## MARS - Metropolitan Activity Relocation Simulator

Günter Emberger, Institute of Transportation - Center for Transport Planning and Traffic Engineering, University of Technology Vienna (Guenter. Emberger@tuwien.ac.at)

## 1. PLANNING CONTEXT

| Geographical Scale | Supra-National<br>National<br>Supra-Municipal<br>Municipal                                              |
|--------------------|---------------------------------------------------------------------------------------------------------|
| Status:            | Implemented as part of<br>the urban/ transport<br>planning process<br>Functioning as a<br>research tool |
| Planning Process:  | Formal and informal Planning Processes                                                                  |

## 2. PLANNING GOALS

| Public Stakeholder<br>Goals:   | How to decide on the location of residences /activities / services                                                                                                                             |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Private Investors<br>Concerns: | Where to locate business Where<br>to invest in real estate Where and<br>how to develop public transport<br>services (private operators)                                                        |
| Main Individual<br>Goals:      | Choosing household location;<br>Choosing the best route to (a)<br>particular activity(ies); Choosing<br>the best mode(s) for (a) particular<br>route(s); Choosing the nearest<br>activity(ies) |

## 3. CHARACTERISTICS OF THE INSTRUMENT

| Decision Support Task:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Cooperative decision support;                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| - common and the comm | Used in the ex-post evaluation of the decision impact                |
| Accessibility Measure Tradition:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Gravity Measures                                                     |
| Components:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The instrument takes into consideration all accessibility components |
| Level of Spatial Disaggregation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NUTS 1 to NUTS 5 / LAU 2 level                                       |
| Level of Socio-economic Disaggregation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Work / Non-Work and income; Car ownership                            |
| Level of Temporal Disaggregation:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Peak / Off peak / Day / Year                                         |
| Transport Modes:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Any mode                                                             |
| Purposes/ Opportunities:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Work / Other                                                         |

How the Instrument Replicate Reality



