

# Metro | Agenda

Meeting:	MRF/CT Subcommittee Workshop Meeting #2
Date:	Wednesday, Feb. 24 <sup>th</sup> , 2016
Time:	1:00p.m. to 3:00 p.m.
Place:	Metro Council Chambers
Purpose:	Discuss history and current issues related to recycling collection practices and recyclable material handling in the region, including regulatory environment.
Outcomes:	History and current regulatory process is understood, MRF regulation question is understood, data needs identified.

---

1:00 p.m.	Welcome, Review Summary and Agenda	Roy Brower
1:15 p.m.	How We Got Here <ul style="list-style-type: none"><li>- Evolution of Collection Programs</li><li>- Current Market Issues</li></ul>	Dan Blue Bruce Walker Dylan de Thomas
2:00 p.m.	Metro Authority	Shane Abma
2:10 p.m.	Current Regulatory Landscape <ul style="list-style-type: none"><li>- Overview of Facility Designations</li><li>- Current Regulatory Practices</li></ul>	Warren Johnson
2:30 p.m.	Review the Questions, Identify Data Needs	Roy Brower
2:45 p.m.	Member Check In, Review Next Meeting Topics	Dan Blue
2:55 p.m.	Public Comments	Public
3:00 p.m.	Adjourn	Roy Brower

For agenda and schedule information, call Dan Blue at 503-797-1863, e-mail: [dan.blue@oregonmetro.gov](mailto:dan.blue@oregonmetro.gov).  
To check on closure or cancellations during inclement weather please call 503-797-1700.

### **Metro's nondiscrimination notice**

Metro respects civil rights. Metro fully complies with Title VI of the Civil Rights Act of 1964 that bans discrimination on the basis of race, color or national origin. For more information on Metro's civil rights program, or to obtain a Title VI complaint form, visit [www.oregonmetro.gov/civilrights](http://www.oregonmetro.gov/civilrights) or call 503-797-1536.

Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings. All Metro meetings are wheelchair accessible. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1536 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 7 business days in advance of the meeting to accommodate your request. For up-to-date public transportation information, visit TriMet's website at [www.trimet.org](http://www.trimet.org).

# Metro | *Meeting minutes*

Meeting: Solid Waste Alternatives Advisory Committee  
Date/time: Wednesday, February 24, 2016; 1:00 p.m. to 3:00 p.m.  
Place: Metro Council Chambers  
Purpose: Discuss history and current issues related to recycling collection practices and recyclable material handling in the region, including regulatory environment.  
Outcomes: History and current regulatory process is understood, MRF regulation question is understood, data needs identified.

---

## **Attendees**

Bruce Walker, City of Portland  
Theresa Koppang, Washington County  
Mike Davis, Clark County Washington (via phone)  
Vinod Singh, Far West Recycling  
Brian May, WRI Republic  
Jeff Murray, EFI  
Dylan de Thomas, Resource Recycling  
Scott Farling, Agilyx  
Matt Marler, Covanta  
Audrey O'Brien, Oregon Dept. of Environmental Quality  
Mike Lafferty, Citizen Rep  
Francisco Ibarra, Citizen Rep  
Betty Patton, Recycling Advocates  
Roy Brower, Metro

## **Absent**

Andy Kahut, KB Recycling

## **Presenters/Staff:**

Dan Blue, Metro  
Kim Waxler, Metro

Guest list is available upon request.

### **1. CALL TO ORDER AND DECLARATION OF A QUORUM**

Chair Roy Brower called the meeting to order and declared a quorum.

### **2. COMMENTS FROM THE CHAIR AND SWAAC MEMBERS**

Chair Brower welcomed members to the second meeting of the Material Recovery Facility and Conversion Technology Subcommittee (MRF-CT).

Subcommittee members and staff supporting the committee introduced themselves.

Chair Brower informed the Subcommittee that the meeting was being recorded and that the recording would be made available upon request. The meeting summary from the February 1, 2016, meeting was reviewed and approved as written without comment.

Chair Brower commented that the focus of the first two meetings of the MRF/CT Subcommittee was to provide a common understanding and knowledge of the regional solid waste and recycling system, how it works, key events of the past, and how it has evolved to the present day. Chair Brower reviewed the main topics for the meeting and the presenters that would discuss those topics including Dan Blue of Metro, Bruce Walker of the City of Portland, Dylan de Thomas of Resource Recycling magazine, and Shane Abma of Metro.

Chair Brower stated that there were three primary questions that he hoped the Subcommittee could address at the meeting including:

- What are the issues and challenges with current recycling system?
- What are potential solutions that the subcommittee should consider to address those challenges?
- What additional data or information does the subcommittee need?

Chair Brower stated that in order to move forward, the subcommittee had to come to an agreement on the assumption that Metro had legal authority to regulate these types of facilities, regardless of whether the subcommittee ended up opting for regulation or some other approach. He further stated that Metro holds that it has broad legal authority to oversee recyclables and the recyclable processing activities and that Metro does not intend to use the subcommittee's time to argue or adjudicate the legal authority of Metro and that there were other venues for that discussion.

All members were provided a MRF/CT notebook that they could use to organize meeting materials.

### **3. HOW WE GOT HERE, EVOLUTION OF COLLECTION PROGRAMS, CURRENT MARKET ISSUES**

Mr. Blue reviewed major milestones in the development of the region's solid waste and recycling system, including passage of major legislation such as Oregon's Bottle Bill and the Opportunity to Recycle Act (see Attachment A).

Mr. Walker provided an overview of how curbside recycling got started in Oregon and more particularly in the Portland region. He provided some background on his personal history and experience with the development of recycling programs. Mr. Walker discussed how materials were added to curbside collection with residents putting materials out in separate bins provided by the customers, then in bins provided by local governments, and maintaining separation of materials within those bins in bags or bundles. Mr. Walker described collection trucks which maintained the materials in separate compartments on the truck and the inefficiencies associated with that approach.

Mr. Walker then described how local governments and haulers started to make changes to the system and added comingled collection practices first in the bins, and then in rollcarts. The premise of comingling was that it was ok to mix materials together in the bins (though a decision was made to keep glass on the side). Mr. Walker then described how expansion of

the collection program allowed for more materials to be added, and equipment was then added at the recovery facilities to allow for the materials to be sorted.

Mr. Walker then mentioned that the challenges of today don't really reflect how things are set out at the curb, but more about the mix of materials being set out. He stated that as the region has moved to rollcarts there has been changes in what is being collected at the curb. While roll carts are more efficient, offer larger volume, are more convenient for customers and haulers, there are challenges including increased contamination and wishful recycling at the curb. Mr. Walker stated that the material stream has changed dramatically from the early '90s into the 2000s and today. As an example, he stated that newsprint was 2/3 of the material stream curbside in the mid '90s and that today it is less than 15%.

Glass was discussed in some detail with questions and comments from the membership. Mr. Walker discussed the decisions around keeping glass on the side while many jurisdictions around the country have gone to "single stream" recycling including glass. Mr. Walker reiterated the region's commitment to keep glass separate from the other materials to maintain quality glass and of other materials, particularly fibers.

Mr. Walker also addressed a question on how local governments decide to add materials to the curbside collection systems and provided an example of adding plastics. Mr. Walker conveyed that the decisions are market driven, that there is strong coordination with local processing facilities and with the haulers.

Mr. Singh concurred that streams have changed, and newsprint has declined very much and asked how would proposed regulation change or address the changing material stream and issues associated with that.

Mr. Murray commented on public depots which in this region have been used to evaluate whether particular materials could be added to curbside programs, and worked together with everyone in the region to make those decisions.

Ms. O'Brien stated that DEQ very much supports keeping glass on the side and that the practice results in maintaining the quality of Oregon's glass. She stated that a lower quality value is using it as an aggregate for use in landfills or for roadbed. Keeping glass on the side keeps value of all materials that are collected high.

Mr. de Thomas then gave a presentation with slides on the current state of recycling commodity markets. Mr. de Thomas focused on downturns in the value of recyclables globally. He provided evidence that commodities across the board are trending down including scrap metal, fibers, and plastics.

He then discussed some of the drivers for this downward trend including the strong US dollar, falling oil prices, changes in China's purchasing practices and internal production capacity, continuation of China's Green Fence material requirements, and the changing demographics within China. All factors continue to drive down commodity pricing, particularly for West Coast suppliers.

Mr. de Thomas discussed some positive indicators, including the growth in other Asian markets such as Indonesia, and that low cost fuel does help with transportation costs in the recycling industry, and finally that this is a very cyclical business which suggests that at some point things could improve. Mr. de Thomas took some questions from the membership and clarified that not every commodity was declining and provided the example of HDPE which has seen some positive pricing.

#### 4. **METRO AUTHORITY**

Mr. Abma from the Office of Metro Attorney provided some comments about Metro's regulatory authority. Mr. Abma stated that Metro's Attorney believes that Metro has broad authority based on Metro's home rule Charter, and based on state statute –particularly ORS 268. Mr. Abma emphasized that Metro's Charter is a modern charter as opposed to older "limited powers charters." Limited power charters tell you what you can do as opposed to modern charters which say that you can do anything unless prohibited under state law. Mr. Abma reiterated that the Subcommittee is not the proper forum for debating legal issues and discussing Metro's legal authority on these issues.

Mr. Abma and Chair Brower took questions and comments from the membership and from guests. Question topics included OAR 459A.075 exemptions, how decisions are made to regulate some recovery facilities but not others, and how Metro makes decisions to address issues within the industry.

Mr. Murray voiced concerns about the prospect of regulation for these facilities especially related to the necessity for conditional land use applications with local governments. Mr. Murray suggested that facilities may have to upgrade their operations due to proposed regulation which may be a non-conforming use from a land use perspective. Mr. Murray also read a statement for the record as follows: *Given that Metro's power to regulate solid waste and recycling is derived from and subject to state law, and that state law defines source separated recyclable materials as not subject to regulation as solid waste, what authority does Metro have to regulate these materials?*

#### 5. **ISSUES, QUESTIONS, AND IDENTIFY DATA NEEDS**

Chair Brower introduced and facilitated a discussion among the membership to identify issues and questions associated with the current recycling system as well as identifying data needs of the committee. The membership brainstormed a list of issues and questions which are grouped by category and listed below. Data needs included information about how source-separated recyclables material recovery facility technology works, and data on contamination issues.

##### **Impact of Regulation on Facilities**

- What are the effects of regulatory authorization (license, franchise etc.) on land use/zoning approval for recycling facilities?
- Land use for recycling facilities issue under conditional use.

##### **Market Volatility**

- What are current/future impacts on system from market volatility?

##### **Accountability**

- There is a lack of knowledge about what goes on within private facilities that are not regulated.
- Without regulation, how do local governments (LGs) achieve a level of transparency? Regulation protects everyone.

- The public thinks that government knows what is going on in these facilities, but LGs don't.
- Metro is sometimes unclear about whether a facility is exempt or not.
- How do LGs maintain commitment to highest and best use of recyclables across the system?
- LGs rely on private sector to deliver the services, LGs regulate hauling, but not the SSR facilities that haulers deliver to, LGs can't control highest and best use of these resources
- LGs want ability to ensure highest and best use of materials, and ensure public confidence in the system.
- What happens when things go wrong at an unregulated facility? A Washington County electronics facility was discussed.
- Can Metro Values be better ensured via regulation including licensing and inspections or not?
- LGs would like more information from SSR facility operators about contamination issues on a more routine basis.
- How can LGs and industry work together better to deal with issues?

#### **Is there a problem?**

- What are the perceived issues at SSRs or at other recycling facilities?
- Are there improvements that can be made on equipment to improve quality of materials?
- Could investments be made to improve material streams?
- Are there quality issues with the material streams?

#### **Authority/Regulation**

- While SSRs are exempted currently from authorizations, Metro has authority to inspect, but they are only able to determine if the materials are SSRs, there are no other standards to inspect against.
- Level the playing field, Metro controls flow of materials, SSRs do not.
- MRFs are regulated by other entities.
- Stormwater regulation is by LG and state.
- Not all environmental concerns are addressed by stormwater or air quality permits.
- What would happen if the SSRs sent the material out of state?

#### **From Guests:**

- Adding additional "pain" on facilities through additional regulation is not the right approach. Build on existing DEQ/OSHA regulations.

### **6. REVIEW OF THE NEXT MEETING'S AGENDA AND FINAL COMMENTS**

Mr. Brower thanked everyone for attending. The meeting adjourned at 3:00 p.m.

#### Upcoming MRF-CT Meetings:

- Thursday, March 17, 2016 from 9:30 a.m. to 11:00 a.m. at the Metro Regional Center
- Monday, April 18, 2016 from 10:00 a.m. to 12:00 p.m. at the Metro Regional Center

**Metro's nondiscrimination notice**

Metro respects civil rights. Metro fully complies with Title VI of the Civil Rights Act of 1964 that bans discrimination on the basis of race, color or national origin. For more information on Metro's civil rights program, or to obtain a Title VI complaint form, visit [www.oregonmetro.gov/civilrights](http://www.oregonmetro.gov/civilrights) or call 503-797-1536.

Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings. All Metro meetings are wheelchair accessible. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1536 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 7 business days in advance of the meeting to accommodate your request. For up-to-date public transportation information, visit TriMet's website at [www.trimet.org](http://www.trimet.org).

DRAFT

# MRF/CT Subcommittee Meeting 2

Feb. 24, 2016

1:00 p.m. – 3:00 p.m.

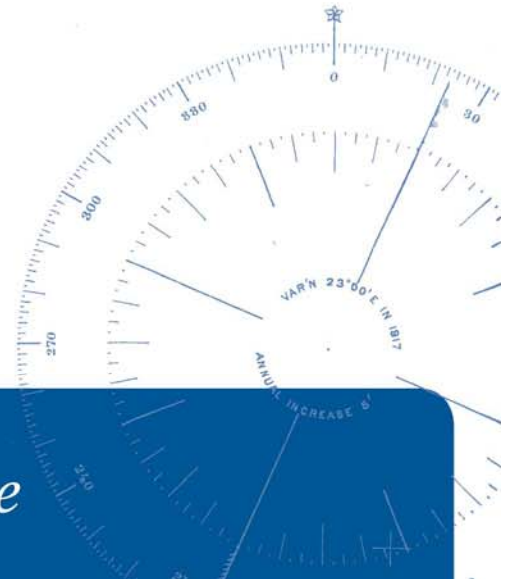
Roy Brower, Solid Waste Compliance & Cleanup Director

Warren Johnson, Compliance Supervisor

Dan Blue, Compliance Policy Specialist



Metro | *Making a great place*





# Agenda

1:00 Welcome, Review Summary and Agenda

1:15 How We Got Here - Timeline

- Evolution of Collection Programs

- Current Market Issues

2:00 Metro Authority

2:10 Review Issues, Questions, ID Data Needs

2:30 Review Next Meeting Topics

3:00 Adjourn

Roy Brower

Dan Blue

Bruce Walker

Dylan de Thomas

Shane Abma

Membership

Dan Blue

\*see detailed Agenda handout



Metro | *Making a great place*



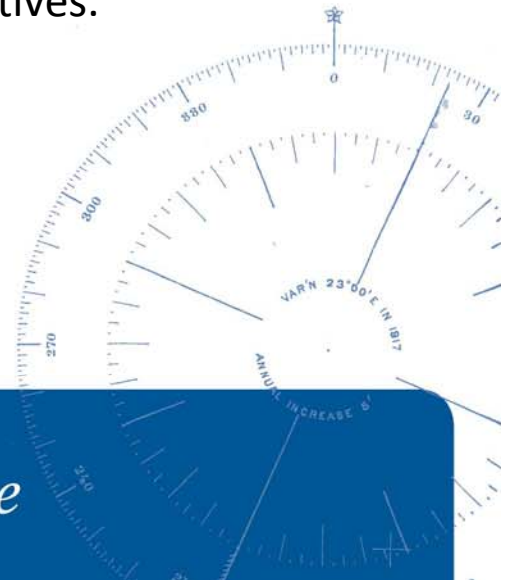
# MRF/CT Subcommittee Charge

**Purpose:** Consider whether MRFs that process source-separated recyclable materials and facilities that convert waste to energy or fuel should be subject to licensing and inspection similar to other facilities. If so, identify which requirements are appropriate?

**Outcome:** Provide the best advice possible to SWAAC on MRF/CT regulation, so that SWAAC can advise Metro Council on alternatives.



Metro | *Making a great place*



# How We Got Here

1. How We Got Here – Timeline
2. Evolution of Collection Programs
3. Current Market Issues

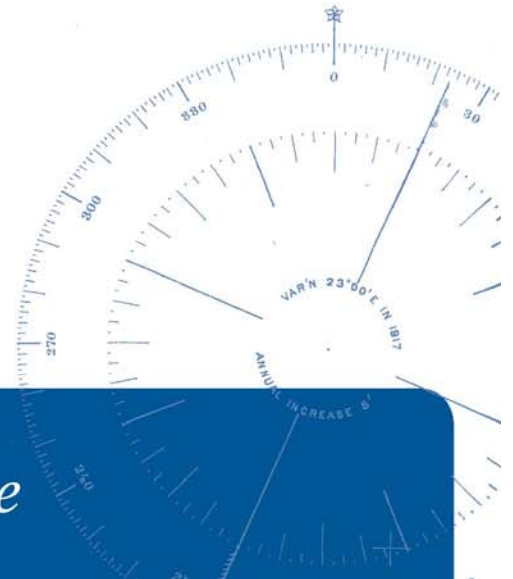
Dan Blue

Bruce Walker

Dylan de Thomas



Metro | *Making a great place*



# Evolution of Collection Programs

- Early recycling collection practices.
- What drove the shift to commingling?
- Composition of materials.
- The big picture.



Metro | *Making a great place*





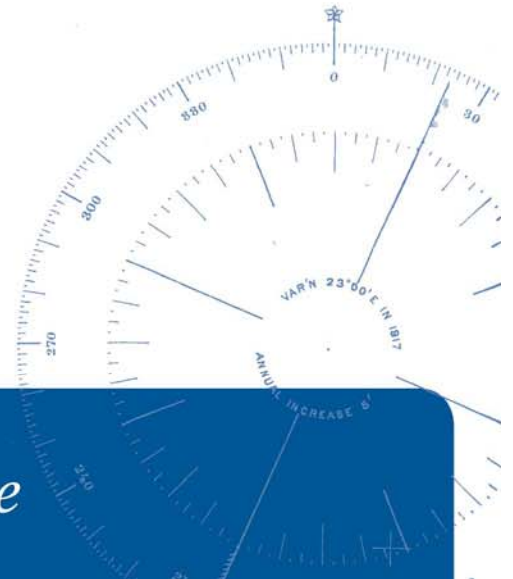
 Metro | *Making a great place*

# Current Market Conditions

Dylan de Thomas, Resource Recycling Magazine



Metro | *Making a great place*



# Agenda

1:00 Welcome, Review Summary and Agenda

1:15 How We Got Here - Timeline

- Evolution of Collection Programs

- Current Market Issues

2:00 Metro Authority

2:10 Review Issues, Questions, ID Data Needs

2:30 Review Next Meeting Topics

3:00 Adjourn

Roy Brower

Dan Blue

Bruce Walker

Dylan de Thomas

Shane Abma

Membership

Dan Blue

\*see detailed Agenda handout

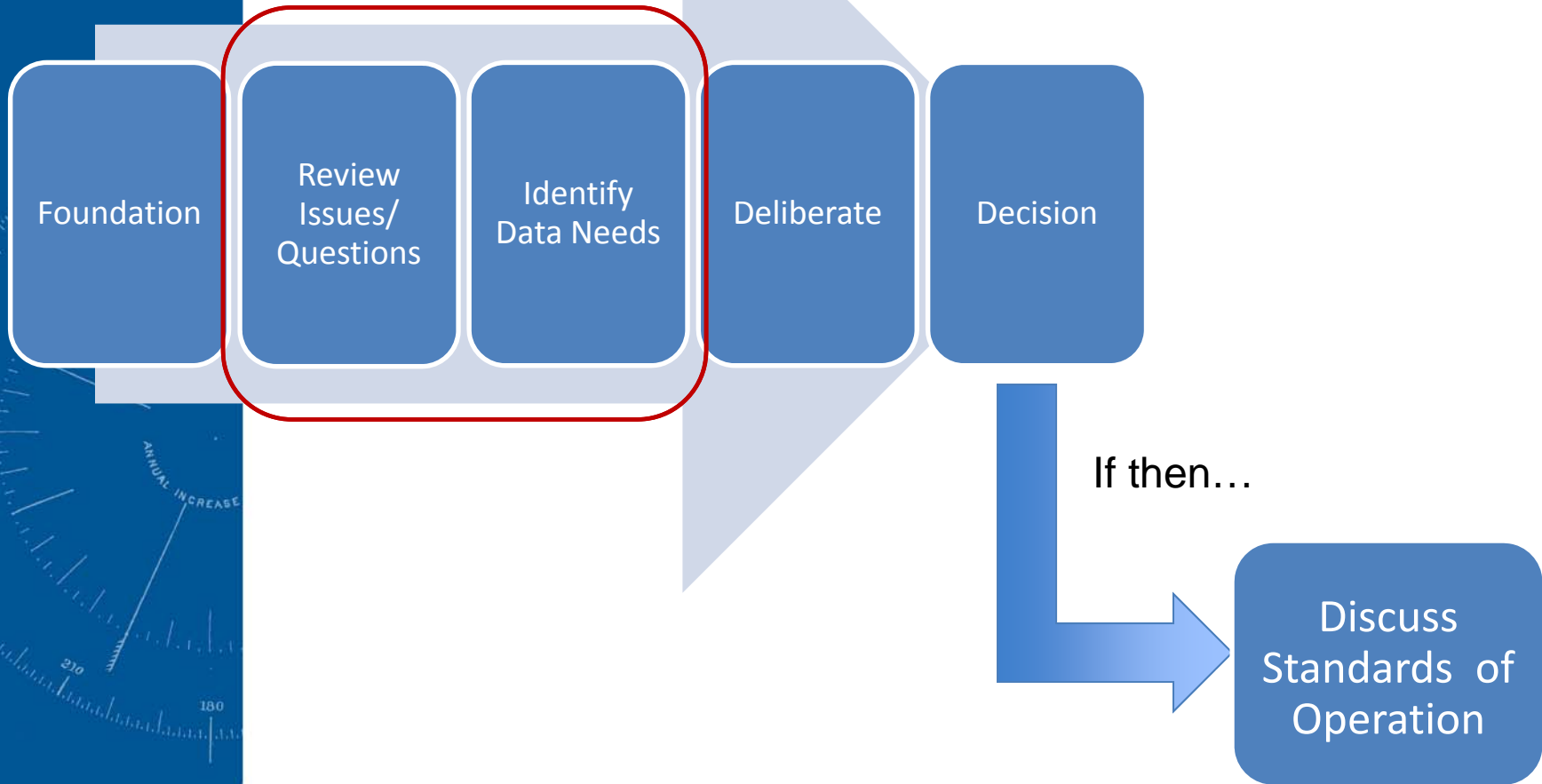


Metro | *Making a great place*





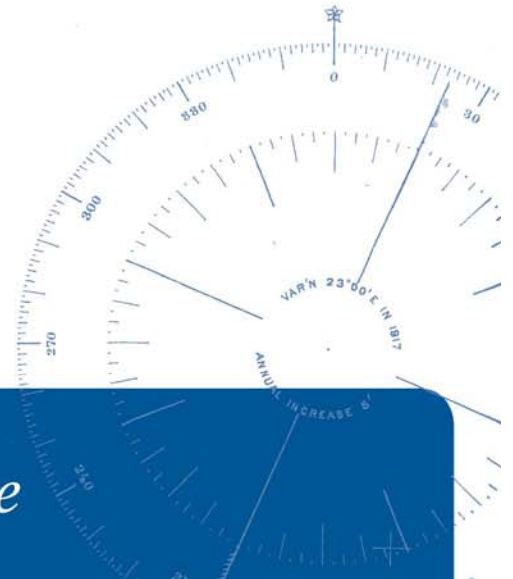
# Process Check





# Review the Question - MRFs

1. Should MRFs that process source-separated recyclable materials be subject to licensing and inspection similar to other facilities.
2. If so, identify which operational requirements are appropriate?



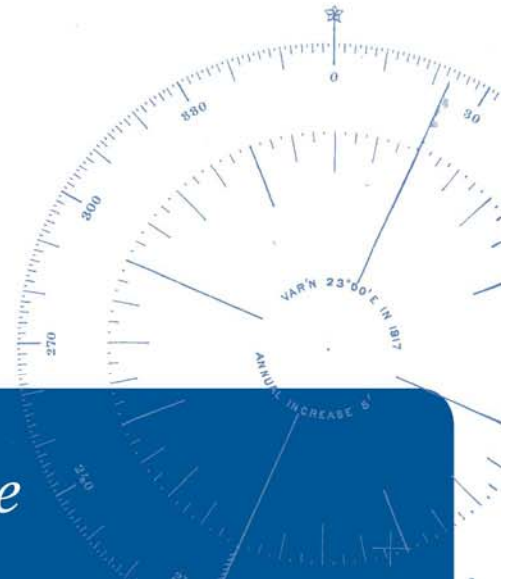
**Discuss Issues/Challenges in Recycling**

**Discuss Range of Solutions to Consider**

**Identify Data Needs**



Metro | *Making a great place*

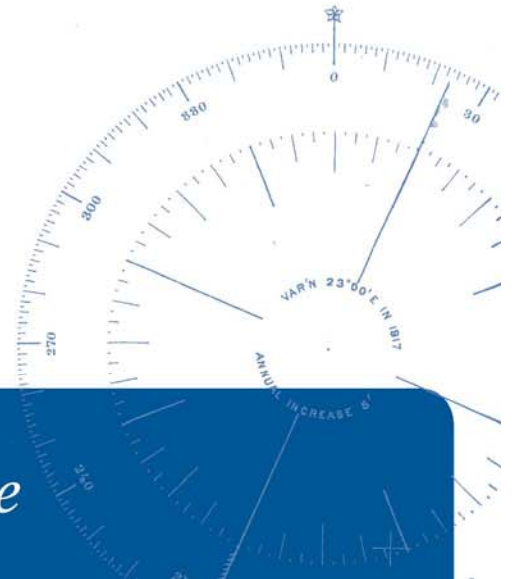


# Subcommittee Check In

- Is approach working?
- Anything in particular that is not working for you?



Metro | *Making a great place*



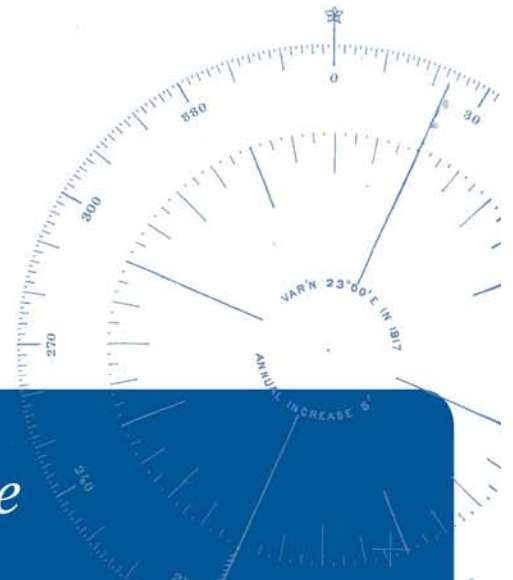
# Next Meeting Topics

Meeting: 3 – March 17<sup>th</sup> 9:30 a.m, Metro Council Chambers

- ***Review Prior Meeting Summary, Clarifications, Questions***
- ***Review Meeting 2 Objectives***
- Response to Data Needs Identified from Meeting 2
- What is the landscape in neighboring states?
- Deliberation
- Stakeholder feedback, questions
- Perhaps... pose the question
- ***Member Check in (every meeting)***
- ***Review schedule (what's on deck)***



Metro | *Making a great place*



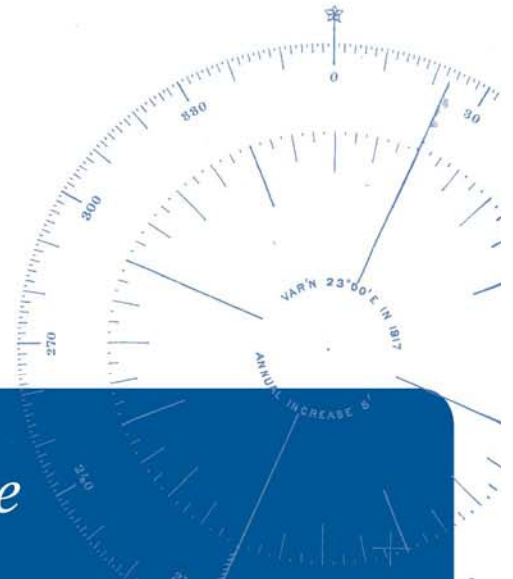
# MRF/CT Subcommittee

# Adjourn.

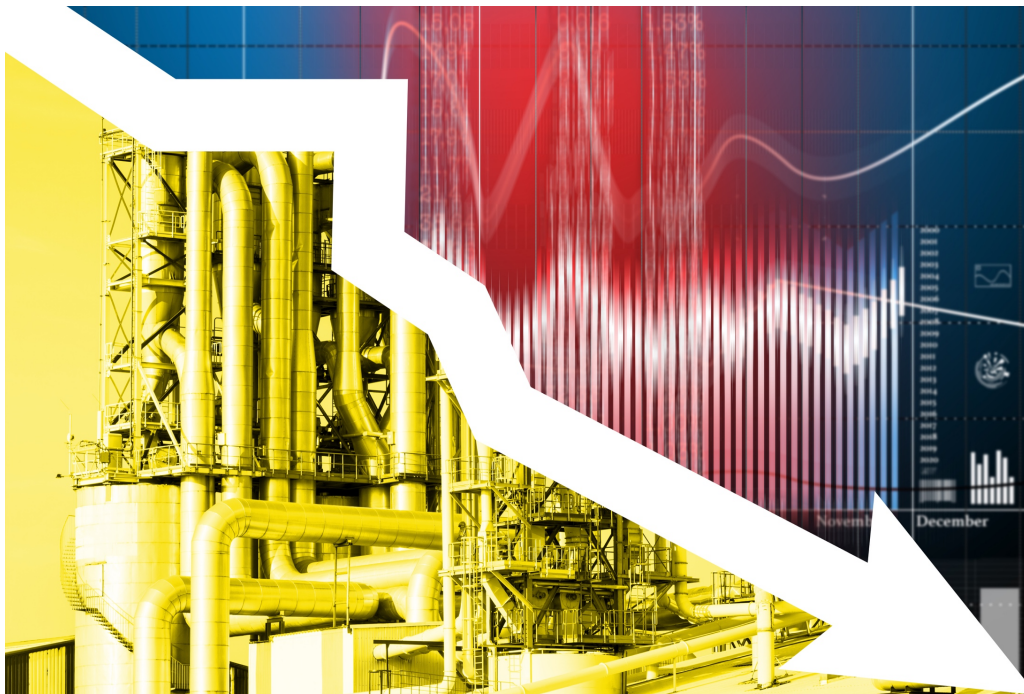
## Thank You!



Metro | *Making a great place*



# Recycling Commodity Markets Overview



**Dylan de Thomas,  
Resource Recycling**

**Metro MRF/CT  
Subcommittee  
Meeting No. 2**

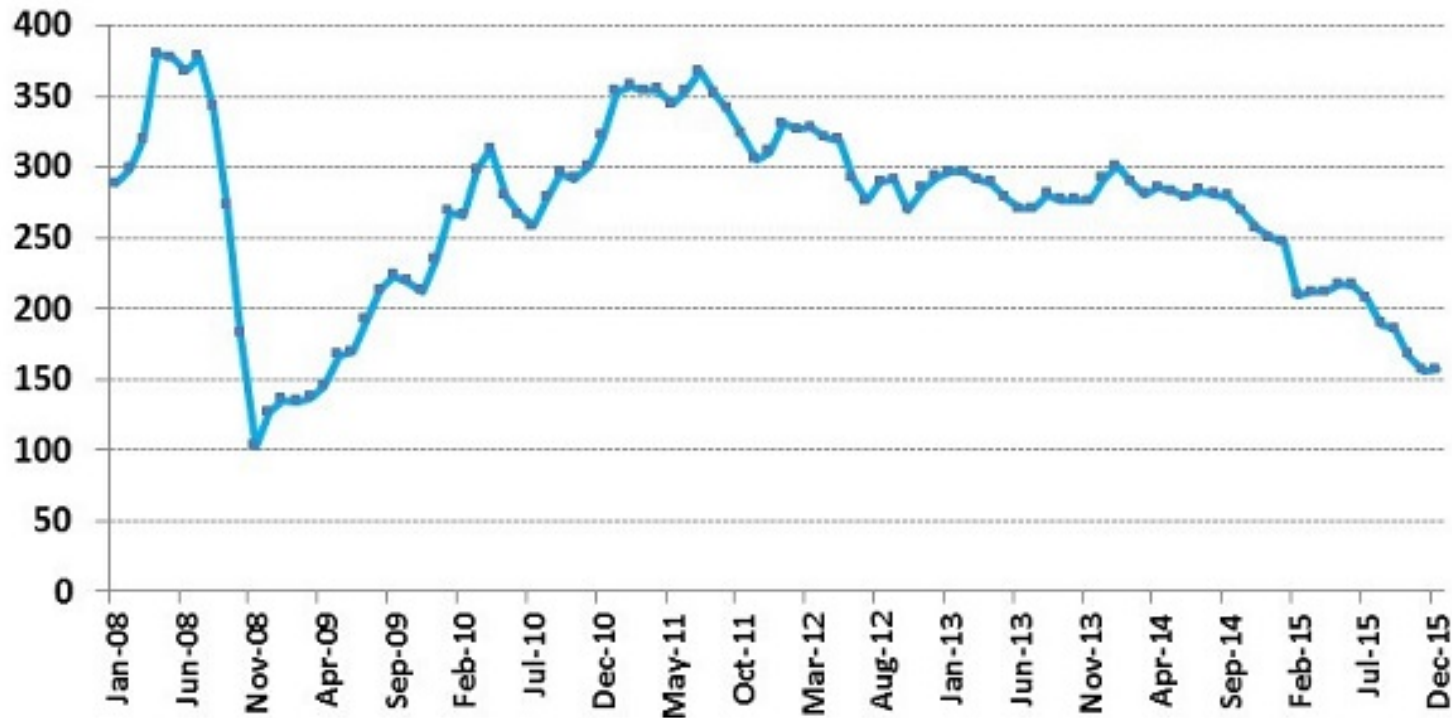
**Feb. 24, 2016**

**RESOURCE  
RECYCLING**

# Aggregate Scrap Material Values

## ISRI Index: Jan 2008 - Dec 2015

(Jan 1998 = 100)





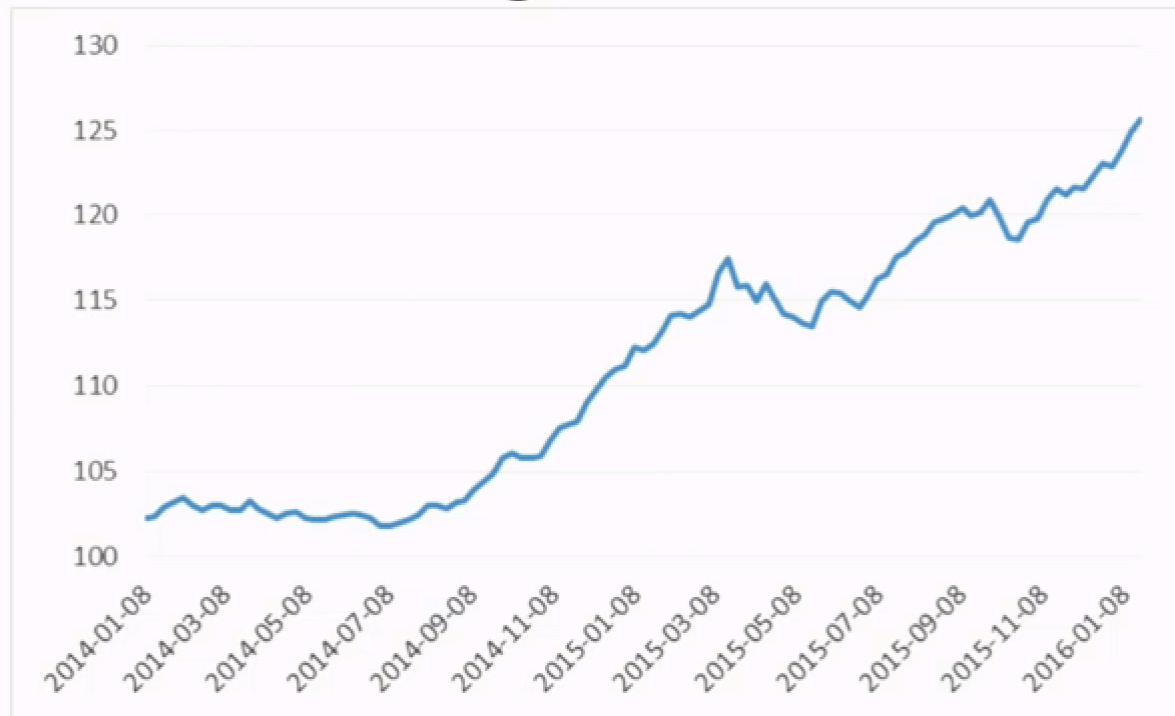
# The Big Picture

- Strong dollar +
- Excess production of crude and other commodities +
- Changes in China +
- = Down market, disappearing margins, hurting industry



# Strong U.S. Dollar

## Strong U.S. Dollar

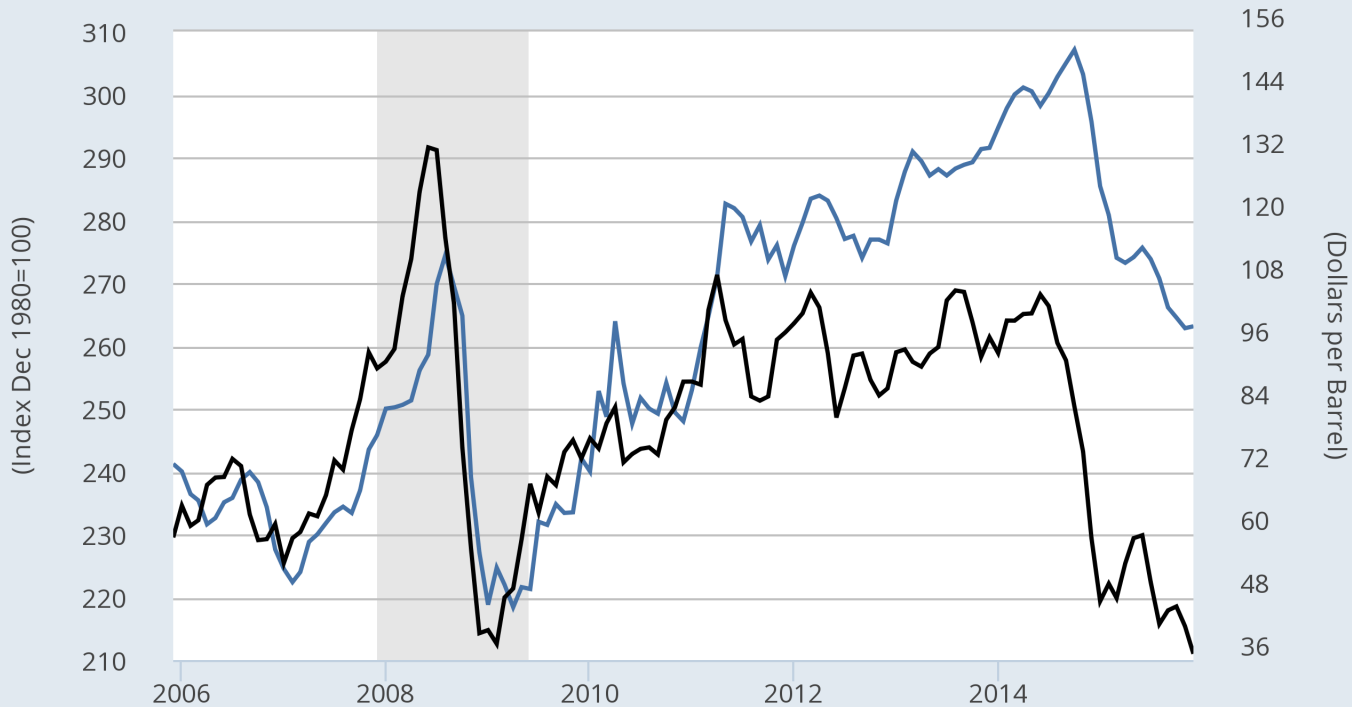


Trade Weighted U.S. Dollar Index: Broad  
Board of Governors of the Federal Reserve System (US)

# Plastics and Oil

**FRED** 

- Producer Price Index by Industry: Plastics Material and Resins Manufacturing (left)
- Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma (right)



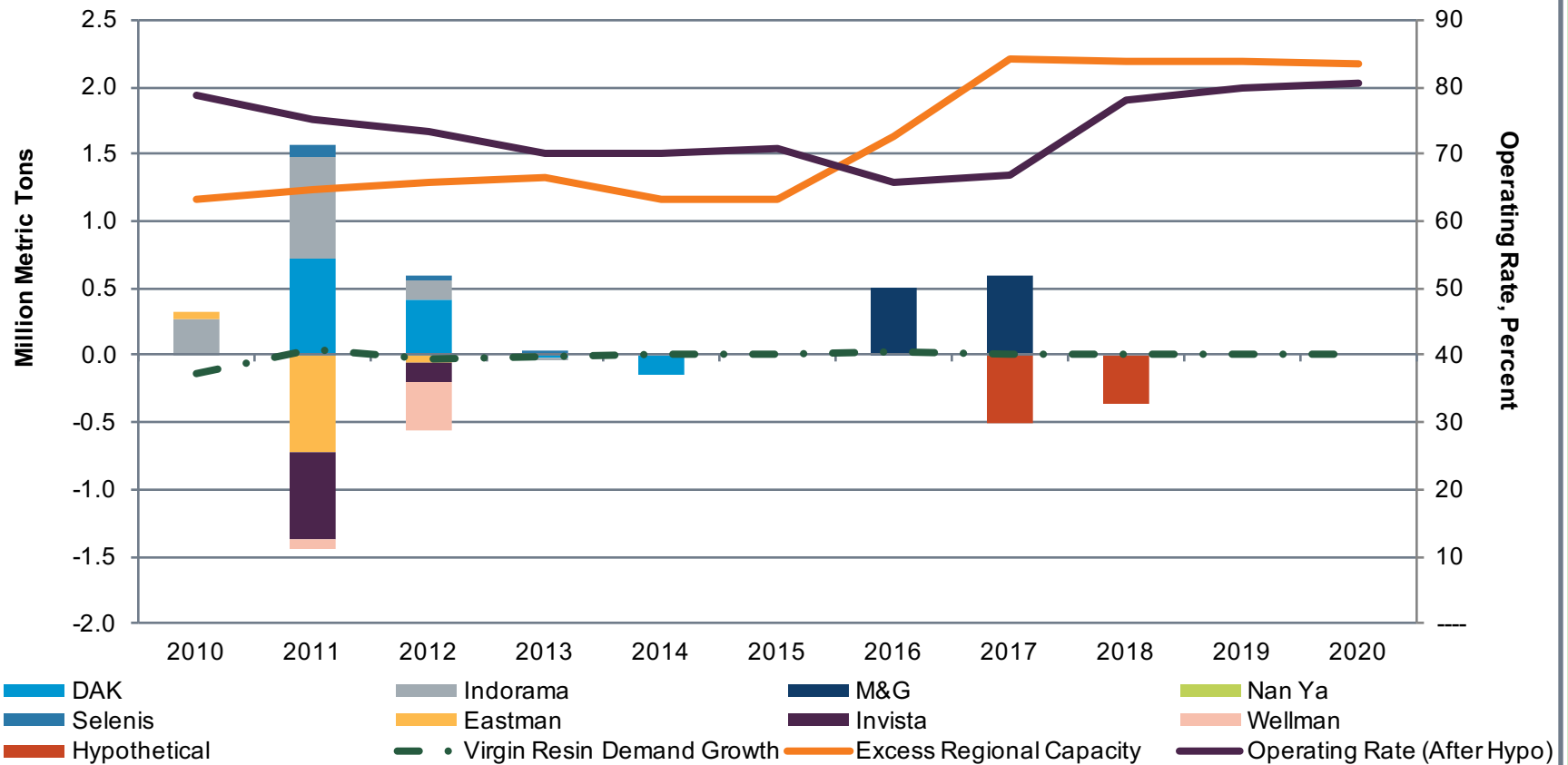
research.stlouisfed.org

myf.red/g/3jh4

**RESOURCE**  
RECYCLING

# Excess Capacity

## North American Capacity Growth



Source: IHS

© 2016 IHS

# Demand from China

## Annual and YTD U.S. Plastic Scrap Exports (metric tons)

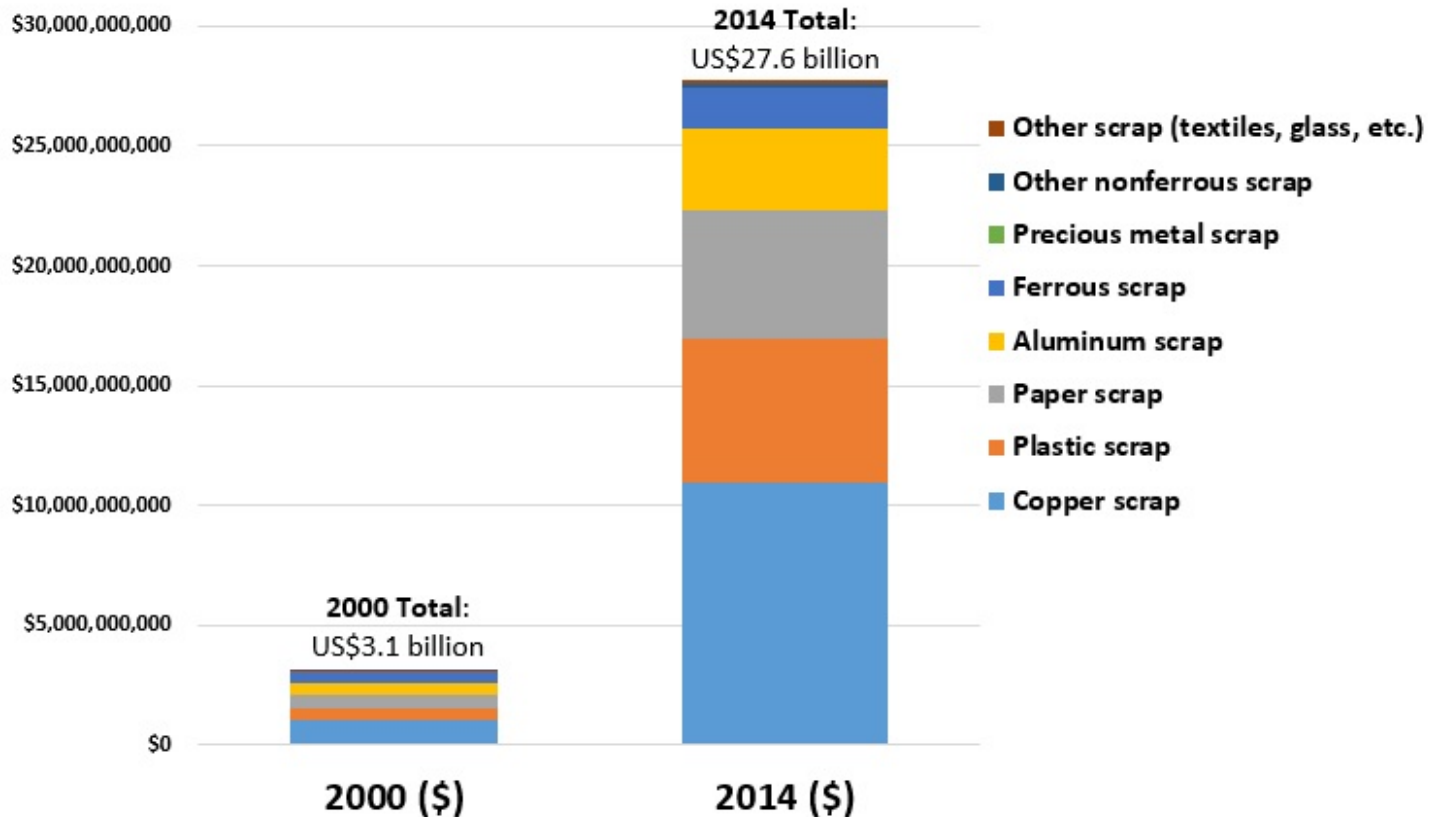
Sources: U.S. Census Bureau/U.S. International Trade Commission

Country	2011	2012	2013	2014	JAN-NOV 2014	JAN-NOV 2015	YTD % CHG
China	1,161,164	1,173,592	1,007,261	1,088,643	1,012,900	814,012	-20%
Hong Kong	606,635	479,093	433,690	563,208	515,358	562,824	9%
Canada	145,531	146,196	137,924	177,858	161,225	218,051	35%
India	72,436	85,342	103,939	86,397	83,023	85,944	4%
Taiwan	16,002	16,194	26,683	29,361	26,772	48,371	81%
Indonesia	20,593	23,311	64,404	81,699	75,249	43,602	-42%
Vietnam	34,936	13,582	22,993	36,076	33,572	42,001	25%
Malaysia	15,444	23,193	50,889	31,664	29,883	30,653	3%
Mexico	20,904	24,007	22,041	23,584	21,600	20,211	-6%
Korea	5,601	5,070	9,979	14,868	13,887	9,591	-31%
El Salvador	1,268	1,868	2,142	4,591	4,471	6,082	36%
Thailand	3,194	998	3,740	14,247	12,884	5,091	-61%
Others	24,169	18,650	23,651	19,493	18,367	21,768	19%
<b>TOTAL</b>	<b>2,127,877</b>	<b>2,011,096</b>	<b>1,909,336</b>	<b>2,171,689</b>	<b>2,009,191</b>	<b>1,908,201</b>	<b>-5%</b>

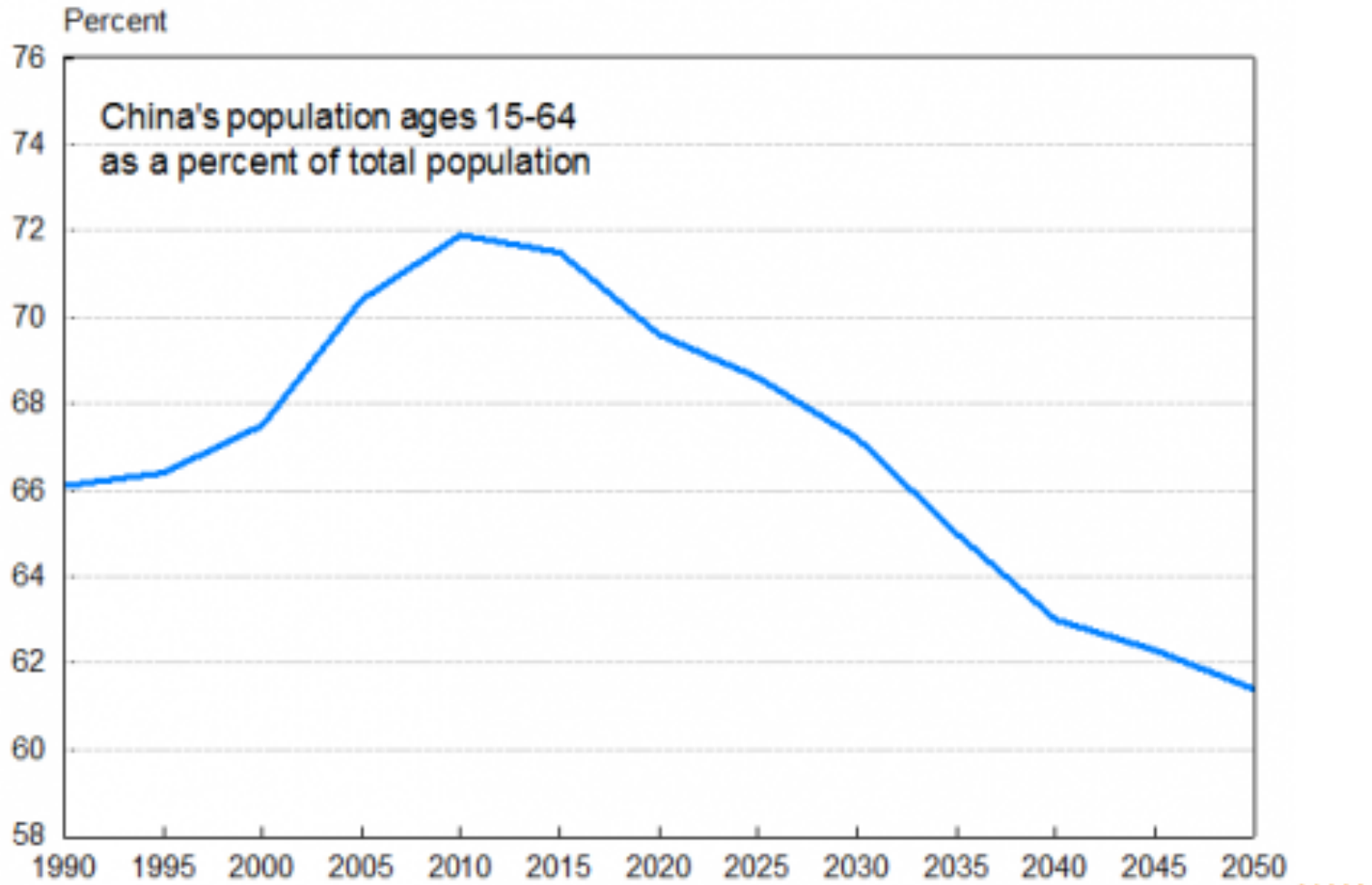
# Context of China

## Value of Chinese Scrap Imports from All Origins (US\$)

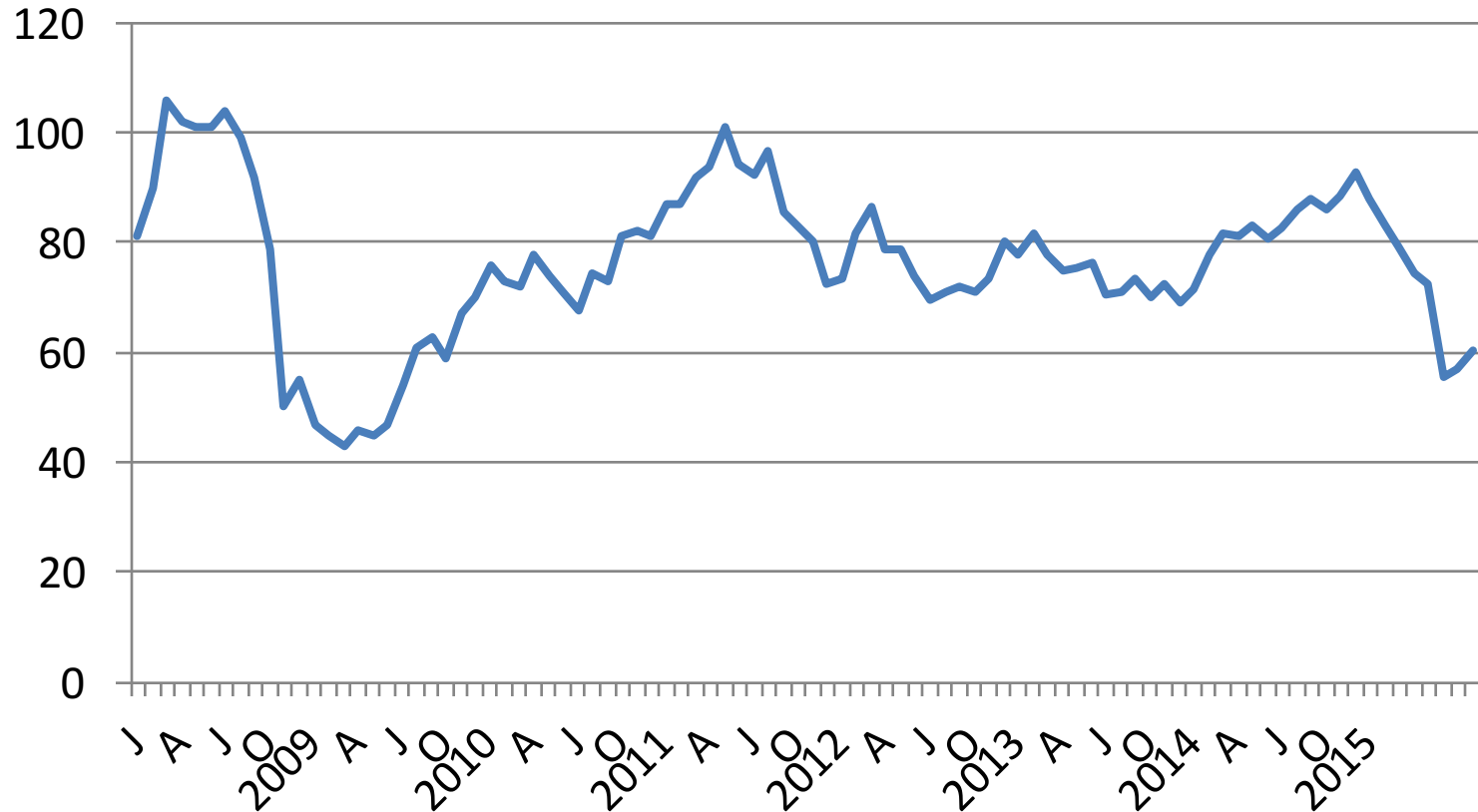
Source: UN Comtrade Database



# Demographics of China

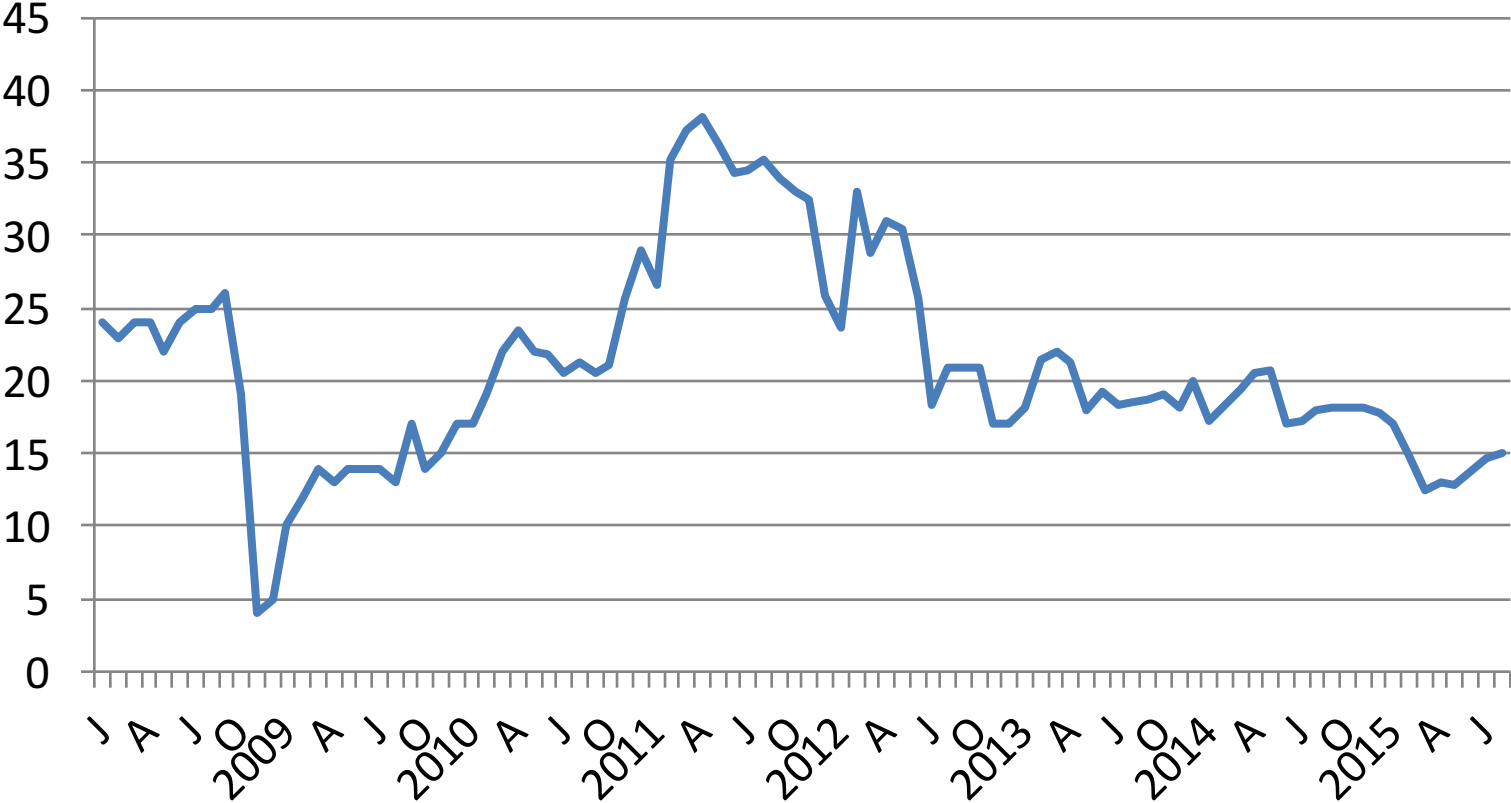


# Aluminum can prices



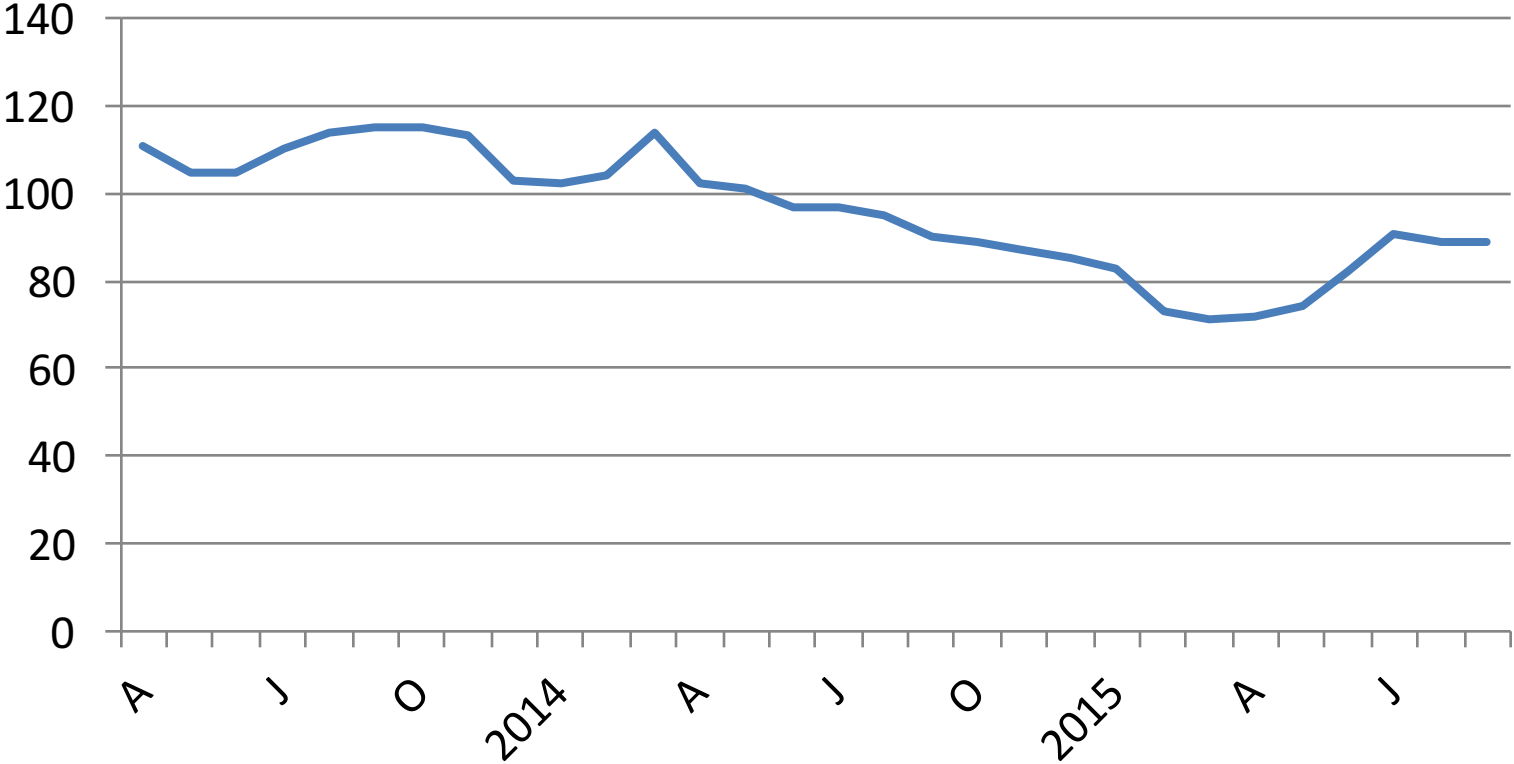


# PET bale prices





# Price of old corrugated containers



# Silver Lining?

- Global GDP expected to rise in 2016
- SE Asia growth notable for scrap
- Transportation costs could drop
- It *is* a cyclical business

## Major Milestones in Regional Collection System Metro Region/Oregon

*Compiled from a variety of sources including DEQ, City of Portland, and Metro documents.*

**1950's – 80's** The region had unregulated residential and commercial collections with some 300+ companies in operation. Solid waste flowing primarily to St. Johns landfill. Some facilities in region process recovered metals and papers (scrap metal, newsprint, and cardboard).

**1971** DEQ requires permits for solid waste disposal for landfills and dumps.

**1971** Oregon passes first bottle bill in nation.

**1974** Metro predecessor Metropolitan Service District adopts first Solid Waste Management Plan.

**1980** DEQ issues first Hazardous Waste Permit.

**1983** Oregon's first **Opportunity to Recycle** act is passed, curbside recycling expands beyond newsprint. Metro South Transfer Station opens.

**1988- 1993** Metro region LG/haulers began multi material curbside collections in bins. Consolidation of haulers occurs.

**1991** St. Johns Landfill closes. Solid waste flowing to Columbia Ridge in Arlington through Metro South and Metro Central (opened in 1991) Transfer Stations.

**1992** All residential collection in region is now franchised, commercial as well outside of Portland.

**Late 1990's** Metro begins authorizations for solid waste facilities, Licenses, Franchises, Designated Facility Agreements (DFAs), and Non System Licenses (NSLs) follow.

**1995-1998** Jurisdictions and haulers begin moving to commingled recycling curbside in bins, carts make an appearance.

**Mid 1990's** Following major consolidation, less than 70 haulers in region.

**1999** Metro and local governments begin offering recycling technical assistance to businesses.

**2007** Bottle Bill expands to include drinking water bottles.

**2008** Metro Council passes Business Recycling Requirement.

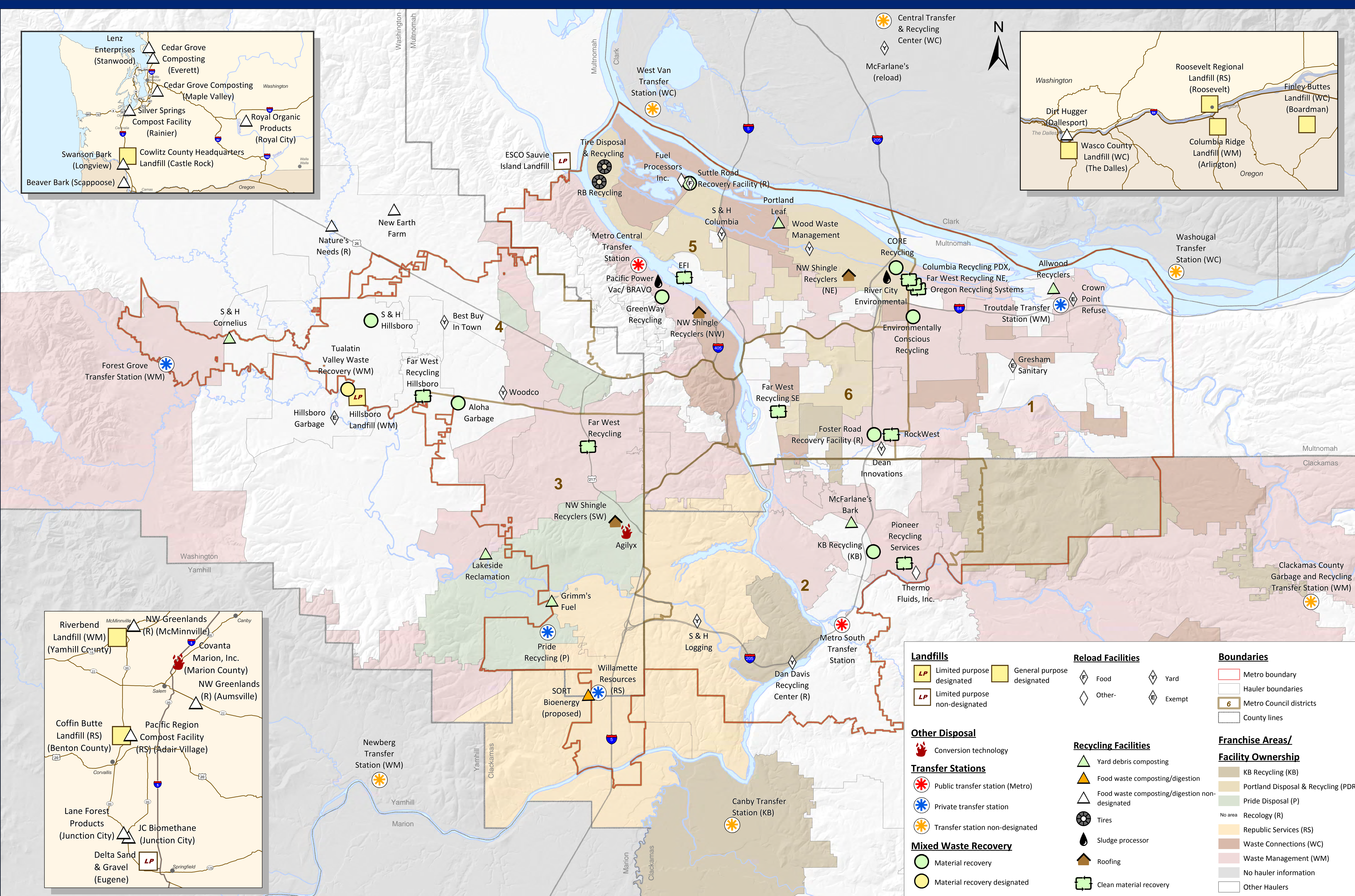
**2008** Solid Waste Roadmap Projects underway.

**2009** Oregon E-Cycles established.

**2012** Most jurisdictions/haulers fully automated and fully carted.

**2015** Lots on the plate... Roadmap projects in high gear, food waste, end of life for discards, contaminants in recycling, new packaging materials in marketplace, new Regional Solid Waste Management Plan (RSWMP) on horizon, oil prices plunging, recycling commodity prices plunging...





**Landfills**

- LP Limited purpose designated
- LP Limited purpose non-designated
- General purpose designated

**Other Disposal**

- Conversion technology

**Transfer Stations**

- Public transfer station (Metro)
- Private transfer station
- Transfer station non-designated

**Mixed Waste Recovery**

- Material recovery
- Material recovery designated

**Reload Facilities**

- Food
- Other
- Yard
- Exempt

**Recycling Facilities**

- Yard debris composting
- Food waste composting/digestion
- Food waste composting/digestion non-designated
- Tires
- Sludge processor
- Roofing
- Clean material recovery

**Boundaries**

- Metro boundary
- Hauler boundaries
- Metro Council districts
- County lines

**Franchise Areas/ Facility Ownership**

- KB Recycling (KB)
- Portland Disposal & Recycling (PDR)
- Pride Disposal (P)
- No area
- Recology (R)
- Republic Services (RS)
- Waste Connections (WC)
- Waste Management (WM)
- No hauler information
- Other Haulers

# Regional Solid Waste Facilities

February 2016  
 DATA RESOURCE CENTER  
 600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736  
 drc@oregonmetro.gov | gis.oregonmetro.gov  
 TEL (503) 797-1742 | FAX (503) 797-1909

