These materials were developed by CalRecycle staff for specific workshops and are posted as reference documents for the local government, interest groups and industry staff who attended this workshop.

*If you require assistance in obtaining access to this presentation, call the Office or Public Affairs at (916) 341-6300.*
State of Recycling and Disposal in California - 2013

Presented by:
• Mark Umfress
• Karen Morrison, Ph.D.
• Peter Staklis

March 24, 2015
State of Recycling and Disposal in California

Presentation Overview:
• History and Statutes
• Infrastructure
• Questions/Policy Issues
History

AB 2020 (1986) – Beverage Container Recycling and Litter Reduction Act
• Created the CRV program for beverage containers
• Administered by the Division of Recycling (DOR)

AB 939 (1989) – Integrated Waste Management Act
• Created the Integrated Waste Management Board
• Mandated diversion by local jurisdictions

SB 63 (2010)
• Created the Department of Resources Recycling and Recovery (CalRecycle)
History – AB 939/SB 1016
Statewide Diversion Rate
History – AB 341

AB 341 (2011) – 75% Recycling

• Mandatory commercial recycling
• Statewide goal to achieve 75% recycling by 2020
• Did not change diversion mandates for local jurisdictions
• Several differences between 75% recycling goal and 50% diversion mandate
<table>
<thead>
<tr>
<th>Goal</th>
<th>AB 939: 50 Percent Diversion (Jurisdictional Mandate)</th>
<th>AB 341: 75 Percent Recycling (Statewide Goal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Generation (Statewide)</td>
<td>12.6 ppd (2003-2006)</td>
<td>10.7 ppd (1990-2010)</td>
</tr>
<tr>
<td>Disposal Target (Statewide)</td>
<td>6.3 ppd</td>
<td>2.7 ppd</td>
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<tr>
<td>Activities that Do Not Count Toward Goal</td>
<td><strong>AB 939</strong></td>
<td><strong>AB 341</strong></td>
</tr>
<tr>
<td>-----------------------------------------</td>
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<tr>
<td></td>
<td><strong>Disposal:</strong> Landfilling</td>
<td><strong>Disposal:</strong> Landfilling</td>
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<td></td>
<td>Exported Disposal</td>
<td>Exported Disposal</td>
</tr>
<tr>
<td></td>
<td>Some Transformation Engineered MSW</td>
<td>All Transformation Engineered MSW</td>
</tr>
<tr>
<td></td>
<td>Post-2020 Green Waste ADC</td>
<td>Disposal-Related:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AIC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other Beneficial Reuse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waste Derived Fuel</td>
</tr>
<tr>
<td>Activities that Count Toward Goal</td>
<td><strong>Diversion:</strong> Source Reduction</td>
<td><strong>Recycling:</strong> Source Reduction</td>
</tr>
<tr>
<td></td>
<td>Composting</td>
<td>Composting</td>
</tr>
<tr>
<td></td>
<td>Recycling</td>
<td>Recycling</td>
</tr>
<tr>
<td></td>
<td>ADC (Alternative Daily Cover)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIC (Alternative Intermediate Cover)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Beneficial Reuse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transformation Credit</td>
<td></td>
</tr>
</tbody>
</table>
2013 Statewide Generation Estimate

- **Landfilled**: 41%
- **ADC**: 4%
- **AIC**: <1%
- **Waste to Energy**: 1%
- **Other Beneficial Reuse**: 3%
- **Waste Tire-Derived Fuel**: <1%
- **Compost/Mulch**: 13%
- **Source Reduction and Recycling**: 37%
Statewide Generation to Meet 75% Recycling Goal

25% Additional Recycling Needed

Source Reduction, Recycling, and Compost/Mulch

Disposal and Disposal-Related
2013 Statewide Generation

Disposal and Disposal-Related

Source Reduction, Recycling, and Compost/Mulch
Disposal and Recycling Infrastructure
Solid Waste Infrastructure in California

Commodities

Waste Generator

Waste Hauler

Transfer Station

MRF

Landfill

Transformation

Disposal-Related

Hazardous Waste

Recycling
Recycling Infrastructure in California

Waste Generator
  └── Organics Processing
      ├── Composting
      │    ├── Chip and Grind
      │    │    └── Anaerobic Digestion
      │    └── Others
      └── Recycling Collection
          ├── Curbside Pickup
          │    ├── Beverage Containers
          │    └── Electronic Waste
          │         ├── HHW
          │         │    └── Medication and Sharps
          │         └── Used Oil
          │             └── Carpet
          │                 └── Paint
          │                     └── Others
          └── Material Processing
              ├── Glass Beneficiation
              │    └── Paper Processing
              │         └── Plastic Processing
              │             └── Scrap Metal
              │                 └── Others
              └── Recycled Content Manufacturing
                  └── Glass
                      └── Paper
                          └── Plastic
                              └── Others

  Others
Tracking Facilities and Activities

Permits (SWIS)  Disposal Reporting System (DRS)  Facility Information Toolbox (FacIT)

Commodities  Recycled Content Commodities  Recycled Content Manufacturing

Waste Generator  Waste Hauler

Transfer Station  MRF

Landfill  Transformation  Disposal-Related  Hazardous Waste

Other End Uses

Material Processing  Recycling Collection

Composting  Chip and Grind  Anaerobic Digestion

Other End Uses
Landfill Locations

Active Landfills
Private or Public, Ownership

- Private, Recology (2)
- Private, Waste Connection (4)
- Private, Independent (10)
- Private, Republic (10)
- Private, Waste Management (12)
- Public, Regional Agency (3)
- Public, Federal (9)
- Public, City (15)
- Public, County (61)
- County

Data from FacIT
Data from FacIT
Data from FacIT
Anaerobic Digestion and Composting Locations

Data from FacIT
Most Jurisdictions Contract with 1 Hauler

**Residential**

**Commercial**

Jurisdiction
- Single Residential Hauler
- Multiple Residential Hauler
- County

Jurisdiction
- Single Commercial Hauler
- Multiple Commercial Hauler
- County
Top 10 Haulers Serving Jurisdictions
(Preliminary Data)

**Residential**

Residential Haulers By Jurisdiction

<table>
<thead>
<tr>
<th>Parent Organization</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management</td>
<td>86</td>
</tr>
<tr>
<td>Republic</td>
<td>66</td>
</tr>
<tr>
<td>Recology</td>
<td>44</td>
</tr>
<tr>
<td>CR &amp; R</td>
<td>32</td>
</tr>
<tr>
<td>Burrtec</td>
<td>21</td>
</tr>
<tr>
<td>Athens</td>
<td>18</td>
</tr>
<tr>
<td>EDCO</td>
<td>15</td>
</tr>
<tr>
<td>Mid Valley Disposal</td>
<td>11</td>
</tr>
<tr>
<td>Ratto</td>
<td>14</td>
</tr>
<tr>
<td>Waste Connections</td>
<td>9</td>
</tr>
<tr>
<td>Government</td>
<td>44</td>
</tr>
<tr>
<td>Other</td>
<td>179</td>
</tr>
</tbody>
</table>

**Commercial**

Commercial Haulers By Jurisdiction

<table>
<thead>
<tr>
<th>Parent Organization</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management</td>
<td>82</td>
</tr>
<tr>
<td>Republic</td>
<td>69</td>
</tr>
<tr>
<td>Recology</td>
<td>45</td>
</tr>
<tr>
<td>CR &amp; R</td>
<td>32</td>
</tr>
<tr>
<td>Burrtec</td>
<td>26</td>
</tr>
<tr>
<td>Athens</td>
<td>19</td>
</tr>
<tr>
<td>EDCO</td>
<td>18</td>
</tr>
<tr>
<td>Mid Valley Disposal</td>
<td>10</td>
</tr>
<tr>
<td>Ratto</td>
<td>8</td>
</tr>
<tr>
<td>Waste Connections</td>
<td>8</td>
</tr>
<tr>
<td>Government</td>
<td>40</td>
</tr>
<tr>
<td>Other</td>
<td>182</td>
</tr>
</tbody>
</table>
New Disposal Flow Tool on CalRecycle Website. Example 1: County Inflows

New Disposal Flow Tool on CalRecycle Website. Example 2: Jurisdiction Outflows

Imports and Exports

• Solid Waste
  • Waste sent to landfills is tracked
  • Solid waste imports account for less than 1% of all waste
  • About 1% of solid waste was exported in 2013 from border counties to Oregon, Nevada, and Arizona

• Recyclables
  • Recycling is not tracked
  • 18.6 million tons of recyclables exported by California sea ports in 2013 (~70% originates in-state)
  • Initial Imported Material Reports show at least 46,000 tons of imported recyclables from Mar-Dec 2014
Exported Waste and Recyclables

74 million tons of generated waste – AB 341
Composition of Waste Stream

**Disposal**
- Special Waste, 3.9%
- HHW, 0.3%
- Inerts and Other, 29.1%
- Mixed Residue, 0.8%
- Paper, 17.3%
- Glass, 1.4%
- Metal, 4.6%
- Electronics, 0.5%
- Plastic, 9.6%
- Other Organic, 32.4%

**Recycling**
- Other Recycling, Composting, and Source Reduction, 96%
- Beverage Container Recycling Program, 3%
- EPR Programs, <1%
- Tires, 1%

2008 Waste Characterization Study

2013 Reported Materials
Waste Sectors

Residential (33%)
- Other Organic, 45%
- Inerts and Other, 15%
- Mixed Residue, 2%
- Special Waste, 3%
- HHW, <1%
- Paper, 18%
- Glass, 2%
- Metal, 5%
- Electronics, 1%
- Plastic, 9%

Commercial (67%)
- Other Organic, 26%
- Inerts and Other, 36%
- HHW, <1%
- Special Waste, 5%
- Mixed Residue, <1%
- Paper, 17%
- Glass, 1%
- Metal, 5%
- Electronics, <1%
- Plastic, 10%

2008 Waste Characterization Study
Estimated Flow of Waste Stream

Disposal at Landfills

- Transfer Station ~40%
- Direct Haul ~40%
- MRF ~20%

Recycling

Data from 2008 Waste Characterization Study, MRF Study and DRS
Disposal Issues and Policy Questions

Disposal and Disposal-Related

Source Reduction, Recycling, and Compost/Mulch
Statewide Disposal Questions

- How will we know what is in the waste stream?
- How much will we dispose of?
- Do we have enough landfill capacity to handle it?
- Will the flow of waste affect goal achievement?
- How do disposal-related materials figure into the mix?
- Will the quality of disposal information be good enough for 75% goal measurement?
- What will be the impact of fees and funding on goal measurement and visa versa?
Waste Composition Data tells us about the Waste Stream

- Policy development
- Diversion program planning
- Market development
- Assessing impacts of laws programs and policies
Impacts of Study Frequency & Future Studies

**Frequency**
- Snapshot in time
- Waste stream changes over time
- Old data not as relevant or useful

**Future Studies**
- 2014 Study completed – Available May 2015
- 2017 Mid-course review?
- 2020 Study planned to assess progress
Landfill Disposal Capacity

• By region, do we have enough annual landfill capacity to handle disposal from year to year?

• By region, do we have enough available lifetime capacity to handle disposal in the near future?

• How many years of available lifetime landfill capacity does California and each region have?
Most regions have adequate annual landfill capacity

<table>
<thead>
<tr>
<th>Region</th>
<th>2013 Population</th>
<th>Per Capita Annual Capacity in Tons per Year</th>
<th>Per Capita Disposal in Tons per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Area</td>
<td>7,390,000</td>
<td>2.03</td>
<td>0.78</td>
</tr>
<tr>
<td>Central Valley</td>
<td>6,710,000</td>
<td>3.69</td>
<td>0.85</td>
</tr>
<tr>
<td>Coastal</td>
<td>1,770,000</td>
<td>2.39</td>
<td>0.84</td>
</tr>
<tr>
<td>Mountain</td>
<td>590,000</td>
<td>1.23</td>
<td>1.28</td>
</tr>
<tr>
<td>Southern</td>
<td>21,700,000</td>
<td>1.93</td>
<td>1.01</td>
</tr>
<tr>
<td>Statewide</td>
<td>38,160,000</td>
<td>2.27</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Data from FacIT, DRS and the Dept. of Finance
Most Regions have at Least 40 Years of Remaining Lifetime Capacity

<table>
<thead>
<tr>
<th>Region</th>
<th>2013 Population</th>
<th>Disposal (million tons)</th>
<th>Total Remaining Capacity (million tons)</th>
<th>Years of Landfill Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Area</td>
<td>7,390,000</td>
<td>4.9</td>
<td>218</td>
<td>44</td>
</tr>
<tr>
<td>Central Valley</td>
<td>6,710,000</td>
<td>5.0</td>
<td>600</td>
<td>121</td>
</tr>
<tr>
<td>Coastal</td>
<td>1,770,000</td>
<td>1.3</td>
<td>106</td>
<td>81</td>
</tr>
<tr>
<td>Mountain</td>
<td>590,000</td>
<td>0.6</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Southern</td>
<td>21,700,000</td>
<td>19.4</td>
<td>793</td>
<td>41</td>
</tr>
</tbody>
</table>

Data from FacIT, DRS and the Dept. of Finance
Most regions currently have plenty of available unused lifetime capacity.

Data from FacIT
How much will we dispose of: three scenarios

Statewide Disposal Projections through 2025

<table>
<thead>
<tr>
<th>Year</th>
<th>Landfilled (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>35,000,000</td>
</tr>
<tr>
<td>2005</td>
<td>37,000,000</td>
</tr>
<tr>
<td>2010</td>
<td>30,000,000</td>
</tr>
<tr>
<td>2015</td>
<td>30,000,000</td>
</tr>
<tr>
<td>2020</td>
<td>35,000,000</td>
</tr>
<tr>
<td>2025</td>
<td>40,000,000</td>
</tr>
</tbody>
</table>

- Statewide disposal (actual)
- Large Economic Boom
- Current Disposal Rates
- Meet 75% Goal
68 years of capacity if we achieve 75% Recycling

- Capacity (historical)
- Large Economic Boom
- Current Disposal Rates
- Meet 75% Goal
Waste Flows

• Where is waste generated?
• How far does waste travel to get to its final destination?
• Why does waste flow the way it does?
Waste flows from county to county

Data from DRS
Reasons for waste flows

- Availability of Facilities
- Daily Limits on Facility Throughput
- Material Types Accepted
- Geography
- Local Ordinances
- Vertical Integration of Waste Companies
- Disposal Costs
Disposal-Related Activities

• How much disposal-related activity is there?
• How will disposal-related activity impact the 75% goal?
Monitoring Disposal-Related Activities

- 6.7 million tons of material went to disposal-related activities in 2013, including:
  - Alternative daily cover
  - Other beneficial reuse
  - Transformation and waste derived fuels
  - Alternative intermediate cover
Disposal-Related Activity

![Graph showing disposal-related activity over time, with different categories and years from 1995 to 2013.](image)

- **Disposal-Related Activity**
- **Tons**
- **Year**
- **Transformation**
- **ADC**
- **AIC**
- **Other Beneficial Reuse**
ADC Comes from Many Jurisdictions

Data from DRS
ADC use is primarily in the Southern Region and the Bay Area.

Total ADC Tons at Landfills, 2013

Total Tons of ADC Used:
- 1 - 15,000 (44 Facilities)
- 15,000 - 50,000 (17 Facilities)
- 50,000 - 100,000 (9 Facilities)
- 100,000 - 320,000 (10 Facilities)

Data from DRS

- Green Material: 44%
- C&D: 17%
- Auto Shredder Waste: 14%
- Sludge: 8%
- Other: 5%
- Contaminated Sediment: 1%
- Ash: < 1%
- Compost: < 1%
- Tires: < 1%
- Mixed: < 1%

Data from DRS
Green Waste is the Most Used Material But has Declined

Data from DRS
2/3 of Green Waste ADC Use is in the Southern Region

Data from DRS
Counties near transformation facilities use transformation the most

Data from DRS
Transformation Use Has Remained Steady

Transformed and Landfilled 1995-2013

Years: 1995 to 2013

- Disposed at Landfills
- Transformed at Transformation Facilities
Few Jurisdictions Need Transformation Credit under AB939

Count of Jurisdictions getting Transformation Credits in 2013

Data from DRS
Compliance Issues with DRS reporting
County Disposal Compliance Issues
(Disposal Modification, Late DRS or Revised DRS)

Any Compliance Issue (38)
No Compliance Issues (20)

DRS Compliance and Data Issues in 2013

- Late or Incomplete Reports
- Disposal Data Revisions
- Disposal Data Modifications

Data from DRS
DRS Data Quality Options

• No meaningful DRS enforcement options

• No monetary penalties or other mechanisms

• We continue to work hard to get better data
Disposal Fees and Funding

• How do landfill tipping fees in California compare to other states?
• What is the Integrated Waste Management Fee and how does it Impact CalRecycle’s funding?
• How do other states fund their solid waste and recycling programs?
Publically Posted Tipping Fees Vary Regionally

Data from CalRecycle Tipping Fee Report
Lower Tipping Fees mean Higher Landfill%
CalRecycle Funding Scenario if 75% Statewide Recycling Goal Met in 2020

- Projected revenue with normal growth and no increase in recycling
- Projected revenue if 75 percent goal is reached by 2020
- Projected total obligations with no changes

Fund balance covers difference

Revenue decrease due to reaching 75% recycling goal on time

Total Gap ≈ $29 M in 2020
Most States Use a Solid Waste Fee
States also rely on other types of fees
Recycling Infrastructure Questions and Policy Issues

Disposal and Disposal-Related

Source Reduction, Recycling, and Compost/Mulch
What materials are recycled in California?
Materials Returned through BCRP

Aluminum

- CRV, 99%
- Pet Food, 1%
- Other, <1%

Glass

- CRV, 72%
- Wine, 20%
- Distilled Spirits, 3%
- Other, 5%

PET

- CRV, 85%
- Large Juice, 3%
- Domestic Food, 9%
- Other, 3%

HDPE

- CRV, 10%
- Milk, 62%
- Laundry Product, 15%
- Domestic Food, 3%
- Cleaning Product, 1%
- Other, 9%

2013 Data, All Recycling Programs
Materials Returned through BCRP

- Many non-CRV containers are returned through the BCPR – how are these materials processed?

- Recycling centers no longer pay a commingled rate – how will this affect the amount of non-CRV materials in other programs?

- How well do residents handle non-beverage recyclable products?
What are the impacts of mandatory commercial and commercial organic recycling?
Mandatory Commercial Recycling

• Requires businesses to arrange for recycling services (July 1, 2012)
• Allows for mixed waste processing that yield diversion rates comparable to source separation

• How effective is MCR?
• What does “comparable to source separation” mean?
• How much additional in-state infrastructure is necessary?
Mandatory Commercial Organic Recycling

Residential (33%)

- Other Organic, 45%
- Plastic, 9%
- Metal, 5%
- Electronics, 1%
- Glass, 2%
- Paper, 18%
- Mixed Residue, 2%
- HHW, <1%
- Inerts and Other, 15%
- Special Waste, 3%

Organics = 6.0 MT

Commercial (67%)

- Other Organic, 26%
- Mixed Residue, <1%
- Paper, 17%
- Plastic, 10%
- Metal, 5%
- Electronics, <1%
- Glass, 1%
- Special Waste, 5%
- HHW, <1%
- Inerts and Other, 36%

Organics = 6.9 MT

2008 Waste Characterization Study
Mandatory Commercial Organic Recycling

- Phased implementation of AB 1826 will begin in 2016
- How much additional infrastructure is necessary?
- How will the impacts of this program be evaluated?
How do imports and exports affect the California recycling infrastructure?
Importing and Exporting Recyclables

18.6 million tons (US exports by sea)
~70% from California

- Ferrous Metal, 34%
- Non-Ferrous Metal, 8%
- Mixed Paper/Cardboard and Paperboard, 52%
- Plastics 1, 2 & 4, 3%
- Other Plastics, 3%
- Other Materials, 1%

Imports (Including 46,000 tons in Imported Material Reports)

Other Exports
Importing and Exporting Recyclables

- How many tons of recyclables are imported into California?

- How much of the exported recyclables originate in California? How much is exported through other means (e.g., train or truck)?

- How are exported recyclables handled at their destination?
How much additional infrastructure is required to reach 75% statewide recycling?

How will California know when it reaches 75%?
Infrastructure Capacity to Reach 75%

Plastic, Glass, Paper, and Metal

<table>
<thead>
<tr>
<th>Material</th>
<th>CRV Collected (Tons)</th>
<th>Processed or Manufactured in CA (Tons)</th>
<th>Manufacturing Annual Capacity (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic</td>
<td>233,564</td>
<td>54,332</td>
<td>68,000</td>
</tr>
<tr>
<td>Glass</td>
<td>683,051</td>
<td>152,247</td>
<td>1,100,000</td>
</tr>
<tr>
<td>Metal</td>
<td>142,865</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Paper</td>
<td>–</td>
<td>–</td>
<td>220,000</td>
</tr>
</tbody>
</table>

• Manufacturing infrastructure insufficient to keep all recyclable materials in California

Data from BCRP and FacIT
Infrastructure Capacity to Reach 75%

Organics

- Currently ~1.5 million tons of additional available capacity for organics
- How much would the infrastructure need to grow in order to support California’s recycling initiatives?
How will we know when we reach 75%?

Average 1990-2010 = 10.7 PPD

50% Recycling in 2013 (5.4 PPD)

75% Recycling = 2.7 PPD
How will California fund its efforts toward the 75% recycling goal?
# Sources of Revenue in California

## Fiscal Year 2012/2013

<table>
<thead>
<tr>
<th>Fund</th>
<th>2012/2013 Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Waste Management Account</td>
<td>$40,910,000</td>
</tr>
<tr>
<td>California Tire Recycling Management Fund</td>
<td>$51,967,000</td>
</tr>
<tr>
<td>California Used Oil Recycling Fund</td>
<td>$28,763,000</td>
</tr>
<tr>
<td>Electronic Waste Recovery and Recycling Account</td>
<td>$86,884,000</td>
</tr>
<tr>
<td>California Beverage Container Recycling Fund</td>
<td>$1,162,265,000</td>
</tr>
<tr>
<td>Recycling Processing Fees (Glass, Bimetal, and PET)</td>
<td>$13,208,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,383,997,000</strong></td>
</tr>
</tbody>
</table>

Current revenue sources include EPR programs.
CalRecycle Funding Scenario if 75% Statewide Recycling Goal Met in 2020

- Projected revenue with normal growth and no increase in recycling
- Projected revenue if 75 percent goal is reached by 2020
- Projected total obligations with no changes

Fund balance covers difference

Revenue decrease due to reaching 75% recycling goal on time

Total Gap = ~ $29 M in 2020
Funding Needs for 75% Recycling

CalRecycle will require an estimated $165 - $295 million/year in additional resources to achieve and maintain the 75% goal

- Reduction in revenue from 75% goal (~ $29 million/year)
- Increases in CalRecycle staffing to support the development and regulation of new facilities (~ $11 million/year)
- Infrastructure and market development (~ $125 - 255 million/year)
- Note: Potential additional costs for landfill closure and post-closure care are not included in the above estimates

<table>
<thead>
<tr>
<th>Revenue Decrease</th>
<th>CalRecycle Staffing</th>
<th>Infrastructure and Market Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>$29M</td>
<td>$11M</td>
<td>$125-255M</td>
</tr>
</tbody>
</table>
Funding Structure under 75% Recycling

How will CalRecycle:

• Provide resources to achieve and maintain 75% goal?

• Account for funding shortfall resulting from achieving 75% goal?

• Financially discourage disposal of organics and other recyclables?

• Ensure that disposal-related activities are not exempt from fees?

• Diversify funding sources to reduce reliance on disposal fees?
How does California compare to other states?
Comparison to Other States

U.S. States That Track Recycling
- Beverage Redemption Program
- At Disposal Facilities
- Beverage Redemption Program & At Disposal Facilities
- Broader Recycling Collection
- No Data
Comparison to Other States

• How do other states track recyclables?

• What policies are in place in other states or countries that facilitate the recycling infrastructure?

• Are there lessons that California can learn from?
Summary of Reports

- Infrastructure and Tracking
- Materials Flows
- Infrastructure Capacity
- Waste Characterization
- Funding
- Comparisons to Other States
Questions and Discussion