

## **CHAPTER 3.**

### **ODOT Transportation Contracts**

Many components of the 2016 Disparity Study require ODOT contract and subcontract data as building blocks for the analysis. When designing the availability research, for example, it is important to understand the geographic area from which ODOT draws contractors and consultants and the types of work involved in ODOT and local agency transportation contracts. The utilization and disparity analyses in the 2016 Disparity Study are based on information from ODOT prime contracts and subcontracts.

Before conducting other analyses, Keen Independent collected information for ODOT transportation contracts for the October 2010 through September 2014 study period. Chapter 3 describes the study team's process for compiling and merging these data. Chapter 3 consists of four parts:

- A. Overview of ODOT transportation contracts;
- B. Collection and analysis of ODOT contract data;
- C. Types of work involved in ODOT contracts; and
- D. Location of businesses performing ODOT work.

Appendix C provides additional detail concerning collection and analysis of contract data.

#### **A. Overview of ODOT Transportation Contracts**

ODOT uses FHWA and state funds to build and maintain transportation projects. The 2016 Disparity Study also includes contracts awarded by cities, counties, other local agencies and tribal entities using FHWA funds passed through ODOT.

- Construction projects include building new highway segments and interchanges, widening and resurfacing roads, and building and improving bridges. The largest construction contract in the study period was the \$141 million Sellwood Bridge project.
- Engineering-related work includes design and management of projects, planning and environmental studies, surveying and other transportation-related consulting services.<sup>1</sup>

The 2016 Disparity Study focuses on highway-related contracts using FHWA or state monies and does not include contracts using funds from the Federal Transit Administration (FTA), Federal Aviation Administration (FAA) or National Highway Transportation Safety Administration (NHTSA). In total, the study team examined about \$1.9 billion in highway-related contract dollars over the study period.

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<sup>1</sup> Throughout the report, Keen Independent discusses construction and engineering-related contracts based on type of work performed, not based on ODOT contracting department or ODOT data source. For example, not all ODOT contracts related to construction are awarded through the Construction Contracts Unit.

A single ODOT project can involve many types of businesses, as described below.

**Prime contracts, subcontracts, trucking and materials supply.** A typical construction project includes a prime contractor and a number of subcontractors. Trucking companies and materials suppliers are often involved in construction projects as well. Some subcontractors on ODOT construction projects further contract out work to what is known as a “second-tier” or “lower-tier” subcontractor. Keen Independent examined ODOT contract information for each level of subcontractor.

Many ODOT projects have an engineering phase prior to construction that requires work performed by engineering companies and related firms. The engineering prime consultant retains the specialized subconsultants needed to complete these contracts. ODOT sometimes contracts with engineering companies through price agreements, also known as agreements to agree, and when specific work is needed, ODOT issues work order contracts to those firms. Other times ODOT enters into direct contracts with engineering companies and related firms. Keen Independent included engineering work order and direct contracts in this analysis.

For both construction and engineering contracts, Keen Independent separated the contract dollars going to subcontractors (and truckers and suppliers) from the dollars retained by the prime contractor. Keen Independent calculated the total dollars going to the prime contractor by subtracting subcontractor, trucker and supplier dollars from the total contract value. This step was important for both the availability analyses and the utilization analyses performed in the 2016 Disparity Study.

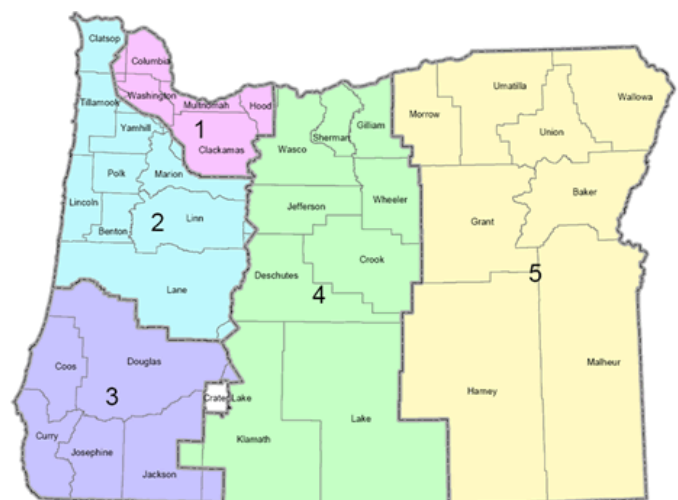
**ODOT and local agency contracts.** The 2016 Disparity Study includes ODOT contracts and those for local agencies that use ODOT-administered funds. Through ODOT’s Statewide Programs Unit and the local agency Certification Program, FHWA funds for transportation projects go to cities, counties, regional transportation commissions, other local agencies and tribal entities.

**Transportation-related contracts.** The study focused on transportation construction and engineering contracts including the acquisition of real property. The study team excluded any contracts to not-for-profit entities or government agencies.

**Regions.** Based on ODOT and industry input, Keen Independent examined geographic location of contracts based on the five ODOT regions shown in Figure 3-1. The region for a contract corresponds to the physical location of the project, not the address of the contractor.

Keen Independent coded statewide assignments and work not in a single physical location as “statewide.”

Figure 3-1.  
Study regions



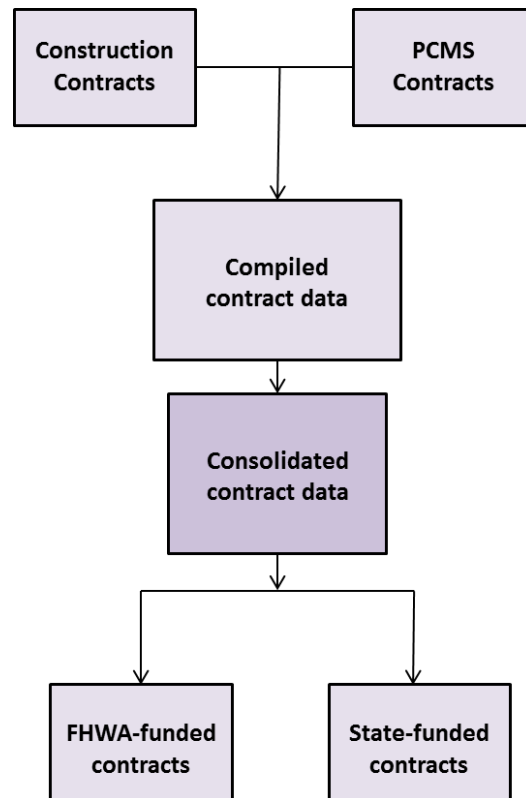
## B. Collection and Analysis of ODOT Contract Data

As shown in Figure 3-2, Keen Independent collected data on ODOT's contracts from multiple sources. Data for most ODOT construction contracts came from ODOT's construction contract database. Data for Engineering-related contracts came from ODOT's Purchasing and Contract Management System (PCMS). Certain data on firms receiving ODOT work were also collected from the ODOT Office of Civil Rights databases. Contracts for local agencies awarded with funds administered through the Certification Program Office, Statewide Program Unit were included in ODOT's construction contract database.

ODOT contract records provided information about award date, dollars, location (region), general description of the work, whether or not the contract was FHWA- or state-funded, and whether DBE contract goals applied. Keen Independent used consistent methods to collect information on FHWA- and state-funded contracts.

Keen Independent merged contracts from different sources into one database, which the study team reviewed for duplicate records and then separated by funding source.

Figure 3-2.  
Collection of ODOT contract data



**Study period.** Keen Independent examined contracts awarded from October 1, 2010 through September 30, 2014.

- **Study period start date.** The previous disparity study completed for ODOT in 2011 examined contracts through September 30, 2010. To avoid a gap in the analysis of ODOT contracts, the study period for the Keen Independent research began with contracts awarded in October 2010.
- **Study period end date.** Because Keen Independent began compiling contract data in early 2015, it was appropriate to choose the close of the previous state fiscal year (September 30, 2014) as the study period end date. However, for those pre-October 1, 2014 contracts, Keen Independent was able to capture subcontracts awarded on those in late 2014 and the first half of 2015. This step ensures that the contract information, including subcontracts, is entirely or substantially complete even for contracts awarded near the end of the study period.

**Awarded amount versus payment amounts.** To the extent possible, the dollar amounts used correspond to the total dollars paid or expected to be paid to the firm for services on that contract or subcontract. In most cases, Keen Independent collected and analyzed data on awarded amounts for each contract. The study team compared contract award amounts to payment amounts on contracts completed during the study period. The difference between the two amounts was minimal. When the participation of DBE and potential DBEs was examined, there was also little difference between contract amount and payment amount.

**Definition of FHWA-funded and state-funded contracts.** When there was any amount of FHWA-funding expected for a contract, ODOT treated that contract as FHWA-funded. “State-funded” contracts are those with no federal funding. Keen Independent’s analysis followed this designation of FHWA- and state-funded contracts.

**Data sources for local agency contracts.** ODOT maintains information about certified local agency projects funded through the ODOT Certified Program Office, Statewide Program Unit.

**Limitations concerning contract data.** As discussed in Appendix C, ODOT consistently collects data for contracts and subcontracts. However, prime contractors do not always use subcontracts to procure certain services such as trucking or to acquire supplies. For these types of work, much of the information in the ODOT data is for DBEs used to meet a contract goal. Keen Independent treated these trucking and supplier procurements by the prime contractor as “subcontracts” in the results of the utilization analyses. This limitation has a minor effect on overall results in Chapter 8 regarding the share of overall “subcontract” dollars going to DBEs and minority- and women-owned firms. However, there was not sufficient information in the study to examine trucking or supplier dollars going to DBEs or minority- and women-owned firms as a share of total trucking or supplier dollars when conducting the overconcentration analysis in Chapter 8.

### C. Types of Work Involved in ODOT Contracts

Keen Independent’s analysis included 2,219 transportation-related contracts and work order contracts totaling \$1.9 billion over the October 2010 through September 2014 study period. There were 5,808 subcontracts identified for these contracts. The total number of prime contracts and subcontracts was 8,027. Figure 3-3 presents the number and dollar value of contracts in FHWA- and state-funded contracts.

Figure 3-3.  
Number and dollars of ODOT and local agency transportation contracts and subcontracts, October 2010–September 2014

	ODOT	Local Agency	Total
Number of contracts			
FHWA-funded	5,638	610	6,248
State-funded	1,779	0	1,779
Total	7,417	610	8,027
Dollars (by millions)			
FHWA-funded	\$ 1,405	\$ 184	\$ 1,589
State-funded	337	0	337
Total	\$ 1,742	\$ 184	\$ 1,926

Note: Numbers may not add due to rounding  
Source: Keen Independent from ODOT contract data.

The study team coded types of work involved in each prime contract and subcontract based upon data in ODOT contract records and, as a supplement, information about the primary line of business of the firm performing the work. Keen Independent developed the work types based in part on the work type descriptions used by ODOT as well as Dun & Bradstreet, the leading commercial provider of business information in the United States.

**Contract dollars by type of work for FHWA- and state-funded contracts.** Figure 3-4 on the following page presents information about contract dollars for 35 different types of prime contract and subcontract work. Dollars for prime contracts are based on the contract dollars retained (i.e., not subcontracted out) by the prime contractor or prime consultant.

Figure 3-4.

ODOT and local agency FHWA- and state-funded transportation prime contract and subcontract dollars by type of work, October 2010–September 2014

Type of work	FHWA-funded		State-funded		Total	
	Dollars (1,000s)	Percent	Dollars (1,000s)	Percent	Dollars (1,000s)	Percent
Bridge and elevated highway construction	\$277,977	17.5 %	\$85,297	25.3 %	\$363,274	18.9 %
Asphalt , concrete or other paving	280,249	17.6	33,913	10.1	314,162	16.3
General road construction and widening	251,264	15.8	19,158	5.7	270,421	14.0
Engineering	129,886	8.2	48,825	14.5	178,711	9.3
Excavation, site prep, grading and drainage	115,238	7.3	33,553	10.0	148,791	7.7
Electrical work including lighting and signals	60,518	3.8	7,960	2.4	68,477	3.6
Drilling and foundations	54,152	3.4	7,584	2.2	61,736	3.2
Temporary traffic control	47,529	3.0	3,911	1.2	51,440	2.7
Landscaping and related work including erosion control	30,369	1.9	9,884	2.9	40,253	2.1
Installation of guardrails, fencing or signs	27,186	1.7	7,986	2.4	35,172	1.8
Other concrete work	30,518	1.9	3,331	1.0	33,849	1.8
Striping or pavement marking	31,317	2.0	1,662	0.5	32,979	1.7
Painting for road or bridge projects	27,663	1.7	1,220	0.4	28,884	1.5
Transportation planning	16,890	1.1	10,702	3.2	27,592	1.4
Concrete flatwork (including sidewalk, curb and gutter)	18,753	1.2	8,116	2.4	26,869	1.4
Structural steel work	20,808	1.3	2,280	0.7	23,088	1.2
Fence or guardrail materials	21,299	1.3	640	0.2	21,939	1.1
Pavement surface treatment (such as sealing)	18,691	1.2	2,130	0.6	20,821	1.1
Pavement milling	17,435	1.1	255	0.1	17,690	0.9
Inspection and testing	9,351	0.6	6,873	2.0	16,225	0.8
Concrete pumping	12,717	0.8	152	0.0	12,869	0.7
Environmental consulting	6,975	0.4	3,768	1.1	10,743	0.6
Surveying and mapping	8,851	0.6	1,629	0.5	10,480	0.5
Aggregate materials supply	4,084	0.3	5,717	1.7	9,801	0.5
Goods - Steel	7,558	0.5	123	0.0	7,681	0.4
Concrete cutting	6,350	0.4	756	0.2	7,106	0.4
Trucking and hauling	4,775	0.3	1,409	0.4	6,184	0.3
Construction management	3	0.0	5,586	1.7	5,589	0.3
Wrecking and demolition	5,289	0.3	172	0.1	5,462	0.3
Underground utilities	3,660	0.2	782	0.2	4,442	0.2
Petroleum	3,188	0.2	0	0.0	3,188	0.2
Goods - Traffic or highway signs	0	0.0	458	0.1	458	0.0
Other professional services	16,911	1.1	16,590	4.9	33,501	1.7
Other construction	18,447	1.2	1,915	0.6	20,362	1.1
Other goods	<u>3,272</u>	<u>0.2</u>	<u>2,766</u>	<u>0.8</u>	<u>6,037</u>	<u>0.3</u>
Total	\$ 1,589,174	100.0 %	\$ 337,103	100.0 %	\$ 1,926,277	100.0 %

Source: Keen Independent from ODOT contract data.

When prime contracts and subcontracts pertained to multiple types of work, Keen Independent coded the entire work element based on what appeared to be the predominant type of work in the contract or subcontract. For example, if a subcontract included fencing and landscaping, and it appeared that the work was predominantly fencing, the entire subcontract was coded as fencing.<sup>2</sup> Similarly, when a more specialized activity could not be identified as the primary area of work, these contracts were classified as general road construction and widening or bridge and elevated highway construction, as appropriate.

As shown in Figure 3-4, the top four general types of work account for almost 60 percent of ODOT FHWA- and state-funded transportation contract dollars.

- Prime contracts and subcontracts for bridge, tunnel and elevated highway construction accounted for about \$363 million of the FHWA- and state-funded contract dollars examined, including prime contracts and subcontracts. This work area accounted for 19 percent of the contract dollars examined.
- Asphalt, concrete and other paving accounted for \$314 million or 16 percent of FHWA- and state-funded prime contracts and subcontracts. (Note that a prime contract or subcontract coded as general road construction and widening work could include asphalt paving, but was entirely coded as road construction because it appeared to include a broad set of work types, or the description of the work was not specific to asphalt paving.)
- General road construction and widening accounted for \$270 million of FHWA- and state-funded prime contracts and subcontracts, or about 14 percent of the total.
- Engineering work accounted for the fourth largest dollar volume of FHWA- and state-funded work (\$179 million or 9 percent of the total). (Note that when contracts for engineering included subcontracts for other types of work such as surveying or testing, these subcontracts were subtracted from the total for engineering.)

Types of work that did not fit into the specific categories listed in Figure 3-4 were included in “other construction,” “other professional services,” or “other goods” as appropriate. Together, these “other” categories comprised 3 percent of FHWA- and state-funded contract dollars, as shown in Figure 3-4.

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<sup>2</sup> Data concerning subcontract awards or payments were for the entire subcontract, not individual work elements.

## D. Location of Businesses Performing ODOT Work

In this study, analyses of local marketplace conditions and the availability of firms to perform contracts and subcontracts focus on the “relevant geographic market area” for ODOT contracting. The relevant geographic market area was determined through the following steps:

- For each prime contractor and subcontractor, Keen Independent determined whether the company had a business establishment in Oregon or two counties in southwest Washington that are part of the Portland Metropolitan Area (Clark and Skamania counties) based upon ODOT vendor records and additional research.
- Keen Independent then added the dollars for firms with Oregon and the two Washington county locations and compared the total with that for companies with no establishments within Oregon or southwest Washington.

Based upon analysis of combined ODOT and local agency contract dollars from October 2010 through September 2014, firms with locations in Oregon and the two Washington counties obtained 88 percent of FHWA- and state-funded transportation contract dollars. This percentage is consistent with definition of relevant geographic market area as reviewed by courts (see Appendix B).

Figure 3-5.  
Dollars of ODOT and local agency transportation prime contracts and subcontracts by location of firm, October 2010–September 2014

	Oregon and two Washington counties	Out of market area	Unknown	Total
Dollars (millions)				
FHWA-funded	\$ 1,407	\$ 164	\$ 19	\$ 1,589
State-funded	<u>295</u>	<u>32</u>	<u>10</u>	<u>337</u>
Total	\$ 1,702	\$ 196	\$ 29	\$ 1,926
Percent of total dollars				
FHWA-funded	89 %	10 %	1 %	100 %
State-funded	88	9	3	100
Total	88 %	10 %	2 %	100 %

Note: Numbers may not add due to rounding.

Source: Keen Independent from ODOT contract data.

Based on this information, Keen Independent determined that Oregon and two counties in Washington (Clark and Skamania) should be selected as the relevant geographic market area for ODOT transportation contracting. Therefore, Keen Independent’s availability analysis focused on firms with locations in Oregon and Clark and Skamania counties in Washington State. The quantitative analyses of marketplace conditions in Chapter 4 also included data for Oregon and the two Washington counties (or just Oregon if only state-wide data were available).