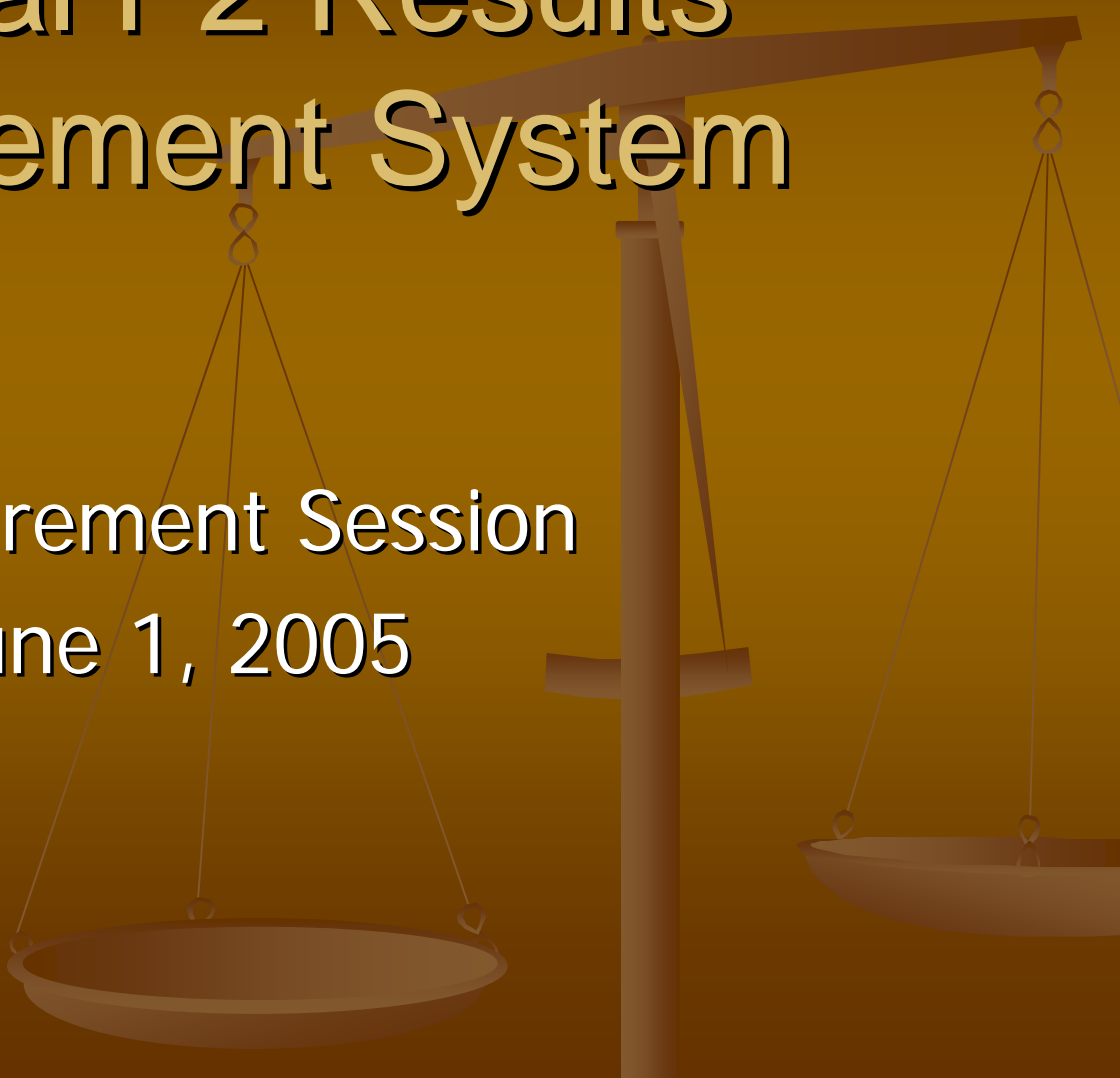


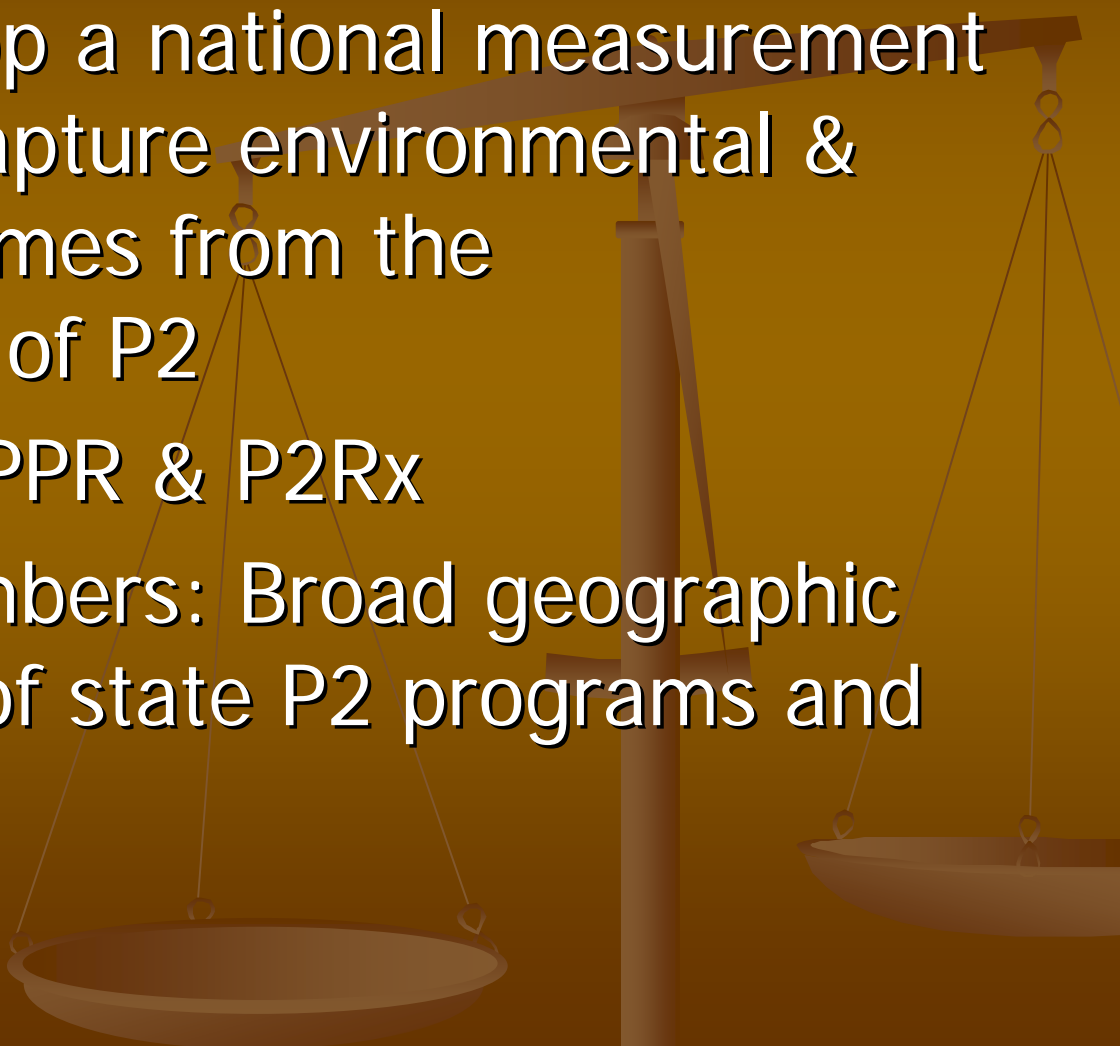
# National P2 Results Measurement System



Measurement Session

June 1, 2005

# National P2 Results Task Force

- Purpose: develop a national measurement framework to capture environmental & economic outcomes from the implementation of P2
  - Joint Project: NPPR & P2Rx
  - Task Force members: Broad geographic representation of state P2 programs and P2Rx Centers
- 

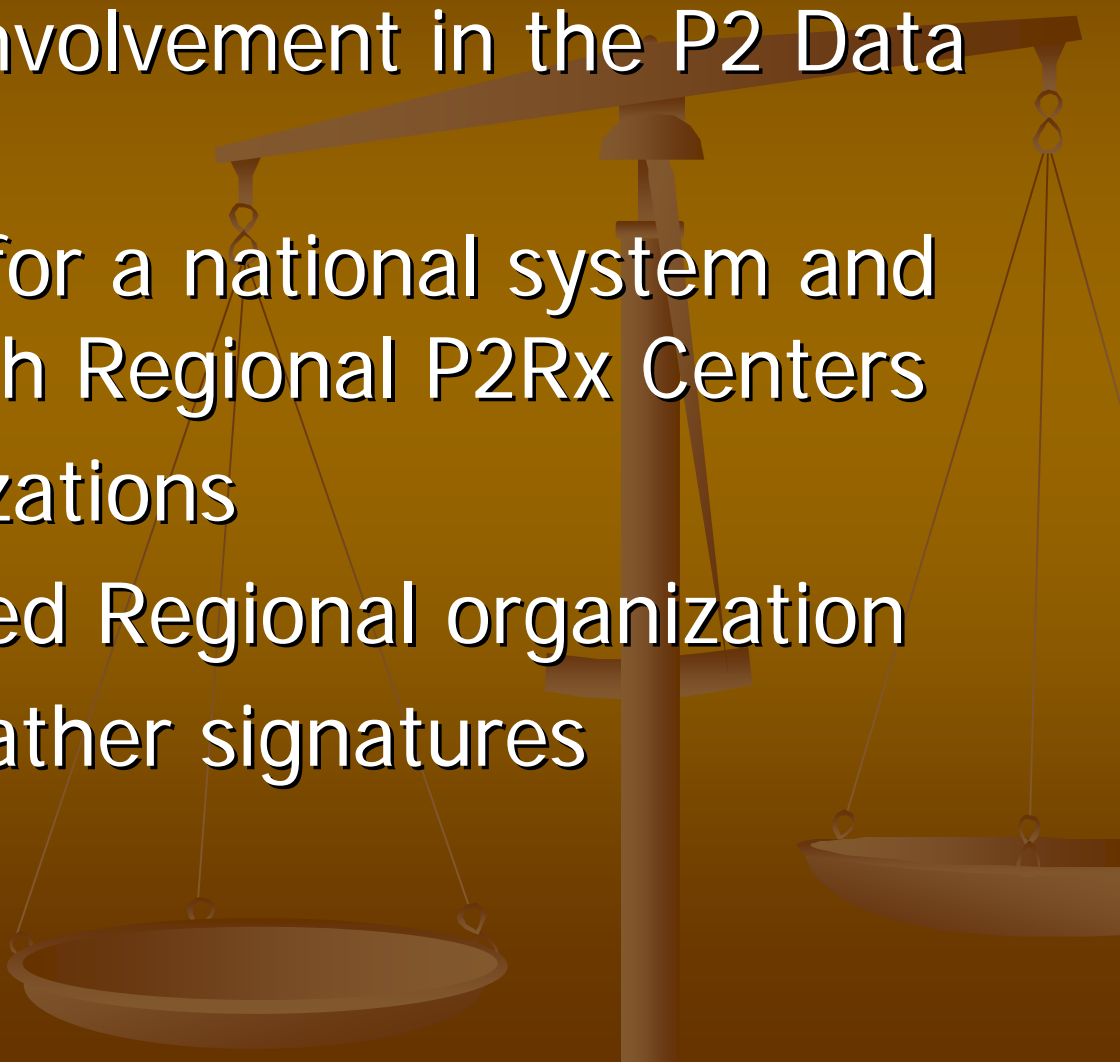
# Benefits



## **A National P2 Results System:**

- demonstrates that publicly-supported P2 programs deliver value for their clients, the public, & taxpayers
- helps policy makers assess P2 & understand what works as they set priorities and goals & objectives
- assists government agencies & others evaluate progress toward P2 goals
- helps P2 programs continually improve their activities

# Memorandum of Agreement

- Demonstrates involvement in the P2 Data effort
  - Shows support for a national system and coordination with Regional P2Rx Centers
  - 26 State organizations
  - 1 Resource-based Regional organization
  - Continuing to gather signatures
- 

# Data Dictionary



## Defines:

- Data elements for reporting
- Units to be used
- Categories of Core Elements
- Crosswalk with other EPA/State Programs
- Addresses EPA P2 Strategic Targets
- Helps meet accountability and budget needs

# Core Measures

**Outcome Measures**

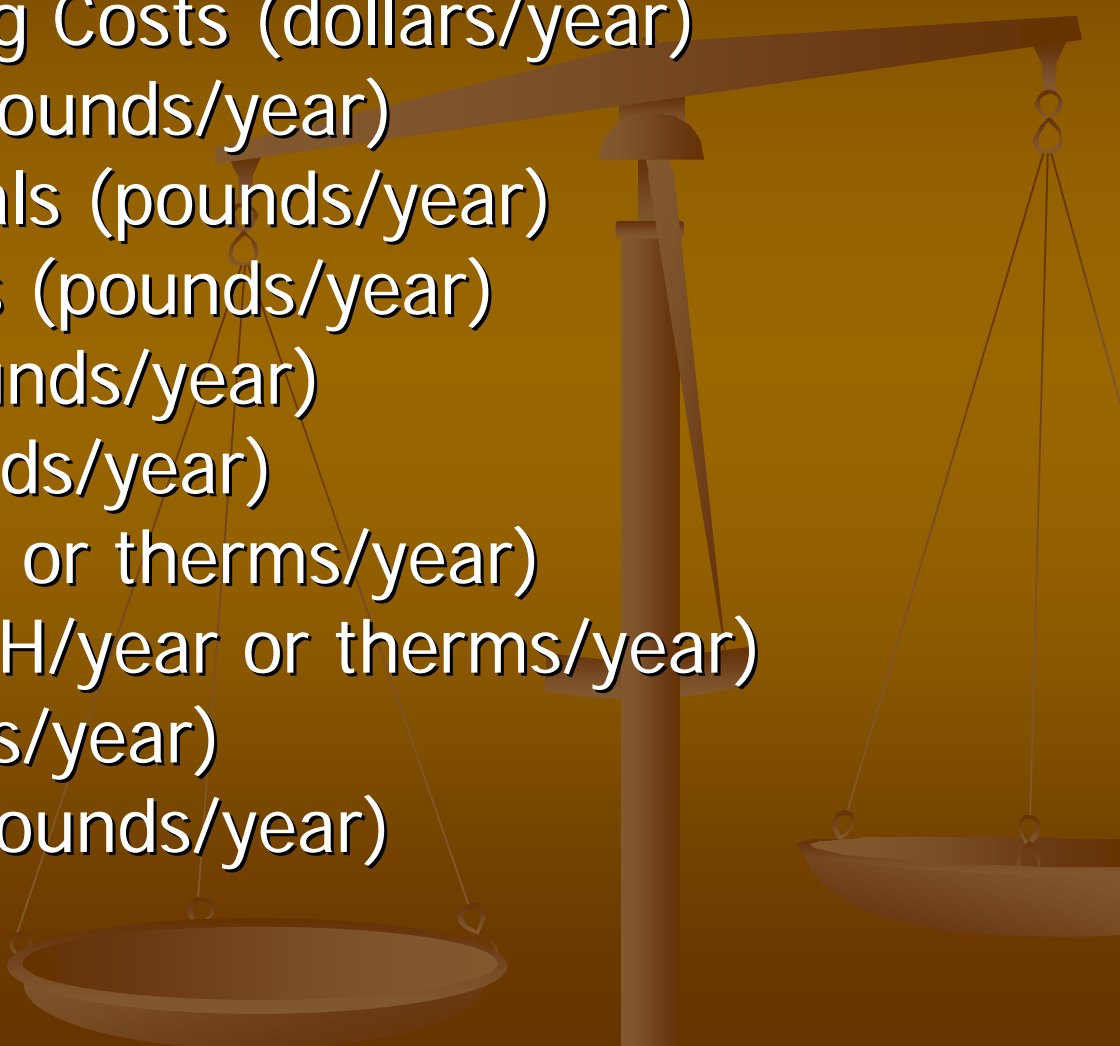
**Behavioral Measures**

**Activity Measures**

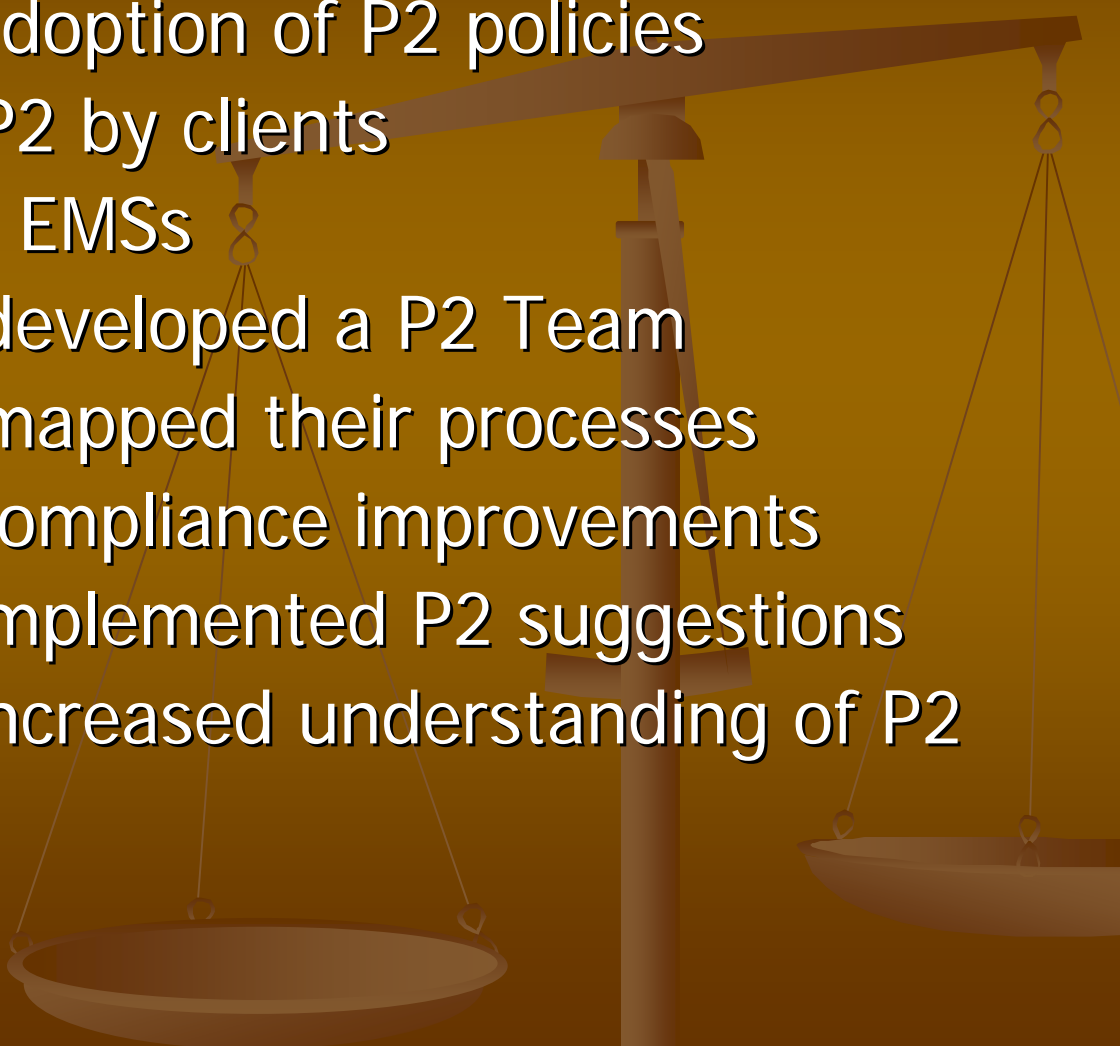
**Investment in P2 Activities**



# Outcome Measure (Level 3)

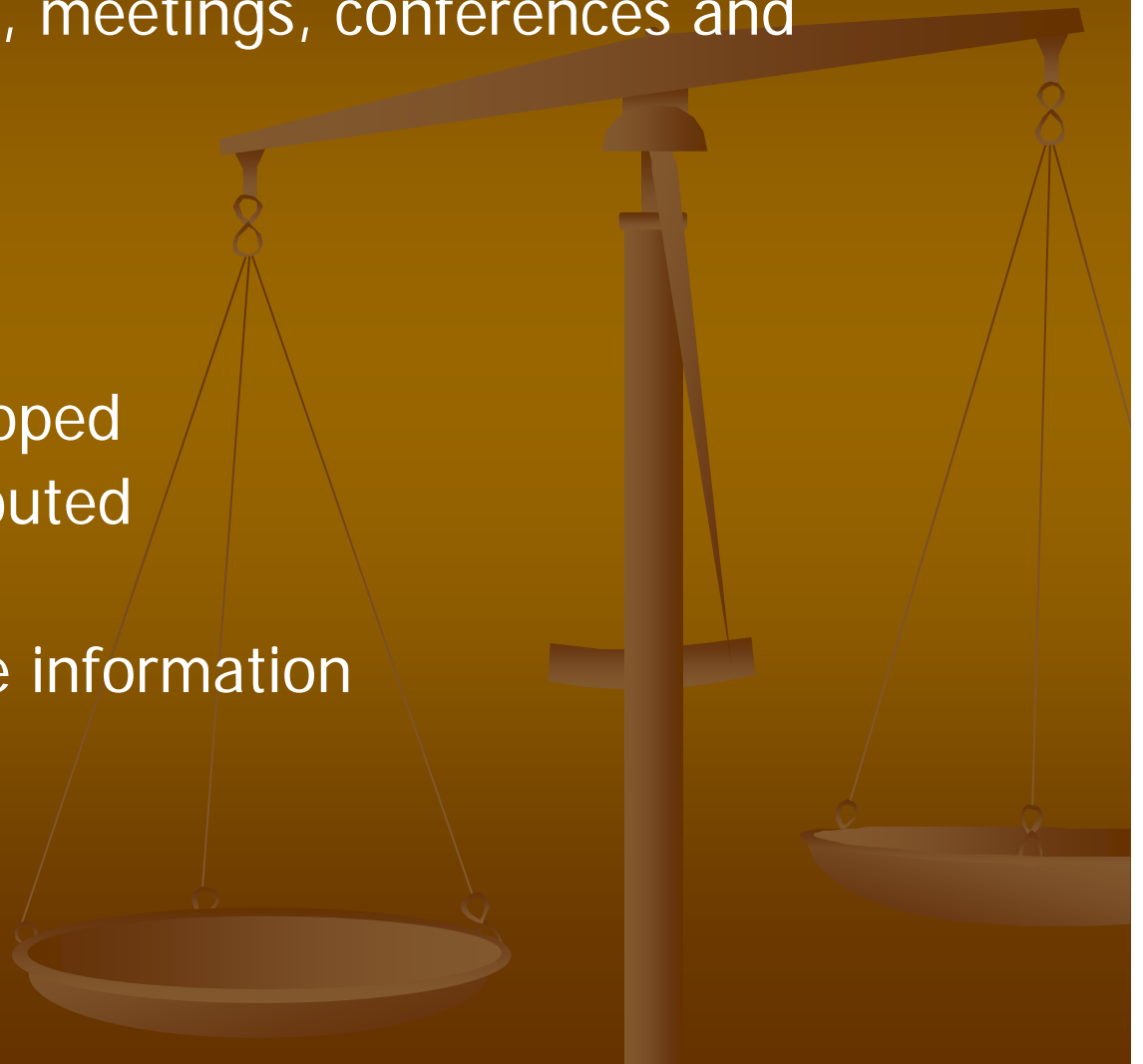
- Reduced Operating Costs (dollars/year)
  - Non-Hazardous (pounds/year)
  - Hazardous Materials (pounds/year)
  - Hazardous Wastes (pounds/year)
  - Air Emissions (pounds/year)
  - Solid Waste (pounds/year)
  - Energy (KwH/year or therms/year)
  - Green Energy (KwH/year or therms/year)
  - Water Use (gallons/year)
  - Water Pollution (pounds/year)
- 

# Behavioral Measures (Level 2)

- Clients reporting adoption of P2 policies
  - People trained in P2 by clients
  - Clients developing EMSs
  - Clients that have developed a P2 Team
  - Clients that have mapped their processes
  - Clients reporting compliance improvements
  - Clients reporting implemented P2 suggestions
  - Clients reporting increased understanding of P2 Opportunities
- 

# Activity Measures (Level 1)

- Trainings, workshops, meetings, conferences and roundtables
- P2 Plans
- Site visits
- Brief assistance
- P2 information developed
- P2 information distributed
- Grants awarded
- Web visitors to online information
- Awards Programs
- Leadership Programs

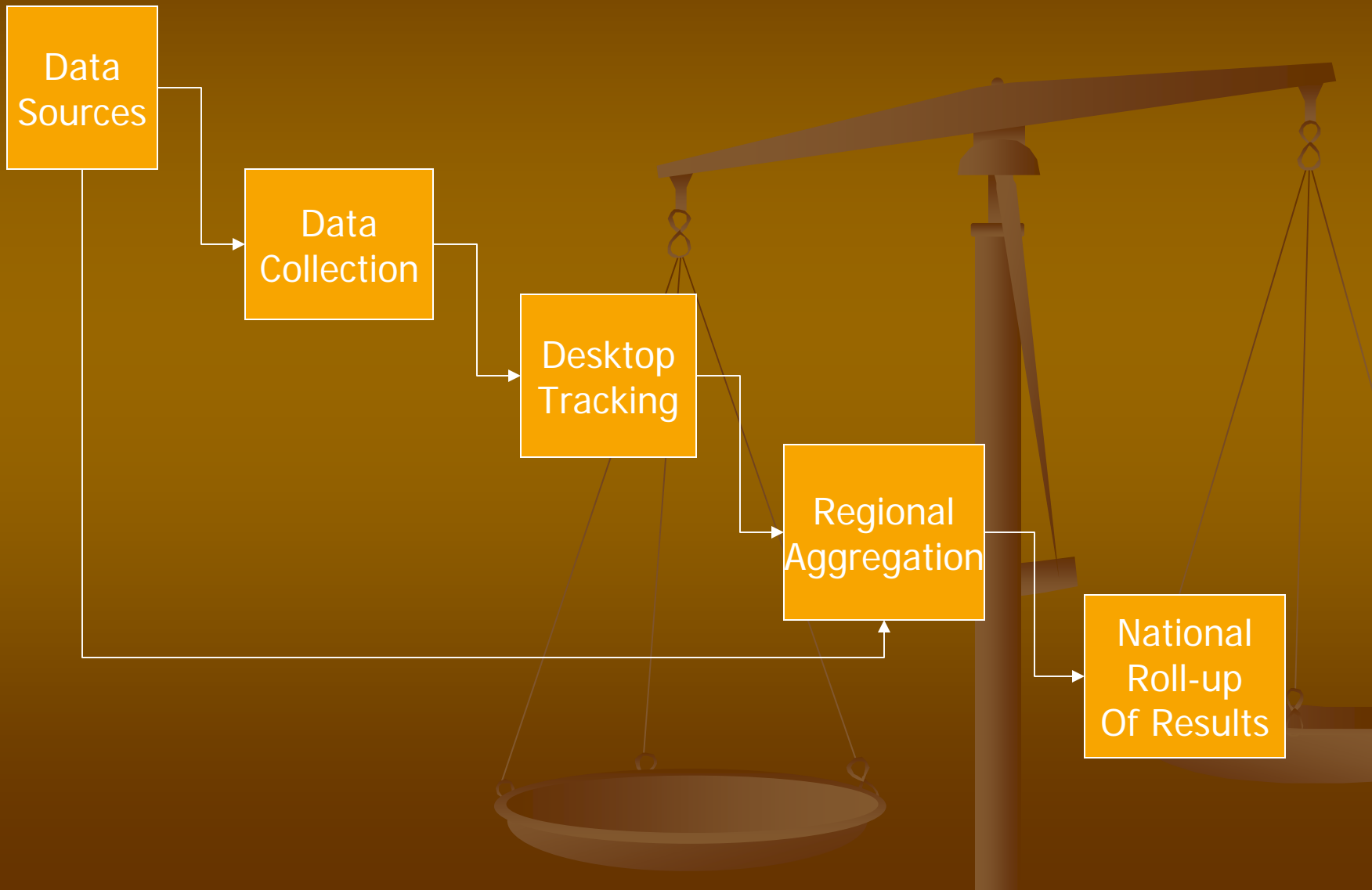


# Investment in P2

- Federal Funds
- State, local, non-profit and matching funds

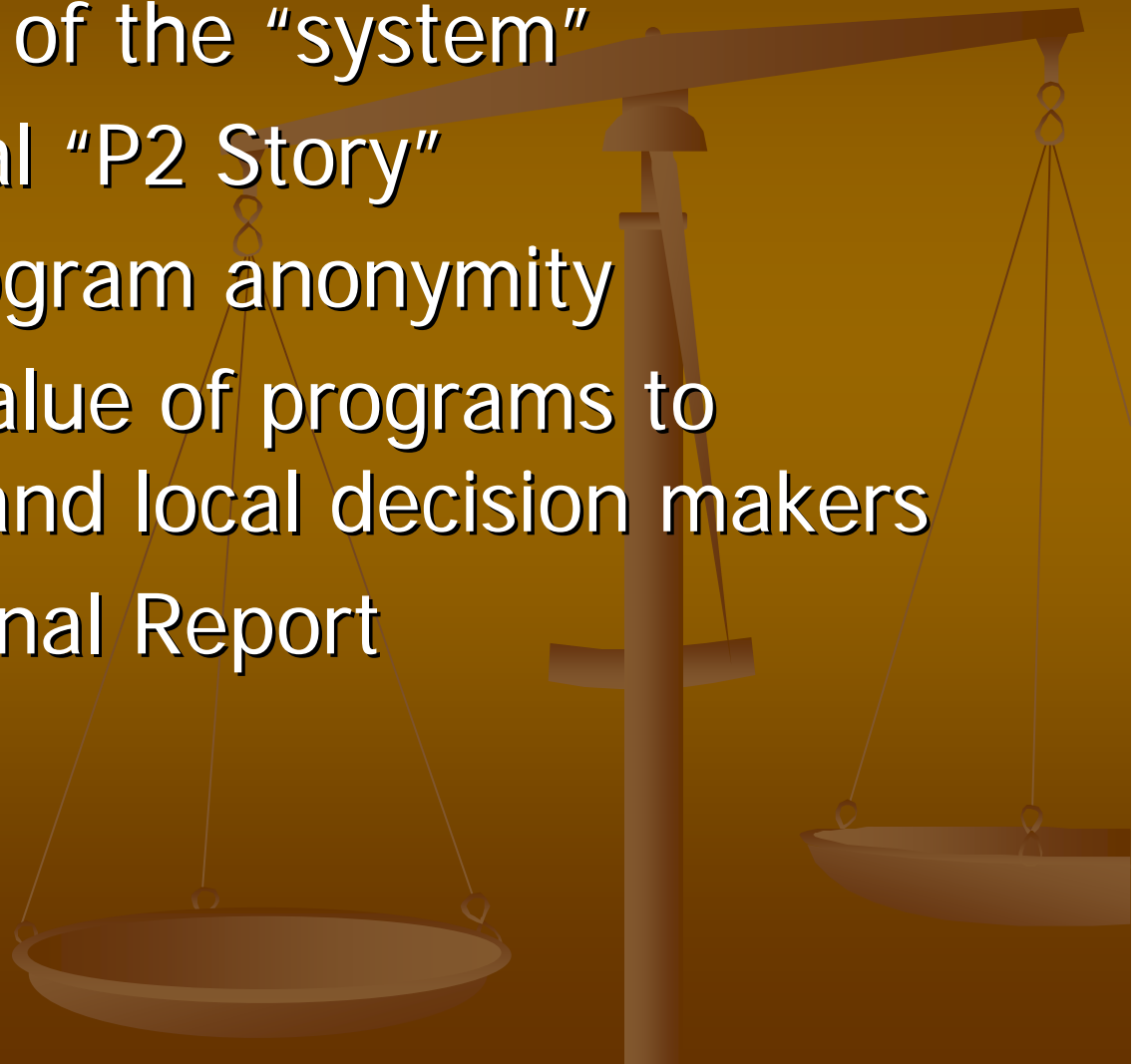


# Data Collection Process



# Regional Aggregation

- Key component of the “system”
- Tell the Regional “P2 Story”
- Can provide program anonymity
- Helps sell the value of programs to regional, state and local decision makers
- Feeds the National Report



Aggregated Northwest P2 Results Report - Microsoft Internet Explorer

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Address <http://www.pprc.org/measure/reports/summary.cfm>

Google Search Web Search Site PageRank 6 blocked Options

## Region 10 P2 Results Measurement Project

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### REGION 10 P2 MEASUREMENT HIGHLIGHTS

Pollution Prevention and Energy Efficiency Activities

*The following report provides a summary of documented results of pollution prevention, energy efficiency, solid waste and natural resource reduction projects in Alaska, Idaho, Oregon and Washington ending between 1993 and the present. This does not reflect all the reductions and resource efficiencies in the region.*

<b>Reduced Operating Costs</b> <a href="#">how was this calculated?</a>	<b>\$ 384,322,628.94</b>	
<b>Reduced Hazardous Waste Generation</b>	26,748,866 36,633	pounds gallons
<b>Reduced Toxic Material Use</b>	1,233,551 595,288	pounds gallons
<b>Electricity Saved</b>	646,338,663	KWh
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<b>Gasoline Saved</b>	5,000 15,000,000	gallons diesel gallons other
<b>Water Saved</b>	2,178,784,348	gallons
<b>Solid Waste Reduced</b>	241,945,291	pounds
<b>CO2 Emissions Eliminated</b>	840.0	tons
<b>Vehicle Miles Avoided</b>	17,588,000	miles
<b>Renewable Energy Generated</b>	1,400,000	KWh

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Region 10 - P2 Results Measurement Project - Microsoft Internet Explorer

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Address <http://www.pprc.org/measure/input/input1.cfm> Mail Go Links >>

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## Region 10 P2 Results Measurement Project

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\* **Report Problems/Issues With This Page** [HERE](#)


The next 4 screens capture information about:

1. **General Project/Activity Information**
2. **Process Inputs**
3. **Process Outputs** and
4. **Renewable/Recycled Materials & Resources.**

Please proceed through each page and enter information, as appropriate.

### 1. GENERAL PROJECT/ACTIVITY INFORMATION

(red\*\* means required)

**Agency/organization\*\*** 


**State in Which Project/Activity Took Place\*\***

**Activity(ies) Contributing to P2 Results**   
workshop/event/training  
site visit  
telephone assistance  
sent written materials  
referred to contacts or web sites  
award/recognition program  
inspection/enforcement followup (select multiple items by using Control key)

**Activity(ies) Description**

**Sector Involved in These Results**

**Sector Description**

**Date Project/Activity Ended\*\***   (enter as mm/dd/yyyy)

**Person Entering Data\*\***

Next... 2. Process Inputs

Internet

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\* Report Problems/Issues With This Page [HERE](#)

### 2. PROCESS INPUTS ?

#### Toxic/Hazardous Materials ?

		Initial Cost ?		Savings ?	
Reduced Use	<input type="text"/> pounds	Non-capital	\$ <input type="text"/>	One-time	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Reduced Use	<input type="text"/> gallons	Capital	\$ <input type="text"/>	Annually Recurring	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Description	<input type="text"/>	Recurring for How Long?		<input type="text"/>	future years

#### Raw Materials ?

		Initial Cost ?		Savings ?	
Reduced Use	<input type="text"/> pounds	Non-capital	\$ <input type="text"/>	One-time	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Reduced Use	<input type="text"/> gallons	Capital	\$ <input type="text"/>	Annually Recurring	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Description	<input type="text"/>	Recurring for How Long?		<input type="text"/>	future years

#### Water ?

		Initial Cost ?		Savings ?	
Reduced Use of Raw/Fresh Water	<input type="text"/> gallons	Non-capital	\$ <input type="text"/>	One-time	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
		Capital	\$ <input type="text"/>	Annually Recurring	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Description	<input type="text"/>	Recurring for How Long?		<input type="text"/>	future years

#### Energy/Fuel ?

Reduced Use		Initial Cost ?		Savings ?	
Electricity	<input type="text"/> kWh	Non-capital	\$ <input type="text"/>	One-time	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Natural Gas	<input type="text"/> therms	Capital	\$ <input type="text"/>	Annually Recurring	\$ <input type="text"/> <input type="radio"/> est. or <input type="radio"/> actual
Vehicle Miles	<input type="text"/> miles			Recurring for How Long?	<input type="text"/> future years
Diesel Fuel	<input type="text"/> gallons				
Other Petroleum (non-auto)	<input type="text"/> gallons				
Coal	<input type="text"/> tons				
Other Fuels	<input type="text"/> kWh equivalent				

Data Entry Field	Definition	Input Protocol
<b>State in Which Project / Activity took place</b>	The state or entire EPA Region 10 where the activity(ies) / projects took place.	For State-specific information: Choose the applicable state. For EPA-specific activities not attributable to one or any state, choose "EPA Region 10"
<b>Date Project / Activity Ended</b>	Date assistance to this client ended, or the date that the project, or implementation of the project was completed. The accuracy of this date is important with respect to reporting. When reports are requested within a specific time period, this is the field that will be queried.	Enter two digits for the month and day, four digits for the year ( <i>mm/dd/yyyy</i> ).
<b>Initial Cost</b>	Costs associated with implementation of the pollution prevention or waste reduction effort.	<i>(Heading - no data entry)</i>
Non-capital	One-time, non-equipment related expenses such as staff time, staff training, non-capital materials or supplies, etc.	Report in U.S. dollars.
Capital	Expenses related to facility modifications, new equipment, payment of contractors for installation/modification, and training staff.	Report in U.S. dollars.
<b>Savings</b>	Cost savings associated with implementation of the pollution prevention or waste reduction effort.	<i>(Heading - no data entry)</i>
One-time	Non-recurring, one-time cost savings, e.g., such as recycling materials from a construction or demolition project, or an inventory reduction involving a material exchange rather than disposal of the inventory.	Report in U.S. dollars.
Annually Recurring	Recurring and tangible cost savings, such as reduced staff time, reduced purchasing costs, reduced storage/treatment/handling, etc. If an accounting system estimates reduced liability or risk costs, this can also be included. Subtract any recurring operating costs incurred by this effort from the total savings value.	Report in U.S. dollars.
Recurring for How Long?	Estimated future years that the ongoing cost savings will be realized.	Report in whole-digit number of years.
<b>PROCESS INPUTS (Input Screen #2)</b>	Consumable material and resource flow into the facility, office, processes, and/or operations. This includes supplies, chemicals, feedstocks, energy and water, and any other tangible inflows of materials or resources.	<i>(Heading - no data entry)</i>
<b>Toxic/Hazardous Materials</b>	Reduced use or need for supplies and feedstocks that are toxic or hazardous and require special handling and storage. Examples include chemicals, solvents, pesticides, etc. This category does NOT include materials that have been used and are now considered toxic or hazardous waste.	Report in annual pounds and/or annual gallons reduced.
<b>Raw Materials</b>	Reduced use of and need for non-hazardous feedstocks, chemicals, supplies, and other consumables used in the facility, office, processes, and/or operations.	Report in annual pounds and/or annual gallons reduced.
<b>Water</b>	Reduced consumption of incoming raw water, from outside sources, for operations, maintenance and landscaping.	Report in annual gallons reduced.

# Reports

- Aggregated Reports for the Region
    - Agency Managers
    - Legislators
    - Business Leaders
  - Reports for Each Program (Inputting Data)
  - Project/Initiative/Activity Specific
- 

Aggregated Northwest P2 Results Report - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Pollution Prevention and Energy Efficiency Activities

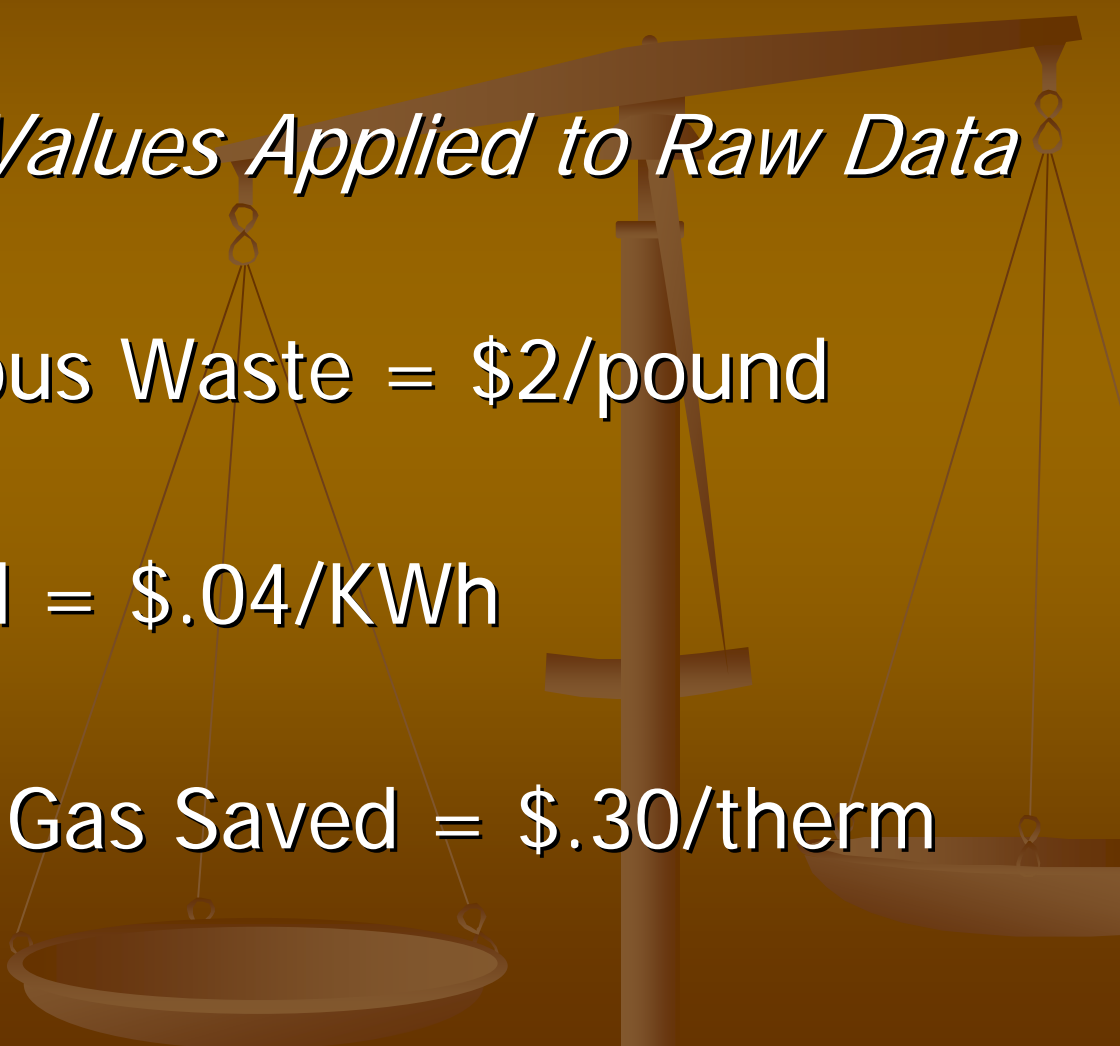
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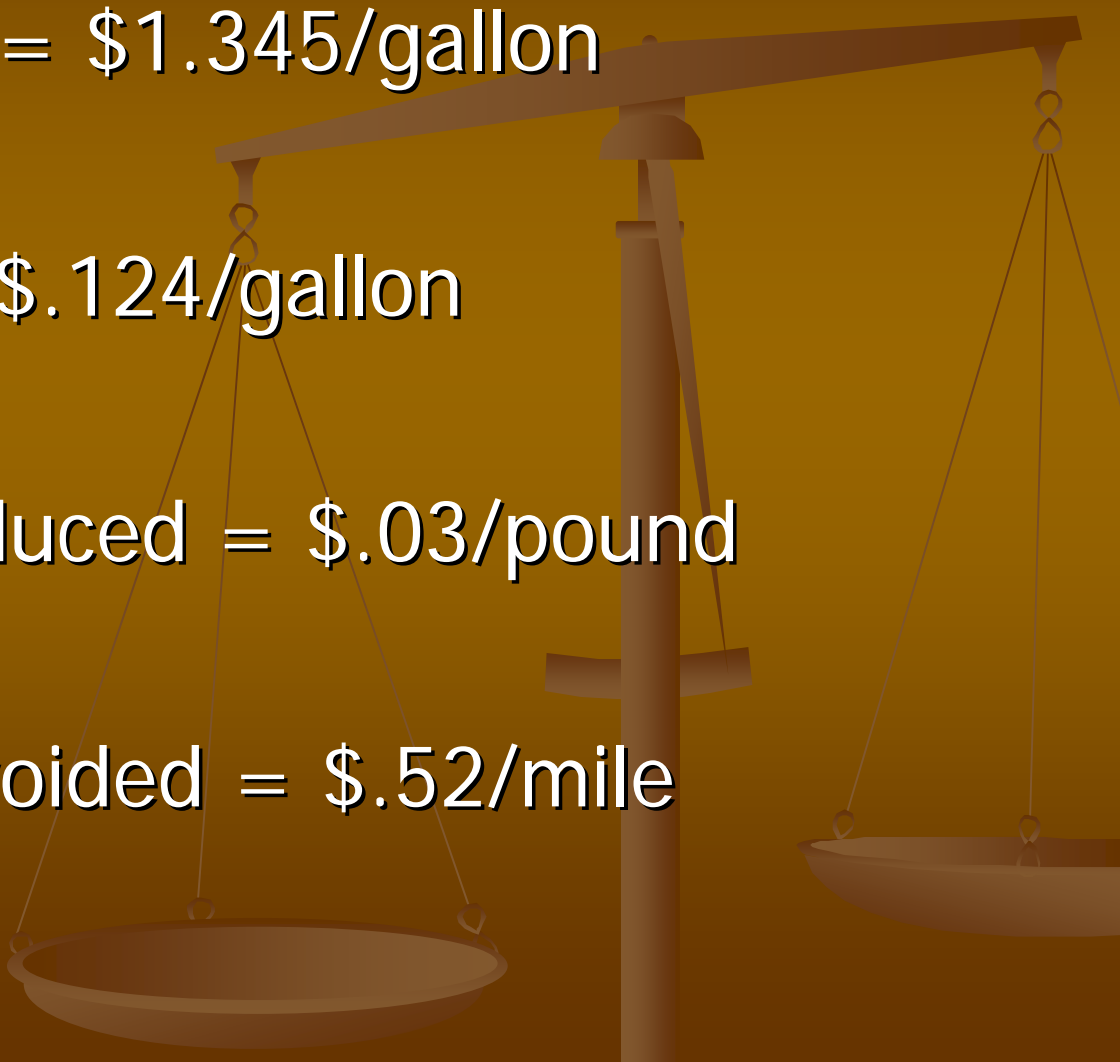
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# Cost Factors and Assumptions

## *Estimated Dollar Values Applied to Raw Data*

- Pounds Hazardous Waste = \$2/pound
  - Electricity Saved = \$.04/KWh
  - Therms Natural Gas Saved = \$.30/therm
- 

# Cost Factors and Assumptions

- Gasoline Saved = \$1.345/gallon
  - Water Saved = \$.124/gallon
  - Solid Waste Reduced = \$.03/pound
  - Vehicle Miles Avoided = \$.52/mile
- 

# Further Information

- Jeff Burke (NPPR)  
202-299-9701, [jeff@p2.org](mailto:jeff@p2.org)
- Chris Wiley (PPRC)  
206-352-2050, [cwiley@pprc.org](mailto:cwiley@pprc.org)
- Jean Waters (P2RX)  
402-554-6259, [jwaters@unomaha.edu](mailto:jwaters@unomaha.edu)

