



## Galilee International Management Institute

- Established in 1987
- management training and capacity building, short and long term seminars, workshops and courses to all levels of personnel and decision makers, from around the globe.
- Delivers training programmes twice a year in Transport Management over 130 graduates.
- Participants are exposed to the Israeli Experience and projects in Transport Management.



## Galilee International Management Institute

- Cooperation with international organisations.
- Cooperation with Palestinian leaders and managers since 1987 - several training programmes in the fields of transport, such as transportation planning and also port engineers for engineers from Gaza.
- Cooperated in the field of Port Engineering and Management with the INstituto Universitario Navale and also with the University of Malta on Mediterranean transportation system.
- Memo of understanding with training institutions within the transport sector
- Tailor made programmes in Israel and abroad – in road safety



# Galileo International Management Institute

For further information

[www.galilcol.ac.il](http://www.galilcol.ac.il)

**EUTRAIN**

European Transport Research Area International  
Cooperation Activities



**Galileo** International Management Institute

# **The Road to freedom: Turning Problems into Solutions**

The Equility Approach  
With Application in  
Transport

© Ron Goldring, Amiram Strulov





## Crisis: Danger and Opportunity

危机

Some people argue, that wēijī, Chinese for Crisis, comprises the symbols for Danger and Opportunity

The European Economic Crisis we are facing now is very dangerous.

It also offers great opportunities.

Let's turn transport problems  
into solutions of the economic crisis



## Goal

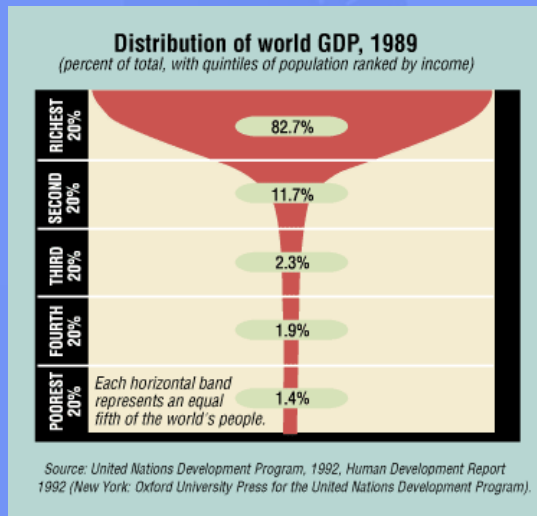
Create a framework for initiation of large scale, transport research-backed projects by using the concept of “**Equility**”:

**Profitable public-financed** high-employment-based activities, employing workers at all levels of education, for the solution of real social, economic and environmental problems.



## The Problems

Huge economic gaps



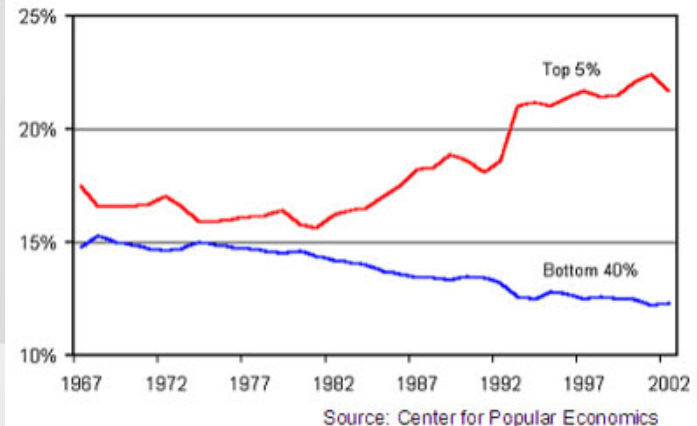
Source:

UN Human Development Report 1992

Still growing

### The Overall Trend

Shares of Total Income Received by the Top 5% and Bottom 40%



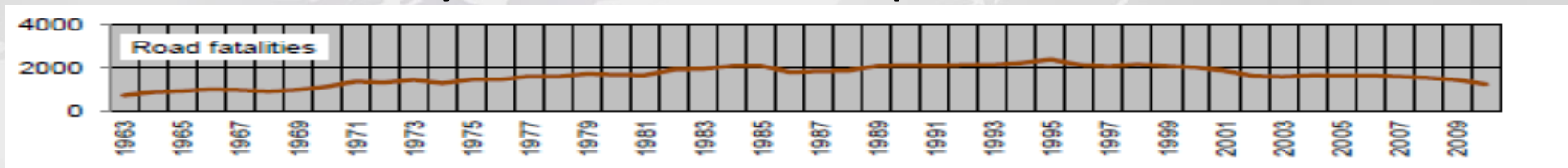
The top 1% of Americans (fewer than 3 million people) now earn more than the bottom 40% (about 110 million people).

Source: Cornell University



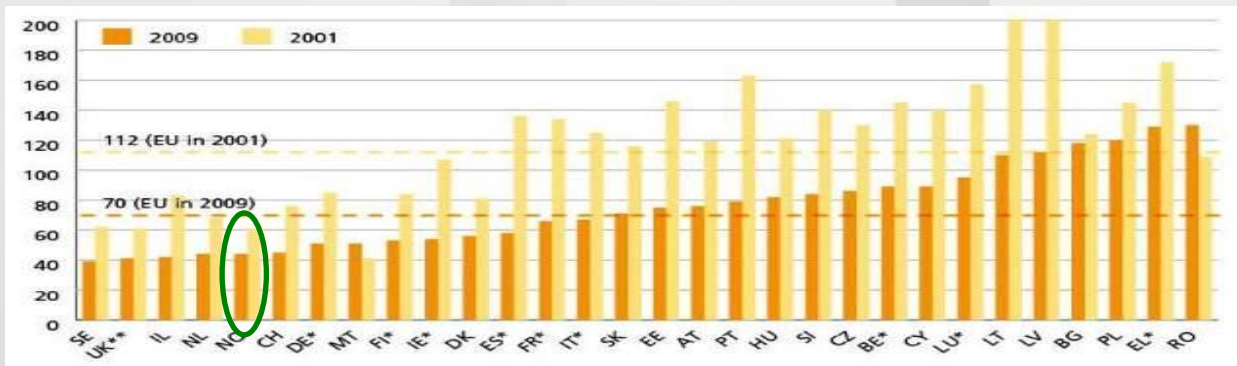
## Transport Problems

Road Safety in Greece –fatality trend 1963 - 2009



Source: Road Fatalities Basic Characteristics, Greece 1991 – 2010 [www.nrso.ntua.gr](http://www.nrso.ntua.gr)

- About 114 fatalities per million people in 2010
- Considerable improvement when compared to 1995
- Considerable way to go, to reach Norway’s figure of ~40 fatalities per million



Source:  
Ireland RSA  
<http://www.rsa.ie>

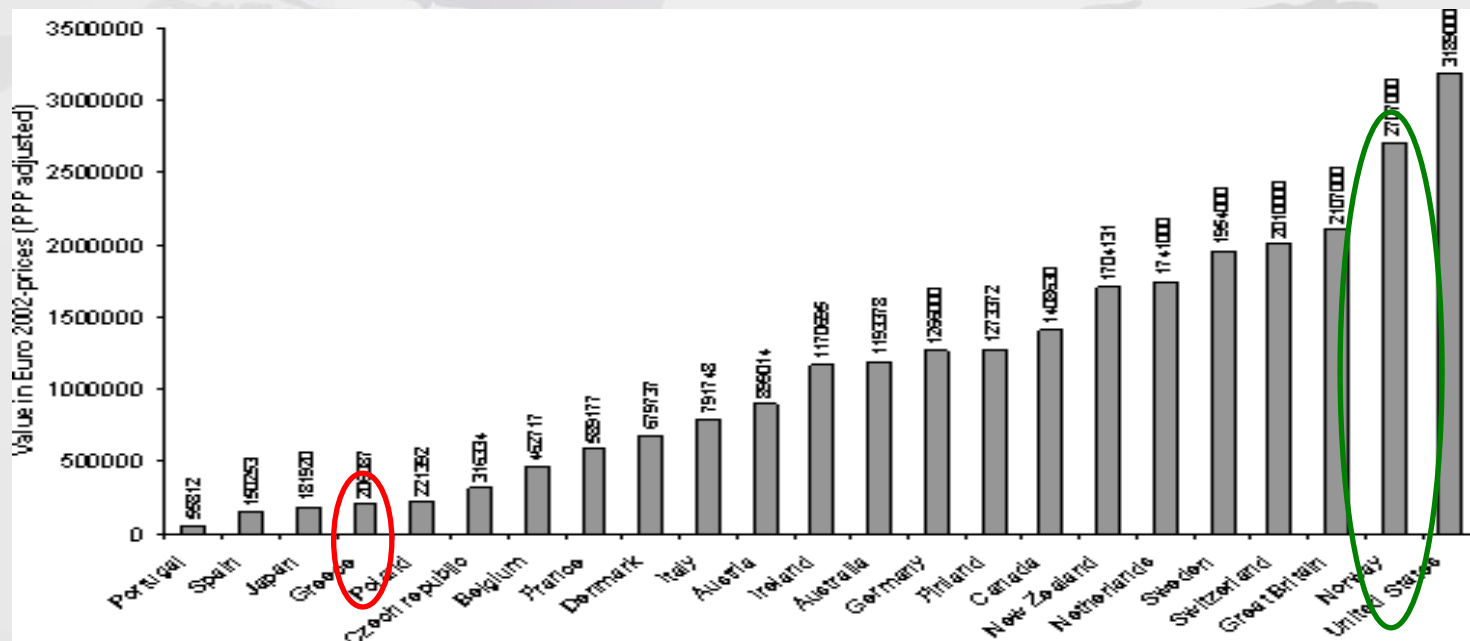




# Equity in Transport

## Transport Problems

### Monetary valuation of road safety



“...some of the countries that have a good safety record, such as Norway, Great Britain, Sweden and the Netherlands, assign a high monetary value to the prevention of a traffic fatality. Some countries with a rather bad road safety record, like Portugal, Spain and Greece, assign a low monetary value to the prevention of a fatality.”

(Source: European Commission)



## Yearly Costs of Damage (Israel)

- Crime: ~B14 NIS (source: MOPS 2005)
- Road Accidents: ~B12.5 NIS (source:Matat )
- Air Pollution: 1100 die in Tel Aviv area (source: MEP) → >B2.2 NIS
- Water and Soil Pollution? Taas Magen – B1.34 NIS (source: Pareto Engineering Ltd. Report)
- 330000 Children at risk: B? NIS

Total >> B30 NIS



## Add Social Value in Transport

- **Reduce road-traffic casualties by 50%**
- **10% more well-paying jobs**
- **Offer safe yield to pension funds**
- **As part of hopeful vision and outlook**

**Using resources that are currently idle and unemployed!!!**



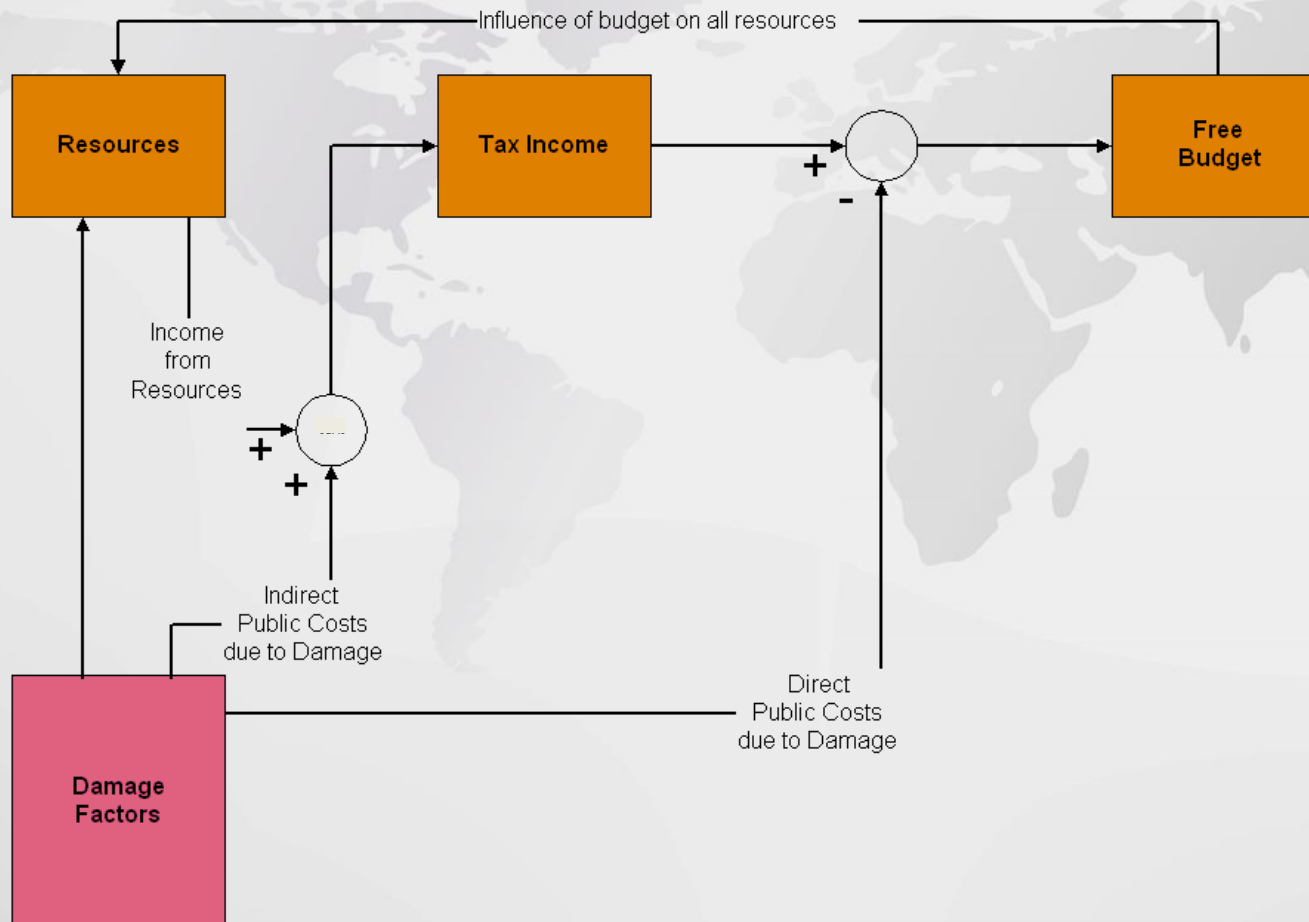
## The solution: Equility

- Creation of new well-paying jobs
- Financing by public funds
- Projects and operations local
- Addressing real problems
- Benefits for the broad public



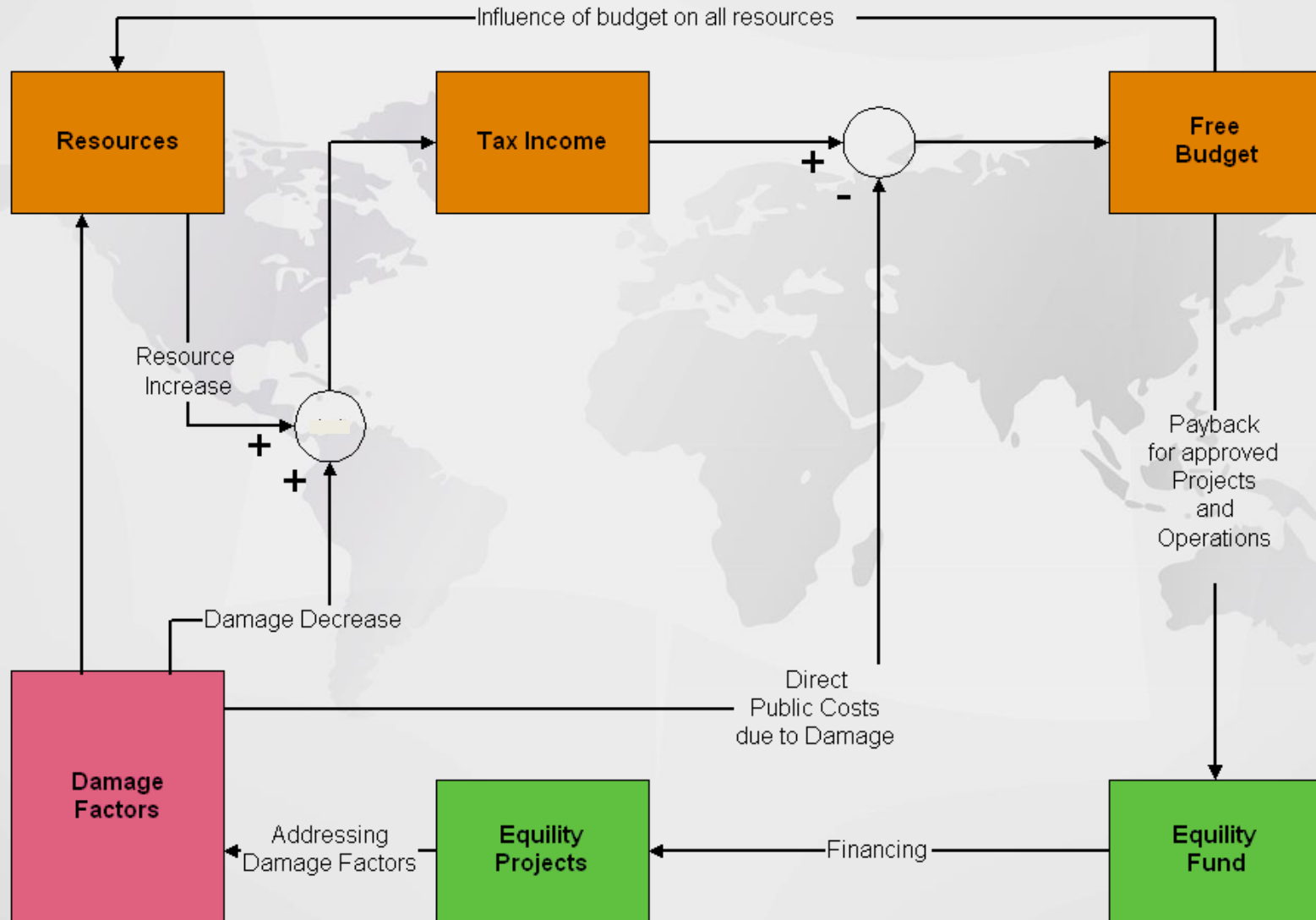
## A model of State Economy

A Model of the Economy - viewed by the Government





## Same Model with Equity





## Project Selection Criteria

### The Equity Inequality

$$\eta_2 t + \eta_1 > 1$$

- $\eta_1$  - direct cost reduction ratio
- $\eta_2$  - indirect cost reduction ratio
- $t$  - tax rate

Simple criterion amounting to:

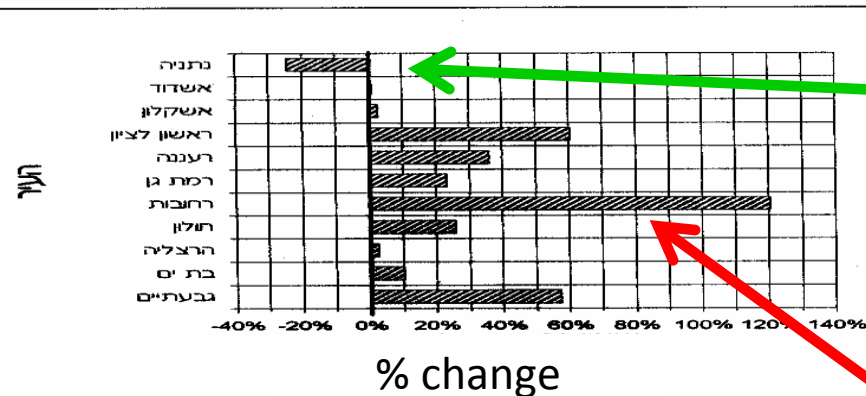
**If it's cost effective for the government – rush to do it, deferring budget restrictions to future economic boom**



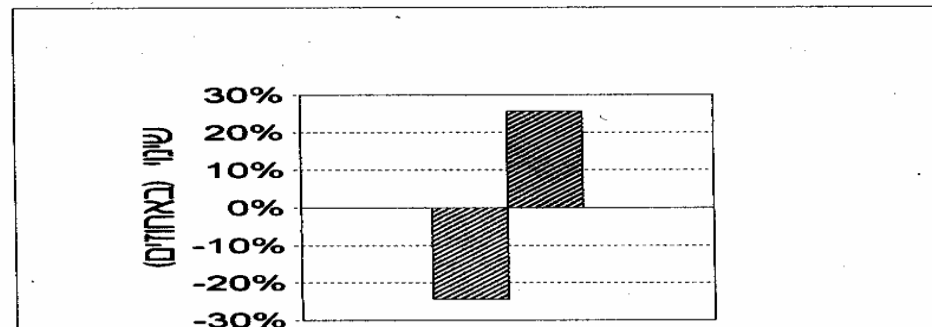
## Example: Road Safety in Netanya

Change in number of Road Injuries – 1996 vs. 1995

Simple project:  
Local, highly  
publicized speed  
enforcement in  
selected roads



Over 20%  
decrease in road  
injuries during  
the project in  
Netanya



120% increase  
in road injuries  
in Rehovot, right  
after cutting a  
similar project

Project Economic Benefit:  
Far exceeding cost by the most conservative calculation

Source: traffic and  
Transport, July 1998  
(Hebrew)





## Our Proposition

- Form a joint **Equility Research Board (ERB)** for application of Equility in transport
- Conduct joint projects subsequent to ERB recommendation
- Provide road safety training and research services
- Change priority investment-Traffic & mobility management on top of Infrastructure development
- Study the results and implications of transportation privatization Vs. public service
- Give high priority to public transport above private car usage
- Promote sustainable transportation systems



## Example: The Public Transportation in Israel, major macro characteristics (2006)

- # of lines: 1,600
- # of weekly bus trips: 275,000
- # of weekly bus vehicle- km: 6.1 Millions.
- # of buses: 5,700
- # of employees: 11,000 (70%= drivers)
- # of operators:17
- # of yearly pass. Trips: 530 Millions.
- Total annual income: 4.0 Billion nis.



## Conclusion



- The road to freedom requires:
  - A broad top-level view
  - Sharp eyes for detail
  - Initiative and action
  - Grabbing the opportunity!!!

Equility: a promising, practical way for enhancing  
Social and Economic well-being.

It paves the road to freedom of the crisis.

**It can be started right away!**