1 ODOT INFORMATION

1.1 <u>Purpose</u>

This chapter is an overview of ODOT, how it is organized and where transportation analysis is within the organization. This section also lists some of the typical units and groups that analysts may need to work with.

1.2 <u>Coordinating with ODOT</u>

The Oregon Department of Transportation (ODOT), through its various Divisions, is responsible for developing Oregon's:

- System of highways and bridges
- Bicycle and pedestrian paths
- Public transportation services
- Rail passenger and freight systems
- Driver licensing and vehicle registration programs
- Motor carrier operations, and
- Transportation safety programs

The following section describes various divisions, sections and units within ODOT that are commonly involved in decision making regarding transportation system planning, design and operations. One or more of these units may need to be contacted for input or to discuss problems and possible solutions regarding a specific project. It is preferable to begin with staff at the Region or District level.

1.2.1 Transportation Development Division

The Transportation Development Division (TDD) is the part of ODOT that:

- Facilitates long and short-term transportation planning
- Keeps statistics about transportation
- Considers transportation policy
- Conducts research to help engineers, planners and project designers
- Helps local governments with transportation through a variety of programs and services.

TDD is comprised of four sections:
    1) Active Transportation
    2) Planning
    3) Research
    4) Transportation Data.

Active Transportation Section

The Active Transportation Section is comprised of the following:
    1) Economic & Financial Analysis Unit
    2) Program & Funding Services Unit
    3) Statewide Programs Unit.

The Economic and Financial Analysis Unit provides Highway Fund revenue forecasts, economic and feasibility studies, cash flow forecasting, revenue impacts, and DMV transaction analysis. In addition, the unit provides economic, financial and policy studies to determine Highway cost allocation, tax comparisons, transportation finance, value of travel time and cost of delay estimates, and job and income generation impacts of construction projects.

The Program and Funding Services Unit of the Active Transportation Section is responsible for the development of the Statewide Transportation Improvement Program (STIP), Project Funding, Financial Plan and Project Accounting.

The Statewide Programs Unit provides educational opportunities, technical support and federal oversight to ODOT Regions, local agencies, consultants, and other transportation partners. The Unit administers the following programs including:
- Bicycle & Pedestrian Program (This includes the planning and funding/grant programs only as the designs and standards are under the Highway Division's Traffic-Roadway Section)
- Certification Program for local agencies
- ConnectOregon
- Funding Programs
- Transportation Enhancement
- Safe Routes to Schools
- Scenic Byways
- Sustainability

Planning Section
ODOT's central Planning section is comprised of four units:
        1) Programs and Economic Analysis Unit;
        2) Transportation Planning Unit;
        3) Freight Planning Unit: and
        4) Transportation Planning and Analysis Unit (TPAU).
This section provides direction for long term management and improvement of Oregon's transportation system and to promote the cost-effective use of public funds through effective research, development and technology transfer.

The Programs and Economic Analysis Unit (PEAU) manages the Transportation and Growth Management Program (TGM), the State Planning and Research Program (SPR), Economic Analysis Services for the entire agency and jointly manages significant plans, initiatives, and projects. These currently include Least Cost Planning, and Tolling Policies and Rules for example. PEAU works closely with programs such as Flexible Funds, Connect Oregon, and others to help ensure planning program consistency, coordination, and implementation. There are also TGM planners based in the five ODOT Regions to lead and coordinate the TGM program.

The Transportation Planning Unit (TPU) is responsible for statewide long range planning and policy development, including creation and maintenance of the Oregon Transportation Plan and other modal plans, such as the Oregon Highway Plan. In addition, TPU is responsible for implementation of plans and policies through the preparation and dissemination of multi-modal,

modal, and topic plans, policies, guidelines and administrative rules. A primary role is to provide assistance designed to help achieve statewide consistency for transportation planning products and activities. In the development of planning and implementation materials, TPU actively works with stakeholder committees and works to balance needs. They also respond to legislative requirements, including initiatives such as Least Cost Planning and greenhouse gas (GHG) reduction planning, known as the Oregon Sustainable Transportation Initiative.

In addition, each of the five ODOT Regions also has long-range planners who are familiar with the local government Transportation System Plans (TSPs) and Comprehensive Plans. They coordinate directly with City and County jurisdictions, within their respective Region, to ensure transportation impacts due to private and commercial development are sufficiently mitigated. These planners typically lead the various transportation planning efforts such as refinement plans, interchange area management plans, and transportation system plans.

The Freight Planning Unit (FPU) coordinates public-private, state-local and state-federal freight transportation investment decisions and activities on a state-wide and state-to-state basis to support goods movement and the Oregon economy. FPU is responsible for developing and implementing the Oregon Freight Plan, and supporting the integration of freight issues into the State's modal plans, corridor plans, and other planning documents and activities. They manage freight transportation studies and intermodal planning programs and projects, including highway, rail, marine, pipeline and air transportation.

The Transportation Planning Analysis Unit (TPAU) provides support and guidance for the development of corridor and urban transportation system plans, transportation model development and use of computer models to forecast transportation needs. TPAU also supports ODOT's project development process by conducting transportation analysis to aid project selection for the Statewide Transportation Improvement Program (STIP) and developing data for environmental analysis. TPAU often acts as a resource to Region Traffic Units requesting technical assistance. TPAU performs analysis and modeling for Regions 2-5. Analysis conducted in Region 1 is the responsibility of the Region 1 Traffic Section. TPAU is made up of three teams:

> The Facility Analysis and Simulation Team conducts, reviews, and provides technical support on a wide variety of studies, including transportation system plans (TSPs), refinement plans, project development, and management plans. The team also maintains the Analysis Procedure Manual.

> The Statewide and Urban Modeling Team works closely with jurisdictions throughout the state to develop, maintain, and apply state-of-the-art travel demand models for small urban areas, metropolitan areas, regions, counties, and statewide. The team also has developed and is maintaining a statewide travel demand model that integrates transportation, land use and economics to provide a reliable way to forecast and evaluate policies.

> The Systems Analysis Team is responsible for evaluating new alternative performance measures, mesoscopic tools, and system planning analysis methods. The team also does system planning analysis using the Congestion Management System (CMS) and the Highway Economic Reporting System (HERS) that decision-makers use to find cost-effective ways to manage transportation facilities that alleviate traffic congestion.

Research Section
The Research Section oversees the state's federally funded research, development and technology transfer program with particular emphasis on new technology intended to enhance the performance of Oregon's transportation systems. Major current research focuses on safety, infrastructure repair and preservation, maintenance practices, innovative contracting and project delivery, sustainable environmental practices, and the land-use, transportation connection.

Transportation Data Section
The Transportation Data Section (TDS) collects substantial data for system inventory, volumes and crash information that can be used for the purpose of conducting traffic studies. Because much of these data are collected and processed by different units within the Department, clear and frequent communication between units regarding what is desired and what is available is critical for ensuring these resources are readily accessible. Furthermore, good communication between units will help to obtain the right data in a timely manner, which is important for maintaining project schedules. Coordinate with the appropriate ODOT department or staff as noted below.

The Crash Analysis & Reporting Unit (CAR) provides motor vehicle crash data through database creation, maintenance and quality assurance, information and reports, and limited database access. Ten years of crash data are maintained at all times. Vehicle crashes include those coded for city streets, county roads and state highways.

The GIS Unit (GISU) serves the Oregon Department of Transportation by providing geographic information products and services through the development of spatially-enabled applications, databases, mapping products, analysis, education and technical support.

Road Inventory and Classification Services (RICS) Unit collects and maintains road information necessary to classify and monitor the highways, roads, and streets within Oregon; provides mileage statistics; develops, maintains, and enhances ODOT's corporate data base known as TransInfo; maintains the Public Road Inventory which is a compilation of information about the status and condition of the road system in Oregon; and films and maintains the State Highway Digital Video Log. From data gathered, reports such as the Federal Highway Performance Maintenance System (HPMS) submittal and the Oregon Mileage Report are written.

The Transportation Systems Monitoring (TSM) Unit develops and maintains a system to collect and process traffic related data on Oregon's Highways. TSM provides traffic volumes, flow maps, trends, manual counts and vehicle class on state highways to Federal, State, Local, private and public constituents.

1.2.2   Highway Division
The Highway Division consists of a wide array of disciplines involved in the operations, construction and maintenance of the state's highways, bridges and other parts of the transportation system.

Traffic-Roadway Section (TRS)
This section prepares specifications, maintains standards for traffic devices and related facilities and provides design expertise in materials, operations and construction support services. TRS

consists of five central units under the authority of the State Traffic Engineer:
- Roadway Engineering – This unit is responsible for roadway standards and manuals, including the Highway Design Manual. It issues design exceptions and technical bulletins related to highway design. This unit includes interchange design, value engineering and the engineering portions of the bicycle and pedestrian program.
- Office of Project Letting (OPL) – This unit is responsible for the preparation of project plans, specifications, cost estimates as well as the process of bid letting and quality assurance of project documentation.
- Geometronics – This unit consists of the maps and plan center, photogrammetry and the central units related to surveying which includes geodetic control and preparation of official survey documents.
- Traffic Engineering – This unit consists of groups that oversee signal operations, the speed zone investigations, highway safety engineering and traffic investigations. This is the unit that typically reviews and oversees State Traffic Engineer approvals.
- Traffic Standards; - This unit is responsible for project plans, specifications and standards for signs, striping, signals, illumination, traffic structures and work zones.

The State Traffic Engineer has delegated authority to approve the installation of all traffic control devices on state highways, including installation of new signals and major modifications to existing signals. All delegated authority requests for State Traffic Engineer approval should follow roughly the same process.
- Consultation with Region Traffic Unit; and
- A request sent through the Region Traffic Manager/Engineer with supporting documentation.

A list of items that require approval by the State Traffic Engineer for use on state highways can be found in the ODOT Traffic Manual.

Region Traffic Units
Region Traffic Units provide expertise to region and district staff on current traffic policies and procedures. Staff is responsible for overseeing all traffic engineering design (including signal and sign design) for Region projects. Staff actively participates as members of project development teams (PDT) to help insure traffic related issues are considered early in the process, and to provide traffic information to the team. They also act as the traffic liaison to local agencies on behalf of ODOT and can be a data source for traffic signal timing sheets and various operational investigations.

The Region Traffic Manager/Engineer may authorize standard applications and some modifications of traffic control devices that are in compliance with the principles outlined in the Manual on Uniform Traffic Control Devices (MUTCD) and applicable ODOT policies and guidelines. Items that may be authorized by the Region Traffic Manager/Engineer are listed in the ODOT Traffic Manual.

Access Management Program
The Access Management Unit (AMU) is part of the Technical Services Branch of the Highway Division. The AMU is responsible for statewide development and administration of the Department's access management program statutes, rules, and policies.

The Access Management Unit is primarily tasked with the following:
- Training agency staff, consultants and local governments;
- Administering the approach permitting database (CHAMPS – Central Highway Approach Maintenance Permit System);
- Developing administrative rules;
- Conducting appeals procedures;
- Providing technical consultation, guidance, and training to support Region and District offices;
- Developing new program initiatives;
- Establishing statewide performance measures and customer service standards;
- Performing research and program evaluation.

In the Regions, Access Management staff implements the policies and guidelines developed by the Access Management Unit. They report to either the Region Traffic Manager or the Region Planning Manager. The Region Access Management Engineer (RAME) is the Region technical expert for access management issues. Tasks include:
- Fielding Access Management applications from private interests;
- Coordinating the Access Management Process between ODOT technical staff, the applicant, and their representatives (i.e. engineering consultants, lawyers);
- Reviewing technical data (i.e. traffic studies) submitted by the applicant, or the applicant's representative;
- Approving or denying access application requests and issuing approach permits.

Bicycle and Pedestrian Program
This program is headquartered within TRS and provides technical assistance to the Department and local officials regarding pedestrian and bicycle design, construction and maintenance. The planning and grant funding portions of the program are under the Transportation Development Division (TDD) Active Transportation Section. Regions typically participate in planning and project development to ensure that bicycle and pedestrian needs are met. They are the resource whenever bicycle or pedestrian improvements are proposed or existing facilities are affected by other proposed improvements.

Construction Section
The Construction Section administers statewide construction policies, procedures and processes and provides construction expertise and training programs. The traffic analyst may provide traffic data to the Pavement Services Unit for use in pavement design on projects.

District Maintenance Offices
The District Maintenance Offices are responsible for the on-going preservation and operation of state transportation facilities and the permitting of all activities (utility, access, miscellaneous) within the highway right of way. They are familiar with local issues and the operational and maintenance history of individual highways, and can offer valuable input during the identification of needs and alternatives, in addition to tracking the status of existing permits. Because they are ultimately responsible for maintaining any proposed improvements, they should be consulted during the selection and design.

The Mobility Unit coordinates the construction/maintenance work zone and other restrictions that may impact freight movements as well as oversize loads. It mainly does this through the Highway Mobility Operations Manual. This guide sets project standards and minimum requirements regarding communication and coordination, vertical and horizontal clearance, bridge weight restrictions, delays, detours, staging, and design.

Region Environmental/Geo-Environmental Section
The Geo-Environmental Section is responsible for coordinating environmental regulatory compliance for all transportation improvement programs in the state which use federal funds. The section is responsible for statewide practices, standards, training, expertise, and asset management for geology, geotechnical, and environmental disciplines within ODOT. Within the Section, the Air Quality, Acoustics & Energy Program studies and mitigates the effects of transportation projects by using the environmental traffic data furnished by the traffic analyst in order to model air quality, noise and energy impacts. Region staff includes the Environmental Program Managers (EPMs) who handle the environmental issues on projects, lead the NEPA (National Environmental Policy Act) process, and manage consultants writing environmental documents.

Potential issues requiring involvement of the central or region environmental staff includes:
- Environmental justice
- Threatened and endangered species
- Wetlands
- Historic buildings
- Air quality
- Noise
- Erosion control
- Stream-bank stabilization
- Fish passage
- Storm water quality and quantity

Right of Way (ROW)
ODOT's central Right of Way Section provides expertise in real estate and other right of way matters to the Department. The ROW Section is responsible for:
- The appraisal, acquisition, and management of property acquired for public projects.
- Assisting people and businesses in relocating from the acquired rights of way.
- Administering, directing and supervising the various programs that reside in the Right of Way Section.

The five ODOT Regions each have their own Right of Way section. The Region Right of Way sections deal with the acquisition of real property and improvements necessary for the construction and maintenance of Oregon's transportation system. They also are tasked to maximize the return on the Highway Trust Fund's real property investment through efficient management and sale of surplus property.

Roadway Engineering
The central Roadway Engineering group, which is part of the Traffic-Roadway Section (TRS), is

responsible for many aspects of the project development process. Responsibilities such as the Highway Design Manual, Standard Drawings, and the Contract Plan Development Guide, which are essential to the development of projects and the preparation of Contract Plans.

Region Roadway Engineering is responsible for the design of new highways and highway features and is located in each of the region technical centers. Early consultation when evaluating potential improvements can help in identifying fatal flaws and ensure design standards can be met before recommending an alternative. The primary difference between Headquarters Roadway Engineering and Region Roadway Engineering; TRS Roadway sets ODOT highway design policies, plus issues specifications and standards for both ODOT and consultant technical staff. Region Roadway Engineering staff implements the design standards by developing plans, cost estimates and specifications for roadway project within their respective Region.

1.2.3   Other Key ODOT Divisions

Public Transit Division
Public Transit Division is the grantee for Federal Transit Authority (FTA) funds, and is responsible for state-level transit program development and management. The division is responsible for assuring the compliance requirements associated with FTA and state funds are met, even when compliance is primarily the obligation of its recipients. Public Transit provides grant management and oversight of projects and activities supported with state and federal transit funds. Technical assistance is provided on an ongoing basis to transit agencies.

Rail Division
The Rail Division has jurisdiction over railroad crossings and traffic control devices used within crossing areas. They also have exclusive legal authority over public grade crossings and provide coordination with the railroads for affected private rail crossings. The Rail Division should be contacted any time a project may have an impact directly to or within 500 feet of a railroad or rail crossing.

Traffic Safety Division
The Traffic Safety Division provides information, direct services, grants and contracts to the public and to partner agencies and organizations. More than half the funding comes from federal funds earmarked for safety programs.

1.2.4   Other Groups
The Aviation Department establishes and enforces airport planning rules, funds infrastructure improvements, and coordinates efforts to improve airport and airplane safety. When developing projects adjacent to a public or private airport, the airport's runway flight triangles must be taken into consideration, to avoid conflicts. Also, it is a mode of transportation, which should be considered by ODOT staff and consultants when developing Transportation Impact Analyses (TIA), Transportation System Plans (TSP) and other plans.

APPENDIX 1A – ODOT TRAFFIC ENGINEERING AUTHORITY