

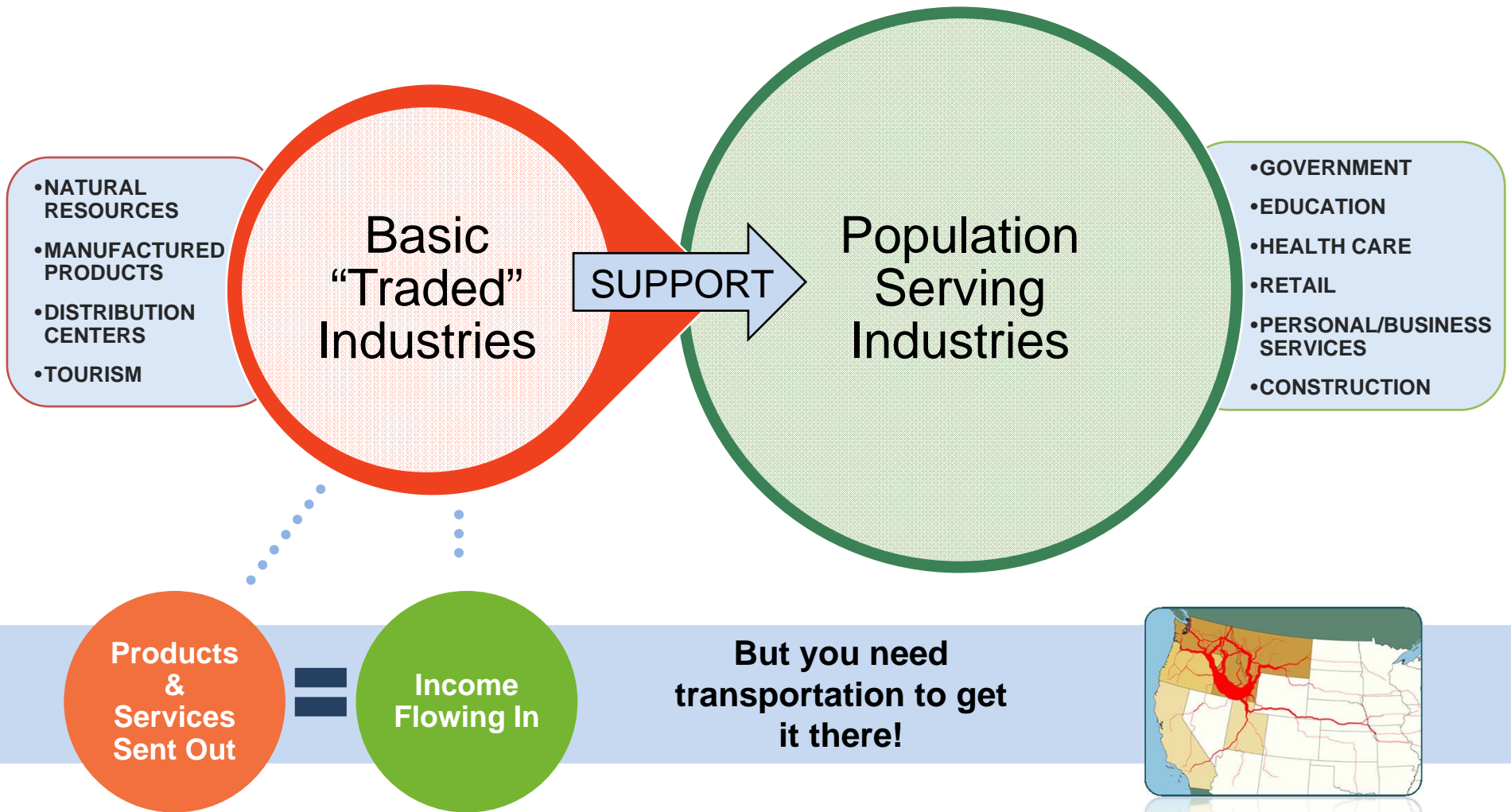
# *Moving* Idaho's Economy

BUILDING ON SUCCESS

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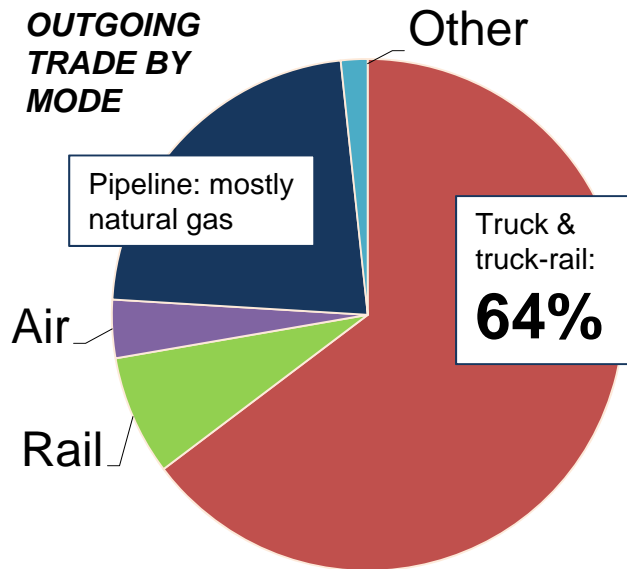
# Why Transportation Matters



# Goods flow out, money flows in

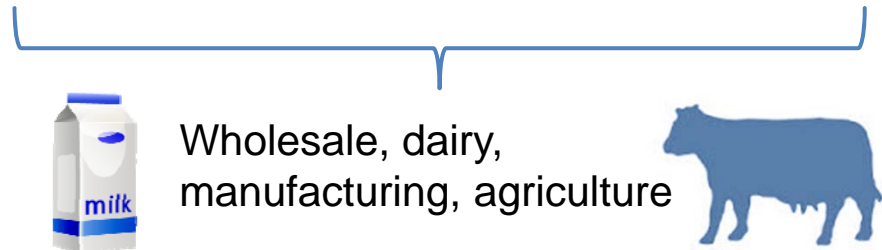
**\$33 B** outgoing trade in 2013; **\$22 B** by truck & truck-rail

OUTGOING TRADE BY MODE



BY TRUCK OUTGOING

Commodity	2013 \$B
Manufactured goods	5.1
Agriculture and food	5.3
Other	6.4
<b>Total outgoing</b>	<b>\$16.8 B</b>



Source: TREDIS

# Supporting Strong Business

## Basic (for export) industries:

(Source: United Dairymen of Idaho)

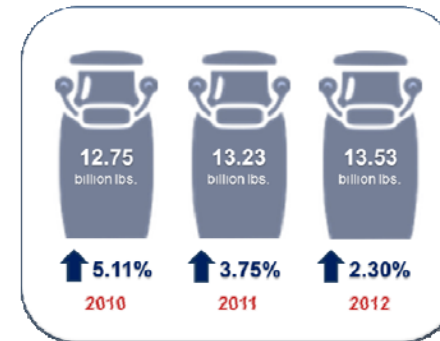
Tourism, dairy, potatoes, wheat, corn seed, computer chips, lumber & wood products, metal mining, phosphate mining and fertilizer, and cheese.



Source: komonews.com

## Idaho's Dairy Industry

- Dairy farms; Dairy manufacturing
- Supports other business: feed grains, dairy equipment & maintenance, fuels, transportation, business services (e.g. veterinary, accounting, and legal services).



Source: Idaho Dairymen's Association

## Other manufacturing...

e.g. Fleetwood residential manufactured homes, Hewlett-Packard, Micron, Simplot Co.

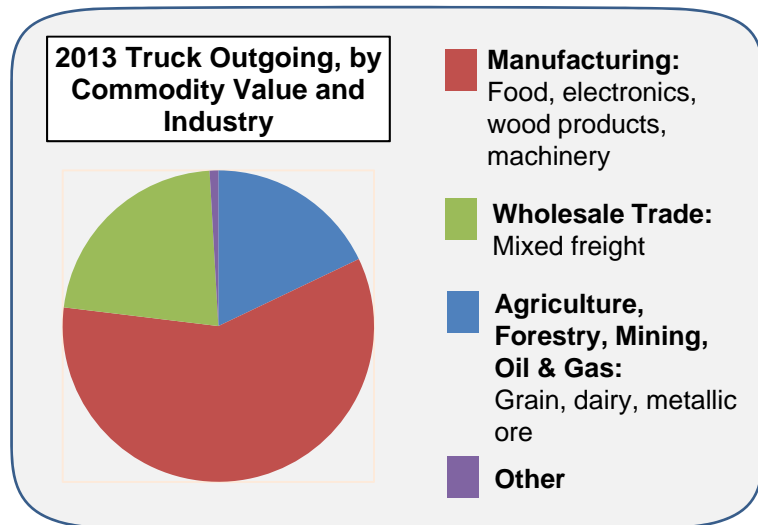


Source: Fleetwood Homes featured in TV show "How It's Made" on the Science Channel

# Transportation and Jobs

## INDUSTRY PRODUCTION RELATED TO OUTBOUND COMMODITY FLOW(S) BY TRUCK – 2013 (WITH MULTIPLIER EFFECTS)

Economic Impacts:	Output (\$B)	Value Added (\$B)	Employment	Wages (\$B)
Total from Outbound Truck Freight:	\$19.5 B	\$7.7 B	96,956 jobs	\$4,180 M
<i>as a percent of the state economy:</i>	<b>19%</b>	<b>14%</b>	<b>11%</b>	<b>12%</b>



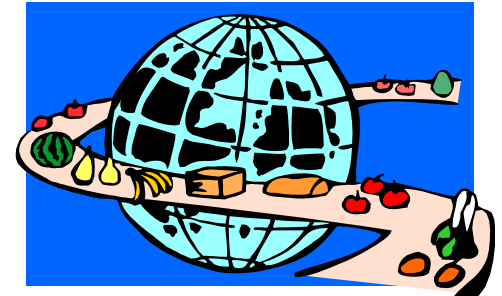
Source: TREDIS

**COMMODITIES WITH THE GREATEST EXPORT GROWTH** (by truck, foreign & domestic)

Commodity Description	Change (2013-2030)
Manufactured goods	\$2.8 B
Agriculture and food	\$1.0 B
Other	\$6.4 B
<b>ALL COMMODITIES</b>	<b>\$10.2 B</b>

# Transportation and Earnings

- Wages in traded industries were 23% higher than Idaho median income in 2012.
- Growth in traded industries leads to higher wages and bigger local markets for others as well.
- The quality of the transportation system is what enables this money to enter Idaho's economy.



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# Transportation Costs and Households

- **\$1,495 Per Household in 2012**
  - Gas, Mileage, Environmental and Crash Costs
  - Does not include insurance or auto ownership costs
  - Will increase to \$1,911 by 2030
  - 30 Year Cost is Equivalent to a bank account of \$20,013 today
- **Additional \$819 for Roads**
  - Federal and state taxes and user fees



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# Transportation Efficiency

- 2013 Performance-Related Household Costs
  - \$616 Fuel, Gas and Mileage
  - \$277 Productive time at work
  - \$375 Quality time at Home
  - \$189 Crashes
  - \$38 Environmental & Health Related

How much could  
you save?





# Paying for Roads

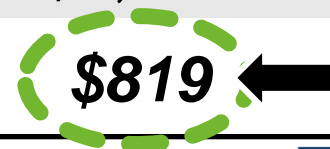
- Largest source of transportation funding
- **Fixed rate:** 25¢ per gallon in ID & 18.4¢ federally with no adjustment for rising costs of building & maintaining roads
- Greater fuel efficiency means more miles on the road but less revenue from the gas tax
- Idaho Gas Tax: pays for **36% less** than it did when the tax rate was last changed (1996)\*



\*Source: Institute on Taxation and Economic Policy, 2011

## Average Annual Household Expenditures: A Comparison

<b>Phone Service</b> <small>(Consumer expenditures survey 2012, BLS)</small>	\$1,239
<b>Electricity</b> <small>(Consumer expenditures survey 2012, BLS)</small>	\$1,388
<b>Health Insurance</b> <small>(Consumer expenditures survey 2012, BLS)</small>	\$2,061
<b>Idaho State &amp; Federal Highway User Fees</b> <small>(Revenue estimates: average 2007-2012, ITD; # of households: US Census 2010)</small>	<b>\$819</b>



# Some Things are Priceless



Quality Time



Natural  
Environment



Life and Health

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# Key Concepts

- Transportation Performance Makes Jobs and Money available.
- Improving Transportation Performance enable households to both earn and save more money.
- The costs of highway infrastructure are less than the costs time, mileage and other factors that can be saved by system improvement.
- The payoffs of transportation investment go beyond dollars.

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# Thank You

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# Speaking Transportation Economics

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# What's A Benefit?

- Benefits are always *absolute* gains to the economy that can be measured in *real dollars*.
- They arise in three ways:
  - *SAVING MONEY* to Households and Businesses
  - Increasing *PRODUCTIVITY* of Businesses
  - Attracting, Creating or Expanding *NEW ECONOMIC ACTIVITY*

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# Money-Saving Benefits

- **Vehicle Operating Costs**
  - Same Activity, Less Mileage on Vehicles or
  - Same Mileage, but better travel conditions
- **Travel Time**
  - Same Activity, Fewer Hours Spent Traveling

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# Money-Saving Benefits

- Reliability
  - Greater Certainty about Arrival Times
- Safety
  - Fewer Crashes and Fatalities
- Environmental
  - Less Emissions, Public Health, Wildlife and other Benefits



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# Productivity Benefits

- **Market Access**
  - More buyers, suppliers and workers to use from
- **Site Efficiency**
  - Business can produce more with the same resources because of site-specific features

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# Contingent Development Benefits

- New Business Attracted (or Created)
  - Must be “net-new” to the state or region
  - Only count “value-added”
  - Do not count “transfers”

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# What's an Impact

- Impacts show what the economy *does with* its benefit
- Over 10 years, a firm saves \$100,000 in reliability time and invests it in a new machine, the firm can then..
- Make and Sell \$225,000 worth of additional goods
- Retain \$20,000 in additional profits
- Employ 2 new workers
- Pay \$130,000 in wages

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# Benefits and Impacts

- Economic BENEFIT = \$100,000
- Economic IMPACTS:
  - \$225,000 Business Output (Goods Sold)
  - \$20,000 Business Profits
  - 2.3 Jobs
  - \$130,000 in Wage Income
  - Tax Revenue, etc. etc.

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# Sources of Impacts

- **Transportation Efficiency**
  - Using the benefit from transportation system performance (savings)
- **Market Access**
  - Using the benefit from increased productivity

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# Sources of Impacts

- **Contingent Development**
  - Often not a benefit, but derived from new business attracted (not simply relocated)
- **Construction**
  - The multiplier effects of capital and operational outlays
- **Adverse Tax/Tolling Impacts**
  - Multiplier effects of taxing/tolling or other revenue mechanisms

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# What are Multiplier Effects?

- Apply Only to Impacts (never benefits)
- Induced Effects
  - Money is “re-spent” in the economy
- Indirect Effects
  - Market is made for supporting inputs to production

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# What about Intangibles?

- Beauty, Wildlife, other strategic outcomes?
  - Never occur in transactions
  - Often distributive in nature
  - Often long-term vs. short-term
  - Best NOT to be monetized



# Multi-Criteria Analysis

Measure	Score	Weight	Weighted Score
Safety	3	4	12
Environment	2	4	8
Mobility	3	3	9
Livability	3	5	15
Future Generations	1	2	2
<b>TOTAL SCORE</b>			<b>37</b>

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# Why Multi-Criteria Analysis?

- Avoids indefensible dollar values
- Avoids distraction of public debate
  - Focuses debate on performance areas and not on “what’s a bird’s life worth”
- Recognizes time-value of money and importance of long-term benefits.

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# Engaging the Discussion

- What kind of outcomes are the most important?
- Who experiences these effects and how?
  - What might the benefits and impacts be?

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# Thank You

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