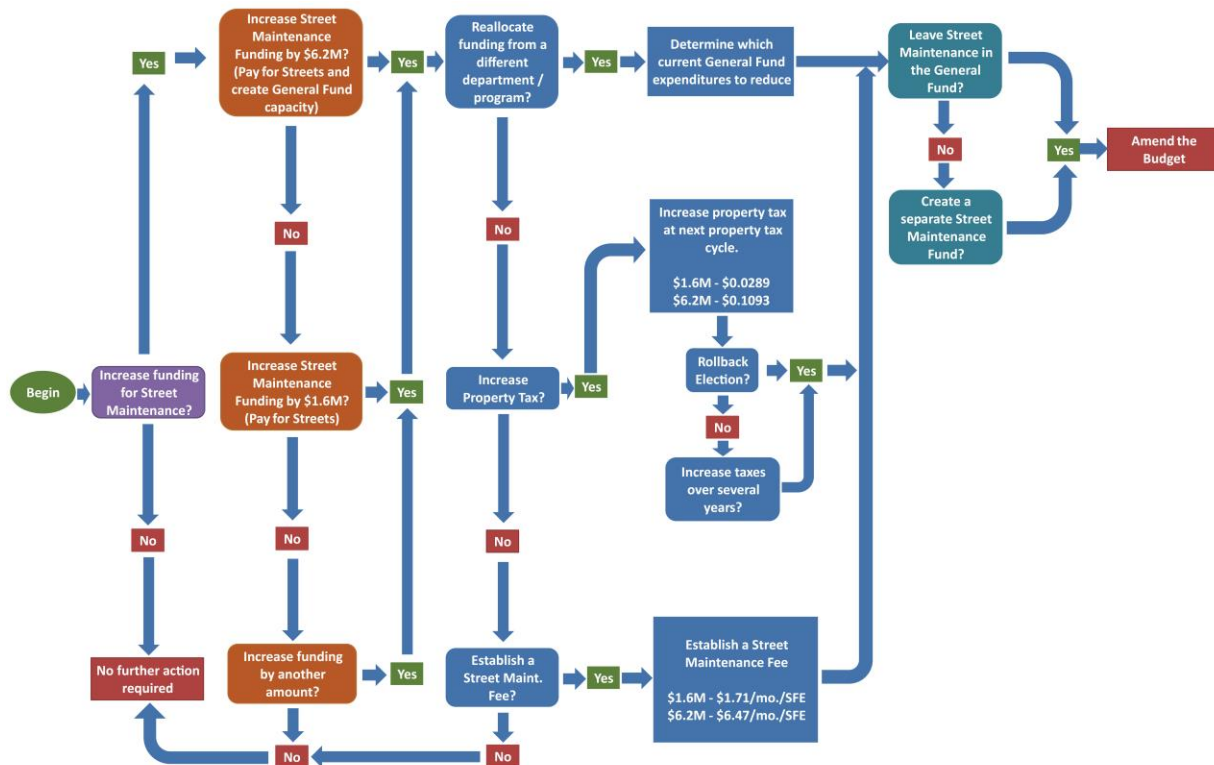
³⁰ Ibid, p. 8.

³¹ City of Killeen, TX. October 23, 2018. Street Maintenance Funding. DS-18-088. <https://www.killeentexas.gov/DocumentCenter/View/1084/2018-10-23---Street-Maintenance-Presentation?bidId=>

³² Hillsboro, OR, Transportation Utility Fee. <https://www.hillsboro-oregon.gov/our-city/departments/public-works/transportation/street-and-road-maintenance/transportation-utility-fee>

- Legislative processes that require one or more hearings; Loveland, CO, had two readings of its TUFs ordinance, both with public hearing components, before it was passed.³³

Figure 3. City of Killeen street maintenance funding policy decision matrix.³⁴



3.5 Adopting an Ordinance

TUFs ordinances set forth the terms of the TUFs program. They often include some or all of the following topics:

- Program purpose (chapter 4)
- TUFs uses (chapter 4)
- Program management (chapter 6)
- How TUFs are collected (chapter 6)

³³ City of Loveland, CO. Ordinance No. 4590: An Ordinance Establishing a Street Maintenance Fee. First Reading on November 27, 2000; Second Reading on December 12, 2000. Documents provided by Dan Klockeman, City of Loveland, CO.

³⁴ City of Killeen, TX. Street Maintenance Fee, Background Materials: Decision Matrix. <https://www.killeentexas.gov/DocumentCenter/View/1085/2018-11-06---Decision-Matrix?bidId=>

- How TUFs monies are held (chapters 6 and 7)
- Fee determination (chapter 5)
- Enforcement (chapter 6)
- Waivers of fees (chapter 6)
- Exemptions and appeals (chapter 6)
- Other administrative matters

While TUFs ordinances may cover the topics discussed above, they vary considerably, even among the ordinances of Oregon municipalities, a State with many municipalities that use TUFs. These differences reflect varying public policy goals and the demographic, economic, and locational characteristics of the municipality.

Most TUFs ordinances can be found online or on a municipality's website, and example excerpts from the Hillsboro, OR, ordinance can be found in appendix A.

TUFs are generally dedicated to the purpose for which they were established and are not considered general revenue. They are commonly collected with other utility fees unless the municipality sets up a separate administrative system. There is economy-of-scale "piggybacking" onto existing fees collection, and enforcement of payment is strengthened as well.

Municipalities may adjust the TUFs after adoption. For example, Loveland, CO, revised its TUFs 9 months after establishment to create a new Retail category and to make the TUFs equivalent to other utility fees in terms of delinquency regulations. Under the new regulations, if an owner fails to pay the TUFs, the city may, after notification, turn off other utilities at the property.³⁵

3.6 Notifying the Public and Implementing/Adjusting TUFs

Before and after TUFs ordinances have been implemented, municipalities often devote extra effort to explain the program to the public. They may do this in a variety of ways, including the following:

- Adding a written explanation on the utility bill.
- Mailing informational materials, such as the Lake Oswego, OR, Investment Brochure for residents or other materials for community associations or business groups,³⁶ and/or launching a citywide advertising program, as Hillsboro, OR, did.³⁷

³⁵ Keough, Dan. Resolution adopting a new schedule of Street Maintenance Fees pursuant to section 16.42.040 of the Loveland Municipal Code, September 18, 2001, City of Loveland, Finance Department.

³⁶ Komarek, Joel. October 27, 2003. City of Lake Oswego Council Report: Ordinance No. 2373, Establishing a Street Maintenance Fee.

³⁷ Bailey, Tina, City of Hillsboro, OR, interview, May 5, 2020.

- Assembling a Business Leaders Group as Lake Oswego did, consisting of owners representing the grocery industry, hotels, property management industry, small businesses, and homeowners' associations.³⁸
- Making presentations to local organizations, including the Lions Club, Rotary Club, chamber of commerce, and neighborhood associations, and holding open houses.
- Using social media, as Hillsboro does.³⁹
- Making staff time available to answer phone or in-person queries.
- Setting up a hotline and recording a message on the utility department's answering service explaining the new fee, as Loveland, CO, did.⁴⁰
- Providing information on the municipality's website, including through FAQs (see table 3).

Table 3. Examples of FAQs for TUFs.

City	Website URLs	Example FAQs
Lake Oswego, OR	City of Lake Oswego, Street Fee Questions, https://www.ci.oswego.or.us/publicworks/street-fee-questions	“Why a Street Maintenance Fee in Lake Oswego?: In the past, the largest funding source for maintenance of the City's street system was the State Gas Tax. The Gas Tax has been used to pay for street maintenance, as well as the energy and maintenance costs for street lights and traffic signal systems citywide. The City Council determined that the Gas Tax must be supplemented by additional funding sources to keep up with ongoing maintenance of our streets. This includes complete pavement overlays, pavement treatments, and reconstruction work that are necessary to keep the street system functioning satisfactorily....”⁴¹
Hillsboro, OR	Hillsboro Public Works, Transportation Utility Fee, www.hillsboro-oregon.gov/TUF	“How was the number of trips for a single-family home determined?: Traffic engineers rely on a “Trip Generation” manual recommended by the Institute of Transportation Engineers to figure out traffic impact on streets. Based on studies, the manual concludes that single-family homes generate, on average, nine or 10 one-way vehicle trips per day....”

³⁸ Komarek, Joel. October 27, 2003. City of Lake Oswego Council Report: Ordinance No. 2373, Establishing a Street Maintenance Fee.

³⁹ Bailey, Tina, City of Hillsboro, OR, interview, May 5, 2020.

⁴⁰ City of Loveland, CO, transcript of incoming utility department phone line. Materials from Dan Keough. Klockeman, Dave, Loveland, CO, interview, June 3, 2020.

⁴¹ City of Lake Oswego, OR. Street Fee Questions. <https://www.ci.oswego.or.us/publicworks/street-fee-questions>

City	Website URLs	Example FAQs
Taylor, TX	Taylor, TX, Transportation User Fee, https://www.ci.taylor.tx.us/826/Transportation-User-Fee	<i>“How long will the TUF be in place?: The ordinance outlines a 3-year review period to periodically review the ordinance and TUF.”</i>
Newberg, OR	City of Newberg, TUF Frequently Asked Questions, https://www.newbergoregon.gov/engineering/page/tuf-frequently-asked-questions	<i>“How will Newberg residents and businesses benefit?: Street repairs! The city will be able to increase annual road maintenance activities. Poor pavement conditions can be damaging to tires, deter business investment, and cost the community more in the long run if not addressed....”</i>

Because most TUFs are an added charge to a utility bill, it is not unusual for those who pay the bill to overlook or not understand how the TUFs are different from the other utility fees, such as for water or trash service. TUFs program officials say that homeowners often ask them why utility bills have increased and fail to realize that it was the addition of the TUFs. Therefore, it is important for municipalities to anticipate and devote adequate resources to educating their legislative bodies and the public on the following:

- The purpose of the TUFs
- How they are calculated
- What exemptions and waivers are available
- How they are enforced

These topics are discussed in chapters 4, 5, 6, and 7, respectively.

CHAPTER 4. APPLICATIONS OF TUFs

TUFs are used primarily for the maintenance of local transportation facilities. This includes street maintenance and pavement preservation, as well as some construction projects. In some communities, this can also include other street infrastructure, such as storm drains, curbs, and signs. TUFs monies can also be spent on street lights, sidewalk maintenance, landscaping, and correcting street deficiencies.

4.1 Street Maintenance and Pavement Preservation

TUFs are primarily used to preserve streets. This includes performing the following improvements to a municipality's public streets, roads, and transportation systems:

- Crack sealing
- Overlaying
- Patching
- Preserving
- Reconstructing
- Renewing
- Repairing
- Replacing
- Resurfacing
- Seal coating

In addition to the maintenance work undertaken by municipal or contract employees, many municipalities define the following activities that directly relate to the maintenance program as eligible for TUFs funding:

- Engineering
- Planning
- Management and administration
- Development of guidelines (e.g., on pavement quality standards) for those implementing the TUFs
- Inspection

4.2 Other Street Infrastructure

TUFs may also fund activities related to the municipality's transportation network, including the following:

- Cleaning and installing storm drains.
- Constructing minor road widening and other miscellaneous repairs.
- Maintaining the safety and operations equipment, and the operations of street lights.
- Rebasement or placing additional road base on local streets.
- Repairing and installing curbs and gutters.
- Repairing and installing signals and illumination.
- Replacing and installing signs.
- Street sweeping.
- Striping

These are activities which are often fundamental to a city's street system, but are less understood by the public, as compared with crack sealing or applying overlays since the latter are much more visible to the typical road user. This makes educating the public on what makes up street maintenance important for a successful program.

Since buses use municipal streets, TUFs, by definition, help pay for transit infrastructure. It is likely that the city's transit department or the regional transit agency pays for the maintenance of transit-only infrastructure, such as bus pads and bus shelters, as is the case in Hillsboro with Portland Metro, the regional transit agency providing service to that city.⁴²

4.3 Sidewalks and Bike Paths

A number of municipalities fund sidewalks and bike paths with TUFs. While the former are more commonly associated with a street network, the latter, if they are separate and distinct from sidewalks, are a newer form of local transportation infrastructure for which demand is growing. These activities may include the following:

- Maintaining, repairing, and installing sidewalks and public bike paths.
- Repairing and installing curb cuts and other improvements that improve access for the disabled or handicapped.

Hillsboro, OR, uses its TUFs to fund, among other uses, the Bicycle and Pedestrian Capital Improvement Program. The program "prioritizes a list of sidewalk, bike lane, and enhanced crossing projects" to improve bicycling and walking in the city.⁴³

Provo, UT, on the other hand, does not allow TUFs to be used for sidewalks.⁴⁴ While TUFs in cities such as Provo may not fund sidewalks, they often have other sources, such as property taxes, gas taxes, State and Federal grants, and/or vehicle registration fees to fund these needs.

4.4 Landscaping

Many TUFs also directly or indirectly allow for the following:

- Maintaining landscaping enhancements along the rights-of-way.
- Maintaining and replacing trees along streets.

Again, this is not an activity that is always associated with street repair, but rather a very common road maintenance and public works activity.

⁴² Bailey, Tina, City of Hillsboro, OR, interview, May 5, 2020.

⁴³ Hillsboro, OR, Public Works. Bicycle & Pedestrian Capital Improvement Program.

⁴⁴ City of Provo, UT. Provo City Code, Chapter 5.08, Transportation Utility Fund. <https://provo.municipal.codes/Code/5.08>

4.5 Correcting Street Deficiencies

Some municipalities allow TUFs to be used for correcting street deficiencies. This may include adding sidewalk curb cuts and other changes on the sidewalk or street network that conform to the Americans with Disabilities Act of 1990 requirements. For example, Phoenix, OR, explicitly states in the section of its city code pertaining to its TUFs that “bicycle and pedestrian facilities, including access for the disabled or handicapped, are an integral part of the transportation network.”⁴⁵ Funds received from the city’s TUFs can be used for several purposes, including for repairing and installing sidewalks or curb cuts.

⁴⁵ City of Phoenix, OR. Ordinance 746 § 1, 1994. <https://www.phoenixoregon.gov/ordinances>

CHAPTER 5. CALCULATING TUFs

Many TUFs programs have similarities in the way that they assess TUFs, including differentiating between residential and nonresidential properties, using the ITE *Trip Generation Manual* to determine trips by property type, enforcement mechanisms, and a variety of exceptions. TUFs programs differ, however, in some small and large ways, based on the size of the municipality, cities' maintenance needs and goals, and other public policy considerations.

While the 10th ITE *Trip Generation Manual* recently issued a supplement,⁴⁶ which includes data on trips taken by pedestrians and those on a bicycle, this data is new and there are few examples of it being used to calculate TUFs.

5.1 Identifying Properties Subject to TUFs

TUFs ordinances specify which types of properties must pay TUFs. Many municipalities hold that any property that creates transportation demand and therefore uses municipal roads and other transportation facilities, pays the TUFs, just as most properties that use water, trash, or other municipal services are required to pay for those services. This often means that public and nonprofit facilities, such as schools or religious institutions, are required to pay the TUFs. Municipalities have a series of exemptions, however, which are discussed in section 6.3.

The most common way that municipalities categorize TUFs properties is by residential and nonresidential (or commercial) categories. For example, Hillsboro, OR, has two residential categories and multiple nonresidential categories based on the estimated number of trips generated by 1,000 square feet of space. See appendix A for more details on this.

Other municipalities have fewer nonresidential categories. For example, Lake Oswego, OR, has just three, all based on square feet of gross floor area.⁴⁷ Loveland, CO, has six nonresidential categories, all based on the acreage of the property.⁴⁸

5.2 Using the ITE Trip Generation Manual

TUFs are set to charge owners a rate that reflects the cost they impose on the road system. This is often measured based on average weekday traffic or the number of trips that properties generate.

The primary source for estimating trips is by using the ITE *Trip Generation Manual* ("ITE Manual"). ITE is a professional membership association that develops technical standards and resources. It has produced several versions of the manual, based on survey data from thousands of studies primarily in the United

⁴⁶ Trip and Parking Generation. *Trip Generation Manual*, 10th Edition Supplement.

⁴⁷ City of Lake Oswego, OR. Ordinance, Article 37.04. <https://www.codepublishing.com/OR/LakeOswego/?LakeOswego37/LakeOswego37.html>

⁴⁸ City of Loveland, CO. Street Maintenance Fees. <https://www.cityofloveland.org/services/public-works/streets>

States and Canada since the 1960s. Most of the data are collected at suburban locations at various times of the year under a variety of conditions, and are provided on a voluntary basis.⁴⁹

While the ITE Manual has benefited from input from numerous transportation professionals, including practitioners and academics, and has published 10 editions, it has some drawbacks:

- It is a national survey that reports “average” parameters by property type. The actual trip generation may vary by geography, property type, season, and many other factors.
- Its focus is primarily on motorized transportation and it lacks good data on transit and other non-motorized transportation facilities.⁵⁰ However, they most recently issued a supplement,⁵¹ which includes data on trips taken by pedestrians and those on a bicycle.
- It has a suburban orientation and, as such, has been criticized for not properly measuring urban area trip generation, infill projects, transit-oriented developments, or mixed-use developments.⁵²
- It takes time for new property uses, such as drive-through coffee shops, to be identified and surveyed, as Loveland, CO, found.⁵³

Cities identify property types and then assign each type the respective ITE Manual trip average, such as average daily trips. For example, the ITE Manual estimates that a single-family residential property generates 10 trips per day. As explained on the Oregon City, OR, TUFs webpage, such trips may include the following:

- Going to and returning from work (2 one-way trips).
- Taking a child to school in the morning and returning to pick them up in the afternoon (4 one-way trips).
- Driving children going to and from a friend's house (2 one-way trips).
- A trip to and from shopping (2 one-way trips).
- A trip to and from a family member's sporting event (2 one-way trips).
- Local deliveries and service providers (U.S. Postal Service, FedEx, trash/recycling pick-up).
- A trip to and from the doctor/pharmacy (2 one-way trips).
- A trip to and from a restaurant of any type (2 one-way trips).
- A trip to and from the recreation center or exercise facility (2 one-way trips).⁵⁴

⁴⁹ Tripi, Eric J. Basics of ITE Trip Generation and Its Role in Calculating Transportation Impact Fees. 2011 Growth and Infrastructure Consortium, October 27, 2011. http://growthandinfrastructure.org/proceedings/2011_proceedings/tripi_tripgen.pdf

⁵⁰ Clifton, Kelly J., Kristina M. Currans, & Christopher D. Muhs. 2015. Adjusting ITE's *Trip Generation Handbook* for Urban Context. *The Journal of Transport and Land Use*, 8(1), 5–6. https://ppms.trec.pdx.edu/media/project_files/Adjusting_trip_gen_urban.pdf

⁵¹ Trip and Parking Generation. *Trip Generation Manual*, 10th Edition Supplement.

⁵² Clifton, Kelly J., et al., pp. 5–6.

⁵³ Klockeman, Dave, City of Loveland, CO, interview, June 30, 2020.

⁵⁴ City of Oregon City, OR. Transportation Utility Fees. <https://www.oregocity.org/publicworks/transportation-utility-fee>

5.3 Calculating TUFs Charges

Using the ITE Manual, municipalities calculate the number of trips generated by their properties. They can then divide the annual street maintenance cost that will be covered by the TUFs program to derive a TUFs per trip as shown in the basic calculation:

$$\begin{aligned} &(\text{Municipal properties} \times \text{Trips by property}) = \text{Total Municipal Trips} \\ &\frac{(\text{Street maintenance budget covered by TUFs})}{(\text{Total municipal trips})} = \text{TUFs per trip} \end{aligned}$$

Loveland, CO, used this approach in developing its TUFs, called a “[street maintenance fee](#),” in 2000–2001. As shown in table 4, Loveland set its street fee at a level to meet its then annual target revenue goal of \$820,000. Using the ITE Manual and its own data, Loveland established daily trip generation by six TUFs categories: residential, industrial, high-traffic retail, retail, retail miscellaneous, and office/institution. The residential category unit of measurement was a dwelling unit, whereas all other categories use acreage. Other communities, such as Hillsboro, OR, use a combination of square feet and acres for nonresidential unit categories.

Based on Loveland’s data:

1. Estimated the number of units in each property category (i.e., it calculated 20,000 residential units).
2. Then by multiplying the daily trip generation by the number of units, it derived the total daily trips for each category (i.e., 10 trips times 20,000 units equaled 200,000 total daily residential trips).
3. From there, it derived the total annual trips for each category by multiplying the daily trips by 365 days per year (i.e., it multiplied 200,000 total daily trips to derive 73,000,000 annual residential trips).
4. Next, Loveland solved for the necessary fee per daily trip so that the expected annual revenue would equate to its target revenue of \$820,000. It did this by dividing the total annual trips (199,085,987) by the target revenue (\$820,000). When it did this, Loveland arrived at a cost of \$0.004119 per trip.
5. To arrive at the monthly fee for each property category, Loveland multiplied the daily trip generation by the average number of days in a month by the cost of \$0.004119 per trip (i.e., 10 trips per day times 30 times \$0.004119 equals a \$1.25 monthly fee for the residential category).

Table 4. Loveland, CO, street maintenance fee calculations.⁵⁵

Property Category	Daily Trip Generation	Basis of Measurement	Number of Units	Total Daily Trips	Total Annual Trips	Monthly Fee	Annual Revenue
Residential	10	per dwelling unit	20,000	200,000	73,000,000	\$1.25	\$300,675
Industrial	76	per acre	330	25,156	9,181,904	\$9.55	\$37,819
High-Traffic Retail	1,634	per acre	48	78,408	28,618,920	\$204.65	\$117,876
Retail	272	per acre	300	81,675	29,811,375	\$34.11	\$122,788
Retail Miscellaneous	174	per acre	48	8,352	3,048,480	\$21.80	\$12,556
Office/ Institution	183	per acre	830	151,850	55,425,308	\$22.92	\$228,287
Total					199,085,987		\$820,000
		Target Revenue	\$820,000				
		Cost per Daily Trip (Total Annual Trips/Target Revenue)	\$0.0041				

It is not unusual for municipalities to conduct a “reality check” on the final TUFs rates and adjust once the initial TUFs are established. For example, a year after it instituted its TUFs, Loveland added another category, Retail Miscellaneous, which captures retail activities that generate substantially less traffic than the existing Retail category. They did this because some nonresidential entities felt that the TUFs they paid did not reflect the traffic that they generated. Other municipalities, such as Hillsboro, OR,⁵⁶ have more nonresidential categories than Loveland to address this issue of TUFs fairness. Furthermore, some municipalities, such as Hillsboro, cap the fee charged for the two highest nonresidential fee categories,⁵⁷ which the city admits slightly increases the monthly fees for the other nonresidential categories. Gas stations benefited from this cap, for example, which the city felt was acceptable since they are the source

⁵⁵ City of Loveland, CO. Resolution adopting a new schedule of Street Maintenance Fees pursuant to section 16.42.040 of the Loveland Municipal Code, September 18, 2001.

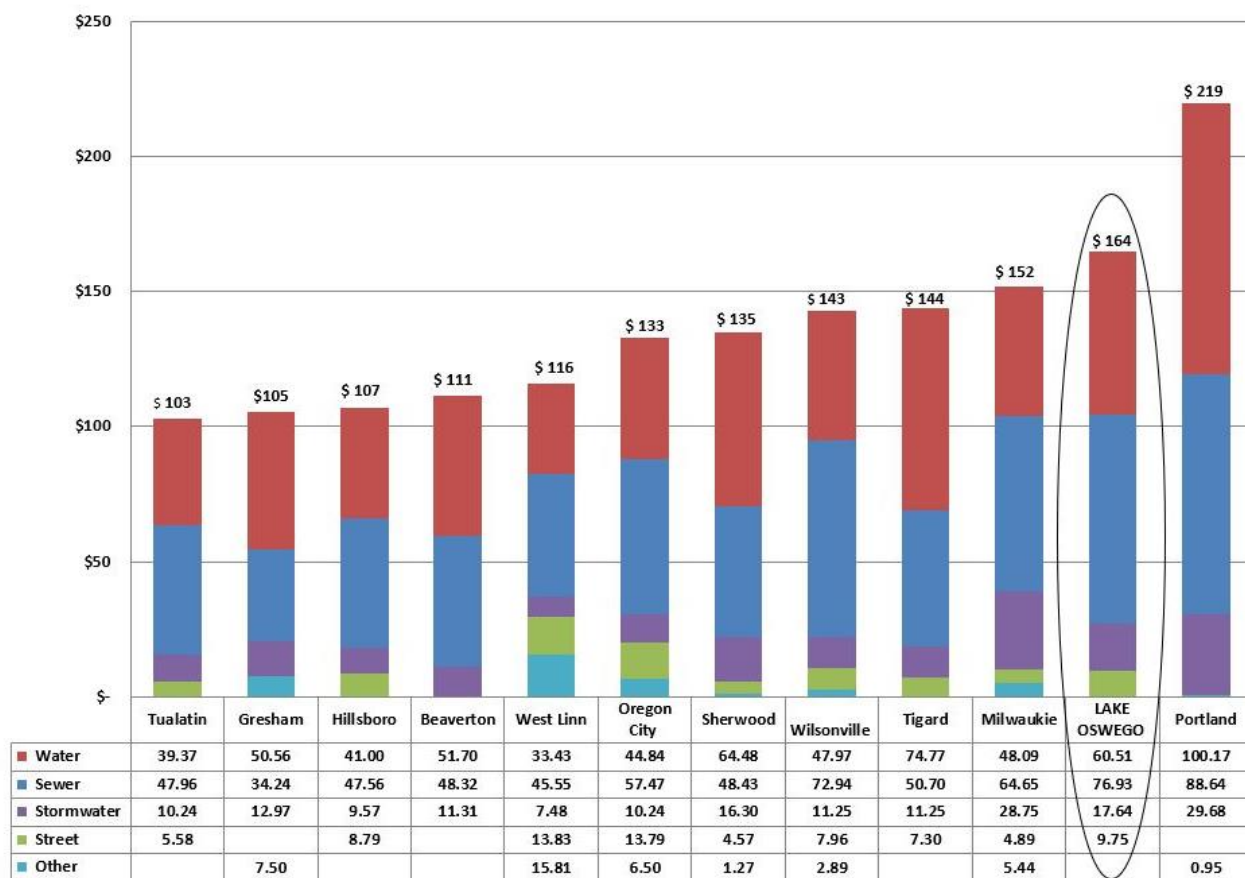
⁵⁶ Hillsboro, OR. Transportation Utility Fee. www.hillsboro-oregon.gov/TUF

⁵⁷ Ibid.

of the city's gas taxes.⁵⁸ As discussed in section 6.3, many TUFs programs allow property owners to appeal their property's classification.

The setting of TUFs could also be affected by the perception among payers of how their utility costs compare with those faced by other municipalities. In discussions with public officials overseeing TUFs programs, this did not come up as a material issue among residents or developers. Because TUFs are included in a property's utility bill, property owners focus less on the TUFs amount and more on the overall bill. Lake Oswego, OR, for example, publishes a comparison of its TUFs and other utility fees with those of neighboring cities in figure 4, which shows that its TUFs are not a major driver of total utility costs, rather water and wastewater costs are.

Figure 4. Comparison of Lake Oswego TUFs and utility bills with neighboring cities.⁵⁹



⁵⁸ Ad Hoc Committee on Transportation Finance. April 2008. City of Hillsboro: Report to the Transportation Committee, Proposed Hillsboro Transportation Utility. p. 5. <https://www.hillsboro-oregon.gov/home/showdocument?id=990>. Bailey, Tina, Hillsboro, OR interview, May 5, 2020.

⁵⁹ City of Lake Oswego, OR. January 1, 2020. Master Fees and Charges, 2020, p. 6. https://www.ci.oswego.or.us/sites/default/files/fileattachments/2020%20Master%20Fees%20Booklet_Final.pdf

Another consideration in setting rates is to identify which types of properties—residential and nonresidential—use which types of roads and other transportation facilities. For example, Hillsboro assigned the costs of arterial, collector, and neighborhood route roadways to residential developed property (RDP) and nonresidential developed property (NDP) equally because both property types generate road maintenance needs relatively equally, as shown in table 5. The roads that are only used for nonresidential property purposes, such as local commercial, local industrial, commercial alley, and industrial alley roadways, are naturally allocated to the NDP category. Residential roads and alleys are naturally allocated to the RDP category.

Table 5. Hillsboro road assignment by TUF category.⁶⁰

Road Type	Residential Developed Property (RDP)	Nonresidential Developed Property (NDP)
Arterial, collector, and neighborhood route roadways	50%	50%
Local commercial, local industrial, commercial alley, and industrial alley roadways	0%	100%
Local residential and residential alleys	100%	0%

Hillsboro sets the budget based on total system need and then collects funds based on the three road types. It then allocates these budgets between RDP and NDP as needs arise and over time in the approximate proportions noted in table 5. For example, the RDP budget is the sum of 50 percent of the “arterial, collector, and neighborhood route roadways” road type maintenance costs and 100 percent of the “local residential and residential alleys” road type maintenance costs. To set the residential TUFs, Hillsboro uses ITE data for single-family and multifamily units. The March 1, 2020, rates of \$9.11 for single-family units and \$8.20 for multifamily units reflect the higher number of trips for single-family units.⁶¹

For nonresidential rates, the TUFs for NDP categories is based on the ITE Manual derived distribution of traffic volumes of the seven NDP groups, described in appendix A. NDP rate calculations are as follows and are described further in table 6:

- For NDP groups 1 through 6 (based on square footage), Hillsboro charges \$8.20, plus the property’s square footage divided by 1,000 times the respective rate code for the group. Hillsboro does this to create a price floor of \$8.20, which is the lowest residential rate, as they originally found that some

⁶⁰ City of Hillsboro, OR. Hillsboro Municipal Code, Subchapter 3.32 Transportation Utility Fee. http://qcode.us/codes/hillsboro/view.php?topic=3-3_32

⁶¹ Ibid. <http://qcode.us/codes/hillsboro/view.php?topic=3&frames=on>

businesses were only being charged TUFs of \$1, and this did not appear to be equitable compared with the residential fee.⁶²

- For NDP group 7 (e.g., gas stations), Hillsboro charges the lower residential rate, or \$8.20, plus the number of units (i.e., vehicle fueling positions) times the trip rate. Then this product (subject to a maximum of 1,500) is multiplied by the TUFs trip rate plus the lowest residential rate.

It is common for TUFs to be phased in over time. For example, Oregon City, OR, phased in its TUFs program over a 5-year period from 2008 to 2013.⁶³ Lake Oswego, however, phased in its TUFs fee only for nonresidential users over a 1-year period; residential users paid the new fees immediately.⁶⁴ Municipalities may also have a backlog of maintenance and seek to incorporate those in the TUFs calculation. As with phasing in the TUFs rates, municipalities may want to eliminate the street maintenance backlog over time (e.g., a period of 5 or 10 years). Hillsboro decided to address its \$9 million backlog over a decade, layering in the backlog costs into the TUFs alongside ongoing needs.⁶⁵

Table 6. Hillsboro NDP calculations.⁶⁶

Group	Calculation
Groups 1–6	Nonresidential Category 6 Example: Fast-Food Restaurant With Drive-Through Window, 3,000 square feet TUF Nonresidential Category Charge Square footage / 1,000 x Rate (TUF Code - 934) 3,000 / 1,000 x 37.50 = \$112.50 TUF nonresidential base charge + TUF nonresidential category charge \$8.20 + \$112.50 = \$120.70 (Monthly TUF Charge)
Group 7	Nonresidential Category 7: Gas Station With 12 Fueling Positions, No Grocery or Car Wash TUF Nonresidential Category Charge Vehicle fueling positions x Trip rate (TUF Code - 944) 12 x 168.56 = 2,022.72 trips Trips (maximum 1,500) x TUF rate per trip 1,500 x \$0.06 = \$90.00 (TUF Nonresidential Category Charge) TUF nonresidential base charge + TUF nonresidential category charge \$8.20 + \$90.00 = \$98.20 (Monthly TUF Charge)

⁶² Bailey, Tina, City of Hillsboro interview, May 5, 2020.

⁶³ City of Oregon City, OR. City Code of Ordinances, Chapter 13.0 Transportation Utility Fees, as of 5/06/2020. https://library.municode.com/or/oregon_city/codes/code_of_ordinances?nodeId=TIT13PUSE_CH13.30TRUTFE

⁶⁴ City of Lake Oswego, OR. November 4, 2003. Agenda Summary Report, Resolution 03- 89. A Resolution of the Lake Oswego City Council Establishing Street Maintenance Fee Rates.

⁶⁵ Ad Hoc Committee on Transportation Finance. April 2008. City of Hillsboro: Report to the Transportation Committee, Proposed Hillsboro Transportation Utility. p. 4. <https://www.hillsboro-oregon.gov/home/showdocument?id=990>

⁶⁶ Hillsboro, OR. City of Hillsboro – Transportation Utility Fee (TUF) Rates Effective March 1, 2020. <https://www.hillsboro-oregon.gov/home/showdocument?id=24222>

5.4 Calculating With Alternative Methods

Most cities set TUFs based on the number of trips. In a 2016 survey, 25 of 36 cities with TUFs based their fees on trip generation estimates, as shown above.⁶⁷ However, there are some alternative methods based on parking spots and service units.

The City of Tigard, OR, charges one TUFs rate for residential units and a TUFs rate for nonresidential based on the number of zoned parking spots allowed for the property.⁶⁸ One of the criticisms of this calculation is that while parking spots are a reasonable proxy for the level of traffic generated by a business, distortions could occur with those properties that have many infrequently used spots, such as a stadium that is used once a week in comparison to a big box retail store with fewer spots but daily traffic.⁶⁹

The City of Sherwood, OR, calculates its residential TUFs as one fee per residential unit or \$2.07. Its nonresidential TUFs is based on an equivalent surface unit (ESU), which is 2,640 square feet. One ESU is the same value as the residential unit value of \$2.07.⁷⁰ This approach has benefits in being simple and easy to understand. The challenges are that it may be overly simplified, and some nonresidential owners may feel that the fee does not accurately reflect the impact of their business on the road system.

Highland, UT, imposes TUFs of \$18.50 on all utility bills, regardless of property type. This is a very simple approach that has been applied to a small, mostly residential suburb.⁷¹

Arlington, TX, used to have a street maintenance fee, collected through the utility bill. In 2002, Arlington voters changed this to a street maintenance sales tax.⁷² A sales tax is distinct from a fee and does not link properties and street use as closely. Arlington is home to several large sports venues, including for professional football and hockey, two theme parks, and a large mall, which provides an opportunity to generate a large amount of sales tax revenue.

5.5 Identifying Parties to Pay TUFs

Payment of TUFs are generally the primary responsibility of the property owner. For properties where the owner and user of the property are the same—such as a single-family residence or a business that owns its property—this does not present an issue. For properties where there are more than one user, such as a multifamily residence, municipalities generally prefer to bill whoever receives the utility bill. So, if the

⁶⁷ Voulgaris, Carole Turley. 2016. A TUF Sell: Transportation Utility Fees as User Fees for Local Roads and Streets. *Public Works Management & Policy*, 21(4), 312. doi: 10.1177/1087724X16629961.

⁶⁸ City of Tigard, OR. Street Maintenance Fee. https://www.tigard-or.gov/city_hall/street_maintenance_fee.php

⁶⁹ Voulgaris, p. 315.

⁷⁰ City of Sherwood, OR. Current Service Rates. <https://www.sherwoodoregon.gov/utilitybilling/page/current-service-rates>

⁷¹ City of Highland, UT. Transportation Utility Fund Background Information. <https://www.highlandcity.org/399/Transportation-Utility-Fund>

⁷² City of Arlington, TX. February 13, 2018. Staff Report: Ordinance Ordering May 5, 2018 Special Election for Reauthorization of the Street Maintenance Sales Tax. https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/145986/Street_Maint_Tax_SR_01.30.18_.pdf

owner of a multifamily residence receives the utility bill and then passes those costs onto individual apartments, the owner is still liable for the TUFs if a tenant does not pay. In some municipalities, the TUFs bill—and the utility bill—are sent to the tenant, who may cover those costs under the terms of their lease. One TUFs observer, Reid Ewing, believes that TUFs should be billed to tenants, where possible, since this strengthens the argument that TUFs are a fee and not a tax. This was a factor in the Fort Collins, CO, State of Colorado Supreme Court case, one of the State rulings in favor of TUFs that is described in more detail in chapter 0 (section 7.2).⁷³ Regardless of these provisions, in most TUFs ordinances, if the TUFs are not paid, then the municipality holds the property owner responsible and takes action against them, as discussed in section 0.

⁷³ Ewing, Reid. 1993. Transportation Utility Fees. Research Record, No. 1395, p. 21. <http://onlinepubs.trb.org/Onlinepubs/trr/1993/1395/1395.pdf#page=23>

CHAPTER 6. ADMINISTERING TUFs

Administering TUFs involves some considerations regarding accounting, enforcement, and addressing exemptions and waivers.

6.1 Anticipating Start-Up Costs

In establishing TUFs, municipalities may need to take on additional costs. These costs may include the following.⁷⁴

- Preparing or updating studies on street maintenance needs, including backlog and traffic analysis using city staff or outside consultants.
- Surveying and classifying affected properties. In the case of Hillsboro, OR, city staff spent several months surveying around 1,200 nonresidential properties to update the city’s data. Some of the data had to be adjusted within the first 6 months of the TUFs, including the correct property uses about which the city lacked the latest information.⁷⁵
- Setting TUFs fees.
- Staff time to present to senior officials, policymakers, business groups, and the general public.
- Development of collateral materials, such as flyers, to inform the public.
- Following implementation, additional staff time for as much as a year to respond to questions about the program and bill payment issues.

In general, municipal staff who have worked on new TUFs programs have not expressed concerns that these costs are especially burdensome in the context of the benefits of a TUFs program. Nevertheless, the consensus is that staff and policymakers need to believe that TUFs are a reasonable solution to funding street maintenance and are willing to spend the organizational and political “capital” to make the program successful.⁷⁶

6.2 Managing TUFs Monies in a Separate Account

As per State or local law, TUFs receipts generally are deposited into accounts that are separate from the municipality’s general fund. This reflects the purpose of the TUFs—to recover the costs of using roads and other transportation fees—defined in a similar manner as water and other utility fees. It also reflects the transparent nature of this fee; residents understand, and hopefully can see, directly where their monies are being expended. Finally, it reflects that TUFs are fees and not a form of tax, which was articulated by the Colorado Supreme Court’s Fort Collins’ decision as described in section 0, and that

⁷⁴ Based on interviews with municipalities regarding their TUFs programs: Tina Bailey, Hillsboro, OR, interview, May 5, 2020; Erica Rooney, Lake Oswego, OR, interview, May 29, 2020; Josh Wheeler, Oregon City, OR, interview, June 8, 2020; Dave Klockeman, City of Loveland, CO, interview, June 30, 2020.

⁷⁵ Ad Hoc Committee on Transportation Finance. April 2008. City of Hillsboro: Report to the Transportation Committee, Proposed Hillsboro Transportation Utility. p. 8. <https://www.hillsboro-oregon.gov/home/showdocument?id=990>. Bailey, Tina, Hillsboro, OR, interview, May 5, 2020.

⁷⁶ Based on interviews with municipalities regarding their TUFs programs: Tina Bailey, Hillsboro, OR, interview, May 5, 2020; Erica Rooney, Lake Oswego, OR, interview, May 29, 2020; Josh Wheeler, Oregon City, OR, interview, June 8, 2020; Dave Klockeman, City of Loveland, CO, interview, June 30, 2020.

they cannot be used for general fund purposes. For many municipalities, this accounting is not a major burden because other utility fees, such as for water or stormwater, are also placed in separate accounts to fund those facilities.

6.3 Enforcing TUFs Payments

Because TUFs are usually invoiced as part of a municipality utility bill, TUFs enforcement terms are similar, if not identical, to those of other municipal utilities. In general, those enforcement terms hold that if a utility bill is not paid within a certain period of time, the municipality can shut off the water to that property. This enforcement option is usually very compelling to the vast majority of property owners. Because of this, municipal staff report very few, if any, issues with TUFs payments. For example, in 2000, Loveland did not include TUFs in their “delinquency process,” which applies to other utilities. After it experienced unpaid bills, Loveland staff asked the city council the next year to include TUFs in that process.⁷⁷ Since then, Loveland has not had major issues with unpaid TUFs bills.⁷⁸

The period of time that a municipality will wait until it takes enforcement action varies. For example:

- Oregon City, OR, determines that a fee is late if “not paid within 30 days of the date of the bill,” and “... billing and collecting agents of the transportation utility fee designated by the city may use any legal means available to collect delinquent service charges.” The city’s ordinance further defines that delinquent TUFs accounts be treated in the same manner as delinquent water service accounts per OCMC section 13.04.2020.⁷⁹
- Corvallis, OR, is less prescriptive and does not provide an explicit period of time, instead the ordinance states that “[i]f the Transportation Maintenance Fee is not paid when due, the City shall proceed to collect such charges in any manner provided by law.”⁸⁰
- Many cities, such as Hillsboro, OR, and Taylor, TX, require that payment for bills “are due upon receipt.”⁸¹

6.4 Managing Exemptions

Because TUFs are fees for services rather than taxes, many municipalities require most properties to pay TUFs, with few properties exempted. As shown in table 7, the exemptions that are granted are primarily for city- or publicly owned parking lots, parking spaces, farms, public schools, vacant properties, properties that do not receive water or sewer service, and railroad rights-of-way.

⁷⁷ City of Loveland, CO. September 18, 2001. Resolution adopting a new schedule of Street Maintenance Fees pursuant to section 16.42.040 of the Loveland Municipal Code.

⁷⁸ Klockeman, Dave. City of Loveland, CO, interview, June 30, 2020.

⁷⁹ City of Oregon City, OR. Code of Ordinances, Title 13 Public Services, Chapter 13.30 Transportation Utility Fees § 13.30.100.

⁸⁰ Corvallis, OR. Ordinance 2020-03, § 2 (Exhibit A), 2/18/2020.

⁸¹ Hillsboro, OR, Municipal Code, Chapter 3 Finance, § 3.32.080 and Taylor, TX, Municipal Code, Chapter 17 Motor Vehicles and Traffic, Art. I § 17-12(g).

Table 7. TUFs exemption examples.⁸²

Municipality	Exemptions
Lake Oswego, OR	- City-owned parking lots and TriMet (rail transit) parking lots - Publicly owned parkland, open spaces, greenways - Areas encompassed by railroad rights-of-way, except for developed railroad property - Vacant property
Corpus Christi, TX	Properties owned or leased, and used by a taxing entity, including city, county, and Federal entities
Austin, TX	- Public schools - Vacant property - Property if used for off-street parking
Provo, UT	- If owner makes a voluntary contribution greater than the respective TUFs - Properties exempt from property tax - Property primarily used as a hospital, college, or religious institution
Corvallis, OR	- City-owned parking - Public parkland - Areas encompassed by railroad rights-of-way - Undeveloped properties
Hillsboro, OR	- City and TriMet parking lots - Developed parks assessed - Farming property - Railroad rights-of-way
Phoenix, OR	Properties that are not receiving city water and sewer service

⁸² From the ordinances of the municipalities: Lake Oswego, OR, Municipal Code, Chapter 37, <https://www.codepublishing.com/OR/LakeOswego/>; Corpus Christi, TX, Code of Ordinances, Division 3 Street Maintenance Fee, § 55-696, https://library.municode.com/tx/corpus_christi/codes/code_of_ordinances; Austin, TX, Code of Ordinances, Chapter 14-10 – Transportation User Fee, § 14-10-14, https://library.municode.com/tx/austin/codes/code_of_ordinances; Provo, UT, Code of Ordinances, Title 5, Fees and Taxation, § 5.08.100, <https://provo.municipal.codes/Code>; Corvallis, OR, Ordinance 2020-03, § 2 (Exhibit A), 2/18/2020, https://library.municode.com/or/corvallis/codes/code_of_ordinances?nodeId=COMUCO; Hillsboro, OR, Municipal Code, Chapter 3 Finance, § 3.32.080, <http://qcode.us/codes/hillsboro/>; Taylor, TX, Municipal Code, Chapter 17 Motor Vehicles and Traffic, Article I, § 17-12(g), https://library.municode.com/tx/taylor/codes/code_of_ordinances; Phoenix, OR, Code of Ordinances, Chapter 13.28 Transportation Utility Fees, § 13.28.110, <https://www.codepublishing.com/OR/Phoenix/>

Hillsboro, OR, has a unique exemption for employers who purchase annual TriMet transit passes for their employees. They receive a TUFs discount based on the percentage of employees for whom they purchase passes. Furthermore, employers receive a credit if they have a commuter options program that has been approved by the Oregon Department of Environmental Quality.⁸³

Hillsboro also addresses the issue that mixed-use properties may experience a change in use of which the city was not aware. In that case, the property owner must continue to pay the TUFs based on the original use until the city can confirm the new TUFs rate for the new category of use.⁸⁴

6.5 Allowing Waivers and Hardship Discounts

Many cities offer some type of waiver or hardship discount to residential owners, usually for income reasons. These waivers include household income being below an established threshold, household members who experienced recent unemployment, and low-income elderly persons, as show in table 8. Some also grant waivers for owners who do not own motor vehicles, which can be a proxy for someone with a low income. For that waiver, Newberg, OR, only grants a 50 percent discount because it argues that the owner still benefits from the transportation network by receiving mail and parcel deliveries, visitors, and vendors.

Table 8. TUFs waiver and discount examples.⁸⁵

Municipality	Waiver or Discount
Lake Oswego, OR	The city manager is authorized to waive or decrease fees based on an unusual circumstance or event.
Corpus Christi, TX	Grants 50% reduction for low-income residents.
Austin, TX	- Exempt if the owner does not regularly use a car. - Exempt if the owner is over age 65.
Newberg, OR	- Grants a 50% waiver if a household earns less than 80% of the U.S. Department of Housing and Urban Development median household income or if it experiences recent unemployment. - If the owner does not own a vehicle, then a 50% waiver is granted because the resident still benefits from the transportation system (e.g., mail delivery).
Oregon City, OR	Grants a waiver if the owner meets Oregon's low-income guidelines.

⁸³ Hillsboro, OR, Municipal Code, Subchapter 3.32 Transportation Utility Fee. <http://gcode.us/codes/hillsboro/view.php?topic=3&frames=on>

⁸⁴ Ibid.

⁸⁵ From the ordinances of the municipalities: Lake Oswego, OR, Municipal Code, Chapter 37. <https://www.codepublishing.com/OR/LakeOswego/>; Corpus Christi, TX, Code of Ordinances, Chapter 55, Article 20, Street Preventative Maintenance Program, § 55-695. https://library.municode.com/tx/corpus_christi/codes/code_of_ordinances; Austin, TX, Code of Ordinances, Chapter 14-10 – Transportation User Fee, § 14-10-14. https://library.municode.com/tx/austin/codes/code_of_ordinances; Newberg, OR, Municipal Code, Chapter 3.45 Transportation Utility Fee. <https://www.codepublishing.com/OR/Newberg/#!/html/Newberg03/Newberg0345.html>; Oregon City, OR, Chapter 13.30 Transportation Utility Fees. https://library.municode.com/or/oregon_city/codes/code_of_ordinances; Hillsboro, OR, Municipal Code, Chapter 3 Finance. <http://gcode.us/codes/hillsboro/>; Phoenix, OR, Code of Ordinances, Chapter 13.28 Transportation Utility Fees, § 13.28.110. <https://www.codepublishing.com/OR/Phoenix/>

Municipality	Waiver or Discount
Hillsboro, OR	30% discount for users with an annual transit pass. 30% discount for users with no vehicle.
Phoenix, OR	- Low-income elderly persons can apply if they receive discounts for water. - Exempts parties without a motor vehicle.

6.6 Providing for Appeals

Several municipal TUFs programs allow for property owners to appeal the fee level and/or the category in which their property has been grouped. Many of the appeals processes deal with nonresidential properties where there is much greater variety and properties may be more difficult to categorize, as shown in table 9. For example, in Lake Oswego, OR, a golf club that primarily has traffic on the weekend was ascribed a use that assumed traffic on weekdays as well.⁸⁶ These programs allow for appeals to city staff and/or to the respective legislative body, such as the city council. In discussions with TUFs municipal staff representatives, appeals appear to be rare. In several cases, nonresidential property owners who appeal are given the opportunity to carry out their own traffic study at their own expense, following the methodologies established by the municipality.

Table 9. TUFs program appeals examples.⁸⁷

Municipality	Appeals Process
Austin, TX	- Owner may appeal and receive a hearing. - May conduct own traffic study at the owner's expense, and if traffic is lower than the category, then the fee is adjusted prospectively.
Oregon City, OR	An appeal is possible for commercial, but not residential, property.
Hillsboro, OR	- Owner may appeal TUFs for other reasons, including complications related to mixed-use properties. - An appeal may be made to the city council.
Phoenix, OR	- An appeal may be made regarding seasonable factors. - Nonresidential property owners may ask to carry out their own traffic study. - Nonresidential property owners may petition the city council.

⁸⁶ Rooney, Erica, Lake Oswego, OR, interview, May 29, 2020.

⁸⁷ From the ordinances of the municipalities: Austin, TX, Code of Ordinances, Chapter 14-10 – Transportation User Fee, § 14-10-9. https://library.municode.com/tx/austin/codes/code_of_ordinances; Oregon City, OR, Chapter 13.30 Transportation Utility Fees, § 13-30-060. https://library.municode.com/or/oregon_city/codes/code_of_ordinances; Hillsboro, OR, Municipal Code, Chapter 3 Finance, § 3.32.130. <http://gcode.us/codes/hillsboro/>; Phoenix, OR, Code of Ordinances, Chapter 13.28 Transportation Utility Fees, § 13.28.070. <https://www.codepublishing.com/OR/Phoenix/>

6.7 Reporting Results to the Public

Municipalities publicly report what TUFs monies have accomplished on a periodic basis. Often, they do this in various types of annual reports on the street maintenance program or their utility programs. Others report the results on their websites. One municipality, Killeen, TX, produced an educational YouTube video that describes the need for street maintenance and funding. This video is available on the city's street maintenance fee webpage.⁸⁸ The Hillsboro, OR, TUFs webpage is rich in content about all aspects related to the city's program. Individuals can find more information about the rationale behind the program, the process for setting the rates, and specific ways that the funds will be spent. The site provides access to maps and plans so it is clear which projects will be pursued with TUFs funds. Furthermore, it provides contact information for city staff who concerned residents can call or email with questions.⁸⁹

6.8 Adjusting for Inflation

Many municipalities adjust their TUFs by an index that reflects inflation or the escalation of costs that relate to street maintenance, such as a construction index. Lake Oswego, OR, indexes its TUFs by the Engineering News Record Construction Cost Index (CCI) for the 20-city average. This is qualified in that the adjustment cannot be less than a 2 percent increase or more than a 7 percent increase.⁹⁰ On the other hand, Hillsboro, OR, does not index its TUFs, rather it increases them based on its needs.⁹¹

⁸⁸ City of Killeen, "Street Maintenance Fee, Killeen Street Service Video," <https://www.killeentexas.gov/488/Street-Maintenance-Fee>

⁸⁹ Hillsboro, OR, Public Works. Transportation Utility Fee. <https://www.hillsboro-oregon.gov/our-city/departments/public-works/transportation/street-and-road-maintenance/transportation-utility-fee>

⁹⁰ City of Lake Oswego, OR. January 1, 2020. Master Fees and Charges, 2020. p. 13. https://www.ci.oswego.or.us/sites/default/files/fileattachments/2020%20Master%20Fees%20Booklet_Final.pdf

⁹¹ Bailey, Tina, Hillsboro, OR, TUFs interview, May 5, 2020.

CHAPTER 7. TUFs LEGAL AND REGULATORY ISSUES

Municipalities that are considering establishing TUFs programs usually ensure that their State allows for TUFs, understand any legal issues under State law, and anticipate local legislative and public opposition.

7.1 Ensuring Appropriate Authority

Before a municipality establishes a TUFs program, it needs to ensure that there is a legal basis. This is usually a question that relates to whether the State in which the municipality is located is (1) a “home rule” State that is allowed the autonomy to impose TUFs, or (2) a “Dillon’s Rule” State with powers limited to what is explicitly permitted under State law. Appropriate legal counsel typically advises municipal staff on the applicable authority in their jurisdiction.⁹²

7.2 Considering Legal Challenges

Municipalities that establish TUFs programs also may benefit from understanding relevant State Supreme Court cases, even if they are not located in those States, because the issues raised in those cases may be relevant for any legislative or legal challenges to their program. Four State Supreme Courts have ruled on municipal TUFs programs. Three of them have struck down such programs and one ruled in favor, yet not for the municipality that was involved in the case. Table 10 summarizes key takeaways from each of the cases.

Table 10. Key takeaways from TUFs legal cases.

Case/State	Takeaway
Brewster v. City of Pocatello, Idaho, 1988 ⁹³	▪ Court holds that revenue to be collected has no relationship to regulation of travel over its streets, but rather to generate funds for street maintenance. ▪ The fee is, in reality, a tax.

⁹² National League of Cities. December 13, 2016. Cities 101 – Delegation of Power. <https://www.nlc.org/resource/cities-101-delegation-of-power>

⁹³ 768 P.2d 765 (1988). 115 Idaho 502 E. (AI) BREWSTER, Logan D. Robinson, Glen S. Marshall, Isaac McDougall, and Ann McDougall, husband and wife, Peter D. Behrendt, Guy Anderst, and Trevor Henderson, Plaintiffs-Respondents, v. CITY OF POCATELLO, a municipal corporation of Idaho, Richard S. Finlayson, Mayor of the City of Pocatello and the City Council of the City of Pocatello, Idaho, Defendants-Appellants, and People for a Progressive Pocatello, Inc., a non-profit corporation, intervenor. Nos. 17074, 17096. December 29, 1988. Rehearing Denied March 2, 1989.

Case/State	Takeaway
Bloom v. City of Fort Collins, Colorado, 1989 ⁹⁴	- TUFs is a service fee and not a property tax. - The provision allowing the “transfer” of TUFs monies to the general fund may transform the special fee into an “impermissible” tax. That provision negated the Fort Collins legislation, but not the TUFs mechanism per se. - The court recognized that TUFs is not conditioned on the voluntary choice of property owners; however, the court does not hold that the service fee must be voluntary.
State v. City of Port Orange, Florida, 1994 ⁹⁵	- TUFs receipts were used to secure revenue bonds. - TUFs convert a city’s roads into a toll road system with only property owners having to pay the tolls. - Court does not find statutory or constitutional authority for such tolls.
Covell v. City of Seattle, Washington, 1995 ⁹⁶	- TUFs varied by the value of the property so that a \$60,000 single-family house paid less than a \$2,400,000 mansion, even if the trip impact was the same. - Court found it difficult to determine that TUFs were (1) intended for services rendered, and (2) fees were intended to regulate street traffic. - Court ruled that these were taxes and not fees, and as a tax, it must be imposed in accordance with the requirements of law.

The case law suggests takeaways for the design of TUFs programs. For example, the Colorado Supreme Court’s holding highlighted that allowing for TUFs monies to flow into the general fund may blur the line between TUFs being fees or taxes. From a public policy perspective, TUFs benefits are that there is much greater transparency regarding the use of public monies. The Washington State case suggested that TUFs be based on a metric related directly to road use, such as the number of trips. Furthermore, in a major academic review of TUFs, Professor Carole Turley Voulgaris of Harvard University argues that cities in Texas establishing TUFs programs may help their future legal defense of the argument that TUFs are not “voluntary” by reducing the fees for residents who do not own vehicles.⁹⁷ As with all value capture

⁹⁴ 784 P.2d 304 (1989). Arvid R. BLOOM and Beverly T. Bloom, Plaintiffs-Appellees, v. CITY OF FORT COLLINS, Defendant-Appellant. No. 88SA162. December 18, 1989. As Modified on Denial of Rehearing January 16, 1990.

⁹⁵ 650 So.2d 1 (1994). STATE of Florida, Appellant, v. The CITY OF PORT ORANGE, Florida, a political subdivision of the State of Florida, Appellee. No. 83103. November 3, 1994. Rehearing Denied February 17, 1995.

⁹⁶ 127 Wn.2d 874 (1995). 905 P.2d 324, LIBBY COVELL, ET AL., Appellants, v. THE CITY OF SEATTLE, Respondent. No. 61178-5. November 2, 1995.

⁹⁷ Voulgaris, Carole Turley. 2016. A TUF Sell: Transportation Utility Fees as User Fees for Local Roads and Streets. *Public Works Management & Policy*, 21(4), 318. doi: 10.1177/1087724X16629961.

techniques, practitioners can consult with legal counsel familiar with their State's case law to determine the relevant legal issues.

7.3 Anticipating Legislative Opposition

In addition to challenges based on legal grounds, municipalities might anticipate challenges based on policy grounds. One criticism of the typical TUFs program based on the ITE *Trip Generation Manual* is that the fees are derived from estimates and not actual traffic generated by a property. In general, courts have found that TUFs programs which are based on a well-thought-out framework that attempts to treat each property in a similar way are acceptable. In the Colorado case, the court ruled 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 [*italics added*]."⁹⁸ Furthermore, the U.S. Supreme Court cases, *Nollan* and *Dolan* establish that other value capture instruments are acceptable as long as there is a "rational nexus" and "rough proportionality" between the exaction of the fee and the infrastructure that is being provided, and that the fee roughly corresponds to the services provided.⁹⁹

Another criticism is that some categories often do not accurately characterize the traffic impact of some nonresidential properties, especially if the TUFs program only has a handful of nonresidential categories. Wholesalers in Medford, OR, rejected a TUFs program, arguing that they should not have been lumped into a commercial land use category with retailers that generate many more trips. Shortly after the TUFs was implemented, Medford added new categories to its TUFs schedule.¹⁰⁰ As discussed, another way to remedy this is for municipalities to cap their highest TUFs, as Austin, TX, and Hillsboro, OR, have. In Austin's case, it capped its "traffic generation factor" at five times the residential rate. Food stores and healthcare facilities were charged equal amounts per acre of development, despite food stores generating almost four times as many trips per acre. These caps may be a natural result of political compromise; however, if fees are too far from the being reasonably related to the payers' use of city streets, they risk losing their legitimacy.¹⁰¹

A third criticism is with regard to application of the fee. In Portland, OR, a TUFs program adopted in 2001 was withdrawn the same year after a successful voter referendum petition. One of the criticisms was that some TUFs uses, such as tow charges for abandoned vehicles, were not directly related to road maintenance.¹⁰²

⁹⁸ 784 P.2d 304 (1989). Arvid R. BLOOM and Beverly T. Bloom, Plaintiffs-Appellees, v. CITY OF FORT COLLINS, Defendant-Appellant. No. 88SA162. December 18, 1989. As Modified on Denial of Rehearing January 16, 1990.

⁹⁹ Curtin, Jr., Daniel J. Exactions, Dedications and Development Agreements Nationally and in California: When and How Do the *Dolan/Nollan* Rules Apply. Presented by the Municipal Legal Studies Center of the Center for American and International Law. Annual Institute on Planning, Zoning and Eminent Domain, San Francisco, CA, April 9–11, 2003, April 10, 2003. https://www.ca-ilq.org/sites/main/files/file-attachments/resources_exactions.pdf

¹⁰⁰ Ewing, Reid. 1993. Transportation Utility Fees. Research Record No. 1395, pp. 15–24. <http://onlinepubs.trb.org/Onlinepubs/trr/1993/1395/1395.pdf#page=23>

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

CHAPTER 8. TUFs AND FINANCING

TUFs are intended to fund the maintenance of local transportation infrastructure, thereby extending the lives of street assets for a period of 5 to 10 years, and as much as 25 years, based on a city's experiences.¹⁰³ Most TUFs programs fund street maintenance on a pay-go basis, in which the monies collected in any given year are used to fund the street maintenance program over the next 1 to 5 years. Should TUFs receipts be inadequate to fund the program, then the city may increase the TUFs, reduce the program, or extend it beyond its stated period, such as from 5 to 8 years. Financing is rarely used in conjunction with TUFs.

Because of the uncertainty regarding the life of the street asset, securing long-term financing may be problematic for municipal TUFs programs. When municipalities secure financing for new transportation infrastructure by issuing municipal bonds or obtaining bank financing, they usually seek long-term maturities or durations, such as for 20 or more years, reflecting the long-term expected life of the asset. A municipality's street maintenance program varies as to how it extends street assets' lives. Since streets are often built at different times and/or because streets are subject to different geotechnical conditions, maintenance on one set of streets may vary from another. Cities, in general, do not measure the extent to which a street maintenance solution extends an asset life. They may, however, measure the PCI, which is arguably a proxy for asset life. Even in that case, however, there are likely to be "gray areas" since cities may accept lower PCIs when funds are scarcer, understanding that this will result in lower maintenance quality, poorer driving conditions, and, likely, additional maintenance costs in the future.¹⁰⁴ On its website, Highland, UT, uses similar arguments against bonding instead of imposing an \$18.50 monthly fee on all properties to a fund street maintenance program on a pay-go basis.¹⁰⁵

Municipalities could secure short-term financing, leveraging TUFs monies based on a conservative assumption that TUFs funding increases asset lives by at least 5 years. Furthermore, if the city has demonstrated that it is collecting its TUFs as expected and there is little volatility in TUFs collections, lenders may view this as a strong credit, similar to other municipal credits. Financing could help cities manage cash flow issues, such as if they were addressing a maintenance backlog. Municipalities could enter into discussions with a variety of lenders, including traditional municipal bond investment banks, commercial banks, the U.S. Department of Transportation's Build America Bureau Transportation Infrastructure Finance and Innovation Act (TIFIA) and Railroad Rehabilitation and Improvement Financing (RRIF) programs, and/or State or local infrastructure banks. Such financing considerations usually are coordinated with the municipality's financial and legal advisors.

¹⁰³ City of Chula Vista, CA. Street Maintenance website. <https://www.chulavistaca.gov/departments/public-works/operations/street-maintenance>; City of Sacramento, CA. Street Preservation & Maintenance Techniques website. <https://www.cityofsacramento.org/Public-Works/Maintenance-Services/Street-Maintenance/Pavement-Techniques>

¹⁰⁴ Based on Interviews with municipalities regarding their TUFs programs: Tina Bailey, Hillsboro, OR, interview, May 5, 2020; Erica Rooney, Lake Oswego, OR, interview, May 29, 2020; Josh Wheeler, Oregon City, OR, interview, June 8, 2020; Dave Klockeman, City of Loveland, CO, interview, June 30, 2020.

¹⁰⁵ City of Highland, UT. Transportation Utility Fund Background Information. <https://www.highlandcity.org/399/Transportation-Utility-Fund>

Even if TUFs are not used to secure financing, they can free up other funding sources that can be used to support financing. Several communities, including Lake Oswego, OR, and Hillsboro, OR, supplemented gas tax sources with TUFs, using gas taxes to fund new projects to secure financing.¹⁰⁶

¹⁰⁶ Rooney, Erica, Lake Oswego, OR, interview. Bailey, Tina, Hillsboro, OR, interview, May 5, 2020.

CHAPTER 9. WHERE TUFs ARE USED

The following summaries of TUFs programs provide additional information on the background of some programs. Additional TUFs program summaries can be found at [FHWA EDC-5](#).¹⁰⁷

9.1 City of Corpus Christi, Texas

Corpus Christi is a coastal town situated on the Gulf of Mexico. A mid-sized town of roughly 386,000 people, it is the eighth most populated municipality in Texas. In 2013, the city council approved an ordinance to establish a street maintenance fee (SMF) for a 10-year period.¹⁰⁸ These revenues funded, in part, the city's Street Preventative Maintenance Program (SPMP), which is part of a four-part plan designed to improve street conditions through reconstruction, rehabilitation, systematic planned street maintenance, and policy changes. The SPMP provides preventative maintenance for those roads classified as in "good" or "fair" condition based on their pavement quality index score. The street maintenance funds are not meant to rehabilitate roads in "poor" or "failed" condition.¹⁰⁹ In fiscal year 2019–2020, the funds collected from the SMFs contributed \$11.7 million, or close to 36 percent of the total street maintenance budget of \$32.5 million. The remaining funds for street maintenance were derived from allocations from the Regional Transportation Authority, 5 percent of revenues collected from industries housed in the industrial district,¹¹⁰ the city's general fund, and other sources. For residents who may take issue with the street maintenance fee, which amounts to \$5.38 per single family house per month in 2020, the city has established an appeals process, and for lower income residents, a discount program.¹¹¹

9.2 City of Hillsboro, Oregon

The City of Hillsboro is a mid-sized town of just over 100,000 people located in a tech-heavy industrial corridor to the northwest of Portland, OR. In 2008, after years of a growing maintenance backlog that could not be addressed through the city's share of State and county gas taxes,¹¹² the city instituted a TUFs program. The program established a monthly user charge on residential and nonresidential property owners. The charges were levied via the city's utility bill, and the proceeds, collected from all residential, business, government, school, and nonprofit properties, are used to support improvements in pavement conditions and construction of new sidewalks and bike paths. Residential property owners pay

¹⁰⁷ U.S. Department of Transportation, Center for Innovative Finance Support. Transportation Utility Fees. https://www.fhwa.dot.gov/ipd/value_capture/defined/transportation_utility_fees.aspx

¹⁰⁸ Martinez, Richard. Street Maintenance Fee City of Corpus Christi Use Transportation Utility Fee (TUF) to Fund Roadway Maintenance & Enhance Safety. FHWA Virtual Peer Exchange, May 14, 2020.

¹⁰⁹ Ibid.

¹¹⁰ The City of Corpus Christi has "industrial district agreements with industries located within the extraterritorial jurisdiction of the City. The companies in the Industrial District pay the City an amount in lieu of property taxes. Five percent of Industrial District revenues go to the Street Maintenance Fund." Adopted FY19–FY20 Operating and Capital Budget. City of Corpus Christi, TX. 2019, p. 48.

¹¹¹ Martinez, Richard.

¹¹² Hillsboro Ad Hoc Transportation Finance Committee. April 2008. Final Report.

monthly fixed fees that invest in two programs—the Pavement Management Program and the Bicycle and Pedestrian Capital Improvement Program. Nonresidential property owners (e.g., governments, schools, nonprofits) pay a base charge and a calculated charge based on property type (according to a classification system), and, in most cases, the business's square footage. Funds received from nonresidential property owners are invested in the Pavement Management Program. In 2015, Hillsboro's city council adopted a stepped rate increase over the subsequent 5-year period, intending to use the funds to fully fund the city's Pavement Management Program, which is one part of the road maintenance budget. Since 2018, revenues from its TUFs program have represented 25 percent to 27 percent of all transportation-related revenues for the city.¹¹³ In 2019, Hillsboro conducted a 5-year review of this program, adjusting the fees to ensure that the cost of maintaining roads was spread fairly across users.¹¹⁴

9.3 City of Highland, Utah

The City of Highland is a small, but rapidly growing suburb of roughly 15,000 people. It is located approximately 30 miles south of Salt Lake City. In the mid-2010s, a consistent complaint from residents pertained to the inadequate condition of the roads, making the municipality prioritize maintaining and improving roads. The city conducted a study in 2016 which found that 45 percent of the city's roads were in poor condition, with many other roads deteriorating quickly.¹¹⁵ The city evaluated options for funding improvements and rehabilitation, including considering raising property taxes. In May 2017, after research and five public hearings, the city council voted to create a Transportation Utility Fund, dedicated to the operations, improvement, maintenance, and rehabilitation of roads. The fund was capitalized through an \$18.50 per month transportation fee on each utility account, which the city began charging in August 2017. There are several fund requirements, including (1) monies can only be used for road maintenance and rehabilitation, (2) an annual report on the fund will be part of the budget process, (3) they will reevaluate the fund if the city gains more or less road funds from the State's gas tax¹¹⁶ or other sources, and (4) the fee will expire on June 30, 2028, when all of the city's bonds will be paid off.¹¹⁷

9.4 City of Newberg, Oregon

The City of Newberg has just over 22,000 people and is located near Portland. In 2016, the city's 65.5 miles of paved streets and 4 miles of gravel roadways ranged from poor to good condition, and the cost of rehabilitating or maintaining them exceeded the available funds.¹¹⁸ The city determined that to maintain current pavement conditions it needed to overcome a funding shortfall of approximately \$1.9 million per year.¹¹⁹ To address this, the city convened an ad hoc committee, composed of 14 representatives from businesses, nonprofits, the school district, and others who use the road network, to examine ways to pay for road maintenance. After several public consultations, the committee recommended that the city adopt

¹¹³ See the City of Hillsboro, OR, Adopted Budget Fiscal Year 2020–2021, p. 78. <https://www.hillsboro-oregon.gov/city-services-overview/budget>

¹¹⁴ <https://www.hillsboro-oregon.gov/our-city/departments/public-works/transportation/street-and-road-maintenance/transportation-utility-fee>

¹¹⁵ <https://www.highlandcity.org/399/Transportation-Utility-Fund#:~:text=The%20fee%20is%20a%20flat,churches%20will%20pay%20a%20fee>

¹¹⁶ Specifically, the Class B & C gas tax.

¹¹⁷ <https://www.highlandcity.org/399/Transportation-Utility-Fund#:~:text=The%20fee%20is%20a%20flat,churches%20will%20pay%20a%20fee>

¹¹⁸ <https://www.newbergoregon.gov/engineering/page/transportation-utility-fee>

¹¹⁹ City of Newberg, OR, Ordinance 2016-2811, Transportation Utility Fee. <https://www.newbergoregon.gov/engineering/page/transportation-utility-fee>

a transportation utility fee, which it did in 2017. The TUFs were expected to bring in close to \$1.2 million per year to be supplemented with potentially \$0.7 million from another source, such as a gas tax.¹²⁰ Single-family homes pay \$4.99 per month; multifamily homes, apartments, and condominiums pay slightly less. Monthly fees charged to nonresidential properties are based on property class and square footage. The city allows for the rate charged to nonresidential buildings to be contested.¹²¹ Furthermore, there is a 50 percent waiver for owners experiencing economic hardships, including for unemployment of a household member if the household makes less than 80 percent of the U.S. Department of Housing and Urban Development median household income.

9.5 City of Taylor, Texas

Taylor is a city of roughly 15,000 people located 29 miles northeast of Austin, the State capital. In February 2016, to address the city's street repair and maintenance challenges, the city council approved a TUFs ordinance, which became effective in June 2016. The TUFs are structured as two separate flat rates: one for residential properties of \$8 per month and one for commercial properties. The rates for commercial properties are based on a five-tier structure, ranging from \$25 to \$133 a month, depending on property size and trip generation factors.¹²² Funds raised via the TUFs can only be used for street repair, reconstruction, and maintenance, as well as sidewalk maintenance. The city reviews the approved ordinance and rate structure every 3 years.¹²³

¹²⁰ Request for Council Action for Ordinance No. 2016-2811, Legislative Hearing, Newberg, OR, May 2, 2016.

¹²¹ https://www.newbergoregon.gov/sites/default/files/fileattachments/engineering/page/17821/ord_2016-2811_transportation_utility_fee_0.pdf

¹²² <https://www.newbergoregon.gov/engineering/page/tuf-frequently-asked-questions>

¹²³ <https://www.ci.taylor.tx.us/826/Transportation-User-Fee#:~:text=The%20TUF%20is%20structured%20in,size%20and%20trip%20generation%20factors>

¹²³ Ibid.

APPENDIX A. EXAMPLE ORDINANCE

Excerpts from the City of Hillsboro, OR, City Code, Chapter 3: Finance, Subchapter 3.32 “Transportation Utility Fee,” found at <http://qcode.us/codes/hillsboro/>

[3.32.010 Definitions](#)

[3.32.020 Transportation utility fee](#)*

[3.32.030 Classification](#)*

[3.32.040 Delegation](#)*

[3.32.050 Transportation fund](#)*

[3.32.060 Fee imposed](#)

[3.32.070 Fee determination](#)*

[3.32.080 Billing and collection](#)*

[3.32.090 Enforcement and penalties](#)

[3.32.100 Waiver of fees](#)

[3.32.110 Fee credits](#)

[3.32.120 Administration](#)

[3.32.130 Appeal](#)

[3.32.140 Mixed use and related properties](#)

[3.32.150 Implementation rules](#)

[3.32.160 Inspection of developments](#)

* Denotes subchapters printed in full below; go to the municipal code to see the entire ordinance.

3.32.020 Transportation utility fee

A transportation utility fee (TUF) is created to fund planning, management, construction, preservation, maintenance, and, where necessary, alteration of the transportation system in the city, including patching, sealing, and reconstructing public streets, repairing sidewalks, maintenance and repair of public bike paths, landscape enhancements along the rights-of-way, tree replacement along streets, maintenance of safety and operational equipment, and the operating cost of street lights.

3.32.030 Classification

The TUF is based on the direct and indirect use of or benefit derived from the use of public transportation facilities. It is not a property tax and is not subject to the limitations of Article XI, Section 11 of the Oregon Constitution.

3.32.040 Delegation

The manager will work with the transportation committee (TC) to establish the process of consideration and assignment of categories of use subject to appeal to the council. The manager will develop and maintain programs for the maintenance of transportation facilities and capital improvement programs to upgrade substandard facilities to current engineering standards for the safety and welfare of the community. The programs are subject to finance committee (FC) review and council approval and the allocation and expenditure of budget resources for transportation facility improvement, maintenance, and street lighting. The manager is responsible for the collection of fees under this subchapter.

3.32.050 Transportation fund

- A. All funds collected under this subchapter will be deposited into the transportation fund. The TUF collected under this subchapter, including fees carried over from prior years and investment earnings from the fees, will be used to operate and administer the transportation facility maintenance and capital improvement programs. This program will patch, seal, overlay/reconstruct streets, repair sidewalks, maintain and repair bike paths, landscape along the rights-of-way, replace trees along streets, maintain safety and operational equipment, and pay for lighting streets. The TUF paid and collected is reasonably related to the cost of providing these services. If the TUF collected is insufficient for these purposes, the council may allocate other non-dedicated funds to pay such costs. The council may direct reimbursement from the transportation fund if additional fees are collected. All amounts in the transportation fund may be invested in accordance with State law. Earnings from such investments will also be credited to the transportation fund.
- B. The administration, maintenance, and operations expenditures from the transportation fund need not relate to the real property from which the TUF is collected. The TUF may not be used for other purposes, except to pay for an equitable share of accounting, management, and other administrative costs that relate to operation of the TUF program. Otherwise, TUF revenues will be used solely to pay for the cost of operation, administration, maintenance, repair, improvement, renewal, replacement, and reconstruction of transportation facilities.
- C. Revenues received for transportation facility operations, maintenance, and preservation will be used solely for such purposes.

3.32.070 Fee determination

- A. The TUF will be calculated as a monthly service charge and collected from owners or occupants of developed property in a manner similar to the collection of water or sewer fees. Fees need not be invoiced monthly but will not be invoiced for intervals longer than 3 months.
- B. The amount of the TUF will be determined by the TC and approved by council resolution. The TUF may be modified annually based on one or more of the following factors:
 - 1. Cost of Service Adjustment. A rate adjustment reflecting a change in the annual amount of revenue required to maintain the transportation facilities defined by this subchapter after including other city revenue that may be pledged for that purpose;

2. Inflationary Index Adjustment. A rate adjustment reflecting the annual changes in the cost of labor, materials, and other services linked to changes to broader economic conditions as measured by the Oregon Department of Transportation (ODOT) Four-Quarter Moving Average Construction Cost Index.
- C. The annual adjustment to the TUF determined by this section will not be automatic or predetermined. The TC will review the TUF program annually for goals, accomplishments, adequacy of collected revenue, and the availability of other revenue sources to determine and recommend any modification to the amount of TUF collected.
- D. Monthly service fees will be established for the following types and classes of developed property:
 1. Residential Developed Properties (RDPs). Developed uses whose primary purpose is domestic shelter, excluding hotels, motels, and other commercial establishments that provide temporary shelter.
 - a. Single-family includes developed property with one, two, or three separate residences. A mobile or modular home located on a developed property, whether alone or with one other dwelling, is considered a single-family dwelling. Each dwelling unit is subject to the TUF for this class. An accessory dwelling is not considered a single-family dwelling.
 - b. Multifamily includes developed property with four or more attached dwellings, condominiums, or town homes and mobile homes in parks as defined in State law. Multifamily also includes accessory dwelling units. Each dwelling is subject to the TUF for this class.
 2. Nonresidential Developed Properties (NDPs).
 - a. Group 1—those that generate fewer than seven average daily trips per 1,000 gross square feet of developed area.
 - b. Group 2—those that generate seven to 20 average daily trips per 1,000 gross square feet of developed area.
 - c. Group 3—those that generate 21 to 52 average daily trips per 1,000 gross square feet of developed area.
 - d. Group 4—those that generate 53 to 150 average daily trips per 1,000 gross square feet of developed area.
 - e. Group 5—those that generate 151 to 400 daily trips per 1,000 gross square feet of developed area.
 - f. Group 6—those that generate more than 400 average daily trips per 1,000 gross square feet of developed area.
 - g. Group 7—those others with trip generating characteristics that are either not documented in the Institute of Transportation Engineers Manual or have special circumstances that merit separate fee calculation. Examples include gas stations, hospitals, universities, churches, transit centers, fairgrounds, and aviation facilities.

- E. The amount of the TUF for the various types and groups of developed properties will be determined by the following:
 - 1. The TUF shall be allocated between RDP and NDP based on the following distribution by center lane mile of roadway:
 - a. Arterial, collector, and neighborhood route roadways shall be allocated equally between RDP and NDP.
 - b. Local commercial, local industrial, commercial alley, and industrial alley roadways shall be allocated entirely to NDP.
 - c. Local residential and residential alleys shall be allocated entirely to RDP.
 - 2. The amount of the TUF for the various groups of NDP shall be based on the distribution of traffic volumes between the groups as estimated using the Institute of Transportation Engineers *Trip Generation Manual*, 7th Edition.
- F. The TUF for NDPs will be a minimum charge equal to the lowest monthly RDP rate per dwelling unit.
- G. Periodically, the city will reevaluate the allocation of costs for developed property classes and related rate structure to ensure that transportation utility costs are fairly apportioned. A fee examination will take place at least once every 5 years. (Ord. 6111 § 1, 2015; Ord. 5961 § 1, 2011)

3.32.080 Billing and collection

- A. The TUF will be billed and collected with monthly water and sewer bills for developed properties using water and sewer. The TUF will be billed and collected separately for developed properties not utilizing water and sewer.
 - 1. For an RDP occupied by the owner and subject to water and sewer utility charges, the TUF bill will be sent to the owner.
 - 2. For an RDP not occupied by the owner, the TUF will be billed to the same persons as the bill for water and sewer charges.
 - 3. For an NDP that is subject to water and sewer utility charges, a common TUF bill will be sent to the same persons as the bill for water and sewer charges, excepting special billing procedures related to mixed-use properties as set forth in this subchapter.
 - 4. For an RDP or NDP that is not subject to water and sewer utility charges, the TUF bill will be sent to the owner.
 - 5. If a tenant in possession of any developed property pays the fee, the payment relieves the owner from that obligation. However, the city will not look to any person other than the owner for the payment of the TUF.
 - 6. All TUF bills become due and payable upon receipt.
- B. If payments received from utility billings are inadequate to satisfy all of the water, sanitary sewer, storm sewer, and TUF balances in full, credit will be applied proportionately between funds, unless directed otherwise by the manager.

APPENDIX B. ABBREVIATIONS AND GLOSSARY

Abbreviation	Term	Description
ADA	Americans with Disabilities Act of 1990	A civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public. As pertains to local transportation infrastructure, depending on the project, the ADA could require increased accessibility, such as the installation of curb ramps.
FAHP	Federal-aid Highway Program	Supports State highway systems by providing financial assistance for the construction, maintenance, and operations of the Nation's 3.9 million miles of highway network, including the Interstate Highway System, primary highways, and secondary local roads.
FHWA	Federal Highway Administration	An agency within the U.S. Department of Transportation that supports State and local governments in the design, construction, and maintenance of the Nation's highway system (Federal-aid Highway Program) and various federally and tribal owned lands (Federal Lands Highway Program).
ITE	Institute of Transportation Engineers	Educational and scientific organization established in the 1930s that has produced a number of versions of the ITE <i>Trip Generation Manual</i> .
ITE Manual	ITE Trip Generation Manual	Manual produced by ITE, based on survey data from thousands of studies primarily in the United States and Canada since the 1960s. Most of the data is collected at suburban locations and provided on a voluntary basis. The data has been collected at various time of the year under a variety of conditions.
O&M	Operations and Maintenance	Functions, duties, and labor associated with daily operations and normal repair, replacement of parts and structural components, and other activities needed to preserve an asset so that it continues to provide acceptable services and achieves its expected life.
PCI	Pavement Condition Index	The PCI is a numerical indicator that rates the surface condition of the pavement. The PCI provides a measure of the present condition of the pavement based on the distress observed on the surface of the pavement, which also indicates the structural integrity and surface operational condition (localized roughness and safety).

Abbreviation	Term	Description
PMUF	Pavement Maintenance Utility Fund	A fund created in Oregon City, OR, to collect all revenues from its TUFs program.
TUFs	Transportation Utility Fees	Fees imposed by municipalities on property owners, treating the transportation system like a utility, charging property owners or occupants for their share of transportation costs based on system use.

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