Scenario Planning Workshop B
Public Involvement

Practical PI for Scenario Development & Evaluation

Transportation Research Board
Scenarios in Transportation Planning
2016

Terry Moore, ECONorthwest

Tech and PI: Different Views

Different Language

Values	Impacts; Evaluation Criteria
Desired Future	Possible Futures
Opinions	Data and Models
Equity	Distribution of Impacts
Definitive; Likely	Uncertainty; Probabilities

The Technical Ideal

All types of impacts

On all types of people

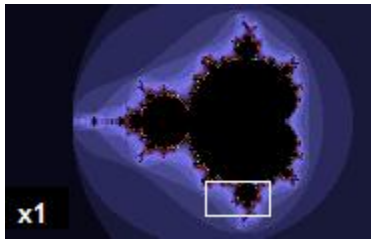
Over all periods of time

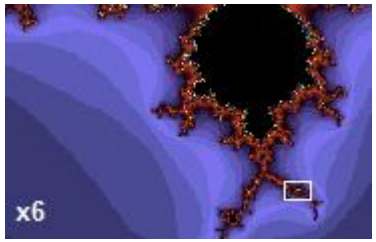
For all possible combinations of driving forces

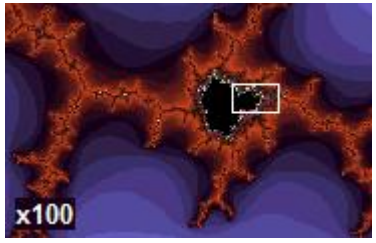
The Technical Reality: No End To…

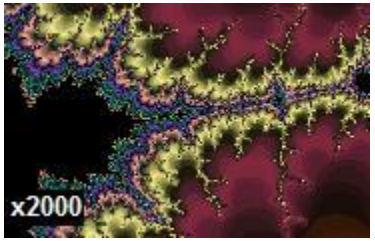
Variables, Complexity, and Data

Exponentials and Fractals



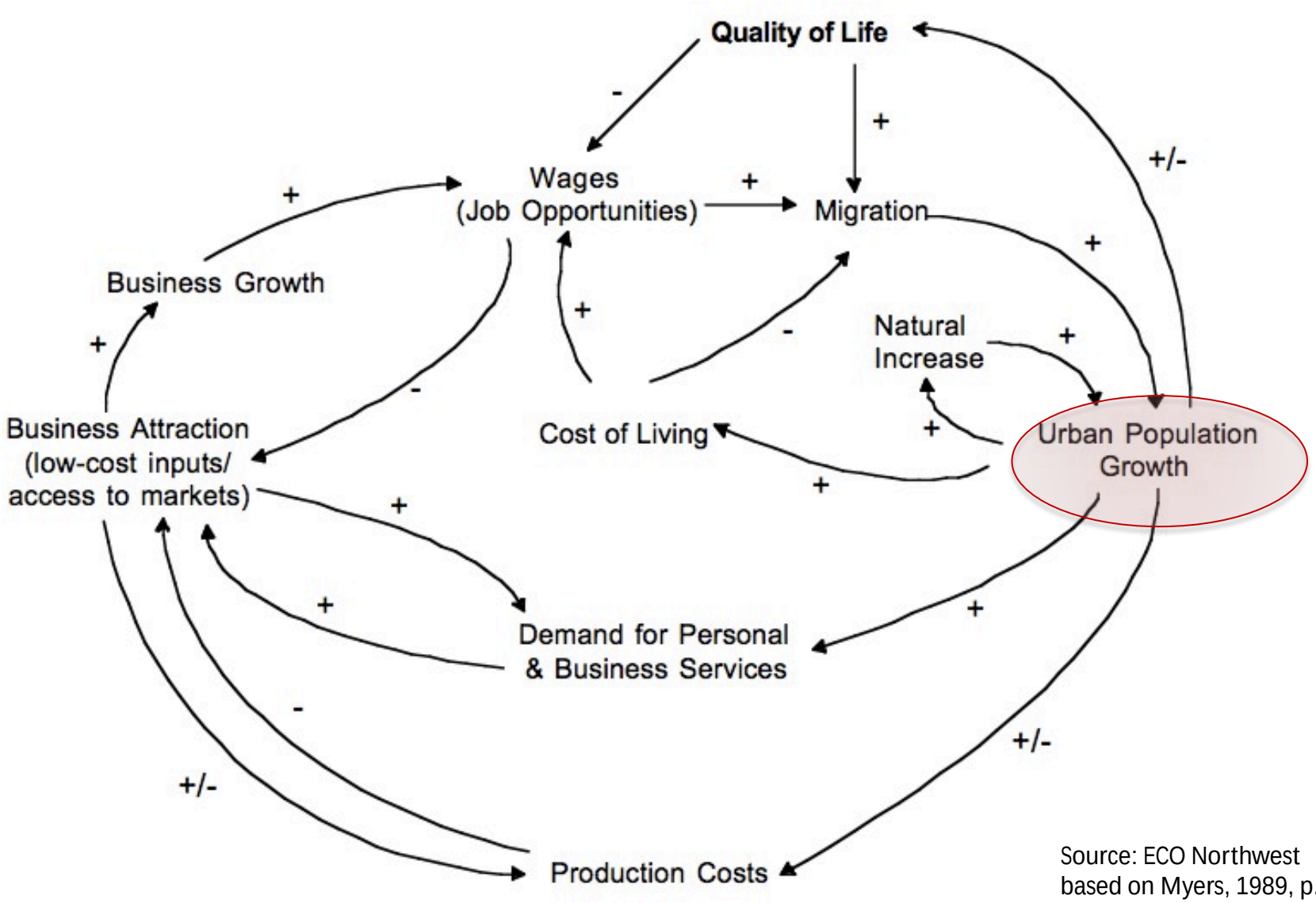






http://en.wikipedia.org/wiki/Fractal

Big View: simple model of urban

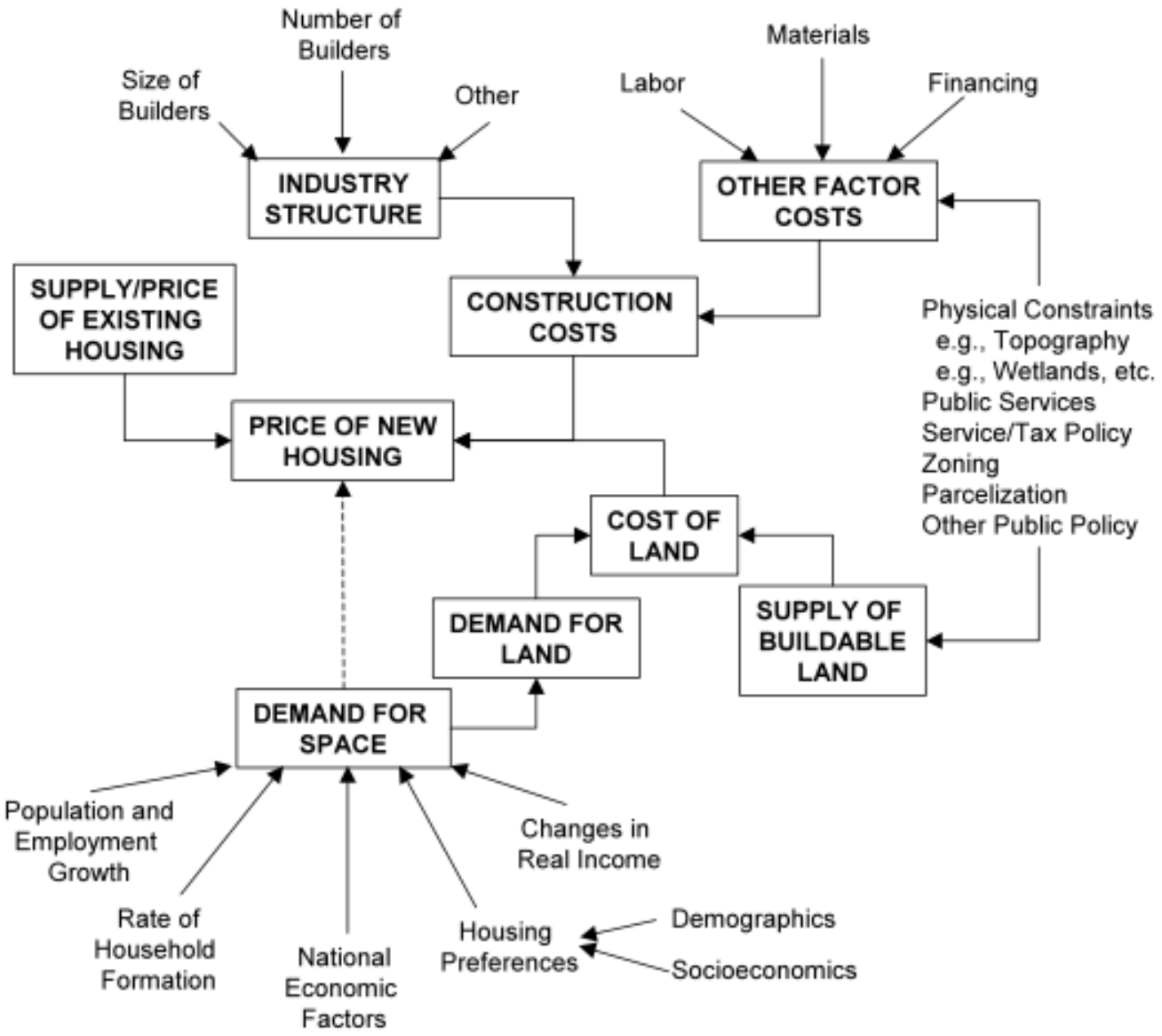


Source: ECO Northwest
based on Myers, 1989, p. 93.

The Fractals

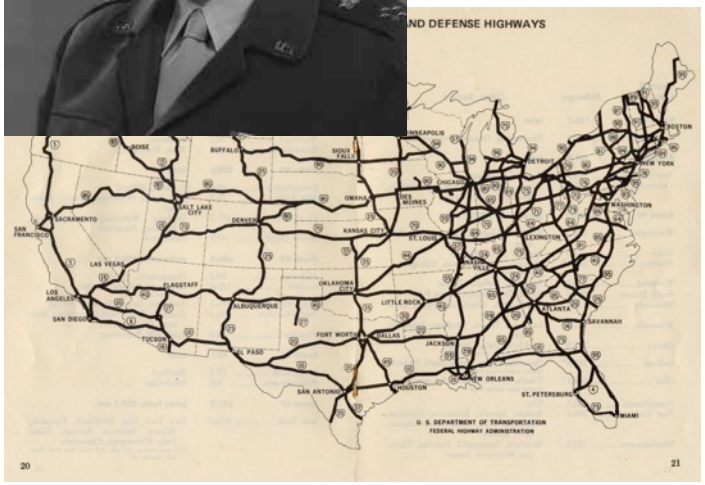
Factors Affecting *Price* of *New Housing*

- Other aspects of housing?
- Commercial, Industrial?
- Economic Development?
- Environment?
- Transportation and Other Infrastructure
- Equity?
- … etc…etc



Impossible but Necessary

"In preparing for battle I have always found that **plans** are useless, but **planning** is i[illegible]able."



Moore's Corollary

Predicting the future is impossible, but thinking about the future is indispensible if we are to improve it.

A Philosophy for PI

- Use public time efficiently
- Inform public debate with rigorous technical work, simply presented
- Circles, not lines

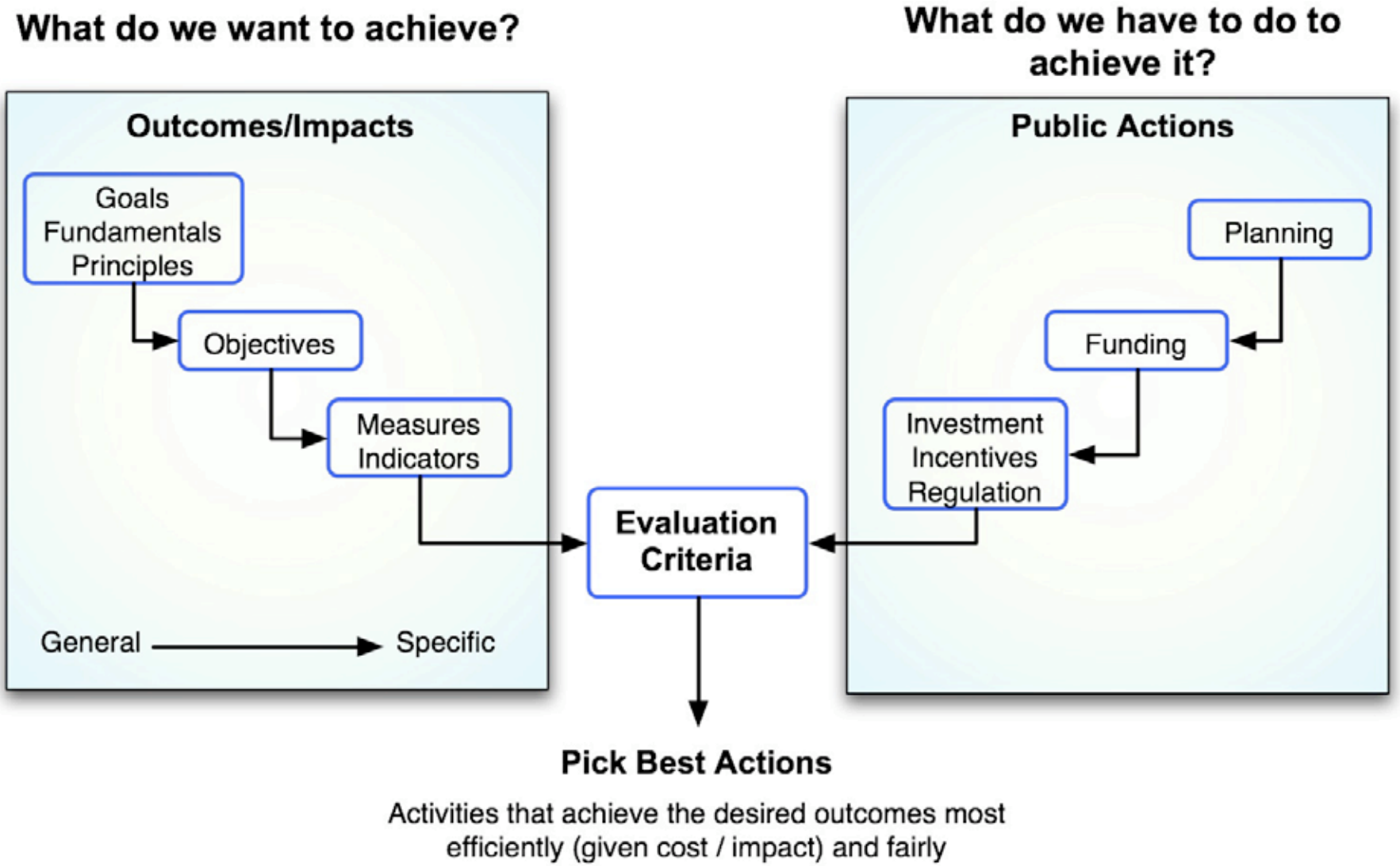
Some corollaries...

#1: Lack of Common Terms

Any productive conversation requires a common language

à *definitions*

Example: Outcomes vs. Actions



#2: The Value of Values?

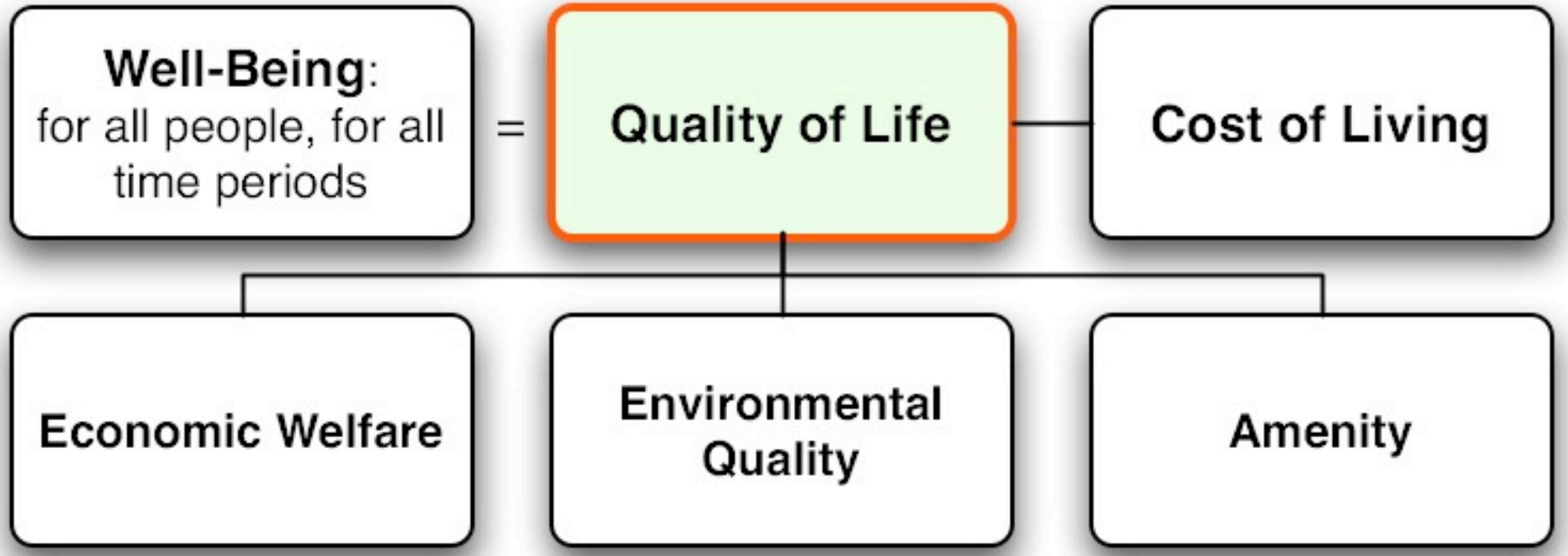
Common mistakes:

- Values = PI, independent of tech input
- Every place is unique à a lot of work to tease out unique values

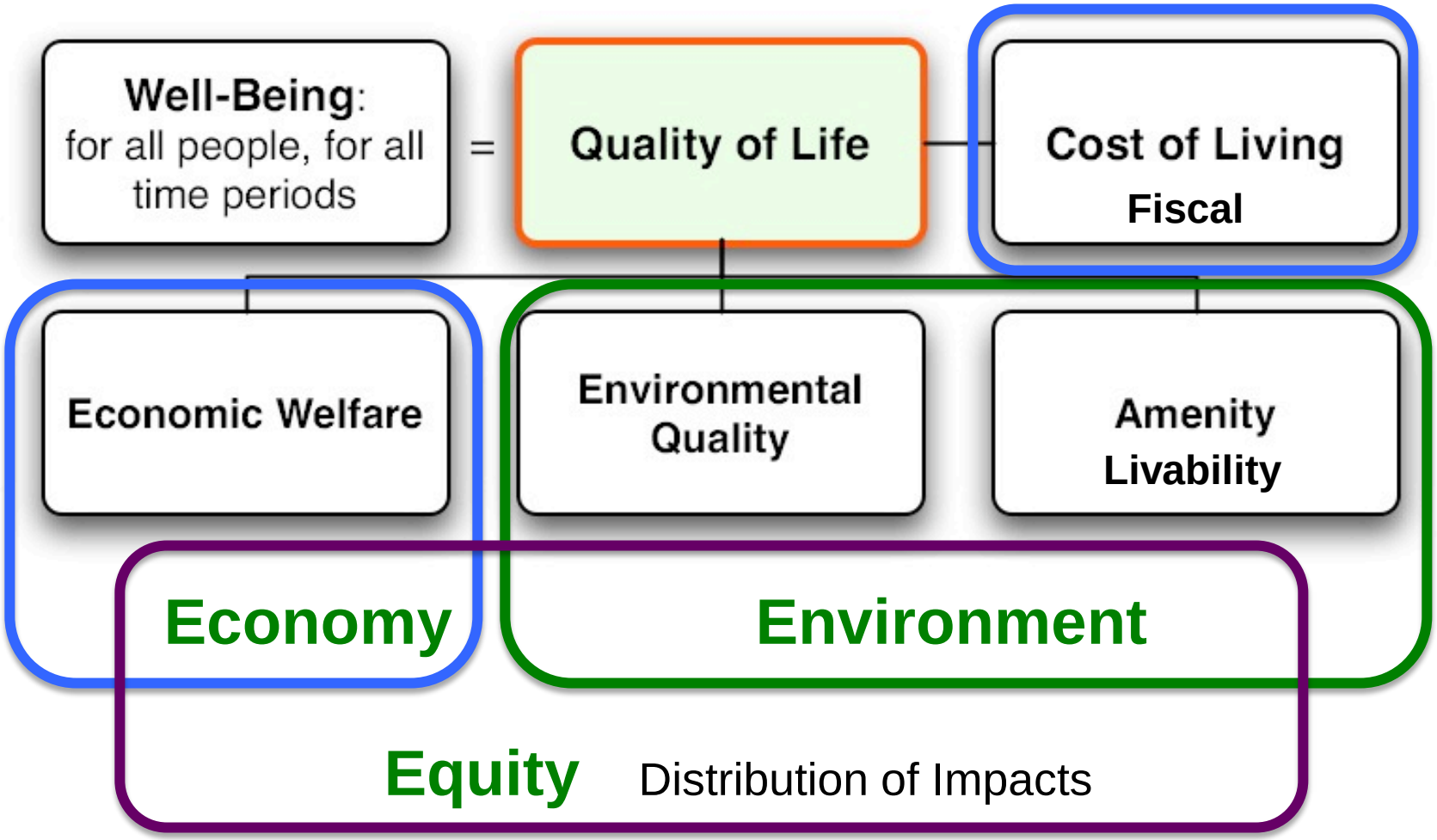
People want to be happy

Hierarchy of needs

Life support à security à amenities à



Triple Bottom Line



Transportation Impacts > Other

- Transportation Performance
  - Safety
  - Speed (accessibility and mobility)
  - Reliability
  - Convenience
  - Cost / Effectiveness / Fiscal Constraint
  - Distribution of impacts (equity)

Secondary Impacts of Transp. Improvements

- Economy
- Environment
- Land Use
- Infrastructure
- Social
- Fiscal
- Public Process
- Equity

E.G. : Oregon DOT (Mosaic)

Transport Performance

- Mobility, Accessibility, Safety & Security

Other Effects (TBL)

- E1: Economic Vitality, Funding & Finance
- E2: Environmental Stewardship, Land Use and Growth Mangmnt, Q of L & Livability
- E3: Equity

Oregon Least Cost Planning

List of Categories and General Indicators for Stage 1

CATEGORIES	DESCRIPTION	GENERAL INDICATORS
Mobility	Does the plan or action help reduce travel costs and improve travel time reliability? Travel cost includes both out-of-pocket expenses and time spent in travel. Reliability includes the extent to which travelers can count on the time their trip will take being consistent from day to day.	Travel time Delay Reliability Out of pocket costs Trip Length Volumes
Accessibility	Does the plan or action facilitate the ease with which travelers can reach or use modes of transportation? Does the plan or action ease access to opportunities and destinations that give rise to the need for travel?	Land use Connectivity/Ease of connections Modal availability Option value Changes in access (Parking supply and regulations)
Economic Vitality	Does the plan or action contribute to the economic prosperity of Oregon (i.e., growth in employment, production or other high value economic activity)?	Economic impacts of more efficient transportation services Economic impacts of transportation spending Wider economic impacts Community revitalization/relocation effects
Environmental Stewardship	Does the plan or action help provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs from the perspective of ecological and social objectives?	Air Energy and greenhouse gases Biodiversity Land Water Community resources
Safety and Security	Does the plan or action improve the safety of transportation facilities and systems? Does it help improve security at existing or planned transportation facilities?	Safety: Property damage only incidents; Injury incidents; Fatality incidents Security: Crime; Perception of security; Resiliency of the transportation network (Emergency vehicle response time)
Funding the Transportation System / Finance	How does the plan or action impact public accounts? Impacts include effects on fiscal balances and indebtedness.	Capital costs Lifecycle costs Operating revenues Levering funds from private sector and other public agencies Net impact on state fiscal balance and debt
Land Use and Growth Management	Does the plan or action help foster efficient development patterns that optimize travel, housing, employment, and infrastructure spending decisions?	Amount and nature of land developed Population and employment density
Quality of Life and Livability	Does the plan or action improve the quality of living and working environments, and the experience for people in communities across Oregon?	Physical activity Exposure to pollutants Community cohesion/severance Streetscape/journey ambiance Access to recreational resources and open space
Equity	Does the plan or action improve the availability of transportation choices among different geographies and population groups? How are the effects of the plan or action distributed across different geographies and population groups?	Distribution of benefits/costs by population group Distribution of benefits/costs by geography Distribution of benefits/costs by user vs. non-user

( ) *Special consideration will be given to refining items in parentheses as the team transitions to Stage 2*

FTA Guidelines

Criteria

- Mobility improvement
- Congestion relief
- Cost effectiveness
- Environmental benefits
- Land use
- Economic development
- Local financial commitment

#3: Ongoing Collaboration

Tech needs PI

PI needs Tech

#4: Usual Suspects ≠ Public

Stakeholders ≠ General Public

- Usually representing an interest
- Sometimes more informed about the policy and technical issues

Broad public opinion only possible with statistically valid surveys But…

- Answers hard to interpret
- Opinions depend on subtle wordings
- Opinions can change quickly

#5: Data vs. Interpretation

Meaning depends on perspective

The future is not fact

Effect is not Importance

#6: Making it *too* simple

"They need it in a page"

It *is* complicated

Discussion of the complexity is the value

Talking down

#7: Confusion about Scenarios

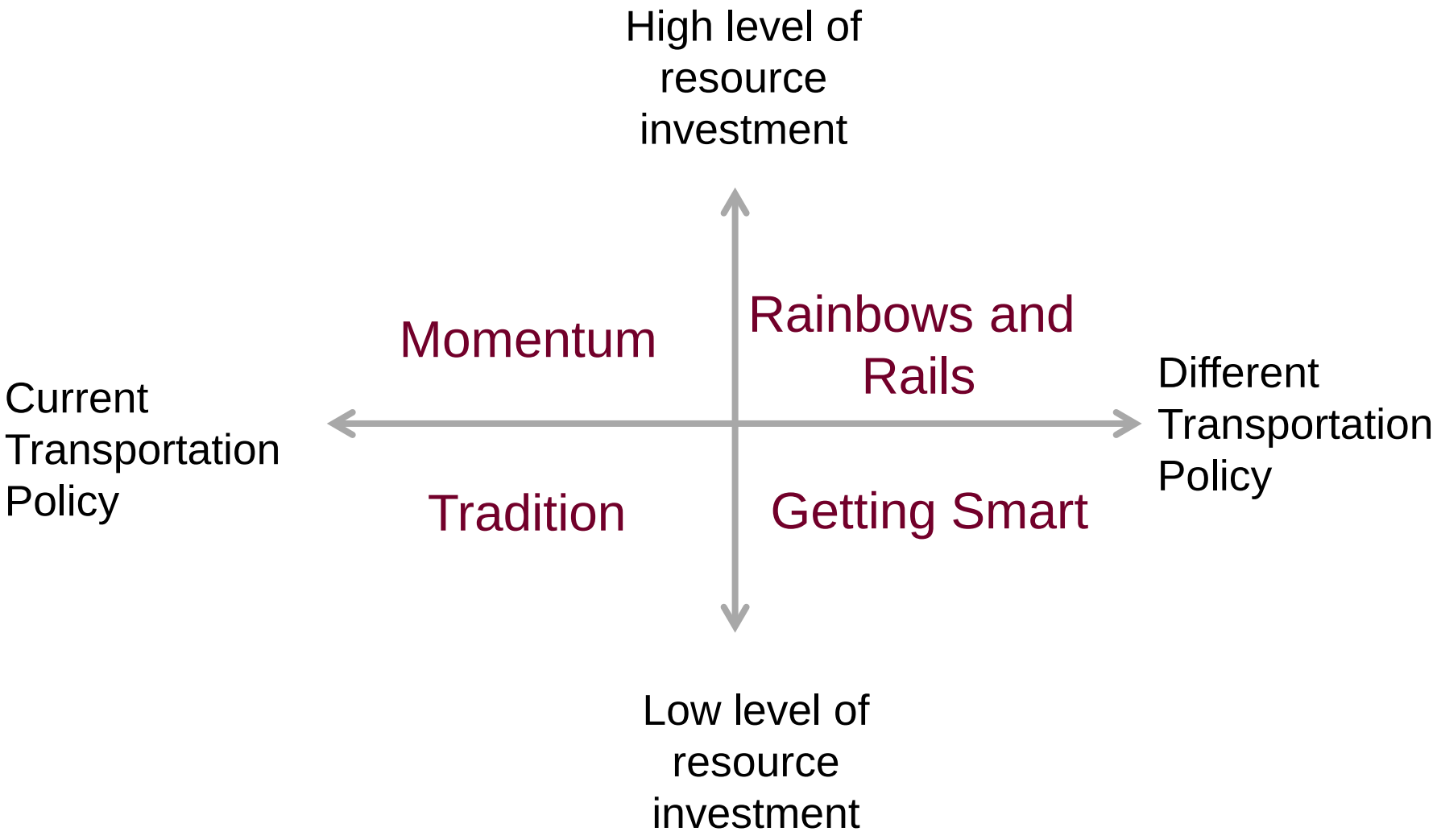
Possible vs. Desired

Incremental vs. End-state

Conditional vs. Inevitable

Choosing themes…

Key Drivers à Scenarios



Spectrum of Choices

Each point on the continuum defined by differences on a few key variables

Business As Usual

Possible but optimistic

Implications for PI

3 broad options:

- **Linear, sequential**. Get agreement, in order, on:

  Values, Conditions, Alternatives, Impacts, Actions

- **Cyclical, iterative**. Start with a sketch of full picture; get public response and add details; repeat as necessary
- **Internal, then external**. Tech work by technicians to create a base for subsequent PI