

Presented by:



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## Transportation System Development Charge Update

Final Report

Prepared for:



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# City of Dallas

## 2018 Transportation SDC Methodology Update

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## Introduction

The City of Dallas conducts periodic updates to its Comprehensive Plan and its various Public Facility Plans to provide orderly and sustainable growth of local roads, water, sewer, stormwater, and parks. A key component to funding these public facilities is the system development charge (SDC) program. SDCs are one-time charges for new development—designed to recover the costs of infrastructure capacity needed to serve new development. This section describes the policy context and project scope upon which the body of this report is based. It concludes with a non-numeric overview of the calculations presented in subsequent sections of this report.

The city's current transportation SDC methodology was established 1991. In September 2017, the City completed the task of updating the capital improvement plan (CIP) for the transportation system. With the preparation/adoption of the new transportation CIP, the City commissioned this update of its transportation SDCs to get the methodology and rates current. With this review and update, the City has stated several objectives:

- Review the basis for transportation charges to ensure a consistent methodology;
- Address specific policy, administrative, and technical issues which had arisen from application of the existing transportation SDCs;
- Determine the most appropriate and defensible fees, ensuring that development is paying its way;
- Consider possible revisions to the structure or basis of the charges which might improve equity or proportionality to demand;
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that City staff could, by reference, respond to questions or concerns from the public.

This report provides the documentation of that effort and was done in close coordination with City staff and available facilities planning documents. The transportation SDC update complies with Dallas City Code Chapter 4: Utilities, subsection Systems Development Charges.

Table 1 gives a component breakdown for the current and proposed residential equivalent SDCs for transportation. Appendix A to this report shows the detailed calculations that were used to arrive at the proposed SDCs for transportation collection and treatment services.

Table 1 - Component Breakdown of the Proposed Single Family Residential Equivalent Transportation SDC

Transportation SDC Components	Proposed	Current	Difference
Reimbursement fee	\$ 609	\$ -	\$ 609
Improvement fee	\$ 2,468	\$ 1,199	\$ 1,269
Administration fee @ 5%	\$ 154	\$ -	\$ 154
Total transportation SDC	\$ 3,231	\$ 1,199	\$ 2,032

The framework for SDC calculation is established by Oregon Revised Statute (ORS) 223.297-314 which is the basis for this review. Under ORS 223.299, SDC's are defined as one-time fees imposed on new development and have two components: reimbursement and improvement.

*The reimbursement fee* considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is future system users contribute no more than an equitable share to the cost of existing facilities. The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.

*The improvement fee* portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee for transportation, each project in the respective service's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. An example is a facility which improves system capacity to better serve current customers. The costs for this type of project must be eliminated from the improvement fee calculation. Only capacity increasing/level of performance costs provide the basis for the SDC calculation. The improvement SDC is calculated as a function of the estimated number of PM Peak Hour Vehicle Trips (PMPHVT's) to be served by the City's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes.

## **SDC Legal Authorization**

SDCs are authorized by Oregon Revised Statute (ORS) 223.297-314. The statute is specific in its definition of system development charges, their application, and their accounting. In general, an SDC is a one-time fee imposed on new development or expansion of existing development and assessed at the time of development approval or increased usage of the system. Overall, the statute is intended to promote equity between new and existing customers by recovering a proportionate share of the cost of existing and planned/future capital facilities that serve the developing property. Statute further provides the framework for the development and imposition of SDCs and establishes that SDC receipts may only be used for capital improvements and/or related debt service.

The methodology used to determine the improvement fee portion of the SDC must consider the cost of projected capital improvements needed to increase system capacity or level of performance. In other words, the cost of planned projects that correct existing deficiencies or do not otherwise increase capacity would not be SDC eligible. The improvement fee must also provide a credit for construction of a qualified public improvement.

Finally, two cost basis adjustments are potentially applicable to both reimbursement and improvement fees: fund balance and compliance costs.

**Fund Balance** - To the extent that SDC revenue is currently available in fund balance, that revenue should be deducted from its corresponding cost basis. For example, if the city has transportation improvement fees that it has collected but not spent, then those unspent improvement fees should be deducted from the transportation system's improvement fee cost basis to prevent charging twice for the same capacity.

**Compliance Costs** - ORS 223.307(5) authorizes the expenditure of SDCs on "the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures." To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDCs. All estimates of compliance costs in this report are based on historical transfers from the appropriate SDC fund to the General Fund.

## SDC Methodology

The essential ingredient in the development of an SDC methodology for transportation services is valid sources of data. For this project, the consultant team has relied on a number of data sources. The primary sources have been the adopted 2008 TSP and plan updates for these municipal facilities. We have supplemented these data sources with City utility billing records, certified census data, and other documents that we deemed helpful, accurate, and relevant to this study. Table 2 contains a bibliography of the key documents/sources that we relied upon to facilitate our analysis and hence the resulting SDCs.

Table 2 - Data Sources for the Calculation of Transportation SDC

Service	Master Plan Document and/or Corroborating Source Documentation
Transportation	<ul style="list-style-type: none"> <li>• Transportation System Plan for the City of Dallas; December 2008; CH2M Hill.</li> <li>• 2017 Dallas Transportation Facilities Plan Amendment and Capital Improvement Plan Update; September 2017; Dallas City Staff.</li> <li>• Dallas transportation system fixed asset schedule; June 30, 2017; City records.</li> <li>• City of Dallas Utility Billing System – active utility accounts and Equivalent Dwelling Units in service report; June 30, 2017.</li> <li>• Portland State University, College of Urban Affairs, Population Research Center; Certified census for Dallas, Oregon; June 2016</li> <li>• U.S. Bureau of the Census; American Community Survey; multiple data sets.</li> </ul>

## Reimbursement Fee Methodology

The reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. Generally, if a system were adequately sized for future growth, the reimbursement fee might be the only charge imposed, since the new customer would be buying existing capacity. However, staged system expansion is needed, and an improvement fee is imposed to allocate those growth-related costs. Even in those cases, the new customer also relies on capacity within the existing system, and a reimbursement component is warranted.

To determine an equitable reimbursement fee to be used in conjunction with an improvement fee, two points should be highlighted. First, the cost of the system to the City’s customers may be far less than the total plant-in-service value. This is because elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less. Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

The method used for determining the reimbursement fee accounts for both points. First, the charge is based on the net investment in the system, rather than the gross cost. Therefore, donated facilities, typically including local collector streets, minor arterials, and grant-funded facilities, would be excluded from the cost basis. Also, the charge should be based on investments clearly made by the current users of the system, and not already supported by new customers. Tax supported activities fail this test since funding sources have historically been from general revenues, or from revenues which emanate, at least in part, from the properties now developing. Second, the cost basis is allocated between used and unused

capacity, and, capacity available to serve growth. This approach reflects the philosophy, consistent with the City's Updated TSP, that facilities have been sized to meet the demands of the customer base within the established planning period.

## Improvement Fee Methodology

There are three basic approaches used to develop improvement fee SDCs: "standards driven", "improvements-driven", and "combination/hybrid" approaches. The "standards-driven" approach is based on the application of Level of Service (LOS) standards for facilities. Facility needs are determined by applying the LOS standards to projected future demand, as applicable. SDC-eligible amounts are calculated based on the costs of facilities needed to serve growth. This approach works best where level of service standards has been adopted but no specific list of projects is available. The "improvements-driven" approach is based on a specific list of planned capacity increasing capital improvements. The portion of each project that is attributable to growth is determined, and the SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in projected future demand, as applicable. This approach works best where a detailed master plan or project list is available, and the benefits of projects can be readily apportioned between growth and current users. Finally, the combination/hybrid-approach includes elements of both the "improvements driven" and "standards-driven" approaches. Level of Service standards may be used to create a list of planned capacity-increasing projects, and the growth required portions of projects are then used as the basis for determining SDC eligible costs. This approach works best where levels of service have been identified and the benefits of individual projects are not easily apportioned between growth and current users.

In the 1999 update, the City utilized the "combination/hybrid" approach for the calculation of transportation SDCs because a recent TSP was not available. This study is using the "improvements-driven" method and has relied on the capital improvement plans that are incorporated in the 2017 plan updates for transportation services.

For this SDC methodology update, the improvement fee represents a proportionate share of the cost to expand the systems to accommodate growth. This charge is based on the capital improvement plans established by the City in the master plans for transportation services. The costs that can be applied to the improvement fees are those that can reasonably be allocable to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to protect existing customers from the cost burden and impact of expanding a system that is already adequate for their own needs in the absence of growth.

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a new street to serve a developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers. An example might be an intersection that both expands transportation collection system capacity and corrects a chronic capacity issue for existing users. In this case, a rational allocation basis must be defined.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the transportation system capacity to accommodate growth or increase its respective level of performance have been included in the cost basis of the fee. As part of this SDC update, City Staff and their engineering consultants

were asked to review the planned capital improvement lists to assess SDC eligibility. The criteria in Figure 1 were developed to guide the City’s evaluation:

Figure 1 - SDC Eligibility Criteria

**City of Dallas**  
**Steps Toward Evaluating**  
**Capital Improvement Lists for SDC Eligibility**

ORS 223

1. Capital improvements mean the facilities or assets used for:
  - a. Transit, intersections, driving, walking, biking, and shared use/path projectsThis definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements;
2. The SDC improvement base shall consider the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related;
3. An increase in system capacity is established if a capital improvement increases the “level of performance or service” provided by existing facilities or provides new facilities.

Under the City’ approach, the following rules will be followed

1. Repair costs are not to be included;
2. Replacement costs will not be included unless the replacement includes an upsizing of system capacity and/or the level of performance of the facility is increased;
3. New regulatory compliance facility requirements fall under the level of performance definition and should be proportionately included;
4. Costs will not be included which bring deficient systems up to established design levels.

In developing the improvement fee, the project team in consultation with City staff evaluated each of its CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedules developed by the City. The improvement fee is calculated as a function of the estimated number of projected additional PMPHVTs for transportation to be served by the City’s facilities over the planning horizon.

Once the future costs to serve growth have been segregated (i.e., the numerator), they can be divided into the total number of new PMPHVTs that will use the capacity derived from those investments (i.e., the denominator).

## Methodology for the Granting of Credits, Exemptions, and Discounts

### SDC Credits Policy

ORS 223.304 requires that credit be allowed for the construction of a "qualified public improvement" which is required as a condition of development approval, is identified in the Capital Improvement Plan, and either is not located on or contiguous to property that is the subject of development approval or is located on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the development project. The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement and may be granted only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve the project. For multi-phase projects, any excess credit may be applied against SDCs that accrue in subsequent phases of the original development project. In addition to these required credits, the City may, if it so chooses, provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the Capital Improvement Plan, or provide a share of the cost of an improvement by other means.

The City has adopted a policy for granting SDC credits and has codified this policy in the Dallas City Code (DCC) §4.655. The adopted SDC credit policy consists of six (6) items as follows:

1. As used in this section and in the definition of "qualified public improvements" in section 4.620, the word "contiguous" means that part of a public way which abuts the development parcel.
2. When development occurs that must pay an SDC under section 4.630, the SDC for the existing use which would have been imposed if this section was in effect when the property was developed shall be calculated and if it is less than the SDC for the proposed use, the difference between the SDC for the existing use and the SDC for the proposed use shall be the SDC required under section 4.630. If the change in use results in the SDC for the proposed use being less than the SDC for the existing use, no SDC shall be required; however, no refund or credit shall be given.
3. The limitations on the use of credits contained in this subsection shall not apply when credits are otherwise given under section 4.655. A credit shall be given for the cost of a qualified public improvement associated with a development. If a qualified public improvement is located partially on and partially off the parcel of land that is the subject of the approval, the credit shall be given only for the cost of the portion of the improvement not located on or wholly contiguous to the parcel of land. The credit provided for by this subsection shall be only of the improvement fee charged for the type of improvement being constructed and shall not exceed the improvement fee even if the cost of the capital improvement exceeds the applicable improvement fee.
4. Applying the methodology adopted by resolution, the city manager may grant a credit against the improvement fee for a capital improvement constructed as part of the development that reduces the development's demand upon existing capital improvements or the need for future capital improvements or that would otherwise have to be constructed at city expense under then-existing council policies.
5. In situations where the amount of credit exceeds the amount of the SDC, the excess credit is not transferable to another development. However, the excess credit may be transferred to another phase of the original development.
6. Credit shall not be transferrable from one type of capital improvement to another.

## Partial and Full SDC Exemptions Policy

The City may exempt certain types of development, from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees and property taxes. As in the case of SDC credits, the City has articulated a policy relative to partial and full SDC exemption. This SDC exemption policy is codified in DCC §4.650, and is as follows:

1. Development which existed on July 1, 1991 and for which a building or placement permit was issued before that date.
2. An alteration, addition, replacement or change in use that does not increase the use of capital improvements.
3. Development exempt under the provisions of DCC 9.850 (Enterprise Zone Development).

## SDC Discount Policy

The City, at its sole discretion may discount the SDC rates by choosing not to charge a reimbursement fee for excess capacity, or by reducing the portion of growth-required improvements to be funded with SDCs. A discount in the SDC rates may also be applied on a pro-rata basis to any identified deficiencies, which must to be funded from sources other than improvement fee SDCs. The portion of growth-required costs to be funded with SDCs must be identified in the CIP. Because discounts reduce SDC revenues, they increase the amounts that must come from other sources, such as user fees or general fund contributions, in order to acquire the facilities identified in the Updated Master Plan

## Conclusions and Recommendations

- The 2018 transportation SDC methodology update was done in accordance with DCC Chapter 4, and with the benefit of adopted master plans and plan updates for transportation services. We recommend the City update the SDC charge and methodology to reflect the current capital improvement program and to incorporate the reimbursement fee component. This will provide additional revenues to help fund the utility's future capital needs. Our analysis indicates the City can charge a maximum of \$3,231 as applied to a new single family residential unit per PMPHVT for transportation. The components of this fee are as follows:

Reimbursement fee .....	\$ 609
Improvement fee .....	2,468
Administration fee .....	<u>154</u>
Total SDC per PMPHVT .....	<u>\$3,231</u>

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# Appendix A

## SDC Calculations

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# Transportation SDC Calculations

## Existing and Future Transportation Demands in PMPHVTs

Demand for transportation facilities is measured in PMPHVTs. One PMPHVT represents one person beginning or ending a vehicular trip at a certain property during the afternoon rush hour. Based on data from the U. S. Census Bureau, we estimate the transportation system is currently serving 9,405 PMPHVTs. The statistical process that was used to arrive at the current demand value is shown in Table 3. We are estimating the City’s transportation system will serve 14,760 PMPHVTs in 2038. These estimates imply growth of 5,354 PMPHVTs over the planning period, as shown in Table 4. A graphic rendering of existing and growth PMPHVTs is shown below in Figure 2.

Figure 2

### PM Peak Hour Vehicle Trips

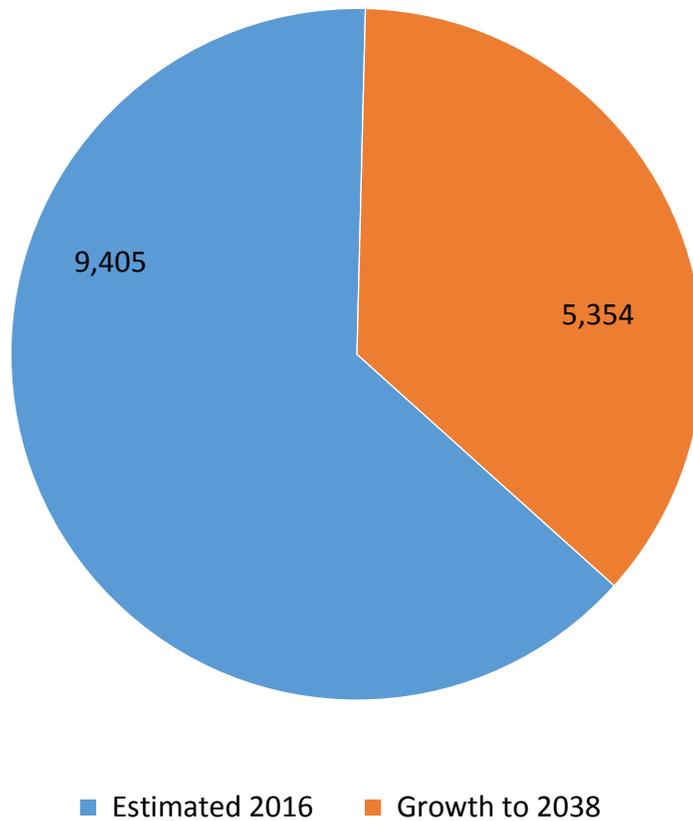


Table 3 – Estimated 2016 Trip Generation - PMPHVTs

	Population	Dwelling Units	Employees	ITE Code <sup>4</sup>	PM peak hour vehicle trips per unit	Total PM peak hour vehicle trips
<i>Estimated 2016 population:</i> <sup>1</sup>	15,175					
Male	7,225					
Female	7,950					
<i>Number of dwelling units:</i> <sup>2</sup>						
Detached single family		3,768		210	1.00	3,768
Attached single family		212		230	0.52	110
Duplex		344		210	1.00	344
Three or Fourplex		529		210	1.00	529
Multifamily:						-
5 to 9 units		228		220	0.62	141
10 to 19 units		34		220	0.62	21
20 to 49 units		139		220	0.62	86
50 or more units		211		220	0.62	131
Mobil home		405		240	0.59	239
Boat, RV, van, ect.		30		240	0.59	18
<i>Number of employees:</i> <sup>3</sup>						
Utilities			10	170	0.76	8
Manufacturing			371	140	0.73	271
Wholesale trade			40	110	0.97	39
Retail trade			627	826	2.71	1,699
Transportation and warehousing			17	130	0.85	14
Information technology			28	160	0.09	3
Finance and insurance			92	750	1.48	136
Real estate, rental, and leasing			42	750	1.48	62
Professional, scientific, and technical services			116	760	1.07	124
Administrative support, waste management/remediation			68	170	0.76	52
Educational services			10	522	2.97	30
Health care and social assistance			250	720	3.57	893
Arts, entertainment, and recreation			40	495	2.74	110
Accommodation and food service			125	932	3.92	489
Other services (except public administration)			60	710	1.49	89
<b>Totals</b>	15,175	5,900	1,896			9,405

<sup>1</sup> Source: U.S. Bureau of the Census; American Community Survey; DP05, demographic and housing estimates

<sup>2</sup> Source: U.S. Bureau of the Census; American Community Survey; Table B25024 2012-2016 ACS 5-year estimate

<sup>3</sup> Source: U.S. Bureau of the Census; American Community Survey; Table EC1200A1 All Sectors: Geographic Area Series: Economy-Wide Statistics: 2012

<sup>4</sup> Trip Generation Manual; Institute of Transportation Engineers; 9th Edition

Table 4 - Projected Future Trip Generation – PMPHVTs

Planning Unit/Node <sup>1</sup>	Zoning	Land Use Category and ITE Code	Buildable Lands Inventory			Trip Generation Rate		PMPHVTs at Buildout
			Gross Acres	Net Acres	Development Plan Units	Total Demand Units	Number of Trips	
Monmouth cutoff road	Heavy industrial	General heavy industrial (120)	319.65	255.72		256 acres	2.16 trips/acre	552
North Dallas intersection	General commercial	Blended rate (commercial)	5.16	4.13		44,954 sf	7.00 per 1,000 sf	315
	Central business district	Blended rate (commercial)	2.11	1.69		18,382 sf	7.00 per 1,000 sf	129
	Multi-family residential	Mid-rise apartment (223)	0.82	0.66		4 du	0.39 per du	2
Barberry Node	Neighborhood commercial	Blended rate (neighborhood commercial)	11.40	9.12		139,044 sf	3.70 per 1,000 sf	514
	Multi-family residential	Mid-rise apartment (223)	31.20	24.96		399 du	0.39 per du	156
	Small lot residential	Residential condominium/townhouse (230)	N/A	N/A	41	41 du	0.52 per du	21
	Single family residential	Single-family detached housing (210)	67.90	54.32	516	733 du	1.00 per du	733
	Schools	Elementary school (520)	-	-		- students	0.28 per student	-
	Parks and open space	City park (411)	11.00	11.00	11	11 acres	1.89 per acre	21
LaCreole Node	General commercial	Blended rate (commercial)	26.25	21.00		228,500 sf	7.00 per 1,000 sf	1,600
	Multi-family residential	Mid-rise apartment (223)	23.75	19.00		304 du	0.39 per du	119
	Small lot residential	Residential condominium/townhouse (230)	25.00	20.00		140 du	0.52 per du	73
	Single family residential	Single-family detached housing (210)	20.00	16.00		64 du	1.00 per du	64
	Mixed use	Low-rise apartment (221); blended rate (neighborhood commercial)	17.50	14.00		70 du	0.58 per du	41
	Parks and open space	Blended rate (neighborhood commercial) City park (411)	- 5.00	- 4.00		30,500 sf 4 acres	3.70 per 1,000 sf 1.89 per acre	113 8
Wyatt Node	Neighborhood commercial	Blended rate (commercial)	4.40	3.52		53,666 sf	3.70 per 1,000 sf	199
	Multi-family residential	Mid-rise apartment (223)	21.00	16.80		101 du	0.39 per du	39
	Single family residential	Single-family detached housing (210)	102.45	81.96	313	641 du	1.00 per du	641
	Parks and open space	City park (411)	9.00	9.00	9	9 acres	1.89 acres	17
								5,354

<sup>1</sup> Note: 384.93 gross acres of residential lands in the Southwest area of the City (i.e., Fairview/Oakdale) has been excluded from this analysis due to a lack of access to urban services. These lands were also excluded from analysis in the 2008 Transportation System Plan.

## Transportation Reimbursement Fee Calculations

Derivation of the transportation reimbursement fee methodology is a six (6) step process. The methodological steps in its construction are restated here.

- Step 1: Calculate the original cost of transportation fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of transportation fixed assets**.
- Step 2: Subtract from the adjusted original cost of transportation fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of transportation fixed assets in service**.
- Step 3: Subtract from the modified book value of transportation assets in service any grant funding or contributed capital. This arrives at the **modified book value of transportation fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of transportation fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross transportation reimbursement fee basis**.
- Step 5: Subtract from the gross transportation reimbursement fee basis the fund balance held in the Transportation Reimbursement SDC fund (if available). This arrives at the **net transportation reimbursement fee basis**.
- Step 6: Divide the net transportation reimbursement fee basis by the sum of existing and future PMPHVTs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total transportation reimbursement fee is shown below in Table 5.

Table 5 - Transportation Reimbursement Fee Calculations

	Original Cost	Accumulated Depreciation	Book Value
Streets fixed assets balance @ June 30, 2016	\$ 75,088,531	\$ 30,703,030	\$ 44,385,501
Asset additions in fiscal 2017-17	1,160,702		1,160,702
Fiscal 2016-17 depreciation expense		2,585,596	(2,585,596)
Asset disposals, trades, and recharacterizations	-	-	-
Streets fixed assets balance @ June 30, 2017	<u>\$ 76,249,233</u>	<u>\$ 33,288,627</u>	<u>\$ 42,960,606</u>
less: June 30, 1995 Auditor's adjustment to achieve GASB 34 compliance	<u>48,524,381</u>	<u>14,557,315</u>	<u>33,967,066</u>
Adjusted streets fixed assets balance @ June 30, 2017	<u>\$ 27,724,852</u>	<u>\$ 18,731,312</u>	<u>\$ 8,993,540</u>
Book value of the City's investments in transportation infrastructure			\$ 8,993,540
less:			
Principal outstanding on transportation infrastructure long term debt			-
Grants and contributed capital			-
Streets reimbursement fee fund balance			-
Reimbursement fee basis			<u>\$ 8,993,540</u>
PM peak hour vehicle trips proportionality test:			
Existing PM peak hour vehicle trips (existing demand)		9,405	
Future PM peak hour vehicle trips created by growth (future demand)		<u>5,354</u>	
Total existing and future demand in PM peak hour vehicle trips			14,760
Unit cost per total system PM peak hour vehicle trip (i.e., reimbursement fee)			<u><u>\$ 609</u></u>

## 2017 TSP Project Costs and Funding Sources

Project Type			Project Title	Total Cost	Funding source					
Road	Ped	Bike			City	SDC	Urban Renewal	State	Federal	LID or Utility
<b>Projects to be Funded in the Next Ten (10) Years</b>										
X	*	*	Connect Hawthorne to SE Hawthorne Ave	\$500,000	\$100,000	\$150,000			\$250,000	
X	*	*	Extend SE Hankle Street to SE Barberry Ave.	\$1,450,000		\$350,000			\$250,000	\$850,000
X	*	*	Improve & widen Hawthorne Ave to City Standard	\$1,250,000		\$300,000			\$600,000	\$350,000
X	*	*	Extend SE Barberry Ave to E. Ellendale Av.	\$2,250,000		\$500,000				\$1,750,000
X	*	*	Signalize & widen E. Ellendale at Fir Villa Rd.	\$1,800,000	\$400,000	\$600,000			\$200,000	\$600,000
X	*	*	Signalize & widen E. Ellendale at SE Barberry Ave.	\$2,500,000		\$800,000			\$200,000	\$1,500,000
X	*	*	Extend Hawthorne Ave North to new East-West connection road.	\$1,150,000		\$300,000			\$150,000	\$700,000
X	*	*	Extend LaCreole north to Kings Valley Hwy.	\$2,750,000		\$650,000			\$300,000	\$1,800,000
X	*	*	New East-West Road connecting Polk Station Rd and Hawthorne Ave	\$2,250,000		\$500,000			\$250,000	\$1,500,000
X	*	*	Widen/Improve James Howe Rd and Improve Intersection at W. Ellendale Ave.	\$1,500,000		\$350,000			\$150,000	\$1,000,000
X	*	*	Extend Wyatt St north to serve Wyatt Node	\$2,100,000		\$500,000				\$1,600,000
X	*	*	Extend River Drive north to City limits.	\$1,650,000		\$400,000			\$250,000	\$1,000,000
X	*	*	New East-West Connector from James Howe Road to NW Douglas Ave.	\$1,750,000		\$400,000			\$350,000	\$1,000,000
X	*	*	New Collector from KV. Highway (Bridlewood Dr.) to SW Hayter St.	\$2,200,000		\$800,000				\$1,400,000
X	*	*	Godsey Road widening & improvements	\$1,800,000	\$100,000	\$0			\$1,500,000	\$200,000
X	*	*	Godsey Road Intersection improvement at Monmouth Cutoff Highway	\$750,000	\$250,000	\$500,000				
X	*	*	SE Fir Villa Road Extension to Monmouth Cutoff Hwy.	\$3,500,000		\$1,500,000			\$300,000	\$1,700,000
X	*	*	Downtown Streetscape Improvements	\$3,500,000			\$3,500,000			

Project Type			Project Title	Total Cost	Funding source						
Road	Ped	Bike			City	SDC	Urban Renewal	State	Federal	LID or Utility	Developer
<b>Projects to be Funded in the Next Ten (10) Years</b>											
X	*	*	E. Ellendale at SE LaCreole Dr. Intersection Improvements - widening & channelization	\$850,000		\$300,000			\$250,000	\$300,000	
X	*	*	Signalization - SE Washington at SE Jefferson Intersection	\$750,000		\$350,000		\$400,000			
X	*	*	Oak Villa Road at E. Ellendale Ave - Widening and channelization	\$1,500,000		\$350,000			\$550,000	\$600,000	
X	*	*	NE Polk Station Road at E. Ellendale Ave - Widening & Channelization	\$1,200,000	\$400,000	\$300,000		\$500,000			
X	*	*	West Ellendale at SW Levens St. - Intersection Improvements	\$350,000	\$300,000	\$50,000					
X	*	*	SE Miller Ave at SE LaCreole Drive - Intersection Improvements	\$350,000	\$300,000	\$50,000					
X	*	*	Signalization - Main St at SE Mill St.	\$750,000	\$300,000	\$150,000	\$300,000				
X	*	*	Signalization - SE Mill St at SE Jefferson Intersection	\$750,000	\$300,000	\$150,000	\$300,000				
X	*	*	Kings Valley Highway at Orchard Drive - Widening and Signalization	\$850,000	\$100,000	\$250,000			\$500,000		
X	*	*	North Dallas Intersection Improvements - add through lanes and right turn lanes.	\$2,200,000	\$200,000	\$750,000			\$1,250,000		
X	*	*	Monmouth Cutoff Highway Widening & Improvements - SE Uglow to SE Godsey	\$2,750,000		\$750,000		\$1,000,000		\$1,000,000	
<b>Projects to be Funded in Fifteen (15) to Twenty (20) Years.</b>											
X	*	*	Widen E. Ellendale Ave from Main St. to Oak Villa Rd.	<u>\$5,250,000</u>	<u>\$250,000</u>	<u>\$1,700,000</u>	<u>\$0</u>	<u>\$300,000</u>	<u>\$1,000,000</u>	<u>\$500,000</u>	<u>\$1,500,000</u>
Total:				<u>\$52,200,000</u>	<u>\$3,000,000</u>	<u>\$13,750,000</u>	<u>\$4,100,000</u>	<u>\$2,200,000</u>	<u>\$4,250,000</u>	<u>\$5,750,000</u>	<u>\$19,150,000</u>

\* Aspects of ped and bike included in all roadway improvement projects.

## Transportation Improvement Fee Calculations

The calculation of the transportation improvement fee also follows the logic discussed in the body of this report. As earlier stated, this study uses the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the transportation infrastructure. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Transportation Improvement SDC Fund. This arrives at **the net transportation improvement fee basis**.
- Step 3: Divide the net transportation improvement fee basis by the forecasted number of growth PMPHVTs over the planning period. This arrives at **the total transportation improvement fee**.

The actual data that was used to calculate the total transportation improvement fee is shown below in Table 6.

Table 6 - Transportation Improvement Fee Calculations

	Total Project Costs	SDC Eligible Costs	Project Costs to be funded from Other Sources
TSP projects to serve growth:			
<i>Projects to be Funded in the Next Ten (10) Years</i>			
Connect Hawthorne to SE Hawthorne Ave	\$ 500,000	\$ 150,000	\$ 350,000
Extend SE Hankle Street to SE Barberry Ave.	1,450,000	350,000	1,100,000
Improve & widen Hawthorne Ave to City Standard	1,250,000	300,000	950,000
Extend SE Barberry Ave to E. Ellendale Av.	2,250,000	500,000	1,750,000
Signalize & widen E. Ellendale at Fir Villa Rd.	1,800,000	600,000	1,200,000
Signalize & widen E. Ellendale at SE Barberry Ave.	2,500,000	800,000	1,700,000
Extend Hawthorne Ave North to new East-West connection road.	1,150,000	300,000	850,000
Extend LaCreole north to Kings Valley Hwy.	2,750,000	650,000	2,100,000
New East-West Road connecting Polk Station Rd and Hawthorne Ave	2,250,000	500,000	1,750,000
Widen/Improve James Howe Rd and Improve Intersection at W. Ellendale Ave.	1,500,000	350,000	1,150,000
Extend Wyatt St north to serve Wyatt Node	2,100,000	500,000	1,600,000
Extend River Drive north to City limits.	1,650,000	400,000	1,250,000
New East-West Connector from James Howe Road to NW Douglas Ave.	1,750,000	400,000	1,350,000
New Collector from KV. Highway (Bridlewood Dr.) to SW Hayter St.	2,200,000	800,000	1,400,000
Godsey Road widening & improvements	1,800,000	-	1,800,000
Godsey Road Intersection improvement at Monmouth Cutoff Highway	750,000	500,000	250,000
SE Fir Villa Road Extension to Monmouth Cutoff Hwy.	3,500,000	1,500,000	2,000,000
Downtown Streetscape Improvements	3,500,000	-	3,500,000
E. Ellendale at SE LaCreole Dr. Intersection Improvements - widening & channelization	850,000	300,000	550,000
Signalization - SE Washington at SE Jefferson Intersection	750,000	350,000	400,000
Oak Villa Road at E. Ellendale Ave - Widening and channelization	1,500,000	350,000	1,150,000
NE Polk Station Road at E. Ellendale Ave - Widening & Channelization	1,200,000	300,000	900,000
West Ellendale at SW Levens St. - Intersection Improvements	350,000	50,000	300,000
SE Miller Ave at SE LaCreole Drive - Intersection Improvements	350,000	50,000	300,000
Signalization - Main St at SE Mill St.	750,000	150,000	600,000
Signalization - SE Mill St at SE Jefferson Intersection	750,000	150,000	600,000
Kings Valley Highway at Orchard Drive - Widening and Signalization	850,000	250,000	600,000
North Dallas Intersection Improvements - add through lanes and right turn lanes.	2,200,000	750,000	1,450,000
Monmouth Cutoff Highway Widening & Improvements - SE Uglow to SE Godsey	2,750,000	750,000	2,000,000
<i>Projects to be Funded in Fifteen (15) to Twenty (20) Years.</i>			
Widen E. Ellendale Ave from Main St. to Oak Villa Rd.	5,250,000	1,700,000	3,550,000
Total TSP future project costs	\$ 52,200,000	\$ 13,750,000	\$ 38,450,000
	100%	26%	74%
Calculation of improvement fee SDC:			
Total TSP future project costs identified to serve growth		\$ 13,750,000	
less: transportation improvement fee fund balance as of April 30, 2018		534,131	
Net transportation improvement fee basis		\$ 13,215,869	
Future PM peak hour vehicle trips created by growth		5,354	
Transportation improvement fee per PM peak hour vehicle trip		\$ 2,468	

## Transportation SDC Model Summary

The 2018 transportation SDC methodology update was done in accordance with Dallas City Code Chapter 4, and with the benefit of adopted capital improvement plans and plan updates for transportation services. We recommend the City update the SDC charge and methodology to reflect the current capital improvement program. Our analysis indicates the City can charge a maximum of \$3,231 per PMPHVT. To charge the appropriate SDC, the City must estimate how many PMPHVTs will be generated by the development in question. That number can then be multiplied by \$3,231 to determine the amount of SDC owed by new development projects.

The number of PMPHVTs that a property will generate is a function of the increase in scope and scale of activities that will occur on that property. By “scope of activities,” we mean land use. For example, a new single-family residence will generate trip-ends differently from a new retail store of the same size. By “scale of activities,” we mean some measure of quantity. For residential land uses, the number of dwelling units is an appropriate measure of scale. For many commercial and industrial land uses, building floor area is the best measure. For example, a 20,000-square-foot store is likely to generate twice the number of trip-ends as a 10,000-square-foot store of the same type. Table 7 presents proposed transportation SDCs per unit of scale for several land uses in the 9th edition of Trip Generation Manual, published by the Institute of Transportation Engineers (ITE):

Finally, we recommend the City adopt a policy of reviewing its suite of SDCs every five years. Between the review dates, the city should apply a cost adjustment index to the SDC rates annually to reflect changes in costs for land and construction. This policy should be codified in the Dallas City Code. We suggest the City consider the following language for that code change:

1. Notwithstanding any other provision, the dollar amounts of the SDC set forth in the SDC methodology report shall on January 1<sup>st</sup> of each year be adjusted to account for changes in the costs of acquiring and constructing facilities. The adjustment factor shall be based on:
  - a. The change in construction costs according to the Engineering News Record (ENR) 20 City Average Construction Cost Index (CCI).
  - b. The system development charges adjustment factor shall be used to adjust the system development charges, unless they are otherwise adjusted by the city based on a change in the costs of materials, labor, or real property; or adoption of an updated methodology.

Table 7 - Transportation SDCs by Sample ITE Code

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked and pass-by Trip Adjustment	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
<b>Port and Terminal (Land Uses 000-099)</b>											
090	Park-an-Ride Lot with Bus Service	0.62	0.00%	0.00%	-	0.62	1,530	378	95	2,003	Parking space
<b>Industrial (Land Uses 100-199)</b>											
110	General light industrial	0.97	0.00%	0.00%	-	0.97	2,394	591	149	3,134	1,000 square feet of gross floor area
120	General heavy industrial	0.68	0.00%	0.00%	-	0.68	1,678	414	105	2,197	1,000 square feet of gross floor area
130	Industrial park	0.85	0.00%	0.00%	-	0.85	2,098	518	131	2,746	1,000 square feet of gross floor area
140	Manufacturing	0.73	0.00%	0.00%	-	0.73	1,802	445	112	2,359	1,000 square feet of gross floor area
150	Warehousing	0.32	0.00%	0.00%	-	0.32	790	195	49	1,034	1,000 square feet of gross floor area
151	Mini-warehouse	0.26	0.00%	0.00%	-	0.26	642	158	40	840	1,000 square feet of gross floor area
152	High-Cube Warehouse/Distribution Center	0.12	0.00%	0.00%	-	0.12	296	73	18	388	1,000 square feet of gross floor area
160	Data center	0.09	0.00%	0.00%	-	0.09	222	55	14	291	1,000 square feet of gross floor area
170	Utilities	0.76	0.00%	0.00%	-	0.76	1,876	463	117	2,455	1,000 square feet of gross floor area
<b>Residential (Land Uses 200-299)</b>											
210	Single family detached housing	1.00	0.00%	0.00%	-	1.00	2,468	609	154	3,231	Dwelling unit
220	Apartment	0.62	0.00%	0.00%	-	0.62	1,530	378	95	2,003	Dwelling unit
231	Low-Rise Residential Condominium/Townhouse	0.78	0.00%	0.00%	-	0.78	1,925	475	120	2,520	Dwelling unit
240	Mobile home park	0.59	0.00%	0.00%	-	0.59	1,456	359	91	1,906	Occupied dwelling unit
251	Senior Adult Housing - Detached	0.27	0.00%	0.00%	-	0.27	666	164	42	872	Dwelling unit
252	Senior Adult Housing - Attached	0.25	0.00%	0.00%	-	0.25	617	152	38	808	Dwelling unit
253	Congregate Care Facility	0.17	0.00%	0.00%	-	0.17	420	104	26	549	Dwelling unit
254	Assisted living	0.22	0.00%	0.00%	-	0.22	543	134	34	711	Bed
255	Continuing Care Retirement Community	0.16	0.00%	0.00%	-	0.16	395	97	25	517	Unit
<b>Lodging (Land Uses 300-399)</b>											
310	Hotel	0.60	0.00%	0.00%	-	0.60	1,481	365	92	1,939	Room
320	Motel	0.47	0.00%	0.00%	-	0.47	1,160	286	72	1,518	Room

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment							
<b>Recreational (Land Uses 400-499)</b>												
411	City Park*	0.19	0.00%	0.00%	-		0.19	466	115	29	611	Acre
414	Water Slide Park	1.92	0.00%	0.00%	-		1.92	4,739	1,169	295	6,203	1,000 square feet of gross floor area
416	Campground/Recreational Vehicle Park	0.27	0.00%	0.00%	-		0.27	666	164	42	872	Occupied camp site
417	Regional park	0.20	0.00%	0.00%	-		0.20	494	122	31	646	Acre
430	Golf course	0.30	0.00%	0.00%	-		0.30	740	183	46	969	Acre
431	Miniature Golf Course	0.33	0.00%	0.00%	-		0.33	814	201	51	1,066	Hole
432	Golf Driving Range	1.25	0.00%	0.00%	-		1.25	3,085	761	192	4,039	Tees/Driving Position
433	Batting Cages	2.22	0.00%	0.00%	-		2.22	5,479	1,352	342	7,172	Cage
435	Multipurpose Recreational Facility	3.58	0.00%	0.00%	-		3.58	8,835	2,180	551	11,566	1,000 square feet of gross floor area
437	Bowling Alley	1.71	0.00%	0.00%	-		1.71	4,220	1,041	263	5,525	1,000 square feet of gross floor area
441	Live Theater	0.02	0.00%	0.00%	-		0.02	49	12	3	65	Seat
443	Movie Theater without Matinee	24.00	0.00%	0.00%	-		24.00	59,232	14,616	3,692	77,540	Movie Screen
444	Movie Theater with Matinee - Friday pm peak hour	45.91	0.00%	0.00%	-		45.91	113,306	27,959	7,063	148,328	Movie screen
445	Multiplex Movie Theater - Friday pm peak hour	22.76	0.00%	0.00%	-		22.76	56,172	13,861	3,502	73,534	Movie screen
460	Arena*	3.33	0.00%	0.00%	-		3.33	8,226	2,030	513	10,768	Acre
465	Ice Skating Rink	2.36	0.00%	0.00%	-		2.36	5,824	1,437	363	7,625	1,000 square feet of gross floor area
488	Soccer Complex	17.17	0.00%	0.00%	-		17.17	42,376	10,457	2,642	55,474	Field
490	Tennis Courts	3.88	0.00%	0.00%	-		3.88	9,576	2,363	597	12,536	Court
491	Racquet/Tennis Club	3.35	0.00%	0.00%	-		3.35	8,268	2,040	515	10,823	Court
492	Health/Fitness Club	3.53	0.00%	0.00%	-		3.53	8,712	2,150	543	11,405	1,000 square feet of gross floor area
493	Athletic Club	5.96	0.00%	0.00%	-		5.96	14,709	3,630	917	19,256	1,000 square feet of gross floor area
495	Recreational Community Center	2.74	0.00%	0.00%	-		2.74	6,762	1,669	422	8,853	1,000 square feet of gross floor area
<b>Institutional (Land Uses 500-599)</b>												
501	Military Base	0.39	0.00%	0.00%	-		0.39	963	238	60	1,260	Employee
520	Elementary School	1.21	0.00%	0.00%	-		1.21	2,986	737	186	3,909	1,000 square feet of gross floor area
522	Middle School/Junior High School	1.19	0.00%	0.00%	-		1.19	2,937	725	183	3,845	1,000 square feet of gross floor area
530	High School	0.97	0.00%	0.00%	-		0.97	2,394	591	149	3,134	1,000 square feet of gross floor area
534	Private School (K-8) - pm peak hour generator	6.53	0.00%	0.00%	-		6.53	16,116	3,977	1,005	21,097	1,000 square feet of gross floor area
536	Private School (K-12) - pm peak hour generator	5.50	0.00%	0.00%	-		5.50	13,574	3,350	846	17,770	1,000 square feet of gross floor area
540	Junior/Community College	2.54	0.00%	0.00%	-		2.54	6,269	1,547	391	8,206	1,000 square feet of gross floor area
550	University/College	0.79	0.00%	0.00%	-		0.79	1,950	481	122	2,552	Employee
560	Church	0.55	0.00%	0.00%	-		0.55	1,357	335	85	1,777	1,000 square feet of gross floor area
561	Synagogue	1.69	0.00%	0.00%	-		1.69	4,171	1,029	260	5,460	1,000 square feet of gross floor area
562	Mosque - pm peak hour generator	11.02	0.00%	0.00%	-		11.02	27,197	6,711	1,695	35,604	1,000 square feet of gross floor area
565	Day Care Center	12.34	0.00%	0.00%	-		12.34	30,455	7,515	1,899	39,869	1,000 square feet of gross floor area
566	Cemetery	0.84	0.00%	0.00%	-		0.84	2,073	512	129	2,714	Acre
571	Prison	2.91	0.00%	0.00%	-		2.91	7,182	1,772	448	9,402	1,000 square feet of gross floor area
580	Museum	0.18	0.00%	0.00%	-		0.18	444	110	28	582	1,000 square feet of gross floor area
590	Library	7.30	0.00%	0.00%	-		7.30	18,016	4,446	1,123	23,585	1,000 square feet of gross floor area
591	Lodge/Fraternal Organization	0.03	0.00%	0.00%	-		0.03	74	18	5	97	Member

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment							
<b>Medical (Land Uses 600-699)</b>												
610	Hospital	0.93	0.00%	0.00%	-		0.93	2,295	566	143	3,005	1,000 square feet of gross floor area
620	Nursing Home	0.74	0.00%	0.00%	-		0.74	1,826	451	114	2,391	1,000 square feet of gross floor area
630	Clinic	5.18	0.00%	0.00%	-		5.18	12,784	3,155	797	16,736	1,000 square feet of gross floor area
640	Animal Hospital/Veterinary Clinic	4.72	0.00%	0.00%	-		4.72	11,649	2,874	726	15,250	1,000 square feet of gross floor area
<b>Office (Land Uses 700-799)</b>												
710	General office building	1.49	0.00%	0.00%	-		1.49	3,677	907	229	4,814	1,000 square feet of gross floor area
714	Corporate Headquarters Building	1.41	0.00%	0.00%	-		1.41	3,480	859	217	4,555	1,000 square feet of gross floor area
715	Single Tenant Office Building	1.74	0.00%	0.00%	-		1.74	4,294	1,060	268	5,622	1,000 square feet of gross floor area
720	Medical-dental office building	3.57	0.00%	0.00%	-		3.57	8,811	2,174	549	11,534	1,000 square feet of gross floor area
730	Government Office Building	1.21	0.00%	0.00%	-		1.21	2,986	737	186	3,909	1,000 square feet of gross floor area
731	State Motor Vehicles Department	17.09	0.00%	0.00%	-		17.09	42,178	10,408	2,629	55,215	1,000 square feet of gross floor area
732	United States Post Office	11.22	0.00%	0.00%	-		11.22	27,691	6,833	1,726	36,250	1,000 square feet of gross floor area
733	Government Office Complex	2.85	0.00%	0.00%	-		2.85	7,034	1,736	438	9,208	1,000 square feet of gross floor area
750	Office park - pm peak hour	1.48	0.00%	0.00%	-		1.48	3,653	901	228	4,782	1,000 square feet of gross floor area
760	Research and development center - pm peak hour	1.07	0.00%	0.00%	-		1.07	2,641	652	165	3,457	1,000 square feet of gross floor area
770	Business park - pm peak hour	1.26	0.00%	0.00%	-		1.26	3,110	767	194	4,071	1,000 square feet of gross floor area

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					and pass-by Trip Adjustment							
<b>Retail (Land Uses 800-899)</b>												
810	Tractor Supply Store	1.40	0.00%	0.00%	-		1.40	3,455	853	215	4,523	1,000 square feet of gross floor area
811	Construction Equipment Rental Store	0.99	0.00%	0.00%	-		0.99	2,443	603	152	3,199	1,000 square feet of gross floor area
812	Building Materials and Lumber Store	4.49	0.00%	0.00%	-		4.49	11,081	2,734	691	14,507	1,000 square feet of gross floor area
813	Free Standing Discount Super Store	4.35	0.00%	28.00%	1.22	3.13	7,730	1,907	482	10,119	1,000 square feet of gross floor area	
814	Variety Store	6.82	0.00%	0.00%	-	6.82	16,832	4,153	1,049	22,034	1,000 square feet of gross floor area	
815	Free Standing Discount Store	4.98	35.25%	17.00%	2.60	2.38	5,869	1,448	366	7,683	1,000 square feet of gross floor area	
816	Hardware/Paint Store	4.84	29.50%	26.00%	2.69	2.15	5,316	1,312	331	6,959	1,000 square feet of gross floor area	
817	Nursery (Garden Center)	6.94	0.00%	0.00%	-	6.94	17,128	4,226	1,068	22,422	1,000 square feet of gross floor area	
818	Nursery (Wholesale)	5.17	0.00%	0.00%	-	5.17	12,760	3,149	795	16,703	1,000 square feet of gross floor area	
820	Shopping Center	3.71	15.86%	34.00%	1.85	1.86	4,591	1,133	286	6,010	1,000 square feet of gross leasable area	
823	Factory Outlet Center	2.29	0.00%	0.00%	-	2.29	5,652	1,395	352	7,399	1,000 square feet of gross floor area	
826	Specialty Retail Center	2.71	0.00%	0.00%	-	2.71	6,688	1,650	417	8,756	1,000 square feet of gross leasable area	
841	Automobile Sales	2.62	0.00%	0.00%	-	2.62	6,466	1,596	403	8,465	1,000 square feet of gross floor area	
842	Recreational Vehicle Sales	2.54	0.00%	0.00%	-	2.54	6,269	1,547	391	8,206	1,000 square feet of gross floor area	
843	Automobile Parts Sales	5.98	13.00%	43.00%	3.35	2.63	6,494	1,602	405	8,501	1,000 square feet of gross floor area	
848	Tire Store	4.15	3.33%	28.00%	1.30	2.85	7,033	1,735	438	9,207	1,000 square feet of gross floor area	
849	Tire Superstore	2.11	0.00%	0.00%	-	2.11	5,207	1,285	325	6,817	1,000 square feet of gross floor area	
850	Supermarket	9.48	25.25%	36.00%	5.81	3.67	9,066	2,237	565	11,869	1,000 square feet of gross floor area	
851	Convenience Market (Open 24 Hours)	52.41	6.47%	61.00%	35.36	17.05	42,072	10,382	2,623	55,076	1,000 square feet of gross floor area	
852	Convenience Market (Open 15-16 Hours)	34.57	12.14%	63.50%	26.15	8.42	20,788	5,130	1,296	27,213	1,000 square feet of gross floor area	
853	Convenience Market with Gasoline Pumps	50.92	17.80%	66.00%	42.67	8.25	20,359	5,024	1,269	26,651	1,000 square feet of gross floor area	
854	Discount Supermarket	8.34	23.20%	23.00%	3.85	4.49	11,074	2,733	690	14,497	1,000 square feet of gross floor area	
857	Discount Club	4.18	0.00%	0.00%	-	4.18	10,316	2,546	643	13,505	1,000 square feet of gross floor area	
860	Wholesale Market	0.88	0.00%	0.00%	-	0.88	2,172	536	135	2,843	1,000 square feet of gross floor area	
861	Sporting Goods Superstore	1.84	0.00%	0.00%	-	1.84	4,541	1,121	283	5,945	1,000 square feet of gross floor area	
862	Home Improvement Superstore	2.33	8.00%	48.00%	1.30	1.03	2,530	624	158	3,312	1,000 square feet of gross floor area	
863	Electronics Superstore	4.50	33.00%	40.00%	3.29	1.22	2,999	740	187	3,925	1,000 square feet of gross floor area	
864	Toy/Children's Superstore	4.99	0.00%	0.00%	-	4.99	12,315	3,039	768	16,122	1,000 square feet of gross floor area	
865	Baby Superstore	1.82	0.00%	0.00%	-	1.82	4,492	1,108	280	5,880	1,000 square feet of gross floor area	
866	Pet Supply Superstore	3.38	0.00%	0.00%	-	3.38	8,342	2,058	520	10,920	1,000 square feet of gross floor area	
867	Office Supply Superstore	3.40	0.00%	0.00%	-	3.40	8,391	2,071	523	10,985	1,000 square feet of gross floor area	
868	Book Superstore	15.82	0.00%	0.00%	-	15.82	39,044	9,634	2,434	51,112	1,000 square feet of gross floor area	
869	Discount Home Furnishing Superstore	1.57	0.00%	0.00%	-	1.57	3,875	956	242	5,072	1,000 square feet of gross floor area	
872	Bed and Linen Superstore	2.22	0.00%	0.00%	-	2.22	5,479	1,352	342	7,172	1,000 square feet of gross floor area	
875	Department Store	1.87	0.00%	0.00%	-	1.87	4,615	1,139	288	6,042	1,000 square feet of gross floor area	
876	Apparel Store	3.83	0.00%	0.00%	-	3.83	9,452	2,332	589	12,374	1,000 square feet of gross floor area	
879	Arts and Crafts Store	6.21	0.00%	0.00%	-	6.21	15,326	3,782	955	20,064	1,000 square feet of gross floor area	
880	Pharmacy/Drugstore without Drive-Through	8.40	4.67%	53.00%	4.84	3.56	8,776	2,166	547	11,489	1,000 square feet of gross floor area	
881	Pharmacy/Drugstore with Drive-Through	9.91	13.00%	49.00%	6.14	3.77	9,294	2,293	579	12,167	1,000 square feet of gross floor area	
890	Furniture Store	0.45	10.33%	53.00%	0.29	0.17	407	100	25	533	1,000 square feet of gross floor area	
896	DVD/Video Store	13.60	0.00%	0.00%	-	13.60	33,565	8,282	2,092	43,940	1,000 square feet of gross floor area	
897	Medical Equipment Store	1.24	0.00%	0.00%	-	1.24	3,060	755	191	4,006	1,000 square feet of gross floor area	

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked and pass-by Trip		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					Adjustment							
<b>Services (Land Uses 900-999)</b>												
911	Walk-in Bank	12.13	0.00%	0.00%	-		12.13	29,937	7,387	1,866	39,190	1,000 square feet of gross floor area
912	Drive-in Bank	24.30	25.67%	47.00%	17.66		6.64	16,392	4,045	1,022	21,459	1,000 square feet of gross floor area
918	Hair Salon	1.45	0.00%	0.00%	-		1.45	3,579	883	223	4,685	1,000 square feet of gross floor area
920	Copy, Print and Express Ship Store	7.41	0.00%	0.00%	-		7.41	18,288	4,513	1,140	23,941	1,000 square feet of gross floor area
925	Drinking Place	11.34	0.00%	0.00%	-		11.34	27,987	6,906	1,745	36,638	1,000 square feet of gross floor area
931	Quality Restaurant	7.49	13.50%	44.00%	4.31		3.18	7,856	1,939	490	10,285	1,000 square feet of gross floor area
932	High-Turnover (Sit Down) Restaurant	9.85	17.25%	43.00%	5.93		3.92	9,663	2,384	602	12,650	1,000 square feet of gross floor area
933	Fast-food restaurant without drive-through	26.15	17.25%	43.00%	15.76		10.39	25,654	6,330	1,599	33,583	1,000 square feet of gross floor area
934	Fast-food restaurant with drive-through	32.65	9.06%	50.00%	19.28		13.37	32,993	8,141	2,057	43,191	1,000 square feet of gross floor area
935	Fast-food restaurant with drive-through and no indoor seating	44.99	0.00%	89.00%	40.04		4.95	12,214	3,014	761	15,989	1,000 square feet of gross floor area
936	Coffee/donut shop without drive-through	40.75	17.25%	43.00%	24.55		16.20	39,977	9,865	2,492	52,334	1,000 square feet of gross floor area
937	Coffee/donut shop with drive-through	42.80	9.06%	50.00%	25.28		17.52	43,250	10,672	2,696	56,618	1,000 square feet of gross floor area
938	Coffee/donut kiosk	75.00	9.06%	50.00%	44.29		30.71	75,788	18,701	4,724	99,214	1,000 square feet of gross floor area
939	Bread/Donut/Bagel Shop without Drive-Through Window	28.00	0.00%	0.00%	-		28.00	69,104	17,052	4,308	90,464	1,000 square feet of gross floor area
940	Bread/Donut/Bagel Shop with Drive-Through Window	18.99	0.00%	0.00%	-		18.99	46,867	11,565	2,922	61,354	1,000 square feet of gross floor area
941	Quick Lubrication Vehicle Shop	5.19	0.00%	0.00%	-		5.19	12,809	3,161	798	16,768	Servicing Position
942	Automobile Care Center	3.11	0.00%	0.00%	-		3.11	7,675	1,894	478	10,048	1,000 sq. ft. of occupied gross leasable area
943	Automobile Parts and Service Center	4.46	0.00%	0.00%	-		4.46	11,007	2,716	686	14,410	1,000 square feet of gross floor area
944	Gasoline/service station	13.87	23.00%	42.00%	9.02		4.85	11,981	2,956	747	15,684	Vehicle fueling position
945	Gasoline/service station with convenience market	13.51	31.22%	56.00%	11.78		1.73	4,260	1,051	266	5,577	Vehicle fueling position
946	Gasoline/service station with convenience market and car wash	13.86	27.11%	49.00%	10.55		3.31	8,172	2,016	509	10,697	Vehicle fueling position
947	Self-Service Car Wash	5.54	0.00%	0.00%	-		5.54	13,673	3,374	852	17,899	Wash stall
948	Automated Car Wash	14.12	0.00%	0.00%	-		14.12	34,848	8,599	2,172	45,620	1,000 square feet of gross floor area
950	Truck Stop	13.63	0.00%	0.00%	-		13.63	33,639	8,301	2,097	44,036	1,000 square feet of gross floor area

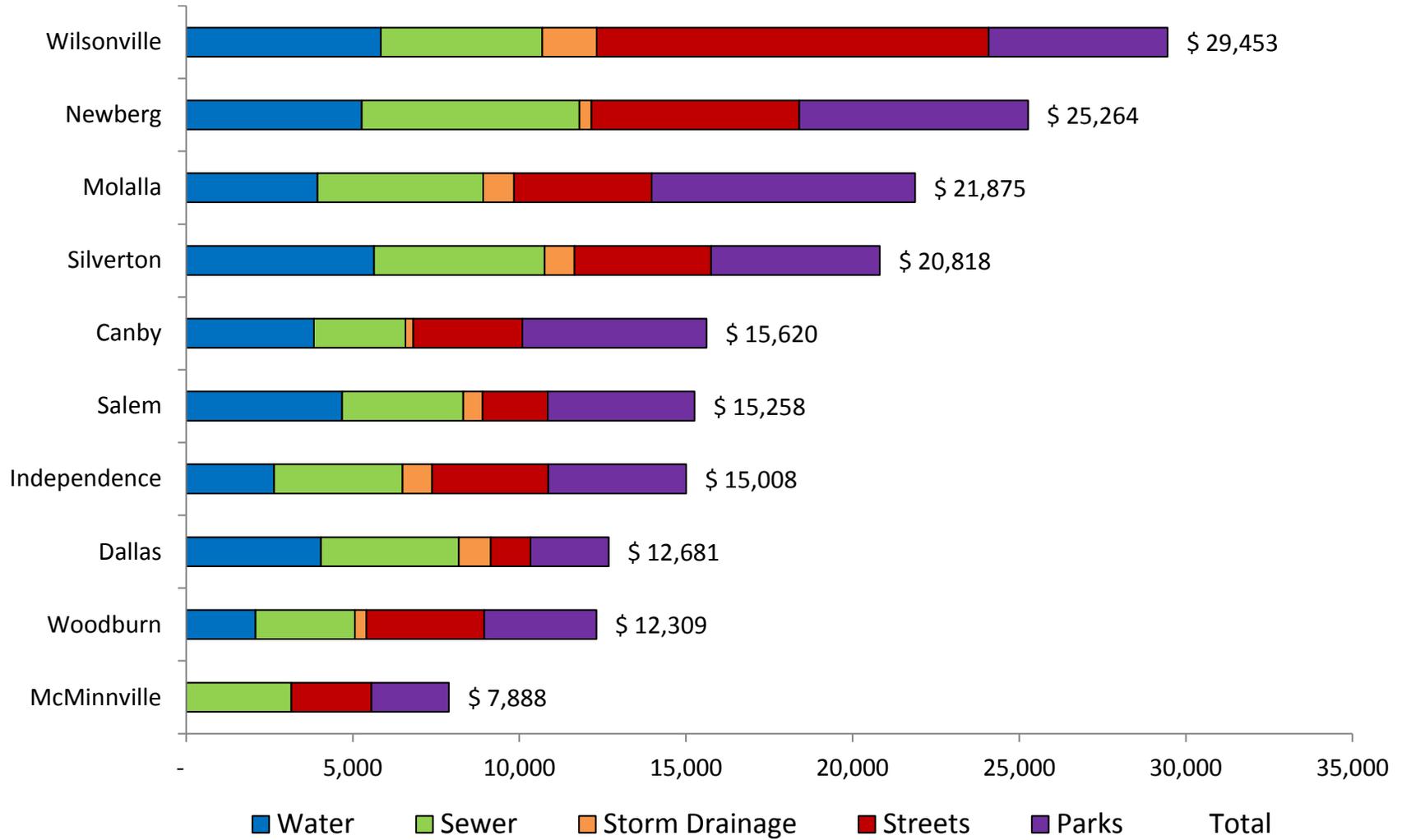
\* No ITE PM peak hour trip generation for this code/category, the trip generation shown is ITE weekday average divided by ten.

Source: ITE, Trip Generation Manual, 9th edition

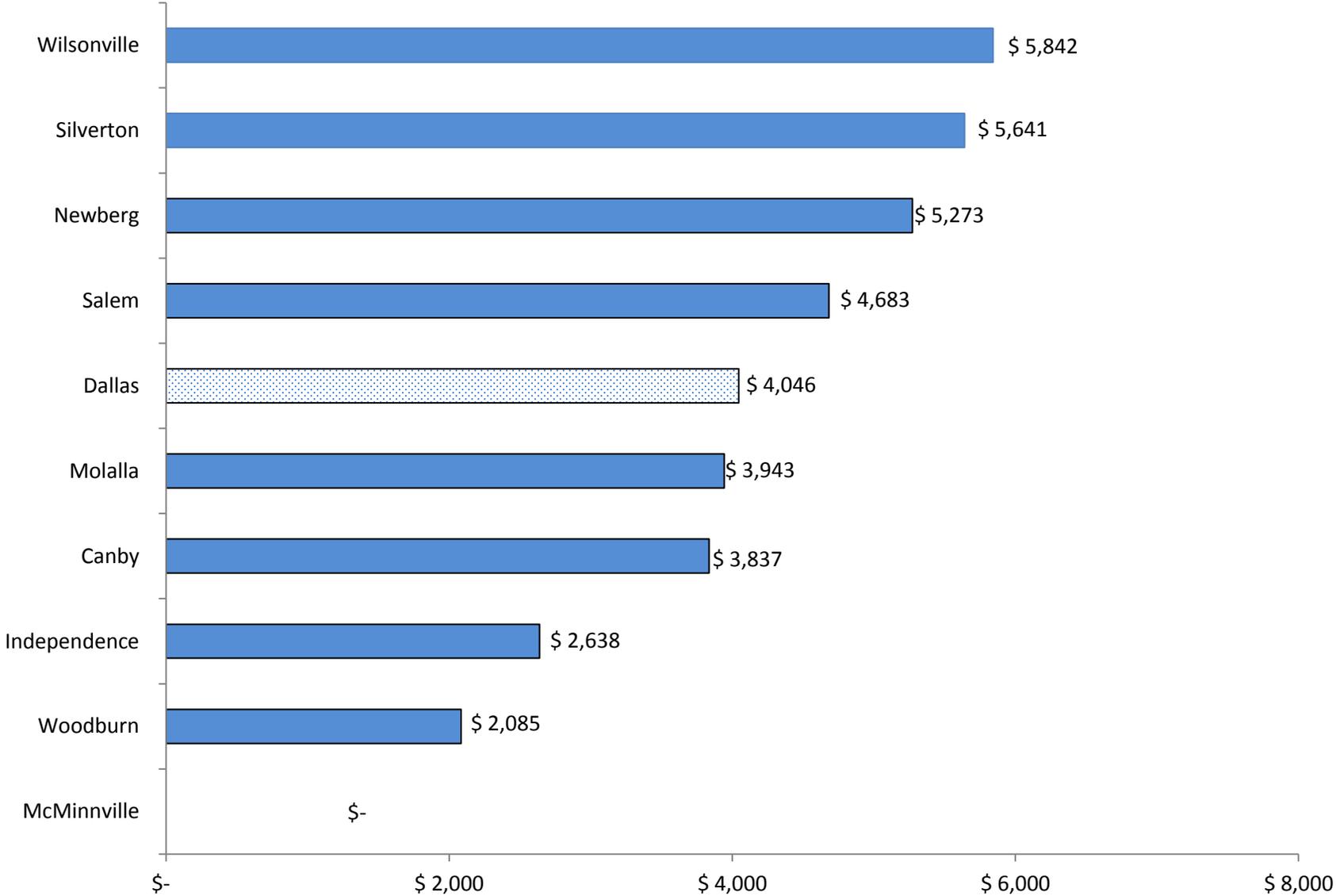
PM peak vehicle trips expressed in trip ends on a weekday, peak hour of adjacent street traffic, one hour, between 4:00 pm and 6:00 pm unless otherwise noted

## Neighboring Communities' SDCs

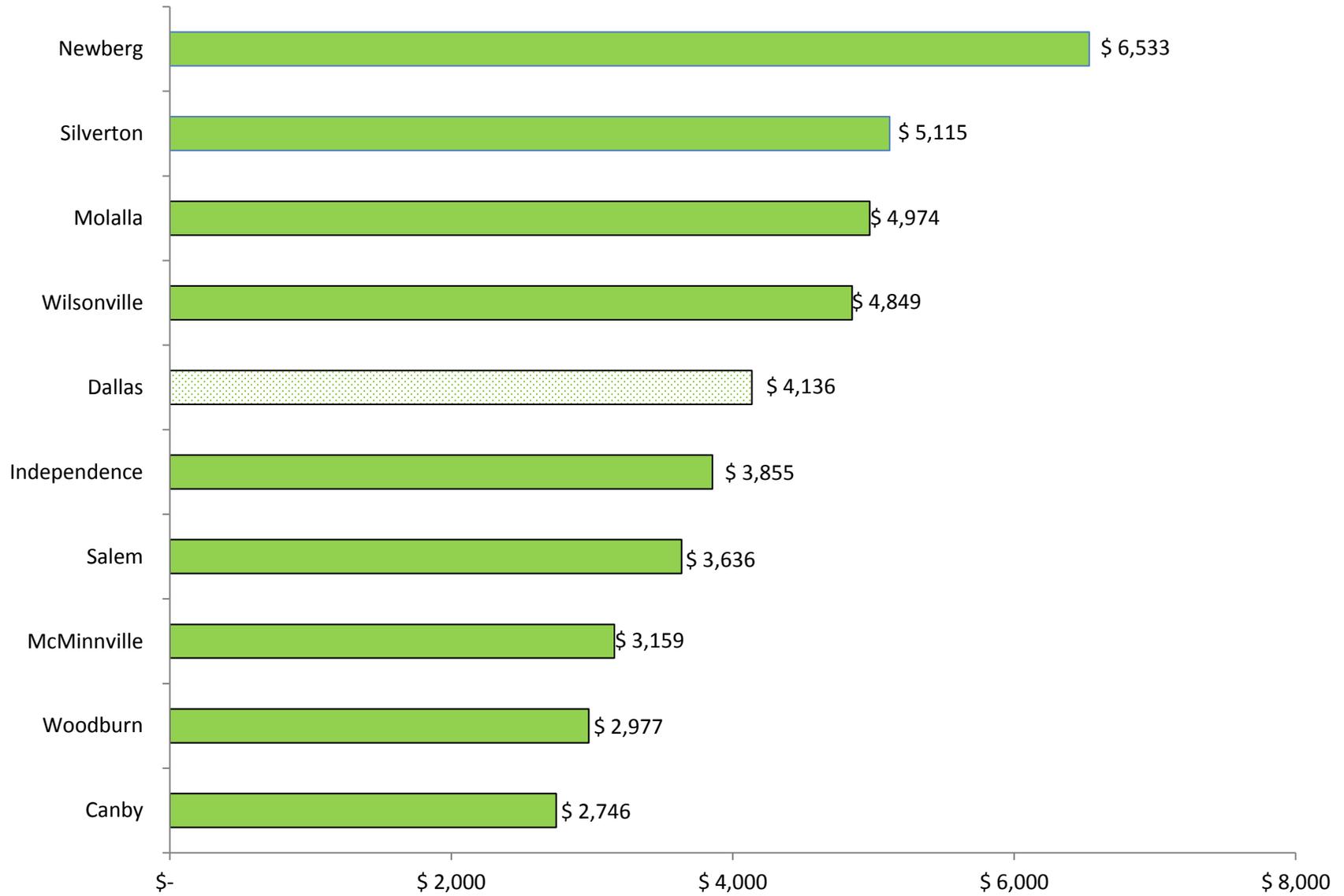
### Total Single Family Residential SDCs by Component



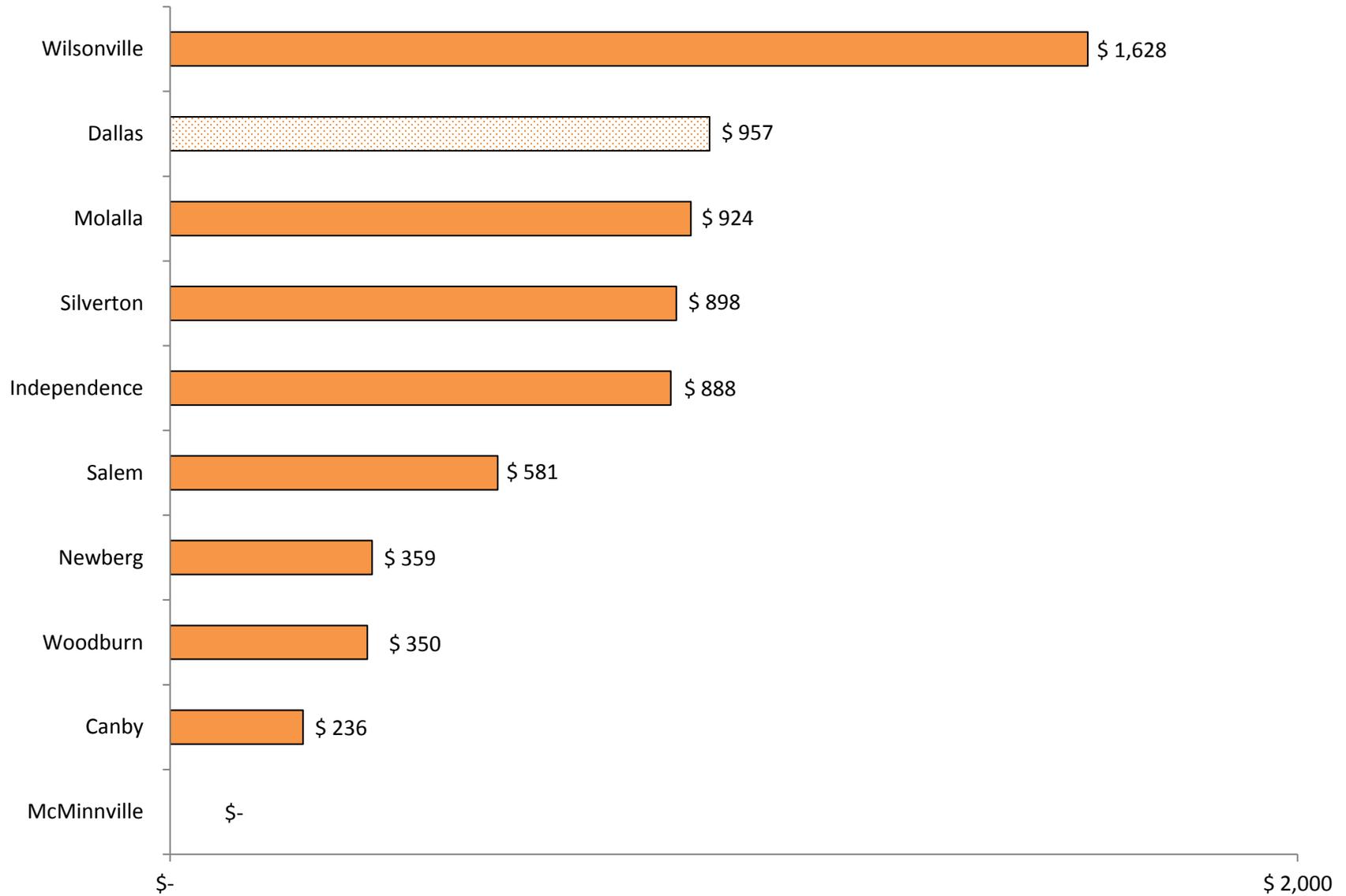
# Single Family Residential SDCs for Water



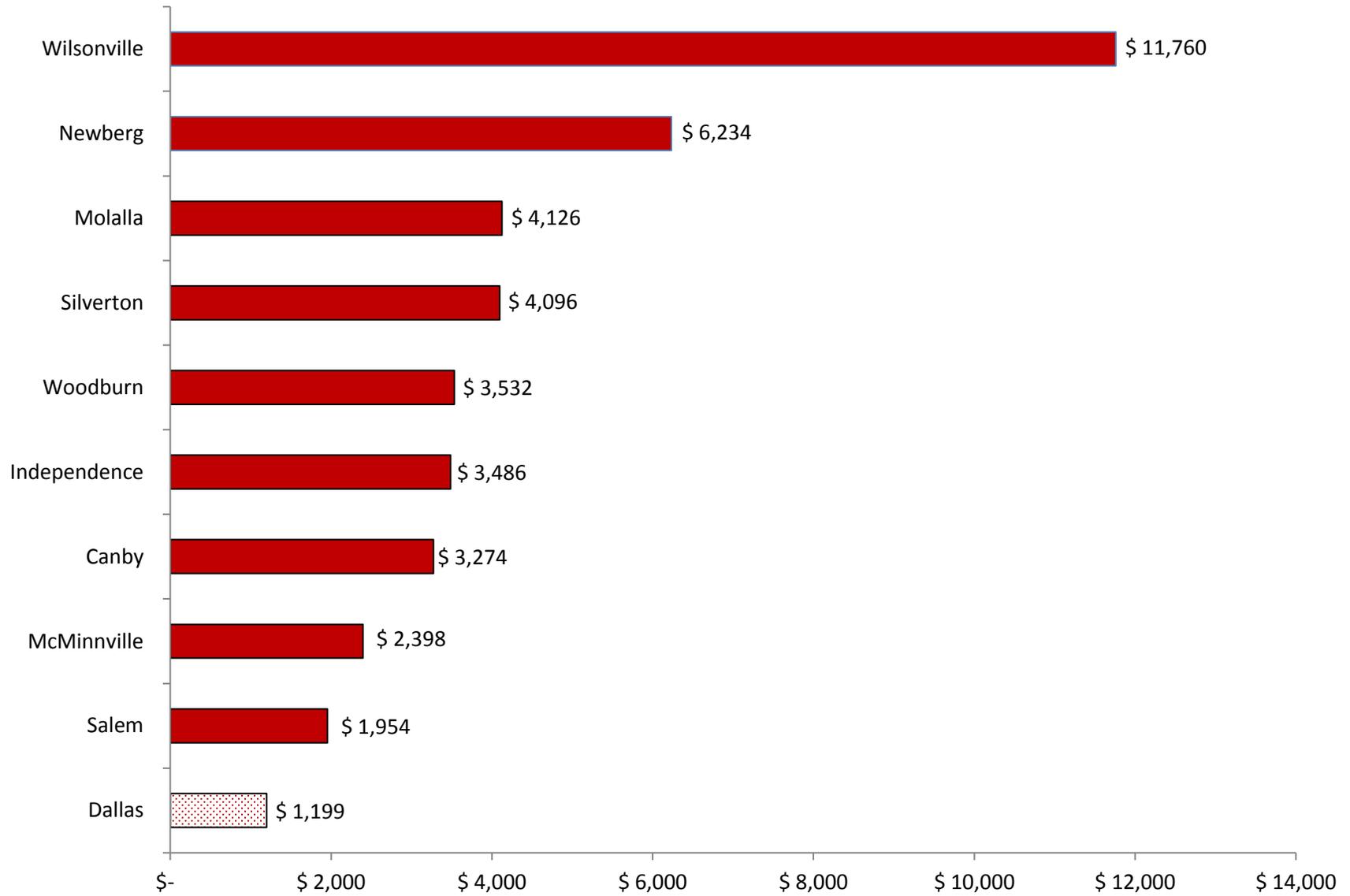
### Single Family Residential SDCs for Sanitary Sewer



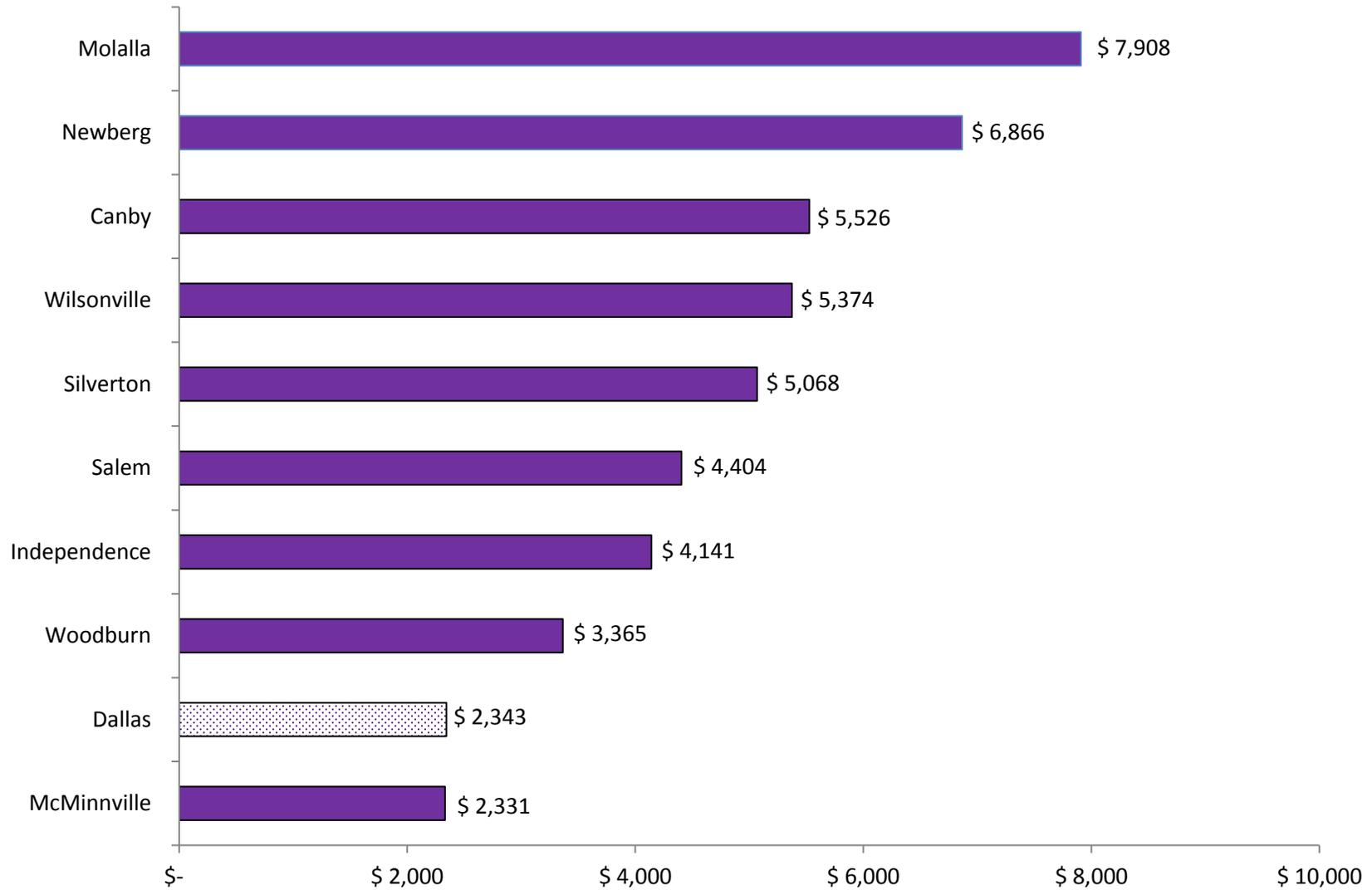
## Single Family Residential SDCs for Storm and Surface Water Management



## Single Family Residential SDCs for Streets

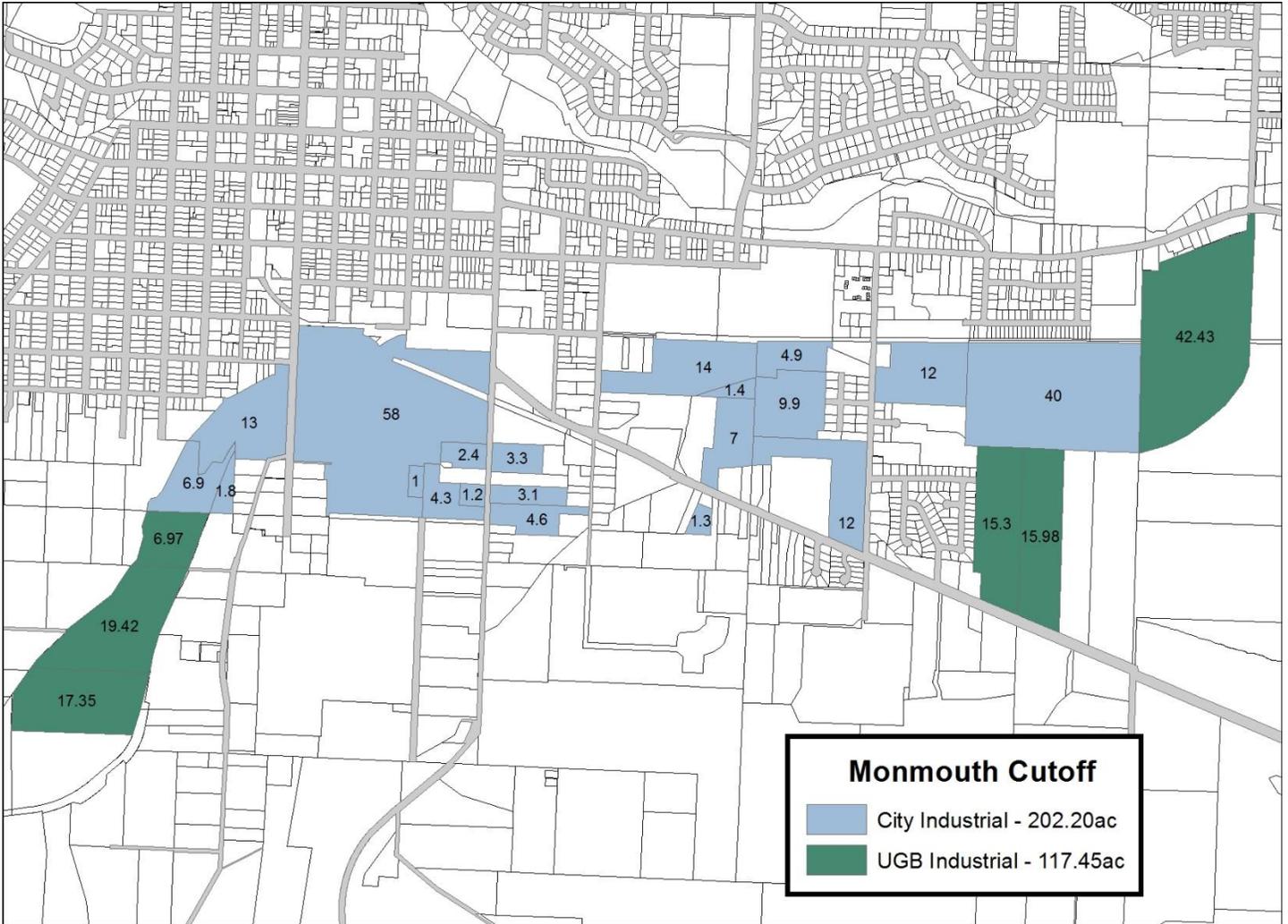


## Single Family Residential SDCs for Parks

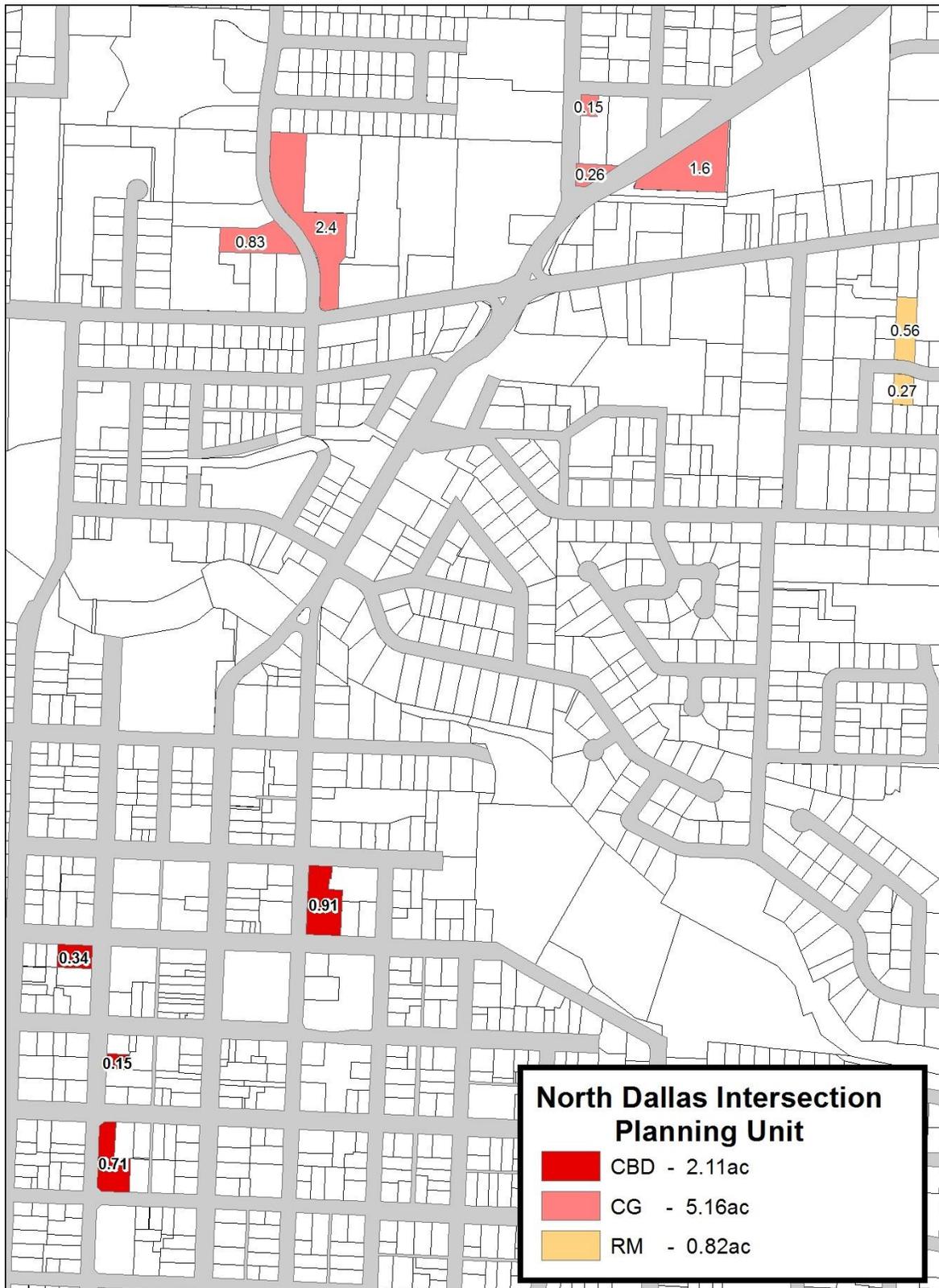


# Transportation Planning Areas/Nodes Maps

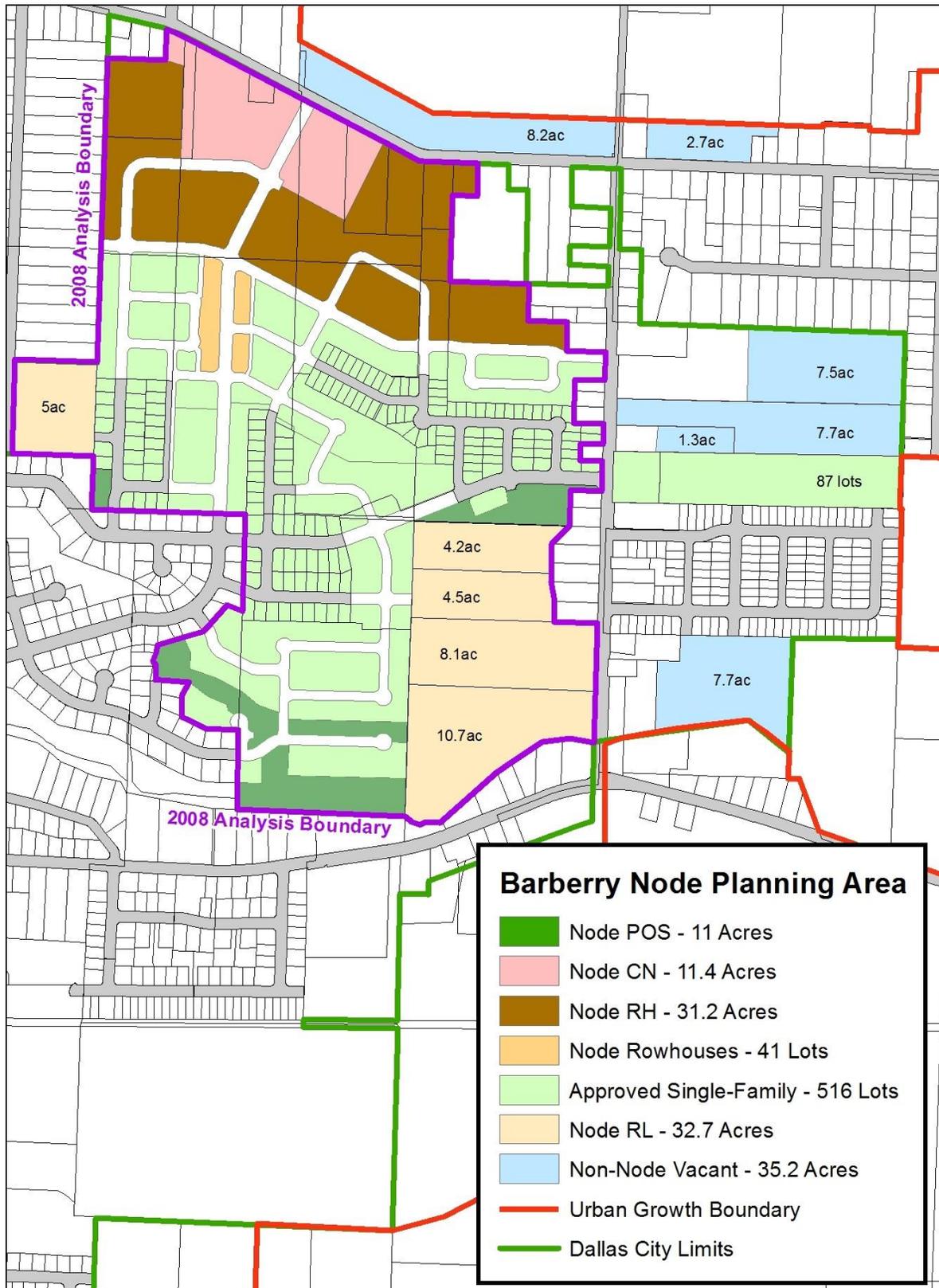
## Monmouth Cutoff Road



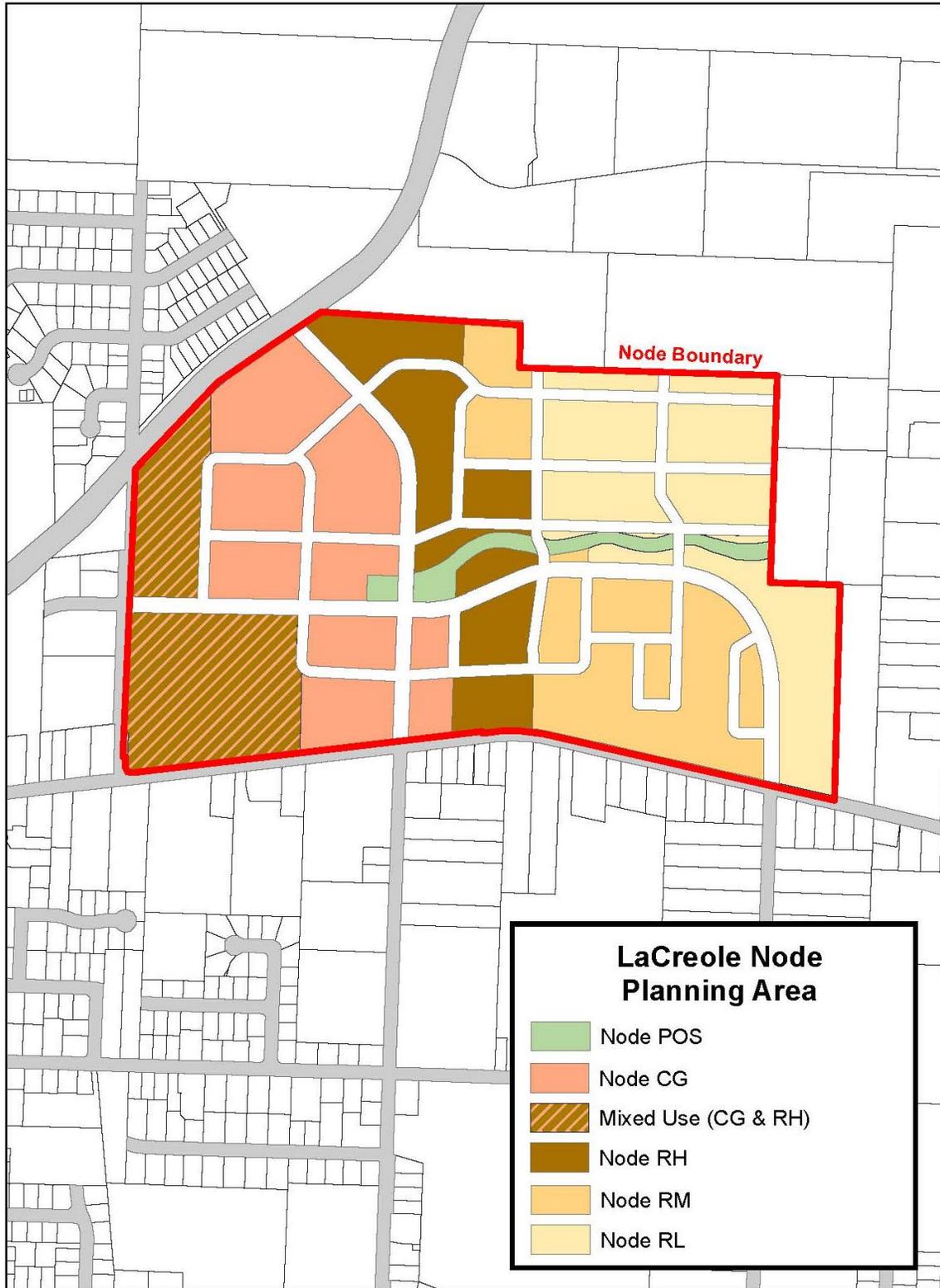
# North Dallas Intersection



# Barberry Node



# LaCreole Node



# Wyatt Node

