

# Uses & Misuses of Economic Impact Analysis: *After the Benefit-Cost Analysis*

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# Overall Bang for the Buck: -- *“After” the Benefit-Cost Analysis*

Benefit-Cost Screening

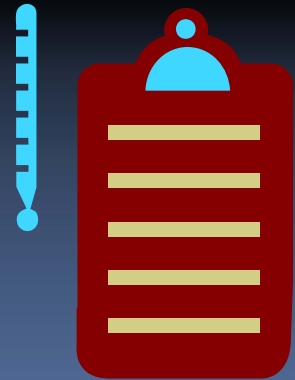
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graph TD; A[Benefit-Cost Screening] --> B[Social Benefit Appraisal]; B --> C[EIS - Impact Analysis];
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Social Benefit Appraisal

EIS – Impact Analysis

# Benefit-Cost Analysis

- Economic Efficiency of spending:  
*return on investment*
- Screening to avoid waste of money
- Not a substitute for broader appraisal of important societal goals:  
*unmeasured econ benefits,  
distributive effects,  
and protective goals*



# Societal Benefit Appraisal

## Benefits Beyond Benefit-Cost Analysis

- Unmeasured econ efficiency benefits (\$)
  - Environment, other “quality of life” elements
  - Economic productivity & independence
  - Cumulative consistency with policy
- Distributive Impacts
  - Spending shifts
  - Economic development shifts
  - Land use shifts



# How Other Benefits are Handled

- Attempt to quantify and add to BCA
- Analyze separately in terms of *Appraisal Summary Table* (Europe) or *Cost-effectiveness for targeted goals* (US)
  - Preservation of system connectivity
  - Congestion mitigation & air quality
  - Economic development
  - International borders
  - Rural access
  - Safety



A close-up photograph of a spreadsheet or financial document. The image is slightly blurred, focusing on a grid of numbers. Visible values include 100,000, 10,000, 10,000, 75,000, \$205,000, and -280,000. The numbers are arranged in rows and columns, typical of a data table.

# EIS Process

## Concerns beyond benefits

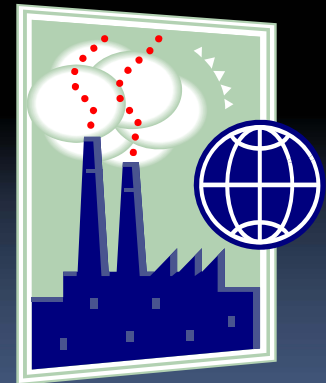
- Economic impact - *efficiency + distributive impact hitting vulnerable & protected parties*
- Social/cultural impact - *distributive impact hitting vulnerable & protected parties*
- Environmental impact - *distributive impact hitting vulnerable & protected parties*

# Regional Economic Growth Impact

## = Impact on the Economy

- Output (Business Sales Activity)
- Income (Personal or GDP Value Added)
- Jobs

Economic growth models traced how direct effects on transport users lead to indirect & induced effects throughout the economy .



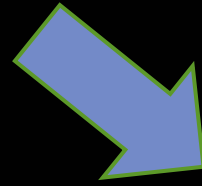
Very useful information; but NOT Benefit-Cost Analysis

# Regional Econ Growth vs BCA

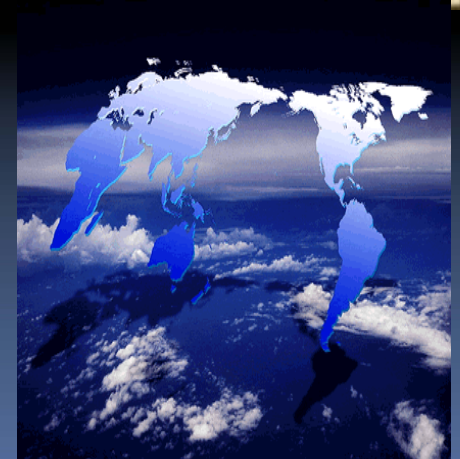
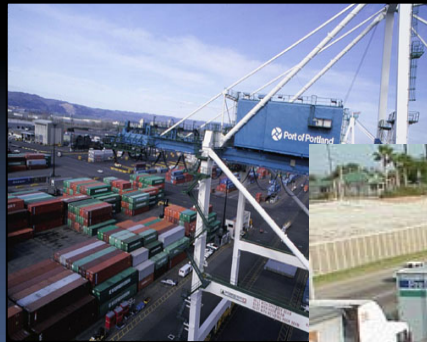
- Econ. Dev. Impact incl. effects of construction & attracting business from other regions.  
→ *NOT ECON EFFICIENCY BENEFITS!*
- Econ. Dev. Impact shows safety improvement as loss of jobs in health care & insurance  
→ *NO ECON GROWTH*
- Personal time & air quality changes do not directly affect money flow  
→ *NO MATCH OF ECON IMPACT TO SOCIAL VALUE*

# Importance of the Econ Devel View

- Rural isolation/market access
- International competitiveness
- Job opportunities & income



Legitimate  
public goals



# International Trade – Key Roles

## Gateway International Trade Facilities



**Ferry  
Terminals**

**Burrard Inlet  
Terminals**



**Rail  
Inter-modal  
Yards**



**Airport**



**Connected by an  
increasingly congested  
urban road network**

**Roberts Bank  
Terminals**



**Fraser River  
Terminals**



**Border  
Facilities** ↓

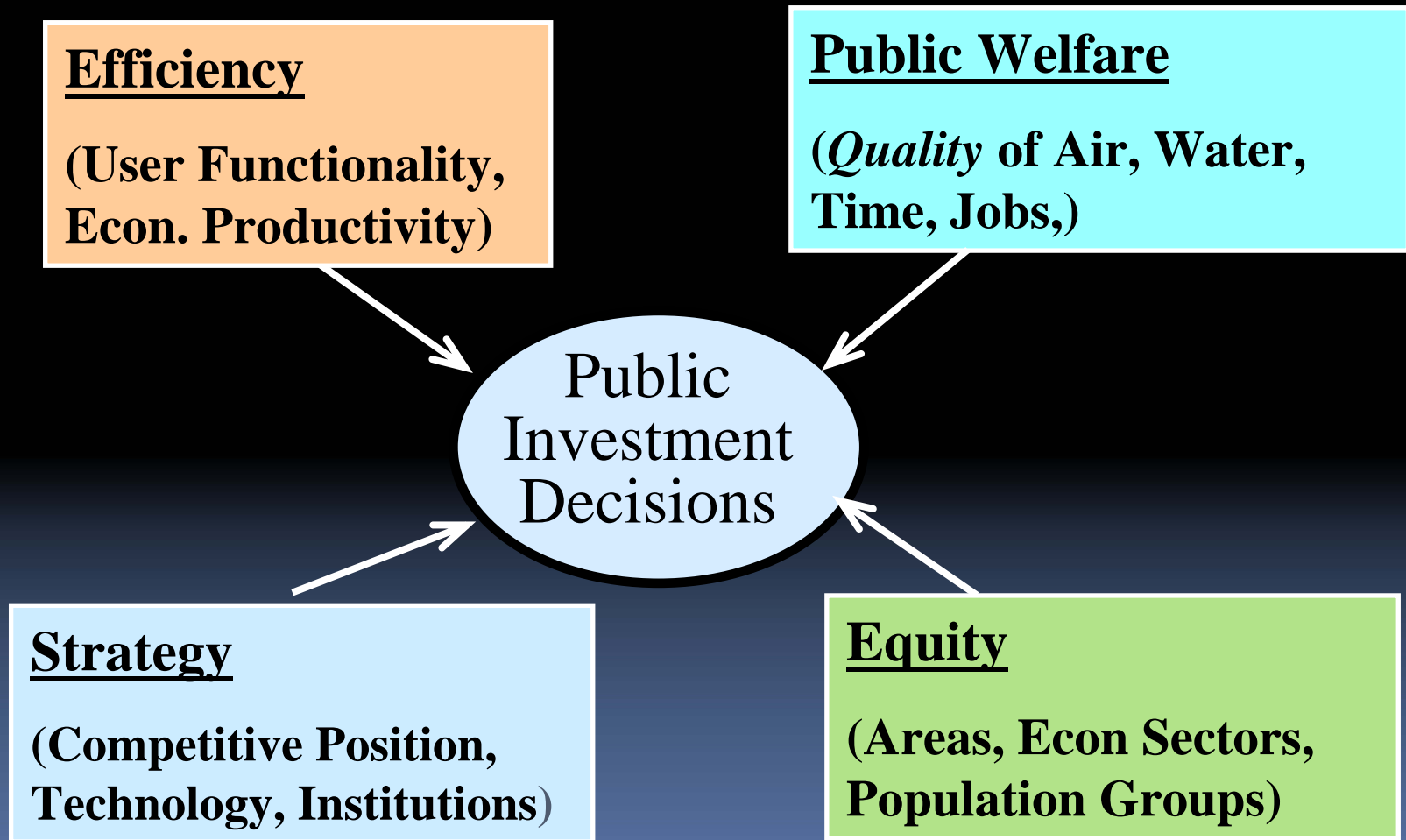
# International Trade – Strategic Plan

## Major Investments

~ \$4.8 – 5.3 billion



# Multiple Objectives of Public \$\$



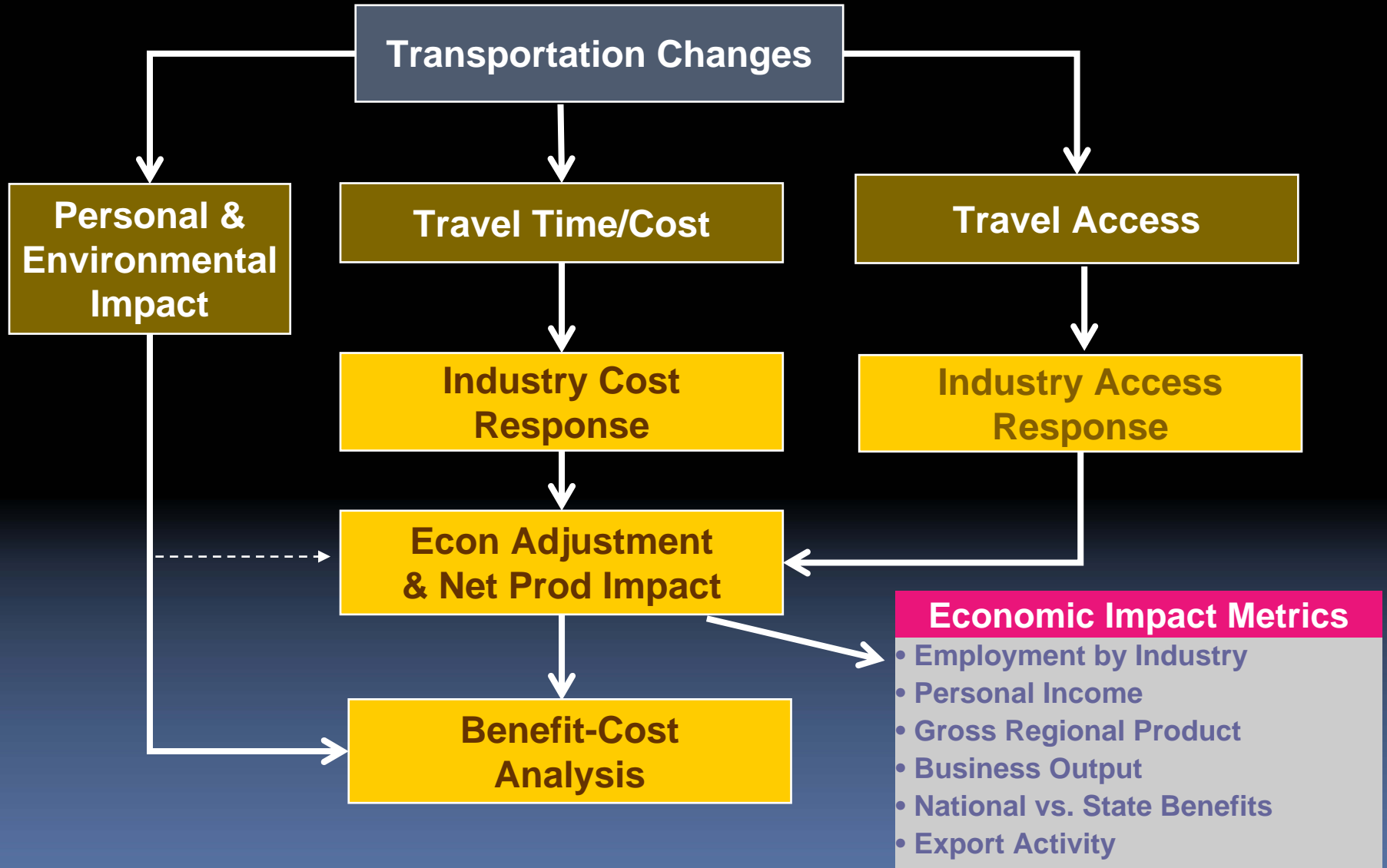
# Ways that transport can support economic development goals (ARC)

1. Resource-Based Development
2. Tourism-Based Development
3. Trade Center-Based Development
4. Export-Based Development
5. Cluster (Agglomeration)-Based Development
6. Supply Chain (Dispersion) Development
7. Inter-modal Distribution Development
8. Producer Services Development

# Needs for Econ Devel Models

- Capture **Multi-modal** implications
- Industry reliance on **specific modes, corridors**
- Data on Travel time/cost *plus* **access & reliability**
- Consideration of **local factors** (utilities, land, buildings)
- Separation of **\$ flow impacts** from other benefits
- Distinguishing **economic, social, environmental** impact
- Distinguishing **local, state, national, global** impact
- Distinguishing B/C **perspective** (traveler, resident, etc.)

# TREDIS Analysis Elements



# Lessons: *Overall Bang for the Buck*

Don't ignore the *adequacy* and *quality* of facilities & services; they can dramatically affect economic development.



Right order for analysis –  
First decide on the *Policy Issue*.  
Then apply appropriate analysis tools  
to fit the policy issue.

# For Further Information...

## *EDRG Web Download Library*

[www.edrgroup.com/edr1/library](http://www.edrgroup.com/edr1/library)

## *FHWA Econ Devel Links*

[www.fhwa.dot.gov/planning/econdev](http://www.fhwa.dot.gov/planning/econdev)

## *TRB Econ Devel Committee Links*

[www.tedcommittee.com](http://www.tedcommittee.com)