

SEATTLE DEPARTMENT OF TRANSPORTATION
STREET USE COST CENTER
RATE MODEL METHODOLOGY

2009-2010

by

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ABSTRACT

The Seattle Department of Transportation's (SDOT) Street Use division manages usage of the City's right of way through permit issuance, inspections and plan review. The Street Use division is organized as a cost center, and is fully self-supporting through fees and charges. This paper details the methodology behind the Seattle Department of Transportation's 2009-2010 Street Use cost center rate model. The structure of the cost center, sources of data, and basis for various forecasts is explained in detail. This paper was prepared as part of the 2009-2010 biennial rate adjustment process for the Street Use cost center's fees and charges.

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I. Background

The Seattle Department of Transportation's (SDOT) Street Use division manages usage of the City's right of way through permit issuance, inspections and plan review. The Street Use division is organized as a cost center, and is fully self-supporting through fees and charges. As with all cost centers, the long-run financial goal is to collect revenues equal to costs and achieve a net balance of zero over the life of the cost center.

Fees and charges for the Street Use cost center are established by City ordinance on a biennial basis and are occasionally adjusted on an annual basis. The most recent fee ordinance is City of Seattle Ordinance Number 122295, signed into law November 22, 2006 and went into effect in 2007. SDOT's overall authority to manage the public right of way and to collect related fees is established by Chapter 15.04 of the Seattle Municipal Code.

The purpose of this study is to explain the rate-setting methodology used to develop the 2009-2010 schedule of Street Use fees.

II. Rate Model Framework

The purpose of establishing rates in the Street Use cost center is to equitably distribute the costs of right-of-way management services onto the citizens, businesses and other government agencies that utilize them. In addition to cost recovery, some fees are designed to serve as tools that help manage the public right of way toward its best use.

The general approach for the 2009-2010 Street Use rate model follows the recommended practices outlined in Chapter 7, "Setting Fees and Charges," in *Cost Analysis and Activity-Based Costing for Government* by R. Gregory Michel (Government Finance Officers Association, 2004). Conceptually, the rate model was developed in a four-step process:

- **Define the Business**: The business of the cost center was divided into unique services for which costs are collected, and unique revenue streams that are designed to offset those costs of service;

- **Compile Data**: Financial and other data was collected for each service and revenue type for as many previous years as possible;

- **Develop Forecasts**: Forecasts of cost center expenditures and revenue were developed based on a series of assumptions about underlying economic and policy conditions; and

- **Propose New Rates**: Based on revenue and expenditure forecasts, rate proposals were developed for each service category that equitably recover the full costs of service while also satisfying other City policy goals.

The remainder of this paper explains how this general framework was practically implemented in the 2009-2010 rate model.

III. Cost Center Expenditures

The expenditures of the cost center can be broadly divided into four categories: (1) costs related to permit issuance; (2) costs related to inspection and plan review; (3) other non-billable costs—such as new software and equipment, consultant studies and time spent on administrative tasks—and (4) the cost of the annual Advance Fund transfer.[1]

The first two types of cost are what accountants classify as *direct costs*. That is, they are directly attributable to a final service provided to the public—in this case, permit issuance and inspection and plan review services. The third cost category, non-billable costs, is an *indirect cost*.[2] Although these costs are incurred as part of the necessary business of the cost center, they are not directly attributable to any particular service provided. The final cost category, the Advance Fund transfer, is also technically an indirect cost. However, because it is funded specifically by Use & Occupation fees, it is treated separately from other cost center expenditures.[3]

In practice, all costs are captured in the City's Summit financial system under project T9CSTPIB ("Utility Inspection/Mapping Cost Center") within the Right-of-Way Management Budget Control Level (BCL).[4] Below the project level, different types of costs are captured in activities. Currently there are 30 active expenditure activities. This study classifies these activities into three cost categories: permit issuance, inspection and plan review, and non-billable costs. The Advance Fund transfer is also classified as a cost, but is treated separately from other costs because it is funded specifically by Use & Occupation fee revenue.

Table 1 summarizes 2007 actual expenditures—the most recent complete year available—and illustrates the crosswalk between Summit expenditure activities and conceptual rate model cost categories.

The largest cost category in 2007 was non-billable costs at $5.3 million. This total includes $1.4 million of expenditures for the final year of the Right-of-Way Management Initiative (ROWMI) ramp-up. This is followed by inspection and plan review services at $4.2 million. The smallest cost category is permit issuance at $1 million. The Advance Fund transfer was $1,664,000. In total, 2007 costs of service were $12.13 million.

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[1] The "non-billable" costs category contains expenditures on the Right-of-Way Management Initiative (ROWMI), which completed major operations at the end of 2007.

[2] While the terminology of "direct" and "indirect" cost is used to categorize types of costs in the 2009-2010 rate model, in fact all Summit expenditure activities capture the fully-loaded cost of each type of expenditure. That is, what we classify as "direct costs" are in fact groups of activities that are directly related to service provision, including all fully-loaded costs. Similarly, what we classify as "indirect costs" are groups of activities not directly related to service provision, including all fully loaded costs.

[3] For a complete explanation of the Advance Fund transfer, see Box 1.

[4] Because the costs of the Advance Fund transfer are recorded as a contra-revenue, they do not directly appear in Summit expenditure activities. See Box 1 for a complete explanation.

Table 1. Expenditures of the Street Use Cost Center in 2007 (Project T9CSTPIB)

Cost Category	Summit Activity	Activity Description	Amount
Permit Issuance	TWA0052	ST VENDOR PERMIT FEES	$6,621
	TWA0060	ST USE PERMIT ISSUANCE	$295,505
	TWA0061	ANNUAL RENEWAL PERMIT ISSUANCE	$364,998
	TWA0062	SIDEWALK CAFE WORK	$3,950
	TWA0070	UTILITY PERMIT ISSUANCE	$309,881
	TWA0074	TERM PERMIT ISSUANCE	$8,009
	TWA0122	PRE-PERMIT ISSUANCE	$44,191
Subtotal			$1,033,155
Plan Review and Inspection	TWA0050	UTILITY INSPECTIONS/MAPPING	$1,295,986
	TWA0113	ST USE INSPECTIONS-REIMB	$807,013
	TWA0114	SEWER INSPECTION-REIMB	$35,459
	TWA0117	SHORING/DCLU-INSPECTION	$244,048
	TWA0120	SHORING/DCLU PLAN REVIEW	$228,884
	TWA0121	PRIVATE CONTRACT INSPECTIONS	$1,540,118
	TWA0129	POLE AND AERIAL PERMIT INSPECT	$1,093
Subtotal			$4,152,602
Non-Billable Costs	TWA0080	GIS EXPENDITURES	$234,158
	TWA0141	SU PERMITING BUSINESS REDESIGN	$524
	TWA0142	ROWM PROJ MGMT OFFICE	$103,581
	TWA0144	ROW IMPROVEMENT MANUAL	$2,893
	TWA0147	GIS CAPABILITIES	$112,775
	TWA0148	FUTURE ENHANCEMENTS	$398,319
	TWA0149	RIGHT-OF-WAY COORD REDESIGN	$478,432
	TWA0150	CUSTOMER INQUIRIES	$324,426
	TWA0151	FIELD ACCESS	$297,952
	TWA0152	NEWSTAND REMOVAL	$877
	TWA0206	NONBILLABLE-ROWI SINGLE FAMILY	$281
	TWA0207	NONBILLABLE-ROWI MULTI/COMMERC	$948
	TWA0208	NONBILLABLE-ROWI OPT OUT	$132
	TWA0209	NONBILLABLE-NON PRIVATE DEVELP	$264
	TWA0210	NONBILLABLE-PRIVATE DEVELOPMNT	$2,063
	TWB1207	STREET USE DIVISION ACTIVITIES	$3,325,480
Subtotal			$5,283,106
Total Summit Costs			$10,468,862
Advance Fund Transfer*	n/a	n/a	$1,664,000
Total Costs			**$12,132,862**

*Note: Advance Fund Transfer is recorded as a contra-revenue, and does not directly appear as an expenditure in Summit. See Box 1 for a complete explanation of the Advance Fund transfer.
Source: SDOT Finance.

Box 1:
History and Explanation of the Advance Fund Transfer

Prior to 2004 the Street Use division contributed funds to the City's General Fund. In 2004, Street Use was reorganized as a cost center and was made financially independent from the General Fund. At the time, Street Use contributed approximately $2.7 million to the General Fund and received back $1.1 million. The remaining $1.6 million was contributed to other general fund transportation projects. On a net basis, this resulted in a transfer of $1.6 million from the Street Use division to the General Fund.

In 2004, a decision was made to make the Street Use cost center independent of the City's General Fund. At the time, it was determined that SDOT would suffer a loss of $1.6 million in General Fund budget authority if all transfers were ended outright, since the cost center had previously contributed $1.6 million to the General Fund on a net basis.

To prevent other SDOT programs from bearing the burden of this loss of budget, a $1.6 million annual transfer was arranged from the Street Use cost center to SDOT's Advance Fund (which consists of General Fund plus transferred-in revenue from the Street Use cost center). These funds are then transferred to SDOT's Street Maintenance division, which is primarily funded by General Fund dollars.

In practice, this transfer is executed on a monthly basis as a contra revenue in project T9CSTPIR under activity TWA060R. The amount is transferred through the Advance Fund and is entered as a contra expenditure in the Street Maintenance project TG351500 under activity TT00000. Because the transfer is executed as a contra revenue, it does not appear as an expenditure by the Street Use cost center in Summit, and Summit revenue for the cost center appears lower than actual revenue by the amount of the transfer. Each year the transfer is increased by the rate of inflation. In 2008, the transfer is $1,723,030, or $143,585.83 per month.

Financially, the Advance Fund transfer represents a cost that is borne by the Street Use cost center. However, this cost is not funded by permit issuance fees or inspection and plan review fees, and therefore is not considered part of the "revenue requirement" for those fees. Instead, the transfer is funded exclusively by revenue from Use & Occupation fees, which are fees designed to discourage short- and long-term blockage of the public right of way.

Prior to 2004, the $1.1 million that was returned to the cost center by the General Fund was used internally to fund operations. After the cost center was made independent of the General Fund, the existing $1.1 million cost offset was retained to fund a portion of inspection and plan review costs. Today, this offset is executed with Use and Occupation fee revenue. That is, a portion of Use and Occupation fee revenue is annually diverted to "buy down" the hourly fee for inspection and plan review services.

As with the Advance Fund transfer that began in 2004, the amount of this cost offset is annually increased by the rate of inflation. In 2008, the cost offset is $1.17 million. For an illustration of how Use and Occupation fee offsets affect cost center rates, see Figure 1 and the accompanying text.

A. Revenue Requirements for Service Categories

The first step in developing cost center rates is to estimate the cost of each service provided. Following GFOA recommended practice for the setting of government fees and charges, we estimate the full cost of service including all direct and indirect costs.[5]

The two services for which fees are established are (1) permit issuance, and (2) inspection and plan review services. To arrive at the revenue requirements for each, we begin with the direct cost for each service.

As shown in Table 1, the direct cost of permit issuance was $1,033,155 in 2007. The direct cost of plan review and inspection services was $4,152,602.[6] These serve as the two main cost pools in the 2009-2010 rate model.

To arrive at the full cost of service, non-billable costs must be allocated to these direct cost pools. In 2007, non-billable costs were $5,283,106. The cost of the Advance Fund transfer is not allocated to the direct cost pools because it is directly funded by Use & Occupation fee revenue.

Non-billable costs are allocated to the permit issuance and inspection and plan review cost pools on a proportional basis based on total expenditures. That is, the amount of non-billable costs allocated to each cost pool is calculated as follows:

$$\textit{Non-Billable Cost Allocated to Pool} = \textit{Total Non-Billable Costs} \times \left(\frac{\textit{Direct Cost of Pool}}{\textit{Total Direct Costs}} \right)$$

For example, in 2007 non-billable costs were $5,283,106. To calculate the portion allocated to the permit issuance pool, we divide the direct costs of permit issuance by the sum of direct costs for both permit issuance and inspection and plan review, or ($1,033,155)/($1,033,155 + $4,152,602 = $5,185,757) = 20 percent. This 20 percent is then applied to total non-billable costs to determine the amount allocated to permit issuance.

Once non-billable costs have been allocated to the permit issuance and inspection and plan review cost pools, we have arrived at the total revenue requirements for each service. In 2007, the total revenue requirement for permit issuance was $2,085,704. The total revenue requirement for inspection and plan review was $8,383,158.

Once revenue requirements have been developed, we next apply the cost offsets from Use & Occupation fee revenue.[7] Currently, there are two cost offsets. One uses a portion of Use and Occupation fee revenue to fund the annual Advance Fund transfer, and the other

[5] See "User Charges and Fees," C. Kurt Zorn in *Local Government Finance: Concepts and Practices*, edited by John E. Petersen and Dennis R. Strachota (GFOA, 1991).
[6] These costs represent the fully-loaded project costs of these activities as recorded in the City's Summit financial system, including all direct and indirect costs.
[7] For a complete explanation of the cost offsets from Use & Occupation fee revenue, see Box 1.

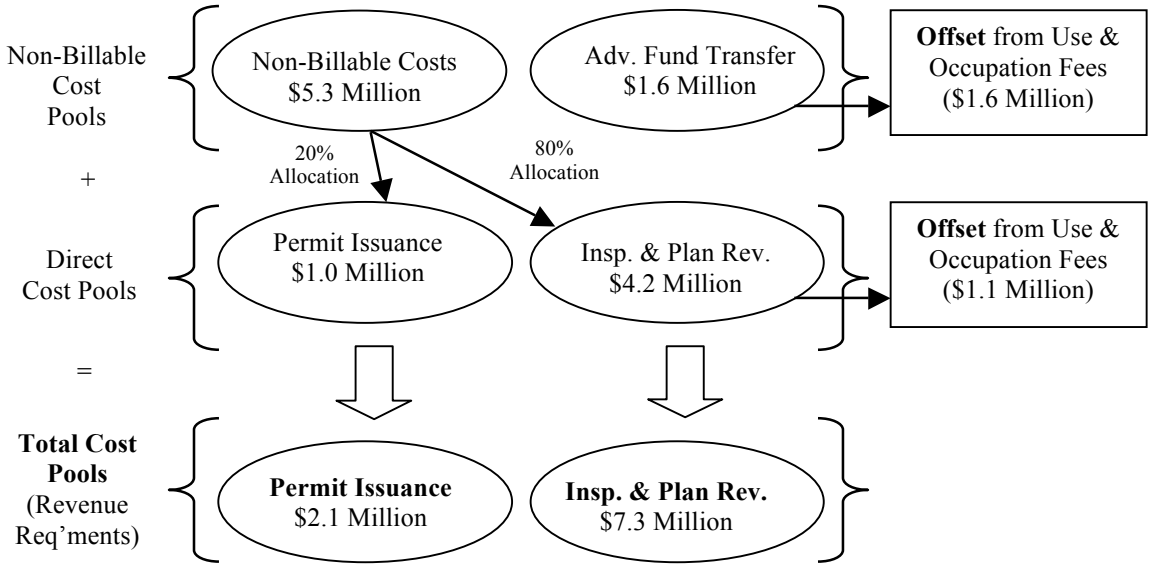
uses a portion of Use and Occupation fee revenue to "buy down" the revenue requirement for inspection and plan review. This arrangement is the result of the prior-year policy decisions by SDOT management detailed in Box 1.

In 2007, the cost offset to fund the Advance Fund transfer was $1,664,000, and the cost offset to inspection and plan review services was $1,132,673. Once these offsets have been applied, we arrive at the final net revenue requirements for permit issuance and inspection and plan review.

In 2007, the net revenue requirement for permit issuance was $2,085,704. The net revenue requirement for inspection and plan review services was $7,250,485. These revenue requirements represent costs that must be equitably recovered through fees and charges.

Figure 1 illustrates the process of developing revenue requirements from raw expenditure data, as well as the 2007 revenue requirements for each service category.

Figure 1. Development of Street Use Cost Center Revenue Requirements for 2007



Source: SDOT Finance.

B. Forecasting Expenditures

Expenditures for City of Seattle programs are legally controlled by budget authority. Within SDOT, budgets are established at the project level. For the Street Use cost center, the 2008 approved budget for project T9CSTPIB is $9,789,710. In addition to these budgeted expenditures, several non-budgeted costs are expected to be incurred in 2008. These non-budgeted costs include:

- $870,000 for the costs of a one-time move from the 37th floor to the 23rd floor of the Seattle Municipal Tower; and
- $266,491 for process improvements recommended by the recent "Sidewalk Permitting Review Process," including $46,648 for one-half year of an Administrative Specialist II, $69,844 for one-half year of a Strategic Advisor I, and $150,000 in consultant services.

Adding budgeted and non-budgeted costs, we arrive at a base service cost of $10,926,201 in 2008. Adding to this base service cost the 2008 Advance Fund transfer of $1,723,030, we arrive at a total 2008 expenditure estimate of $12,649,231.

Forecasts of expenditures in 2009 and 2010 take into account three factors: (1) Budget Issue Paper (BIP) requests for new spending authority, (2) regular inflation adjustments to existing expenditures, and (3) cost increases expected to exceed the ordinary rate of inflation in 2009 and 2010.

The Street Use division has tentatively proposed $1.1 million in additional expenditures in both 2009 and 2010. These expenditures will be requested as part of the normal 2009-2010 budget process. As with all budget requests, some or all of these requests may not be approved. For the purposes of developing 2009-2010 cost center rates, we include all proposed BIP costs.

Table 2 summarizes the estimated cost of the 2009-2010 Street Use proposed BIPs.

Table 2. Assumed Cost Increments for Street Use Expenditure Forecasts

Expected Cost Increments from 2009-2010 BIPs	2009*	2010*
Response to Use Fee Audit		
Inspector (Associate C.E.S.) for Use Fee Compliance	$141,976	$145,810
Vehicle Fleet Add	$24,000	$0
Vehicle Rental Charges	$4,490	$4,611
Response to Sidewalk Permit Review Process		
Admin Spec. II	$93,296	$95,815
Strategic Advisor I	$139,687	$143,459
Consultant Costs (Fee Estimation Study & Process Improvements)	$450,000	$450,000
Other Position Adds		
Inspector (Associate C.E.S.) for Non-Construction Group	$141,976	$145,810
Admin. Spec. II	$93,296	$95,815
Other Non-Labor Cost Increments		
Other Employee Training ($500/FTE/Year)	$29,000	$29,783
Total Cost Increments	**$1,117,721**	**$1,111,102**

Source: SDOT Finance.

Once proposed BIPs have been accounted for, the 2009-2010 rate model assumes most other expenditures grow by the annual rate of inflation. The inflation measure used is the Seattle-area CPI-W for the 12-months ending in June. This inflation measure is used for the annual cost-of-living adjustments for most SDOT salaries. Because labor costs dominate expenditures in the Street Use cost center, this measure is an appropriate measure for most future cost increases.

For 2008 and 2009, the forecast of CPI-W is drawn from the inflation forecast provided by the Seattle Department of Finance.[8] In 2010 and beyond, a forecast series from Conway Pedersen Economics, Inc. is used as the inflation measure.

There are two exceptions to the inflation-based cost projection method outlined above: (1) vehicle usage costs, and (2) City Central costs. Based on estimates from the Seattle Fleets and Facilities Department, vehicle costs are assumed to grow by 17 percent in 2009 and 9 percent in 2010. Similarly, based on estimates from SDOT Finance, the portion of City Central costs paid by the Street Use division is assumed to grow by 10 percent in 2009.[9] Both costs are assumed to grow by the rate of inflation in 2011 and beyond.

The final forecasts for Street Use cost center expenditures through 2012 are presented in Appendix I, "Final Rate Model Forecasts."

[8] Inflation forecasts from the Seattle Department of Finance are available online at seattle.gov/financedepartment/cpi/forecast.htm.

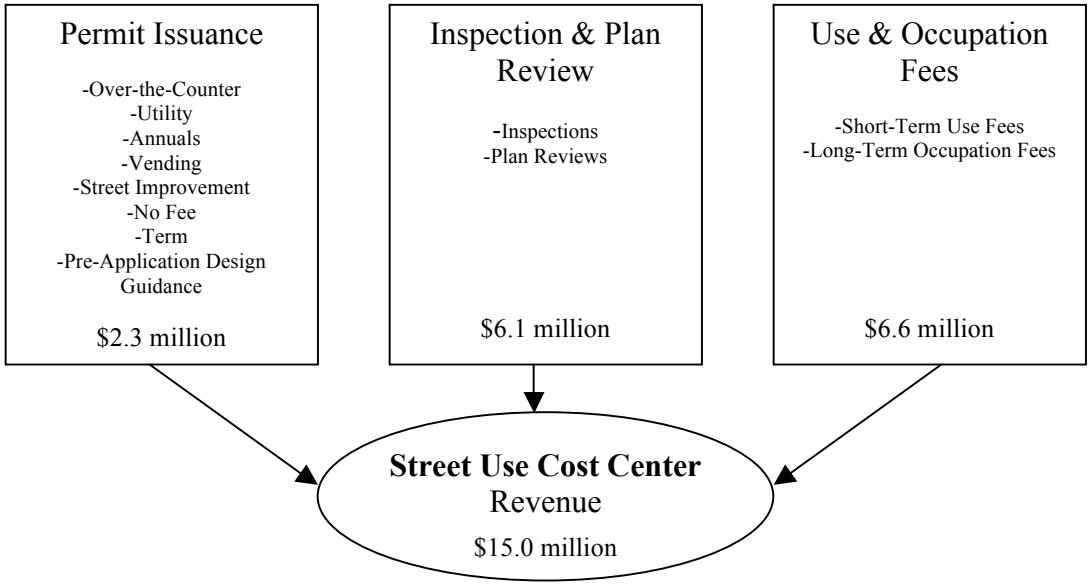
[9] In practice, these cost increases beyond the ordinary rate of inflation are added to total expenditures in the 2009-2010 rate model as lump-sum estimates in 2009 and 2010.

IV. Cost Center Revenue

The Street Use cost center collects revenue from three sources: (1) permit issuance fees, (2) inspection and plan review service fees, and (3) Use and Occupation fees. In 2007, these revenue sources totaled approximately $15 million.[10]

Figure 2 summarizes these revenue categories, along with their 2007 amounts. Use & Occupation fees comprise the largest revenue source at $6.6 million. Inspection and plan review service fees were second largest, totaling $6.1 million. The smallest revenue source is permit issuance fees at $2.3 million.

Figure 2. Revenue Sources for the Street Use Cost Center in 2007



Source: SDOT Finance.

Policy Goal of Fees

When establishing fees and charges, it is important to identify the policy goal of the fee.[11] In practice, fees often serve several purposes, such as recovering costs; managing access to public resources; promoting equity goals; or raising revenue for City programs. However, for the purposes of rate setting it is important to identify the central policy goal of fees so that clear criteria can be established for what constitutes an appropriate structure and level for the fee.

For example, if the policy goal of a fee is to recover costs, the appropriate structure is one that equitably distributes costs to users and raises revenue approximately equal to costs. In contrast, if the goal is to influence behavior—such as with congestion pricing systems designed to manage freeway demand—the appropriate structure and level will differ markedly from a fee designed only to recover costs.

[10] Total includes the Advance Fund transfer of $1,664,000, as well as the Summit revenue totals in project T9CSTPIR.

[11] See Chapter 7, "Setting Fees and Charges," in *Cost Analysis and Activity-Based Costing for Government* by R. Gregory Michel (GFOA, 2004).

For this reason, it is essential to identify the goal of each fee when establishing rate proposals. In the Street Use cost center, fees are generally designed to satisfy one of the following policy goals:

- **Full Cost Recovery**: Fees designed primarily to recover costs should be structured to equitably distribute the cost center's full cost of service onto users. In general, fees should not over- or under-recover costs or cross-subsidize services without an explicit policy explaining why.

- **Manage the Public Right of Way Toward its Best Use**: Fees designed to manage the public right of way toward its best use are not primarily designed to recover costs. Instead, they have been adopted by the City Council and Mayor as a way to promote an unimpeded public right of way through the use of economic incentives. Although these fees are not primarily designed to recover costs, responsible financial management requires that a policy be in place specifying how revenue will be disposed of.

The following sections discuss each revenue source for the cost center, the policy goal of each, and explain the method used to forecast revenue in 2009 and 2010.

A. Permit Issuance Fees

The smallest revenue source for the cost center is permit issuance fees. These revenues are generated upon the issuance of various types of right-of-way permits issued by the Street Use division.

Street use permit types are identified by use codes. Currently there are approximately 79 active use codes.[12] For management purposes, use codes are grouped into functional categories such as over-the-counter, utility, and street improvement permits. In 2007, approximately 20,380 permits were issued by the cost center.[13]

In the 2009-2010 rate model, we group permit issuance revenue into the nine functional categories outlined in Table 3.[14]

Table 3. Functional Permit Issuance Categories Used in the 2009-2010 Rate Model

Functional Permit Type	Description
Over the Counter (OTC)	Construction-related permits for temporary use of the right of way for storage of construction materials, concrete driveway construction, mobile cranes, etc.
Utility	Utility-related permits for installation and repair of water and power lines in the right of way.
New Annuals	New permits for minor, long-term encroachments in the right of way, including signs, overhangs and sidewalk cafes.
Renewed Annuals	Renewed annual permits, which are categorized separately due to them having a different annual fee from new annual permits.
Vending	Permits for vending businesses that operate in the right of way, including stadium vending, vending carts, and First Amendment vending and distribution.
Street Improvement	Construction-related permits for street improvements that accompany new single-family, commercial or multi-use buildings, including new sidewalk construction.
No Fee	Permits for activities in the right of way for which a policy decision has been made to not charge fees, including beautification, tree pruning and sidewalk repair.
Term	Major, long-term encroachments in the right of way such as sky bridges, tunnels, arches and pipelines. Term permits are individually established by City of Seattle ordinance and are annually increased by inflation.
Pre-Application Design Guidance	Pre-application conferences advise permit applicants on design issues and prepare them for the permit process. While not technically a permit, the conference generates a flat fee per occurrence and is therefore classified as a permit revenue stream in the rate model.

Source: SDOT Finance.

i. Policy Goal of Fees

The primary goal of permit issuance fees is *full cost recovery.* Fees are designed to recover the full costs of permit issuance services, including all direct and indirect costs.

[12] The 79 use codes cited here do not include Term permits and Pre-Application Design Guidance fees, which are classified in the rate model as permit issuance revenue.
[13] The complete schedule of 2007 Street Use fees is available at seattle.gov/transportation/stuse_permitlist.htm.
[14] For a detailed description of each functional group of permits, see SDOT Client Assistance Memo 2100, "Seattle Permits," available at seattle.gov/transportation/stuse_docs.htm.

Most permit issuance fees are currently $101 for new permits or $97 for renewed permits. The exceptions are permit use code 14C which generates a $40 fee; the various no-fee permits that generate no revenue; and the $375 Pre-Application Design Guidance fee which is classified as permit revenue in the 2009-2010 rate model.

In 2007, the revenue requirement for permit issuance fees from Figure 1 was $2,085,704. The estimated revenue generated by permit issuance fees was $2,308,659 in 2007. This indicates that current fees slightly over-recovered full costs by $222,955 in 2007. The fees required to recover full costs would be approximately $89 for new permit issuance, and $85 for renewed permit issuance in 2007. The calculated cost-of-service permit issuance fees for each year from 2007 through 2012 are presented in Appendix I.

ii. Compiling Historical Data

Historical data on the issuance of right-of-way permits was provided to SDOT Finance by the Street Use division. Information on Pre-Application Design Guidance conferences was obtained from the Seattle Department of Planning and Development (DPD), which collects the fees.

There are some limitations to historical permit data. For some permit types, data extend back to 1998, while others extend only to 2004 or 2006. Also, because recent data are extracted from the Hansen work management system while older data are derived from the pre-Hansen system, data before and after 2005 may not be strictly comparable.

The 2009-2010 rate model compiles permit issuance data into an Excel workbook with one tab for each of the 79 use codes. The model then combines permit volumes with statutory permit fees to generate a "predicted" revenue amount for each year. These permit issuance revenues are then grouped into the nine functional categories outlined above. Using this method, the rate model generates a 2007 estimated revenue from permit issuance of $2.3 million.

iii. Forecasting Permit Volumes

Because of the limitations of historical permit data, quantitative forecasting methods such as time series and regression models can not be practically applied to the cost center. Instead, the model takes a qualitative approach to permit issuance forecasting that combines (1) forecasts of related economic variables, and (2) best estimates of future policy and economic trends from managers in the Street Use division.

As a first step, the model separates permits into three broad categories: (1) permits that are construction related and are primarily driven by new construction; (2) permits that are not primarily driven by new construction but are instead driven by overall economic growth; and (3) permits that are primarily driven by inflation adjustments in City ordinances.

Table 4 summarizes the nine functional permit categories used in the rate model, and the forecast basis for each. Each forecast is briefly described below.

Table 4. Forecast Bases for Permit Issuance Fees in the 2009-2010 Rate Model

Functional Revenue Category	Base Data Source	Forecast Basis	Forecast Data Source
Permit Issuance			
Over-the-Counter (OTC)	SDOT Hansen	Census building permit growth (Puget Sound region)	Conway Pedersen Economics
Utility	SDOT Hansen	Real GDP growth	Conway Pedersen Economics
New Annuals	SDOT Hansen	Real GDP growth	Conway Pedersen Economics
Renewed Annuals	SDOT Hansen	Real GDP growth	Conway Pedersen Economics
Vending	SDOT Hansen	Real GDP growth	Conway Pedersen Economics
Street Improvement	SDOT Hansen	Census building permit growth (Puget Sound region)	Conway Pedersen Economics
No Fee	SDOT Hansen	Real GDP growth	Conway Pedersen Economics
Term	SDOT Hansen	CPI-U growth	Conway Pedersen Economics
Pre-Application Design Guidance	DPD Hansen	Census building permit growth (Puget Sound region) for period t+1	Conway Pedersen Economics

Source: SDOT Finance.

a. Forecasting Construction Related Permits

Three permit categories are classified as "construction related" in the rate model: Over-the-Counter (OTC), Street Improvement, and Pre-Application Design Guidance fees.[15] As a starting point, these permits were assumed to grow at the rate of overall building permits in the Puget Sound region.[16]

Data on building permits comes from the U.S. Census Bureau, and is a widely-used measure of economic activity in the single family and multi-unit construction industry. The data for Puget Sound building permits encompasses King, Kitsap, Pierce and Snohomish counties. The data are publicly available from the U.S. Census Bureau at www.census.gov/const/www/permitsindex.html.

Figure 3 illustrates the historical relationship between OTC permits and Census building permits. Due to extremely limited historical data for Street Improvement permits and Pre-Application Design Guidance fees, only OTC permits are analyzed here.[17]

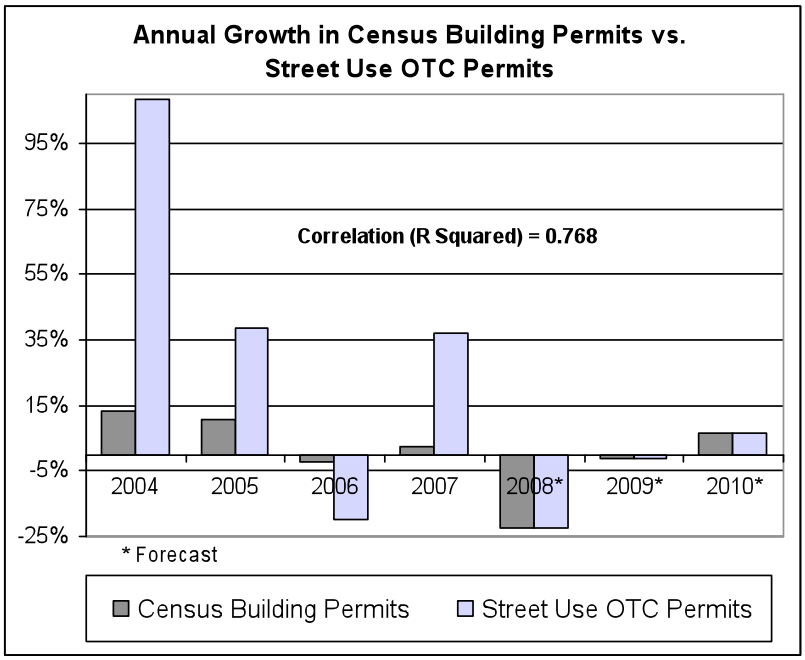
[15] While not technically a permit, Pre-Application Design Guidance conferences generate a flat fee per occurrence and are therefore classified as a "permit" revenue stream in the rate model.

[16] Because Pre-Application Design Guidance fees are collected at the beginning of the permit process, technically the forecast is lagged by one period and is based on growth in Census building permits in period t+1.

[17] Street Improvement permits consist of use codes 45 and 45A, which are recently created permit types with low volume. These permits accounted for just 129 permits in 2007, compared to 5,613 OTC permits. No data are available prior to 2005. Similarly, no data are available for Pre-Application Design Guidance fees before 2006. For this reason, we only analyze the historical relationship between OTC and Census building permits here.

In general, OTC permits have been more volatile than Census building permits. However, the series are broadly correlated. The R-Squared value between the two series is 0.768 between 2004 and 2007, with 1.0 representing perfect correlation. In the absence of more complete and reliable historical permit data, we conclude that growth in Census building permits is a reasonable basis for forecasting construction-related permits.

Figure 3. Annual Growth in OTC Permits vs. Puget Sound Building Permits



Source: U.S. Census Bureau; Conway Pedersen Economics; SDOT Finance.

To develop a forecast of OTC permits, SDOT Finance purchased a forecast series of Census building permits from Conway Pedersen Economics, Inc., a Seattle economic consulting firm. The forecast data are based on the firm's well-known econometric model of the Puget Sound regional economy. All forecasts extend to 2018.[18] Overall, Conway Pedersen Economics, Inc., forecasts declines in building permits of 22.5 percent in 2008 and 1.4 percent in 2009, with a moderate increase of 6.4 percent in 2010.

Once preliminary permit forecasts were developed, the figures were distributed via email to managers in the Street Use division for review and comment. The goal of this process was to incorporate the best available information about future events from managers, and to create a more realistic consensus forecast than one based only on aggregate economic data.

The following is a summary of managers' adjustments to the initial forecasts:

[18] Background information on Conway Pedersen Economics, Inc.'s "Puget Sound Economic Forecasting Model" is available at www.economicforecaster.com.

1. Permit use code 33A was moved from the Annual permit category to the OTC category in 2008, resulting in a projected 136 additional OTC permits not reflected in the initial forecast.

2. Due to a policy change designed to encourage the construction of new sidewalks throughout the City, Street Improvement permits are expected to experience a one-time increase of roughly 50 percent in 2008, which was not reflected in the original forecast.

3. Due to a policy decision the $375 Pre-Application Design Review fee will no longer be collected after 2008, which was not reflected in the initial forecast.

The final forecast for OTC, Street Improvement, and Pre-Application Design Guidance fees is shown in Appendix I, "Final Rate Model Forecasts."

b. Forecasting Non-Construction Related Permits

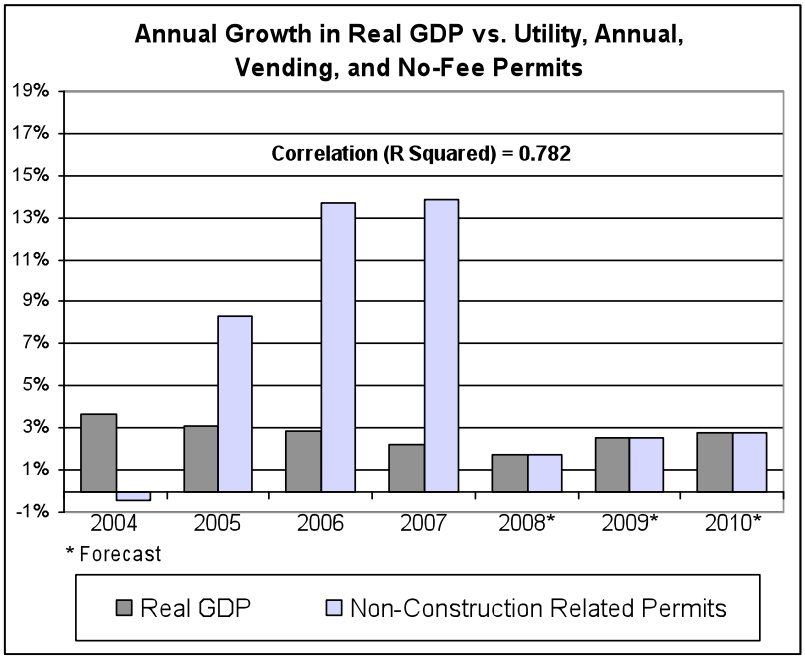
Five permit types were classified as "non-construction related" in the rate model: Utility, New Annual, Renewed Annual, Vending, and No Fee permits. Although these permits are clearly influenced by construction demand, they are more likely to be driven by overall growth in the underlying economy rather than growth in new construction alone.

For the purposes of forecasting, these permit volumes are assumed to grow at the overall growth rate of Real Gross Domestic Product (GDP) as measured by the U.S. Commerce Department's Bureau of Economic Analysis. Real GDP is a broad measure of overall economic activity and is inflation-adjusted to reflect only real economic growth.

Figure 4 illustrates the historical relationship between Real GDP and the issuance of non-construction-related permits. As with construction-related permits, Street Use permits are generally more volatile than Real GDP. However, the data series are broadly correlated. The R-Squared value between the two series is 0.782 between 2004 and 2007, with 1.0 representing perfect correlation.

In the absence of more complete and reliable permit data, we conclude that Real GDP is a reasonable basis for forecasting the overall growth of non-construction related Street Use permits.

Figure 4. Annual Growth in Utility, Annual, Vending and No-Fee Permits vs. Real GDP



* Note: Data for Utility permits is smoothed in 2006 to remove the effects of a large one-time increase in permits at the end of 2006. The smoothing was implemented by assuming the number of 2006 permits is equal to the average of 2005 and 2007 values.
Source: U.S. Bureau of Economic Analysis; Conway Pedersen Economics; SDOT Finance.

As with construction-related permits, forecasts were developed using a forecast data series of Real GDP from Conway Pedersen Economics, Inc. through 2018. Conway Pederson Economics, Inc., forecasts that GDP growth will slow to 1.7 percent in 2008, and will increase to 2.6 percent in 2009 and 2.8 percent in 2010.

Once initial permit forecasts were developed, they were circulated for review and comment by managers in the Street Use division. The following is a summary of managers' adjustments to the initial forecasts:

1. Permit use code 33B was created under Utility permits, shifting roughly 500 permits from other Utility use codes into this use code in 2008 and beyond.

2. Permit use code 33 in the Annual permit category was superseded in 2007 by OTC use code 33A. This will result in a decline of roughly 136 permits in the Annual category in 2008 that was not reflected in the initial forecast.

The final forecasts of Utility, Annuals, Vending and No Fee permits are shown in Appendix I, "Final Rate Model Forecasts."

c. Forecasting Ordinance-Driven Permits

The rate model classifies one permit type as being primarily driven by ordinance language: Term permits. Term permits are issued for major, long-term encroachment on the public right of way such as sky bridges, tunnels and pipelines. Each term permit is

established by City ordinance specifying fees, the timing of renewal, and any annual rate of increase.

For forecasting purposes, Term permits were divided into new permits and existing permits. Existing permit fees generally increase by the rate of inflation, and forecasts for them are based on a 10-year forecast of CPI-U inflation for the Puget Sound region from Conway Pedersen Economics, Inc. The forecast of new permits is based on information obtained from managers in the Street Use division. Managers expect roughly $5,000 in new term permits per year for the foreseeable future.

The final forecast for Term permits is shown in Appendix I, “Final Rate Model Forecasts.”

B. Inspection and Plan Review Service Fees

The Street Use division provides inspection and plan review services for construction and other projects that encroach on the City right of way. These services are generally referred to as "billable hours." For management purposes, Street Use divides billable hours into three work groups: Inspection, Shoring/Major Projects, and Engineering.

i. Policy Goal of Fees

The primary goal of inspection and plan review fees is *full cost recovery.* The fees are designed to recover the full costs of inspection and plan review services, including all direct and indirect costs.

The current rate for inspection and plan review services is $150 per hour. In 2007, the revenue requirement for inspection and plan review services from Figure 1 was $7,250,485. Revenue from inspection and plan review fees in that year was approximately $6,054,891. This indicates current fees under-recovered full costs by $1,195,594 in 2007. The fee required to have fully recovered costs is approximately $179 per hour in 2007. The calculated cost-of-service inspection and plan review fees for each year from 2007 through 2012 are presented in Appendix I.

ii. Compiling Historical Data

Historical data on inspection and plan review from 2003 through 2007 were provided to SDOT Finance by the Street Use division. Figures from 2005 to the present were extracted from the Hansen work management system, while figures from 2003 and 2004 were derived from the pre-Hansen system. As a result, data from before 2005 are not strictly comparable to more recent data.

Once quantity data for inspection and plan review were compiled, the 2009-2010 rate model combines these data with the hourly fee of $150 per hour to generate a "predicted" revenue amount. Using this method, an estimated $6.1 million were generated by plan review and inspection service fees in 2007.

iii. Forecasting Inspection and Plan Review Hours

Historically there have been two main drivers of inspection and plan review services: (1) demand for services, and (2) the number of billable full-time equivalents (FTEs) in the Street Use division. The second factor is an important driver of billable hours as it impacts the rate at which the work backlog in the cost center is transformed into current-period revenue.

Because historical data on billable hours are unavailable before 2003, we cannot readily estimate the effect of slowing economic demand on inspection and plan review services. As a result, forecasts for billable hours in the 2009-2010 rate model are based only on the number of billable FTEs in the Street Use division.

Forecasts are generated via the following process. First, historical data on billable hours and number of billable FTEs was compiled. Using these data, we calculate the average number of billable hours per FTE for each year. In 2007, the average billable hours per

FTE was 1,589. To generate forecasts, the estimated number of Street Use billable FTEs for each year is multiplied by a two-year moving average of billable hours per FTE. The result is a forecast of inspection and plan review hours through 2018. Multiplying this figure by the $150 per hour rate yields the total revenue forecast for each year.

The final forecast for inspection and plan review service fee revenue is shown in Appendix I, “Final Rate Model Forecasts.”

C. Use and Occupation Fees

Use and Occupation fees are charges designed to help manage the public right of way toward its best use and promote unimpeded thoroughfares in the City of Seattle through the use of economic incentives.

Use fees are designed to manage short-term usage of the right of way, most of which is construction related. Occupation fees are designed to manage long-term usage of the right of way, such as sidewalk cafes, signage, and architectural features. The fees apply only to certain Street Use permits and have an escalating structure based on the square footage of the encroachment, the length of time, and whether the encroachment is on an arterial or non-arterial roadway.

Table 5 summarizes the current fee structure of use and occupation fees. The current structure was first established by City Ordinance Number 121334, which was signed into law December 5, 2003 and went into effect in 2004.

Table 5. Current Structure of Use and Occupation Fees

Type of Fee	Affected Use Codes	Fee Structure
Use Fees (Short Term)	3A, 13, 15, 22, 31, 31B, 31C, 40, 41, 44, 46, 49, 50, 45, 45A, 51, 51A, 51B, 51C, 51D, 51E, 51G, 51H, 51I	NON-ARTERIAL mo 1 = no fee, mo2&3 = $.10/sf/10d mo4&5 = $.20/sf/10d mo6&7 = $.40/sf/10d mo8&9 = $.80/sf/10d mo10+ = $1.20/sf/10d in mo 10+ up to $.20/sf/10day credit for mobility mitigation ARTERIAL mo1 = $.10/sf/10d mo2 = $.20/sf/10d mo3 = $.40/sf/10d mo4 = $.80/sf/10d mo5 = $1.20/sf/10d in mo5+ up to $.20/sf/10d credit for mobility mitigation
Occupation Fees (Long Term)	Various	2A, 21 = $590/yr 7, 12, 16 = $.51/sf/yr 18, 18A = $1.56/sf/yr 22B = $1011/pile 27 = $.51/sf 7A, 12A, WW100, WW200, WW250 = $.14/sf/mo 14C = $35/mo 14D = $121.50/mo 14E = $18/mo

Source: SDOT Finance.

i. Policy Goal for Fees

The policy goal of Use and Occupation fees is to *manage the public right of way toward its best use through the use of economic incentives*. They are not primarily designed to recover costs. Instead, a portion of these revenues is diverted to offset other cost center

expenditures such as the cost of the Advance Fund transfer and the costs of inspection and plan review services.[19]

ii. Compiling Historical Data

Historical data on Use & Occupation fees was provided to SDOT Finance by the Street Use division. Monthly revenue data are available only for 2006 and 2007. For each year, data was also obtained on the permit use codes that generated the fees. In 2007, total Use and Occupation fees were approximately $6.6 million.

iii. Forecasting Use and Occupation Fees

Three factors make Use and Occupation fees the most difficult revenue source to forecast. First, only two years of historical data are available. Second, revenues have been highly volatile during that period, growing 69 percent between 2006 and 2007, from $3.9 million to over $6.6 million due to booming Seattle-area construction. Third, the slowing regional economy in 2008 and beyond will have unpredictable effects on revenue in future years.

The forecast for Use and Occupation fees begins with data from 2006 and 2007 on the percentage of total fees collected from each permit use code. This establishes a distribution of Use and Occupation fees across permit types, illustrating the relative contribution of each toward total revenue.

Table 6 shows the percentage of Use and Occupation fees raised from each permit type in 2007. For Use fees, the dominant revenue source is 31 permits ("Construction Use") which accounts for 84.5 percent of fees. For Occupation fees, 12 permits ("Materials Storage") is the largest revenue source at 45.9 percent, followed by 16 permits ("Areaways Existing Prior to January 1, 1995") at 11.2 percent and 7A permits ("Structures and Overhangs on Underwater Streets") at 10.2 percent.

[19] For an explanation of the current structure of cost offsets funded by Use and Occupation fee revenue, see Figure 1 and accompanying text.

Table 6. Distribution of Use and Occupation Fees by Permit Use Code in 2007.

Permit Use Code	Percentage of Total Fees
Use Fees	
OTC Permits	
3A	0.0%
13	0.9%
15	0.2%
22	0.0%
31	84.5%
31B	1.1%
31C	0.0%
40	0.0%
41	2.6%
44	4.2%
46	0.0%
49	0.2%
50	1.8%
Street Improvement Permits	
45	0.3%
45A	0.0%
Utility Permits	
51s (Combo)	4.1%
Total	100%
Occupation Fees	
New and Renewed Annual Permits	
2A	1.5%
21	3.6%
7	8.2%
7A	10.2%
12	45.9%
12A	9.4%
16	11.2%
18	6.8%
18A	0.3%
Vending Permits	
14C	0.1%
14D	1.3%
14E	0.2%
OTC Permits	
27	1.3%
Total	100%

Source: SDOT Street Use; SDOT Finance.

Once the distribution of revenue by permit type is established, this information is combined with permit volumes to calculate Use and Occupation fees per related permit. For example, 84.5 percent of Use fees are generated by permit type 31, and 1,579 of those permits were issued in 2007. This implies that the average 31 permit generated $2,886 in fees, for a total of $4.56 million. In this way, average fees per related permit were calculated for each of the 16 permits subject to Use fees and the 13 permits subject to Occupation fees.

To generate revenue forecasts, we multiply the average fee per related permit by the forecasted volume for each permit type. For Occupation fees, fees per related permit are assumed to stabilize at their 2007 level of $812 per permit overall. For Use fees, fees per related permit are assumed to stabilize at their 2007 value of $561 in 2008, but are assumed to decline by 50 percent in 2009 to $281 to reflect sharply slowing new

construction activity in the Seattle area. Fees per related permit are then assumed to stabilize in 2010, 2011, and 2012. This adjustment is made to model the projected revenue effects of declining construction-related Use fees that is likely to occur in 2009 and beyond.

In 2013 and beyond, the rate model assumes that the 7-year pattern of Use & Occupation fees per related permit from 2006-2012 repeats itself beginning in 2013. This is done to reflect a best estimate of the long-term cycle of Use & Occupation fees that mirrors the cycle of Seattle-area construction activity.

The final forecast of Use and Occupation fee revenue is shown in Appendix I, "Final Rate Model Forecasts."

Appendix I. Final Rate Model Forecasts

Expenditures	2007	2008*	2009*	2010*	2011*	2012*
Base Service Costs						
Permit Issuance	$1,033,155	$1,072,674	$1,109,145	$1,139,092	$1,167,093	$1,194,032
Inspection & Plan Review	$4,152,602	$4,311,446	$4,770,478	$4,874,632	$4,994,457	$5,109,741
Non-Billable Costs						
Right-of-Way Management Initiative (ROWMI)	$1,391,583	$617,000	$500,000	$500,000	$512,291	$524,115
2008 Move Costs (One-Time)	$0	$869,665	$0	$0	$0	$0
2008 Sidewalk Permit Rev. Process (One-Time)	$0	$0	$0	$0	$0	$0
Admin Spec. II	$0	$46,648	$0	$0	$0	$0
Strategic Advisor I	$0	$69,844	$0	$0	$0	$0
Consultant Costs	$0	$150,000	$0	$0	$0	$0
Fleets Cost Increase Beyond Inflation	$0	$0	$28,758	$45,121	$0	$0
City Central Cost Increase Beyond Inflation	$0	$0	$92,174	$0	$0	$0
Other Non-Billable Costs	$3,891,523	$3,788,590	$4,860,659	$5,042,788	$4,604,929	$4,711,222
Total Non-Billable Costs	$5,283,106	$5,541,746	$5,481,591	$5,587,909	$5,117,220	$5,235,337
Subtotal	$10,468,862	$10,925,866	$11,361,213	$11,601,634	$11,278,770	$11,539,110
Advance Fund Transfer	$1,664,000	$1,723,030	$1,781,613	$1,829,717	$1,874,693	$1,917,966
Total Cost	**$12,132,862**	**$12,648,896**	**$13,142,827**	**$13,431,350**	**$13,153,463**	**$13,457,075**
Percentage Change	4.0%	4.3%	3.9%	2.2%	-2.1%	2.3%

Total Revenue Requirements (Before Offsets)	2007	2008*	2009*	2010*	2011*	2012*
Permit Issuance	$2,085,704	$2,176,753	$2,143,205	$2,197,529	$2,136,373	$2,185,686
Inspection & Plan Review	$8,383,158	$8,749,114	$9,218,008	$9,404,105	$9,142,396	$9,353,424
Total Revenue Requirement	**$10,468,862**	**$10,925,866**	**$11,361,213**	**$11,601,634**	**$11,278,770**	**$11,539,110**
Percentage Change	4.1%	4.4%	4.0%	2.1%	-2.8%	2.3%

Net Revenue Requirements (After Offsets)*	2007	2008*	2009*	2010*	2011*	2012*
Permit Issuance	$2,085,704	$2,176,753	$2,143,205	$2,197,529	$2,136,373	$2,185,686
Inspection & Plan Review	$7,250,485	$7,576,259	$8,005,277	$8,158,630	$7,866,306	$8,047,878
Total Revenue Requirement	**$9,336,189**	**$9,753,012**	**$10,148,482**	**$10,356,158**	**$10,002,679**	**$10,233,564**
Percentage Change	4.3%	4.5%	4.1%	2.0%	-3.4%	2.3%

*Note: For an explanation of cost offsets funded by Use and Occupation fee revenue, see Box 1.

Predicted Revenue	2007	2008*	2009*	2010*	2011*	2012*
Base Service Revenue						
Permit Issuance Fees	$2,308,659	$2,226,512	$2,067,462	$2,146,333	$2,205,364	$2,275,524
Inspection & Plan Review Fees	$6,054,891	$6,112,541	$6,392,378	$6,370,008	$6,499,363	$6,493,667
Subtotal	$8,363,550	$8,339,053	$8,459,840	$8,516,341	$8,704,727	$8,769,191
Use Fees	$5,370,373	$4,229,562	$2,089,155	$2,218,568	$2,252,543	$2,329,674
Occupation Fees	$1,259,123	$1,281,968	$1,314,257	$1,351,513	$1,390,511	$1,430,912
Subtotal	$6,629,496	$5,511,530	$3,403,412	$3,570,081	$3,643,054	$3,760,586
Total Revenue	**$14,993,046**	**$13,850,583**	**$11,863,251**	**$12,086,422**	**$12,347,781**	**$12,529,776**
Percentage Change	27.1%	-7.6%	-14.3%	1.9%	2.2%	1.5%

Permit Issuance Revenue	2007	2008*	2009*	2010*	2011*	2012*
Over-the-Counter (OTC)	$564,618	$452,986	$446,534	$475,083	$481,990	$498,640
Utility	$582,825	$595,269	$610,501	$627,595	$645,795	$664,523
New Annuals	$59,651	$58,356	$59,849	$61,525	$63,309	$65,145
Renewed Annuals	$674,802	$674,311	$691,565	$710,929	$731,546	$752,761
Vending						
14A New	$503	$514	$527	$542	$557	$573
14A Renewed	$1,932	$1,973	$2,024	$2,081	$2,141	$2,203
14C	$797	$814	$835	$858	$883	$908
14D	$0	$0	$0	$0	$0	$0
14E	$0	$0	$0	$0	$0	$0
Street Improvement	$12,976	$15,141	$14,926	$15,880	$16,111	$16,667
No Fee	$0	$0	$0	$0	$0	$0
Term	$209,372	$228,026	$240,702	$251,841	$263,032	$274,103
Pre-Application Design Guidance	$201,182	$199,123	$0	$0	$0	$0
Total Revenue	**$2,308,659**	**$2,226,512**	**$2,067,462**	**$2,146,333**	**$2,205,364**	**$2,275,524**
Percentage Change	-4.3%	-3.6%	-7.1%	3.8%	2.8%	3.2%

Inspection & Plan Review Revenue	2007	2008*	2009*	2010*	2011*	2012*
Inspectors	20	20	21	21	21	21
Plan Reviewers	6	6	6	6	7	7
Total Billable FTEs	26	26	27	27	28	28
Hours Billed Per FTE	1,589	1,567	1,578	1,573	1,576	1,574
Total Inspection & Plan Review Hours	40,530	40,750	42,616	42,467	43,329	43,291
Total Revenue	**$6,054,891**	**$6,112,541**	**$6,392,378**	**$6,370,008**	**$6,499,363**	**$6,493,667**
Percentage Change	7.1%	1.0%	4.6%	-0.3%	2.0%	-0.1%

Use Fee Revenue	2007	2008*	2009*	2010*	2011*	2012*
OTC						
3A	$0	$0	$0	$0	$0	$0
13	$48,920	$38,054	$18,756	$19,955	$20,245	$20,945
15	$0	$0	$0	$0	$0	$0
22	$0	$0	$0	$0	$0	$0
31	$4,538,432	$3,530,425	$1,740,070	$1,851,324	$1,878,239	$1,943,119
31B	$61,122	$47,546	$23,435	$24,933	$25,295	$26,169
31C	$0	$0	$0	$0	$0	$0
40	$1,357	$1,056	$520	$554	$562	$581
41	$140,655	$109,415	$53,928	$57,376	$58,210	$60,221
44	$227,161	$176,708	$87,095	$92,664	$94,011	$97,259
46	$0	$0	$0	$0	$0	$0
49	$10,748	$8,361	$4,121	$4,384	$4,448	$4,602
50	$95,404	$74,214	$36,578	$38,917	$39,483	$40,847
Street Improvement						
45	$14,550	$16,977	$8,368	$8,903	$9,032	$9,344
45A	$925	$1,080	$532	$566	$574	$594
Utility						
51s (Combo)	$221,007	$225,726	$115,751	$118,992	$122,442	$125,993
Total Use Fees	**$5,370,373**	**$4,229,562**	**$2,089,155**	**$2,218,568**	**$2,252,543**	**$2,329,674**
Percentage Change	89.3%	-21.2%	-50.6%	6.2%	1.5%	3.4%

Occupation Fee Revenue	2007	2008*	2009*	2010*	2011*	2012*
New and Renewed Annual						
2A	$19,488	$19,904	$20,414	$20,985	$21,594	$22,220
21	$45,213	$46,178	$47,360	$48,686	$50,098	$51,550
7	$103,158	$105,360	$108,056	$111,082	$114,303	$117,618
7A	$128,850	$131,601	$134,968	$138,747	$142,771	$146,911
12	$577,862	$590,200	$605,301	$622,250	$640,295	$658,864
12A	$118,579	$121,111	$124,210	$127,688	$131,391	$135,201
16	$141,095	$144,108	$147,795	$151,933	$156,339	$160,873
18	$85,871	$87,704	$89,948	$92,467	$95,148	$97,908
18A	$3,252	$3,322	$3,407	$3,502	$3,604	$3,708
Vending						
14C	$925	$945	$969	$996	$1,025	$1,055
14D	$16,213	$16,559	$16,983	$17,458	$17,965	$18,486
14E	$2,027	$2,071	$2,124	$2,183	$2,246	$2,312
OTC						
27	$16,590	$12,906	$12,722	$13,535	$13,732	$14,206
Total Occupation Fees	**$1,259,123**	**$1,281,968**	**$1,314,257**	**$1,351,513**	**$1,390,511**	**$1,430,912**
Percentage Change	16.7%	1.8%	2.5%	2.8%	2.9%	2.9%

Full Cost-of-Service Rates	2007	2008*	2009*	2010*	2011*	2012*
New Permit Issuance Fee	$89	$98	$105	$104	$97	$96
Renewed Permit Issuance Fee	$85	$94	$101	$100	$94	$93
Inspection & Plan Review Fee	$179/hour	$186/hour	$188/hour	$192/hour	$182/hour	$186/hour

Real GDP (Annual Change)	**2.2%**	**1.7%**	**2.6%**	**2.8%**	**2.9%**	**2.9%**
Census Building Permits (Annual Change)	**2.3%**	**-22.5%**	**-1.4%**	**6.4%**	**1.5%**	**3.5%**
CPI-W Inflation (Annual Change)	**3.8%**	**3.4%**	**2.7%**	**2.5%**	**2.3%**	**2.3%**

Source: 2009-2010 Street Use Rate Model

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