

The Meaning of Mobility

*“— Inviting intuitions for the spare
painfulness of barren tongues!”*

Eno Transportation Foundation

May 21, 2001

Alan E. Pisarski

THE BASIS FOR DISCUSSION – **THE FORMS OF TRANSPORT**

- **COMMUTING**
- **OTHER LOCAL TRAVEL**
- **TOURISM**
- **SERVICE VEHICLES**
- **PUBLIC VEHICLES**
- **URBAN GOODS MOVEMENT**
- **THRU PASSENGER TRAVEL**
- **THRU FREIGHT TRAVEL**

The New Millennium World

- **A STABLE “OLD” POP**
- **A GLOBAL ECONOMY**
- **“HIGH COST” TRANSPORT OK**
- **SKILLED WORKERS AT A PREMIUM**
- **WORKERS CAN LIVE, WORK ANYWHERE**
- **WHO, WHERE ARE THE IMMIGRANTS**
- **MAINSTREAMED MINORITIES**
- **A CHALLENGED AFFLUENT SOCIETY**

A challenged affluent society

in which

Mobility

**is central to meeting our
social and economic
goals**

**TRANSPORTATION HAS
ALWAYS BEEN ABOUT DISTANCE
AND TIME**

**TODAY THE PRESSURES OF TIME
DOMINATE**

WE HAVE DESTROYED DISTANCE

**TRANSPORTATION HAS
ALWAYS BEEN ABOUT DISTANCE
AND TIME**

**TODAY THE PRESSURES OF TIME
DOMINATE**

**WE HAVE DESTROYED DISTANCE,
ALMOST**

WHY IS TIME DOMINANT NOW?
WHY WILL TIME BE DOMINANT IN
THE FUTURE?

- **A HIGH INCOME POPULATION**
- **A HIGH VALUE OF GOODS**
- **A MULTI-TASKING SOCIETY**
- **PRESSURES ON FAMILY**

At the Millennium

American society is highly dependent on mobility for all economic and social interactions. This is:

- Negative in that it generates high degree of interdependence in the society;
- Positive because it generates most of the tremendous economic benefits of our society.
- This is the high wire act of modern societies

-POSITIVE WINS-

At the Millennium

Trips always have economic or social transactions at their end of value to the trip maker

**American Society has the mobility it needs to meet its social and economic goals,
*Almost!***

There are a number of tasks yet undone!

•

- The Starting Point -

WHAT IS THE GOAL?

My goal for transportation is to reduce the effects of distance as an inhibiting force in our society's ability to realize its economic and social aspirations.

WHAT THEN IS TRANSPORTATION'S PRODUCT?

- As a nation we invest vast sums, both private and public, in transportation networks, vehicles and services.
- The “product” of that investment is “mobility.”
- We obviously value that product highly, but don't seem to understand it very well.

MOBILITY

We value it highly, but:

- We can't define it usefully
- We can't quantify it effectively
- We are dependent on others to intuit what we mean by it

U.S. DOT PRODUCES A PRODUCT THAT IT
DOESN'T FULLY UNDERSTAND AND
CAN'T EXPLAIN TO OTHERS

WHAT ARE ITS ATTRIBUTES?

- **Speed**
- **Cost**
- **Convenience**
- **Safety/ Security**
- **Reliability**

All The Things That We Measure Badly!

WILL IT STILL MATTER IN THE FUTURE? MORE THAN EVER!

- **THE CRITICAL NEED FOR SKILLED WORKERS**
- **EXPANDING OPPORTUNITY**
- **COMPARATIVE ADVANTAGE IN A GLOBALIZED ECONOMY**
- **KNITTING TOGETHER SOCIETIES**

PRESSING ISSUES FOR MOBILITY

- **We are doing policy and planning trade-offs between mobility and other values without understanding what we are trading for what.**
- **The alternative values are often explicitly defined (often in law)**
- **The mobility alternative is understood only in the vaguest terms**

PRESSING ISSUES FOR MOBILITY

- 1. Understand It And Quantify It**
- 2. Transmit That Understanding To Others**
 - 1. Decision-makers**
 - 2. The Public**
- 3. Expand The Debate**
- 4. Make The Case For The Value Of Mobility**

TWO ASPECTS

- **MOBILITY** - An Attribute of People
- **ACCESSIBILITY** - An Attribute of Places

Measured in opportunities per minute

Mobility makes cities both smaller and bigger!

- **Smaller in that the times to traverse distances are reduced**
- **Bigger in that a city knitted together with effective transportation acts bigger**
 - economically
 - socially

Facets of the same Mobility Concept

- **BUSINESS**

- # of suppliers $\frac{1}{2}$ hr from my factory
- # of workers $\frac{1}{2}$ hr from my office
- # of customers $\frac{1}{2}$ hr from my store

- **PRIVATE**

- # of job opportunities $\frac{1}{2}$ hr from my home
- # key social services $\frac{1}{2}$ hr from my home

- **PUBLIC**

- % pop with major hospital $\frac{1}{2}$ hr away
- % pop with major Univ. 1 hour away

Example: Hospital-mobility trade-off

**Goal: A major medical services facility
within 1/2 hr of all citizens**

SUPPLY SIDE

- Specialization yields vast market-sheds
- Build more hospitals;
train more doctors
- Single purpose

TRANSPORT SIDE

- Public/private transportation system provides enhanced access
- Multi-purpose

ISSUES OF MEASUREMENT

- **OPPORTUNITIES PER MINUTE**
- **SHARES OF POP WITH ACCESS TO NEEDS BY MINUTES SPENT**
- **TRAVEL TIME MONITORING**
- **TRAVEL TIME DISTRIBUTIONS**
- **EMBEDDED TRANS. COST IN PRODUCTS**
- **MOBILITY/ACCESSIBILITY TRADE-OFFS**
- **THE LINKAGE WITH DENSITY AND ITS EFFECTS**

THE FUTURE OF MOBILITY – *A WORK PROGRAM*

- **UNDERSTANDING AND EXPLAINING IT –
*ARTICULATING THE VALUE OF MOBILITY***
- **EXTENDING ITS REACH – *THE
DEMOCRATIZATION OF MOBILITY***
- **RESPONDING TO RISING DEMAND – *THE
DILEMMA OF AFFLUENCE***
- **ENHANCING ITS COMPETITIVE POWER –
*THE ROUTE TO PRODUCTIVITY***
- **AMELIORATING ITS NEGATIVE EFFECTS
– *SAFETY, ENVIROMENT, RESOURCES***
- **SUPPORTING ITS VALUE – *MAKING THE
CASE***