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Transportation Policy
& Environmental Limits
Lecture 2

Tragedy of the Concrete Commons

The Commons Defined

- What is the 'commons' according to Garret Hardin?

- Useful to understand population or growth-related problems.

- How can we apply it as a metaphor to transport?

Transportation as the Concrete Commons

- Increases in VMT.
- Number of emplanements.
- Number of vehicles.
- Miles of highway.
- Reduce air quality, land use.
- Limits to airside/portside and landside space.
- Slots….
- What is the dynamic of the commons dilemma?

Dynamic of the Concrete Commons

- Incentive to the individual –use the system or resources to the utmost.

- Issues: Short-term view, deleterious to commonweal.

- *Therein is the tragedy. Each man is locked into a system that compels him to increase his herd (or number of vehicles) without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own interest in a society that believes in the freedom of the commons. (Garret Hardin, 1968:1244)*

Transportation Policy & Lifestyle Dilemma

- What is transportation?

- ~ 18% of product cost.

- Estimated to approach 17% of GDP.

- For example, single largest item in defense budget after personnel – 'lift.'

Love Affair with Automobile

- Commons and traffic congestion.
- Long standing love affair and hate of automobile.
- 1920s complaints of noise, mud and scaring animals.
- Nearly 80% of highway travel occurs in congested conditions.
- Can congestion be seen as a good thing?

Expanding the Concrete Commons

- Unlike Hardin's commons it is often possible to expand the concrete commons, e.g., Florida's Gold Coast, 2000-2010/8 to 16 lane expansion.

- Transportation Demand Management – transit, HOV, pricing.

- Transportation Supply Management – build more, ITS.

I-95 Expressway

< 239 Feet >

NW 79th St Exit

Problem and Policy Definition
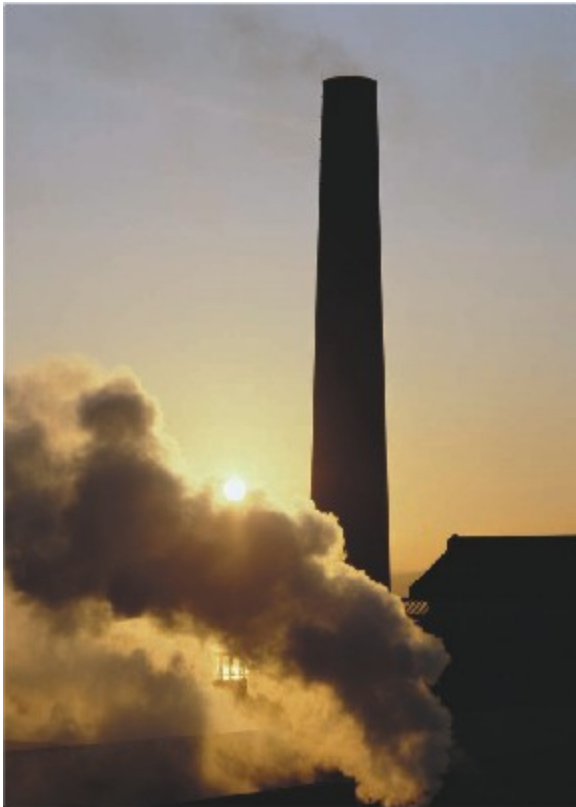# Defining Congestion

- What is the definition of congestion?
- Problem definition defines in and out the range of <u>available</u>, <u>acceptable</u> and often <u>affordable</u> solutions.

Reality as a Social Construction

- *...individuals, groups and societies tend to place interpretations upon reality – interpretations which may or may not be true in an absolute sense. These definitions, explanations and assertions are constructed to help us make sense of those things and events that we experience and to help us decide how to respond to the those experiences. In the face of uncertainty and ambiguity, these social constructions themselves are frequently based on 'fashionable' and therefore changeable assumptions and value judgments.* (Northcott, 1992: 1-2)

Policy Reality as Argument

- <u>Emphasis:</u> What to look at point source or mobile source emitters.

- <u>Level of analysis</u>: individual, organizational, global regional, local, social system?

Policy Reality as Argument

- <u>Interconnections</u> – how linked to other issues, environmental holistic, transport, system approach.
- <u>Causality</u> – who is to blame, political as much as technical, automobile technology or drivers?

Policy Reality as Argument

- Severity – global climate change, health risks, immediacy, competition with other 'pressing' issues on policy agenda.

- Incidence – how frequent and wide spread a problem, e.g., Asthma rates, airport delay.

- Novelty – new dimension of problem, degradation of artwork and statuary, rising water levels.

Policy Reality as Argument

- <u>Proximity</u> – how close to personal interests, everyday life.
- <u>Crisis</u> – hard to define line between problem and crisis, e.g, traffic congestion, safety, warming, sea level. Rhetoric of calamity.
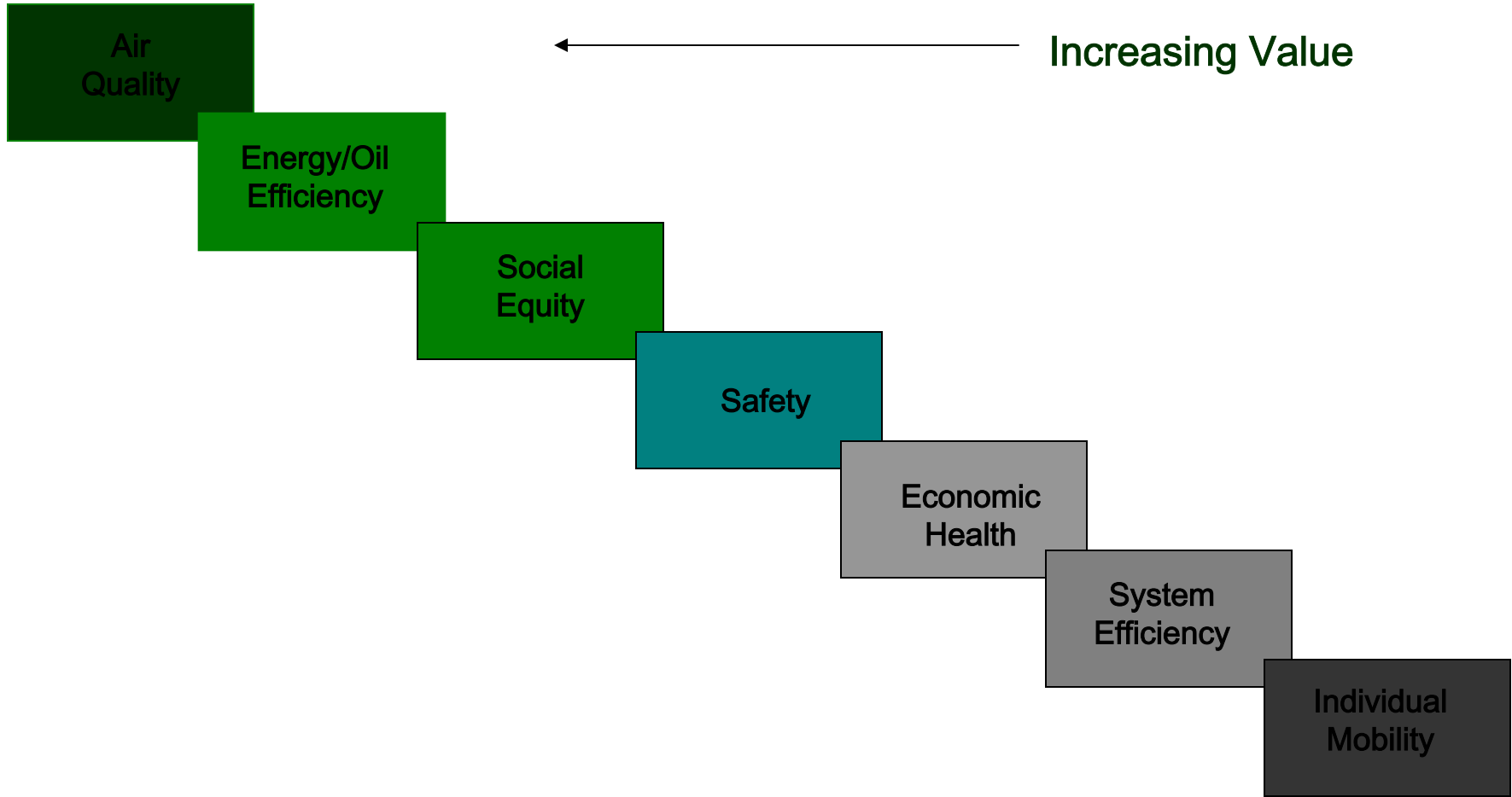- <u>Problem populations</u>: victims versus the culpable

Cultural Basis to Explain Transportation & Environmental Policy

- The management of the concrete commons and its impact on the 'commonweal or commonwealth' is derived from how people agree to live with each other and share common resources.

- How we define this arrangement predisposes us to certain problem definitions and policy solutions.

- Transportation facilitate, reflects and reinforces how we choose to live with each other and therefore can become highly politicized.

Competing & Conflicting Value Sets

- Individualist – high value on personal choice an individual freedom.

- Communitarian – high value on community & social equity.

- Collective policy decisions (transport) choose values between these two perspectives.
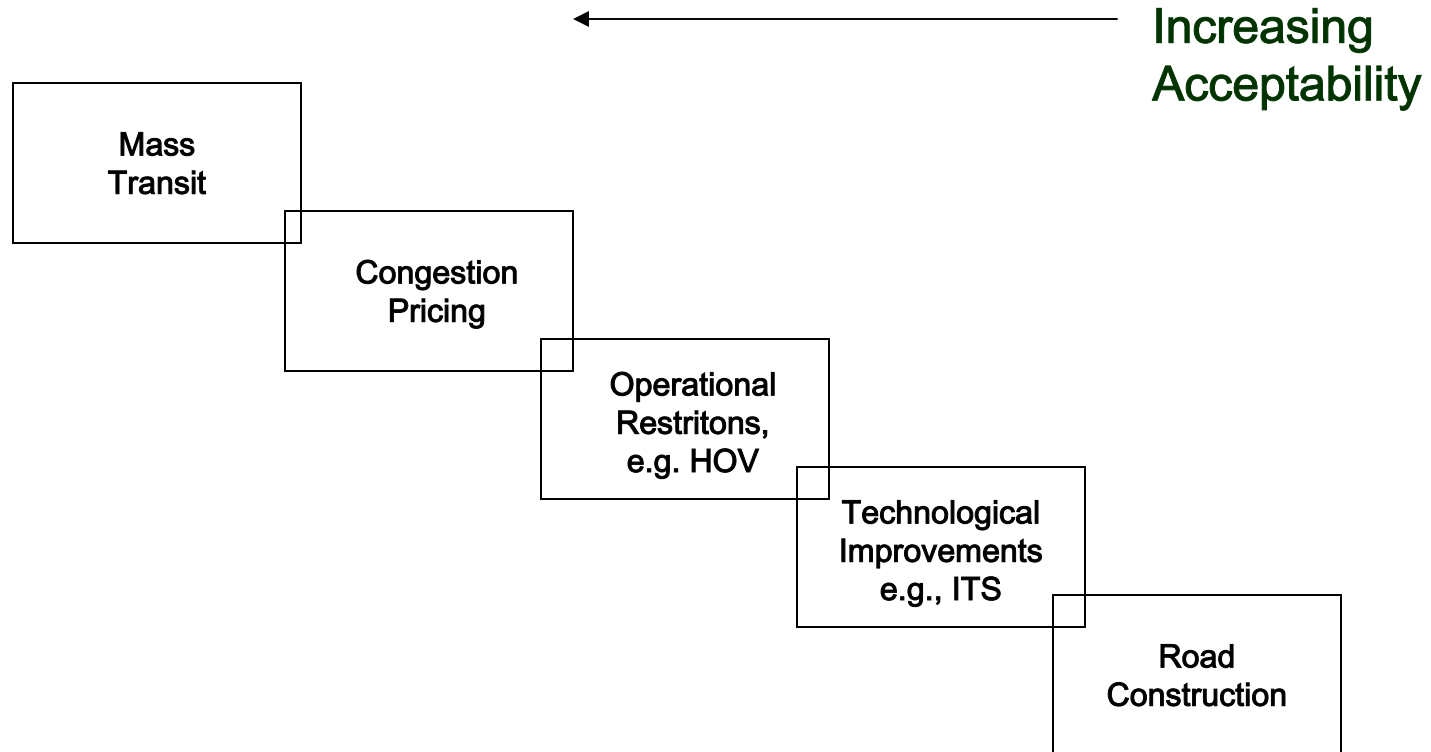
GREEN PERSPECTIVE

Air Quality

Energy/Oil Efficiency

← Increasing Value

Social Equity

Safety

Economic Health

System Efficiency

Individual Mobility

TRADITIONAL GROWTH PERSPECTIVE

Increasing Value →

GREEN PERSPECTIVE

Increasing Acceptability

Mass Transit

Congestion Pricing

Operational Restritons, e.g. HOV

Technological Improvements e.g., ITS

Road Construction

TRADITIONAL GROWTH PERSPECTIVE

Increasing Acceptability