



AGENDA

Wednesday, November 21, 2012 - 10:00 AM
Board of County Commissioners Business Meeting

Beginning Board Order No. 2012-109

I. CALL TO ORDER

- Roll Call
- Pledge of Allegiance
- Approval of Order of Agenda

II. PUBLIC HEARING *(The following items will be individually presented by County staff or other appropriate individuals. Persons appearing shall clearly identify themselves and the organization they represent. In addition, a synopsis of each item, together with a brief statement of the action being requested shall be made by those appearing on behalf of an agenda item.)*

1. First Reading of Ordinance No. ____ Amending and Restating the Rules & Regulations of Clackamas County Service District No. 1 (Chris Storey, County Counsel)

III. DISCUSSION ITEM *(The following items will be individually presented by County staff or other appropriate individuals. Citizens who want to comment on a discussion item may do so when called on by the Chair.)*

Department of Transportation & Development

1. Approval of an Intergovernmental Agreement with Metro to Implement the Year 23 Metro and Local Government Annual Waste Reduction Plan and the Recycle at Work Program (Rick Winterhalter)

IV. CONSENT AGENDA *(The following items are considered to be routine, and therefore will not be allotted individual discussion time on the agenda. Many of these items have been discussed by the Board in Study Session. The items on the Consent Agenda will be approved in one motion unless a Board member requests, before the vote on the motion, to have an item considered at its regular place on the agenda.)*

A. Health, Housing & Human Services

1. Board Order No. ____ Approving the Mental Health Director's Designees to Authorize a Custody Hold under ORS 426.233 - BH
2. Approval of Amendment No. 2 of an Intergovernmental Agreement with the Workforce Investment Council of Clackamas County for Specialized Work Force Services - cs

B. Department of Transportation & Development

1. Formal Recognition of the Safe Communities Advisory Board
2. Adoption of the Transportation Safety Action Plan

C. Elected Officials

- 7
8
9
1. Approval of Previous Business Meeting Minutes – BCC
 2. Request for Approval to Accept a Safety Belt Grant with the Oregon State Sheriff's Association - CCSO
 3. Request for Approval to Accept a DUII Overtime Enforcement Grant with the Oregon State Sheriff's Association - CCSO

V. NORTH CLACKAMAS PARKS AND RECREATION DISTRICT

- b
1. Approval of an Oregon Parks and Recreation Department Local Government Grant Program Agreement – Hood View Park Playground

VI. DEVELOPMENT AGENCY

- 11
1. Approval of an Agreement between Clackamas County Development Agency, Oregon Iron Works and United Streetcar for Site Development and Economic Expansion

VII. CITIZEN COMMUNICATION *(The Chair of the Board will call for statements from citizens regarding issues relating to County government. It is the intention that this portion of the agenda shall be limited to items of County business which are properly the object of Board consideration and may not be of a personal nature. Persons wishing to speak shall be allowed to do so after registering on the blue card provided on the table outside of the hearing room prior to the beginning of the hearing. Testimony is limited to three (3) minutes. Comments shall be respectful and courteous to all.)*

VIII. COUNTY ADMINISTRATOR UPDATE

IX. COMMISSIONERS COMMUNICATION

NOTE: Regularly scheduled Business Meetings are televised and broadcast on the Clackamas County Government Channel. These programs are also accessible through the County's Internet site. DVD copies of regularly scheduled BCC Thursday Business Meetings are available for checkout at the Clackamas County Library in Oak Grove by the following Saturday. You may also order copies from any library in Clackamas County or the Clackamas County Government Channel.

<http://www.clackamas.us/bcc/business.html>



Beyond clean water.

1

Water Quality Protection
Surface Water Management
Wastewater Collection & Treatment

Michael S. Kuenzi, P.E.
Director

November 21, 2012

Board of County Commissioners
Clackamas County
Sitting as the Governing Body of
Clackamas County Service District No. 1

Members of the Board:

A FIRST READING OF AN ORDINANCE AMENDING AND RESTATING THE RULES
AND REGULATIONS OF
CLACKAMAS COUNTY SERVICE DISTRICT NO. 1

Clackamas County Service District No. 1 ("District") provides surface water management and wastewater treatment services to northern unincorporated Clackamas County and the cities of Happy Valley, the Carver area of Damascus, and wholesale wastewater treatment only via contract for the cities of Milwaukie and Johnson City pursuant to a Clean Water Act permit issued by the Environmental Protection Agency and their delegee the Oregon Department of Environmental Quality ("DEQ").

Currently CCSD#1's sanitary rules and surface water rules are contained in separate documents that are not consistent in the manner in which contract protests, appeals of SDC charges, and similar mechanistic processes are handled within the District. Staff has found the current rules to be increasingly inflexible when trying to work with new development and environmental standards. In particular, many of the technical requirements of the District are contained in the Rules, setting by ordinance such issues as the proper size and type of materials allowed for construction of new sewer pipe.

Staff raised the idea of revising the rules in a study session on October 6, 2009, focusing on merging the two sets of rules into one and removing technical requirements from the realm of ordinance and delegating the technical details to a separate design document that would be managed by the director of WES according to best practices in the industry. The Board accepted the recommended action and directed staff to move forward, including the proposed path of meeting with stakeholder groups including the homebuilders association and local watershed councils for discussion regarding any potential impacts of the process on issues of concern to them. Staff held those discussions and reported back to the Board on March 15, 2011 and requested authorization to move forward with the changes. The Board agreed and staff has worked with the stakeholders in creating the proposed new rules.

Attached is the proposed Amended and Restated Rules and Regulations of CCSD#1 (the "Revised Rules"). The rules now combine the sewer and surface water requirements into one document for clarity and transparency. As part of the project, staff has attempted to avoid policy

changes unrelated to the goal of streamlining the document and harmonizing certain provisions. The draft including the following changes:

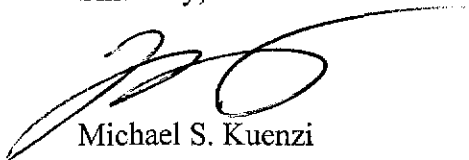
- The industrial pre-treatment (“IPT”) sections of the Revised Rules have been updated per requirements issued by DEQ, much the same as was done with the Tri-City Service District Rules. The overall impact of the amendments would be to add flexibility in considering the manner in which the District can have businesses comply with industrial pretreatment requirements, and incorporating the concept of “best management practices” adaptability into IPT.
- All references to specific design criteria or particular technology requirements have been removed to a design guide document, and the Revised Rules now allow the Director to promulgate those design requirements rather than having them be set by ordinance.
- Consistent with changes made for the DTD Director, the WES Director would now have the authority to accept right of way or other easements & service connection mortgage liens on behalf of the District instead of those items being part of the BCC business meeting docket.
- The provisions regarding appeal process for contract awarding and SDC charges and assessments were harmonized with each other and to match best industry practice.
- The Revised Rules now allow for billing owners of real property rather than renters to better align collection and payment practices.

The proposed amendments are mandatory and failure to adopt them could result in the District being fined by DEQ for permit noncompliance. Attached is a memorandum that summarized the proposed changes and their impact. This ordinance has been reviewed and approved by County Counsel.

RECOMMENDATION

Staff respectfully recommends the Board of County Commissioner sitting as Clackamas County Service District No. 1 Board read the proposed Ordinance by title only and hold a second reading on December 6, 2012.

Sincerely,



Michael S. Kuenzi
Director

For information on this issue or copies of attachments, please contact Chris Storev at 503.742.4623

DRAFT

CLACKAMAS COUNTY SERVICE DISTRICT NO. 1

**RULES AND REGULATIONS
For
SANITARY SEWER AND
SURFACE WATER MANAGEMENT**

JANUARY 2013



CLACKAMAS COUNTY SERVICE DISTRICT NO. 1
 RULES AND REGULATIONS for Sanitary Sewer and Surface Water Management

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Table III: Local Limits

Table VI Oregon Administrative Rules Review Of Plans And Specification Chapter 340, Division 52

Table VII Assignment Of Equivalent Dwelling Units To Classes Of Service
North Clackamas Sanitary Sewer Service Area

Table VIII Assignment Of Equivalent Dwelling Units To Classes Of Service Boring Sewer

Service Area

Table IX Assignment Of Equivalent Dwelling Units To Classes Of Service

Hoodland Sewer Service Area

Table X Assignment Of Equivalent Dwelling Units To Classes Of Service Fischers Forest Park Service Area

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Table XII User Charges And Fees

Table XIII Surface Water Management Fees

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ARTICLE I

SECTION 1 DECLARATION OF POLICY

1.1 PURPOSE AND OBJECTIVES

Clackamas County Service District No. 1 (the "District"), Clackamas County, Oregon, was organized pursuant to Oregon Revised Statutes Chapter 451 for the purpose of providing sewerage, surface water, and stormwater management, including all facilities necessary for collecting, pumping, treating and disposing of sanitary or storm sewage within its boundaries. It is further declared to be the policy of the District to provide and offer sewage disposal service for such incorporated or other areas adjacent to the District as may, in the judgment of the District, be feasibly and appropriately served upon such terms, conditions, and rates as the District shall, from time to time in its sole and absolute discretion, determine. The objectives of these Rules and Regulations ("Rules and Regulations") are: (a) to advance public health and welfare; (b) to prevent the introduction of pollutants that will interfere with the operation of the sewage system, contaminate the resulting biosolids, or pollute surface or storm waters; (c) to prevent the introduction of pollutants that could enter the surface waters or pass through the sewage system into receiving waters or the atmosphere or otherwise be incompatible with the system; (d) to protect City and District personnel who may come into contact with sewage, biosolids and effluent in the course of their employment, as well as protecting the general public; (e) to ensure that the District complies with its National Pollutant Discharge Elimination System (NPDES) permit conditions and requirements, biosolids use and disposal requirements and other applicable Federal and State laws; (f) to improve the opportunity to recycle and reclaim wastewaters and sludges from the system; (g) to provide for the equitable distribution of the costs of the sewage system and the surface water management program; (h) to establish policies that prevent future pollution and erosion through implementation of Best Management Practices; and (i) to better manage and control surface water in the District.

1.2 ADOPTION OF NEW OR AMENDED RULES AND REGULATIONS

Upon the recommendation of the Director, or on its own motion, the Board of County Commissioners of Clackamas County, Oregon, acting as the governing body of the District, may promulgate new or amended rules pertaining to these Rules or Regulations. Except as specifically provided in these Rules and Regulations, any new or amended rule(s) will be adopted pursuant to ORS 198.510 through 198.600 and ORS 451.

1.3 DELEGATION OF AUTHORITY TO THE DIRECTOR

A. Easements. The Director of the District shall have the authority to accept, reject or release easements for the purposes as set forth below in subsections 1, 2, 3 and 4; and as the Board may further determine by resolution and order.

1. The Board grants the Director authority to govern easements for the District as shown by one or more of the following examples:

a. Assessment District;

- b. Local Improvement District;
 - c. Capital Improvement Project;
 - d. Existing easements recorded by instrument or plat;
 - e. Proposed easement to be recorded by instrument or plat; and
 - f. Quit claim of an existing easement.
2. All documents accepted pursuant to this section and submitted for recording shall show evidence of approval by Districts legal counsel and the signature and title of the person accepting the document on behalf of the District.
 3. The Director, in instances when the Director is not present, shall have the power to delegate the authority under this section by a written statement to his or her designee declaring the delegation, the individual designated, and the duration of the designation.
 4. The authority granted in this section shall be in addition to other authority that may be provided to District officers and employees to acquire interests in real property on behalf of the District. Nothing in this section shall be deemed to grant any employee or individual the authority to acquire or accept an interest in real property on behalf of the District except as specifically provided herein, or upon the direction or approval by the Board.
- B. Standards. The Director shall have the authority to promulgate such technical standards and requirements necessary to implement the purpose and intent of these Rules and Regulations, including but not limited to pipe type, size, connection requirements, elevation, grade, materials, and any other good and necessary item. Such standards shall be contained in one or more documents that are publicly available and the District shall provide 30 days public notice on its website of any potential change to such standards or requirements.
- C. No other provision of the District Rules and Regulations shall be affected by the provisions of this Section 1.3. A determination by a court of competent jurisdiction that any section, clause, phrase, or word of this Ordinance or its application is invalid or unenforceable for any reason shall not affect the validity of the remainder of this Ordinance or its application, and all portions not so stricken shall continue in full force and effect.

SECTION 2 DEFINITIONS

2.1 WORDS AND TERMS

Unless the context specifically indicates otherwise, the following words and terms, as used in

these Rules and Regulations, shall have the meanings hereinafter designated:

- 2.1.1 Act. The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et. seq.
- 2.1.2 Advanced Sedimentation and/or Filtration Process. Any process that, through correct application/implementation, brings effluent discharge from the site into compliance with local, state and federal requirements. Polymers and electrolytic processes are two possible examples.
- 2.1.3 Applicable Pretreatment Standards. Local, state, and federal standards, whichever are more stringent and apply to the Industrial User.
- 2.1.4 Best Management Practices or BMPs. Means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). BMPs include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.
- 2.1.5 Biochemical Oxygen Demand or BOD. The quantity of oxygen utilized in the biochemical oxidation of organic matter under a standard laboratory procedure in five (5) days at a temperature of twenty degrees centigrade (20°C), expressed in milligrams per liter or parts per million. Laboratory determinations shall be made in accordance with the applicable techniques prescribed in 40 CFR Part 136.
- 2.1.6 Biosolids. Domestic wastewater treatment facility solids that have undergone adequate treatment to permit land application, recycling or other beneficial use.
- 2.1.7 Board. The Board of County Commissioners of Clackamas County, acting as the governing body of the Clackamas County Service District No. 1.
- 2.1.8 Bond. As required by the District, a surety bond, cash deposit or escrow account, assignment of savings, irrevocable letter of credit or other means acceptable to and required by the District to guarantee that work is completed in compliance with all requirements of the District Regulations and Specifications and for a maintenance period specified in the Standards.
- 2.1.9 Buffer/Undisturbed Buffer. The zone contiguous with a sensitive area that is required for the continued maintenance, function, and structural stability of the sensitive area. The critical functions of a riparian buffer (those associated with an aquatic system) include shading, input of organic debris and coarse sediments, uptake of nutrients, stabilization of banks, interception of fine sediments, overflow during high water events, protection from disturbance by humans and domestic animals, maintenance of wildlife habitat, and room for variation of aquatic system boundaries over time due to hydrologic or climatic effects. The critical functions of terrestrial buffers include protection of slope stability, attenuation of surface water flows from surface water runoff and precipitation, and erosion control.

- 2.1.10 Building. Any structure containing sanitary facilities.
- 2.1.11 Building Drain. That part of the Districts sewerage system piping that receives the discharge from the drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5) feet outside the building wall.
- 2.1.12 Building Sewer. The extension from the building drain to the service connection.
- 2.1.13 Capital Improvement(s). Facilities or assets used for the purpose of providing sanitary sewerage collection, transmission, treatment and/or disposal.
- 2.1.14 Categorical Pretreatment Standards. National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties that may be discharged or introduced into a public sewer system by specific industrial categories. These standards are promulgated pursuant to Section 307(b) and (c) of the Clean Water Act.
- 2.1.15 Civil Penalty. A civil penalty is a monetary sanction for violation of the District's Rules and Regulations, levied pursuant to Section 8 below, whereby the District may impose a fine or penalty for violation of these Rules and Regulations, as well as recover all costs incurred, which are attributable to or associated with the violations, including but not limited to the costs of administration, investigation, sampling and monitoring, legal and enforcement activities, damages to the storm sewer system, and contracts or health studies necessitated by the violation.
- 2.1.16 COE. U.S. Army Corps of Engineers.
- 2.1.17 Cooling Water. The water discharged from any use such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.
- 2.1.18 Combined Sewer System. A conduit or system of conduits in which both sewage and stormwater are transported.
- 2.1.19 Composite Sample. A series of samples mixed together so as to approximate the average strength of discharge to the sewer. A composite sample is collected over a period of time greater than 15 minutes, formed by an appropriate number of discrete samples that are: (a) collected at equal intervals and combined in proportion to wastewater flow; (b) are equal volumes taken at varying time intervals in proportion to the wastewater flow; or (c) equal volumes taken at equal time intervals.
- 2.1.20 Contractor. A person duly licensed or approved by the State of Oregon and District to perform the type of work to be done under a permit or contract issued by the District.
- 2.1.21 County. Clackamas County, Oregon.
- 2.1.22 Day. A continuous twenty-four (24) hour period from 12:01 a.m. to 12:00 p.m.

- 2.1.23 DEQ. The State of Oregon Department of Environmental Quality or successor state organization.
- 2.1.24 Detention. The release of surface water runoff from a site at a slower rate than it is collected by the drainage system, the difference being held in temporary storage.
- 2.1.25 Development. All human-induced changes to improved or unimproved real property.
- 2.1.26 Discharge. Any addition of water, stormwater, wastewater, process water or any pollutant or combination of pollutants to waters of the State, directly or indirectly, by actions of dumping, spilling, disposing or physically connecting to the public storm system or natural drainage conveyance.
- 2.1.27 Director. The Director of Water Environment Services, a Department of Clackamas County, Oregon.
- 2.1.28 Discharger or User. Any person who causes wastes or sewage to enter directly or indirectly to the District sewerage system.
- 2.1.29 District. Clackamas County Service District No. 1.
- 2.1.30 District Regulation. The adopted rules, regulations, standards, principles and policies established by the District.
- 2.1.31 District System. Any sanitary or stormwater conveyance, treatment or pumping facilities that are owned, operated and maintained by the District.
- 2.1.32 Domestic Sewage. Sewage derived from the ordinary living processes free from industrial wastes and of such character as to permit satisfactory disposal without special treatment into the District sewerage system.
- 2.1.33 Drainageway. A channel such as an open ditch that carries surface water.
- 2.1.34 Drywell. An approved receptacle used to receive storm, surface and other water, the sides and bottom being porous, permitting the contents to seep into the ground. A drywell must conform to the District's current standards.
- 2.1.35 DSL. Oregon Department of State Lands or successor state organization.
- 2.1.36 Dwelling Unit. A living unit with kitchen facilities including those in multiple dwellings, apartments, hotels, motels, mobile homes, or trailers.
- 2.1.37 Easement. The legal right to use a described piece of land for a particular purpose. It does not include fee ownership, but may restrict the owner's use of the land. Easements granted must be legally recorded with the County Clerk and Recorder.
- 2.1.38 Easement - Sewer. Any easement in which the District has the right to construct and

maintain a public sewer.

- 2.1.39 Engineer. A registered professional engineer licensed to practice by the State of Oregon.
- 2.1.40 EPA. The U.S. Environmental Protection Agency, or where appropriate the term may also be used as a designation for the Administrator or other duly authorized official of said agency.
- 2.1.41 Equivalent Dwelling Unit, or EDU. A unit of measurement of sewer usage that is assumed to be equivalent to the usage of an average dwelling unit. Equivalent Dwelling Unit has the following definition for the purposes listed below:
- (a) User Charge. A unit, based on water consumption and strength of sewage of a single dwelling unit, by which all users of the sanitary sewers may be measured.
 - (b) System Development Charge. A unit, based upon a single dwelling unit or its equivalent, for connecting to the District sewerage system.
- 2.1.42 Equivalent Service Unit (ESU). A configuration of development resulting in impervious surfaces on a parcel that contributes runoff to the stormwater system. One ESU is equal to 2,500 square feet of impervious surface area.
- The number of ESU's attributable to a user's area is calculated in whole units, with the minimum user's charge set at 1 ESU. For non-single family users with more than 1 ESU, the charge will be rounded to the nearest whole unit with a half value, or more, being rounded up.
- 2.1.43 Erosion. Erosion is the movement of soil particles resulting from the flow or pressure from water, wind, or earth movement.
- Visible or measurable erosion includes, but is not limited to:
- (a) Deposits of mud, dirt, sediment or similar material exceeding ½ cubic foot in volume on public or private streets, adjacent property, or into the storm and surface water system, either by direct deposit, dropping, discharge, or as a result of the action of erosion.
 - (b) Evidence of concentrated flows of water over bare soils; turbid or sediment-laden flows; or evidence of onsite erosion such as rivulets or bare soil slopes, where the flow of water is not filtered or captured on the site.
 - (c) Earth slides, mud flows, earth sloughing, or other earth movement which results in material leaving the property.
- 2.1.44 Erosion Control Plan. A plan containing a list of best management practices to be used during construction to control and limit soil erosion in accordance with the District's current erosion prevention manual.

- 2.1.45 FEMA. Federal Emergency Management Agency.
- 2.1.46 Fences. Structures which consist of concrete, brick, wood, plastic, or metal posts located in the ground, connected by wood, metal, or plastic, and capable of allowing passage of water.
- 2.1.47 Garbage. Solid wastes from the preparation, cooking, and dispensing of food and from the handling, storage and sale of produce.
- 2.1.48 Government Agency. Any municipal or quasi-municipal corporation, state or federal agency.
- 2.1.49 Grab Sample. A sample that is taken from a waste stream or surface flow on a onetime basis with no regard to the flow in the waste stream or surface flow and without consideration of time.
- 2.1.50 Hauled Waste. Any waste hauled or transported by any method that may include, but not be limited to, drop tanks, holding tanks, chemical toilets, campers, trailers, septic tanks, and vacuum pump tank trucks.
- 2.1.51 Hazardous Materials. Materials described as hazardous by the Department of Environmental Quality, including any toxic chemicals listed as toxic under Section 307(a) of the Clean Water Act or Section 313 of Title III of SARA.
- 2.1.52 Hearings Officer. Officer, appointed by the Director, for hearings of appeals of administrative actions.
- 2.1.53 Highly Erodible. Soils with erosion (K) factors greater than 0.25, as listed in the Soil Survey of Clackamas County Area, Oregon, developed by the Soil Conservation Service.
- 2.1.54 Illicit Discharge. Any discharge to the public or natural stormwater conveyance system that is not composed entirely of stormwater, except discharges governed by and in compliance with an NPDES permit.
- 2.1.55 Impervious Surface.
That surface area which either prevents or retards the entry of water into the soil mantle and/or causes water to run off the surface in greater quantities or at an increased rate. Impervious surfaces may include, but are not limited to, rooftops, concrete or asphalt paving, walkways, patios, driveways, parking lots, oiled macadam, gravel, or other surfaces which similarly resist infiltration or absorption of moisture.
- 2.1.56 Improvement Fee. A fee for costs associated with capital improvements to be constructed after the date these Rules and Regulations become effective.
- 2.1.57 Indirect Discharge. The discharge or the introduction of non-domestic pollutants or

industrial wastes into the sewerage system from any source regulated under Section 307(b) or (c) of the Act (33 U.S.C. 1317), including hauled tank wastes discharged into the sewerage system.

- 2.1.58 Industrial User. Any person who discharges industrial waste into the District sewerage system.
- 2.1.59 Industrial Waste. Any liquid, gaseous, radioactive or solid waste substance, or a combination thereof, resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources, or as defined by the DEQ or the EPA, exclusive of domestic sewage.
- 2.1.60 Infiltration System. A drainage facility designed to use the hydrologic process of surface and stormwater runoff soaking into the ground, commonly referred to as recharge, to dispose of surface and stormwater runoff.
- 2.1.61 In-Lieu of Fee. A fee paid to the District to cover on-site water quality or water quantity facilities from a site on which stormwater management is not practical.
- 2.1.62 In-Line Detention. Detention located in a stream channel, a drainageway, or in a regional or subregional piped system. In-line detention mixes flows to be detained with flows from other areas.
- 2.1.63 Inspector. A person designated by the District to inspect building sewers, construction sites, service connections, and other installations to be related to the District sewerage and/or surface water system.
- 2.1.64 Installer. Either the owner of the property being served or a contractor doing work in connection with the installation of a service connection or building sewer under a proper permit from the District.
- 2.1.65 Interference. A discharge which, alone or in conjunction with a discharge from other sources, inhibits or disrupts the public sewer system, treatment processes or operations, or its biosolids processes, biosolids use or disposal, or that contributes to a violation of any requirement of the District's NPDES Permit or other permit issued to the District.
- 2.1.66 Intermittent Stream. A stream with no visible surface flows for a period of 30 or more continuous days per year.
- 2.1.67 Local Collection Facilities. All sewerage facilities that are owned, operated and maintained by a City that collect and convey sewage to the District sewerage system.
- 2.1.68 Local Limit. Specific discharge limits developed and enforced by the District upon industrial or commercial facilities to implement the general and specific discharge prohibitions listed in 40 CFR 403.5(a)(1) and (b).
- 2.1.69 May. The word "may" is permissive.

- 2.1.70 Mean High Water Line. The bank of any river or stream established by the annual fluctuations of water generally indicated by physical characteristics, such as a line on the bank, changes in soil conditions or vegetation line.
- 2.1.71 Metro. The elected regional government that serves more than 1.3 million residents in Clackamas, Multnomah and Washington counties, and the 25 cities in the Portland, Oregon, metropolitan area.
- 2.1.72 Minor Modification. A slight change or alteration made to the Standards to improve something or make it more suitable and does not change the functionality, maintenance, or intent of the Standards.
- 2.1.73 Modification. A change or alteration made to the Standards to improve something or make it more suitable. A modification shall meet the intent of the Standards.
- 2.1.74 NPDES Permit. A National Pollution Discharge Elimination System permit issued pursuant to Section 402 of the Clean Water Act (33 U.S.C. 1342).
- 2.1.75 New Source. Any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced according to the deadlines and conditions of 40 CFR 403.3.
- 2.1.76 Open Spaces. Land within a development that has been dedicated in common to the ownership within the development or to the public specifically for the purpose of providing places for recreational uses or scenic purposes.
- 2.1.77 Operation, Maintenance, and Replacement; or O, M, & R. Those functions that result in expenditures during the useful life of the treatment works, sewerage system, or stormwater system for materials, labor, utilities, administrative costs, and other items which are necessary for managing and maintaining the sewage works to achieve the capacity and performance for which such works were designed and constructed.
- 2.1.78 Owner. The owners of record title or the purchasers under a recorded sale agreement and other persons having an interest of record in the described real property.
- 2.1.79 Parcel of Land. A lot, parcel, block or other tract of land that is occupied or may be occupied by a structure or structures or other use, and includes yards and other undeveloped areas required under the zoning, subdivision or other development ordinances.
- 2.1.80 Pass Through. A discharge that exits the POTW into State waters in quantities or concentration that alone or in conjunction with a discharge or discharges from other sources is a cause of a violation of any requirement of the District's NPDES permit (including an increase in the magnitude or duration of the violation) or any other permit issued to the District.
- 2.1.81 Perennial Stream. A permanently flowing (non-intermittent) stream.

- 2.1.82 Permit. Any authorization required pursuant to this or any other regulation of the District.
- 2.1.83 Permittee. The person to whom a building permit, development permit, waste discharge permit or any other permit described in this ordinance is issued.
- 2.1.84 Person. Any individual, public or private corporation, political subdivision, governmental agency or department, municipality, industry, partnership, association, firm, trust or any other legal entity.
- 2.1.85 pH. The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in Standard Units (S.U.). pH shall be determined using one of the applicable procedures prescribed in 40 CFR Part 136.
- 2.1.86 Pollutant. Any of the following, including but not limited to: dredged soil spoil, solid waste, incinerator residue, sewage, garbage, sewage biosolids or sludge, munitions, chemical wastes, oil, grease, mining waste, biological materials, radioactive materials, heat, wrecked or discharged equipment, heavy metals, asbestos, rock, sand, cellar dirt and untreated industrial, municipal and agricultural waste discharges into water.
- 2.1.87 Post-developed. Conditions after development.
- 2.1.88 Pre-developed. Conditions at the site immediately before application for development. Man-made site alterations or activities made without an approved development permit will not be considered as pre-developed conditions.
- 2.1.89 Pretreatment or Treatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in water to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the public sewage system or the Waters of the State, as applicable. The reduction or alteration can be obtained by physical, chemical or biological processes, or process changes or other means, except as prohibited by 40 CFR, Section 403.6(d).
- 2.1.90 Pretreatment Requirement. Any substantive or procedural pretreatment requirement other than Applicable Pretreatment Standard, imposed on an Industrial User.
- 2.1.91 Private Storm System. That portion of the storm system owned and/or maintained by any person or entity other than the District and is located outside the public right-of-way, except as otherwise approved by the District.
- 2.1.92 Properly Shredded Garbage. The wastes from foods that have been shredded to such a degree that all particles will be carried freely under the flow and conditions normally prevailing in public sewers with no particle greater than one-half inch ($\frac{1}{2}$ ") in any dimension.
- 2.1.93 Publicly Owned Treatment Works, or POTW. A treatment works as defined by Section 212 of the Act (33 U.S.C. 1292), which is owned by a governmental entity. This

definition includes any public sewers that convey wastewater to the POTW treatment plant, but does not include pipes, sewers, or other conveyances not connected to a facility providing treatment. For the purposes of these Rules and Regulations, "POTW" shall also include any sewers that convey wastewaters to the POTW from persons outside the District who are, by contract or agreement with the District, users of the District's POTW.

- 2.1.94 Public Right-of-Way. Any public highway, road, street, avenue, alleyway, public place, public easement, or public right-of-way.
- 2.1.95 Public Sewer or Public Sewerage System. Any or any part of the facilities for collection, pumping, treating and disposing of sewage as acquired, constructed, donated, or used by the District within the boundaries of the District.
- 2.1.96 Public Stormwater System. Those portions of the stormwater system that are accepted for repair and maintenance responsibilities by the District. Natural waterways are defined under State and Federal regulations.
- 2.1.97 Qualified Public Improvements. A capital improvement that is: (a) required as a condition of development approval; (b) identified in the District's adopted Capital Improvement Plan pursuant to ORS 223 or the District's System Development Charge Project Plan adopted pursuant to Section 4.1.6 hereof; and (c) not located on or contiguous to a parcel of land that is the subject of the development approval.
- 2.1.98 Rational Method. A formula for estimating maximum discharge of runoff at a point, using flow (Q), runoff coefficient (C), rainfall intensity (I) for selected recurrence interval, and area (A), in the formula: $Q=CIA$.
- 2.1.99 Receiving Waters. Any body of water into which effluent from a sewage treatment plant or from a surface water outfall is discharged either directly or indirectly.
- 2.1.100 Recharge. The flow to ground water from the infiltration of surface and stormwater.
- 2.1.101 Redevelopment. On an existing developed site, the creation or addition of impervious surfaces, external structural development, including construction, installation, or expansion of a building or other structure, and/or replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities associated with structural or impervious redevelopment. (See Development.)
- 2.1.102 Reimbursement Fee. A cost associated with capital improvements constructed or under construction on the effective date of these Rules and Regulations.
- 2.1.103 Replacement. Any actions that result in expenditures for obtaining and installing equipment, accessories, or appurtenances that are necessary during the design or useful life, whichever is longer, of the treatment works or other facilities to maintain the capacity and performance for which such works were designed and constructed.

2.1.104 Retention. The process of collecting and holding surface water runoff with no surface outflow.

2.1.105 Rules and Regulations. These Rules and Regulations as adopted, and any and all rules and orders adopted pursuant hereto, and all amendments thereto.

2.1.106 Sanitary Sewer System. A conduit intended to carry liquid and water-carried wastes from residences, commercial buildings, industrial plants and institutions, together with minor quantities of ground, storm, and surface waters that are not admitted intentionally.

2.1.107 Sensitive Areas. Sensitive Areas are:

(a) Existing or created wetlands, including all mitigated wetlands; limits defined by wetlands reports approved by both the Division of State Lands and the District.

(b) Rivers, streams, sloughs, swamps, creeks; limits defined by the top of the bank or first break in slope measured upland from the mean high water line;

(c) Impoundments (lakes and ponds); limits defined by the top of the bank or first break in slope measured upland from the mean high water line.

Sensitive Areas shall not include a constructed wetland, an undisturbed buffer adjacent to a sensitive area, or a water feature, such as a lake, constructed during an earlier phase of a development for specific purposes not including water quality, such as recreation.

2.1.108 Service Area. An area served by the District sanitary sewer system or surface water management within the District boundaries or a defined geographic area that becomes a part of the District.

2.1.109 Service Connection. The portion of a private sewer that has been constructed from the public sewer to the edge of the public right-of-way or sewer easement, in which the public sewer is located.

2.1.110 Sewage. The water-carried human, animal, or vegetable wastes from residences, business buildings, institutions, and industrial establishments, together with groundwater infiltration and surface water as may be present. The admixture with sewage of industrial wastes or water shall be considered "sewage" within the meaning of this definition.

2.1.111 Sewage Disposal Agreement. An agreement between the District and any government agency or person providing for the delivery or receipt of sewage to or from the District sewerage system.

2.1.112 Sewage Treatment Plant. An arrangement of devices, structures, and equipment for treating sewage.

2.1.113 Sewer. A piped or open conveyance system designed and operated to convey either

sewage or stormwater runoff.

2.1.114 Sewer Main Extension. Any extension or addition of the public sewer.

2.1.115 Sewer User. Any person using any part of the public sewerage system. In the case of tenants, the property owner shall also be considered the sewer user for that property.

2.1.116 Shall. The word "shall" is mandatory.

2.1.117 Significant Industrial User. The term significant industrial user means:

(a) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter 1(N); and

(b) Any other industrial user that: discharges an average of 25,000 gallons per day or more of processed wastewater to the sewerage system (excluding sanitary, non-contact cooling and boiler blowdown wastewater); contributes a process waste stream that makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the District's treatment plant; or is designated as such by the District on the basis that the industrial user has a reasonable potential for adversely affecting the treatment plant's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

(c) Upon finding that an industrial user meeting the criteria of this definition has no reasonable potential for adversely affecting the District's operations or for violating any pretreatment standard or requirement, the District may at any time, on its own initiative or in response to a petition received from the industrial user, determine that such industrial user is not a significant industrial user.

2.1.118 Significant Non-Compliance. An industrial user is in significant non-compliance if its violation meets one or more of the following criteria:

(a) Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all the measurements taken during a six-month period exceeded (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l), or any successor statutes;

(b) Technical Review Criteria (TRC) violations, defined as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);

(c) Any other violation of a pretreatment effluent limit (daily maximum or longer-termed average) that the District determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of District

personnel or the general public);

(d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the District's exercise of its emergency authority to halt or prevent such a discharge;

(e) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a permit or order for starting construction, completing construction, or attaining final compliance;

(f) Failure to provide within 45 days after the due date, required reports, initial compliance reports, periodic compliance reports, and reports on compliance with compliance schedules;

(g) Failure to accurately report noncompliance;

(h) Any other violation or group of violations, may include a violation of BMPs, which the District determines will adversely affect the operation or implementation of the pretreatment program.

2.1.119 Slug Discharge. Any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause interference or pass-through or in any way violate the District's local limits or permit conditions.

2.1.120 SIC. A standard industrial classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget.

2.1.121 Standards. The adopted standards, principles and policies established by the District to meet the intent of District Regulations. The standards are required to meet all Local, State and Federal requirements of any permitting agency with authority to govern the activities of the District.

2.1.122 Standard Methods. The examination and analytical procedures set forth in the most recent edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.

2.1.123 Stop Work Order. An Order issued by the District for violation of the Rules and Regulations. All work contributing to the violation must cease when a Stop Work Order is issued and the Stop Work Order will stay in place until such time as removed by the District in writing.

2.1.124 Storm Sewer. A conveyance structure designed to carry only stormwaters, surface water runoff, and / or drainage.

- 2.1.125 Stormwater. Waters on the surface of the ground resulting from precipitation.
- 2.1.126 Stormwater Management. A program to provide surface water quality and quantity controls through structural and nonstructural methods and capital improvement projects. Nonstructural controls include maintenance of surface water facilities, public education, water quality monitoring, implementation or intergovernmental agreements to provide for regional coordination, and preparation of water quality control ordinances and regulations.
- 2.1.127 Stormwater Management Plan. Plan incorporating stormwater best management practices approved and/or permitted by the District which provides for stormwater runoff, infiltration, water quality treatment, flow control and conveyance as required within the Stormwater Standards.
- 2.1.128 Stormwater Quality Treatment Facility. Any structure or drainageway that is designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of water quality improvement. It may include, but is not limited to, constructed wetlands, water quality swales, and ponds.
- 2.1.129 Stream. A drainageway that is determined to be jurisdictional by the Oregon Division of State Lands or the U.S. Army Corps of Engineers.
- 2.1.130 Surface Waters. (See Stormwater).
- 2.1.131 Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquids, and which is removable by laboratory filtering in accordance with the applicable procedures prescribed in 40 CRF Part 136.
- 2.1.132 System Development Charge. A reimbursement fee, an improvement fee or a combination thereof assessed or collected as a condition of connection to the sanitary sewer or stormwater system, or at the time of increased usage of the capital improvement or at the time of issuance of the development or building permit. It shall also include that portion of a sanitary sewer connection charge or stormwater mitigation charge that is greater than the amount necessary to reimburse the District for its average cost of inspecting connections to the sanitary sewer or stormwater system. "System Development Charge" does not include (a) any fees assessed or collected as part of a local improvement district; (b) a charge in lieu of a local improvement district or assessment; or (c) the cost of complying with requirements or conditions imposed upon a land use decision.
- 2.1.133 Toxic Pollutant. Any pollutant or combination of pollutants listed as toxic in regulations promulgated by the Administrator of the EPA under the provision of CWA 307(a), 503(13), or other federal or state Acts, or any successor statutes.
- 2.1.134 Undue Hardship. Special or specified circumstances that partially or fully exempt a person from performance of the Rules and Regulations so as to avoid an unreasonable or disproportionate burden or obstacle.

- 2.1.135 Unit. A unit of measurement of sewer usage assumed to be equivalent to the usage of an average single-family dwelling unit. A unit is equivalent to sewage of a strength and volume normally associated with an average single family dwelling unit or its equivalent. Where unit equivalency must be computed it shall be equivalent to: (a) 1,000 cubic feet of water consumption per month; (b) 0.449 pounds of BOD5 per day; and (c) 0.449 pounds of suspended solids per day.
- 2.1.136 Unpolluted Water or Liquids. Any water or liquid containing none of the following: free or emulsified grease or oil, acids or alkalis, substances that may impart taste and odor or color characteristics, toxic or poisonous substances in suspension, colloidal state or solution, odorous or otherwise *obnoxious* gases. Such water shall meet the current state standards for water use and recreation. Analytical determination shall be made in accordance with the applicable procedures prescribed in 40 CRF Part 136.
- 2.1.137 Upset. An exceptional incident in which an Industrial User unintentionally and temporarily is in a state of noncompliance with these Rules and Regulations, due to factors beyond the reasonable control of the Industrial User, and excluding noncompliance to the extent caused by operational error, improperly designed or inadequate treatment facilities, lack of preventive maintenance or careless or improper operation thereof.
- 2.1.138 Useful Life. The period during which a treatment works or other specific facility operates.
- 2.1.139 User. Any person or entity in whose name service is rendered as evidenced by the signature on the application or contract for that service, or in the absence of a signed instrument, but the receipt and payment of utility bills regularly issued in his/her/its name. A user, under this system and structure of rates, is either single family or non-single family.
- 2.1.140 User – Non-Single Family. Any user whose impervious surface results from the development of land for purposes of operating a dwelling unit for occupancy by more than one single family or for other business, industrial, commercial or institutional purposes and to whom utility services are provided at a distinct service location.
- 2.1.141 User – Single Family. Any user whose impervious surface results from the development of land for purposes of establishing a dwelling unit for occupancy by a single family and to whom utility services are provided at a distinct service location.
- 2.1.142 User Charge. The periodic charges levied on all users of the public sewerage system for the cost of operation, maintenance, and replacement; including but not limited to, any other costs, such as, but not limited to, debt service, debt service coverage, capital improvements, regulatory compliance, program administration, etc.
- 2.1.143 Variance. A discretionary decision to permit modification of the terms of any part of these Rules & Regulations based on a demonstration of unusual hardship or

exceptional circumstance unique to a specific property.

2.1.144 Vegetated Corridor. See Buffer/Undisturbed Buffer.

2.1.145 Water Quality Facility. A facility specifically designed for pollutant removal.

2.1.146 Water Quality Resource Areas. Areas as defined on the Water Quality and Flood Plain Management Areas Map adopted by Metro or Clackamas County and amended.

2.1.147 Water Treatment Bioswale/Water Quality Swale. A vegetated natural depression, wide shallow ditch, or similar constructed facility used to filter runoff for the purpose of improving water quality.

2.1.148 Waters of the State. All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the State of Oregon or any portion thereof.

2.1.149 Wetland. Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are those areas identified and delineated by a qualified wetlands specialist as set forth in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, January 1987, or by a DSL/COE 404 permit. Wetlands may also consist of:

(a) Constructed Wetlands. As defined in Section 404 of the Clean Water Act, constructed wetlands are those areas developed as a water quality or quantity facility, subject to maintenance as such. These areas must be clearly separated from existing or created wetlands.

(b) Created Wetlands. Created wetlands are those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement.

(c) Existing Wetlands. Existing Wetlands are those identified and delineated as set forth in the Federal Manual for Identifying the Delineating Jurisdictional Wetlands, January 1987, or as amended, by a qualified wetlands specialist.

2.1.150 Wet Weather Measures. Erosion prevention and sediment control methods deemed necessary to meet the types of conditions that occur during the wet weather season, as identified in the District's current erosion control manual.

2.1.151 Wet Weather Season. The portion of the year when rainfall amounts and frequency tend to have the most significant effect on erosion prevention and sediment control (October 1 to April 30).

2.1.152 Work Area. Areas of disturbance for activities defined under "Development". Work Area includes areas used for storage of equipment or materials that are used for these activities.

2.2 ADDITIONAL WORDS OR TERMS

Words, terms or expressions peculiar to the art or science of wastewater or surface water not hereinabove defined shall have the meanings given therefore in Glossary, Water and Wastewater Control Engineering, published in 1969 and prepared by a Joint Committee representing the American Public Health Association, American Society of Civil Engineers, American Water Works Association, and the Water Pollution Control Federation.

2.3 PRONOUNS

Pronouns indicating number or gender in these Rules and Regulations are interchangeable and shall be interpreted to give effect to the requirements and intent of these Rules and Regulations.

2.4 ABBREVIATIONS

The following abbreviations shall have the designated meanings:

ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
CWA	Clean Water Act
EDU	Equivalent Dwelling Unit
L	Liter
mg	Milligrams
mg/L	Milligrams per liter
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes

SECTION 3 DISCHARGE REGULATIONS

3.1 GENERAL DISCHARGE PROHIBITIONS

3.1.1 Discharge to Sanitary Sewer System. No person shall discharge or contribute to the discharge of any stormwater or other unpolluted water into the District's sanitary sewerage system.

3.1.2 Discharge to Public Stormwater System. No person shall discharge or cause to be discharged, directly or indirectly, to the public storm system any quantity of stormwater or any pollutant, substance, stormwater, or wash water, that will violate the discharger's permit, if one is issued, the District's NPDES permit, these Rules and Regulations or any environmental law or regulation, or water quality standard. Prohibited activities include, but are not limited to, the following:

- (a) Introduction of pollutants or waters to the public stormwater system containing pollutants or concentrations at levels equal to or in excess of those necessary to protect waters of the State.
- (b) Failure to abide by the terms of any NPDES permit, statute, administrative rule, Rules and Regulations, stipulated and final order or decree or other permit or contract.
- (c) Discharges of non-stormwater or spills or dumping of materials other than stormwater into public storm system unless pursuant to a conditional permit approved by the District and in compliance therewith.
- (d) Illegal or unpermitted connection or methods of conveyance to the public stormwater system.
- (e) Any discharge that will violate water quality standards.

3.1.3 Discharge to Creeks or Drainageways. Storm drains and roof drains are not allowed to drain to creeks or drainageways or encroach into the buffer unless approved in writing by the District. Encroachment into buffer areas must be approved by the District and will require mitigation. Existing and replacement storm drains shall be constructed according to State and Federal Regulations. Non-single family development shall provide an approved water quality facility prior to any discharge from the site to a storm drain system, a creek or drainageway, as approved by the District.

3.1.4 Prohibited Substances. No persons shall discharge or cause to be discharged, directly or indirectly, into the public sewerage system any pollutant, substances, or wastewater that will interfere with the operation or performance of the public sewerage system, cause a pass through, have an adverse effect on the receiving stream, endanger life, limb or public property, or constitute a nuisance. Prohibited substances, shall include, but not be restricted to, the following:

- (a) Any liquids, solids, or gases, which by reason of their nature or quantity are, or may be, sufficient, either alone or by interaction with other substances to cause fire or explosion or be injurious in any way to persons, property or the public sewerage system. Pollutants that create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods of 40 CFR 261.21, as it may be amended from time to time. At no time shall two (2) successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system), be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, fuel oils, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides.
- (b) Any sewage containing pollutants in sufficient quantity either at a flow rate or pollutant concentration, singularly or by interaction with other pollutants, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters, or exceed the limitations set forth in federal categorical pretreatment standards. Toxic pollutants shall include, but not be limited to, any pollutant listed in the toxic pollutant list set forth in Table II, attached to these Rules and Regulations.
- (c) Any sewage having a pH lower than 5.5 Standard Unit ("S.U.") or higher than 11.5 S.U., or having any corrosive property capable of causing damage or hazard to structures, equipment or persons.

Facilities with continuous monitoring of pH shall not exceed the pH range of 5.5 S.U. to 11.5 S.U. more than a total of 15 minutes on any single day (cumulative duration of all excursions) provided that, at no time shall any discharge be lower than 5.0 S.U. or at/or above 12.5 S.U pH.

- (d) Any solid or viscous substances in quantities or size capable of causing obstruction to the flow of sewers or other interference with the proper operation of the sewage treatment plant such as, but not limited to, ashes, cinders, sand, mud, straw, insoluble shavings, metal, glass, rags, feathers, tar, creosote, plastics, wood, animal paunch contents, offal, blood, bones, meat trimmings and wastes, fish or fowl heads, entrails, trimmings and wastes, lard, tallow, baking dough, chemical residues, paint residues, cannery waste, bulk solids, hair and fleshings, or plastic or paper dishes, cups, or food or beverage containers, whether whole or ground.
- (e) Any pollutant having a temperature higher than 140 degrees Fahrenheit (60 degrees Celsius) or having temperatures sufficient to cause the influent to the treatment plant to exceed 104 degrees Fahrenheit (40 degrees Celsius). If, in the opinion of the District, lower temperatures of such wastes could harm the

sewers, sewage treatment process, or equipment, or could have an adverse effect on the receiving streams or otherwise endanger life, health or property, or constitute a nuisance, the District may prohibit such discharges.

- (f) Any sewage containing garbage that has not been properly shredded to one-half inch ($\frac{1}{2}$ " or less in any dimension.
- (g) Any sewage containing unusual concentrations of inert suspended solids (such as, but not limited to, Fullers earth, lime slurries, and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate), which may interfere with the operation of the sewerage system.
- (h) Any sewage with objectionable color not removed in the treatment process (such as, but not limited to, dye and printing wastes and vegetable tanning solutions).
- (i) Any slug discharge, which means any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a single discharge episode of such volume or strength as to cause interference to the sewerage system.
- (j) Any noxious or malodorous liquids, gases, or solids that either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into sewers for maintenance and repair.
- (k) Any hauled wastes or pollutants, except such wastes received at the District's sewage treatment plant under a District permit or at a District approved dump station.
- (l) Any substance that may cause any of the District's sewage treatment plants to violate its NPDES Permit or the receiving water quality standards or any other permit issued to District.
- (m) Any wastewater that causes or may cause a hazard to human life or creates a public nuisance.
- (n) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as to exceed limits established by State or Federal regulations.
- (o) Any substance that may cause any of the District's sewage treatment plants effluent or any other product of the District's sewage treatment process such as residues, biosolids, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. (In no case, shall a substance discharged to the District's sewerage system cause the District to be in noncompliance with biosolids use or disposal criteria, guidelines, or regulations developed under Section 405 of the Clean Water Act, as may be amended; any criteria, guidelines, or regulations affecting biosolids use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control

Act, or State criteria applicable to the sludge management method being used, or any amendments thereto).

- (p) Petroleum oil, non-biodegradable cutting oil or products of mineral oil origin in amounts that will cause interference or pass through.
- (q) Pollutants that result in presence of toxic gases, vapors, or fumes in the POTW that may cause acute worker health and safety problems.

3.2 DISCHARGE LIMITATIONS

3.2.1 National Categorical Pretreatment Standards. National categorical pretreatment standards, as promulgated by the EPA, pursuant to the Federal Water Pollution Control Act, if more stringent than limitations imposed under these Rules and Regulations, shall be met by all Dischargers into the sewerage system who are subject to such standards.

3.2.2 State Requirements. State requirements and limitations on all discharges to the public sewerage system shall be met by all Dischargers who are subject to such standards in any instance in which the State standards are more stringent than Federal requirements and limitations, or those in this or any other applicable Rules and Regulations.

3.2.3 District Requirements. No persons shall discharge into the public sewerage system any sewage containing the following:

- (a) Fats, wax, grease, or oils (whether emulsified or not), in excess of 100 milligrams per liter for sources of petroleum origin, or in excess of 300 milligrams per liter for sources composed of fatty matter from animal and vegetable sources, or containing substances which may solidify or become viscous at temperatures between 32 degrees Fahrenheit and 150 degrees Fahrenheit (zero degrees Celsius and 65 degrees Celsius).
- (b) Strong acid, iron pickling wastes or concentrated plating solutions, whether neutralized or not, unless the Discharger has a valid Industrial Wastewater Discharge Permit that allows otherwise.
- (c) Pollutants in excess of the concentrations in Table III measured as a total of both soluble and insoluble concentrations for a composite representing the process day or at any time as shown by grab sample, unless the Discharger has a valid Industrial Wastewater Discharge Permit which established a different limitation for the specific pollutant as set forth in Table III.

3.2.4 Wastewater Discharge Permit Limitations. It shall be unlawful for an Industrial User with a valid Industrial Wastewater Discharge Permit to discharge wastes to the public sewerage system in excess of the limitations established in the discharge permit or in violation of the prohibited discharge substances described in Subsection 3.1.4. The District is authorized to establish Local Limits pursuant to 40 CFR 403.5, as may be amended from

time to time, to implement the prohibitions listed in sections 3.1.2 and 3.2.3. The District may also develop Best Management Practices, by ordinance or in individual wastewater discharge permits, to implement Local Limits and the Requirements of Sections 3.1.2 and 3.2.3.

3.2.5 Tenant Responsibility. Any occupant of the premises as a tenant under any rental or lease agreement shall be jointly and severally responsible for compliance with the provisions of these Rules and Regulations in the same manner as the owner.

3.2.6 More Stringent Limitations. The District reserves the right for the Director to promulgate new orders at any time to provide for more stringent limitations or requirements on discharges to the public sewerage or stormwater system where it deems necessary to comply with the objectives of these Rules and Regulations. Nothing in these Rules and Regulations shall prohibit a City served by the District from adopting more stringent limitations or requirements than are contained herein.

3.2.7 Notification of Hazardous Waste Discharges. All Industrial Users shall notify the District in writing of any discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR, Part 261, as set forth in 40 CFR 403.12(p) or any successor statutes. Any Industrial User who commences discharging, shall provide notification in accordance with 40 CFR 403.12(p) no later than 180 days after the discharge of any listed or characteristic hazardous waste(s).

3.2.8 Dilution. No discharger shall increase the use of potable or processed water in any way for the purpose of diluting a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the standards set forth in these Rules and Regulations.

3.3 ACCIDENTAL DISCHARGES

3.3.1 Generally. Each Discharger shall provide protection from accidental discharge of prohibited substances or other substances regulated by these Rules and Regulations. Where necessary, facilities to prevent accidental discharge of prohibited substances shall be provided and maintained at the Discharger's own cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the District for review, and shall be approved by the District before construction of the facility. Each existing Discharger shall complete its plan and submit it to the District upon request. No Discharger shall be permitted to introduce pollutants into the public sewerage system until the accidental discharge protection procedures have been approved by the District. Review and approval of such plans and operating procedures by the District will not relieve the Discharger from the responsibility to modify its facility as necessary to meet the requirements of these Rules and Regulations. Dischargers shall notify the District immediately upon the occurrence of an accidental discharge of substances, or slug loadings, prohibited by this Rules and Regulations. The notification shall include location of discharge, date and time thereof, type of waste, concentration and volume, corrective actions taken.

3.3.2 Written Notice. Within five (5) days following an accidental discharge, the Discharger shall submit to the District a detailed written report describing the cause of the discharge and the measures to be taken by the Discharger to prevent similar future occurrences. Such notification shall not relieve the Discharger of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, harm to aquatic life, or any other damage to person or property; nor shall such notification relieve the discharger of any fines, civil penalties, or other liability which may be imposed by this subsection or other applicable law.

3.3.3 Notice to Employees. A notice shall be permanently posted on the Discharger's bulletin board or other prominent place advising employees whom to call in the event of an accidental discharge. Employers shall insure that all employees who may cause or discover such a discharge to occur are advised of the emergency notification procedure.

3.4 PRETREATMENT FACILITIES

If it is determined by the District that pretreatment facilities are necessary to comply with water quality standards, the District may require that such facilities be constructed or modifications made within the shortest reasonable time, taking into consideration the construction time, impact of the surface water on the District's system, economic impact on the facility and any other appropriate factor. All such facilities shall be constructed and operated under authority issued by the District.

3.5 CONNECTION REQUIREMENTS

3.5.1 Authority of Connection. The District shall approve and / or permit any connection to any sanitary or stormwater facility owned, operated or maintained by the District, whether constructed or natural. Before connecting to any facilities, the applicant must obtain authorization to make such connection by paying the applicable fees, and obtaining approval and / or a written permit from the District.

SECTION 4 – APPLICABLE CHARGES

4.1 GENERAL

This Section is intended to provide authorization for system development charges for capital improvements pursuant to ORS 223.297-223.314, as may be amended from time to time, for the purpose of creating a source of funds to pay for existing system capacity and/or the installation, construction and extension of capital improvements to accommodate new connections to the system. These charges shall be due and payable at the time of and as a precondition for permitted increased improvements by new development whose impacts generate a need for those facilities. The system development charges imposed by Section 4.1 are separate from and in addition to any applicable tax, assessment, charge or fee otherwise provided by law or imposed as a condition of development.

4.1.1 Service Areas. The service areas of the District are:

- (a) **North Clackamas Service Area.** The North Clackamas Sewer Service Area consists of the boundaries of Clackamas County Service District No. 1 served by the Kellogg Creek Water Pollution Control Plant and/or District capacity at the Tri-City Water Pollution Control Plant. Table VII, attached hereto and incorporated by reference, applies to this sewer service area.
- (b) **Boring Sewer Service Area.** The Boring Sewer Service Area consists of the property annexed by Order No. 1990 of the Portland Metropolitan Local Government Boundary Commission dated March 8, 1984, and any area subsequently served by the sewage treatment plant to be constructed within this sewer service area. No system development charge shall be assessed for those properties within the original boundaries of Assessment District 84-1. A system development charge per dwelling unit is hereby imposed on all other property in the Boring Area connecting to the District sewerage system. Table VIII, attached hereto and incorporated herein by reference, applies to this sewer service area.
- (c) **Hoodland Sewer Service Area.** The Hoodland Sewer Service Area consists of the property merged by Order 1956 of the Portland Metropolitan Local Government Boundary Commission dated November 10, 1983, and any area subsequently served by the sewage treatment plant in that sewer service area. Table IX, attached hereto and incorporated by reference, applies to this sewer service area. Any parcel of property that was assessed for an area density benefit within Assessment District 1-80 shall be exempt from the imposition of the system development charge for the number of equivalent dwelling units equal to each \$2,170 of area density benefit assessment.
- (d) **Fischer's Forest Park Sewer Service Area.** The Fischer's Forest Park Sewer Service Area consists of the property merged by Order 1956 of the Portland Metropolitan Local Government Boundary Commission dated November 10, 1983, and any area subsequently served by its system. There are no system

development charges levied in this sewer service area. Table X, attached hereto and incorporated by reference, applies to this sewer service area.

4.1.2 Exemption. Exemptions to the system development charge in the Boring Sewer Service Area shall be in accordance with the following:

- (a) Dwellings, regardless of the date of construction and within the original boundaries of Assessment District 84-1, are exempt from any system development charge; except, if at the time of connection the number of connection units sought exceeds the highest number of connection units (density) allowed by the zoning ordinance at the time Assessment District 84-1 was formed. The property owner shall pay a system development charge for each excess connection unit.
- (b) Structures other than single family dwellings within Assessment District 84-1, regardless of the date of construction, are exempt from any connection charge; except, if at the time of connection the number of connection units sought exceeds the highest number of connection units (density) allowed by the zoning ordinance at the time Assessment District 84-1 was formed. The property owner shall pay a connection charge for each excess connection unit.

4.1.3 System Development Charge Imposed; Method for Establishment Created. Unless otherwise exempted by the provisions of these Rules and Regulations or other local or state law, a system development charge is hereby imposed on all development within the District that increases usage upon the sanitary sewer facilities for each equivalent dwelling unit as defined in the Table related to the service area. System development charges shall be established and may be revised by resolution or order of the Board. The resolution or order shall set the methodology and amount of the charge.

4.1.4 Methodology.

- (a) The methodology used to establish the system development charges shall consider the cost of the then-existing facilities, prior contributions by then-existing system users, the value of unused capacity, rate-making principles employed to finance publicly-owned capital improvements, and other relevant factors identified by the board. The methodology shall promote the objective that future system users shall contribute not more than an equitable share of the cost of then-existing facilities.
- (b) The methodology used to establish the system development charge shall consider the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related and other relevant factors identified by the Board.
- (c) The methodology used to establish the system development charge shall be adopted by resolution or order of the Board.

- (d) The system development charge may be adjusted by the periodic application of one or more specific cost indexes or other periodic data sources. The resolution that adopts the system development charge shall identify the cost indexes to be used. A specific cost index or periodic data source must be:
 - (i) A relevant measurement of the average change in prices or cost over an identified time period for materials, labor, real property or a combination of the three;
 - (ii) Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the system development charge methodology; and
 - (iii) Incorporated as part of the established methodology or identified and adopted in a separate resolution.

4.1.5 Authorized Expenditure.

- (a) System development charges shall be applied only to capital improvements associated with the systems for which the fees are assessed, including expenditures relating to repayment of indebtedness.
- (b) (1) System development charges shall be spent only on capacity increasing capital improvements, including expenditures relating to repayment of debt for such improvements. An increase in system capacity occurs if a capital improvement increases the level of performance or service provided by existing facilities or provides new facilities. The portion of the improvements funded by improvement fees must be related to demands created by current or projected development.

(2) A capital improvement being funded wholly or in part from the revenues derived from the improvement fee shall be included in the Capital Improvement Program adopted by the Board.
- (c) Notwithstanding 4.1.5(a) and (b), system development charge revenues may be expended on the direct costs of complying with the provisions of these Rules and Regulations, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge funds.

4.1.6 System Development Charge Project Plan.

- (a) The Board has adopted by resolution or order the Clackamas County Service District No. 1 System Development Charge Report for the North Clackamas Area Sanitary Sewer Service Area. This Report:

- (1) Lists existing facilities and the capacity available for new development;
 - (2) Lists the planned capital improvements that may be funded with improvement fee revenues; and
 - (3) Lists the estimated cost and time of construction of each improvement.
- (b) In adopting this Report, the Board may incorporate by reference all or a portion of any Public Facilities Plan, Master Plan, Capital Improvements Plan or similar plan that contains the information required by this section. The Board may modify the projects listed in that Report at any time through the adoption of an appropriate resolution.

4.1.7 Collection of Charge.

- (a) As a condition to connection of the sanitary sewer system, the applicant shall pay all applicable charges. Except as allowed in Section 4.1.8, the system development charge is payable at the time of permitted increased usage upon issuance of:
- (1) A building permit; or
 - (2) A development permit for development not requiring the issuance of a building permit; or
 - (3) Increased usage of the system or systems provided by the District.
- (b) The resolution that sets the amount of the charge shall designate the permit or systems to which the charge applies.
- (c) If development is commenced or connection is made to the systems provided by the District within an appropriate permit, the system development charge is immediately payable upon the earliest date that a permit was required or increased usage occurred.
- (d) The Director or his/her designee shall not issue such permit or allow connection or increased usage of the system(s) until the charge has been paid in full, unless provision for installment payments has been made pursuant to Section 4.1.8, or unless an exemption is granted pursuant to Section 4.1.9.
- (e) All moneys collected through the system development charge shall be retained in a separate fund and segregated by type of system development charge.
- (f) In addition, each person making an application for connection shall pay an inspection charge for stormwater or sanitary sewer system construction inspection and testing for the type of service for which the application has been

submitted and the permit to be reasonably calculated.

4.1.8 Installment Payment of District's System Development Charges.

- (a) Where the District's system development charges and/or collection sewer charge are greater than two times the amount of a system development charge for a single family residential unit, the applicant may, at the time of application, with the consent of the District, make a one-time election to pay the charge in installments. If approved, payment in 20 semi-annual installments, secured by a lien on the property upon which the development is to occur or to which the connection is to occur or to which the connection is to be made, to include interest on the unpaid balance. The Director may enter into such agreements and related documents to implement the intent of this section.
- (b) The District shall provide application forms for installment payments, which shall include a waiver of all rights to contest the validity of the lien, except for the correction of computational errors.
- (c) The District reserves the right to reject any application for installments payments. Requirements and procedures for installment payments of the District's share of the system development charge shall be in accordance with the following:
 - (1) A person requesting installment payments shall have the burden of demonstrating the person's authority to assent to the imposition of a lien on the property and that the interest of the person is adequate to secure payment of the lien.
 - (2) Any eligible property owner requesting the installment shall, at the time of the application for connection, submit to the District an application for deferral on a form provided by the District.
 - (3) Upon receipt of an application, the applicant, at his expense, shall order a preliminary title report from a title insurance company doing business in Clackamas County, Oregon, and provide it to the District.
 - (4) The applicant, at his expense, shall furnish the District with a current statement of amount due to each lienholder disclosed by the preliminary title report, the tax assessor's statement of true cash value, and, for property proposed for improvement, an MAI appraisal, certified by the appraiser, as to the estimated fair market value upon completion of the proposed improvement. The applicant shall answer such questions as the District deems proper regarding the applicant's ability to make the installment payments, as well as any other lienholder. The applicant also authorizes the District to contact other lienholders regarding applicant's payment history.

- (5) If, upon examination of the title to the property and other information, the District is satisfied:
- (i) That the total unpaid amount of all liens disclosed, together with the amount of the system development charge sought to be paid by installments, does not exceed (1) the appraised value of the property as determined by the current appraisal of the County Assessor or (2) if the District elects, based upon the appraisal or other evidence of value acceptable to the District, the amount does not exceed the estimated fair market value of the property; and
 - (ii) The District, in its discretion, upon review of the applicant's ability to make payments as required under the proposed mortgage or trust deed and other debt obligations and the status of applicant's title to the property, consents to execution of the mortgage or trust deed; then
 - (iii) The applicant shall execute an installment promissory note, payable to the District in the form prescribed by the District for payment in installments, not to exceed 20 equal semi-annual installments, due January 1 and July 1 of each year, together with interest on the deferred principal balance at the prime rate of interest being charged on each principal payment date by the bank doing business in Oregon and having the largest deposits. The promissory note shall be secured by a mortgage or trust deed covering the property to be connected thereto. The cost of recording, preparation of security documents, title company report and filing fees shall be borne by the applicant in addition to the system development charge. The applicant, by electing to pay in installments, agrees that as an additional remedy to recovery upon the promissory note and foreclosure of the mortgage or remedy in lieu thereof, the District may, after ten (10) days notice of delinquent installments, cause termination of service to the defaulting property.
- (d) If the District determines that the amount of system development charge, together with all unpaid liens, exceeds the appraised value of the property or that the applicant cannot execute a mortgage or trust deed that will be a valid lien or if the District believes that it will not have adequate security, or that the applicant cannot make the required payments, it shall so advise the applicant and installment payments shall not be accepted.
- (e) The District shall docket the lien in the lien docket. From that time, the District shall have a lien upon the described parcel for the amount of the system development charge, together with interest on the unpaid balance at the rate

established by the Board. The lien shall be enforceable in the manner provided in ORS Chapter 223, as may be amended from time to time, and shall be superior to all other liens pursuant to ORS 223.230.

- (f) The District at its sole discretion can allow an applicant to apply for installment payment per this Section in an amount equal to or greater than one times the amount of a system development charge for a single family residential unit as prescribed in Section 4.1.8(a), if the applicant can demonstrate a financial Undue Hardship and the inability to obtain financial funding.

4.1.9 Exemptions. The System Development Charge shall not apply to:

- (a) Structures and uses of the sewerage or surface water system facilities on or before the effective date of the resolution.
- (b) Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the Uniform Building Code or the County's Zoning Development Ordinance.
- (c) An alteration, addition, replacement or change in use that does not increase the parcel's or structure's use of the sanitary sewer or surface water system facilities.

4.1.10 Credits.

- (a) A permittee is eligible for credit against the improvement fee element of the system development charge for constructing a qualified public improvement. A qualified public improvement means it meets all of the following criteria:
 - (1) Required as a condition of development approval by the Board or its designee through the development review process; and
 - (2) Identified in the Capital Improvement Plan, or other plan set forth in 4.1.6, or adds additional capacity in excess of a local sewer system; and
 - (3) (i) Not located within or contiguous to the property or parcel that is subject to development approval, or (ii) located in whole or in part on, or contiguous to, property that is the subject of development approval and required to be build larger or with greater capacity than is necessary for the particular development project to which the improvement fee is related.
 - (4) This credit shall be only for the improvement fee charged for the type of improvement being constructed. Credit under this section may be granted only for the cost of that portion of the improvement that exceeds the facility size or capacity needed to serve the development project and their oversizing provides capital usable by the District.

- (b) Applying the adopted methodology, the District may grant a credit against the improvement charge for capital facilities provided as part of the development that reduces the development's demand upon existing capital improvements or the need for further capital improvements or that would otherwise have to be constructed at District expense under the then-existing Board policies.
- (c) When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee that would otherwise be levied against the project receiving development approval, the excess credit may be applied against improvement fees that accrue in subsequent phases of the original development project.
- (d) All credit requests must be in writing and filed with the District before the issuance of a building permit. Improvement acceptance shall be in accordance with the usual and customary practices, procedures and standards of the District. The amount of any credit shall be determined by the District and based upon the subject improvement construction contract documents, or other appropriate information, provided by the applicant for the credit. Upon a finding by the District that the contract amounts exceed the prevailing market rate for a similar project, the credit shall be based upon market rates. The credit shall state the actual dollar amount that may be applied against any system development charge imposed against the subject property. The applicant has the burden of demonstrating qualification for a credit.
- (e) Credits shall be apportioned against the property that was subject to the requirements to construct an improvement eligible for credit. Unless otherwise requested, apportionment against lots or parcels constituting the property shall be proportionate to the anticipated public facility service requirements generated by the respective lots or parcels. Upon written application to the District, however, credits shall be reapportioned from any lot or parcel to any other lot or parcel within the confines of the property originally eligible for the credit. Reapportionment shall be noted on the original credit form retained by the District.
- (f) Any credits are assignable; however, they shall apply only to that property subject to the original condition for land use approval upon which the credit is based or any partitioned or subdivided parcel or lots of such property to which the credit has been apportioned. Credits shall only apply against system development charges, are limited to the amount of the fee attributable to the development of the specific lot or parcel for which the credit is sought, and shall not be a basis for any refund.
- (g) Any credit request must be submitted before the issuance of a building permit. The applicant is responsible for presentation of any credit and no credit shall be considered after issuance of a building permit.

- (h) Credits shall be used by the applicant within ten years of their issuance by the District.

4.1.11 Payment of Charges. As a condition of service and/or connection District System, the applicant shall pay all fees and charges, except as allowed under Section 4.1.8.

In addition, each person making an application for service and/or connection shall pay an Inspection Charge to the District for providing construction inspection and testing for the type of service for which the application has been submitted and was reasonably calculated.

4.1.12 Changing Class of Service. Whenever a parcel of property becomes connected to the District's sanitary sewer system and shall thereafter undergo a change of use so that a different number of dwelling units would be assigned to the property if connection were made after the change, the following shall occur:

(a) North Clackamas Sewer Service Area - Surface Water

- (1) If the change results in the assignment of a greater number of ESU's pursuant to Table XIII, an additional system development charge shall be levied prior to issuance of a permit to cause such change. The additional charge shall be equal to the net increase of ESU's times the current system development charge per ESU's.
- (2) If the change results in the assignment of a lesser number of ESU's pursuant to Table XIII, there shall be no additional charge of rebate. However, the full number of ESU's originally assigned shall be used as a basis for determining any further change of use resulting in the assignment of additional ESU's.

(b) North Clackamas Sewer Service Area – Sanitary Sewer

- (1) If the change results in the assignment of a greater number of EDU's pursuant to Table VII, an additional system development charge shall be levied at the time of such change. The additional charge shall be equal to the net increase of EDU's times the current system development charge by EDU.
- (2) If the change results in the assignment of a lesser number of EDU's pursuant to Table VII, there shall be no additional charge or rebate. However, the full number of EDU's originally assigned shall be used as a basis for determining any future system development charges in the event of a further change of use resulting in the assignment of additional EDU's.

(c) Boring Sewer Service Area – Sanitary Sewer

- (1) If the change results in the assignment of a greater number of EDU's pursuant to Table VIII, an additional system development charge shall be levied at the time of such change. The additional charge shall be equal to the net increase of EDU's times the current system development charge by EDU.
- (2) If the change results in the assignment of a lesser number of EDU's pursuant to Table VIII, there shall be no additional charge or rebate. However, the full number of EDU's originally assigned shall be used as a basis for determining any future system development charges in the event of a further change of use resulting in the assignment of additional EDU's.
- (3) There is not a charge for changing class of service for any property located within the boundaries of Assessment District 84-1. These provisions apply to all properties outside Assessment District 84-1.

(d) Hoodland Sewer Service Area – Sanitary Sewer

- (1) If the change results in the assignment of a greater number of EDU's pursuant to Table IX, an additional system development charge shall be levied at the time of such change. The additional charge shall be equal to the net increase of EDU's times the current system development charge by EDU.
- (2) If the change results in the assignment of a lesser number of EDU's pursuant to Table IX, there shall be no additional charge or rebate. However, the full number of EDU's originally assigned shall be used as a basis for determining any future system development charges in the event of a further change of use resulting in the assignment of additional EDU's.

4.1.13 Notification/Appeals The District shall maintain a list of persons who have made a written request for notification prior to adoption or amendment of the system development charge methodology. These persons shall be so notified in writing of any such proposed changes at least 45 days prior to the first hearing to adopt or amend such methodology(ies). This methodology shall be available at least 30 days prior to the public hearing. Any challenge to the system development charge methodology shall be filed not later than 60 days following final adoption by the Board and only pursuant to the provisions of ORS 34.010 to 34.100, as may be amended from time to time.

4.1.14 Annual Accounting. The District shall prepare for public inspection an annual accounting for system development charges showing the total amount of system development charges collected for each system.

4.1.15 **Challenges.** Any citizen or interested person may challenge expenditure of system development charge revenues according the Section 6 of the Rules and Regulations. Notwithstanding Section 6, the initial appeal of that Section with respect to an expenditure of system development charge revenues shall be filed within two years of the expenditure complained of. Thereafter, all time limits of Section 6 shall apply including Circuit Court review pursuant to ORS 34.010 to 34.100, as may be amended from time to time.

4.2 USER CHARGES – SURFACE WATER

4.2.1 **Customer Charges.** Equivalent service unit rate structure. Except as specifically provided below, a monthly surface water charge shall be paid by the user. The rate is set according to the surface water service area as follows:

(a) North Clackamas Surface Water Service Area. There is hereby imposed a system of rates for users for surface water services established by this Ordinance. The rates are set forth and amended from time to time to fund the administration, planning, design, construction, water quality and quantity programming, operation, maintenance and repair of surface water facilities.

Rates are hereby established for all users within the North Clackamas Surface Water Service Area as set forth on Table XIV, attached hereto and incorporated by reference. The Table may be amended by Resolution or Order of the Board of County Commissioners.

(b) Annexation. The rates, fees, and system development charges set forth in Table XIII of this Ordinance shall not be charged in areas annexing to the District after January 1, 2005 until urban level¹ sanitary sewer and/or surface water management services are provided to the User. Such charges shall commence upon the date of connection or use of the sanitary sewer and public storm water/surface water management system.

¹ For the purposes of this section, urban level of service shall be defined as connection to the sanitary sewer system; or having any point of the property boundary within three hundred (300) feet of a serviceable public sanitary sewer and participation in an assessment district, local improvement district, or other service funding mechanism; and/or within three hundred (300) feet of a surface water management program collecting, regulating, and/or controlling surface waters and storm drainage in response to a National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System permit or other regulation imposed upon Clackamas County Service District No. 1 by the Oregon Department of Environmental Quality, United States Environmental Protection Agency, or other regulatory authority.

(c) Mitigation Reduction Factor. The amount of surface water service for sites can be controlled through provision of retention and/or other storm water quantity or quality control mitigation facilities. The District's Planning and Engineering Services Manager, or designee, shall determine the appropriate mitigation credit factor for customers who provide such mitigation in excess of

the current District Regulations in a manner consistent with the Administrative Procedures adopted by the District.

4.2.2 Payment of Customer Charge. Single family customers will be billed on a two (2) month basis in advance, with payment due within fifteen (15) days of the billing date. Non-single family customers will be billed on a monthly basis in advance, with payment due within fifteen (15) days of the billing date.

4.3 USER CHARGES – SANITARY SEWER

4.3.1 Dwelling Unit Monthly User Charge. Except as specifically provided below, a monthly sewer user charge for each residential dwelling unit is assigned each residential class of service listed in the attached tables and shall be paid by the property owner or user commencing on the third month following the date of connection to the District's sewer system. All nonresidential users shall pay from the date of connection to the system. The rate is set according to the sewer service area as follows:

(a) **North Clackamas Service Area.** A monthly user charge shall be as stated in Table XII, attached hereto and made a part hereof, for each dwelling unit as assigned each class of service listed in Table VII, and shall be paid by the property owner commencing on the third month from the date of connection to the District sewerage system.

(b) **Boring Service Area.** A monthly user charge shall be as stated in Table XII, attached hereto and made a part hereof, for each equivalent dwelling unit is assigned to each class of service pursuant to Table VIII, and shall be paid by the property owner or agent authorized to accept billing. The charge shall be paid by the owner commencing on the third month from the date of connection to the District's sewerage system.

(c) **Hoodland Service Area.** A monthly user charge shall be as stated in Table XII, attached hereto and made a part hereof, for each equivalent dwelling unit is assigned to each class of service pursuant to Table IX, and shall be paid by the property owner or agent authorized to accept billing. The charge shall be paid by the owner commencing on the third month from the date of connection to the District's sewerage system.

(d) **Fischer's Forest Park Service Area.** A monthly user charge shall be as stated in Table XII, attached hereto and made a part hereof for each dwelling unit is assigned to each class of service listed in Table X, and shall be paid by the property owner commencing on the third month from the date of connection to the District's sewerage system.

(e) The Board may set user fees and charges by order or resolution.

4.3.2 Low Income Monthly User Charge. The monthly user charge for sanitary sewer service provided to the principal resident or family having a maximum income under the qualifying income limits shall be fifty percent (50%) of the monthly sewer service charge stated in Table XIII. On July 1st of each year, the qualifying limits shall be set at one

hundred eighty-five percent (185%) of the most recently published poverty guidelines in the Federal Register by the U.S. Department of Health and Human Services under authority of 42 U.S.C. 9902(2), as may be amended from time to time, and shall remain in force until the next July 1st. The qualifying income limit for a single person household shall be based on the federal poverty guidelines for a one-person household. The qualifying income limit for a family shall be based on the poverty guidelines for a two-person household. In order to be eligible for the reduced user charge, the qualified person must be the person to whom the monthly user charge is billed and must have completed and filed with the District an application for the reduced rate on a form supplied by the District.

4.4 OTHER CHARGES

4.4.1 Collection Sewer Charge. It is the intent of the District that the owners of all property within the District shall pay their proportionate share of the cost of installation of the local sanitary sewer system. Therefore, whenever any property is connected to the District's sanitary sewer system that has not previously been assessed the full proportional cost of the sanitary system; the owner of such property shall pay a collection sewer charge prior to connecting to the sanitary sewer system. "Full proportional cost" for the purposes of this Section shall mean the cost to design and construct the sanitary sewer system to which connection is made, which would have been assessed against the property if the property had been in an assessment district and assessed in full without regard to any exceptions to the assessment formula. The collection sewer charge shall be:

- (a) For property located within an existing assessment district and connecting to facilities for which an assessment has been levied, a sum equal to the amount of assessment which would have been levied against the property had the property been assessed at the time the assessment district was formed without regard to any exception contained in the assessment formula; or
- (b) For property connecting to facilities for which no assessment has been levied and were not constructed by the District, a sum equal to the proportionate share of the cost of the sanitary sewer system, or
- (c) For capital improvement projects constructed by the District and for which no assessment district have been made, a sum equal to the proportionate share of the cost of the sanitary sewer system, or
- (d) The Director is hereby granted wide discretion in the interpretation of this Section and in its application to particular parcels of property based upon users, lots or acreage to be served, so that the intent of this Section as expressed herein shall be fully implemented.

4.4.2 Sewer Tap-In Charge. Whenever any property connects to the District sanitary sewer system and there has not been provided a service connection to serve such property, the owner shall provide a service lateral at their own expense and at the time of connection shall pay a tap-in charge.

4.4.3 Other Connecting Charges. Whenever sanitary sewer service to a property requires special facilities to be provided by the District, the property owner shall be charged the actual cost incurred by the District in providing the special facilities. Special facilities shall include, but are not limited to, manhole connections, extension of the public sewer, or modification of the public sewer.

4.4.4 Industrial Waste User Charge. An industrial waste user charge will be applied to each class of industrial user as defined in Tables VII through X. The user charge shall be comprised of rates for the customer's proportionate contribution of flow, the suspended solids ("TSS") and biochemical oxygen demand ("BOD") that are in excess of domestic sewage contributions.

Rates for industrial flows shall be based on their Equivalent Dwelling Units as determined by metered water consumption. Rates for TSS and BOD removal shall be based on the actual treatment cost per pound incurred by the District, including administrative overhead, operation, maintenance, and other expenses as established by the District. The user charge shall be based on simultaneous monitoring of flow, TSS, and BOD concentrations measured at the customer's property and the sewage treatment plant periodically during the preceding three-month period. Quarterly adjustments may be made to reconcile differences in projected versus actual conditions.

Such user charge shall be payable from the date of connection to the District sanitary sewer system or from the date on which the property owner is required to connect to the District sanitary sewer system, whichever occurs first.

4.4.5 Surcharge. If the District verifies that any customer has discharged waste on a sustained, periodic, or accidental basis, and those wastewater characteristics result in additional costs above the normal costs associated with treating, operating, maintaining, or complying with regulatory requirements, then that customer may be billed for the additional costs resulting from that discharge.

4.5 PAYMENT OF CHARGES

4.5.1 User Charges. Owners of property will be billed in accordance with the following schedule:

- (a) **North Clackamas Sewer Service Area**. All property owners will be billed on a monthly basis, with payment due within fifteen (15) days of the billing date.
- (b) **Boring Sewer Service Area**. All property owners will be billed monthly for the previous month's service, with payment due within fifteen (15) days of the billing date.
- (c) **Hoodland Sewer Service Area**. All property owners will be billed monthly for the previous month's service, with payment due within fifteen (15) days of the

billing date.

- (d) **Fischer's Forest Park Sewer Service Area.** All property owners will be billed on a monthly basis in advance, with payment due within fifteen (15) days of the billing date.

4.5.2 Temporary Charges. User charges to property owners within North Clackamas Sewer Service Area and Boring Sewer Service Area, whose charges may be based upon metered water consumption or EDU count at the District's discretion, will have their charges computed on the basis of the number of dwelling units assigned such use.

4.5.3 Notification Requirements. In conjunction with a regular bill, the District will provide an annual notification to each user of that portion of the monthly user rate that is attributable to wastewater treatment services.

4.5.4 Irrigation Water Meters. Owners of nonresidential properties may install a separate public water meter for irrigation purposes that shall not be included in the billing for sanitary sewer purposes.

4.5.5 Other Charges and Fees. All other charges and fees shall be due and payable at the time of service, unless otherwise specifically provided by these Rules.

4.6 DEFERRAL OF PAYMENTS OF COLLECTION CHARGES

The District reserves the right, in its sole discretion, to allow the applicant to make a one-time election to pay the system development charge or sewer collection charge in installments at the time of application. The District reserves the right to reject any application for installment payments.

4.7 SEGREGATION OF SPECIAL ASSESSMENTS

Pursuant to Oregon Revised Statutes Chapter 307, as may be amended from time to time, and Board Order No. 832036, special assessments may be segregated in accordance with the following subsections when requested by an owner, mortgagee or lien holder of property that was partitioned or divided subsequent to the original assessment.

4.7.1 Application. Whenever an application has been made under the provisions of Chapter 223 of the Oregon Revised Statutes, as may be amended from time to time, and the application has been accepted and payment of the assessment has in fact been financed by such procedure, the lien of such assessment may be segregated upon the following terms and conditions:

- (a) The property for which the segregation is to be made shall have been assessed as a unit and entered accordingly in the bond lien docket.
- (b) There shall be no delinquent installments of principal or interest on the

assessment of the entire parcel.

- (c) Written application shall be made to the District in such form as may be required, and such application shall be accompanied by any fees established in accordance with Paragraph (5) hereafter.
- (d) If the District determines that the lien may be segregated and divided without prejudice to the overall security of the entire balance owed, then an equitable division of the assessment shall be made based upon the original assessment formula and the preservation of the security interest. Such segregation shall describe the various parcels of the entire tract and the amount of the assessment to be apportioned to each parcel. The District may require that the portion of the assessment segregated and apportioned to a particular parcel be paid in full or whether the remaining parcel shall be relieved of liability for payment of that portion of the lien.
- (e) To defray the costs of investigation, preparing legal documents, calculating an equitable division of the assessment and making the lien docket entries, the Board hereby reserves the right to establish such fees as it deems proper from time to time. Such fees shall not be refundable if the application is disapproved or if the applicant withdraws the application.

4.7.2 Approval. After the apportionment application, upon such form as developed by the District, is received, fees paid and investigation made, the District shall forward the application to the Board for approval pursuant to Oregon Revised Statutes Chapter 307, as may be amended from time to time.

If the application is approved by the Board and the fees provided herein are paid, the District shall certify the fact on the bond lien docket and appropriate entries shall be made therein segregating the total assessment. When such entries are made, the lien shall be thereby only in the amount and as to the parcels thereby approved by the Board.

SECTION 5 COLLECTION PROCEDURES

5.1 GENERAL

The District requires that the user (in whose name the account is set up) is responsible for all fees and charges at the service location.

5.1.1 Account Setup. All applications for service shall be on forms provided by the District. The account holder shall be considered the user of the service. In the case of a landlord-tenant situation, the landlord shall be the account holder.

5.1.2 Notices. Regardless of who is listed as the user, the District will make all reasonable efforts to provide the landlord with copies of all invoices, notices, and other information relating to fees and charges. This policy is intended to comply with ORS 91.255, as it may be amended from time to time, and to provide notices to enable the landlord and tenant a reasonable opportunity within the time set by the District to avoid delinquent charges and discontinuance of service.

5.1.3 Collection of Charges. All invoices or bills for fees and charges shall be sent to the user at the address set forth on the District's records. If the District's records reveal that the user is not the owner and the owner has not executed a document to pay for services, then the District shall take all reasonable steps to provide the owner with copies of all invoices, bills and notices pursuant to ORS 91.255, as it may be amended from time to time.

If the owner has executed such an agreement to be bound or if the rental agreement provides, then the landlord and the tenant shall be jointly and severally liable and, following notices to each in accordance with the District's procedures, collection practices may ensue. The District may look to either or both parties for payment in addition to the remedies of Section 5.4.1, ORS 91.255, and ORS 454.225, or any successor statutes.

The District may enter into a payment plan in its sole discretion to avoid hardship to the user and leave the ultimate resolution between landlord and tenant.

The District may also deny or terminate service to the delinquent user at a new service location within the District based upon the outstanding fees and charges at the previous service location.

The Director may enter into such agreements regarding payment of delinquent fees and charges as are reasonable and necessary in the judgment of the Administrator or Director to obtain payment to the District and avoid hardship and inequities.

5.1.4 Delinquent Charges. All user charges by the District shall be due within twenty (20) days of billing. Thereafter, a charge shall be considered delinquent. All delinquent charges shall bear interest at 9% per annum from the date of delinquency until paid. Failure to make payment when due shall give the District the right to undertake such collection action as it deems appropriate under the circumstances including, but not limited to, letters, telephone

calls (reasonable as to time and place), legal proceedings or certification to the Tax Assessor. The District may certify the amount to the Assessor for inclusion on the property tax statement pursuant to ORS 454.225, as amended from time to time, and in such case those charges shall become a lien upon the property from the date of the certification to the Assessor and any such collection of the debt and foreclosure of said lien shall be according to the Oregon Revised Statutes.

- (a) For surface water customers, upon ten (10) days written notice, if feasible, the District may undertake those steps to construct on-site mitigation facilities or obtain cessation of a customer's impact upon the District's or public's surface water system and the charges therefore shall be owed by customer to the District. Any costs incurred by the District to cease or mitigate the customer's impact on the surface water system, shall be charged at the District's usual labor and material rates.

5.1.5 Discontinuance of Service. The District may, at any time after any charges or fees hereunder become delinquent, remove or close connections and enter upon any delinquent owner's property for such purpose. In addition, when any property owner fails to cease discharging into the District's sewerage system prohibitive substances after being notified by the District to do so, sewerage service may be similarly discontinued. The expense of such discontinuance, as well as the expense of restoring service, shall be a debt due to the District and may be recovered in the same manner as other delinquent charges. Nothing herein shall prevent the District from entering into an agreement with the water service provider to terminate water service for nonpayment of a sanitary sewer bill.

5.1.6 Restoration of Service. Sewer service that has been discontinued by the District shall not be restored until all accrued charges, including the expenses of discontinuance and restoration have been paid and the cause for discontinuance corrected.

5.1.7 Fees and Costs. By resolution, the District shall set fees and charges, for collection efforts, including fees and charges necessary to recover all costs related to an insufficient fund check or the cost of processing lien searches and the like based upon labor rates or other items deemed reasonable by the Board or Director as its designee.

SECTION 6 APPEALS; ENFORCEMENT

6.1 INTERPRETATION OF THESE RULES AND REGULATIONS

6.1.1 Appeal. Any person aggrieved by a ruling or interpretation of the provisions of these Rules and Regulations may submit a written appeal to the Director. The appeal must be in writing and submitted within fourteen (14) days after the decision was made. The appeal shall set forth the events and circumstances leading to the appeal, the nature of the ruling or interpretation from which relief is sought, the nature of the impact of the ruling on appellant's property or business, together with any other reasons for the appeal. This provision shall not apply in cases arising under Section 6.2.

6.1.2 Decision of District. The District shall study the matter, hear testimony if deemed necessary, and issue written findings and reasons for such recommendations to the appellant. The Director shall make a written decision within thirty (30) days of written notification of appeal.

6.1.3 Appeal to Board. If the appellant considers that his grievance has not been handled to his satisfaction, he may apply to the governing body of the District for an independent review of his case within thirty (30) days from the date of the written decision. The Board may make an independent review of the case and hear additional testimony on the matter if it deems necessary. Within thirty (30) days from receipt of the appeal, if the Board chooses to review the matter, it will prepare a written decision on the matter, which shall be sent to the applicant. In lieu of a hearing by the Board, a hearing officer may be appointed.

- (a) If appointed, the hearings officer shall set a de novo hearing on the matter at which he or she will take testimony and hear arguments. The Director shall give notice of the time and place for the hearing to the appellant, the applicant, and all property owners within 250 feet of the subject property. The notice called for in this section shall be given by First Class mail, postage prepaid, at least fourteen (14) days in advance of the time scheduled for the hearing. Only persons who have been aggrieved by the Director's decision shall have standing to participate in the hearing. The hearings officer shall issue written findings and a decision on the appeal within thirty (30) days after the de novo hearing, with copies to the Board, all persons who participated in the hearing and those persons who have requested a copy.

6.1.4 Circuit Court Review. The decision of the Board or Hearings Officer shall be final unless appellant provides a notice of intent to file a writ of review in the Circuit Court, which is received by the District or Hearings Officer within ten (10) days after the decision of the District or Hearings officer was sent to the appellant. Decisions of the Board shall be reviewable by the Circuit Court of the State of Oregon for Clackamas County, solely and exclusively under the provisions of ORS 34.010 to 34.100, or any successor statutes.

6.2 VIOLATIONS AND CIVIL PENALTIES

6.2.1 Violation of These Rules and Regulations. The District may impose civil penalties, including, but not limited to, fines, damages, modification or revocation of permit, cessation

of services, stop work orders, seek an injunction or other relief provided by law when any user or person violates any condition or provision of these Rules and Regulations, any rule adopted thereto or any final order with respect thereto, as well as violation of federal or state statutes, regulations or administrative rules. The goal of enforcement is to (a) obtain and maintain compliance with the District's statutes, rules and regulations, permits and orders; (b) protect the public health and the environment; (c) deter future violators and violations; and (d) ensure appropriate and consistent enforcement. Except as provided by 6.3.2 the District shall endeavor by conference, conciliation and persuasion to solicit compliance. The District shall address all documented violations in order of seriousness at the most appropriate level of enforcement necessary to achieve the goals set forth herein under the particular circumstances of each violation. The violators who do not comply with initial enforcement action shall be subject to increasing levels of enforcement until compliance is achieved.

6.2.2 Definitions for Enforcement.

- (a) "Compliance" means meeting the requirements of the District's statutes, rules, permits or orders.
- (b) "Documented Violation" means any violation that the District or other government agency verifies through observation, investigation or data collection.
- (c) "Enforcement" means any documented action taken to address a violation.
- (d) "Flagrant" means any documented violation where the respondent had actual knowledge of the law and had consciously set out to commit the violation.
- (e) "Formal enforcement" means an administrative action signed by the Director or designee that is issued to a respondent on the basis that a violation has been documented, requires the respondent to take specific action within a specified time frame and states consequences for continued noncompliance.
- (f) "Intentional" means respondent consciously and voluntarily took an action or admitted to taking an action and knew the probable consequences of so acting or omitting to act.
- (g) "Magnitude of Violation" means the extent and effects of a violator's deviation from the District's statutes, rules, permits or orders. In determining magnitude, the District shall consider all available applicable information, including such factors as, but not limited to, concentration, volume, duration, toxicity or proximity to human or environmental receptors, and the extent of the effects of the violation. Deviations shall be classified as major, moderate or minor.
- (h) "Prior Significant Action" means any violation proven pursuant to a contested case hearing or established with or without admission of a violation by payment of a civil penalty, by order or default, or by Stipulated Final Order of the District.

- (i) "Respondent" means the person to whom a formal enforcement action is issued.
- (j) "Risk of Harm" means the level of risk created by the likelihood of exposure (either individual or cumulative) or the actual damage (either individual or cumulative) caused by a violation to public health or the environment. Risk of harm shall be categorized as major, moderate or minor.
- (k) "Systematic" means any documented violation that occurs on a regular basis.
- (l) "Violation" means a transgression of any statute, rule, order, license, permit or any part thereof and includes both acts and omissions. Violations shall be classified as follows:
 - (1) "Class I" means any violation that poses a major risk of harm to public health or the environment, or violation of any compliance schedule contained in a District permit or a District order:
 - (i) Violation of a District Order;
 - (ii) Intentional unauthorized discharges;
 - (iii) Negligent spills that pose a major risk of harm to public health or the environment;
 - (iv) Waste discharge permit limitation violations that pose a major risk of harm to public health or the environment;
 - (v) Discharge or introduction of waste to the publicly owned treatment works, as defined in 40 CFR 403.3(o), without first obtaining an Industrial User Waste Discharge Permit;
 - (vi) Failure to immediately notify the District of a spill or upset condition that results in an unpermitted discharge to public waters or to the publicly owned treatment works as defined in 40 CFR 403.3(o);
 - (vii) Violation of a permit compliance schedule;
 - (viii) Failure to provide access to premises or records;
 - (ix) Any other violation related to water quality that poses a major risk of harm to public health or the environment;
 - (x) Two Class II violations, one Class II and two Class III violations or three Class III violations.

(2) "Class II" means any violation that poses a moderate risk of harm to public health or the environment, including, but not limited to:

- (i) Waste discharge permit limitation violations that pose a moderate risk of harm to public health or the environment;
- (ii) Negligent spills that pose a moderate risk of harm to public health or the environment;
- (iii) Failure to submit a report or plan as required by permit or license;
- (iv) Any other violation related to water quality that poses a moderate risk of harm to public health or the environment.

(3) "Class III" means any violation that poses a minor risk of harm to public health or the environment, including, but not limited to:

- (i) Failure to submit a discharge monitoring report (DMR) on time;
- (ii) Failure to submit a completed DMR;
- (iii) Negligent spills that pose a minor risk of harm to public health or the environment;
- (iv) Violation of a waste discharge permit limitation that poses a minor risk of harm to public health or the environment;
- (v) Any other violation related to water quality that poses a minor risk of harm to public health or the environment.

6.3 PROCEDURE FOR ENFORCEMENT

6.3.1 Inspection, Entry, and Sampling. Authorized District representatives may inspect the property and facilities of any person to determine compliance with the requirements of the Ordinance. The user person shall allow the District or its authorized representatives to enter upon the premises at all reasonable hours for the purpose of inspection, sampling or records examination. The District shall also have the right to set up on the person's property such devices as are necessary to conduct sampling, inspection, compliance, monitoring and/or metering operations. The right of entry includes but is not limited to access to those portions of the premises that contain facilities for sampling, measuring, treating, transporting, or otherwise handling surface water and storing records, reports, or other documents related thereto.

- (a) The District is authorized to conduct inspections and take such actions as required to enforce any provisions of this ordinance or any permit issued pursuant to this ordinance whenever the Director has reasonable cause to believe there exists any violation of this ordinance. If the premises are

occupied, credentials shall be presented to the occupant and entry requested. If the premises are unoccupied and no permit has been issued, the District shall first make a reasonable effort to locate the owner or other person having charge or control of the premises and request entry. If entry is refused in either case, the District shall have recourse to the remedies provided by law to secure entry.

- (b) Where feasible, inspections shall occur at reasonable times of the day. If a permit has been issued and the responsible party or their representative is at the site when the inspection is occurring, the Director or authorized representative shall first present proper credentials to the responsible party. The permittee or person having charge or control of the premises shall allow the Director or the Director's authorized representatives, agents and contractors to:
- i. Enter upon the property where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of a permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of a permit;
 - iii. Inspect at reasonable times the property, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required by these rules and regulations or under a permit; and
 - iv. Sample or monitor at reasonable times, for the purpose of assuring permit compliance with these rules and regulations or as otherwise authorized by local or state law, any substances or parameters at any location.

6.3.2 Prior Notice and Exceptions. Except as otherwise provided, prior to the assessment of any civil penalty, the District shall serve a notice of violation upon the Respondent. The written notice shall be served, either personally, by office or substitute service, as those terms are defined in the Oregon Rules of Civil Procedure, or by certified or registered mail, return receipt requested, specifying the violation and stating that the District will assess a civil penalty if a violation continues or occurs after five days following receipt of the notice.

The above notice shall not be required where the Respondent has otherwise received actual notice of the violation not less than five days prior to the assessment of civil penalty. No advance notice, written or actual, shall be required if (a) the act or omission constituting the violation is intentional; or (b) the water pollution would normally not be in existence for five days.

6.4 ENFORCEMENT ACTION

6.4.1 Notice of Non-Compliance (NON). At the District's discretion, it may issue a notice of noncompliance (NON) as a formal enforcement action that:

- (a) Informs a person of the existence of a violation, the actions required to resolve the violations and the consequences of continued noncompliance. The notice may specify the time by which compliance is to be achieved and that the need for formal enforcement action will be evaluated;
- (b) Shall be issued under the direction of the Director or designee;
- (c) Shall be issued for all classes of documented violations; and
- (d) Is consistent with the policy of 6.3.2.

Typically, a NON will be in the form of a letter and may include a request for a written report within five (5) business days. The report shall detail the event, steps taken to correct the problem and steps to prevent future events. 6.4.2 Notice of Violation and Intent to Assess a Penalty (NOV).

6.4.2 Notice of Violation and Intent to Assess a Penalty (NOV). In lieu of or subsequent to a NON in the District's sole discretion, it may issue a Notice of Violation and Intent to Assess a Civil Penalty (NOV) as a formal enforcement action that: (a) is issued pursuant to 6.3.2; (b) may include a time schedule by which compliance is to be achieved; (c) shall be issued by the Director or designee; (d) shall be issued for the first occurrence of a documented Class I violation that is not excepted under 6.3.2 or the repeated or continued occurrence of documented Class II or Class III violations, where notice of noncompliance has failed to achieve compliance or satisfactory progress toward compliance.

6.4.3 Notice of Civil Penalty Assessment. A notice of Civil Penalty Assessment is a formal enforcement action that: (a) is escalated pursuant to Section 6.5; (b) shall be issued by the District or designee; and (c) may be used for the occurrence of any class of documented violation or for any class of repeated or continuing violations if a person has failed to comply with a Notice of Violation and intent to assess a civil penalty, Stipulated Final Order or other order.

6.4.4 Memorandum of Agreement and Order. A Memorandum of Agreement and Order (MAO) is a formal enforcement action that is in the form of a MAO, stipulated final order or consent order issued by the Director that: (a) may be negotiated between the District and the subject party prior to or after any notice set forth above; (b) shall be signed by the Director or designee on behalf of the District and the authorized representative of the subject party; and (c) shall set forth action to be taken and set civil penalties. This may be issued for any class of violations. The formal enforcement action as described in these sections in no way limits the District from seeking other legal or equitable remedies in the proper court as provided by Oregon law.

6.4.5 Right to Hearing. A civil penalty shall be due and payable 10 days after the date of service of the Notice of Civil Penalty Assessment. The decision of the Director or the Director's designee to assess a civil penalty or other formal enforcement action or any violation pertaining to the District's statutes, regulations, permits, or orders shall be served on the user or person (hereinafter "Respondent") by personal service, office or substitute service, as those terms are defined in the Oregon Rules of Civil Procedure or by certified or registered mail, return receipt requested. Service may be made upon any agent, officer or authorized representative of the user or person. The Notice shall specify the violation, the

reasons for the enforcement action and the amount of the penalty. It shall comply with ORS 183.090, as may be amended from time to time, relating to notice and contested cases. The decision shall be final unless the respondent files a written Notice of Appeal and Request for Hearing with the District within 21 days from the date of the Director's decision. The Notice of Appeal and Request for Hearing shall contain the following:

- (a) The name of the Respondent and the case file number or permit number.
- (b) The name and signature of the Respondent and a statement that, if acting on behalf of a partnership or corporation, the person executing the Notice of Appeal is duly authorized to file such appeal and such person is the contact representative.
- (c) The date that the Notice of Civil Penalty Assessment or other formal enforcement was received by the Respondent.
- (d) The nature of the decision and the specific grounds for appeal. In the Notice of Appeal, the party shall admit or deny all factual matters and shall affirmatively allege any affirmative claim and defense and the reasons therefore.
- (e) The appeal shall be limited to the issues raised in the petition.
- (f) The hearing shall be conducted in accord with ORS Chapter 183, as may be amended from time to time. The record of the hearing shall be considered by the District or Hearings Officer, which shall enter appropriate orders, including the amount of any civil penalty assessed. Appeal of such orders may be taken by the Respondent as provided in Section 6.1. Notwithstanding the foregoing, nothing shall be construed to prevent the District from taking any other enforcement action or remedy available.

6.4.6 Other Remedies. The formal enforcement action as described in these sections in no way limits the District from seeking other legal or equitable remedies in the proper court as provided by Oregon law.

6.5 CIVIL PENALTY SCHEDULE MATRICES

In addition to any liability, duty or other penalty provided by law, the Director may assess a civil penalty for any violation pertaining to the District's statutes, regulations, permits or orders by service of a written notice of assessment of civil penalty upon the respondent as set forth in Paragraph 6.4 above. The amount of any civil penalty shall be determined through the use of the following matrices, in conjunction with the formula contained in Section 6.5.3.

6.5.1 Base Penalty Matrix.

	Magnitude of Violation		
	Major	Moderate	Minor
Class I	\$5,000	\$2,500	\$1,000
Class II	\$2,000	\$1,000	\$500
Class III	\$500	\$250	\$100

No civil penalty issued by the Director pursuant to this matrix shall be less than one hundred dollars (\$100) or more than ten thousand dollars (\$10,000) for each day of each violation.

6.5.2 Petroleum Spills. Persons causing oil spills to waters of the state within the jurisdiction of the District through intentional or negligent acts shall incur a civil penalty of not less than one hundred dollars (\$100) or more than twenty thousand dollars (\$20,000) per violation. The amount of the penalty shall be determined by doubling the values contained in the matrix in subsection 6.5.1 of this rule, in conjunction with the formula contained in 6.5.3. In determining whether to seek a civil penalty, the District shall take into account the circumstances and enforcement efforts of other governmental agencies having jurisdiction.

6.5.3 Civil Penalty Determination Procedure.

- (a) When determining the amount of civil penalty to be assessed for any violation, the Director shall apply the following procedures:
- (1) Determine the class of violation and the magnitude of violation;
 - (2) Choose the appropriate base penalty established by the matrix of Section 6.5.1, based upon the above finding;
 - (3) Starting with the base penalty (BP), determine the amount of penalty through the application of the formula $BP + [(1 \times BP) (P + H + E + O + R + C)]$ where:
 - (i) "P" is whether the Respondent has any prior significant actions relating to statutes, rules, orders and permits pertaining to environmental quality or pollution control. The values for P and the finding which supports each are as follows:
 - 0 if no prior significant action or there is insufficient information on which to base a finding;
 - 1 if the prior significant action is one Class II or two Class III violations;

- 2 if the prior significant action is one Class I or equivalent;
- 3 if the prior significant actions are two Class I or equivalents;
- 4 if the prior significant actions are three Class I or equivalents;
- 5 if the prior significant actions are four Class I or equivalents;
- 6 if the prior significant actions are five Class I or equivalents;
- 7 if the prior significant actions are six Class I or equivalents;
- 8 if the prior significant actions are seven Class I or equivalents;
- 9 if the prior significant actions are eight Class I or equivalents;
- 10 if the prior significant actions are nine Class I or equivalents.

In determining the appropriate value for prior significant actions as listed above, the District shall reduce the appropriate factor by:

- A value of two if all prior significant actions are greater than three years old, but less than five years old;
- A value of four if all the prior actions are greater than five years old;

In making the above reductions no finding shall be less than zero. Any prior significant action that is greater than ten years old shall not be included in the above determination.

(ii) "H" is past history of the Respondent taking all feasible steps or procedures necessarily appropriate to correct any prior significant actions. The values for H and the findings which support each are as follows:

- Minus 2 if the Respondent took all feasible steps to correct any violation;
- 0 if there is no prior history or insufficient information on which to base a finding;
- 1 if the Respondent took some but not all feasible steps to correct a Class II or III violation;
- 2 if the Respondent took some but not all feasible steps to correct a Class I violation;

- 3 if no action to correct prior significant actions.

(4) "E" is the economic condition of the Respondent. The values for E and the finding which support each are as follows:

- 0 to minus 4 if economic condition is poor, subject to any significant economic benefit gained by Respondent through non compliance.
- 0 if there is insufficient information on which to base a finding, the Respondent gained no economic benefit through noncompliance, or the Respondent is economically sound;
- 2 if the Respondent gained a minor to moderate economic benefit through noncompliance;
- 4 if the Respondent gained a significant economic benefit through noncompliance.

(5) "O" is whether the violation was a single occurrence or was repeated or continuous during the period resulting in the civil penalty assessment. The values for "O" and the finding which supports each are as follows:

- If a single occurrence;
- If repeated or continuous.

(6) "R" is whether the violation resulted from an unavoidable accident, or a negligent or intentional act of the Respondent. The values for "R" and the finding which supports each are as follows:

- Minus 2 if unavoidable accident;
- 0 if insufficient information to make any other finding;
- 2 if negligent;
- 4 if grossly negligent;
- 6 if intentional
- 10 if flagrant.

(7) "C" is the Respondent's cooperativeness in correcting the violation. The values for "C" and the finding which supports each are as follows:

- Minus 2 if Respondent is cooperative;

- 0 if Respondent is neither cooperative nor uncooperative or there is insufficient information on which to base a finding;
 - 2 if violator is uncooperative.
- (b) In addition to the factors listed in 6.5.3(a) of this rule, the Director may consider any other relevant rule or statute and shall state the effect the consideration had on the penalty. On review, the Board of county Commissioners or Hearings Officer shall consider the factors contained in 6.5.3(a) of this rule and any other relevant rule or statute.
- (c) If the District finds that the economic benefit of noncompliance exceeds the dollar value of 4 in subsection 6.5.3(a)(iii) of this section, it may increase the penalty by the amount of economic gain, as long as the penalty does not exceed the maximum penalty allowed by rule and statute.
- (d) In any contested case proceeding or settlement in which Respondent has raised economic condition as an issue, Respondent has the burden of providing documentary evidence concerning its economic condition. In determining whether to mitigate a penalty based on economic condition, the Hearings Officer or District may consider the causes and circumstances of Respondent's economic condition.

6.6 STOP WORK ORDERS

6.6.1 Erosion Control Violations. In addition to civil penalties described in Section 6.2, erosion control violations will be enforced by on-site control activities to mitigate existing violations and prevent future violations to the greatest extent possible. Initial violations will result in a written description of requirements for repair of the problem and a 24-hour time period for compliance or a specified time for compliance as included in the Deficiency Notice. If the repair is not performed, or violations continue, the inspector will issue a stop work order on the project, which will remain in effect until the violation is repaired to the requirements stated in these Rules and Regulations. If the violation is not remedied or the person fails to commence diligently remedying the violation within 24 hours, the District may enter upon the property to abate the violation. Notwithstanding anything herein to the contrary, if the District reasonably believes the violation constitutes an emergency or other circumstance requiring immediate action, the District may take reasonable and necessary remedial action with or without notice to the owner as deemed appropriate by the District considering the circumstance. Any costs incurred by the District to remedy a violation shall be paid by the owner. If the required repairs are not completed within the specified time frame or if violations continue that require additional site visits, additional daily charges described in Table XIII will be assessed to the owner of the property.

6.6.2 Other Violations. In addition to civil penalties described in Section 6.2, other violations may be enforced by on-site control activities to mitigate existing violations of these rules including failure to follow approved plans and prevent future violations to the greatest extent possible. Initial violations will result in a written description of requirements for

compliance and a specified time period for compliance as included in the Deficiency Notice. If compliance is not achieved, or violations continue, the inspector will issue a stop work order on the project, which will remain in effect until the violation is repaired to the requirements stated in these Rules and Regulations. If the violation is not remedied or the person fails to commence diligently remedying the violation within 24 hours, the District may enter upon the property to abate the violation. Notwithstanding anything herein to the contrary, if the District reasonably believes the violation constitutes an emergency or other circumstance requiring immediate action, the District may take reasonable and necessary remedial action with or without notice to the owner as deemed appropriate by the District considering the circumstance. Any costs incurred by the District to remedy a violation shall be paid by the owner. If the required repairs are not completed within the specified time frame or if violations continue that require additional site visits, additional daily charges described in Table XIII will be assessed to the owner of the property.

6.7 ABATEMENT

Nothing herein shall prevent the District, following seven (7) days written notice to the discharger, and discharger's failure to act, from entering upon the property and disconnecting, sealing, or otherwise abating any unauthorized connection to the storm water or system discharger violating any permit, this ordinance or water quality standards. As part of this power, the District may perform tests upon the property to trace sources of water quantity or water quality violation.

6.8 COMPROMISE OR SETTLEMENT OF CIVIL PENALTY BY DIRECTOR

6.8.1 Any time subsequent to service of a written notice of assessment of civil penalty, the Director may compromise or settle any unpaid civil penalty at any amount that the Director deems appropriate. Any compromise or settlement executed by the Director shall be final.

6.8.2 In determining whether a penalty should be compromised or settled, the Director may take into account the following:

- (a) New information obtained through further investigation or provided by Respondent that relates to the penalty determination factors.
- (b) The effect of compromise or settlement on deterrence.
- (c) Whether Respondent has or is willing to employ adequate means to correct the violation or maintain compliance.
- (d) Whether Respondent has had any previous penalties that have been compromised or settled.
- (e) Whether the compromise or settlement would be consistent with the District's goal of protecting the public health and environment, as set forth in Section 1.1 of these Rules and Regulations.

- (f) The relative strengths and weaknesses of the District's case.

6.9 STIPULATED PENALTIES

Nothing herein shall affect the ability of the District to include stipulated penalties in a Stipulated Final Order or any other agreement.

6.10 COLLECTION OF CIVIL PENALTY

Procedures for the enforcement of the civil penalty shall be as follows:

6.10.1 Time Limit. Any civil penalty imposed shall be a judgment and lien and may be registered with the Court Clerk. The penalty shall be paid in full within fifteen (15) days of the date the decision is final. Payment shall be made either in cash or by certified check made payable to the District.

6.10.2 Relief in Circuit Court. If full payment is not made, the District may take further action, pursuant to collection authority granted under ORS 454.225 or any successor statutes, for collection and/or cause sewer service to be terminated. Alternatively, counsel for the District may, following the authorization of such action by the District, commence an action for appropriate legal and/or equitable relief in the Circuit Court. Notwithstanding the foregoing administrative hearing processes, nothing in this Subsection shall prohibit the District from commencing civil action in the Circuit Court for injunction or other relief or seeking imposition of civil penalties described above by the court.

6.11 ENFORCEMENT

Nothing shall prevent enforcement of these Rules and Regulations or applicable Federal or State statutes or rules or regulations in Federal and State Courts.

6.12 ARTICLE 1, SECTION 18 CLAIM PROCESSING PROCEDURE AUTHORIZATION

6.12.1 The Board of County Commissioners may by resolution adopt, and from time to time amend, a process for consideration of claims brought by property owners for compensation pursuant to Article 1, section 18, subsections (a) through (e) of the Oregon Constitution. The process shall apply to claims brought relating to regulations, as that term is used in those subsections, which are District regulations. If a process is adopted, a property owner seeking compensation pursuant to that provision shall only be entitled to compensation through adjudication of a claim through such process.

6.12.2 The claims process shall provide, at a minimum, for the following:

- (a) An opportunity for the claimant to provide evidence to support the claim, and an opportunity for the claimant to have a hearing before the Board on the matter.
- (b) Final disposition of a claim by Board Order. The final disposition of any claim may direct payment of the claimed amount, or other appropriate amount, denial of the claim, release of the private real property from the use restriction in lieu of compensation, or such other remedy as the Board deems appropriate.
- (c) Consideration by the Board of the fiscal impact on District programs and services if compensation is paid.

6.12.3 A final disposition of a claim that results in compensation to the property owner, or release of the use restriction in lieu of compensation, shall be recorded in the County deed records with reference to the affected real property. The final disposition may include such conditions and restrictions as the Board deems necessary to carry out its decision and to protect the public interest.

SECTION 7 ADMINISTRATIVE RULES

7.1 COMPLIANCE WITH LAWS

Conformance with these Rules and Regulations shall in no way be a substitute for, or eliminate the necessity of, conforming with any and all federal, state and local laws, policies, Rules and Regulations that are now, or may in the future, be in effect.

7.2 REGULATIONS AND RULES AS CONTRACT

The terms and conditions contained in these Rules and Regulations, and all resolutions, policies and orders adopted pursuant hereto, shall constitute a contract between the District and all users, contractors, and connectors to the system. The consideration for the conditions imposed upon such users and connectors shall be the privilege of the use of, and/or connection to, the District's sewerage and/or surface water systems.

7.3 NO PROPERTY INTEREST ACQUIRED BY PURCHASE OF PERMIT OR CONNECTION TO SYSTEM

A user to the sewerage and/or surface water system does not thereby acquire a vested property interest in continued use or connection to the system. Such use or connection is conditioned always upon such user complying with all applicable terms and conditions contained in these Rules and Regulations, and all regulations, policies and orders adopted pursuant hereto and, further, upon compliance with all federal, state or local requirements that are, or may hereafter be, imposed upon such user or connector.

Nothing contained herein shall require the District to provide service or access to the system to such user when any federal, state, or local agency having jurisdiction over the District has imposed limitations upon such service or access, or when the District, in its discretion, has determined that the public interest requires any such limitation.

7.4 CONFLICTS WITH EXISTING AND FUTURE REGULATORY REQUIREMENTS OF OTHER AGENCIES

Any provisions or limitations of these Rules and Regulations, or any policy, regulation and order adopted pursuant hereto, are superseded and supplemented by any applicable federal, state, or local requirements existing or adopted subsequent hereto that are more stringent. Any provisions of these Rules and Regulations, or any policy, resolution and order adopted pursuant hereto, that are more stringent than any such applicable federal, state or local requirement shall prevail and shall be the standard for compliance by the users of and connectors to the District sewerage and/or surface water system.

7.5 PREVIOUS RULES AND REGULATIONS, RESOLUTIONS REPEALED

Any portion of any Rules and Regulations, regulation and minute order heretofore adopted by the District or its predecessor agencies is hereby repealed to the extent that such portion

is inconsistent with these Rules and Regulations and any regulation and order adopted pursuant hereto.

7.6 ADMINISTRATION OF THESE RULES AND REGULATIONS

The District, through its Director or other authorized designee or representative, shall have the authority to do all things necessary to administer the provisions of these Rules and Regulations and any rules adopted pursuant thereto.

7.7 SEVERABILITY

If any section, subsection, provision, clause, or paragraph of these Rules and Regulations or policies, rules, or orders adopted pursuant hereto shall be adjudged or declared to be unconstitutional or invalid by any court of competent jurisdiction, such judgment shall not affect the validity of the remaining portions of these Rules and Regulations or other such rules, policies and orders adopted pursuant hereto, and it is hereby declared that every other section, subsection, provision, clause, or paragraph is, and shall remain, irrespective of the validity of any other provision.

7.8 EFFECTIVE DATE

The provisions of these Rules and Regulations and the rules herein adopted shall be effective on the date of enactment.

ARTICLE II

This Section sets forth uniform requirements for direct and indirect discharges of industrial wastes into the public sewerage system, and enables the District to comply with all applicable State and Federal laws required by the Clean Water Act and the General Pretreatment Regulations (40 CFR, Part 403), or any successor statutes.

SECTION 8 INDUSTRIAL WASTES

8.1 GENERAL STATEMENT

8.1.1 Scope. The District shall be empowered to enforce Section 307(b) and (c) and 402(b)(8) of the Clean Water Act and any implementing regulations pursuant to these Rules and Regulations, as may be amended from time to time. Enforcement may include injunctive or any other relief in Federal and State courts or through administrative hearings.

The objectives of this section of the Rules and Regulations are to prevent the introduction of pollutants into the public sewerage system that will interfere with the operation of the systems or contaminate the resulting biosolids; to prevent the introduction of pollutants into the public sewerage system that will pass through the system, inadequately treated, into receiving waters or the atmosphere or otherwise be incompatible with the system; to improve the opportunity to recycle or reclaim wastewaters and biosolids from the system; and to provide for equitable distribution of the cost of the District sewerage system.

This section provides for the regulation of direct and indirect discharges of industrial wastes to the public sewerage system through the issuance of permits to certain non-domestic users and through enforcement of general requirements for the other users, authorizes monitoring and enforcement activities, requires user reporting, assumes that existing customer capacity will not be preempted, and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

8.1.2 Signatory Requirements. All applications, reports, or information submitted to the District shall be signed and certified in accordance with 40 CFR 403.12(l), as may be amended from time to time.

8.1.3 Provision on Fraud and False Statements. Any reports required in this Rules and Regulations and any other documents required to be submitted to the District or maintained by the Industrial User shall be subject to enforcement provisions of municipal and state law relating to fraud and false statements. In addition, the Industrial User shall be subject to the following, as may be amended from time to time: (a) the provisions of 18 U.S.C. Section 1001 relating to fraud and false statements; (b) the provisions of Sections 309(c)(4) of the Clean Water Act, as amended governing false statements representation or certification; and (c) the provision of Section 309(c)(6) regarding responsible corporate officers.

8.2 INDUSTRIAL WASTEWATER DISCHARGE PERMITS

8.2.1 Requirements for a Permit. All users discharging or proposing to discharge industrial wastes into any sewer outlet within the jurisdiction of the District or that flows to the public sewerage system shall obtain an Industrial Wastewater Discharge Permit from the District if:

- (a) The discharge is subject to promulgated national categorical pretreatment standards; or
- (b) The discharge, as determined by the District, under 40 CFR 403, as may be amended from time to time, contains pollutants in concentrations or quantities that interfere or have the potential to interfere with the operation of the public sewerage system; has a significant impact or potential for a significant adverse impact on the public sewerage system, either singly or in combination with other contributing industries; or increases the cost of operation of the sewerage system; or
- (c) The discharge requires pretreatment in order to comply with the discharge limitations set forth in Section 3 of this Rules and Regulations; or
- (d) The discharge contains suspended solids or BOD in excess of 350 mg/l, or in excess of thirty (30) pounds in any one day; or
- (e) The discharge contains wastes requiring unusual quantities of chlorine (more than 20 mg/l) for treatment at the treatment plant; or
- (f) The discharge exceeds an average flow of 10,000 gallons or more in any one day, excluding sanitary, non-contact cooling water and boiler blowdown wastewater, or contributes a maximum instantaneous flow that exceeds ten (10) percent of the capacity of the available lateral or appropriate trunk sewer; or
- (g) Contributes a process waste stream that makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the POTW; or
- (h) The discharge is a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261, as may be amended from time to time.

8.2.2 Permit Applications. Application for an Industrial Wastewater discharge permit shall be made to the District on forms provided by the District. The application shall not be considered as complete until all information identified on the form is provided, unless specific exemptions are granted by the District. Completed applications shall be made within thirty (30) days of the date requested by the District or, for new sources, at least ninety (90) days prior to the date that discharge to the sewerage system is to begin.

8.2.3 Industrial Waste Inspection. After the submitted discharge permit application has been received and reviewed, the District may schedule with the applicant an industrial waste inspection. The industrial waste inspection will consist of an interview with applicant

personnel and a plant tour. At the interview, the applicant's application, waste generating process, water consumption, wastewater composition and quantities of wastewater flow are discussed. As part of the tour of that plant, an industrial waste sampling point will be identified. The sampling location, if appropriate and acceptable to the District, will be used for both self-monitoring and monitoring by District personnel for water quality and quantity monitoring and permit enforcement. The investigator's report of the inspection, together with the completed permit application from the industry, form the basis for establishing the discharge permit conditions.

8.2.4 Issuance of Permit. After full evaluation and acceptance of the data furnished by the applicant, the District may approve the basis for a permit and issue an Industrial Wastewater Discharge Permit subject to the terms and conditions provided herein. No permit shall be issued or effective until payment of the applicable initial or renewal fees as the Board may prescribe by Order. All fees charged by the District may be amended at any time by an Order of the Board. The permittee shall reapply with the District for reissuance of its permit at least 90 days prior to the permit expiration date. Reapplication shall be on the form provided by the District.

8.2.5 Permit Conditions. Industrial Wastewater Discharge Permits shall specify, where applicable, the following:

- (a) Fees and charges to be paid upon initial permit issuance.
- (b) Limits on the average and maximum wastewater constituents and characteristics.
- (c) Limits on average and maximum rate and time of discharge and/or requirements for flow regulations and equalization.
- (d) Requirements for installation and maintenance of inspection and sampling facilities compatible with facilities of the District.
- (e) Special conditions as the District may reasonably require under particular circumstances of a given discharge including sampling locations, frequency of sampling, number, types, and standards for test and reporting schedule.
- (f) Compliance schedules.
- (g) Requirements for submission of special technical reports or discharge reports where the same differ from those prescribed by this Rules and Regulations.
- (h) An effective date and expiration date of the permit.
- (i) Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the District, Oregon DEQ and the EPA, and affording District access thereto for purposes of inspection and copying.
- (j) Requirements for inspection and surveillance by District personnel and access to

the Industrial User's parcel.

- (k) Requirements for notification to the District of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents, including listed or characteristic hazardous wastes, being introduced into the District sewerage system or any significant change in the production where the permit incorporates equivalent mass or connection limits calculated from a production based standard.
- (l) Requirements for a Slug Control Plan, notification to the District of slug discharges and changes at the Industrial User's facility affecting potential for a slug discharge.
- (m) Other conditions as deemed appropriate by the District to ensure compliance with this Rules and Regulations and Federal and State statutes, and Administrative Rules.
- (n) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule.
- (o) Duty to reapply and to obtain a new permit should the permittee wish to continue the activity regulated by the discharge permit following the expiration date of the discharge permit.
- (p) Requirements that samples and measurements taken for purposes of monitoring be representative of the monitored activity, including, but not limited to, the volume and nature of the discharge.

8.2.6 Permit Modifications. An Industrial Wastewater Discharge Permit may be modified for good and valid cause at the written request of the permittee and/or at the discretion of the District. Any new or increased discharge shall require the Discharger to apply for permit modification. The District at all times has the right to deny or condition new or increased contributions or changes in the nature of pollutants to meet applicable pretreatment standards or requirements or to prevent violation of its NPDES permit or any permit issued to the District. Permittee modification requests shall be submitted to the District and shall contain a detailed description of all proposed changes in the discharge. The District may request any additional information needed to adequately prepare the modification or assess its impact.

The District may deny a request for modification if, as determined by the District, the change will result in violations of District, State, or Federal laws or regulations will overload or cause damage to any portion of the District sewerage system, or will create an imminent or potential hazard to personnel.

If a permit modification is made at the discretion of the District, the permittee shall be notified in writing of the proposed modification at least thirty (30) days prior to its effective date and shall be informed of the reasons for the changes. Any request for reconsideration shall be

made before the effective date of the changes.

8.2.7 Permit Duration/No Property Interest Acquired. All Industrial Wastewater Discharge Permits shall be issued for a specified time period, not to exceed five (5) years, as determined by the District and subject to amendment, revocation, suspension or termination as provided in these Rules. No Discharger acquires any property interest by virtue of permit approval and continued approval is expressly contingent upon compliance with all applicable federal, state, and local requirements.

8.2.8 Limitations on Permit Transfer. Industrial Wastewater Discharge Permits are issued to a specific Discharger for a specific operation and are not assignable to another Discharger or transferable to any other location without the prior written approval of the District and provision of a copy of the existing permit to the new owner or operator.

8.2.9 Permit Revocation. Industrial Wastewater Discharge Permits may be revoked for the following reasons:

- (a) Failure to notify the District of significant changes to the wastewater prior to the changed discharge;
- (b) Falsifying self-monitoring reports;
- (c) Tampering with monitoring equipment;
- (d) Refusing to allow the District timely access to the facility premises and records;
- (e) Failure to meet effluent limitations;
- (f) Failure to pay fines;
- (g) Failure to pay user charges;
- (h) Failure to meet compliance schedules;
- (i) Failure to provide advance notice of the transfer of a permitted facility; or
- (j) Violation of any applicable pretreatment standard or requirement, any terms of the permit or these Rules and Regulations.

Permits shall be voidable upon nonuse, cessation of operations, or transfer of business ownership. All are void upon the issuance of a new Industrial Wastewater Discharge Permit.

8.3 PRETREATMENT FACILITIES

8.3.1 General Requirements. If, as determined by the District, treatment facilities, operation changes or process modifications at an Industrial User's facility are needed to comply with any requirements under this Rules and Regulations or are necessary to meet any applicable

pretreatment standards or requirements, the District may require that such facilities be constructed or modifications or changes be made within the shortest reasonable time, taking into consideration construction time, impact of the untreated waste on the public sewerage system, economic impact on the facility, impact of the waste on the marketability of the District's treatment plant biosolids, and any other appropriate factor.

Existing Sources and New Sources shall meet the deadlines for installation and start-up of equipment and compliance with Categorical Pretreatment Standards established according to 40 CFR 403.6(b), or any successor statutes.

8.3.2 Condition of Permit. Any requirement in Paragraph 8.3.1 may be incorporated as part of an Industrial wastewater Discharge Permit issued under Subsection 8.2 and made a condition of issuance of such permit or made a condition of the acceptance of the waste from such facility.

8.3.3 Plans, Specifications, and Construction. Plans, specifications and other information relating to the construction or installation of pretreatment facilities required by the District under this Rules and Regulations shall be submitted to the District. No construction or installation thereof shall commence until written approval of plans and specifications by the District is obtained. Plans must be reviewed and signed by an authorized representative of the Discharger and certified by a qualified professional engineer. No person, by virtue of such approval, shall be relieved of compliance with other laws of the City, County, or State relating to construction and to permits. Every facility for the pretreatment or handling of wastes shall be constructed in accordance with the approved plans and installed and maintained at the expense of the Discharger.

8.3.4 Sampling and Monitoring Facility. Any person constructing a pretreatment facility, as required by the District, shall also install and maintain at his own expense a sampling manhole or other suitable monitoring access for checking and investigating the discharge from the pretreatment facility to the public sewer. The sampling manhole or monitoring access shall be placed in a location designated by the District and in accordance with specifications approved by the District.

8.4 REPORTING REQUIREMENTS

8.4.1 Initial Compliance Report. Within one hundred eighty (180) days after the effective date of a Categorical Pretreatment Standard issued by the EPA or within ninety (90) days after receiving notification from the District that such a standard has been issued, whichever is sooner, existing Industrial Waste Dischargers subject to such standard shall submit a baseline monitoring report to the District, as required by the EPA pretreatment regulations, which includes the following:

- (a) The name and address of the facility and the name of the owner and operator;
- (b) A list of any environmental control permits on the facility;
- (c) A description of the operation(s);

- (d) The measured average and maximum daily flow from regulated process streams and other streams as necessary to allow use of the combined wastestream formula;
- (e) Measurement of the particular pollutants that are regulated in the applicable pretreatment standard and results of sampling as required in the permit;
- (f) A statement reviewed by an authorized representative and certified by a qualified professional as to whether the applicable standards are being consistently met and, if not, what additional measures are necessary to meet them; and
- (g) If additional pretreatment and/or operation and maintenance will be required to meet the pretreatment standards, a report on the shortest schedule by which the needed pretreatment and/or operation and maintenance can be provided. The compliance date for users covered by categorical pretreatment standards should not be later than the compliance date established for the particular standard. The report shall be reviewed and signed by an authorized representative of the Discharger and certified to by a qualified professional engineer.

New sources subject to an effective categorical pretreatment standard issued by the EPA shall submit to the District, 90 days prior to commencement of their discharge into the sewerage system, a report that contains the information listed in items (a) through (e) above, along with information on the method of pretreatment the source intends to use to meet applicable pretreatment standards.

These reports shall be completed in compliance with the specific requirements of Section 403.12(b) of the General Pretreatment Regulations for Existing and New Sources (40 CFR Part 403) promulgated by the EPA on January 28, 1981, or any subsequent revision thereto, including the signatory requirements 403.12(l) for industrial user reports.

If the information required by these reports has already been provided to the District and that information is still accurate, the Discharger may reference this information instead of submitting it again.

8.4.2 Report on Compliance. Within ninety (90) days following the date for final compliance with applicable Categorical Pretreatment Standards or, in the case of a New Source, within sixty (60) days following commencement of the introduction of wastewater into the public sewerage system, any Discharger subject to applicable pretreatment standards and requirements shall submit to the District a report indicating the nature and concentration of all pollutants in the waste stream from the regulated process and the average and maximum daily flow for these process units, and long term production data, or actual production data, when requested. This report shall also include an estimation of these factors for the ensuing twelve (12) months. The report shall state whether the applicable pretreatment standards or requirements are being met on a consistent basis and, if not, what additional operation and maintenance and/or pretreatment is necessary to bring the Discharger into compliance with the applicable pretreatment standards or requirements. This statement shall be signed by

an authorized representative of the Discharger and certified to by a qualified professional engineer. A new source is required to achieve compliance within 90 days after commencement of discharge.

If the Industrial Discharger is required to install additional pretreatment or provide additional operation and maintenance, a schedule will be required to be submitted. The schedule shall contain increments of progress in the form of dates for commencement and completion of major events leading to the construction and operation of additional pretreatment or operation and maintenance (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.) No increment of progress shall exceed nine (9) months. The Industrial Discharger shall submit a progress report to the District including, at a minimum, whether or not it complied with the increment of progress to be met on such a date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the industrial discharger to return the construction to the schedule established. This progress report shall be submitted not later than fourteen (14) days following each date in the schedule and the final date of compliance. In no event shall more than nine (9) months elapse between such progress reports to the District.

8.4.3 Periodic Compliance Reports. Any Discharger that is required to have an Industrial Wastewater Discharge Permit pursuant to this Rules and Regulations shall submit to the District during the months of June and December, unless required on other dates and/or more frequently by the District, a report indicating the nature of its effluent over the previous six-month period. The report shall include, but is not limited to, a record of the nature and concentrations (and mass if limited in the permit) for all samples of the limited pollutants that were measured and a record of all flow measurements that were taken or estimated average and daily maximum flows, and long term production data, or actual production data, when requested.

The frequency of the monitoring shall be determined by the District and specified in the Industrial Wastewater Discharge Permit. If there is an applicable effective Federal Categorical Pretreatment Standard, the frequency shall be not less than that prescribed in the standard. If a Discharger monitors any pollutant at the appropriate sampling location more frequently than required by the District, all monitoring results must be included in the periodic compliance reports.

Flows shall be reported on the basis of actual measurement; provided, however, where cost or feasibility considerations justify, the District may accept reports of average and maximum flows estimated by verifiable techniques.

The District may require reporting by Industrial Dischargers that are not required to have an Industrial Wastewater Discharge Permit if information and/or data are needed to establish a sewer charge, determine the treatability of the effluent or determine any other factor that is related to the operation and maintenance of the sewer system.

The District may require self-monitoring by the Discharger, or if requested by the Discharger, may agree to perform the periodic compliance monitoring needed to prepare the periodic

compliance report required under this Subsection of the Rules and Regulations. If the District agrees to perform such periodic compliance monitoring, the District will charge the Discharger for the monitoring based upon the costs incurred by the District for the sampling and analyses.

8.4.4 TTO Reporting. Those industries that are required by EPA to eliminate and/or reduce the levels of total toxic organics (TTO's) discharged into the public sewerage system must follow the National Categorical Pretreatment Standards for that industry.

8.4.5 Violations. The Industrial User shall notify the District within twenty-four (24) hours of becoming aware of a sampling activity that indicates a violation of the permit. The Industrial User shall repeat the sampling and analysis and submit their results to the District as soon as possible, but in no event later than thirty (30) days after becoming aware of the violation.

8.5 INSPECTION AND SAMPLING

8.5.1 Inspection. Authorized District representatives may inspect the monitoring facilities of any Industrial Waste Discharger to determine compliance with the requirements of the Rules and Regulations. The Discharger shall allow the District to enter upon the premises of the Discharger at all reasonable hours, for the purpose of inspection, sampling, or records examination and copying. The District shall also have the right to set up on the Discharger's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations. The right of entry is to the Industrial User's entire premises, and includes, but is not limited to, access to manufacturing, production, and chemical storage areas, to those portions of the premises that contain facilities for sampling, measuring, treating, transporting, or otherwise handling wastes, and storing records, reports or documents relating to the pretreatment, sampling, or discharge of the wastes. The following conditions for entry shall apply:

- (a) The authorized District representative shall present appropriate credentials at the time of entry;
- (b) The purpose of the entry shall be for inspection, observation, measurement, sampling, testing or record examination and copying in accordance with the provisions of these Rules and Regulations;
- (c) The entry shall be made at reasonable times during normal operating or business hours unless an emergency situation exists as determined by the District; and
- (d) The District representative(s) shall comply with all regular safety and sanitary requirements of the facility to be inspected upon entering the premises.

8.5.2 Sampling. Samples of wastewater being discharged into the public sewage system shall be representative of the discharge and shall be taken after treatment, if any.

For Industrial Users subject to Categorical Pretreatment Standards and for sampling required in support of baseline monitoring and 90-day compliance reports, a minimum of

four grab samples must be used for pH, cyanide, total phenols, oil grease, sulfides, and volatile organics for Industrial Users for which historical data does not exist; for Industrial Users for which historical sampling data are available, the District may authorize a lower minimum. For all other pollutants, the sampling method shall be by obtaining 24-hour composite samples through flow proportional composite sampling techniques unless time-proportional composite sampling or grab sampling is authorized by the District. Where time-proportional composite sampling is authorized by the District, the samples must be representative of the discharge.

Samples that are taken by the District for the purposes of determining compliance with the requirements of these Rules and Regulations shall be split with the Discharger (or a duplicate sample provided in the instance of fats, oils, and greases) if requested before or at the time of sampling.

All sample analyses shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and any amendments thereto. Where 40 CFR Part 136 does not include a sampling or analytical technique for the pollutant in question, or where the District determines that the Part 136 Sampling and Analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or any other sampling and analytical procedures including procedures suggested by the District or other parties, that have been approved by the Administrator of the EPA.

8.5.3 Monitoring Facilities.

- (a) Any person discharging industrial waste into the public sewerage system that requires an Industrial Wastewater Discharge Permit shall, at their own expense, construct and maintain an approved control manhole, together with such flow measurement, flow sampling and sample storage facilities as may be required by the District. The facilities required shall be such as are reasonably necessary to provide adequate information to the District to monitor the discharge and/or to determine the proper user charge.
- (b) Such monitoring facilities shall be located on the Discharger's premises except when, under circumstances approved by the District, it must be located in a public street or right-of-way, provided it will not be obstructed by landscaping or parked vehicles.
- (c) There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling, and measurement equipment shall be maintained at all times in a safe and proper operating condition at the expense of the Discharger.
- (d) Whether constructed on private or public property, the sampling and monitoring facilities shall be provided in accordance with the District's requirements and all applicable local construction standards and specifications. Construction shall be completed within ninety (90) days following written notification by the District.

- (e) Dischargers shall allow the District and its representative's access to monitoring facilities on their premises at all times. The District and City shall have the right to set up such supplementary monitoring equipment as it may require.
- (f) The District may, in lieu of requiring measurement sampling and monitoring facilities, procure and test, at the user's expense, sufficient composite samples on which to base and compute the user charge. In the event that measurement sampling and monitoring facilities are not required, the user charge shall be computed using the metered water flow to the premises as a basis for waste flow and the laboratory analysis of samples procured as the basis for computing BOD and suspended solids content. Metered water flow shall include all water delivered to or used on the premises. In the event that private water supplies are used, they shall be metered at the user's expense. Cooling waters or other waters not discharged into the public sewerage system may be separately metered at the user's expense in a manner approved by the District, and all or portions of these waters deducted from the total metered water flow to the premises subject to District approval.

8.6 CONTROL OF DISCHARGE

It shall be the responsibility of every Industrial User to control the discharge of industrial wastewater into the public sewerage system, or any private or side sewer that drains into the public sewerage system, so as to comply with these Rules and Regulations and the requirements of any applicable wastewater discharge permit issued pursuant to the provisions of these Rules and Regulations.

8.7 CHANGE IN PERMITTED DISCHARGE

It shall be the responsibility of every Industrial User to promptly report to the District any changes (permanent or temporary) to the Discharger's premises or operations that change the quality or quantity of the wastewater discharge. Changes in the discharge involving the introduction of a wastestream(s), or hazardous waste as set forth in 40 CFR Part 261, as may be amended from time to time, not included in or covered by the Discharger's Industrial Wastewater Discharge Permit Application itself shall be considered a new discharge, requiring the completion of an application as described under Subsection 8.2. Any such reporting shall not be deemed to exonerate the Discharger from liability for violations of these Rules and Regulations. Any industrial user operating under equivalent mass or concentration limits calculated from a production based standard shall notify the District within two (2) business days after the industrial user has a reasonable basis to know that the production level will significantly change within the next calendar month. An industrial user not notifying the District of such anticipated change will be required to meet the mass or concentration limits that were based on the original estimate of the long-term average production rate.

8.8 RECORDS

All Dischargers subject to these Rules and Regulations shall retain and preserve for not less

than three (3) years all records, books, documents, memoranda, reports, correspondence, and any and all summaries thereof, relating to monitoring, sampling, and chemical analyses made by or on behalf of a Discharger in connection with its discharge. All such records shall be subject to review by the District. All records that pertain to matters subject to appeals or other proceedings before the Director or the Board, or any other enforcement or litigation activities brought by the District shall be retained and preserved until such time as all enforcement or other activities have concluded and all periods of limitation with respect to any and appeals have expired.

8.9 CONFIDENTIAL INFORMATION

8.9.1 **Public Inspection.** Information and data furnished to the District regarding frequency and nature of discharges into the public sewerage system or other information submitted in the regular course of reporting and, compliance with the requirements of these Rules and Regulations or the Industrial User's Permit, shall be available to the public or other governmental agencies without restriction unless the industrial user claims, when submitting the data, and satisfies the District as to the validity of the claim, that release of the information would divulge information, processes or methods of production entitled to protection as "trade secrets" under federal laws or ORS 192.501(2) or any successor statutes. Such portions of an industrial user's report that qualify as trade secrets shall not be made public. Notwithstanding the foregoing, the United States Environmental Protection Agency and the State of Oregon Department of Environmental Quality shall have access to all records at all times. Effluent data, as defined and set forth in 40 CFR Part 2, as may be amended from time to time and incorporated by reference hereto, shall be available to the public.

8.9.2 **Disclosure in the Public Interest.** Nothing in paragraph 8.9.1 shall prevent disclosure of any information submitted by an industrial user when the public interest in that case requires disclosure. Disclosure to other governmental agencies for uses related to these Rules and Regulations is in the public interest.

8.9.3 **Procedure.**

- (a) An industrial user submitting information to the District may assert a "trade secret" or "business confidentiality" claim covering the information by placing on or attaching to the information a cover sheet, stamped or type legend or other suitable form of notice employing language such as "trade secret", "proprietary" or "business confidential". This shall be done at the time of submission. Post submittal claims of confidentiality will not be considered unless good cause is shown by the industrial user to the satisfaction of the Director. Allegedly confidential portions of otherwise non-confidential documents shall be clearly identified by the industrial user and may be submitted separately to facilitate identification. If the industrial user desires confidential treatment only until a certain date or until the occurrence of a certain event, the notice shall so state. If no claim of confidentiality is made at the time of submission, the District may make the information available to the public without further notice. If a claim is asserted, the information will be evaluated pursuant to the criteria of ORS

192.501(2) and 40 CFR Part 2 relating to Effluent Data, or any successor statutes.

- (b) The industrial user must show that it has taken reasonable measures to protect the confidentiality of the information, that it intends to continue to take such measures and must show that the information claimed to be confidential (a) is not patented; (b) is known only to a limited number of individuals within the industrial user who are using it to make or produce an article of trade or a service or to locate a mineral or other substance; (c) has commercial value; (d) gives the industrial user a chance to obtain a business advantage over competitors not having the information; and (e) is not, and has not been, reasonably obtainable without the industrial user's consent by other persons (other than governmental bodies) by use of legitimate means (excluding discovery in litigation or administrative proceedings).
- (c) The District shall examine the information meeting the criteria set forth above and to the extent allowed, will determine what information, if any, is confidential.
- (d) If the District determines that the information is confidential, it shall so notify the industrial user. If a request for inspection under the public records law has been made, the District shall notify the person requesting the information of its confidentiality and notify the industrial user of the inquiry and the District's response.
- (e) If the District determines that the information is not entitled to confidential treatment, the District shall notify the industrial user of its decision, as well as any other person who has requested the information.
- (f) Any party aggrieved by a ruling of the District may, within three business days of the decision, seek reconsideration by filing a written request accompanied by any additional supporting arguments or explanation supporting or denying confidentiality. Once the final decision is made, the District will wait five (5) business days before releasing the subject information so that the industrial user may have an adequate time to obtain judicial relief to prevent disclosure.
- (g) Information deemed confidential, or while a decision thereon is pending, will be kept in a place inaccessible to the public.
- (h) Nothing herein shall prevent a party requesting information to exercise remedies provided by the Oregon Public Records law to obtain such information. Nothing herein shall prevent the industrial user from undertaking those remedies to prevent disclosure if the District has determined that such disclosure will occur. The District will not oppose any motion to intervene or other action taken by an industrial user to perfect standing to make any confidentiality claims before a court of competent jurisdiction.

8.10 ENFORCEMENT OF STANDARDS THROUGH ADMINISTRATIVE PENALTIES

8.10.1 Enforcement. In addition to the imposition of civil penalties, the District shall have the right to enforce these Rules and Regulations by injunction, or other relief, and seek fines, penalties and damages in Federal or State courts.

Any discharger that fails to comply with the requirements of these Rules and Regulations or provisions of its Industrial Wastewater Discharge Permit may be subject to enforcement actions as prescribed below in addition to those developed by the District.

(a) Violations

- (1) A violation shall have occurred when any requirement of these Rules and Regulations has not been met.
- (2) Each day a violation occurs or continues shall be considered a separate violation.
- (3) For violations of discharge limits, each parameter that exceeds a discharge limit shall be considered a separate violation.
- (4) Significant Non-Compliance: Significant non-compliance with applicable pretreatment requirements exists when a violation by any discharger meets one or more of the criteria defined in Section 2.

(b) Enforcement Mechanisms

- (1) In enforcing any of the requirements of these Rules and Regulations or rules or procedures adopted hereunder, the District may:
 - (i) Take civil administrative action (such as issuance of notices of violations, administrative fines, revocation of a permit) as outlined in herein;
 - (ii) Issue compliance orders;
 - (iii) Cause an appropriate action (such as civil litigation, criminal prosecution) to be instituted in a court of competent jurisdiction;
 - (iv) Terminate sewer service; or
 - (v) Take such other action as the District deems appropriate.
- (2) The type of enforcement action shall be based on, but not limited by, the duration and the severity of the violation; impacts on water quality, biosolids, disposal, interference, worker health and safety; and violation of the District's NPDES permit. Enforcement shall, generally, be escalated in nature.

(3) Whenever the District finds that any discharger has violated any provisions of these Rules and Regulations, or its waste discharge permit, it shall take appropriate enforcement action against the non-complying industry based on its enforcement response procedures. The discharger will be required to comply with all requirements contained in the enforcement document issued by the District to include such items as responding in a timely fashion to notices of violation letters, compliance inquiry letters, or show cause hearings, and compliance with all terms of compliance orders or other enforcement mechanisms as established by the District.

8.10.2 Imposition of Civil Penalties. The District may impose civil penalties including, but not limited to, fines, damages, modification or revocation of permit and/or cessation of services when any Industrial User: (a) fails to factually report the wastewater constituents and characteristics of its discharge; (b) fails to report significant changes in wastewater constituents or characteristics; (c) tampers with sampling and monitoring equipment; (d) refuses reasonable access to the user's premises by representatives of the District for the purpose of inspection or monitoring; or (e) violates any condition or provision of its permit, these Rules and Regulations, any rule adopted pursuant hereto, or any final judicial order entered with respect thereto. Nothing herein shall prevent the District from seeking injunctive or declaratory relief or any other remedy available under Federal or State law.

8.10.3 Procedure for Imposition of Civil Penalties. Procedures for the imposition of civil penalties on Industrial Users shall be in accordance with Section 6. In addition to any other remedy or penalty, the District may assess civil penalties of at least \$1,000 per day for each violation.

8.10.4 Emergency Suspension of Service and Permits Notwithstanding Any Other Provisions of These Rules and Regulations. In addition to the procedures given in Section 6 for the enforcement of the civil penalty, the District may immediately cause wastewater treatment service and/or the sewer permit of an Industrial User to be suspended when it appears that an actual or threatened discharge presents, or may present, an imminent danger to the health or welfare of persons or the environment, interferes with the operations of the public sewerage system, or violates any pretreatment limits imposed by these Rules and Regulations, any rule adopted or any permit issued pursuant hereto, or any other applicable law.

The suspension notice shall be served upon the Industrial User by personal, office, or substitute service as those terms are defined in the Oregon Rules of Civil Procedure, or by certified or registered mail, return receipt requested, unless the emergency nature of the suspension makes service impracticable.

Any Industrial User notified of the suspension of the Industrial User's permit and/or service shall cease all discharges within the time determined solely by the District and specified in the suspension notice. If the Industrial User fails to comply voluntarily with the notice of suspension, the District may immediately, in its discretion, enter upon the property and disconnect the service, or seek a temporary restraining order or other relief from the Circuit

Court to compel compliance or may proceed judicially or administratively as set forth in these Regulations to insure compliance with these Rules and Regulations. The District shall reinstate the permit and/or service of the Industrial User and may terminate, in its discretion, any proceedings brought upon proof by the user of the elimination of the non-complying discharge or conditions creating the threat of eminent or substantial danger as set forth above.

8.10.5 Operational Upset. Any Industrial User who experiences an upset in operations that places the industrial user in a temporary state of noncompliance with these Rules and Regulations, and/or any rule adopted or permit issued pursuant hereto, shall inform the District thereof as soon as practicable, but not later than twenty-four (24) hours after first awareness of commencement of the upset. Where such information is given orally, a written follow-up report thereof shall be filed by the industrial user with the District within five (5) days.

An upset shall constitute an affirmative defense to an action brought for noncompliance if the Industrial User demonstrates, through properly signed, contemporaneous operating logs or other relevant evidence: (a) a description of the upset, the cause(s) thereof, and the upset's impact on the industrial user's compliant status; (b) the duration of noncompliance, including exact dates and times or, if not corrected, the anticipated time that noncompliance is expected to continue; (c) all steps taken, or to be taken to reduce, eliminate and prevent recurrence of such upset or other conditions of noncompliance; and workmanlike manner and in compliance with applicable operational maintenance procedures.

A documented, verified, and bona fide operation upset, including good faith and reasonable remedial efforts to rectify the same, shall be an affirmative defense to any enforcement action brought by the District against an industrial user for any noncompliance with these Rules and Regulations or any rule adopted or permit issued pursuant hereto that arises out of violations alleged to occur during the period of the upset. In an enforcement proceeding, the industrial user seeking to establish the occurrence of an upset shall have the burden of proof.

The Industrial User shall control production for all discharges to the extent necessary to maintain compliance with this Rules and Regulations or any rule adopted or permit issued pursuant hereto upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in a situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

8.10.6 Bypass. Bypass means the intentional diversion of waste streams from any portion of an industrial user's treatment facility. Bypass is prohibited and the District may take enforcement action against an industrial user for a bypass, unless: (a) the bypass was unavoidable to prevent loss of life, personal injury or severe property damage as defined in 40 CFR 403.17(A)(2), as may be amended from time to time; (b) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate backup equipment should have been installed in the

exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of down time or preventative maintenance); and (c) the Industrial User submitted notices as set forth below.

If an Industrial User knows in advance of the need for a bypass, it shall submit prior notice to the District, if possible, at least ten (10) days before the date of the bypass. The District may approve an anticipated bypass after considering its adverse effects, if the District determines that it will meet the three conditions set forth above.

An Industrial User shall submit oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the District within twenty four (24) hours from the time the Industrial User becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the industrial user becomes aware of the bypass. The written submission shall contain: (i) a description of the bypass and its cause; (ii) the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and (iii) steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass. The District may waive the written report on a case-by-case basis if the oral report has been received.

An Industrial User may allow any bypass to occur that does not cause Pretreatment Standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of the paragraphs of this section.

8.10.7 Affirmative Defense. Any Industrial User shall have an affirmative defense in any action brought against it alleging a violation of the general prohibitions covered in 40 CFR 403.5(a)(1) and the specific prohibitions covered in 40 CFR 403.5(b)(3), (b)(4), (b)(5), (b)(6) and (b)(7), in addition to those covered in these Rules and Regulations. The Industrial User in its demonstration shall be limited to provisions of 40 CFR 403.5(a)(2)(i) and (ii).

8.10.8 Public Notification. At least annually, the District shall publish in a newspaper of general circulation in the District, a list of the Industrial Users who were in significant noncompliance of Applicable Pretreatment Standards or requirements for the preceding twelve (12) months, in accordance with and as defined in 40 CFR 403.8(f)(2)(viii).

SECTION 9 USE OF PUBLIC SANITARY SEWERS

9.1 GENERAL

The owner of any building situated within the District and proximate to any street or sewer easement in which there is located a public sanitary sewer of the District, may request permission, at owner's expense, to connect said building directly to the proper public sewer in accordance with the provisions of and the District Regulations and other applicable codes. Such request shall be made through proper application to connect to the sanitary sewer system.

9.2 DISCONNECTION

A property owner may request disconnection from the District's system provided all applicable statutes, District Regulations, and policies and procedures are complied with. The property owner shall pay a disconnection inspection fee at the time disconnection is requested. The fee shall be due and payable immediately upon billing. The fee may be amended from time to time by order of the Board. No refund shall be made of any previously assessed SDCs or connection charges and shall not remove the obligation to make payments to any assessment district or similar process that may impact the disconnecting property.

9.3 HEALTH HAZARDS

Where it is determined that property not within the boundaries of the District and has a failing subsurface disposal system constituting a health hazard, the property owner may apply to the District for annexation. Annexation will occur by an Order of the Board finding a health hazard, said Order subject to compliance with other applicable statutes. If the property is within the Urban Growth Boundary, the property shall be required to annex to the District and no extraterritorial extension of service will be allowed. If the property is outside the Urban Growth Boundary and the on-site sewage system cannot be repaired, then District may serve the property by extraterritorial extension in its discretion. If the extraterritorial extension is allowed, the property owner shall agree to pay all amounts determined under these Rules and Regulations in the District's applicable assessment formulas or collection sewer charge so that the proportionate fair share for service is fully paid.

SECTION 10 CONNECTION RULES AND SPECIFICATIONS

10.1 GENERAL REQUIREMENTS

10.1.1 Unauthorized Connections. No person shall uncover, make any connection to, make any opening into, use, alter, or disturb any portion of the Districts System without first making an application to and obtaining the authority and/or permit from the District therefor.

10.1.2 Permit Applications. The installer of work covered by this Section shall make application to the District for connection. The application shall be supplemented by any plans, specifications or other information considered necessary by the District.

10.1.3 Payment of Charges. All system development charges, and other fees or charges, except user charges, established by the District, shall be paid prior to the issuance of a permit to connect, except charges which have been deferred pursuant to the provisions of Section 9.5.

10.1.4 To Whom Permit Issued. The permit shall be issued the property owner or installer.

10.1.5 Indemnification of District. The owner and installer shall indemnify the District, its officers and agents from any loss or damage that may directly or indirectly be occasioned by the installation of the service connection or building sewer.

10.1.6 Direct Connection Required. All building sewers connected to the District sanitary sewer system shall be directly connected thereto without any intervening private sewage disposal system.

10.1.7 Separate Service Connection and Building Sewer. A separate and independent service connection and building sewer shall be provided by the owner at his expense for each tax lot or lot of record, except:

- (a) That court apartments, motels, mobile home parks and similar properties held under a single ownership, or condominiums represented by a homeowners association, may be permitted in the sole discretion of the Director to use a single service connection and building sewer while such single ownership shall continue. Each single connection shall be of a size and type adequate to service the connecting buildings; or
- (b) In the sole discretion of the Director or his designee, to avoid unnecessary undue hardship, more than one user may share a service connection and private sewer line if the following criteria are met:
 - (1) All parties to the shared service connection and private sewer line have entered into a written agreement recorded in the Clackamas County Real Property Records regarding use and maintenance of the private sewer line and reciting it is for the benefit of District;

(2) Said agreement shall further provide that it is a covenant running with the land and inures to the benefit of and binds all the parties' heirs, successors and assigns;

(3) Said agreement contains a clause holding the District harmless from any and all liability arising out of the use, damage or destruction of the private sewer line, and that the District shall be indemnified for any and all claims or costs, including legal fees, for which the District may be held liable;

(4) The District and its employees shall have the right to enter upon the private property if necessary to protect, maintain, repair and replace any portion of the District's sewerage system;

(5) The District may terminate sewer service to all users of the private sewer line if one of the users shall violate these Rules and Regulations and termination of service is a remedy. District may do so without liability to any user of the private sewer line; and

(6) The agreement is approved by the District prior to recording and no building permit will be issued until the District has so approved.

Each user shall pay all charges in accord with the District Regulations as if a separate connection to the District's sewerage system had been accomplished. Each single connection under an agreement so approved shall be of a size and type adequate to service the connecting buildings.

10.1.8 Restricted Connections. No person shall connect any roof, surface, foundation, footing, drainage or area drain to any sanitary sewer service connection, sanitary building sewer, or building drain that is connected to the District sanitary sewer system.

10.1.9 Existing Sewers. Whenever a sanitary or storm building sewer or service connection has been installed that does not conform to District Regulations, then the portions nonconforming shall be replaced in accordance with such regulations.

10.1.10 Abandoned Sewers. When building sewers are abandoned, they shall be properly plugged or capped at the property line by the property owner at the time the building sewer is abandoned. District inspection and approval of the plugged or capped building sewer is required prior to backfilling the exposed sewer to be abandoned. An abandoned building sewer found not properly plugged or capped at the property line shall be properly plugged or capped by the property owner when notified to do so by the District. If the property owner fails to properly abandon the building sewer after twenty (20) days of being notified to do so, the District may have the work done at the property owner's expense.

10.1.11 Users Requiring Pumping Facilities. If the building is below the available gravity sewer line, the owner or user shall install pumping facilities in accordance with the Uniform Plumbing Code. The owner or user will be required to enter into an agreement with the District regarding the terms and conditions of connection and pumping. When pumping

facilities serve multiple residential users, backup electrical generation facilities to serve the pumping mechanism shall be required and installed.

10.2 GREASE, OIL, AND SCUM TRAPS

All restaurants, fast food, delicatessens, taverns, and other food preparation facilities that prepare food onsite, service stations, automotive repair facilities or any other facility so determined by the District shall install grease, oil, and scum trap separators to remove fats, oils, greases, and scums.

In addition, all proprietors will be responsible for cleaning and maintaining these separators. The District shall also have the authority to enter upon premises drained by any side sewer, at all reasonable hours, to ascertain whether this provision of limiting the introduction of fats, oils, greases, and scums to the system has been complied with. Violators of this provision may be directed to prepare a schedule of corrective action, pay a penalty as prescribed in Section 6, or both.

SECTION 11 PUBLIC SANITARY SEWER EXTENSIONS

11.1 EXTENSION GENERALLY

Whenever any property within the District cannot be served by the existing District sanitary sewer system, any interested person may cause sewers to be constructed to serve the property in accordance with the provisions of the District Regulation. Upon completion of the construction in accordance with the District Regulations, the District will accept title thereto and thereafter such sewer extension shall be owned, operated and maintained by the District as a part thereof. Further, those provisions of Oregon Administrative Rules, Chapter 340, Division 52, Subsection 040, as may be amended, are attached hereto as Table VI and incorporated by reference and shall be followed.

11.2 PLAN REVIEW AND APPROVAL

Applicants proposing sanitary sewer extension or connection to the sanitary sewer system shall be governed the District Regulation and shall submit the plans, reports, studies, and information as required by District Regulations. The submittals shall be reviewed and approved by the District. All sanitary sewer extensions shall be located within the public right-of-way wherever possible.

11.3 EASEMENTS

The Sanitary sewer extension plan shall have provide easements and access for construction, operation and maintenance in accordance with the District Regulations.

11.4 ENGINEERING SERVICES

Any sanitary sewer extension proposed for connection to the District sanitary sewer system must be designed, constructed and tested under the continuous inspection of a registered professional engineer approved by the District.

11.5 SPECIFICATIONS

All construction and material specifications for any sanitary sewer extension shall be in conformance with the construction, material specifications and District Regulations.

11.6 LICENSED CONTRACTOR

Sanitary sewer extensions shall be constructed by a contractor duly licensed by the State of Oregon and any other licensing political subdivision having jurisdiction over the work.

11.7 ACCEPTANCE BY DISTRICT

Upon the completion of construction and certification by the engineer the District shall inspect, approve and accept the sanitary sewer system for ownership, operation and

maintenance pursuant to the District Regulations.

11.8 WARRANTY / SURETY BOND

The District shall require a warranty bond or surety in the amount of 25% of the cost of construction for a period of time and conditions pursuant to the Sanitary Sewer Standards.

11.9 PERFORMANCE BOND.

If the requirements of Section 11.5 are not completed the permittee shall provide a performance bond or other surety acceptable to the District prior to recording of the plat for residential developments or the issuance of building permits for commercial or industrial developments. The amount of the performance bond shall be in the amount of 125% of the engineer's cost estimate for all approved but uncompleted surface water and buffer improvements.

11.10 CONVEYANCE.

A conveyance document supplied by the District transferring all rights, title and interest in the sanitary sewer extension to the District.

11.11 ADDITIONAL INFORMATION.

Information related to engineering services, plans, specifications, sanitary sewer extensions, certification and District acceptance can be found in the District Regulations and adopted Sanitary Sewer Standards. Compliance with all aspects of the Standards is required prior to acceptance by the District of any public sanitary sewer system extension.

ARTICLE III

Article III is the District Surface Water Management requirements regarding development activities to preserve watershed health, which, in turn, benefits human health, fish and wildlife habitat, recreational, and water resources.

SECTION 12 – STORMWATER STANDARDS

12.1 GENERAL STANDARDS

- 12.1.1 All development shall be planned, designed, constructed and maintained to:
- (a) Protect and preserve existing streams, creeks, natural drainage channels and wetlands to the maximum practicable extent, and to meet state and federal requirements.
 - (b) Protect property from flood hazards. Provide a flood evacuation route if the system fails.
 - (c) Provide a system by which storm/surface water within the development will be controlled without causing damage or harm to the natural environment, or to property or persons.

12.2 PLAN REVIEW AND APPROVAL

All applicants proposing stormwater management plans shall be governed the District Regulation and shall submit the plans, reports, studies, and information as required by District Regulations. The submittals shall be reviewed and approved by the District. All stormwater conveyance facilities shall be located within the public right-of-way wherever possible.

12.3 ENGINEERING SERVICES

Stormwater management plans and calculations must be stamped and signed by a civil engineer licensed by the State of Oregon and meet the standards of the District. The construction, specifications, and testing must be completed under the direction of the engineer.

12.4 SPECIFICATIONS

All construction and material specifications for any stormwater management plan shall be in conformance with the construction, material specifications and District Regulations.

12.5 LICENSED CONTRACTOR

Stormwater management facilities shall be constructed by a contractor duly licensed by the State of Oregon and any other licensing political subdivision having jurisdiction over the work.

12.6 REDEVELOPMENT

All developments and redevelopments shall provide water quantity, water quality and infiltration facilities as specified in accordance with the Stormwater Standards.

12.7 CONSTRUCTION ACCEPTANCE

Upon the completion of construction and certification by the engineer the District shall inspect and approve the construction of the stormwater management plan.

12.8 PHASING

Development activities shall not be phased or segmented in such a manner to avoid the requirement of the District Regulations.

12.9 WATER COURSE

In the event a development or any part thereof is traversed by any water course, channel, stream or creek, gulch or other natural drainage channel, adequate easements for surface water drainage purposes shall be provided to the District. This does not imply a maintenance obligation by the District.

12.10 MAINTENANCE

Maintenance is required for all stormwater management facilities. The maintenance program must be approved by the District. Proof of maintenance shall be annually submitted in accordance with a schedule approved by the District. If the facility is not maintained, the District may perform the maintenance and charge the owner of the facility.

12.11 EASEMENTS

A stormwater management plan shall provide easements and access for construction, operation and maintenance in accordance with the District Regulations.

12.12 WARRANTY / SURETY BOND.

The District shall require a warranty bond or surety in the amount of 25% of the cost of construction for a period of time in accordance with the Stormwater Standards.

12.13 PERFORMANCE BOND.

If the requirements of Section 12.7 are not completed the permittee shall provide a performance bond or other surety acceptable to the District prior to recording of the plat for residential developments or the issuance of building permits for commercial or industrial developments. The amount of the performance bond shall be in the amount of 125% of the engineer's cost estimate for all approved but uncompleted surface water and buffer improvements.

SECTION 13 – NATURAL RESOURCE PROTECTION

13.1 STUDY

The District shall require the applicant to provide a study identifying areas on the parcel which are or may be sensitive areas when, in the opinion of the District:

- (a) An area or areas on a parcel may be classified as a sensitive area; or
- (b) The parcel has been included in an inventory of sensitive areas adopted by the District and more site specific identification of the boundaries is needed; or
- (c) A natural resource is located within 200-feet of the property.

13.2 UNDISTURBED BUFFER REQUIRED

New development or a division of land adjacent to sensitive areas shall preserve and maintain an undisturbed buffer wide enough to protect the water quality functioning of the sensitive area. The undisturbed buffer is a facility required to prevent damage to the sensitive area caused by the development. The width of the undisturbed buffer shall be as specified in Table 13.1.

Undisturbed buffers shall be protected, maintained, enhanced or restored as follows: Vegetative cover native to the region shall be maintained or enhanced, or restored, if disturbed in the buffer. Invasive non-native vegetation may be removed from the buffer and replaced with native vegetation. Only native vegetation shall be used to enhance or restore the buffer. This shall not preclude construction of energy dissipaters at outfalls and as approved by the District. Any disturbance of the buffer requires prior written District approval.

Uncontained areas of hazardous materials are prohibited in the buffer.

Starting point for measurements from the Sensitive Area begin at:

- Either the edge of bankfull stage or 2-year storm level for streams; and
 - An Oregon Division of State Lands approved delineation marking the edge of the wetland area.
- (a) Where no reasonable and feasible option exists for not encroaching within the minimum undisturbed buffer, such as at a road crossing or where topography limits options, then onsite mitigation on the intrusion of the buffer will be on a ratio of 1.5 to 1 (one). All encroachments into the buffer, except those listed in 13.2.3, require a written variance from the District. The Surface Water Manager may grant a variance. The District shall give notice by First Class mail of its decision to grant or deny a variance to the applicant and to owners of property within 250 feet of the affected property.

Table 13.1 – Undisturbed Buffers

Sensitive Area	Upstream Drainage Area	Slope Adjacent to Sensitive Area	Width of Undisturbed Buffer
Intermittent Creeks, Rivers, Streams	Less than 50 acres	Any slope	25 feet
Intermittent Creeks, Rivers, Streams	50 to 100 acres	<25%	25 feet
Intermittent Creeks, Rivers, Streams	50 to 100 acres	≥25%	50 feet
Intermittent Creeks, Rivers, Streams	Greater than 100 acres	<25%	50 feet
Intermittent Creeks, Rivers, Streams	Greater than 100 acres	≥25%	100 to 200 feet
Perennial Creeks, Rivers, Streams	Any upstream area	<25%	50 feet
Perennial Creeks, Rivers, Streams	Any upstream area	≥25%	100 to 200 feet
Wetlands, lakes (natural), and springs.	Any drainage	<25%	50 feet
Wetlands lakes (natural), and springs.	Any drainage	≥25%	100 to 200 feet

Note: See Administrative Procedures for details for application of undisturbed buffer.

13.3 PERMITTED USES WITHIN AN UNDISTURBED BUFFER

No future structures, development, or other activities shall be allowed which otherwise detract from the water quality protection provided by the buffer, as required by state and federal regulations, except as allowed below:

- (a) A road crossing the undisturbed buffer to provide access to the sensitive area or across the sensitive area.
- (b) Utility construction or approved plans by a governmental agency or public utility subject to Public Utility Commission regulation, providing the buffer is restored and a restoration plan approved by the District.
- (c) A walkway or bike path not exceeding eight feet in width, only if it is part of a regional system of walkways and trails managed or adopted by a public agency.
- (d) A pervious walkway or bike path, not exceeding eight feet in width that does not provide access to the sensitive areas or across the sensitive areas. If the walkway or bike path is impervious, then the buffer must be widened by the width of the path. The average distance from the path to the sensitive area must be at least 60% of the total buffer width. At no point shall a path be constructed closer than ten feet from the boundary of the sensitive area, unless approved by the District.

- (e) Measures to remove or abate hazards, nuisances, or fire and life safety violations.
- (f) Homeowners are allowed to take measures to protect property from erosion, such as protecting river banks from erosion, within limits allowed by State and Federal regulations.
- (g) The undisturbed buffer shall be left in a natural state. Gardens, lawns, or other landscaping shall not be allowed except with a plan approved by the District. The proposal shall include information to demonstrate that improvement and maintenance of improvements will not be detrimental to water quality.
- (h) Fences: The District may require that the buffer be fenced, signed, delineated, or otherwise physically set apart from parcels that will be developed.

13.4 LOCATION OF UNDISTURBED BUFFER

In any new development or redevelopment, the District may require a separate tract, conservation easement or some other mechanism to ensure protection of the undisturbed buffer. Restrictions may include permanent signage, fencing, documentation with the title of the property, or other acceptable methods. All methods shall be approved by the District and the City of Happy Valley.

13.5 CONSTRUCTION IN THE UNDISTURBED BUFFER

With approval of the District and an approved plan, noxious vegetation may be removed and replaced with native vegetation. Any disturbance of the buffer shall be replaced with native vegetation and with the approval of the District.

SECTION 14 – EROSION CONTROL RULES

14.1 GENERAL – EROSION CONTROL

This section shall apply during construction and until permanent measures are in place following construction as described herein, unless otherwise noted.

14.1.1 The District requires temporary and permanent measures for all construction projects to lessen the adverse effects of site alteration on the environment. The owner or his/her agent, contractor, or employee, shall properly install, operate and maintain both temporary and permanent works as provided in this section or in an approved plan, to protect the environment during the useful life of the project. These erosion control rules apply to all parcels within the authority of the District.

Nothing in this section shall relieve any person from the obligation to comply with the regulations or permits of any federal, state, or local authority.

14.2 EROSION CONTROL

14.2.1 Intent. It is the District's intent to prevent erosion and to minimize the amount of sediment and other pollutants reaching the public storm and/or surface water system resulting from development, construction, grading, filling, excavating, clearing, and any other activity as prescribed in the current version of the Erosion Prevention and Sediment Control

Manual. And as required by water quality standards set forth in OAR 340-41-445 through 340-41-470, as may be amended from time to time.

14.2.2 Erosion Prohibited. No visible or measurable erosion shall leave the property during construction or during activity described in Section 12.2.1. The owner of the property, together with any person who causes such action from which the visible or measurable erosion occurs, shall be responsible for clean up, fines, and damages. Clean up responsibilities involve public facilities and sensitive areas including, but not limited to: creeks, drainageways, wetlands, catch basins and storm drains, and sensitive areas, impacted by a project.

14.2.3 Exposed Soil. No soils shall remain exposed for more than fourteen (14) days in the wet weather season unless an advanced sedimentation or filtration process is used. District must approve such process prior to implementation.

14.2.4 Erosion Control Permit. All development activities disturbing an area of square feet or greater as specified in the Stormwater Standards will obtain an erosion control permit pursuant to the Standards.

14.2.5 Performance. The District may require the Applicant to submit a bond, cashiers check or irrevocable letter of credit from an acceptable financial institution to secure performance of the requirements of this section. Upon default, the District may perform work or remedy violations and draw upon the bond or fund. If the District does not require a bond and the Developer does not perform the erosion control plan in whole or in part, the District may, but shall not be obligated to, perform or cause to be performed corrective work and charge the Developer the cost of such remediation. Such amount shall bear interest at 9% per annum and shall be a lien upon the property foreclosable in accordance with ORS Chapter 88, or any successor statutes.

14.2.6 Maintenance. The applicant shall maintain the facilities and techniques contained in the approved Erosion Control Plan so as to continue to be effective during construction or other permitted activity. If the facilities and techniques approved in an Erosion Control Plan are not effective or sufficient as determined by the District's site inspector, the permittee shall submit a revised plan within three (3) working days of written notification by the District. In cases where erosion is occurring, the District may require the applicant to implement interim control measures prior to submittal of a revised Erosion Control Plan and without limiting the District's right to undertake enforcement measures. Upon approval of the revised plan by the District, the permittee shall immediately implement the revised plan. The developer shall implement fully the revised plan within three (3) working days of approval by the Director, or their designee.

14.2.7 Inspection. The erosion control measures necessary to meet the requirements of Section 12.2.2 shall be installed by the owner or their representative and shall be inspected by the District prior to the start of any excavation work.

14.2.8 Re-Inspection Fee. Re-inspection fees may be charged for those sites that are notified of deficiencies and fail to complete corrective actions in full by the time of the next inspection.

14.2.9 Permit Fee. The District may collect all fees for the review of plans, administration, enforcement, and field inspection(s) to carry out the regulations contained herein as

established and amended by the District.

14.2.10 Permit Duration.

- (a) Development or construction must be initiated as per the approved final development plans within one (1) year of the date of erosion control permit issuance or the permit will be null and void. If a Hearings Officer or the Board of County Commissioners specify a time period for commencement of a development, that time period shall supersede.
- (b) Erosion Control permits (excluding 1200-C permits) shall expire and become null and void twenty four (24) months after the date of permit issuance unless extended by the District. If the work authorized by such permit has not received final inspection approval prior to the permit expiration date, and the permit has not been extended by the District, all work shall stop until a new permit is obtained that conforms to the erosion control regulations in effect at the time of re-application. The District may extend the time for action by the permittee for a period not exceeding twelve (12) months in the District's sole and absolute discretion on written request by the permittee showing that circumstances beyond the control of and unforeseeable by the permittee have prevented work from being completed.
- (c) 1200-C permits shall expire and become null and void if the permit is not renewed annually or as per the general permit schedule set forth by the DEQ.

14.3 AIR POLLUTION

14.3.1 Dust. Dust and other particulate matters caused by development activity containing pollutants may not settle on property and / or be carried to waters of the state through rainfall or other means. Dust shall be minimized to the extent practicable.

14.4. PRESERVE WATER QUALITY

14.4.1 Construction of new facilities between stream banks shall be pursuant to permits issued by state and federal agencies having jurisdiction and applying their regulations.

14.4.2 Pollutants such as, but not limited to, fuels, lubricants, asphalt, concrete, bitumens, raw sewage, and other harmful materials shall not be discharged into rivers wetlands, streams, impoundments, undisturbed buffers or any storm drainage system, or at such proximity that the pollutants flow to these watercourses, buffers, or systems.

14.4.3 The use of water from a stream or impoundment, wetland or sensitive area, shall not result in altering the temperature or water quality of the water body in violation of Oregon Administrative Rules, and shall be subject to water rights laws.

14.4.4 All sediment-laden water from construction operations shall be routed through sedimentation basins, filtered, or otherwise treated to remove the sediment load before release into the surface water system.

14.5 FISH AND WILDLIFE HABITAT

Construction shall be done in a manner to minimize adverse effects on wildlife and fishery resources pursuant to the requirements of local, state, and federal agencies charged with wildlife and fish protection.

14.6 NATURAL VEGETATION

14.6.1 As far as is practicable, natural native vegetation shall be protected and left in place in undisturbed buffer areas. Work areas shall be carefully located and marked to reduce potential damage. Trees shall not be used as anchors for stabilizing working equipment.

14.6.2 During clearing operations, trees shall not be permitted to fall outside the work area. In areas designated for selective cutting or clearing, care in falling and removing trees and brush shall be taken to avoid injuring trees and shrubs to be left in place.

14.6.3 Where natural vegetation has been removed, or the original land contours disturbed, the site shall be revegetated per a submitted and approved seeding and maintenance plan from a list approved by the District as soon as practicable after construction has commenced, not later than September 1. After that date a reseeding and stabilization plan approved by the District must be used.

14.7 PESTICIDES, FERTILIZERS, CHEMICALS

14.7.1 The use of hazardous chemicals, pesticides, including insecticides, herbicides, defoliants, soil sterilants, and the use of fertilizers, must strictly adhere to federal, state, county, and local restrictions.

14.7.2 All materials defined in Section 12.7.1 delivered to the job site shall be covered and protected from the weather. None of the materials shall be exposed during storage. Waste materials, rinsing fluids, and other such material shall be disposed of in such a manner that pollution of groundwater, surface waste, or the air does not occur. In no case shall toxic materials be dumped into drainageways.

14.8 CONTAMINATED SOILS

In the event the construction process reveals soils contaminated with hazardous materials or chemicals, all parties shall stop work immediately to ensure no contaminated materials are hauled from the site, remove work forces from the contaminated areas, leaving all machinery and equipment, and secure the areas from access by the public until such time as a mitigation team has evaluated the situation and identified an appropriate course of action. The Owner and the Contractor shall notify OSHA and DEQ of the situation upon discovery. The Owner and the Contractor must comply with OSHA and DEQ statutes and rules. Failure to comply with OSHA and DEQ statutes and rules shall be deemed a failure to comply with these Rules and Regulations.



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Campbell M. Gilmour
Director

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD | OREGON CITY, OR 97045

November 21, 2012

Board of Commissioners
Clackamas County

Members of the Board:

**APPROVING INTERGOVERNMENTAL AGREEMENT WITH METRO TO
IMPLEMENT THE YEAR 23 METRO AND LOCAL GOVERNMENT
ANNUAL WASTE REDUCTION PLAN AND THE RECYCLE AT WORK PROGRAM**

Metro has approved the County's Waste Reduction Plan for Year Twenty-three (FY13) as required by the Regional Solid Waste Management Plan (RSWMP). This is a continuing program designed to meet the goals and objectives of the RSWMP. The Board approved the Year 22 IGA on October 27, 2011.

Metro redistributes funds earned from disposal of garbage at Metro's owned and franchised facilities. The regional distribution of funds is calculated based on the population (for the Annual Plan) and the number of employees (for Recycle at Work) in each jurisdiction. Cities within the County are eligible recipients of these funds. In addition to carrying out responsibilities for the unincorporated county, County staff, through a series of agreements, performs the annual responsibilities of the RSWMP as outlined in the Waste Reduction Plan for the Cities of Barlow, Canby, Damascus, Estacada, Gladstone, Happy Valley, Lake Oswego, Milwaukie, Molalla, Oregon City, Sandy, West Linn, and Wilsonville, in exchange for the funds allocated to those jurisdictions by Metro.

During the past year staff has been busy assisting the citizens of Clackamas County engage in waste reduction practices at home, work, school and play, allowing us to reach a 59.3% recovery rate up from the 2010 rate of 57.9%. The regional recovery goal is 64%, so work remains to be done.

Highlights from the past year include:

- Producing and delivering our 16 page twice-a-year mailer to 174,000 homes and businesses.
- Meeting with property managers, conducting site evaluations and delivering education materials to 295 multifamily communities.
- Delivering over 2,000 paper collection boxes as requested to large and small businesses.
- Certifying over 3,500 businesses as compliant with the Business Recycling Requirements.
- Providing personal assistance to over 1,200 small and large businesses.
- Reaching over 5,000 K-12 students through waste audits, presentations and Oregon Green Schools assemblies.
- Enhancing the collection of recyclables at 65 schools in 10 school districts.
- Providing containers for recycling at over 90 events including youth sporting events, community concerts, the County Fair and the Pick-a-Thon.

All of these efforts would be for naught without the work provided by our solid waste collection franchisees. Providing convenient access to recycling to citizens allows the materials collected to return to the stream of commerce providing economic benefits to manufacturers and environmental benefits for us all. The annual report offers details of the work accomplished using the grant funds provided through this IGA.

Metro has allocated \$176,570.00 to provide assistance in maintaining the waste reduction programs currently in place throughout the county. An additional, \$102,688.00 is allocated to partially fund the Recycle at Work Program. A signed Intergovernmental Agreement (IGA) with Metro is required in order to receive funds. The IGA Scope of Work Exhibit A includes the Annual Waste Reduction Plan, Scope of Work for the Recycle at Work program, and the Year

Twenty-Three Plan. Also attached are the agreements with the Cities and the Year Twenty-Two Annual Waste Reduction and Recycle at Work Reports.

The intergovernmental agreement with Metro has been reviewed and approved by County Counsel.

In order to receive the funding, the Board must approve the annual plan and sign the copies of the attached intergovernmental agreement.

RECOMMENDATION

Staff respectfully recommends the Board of County Commissioners approve the Year Twenty-Three Plan and Recycle at Work Program and sign the Intergovernmental Agreement with Metro to fund the Programs. Please feel free to call me at 503-742-4466 with any questions.

Sincerely,



Rick Winterhalter, Sustainability Analyst, Senior
Office of Sustainability

For information on this issue or copies of attachments please contact Rick Winterhalter at (503) 742-4466



600 NE Grand Ave.
Portland, OR 97232-2736
(503) 797-1700

Intergovernmental Agreement

Metro Contract No. 931521

THIS AGREEMENT, entered into and under the provisions of ORS Chapter 190, is between Metro, a metropolitan service district organized under the laws of the State of Oregon and the Metro Charter, located at 600 NE Grand Avenue, Portland, OR 97232-2736, and CLACKAMAS COUNTY, hereinafter referred to as "County", whose address is 150 Beaver Creek Road, Oregon City, OR 97045.

In exchange for the promises and other valuable consideration set forth below, the parties agree as follows:

1. Purpose. The purpose of this Agreement is to establish the responsibilities of the parties in implementing the Year 23 Metro and Local Government Annual Waste Reduction Plan and the Recycle at Work Program.

2. Term. This Agreement shall be effective July 1, 2012, and shall remain in effect through June 30, 2013 unless earlier terminated in conformance with this Agreement. Costs for this project may be incurred from date of last contract signature.

3. Services Provided and Deliverables. County and Metro shall perform the services described in the attached Scope of Work, which is made part of this Agreement by reference, and otherwise fully comply with the provisions in the attached Scope of Work (Attachments A, B and C).

4. Payment for Services. Metro shall pay County for Annual Waste Reduction services performed and materials delivered in the maximum sum of ONE HUNDRED SEVENTY-SIX THOUSAND, FIVE HUNDRED SEVENTY AND NO/100THS DOLLARS (\$176,570.00) and for Recycle at Work services performed and materials delivered in the maximum sum of ONE HUNDRED TWO THOUSAND, SIX HUNDRED EIGHTY-EIGHT AND NO/100THS DOLLARS (\$102,688.00) in the manner and at the time designated in the Scope of Work.

5. Insurance. County agrees to maintain insurance levels, or self-insurance in accordance with ORS 30.282, for the duration of this Agreement to levels necessary to protect against public body



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Intergovernmental Agreement

liability as specified in ORS 30.272. County also agrees to maintain for the duration of this Agreement, Workers' Compensation Insurance coverage for all its employees as a self-insured employer, as provided by ORS chapter 656, or disability coverage under its Disability, Retirement and Death Benefits Plan.

6. Indemnification. Subject to the provisions of the Oregon Constitution and Oregon Tort Claims Act, County shall indemnify, defend, and hold Metro and Metro's agents, employees, and elected officials harmless from any and all claims, demands, damages, actions, losses, and expenses, including attorney fees, arising out of or in any way connected with, County's performance under this Agreement.

7. Termination. This Agreement may be terminated by either party without cause upon giving 90 days written notice of intent to terminate. This Agreement may be terminated with less than 90 days notice if a party is in default of the terms of this Agreement. In the case of a default, the party alleging the default shall give the other party at least 30 days written notice of the alleged default, with opportunity to cure within the 30-day period. Termination shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination.

8. State Law Constraints. Both parties shall comply with the public contracting provisions of ORS chapter 279A, B & C and to the extent those provisions apply, they are incorporated into this Agreement by reference. Specifically, it is a condition of this Contract that all employers working under this Agreement are subject employers that will comply with ORS 656.017.

9. Notices. Legal notice provided under this Agreement shall be delivered personally or by certified mail to the following individuals:

For County:
Rick Winterhalter
Clackamas County
150 Beavercreek Road
Oregon City, OR 97045

For Metro:
Office of Metro Attorney
Metro
600 NE Grand Avenue
Portland, OR 97232-2736

Informal coordination of this Agreement will be conducted by the following designated Project Managers:



600 NE Grand Ave.
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Intergovernmental Agreement

For County:

Rick Winterhalter
Clackamas County
150 Beaver Creek Road
Oregon City, OR 97045

For Metro:

Jennifer Erickson
Metro
600 NE Grand Ave.
Portland, OR 97232

County may change the above- designated *Project Manager* by written notice to Metro. Metro may change the above-designated *Project Manager* by written notice to County.

10. Assignment. This Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any condition, be assigned or transferred by either party without prior written approval by the other party.

11. Integration. This writing contains the entire Agreement between the parties, and may only be amended by written instrument, signed by both parties.

12. Severability. If any portion of this Agreement is found to be illegal or unenforceable, this Agreement nevertheless shall remain in full force and effect and the offending provision shall be stricken.

This Agreement is dated as of the last signature date below.

CLACKAMAS COUNTY

METRO

By: _____

By: _____

Print name and title

Print name and title

Date

Date

Intergovernmental Agreement

Attachment A

SCOPE OF WORK: Annual Waste Reduction Plan

- I. Task: Funding for Year 23 of the Metro and Local Government Annual Waste Reduction Plan.
- a) Term: July 1, 2012 to June 30, 2013
- b) County's responsibilities. County shall:
1. Provide to Metro a copy of County's Resolution or Ordinance approving this Intergovernmental Agreement including all of its attachments.
 2. Provide to Metro a copy of the Intergovernmental Agreement authorizing County to act on Cities' behalf in developing and implementing a joint annual waste reduction program.
 3. Ensure that by June 30, 2013, the activities specified in Attachment A and Attachment C have been completed.
 4. On or before August 1, 2013, submit the following:
 - A) A completed reporting worksheet.
 - B) Demonstrated compliance with OAR 340-090-0040 and the Regional Solid Waste Management Plan.
- c) Metro Responsibilities. Metro shall:
1. Provide technical assistance to County as necessary to develop, execute, monitor, and evaluate the project.
 2. Provide assistance to County on promotional and educational activities.
 3. Monitor the general project progress and review as necessary, County's accounting records relating to project expenditures.
- d) Budget and Terms of Payment:
1. Upon completion of section (b)(1) and (b)(2) of this Scope of Work, Metro shall pay County ONE HUNDRED SEVENTY-SIX THOUSAND, FIVE HUNDRED SEVENTY AND NO/100THS DOLLARS (\$176,570.00) in one lump sum. County's billing invoices shall include the Metro contract number, County name, remittance address, invoice date, invoice number, and invoice amount. County's billing invoices shall be sent to Metro Accounts Payable, 600 NE Grand Avenue, Portland, OR 97232-2736 or metroaccountspayable@oregonmetro.gov. The Metro contract number shall be referenced in the email subject line. County's billing invoices for goods and services through June 30 shall be submitted to Metro by July 15. Payment shall be made by Metro on a Net 30 day basis upon approval of County invoice.



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Intergovernmental Agreement

2. County shall provide services described in Attachment C in exchange for the following funding allocations:

	<u>Funding allocation</u>	
Barlow		\$63
Canby		\$7,363
Damascus		\$4,919
Estacada		\$1,326
Gladstone		\$5,347
Happy Valley		\$6,666
Johnson City		\$263
Lake Oswego		\$17,083
Milwaukie		\$9,489
Molalla		\$3,772
Oregon City		\$14,987
Rivergrove		\$174
Sandy		\$4,549
West Linn		\$11,745
Wilsonville		\$9,101
<u>Unincorporated Clackamas County</u>		<u>\$79,724</u>
TOTAL		\$176,570

3. County and Metro recognize that the Metro and Local Government Annual Waste Reduction Plan is a multi-year program and that future rounds of funding will depend in part on County's performance in implementing program activities during the term of this contract.

Intergovernmental Agreement

Scope of Work – Exhibit A

Attachment B

SCOPE OF WORK: Recycle at Work Program

- I. Task: Funding the Recycle at Work Program.
 - a) Term: July 1, 2012 to June 30, 2013
 - b) County's responsibilities. County shall:
 1. Hire individuals as staff or contractors who work in the jurisdiction's offices or external contractors whose primary responsibilities and duties are to provide waste evaluations (outlined in number 2 below), technical assistance and business recycling requirement compliance services to businesses.
 2. Provide technical assistance to businesses by conducting baseline and follow-up on-site evaluations in recycling, waste prevention and sustainable purchasing and operations, following the Recycle at Work Program core actions.
 3. Participate in regional outreach campaigns as developed by the Business Recycling Work Group (BRWG) and provide follow-up technical assistance and evaluation as required by the annual outreach program design.
 4. Develop an Outreach Plan that identifies the jurisdiction's strategy for targeting and recruiting businesses for Recycle at Work assistance. The plan must also include the following three strategies: 1, a focus on assisting the jurisdiction's government facilities and ensuring that each facility is in compliance with Business Recycling Requirements; 2, a focus on new businesses to the program and Medium (20 -250 or more employees) businesses; and 3, how the jurisdiction plans to move more light-touch businesses to in-depth businesses as defined by the new targets and measurements. In addition, the plan should take into account the jurisdiction's participation in regional annual outreach campaigns. Other elements of the Outreach Plan should include businesses or institutions that are targeted and desired outcomes as well as any underserved or underrepresented businesses targeted.
 5. Make available resources to businesses as identified by the BRWG and appropriate for the jurisdiction.
 6. Collect data for each business that summarizes key contact information and the actions taken in recycling, waste prevention, sustainable purchasing, operations and business recycling requirement compliance. Enter all data in the Recycle at Work Information System developed by Metro and the BRWG, whose design allows for regional consistency and uniform analysis of program data. Jurisdictions will continue to use the existing evaluation format until a new format is designed during this fiscal year.
 7. Conduct a follow-up evaluation at each business that has received technical assistance and provide on-site evaluation assistance, whenever possible and appropriate, of the changes the business has made.

Intergovernmental Agreement

Scope of Work – Exhibit A

8. Prepare an annual progress report on the accomplishments of the Recycle at Work Program that will include administrative information (staff and expenditures), review of the outreach strategy, the number of site visits and deliveries, evaluations performed, actions recommended and implemented, time spent on data entry, administration and program coordination, outreach and marketing, compliance actions taken, resources delivered, and successes and challenges.
 9. Establish a compliance program for Business Recycling Requirements consistent with Section 2.6 of the administrative procedures for Metro Code Chapter 5.10 and provide written description to Metro.
 10. All Recycle at Work funded staff are required to participate in quarterly Specialist Roundtables and any training identified by BRWG.
 11. Track the use of any tools that have been developed by Metro with the guidance of BRWG.
- c) Metro Responsibilities. Metro shall:
1. Provide technical assistance to jurisdiction as necessary to develop, execute, monitor, and evaluate the project.
 2. Provide assistance to jurisdiction on promotional and educational activities.
 3. Monitor the general project progress and review as necessary, jurisdiction's accounting records relating to project expenditures.
 4. Convene the Business Recovery Work Group (BRWG).
 5. Notify the jurisdiction of outreach campaigns and any other business recruitment scheduled for the term of the IGA. BRWG members will review and advise on all outreach campaigns and recruitment to the business sector. In conjunction with the BRWG, develop and provide to the jurisdiction an overview of the outreach that will occur. This overview will include draft guidelines and protocols for the jurisdiction to respond to requests by businesses and to provide assistance. The overview should also include a timeline for the campaigns and recruitment and a process for notifying the jurisdiction of press releases.
 6. Develop, in conjunction with the BRWG, the list of actions in waste prevention, recycling and green purchasing that shall be addressed by the jurisdictions in its on-site visits to businesses and that will be incorporated into the Recycle at Work information system.
 7. Develop, in conjunction with the BRWG and recycling specialists, the resources, such as desk-side paper collection containers that shall be provided to businesses, and the training that will be given to recycling specialists.
 8. Provide technical assistance and resources to the jurisdiction as needed to develop, execute, monitor and evaluate the Recycle at Work program.
 9. Provide the jurisdiction with guidelines and protocols on the Recycle at Work information system, on-going support and updates.
 10. Provide the jurisdiction with standardized reporting forms for annual progress reports. The report forms will be used to record quantitative data generated from the information system and anecdotal information.



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Intergovernmental Agreement Scope of Work – Exhibit A

11. Coordinate and convene quarterly roundtables and periodic trainings for recycling specialists as determined by the BRWG.
12. Develop and review the program goals and budget in conjunction with the BRWG.
13. Conduct an evaluation of the Recycle at Work Program as needed, which may include on-site visits to regional businesses by Metro staff or independent third-party contractors.

d) Budget and Terms of Payment:

1. Upon completion of section (b)(4) of this Scope of Work, Metro shall pay County ONE HUNDRED TWO THOUSAND, SIX HUNDRED EIGHTY-EIGHT AND NO/100THS DOLLARS (\$102,688.00) in one lump sum. County’s billing invoices shall include the Metro contract number, County name, remittance address, invoice date, invoice number, and invoice amount. County’s billing invoices shall be sent to Metro Accounts Payable, 600 NE Grand Avenue, Portland, OR 97232-2736 or metroaccountspayable@oregonmetro.gov. The Metro contract number shall be referenced in the email subject line. County’s billing invoices for goods and services through June 30 shall be submitted to Metro by July 15. Payment shall be made by Metro on a Net 30 day basis upon approval of County invoice.
2. County shall provide services described in section (b) in exchange for the following funding allocations:

Funding allocation

Barlow	\$15
Canby	\$3,872
Damascus	\$0*
Estacada	\$0*
Gladstone	\$1,826
Happy Valley	\$1,536
Johnson City	\$5
Lake Oswego	\$13,479
Milwaukie	\$9,203
Molalla	\$1,487
Oregon City	\$10,509
Rivergrove	\$4
Sandy	\$0*
West Linn	\$3,201
Wilsonville	\$13,934
<u>Unincorporated Clackamas Co.</u>	<u>\$43,617</u>

TOTAL \$102,688

*Funding withheld due to non-compliance with the Business Recycling Requirement

Intergovernmental Agreement

Scope of Work – Exhibit A

Attachment C

YEAR 23 (FY 2012-13)

LOCAL GOVERNMENT ANNUAL WASTE REDUCTION WORK PLAN

Jurisdiction: **Clackamas County** Contact: **Rick Winterhalter**

I. Program Overview Narrative

Please provide a narrative overview of programs, services and focus areas for FY 2012-13 and describe your jurisdiction's waste prevention and recycling activities separately. Include participation with regional planning efforts and demonstration of compliance with state law. In addition, the following elements are **required** as part of the Annual Plan and may be addressed in the narrative portion of your plan or in the tasks table:

- a) Demonstrate compliance with the Regional Service Standard by stating whether or not your jurisdiction has submitted a Compliance Certification form to Metro--cooperatives should report on behalf of member jurisdictions.
- b) Implement waste prevention activities for each area of the residential and commercial sector (single-family, multi-family, business, construction & demolition, commercial organics, toxicity reduction).
- c) Identify and undertake a specific curbside recycling outreach activity for an existing local government program.
- d) Participate in at least one regional waste reduction planning group.
- e) Maintain or increase curbside recovery levels (total tons and per capita tons recovered and disposed).
- f) Recycle at Work program goals (including compliance with the Business Recycling Requirement).

The **Clackamas County Office of Sustainability** provides waste reduction and recycling programs for the unincorporated areas of the County, and by agreement, for the cities of Barlow, Canby, Damascus, Estacada, Gladstone, Happy Valley, Lake Oswego, Milwaukie, Molalla, Oregon City, Sandy, West Linn and Wilsonville. The same services are provided informally to the cities of Rivergrove and Johnson City. All comply with the Regional Service Standard.

Waste reduction and recycling programs reach residents, including multifamily communities, businesses, government agencies, schools and other organizations. These programs will continue to focus on providing quality recycling education, while emphasizing an increased focus on waste prevention education and activities, such as thoughtful consumption, green building, natural gardening, green cleaners, composting, and food donation.

Intergovernmental Agreement

Scope of Work – Exhibit A

II. Budget Information

- a) Provide overall solid waste and recycling budget.
 The County does not have a separate solid waste and recycling budget. The Office of Sustainability Division includes this function along with general sustainability programs and the energy program. The total budget for the Division is \$3,121,826.
- b) Provide overall Recycle at Work budget and percentage of budget supported by Metro Recycle at Work funds. List staff working on Recycle at Work, FTE, and source of funding for staff (Metro or local government).
- Budget and funding sources
 - Staff (name, title, FTE, funding source, changes over previous FY)

The County does not maintain a separate budget for incidental expenses associated with the Recycle At Work program. Only the labor portion is shown below as that is the purpose of the grant funds. The table lists all personnel in the Division contributing to Recycle At Work and the Business Recycling Requirement. About forty percent of the salary and benefits will be covered by Metro funds.

Program Staff	Title	RAW FTE	Salary & Benefits	Funding Source
Susan Ziolko	Program Supervisor	0.01	\$1,216	County
Rick Winterhalter	Project Manager	0.05	\$5,863	County
Sherri Dow	Sustainability Analyst	0.10	\$10,767	County
Susan Terry	Sustainability Analyst	0.25	\$22,413	County
Rosalynn Greene	Sustainability Analyst	0.65	\$67,677	County
Shannon Martin	Sustainability Analyst	0.80	\$81,854	RaW/ County
Ginny Haines	Temporary part-time	0.49	\$26,250	Recycle At Work
Julane Potter	Temporary part-time	0.35	\$18,750	Recycle At Work
Liz Braman	Contractor	0.40	\$25,000	Recycle At Work
Mitch Frister	Temporary	0.25	\$11,868	Recycle At Work
Laurel Bates	Contractor	0.40	\$22,000	County/Franchisees
Total		3.75	\$293,658	

Intergovernmental Agreement

Scope of Work – Exhibit A

III. Annual Program Tasks

Complete the following tables, separately listing specific waste prevention and recycling activities planned for completion during this fiscal year. Identify if the particular program or activity is primarily ongoing (O), revised (R) or new (N). Add additional rows if needed.

Status Key:

- O = Ongoing (minor administrative updates and changes only).
- R = Revised (major program policy or implementation adjustments).
- N = New (brand new program, or substantially revised or reconstituted).

Single-family Residential (Include home composting programs)	
Waste Prevention Activities	Status
1. Going Beyond Green / Trash Talk, a 16-page tabloid-size newsletter, will continue to be sent to all mail recipients in the county in the spring and fall (≈ 175,000 each edition). The newsletter covers many waste reduction initiatives as well as providing information on recycling and sustainability. Also applies to the Recycling Activities section.	O
2. Promote Catalog Choice as way for residents to help stop the waste of unwanted catalogs, phone books and mail. We will have a link on our website, include Catalog Choice information in newsletters and other publications, and promote it at presentations and at community events such as farmers markets and the Clackamas County Fair.	N
3. Use social media, such as Facebook and Twitter, to promote waste prevention information, activities and events. Prior to creating a Sustainability Facebook page (PGA permission required) we will work in with the Public and Government Affairs Department (PGA) to post at least weekly waste prevention information, events and activities on the County's Facebook page and tweet shorter versions of the above posts on our Twitter account LivableClackamas.	N
4. Compile a list of reuse, repair and refurbishing businesses and organizations in Clackamas County and promote this list on our website, in our newsletter and other publications, and at presentations and community events such as farmers markets and the Clackamas County Fair. Through the Local Government Workgroup we will be involved with the regional effort to provide an online map of these types of businesses and organizations.	N
5. Continue to review and add content to our web pages to promote waste prevention activities.	O
6. Provide content for City newsletters focusing on thoughtful consumption and reuse activities in their specific city.	O
7. Promote home composting and grasscycling in the Spring issue of the Going Beyond Green / Trash Talk newsletter. A <i>Compost at Home</i> display board will continue to be available for presentations and community events.	O
8. Waste prevention and recycling displays will be included in Sustainability tent at the six-day Clackamas County Fair and at other community events. Also applies to the Recycling Activities section.	O
9. Continue to support of regional Master Recycler program, including \$5000 of funding support. The Office of Sustainability will continue to host one course per year with staff presenting on several topics. Staff also represents Clackamas County on the Master Recycler Advisory Board and provides displays and materials as requested by Master Recyclers for	O

Intergovernmental Agreement Scope of Work – Exhibit A

events located in Clackamas County. Also applies to the Recycling Activities section.	
Recycling Activities	Status
1. Required: Curbside recycling outreach activity for an existing program: Use social media, such as Facebook and Twitter, to educate citizens about on the Recycling YES and NOs. Prior to creating a Sustainability Facebook page (PGA permission required) we will work in with the Public and Government Affairs Department (PGA) to post at least weekly information on recycling on the County's Facebook page and tweet shorter versions of the above posts on our Twitter account LivableClackamas.	N
2. Continue to update and maintain the Recycling YES and NO paper and plastic displays that include the actual items. Continue to focus on the most commonly missed recyclable items and the most commonly included contamination. Available for presentations and community events.	O
3. Continue to update and provide Recycling YES and NO flyers at community events, on our website and upon request.	O
4. Continue to provide Curbside Yard Debris YES and NO flyers to franchised collection companies that provide curbside yard debris collection. Please note that the curbside collection of yard debris is only available in the urban areas of Clackamas County. These flyers include a suggestion to contact the Metro Recycling Hotline to find information about natural gardening and composting. See Toxicity Reduction section for more about how we promote natural gardening and composting in other ways.	O
5. Provide <i>Recycling Notices</i> and <i>Yard Debris Notices</i> – incorrect preparation notices to the franchised collection companies upon request.	O
6. Provide Oregon E-Cycles information at community events, upon request, and as a link on our website.	O

Multi-family Residential

Waste Prevention Activities	Status
1. Our current AmeriCorps member will continue assisting multi-family communities in Clackamas County with their recycling and waste reduction efforts on a part-time basis after the AmeriCorps service term ends (August).	R
2. Continue to offer "Move Out" guides for tenants as it provides suggestions about where to take reusable items such as furniture and clothing.	O
3. See Single Family Residential Waste Prevention Activities	O
4. Develop a recognition component for multifamily communities and require a waste prevention activity as part of the pledge, similar to Marion County.	N
5. Promote Catalog Choice as way for residents to help stop the waste of unwanted catalogs, phone books and mail. There will be a link on our website and Catalog Choice postcards will be provided to property managers for distribution to residents. It will be promoted at presentations and events at multifamily communities as well.	N
Recycling Activities	Status
1. Provide personal assistance to multifamily sites upon request or referred by the franchised collection company and city partners.	O
2. Provide recycling decals. Work with franchised collection companies to re-label containers as we work with their customers.	O
3. Participate in regional Multifamily outreach discussions as needed through the Local Government Regional Coordinators workgroup.	O
4. Purchase tenant bags based on the Washington County and City of Beaverton model.	N

Intergovernmental Agreement

Scope of Work – Exhibit A

Recycle at Work Outreach Strategy	
Target audience, goals, and outreach strategy	Status
Government Facilities (required)	
Goals: <ul style="list-style-type: none"> Clackamas County, our cities and local school districts will continue to be strong leaders and noteworthy examples when it comes to modeling sustainable business operations, especially in the area of recycling and waste prevention. 	O
Outreach Strategy: Clackamas County <ul style="list-style-type: none"> Continue educating employees about the recycling program through staff presentations, emails, intranet promotion and static displays. Conduct waste sorts for targeted county buildings, establish baselines and begin to develop a waste reduction plan for Clackamas County. Finalize and distribute the Clackamas County Employee Guide to Sustainability through direct outreach at staff meetings. Work with Facilities and other County departments to reduce chemicals used on county land and facilities through the S-Team's Toxics Reduction Subcommittee. An Integrated Pest Management plan will be finalized and presented to the Board of County Commissioners. Distribute guide to waste-free meetings including a Sustainable Caterers list. Sustainability staff will continue to facilitate the Employee Sustainability Trainings. All employees are required to attend this training. Continue to participate in the Sustainability Team (S-Team), Clackamas County's green team, which is intended to have representation from each department. Schools and other local governments <ul style="list-style-type: none"> Conduct outreach to schools and district offices to ensure they are in compliance with the Business Recycling Requirement. Continue to offer assistance to city partners. Continue to work with Coffee Creek Correction Facility and other state offices upon request. 	O O O O N O O O
New and Medium Businesses (required)	
Goals: <ul style="list-style-type: none"> Establish and/or grow our working relationships with new and medium size businesses. 	O
Outreach Strategy: <ul style="list-style-type: none"> Participate in regional, Metro-convened planning meetings for the annual outreach campaign. Participate in regional, Metro-convened planning meetings focused on coordinated outreach efforts to multi-jurisdictional businesses. Recruit businesses through our local chambers of commerce. Use the state business data to identify medium businesses we haven't worked in the past 1-2 years. Continue to follow-up with businesses that did not respond to Phase 1 or Phase 2 of the Business Recycling Requirement outreach. 	O N O O O

Intergovernmental Agreement

Scope of Work – Exhibit A

Target Businesses that are Underserved or Underrepresented	
Goals: <ul style="list-style-type: none"> For businesses that are Hispanic owned or have Spanish-speaking employees, offer translated materials or presentations in Spanish. 	N
Outreach Strategy: <ul style="list-style-type: none"> We now have an employee who speaks Spanish fluently and is able to provide business assistance on a limited basis. 	N
Target Business Sectors, Institutions or Materials (such as organics)	
Goals: <p>Organics:</p> <ul style="list-style-type: none"> Recruit food generating businesses to participate in the Clackamas County We Compost Program. Focus outreach on large food waste generators including full service restaurants, grocery stores, retirement homes, food production facilities and large institutions. Work with the region to develop consistent messaging and encourage restaurant suppliers to provide only acceptable compostable products. Increase the number of businesses willing to join the program as reload facilities, such as Metro South, begin to accept food scraps. Clackamas County staff is working to develop a fee for organics collection and is planning to bring it before the Solid Waste Commission and the Board of County Commissioners in FY 2012-13. 	<p>O</p> <p>O</p> <p>O</p> <p>N</p>
<p>Organics Outreach Strategy:</p> <p>Program Roll Out</p> <ul style="list-style-type: none"> Promotion of the program will continue with a soft roll out in Lake Oswego, West Linn and portions of unincorporated Clackamas County, including the Clackamas Town Center. Staff will set up meetings with managers to introduce food scrap collection options. After businesses sign up for the program, we will provide ongoing support to ensure their material is clean and acceptable. <p>Resource Development</p> <ul style="list-style-type: none"> County staff will continue to develop educational tools and resources to help educate food generators about the program. Businesses will be offered slim jims and brute containers to assist with internal collection. Staff will continue to work with Metro on resource development to ensure that there is a consistent regional messaging. We will continue to work with the Organics Roundtable group to develop a list of "acceptable" compostable serviceware, for both fiber and plastic materials. The Clackamas Clackamas We Compost Program <u>will not</u> include an approved list of products with our educational packet until a state protocol is in place for acceptable materials. 	<p>O/N</p> <p>O</p> <p>O</p> <p>O</p> <p>O</p>

Intergovernmental Agreement

Scope of Work – Exhibit A

Moving Light-touch Businesses to In-depth Businesses (required)	
Goals: <ul style="list-style-type: none"> • Focus on our industrial area customers to enhance recycling efforts and inspire them to go in-depth. • Encourage large paper generating businesses to go beyond recycling and reduce paper usage. • Enhance the food donation infrastructure and partnerships. • Provide educational opportunities for our specialists on how to reduce toxins in the workplace and benefits of such actions. 	 N N N N
Outreach Strategy: <ul style="list-style-type: none"> • Staff will focus on reaching out to our industrial area customers to ensure they are recycling and to engage them in more upstream activities. One way we will do this is by promoting industrial exchange and the upcoming Resourceful Use workshops. • Using the paper reduction tools, we will target large paper generators to reduce waste. • We will continue developing partnerships with our local food pantries so we can better connect them with restaurants, grocery stores, etc. If you would like more information about our outreach plan, we have a project charter that is available on request. • With the added emphasis on toxins after the Targets and Measurement project, we will actively look for opportunities to provide training for our employees in this area. • Develop closer partnerships with our local churches for many reasons: 1) to ensure they are in compliance with the Business Recycling Requirement, 2) identify whether they accept and distribute food, 3) help them identify ways to prevent waste, and 4) encourage them to provide sustainability related information to their members 	 N N N N N
Compliance Strategy for Business Recycling Requirement (required)	
Goals: Ensure all businesses are in compliance with BRR.	O
Outreach Strategy: To date Business Recycling Requirement enforcement actions have not been necessary within Clackamas County. We will continue to engage in regional conversations about how to coordinate outreach efforts to multijurisdictional businesses. If a business were to be cited, the following procedures would be followed by our Code Enforcement Division: <ol style="list-style-type: none"> 1. Alleged letter is sent requesting contact with us within 10 days; <ol style="list-style-type: none"> a. Site check is conducted to confirm violation; b. Assistance offered to bring business into compliance 2. If assistance refused: <ol style="list-style-type: none"> a. 2nd Letter is sent providing specific timelines to comply; b. Notifies non-compliant business when the \$75.00/monthly administrative fee will begin to accruing until the violation is abated and potentially additional civil penalties, citations, liens, etc. (legal info) c. Provide 2nd opportunity for direct assistance to bring business into compliance with BRR; d. Fee waived if deadlines met; 3. 1st Citation if business fails to comply; <ol style="list-style-type: none"> a. \$75.00/monthly administrative fee assessed; b. Fine imposed; c. Opportunity to correct; to stop process 4. 2nd Citation if business fails to comply 	O

Intergovernmental Agreement Scope of Work – Exhibit A

<ul style="list-style-type: none"> a. \$75.00/monthly administrative fee assessed; b. Fine imposed; c. Opportunity to correct; to stop enforcement process <ul style="list-style-type: none"> 5. Hearing 6. Circuit Court 	
--	--

Construction & Demolition	
Waste Prevention Activities	Status
1. Promote the regional Green Building Hotline in the Spring issue of Going Beyond Green / Trash Talk newsletter, on our website, at community events and in our permits lobby. Provide funding support of \$5,000.	O
2. Promote reuse of building materials and the locations to purchase them such as the MetroPaint store, the Rebuilding Center, Habitat Restores and others in our newsletter, on our website and at community events.	O
3. Participate in the Local Government work group which includes construction and demolition initiatives.	O
4. A Sustainability Analyst with green building expertise will work with the Building Codes Division to develop a green building desk for the Clackamas County permits lobby. She will collaborate with Green Building Hotline staff to ensure we are conveying the same messages. The desk will be staffed either during certain hours, by appointment or in conjunction with scheduled plan review meetings. Also, we will be coordinating ongoing training for Building Codes staff on green building practices.	N
Recycling Activities	Status
1. Promote Metro's Construction and Demolition Find a Recycler website in our permit lobby, on our website and upon request.	O
2. Provide Metro's Salvage and Recycling Toolkit in our permit lobby	O
3. In addition to the Toolkit, Green Building desk staff will provide information on where to recycle construction and demolition materials.	N

Intergovernmental Agreement

Scope of Work – Exhibit A

Toxicity Reduction	
Waste Prevention Activities	Status
Promote green cleaners and natural gardening in our Spring issue of the Going Beyond Green / Trash Talk newsletter.	O
Provide the green cleaner and natural gardening display board for presentations and community events. Demonstrate making green cleaners.	O
Provide Green Cleaner, Natural Gardening, Native Plant, Hazardless Home Handbook, Grow Smart, Grow Safe and other similar publications at community events, upon request and as links on our website.	O
Partner with Metro to include their Healthy Home display as part of our Sustainability booth at the Clackamas County Fair.	O
Also see Recycle at Work Outreach Strategies.	O
Use social media, such as Facebook and Twitter, to promote using less toxics. Prior to creating a Sustainability Facebook page (PGA permission required) we will work in with the Public and Government Affairs Department (PGA) to post at least weekly information about using less toxics such as green cleaner recipes or natural gardening tips on the County's Facebook page and tweet shorter versions of the above posts on our Twitter account LivableClackamas.	N
Continue to participate in the Clackamas County Employee Wellness and Sustainability Fair and provide information about using less toxics.	O
Recycling Activities	Status
Continue to promote the Metro Hazardous Waste facilities as a safe way to dispose of unwanted paint and other hazardous materials. Some of the materials collected are reused or recycled.	O

Intergovernmental Agreement

Scope of Work – Exhibit A

Other	
Required Elements (may be addressed here or in narrative portion of the plan)	Status
1. Demonstrate compliance with the Regional Service Standard (including individual jurisdictions within cooperatives) Unincorporated Clackamas County and the cities of Barlow, Canby, Damascus, Estacada, Gladstone, Happy Valley, Johnson City, Lake Oswego, Milwaukie, Molalla, Oregon City, Rivergrove, Sandy, West Linn and Wilsonville are in compliance with the Regional Service Standard.	O
2. Maintain or increase curbside recovery levels (total tons and per capita tons recovered and disposed). Clackamas County Office of Sustainability will continue to monitor recovery levels throughout Clackamas County. We will continue to respond with increased outreach, education and troubleshooting should there be areas falling behind.	O
3. Participate in at least one regional waste reduction planning group. <i>(please provide details)</i> Clackamas County Office of Sustainability staff participates in several regional work groups including Solid Waste Directors, Business Recycling and the Local Government work group.	O
Waste Prevention Activities	Status
Continue to co-fund 1 FTE Waste Reduction Education Coordinator with the Clackamas County Refuse and Recycling Association to provide waste reduction assistance to ≈150 schools in the County with a focus on the Oregon Green Schools program. Also applies to Recycling Activity section.	O
Participate in any regional waste prevention activity that is part of the Local Government Workgroup work plan.	N
Recycling Activities	Status
Office of Sustainability staff will continue to review site designs and work with developers to ensure there is adequate space and access for garbage and recycling receptacles. This is a requirement for new commercial and multifamily developments in unincorporated Clackamas County under Section 1021 of Clackamas County's Zoning and Development Ordinance.	O
ClearStreams, used for collecting cans and plastic bottles for recycling, are loaned to community events, local festivals, farmers markets and sporting events. An events recycling contractor coordinates this popular program.	O

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November 21, 2012

Board of County Commissioners
Clackamas County

Members of the Board:

**Board Order # _____ Approval of Mental Health Director's
Designees to Authorize a Custody Hold Under ORS 426.233**

The Behavioral Health Division of the Health, Housing & Human Services Department requests the approval of the Designation of Alison Campbell, LCSW, by the Clackamas County Behavioral Health Director as an additional designee authorized under ORS 426.233 (copy attached) to direct a peace officer to take a person into custody and remove the person to a hospital or non-hospital facility approved by the Oregon Mental Health and Developmental Disability Services Division.

Recommendation

Staff recommends the Board approve the attached Board Order Alison Campbell, LCSW, as an additional qualified mental health professional authorized to direct a peace officer to take a person into custody under ORS 426.233.

Respectfully submitted,



Cindy Becker
Director

For more information on this issue or copies of attachments,
please contact Teri Beemer at 503 655-8356

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF CLACKAMAS COUNTY, STATE OF OREGON**

In the Matter of the Designation of Alison
Campbell, LCSW as Mental Health
Director Designee to Direct Peace Officer
Custody Holds



ORDER NO.

This matter coming on at this time to be heard, and it appearing to this Board that Cindy Becker, Director of Health, Housing & Human Services Department, has recommended to this Board the approval of Alison Campbell, LCSW, as additional designee of the Behavioral Health Division Director, authorized under ORS 426.233 to direct a peace officer to take a person into custody and remove the person to a hospital or non-hospital facility approved by the Oregon Mental Health and Developmental Disability Services Division, and

This Board finds that it would be in the best interest of Clackamas County to approve said designation,

IT IS THEREFORE HEREBY ORDERED that Clackamas County approve the designation of Alison Campbell, LCSW, as a qualified mental health professional authorized to direct a peace officer to take a person into custody under ORS 426.233.

ADOPTED this 21st day of November, 2012.

BOARD OF COUNTY COMMISSIONERS

Chair

Recording Secretary

426.233 Authority of community mental health program director and of other persons; costs of transportation. (1)(a) A community mental health program director operating under ORS 430.610 to 430.695 or a designee thereof, under authorization of a county governing body, may take one of the actions listed in paragraph (b) of this subsection when the community mental health program director or designee has probable cause to believe a person:

(A) Is dangerous to self or to any other person and is in need of immediate care, custody or treatment for mental illness; or

(B)(i) Is a mentally ill person placed on conditional release under ORS 426.125, outpatient commitment under ORS 426.127 or trial visit under ORS 426.273; and

(ii) Is dangerous to self or to any other person or is unable to provide for basic personal needs and is not receiving the care that is necessary for health and safety and is in need of immediate care, custody or treatment for mental illness.

(b) The community mental health program director or designee under the circumstances set out in paragraph (a) of this subsection may:

(A) Notify a peace officer to take the person into custody and direct the officer to remove the person to a hospital or nonhospital facility approved by the Oregon Health Authority;

(B) Authorize involuntary admission of, or, if already admitted, cause to be involuntarily retained in a nonhospital facility approved by the authority, a person approved for care or treatment at a nonhospital facility by a physician under ORS 426.232;

(C) Notify a person authorized under subsection (3) of this section to take the person into custody and direct the authorized person to remove the person in custody to a hospital or nonhospital facility approved by the authority;

(D) Direct a person authorized under subsection (3) of this section to transport a person in custody from a hospital or a nonhospital facility approved by the authority to another hospital or nonhospital facility approved by the authority as provided under ORS 426.235; or

(E) Direct a person authorized under subsection (3) of this section to transport a person in custody from a facility approved by the authority to another facility approved by the authority as provided under ORS 426.060.

(2) A designee under subsection (1) of this section must be recommended by the community mental health program director, meet the standards established by rule of the authority and be approved by the county governing body before assuming the authority permitted under subsection (1) of this section.

(3) The county governing body may, upon recommendation by the community mental health program director, authorize any person to provide custody and secure transportation services for a person in custody under ORS 426.228. In authorizing a person under this subsection, the county governing body shall grant the person the authority to do the following:

(a) Accept custody from a peace officer of a person in custody under ORS 426.228;

(b) Take custody of a person upon notification by the community mental health program director under the provisions of this section;

(c) Remove a person in custody to an approved hospital or nonhospital facility as directed by the community mental health program director;

(d) Transfer a person in custody to another person authorized under this subsection or a peace officer;

(e) Transfer a person in custody from a hospital or nonhospital facility to another hospital facility or nonhospital facility when directed to do so by the community mental health program director; and

(f) Retain a person in custody at the approved hospital or nonhospital facility until a physician makes a determination under ORS 426.232.

(4) A person authorized under subsection (3) of this section must be recommended by the community mental health program director, meet the standards established by rule of the authority and be approved by the governing body before assuming the authority granted under this section.

(5) The costs of transporting a person as authorized under ORS 426.060, 426.228 or 426.235 by a person authorized under subsection (3) of this section shall be the responsibility of the county whose peace officer or community mental health program director directs the authorized person to take custody of a person and to transport the person to a facility approved by the authority, but the county shall not be responsible for costs that exceed the amount provided by the state for that transportation. A person authorized to act under subsection (3) of this section shall charge the cost of emergency medical transportation to, and collect that cost from, the person, third party payers or otherwise legally responsible persons or agencies in the same manner that costs for the transportation of other persons are charged and collected. [1993 c.484 §5; 1997 c.531 §5; 2009 c.595 §405]

November 21, 2012

Board of County Commissioners
Clackamas County

Members of the Board:

**Approval of Amendment No. 2 of an Intergovernmental Agreement with the
Workforce Investment Council of Clackamas County
for Specialized Work Force Services**

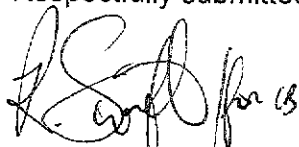
Community Solutions for Clackamas County (CSCC) a division of the Health, Housing & Human Services (H3S) Department, requests approval Amendment No. 2 of an Intergovernmental Agreement (IGA) between Workforce Investment Council of Clackamas County and CSCC for specialized work force of Clackamas County Public services designed exclusively for residents Housing.

The new agreement total is \$1,955,255. which includes an amendment of \$332,395. The agreement provides for an additional full time Job Development Specialist, additional support services and training funds for participants; and additional wage subsidies for employers to train our participants on the job. No County General Funds are involved. This agreement was previously approved by County counsel on May 27, 2010. This agreement was effective July 1, 2011 and terminates on October 31, 2015.

Recommendation:

We recommend approval of this amendment and further recommend that Cindy Becker be authorized to sign on behalf of the Board of Commissioners.

Respectfully submitted,



Cindy Becker
Director

For more information on this issue or additional copies of attachments,
Please contact Lori Mack at (505) 655-8843

Healthy Families. Strong Communities.

WORKFORCE INVESTMENT COUNCIL OF CLACKAMAS COUNTY

AGREEMENT TO MODIFY

This Amendment, when signed by the Contractor and the Workforce Investment Council of Clackamas County (WICCO), will become part of the contract documents, superseding the original to the applicable extent indicated.

CONTRACT NUMBER: 12-13-3

MODIFICATION: # 2

CONTRACTOR NAME: Community Solutions for Clackamas County

CONTRACT TYPE: Services for the Board of Directors of the Workforce Investment Council of Clackamas County.

The Workforce Investment Council of Clackamas County (WICCO) and Community Solutions for Clackamas County have agreed it is in the *mutual interest of both parties* to amend and modify the contract to include **\$332,395 in Housing Innovation funds. These funds are effective July 1, 2011 and will expire October 31, 2015.**

Use of these funds shall be tracked separately for the purpose outlined in the Project Description/Scope of Work.

The new total amount of this contract is \$1,955,255.

CHANGE: SECTION C - FISCAL PROVISIONS & COST REIMBURSEMENT BUDGET

1. The budget for this contract will be divided into four separate budgets:

- (A) Adult WIA Services.
- (B) Dislocated Worker WIA Services
- (C) National Career Readiness Certificate
- (D) Solutions to Work

9. Leveraged Funds

The Contractor has committed to provide *leveraged funds for Solutions to Work* as set forth in the project grant proposal. Leveraged funds must be tracked and reported periodically as required by WICCO.

10. Project Budget (see Attachment 1 for details)
PY12-13

WIA Adult Funding Stream

Budget Line Item	Begin Bal	Change	Total
General Costs	23,050		23,050
Direct Participant Costs	87,200	1,860	89,060
Adult Total	110,250	1,860	112,110

WIA Dislocated Worker Funding Stream

Budget Line Item	Begin Bal	Change	Total
General Costs	27,350		27,350
Direct Participant Costs	107,400		107,400

Dislocated Worker Total	134,750	0	134,750
-------------------------	---------	---	---------

WIA NCRC Funding Stream

Budget Line Item	Begin Bal	Change	Total
General Costs			0
Direct Participant Costs	26,000		26,000
NCRC Total	26,000	0	26,000

Solutions to Work

Budget Line Item	Begin Bal	Change	Total
Admin Personnel & Materials	0	84,000	84,000
Direct Personnel & Materials	0	516,000	516,000
Direct Participant Costs	0	750,000	750,000
Solutions to Work Total	0	1,350,000	1,350,000

TO READ: SECTION C - FISCAL PROVISIONS & COST REIMBURSEMENT BUDGET

2. The budget for this contract will be divided into five separate budgets:

- (A) Adult WIA Services.
- (B) Dislocated Worker WIA Services
- (C) National Career Readiness Certificate
- (D) Solutions to Work
- (E) Housing Works

9. Leveraged Funds

Contractor has committed to provide leveraged funds for Solutions to Work and Housing Works as set forth in project grant proposals. Leveraged funds must be tracked and reported periodically as required by WICCO.

Housing Works Leverage Requirements

- 1) Cost line items are restricted by individual line item budgets
- 2) Contractor shall meet or exceed at least 80% of each line item amount
- 3) Any additional leverage line item flexibility must be requested in writing and include sufficient documented justification for the change(s) based on program objectives. Approval from funder is required.

Contractor is required to contribute leverage which meets or exceeds the following milestone amounts annually by each year as well as in total by the end of the project:

Budget Period ending	Total Cumulative Leverage Required
June 30, 2013	\$ 47,345
June 30, 2014	\$ 94,689
June 30, 2015	\$157,816
October 31, 2105	\$175,351

Should Contractor fail to show progression towards meeting the milestone leverage amounts, WICCO may require Contractor to provide a written plan for meeting leverage requirements. Payment may be withheld until a satisfactory plan for meeting leverage requirements has been presented and approved by funder.

10. Project Budget (see Attachment 1 for details)
 PY12-13

Housing Works

Budget Line Item	Begin Bal	Change	Total
Occupational Coaching		30,463	30,463
Occupational Skills Training		33,000	33,000
Internships		54,000	54,000
On-the-Job Training		18,750	18,750
Worksource Liason		25,000	25,000
Job Developers		20,833	20,833
Support Services		21,269	21,269
Admin & Supervision Personnel		9,080	9,080
Case Management		120,000	120,000
Housing Works Total	0	332,395	332,395

ADD: 11. Additional Expenditure Restrictions

Housing Works funds have the following restrictions for the entire project period.

- 1) Equipment or capital outlays may not be purchased with Housing Works funds.
- 2) Expenditures are
 - a. Restricted by individual line item budgets.
 - b. Over-expenditures of line items of up to 20% may be balanced by under-expenditures of other line items without a formal budget modification. Case management expenditures are excluded.
 - c. Case Management line item expenditures must meet or exceed budgeted amounts
- 3) All other changes to the budget require a formal budget modification and must be requested by the Contractor in writing and be approved by funder prior to Contractor expending funds outside of the budget line flexibility. Sufficient rigorous justification for the change(s) must be documented and be based on program requirements.

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ADD: SECTION B PROJECT DESCRIPTION

11. Housing Works Grant (July 1, 2012 – October 31, 2015)

This Department of Labor (DOL) Workforce Innovation Fund Grant is to help 50 PHA housing residents gain the life and employment skills necessary to attain self-sufficiency.

Contractor will:

- **Coordinate with county partners to ensure local implementation is consistent with program requirements and implementation across regions.**
- **Perform WorkSource Liaison duties as outlined in the WorkSource Liaison position description.**
- **Ensure the case manager performs duties as outlined in the case manager position description.**
- **Facilitate orientations as part of recruitment and selection activities.**
- **Ensure eligibility and enrollment before commencement of grant-funded services to participants.**
- **Engage participants in all program activities including interacting regularly with case managers, Oregon Pathways for Adult Basic Skills (if appropriate), Career Link courses, Occupational Skills Training, internships, On-the-Job Training, Workforce Coaching and job search activities. Training activities will be in accordance with targeted Housing Works industries.**
- **Work with the employers named in the MOU, the Regional Competitiveness Committee (of the Columbia-Willamette Regional Workforce Collaborative), WorkSource, and additional local employers to develop ongoing industry intelligence to inform training pathways, and to develop employment opportunities and work experiences for Housing Works participants.**
- **Ensure participant access to general WorkSource services supported by grant and leveraged dollars including WIA enrollment, job search workshops and individual assistance.**
- **Track program services, collect data, secure release of information agreements, and support evaluators in implementation of evaluation plan.**
- **Fully participate in the Housing Works County and Regional Alliances and coordinate with partners to adhere to grant goals and reporting guidelines.**
- **Complete and submit quarterly program narrative reports by the 20th of month following quarter's end (January, April, July and October).**
- **Set aside training resources through leveraged dollars, as outlined in the Workforce Innovation Fund grant proposal and budget narrative, to supplement the resources provided through the Workforce Innovation Fund grant. Ensure that the following WorkSource resources are reserved for the Housing Authority program participants enrolled in the Housing Works Project and available throughout the life of the grant:**
 - **Workforce Investment Act enrollment at WorkSource (all participants).**

- Workshops and one-on-one staff assisted services (all participants).
 - Internships (25), Occupational Skills Training programs/certifications (25), and/or On-the-Job Training (OJT) programs (8), as appropriate.
- Resource other project expenses through leveraged dollars as outlined in the Workforce Innovation Fund grant proposal/budget narrative, to supplement the resources provided through the Workforce Innovation Fund grant itself.

PERFORMANCE

Contractor Performance Measures	Goal
Participants who complete WIA and Housing Works Eligibility and begin project funded services	<u>50/100%</u>
Participants who earn industry-recognized credential	<u>22/44%</u>
Participants who complete internship and/or OJT	<u>22/44%</u>
Percent of participants that enter long-term basic skills instruction courses who complete successfully	75%
Participants who report that barriers to employment have been removed	33/65%
Of participants who enter program unemployed, the percent who enter employment	65%
Of participants who enter employment, the percent who are retained in 2 nd and 3 rd quarters that follow the quarter of employment start date	70%
Of participants who enter employment, the average six month earnings	\$12,000
Of participants employed at enrollment, the average increase in earnings	20+%
Average annual reduction in subsidy by households that retain employment because of an increase in income directly attributable to a participant's employment income and controlling for other factors.	\$3,250
Participants vocationally case managed who attain identified training and employment goals in the Career and Resource Plan.	75%
Average annual reduction in subsidy by households that retain employment because of an increase in income directly attributable to a participant's employment income and controlling for other factors.	\$3,250
Participants vocationally case managed who attain identified training and employment goals in the Career and Resource Plan.	75%

If performance falls below the negotiated level after the first year, the WICCO will take the following actions with the Contractor:

- When final performance numbers have been issued, report to the WICCO Board which performance measure(s) have been missed/achieved.
- Meet with the Contractor to assess why the performance measure(s) were not met and create a written performance improvement plan.

If performance remains below the negotiated level for a second year in a row, the WICCO will take the following actions with the Contractor:

- When final numbers have been issued, report to the WICCO Board that a performance measure(s) has been missed two years in a row.
- Review historical data and follow the considerations and recommendations of the WICCO Board from the following options:
 - Review historical data and make a determination if course corrections are adequate and grant additional year of the contract under a corrective action plan.
 - Require other appropriate measures designed to improve the performance of the Contractor.
 - Discontinue use of the Contractor due to inability to achieve required performance levels.

**WORKFORCE INVESTMENT COUNCIL
OF CLACKAMAS COUNTY**



Kim Parker
Executive Director

11-1-12

Date

365 Warner Milne Rd., Suite 202
Oregon City, OR 97045
(503) 657-6644

Federal ID Number 93-1246270


CLACKAMAS COUNTY

Commissioner: Charlotte Lehan
Commissioner: Jim Bernard
Commissioner: Jamie Damon
Commissioner: Ann Lininger
Commissioner: Paul Savas

Signing on Behalf of the Board:

Cindy Becker, Director
Dept of Health, Housing & Human Services

Date



Maureen Thompson, Director
Community Solutions for Clackamas
County

11/8/12

Date

Federal ID Number: 96-6002286



COPY 

CAMPBELL M. GILMOUR
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD | OREGON CITY, OR 97045

November 21, 2012

Board of Commissioners
Clackamas County

Members of the Board:

FORMAL RECOGNITION OF THE SAFE COMMUNITIES ADVISORY BOARD

In 2005, the Board of County Commissioners approved formation of the Clackamas Safe Communities Program (CSCP), a partner program with the Clackamas County Sheriff's Office and Department of Transportation and Development. The mission of the CSCP is to; "Reduce injuries and fatalities in Clackamas County." This program has been supported by grant funding from the Oregon Department of Transportation – Transportation Safety Division and County general fund revenue from the Justice Court.

A requirement of the CSCP was the formation of an advisory board. The Safe Communities Advisory Board (SCAB) was formed in 2005 and has met on a quarterly basis serving as the oversight body of the Clackamas Safe Communities Program.

The SCAB was a requirement of, but not officially memorialized during the 2005 Clackamas Safe Communities Program approval.

This report has been reviewed by County Counsel.

RECOMMENDATION:

Staff respectfully recommends that the Board of County Commissioners formally recognize the Safe Communities Advisory Board.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mike Bezner".

Mike Bezner, PE
Transportation Engineering Manager

For information on this issue or copies of attachments,
please contact Joseph Marek at 503-742-4705



CAMPBELL M. GILMOUR
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING

150 BEAVERCREEK ROAD | OREGON CITY, OR 97045

November 21, 2012

Board of Commissioners
Clackamas County

Members of the Board:

ADOPTION OF THE TRANSPORTATION SAFETY ACTION PLAN

Attached please find a copy of the the Transportation Safety Action Plan (TSAP). This document represents a milestone as the first formal TSAP for Clackamas County and for a County within Oregon. Utilizing the 5E approach to safety including Education, Emergency Services, Enforcement, Engineering and Evaluation, the plan sets a 10 year goal of reducing fatal and serious injury crashes in Clackamas County by 50 percent.

Development of this plan has been a collaborative process including the Clackamas County Department of Transportation and Development, Clackamas County Safe Communities, Clackamas County Sheriff's Office, Clackamas County Health, Housing and Human Services and the Clackamas County Traffic Safety Commission along with many external safety partners. Clackamas County Safe Communities funded the TSAP through a grant from the Oregon Department of Transportation – Transportation Safety Division.

The Transportation Safety Action Plan (TSAP) will serve to help in the Countywide "Slow to Zero" campaign, a goal towards zero fatalities due to vehicle crashes. The ambitious goal of a 50 percent reduction will result in 16 lives saved and prevention of 125 serious injuries annually at the ten year milestone.

On September 11, 2012, Engineering Manager Mike Bezner and Safe Communities Director Joseph Marek presented the plan to the Board of County Commissioners. Outcomes of this session included a recommendation to adopt the plan.

This report has been reviewed by County Counsel.

RECOMMENDATION:

Staff respectfully recommends that the Board of County Commissioners adopt the Transportation Safety Action Plan.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Mike Bezner'.

Mike Bezner, PE
Transportation Engineering Manager

For information on this issue or copies of attachments
please contact Joseph Marek at 503-742-4705

CLACKAMAS COUNTY TRANSPORTATION SAFETY ACTION PLAN

Clackamas County, Oregon

July 2012





Clackamas County Transportation Safety Action Plan

Clackamas County, Oregon

Prepared For:

Clackamas County
Department of Transportation and Development

150 Beaver Creek Road
Oregon City, OR 97045
(503) 742-4705

Prepared By:

Kittelson & Associates, Inc.

610 SW Alder, Suite 700
Portland, OR 97205
(503) 228-5230

Project Manager: Nick Foster, A.I.C.P.

Project Principal: Brian Ray, P.E.

With:

Science Applications International Corporation

1001 4th Ave, Suite 2500
Seattle, WA 98154
(573) 356-7520

Project Manager: Brian Chandler, P.E., P.T.O.E.

Project Analysts: Christopher Armstrong,
Jennifer Atkinson, P.E.

Project No. 11235.0

July 2012

Contributors:

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Director, Clackamas Safe Communities Program
503-742-4705
joem@clackamas.us

Patty McMillan
Safe Communities Coordinator
150 Beaver Creek Road
Oregon City, OR 97045

*All photos courtesy of Clackamas County staff,
unless otherwise cited*



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Appendix E Safety Stakeholder Survey Results

Executive Summary





EXECUTIVE SUMMARY

The Clackamas County Transportation Safety Action Plan (TSAP) is one of the first plans to be completed for an Oregon County. This plan outlines a strategy for the County to build and implement a County-wide Safety Culture. Its ultimate goal is to reduce transportation-related fatalities and serious injuries by 50% over the next ten years. In order to create this culture and effectively meet the goal, the TSAP employs a 5E's approach, with action items related to engineering, education, enforcement, emergency medical services, and evaluation activities.

This TSAP is derived from larger national and state trends related to reducing fatal and serious injury crashes. Development of the TSAP has been based upon a collaborative effort across County departments including the Department of Transportation and Development, Clackamas County Safe Communities, Clackamas County Sheriff's Office, and the Clackamas County Health, Housing and Human Services Department. The Clackamas County Traffic Safety Commission (TSC), along with the Transportation Maintenance Division and the County Pedestrian and Bicycle Committee staff, supported the plan as an advisory committee. In addition, other key safety partners in the community have been engaged in the process through the Safe Communities Program.

Using a data-driven approach based on a detailed review of County-wide crash data, a number of emphasis areas have been identified with specific detail and actions for the top three focus areas. These three focus areas are Aggressive Driving, Young Drivers (ages 15-25), and Roadway Departure crashes. For each focus area, a description of the issue and countermeasures are discussed incorporating the 5E approach.

Looking towards the future, integration of the Highway Safety Manual is an important element of evolving safety technology for the County. The need for a robust roadway data inventory system and a data-driven focus requiring integration and analysis of a variety of data sources is discussed. These data sources include crashes, emergency calls, patient transport data, patient outcome data, liquor sales, and citations, just to name a few.

Moving the plan forward includes a series of policy directions and action items focused on short term (1-2 years), mid-term (3-5 years) and long term (6+ years). These policies and action items will guide the County by laying the groundwork for reducing fatality and serious injury crashes and building a County-wide Safety Culture.

Part 1: Overview and Background





PART 1: OVERVIEW AND BACKGROUND

Fatalities due to vehicle crashes in the United States dropped to 32,788 in 2010, the lowest rate since 1949. The steady decline in traffic fatalities can in part be attributed to safer vehicles and national efforts to improve transportation safety, including the federal surface transportation authorization act, known as the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). With SAFETEA-LU, safety was identified as a stand-alone program, with funding coming through the Highway Safety Improvement Program (HSIP). A critical aspect of the HSIP is the requirement that states draft a Strategic Highway Safety Plan (SHSP), thereby supporting the national directive emphasizing the importance of strategic planning in reducing the number of transportation-related fatalities. More recently, the Federal Highway Administration (FHWA) determined there should be a national strategy for reducing the number deaths on America's roads. This strategy is founded on the idea that even one death on the nation's roads is too many and is thus named *Toward Zero Deaths: A National Strategy on Highway Safety* (<http://safety.fhwa.dot.gov/tzd/>). National Cooperative Highway Research Program (NCHRP) Project 17-51 is developing this strategy, which is slated for completion later in 2012.

Oregon has long been a leader in transportation safety through the Oregon Department of Transportation (ODOT) Transportation Safety Division. ODOT has developed its own Transportation Safety Action Plan (TSAP) which satisfies the HSIP requirements for a SHSP. The Oregon TSAP encourages local agencies to integrate safety into their planning efforts and this is affirmed in Oregon Administrative Rule 660.012, the Transportation Planning Rule.

METRO, the Portland-area regional government, is currently developing a Transportation Safety Action Plan in cooperation with ODOT and its regional partners with anticipated adoption in the summer of 2012. This plan will build upon the statewide plan, taking into account lands within the Urban Growth Boundary (UGB), and will identify general safety trends for local agencies to consider as they embark upon their own TSAPs.

Clackamas County has made a commitment to transportation safety for all modes of travel and this TSAP represents one of the key first steps towards that goal. This TSAP is derived from larger state and national trends and positions Clackamas County to be a leader in transportation safety. It is the product of a collaborative effort across County departments including the Department of Transportation and Development, Clackamas County Safe Communities, Clackamas County Transportation Maintenance Division, Clackamas County Sheriff's Office and the Clackamas County Health, Housing and Human

Services Department. The Clackamas County Traffic Safety Commission (TSC), supplemented by the Clackamas County Pedestrian and Bicycle Committee staff, supported the plan as a public advisory committee. Collectively, their insights and knowledge are supplemented by a survey of County staff and other key safety partners, as well as analysis results of crash and roadway data (see Appendix “B”).

INTRODUCTION

Clackamas County is one of the largest counties in the northwestern part of the State of Oregon, containing 1,879 square miles in the northern Willamette Valley. A network of 1,400 miles of County-maintained roads provides access for approximately 376,000 residents (Reference 1). Terrain in the southern part of the County is relatively flat with mountainous terrain and higher elevations in the far eastern portion. Traffic crashes are the number one cause of death in the county for individuals ages 5 to 34 (Reference 2). Clackamas County is working to improve the transportation system for the traveling public by implementing innovative strategies to reduce fatal and serious injury crashes and partnering with other agencies within the County and State.



Terrain and conditions vary widely across Clackamas County

Between 2005 and 2009, 160 people were killed in vehicular crashes in Clackamas County. These deaths were not from natural occurrences and, by and large, were avoidable. As stewards of the transportation system, the County is making transportation safety a top priority.



The Clackamas County TSAP outlines a strategy for the County to build and implement a County-wide Safety Culture with the ultimate goal of reducing transportation-related injuries and fatalities. Policy and action items set forth in the plan, when implemented, will achieve the desired goals; however, successful implementation depends upon a number of factors, including strong safety leadership at all levels, cohesive safety partnerships, funding, and working together toward a common goal. Success will result in reduced injuries and fatalities on roadways within the County.

TSAP DEVELOPMENT PROCESS

The County TSAP came about from a goal of the Safe Communities Program to reduce injuries and fatalities in Clackamas County and a grant funding opportunity from the Oregon Department of Transportation - Transportation Safety Division. County Engineering and Safe Communities staff were intrigued with the state TSAP and saw the opportunity to develop a similar plan at the county level. The County's Transportation System Plan (TSP) update was recently underway, so the timing was optimal to undertake a TSAP and adopt it into the TSP document. All of the work for the TSAP has been accomplished through a collaborative process with the support of the Safe Communities Advisory Board and the Traffic Safety Commission as the Public Advisory Committee. In addition, the diversity of the plan is the result of input from our safety partners, including the Clackamas County Sheriff's Office, Clackamas County Health, Housing and Human Services, Oregon Impact, American Medical Response, Clackamas County Fire District #1, Estacada Fire District #69, Alliance for Community Traffic Safety, Clackamas 9-1-1 and OHSU Think First. The state of the existing Safety Culture in the County was queried via a survey that was distributed to our safety partners (see Appendix "E").



GOAL AND OBJECTIVES

The County's primary goal for transportation safety is as follows:

*As part of initiating a Safety Culture, the County will work collaboratively with state, regional, and local agencies and County residents to reduce the number of fatalities and serious injuries on roadways in Clackamas County by **one-half** in the next 10 years. Based on the 2005-2009 average number of fatalities and serious injuries due to crashes, this corresponds to saving 16 lives and preventing 125 serious injuries annually at the completion of the program.*

Fulfillment of this goal is illustrated in Figure 1 and shows the reduction in the rate of fatalities and serious injuries in the next ten years.

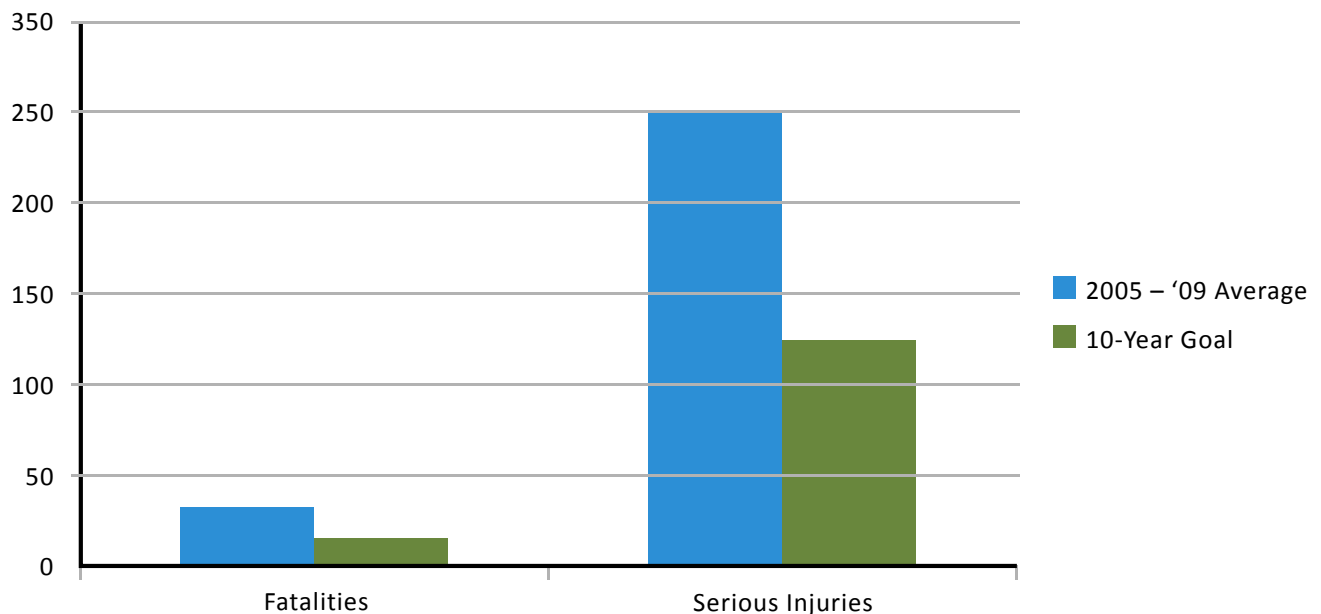
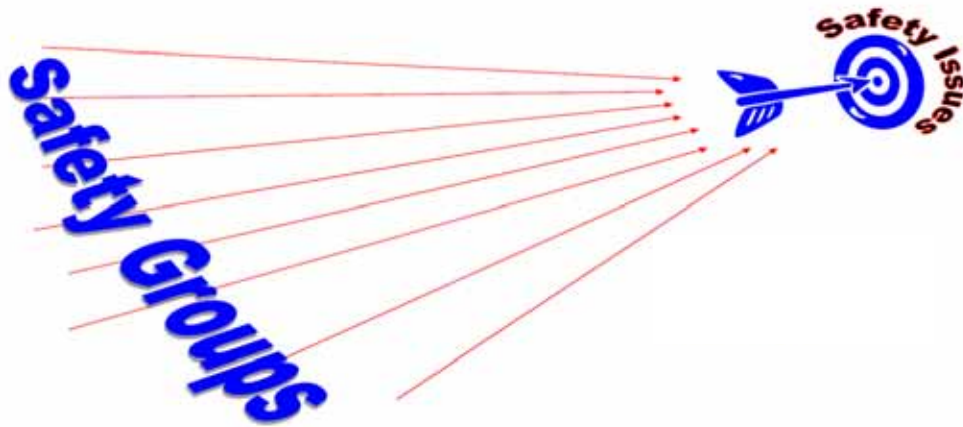


Figure 1 Impact of County's 10-Year Goal

THE COUNTY'S OVERALL OBJECTIVES FOR SAFETY ARE AS FOLLOWS:

1. **Setting the standard and foundation for developing a Safety Culture in Clackamas County.** Simply put, "Lead by Example!" To successfully build a Safety Culture within the County, staff and elected officials must lead the way through their actions, regulations, policies, and practices at all levels. Recognizing that this is an iterative process accomplished through partnering and spreading the message, the County is ready to take up this task.

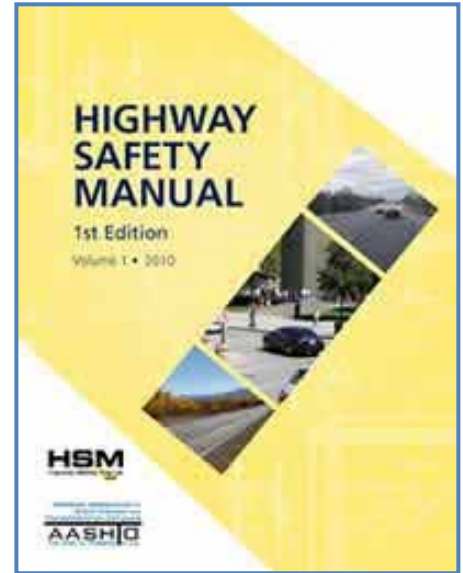
2. **Aligning County departments and external safety groups to work toward common state, regional, county, and city safety goals.** Using mutually beneficial partnerships, such as the work of the Safe Communities Program, over the past seven years, the safety community within the County has been able to better focus its efforts and better coordinate resources towards common goals. In other words, collective groups have become more aligned. This movement has been a grass-roots effort percolating from the staff and community level and it has started to draw the attention of policy and decision makers. Continued growth depends on decision and policy makers elevating safety in their planning processes. The result will be increased coordination and partnerships coupled with policies, standards and directional focus strongly rooted around safety.



Collaborative Partnerships Help Focus on Common Safety Goals

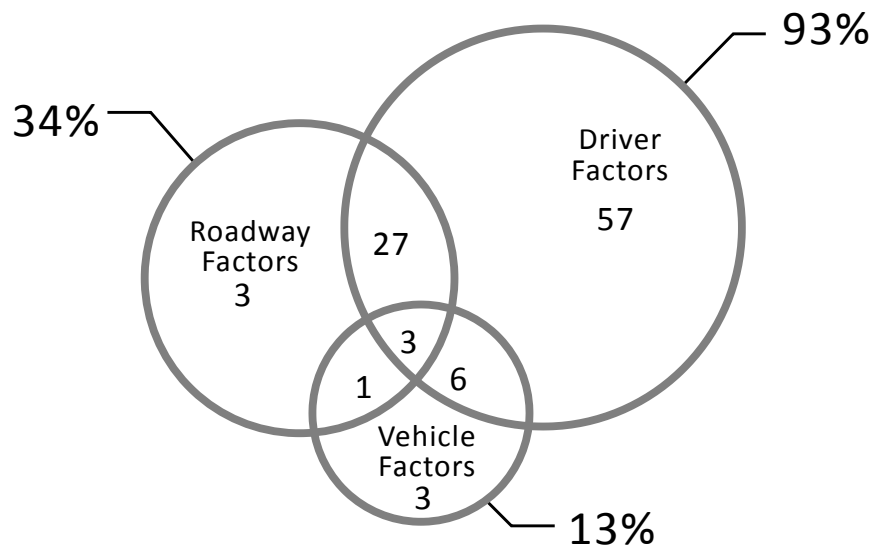
3. **Integrating roadway, safety, and traffic data management sources.** Success in building a Safety Culture and ultimately reducing fatal and injury crashes depends on a data-driven approach to help us understand and diagnose the issues and potential solutions as well as to shape policy and justify expenditures. Data availability, integration, and mapping capabilities have changed exponentially over the past ten years. What was not possible just a few years ago is now easily accomplished. With these advances, our ability to tell the safety story has been greatly improved. Examples such as mapping multiple data fields such as crash types and cause factors allows decision makers and the public to understand and relate to the safety of the system which, correspondingly, helps them understand and support various safety efforts.

4. **Integrating HSM principles.** The publication of the First Edition of the *Highway Safety Manual* (HSM) (Reference 3) set the stage for developing a robust and comprehensive safety assessment and mitigation process. As full implementation of the manual occurs over the next several years, safety will change from what has often been a subjective and reactive assessment to a more objective, quantitative, and proactive process. As the need for justification of investments increases, the HSM provides the tools to measure the success of our current investments and anticipate safety solutions needed in the future.



INTRODUCTION TO THE 5E APPROACH TO SAFETY

Motor vehicle crashes generally involve multiple contributing factors, which may be related to drivers, the roadway, or the vehicle, thus making transportation safety a multidisciplinary concern (Figure 2). The contributing factors that relate to roadway elements are about one-third of those related to those of the driver. This means we cannot “engineer” our way to safety and education and enforcement must be integrated into a Safety Culture and strategy.



Source: Treat 1979

Figure 2 Contributing Factors to Crashes

The County's goal cannot be achieved by one agency working alone. Accomplishing our safety goals requires a collaborative approach that draws from several key areas associated with traffic safety, which are shown in Figure 3 and listed here (in alphabetical order):

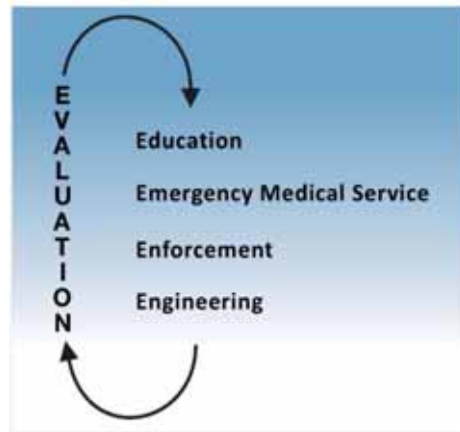


Figure 3 The 5E's

- **Education** – States and cities incorporating strong educational components report declines in fatality rates (Reference 4). Effective prevention education programs typically include some combination of knowledge content, social norming, personal commitment, and resistance skill strategies (Reference 5).
- **Emergency Medical Service (EMS)** – EMS provides the last opportunity to improve health outcomes from motor vehicle crashes and other medical emergencies. EMS data is highly reliable and valuable to crash analysis.
- **Enforcement** – Law enforcement affects behavior changes to transportation system users through enforcement, education, and incarceration.
- **Engineering** – Engineering includes designing, constructing, operating, and maintaining transportation facilities.
- **Evaluation** – This ties the other four elements together by measuring the success (effect in improving safety and cost effectiveness) of implemented solutions and deploying new solutions to address evolving needs.

The 5E's of safety are represented in the broad stakeholder groups who are responsible for making the roads safe for all users and will be covered in depth in Part II.

CURRENT SAFETY CULTURE

Policy documents, organizational relationships, and data management are all components of the County's current safety organization, and these individual components build upon each other to establish a Safety Culture.

PLANS AND POLICY DOCUMENTS

The County's current safety work is guided by a number of plans and policy documents. These documents and their relationship are discussed below.

COMPREHENSIVE PLAN

Clackamas County's Comprehensive Plan is the overarching planning policy document for the County. A proposed section on transportation safety is included herein as Appendix "A." This appendix also includes recommendations for refining safety-related language in other sections of the comprehensive plan.

Transportation System Plan

The Transportation System Plan (TSP) is the County's long-range plan for its transportation system and makes up Chapter 5 of the Comprehensive Plan. At the writing of the TSAP, the 2000 TSP is being updated. The entirety of the TSAP will be incorporated into the TSP through reference and then specific components such as livability, health, and community will also be included. The TSAP will also be used to inform the TSP update.

Location-Specific Plans

Location-specific plans provide a detailed look at a specific area. These documents often include in-depth crash data review and specific improvement recommendations. The types of safety analyses performed for these plans are currently guided by existing practices. The TSAP concepts will inform and guide future studies, including improved analysis procedures and countermeasure recommendations.



Photo Courtesy of South Metro Area Regional Transit

County Code

Chapter 7.03 of the County Code addresses road use impediments and other activities within the County road rights-of-way. This document provides enforcement authority to address a variety of safety issues within public rights-of-way, such as clear zone issues, fixed objects, vegetation and debris in the road.

SAFETY ORGANIZATIONS AND GROUPS



Figure 4 TSAP Implementation Groups

Improving transportation safety in Clackamas County requires the efforts of many County departments and multiple safety groups. These efforts include the work of elected officials, County departments, citizen groups, other public agencies, non-profit groups, and business partners. Organizations and groups referenced in this document currently provide support to the Safe Communities Program and do not represent every safety agency (Figure 4). As the Safety Culture grows, we anticipate more partnerships will be identified.

COUNTY DEPARTMENTS

Transportation Engineering Division (www.Clackamas.us/Transportation)

Clackamas County's Transportation Engineering Division is directly responsible for engineering related to the safety, design, operations, and maintenance of 1,400 miles of County-owned roads and 5,900 intersections. Historically, the County has taken an adaptive approach to respond to crash locations. In the future, the County will be able to expand to proactive strategies and methodologies to reduce crash risk. Traffic engineering is currently undertaking the following activities to reduce crashes:

- *Safety Priority Index System (SPIS) List* – The County develops an annual list of priority high-crash roadway segments and intersections. SPIS is a composite formula of crash frequency (25%), crash rate (25%), and crash severity (50%).
- *Safety Corridor Program* – The County has a Safety Corridor program that targets up to two high crash or high severity corridors at any one time. The Traffic Safety Commission assists with recommending Safety Corridors, and the Board of County Commissioners adopts the

selected corridors. Road Safety Audits are conducted and recommendations are implemented.

- *Safety Projects* – County staff plan, design, and construct roadway projects in an effort to reduce crashes for the various users of the roadway system.
- *Service Requests* – The County responds to citizen comments by reviewing the area, analyzing the situation, and considering solutions.
- *Safety Reviews/Audits* – County staff conducts a field and crash data review of a specific roadway corridor and develops and implements safety improvements.
- *Incident Response Traffic Control* – County staff respond to traffic crashes and other on-road incidents by providing traffic control to allow emergency medical services and other first responder groups to work safely at the incident.
- *Intelligent Transportation Systems (ITS)* – This program focuses on the safety, operations, and management of the roadway system with a strong focus on traffic signal systems using sensors, communications, control, electronics, and data management.
- *Development Review* – Development review encompasses the review and approval process for land development pursuant to the Clackamas County Zoning and Development Ordinance. Proposed land use actions are reviewed relative to safety criteria, and mitigation of safety issues are recommended by Staff.
- *Clackamas Safe Communities Program* – This program has a mission to **“Reduce Injuries and Fatalities in Clackamas County.”** It strives to be the nexus that brings a diverse group of safety advocates together for a common mission. The program develops, oversees, and coordinates several educational efforts; obtains funding for special projects; and liaises with emergency medical service providers, thereby providing a critical link between engineering and the other E’s. (<http://clackamassafecommunities.org/index.cfm>)
- *Clackamas County Traffic Safety Commission (TSC)* – The TSC was formed in 1980 and is one of the longest continuously operating traffic safety commissions in Oregon. The TSC gives the citizens of Clackamas County a forum to voice traffic safety concerns, evaluate related issues, interact with County agencies, and promote traffic safety. The TSC represents Clackamas County citizens on road safety topics to the County Traffic Engineering department. It also evaluates safety topics and works to educate County residents through its annual safety fair and other activities.



Canby-Marquam Highway and Barnards Road - This intersection was the #1 Safety Priority Index System (SPIS) site in the county. Converting the intersection from two-way stop-control to all-way stop control cost less than \$2,000.

In 2008, Canby Marquam Highway and Barnards Roads was the county's #1 safety site. In 2009, after an engineering treatment costing less than \$2,000, the site is no longer on the list!



Transportation Maintenance Division (www.Clackamas.us/Roads)

Clackamas County's Transportation Maintenance Division is responsible for operating and maintaining the County's 1,400-mile transportation system. Its primary role is to ensure the safety of the system through:

- Traffic sign and pavement marking maintenance
- Traffic signal maintenance
- Guardrail installation and maintenance
- Vegetation management
- Roadway maintenance including surface, shoulders and drainage
- Roadway Data Management



Flood Damage Closes Lolo Pass Road

Wilsonville Road Safety Assessment – The County evaluated a 4.5 mile stretch of Wilsonville Road to examine ways to reduce run-off-the-road incidents. County staff reviewed signing, pavement markings, guardrail, and vegetation and implemented a plan to improve roadway visibility in a low-cost manner.



Chevron Signs and Reflective Markings Improve Visibility on Wilsonville Road

Sheriff's Office - (www.clackamas.us/sheriff/)

The Sheriff's Office motto is "***Working Together to Make a Difference.***" The department has demonstrated its commitment to traffic safety by:

- Efficiently responding to and investigating crashes
- Deploying a highly functional traffic unit to address citizen complaints, work zone needs, and high crash locations
- Incorporating technology such as E-Ticketing to enhance data collection and staff efficiencies
- Partnering on enhanced enforcement details, such as alcohol compliance operations, impaired driving patrols, and seat belt compliance
- Participating in local community forums, safety fairs, and school presentations
- Participating on the Safe Communities Advisory Board



Sheriff's Office Traffic Unit on Patrol

Health, Housing and Human Services (H3S) – Prevention Coalition (www.clackamas.us/dhs/)

The mission of the Health, Housing and Human Services (H3S) Department is to ***“promote and assist individuals, families and communities to be safe, healthy and thrive.”*** The department has demonstrated its commitment to traffic safety by:

- Working with youth about the consequences of alcohol and drug use
- Funding for Drug Recognition Expert (DRE) training for law enforcement personnel
- Funding enforcement and educational activities, such as Alcohol Compliance Details and Sticker Shock campaigns
- Supporting and funding publications targeting risks associated with distracted driving, speed, and impairment
- Participating in local community forums, safety fairs, and after-school programs
- Participating on the Safe Communities Advisory Board



“Sticker Shock” Window Cling

Clackamas County Communications (C-COM) - (<http://clackamas911.org/>)

C-COM provides 9-1-1 emergency and non-emergency call taking and dispatch service to the public. The department supports traffic safety by:

- Providing highly reliable crash and impaired driving data
- Educating citizens how to access emergency services via the 9-1-1 system
- Participating in local community forums, safety fairs and school programs



C-COM Educational Booth

EXTERNAL SAFETY ORGANIZATIONS

Emergency Service Providers

(http://www.clackamas.us/community_health/)

Emergency Service providers include first responders from fire districts, the Life Flight network and transport agencies. Representatives from Clackamas Fire District #1, Estacada Fire District #69, and American Medical Response participate on the Safe Communities Advisory Board.

These organizations have demonstrated their commitment to traffic safety by:

- Efficiently responding to crashes
- Providing transport data
- Participating in local community forums, safety fairs, and school presentations

Oregon Impact – (www.OregonImpact.org/)

Oregon Impact provides community education, prevention and awareness activities to stop individuals from driving under the influence of intoxicants or driving distracted. The 501(c)(3) supports traffic safety by:

- Administrating impact panels for citizens remanded to the driving under the influence diversion program
- Providing educational activities such as the Every 15 Minutes program and guest speakers for school assemblies
- Supporting driver education programs locally and statewide
- Participating on the Safe Communities Advisory Board



Clackamas Fire District #1
On-Scene at a Crash



Crash Reenactment at a Local
High School



Oregon Impact Trailer

Alliance for Community Traffic Safety (ACTS) Oregon - (www.actsoregon.org/)

ACTS Oregon's mission is **"to reduce fatalities, injuries and the severity of injuries resulting from vehicle crashes throughout Oregon."** The agency supports traffic safety by:

- Facilitating Building Safer Communities and Safe Routes to School mini grants
- Certifying child passenger safety technicians
- Supporting child passenger safety seat clinics, safety fairs, and school programs
- Creating educational materials including a monthly newsletter focused on traffic safety best practices
- Participating on the Safe Communities Advisory Board
- Supporting local traffic safety commissions



ThinkFirstOregon - (www.ohsu.edu/xd/outreach/programs/thinkfirst/)

The mission of ThinkFirst is **"to reduce the incidence of brain, spinal cord, and other traumatic injuries and fatalities by providing education to youth, parents, and community members throughout Oregon."** The agency supports traffic safety by:

- Selling helmets at a reduced cost for low-income populations and ensuring all helmets are fitted properly
- Organizing school activities focused on preventing traumatic injury
- Targeting education to populations who are at risk for brain/spinal cord injury such as bicyclists, skateboarders, and skiers





The MAX Green Line opened in 2009 introducing light rail into Clackamas County - Photo courtesy of TriMet

COUNTY TRANSIT

Several bus transit systems provide local citizen transportation within the County in the form of bus, small transit vehicle, and light-rail. TriMet is the major transit provider; however, its service district does not include the entire County. For those areas not within TriMet's service district, smaller transit agencies provide service, including South Clackamas Transportation District between Molalla and Clackamas Community College; Canby Area Transit (CAT) connecting Canby to Oregon City; Sandy Area Metro (SAM) connecting Sandy to Gresham; and South Metro Area Regional Transit (SMART) serving the Wilsonville area. TriMet has a tri-county Safety Education Advisory Committee (SEAC) to help strengthen community presence and promotion of safety programs and services for pedestrians, bicyclists, and motor vehicles around buses and trains.



Photo Courtesy of Sandy Area Metro (SAM)

Data Management

Successful implementation of the TSAP relies on a data-driven approach. Currently the County primarily utilizes crash data. Additional datasets are becoming available, but integration of the datasets has not yet occurred.

Current projects include designing a data integration platform to integrate existing and future datasets. An integrated platform would support the County's ability to more efficiently address transportation needs. Increasingly, this data is geocoded, allowing easy map making to clearly display information. Geocoded data supports efficient geospatial analysis to monitor trends and system performance.

Current datasets available to support the TSAP include:

- Oregon Department of Transportation (ODOT) crash data
- 9-1-1 calls for service and response data
- American Medical Response transport data

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Part 2: Transportation Safety Action Plan





PART 2: TRANSPORTATION SAFETY ACTION PLAN

The Clackamas County Transportation Safety Action Plan (TSAP) proposes the framework for a County-wide Safety Culture through a close examination of the 5E approach to transportation safety, detailed crash data, and key emphases areas for crash reduction. The TSAP provides action items related to specific contributing factors identified from existing crash data and identifies programmatic measures and recommendations for moving the plan forward.

SAFETY DATA

Quality data and analysis techniques are fundamental to effectively identifying locations for potential improvements and countermeasures to reduce the frequency and severity of crashes. The TSAP is founded upon, and guided by, quantitative safety data obtained from crash reports and roadway information. For this first version of the TSAP, crash reports are the primary source of data due to their availability. Results of the safety data analysis will provide focus for current and future engineering, enforcement, emergency medical and education efforts while presenting opportunities to further integrate new data sources. In addition to near-term opportunities, the crash data helps identify near, mid, and long-term enhancements to the County's roadway safety management program efforts. Presently, the County uses crash data reactively; however, in the future as its roadway safety management approach evolves, the County will be able to apply proactive strategies, methods, and tools to reduce the future potential of crash risk.

ACCOUNTING FOR CRASH RANDOMNESS

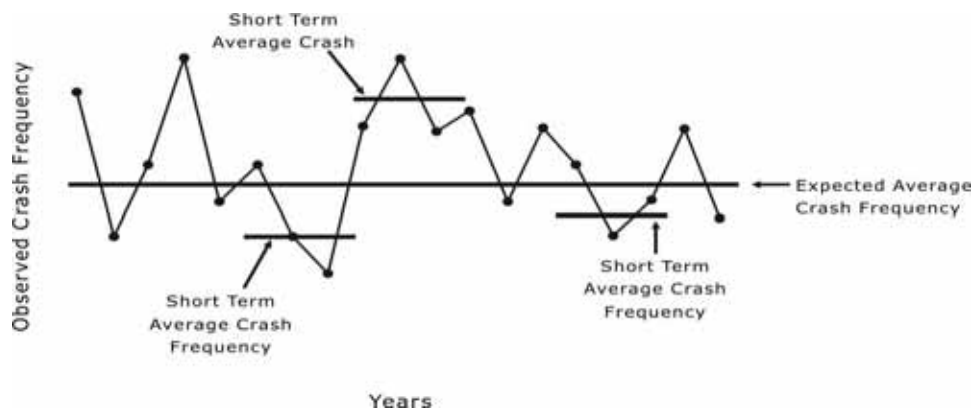
Clackamas County currently uses an adaptive approach to roadway safety assessments by reviewing past data and identifying strategies to counter documented incidents. This approach is based on information derived from the Safety Priority Index System (SPIS). SPIS uses multiple factors to prioritize crash locations; however, it does not adequately account for the randomness of crash locations. While certain physical conditions may make an intersection or road segment more prone to crashes (e.g., sharp curves, busy driveways, etc.), actual crash events are based largely on human factors, frequently combined with physical and vehicular conditions; thus, the location of crash events is largely random. The random nature of crashes can skew crash data (Figure 5), causing priority locations to vary widely from one year to the next. The SPIS analysis may identify locations where there is no physical deficiency because of a random one-time event (e.g., a DUI crash involving multiple fatalities on a low-volume road would skew the crash rate and severity components of the SPIS). The SPIS does not account for crash randomness. The Highway Safety Manual (HSM) describes new tools and methods to consider

and evaluate safety performance, accounting for the randomness, and helps an agency develop strategic and cost-effective safety countermeasures.

CRASH DATA – LIMITATIONS AT THE COUNTY LEVEL

The TSAP is primarily focused on fatal and severe injury (i.e., Level A) crashes. While Clackamas County is one of the largest counties in northwest Oregon in geographic area and population, there is a limited amount of crash data from which to draw statistical conclusions. This is consistent in all but the largest counties in the country. It is not clear how Oregon’s citizen crash reporting affects the crash data. These factors should be considered when drawing conclusions from the data.

The crash and roadway inventory databases are not linked together, which represents an opportunity to potentially link and correlate roadway, traffic, and crash data, as will be discussed later in this plan.



Source: Highway Safety Manual, 1st Edition

Figure 5 The random nature of crashes results in short-term spikes and valleys.

CRASH REPORTING IN OREGON

Oregon, unlike most other states, collects non-injury crash reports predominantly from citizens. This potentially affects the quantity of the crash reports compared with states that have only law enforcement reporting. Previous studies have indicated the number of non-injury crash reports in Oregon may be lower than would be expected in a state with similar transportation-related demographics (e.g., population, vehicles miles traveled (VMT), and severe roadway departure crashes) (Reference 4).



It is common to want to compare crash rates across counties around the nation. However, it is difficult to compare Clackamas County crash rates with data from other states because the rates in Clackamas County may be lower due to Oregon's reliance on citizen reporting. This could also affect the quality of reports and mask some crash patterns. It similarly affects severity percentage comparisons with other states (i.e., the number of fatalities and/or injuries per crash), making this value higher than most other jurisdictions around the country, because the value in the denominator (total crashes) does not capture all property damage only (PDO) crashes that occurred. This means comparisons to other states could potentially lead to over-focusing resources at unwarranted locations or crash types. These factors support Clackamas County using a county-specific, data-driven safety evaluation process to guide safety decisions.



ROADWAY INVENTORY DATA

Clackamas County has an extensive roadway data inventory system. It is rare for a county-level data system to include the quantity and quality of roadway information found in Clackamas County's Roadway Infrastructure Management Systems (RIMS). The following features, among others, are available for Clackamas County-maintained roads:

- Number of Lanes
- Road History
- Shoulder Types
- Shoulder Widths
- Surface Types
- Surface Widths
- Traffic Signs
- Average Daily Traffic (ADT) Values
- Functional Class
- Guardrail
- Intersections
- Median Type and Widths

THE 5E APPROACH TO CRASH REDUCTION

Part 1 provided an introduction to the 5E approach for addressing transportation safety. This section will further explore the 5E approach and provide some examples of how it can be used to affect transportation safety.

Education – As was previously shown, human factors contribute to 93% of crashes. States and cities that conduct strong educational components report declines in fatality rates (Reference 5). Through education, users of the transportation system learn about traffic laws and become more aware of how their behavior contributes to safety. Effective prevention education programs typically include a combination of knowledge content, social norming, personal commitment, and resistance skill strategies. They may also include high-intensity media campaigns combined with school education programs and/or other community-level interventions (Reference 6). Repeated exposure to educational messages is critical. The National Cancer Institute suggests a minimum of five to eight exposures before individuals take action (Reference 7).

Examples of Safe Communities educational programs include:

- Young driver education presentations and contests serving hundreds of high school students each year
- Fleet vehicle wraps with safety messages
- Traffic signal cabinet safety message program
- Safety Street educational driving course serving thousands of children each year
- Coloring and activity books focused on pedestrian, bike, and motor safety distributed at safety events and in local libraries at no charge
- Safety Fairs promoting safety through a number of informational booths, displays, and interactive activities



Vehicle Wraps on County Fleet Vehicles Turn Them into Portable Safety Announcements



Signal Cabinets Remind Drivers of Desirable Behaviors



Emergency Medical Service (EMS) - EMS provides the last opportunity to improve health outcomes from transportation-related crashes and other medical emergencies. EMS is provided by a highly organized system that ensures prompt notification of the location and severity of the crash, timely dispatch of trained emergency care providers, use of evidence-based treatment protocols and triage to an appropriate health care facility. The overall risk of death is 25-percent lower when care is provided at a Level I Trauma Center than when it is provided at a non-trauma center. Counties with coordinated systems for trauma care have been shown to have crash fatality rates as much as 50% lower than counties without trauma systems. Supporting a well-functioning EMS system and engaging the State EMS Office are key strategies for reducing highway fatalities and serious injuries on all public roads (Reference 8). The Emergency Medical Services Council serves as an advisory committee for the Board of County Commissioners regarding EMS activities such as:

- System enhancement and protocol development
- EMS equipment and training recommendations
- 9-1-1 dispatch coordination
- System quality improvement

Enforcement - High-visibility enforcement can create a significant deterrent to violation of laws. Research shows even well-planned public awareness and education campaigns that promote traffic safety do not succeed without targeted enforcement. Likewise, without the community's support and a corresponding publicity component, law enforcement efforts tend to fall short. There must be a unified effort between traffic safety advocates and law enforcement agencies for any campaign to articulate its message effectively (Reference 9).



*Outreach is One Way
Enforcement Groups Seek to
Improve Transportation Safety*

Examples of enforcement activities include:

- Enhanced enforcement (e.g., impaired driving saturation patrols, safety corridors, speed complaints, and work zones)
- Alcohol sales compliance details which partner law enforcement personnel and Oregon Liquor Control Commission inspectors. These operations reduce youth access to alcohol by enforcing vendor compliance
- Safety Fairs where law enforcement partners provide outreach and education to the community

Engineering – The role of engineering includes designing, constructing, operating, and maintaining the transportation infrastructure system to meet the needs of citizens through capital improvement projects, development review, and administration of road statutes. Examples of efforts related to transportation safety include:

- Evaluating citizen issues related to safety
- Operating the 1,400-mile system, including traffic signals, signing, pavement markings, roadside shoulders, and pavement surface
- Developing the transportation safety action plan
- Deploying radar reader signs that display speeds to drivers
- Conducting road safety audits and transportation safety assessments
- Performing road system evaluations and developing safety priority lists
- Managing the Safety Corridor Program



*“Wow, thanks for letting us have that radar sign for so long here on Burma Road. It truly made a difference.”
Debbie Thomas – 2009*

Evaluation – Conducting assessments is an integral part of program implementation. Crash data serves as one evaluation tool. Safety professionals from education, enforcement, engineering, and the emergency medical service program also provide assessments and evaluations. This feedback element helps assess if implemented solutions are providing the anticipated outcomes.

GENERAL COUNTY CRASH TRENDS

The average annual number of roadway crashes was approximately 3,900 on all roadways within the County from 2005 through 2009. Figure 6 shows the highest number of traffic fatalities in this period occurred in 2005 at 41, but leveled over the next four years to about 30 per year on all roads.

The crash data review focused on 2005-2009 annual crash data, the most recent five years of available data from ODOT at the time of this analysis. The review considered reported crashes on:

- All roadways within Clackamas County regardless of jurisdiction
- County-maintained roadways and intersections

Analyzing crashes on County-maintained roadways and intersections helps identify areas that the County might improve through a complete 5E approach. Reviewing all crashes on all road types can help the County identify behavior modification activities, such as education outreach that affect drivers on all roads in the County. In addition, this approach helps direct where to look for opportunities to collaborate with other agencies (i.e., ODOT and cities) to reduce crashes in the County regardless of road ownership. A complete summary of the crash data analysis can be found in Appendix “B.”

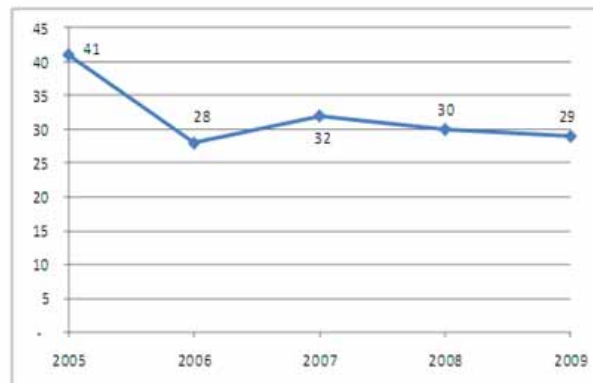


Figure 6 Traffic Fatalities per Year on All Clackamas County Roads

SAFETY EMPHASIS AREAS & PROPOSED COUNTERMEASURES

The most frequently occurring contributing circumstances by percentage to Clackamas County traffic crashes are:

- Aggressive driving
- Young drivers (ages 15-25)
- Roadway departure crashes, including horizontal curves, head-on collisions, run-off-road and fixed object crashes
- Older drivers (age 65 and up)
- Signalized and unsignalized intersections
- Inattentive driving
- Alcohol and other drugs
- Commercial motor vehicles
- Work zones
- Unlicensed drivers
- Unrestrained occupants
- Pedestrians
- Bicycles
- School buses or school zones

Top contributing circumstances for County-maintained roads are illustrated in Figure 7 for 2005 to 2009¹.

The data reveals a distinct break after the three highest contributing circumstances. As a starting point for the TSAP, the top three areas were identified as emphasis areas for this plan.

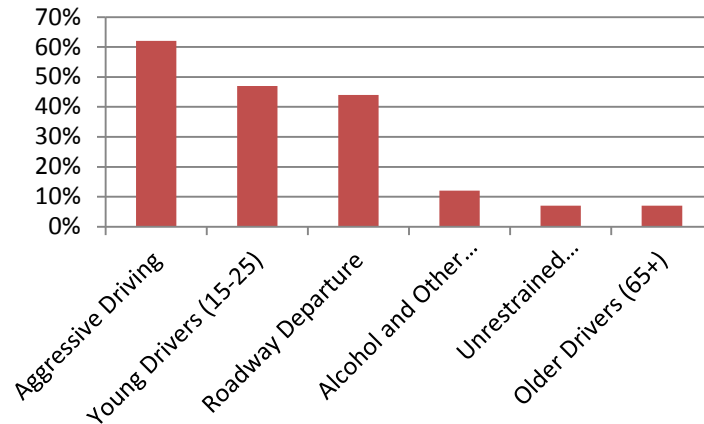


Figure 7 Six Highest Contributing Circumstances to Fatal and Severe Crashes on County-maintained Roads, 2005-2009

AGGRESSIVE DRIVING

Aggressive driving is defined by the U.S. Department of Transportation as “driving actions that markedly exceed the norms of safe driving behavior and directly affect other road users by placing them in unnecessary danger” (Reference 10). Aggressive driving is defined for this analysis using the following contributing circumstances from the crash report forms:

- Too fast for conditions
- Following too closely
- Driving in excess of posted speed

Aggressive driving is attributed to approximately 57-percent of all fatal or serious injury crashes on all roads in Clackamas County. The breakdown of contributing circumstances to aggressive driving crashes is shown in Figure 8.

¹ These categories are not mutually exclusive and there is overlap between them (e.g., young speeding drivers running off the road). For this reason, crash type percentages cannot be added cumulatively.

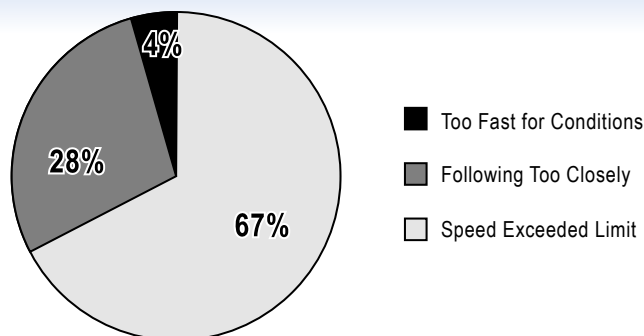


Figure 8 Contributing Circumstances to Aggressive Driving Crashes on all Roads in Clackamas County, 2005-2009

Of all crash types analyzed on County-maintained roads, aggressive driving crashes accounted for the highest percentage involving a fatality or serious injury at 62-percent. Specifically, speeding-related crashes are a higher percentage of crashes on Clackamas County-maintained roads (41-percent) than all routes in the county (31-percent).

Within the subset of fatal and serious aggressive driving crashes on all routes, the most common other circumstances are shown in Table 1.

Table 1 Other Circumstances Related to Aggressive Driving Crashes, All Roads in Clackamas County, 2005-2009

Circumstance	Location	Fatal/Severe Injury Crashes	Percentage of all Aggressive Driving Fatal/Severe Injury Crashes
Roadway Departure	Rural	176	72%
	Urban	76	21%
	All	252	42%
Young Driver (15-25) Involved	Rural	102	42%
	Urban	172	48%
	All	274	45%
Alcohol or Drug Impairment	Rural	42	17%
	Urban	26	7%
	All	68	11%

There is considerable overlap between aggressive driving crashes and roadway departures and young drivers, the other two primary emphasis areas. Roadway departure crashes and alcohol- or drug-related crashes are associated with aggressive driving most often in rural areas. While young drivers are involved in similar proportions of severe aggressive driving crashes in urban and rural areas, the number of severe young driver aggressive driving crashes is higher in urban areas.

COUNTERMEASURES

A number of countermeasures can be deployed to potentially reduce aggressive driving crashes. A list of possible countermeasures the County could implement is provided in Table 2. A more complete description of each countermeasure and its characteristics (i.e., where to use, cost, and effectiveness) is provided in Appendix “C.”

Table 2 Possible Aggressive Driving Countermeasures

Countermeasure	5E Category
Public Education of Automated Enforcement Methods	Education
Establishing Appropriate Speed Limits	Engineering
Signal Retiming and Coordination	Engineering
Automated Speed Enforcement	Enforcement
Automated Red Light Enforcement	Enforcement
Targeted Corridor Speed Enforcement	Enforcement

In addition to these countermeasures, those listed in the following sections for Roadway Departure crashes and Young Drivers could potentially reduce the number and severity of crashes related to aggressive driving.

YOUNG DRIVERS

Young drivers, defined as those 15 to 25 years of age, are a vulnerable motorist group because of limited experience handling the tasks of operating a vehicle and applying newly-acquired driving skills, especially with the number of in-vehicle distractions (e.g., radio, GPS, cell phones, passengers) present on many trips. This age group is involved in approximately 44-percent of all fatal and serious injury crashes occurring on all roads in Clackamas County. On County-maintained roads, the number was even higher at about 47-percent. On all roadways in the county, the subset of fatal and serious young driver crashes includes aggressive driving, roadway departure, and alcohol or drug impairment (see Table 3).

Table 3 Contributing Circumstances to Young Driver Crashes, 2005-2009

Contributing Circumstance	Location	Fatal/Severe Injury Crashes	Percentage of all Young Driver Fatal/Severe Injury Crashes
Aggressive Driving	Rural	102	64%
	Urban	172	60%
	All	274	61%
Roadway Departure	Rural	99	62%
	Urban	41	14%
	All	140	31%
Alcohol or Drug Impairment	Rural	26	16%
	Urban	19	7%
	All	45	10%

Young drivers in Clackamas County stand to benefit from roadway departure and aggressive driving countermeasures, with the former being more prevalent in rural areas, while the latter is more common in urban areas.

COUNTERMEASURES

A number of countermeasures can be deployed to potentially reduce young driver crashes, in addition to those previously listed for roadway departure and aggressive driving crashes. A listing of potential countermeasures is provided in Table 4. A more complete description of each countermeasure and its characteristics (i.e., where to use, cost, and effectiveness) is provided in Appendix “C.”

Table 4 Possible Young Driver Crashes Countermeasures

Countermeasure	5E Category
Social Norming	Education
Driver’s Education (see Figure 9)	Education
Stricter Enforcement of No Texting While Driving/Hands Free Law	Enforcement
Enforcing Primary Seatbelt Law	Enforcement
Enforcing Graduated Driver Licenses (GDL) and Zero Tolerance Laws	Enforcement
Warning Signing	Engineering



Figure 9 The 2012 Oregon Department of Transportation Parent Campaign “Why Drive with ED” focuses on parents with pre-licensed children to invoke parent engagement in the value of driver education.
<http://www.whydriewithed.com/>

ROADWAY DEPARTURE CRASHES

Roadway departure crashes are defined by FHWA as non-intersection crashes that occur after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. These crashes are extracted from the ODOT database using the following criteria:

- Single vehicle, non-pedestrian and non-bicycle crashes
- Head-on and sideswipe crashes where vehicles are traveling in the opposite direction (i.e., north vs. south or east vs. west)
- Crashes involving a fixed object and only one vehicle

Intersection, pedestrian, and bicycle crashes are not considered roadway departure crashes.

Roadway departure crashes account for 34-percent of all fatal/serious injury crashes in Clackamas County. Percentages of this crash type are higher at 44-percent on County-maintained roads. Nearly 25-percent of roadway departure crashes on County roads that resulted in a fatality or severe injury were collisions with trees. Within the subset of roadway departure crashes on County-maintained roads, head-on and sideswipe meeting and fixed object collisions are associated with the highest number of traffic fatalities (see Table 5).



Roadway Departure Crash Involving a Tree

Table 5 Contributing Circumstances to Roadway Departure Fatalities, 2005-2009

Crash Type	Location	Percentage of Traffic Fatalities, 2005-2009		
		County-Maintained Roads	All Roads in County	National Average
Head-on + Sideswipe Meeting	Rural	25%	28%	12% ¹
	Urban	0%	10%	7% ¹
	All	21%	23%	10% ¹
Fixed Object	Rural	47%	37%	23% ²
	Urban	63%	21%	22% ²
	All	49%	33%	22% ²

¹ Fatality Analysis Reporting System (FARS), 2005-2009

² Insurance Institute for Highway Safety. http://www.iihs.org/research/fatality_facts_2009/fixeObject.htm

Roadway departure crashes generally account for a higher percentage of traffic fatalities in Clackamas County than the national average, and are primarily focused on rural roads (Table 5). Head-on and Sideswipe Meeting fatalities in all locations are more than double the percentage of the total that is typically experienced around the country (about 10-percent). Due to the small sample size for data on County-maintained roads, this data may be less reliable than larger sample size evaluation results. Fixed Object crash percentages exceed the national average, especially on County-maintained roads in the urban portions of the county. On County-maintained roads in all areas, nearly half (49-percent) of traffic fatalities include the vehicle hitting a fixed object. This number increases to 63-percent in urban areas. Safety Performance Functions in Part C of the HSM indicate that run-off-the-road crashes are typically expected to contribute to a relatively high proportion of fatal and severe-injury crashes for rural two-lane highways and urban and suburban arterials. However, only detailed analysis of the individual roadways could determine if the proportions derived from the actual crash data are consistent with expected values from the HSM.

COUNTERMEASURES

A number of countermeasures can be deployed to potentially reduce roadway departure crashes. A listing of countermeasures the County could implement is provided in Table 6. A more complete description of each countermeasure and its characteristics (i.e., where to use, cost, and effectiveness) is provided in Appendix “C.”

Table 6 Possible Roadway Departure Countermeasures

Countermeasure	5E Category
Advance Curve/Turn Warning Signs and Chevrons	Engineering
Flashing Beacons at Curves	Engineering
Centerline and Edgeline Pavement Markings	Engineering
Centerline and Edgeline Rumble Strips	Engineering
Alignment Delineation	Engineering
High Friction Surface Treatment	Engineering
Fixed Object Removal/Relocation/Modification	Engineering
Documentation of treatment benefits	Evaluation

Most of these countermeasures have been shown to reduce head-on + sideswipe meeting and fixed object crashes (Reference 11). Centerline pavement markings and rumble strips would be expected to have the most crash reduction benefit for head-on and sideswipe meeting crashes. Edgeline pavement markings and rumble strips and fixed object removal/relocation/modification would be expected to have the most crash reduction benefit for fixed object crashes.

INTERSECTION CRASHES

Clackamas County severe intersection crashes are lower than what is typically seen nationally. On County-maintained roads about 3-percent of fatal and severe crashes, which are likely not subject to the same underreporting as PDO crashes, have occurred at intersections. For all roads in the county, 4-percent have been at intersections. Nationally, approximately 20-percent of traffic fatalities occur at intersections (Reference 12).

While not a specific focus area, the County should review safety countermeasures as described in the National Cooperative Highway Research Program (NCHRP) Series 500 reports (Reference 11).



VULNERABLE USERS

Bicyclists, motorcyclists, and pedestrians are considered vulnerable users of the transportation system as they are more exposed in a crash than someone traveling in a car or truck. Table 7 compares the proportion of fatal and serious injury crashes these groups account for compared to their approximate mode share.

Table 7 Vulnerable User Fatal/Severe Injury Crash vs. Mode Split Comparison in Clackamas County

User Type	Percentage of all Fatal/Severe Injury Crashes	Percentage of all Trips to Work ¹
Bicyclists	2.5%	0.5%
Motorcyclists	10.7%	0.3%
Pedestrians	5.1%	2.8%

¹ 2005-09 American Community Survey, US Census Bureau

As Table 7 shows, each group accounts for a greater percentage of all fatal and severe injury crashes in Clackamas County than they do for trips to work. This indicates these user categories may be overrepresented in fatal and severe injury crashes, assuming that their respective share of commuter trips is representative of other trips. However, the table also shows each group accounts for a lower percentage of all fatal and severe injury crashes than the three emphasis areas previously identified. Organizations including the Bicycle Transportation Alliance (BTA), Team Oregon (motorcycle safety), and Oregon Department of Transportation – Transportation Safety Division Pedestrian Safety Program support safety initiatives for vulnerable users. The NCHRP Series 500 reports can provide countermeasure concepts for these users (Reference 11).

HIGHWAY SAFETY MANUAL INTEGRATION

Most typical roadway safety evaluation tools have included methods based on current and past data, typically centered on calculations dealing with crash rate, crash frequency and crash severity. There is now a more comprehensive method available for examining roadway safety. The First Edition of the Highway Safety Manual outlines methods and procedures to comprehensively manage roadway facilities and guide project decisions. The organization of the HSM is shown in Figure 10. HSM concepts employ an integrated approach to safety-based improvements applicable to all aspects of the County’s project development process (planning through maintenance). The HSM concepts provide the means to incrementally improve current County activities from the planning documents noted in Part 1 to guiding funding toward programs that can measurably improve safety.

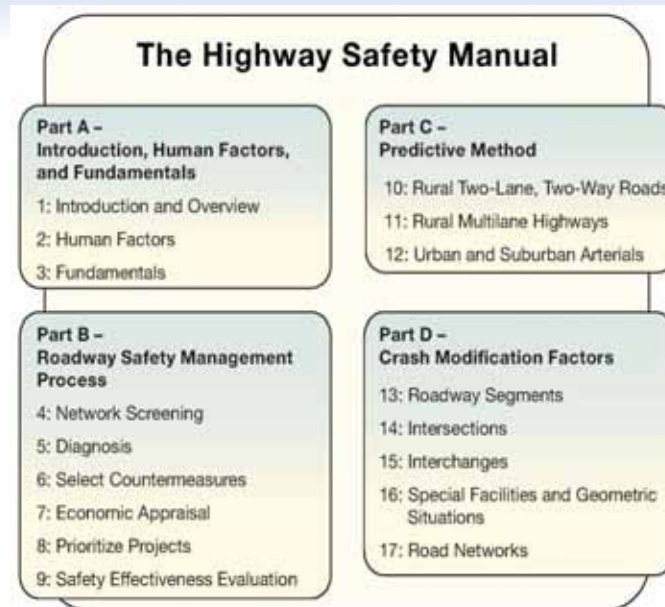


Figure 10 Highway Safety Manual Organization

DATA INTEGRATION WITH HSM

Successful implementation of the HSM relies on a robust database including crash and roadway data. While Oregon crash data is relatively thorough, roadway data may need some additional elements. In response to the release of the HSM, the Federal Highway Administration (FHWA) published a report titled: “MIRE – Model Inventory Roadway Elements” (Reference 13). Within this document, roadway elements necessary for full utilization of the HSM are described.

Integrating crash and roadway data would allow stronger analyses in line with recommendations from the HSM, including:

- *Section 2, Part C – Predictive Method* could be used to better understand the safety performance of Clackamas County’s current roadway network. Because the County maintains such detailed roadway data, it could predict the likelihood of crashes using safety performance functions (SPFs) to identify opportunities for improving the network based on the HSM Excess Predicted Crashes method, which accounts for crash randomness.
- *Section 3 – Data Needs* could be considered over the coming years as the County looks to improve roadway and crash data collection. The section describes and specifies the data needs required to perform the calculations and analysis presented in Section 2. For example, Clackamas County could collect horizontal curve data to better understand the safety performance of its rural two-lane, two-way roads. Data elements like curve length, radius, and superelevation are needed to apply the SPFs for these types of roadways. Predictive tools and SPFs could help identify systematic improvements or maintenance activities to reduce the potential for crashes.
- Roadway Information Management System (RIMS) data can be connected to other HSM-related tools (e.g., FHWA spreadsheets, HiSafe software) to support County staff-conducted data analysis

at a potentially lower cost than more complex tools (e.g., SafetyAnalyst). Roadway, crash, and traffic data are used together to perform crash analyses. Currently each of these types of data is stored in an individual database not linked to the others. Although the extent of data collected in RIMS is impressive, it is an isolated database that cannot be easily connected to other systems, such as the Integrated Road Information System (IRIS) used by the Association of Oregon Counties and its many member counties. The current limitations of non-integrated databases reinforce an adaptive approach to roadway safety management where County actions and efforts focus on what has been reported. Enhanced data management tools will support future County efforts to proactively consider roadway safety management.

EXAMPLES OF HOW THE HSM CAN BE USED TO ANSWER TRANSPORTATION SAFETY QUESTIONS

By combining crash and roadway database information, the following few example questions about the roadway departure emphasis area could be answered:

- Are there geometric cross section attributes that correlate to the roadway departure crash rate on rural 2-lane roads (such as lane width or shoulder width and type)?
- Does the age of pavement and associated friction values correspond to the safety performance of that roadway – particularly with regard to inclement weather-related crashes?
- Is there a width or type of median particularly related to cross-median crashes?

Taking advantage of the County's robust data will allow both a higher level of querying and more meaningful data outcomes.

DEGREE OF CURVATURE OR CURVE RADIUS

Data on roadway degree of curvature or radius values for curves is currently not available in the county roadway information database. If this data becomes available, additional analysis could be performed to systematically implement curve treatments for addressing roadway departure crashes. Using curve type and degree of curvature or radius data could support greater capital cost efficiencies, allowing the County to prioritize curve treatments based on their geometric attributes. It could help the County best choose where to spend construction and maintenance funding by systematically identifying curve locations that need improvement. Most importantly, safety countermeasures applied using this information may effectively reduce the number and severity of curve-related crashes.

As an interim measure, a similar system-wide determination of curves can examine if all curves have been signed with advisory speed signs. Locations of curves with low advisory speeds could be identified because the county maintains sign placement records. These curves could then be treated with chevrons or other measures.

NETWORK SCREENING USING THE HSM

Network screening means reviewing a transportation network to identify and prioritize locations for potential safety improvements. It is the first step in the roadway safety management process as defined by the HSM. More information on network screening and performance measures contained in the HSM can be found in Appendix “D” of this plan.

As was previously discussed, the County currently screens its network through an annual ranking process using the ODOT SPIS methodology. Over time, and with enhanced access to and evaluation of roadway, traffic, and crash data, the County could incorporate safety performance measures that consider the randomness of crashes. These performance measures and screening methods of the HSM could help focus County funds more accurately on prioritized locations or crash types with the whole system in mind.

PERFORMANCE MEASURES

The most stable performance measures defined in the HSM need to be calibrated to local conditions using a locally developed calibration factor or a locally developed function. ODOT has developed local calibration factors for State highways and will make them available in mid-2012. Clackamas County has the opportunity to transition to using these calibration factors for applying the more stable performance measures on its roads. However, using these measures will be more data and time intensive than the current methods. Over time, and if the County integrates its roadway, traffic, and safety data, future safety analyses might be conducted in a more effective and efficient manner.

Interim steps could include using supplemental performance measures outlined in the HSM including: the method of moments, probability of specific crash types, excess proportion of specific crash types, or critical rate performance measures. The probability of specific crash types and excess proportion measures could be particularly valuable given the specific emphasis areas identified previously. For instance, either method could be run network-wide for a specific crash type (e.g., run-off-the-road crashes) to develop a prioritized list of locations for that crash type. Similarly for young drivers or alcohol-involved crashes, either measure could be used to identify what locations are overrepresented, which could identify locations to increase enforcement.

NETWORK SCREENING TOOLS

The process of using more stable performance measures to screen the County’s roadway network could potentially be simplified using network screening tools. An off-the-shelf tool is available for this process or a tool could be custom-built for the County.

AASHTO’s *SafetyAnalyst* is currently the only off-the-shelf tool implementing the Roadway Safety Management Process from Part B of the HSM. *SafetyAnalyst* applies the entire Part B process from network screening to evaluating the effectiveness of implemented treatments. Two limitations to the software are its intensive data requirements and cost. The program was developed for State DOTs and

requires detailed roadway, crash, and traffic data. The most recent cost information posted on the program's website states that the program costs \$15,000 per year for one workstation license or \$25,000 for a site license. More information about *SafetyAnalyst* can be found at www.SafetyAnalyst.org.

An alternative to *SafetyAnalyst* would be a custom-built tool that taps into the County's RIMS and crash databases and performs the network screening analysis.

QUANTITATIVE SAFETY ANALYSIS METHODS USING THE HSM

The HSM allows for quantitative safety analysis. Part C of the HSM covers the Predictive Method in detail. The Predictive Method allows analysts to predict the expected average crash frequency in terms of crashes per year for a road segment or intersection based on traffic volumes, geometric features, and a local calibration factor.

The Predictive Method can be used on existing facilities as well as planned improvements and new roadways. It can also be used to quantitatively compare alternative improvement options for a segment and/or intersection for an existing or new roadway. Alternatives can then be compared according to the differences in expected average crash frequency or by using a benefit-cost calculation to better compare projects of different cost magnitudes.

Using the Predictive Method requires more data than a traditional crash frequency, rate, or severity analysis. Fortunately, the County already collects much of the data required to implement the HSM. A full listing of additional data that would be needed in RIMS to automate analyses can be found in Appendix "D."

In addition to local roadway data, a locally developed calibration factor is required to adjust the results, which are based on national data, to local conditions. To begin implementing the Predictive Method in the near-term, the County could rely on these factors. In the longer-term, more accurate results could potentially be obtained by using calibration factors developed from county-level data. This is described in more detail in Appendix "D."

Areas of the County's practices into which the Predictive Method could be incorporated include:

- Network screening/roadway system management
- Countermeasure identification and analysis
- Alternatives evaluation
- Improvement prioritization
- Safety analyses
- Traffic studies, including development review studies

The County has already taken steps to implement the Predictive Method, including hiring an analyst responsible for safety analysis.

BROADER DATA ANALYSIS AND TRENDING

The County's safety analysis is currently based on crash data. However, the County has a stated desire to incorporate additional data to provide more comprehensive analyses and examine different aspects of safety and risk. The trends stemming from considering additional data sets could potentially be included in proactive strategies in engineering, education, emergency medical, and enforcement activities. This additional data could include:

- Societal trends (demographics, technology changes, etc.)
- 9-1-1 data
- Hospital records
- School absenteeism trends
- Citizen complaints

Among other things, the use of this data has the potential to uncover issues not seen in crash data. For instance, a recent study by the Norwegian Institute of Science and Technology (Reference 14) used hospital data on slip-and-fall injuries to show wintertime maintenance of pedestrian facilities helps to prevent injuries in Norwegian cities. These types of injuries and trends would not otherwise be seen as there is no reporting mechanism. In Clackamas County, 9-1-1 calls could include reports of speeding and aggressive driving patterns, road racing, or underage drinking parties or gatherings. In the absence of reported crashes, this information could be the basis for special enforcement zones or education outreach to local high schools.

Collecting and analyzing additional data in a coordinated fashion will require a time investment. Ideally the data would be sent to a central location for processing and comprehensive analysis. The data could be used to identify locations for treatment, programmatic needs, and areas to target with educational outreach efforts. Building applications to merge, query, map, and create tables/reports will become increasingly important as the Safety Culture grows and we partner with additional community stakeholders. Future plans need to include creation of the data infrastructure and sharing agreements to allow this data warehouse to grow and flourish. In addition, other regional partners and academia would likely have interest in this data.

DEVELOPMENT REVIEW

Traditionally, the focus of development review has been on the capacity impact of new development. Safety is considered but sometimes it is more difficult to define because either the facilities do not yet exist or they have been utilized differently. Agencies have struggled to provide the same level of consideration to safety as capacity because there has not been a readily available way to quantitatively

analyze safety. The Predictive Method can be used to identify the impacts of a development on crash frequency, and quantify the effect of alternative mitigation improvements on crash frequency.

Potential ways safety considerations could be incorporated into the development review process include:

- Requiring a Predictive Method analysis of impacted roadway facilities along with a capacity analysis as part of traffic impact studies (TIS).
- Allowing safety improvements in lieu of capacity improvements. To determine if a safety improvement provides an offsetting benefit compared to the disadvantage created by the increased congestion, the benefit of the safety improvement could be calculated in monetary terms using the reduction in expected average crash frequency, which could then be compared to the monetary value of the increase in congestion using the value of travel time. In some cases capacity improvements can decrease safety (i.e., as capacity is added on a segment or at an intersection, speeds may increase with improved flow). Less severe crashes could potentially be replaced with fewer but more significant serious crashes.
- Developing and implementing crash frequency standards, similar to the current use of mobility standards.
- Assess fees for the number of estimated trips through safety focus intersections and/or roadway segments. The fees would be used to implement safety improvements at those locations and/or implement enforcement or education programs to improve safety behaviors.

Implementing any of these ideas will require work to fit the concepts with existing codes and practices. Such changes will need to follow the County process of involving a broad range of stakeholders from policy makers to developers. For this reason, the County may want to test proposed ideas on select pilot development projects to determine whether implementation helps to accomplish the County's vision and whether the idea being tested can be practically implemented.

KEY OUTREACH ACTIVITIES AND SAFETY STAKEHOLDERS

There are a number of groups and individuals involved in promoting transportation safety in Clackamas County. Without their support and participation, many key activities would not be possible. These programs have been successful and should continue to be supported and potentially expanded as part of the TSAP.

SAFETY STREET

Safety Street is an interactive driving course for children and the most popular activity operated through the Safe Communities Program. Thousands of children ride the course each year with the help of volunteers from local church groups, schools, private business, and citizens at large.



Safety Street



Roadway and Safety Fair

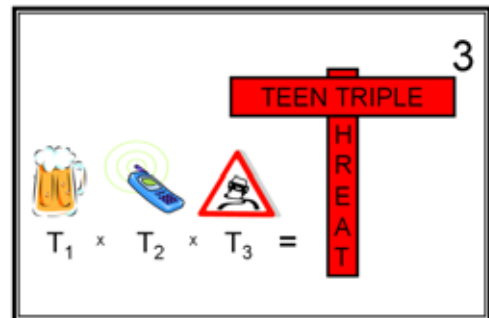
THE CLACKAMAS TOWN CENTER ROADWAY AND SAFETY FAIR

This annual fair takes place at Clackamas Town Center under the leadership of the Clackamas Traffic Safety Commission, Happy Valley Traffic & Public Safety Commission, and Safe Communities Program. These groups manage safety stations from diverse partners, including Portland General Electric, TriMet, Clackamas Women’s Services, Oregon Partnership, and Team Oregon.

TEEN TRIPLE THREAT

The Teen Triple Threat contest is held every other year and invites high school students to create safe driving messages based on speed, distracted driving, and impaired driving. Since 2008, students have created safety videos, animated public safety announcements, and safe driving scripts that have been professionally produced. Partnerships with school organizations make the project possible.

Private businesses, such as the Clackamas Review and State Farm Insurance, have supported the contest with contributions for prizes and media outreach. Winning videos are posted on the Clackamas Safe Communities Facebook page and YouTube site.



MIK AND NERO COMIC SERIES

The Clackamas County Sheriff’s Office created the first of the Mik and Nero comic books about the dangers of methamphetamine use. Three comic and activity books were later created related to safe driving. The Safety Street Activity book is the most popular with over 10,000 distributed throughout the county at fairs, community events, and schools. They are also distributed statewide through ODOT’s



Transportation Safety Division and are available at county libraries at no charge. They can be downloaded at: www.clackamas.us/sheriff/kids/.

OTHER SAFETY STAKEHOLDERS

Clackamas County has worked to incorporate a broad range of safety partners to help create a 5E approach to safety. The addition of the Safe Communities Program, beginning in 2005, helped the building of partnerships considerably through its outreach and broad 5E focus. The list of partners continues to grow and expand.

In addition to those safety partners/organizations and groups mentioned in this report, the following ancillary groups should be recognized for their support and partnership. They contribute to Clackamas County's growing Safety Culture:

EDUCATION	WEB SITE
Bicycle Transportation Alliance	btaoregon.org/
Clackamas County Driver Education Program	depts.clackamas.edu/driverEd/
Clackamas County Fair Board	www.clackamas.us/fair/
North Clackamas School District and Transportation Office	www.nclack.k12.or.us
Northwest Family Services – Vibrant Futures Drug Free Youth Coalition	www.facebook.com/pages/Vibrant-Futures-of-Milwaukie
Operation Lifesaver – Rail Safety	www.oli.org/
Safe Kids Oregon	www.public.health.oregon.gov
EMERGENCY MEDICAL SERVICES	
Oregon Trauma System	www.public.health.oregon.gov
Providence Hospital	www.provhosp.org/
Sandy Fire District #72	www.sandyfire.com
ENFORCEMENT	
Clackamas County Sheriff's Office – Crime Prevention and PIO Unit	www.clackamas.us/sheriff/neighborhoodwatch.jsp
Clackamas County Justice Court	www.clackamas.us/justice/
Oregon Liquor Control Commission (OLCC)	www.oregon.gov/OLCC/index.shtml
Oregon State Police (OSP)	www.oregon.gov/OSP/
ENGINEERING	
Federal Highway Administration	www.fhwa.dot.gov/
METRO	www.oregonmetro.gov/
National Highway Traffic Safety Administration	www.nhtsa.gov/

ACTION ITEMS

The County has identified action items that will be undertaken over the next several years to potentially improve transportation safety in Clackamas County. These action items have been developed by the County working in consultation with its safety partners and the project team, and drawing on the analysis described previously. For organizational purposes, they are divided into six categories: County-wide action items and action items related to each of the 5E's. Within each category, items are grouped by a targeted timeframe that has been set by County staff: short-term (1-2 years), mid-term (3-5 years), and long-term (6+ years).

COUNTY-WIDE ACTION ITEMS

County-wide actions generally define broad, organizational activities meant to enable specific actions identified for the 5E's and promote an overall Safety Culture. These actions will generally be led by the County's traffic engineering division and the Safe Communities Program, with support from other County agencies.

	SHORT TERM
CW1	Creating a county-wide "Safety Culture" work group
CW2	Developing and implementing a financial sustainability model for the Safe Communities Program
CW3	Continuing to promote and support the efforts of the Clackamas County Traffic Safety Commission
CW4	Supporting internal agencies, such as the Department of Transportation and Development; the Sheriff's Office; and Health, Housing, and Human Services; and external organizations, such as Oregon Impact; Alliance for Community Traffic Safety; and Think First, in their transportation safety initiatives
CW5	Integrating this TSAP into County policy via the Comprehensive Plan through its inclusion in the Transportation System Plan (TSP) update and subsequent adoption into the Comprehensive Plan
	MID TERM
CW6	Supporting technology that improves efficiency and data sharing
CW7	Supporting legislation, ordinances, and policies that promote traffic safety and/or patient outcome (e.g., mandated driver's education) and likewise opposing legislation, ordinances, and policies that would detrimentally impact transportation safety and/or patient outcome
CW8	Expanding the Safe Communities Program into cities within the County
	LONG TERM
CW9	Updating the TSAP to ensure it remains current
CW10	Continuing to fund, support, promote and expand the Safe Communities Program
CW11	Developing and implementing a sustainability model for TSAP-related initiatives

EDUCATION

Human factors are a primary contributing cause to transportation crashes. Educational efforts seek to create drivers who are informed about safe driving and promote an overall Safety Culture. These action items will be led by County agencies and external organizations and agencies.

	SHORT TERM
EDU1	Support partner safety programs from Oregon Impact, Clackamas County 9-1-1, and Alliance for Community Traffic Safety (ACTS) Oregon
EDU2	Use safety messaging strategies, including monitor/kiosk systems, public safety announcements, vehicle wraps, <i>Mik and Nero</i> comic series, and signal cabinets for broad outreach
EDU3	Support infant/child passenger safety with car/booster seat and seat belt education. If feasible, offer reduced priced seats for low income families
EDU4	Provide ongoing targeted safety education to: Young children (Kindergarten-3 rd grade) and their parents emphasizing safe crossing practices, not playing behind vehicles or near streets, and the importance of adult supervision. Elementary school children (grades 4-6) emphasizing pedestrian safety, bicycle and skateboard safety, and school bus safety. Teens (grades 7-12) emphasizing distracted driving, impaired driving, graduated driving license compliance, aggressive driving, and speed.
EDU5	Use a variety of forums including safety fairs, school presentations, town halls, and community events to educate county citizens
EDU6	Increase the use of social media in education and outreach
	MID TERM
EDU7	Seek additional funding (grants/donations), utilize volunteers, and investigate other methods to keep the Safe Communities Program's operations cost-effective
EDU8	Conduct internal and external training regarding the goals and mission of this TSAP
EDU9	Find methods to educate diverse populations of all income levels regarding safety
EDU10	Provide focused education on populations overrepresented in crash and citation data
EDU11	Educate citizens about traffic laws
EDU12	Incorporate safety education for multiple modes of travel, including pedestrian, bike, transit, train, motorcycle, school bus, and personal motor vehicle, as appropriate
EDU13	Develop a formal clearinghouse/forum for information sharing regarding safety-related activities
	LONG TERM
EDU14	Continue educational activities
EDU15	Support Safety Culture work group goals and objectives

ENFORCEMENT

Enforcement actions will be led by law enforcement agencies within the County, with support provided by the Safe Communities Program and other County agencies.

	SHORT TERM
ENF1	Enhance Driving Under the Influence (DUI) and impaired driving enforcement
ENF2	Continuation/expansion of the Minor Decoy Operations program
ENF3	Assign resources to address Clackamas County Sheriff's Office (CCSO) top ten crash locations in Clackamas County
ENF4	Assign one law enforcement representative to the Safe Communities Program Work Group
	MID TERM
ENF5	Enhance DUI and impaired driving enforcement activities through: Data-driven Saturation Patrols Enhanced training, including, Drug Recognition Training (DRE & K9), Standardized Field Sobriety Tests training, and wet labs A dedicated DUI enforcement unit
ENF6	Employ technology such as e-Citation & e-Crash to maximize efficiency and increase data sharing
ENF7	Enforce Graduated Driving License (GDL) compliance for youth drivers
ENF8	Increase Motor Carrier Safety Inspections and sanctions as needed
ENF9	Conduct work zone, chain enforcement, and other specialized details
ENF10	Continue to support and expand traffic unit
ENF11	Deploy resources based on safety assessments
ENF12	Target distracted driving in outreach and enforcement efforts
	LONG TERM
ENF13	Enhance DUI and impaired driving enforcement activities by working with county officials to investigate repeat DUI driver offender programs
ENF14	Support Data-Driven Approaches to Crime and Traffic Safety (DDACTS)

EMERGENCY MEDICAL SERVICES

Emergency Medical Services (EMS) actions will be led by EMS companies or County agencies.

	SHORT TERM
EMS1	Assign one Emergency Medical Services (EMS) representative to the Safe Communities Program Work Group
EMS2	Work with the Emergency Medical Services Council to improve EMS reporting for the purposes of safety audits
EMS3	Work with stakeholders to sustain coordinated systems for Level 1 trauma centers
	MID TERM
EMS4	Work with Emergency Medical Service Council and other stakeholders to ensure maximum efficiency with urban and rural response times through techniques such as activation of Life Flight as requested by crews en route to crash scenes
EMS5	Work with stakeholders to identify equipment upgrades or enhancements that would improve patient outcome (e.g., Life Flight landing zone equipment)
EMS6	Support evidence-based EMS research and review opportunities to improve it
EMS7	Improve EMS data reliability with a goal to have an electronic patient care record that is complete for each incident from the initial contact to a public safety answering point (9-1-1), to the outcome, including hospital outcomes when appropriate
EMS8	Review patient transport time data and work with stakeholders to fill gaps through voluntary or contractual requirements
	LONG TERM
EMS9	Support quality assurance for medical delivery and review improvement opportunities

ENGINEERING

Engineering is primarily the responsibility of the Clackamas County Department of Transportation and Development. Action items in this category range from implementing specific countermeasures to improving data management.

	SHORT TERM
ENG1	Continue Safety Corridor Program
ENG2	Convene a group to investigate incorporating increased safety analysis requirements into development review as outlined in the TSAP
ENG3	Research the relationship between capacity and safety improvements
ENG4	Increase the focus on safety in development review by: Developing and implementing crash frequency standards Assessing impact fees for trips through Safety Focus roadways and intersections
ENG5	Collect data on at-risk indicators (e.g., 9-1-1 calls)
	MID TERM
ENG6	Develop a policy and practice for incorporating safety assessments into project development, design, and construction
ENG7	Work with Transportation Maintenance to develop internal policies for integrating Highway Safety Manual (HSM) principles into maintenance practices
ENG8	Deploy safety countermeasures related to safety emphasis areas
ENG9	Integrate Roadway Infrastructure Management Systems (RIMS), crash, and traffic databases
ENG10	Screen network for overrepresentation of emphasis area crashes
ENG11	Integrate the HSM predictive method into: Countermeasure identification & analysis Alternatives evaluation Safety analyses
ENG12	Develop a formal method for sharing safety data with partners (i.e., newsletter, website, presentation)
ENG13	Integrate Road Safety Audits (RSAs) into the project development process for new roads and intersections. Encourage RSAs on existing roads and intersections.
ENG14	Begin incorporating additional roadway information necessary for HSM Predictive Method analyses into roadway database for segments and intersections
ENG15	Automate network screening by creating a custom tool or purchase an off-the-shelf tool
ENG16	Fully integrate HSM procedures into the Development Review Process
	LONG TERM
ENG17	Add curve data into roadway database
ENG18	Incorporate HSM Predictive Method analysis of roadways and intersections
ENG19	Implement network screening using a safety performance function (SPF) based performance measure from the HSM. Use the results to prioritize improvements in the CIP, TSP, and other planning documents

EVALUATION

Evaluation efforts are a continuous process and will be primarily led by the traffic engineering division and the Safe Communities Program, with support from other County departments and external stakeholders.

	EVALUTION
EVAL1	Provide quarterly updates to the Board of County Commissioners on crash occurrence and Safe Communities Program activities
EVAL2	Work with county departments to create and deploy a comprehensive survey covering transportation-related attitudes, behaviors, and projects
EVAL3	Evaluate the effectiveness of the Safety Culture work group by way of outcomes that are measurable and sustainable
EVAL4	Review crash and safety-related data on an annual basis with respect to TSAP goals
EVAL5	Refine and review other datasets to determine if emphasis area crashes are being reduced and experiencing changing trends

MOVING THE PLAN FORWARD

The greatest challenge of most plans is implementation. Success of the TSAP requires strong commitments and dynamic partnerships. As stewards of the transportation system, the County will strive to fully implement this plan.

The action items described above are too broad for any single department or group to implement on its own. Implementation will need to be a well-coordinated effort. The Safe Communities Program is best positioned for being the lead in monitoring and championing implementation of this TSAP given its current coordination activities and contact network. The program will accomplish much of this work with the County-wide Safety Culture work group identified in the short-term County-wide action items, as this group will include representatives from multiple County departments.

To maintain the TSAP as a relevant document it needs to be updated regularly. The TSAP could be updated in conjunction with efforts to update the County's TSP. Updating the TSAP in combination with the TSP will allow the TSAP to be seamlessly integrated with the County's overall transportation vision.

CONCLUSION

The success of this TSAP can ultimately be measured in the progress the County makes toward achieving the overall goal laid out in the beginning of this plan: *to reduce the number of fatalities and serious injuries due to crashes in the next 10 years*. Evaluation needs to be included as part of each activity so that actions, projects, and partnerships can be modified as needed. The ability to adjust the plan will better help build a road to success and, ultimately, help the County achieve its goal of a 50-percent reduction in fatal and serious injury crashes by 2022.

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Part 3: Appendices



PART 3: APPENDICES

Appendix A – Comprehensive Plan Language Memorandum

Appendix B – Data Analysis Summary Memorandum

Appendix C – Countermeasure Summary Sheets

Appendix D – Information on Additional Programmatic Areas

Appendix E – Survey Results

Appendix A
Comprehensive Plan Language Memorandum





MEMORANDUM

Date: June 19, 2012 Project #: 11235.0
To: Joe Marek, PE, PTOE; Clackamas County
CC: Patty McMillan, Clackamas County
From: Brian Ray, PE; Nick Foster, and John Ringert, PE
Project: Clackamas County Transportation Safety Action Plan
Subject: Draft Comprehensive Plan Language

Kittelison & Associates, Inc. (KAI) is assisting Clackamas County to prepare a county-wide transportation safety action plan (TSAP). This plan will ultimately become the action plan for the County's *Slow to Zero* campaign for improving transportation safety. To incorporate the TSAP into County policy, KAI drafted language to increase the emphasis the County's Comprehensive Plan places on transportation safety and clarify the manner in which it does so. Our text is meant to support ongoing interagency (e.g. Traffic Engineering, Sheriff's Office, Office for Children and Families, ODOT, Fire, Communications, school districts, and City agencies) and private sector participation (e.g. emergency response providers, youth and family advocates, grant and volunteer providers, etc...) in improving the safety culture of Clackamas County. This memorandum provides a draft version of this text for the Comprehensive Plan and describes the documents reviewed as part of this process. This draft text will evolve to include more specific measures once the data analysis portion of the project is complete.

DOCUMENT REVIEW

KAI staff reviewed County, Regional and State planning documents to consider their roles, relationships, and opportunities to coordinate with the County Comprehensive Plan. In summary, the documents provide useful guidance in helping the County coordinate its plan with other efforts. The following documents were reviewed in developing the draft Comprehensive Plan language:

- *Oregon Transportation Safety Action Plan (TSAP, 2004)* – This statewide plan is an element of the *Oregon Transportation Plan*. It contains a vision for improved transportation safety in Oregon, implemented through 69 actions, with 9 actions being considered key. A 2006 amendment identified priority emphasis areas to be addressed through engineering strategies in order to bring the TSAP into full compliance with the guidance provided by SAFETEA-LU federal authorization.
- *Oregon Transportation Plan (2006)* – This is the guiding document for statewide transportation policy and contains a safety goal (5) and supporting policies and strategies.

- *Metro Regional Transportation Plan (2004)* – Metro’s plan contains policies for regional planning efforts, including a policy (20.3) stating that safety related projects should be given utmost priority.
- *Clackamas County Comprehensive Plan (2008)* – This is the County’s guiding policy document for planning and includes a transportation chapter addressing the County’s transportation needs.

DRAFT COMPREHENSIVE PLAN LANGUAGE

The draft language proposed for Clackamas County’s Comprehensive Plan is separated into two subsections in this memo. The first is a draft new section on safety. Following this, draft language to be incorporated into existing sections of the comprehensive plan is provided. The following text stems from our review of the County, Regional, and State planning documents, what we understand to be County objectives in initiating a “culture of safety”, and KAI project experience in implementing multimodal safety plans.

Safety Section

From 2005 to 2009, there were approximately 160 fatalities and 1,245 serious injuries in Clackamas County due to crashes. The County has a strong stated desire to improve the safety of its system for all users and reduce the number and severity of traffic crashes for future years. The County seeks to address existing known problems and proactively attempt to reduce serious crashes. Improving safety is a truly multimodal concern that affects each and every resident of the County. The County intends to be a leader in the state of Oregon in implementing innovative strategies for reducing fatal and serious injury crashes and working with other agencies in the state to improve safety across Oregon.

Goal:

- As part of initiating a Safety Culture, the County will work collaboratively with state, regional, and local agencies and County residents to reduce the number of fatalities and serious injuries on roadways in Clackamas County by one-half in the next 10 years. Based on the 2005-2009 average number of fatalities and serious injuries due to crashes, this corresponds to saving 16 lives and preventing 125 serious injuries annually at the completion of the program.

Objectives:

- **Setting the standard and foundation for developing a Safety Culture in Clackamas County.** Simply put, “Lead by Example!” To successfully build a Safety Culture within the County, staff and elected officials must lead the way through their actions, regulations, policies and practices at all levels. Recognizing that this is an iterative process accomplished through partnering and spreading the message, the County is ready to take up this task.

- **Aligning County departments and external safety groups to work toward common state, regional, county, and city safety goals.** Using mutually beneficial partnerships, such as the work of the Safe Communities Program, over the past seven years, the safety community within the County has been able to better focus its efforts and better coordinate resources towards common goals. In other words, collective groups have become more aligned. This movement has been a grass roots effort percolating from the staff and community level and it has started to draw the attention of policy and decision makers. Continued growth depends on decision and policy makers elevating safety in their planning processes. The result will be increased coordination and partnerships coupled with policies, standards and directional focus strongly rooted around safety.
- **Integrating roadway, safety, and traffic data management sources.** Success in building a Safety Culture and ultimately reducing fatal and injury crashes depends on a data driven approach to help us understand and diagnose the issues and potential solutions as well as to shape policy and justify expenditures. Data availability, integration, and mapping capabilities have changed exponentially over the past ten years. What was not possible just a few years ago is now easily accomplished. With these advances, our ability to tell the safety story has been greatly improved. Examples such as mapping multiple data fields such as crash types and cause factors allows decision makers and the public to understand and relate to the safety of the system which, correspondingly, helps them to understand and support various safety efforts.
- **Integrating HSM principles.** The publication of the First Edition of the *Highway Safety Manual* (HSM) (Reference 3) set the stage for developing a robust and comprehensive safety assessment and mitigation process. As full implementation of the manual occurs over the next several years, safety will change from what has often been a subjective and reactive assessment to a more objective, quantitative, and proactive process. As the need for justification of investments increases, the HSM provides the tools to measure the success of our current investments and anticipate safety solutions needed in the future.

Action Items:

The County has identified action items that will be undertaken over the next several years to potentially improve transportation safety in Clackamas County. These action items have been developed by the County working in consultation with its safety partners and the project team, and drawing on the analysis described previously. For organizational purposes, they are divided into six categories: county-wide action items and action items related to each of the 5E's. Within each category, items are grouped by a targeted timeframe that has been set by County staff: short-term (1-2 years), mid-term (3-5 years), and long-term (6+ years).

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	LONG TERM
CW9	Updating the TSAP to ensure it remains current
CW10	Continuing to fund, support, promote and expand the Safe Communities Program
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	Teens (grades 7-12) emphasizing distracted driving, impaired driving, graduated driving license compliance, aggressive driving, and speed.
EDU5	Use a variety of forums including safety fairs, school presentations, town halls, and community events to educate county citizens
EDU6	Increase the use of social media in education and outreach
	MID TERM
EDU7	Seek additional funding (grants/donations), utilize volunteers, and investigate other methods to keep the Safe Communities Program's operations cost-effective
EDU8	Conduct internal and external training regarding the goals and mission of this TSAP
EDU9	Find methods to educate diverse populations of all income levels regarding safety
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EDU12	Incorporate safety education for multiple modes of travel, including pedestrian, bike, transit, train, motorcycle, school bus, and personal motor vehicle, as appropriate
EDU13	Develop a formal clearinghouse/forum for information sharing regarding safety-related activities
	LONG TERM
EDU14	Continue educational activities
EDU15	Support Safety Culture work group goals and objectives

Enforcement

Enforcement actions will be led by law enforcement agencies within the County, with support provided by the Safe Communities Program and other County agencies.

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ENF1	Enhance Driving Under the Influence (DUI) and impaired driving enforcement
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ENF5	Enhance DUI and impaired driving enforcement activities through: Data-driven Saturation Patrols Enhanced training, including, Drug Recognition Training (DRE & K9), Standardized Field Sobriety Tests training, and wet labs A dedicated DUI enforcement unit
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ENF7	Enforce Graduated Driving License (GDL) compliance for youth drivers
ENF8	Increase Motor Carrier Safety Inspections and sanctions as needed
ENF9	Conduct work zone, chain enforcement, and other specialized details
ENF10	Continue to support and expand traffic unit
ENF11	Deploy resources based on safety assessments
ENF12	Target distracted driving in outreach and enforcement efforts
	LONG TERM
ENF13	Enhance DUI and impaired driving enforcement activities by working with county officials to investigate repeat DUI driver offender programs
ENF14	Support Data-Driven Approaches to Crime and Traffic Safety (DDACTS)

Emergency Medical Services

Emergency Medical Services (EMS) actions will be led by EMS companies or County agencies.

	SHORT TERM
EMS1	Assign one Emergency Medical Services (EMS) representative to the Safe Communities Program Work Group
EMS2	Work with the Emergency Medical Services Council to improve EMS reporting for the purposes of safety audits
EMS3	Work with stakeholders to sustain coordinated systems for Level 1 trauma centers
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EMS4	Work with Emergency Medical Service Council and other stakeholders to ensure maximum efficiency with urban and rural response times through techniques such as activation of Life Flight as requested by crews en route to crash scenes
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EMS8	Review patient transport time data and work with stakeholders to fill gaps through voluntary or contractual requirements
	LONG TERM
EMS9	Support quality assurance for medical delivery and review improvement opportunities

Engineering

Engineering is primarily the responsibility of the Clackamas County Department of Transportation and Development. Action items in this category range from implementing specific countermeasures to improving data management.

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ENG2	Convene a group to investigate incorporating increased safety analysis requirements into development review as outlined in the TSAP
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ENG5	Collect data on at-risk indicators (e.g., 9-1-1 calls)
	MID TERM
ENG6	Develop a policy and practice for incorporating safety assessments into project development, design, and construction
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ENG15	Automate network screening by creating a custom tool or purchase an off-the-shelf tool
ENG16	Fully integrate HSM procedures into the Development Review Process
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ENG17	Add curve data into roadway database
ENG18	Incorporate HSM Predictive Method analysis of roadways and intersections
ENG19	Implement network screening using a safety performance function (SPF) based performance measure from the HSM. Use the results to prioritize improvements in the CIP, TSP, and other planning documents

Evaluation

Evaluation efforts are a continuous process and will be primarily led by the traffic engineering division and the Safe Communities Program, with support from other departments in the County and external stakeholders.

	EVALUTION
EVAL1	Provide quarterly updates to the Board of County Commissioners on crash occurrence and Safe Communities Program activities
EVAL2	Work with county departments to create and deploy a comprehensive survey covering transportation-related attitudes, behaviors, and projects
EVAL3	Evaluate the effectiveness of the Safety Culture work group by way of outcomes that are measurable and sustainable
EVAL4	Review crash and safety-related data on an annual basis with respect to TSAP goals
EVAL5	Refine and review other datasets to determine if emphasis area crashes are being reduced and experiencing changing trends

Incorporating Safety into Existing Sections

The following provides suggested language that can be incorporated into existing sections of the Comprehensive Plan.

GENERAL TRANSPORTATION GOALS

Add the following goal:

- As part of initiating a Safety Culture, the County will work collaboratively with state, regional, and local agencies and County residents to reduce the number of fatalities and serious injuries on roadways in Clackamas County by one-half in the next 10 years. Based on the 2005-2009 average number of fatalities and serious injuries due to crashes, this corresponds to saving 16 lives and preventing 125 serious injuries annually at the completion of the program.

ROADWAYS

Add the following text to the following subsections:

Needed Roadway Improvements

Modify Policy 7.0 as follows (*modified text in italics*):

- Fund and build the roadway improvements needed to accommodate and appropriately manage future traffic demands for the next 20 years *and reduce fatality and serious injury crashes...*

Improvements to Serve Development

Modify Policies 15.0, 21.0, 22.0, 24.0, and 26.0 as follows (*modified text in italics*):

- 15.0 - ...off-site improvements for new developments and land divisions necessary to *safely* handle expected traffic loads and travel by alternative modes.
- 21.0 - ...improve circulation *and safety...*
- 22.0 - ...decreases average trip length *and improves safety.*
- 24.0 - ...and speeds *in order to improve roadway safety.*
- 26.0 - ...connectivity. *The owner of private road should demonstrate that access to the private road would not significantly impact the safety of the County road it connects to.*

TRANSIT

Add the following text to the following subsections:

Goals

- Provide safe access to transit stops.

Policies

- Evaluate and improve the safety and comfort of access to transit stops when planning and designing roadway projects.
- Coordinate with TriMet to provide adequate security at light-rail stations and transit centers
- Educate transit riders on how to make themselves visible in the dark

PEDESTRIAN AND BICYCLE FACILITIES

Add the following text to the following subsections:

Policies

- Coordinate with area Safe Routes to School (SRTS) programs to implement improvements and outreach and educational campaigns that will increase the safety of children bicycling and walking
- Explicitly consider pedestrian and bicycle safety when planning and designing roadway improvements
- Work with driver's educational programs to ensure that cyclist and pedestrian awareness is taught to young drivers

Appendix B
Data Analysis Summary Memorandum



Technical Memorandum

To: Kittelson & Associates, Inc.
From: SAIC
Subject: Data Analysis Findings
Date: October 25, 2011

The purpose of this technical memorandum is to provide information gained during the data analysis that outlines trends and significant findings to define the direction for reducing traffic fatalities and serious injuries in Clackamas County. For the purposes of this project the research team analyzed traffic crashes from 2005 to 2009.

Overall Findings

From 2005 to 2009, roadway crashes averaged approximately 3,900 per year on all roadways within the County. As shown in Figure 1, the number of traffic fatalities spiked to a high of 41 in 2005, but leveled over the next 4 years to about 30 per year on all roads.

County-maintained vs. All Roads. On the County-maintained system, we assumed that both infrastructure and behavioral modifications would be considered as potential treatments to improve safety. On other roadway types not maintained by the County (e.g., city streets, State routes, Interstates), the Transportation Safety Action Plan (TSAP) will include only human behavior-related strategies, as only through behavior modification efforts will the County influence non-county roads. Any infrastructure improvements on these routes would need to be addressed by other jurisdictions (e.g., cities, Oregon DOT).

The data revealed three distinct areas that could benefit from infrastructure and behavioral changes on County-maintained roads: roadway departure, young drivers and aggressive drivers.¹

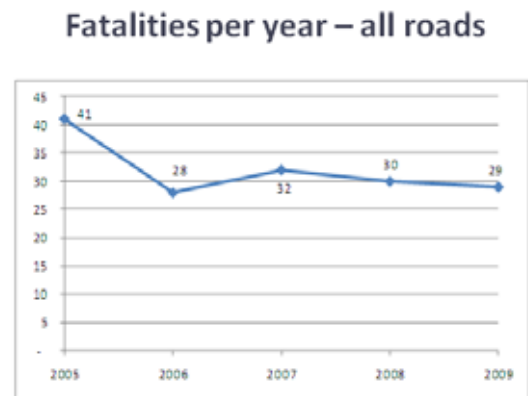


Figure 1. Traffic Fatalities in Clackamas County

¹ Crashes may be attributed to multiple contributing circumstances and overlap into several categories. For this reason, crash type percentages cannot be added cumulatively.

Table 1. Contributing Circumstances to Severe Crashes, 2005-2009

Contributing Circumstances	Fatal/Severe Crashes	Percent of all Fatal/Severe Crashes
Aggressive Driving	221	62%
Young Drivers (15-25)	166	47%
Roadway Departure	157	44%

Intersection Crashes. Data analysis shows that Clackamas County severe intersection crashes were lower than what is typically seen nationally. On County-maintained roads about 3 percent of fatal and severe crashes occurred at intersections. For all roads in the County, 4 percent were at intersections. Nationally, this number is typically between 15 and 20 percent.²

Roadway Departure

Roadway departure crashes accounted for 34 percent of all crashes in Clackamas County where fatalities and serious injuries were involved. Roadway departure crashes meet the following criteria:

- Single vehicle non-pedestrian, non-bicycle crashes.
- Head-on crashes and sideswipe crashes where one vehicle was traveling east and one west, or one vehicle was traveling north and one south.
- All other multi-vehicle crashes where one of the first three identified crash events was a fixed object and none of the first three events involved another vehicle.
- Does not include intersection crashes.
- Does not include any other pedestrian or ped/cycle-related crashes.

On Clackamas County-maintained roads, roadway departure crashes were even more common, resulting in 44 percent of fatal and serious injury crashes. Nearly 25 percent of these roadway departure crashes on County roads were collisions with trees.

Within the subset of roadway departure crashes on County-maintained roads, the collision types in the figure below are associated with the highest number of traffic fatalities:

Head-on Crashes. “Head-on + Sideswipe Meeting” fatalities were more than double the percentage of the total that is typically experienced around the country (about 10 percent). This crash type accounted for 21 percent of traffic fatalities on County roads and 23 percent of fatalities on all roadways within the County.

Fixed Object Crashes. Fixed object crashes far exceeded the national average as well, especially on County-maintained roads. On these highways, nearly half (49 percent) of traffic fatalities included the vehicle hitting a fixed object.

² FHWA Office of Safety. <http://safety.fhwa.dot.gov/intersection/>

Table 2. Contributing Circumstances to Roadway Departure Fatalities, 2005-2009

Crash Type	Percentage of Traffic Fatalities, 2005-2009		
	County Maintained Roads	All Roads in County	National Average
Head-on + Sideswipe Meeting	21%	23%	10% ³
Fixed Object	49%	33%	22% ⁴

Aggressive Driving

Aggressive driving was attributed to 57 percent of all fatal or serious injury crashes on all roads in Clackamas County. The breakdown of contributing circumstances to aggressive driving crashes is shown in Figure 2.

On County-maintained roads, aggressive driving crashes were the most common contributing circumstance among crashes involving a fatality or serious injury at 62 percent. Specifically, speeding-related crashes were a significantly higher percentage of crashes on Clackamas County-maintained roads (41 percent) than all routes in the county (31 percent).

Within the subset of fatal and serious aggressive driving crashes on all routes, the most common other circumstances are shown in Table 3.

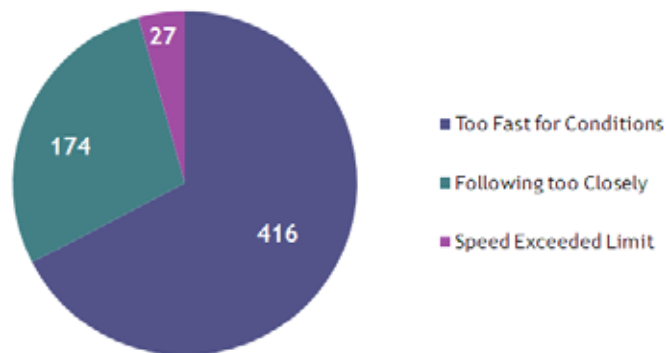


Figure 2. Contributing Circumstances to Aggressive Driving Crashes, 2005-2009

³ Fatality Analysis Reporting System (FARS), 2005-2009

⁴ Insurance Institute for Highway Safety. http://www.iihs.org/research/fatality_facts_2009/fixedObject.html

Table 3. Contributing Circumstances to Aggressive Driving Crashes, 2005-2009

Contributing Circumstance	Fatal/Severe Crashes	Percent of Aggressive Fatal/Severe Crashes
Roadway Departure	252	42%
Young Driver Involved (15-25)	274	45%
Alcohol or Drug Impairment	68	11%

Young Drivers (Ages 15-25)

Young drivers 15 to 25 years of age were involved in 44 percent of all fatal and serious injury crashes occurring on all roads in Clackamas County. On County-maintained roads, the number was even higher: 47 percent.

On all roadways in the county, the subset of fatal and serious young driver crashes included the following contributing circumstances, shown in Table 4.

Table 4. Contributing Circumstances to Young Driver Crashes, 2005-2009

Contributing Circumstance	Fatal/Severe Crashes	Percent of Young Driver Fatal/Severe Crashes
Aggressive Driving	274	61%
Roadway Departure	140	31%
Alcohol or Drug Impairment	45	10%

Appendix C
Countermeasure Summary Sheets



Aggressive Driving Crashes

Aggressive driving is defined by the U.S. Department of Transportation as driving actions that markedly exceed the norms of safe driving behavior and that directly affect other road users by placing them in unnecessary danger.¹ In the data analysis conducted for the Clackamas County TSAP, aggressive driving is defined using the following contributing circumstances from the crash report forms:

- Too fast for conditions
- Following too closely
- Driving in excess of posted speed

Aggressive driving was attributed to 57 percent of all fatal or serious injury crashes on all roads in Clackamas County. The following are recommended countermeasures to address aggressive driving crashes in Clackamas County.

Targeted Corridor Speed Enforcement

Identifying corridors with a history of speed related crashes supports a targeted enforcement and education campaign to reduce the number and severity of speeding crashes. Multiple strategies are available for developing successful targeted enforcement efforts. The National Highway Traffic Safety Administration (NHTSA) outlines planning and implementation of an aggressive driving campaign.¹

<http://www.nhtsa.gov/people/injury/enforce/aggressdrivers/aggenforce/toc.html>

Crash type addressed

Aggressive driving crashes related to exceeding the posted speed limit, driving too fast for existing conditions, or driving considerably faster than prevailing travel speeds of other vehicles on the same roadway.

Where to use

Urban or rural corridors with a history of speed related crashes.

Why it works

Targeted enforcement campaigns can include an education component to share with the driving public where and when additional enforcement will be present, thereby changing driving behavior. Combining public education efforts with law enforcement campaigns has been shown to be more effective than individual efforts at improving traffic safety.

Approximate Cost

Enforcement costs vary based on the extent of use, and whether enforcement will consist of the daily activities of law enforcement personnel or used in primarily overtime situations. Grants are available through State's Highway Safety Improvement Programs (HSIP), Strategic Highway Safety Plans (SHSP) and NHTSA-administered funding sources.

Crash Modification Factor²

0.65-0.90 for speed related crashes.

¹ "Aggressive Driving Enforcement: Strategies for Implementing Best Practices," NHTSA.

<http://www.nhtsa.gov/people/injury/enforce/aggressdrivers/aggenforce/toc.html>

² "Countermeasures That Work: A Highway Safety Countermeasures Guide For State Highway Safety Offices", NHTSA, Sixth Edition, 2011.

Establishing Appropriate Speed Limits

Treatment includes establishing speed limits that are rational and meet driver expectations. Factors that can influence speed limits are:

- 85th percentile speed
- Crash history
- Number and type of ingress/egress points
- On-street parking
- Volume of pedestrians
- Roadway geometrics³

Crash type addressed

Aggressive driving crashes related to exceeding the posted speed limit, driving too fast for existing conditions, or driving considerably faster than the prevailing travel speeds of other vehicles on the same roadway.

Where to use

Speed limits are used on all roadways, whether by legislative action or administrative acts from a local agency.

Establishing effective speed limits must include the consideration of broad public acceptance, roadway characteristics, active enforcement, and publicity.⁴

Agencies can first establish homogenous speed limits for all congruent sections of roadway, and then address sections with unique design characteristics or specific zoning and special-case issues.

Why it works

Setting speed limits that are in line with driver expectations and acceptance can lead to a change in driver behavior, especially when coupled with public education and enforcement.

Approximate Cost

Limited costs associated with new signage. Costs of enforcement can be applied in the overall estimate.

Crash Modification Factor

The CMF for posting an appropriate speed limit at a location is dependent on the speed limit, ingress/egress points, crash history and severity, and prevailing vehicle speeds before the change.

³ Federal Highway Administration, Report No. FHWA/RD-85/096. July 1985.

⁴ Transportation Research Board, 1998.

Signal Retiming and Coordination

Crash type addressed

Aggressive driving crashes attributed to motorists running through the red phase at traffic signals.

Where to use

At any signalized intersection, particularly where red-light running is frequent or the location has experienced a high number of angle crashes.

Why it works

Signal timing that follows ITE guidelines for clearance intervals and/or provides coordination of a signal system reduces the delay experienced by drivers. Reducing delay can lead to less aggressive motorist behavior at traffic signals.

Approximate Cost

Cost for traffic staff to develop and implement signal timing plans.

Crash Modification Factor ⁵

0.92 for all crash types for using ITE clearance intervals

0.96 for angle crashes for using ITE clearance intervals

Automated Speed Enforcement

Due to the limitations of law enforcement agencies to be ever-present on a jurisdiction's roadways, technology options are available to support enforcement efforts to curb aggressive driving. One of these tools is the automated speed enforcement system, consisting of a speed collection device (e.g., radar or lidar), a camera to identify the vehicle (and in some cases, the driver), and computer equipment to collect the data and transmit it to the agency. In most cases a citation is sent to violators by mail.

Crash type addressed

Aggressive driving crashes related to exceeding the posted speed limit.

Where to use

Automated enforcement radar equipment is located in places of known speed limit disobedience or at locations where traditional speed enforcement approaches are not an option (e.g., lack of shoulder presence, limited access right of way, lack of ingress/egress locations).

Why it works

In locations known to drivers as having automated speed enforcement, drivers may reduce their speeds to reflect prevailing traffic speeds or speeds near the established speed limit.

Approximate Cost

Cost varies. Equipment can be purchased, leased or used from a contractor in exchange for a share of the revenues.⁶

Crash Modification Factor ⁷

0.84 for speed-related crashes with the installation of speed enforcement cameras.

⁵ <http://www.cmfclearinghouse.org>

⁶ "Speed Enforcement Camera Systems and Operational Guidelines", NHTSA and FHWA, 2008.

⁷ "Estimating the Longer Term Safety Effects of Speed Enforcement Cameras in Charlotte, NC", Moon and Hummer, Jan 2010.

Automated Red Light Enforcement

Crash type addressed

Aggressive driving crashes attributed to motorists running through red signal indications at traffic signals.

Where to use

Automated enforcement equipment can be used at intersections where red light running is a known problem or at locations where traditional enforcement approaches are difficult or risky (e.g., requiring an officer to run the red light himself/herself to catch a violator up ahead).

Why it works

In locations known to drivers as having automated red-light enforcement, drivers are more aware of the need to obey the signal indication. In some cases other non-automated signals have also experienced a reduction in red light running crashes.

Approximate Cost

Cost varies. Options for system operation and citation processing functions include agency owned/operated, contractor owned/operated or agency owned/contractor operated.⁸

Crash Modification Factor⁹

0.79 for angle crashes

1.18 for rear-end crashes. It is important to consider this trade off, as the total number of crashes at an intersection may increase. However, severe crashes are likely to decrease.

Public Education of Automated Enforcement Methods

Crash type addressed

All aggressive driving crashes that are speed and red light running related.

Where to use

County-wide.

Why it works

When tied to enforcement action, public information campaigns are shown increase compliance with existing speed limit and red light laws.

Approximate Cost

Varied based on the use of free public education advertisements or paid advertising campaigns

Crash Modification Factor¹⁰

0.90 for media coverage of installation of speed or red-light running enforcement cameras (can be applied in addition to the CMF for speed or red-light running enforcement cameras)

⁸ "Red Light Camera Systems Operation Guidelines", NHTSA & FHWA, 2005.

⁹ Table 14-28: Potential Crash Effects of Installing Red Light Cameras at Intersections, Highway Safety Manual, 2010.

¹⁰ "Estimating the Longer Term Safety Effects of Speed Enforcement Cameras in Charlotte, NC", Moon and Hummer, Jan 2010.

Young Driver Crashes

Young drivers 15-25 years of age are a vulnerable motorist group, as they have relatively little experience with handling the tasks of operating a vehicle and applying newly-acquired driving skills, especially with the number of in-vehicle distractions (e.g., radio, GPS, cell phones, passengers) present on most trips. In Clackamas County, young drivers stand to benefit significantly from roadway departure and aggressive driving countermeasures, given that nearly 50 percent of both types of crashes involve young drivers. In addition, the following targeted safety strategies could provide an additional benefit to young driver safety in the county.

Enforcement of Graduated Driver Licenses (GDL) and Zero Tolerance Laws

Public education of the laws regarding GDL and Zero Tolerance – combined with education of law enforcement personnel and aggressive, targeted enforcement – have the potential to reduce young driver crashes associated with impaired driving, distracted driving, drowsy driving, and risky behaviors such as speeding and non-compliance with traffic control.

Crash type addressed

Impaired driving, distracted driving, drowsy driving, speed-related crashes and crashes associated with driver inexperience.

Where to use

Large scale deployment of this strategy throughout the county will provide the greatest benefit.

Why it works

Holding young drivers accountable for the responsibilities associated with possessing a driver's license has been documented to effectively lower young driver crashes.

Approximate Cost

Varied based on the use of free public service announcements or paid advertising campaigns. Enforcement of GDL and zero tolerance laws can be integrated into existing enforcement detail, therefore requiring little additional costs.

Crash Modification Factor

Studies have shown that enforced GDL restrictions effectively reduce crashes involving young drivers between 20-40 percent.¹

¹ http://www.nsc.org/safety_road/TeenDriving/Documents/7-9500KeyGDLInfluences.pdf

The Role of Parents and Formal Driver Education

Parents:

Parents have an important role in youth driving. Each hour of instruction keeps teens more safe on the road, especially as they pass through the later stages of graduated licensing and leave parent supervision. Provisional license requirements include a minimum of 50 hours of supervised driving and approved traffic safety education course OR at least 100 hours of supervised driving. As well as supervising driving, parents should thoroughly understand Oregon's Graduated Driver Licensing (GDL) laws, establish family driving rules and limits, and set a good example for new drivers.

Driver Education:

A study completed in Oregon in 2005, reviewed teen driving records including 16, 17, 18, and 19-year old drivers and compared teens who took a formal driver education course to those who chose 100 hours of driving practice with their parents. Teens who took the formal driver course had a lower crash rate, lower traffic conviction rate, and lower driver suspension rate.²

In 2012, the Oregon Department of Transportation – Transportation Safety Division implemented the “Why Drive with Ed” campaign focused on parents with pre-licensed children to invoke parent engagement in the value of driver education. More information can be found at: www.whydriewithed.com.



Crash type addressed

Distracted driving, driving under the influence, and most other crash types. Additionally, lower citation and suspension rates for youth drivers who complete a formal driver education course.

Where to use

Large scale deployment of this strategy throughout the county will provide the greatest benefit.

Why it works

Studies have shown students who take a formal driver education course experience a:

- reduced crash rate of 11-21%,
- reduced traffic conviction rate of 39-57%
- reduced driver license suspension rate of 51-53%³

Approximate Cost

Oregon's Approved Driver Education Program reimburses schools that meet approved program requirements (approved curriculum; trained, qualified teachers; etc.) up to \$210 per student as a means to reduce the overall cost to parents. The tuition assistance for students who meet the following criteria:

- Obtain a current Oregon instruction permit by the first day of class.
- Complete the course before receiving their driver's license and before turning 18.
- Complete all course work within 90 days of starting the class.

² "The Oregon Parent Guide to Teen Driving." Oregon Department of Transportation.

³ Ibid

Enforcement of Primary Seatbelt Law

Crash type addressed

The severity of all crash types is reduced by seatbelt use.

Where to use

Large scale deployment of this strategy throughout the county will provide the greatest benefit.

Why it works

Numerous studies show a reduction in the severity of injuries that drivers and passengers sustain when involved in crashes.

Approximate Cost

Enforcement of the primary seatbelt law can be integrated into existing enforcement detail, therefore requiring little additional costs.

Crash Modification Factor

When lap/shoulder safety belts are used properly, they reduce the risk of fatal injury to front-seat occupants riding in passenger vehicles by 45 percent and the risk of moderate-to-critical injury by 50 percent.⁴

Social Norming

Crash type addressed

Crashes involving high-risk behavioral choices made by drivers (e.g., driving while impaired and distracted driving).

Where to use

County-wide. Campaigns can be used in media or through school programs.

Why it works

Social norming campaigns are built on the premise that an individual's behavior is influenced by his or her perceptions of how most people behave.⁵ By addressing issues that young drivers face with correct statistics, rather than myths, misperceptions, or facts that have been misconstrued, drivers are less likely to submit to the risky behavior involved in the campaign.

For example, surveys of young adults age 21 to 34 in Montana revealed that only 20 percent of respondents had driven in the previous month after consuming two or more alcoholic drinks, although more than 90 percent thought their peers had done so. Based on this finding, a paid media campaign was developed with the normative message, "Most Montana Young Adults (4 out of 5) Don't Drink and Drive." By the end of the campaign, there was a 13.7 percent decrease in young adults who reported driving after drinking.⁴

Approximate Cost

Varies based on the methods used to communicate the campaigns.

⁴ <http://www.nhtsa.gov/people/injury/airbags/occupantprotectionfacts/restraint.htm>, NHTSA.

⁵ "Countermeasures That Work: A Highway Safety Countermeasures Guide For State Highway Safety Offices", NHTSA, Sixth Edition, 2011.

Stricter Enforcement of No Texting While Driving/Hands Free Law

Oregon has banned the use of text messaging and handheld cell phones by all drivers, with hands-free attachments allowable only for those over 18 years of age. For drivers under the age of 18 with learner's permits or intermediate licenses, the ban applies to all cell phone use, regardless of whether a hands-free device is employed.

Crash type addressed

Crashes involving distracted driving.

Where to use

County-wide. Enforcement of this law can be incorporated into routine enforcement strategies.

Why it works

Strict enforcement of laws can reduce undesirable driver behavior. Reducing the number of distractions allows a driver to focus his or her attention on the operation of their vehicle and make timely adjustments to changing road conditions.

Approximate Cost

Enforcement of the hands free law can be integrated into existing enforcement detail, therefore requiring few additional costs.

Roadway Departure Crashes

Curves: Advanced Curve/Turn Warning Signs and Chevrons

Treatments include basic warning signs, chevron delineation signs, and advisory speed plaques. Additional elements, including doubled-up advanced warning signs and fluorescent sign sheeting, can enhance conspicuity of the curve/turn.

Crash type addressed

Roadway departure crashes attributed to motorists running off the road while attempting to negotiate a curve or turn in the roadway. In some situations, the driver was not aware they were approaching a curve or turn.¹

Where to use

Any curve or turn with a history of roadway departure crashes, and curves or turns with risk factors (e.g., unusual geometry, superelevation concerns, sharp radius).

Addressing curves based on the advisory speed criterion, as a minimum, will be required to meet the the 2009 MUTCD. According to Table 2C-5, warning signs are required on curves or turns where the advisory speed is 10 mph less than the posted speed. Alignment delineation (chevrons) or a one direction large arrow sign is required on curves or turns where the advisory speed is 15 mph less than the posted speed limit.

Why it works

Installing warning signs and chevrons provides information to motorists before they enter the curve, giving them a chance to reduce their approach speed as they enter the new horizontal alignment. Advisory speed plaques provide additional information about the relative “sharpness” of the curve or turn.

Approximate Cost

\$5,000 per curve

Crash Modification Factor²

0.70 for curve crashes

Curves: Flashing Beacons

A flashing beacon is typically placed above one or more advanced warning signs approaching a horizontal curve or turn.

Crash type addressed

Roadway departure crashes attributed to motorists running off the road while attempting to negotiate a curve or turn in the roadway. In some situations, the driver was not aware he or she was approaching a curve or turn.

Where to use

Any curve or turn with a very high number of roadway departure crashes, or a location that has not responded to basic and enhanced signing treatments.

Why it works

Flashing beacons can provide enhanced information to motorists before they enter the curve, giving them a chance to modify their approach speed as they enter the new horizontal alignment.

¹ Curve is typically defined as horizontal alignment measured above 30mph; a turn is typically defined as 30mph or below.

² Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes,” FHWA, 2008.

Approximate Cost

\$7,000 per curve

Crash Modification Factor³

0.85 for curve crashes (can be applied in addition to the CMF for signing treatments)

Pavement Marking (Centerline and Edgeline)**Crash type addressed**

Roadway departure crashes attributed to motorists running off the right side of the road, crossing the center line, or dropping off the roadway on an edge drop-off. Contributing circumstances include speed, inattention, and impairment.

Where to use

Any road is a candidate for this basic treatment – particular those with a history of run-off-road right, head-on, opposite-direction-sideswipe, or run-off-road-left crashes. Depending on the width of the roadway, various combinations of edge line and/or center line pavement markings may be the most appropriate.

Why it works

Pavement markings provide motorists important guidance information regarding the edge of the traveled way on the right and the location of the opposing lane on the left. When used around curves, pavement markings can serve as curve delineation.

Approximate Cost

\$2,000/lane mile

Crash Modification Factor⁴

0.67 (all crashes) for centerline markings

0.56-0.62 (all crashes) for edgeline markings

Rumble Strips**Crash type addressed**

Run-off-road-right, run-off road-left, and head-on crashes attributed to a vehicle leaving its lane of travel. Contributing circumstances include speeding, impaired driving, and inattention.

Where to use

Center line rumble strips/stripes can be used on virtually any roadway – especially those with a history of head-on crashes. Shoulder and edge line milled rumble strips/stripes should be used on roads with a history of roadway departure crashes.

In order to receive the full benefit, an agency should consider applying rumble strips/stripes systematically along an entire route instead of only at spot locations. For all rumble strips/stripes, pavement condition should be sufficient to accept milled rumble strips. For shoulder rumble strips, FHWA recommends a minimum 4 ft. shoulder. In situations

³ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

⁴ "Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

where shoulder width is not sufficient, an agency should consider edgeline rumble stripes (or mini-rumble stripes of 4 to 6 inches in width).

Why it works

Rumble strips provide an auditory indication and tactile rumble when driven on, alerting drivers that they are drifting out of their travel lane, giving them time to recover before they depart the roadway or cross the center line.

Approximate Cost

Edge line: \$6,000 per mile

Center line: \$3,000 per mile

Crash Modification Factor⁵

Shoulder/Edge line: 0.71 for severe run-off-road crashes

Centerline: 0.54 for severe head-on crashes

Alignment Delineation

Alignment delineation refers to Raised Pavement Markers (RPMs), and delineators on roadside objects (e.g., guard rail, cable barrier, concrete barrier)

Crash type addressed

Roadway departure crashes attributed to a vehicle leaving the traveled way. Contributing circumstances include speeding, impaired driving, and inattention.

Where to use

RPMs and other methods to delineate the alignment of the roadway for night driving should be considered on all sections of highway, with a focus on those sections that have high incidences and proportions of crashes in dark conditions.

Why it works

Alignment delineation provides information about the alignment of the roadway and the location of the lane to motorists, allowing them to stay in their lane.

Approximate Cost

\$5,000 per mile on average, but varies based on product used.

Crash Modification Factor⁶

0.75 - 0.96 for dark crashes, depending on the delineation used and the detailed crash history.

⁵ NCHRP Report 641 - Guidance for the Design and Application of Shoulder and Centerline Rumble Strips

⁶ Highway Safety Manual

High Friction Surface Treatment

High friction treatments include epoxy-based, microsurface, or chip seal overlays applied to the surface of the roadway.

Crash type addressed

Roadway departure crashes attributed to motorists sliding off the roadway. This treatment is most applicable in situations where the crashes have occurred on wet pavement.

Where to use

High friction treatments can address spot locations (e.g., a single curve, interchange ramp, bridge, or short roadway section). It should be used at locations with severe slick conditions that could benefit from increased friction. These locations can be identified by the history of wet pavement crashes and/or friction data collected on the roadway system.

Why it works

Vehicles often leave the road due to lack of friction – especially in wet conditions when water gets between the tires and pavement causing hydroplaning. The epoxy overlay can reduce the number of wet crashes by improving friction at specific locations of need.

Approximate Cost

\$50,000 per location, but varies based on product used (e.g., epoxy, thin lift overlay)

Crash Modification Factor⁷

0.57 for wet pavement-related crashes

Fixed Objects (Trees, Utility Poles)

Crash type addressed

Roadway departure crashes attributed to vehicles striking a fixed object on the side of the roadway. Common examples include trees and utility poles.

Where to use

Depending on the situation, fixed objects on any roadway should be addressed in the following prioritized order:

1. Remove the obstacle.
2. Redesign the obstacle so it can be safely traversed.
3. Relocate the obstacle to a point where it is less likely to be struck.
4. Reduce impact severity by using an appropriate breakaway device.
5. Use impact attenuation devices to shield the obstacle, reducing crash severity.
6. Protect the driver through redirection of the errant vehicle.
7. Mark the object to provide motorist information.

Regarding trees and utility poles, locations for removal/relocation should be prioritized based on crash history and crash risk. In these cases, risk is typically defined as proximity to the roadway and exposure, with closer fixed objects and sections with high traffic volumes having a higher risk.

⁷ Highway Safety Manual

Why it works

Removing, redesigning, marking, or relocating the fixed object reduces the likelihood of a crash. If a crash occurs, adding breakaway features, crash cushions, or redirection devices reduces crash severity.

Approximate Cost

\$25,000/mile for tree or utility pole removal/relocation

Crash Modification Factor⁸

0.29 (run-off road crashes) for removing or relocating fixed objects outside the clear zone.

⁸ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

Intersections

Signing and Marking Improvements at Stop-controlled Intersections

Treatments include advanced warning signs for major and minor road motorists, double-up Stop signs on the minor approach, and intersection pavement marking to increase conspicuity.

Crash type addressed

Right-angle and rear-end crashes attributed to drivers unaware of the intersection.

Where to use

Unsignalized intersections not clearly visible to approaching motorists, especially approaching motorists on the major road. The strategy is particularly appropriate for intersections with patterns of rear-end, right-angle, or turning crashes related to lack of driver awareness of the presence of the intersection.

Why it works

Installation of signing in advance of and at intersections will provide approaching motorists with additional information at these locations. Drivers should be more aware that the intersection is coming up, and therefore make informed decisions as they approach the intersection.

Approximate Cost

\$6,000 per intersection

Crash Modification Factor⁹

0.70 for all intersection-related crashes

Flashing Beacons at Stop-controlled Intersections

Flashing beacons are typically placed on top of the advanced warning signs and/or the Stop signs. In some cases they can be actuated to detect approaching vehicles.

Crash type addressed

Right-angle and rear-end crashes attributed to drivers unaware of the intersection or failing to stop at the Stop sign.

Where to use

Unsignalized intersections with patterns of right-angle crashes related to lack of driver awareness of the intersection on an uncontrolled approach and lack of driver awareness of the Stop sign on a stop-controlled approach.

Why it works

Flashing beacons indicate the presence of an intersection and can be effective in rural areas where there may be long stretches between intersections; they can also help at locations where nighttime visibility of intersections is an issue.

Approximate Cost

\$15,000 per intersection

Crash Modification Factor¹⁰

0.91 for all intersection related crashes (can be applied in addition to the CMF for signing and marking improvements)

⁹ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

¹⁰ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

Basic Sign and Signal Improvements at Signalized Intersections

This treatment can consist of any or all of the following:

- Back plates for all signal heads (may be reflectorized).
- 12-inch LED lenses and at least one signal head per approach lane.
- Signal clearance timing in accordance with Institute of Transportation Engineers (ITE) clearance formula.
- Elimination of flashing operation during night conditions.

Crash type addressed

Signalized intersection crashes attributed to drivers unaware of the intersection or failing to stop at the traffic signal.

Where to use

Signalized intersections with patterns of right-angle or rear-end crashes or risk of this type of crash due to sight distance or other conspicuity issues.

Why it works

The combination of this set of low-cost countermeasures provides additional information to the driver that a signal is ahead, and provides adequate clearance time for a vehicle entering at the end of green to clear the intersection.

Approximate Cost

Up to \$30,000 per intersection, depending on the number and type of treatments selected.

Crash Modification Factor¹¹

0.70 for all intersection-related crashes

Change Permitted/Protected Left Turns to Protected Only

A permitted/protected left turn signal indication provides for a protected left arrow during part of the signal cycle, and a permitted signal (typically a green ball or flashing yellow arrow) during another part of the cycle. This treatment converts the permitted portion of the left turn phase to protected-only.

Crash type addressed

Left turn crashes attributed to a left-turning driver pulling out in front of a conflicting through movement.

Where to use

Any signalized intersection that has permitted/protected left turn signal phasing – particularly those with a history of left-turn crashes. An operational analysis may be needed to identify potential effects on vehicle delay.

Why it works

Turning left on a permitted green signal indication is a difficult maneuver that requires a driver to be watching multiple things at the same time (e.g., traffic signal indication, approaching vehicles, pedestrians in the crosswalk, vehicles in the desired lane). Providing a protected movement for the left-turning motorists reduces the complexity of this maneuver, and removes the need for depth perception of oncoming traffic.

¹¹ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

Approximate Cost

\$15,000 per intersection

Crash Modification Factor¹²

0.52 for multi-vehicle left turn crashes

Pedestrian Improvements

Pedestrian treatments at intersections can include the following:

- Pedestrian countdown signals.
- Crosswalks (if none exist) in some situations.¹³
- Warning signs for active pedestrian crossings.
- Potential elimination of the permissive portion of any protected/permissive turning operation phase that creates substantial conflicts with crossing pedestrians.

Crash type addressed

Pedestrian-related crashes at stop-controlled and signalized intersections.

Where to use

Intersections with a history of pedestrian crashes, known pedestrian activity, and/or other risks of pedestrian crashes.

Why it works

Crosswalks and warning signs provide conspicuity of pedestrians to motorists. Countdown signals give pedestrians more information about the safest times to cross. Protected-only left turns reduce the number of conflicts between pedestrians and vehicles.

Approximate Cost

Up to \$30,000 per intersection, depending on the treatment chosen.

Crash Modification Factor¹⁴

0.60 for pedestrian-related crashes

Lighting Installation or Upgrade**Crash type addressed**

Intersections crashes occurring in low-light or dark conditions.

Where to use

Unlit intersections with substantial patterns of nighttime crashes. In particular, patterns of rear-end, right-angle, or turning crashes on the major road approaches may indicate that approaching drivers are unaware of the presence of the intersection.

¹² Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

¹³ Note that there are situations where crosswalks alone are not considered beneficial for safety (*Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations*, Zegeer, 2005)

¹⁴ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

Why it works

In many situations the only source of lighting for roadways is provided by vehicle headlights. Roadway lighting allows for greater visibility of the intersection which makes the intersection more conspicuous to motorists and provides aid in helping drivers determine their paths through the intersection by making signs and markings more visible.¹⁵

Approximate Cost

\$15,000 per intersection

Crash Modification Factor¹⁶

0.50 for dark crashes

High Friction Surface Treatment at Intersections

High friction treatments include epoxy-based, microsurface, or chip seal overlays applied to the surface of the intersection approaches.

Crash type addressed

Intersection crashes attributed to motorists sliding on wet pavement.

Where to use

Epoxy-based, microsurface, or chip seal overlays can address intersection approaches. The treatment should be used at locations with severe slick conditions that could benefit from increased friction.¹⁷

Why it works

Vehicles often lose control of their vehicle or are unable to stop due to lack of friction – especially in wet conditions when water gets between the tires and pavement causing hydroplaning. The epoxy overlay can reduce the number of wet crashes by improving friction at specific locations of need.

Approximate Cost

Varies based on product (e.g., epoxy, thin lift overlay)

Crash Modification Factor¹⁸

0.50 for wet pavement-related intersection crashes

¹⁵ Though not directly addressed, there is anecdotal evidence that installing lighting at intersections can also reduce daytime crashes, as the light poles themselves make the intersection more conspicuous from a distance.

¹⁶ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

¹⁷ Rear-end crashes may not indicate a friction problem, but some other issue, including sight distance limitations or traffic signal clearance interval issues.

¹⁸ Toolbox of Countermeasures and Their Potential Effectiveness for Roadway Departure Crashes," FHWA, 2008.

Appendix D
Information on Additional Programmatic Areas



APPENDIX D – NETWORK SCREENING

Network screening is discussed in Part B of the HSM and describes and applies Safety Performance Functions (SPFs) and Empirical Bayes (EB) methods to estimate expected crash frequency. The HSM also describes the concept of Regression to the Mean (RTM) in considering the random and varying nature of crash frequency over time. These terms are described briefly as follows:

- *Safety Performance Function*: A nonlinear regression equation that provides a base prediction of the number of crashes per year based on traffic volumes and basic roadway or intersection information (i.e., length of segment, number of travel lanes, median type, number of intersection legs, and type of intersection control).
- Empirical Bayes: A statistical method that ties the observed crash frequency history at a site to the predicted crash frequency; thereby accounting for RTM bias.
- Regression to the Mean: The tendency for extreme measures of crash frequency measures in one period to return toward an average condition in the next period. Failing to account for this is called “Regression to the Mean Bias.” This concept is illustrated in Figure D-1.

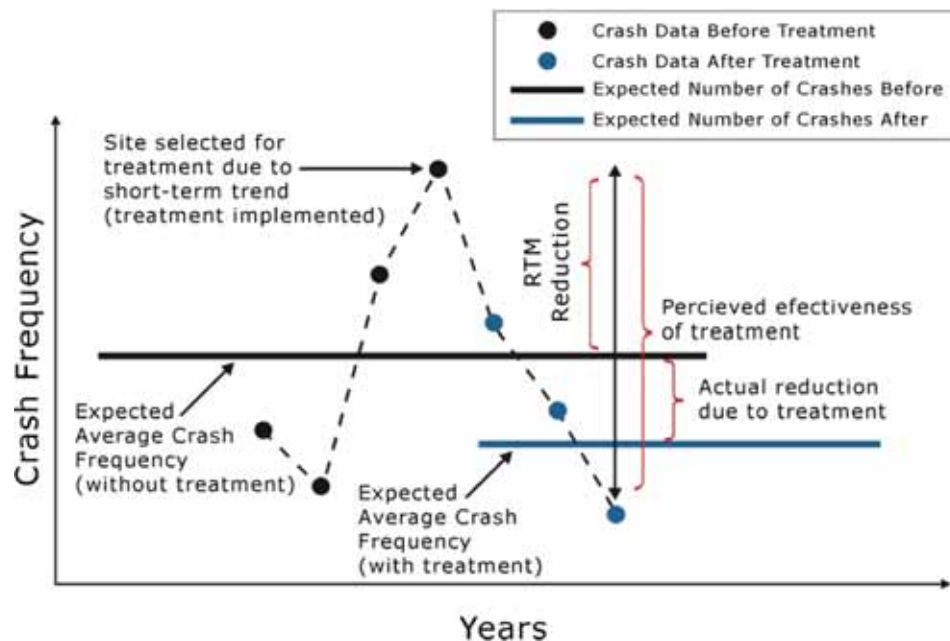


Figure D-1 - Accounting for RTM is important to accurately identify high crash locations and measure the benefit of implemented countermeasures.

Figure Source: Highway Safety Manual, 1st Edition

THE FIVE STEPS

Chapter 4 of the HSM describes the following five steps of network screening:

Step 1: Establish Focus – An agency establishes its goal in screening its network, whether it is to identify sites with the greatest potential for crash frequency or severity reduction or to identify sites with specific crash types or severity to address with a systematic treatment (e.g., run-off-the-road crashes for rumble strip installation).

Step 2: Identify Network & Establish Reference Population – Based on the purpose defined in the first step, the agency selects the roadway elements to be screened. Roadway elements covered by the HSM include intersections, segments, facilities (segments and intersections combined), ramps, ramp terminal intersections, and at-grade rail crossings). The study sites would be grouped into reference populations by defining attributes. This could be specific elements of a certain type or they could be defined by similar characteristics (e.g., traffic control, functional classification, cross-section, traffic volumes, etc...).

Step 3: Select Performance Measures – The measure, or measures, that would be used to evaluate the potential to reduce crash frequency or severity are selected. The HSM discusses thirteen performance measures that are summarized later in this section. Three key criteria to consider when selecting a performance measure are: 1) data requirements of the measure compared to available data, 2) stability of the results produced by the measure (i.e., the degree to which the measure accounts for Regression-to-the-Mean Bias), and 3) whether the measure provides a performance threshold to which the results can objectively be compared. The screening would likely be the most effective if readily available or collectable data allows the agency to use a stable measure (minimizing the effect of the randomness of crashes) that provides a performance threshold.

Step 4: Select Screening Method – The HSM recommends using either the sliding window or peak searching methods for screening roadway segments and the simple ranking method for screening intersections. A combination of methods should be used when examining a facility.

Step 5: Screen and Evaluate Results – Order the reference population being examined by the selected performance measure and identify sites for further study for countermeasure application.

PERFORMANCE MEASURES

The HSM contains thirteen performance measures that can be used for network screening. Table D-1 summarizes the measures in the general order of their statistical reliability and whether they provide a performance threshold. In the near term (0-5 years) the County could consider augmenting the SPIS information with another or other performance measures that use currently readily available information accessible by the County. Over time and as the County integrates or supplements its roadway, traffic, and safety data it could incorporate more robust performance measures. Considering the long term, the County could target its desired network screening performance measures and begin collecting roadway, traffic, and safety data that support the long term vision. More information on each measure, including specific strengths and weaknesses can be found in Chapter 4 of the HSM.

Table D-1 Network Screening Performance Measures

Performance Measure	Data Requirements	Accounts for RTM Bias	Provides a Performance Threshold	Potential County Application
Average Crash Frequency	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) 	No	Average Crash Frequency	Considered in the SPIS
Crash Rate	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) Traffic Volume 	No	Crash Rate	Considered in the SPIS
Equivalent Property Damage Only (EPDO) Average Crash Frequency	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) 	No	Equivalent Property Damage Only (EPDO) Average Crash Frequency	Near term
Relative Severity Index	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) 	No	Relative Severity Index	Near term
Critical Rate	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) Traffic Volume 	No, but accounts for some variance	Critical Rate	Near term
Excess Predicted Average Crash Frequency Using Method of Moments	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) Traffic Volume 	No, but accounts for some variance	Excess Predicted Average Crash Frequency Using Method of Moments	Long term
Level of Service of Safety	<ul style="list-style-type: none"> Crash Data Specific Site Characteristics Traffic Volume Calibrated SPF and Over dispersion Parameters 	No, but accounts for some variance	Level of Service of Safety	Long term
Excess Predicted Average Crash Frequency Using SPFs ¹	<ul style="list-style-type: none"> Crash Data Specific Site Characteristics Traffic Volume Calibrated SPF and Over dispersion Parameters 	No	Excess Predicted Average Crash Frequency Using SPFs ¹	Long term
Probability of Specific Crash Types Exceeding Threshold	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop 	Accounts for variance in data; Not	Probability of Specific Crash Types	Mid term

Performance Measure	Data Requirements	Accounts for RTM Bias	Provides a Performance Threshold	Potential County Application
Proportion	Comparison Groups (e.g., type of intersection control)	affected by RTM ³	Exceeding Threshold Proportion	
Excess Proportion of Specific Crash Types	<ul style="list-style-type: none"> Crash Data Basic Roadway Information to Develop Comparison Groups (e.g., type of intersection control) 	Accounts for variance in data; Not affected by RTM ³	Excess Proportion of Specific Crash Types	Mid term
Expected Average Crash Frequency with EB ² Adjustment	<ul style="list-style-type: none"> Crash Data Specific Site Characteristics Traffic Volume Calibrated SPF and Over dispersion Parameters 	Yes	Expected Average Crash Frequency with EB ² Adjustment	Long term
EPDO Average Crash Frequency with EB Adjustment	<ul style="list-style-type: none"> Crash Data Specific Site Characteristics Traffic Volume Calibrated SPF and Overdispersion Parameters 	Yes	EPDO Average Crash Frequency with EB Adjustment	Long term
Excess Expected Average Crash Frequency with EB Adjustment	<ul style="list-style-type: none"> Crash Data Specific Site Characteristics Traffic Volume Calibrated SPF and Overdispersion Parameters 	Yes	Excess Expected Average Crash Frequency with EB Adjustment	Long term

¹SPF: Safety Performance Function

²EB: Empirical Bayes

³This method calculates the probability of a specific crash type being higher than its long-term expected value. It is essentially calculating the probability of that the over representation of a specific crash type is due to site characteristics and not RTM.

As Table D-1 shows, each measure requires at least crash data and some degree of roadway information. Other measures apply traffic volumes and/or SPFs calibrated to local conditions along with overdispersion parameters. Generally speaking, as data requirements intensify, the measures become more stable (i.e., less statistically biased). The table also provides a general sense of how these performance measures may be applicable to the County in the near, mid, and long term future.

The measures currently used in the SPIS (weighted crash frequency and rate) are found in the top part of Table D-1. They require limited data, but are susceptible to RTM bias and do not establish a performance threshold. Advancing the County’s safety analysis practices would be based on moving beyond these current measures to more stable measures.

The most stable measures require SPFs calibrated to local conditions using a locally developed calibration factor or a locally developed SPF. ODOT has developed local calibration factors for State highways the County could use. Since the ODOT factors will be available shortly (currently anticipated to be early-mid 2012), the County has the opportunity to begin transitioning to using SPF-based

measures. However, using these measures will be more data and time intensive than the current measures. Over time, and if the County integrates its roadway, traffic, and safety, data, future safety analyses might be conducted in an efficient and effective manner.

Interim steps could include using the method of moments, probability of specific crash types, excess proportion of specific crash types, or critical rate performance measures. The probability of specific crash types and excess proportion measures could be particularly valuable given the specific emphasis areas identified previously. For instance, either method could be run network-wide for a specific crash type (e.g., run off the road crashes) to develop a prioritized list of locations for that crash type. Similarly for young drivers or alcohol involved crashes either measure could be used to identify what locations are overrepresented, which could identify locations to increase enforcement.

QUANTITATIVE SAFETY ANALYSIS METHODS

The HSM allows for quantitative safety analysis. Part C of the HSM covers the Predictive Method in detail. Part C allows analysts to predict the expected average crash frequency in terms of crashes per year for a road segment or intersection based on traffic volumes, geometric features, and a local calibration factor. This is accomplished by using a SPF to provide a base estimate based on traffic volumes and road segment length or intersection control and number of legs; followed by applying crash modification factors (CMFs) to adjust the base prediction for site-specific characteristics (e.g., median width, presence of turn lanes); and then, since the models are based on national data, a local calibration factor would adjust the results to account for local conditions (e.g., weather, driver behavior). If the analysis is being performed on an existing roadway, historical crash data can then be used to further adjust the predicted crash frequency to arrive at the expected average crash frequency. This weighting methodology uses a statistical method called Empirical Bayes.

The HSM also contains a number of CMFs in Part D of the manual that can be used on their own to estimate the change in crash frequency that is expected to occur with implementation of an improvement (e.g., converting a signal to a roundabout has a CMF of 0.40 and a standard error of 0.1 for injury crashes, meaning that a roundabout would be expected to reduce injury crashes by approximately 20-60%). In addition to the CMFs found in the HSM, FHWA maintains a clearinghouse of CMFs that is updated regularly at www.cmfclearinghouse.org. Each CMF is given a quality rating based on a five-star scale with five-stars being the most reliable and statistically sound CMFs. ODOT has recommended using only CMFs of four stars or greater.

The Predictive Method can be used on existing facilities as well as planned improvements and new roadways. Crash randomness (RTM Bias) can be accounted for in an existing crash conditions analysis by using the Predictive Method in conjunction with local crash data as described in the HSM. This provides a more reliable way of determining whether or not location is experiencing more crashes than would be expected than a simple review of crash frequency, rate, or severity. As was mentioned in the section above, this method can also be used to identify high crash locations in a more reliable manner than a traditional “Black Spot” or SPIS analysis.

The Predictive Method can also be used to quantitatively compare alternative improvement options for a segment and/or intersection for an existing or new roadway. Alternatives can then be compared according to the differences in expected average crash frequency or by using a benefit-cost calculation to better compare projects of different cost magnitudes.

As was mentioned in the Network Screening section above, using the Predictive Method's SPFs requires more data than a traditional crash frequency, rate, or severity analysis. Fortunately, the County already collects much of the data required to implement the HSM. Additional data that would be needed in RIMS to automate analyses for roadway segments includes:

- Lane width (rural two-lane roads)
- Curve data (rural two-lane roads)
- Grade (rural two-lane roads)
- Presence of rumble strips (rural two-lane roads)
- Presence of a passing lane (rural two-lane roads)
- Two-way left-turn lane presence (rural two-lane roads and urban/suburban arterials)
- Roadside hazard rating (rural two-lane roads)
- Presence of automated speed enforcement (all roads)
- Presence of roadway lighting (all roads)
- Sideslope (rural multi-lane roads)
- Lane designations (urban/suburban arterials)
- Presence of a depressed median (urban/suburban arterials)
- On-street parking (urban/suburban arterials)
- Driveway type/size information (urban/suburban arterials)
- Roadside fixed object density and average offset (urban/suburban arterials)
- Speed (urban/suburban arterials)
- Additional data that would be needed in RIMS to automate analyses for intersections includes:
 - Intersection control (all roads)
 - Skew angle (all rural roads)
 - Presence of turn lanes on free-flowing or signalized approaches (all roads)
 - Presence of lighting (all roads)
 - Pedestrian crossing distance (urban/suburban arterial signalized intersections)

- Approaches for which right-turns on red are prohibited (urban/suburban arterial signalized intersections)

Additional data that would be needed in RIMS to automate analyses for pedestrian-vehicle collisions at signalized urban/suburban signalized intersections only includes:

- Number of bus stops, schools, and alcohol sales establishments within 1,000 feet of the intersection
- Presence of red light cameras
- Approaches that right-turn on red is allowed

In addition to local roadway data, a locally developed calibration factor is required to adjust the results, which are based on national data, to local conditions. ODOT will likely continue developing these factors based on crash data from State roadways. To begin implementing the Predictive Method in the near-term, the County could rely on these factors. In the longer-term, more accurate results could potentially be obtained by using calibration factors, or even SPFs, developed from county-level data.

County-specific SPFs could provide more accurate results, but calibration factors would require less data. The HSM provides guidance for developing both of these. To develop county-specific SPFs or calibration factors, the County would need to work with other counties in the state to gather data from enough sites to develop reliable tools. This could potentially be accomplished by using the Association of Oregon Counties (AOC) as a vehicle for coordination. The current County RIMS database might need to be modified to integrate with the AOC database to streamline this process.

Areas of the County's practices into which the Predictive Method could be incorporated include:

- Network screening/roadway system management (described above)
- Countermeasure identification and analysis
- Alternatives evaluation
- Improvement prioritization
- Safety analyses
- Traffic studies, including development review studies (discussed more in a later section)

The County has already taken steps to implementing the Predictive Method, including hiring an analyst responsible for safety analysis.

Appendix E
Safety Stakeholder Survey Results



Page 1, Q2. What efforts to improve transportation safety that your agency undertakes do you see as the most effective and why?

1	Traffic enforcement, focused traffic details in areas designated as high crash areas, education	Jun 6, 2011 11:46 AM
2	1) Federally funded highway safety Grants 2) Education, especially prevention 3) High crash location analysis and solution development	May 31, 2011 11:32 AM
3	Working to support local traffic safety committees and commissions with resources, mini-grant funding and networking. Child passenger safety training, education and public outreach through car seat check-up events.	May 31, 2011 8:45 AM
4	Gather input from community about safety issues in their area and try and address specific problems	May 31, 2011 7:41 AM
5	Road repair and improvements Safety Education Police Patrol and Traffic Enforcement	May 27, 2011 6:14 PM
6	Occupant Protection programs for children (child passenger safety) and teen driving programs.	May 27, 2011 6:01 PM
7	Continued education and emphasis on getting to scenes safely and how to manage traffic at emergency scenes. Required seat belt use prior to engagement of vehicle transmission by verbal confirmation of passengers.	May 27, 2011 2:45 PM
8	Fairly high patrol presence on the main roadways in Clackamas County. This seems to encourage citizens to slow down and drive responsibly.	May 25, 2011 9:23 AM
9	Public Education - It is what we have resouces to do	May 20, 2011 10:19 AM
10	Participation with Safe Communities and Oregon Impact. These 2 groups probably have the most overall impact in coordianting and promoting traffic and transportation issues for high risk issues.	May 19, 2011 10:38 AM
11	Education and transportation improvements	May 19, 2011 9:37 AM
12	education, outreach, advocacy, lobbying, media relations	May 19, 2011 8:35 AM
13	Efforts to reduce drinking and driving are the most important actions we take to improve transportation safety. Those efforts include educational videos, public service announcements to minors and adults, training to servers and bartenders to recognize the signs of impairment so that people aren't overserved and so that someone can intervene before the person gets in a motor vehicle and the third effort is to contact businesses that are accused of serving alcohol to patrons who have been involved in a DUII. Not one practice could have an overarching effect, but many efforts combined can have a deeper effect on the population at large.	May 18, 2011 3:05 PM
14	From the Wellness/Safety perspective, we have just starting doing more newsletter awareness about causes of County vehicle accidents (distracted driving/backing/following too close). Not sure if its effective. Need to see long term County vehicle accident data.	May 18, 2011 2:46 PM
15	education	May 18, 2011 2:26 PM
16	Listening to the citizens concerns, complaints and take appropriate action as necessary	May 18, 2011 1:04 AM

Page 1, Q2. What efforts to improve transportation safety that your agency undertakes do you see as the most effective and why?

17	Collective thought & input from TSC members and the ability to put programs into action, e.g., fatal DUII sims, safety fair.	May 17, 2011 3:34 PM
18	We work on youth drug and alcohol prevention. I think the most effective work we do is not really our own, but those activities that have been proven effective through research, such as partnering on the minor decoy operations with the CCSO, Safe Communities and OLCC. I think it is best to invest in those strategies that we know have been proven with years of research and multiple studies as effective. I also think that there is too much of an emphasis on programs and less focus on "environmental strategies," which target environments where problematic behaviors are occurring. I think it is also important to have comprehensive strategies to address transportation safety and prevention in general. It is not enough to provide information, although it is part of the puzzle, it typically doesn't change people's behaviors. You need to have incentives, disincentives, etc. to get at this piece.	May 17, 2011 12:57 PM
19	In-school education programs, safety fairs and outreach activities. I feel the in-school presentations are most effective because teens are over represented in crashes. safety fairs because they reach a broad audience and outreach because the word is reaching the community about safety programs.	May 17, 2011 12:06 PM

Page 1, Q3. Without any constraints or limitations, what would you like to do better, or more of, to improve transportation safety?

1	More officers dedicated to traffic enforcement, DUII cars on during the evening, more education	Jun 6, 2011 11:46 AM
2	Put more funding into prevention of all types. Too much of our work is "after the fact."	May 31, 2011 11:32 AM
3	Provide mores support to communities to encourage local transportation safety action plans, networking between communities to share successes and challenges, promotion of best practices.	May 31, 2011 8:45 AM
4	Pipe drainage ditches and gravel over to eliminate roadside ditch, provide for water treatment for runoff, and add flashing lights to indicate stops at dangerous intersections. Provide gaurd rails where needed. Repair slide areas	May 31, 2011 7:41 AM
5	more community education and outreach	May 27, 2011 6:14 PM
6	Increase public education efforts, mandatory CPS training in hospitals so the day infants go home they are safely restrained. \$\$ for child safety seats for low income families. Big budget \$\$ for promotion of traffic safety messaging to the public on TV, etc.	May 27, 2011 6:01 PM
7	More training.	May 27, 2011 2:45 PM
8	It seems that too many citizens who have multiple DUIIs are still on our roads. Some have reinstated drivers licenses, others drive while suspended. If there were stiffer penalties, like the loss of a vehicle or jail time after the 3rd DUII, this might make more of an impact. Also, our motors team is currently not on the road, but should be coming back soon. Even with them at their full strength of 5 motors, this certainly could be increased to double the number for adequate coverage in our large county.	May 25, 2011 9:23 AM
9	More enforcement - but this is not our agency	May 20, 2011 10:19 AM
10	Do more focused public eduaction, awareness and media presentations to target high risk behaviors	May 19, 2011 10:38 AM
11	more roadway fixes i.e. better recovery areas, more guardrail, removal of hazards in the clear zone.	May 19, 2011 9:37 AM
12	Hire a huge staff to help in all of the efforts listed above!	May 19, 2011 8:35 AM
13	I would like to be able to make more videos targeted to specific audiences. I personally would also like to see our agency have more inspectors statewide so that we can do more proactive outreach to licensees.	May 18, 2011 3:05 PM
14	People - calm, not hurried, not distracted. Taking one's time to get there and being mindful. Environment - lots more sidewalks and bike lanes for safe ped/biking commute to work.	May 18, 2011 2:46 PM
15	make driver education required (all age groups)	May 18, 2011 2:26 PM
16	Be able to provide the necessary sidewalks, bath paths/lanes and keep current with road repair issues.	May 18, 2011 1:04 AM

Page 1, Q3. Without any constraints or limitations, what would you like to do better, or more of, to improve transportation safety?

17	Make judges accountable for their actions and inactions. There are innumerable incidents here locally where a driver, having been convicted of multiple DUII offenses, is still out there driving until he kills someone.	May 17, 2011 3:34 PM
18	I think continuing to partner on ways we can prevent youth from getting involved in risky behaviors, including drugs and alcohol which impairs driving, nut not just limited to this.	May 17, 2011 12:57 PM
19	More media use. More road improvements. More enforcement activites (saturation patrols, targeted enforcement) More citizen outreach. More programs that have a comprehensive (5E) design.	May 17, 2011 12:06 PM

Page 1, Q4. What impediments or limitations have prevented your agency from considering or implementing other initiatives or programs?

1	Money, people, and resources	Jun 6, 2011 11:46 AM
2	Federal and state rules and budgets are the main limitations. Public and media criticism are the next.	May 31, 2011 11:32 AM
3	Funding to increase staffing. The need for more planning to identify needs and services that would increase local community efforts to impact traffic safety.	May 31, 2011 8:45 AM
4	Financial limitations and staff limitations. The fact that we have 1800 miles of roads	May 31, 2011 7:41 AM
5	budget-manpower	May 27, 2011 6:14 PM
6	Funding	May 27, 2011 6:01 PM
7	Already increased requirements on other disciplines in both original certifications and recerts.	May 27, 2011 2:45 PM
8	Lack of funds.	May 25, 2011 9:23 AM
9	Funding	May 20, 2011 10:19 AM
10	Funding and personnel availability	May 19, 2011 10:38 AM
11	Money	May 19, 2011 9:37 AM
12	budget and staff constraints	May 19, 2011 8:35 AM
13	Much of what the agency does is outlined by state statutes and budgetary constraints.	May 18, 2011 3:05 PM
14	Time. Projects such as sidewalks/bike paths not in my area of work; our Dept of Transportation is doing good work in this area.	May 18, 2011 2:46 PM
15	probably cost	May 18, 2011 2:26 PM
16	MONEY!!!! Citizens would like to see more sidewalks, bike paths etc. but money is very tight and public works is out there monitoring the road conditions. Trying to balance what the citizens want to what we can seriously afford to pay for. Life threatening situations are taken care of immediately.	May 18, 2011 1:04 AM
17	Budget restraints	May 17, 2011 3:34 PM
18	I think staff time is a big one, especially now when we are having to do so much community mobilization just to keep ourselves afloat due to funding cuts. Many of us are facing significant cuts and it is critical for us to have partnerships in place so we can sustain prevention work in our community. I also think politics and turf issues - like who gets credit for what impacts our work greatly. I think that my parent agency sometimes doesn't understand the work we are doing and we don't get support at times in partnering. It takes a lot of effort and more support to get things done with so many "hoops" to jump through.	May 17, 2011 12:57 PM
19	Funding. Support at all levels. Laws that impede safety initiatives. Grant - limitations.	May 17, 2011 12:06 PM

Page 1, Q5. What type of assistance/collaboration could your agency use from other agencies/partners to promote transportation safety?

1	Money, assistance in the way of bodies from other state and local LE to help promote safety and focus on high crash areas.	Jun 6, 2011 11:46 AM
2	Better state/local connections and possibly better volunteer development/training/rewards that keep good volunteers in safety from year to year.	May 31, 2011 11:32 AM
3	Traffic safety committees and commissions in Clackamas County are built on the successful model used by the county which we share with other counties and cities. More commitment from agencies in Clackamas County to take a lead in collaborating regarding child passenger safety check-up events and car seat distribution.	May 31, 2011 8:45 AM
4	Financial assistance and coordinated efforts to specifically identify and fund traffic safety issues	May 31, 2011 7:41 AM
5	joint safety education programs	May 27, 2011 6:14 PM
6	Collaborative staffing assistance at events, resources, etc.	May 27, 2011 6:01 PM
7	Outside instruction, simulators.	May 27, 2011 2:45 PM
8	Funding. Perhaps periodic updates on major crash sites would be good information for us to have.	May 25, 2011 9:23 AM
9	We should continue to collaborate with safe Communities and law enforcement	May 20, 2011 10:19 AM
10	Assistance with funding for community service related activities. I think we are fairly well connected for collaboration and partnerships.	May 19, 2011 10:38 AM
11	Always additional funding.	May 19, 2011 9:37 AM
12	being aware of and involved in transportation safety efforts when appropriate	May 19, 2011 8:35 AM
13	More partnerships and education on drinking and driving. Supporting and encouraging servers and bartenders to make the right decision of removing a drink, calling a cab, etc.	May 18, 2011 3:05 PM
14	Patty was great spending the day at the Wellness Fair educating about distracted driving.	May 18, 2011 2:46 PM
15	funds from ODOT	May 18, 2011 2:26 PM
16	Exchange of information with other agencies/partners promotes good building practices and sharing our resources.	May 18, 2011 1:04 AM
17	The CCTSC is already lucky to have a great working relationship with ODOT, local law enforcement, Safe Comm., Kittleson, et al.	May 17, 2011 3:34 PM

Page 1, Q5. What type of assistance/collaboration could your agency use from other agencies/partners to promote transportation safety?

- | | | |
|----|---|-----------------------|
| 18 | I think Patty does a great job of partnering with our community coalitions to disseminate information and get activities done that help to promote safe driving and reducing risky behaviors. I think continuing in this vein is good. I would like to have more planning up front though, because it is hard for me to drop everything in my schedule at the last minute to get things done. When I know ahead of time it makes it easier for me to create space in my calendar and I think that might be the next step in strengthening or partnerships. We all have different outcomes that we need to focus on and be responsible for achieving and if we can spend more time planning up front I think that would help to share in each other's work. There have also been a lot of changes in my parent agency that make work a lot longer to get done and there are more restrictions on things now than previously, which is frustrating. | May 17, 2011 12:57 PM |
| 19 | More funding. More support/collaboration. Less constraints in grant funding. More partners and volunteers. | May 17, 2011 12:06 PM |

Page 1, Q6. Does your agency have any planned new initiatives or programs aimed at promoting transportation safety that are planned to be implemented in the near future? If so, what are they?

1	Grants received from ODOT and OSSA to battle DUII's, Seat Belt compliance, Work Zones, Chain Enforcement during the winter, Motor Carrier Safety Inspections, and general money for Traffic Team OT	Jun 6, 2011 11:46 AM
2	State TSAP is our long range / new initiatives plan. Sadly, without new funding, I predict there will be few "new" initiatives launched near future.	May 31, 2011 11:32 AM
3	Not at this time. The formation of an Advisory Committee for the Community Traffic Safety Program may result in additional ideas.	May 31, 2011 8:45 AM
4	We are considering funding tools	May 31, 2011 7:41 AM
5	not sure	May 27, 2011 6:14 PM
6	Yes, Safe Kids Countdown 2 Drive program- targeted at teen pre-drivers.	May 27, 2011 6:01 PM
7	No	May 27, 2011 2:45 PM
8	Unknown.	May 25, 2011 9:23 AM
9	None that I know of	May 20, 2011 10:19 AM
10	No	May 19, 2011 10:38 AM
11	unknown	May 19, 2011 9:37 AM
12	Continued involvement in driver safety issues, including teen driving, senior driving, distracted driving, preventing DUII, etc.	May 19, 2011 8:35 AM
13	Not directly. In Wellness, mindfulness is a growing area that can help us all slow down and enjoy the present.	May 18, 2011 2:46 PM
14	not that I know of at this time	May 18, 2011 2:26 PM
15	We have considered a "Street Utility fee" to help fund the necessary sidewalks, proper bike lanes but how n when n where the money will be allocated was somewhat confusing. Citizens want lot of high dollar upgrades.	May 18, 2011 1:04 AM
16	TSAP for Clacamas Co. & it is coming along very well.	May 17, 2011 3:34 PM
17	We have planned to meet with Safe Communities, and OLCC to do more frequent alcohol compliance stings. This is not really a new initiative, but this is something that we had planned previously and haven't done yet.	May 17, 2011 12:57 PM
18	The TSAP. We are just about to begin planning new initiatives for next grant cycle. DUI - impaired driving has been mentioned but no actions addressing that issue yet. Some of the new initiatives will be based on results of the data work with the TSAP.	May 17, 2011 12:06 PM

Transportation Safety Action Plan (TSAP) Survey

As it relates to your key safety issue, does your agency employ the use of the 4E's in their strategy? (select all that apply)

Answer Options	Response Percent	Response Count
Engineering	50.0%	9
Education	88.9%	16
Enforcement	55.6%	10
Emergency Medical or Fire Services	55.6%	10
Other (please specify)	16.7%	3
<i>answered question</i>		18
<i>skipped question</i>		1

Number	Response Date	Other (please specify)	Categories
1	May 31, 2011 6:38 PM	Training, funding, legislation, standards	
2	May 31, 2011 3:49 PM	Encouragement	
3	May 18, 2011 9:31 PM	driver ed option for permit drivers	

Transportation Safety Action Plan (TSAP) Survey

What age group is your target audience? (mark all that apply)

Answer Options	Response Percent	Response Count
Infant (0-5 years)	33.3%	6
Child (6-12 years)	61.1%	11
Teenagers (13-18)	88.9%	16
Young Adults (19-24 years)	77.8%	14
Adults (25-50 years)	72.2%	13
Seniors (50+ years)	55.6%	10
Other (please specify)	5.6%	1
<i>answered question</i>		18
<i>skipped question</i>		1

Number	Response Date	Other (please specify)	Categories
1	May 18, 2011 9:31 PM	any person w/o a driver's license (15 +)	

Transportation Safety Action Plan (TSAP) Survey

How do you reach your target audience?		
Answer Options	Response Percent	Response Count
Website	66.7%	12
Television/Radio	38.9%	7
Community Meetings	55.6%	10
You Tube	22.2%	4
Citizen Contacts	61.1%	11
One-on-one (meet with client)	22.2%	4
Safety Events/Fairs	66.7%	12
Newsletter	50.0%	9
Facebook	22.2%	4
Newspapers	38.9%	7
Other (please specify)	27.8%	5
<i>answered question</i>		18
<i>skipped question</i>		1

Number	Response Date	Other (please specify)	Categories
1	May 31, 2011 6:38 PM	Training, conferences, mailers, pul	
2	May 18, 2011 10:07 PM	Servers/Bartenders and liquor lice	
3	May 18, 2011 9:31 PM	school district/community college p	
4	May 17, 2011 10:39 PM	monthly meeting open to anyone	
5	May 17, 2011 7:10 PM	In class presentations	

Are the following issues a focus of your agency? Select all that apply.		
Answer Options	Response Percent	Response Count
Ped/Bike Safety	66.7%	12
Teen Drinking/Drug Use	77.8%	14
Texting - Cell Phones	72.2%	13
Passenger Safety	72.2%	13
Impaired Driving	77.8%	14
Speed	77.8%	14
Road Maintenance	27.8%	5
Agressive Driving	61.1%	11
Rail	11.1%	2
Tranportation of Children/disabled/elderly passengers	16.7%	3
Distracted Driving	61.1%	11
Other (please specify)	16.7%	3
<i>answered question</i>		18
<i>skipped question</i>		1

Number	Response Date	Other (please specify)	Categories
1	May 31, 2011 6:38 PM	Motorcycles, child safety seats, tru	
2	May 18, 2011 9:53 PM	These aren't exactly a focus; we a	
3	May 17, 2011 8:02 PM	Preventing Youth Risky Behaviors	

Transportation Safety Action Plan (TSAP) Survey

What resources would assist your agency to fulfill your goals?

Answer Options	Response Percent	Response Count
Volunteers	58.8%	10
Funding	100.0%	17
Staff	64.7%	11
Technical Support (grant writing etc)	58.8%	10
More Outreach Opportunities	41.2%	7
More Partners	58.8%	10
Training	47.1%	8
Reliable Data	41.2%	7
Other (please specify)	11.8%	2
<i>answered question</i>		17
<i>skipped question</i>		2

Number	Response Date	Other (please specify)	Categories
1	May 31, 2011 6:38 PM	Hard not to just check all of these	
2	May 27, 2011 9:50 PM	Oregon impact crash simulation	

Page 2, Q6. What (if any) emerging trends can you identify. Problems or solutions.

1	Distracted Driving due to texting and celluarl phone use	Jun 6, 2011 11:48 AM
2	Problems: distracted drivers; GPS and related in car devices; elderly drivers; aggressive bikes and peds; poorly researched legislation	May 31, 2011 11:38 AM
3	Government funding is on the decrease which impacts our funding but also impacts the ability for counties and cities to maintain traffic safety committees and commissions and focus on local issues. The business sector may be seeing better times so we are needing to develop relationships with more businesses and other partners to be more efficient.	May 31, 2011 8:49 AM
4	Impaired driving and increase congestion	May 31, 2011 7:43 AM
5	Not sure	May 27, 2011 6:16 PM
6	inexperienced and distracted drivers,	May 27, 2011 2:50 PM
7	Now that using cell phones while driving is a traffic violation, many people elect to "hide" the fact that they are texting. This causes them to hold the cell phone low and out of site, which also causes them to avert their eyes away from the road.	May 25, 2011 9:29 AM
8	Texting as a inceasing risk to be an significant risk while driving.	May 19, 2011 10:41 AM
9	Senior driving safety will continue to be important as the number of older drivers grows. Also, distracted driving continues to be a major issue.	May 19, 2011 8:37 AM
10	Teens are drinking at an earlier age. We need to reach these students BEFORE they start drinking.	May 18, 2011 3:07 PM
11	Aging population. Better planning for new subdevelopments (sidewalks) More awareness of planning for walkers and bikes on roads. Still a hurried stressed culture that needs to slow down.	May 18, 2011 2:53 PM
12	any kind of distracted driving in addition to cell phones/texting which seem to be the focus. Eating, dogs jumping on driver's lap, etc.	May 18, 2011 2:31 PM
13	People continue to expect the moon and are madly disappointed where there's only a cow up there. Inother words, they want what they can't affors	May 18, 2011 1:09 AM
14	Too many drivers are ignoring the "hands free only" cell phone laws. Too many drivers are getting probation or just a week in jail for 2nd, 3rd, 4th, ad. inf., DUII convictions.	May 17, 2011 3:39 PM
15	Well, Clackamas is such a huge county with so many different cultures in our respective communities. It is hard to plan to meet the unique needs of each local area. I think that there is a concerning emergence of youth prescription drug use. While the data continues to show alcohol as our number one problem, it also points to more kids turning to prescription drugs. This has huge implications for drugged driving. I think more work in this area is needed and would truly reflect prevention. Solutions would involve continuing to work on changing social norms and perceptions about prescription drug safety, in conjunction with information dissemination, enforcement, and policy changes. Taken together, this would make quite a difference.	May 17, 2011 1:02 PM

Page 2, Q6. What (if any) emerging trends can you identify. Problems or solutions.

16 Aging population as drivers. "Drugged" drivers. More bicyclists and peds in Clackamas.

May 17, 2011 12:10 PM

Thank you for your time. Please use the space below to share any further information.

	Response Count
	4
answered question	4
skipped question	15

Page 2, Q7. Thank you for your time. Please use the space below to share any further information.

1	Thanks for the invitation to comment - KC	May 31, 2011 11:38 AM
2	Thanks for your work!	May 18, 2011 2:53 PM
3	wish driver ed was a requirement for all drivers...	May 18, 2011 2:31 PM
4	I am a retired Oregon State Police Senior Trooper who used to patrol most all of Clackamas County and I could indicate on a traffic crash any factors that might have any safety concerns, line of sight, lack of lane markings etc" I took my job seriously and did my best to keep the public safe.	May 18, 2011 1:09 AM

Clackamas County Sheriff's Office

"Working together to make a difference"



CRAIG ROBERTS, Sheriff
DAVID KIRBY, Undersheriff

8

November 21, 2012

Board of County Commissioners
Clackamas County

Members of the Board:

Request for Approval to accept a Safety Belt Grant with the Oregon State Sheriff's Association 2/11/13 – 9/8/13

The objective of the Safety Belt Overtime Grant Program is to increase compliance with Oregon Motor Vehicle occupant restraint laws towards the State's goal of minimizing traffic crash fatalities and injuries. In order to meet this objective, the Oregon State Sheriff's Association offers reimbursement for officer overtime for enforcement focusing on occupant restraint, speed and other traffic violations.

Each participating agency is required to participate in three specific blitz periods. The first blitz runs February 11 through February 24, 2013 and will have emphasis on belts, boosters, texting and speed. The second blitz runs May 20 through June 2, 2013 with emphasis on night-time/daytime belts, minors in open pickup beds and Click It or Ticket mobilization (nationwide). The third blitz runs August 26 through September 8, 2013 and will emphasize child seats/fitting station referrals, texting and speed.

The Oregon State Sheriff's Association has approved \$16,000 for the activities listed above. The grant period runs from acceptance through September 30, 2013. The request to apply for these funds was approved by Steve Wheeler on October 3, 2012.

RECOMMENDATION

It's recommended that the Board of County Commissioners accept this Grant Agreement between the Clackamas County Sheriff's Office and the Oregon State Sheriff's Association for the 2012/2013 Safety Belt Grant.

Sincerely,

A handwritten signature in cursive script, appearing to read "MEU".

Matt Ellington
Undersheriff

For information on this issue or copies of attachments, please contact
Sgt. John Naccarato @ 503-785-5000

Clackamas County Sheriff's Office

"Working together to make a difference"



CRAIG ROBERTS, Sheriff
DAVID KIRBY, Undersheriff

November 21, 2012

Board of County Commissioners
Clackamas County

Members of the Board:

Request Approval to accept a DUII Overtime Enforcement Grant
With the Oregon State Sheriff's Association 10/1/12 – 9/1/13

The objective of the DUII Enforcement Grant Program is based on the goals and requirements of the National Highway Traffic Safety Administration (NHTSA) to increase patrols during pre-declared High Visibility Enforcement (HVE) national events. In order to meet this objective, the Oregon State Sheriff's Association offers reimbursement for officer overtime for enforcement during these specified periods.

Each participating agency is required to participate in two pre-declared HVE national events with the Oregon Association of Chiefs of Police and the Oregon State Police, as well as four other designated HVE events. The Clackamas County Sheriff's Office agrees to participate during Christmas 2012/New Year 2013 and Labor Day 2013 as the two pre-declared HVE national events. The four other designated HVE events include Thanksgiving 2012, Super Bowl 2013, Memorial Day 2013 and the 4th of July 2013.

The Oregon State Sheriff's Association has approved \$35,000 for the activities listed above with the goal of 60 arrests. The grant period runs from acceptance through September 30, 2013. The request to apply for these funds was approved by Steve Wheeler on October 3, 2012.

RECOMMENDATION

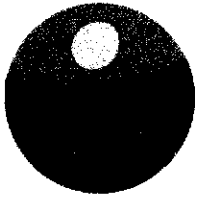
It's recommended that the Board of County Commissioners accept this Grant Agreement between the Clackamas County Sheriff's Office and the Oregon State Sheriff's Association for the 2012/2013 DUII Enforcement Grant.

Sincerely,

A handwritten signature in black ink, appearing to read "MEU".

Matt Ellington
Undersheriff

For information on this issue or copies of attachments, please contact
Sgt. John Naccarato @ 503-785-5000



**NORTH CLACKAMAS
PARKS & RECREATION DISTRICT**

Administration

150 Beaver Creek Rd.
Oregon City, OR 97045
503.742.4348 phone 503.742.4349 fax
ncprd.com

10

November 21, 2012

Board of County Commissioners
Clackamas County

 **COPY**

Members of the Board:

**Approval of an Oregon Parks and Recreation Department
Local Government Grant Program Agreement LGPL-12-07, Hood View Park Playground**

The Oregon Parks and Recreation Department (OPRD) has awarded North Clackamas Parks and Recreation District (NCPRD) a \$77,000 Local Government Grant for construction of a playground at Hood View Park. The Hood View Park nature play themed playground combines traditional play elements with man-made nature-inspired play components including logs, boulders, and climbable animal play sculptures. The project includes landscaping, picnic tables and benches, and expands the park walking path. The playground is indicated as "play areas" on the attached Hood View Park Conceptual Plan, dated June 8, 2009.

Constructing a playground at Hood View Park is a priority of the District. Hood View Park is approximately 35 acres in size and is located in Happy Valley. NCPRD acquired the park property and completed a public process to develop a master plan for the site in 2008. Phase 1 of the park was completed in 2010, and consists of four large all-weather softball fields, one all-weather multi-use field, a loop trail, picnicking areas, a concessions and restroom building, associated parking, and a caretaker's house. Future proposed phases of development include the playground, additional ballfields, a skatepark, a dog park, and a community center. The park draws approximately 180,000-200,000 participants from across the District, Region, and Country for tournaments, games and practices every year. The playground will provide an opportunity for children to be engaged in the park while their parents and siblings use the field facilities.

The Board authorized NCPRD to apply for the grant on March 29, 2012, as Resolution 2012-24. The total cost of the project covered by this agreement is estimated to be \$157,000. Under this agreement OPRD agrees to pay up to \$77,000 of the total project costs. NCPRD is contributing \$80,000 in cash. NCPRD's funding is included in the approved 2012-2013 fiscal year budget. The attached grant agreement with OPRD assigns roles, responsibilities and financial obligations for the use of these grant funds. County Counsel's Office has reviewed and approved the agreement.

RECOMMENDATION:

Staff respectfully recommends that the Board of Commissioners acting as the Governing Body of North Clackamas Parks and Recreation District approve and sign the attached Agreement (Project number LGPL-12-07) between NCPRD and OPRD.

Sincerely,

Laura Zentner
Deputy Director

For more information on this issue or copies of attachments, please contact Katie Dunham at (503) 742-4358

FUTURE
SE 162ND AVENUE
EXTENSION

MAINT

PICNIC / PASSIVE
RECREATION /
NATURE
INTERPRETATION

EASEMENT

RUNNING
TRACK

PARKING

TENNIS

HOOD VIEW PARK



CONCEPTUAL MASTER PLAN

JUNE 8, 2009



SCALE: 1" = 40'

**LOCAL GOVERNMENT GRANT PROGRAM
LGPL-12-07 Hood View Park Playground**

THIS AGREEMENT is made and entered into by and between the State of Oregon, acting by and through the Oregon Parks and Recreation Department, hereinafter referred to as the **OPRD**, and **North Clackamas Parks and Recreation District**, hereinafter referred to as the "Sponsor."

RECITALS

WHEREAS, under ORS 390.180, the State and Sponsor may enter into an agreement concerning acquisition, development, and or rehabilitation of public outdoor recreation areas and facilities, hereinafter called "Project," and the State may make grants of money to assist the Sponsor in such projects.

WHEREAS, under OAR Chapter 736, Division 6, the Sponsor agrees to comply with the Local Government Grant Program administrative rules.

NOW, THEREFORE, OPRD and the Sponsor agree to the following:

AGREEMENT

1. Effective Date. This Agreement shall become effective on the date this Agreement is fully executed and approved as required by applicable law. Unless otherwise terminated or extended, the Project shall be completed by **June 30, 2014 ("Project Completion Date")**. This Agreement shall expire on the date final payment is made by OPRD.

2. Agreement Documents. This agreement consists of this document and includes the following listed exhibits which are incorporated into this Agreement:

Exhibit A:	Sponsor's Grant Application
Exhibit B:	Progress Report Form
Exhibit C:	Request for Grant Reimbursement Form

In the event of a conflict between two or more of the documents comprising this Agreement, the language in the document with the highest precedence shall control. The precedence of each of the documents comprising this Agreement is as follows, listed from highest precedence to lowest precedence: this Agreement without Exhibits; Exhibit A; Exhibit B; Exhibit C.

3. Grant. In accordance with the terms and conditions of this Agreement, OPRD shall provide Sponsor **\$77,000 or 49.1 percent**, whichever is less, of the total project cost, for the purposes described in Section 5. OPRD shall pay the Grant from monies available through the Local Government Grant Program.

4. Project Cost; Matching Funds. Total Cost of the Project is **\$157,000**. The Sponsor Match is **\$80,000**. The Sponsor shall contribute matching funds or the equivalent in labor, materials, property, or services, which are shown as eligible match in the rules, policies and guidelines for the Local Government Grant Program.

5. Project: The purpose of this Project is to provide funding assistance to the North Clackamas Park and Recreation District for nature play park playground development including design, earthwork, logs, boulders, climbable animal play sculptures, habitat gardens, picnic tables, picnic shelter, playground shelter, benches, landscaping, and expansion of the walking path. The Project is further described in the Sponsor's Grant Application, which is Exhibit A attached hereto. Sponsor shall have six-months from the Effective Date of this Agreement to commence substantial work (i.e., for the Sponsor to award contracts for work or show at least 25% of work is complete). Projects not in compliance with this schedule may be

cancelled unless OPRD determines, in its sole discretion, that Sponsor has provided to OPRD justification for an extension.

6. Progress Reports. Once work has begun, Sponsor shall report to ORPD on work completed on a quarterly basis as follows:

- Period beginning January 1, ending March 31, report is due **April 30**.
- Period beginning April 1, ending June 30, report is due **July 31**.
- Period beginning July 1, ending September 30, report is due **October 31**.
- Period beginning October 1, ending December 31, report is due **January 31**.

A progress report giving an accounting of the work accomplished is also required whenever Project reimbursements are requested. Reports must be in the form provided in Exhibit B.

Sponsor must submit a Final Report and final reimbursement request to OPRD within 45 days of the Project Completion Date using the form attached hereto as Exhibit B. The final report shall include a full and final accounting of all expenditures and a description of the work accomplished.

7. Disbursement and Recovery of Grant.

a. Disbursement Generally. OPRD shall disburse up to 75 percent of the Grant Funds to Sponsor on a cost reimbursement basis upon approval of invoices submitted to OPRD. Sponsor may send invoices to OPRD at any time but no more than once per calendar quarter. Invoices must be in the form provided in Exhibit C attached hereto and provide detail indicating the nature of costs to be reimbursed, and all such costs must be directly related to the Project and Project budget as shown in Exhibit A. Invoices must be signed by an authorized representative of Sponsor. Prior to approval of any invoice, all reports due under Section 6 hereof must be complete and provided to and approved by OPRD. OPRD will disburse the final 25 percent of the Grant Funds upon approval by OPRD of the Final Report and the completed Project. OPRD will not be obligated to make final payment to Sponsor until all documentation and reports due under Section 6 hereof are complete and provided to OPRD, including the ID number or vehicle identification number of any equipment purchased by Sponsor, and subject to a final inspection and approval of the Project by OPRD.

b. Allowable Costs. The Grant is for the Project and shall not be used for any other purpose. No Grant funds will be disbursed for any changes to the Project unless such changes are approved by OPRD by Amendment pursuant to section 13.b hereof. Sponsor shall not use any Grant Funds for administration, overhead or indirect costs, whether or not related to this Agreement.

c. Conditions Precedent to Disbursement. OPRD's obligation to disburse Grant moneys to Sponsor under this Agreement is subject to satisfaction, with respect to each disbursement, of each of the following conditions precedent:

- i. OPRD has received sufficient funding, appropriations, limitations, allotments, or other expenditure authority sufficient to allow OPRD, in the exercise of its reasonable administrative discretion, to make the disbursement.
- ii. No default as described in section 11 has occurred.
- iii. Sponsor's representations and warranties set forth in section 8 are true and correct on the date of disbursement with the same effect as though made on the date of disbursement.
- iv. Sponsor shall provide OPRD a copy of all necessary federal, state and local permits required for the Project.

d. Recovery of Grant Moneys. Any Grant moneys disbursed to Sponsor under this Agreement that are expended in violation or contravention of one or more of the provisions of this Agreement ("Misexpended Funds") or that remain unexpended on the earlier of termination or expiration of this Agreement must be returned to OPRD. Sponsor shall return all Misexpended Funds to OPRD promptly after OPRD's written demand and no later than 15 days after OPRD's written demand. Sponsor shall return all Unexpended Funds to OPRD within 14 days after the earlier of expiration or termination of this Agreement.

8. Representations and Warranties of Sponsor. Sponsor represents and warrants to OPRD as follows:

- a. Organization and Authority.** Sponsor is a:
- Municipal agency
 - Other Governmental Entity (regional governments, port districts, special districts, etc)

duly organized and validly existing under the laws of the State of Oregon and is eligible to receive the Grant. Sponsor has full power, authority and legal right to make this Agreement and to incur and perform its obligations hereunder, and the making and performance by Sponsor of this Agreement (1) have been duly authorized by all necessary action of Sponsor and (2) do not and will not violate any provision of any applicable law, rule, regulation, or order of any court, regulatory commission, board, or other administrative agency or any provision of Sponsor's Articles of Incorporation or Bylaws (3) do not and will not result in the breach of, or constitute a default or require any consent under any other agreement or instrument to which Sponsor is a party or by which Sponsor or any of its properties may be bound or affected. No authorization, consent, license, approval of, filing or registration with or notification to any governmental body or regulatory or supervisory authority is required for the execution, delivery or performance by Sponsor of this Agreement.

b. Binding Obligation. This Agreement has been duly executed and delivered by Sponsor and constitutes a legal, valid and binding obligation of Sponsor, enforceable in accordance with its terms subject to the laws of bankruptcy, insolvency, or other similar laws affecting the enforcement of creditors' rights generally.

c. Use of Project property: Sponsor further warrants that the land within the project boundary described in Exhibit A shall be dedicated and used for a period of no less than 25 years from the completion of the Project. Sponsor agrees to not change the use of, sell, or otherwise dispose of the land within the Project boundary, except upon written approval by OPRD. Leases for projects placed on federally owned property must be at least 25 years.

If the Sponsor converts lands within the Project boundary to a use other than as described in the grant application or disposes of such land by sale or any other means, the Sponsor must provide replacement property acceptable to OPRD within 24 months of either the conversion or the discovery of the conversion.

If replacement property cannot be obtained within the 24 months, the Sponsor will provide payment of the grant program's prorated share of the current fair market value to the State. The prorated share is that percentage of the original grant (plus any amendments) as compared to the original project cost(s). The replacement property must be equal to the current fair market value of the converted property, as determined by an appraisal. The recreation utility of the replacement property must also be equal to that of the lands converted or disposed.

If conversion should occur through processes outside of the Sponsor's control such as condemnation or road replacement or realignment, the Sponsor will be required to pass through to the State that prorated share of whatever consideration is provided to the Sponsor by the entity that caused the conversion. The monetary value of whatever consideration provided by the taking will normally consist of the fair market value of the property established by an appraisal.

The warranties set forth above are in addition to, and not in lieu of, any other warranties set forth in this Agreement or implied by law.

9. Certain Covenants of Sponsor. Sponsor shall:

- a. Grant Funds.** Vigilantly safeguard the Grant moneys received hereunder and maintain financial controls sufficient to protect such moneys and ensure that the Grant moneys are used solely for purposes of the Project;
- b. Completion.** Complete the Project on or before the expiration date of this Agreement and submit a final report for the Project to OPRD in accordance with Section 6 hereof.
- c. Publicity.** Sponsor shall make every effort to acknowledge and publicize ORPD's participation and assistance with the project. Sponsor agrees to place signs at the Project location acknowledging ORPD's grant program support. Sponsor also agrees to maintain the signs throughout the life of the project. State may withhold final reimbursement payment until signage has been placed.
- d. Public Access to Project:** The Sponsor shall allow open and unencumbered public access to the completed Project to all persons without regard to race, color, religious or political beliefs, sex, national origin, or place of primary residence.

10. Records Maintenance and Access.

- a. Access to Records and Facilities.** OPRD, the Secretary of State of the State of Oregon (Secretary) and their duly authorized representatives shall have access to the books, documents, papers and records of Sponsor that are directly related to this Agreement, the Grant moneys provided hereunder, or the Project for the purpose of making audits and examinations. In addition, OPRD, the Secretary and their duly authorized representatives may make and retain excerpts, copies, and transcriptions of the foregoing books, documents, papers, and records. Sponsor shall permit authorized representatives of OPRD and the Secretary to perform site reviews of all services delivered as part of the Project.
- b. Retention of Records.** Sponsor shall retain and keep accessible all books, documents, papers, and records, that are directly related to this Agreement, the Grant moneys or the Project for a minimum of six (6) years, or such longer period as may be required by other provisions of this Agreement or applicable law, following the expiration date. If there are unresolved audit questions at the end of the three-year period, Sponsor shall retain the records until the questions are resolved.
- c. Expenditure Records.** Sponsor shall document the expenditure of all Grant moneys disbursed by OPRD under this Agreement. Sponsor shall create and maintain all expenditure records in accordance with generally accepted accounting principles and in sufficient detail to permit OPRD to verify how the Grant moneys were expended.

11. Default. Sponsor shall be in default under this Agreement upon the occurrence of any of the following events:

- a.** Sponsor fails to perform, observe, or discharge any of its covenants, agreements, or obligations set forth herein.
- b.** Any representation, warranty or statement made by Sponsor herein or in any documents or reports relied upon by OPRD to monitor implementation of the Project, the expenditure of Grant moneys or the performance by Sponsor is untrue in any material respect when made;

c. Sponsor (i) applies for or consents to the appointment of, or taking of possession by, a receiver, custodian, trustee, or liquidator of itself or all of its property, (ii) admits in writing its inability, or is generally unable, to pay its debts as they become due, (iii) makes a general assignment for the benefit of its creditors, (iv) is adjudicated as bankrupt or insolvent, (v) commences a voluntary case under the Federal Bankruptcy Code (as now or hereafter in effect), (vi) files a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up, or composition or adjustment of debts, (vii) fails to controvert in a timely and appropriate manner, or acquiesces in writing to, any petition filed against it in an involuntary case under the Bankruptcy Code, or (viii) takes any action for the purpose of effecting any of the foregoing; or

d. A proceeding or case is commenced, without the application or consent of Sponsor, in any court of competent jurisdiction, seeking (i) the liquidation, dissolution or winding-up, or the composition or readjustment of debts, of Sponsor, (ii) the appointment of a trustee, receiver, custodian, liquidator, or the like of Sponsor or of all or any substantial part of its assets, or (iii) similar relief in respect to Sponsor under any law relating to bankruptcy, insolvency, reorganization, winding-up, or composition or adjustment of debts, and such proceeding or case continues undismissed, or an order, judgment, or decree approving or ordering any of the foregoing is entered and continues unstayed and in effect for a period of sixty consecutive days, or an order for relief against Sponsor is entered in an involuntary case under the Federal Bankruptcy Code (as now or hereafter in effect).

e. **Remedies upon Default.** If Sponsor's default is not cured within 30 calendar days of written notice thereof to Sponsor from OPRD or such longer period as OPRD may authorize in its sole discretion, OPRD may pursue any remedies available under this Agreement, at law or in equity. Such remedies include, but are not limited to, termination of this Agreement, return of all or a portion of the Grant moneys, payment of interest earned on the Grant moneys, and declaration of ineligibility for the receipt of future grant awards from OPRD. If, as a result of Sponsor's default, OPRD demands return of all or a portion of the Grant moneys or payment of interest earned on the Grant moneys, Sponsor shall pay the amount upon OPRD's demand.

12. TERMINATION

a. **Termination for Convenience.** Either party may terminate this Agreement at any time prior to the expiration date of this Agreement upon 15 days notice to the other party. Neither party shall incur any new obligations for the terminated portion of this Agreement and shall cancel as many obligations as possible immediately upon receipt of notification from the other party. Payment in full shall be allowed for the non-cancelable obligations properly incurred up to the effective date of the termination. All Unexpended Funds shall be returned to OPRD within 14 days of termination.

b. **OPRD Termination.** OPRD may terminate this Agreement:

i. Immediately upon written notice to Sponsor, if OPRD does not obtain sufficient funding and expenditure authorizations to allow OPRD to meet its payment obligations under this Agreement.

ii. Immediately upon written notice to Sponsor if state or federal laws, regulations, or guidelines are modified, changed or interpreted in such a way that OPRD does not have the authority to provide Grant moneys for the Project or no longer has the authority to provide the Grant moneys from the funding source it had planned to use.

iii. Upon 30 calendar days advance written notice to Sponsor, if Sponsor is in default under this Agreement and such default remains uncured at the end of said 30 day period or such longer period, if any, as OPRD may specify in the notice.

13. GENERAL PROVISIONS

a. **Indemnification.** To the extent permitted by the Oregon Constitution and the Oregon Tort Claims Act, Sponsor shall indemnify, defend (subject to ORS chapter 180), and hold harmless the State of Oregon and OPRD and their officers, employees, and agents from all claims, suits, actions, losses, damages, liabilities, costs and expenses of any nature, resulting from, arising out of or relating to the activities of the Sponsor or Sponsor's officers, employees, sub-contractors, or agents under this Agreement.

b. **Amendments.** This Agreement may be amended or extended only by a written instrument signed by both parties. A request for an extension of the Project Completion Date for a six month period may be granted if requested by Sponsor in writing at least 30 days prior to the Project Completion Date and the request includes a compelling need, as determined in OPRD's sole discretion, for the extension.

c. **Participation in Similar Activities.** This Agreement in no way restricts Sponsor or OPRD from participating in similar activities with other public or private agencies, organizations, or individuals.

d. **Duplicate Payment.** Sponsor is not entitled to compensation or any other form of duplicate, overlapping or multiple payments for the same work performed under this Agreement from any agency of the State of Oregon or the United States of America or any other party, organization or individual. All sponsor matching contributions must be used and expended for this project only and within the Project period.

e. **No Third Party Beneficiaries.** OPRD and Sponsor are the only parties to this Agreement and are the only parties entitled to enforce its terms. Nothing in this Agreement gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly or indirectly, to a third person unless such a third person is individually identified by name herein and expressly described as intended beneficiary of the terms of this Agreement.

f. **Notices.** Except as otherwise expressly provided in this Agreement, any communications between the parties hereto or notices to be given hereunder shall be given in writing by personal delivery, facsimile, or mailing the same, postage prepaid to Sponsor or OPRD to the applicable Principal Contact at the address or number set forth below, or to such other addresses or numbers as either party may indicate pursuant to this section. Any communication or notice so addressed and mailed shall be effective five (5) days after mailing. Any communication or notice delivered by facsimile shall be effective on the day the transmitting machine generates a receipt of the successful transmission, if transmission was during normal business hours of the Sponsor, or on the next business day, if transmission was outside normal business hours of the Sponsor. Any communication or notice given by personal delivery shall be effective when actually delivered.

OPRD:

Oregon Parks and Recreation Department
Local Government Grant Program Coordinator
725 Summer Street NE, Suite C
Salem, OR 97301
Phone: 503-986-0708
Fax: 503-986-0794

Sponsor:

North Clackamas and Recreation District
Katie Dunham
150 Beaver Creek Road
Oregon City, OR 97045
Phone: (503) 742-4358
Fax: (503) 742-4349
Email: kdunham@clackamas.us

g. Governing Law, Consent to Jurisdiction. This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively, "Claim") between OPRD (or any other agency or department of the State of Oregon) and Sponsor that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the Circuit Court of Marion County in the State of Oregon. In no event shall this section be construed as a waiver by the State of Oregon of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the eleventh amendment to the Constitution of the United States or otherwise, from any Claim or from the jurisdiction of any court. **EACH PARTY HEREBY CONSENTS TO THE EXCLUSIVE JURISDICTION OF SUCH COURT, WAIVES ANY OBJECTION TO VENUE, AND WAIVES ANY CLAIM THAT SUCH FORUM IS AN INCONVENIENT FORUM.**

h. Compliance with Law. Sponsor shall comply with all federal, state and local laws, regulations, executive orders and ordinances applicable to the Agreement or to the implementation of the Project. Without limiting the generality of the foregoing, Sponsor expressly agrees to comply with the following laws, regulations and executive orders to the extent they are applicable to the Agreement or the implementation of the Project: (a) all applicable requirements of state civil rights and rehabilitation statutes, rules and regulations, (b) Titles VI and VII of the Civil Rights Act of 1964, as amended, (c) Sections 503 and 504 of the Rehabilitation Act of 1973, as amended, (d) the Americans with Disabilities Act of 1990, as amended, and ORS 659A.142, (e) Executive Order 11246, as amended, (f) the Health Insurance Portability and Accountability Act of 1996, (g) the Age Discrimination in Employment Act of 1967, as amended, and the Age Discrimination Act of 1975, as amended, (h) the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, (i) all regulations and administrative rules established pursuant to the foregoing laws, and (j) all other applicable requirements of federal civil rights and rehabilitation statutes, rules and regulations. These laws, regulations and executive orders are incorporated by reference herein to the extent that they are applicable to the Agreement or the Project and required by law to be so incorporated. Sponsor shall not discriminate against any individual, who receives or applies for services as part of the Project, on the basis of actual or perceived age, race, creed, religion, color, national origin, gender, disability, marital status, sexual orientation, alienage or citizenship. All employers, including Sponsor, that employ subject workers who provide services in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126.

i. Severability. If any term or provision of this Agreement is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular term or provision held to be invalid.

j. Assignment of Agreement, Successors in Interest. Sponsor shall not assign or transfer any interest in this Agreement, enter into any subcontracts, or subgrant any Grant moneys, without the prior written approval of OPRD. Any such assignment, transfer, subcontract, or subgrant, if approved, is subject to such conditions and provisions, as OPRD may deem necessary, including without limitation that, for any portion of the Project awarded by Sponsor to a contractor, Sponsor shall provide to OPRD a copy of the contractor's performance bond in the amount of the contract issued by a surety company authorized to do business in Oregon. No approval by OPRD of any assignment, transfer, subcontract or subgrant shall be deemed to create any obligation of OPRD in addition to those set forth in this Agreement nor will OPRD's approval of an assignment, transfer, subcontract or subgrant relieve Sponsor of any of its duties or obligations under this Agreement.

k. Survival. All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Sections 6, 8, 10, 13.a, 13.e, 13.g, 13.k and 13.l.

l. Integration and Waiver. This Agreement, including all Exhibits, constitutes the entire agreement between the parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. The delay or failure of either

party to enforce any provision of this Agreement shall not constitute a waiver by that party of that or any other provision. Sponsor, by the signature below of its authorized representative, hereby acknowledges that it has read this Agreement, understands it, and agrees to be bound by its terms and conditions.

IN WITNESS THEREOF: the parties hereto have caused this agreement to be properly executed by their authorized representatives as of the day and year hereinafter written.

Sponsor:

ORPD Grant Program:

By: _____
Printed Name & Title

By: _____
Local Government Grants Program Coordinator

Sponsor Signature

Date

Date

Grants Division Manager

Date

**State of Oregon, acting by and through its
State Parks and Recreation Department**

By: _____
Roger Roper, Assistant Director

Date

**Approved for legal sufficiency (when Grant amount exceeds \$150,000)
Oregon Department of Justice**

By: _____

Date: _____



DAN JOHNSON
MANAGER

DEVELOPMENT AGENCY

DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD | OREGON CITY, OR 97045

November 21, 2012

Development Agency Board
Clackamas County

Members of the Board:

**Approval of an Agreement between the Clackamas County Development Agency,
Oregon Iron Works, and United Streetcar
for Site Development and Economic Expansion**

In 2007, years of effort by Oregon Iron Works (OIW) culminated in the formation of United Streetcar (USC), a subsidiary of OIW and the only manufacturer of street cars in the United States. Formation of this subsidiary, initiated a regional search to site United Streetcar's future manufacturing facility. Location of this facility in Clackamas County would result in the manufacturing of traded sector goods that are new to our region, new private investment, family wage jobs, and an economic boost to numerous businesses in the area benefiting from local sourcing.

The Board of County Commissioners identified an opportunity to utilize a 32.3 acre parcel of land, adjacent to the existing OIW facility and originally acquired for right-of-way purposes. It was determined the site could meet the transportation needs of the region, as well as support the expansion needs of OIW.

In May of 2009, the Board secured the commitment of OIW/USC to site this new manufacturing facility at the former Northwest Pipe and Casing site on Mather Road in Clackamas County's industrial area.

To assist in creating these new traded sector jobs and foster sizable private investment, the Board of County Commissioners negotiated an agreement with OIW/USC whereby the County would provide incentives if and when OIW/USC achieves mutually agreed upon performance objectives.

Recommendation

- Approve the attached Agreement between the Clackamas County Development Agency, Oregon Iron Works, and United Streetcar.
- Delegate authority to the Board Chair to execute the Agreement and any other related document on behalf of the Development Agency Board.

Respectfully submitted,

Dan Johnson
Development Agency Manager

For more information on this issue please contact Dan Johnson at (503) 742-4325 or via e-mail at danjoh@co.clackamas.or.us

AN AGREEMENT BETWEEN THE CLACKAMAS COUNTY DEVELOPMENT AGENCY, OREGON IRON WORKS, AND UNITED STREETCAR FOR SITE DEVELOPMENT AND ECONOMIC EXPANSION

This is an agreement by which funds are transferred for the purpose of creating the capital and human investment that leads to job creation and economic growth, hereinafter referred to as the "Agreement". It is made and entered into by and between the CLACKAMAS COUNTY DEVELOPMENT AGENCY, the urban renewal agency of Clackamas County and a municipal corporation of the State of Oregon, acting by and through its local officials, hereinafter referred to as "Agency," OREGON IRON WORKS, INC., an Oregon corporation with its corporate headquarters in Clackamas County, hereinafter referred to as "OIW," and UNITED STREETCAR, LLC, an Oregon limited liability company located in Clackamas County, all herein referred to individually or collectively as "Party" or "Parties."

RECITALS

- A. The Agency and OIW have entered into a long-term lease of property located at 9571 SE Mather Rd. under the terms of which OIW as lessee is using land owned by the Agency for the manufacture of streetcars. A copy of the lease is attached to this Agreement as Exhibit A, hereinafter the "Lease".
- B. An important element in the relationship between OIW, United Streetcar, and the Agency is OIW's and United Streetcar's commitment to manufacture streetcars in Clackamas County, and the Agency's recognition that the manufacture of streetcars is a specific economic development opportunity that creates jobs.
- C. The State of Oregon has also recognized the manufacture of streetcars as an important economic development opportunity that creates jobs by selecting the "Oregon Iron Works – Highway 212 to Lawnfield Road Connector" as an Immediate Opportunity Fund Agreement," hereinafter the "IOF Agreement". A copy of the IOF Agreement is attached to this Agreement as Exhibit B.
- D. In order to best realize this opportunity for primary economic development and important job creation, OIW, United Streetcar, and the Agency enter into the following agreement, by which the Agency transfers up to three hundred and fifty thousand dollars (\$350,000.00) for job creation, six hundred and fifty thousand dollars (\$650,000.00) for purchasing from local sources, and one million dollars (\$1,000,000.00) for onsite capital investment to OIW and United Streetcar under the terms and conditions set out below. In exchange OIW and United Streetcar commit to the creation of 100 (one hundred) specific jobs at three hundred percent (300%) of the minimum wage, a 10% (ten percent) increase in local sourcing, and ten million dollars (\$10,000,000.00) in private investment.

The Agreement

1. The obligations of OIW and United Streetcar.
 - 1.1. OIW and United Streetcar shall only use the funds they may receive from the Agency for capital expenditures, local sourcing, or work force spending specifically located at or about the property subject to the Lease set out as Exhibit A.
 - 1.2. Within twenty four (24) months of the execution of this Agreement OIW and United Streetcar shall provide to the Agency documentation demonstrating that one hundred (100) new positions have been filled during the dates set forth below.
 - 1.2.1. The hundred (100) new positions referenced in Section 1.2 shall be employees of OIW or United Streetcar and may only be located in Clackamas County, at or about the property that is the subject of the Lease.
 - 1.2.1.1. For purposes of this Agreement "Employees" shall be defined as workers:
 - 1.2.1.1.1. Who are paid through the normal payroll system of either OIW or United Streetcar;
 - 1.2.1.1.2. For whom Federal Insurance Contribution Act ("FICA") and federal and state income taxes are deducted from his or her gross wages, and then forwarded to the appropriate agencies by either OIW or United Streetcar on behalf of the worker;
 - 1.2.1.1.3. As to whom OIW or United Streetcar pays federal and state unemployment insurance; and
 - 1.2.1.1.4. As to whom OIW or United Streetcar contributes to FICA.
 - 1.2.1.2. An exception to the requirements set out in Section 1.2.1.1 shall be made if OIW or United Streetcar uses a leasing agent or equivalent entity for its workers and the terms of the leasing agreement are such that hiring decisions are made by OIW or United Streetcar and for all purposes the worker is an employee of OIW or United Streetcar.
 - 1.2.1.3. Workers shall not be considered as employees if the workers are:

1.2.1.4. Hired through an agency to provide temporary services to OIW or United Streetcar, or

1.2.1.5. Acting as independent contractors.

1.2.2. Each and every one of the hundred (100) jobs shall be new full-time equivalent positions three hundred percent (300%) of the minimum wage. For purposes of this Agreement, the number of full-time equivalent jobs maintained by OIW or United Streetcar shall equal the amount obtained by taking the total hours worked by employees in a calendar quarter, as such hours are reflected in employment information obtained from the Oregon Employment Department or comparable information provided by OIW or United Streetcar, and dividing the total hours by four hundred fifty five (455).

1.2.3. Each and every one of the hundred (100) jobs shall be maintained for an uninterrupted two-year period consisting of eight (8) consecutive calendar quarters that begins no earlier than May 6, 2009 and ends no later than December 31, 2014. OIW and United Streetcar may designate any single set of eight (8) consecutive calendar quarters occurring between May 6, 2009 and December 31, 2014 as the contract period.

1.2.4. The Agency intends to obtain the number of hours worked by employees at the OIW and United Streetcar Clackamas Facility during the contract period through information obtained from the Oregon Employment Department. If the Agency is not able to obtain information from the Oregon Employment Department to determine the number of hours worked by OIW and United Streetcar employees at the Clackamas Facility during the contract period, OIW and United Streetcar shall provide comparable information, as the Agency may reasonably request, for each such employee in order to determine the actual number of full-time equivalent jobs at the Clackamas Facility during the contract period. The Agency, or any of its designees, shall have the right to audit the payroll records of OIW and United Streetcar in order to confirm information in the letter.

1.2.4.1. If the documentation shows a deficiency in the number of new positions, OIW and United Streetcar shall reimburse the Agency on a pro-rated basis. The formula for the pro-rated amount of funds paid to OIW and United Streetcar shall be an amount equal to the number of actual new positions divided by the number of projected new positions (100) multiplied by the total funds available. Reimbursement will be the amount actually distributed less the pro-rated amount.

the date of execution of this Agreement. Interest shall accrue from the date of the first transfer of funds from the Agency to OIW and United Streetcar.

1.3.2. 3. At OIW or United Streetcar's request and upon the Agency's consultation with other entities, the Agency may grant a time extension on the reimbursement or a time extension to provide additional job growth. Any extension will only be effective upon amendment to this Agreement.

1.4 Within twenty four (24) months of the execution of this OIW and United Streetcar shall provide evidence, satisfactory to the Agency, of a minimum of ten million dollars (\$10,000,000.00) investment of private capital in and about the property that is the subject of the Lease set out in Exhibit A.

1.4.1. The investment of private capital shall be defined as the expenditure for buildings and structures, machinery and equipment, and private infrastructure that results in an increase in assessed value for property tax purposes, or which would result in an increase in assessed value were it not for a property tax deferral of limited duration.

1.4.2. The verification of the private investment described in Section 1.4 shall, as a minimum, be by a letter on company letterhead signed by an official of OIW or United Streetcar, duly authorized to represent the entity, certifying the increase in private investment. The Agency, or any of its designees, shall have the right to audit the records of OIW and United Streetcar in order to confirm information in the letter.

1.5. OIW and United Streetcar each acknowledge and agree that the Agency has only been able to enter into this Agreement and transfer the funds because of its involvement and association with other entities, including the State of Oregon. OIW and United Streetcar each specifically agrees that, among others, the State of Oregon, the Oregon Secretary of State's Office, the federal government, and their duly authorized representatives shall have access to such fiscal records and other books, documents, papers, plans and writings of OIW and United that are pertinent to this Agreement to perform examinations and audits and make excerpts and transcripts. OIW and United Streetcar shall each retain and keep all files and records for a minimum of six (6) years after the last date calculated under Section 1.2.3 above.

1.6. OIW and United Streetcar shall comply with all federal, state, and local laws, regulations, executive orders and ordinances applicable to the work under this Agreement. Without limiting the generality of the foregoing, OIW and United Streetcar expressly agrees to comply with (i) Title VI of Civil Rights Act of 1964; (ii) Title V and Section 504 of the Rehabilitation Act of 1973; (iii) the

Americans with Disabilities Act of 1990 and ORS 659A.142; (iv) all regulations and administrative rules established pursuant to the foregoing laws; and (v) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations.

1.7. OIW and United Streetcar each agrees to indemnify, defend, save and hold harmless the State of Oregon, the Oregon Transportation Commission and its members, the Department of Transportation and its officers, employees and agents, the Agency, and Clackamas County, its officers, agents, and employees, from and against any and all claims, actions, liabilities, damages, losses, or expenses, including attorneys' fees, arising from tort, as now or hereafter defined in ORS 30.260, caused or alleged to be caused, in whole or in part, by the negligent or willful acts or omissions of OIW or United Streetcar and its officers, agents, employees or subcontractors. It is the specific intention of the Parties that the Agency and the aforelisted parties shall, in all instances except for claims arising solely from their own negligent or willful acts or omissions, be indemnified by from and against any and all claims.

2. The obligations of the Agency.

2.1. Economic Opportunity Fund: Within sixty days of the execution of this Agreement and receipt of the one million dollars (\$1,000,000.00) described in the IOF Agreement set out as Exhibit B, the Agency may begin transfer of up to one million dollars (\$1,000,000.00) in immediately bankable funds. The manner of transfer shall be on a reimbursement basis according to a demonstration of the number of jobs created, valued at three hundred fifty thousand dollars (\$350,000.00), in accordance with the provisions of Section 1.2 and increase in local sourcing, valued at six hundred fifty thousand dollars (\$650,000.00), and may occur quarterly or at such other interval as the parties may decide.

2.1.1. OIW and United Streetcar acknowledge that these funds shall be used solely for job creation and increase in local sourcing and shall be subject to the performance standards outlined in Section 1.2 and 1.3.

2.1.2. OIW and United Streetcar acknowledge that the Agency has responsibilities for the transfer of funds according to the terms of the IOF Agreement set out as Exhibit B, and accept the responsibility and obligation to otherwise indemnify or reimburse the Agency in the event of any demands under the Agreement.

2.2. Site Development Grant: Within sixty days of the execution of this Agreement, the Agency may begin transfer of up to one million dollars (\$1,000,000.00) in immediately bankable funds. The manner of transfer shall be on a reimbursement basis according to a demonstration of the amount of private investment and may occur quarterly or at such other interval as the parties may

decide. OIW and United Streetcar acknowledge that these funds shall be used solely for capital expenditures specifically located on the Agency's property subject to the Lease set out as Exhibit A and shall be subject to the performance standards outlined in Section 1.4.

- 2.3. The Agency shall, at its own expense, exclusive of the moneys set out in Section 2.1 and 2.2 above, assign a Project Liaison to monitor the expenditure by OIW and United Streetcar of the sums received by OIW and United Streetcar pursuant to this Agreement. The Agency shall be provided all information it may request as to the investments made and the jobs created.

3. General Terms.

- 3.1. Any notice, communication, or delivery required or permitted by the terms of this Agreement shall be deemed given if delivered personally to an officer of the party to be notified as set out below, or sent by United States registered or certified mail, postage prepaid, return-receipt requested, and addressed as follows:

If to the Agency: Clackamas County Development Agency
Attn: Development Agency Manager
Development Services Building
150 Beaver Creek Rd.
Oregon City, OR 97045

If to OIW: Oregon Iron Works, Inc.
Attn: General Counsel
9700 SE Lawnfield Rd.
Clackamas, OR 97015

If to United Streetcar: United Streetcar, LLC
Attn: General Counsel
9700 SE Lawnfield Rd.
Clackamas, OR 97015

- 3.2. Neither anything in this Agreement, nor any acts of the parties hereto shall be deemed or construed to create the relationship of principal and agent, or of partnership, or of joint venture, or of any association between any the parties to this Agreement other than the specific obligations set out herein.
- 3.3. This Agreement and attached exhibits constitute the entire agreement between the Parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No waiver, consent, modification, or change of terms of this Agreement shall bind either Party unless in writing and signed by both Parties and all necessary approvals have been obtained. Such waiver, consent,

modification, or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of the Agency to enforce any provision of this Agreement shall not constitute a waiver by the Agency of that or any other provision.

3.4. This Agreement may be terminated by mutual written consent of both Parties.

- 3.4.1. The Agency may terminate this Agreement effective upon delivery of written notice to OIW and United Streetcar, or at such later date as may be established by the Agency, under any of the following conditions:
 - 3.4.2. If OIW or United Streetcar fails to provide services called for by this Agreement within the time specified herein or any extension thereof.
 - 3.4.3. If OIW or United Streetcar fails to perform any of the other provisions of this Agreement, or so fails to pursue the work as to endanger performance of this Agreement in accordance with its terms, and after receipt of written notice from the Agency fails to correct such failures within ten (10) days or such longer period as the Agency may authorize.
 - 3.4.4. If the Agency fails to receive funding, appropriations, limitations or other expenditure authority sufficient to allow the Agency, in the exercise of its reasonable administrative discretion, to continue to make payments for performance of this Agreement.
 - 3.4.5. If federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the work under this Agreement is prohibited or the Agency is prohibited from paying for such work from the planned funding source.
 - 3.4.6. Any termination of this Agreement shall not prejudice any rights or obligations accrued to the Parties prior to termination.
- 3.5. The Parties shall attempt in good faith to resolve any dispute arising out of this Agreement. In addition, the Parties may agree to utilize a jointly selected mediator or arbitrator (for non-binding arbitration) to resolve the dispute short of litigation.
- 3.6. OIW, United Streetcar, and the Agency hereto agree that if any term or provision of this Agreement is declared by a court of competent jurisdiction to be invalid, unenforceable, illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected, and the rights and obligations of the Parties shall be construed and enforced as if the Agreement did not contain the particular term or provision held to be invalid.

- 3.7. While OIW, United Streetcar, and the Agency are entering into this Agreement with the intention of supporting primary economic development in Oregon through the construction of streets and roads, there are no third party beneficiaries with rights to enforce this contract.
- 3.8. This Agreement may be executed in several counterparts (facsimile or otherwise) all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of this Agreement so executed shall constitute an original.

The Parties, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, and agree to be bound by its terms and conditions.

CLACKAMAS COUNTY DEVELOPMENT AGENCY, by and through its Board of Commissioners

By _____
Chair

By _____
Recording Secretary

Date _____

///

Oregon Iron Works, Inc.

By _____
President

Date _____

United Streetcar, LLC

By _____

Date _____