

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Study Session Worksheet

Presentation Date: 1/28/14

Approx Start Time: 1:30 pm

Approx Length: 1 hour

Presentation Title: Solid Waste and Recycling Administration

Department: Transportation and Development

Presenters: Scott Caufield (Division Manager), Eben Polk (Supervisor), and Rick Winterhalter (Sr. Analyst)

Other Invitees: Solid Waste Commissioners; Garbage and Recycling Franchisees; Barb Cartmill, DTD Acting Director

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD? This is an informational update and no action is requested.

EXECUTIVE SUMMARY:

Study Session Objectives:

- Review the development of solid waste and recycling administration including franchises and statutory requirements
- Discuss role of system in providing for a healthy, livable, safe community
- Review how the franchise system functions
- Identify emerging trends and policy issues

Summary of Information Covered:

- Clackamas County solid waste and recycling history
- Statutory background
- Current solid waste and recycling system
 - Franchise areas, rates, and fees
 - Rate review and adjustment process
- Solid Waste Commission
- Public feedback on the current system
- Emerging policy issues
 - Disaster debris management planning
 - Compost service and siting
 - Increase waste prevention and recovery of valuable materials

FINANCIAL IMPLICATIONS (current year and ongoing): Administration and programs for solid waste and recycling primarily have been funded through fees and do not draw on the General Fund. Other initiatives in this division have received limited general fund allocations in certain years since 2008 for work that reduces costs for county operations, or other projects that relate to the county at large.

LEGAL/POLICY REQUIREMENTS: Relevant laws and statutes include:

- Clackamas County Solid Waste Code (Chapter 10 of the County Code) (1970)
- Resource Conservation and Recovery Act (1976)

- Oregon Revised Statutes (ORS) 459 & 459A (known as the Opportunity to Recycle Act, 1983, revised 1991)

PUBLIC/GOVERNMENTAL PARTICIPATION: Clackamas County's Solid Waste Commission advises the Board.

OPTIONS: N/A

RECOMMENDATION: N/A

ATTACHMENTS: Background documents on solid waste and recycling administration

SUBMITTED BY:

Division Director/Head Approval

Scott D. Campbell

Department Director/Head Approval

H. B. Cartmill 1-22-14

County Administrator Approval _____

For information on this issue or copies of attachments, please contact Eben Polk @ 503-742-4470

Fiscal Impact Form – Instructions

RESOURCES:

Is this item in your current work plan and budget?

YES

NO

START-UP EXPENSES AND STAFFING (if applicable):

N/A

ONGOING OPERATING EXPENSES/SAVINGS AND STAFFING (if applicable):

N/A

ANTICIPATED RESULTS:

Continued oversight and provision of programs to ensure a safe, cost-effective, and valuable solid waste and recycling system for unincorporated Clackamas County residents.

COSTS & BENEFITS:

N/A

Attachment A. Solid Waste and Recycling Background & History

Early Garbage Collection

When 'modern' refuse collection systems were first established more than 100 years ago, their primary benefit was to remove putrescible and foul waste from communities and reduce open burning of garbage, improving public health and safety. Prior to municipal collection of garbage and rubbish only the wealthy were able to hire private services. Much of the working population lived in squalor. Municipal collection dramatically reduced disease vectors and odors while cleaning up streets, soils, waterways, and the air. Much of this waste was food scraps, manure, and inorganic materials like ash.

Early solid waste collection systems were established in the 1880s largely as a local responsibility, centering on municipal dumps. The approach adopted by New York City was replicated nationwide by local departments of sanitation. It included street sweeping, refuse collection and transportation, resource recovery, and disposal. In the following decades technologies such as trucks, motorized street sweepers, and sanitary and lined landfills were developed.

1950s: Clackamas County establishes a transfer station in Sandy.

Though roadside collection service is available for all citizens in the County, some may choose to haul their own garbage. The county's transfer station at Canyon Valley Road, 1.5 miles east of Sandy, was used as a refuse dump in the 1950s and 1960s, operated by the County. In 1971 the Board converted the facility into a transfer station to continue to assist citizens in the areas around Sandy. Until 1983 the facility was operated by the County or contractors. Since 1983 the facility has been operated via a franchise, currently held by Waste Management of Oregon, Inc. The County regulates the service offered and establishes the fees.

Today the facility provides drop-off service for garbage and curbside recyclables. It serves as an eCycles site for collecting old computers and TVs. The site also accepts lead acid batteries, cooking oil, tires, appliances and other metal scrap for recycling.

1970: Clackamas County establishes solid waste collection franchises.

Clackamas County's franchise system was established in 1970, governed by ordinance reflected today in Chapter 10 of the County Code. The 27 private collection businesses operating in unincorporated areas at the time accepted service territories, based predominantly on where they were already providing service. The franchise system was established as a public-private partnership, emerging from the market and its locally-owned businesses. Efficient service boundaries were set, some of which reflected trades or acquisitions amongst franchisees. The County acted as arbiter to facilitate mutual agreements where necessary.

Collection of garbage, recycling and yard debris is a utility-type service that lends itself to single providers with public oversight, similar to services such as cable, phone, electricity, natural gas, and water. Municipal involvement in garbage collection services reflects a variety of methods throughout the country. Franchise systems are common west of the Mississippi, while east of the Mississippi publicly-operated collection systems and contracting have been more common. In Oregon, local governments oversee and regulate solid waste collection. Most use a franchise system. Those that do not tend to have similar approaches such as licenses, permits or contracts for collectors, and fees to fund oversight and required programs. For example in the

metro area all jurisdictions use a franchise system with the exception of the City of Portland's commercial collection, which instead is governed with administrative rules, permits, and per ton fees.

Advantages of a franchise system:

- **Responsibility:** The County's solid waste collection system is an effective means to implement our responsibility for solid waste policy and programs. Solid waste management policy is inherently a public issue and ensures public accountability in this area.
- **Consistent service** is provided to all residents and businesses in unincorporated Clackamas County.
- **Balances streamlined collection services with promoting the competitive efficiencies of the free market.**
- **Efficiencies and scale:** Lower per-customer costs are also a result of collection efficiencies (e.g. in use of time and fuel) and sufficient scale.
- **Road maintenance, safety, noise, and traffic:** One collector in a service territory reduces the impact on highways and roads by heavy duty trucks, encourages road safety, and reduces traffic and noise in neighborhoods.
- **Equity and access:** A franchise system helps maintain some equity in costs for rural residents and businesses and ensures that everyone has the opportunity to receive collection service.
- **Operational standards:** Collectors receive the revenue necessary to maintain equipment in safe and peak operational condition, ensuring proper maintenance and safe operation. The franchise provides some surety to lenders, allowing collectors to obtain financing to replace trucks as necessary, ensuring they are more efficient and cleaner.
- **Statutory requirements:** Enforcement, compliance tracking, and recycling services are streamlined and easier to accomplish.

Additionally, while the system does not inherently guarantee local investment, Clackamas County's system emerged from services predominantly held by locally-owned companies providing family-wage jobs. The County's system has helped ensure that these companies remained competitive over time.

1971: Oregon's Bottle Bill

Oregon became the first state in the US to institute a container redemption system in 1971, with a five-cent deposit on all carbonated beverages sold in the state. At the time, the system was driven by the desire to reduce litter on roads and beaches. Later, the diversion of bottles for recycling was recognized as another important benefit by the state and industry. Recent changes to the Bottle Bill have helped it stay relevant—water bottles were added in 2009, with juices and teas to follow by 2018.

1976: the Resource Conservation and Recovery Act

The 1976 Resource Conservation and Recovery Act (RCRA) led to the closure of many unsanitary municipal dumps nationwide, which in turn led to more regional planning for municipal solid waste (MSW). Private companies assumed an expanded role through regional facilities that required the transportation of MSW longer distances and across state lines. Ultimately this shaped today's landscape of MSW: managed by municipalities, with collection, transfer and disposal services provided by a relatively small number of private companies. In many cases these services are governed by state and regional policy. Services consist of a mixture of landfill, incineration, recycling, and composting, regulated under RCRA and other federal and state laws.

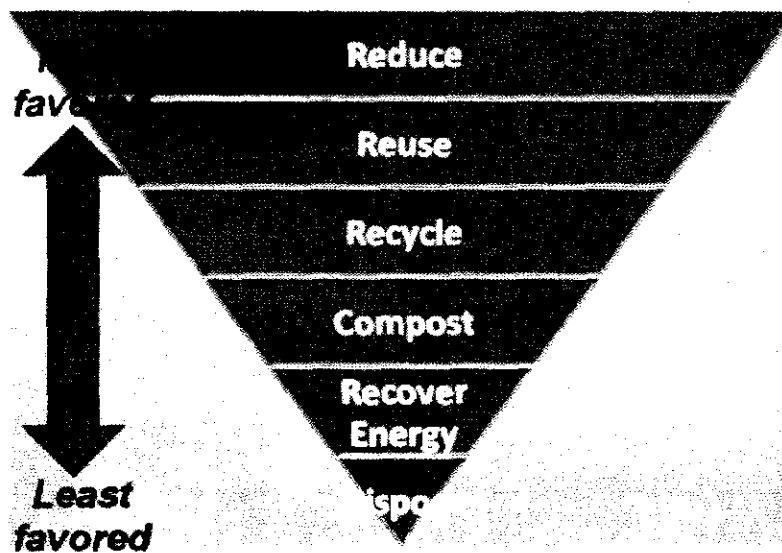
1983: the advent of Oregon's statewide Solid Waste and Recycling framework

Oregon enacted solid waste and recycling legislation in 1983, in part in response to requirements of RCRA.

ORS 459, known as the Opportunity to Recycle Act:

- Identified individual counties as 'wastesheds' for solid waste planning purposes
- Led to many new monthly curbside residential recycling programs
- Required the establishment of recycling depots in wastesheds
- Codified a preferential hierarchy for solid waste management, pictured below

**Oregon's Solid Waste Hierarchy
(ORS 459.015—1983 Recycling Opportunity Act, revised 1991)**



Franchise authority is formalized

The 1983 Opportunity to Recycle Act also codified authority for local governments to franchise garbage and recycling collection. By that time, most local jurisdictions already had some form of control, permitting, licensing or franchises in place. ORS 459.085 states that counties may (a) *Prescribe the quality and character of and rates for collection service, and the minimum requirements to guarantee maintenance of service;* and (b) *Divide the unincorporated area into service areas, grant franchises to persons for collection service within service areas, and establish and collect fees from persons holding franchises.*

Clackamas County leadership

Since 1983 Clackamas County has played a leadership role in shaping a solid waste collection system focused on capturing materials with value. After the Opportunity to Recycle Act's passage, the County was one of a few jurisdictions reporting to the DEQ, instituted the beginnings of an education program in the schools, and offered monthly collection of newspapers to residential customers. As required by state law, the cost of the education and collection was reflected in rates through the franchise fee. The County was the first to offer curbside recycling collection for all residents.

1991 - 2001: Oregon updates solid waste and recycling statutes

Oregon has revised the Opportunity to Recycle Act in recognition that opportunities remain to increase recovery of recyclable materials and return them to the stream of commerce rather than ending their economic life. The **1991** act, among other things:

- Set a *statewide recovery goal of 50 percent by 2000* and interim recovery goals for individual wastesheds by 1995, later revised to 2009 goals
- Combined Clackamas, Multnomah and Washington Counties into a single wasteshed and designated Metro as the coordinating agency for solid waste planning
- Expanded opportunity-to-recycle, incorporating optional program elements
- Established a state household hazardous waste program
- Required recycled content in glass containers, directories and newsprint and set requirements for *recycling rigid plastic containers to promote market development*
- Required DEQ to develop a solid waste management plan

Local government programs

Legislation in **1991 and 1997** established a menu of options for local governments to encourage recycling participation and increase the amount of material recovered from the waste stream, also clarified in OAR 340-090-0040. Cities with 4,000 or more residents offer at least three programs from the list below, and basic *regular education and promotion of recycling*. Cities with population 10,000 or more must provide one or two more program elements.

1. Weekly, residential curbside collection of source-separated recyclable materials, on the same day as garbage service. (If this program element is not implemented, a minimum of monthly curbside collection is still required.) Local governments must also give notice to each person of the opportunity to recycle and encourage source separation of recyclable materials through an education and promotion program.
2. An expanded recycling education and promotion program which includes, among other things, *recycling collection promotion directed at residential and commercial solid waste service customers and generators at least four times a year*.
3. Provision of at least one durable recycling container directly to each residential collection service customer.
4. Recycling collection service provided to multi-family dwelling complexes having five or more units.
5. Residential yard debris collection program for collection and composting of residential yard debris.
6. Regular, on-site collection of source-separated principal recyclable materials from commercial generators.
7. Establishment of an expanded system of recycling depots which are conveniently located to the population served.
8. Garbage collection rates established as a waste reduction incentive, including a mini-can option.
9. A collection and composting program for commercial and institutional food waste, non-recyclable paper and other compostable waste.

In 2001, HB 3744:

- extended the statewide recovery goal to 50 percent by 2009
- led to solid waste management plans at the wasteshed level
- established goals for no per capita increase in waste generation by 2005 and no total increase by 2009

Today's System

Clackamas County regulates solid waste and recycling collection pursuant to Chapter 10 of the County Code and the aforementioned statutes, especially ORS 459 and 459A.

With collaboration from local governments, Metro is responsible for planning and reporting to the Oregon Department of Environmental Quality (DEQ) on the activities of the counties and cities in the three-county area. In the Portland metropolitan area, local jurisdictions franchise/permit for the *collection of solid waste* and Metro licenses / franchises / contracts for the *disposal of solid waste*. The tri-county wasteshed (coordinated by Metro) set a voluntary goal of 64% for 2009. Our Regional Solid Waste Management Plan was updated in 2008.

Oregon's statewide recovery rate stands at 50% and the tri-county wasteshed of Clackamas, Multnomah and Washington counties recovers at least 56%. Oregonians dispose of 3.4 lbs per person per day, and recover 3.4 lbs per day through recycling, composting and incineration. Oregon also has well-regarded recycling or recovery programs for electronic waste (25.9 million pounds in 2011) and paint (PaintCare).

Oregon law also governs solid waste and recycling policies such as:

- the Bottle Bill
- a Paint Care program guiding paint stores to recover unused paint
- Electronics recycling
- Hazardous Waste

Attachment B. Clackamas County's Solid Waste & Recycling Collection System

Since the inception of the system in 1970, periodically some franchises have been acquired by other franchisees. The County now has 14 companies that hold 22 franchises. See Attachment D below for maps outlining franchises in both unincorporated county and in cities.

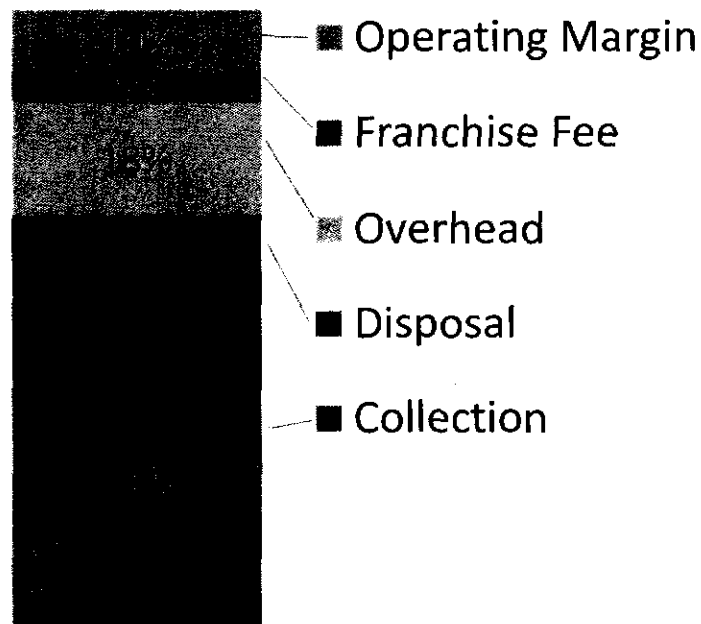
Number of customers by area:

Fee Zone	Customers
Urban	29,500
Rural	14,000
Distant Rural/Mountain	7,600

Franchise Rates

A principal component of the franchise system is the setting of rates charged by collectors. The County may adjust the rates annually, which reflects 5 cost areas as shown below.

Components of the Rate



The primary drivers of rates are changes in costs of inputs for service (e.g. fuel, labor, capital equipment), disposal costs, and less-frequently, changes in service. The rate setting process used in Clackamas County has resulted in conservative rate increases. For example, since 1992 the monthly rate for weekly residential service with a 32-gallon trash can, plus recycling and yard debris collection, has increased 72% from \$16.85 to \$28.90 in 2013. This is very close to the rate of inflation as experienced by US consumers in the consumer price index: it takes \$28 today to purchase what \$16.85 could purchase in 1992. This was also a slower rate of increase than other utilities such as natural gas, electricity, or benchmarks like the federal mileage reimbursement rate.

Franchise Fee

To administer the program and meet state and regional requirements for solid waste and recycling programs, Clackamas County adopted a franchise fee at the inception of the system in 1970. The fee is included in the overall rates.

The franchise fee serves multiple purposes:

- Oversight of collection of garbage, recycling, and yard debris
- Provide for a safe and sanitary system of collection, storage, transportation and disposal
- Support an annual financial review of collection costs and revenues
- Support consumer protection through rate-setting
- Ensure community livability by abating solid waste nuisances, prohibiting the accumulation of solid waste and solid waste nuisances on property, and ensuring compliance with relevant sections of the ZDO
- Implementing programs that meet state requirements, reflected in our Annual Plan
- Ensuring participation in local, regional and state solid waste planning activities
- Protect and provide the opportunity to recycle, in part via education, information, resources offered community-wide, and technical assistance for waste reduction offered specifically to businesses
- Historically, and again in FY13-14, funding clean up of dumping sites primarily in forest lands (DumpStoppers)

The franchise fee is a percentage of gross revenue.

Clackamas County Franchise Fee History

1970 – 1988:	2%
1988 – 1996:	3%
1996 – present:	5%

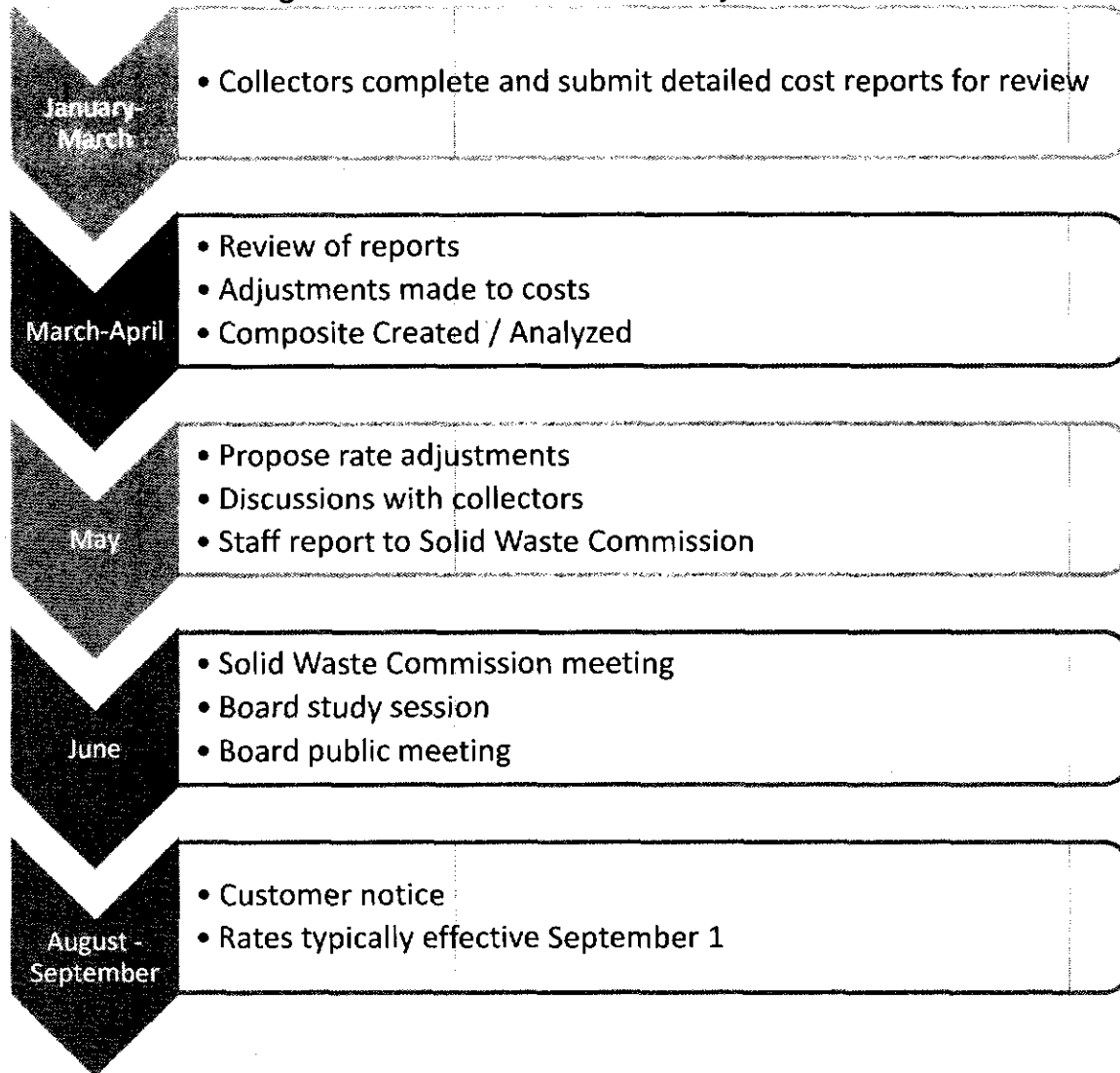
Regional fees collected by Metro on the transfer of garbage and recycling are also shared with the County through an annual IGA. These funds are specifically earmarked for waste reduction programs.

Rate Setting Process

Each year the County goes through a rate review process, which may lead to a rate adjustment. The review begins with financial and operational data submitted by the private collectors. Some costs that collectors report are excluded from the calculations that set the rate, costs that may be allowed for their tax purposes but that are not appropriate for ratepayers to cover. This includes the cost of buying out other collection routes and charitable contributions. The county contracts with a third party, a CPA specializing in solid waste system finances, to assist with the review. The individual company records are combined into a composite. The financial health of the system is based on the operating margin falling between 8 and 12%.

The rates customers pay ultimately include the cost of collection and disposal, minus revenues earned from recyclable materials, plus a franchise fee and an operating margin. The rates may also take into account contractual obligations for labor, which constitute 25% of the direct costs. If a change in rates appears to be justified, the proposal is presented to and deliberated by the Solid Waste Commission for possible recommendation to the Board.

Diagram of Annual Rate Review & Adjustment Process



Comparison of rates and fees

Franchise fees in neighboring jurisdictions are comparable to Clackamas County's 5% fee. For example:

- Beaverton: 5%
- Gresham: 7.5%
- Lake Oswego: 5%
- Milwaukie: 4%
- Portland: 4.5% (plus separate per-ton fees on commercial collection)
- Washington County: 5%

Clackamas County's cable franchise also assesses a 5% fee.

Solid Waste Commission

Together with the Board of Commissioners, a seven-member Solid Waste Commission oversees and governs the franchise system. The Board appoints members of the Solid Waste Commission except for those public employees who serve by reason of and for the duration of the position they hold.

Among other responsibilities, the SWC:

- Monitors franchise agreements between the County and franchised collectors and make recommendations for the Board to grant, modify, or revoke franchises.
- Reviews collection rate adjustments and recommends action to the Board
- Reviews, upon request, solid waste enforcement actions and appeals
- Reviews or recommends changes to regulations in Chapter 10.03 of the county code
- Reviews legislative changes affecting solid waste management and recycling in the County, making recommendations to the board for appropriate action
- Cooperate with other authorities in long-range planning for disposal sites and facilities
- Makes recommendations to the Board for waste reduction and recycling programs

The SWC includes seven members:

1. Director of the Department of Transportation and Development or his/her authorized representative.
2. Health Officer or his/her authorized representative.
3. One Member of the public.
4. One Member of the public.
5. One Member of the public.
6. One Collection Service Franchise holder.
7. One Collection Service Franchise holder.

Public Opinion

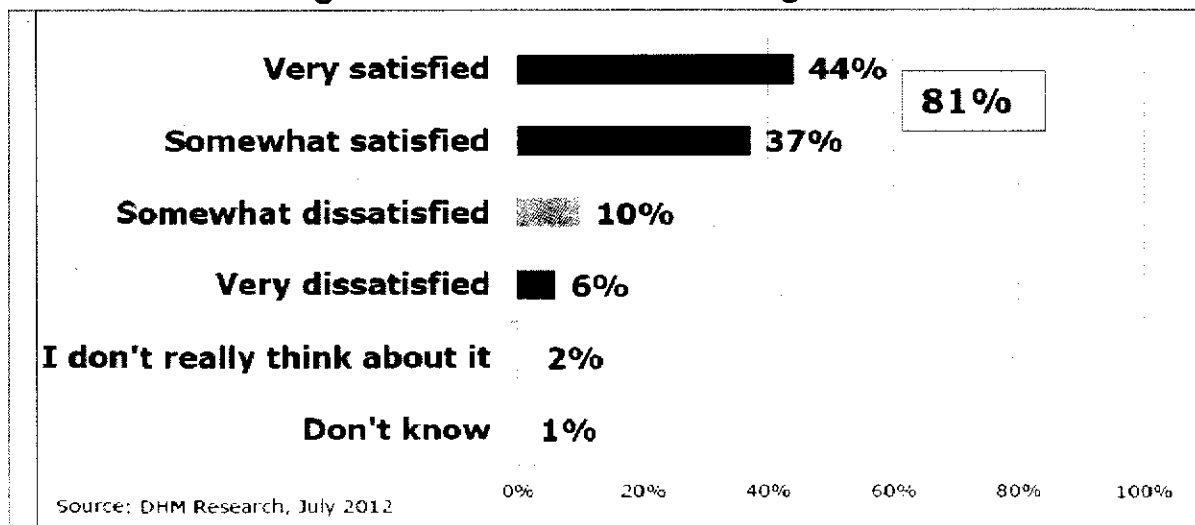
Historically when the public has been surveyed about the system of the curbside collection of garbage, recyclables, and yard debris, over 80% of the respondents indicate overall satisfaction. The business outreach program is also well received and is one area where the County provides a positive, direct service to a large number of businesses.

A recent survey indicates that generally, Clackamas County residents have favorable impressions of their garbage and recycling service and the current system of local haulers and regional transfer stations. In 2012 DHM Research administered an online survey about garbage management using Metro's Opt In tool, with 3,536 respondents. *The population sampled is not a statistically complete sample of the region, so the results should be taken as more indicative than perfectly representative.*

Satisfaction with current garbage service was higher among 411 Clackamas County residents (90% very or somewhat satisfied), than the regional average of 81%.

The top priorities for garbage management were protection of health and our environment. Keeping monthly garbage bills as low as possible was also a notable priority. Commenters also expressed a desire for improved recycling programs, reducing garbage generation, and consistent regional information and expectations.

Regional Satisfaction with Garbage Service



Although Metro is responsible for the ultimate disposal of garbage, but not its collection, the survey began with a question asking the members about their satisfaction with their current garbage service.

- Satisfaction was higher among Clackamas (90%) and Washington (89%) county members than those in Multnomah County (77%)

Attachment C. Emerging Policy Issues

1. Disaster Debris Management

Staff in the Sustainability and Emergency Management are initiating the development of a disaster debris management plan. Planning for the handling of debris is a vital component of the response to a disaster. Floods and earthquakes, for example, leave behind many tons of solid waste. Debris from collapsed or damaged buildings, roadways, and other infrastructure requires an immediate response to restore basic transportation and maintain public health. Disaster debris management entails cooperation and mutual aid agreements among many local jurisdictions to transfer debris to pre-selected local sites pending eventual sorting and removal, while also restoring regular garbage service as soon as possible.

We anticipate a collaborative process developed through IGAs with cities in Clackamas County, resulting in a plan that will be included as an appendix in the County's Emergency Response Plan. Disaster debris planning has been a focus in the region over the last year.

2. Composting Service and Siting

One of the next significant opportunities to capture valuable materials for economic use is in capturing food waste and food-related organic material. At present, Clackamas County does not have a formal food waste collection service. We would propose such service when reliable sites are available to process food waste.

Based on recent experience with food waste composting in Oregon, it is likely that commercial food waste will be treated separately from residential food waste. Recently commercial food waste generated within the Metro region, primarily within Portland, has been re-routed from the Nature's Needs, to an anaerobic digestion facility outside Corvallis called JC Biomethane. The facility converts food waste into gas for electricity generation, a solid compost product similar to peat moss, and a liquid fertilizer. A similar facility, Columbia Biogas, has been proposed but not yet financed in North Portland.

Residential food waste has the potential to be collected in yard debris, typically as a very small percentage compared to yard debris quantities. At the Nature's Needs facility in Washington County, odor complaints dropped significantly after the facility was limited to yard debris with intermingled food waste. Food waste is now a small percentage of the material accepted there. Currently the region lacks capacity for additional residential food waste. The local private facilities that accept and process yard debris are not currently permitted under DEQ rules to accept food waste mixed in. And, attempts to open new sites have not been successful.

At present, three cities in Clackamas County (Canby, West Linn, and Lake Osweg) have adopted commercial food waste collection service. County staff are working in these jurisdictions to roll out composting practices at grocery stores and restaurants. These materials are going to the Pacific Region Compost facility operated by Allied, outside Corvallis.

3. Increasing Commitment to Reducing Waste and Increasing Reuse and Recycling

The use of goods and materials is in the midst of a gradual but critical transformation from a linear, single-use system to a system which emphasizes reducing or eliminating waste through efficient use, less packaging, and recycling or reusing materials.

In the 20th century, municipal solid waste collection became a step in a linear life-cycle of manufactured goods, in which goods were produced, delivered, consumed, and almost universally disposed in a landfill. From 1960 to 2005 the discard of throw-away products and packaging waste tripled, growing more than twice as fast as U.S. population.

Yet, many materials we manufacture or harvest are high in value and have beneficial uses outside a landfill. Some are limited in supply. Some have

negative impacts associated with extraction. For these reasons, recycling and reusing materials has a much higher economic value, a lower total cost, and protects valuable lands and resources. As shown in the figure below, Oregon has made significant strides in increasing the percentage of materials that are recovered for valuable uses through recycling, composting or other means. National trends have been similar: per-capita garbage disposed peaked in 2000, at 4.74 lbs per person per day. In the U.S. we now recycle 34.7% of our waste, a rate that continues to grow. As of 2011 there were over 9,800 curbside recycling programs in the U.S. and 3,090 community composting programs. The 87 million tons recycled in 2011 saved as much energy as that used by 10 million U.S. households in a year.

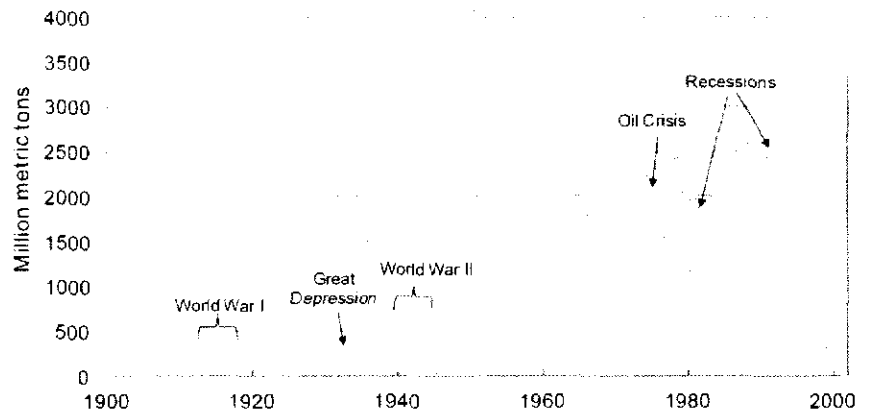
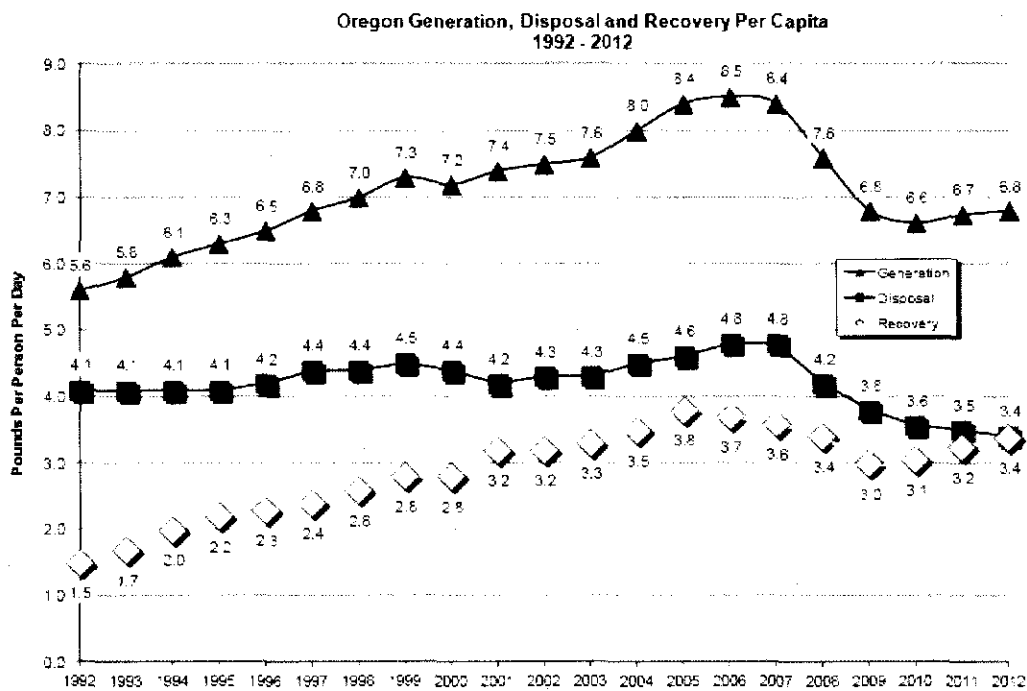
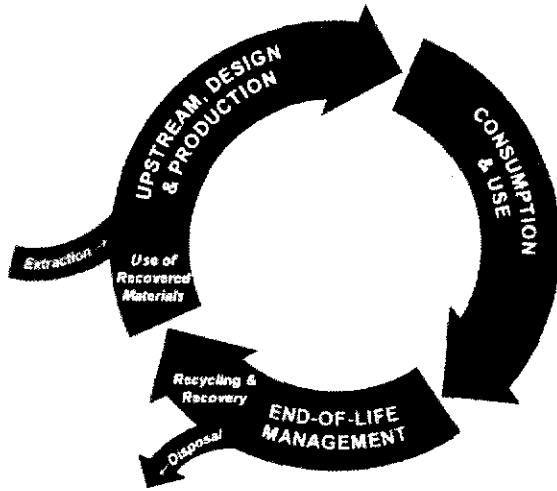


Figure 3. Use of Materials in the United States, 1900-2002. Modified from Center for Sustainable Systems, University of Michigan (2011), based on Matos and Wagner, 1998, and Wagner, 2002.⁴



Source: <http://www.deq.state.or.us/lq/pubs/docs/sw/2012MRWGRatesReport.pdf>



1. Lifecycle of Materials and Products (Source: Oregon 2050 Materials Management Vision)

Looking forward, Oregon’s vision for use of materials in the future looks more like a circle—in which the products we make and use can be reused and recycled as valuable inputs to more goods, rather than ending up in landfills. Many firms in the private sector are playing a role in this trend: reducing their own waste, finding valuable uses for used materials, increasingly recovering durables at their end of life, and designing products with less packaging. States and local governments are playing a role too: improving recycling policies, establishing collection options for food waste and other organic materials, and educating businesses and citizens. This transition will retain the public health benefits of solid waste collection while increasing the total value of our use of materials, and supporting more jobs than the historic collection-to-landfill lifecycle. This is an important change for a sustainable economy.

Oregon recently adopted this 2050 Vision and Framework for Materials Management:

***Oregonians in 2050 produce and use materials responsibly
conserving resources • protecting the environment • living well***

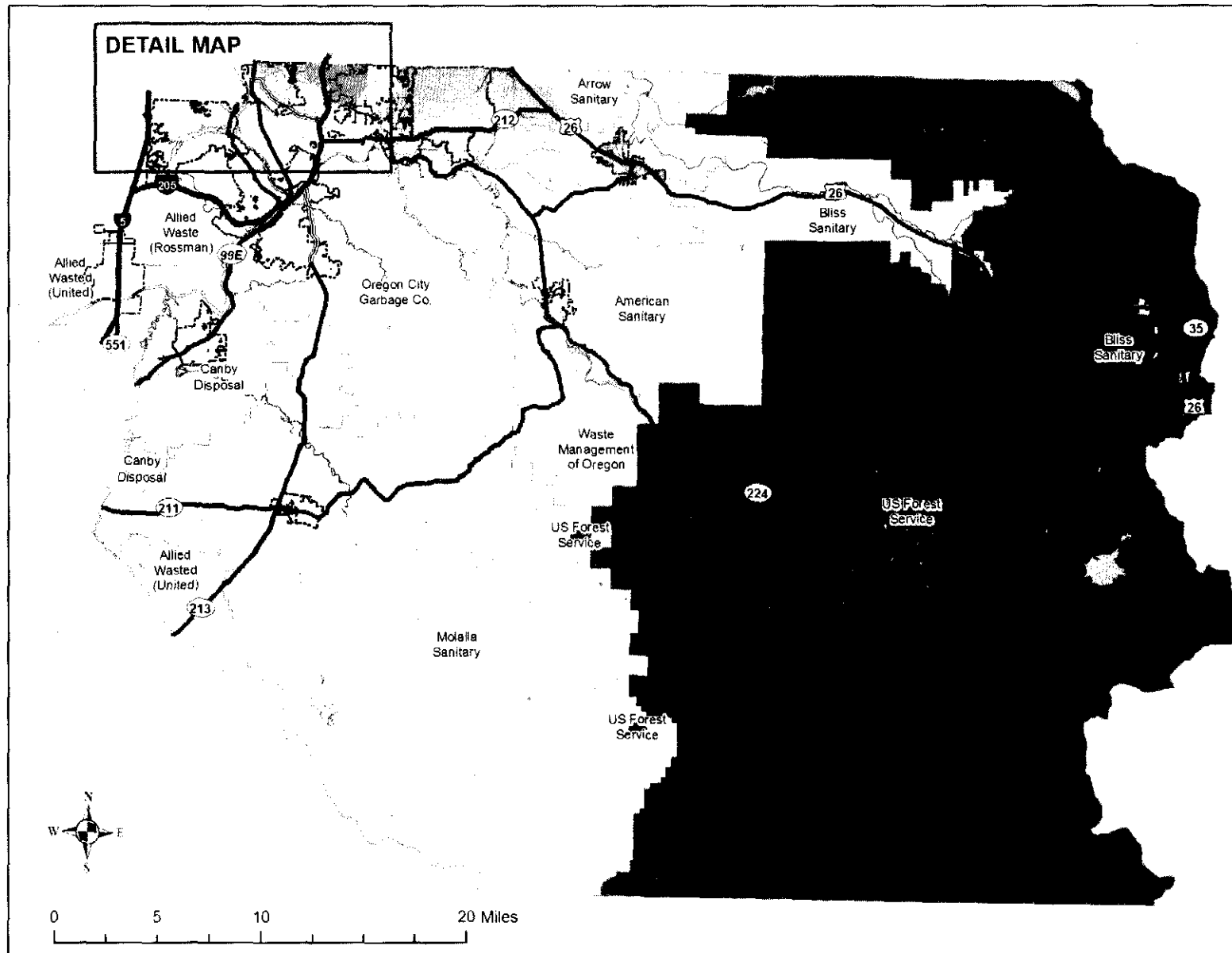
Additional statistics available at:

Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2011.

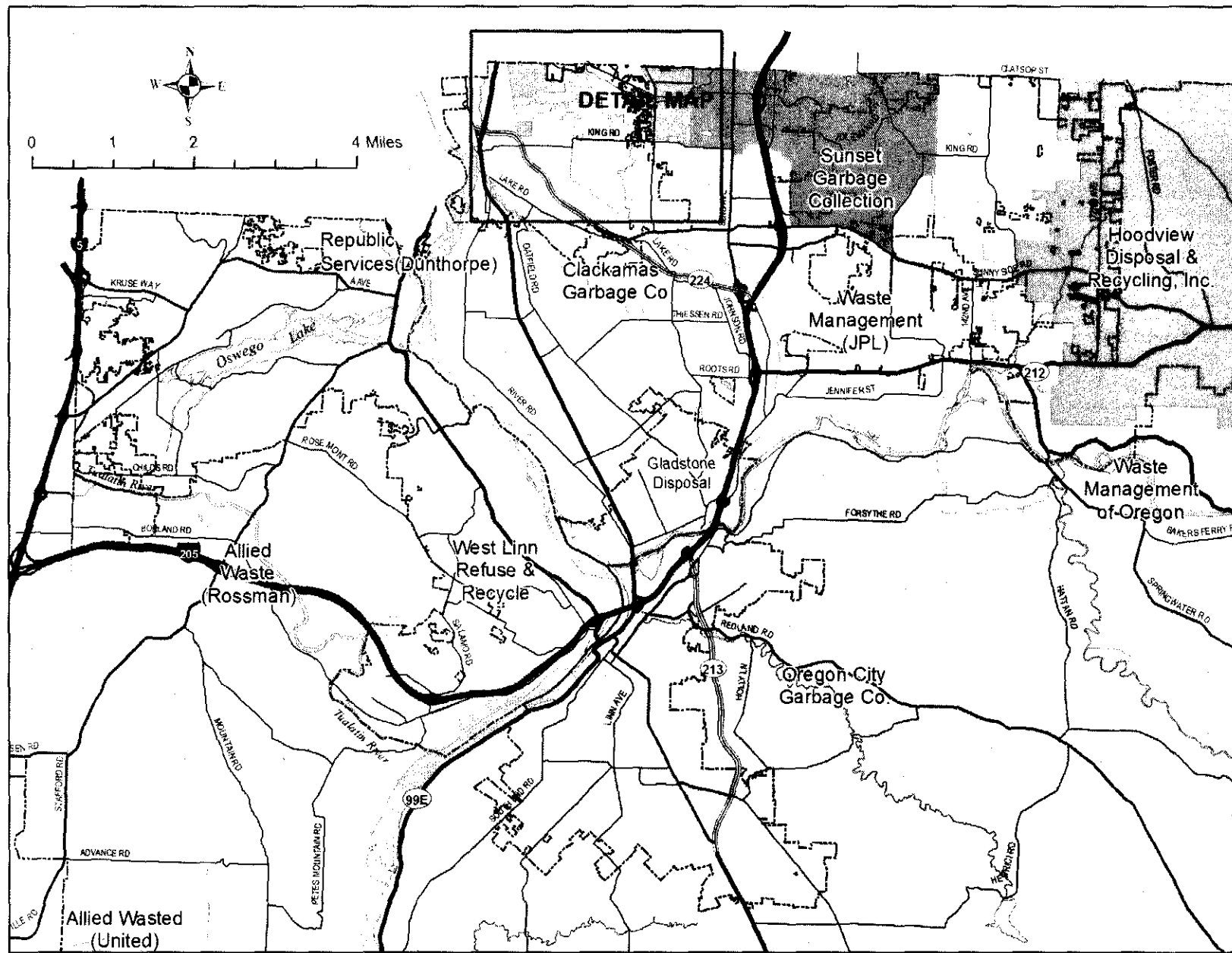
http://www.epa.gov/epawaste/nonhaz/municipal/pubs/MSWcharacterization_508_053113_fs.pdf

Attachment D. Maps

Map 1. Solid Waste Franchise Service Territories in Clackamas County



Map 2. Detail Map—Northwest Clackamas County Solid Waste Franchise Service Territories



Map 3. Detail Map—Clackamas and Milwaukie area Franchise Service Territories

