GIP
the Austrian Reference Network for ITS

Nik Widmann

… about PRISMA solutions

… from Austria
… working in the fields of GIS & transportation
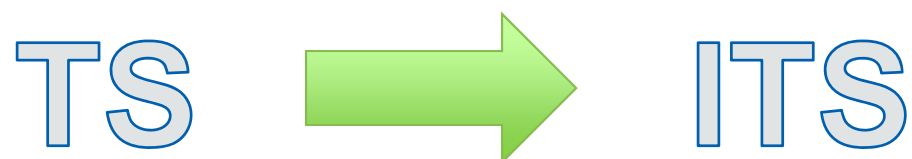… focussing on E-Government & ITS

Why do we need a reference network ?

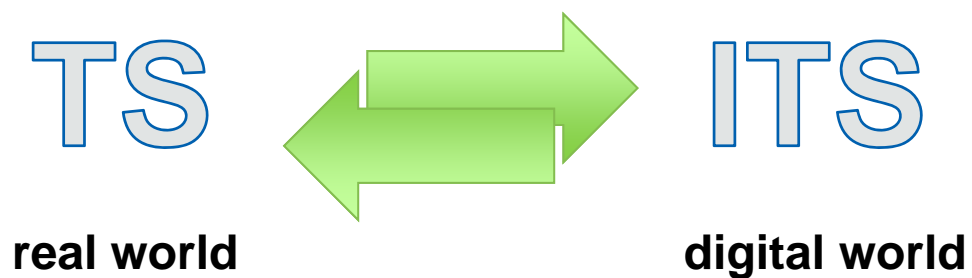# Why do we need a reference network ?

TS ➡ ITS

Why do we need a reference network ?

TS ⬅➡ **ITS**

real world   **digital world**

Why do we need a reference network ?
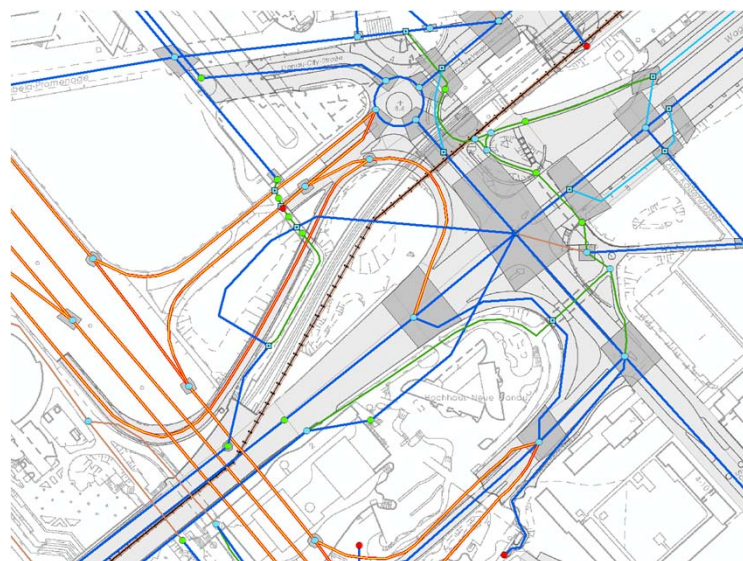
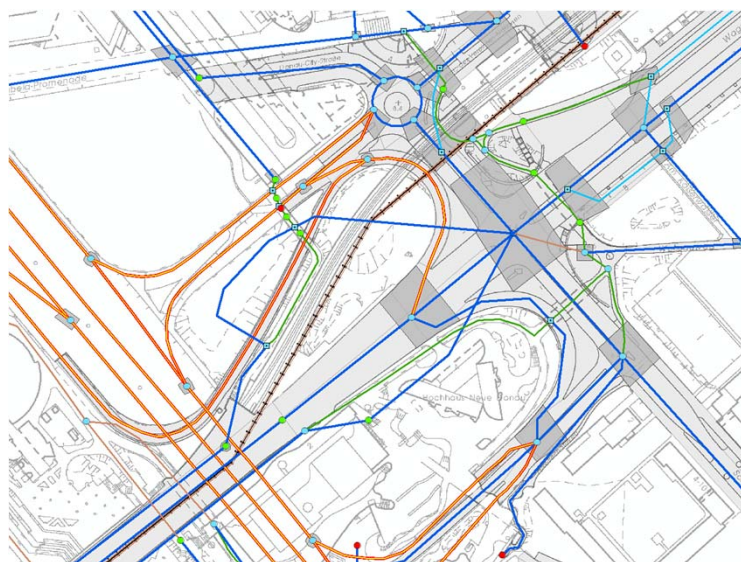# Why do we need a reference network ?

Why do we need a reference network ?

Who can provide such a reference network ?

Requirements

… covering whole area of interest
… including all modes of transport
… reliability (correct and up to date)
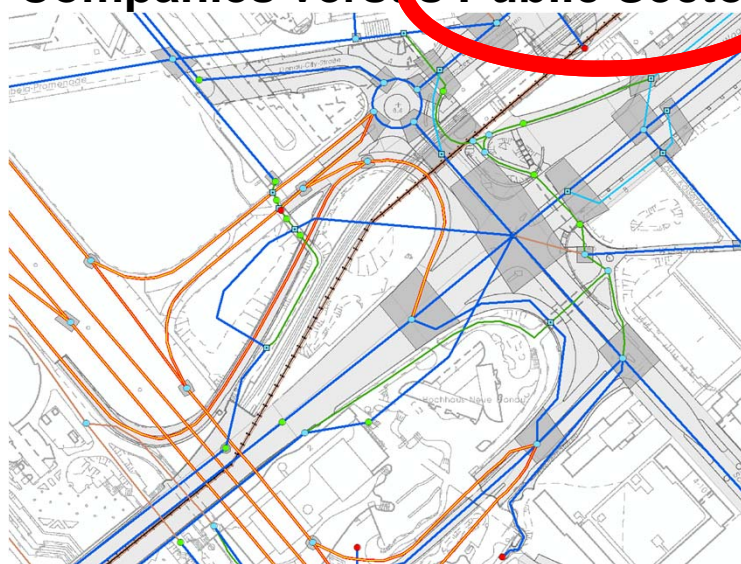
Who can provide such a reference network ?

Requirements

… covering whole area of interest
… including all modes of transport
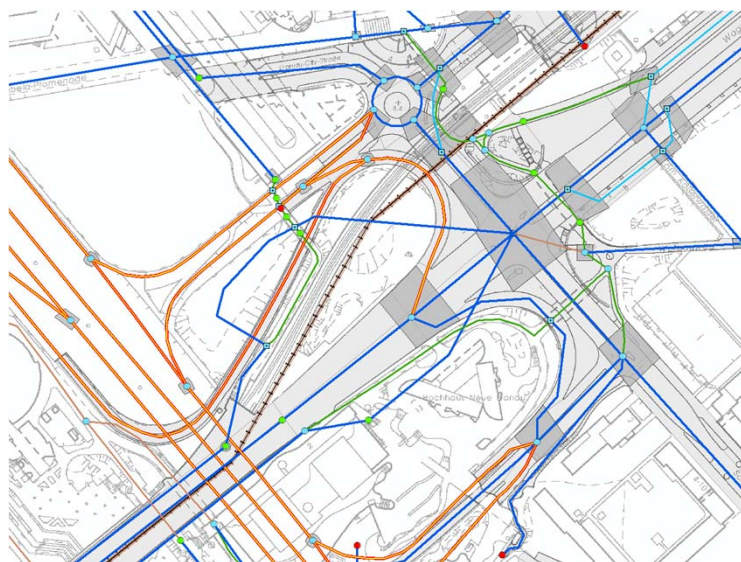**… reliability (correct and up to date)**

Private Companies versus Public Sector ?

Why Public Sector as Provider ?

**All changes in infrastructure base on public
administration processes**

**Collecting this Information and providing for ITS
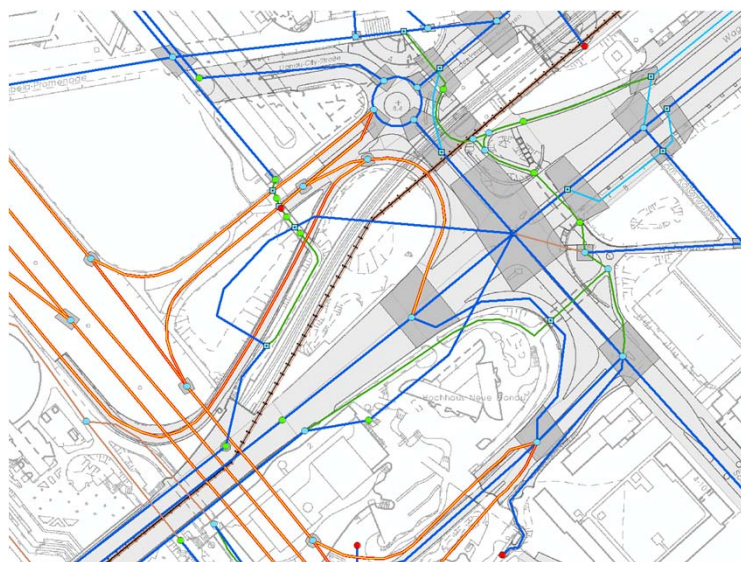-> fulfillment of all reqirements**

How does it work ?

Support of E-Government Processes

Data to be regarded as „waste product" of these Processes

Data are the Basis for ITS Services

Public Sector

ITS

How does it work in Austria ?

Initial Situation:

no common probelm perception

each institution working with its own networks
(with differences in terms of scale and accuracy)

(more than) one network for each purpose

no conection between different modes

How does it work in Austria ?

Initial Situation:

How does it work in Austria ?

Main Objective:

single, consistent multimodal transport graph for all application areas

Administration (E-Government, Cartography, etc)

Traffic management (intermodal routing, etc.)

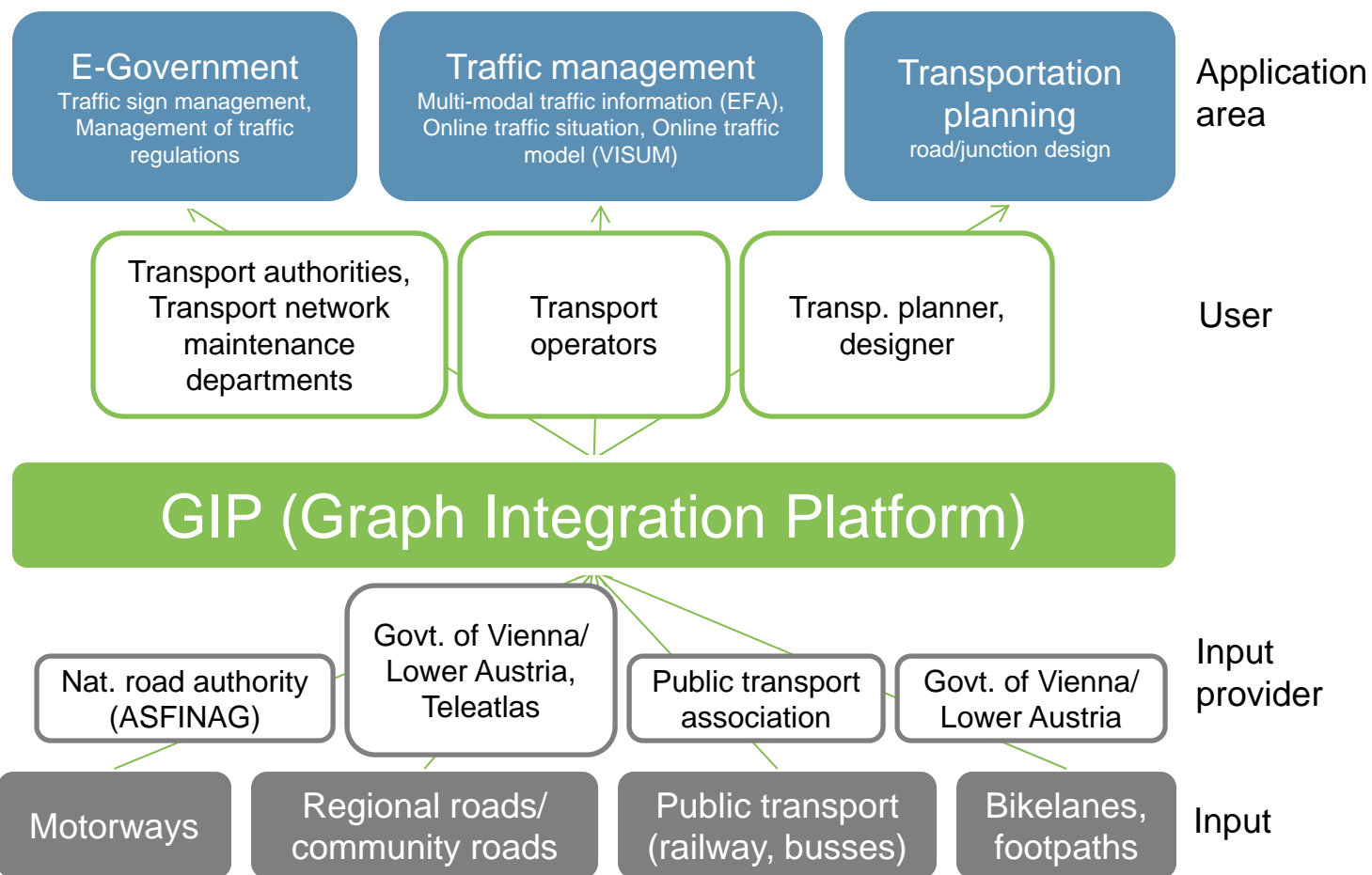Transportation planning (real-time traffic modelling, etc.)

Traffic design (junction design/simulation, etc.)

How does it work in Austria ?

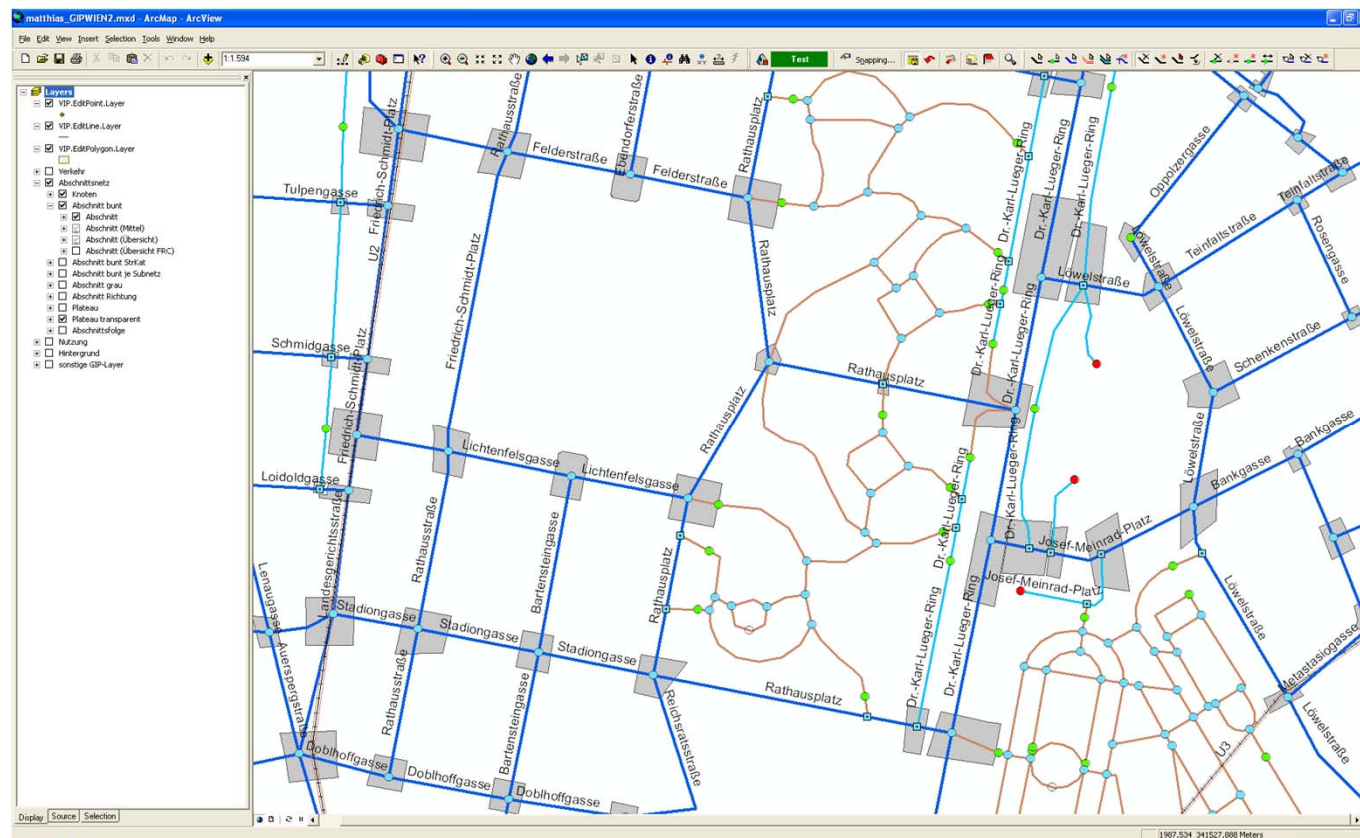|			
E-Government Traffic sign management, Management of traffic regulations	**Traffic management** Multi-modal traffic information (EFA), Online traffic situation, Online traffic model (VISUM)	**Transportation planning** road/junction design	**Application area**
Transport authorities, Transport network maintenance departments	Transport operators	Transp. planner, designer	**User**

GIP (Graph Integration Platform)

Nat. road authority (ASFINAG)	Govt. of Vienna/ Lower Austria, Teleatlas	Public transport association	Govt. of Vienna/ Lower Austria	**Input provider**
Motorways	Regional roads/ community roads	Public transport (railway, busses)	Bikelanes, footpaths	**Input**

ITS Vienna Region

Example: Vienna

Multimodal Base Layer
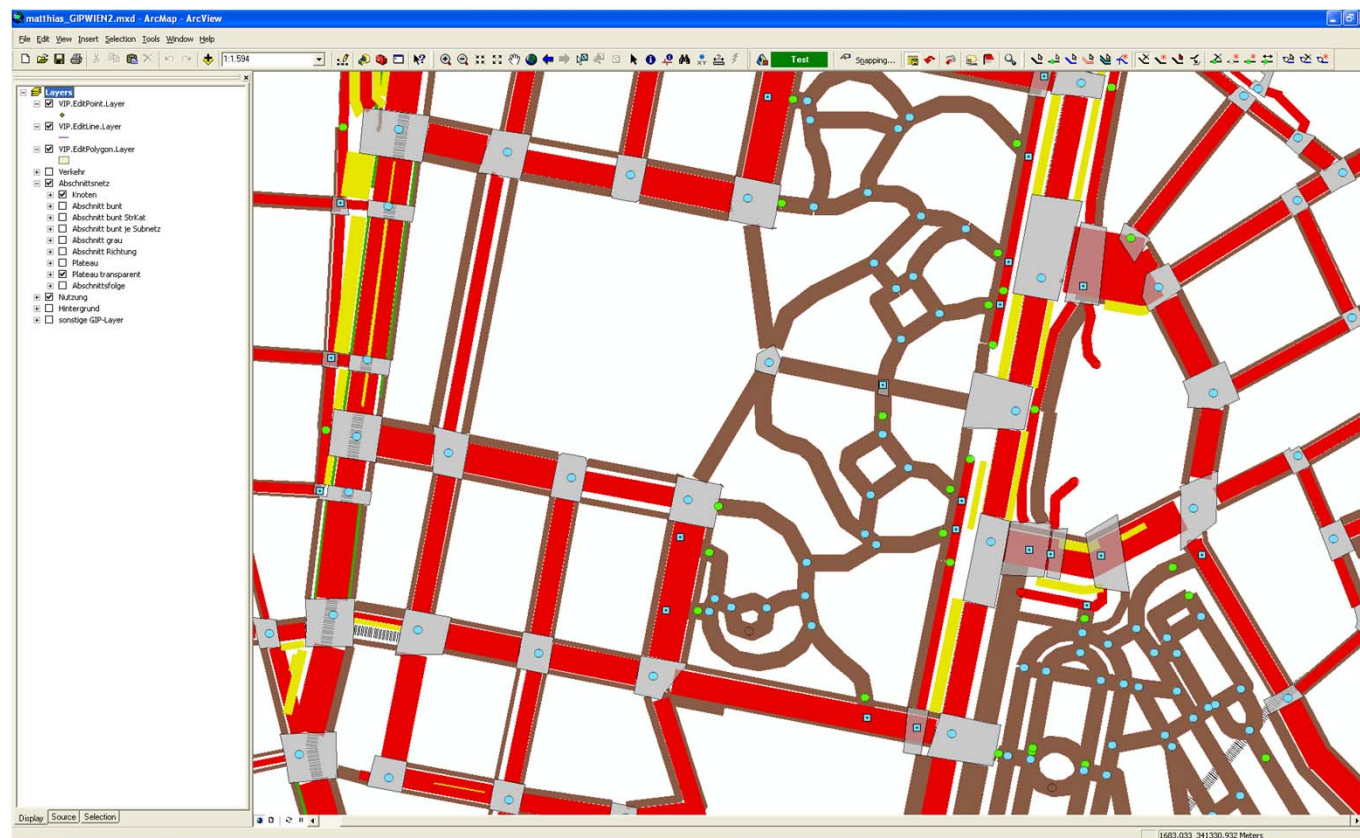
Example: Vienna

Cross Profiles for Roads
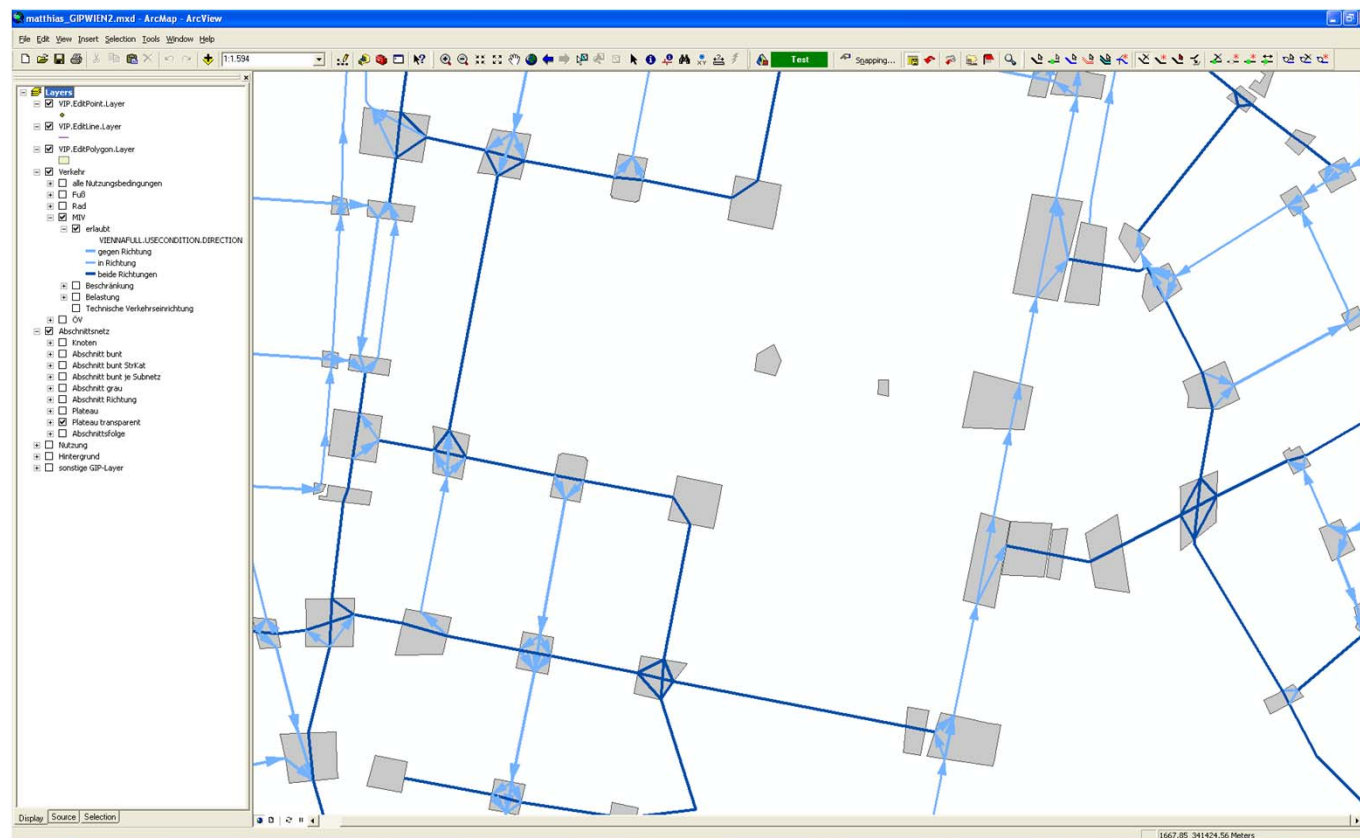
Example: Vienna

Network for Vehicles

... more than just solutions.
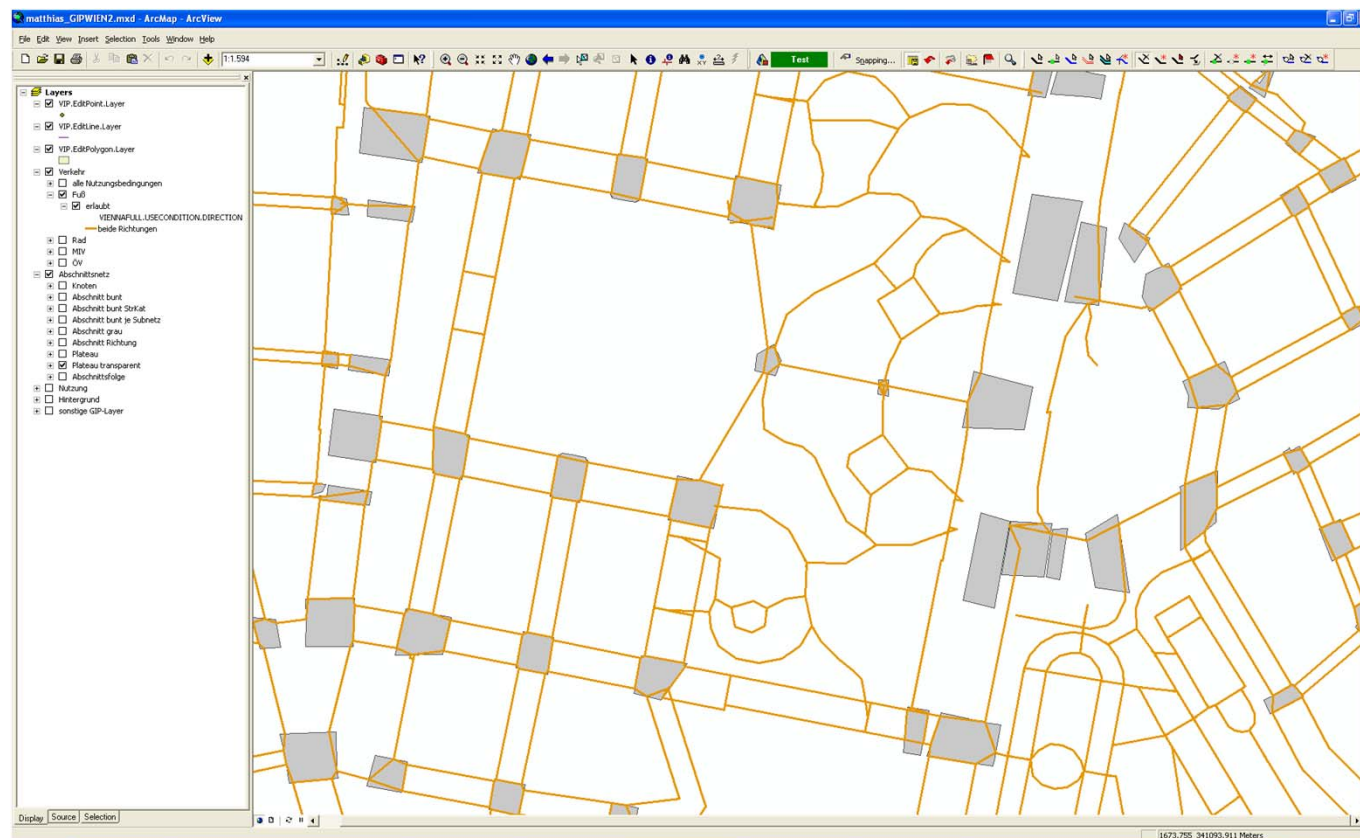
Example: Vienna

Network for Pedestrians

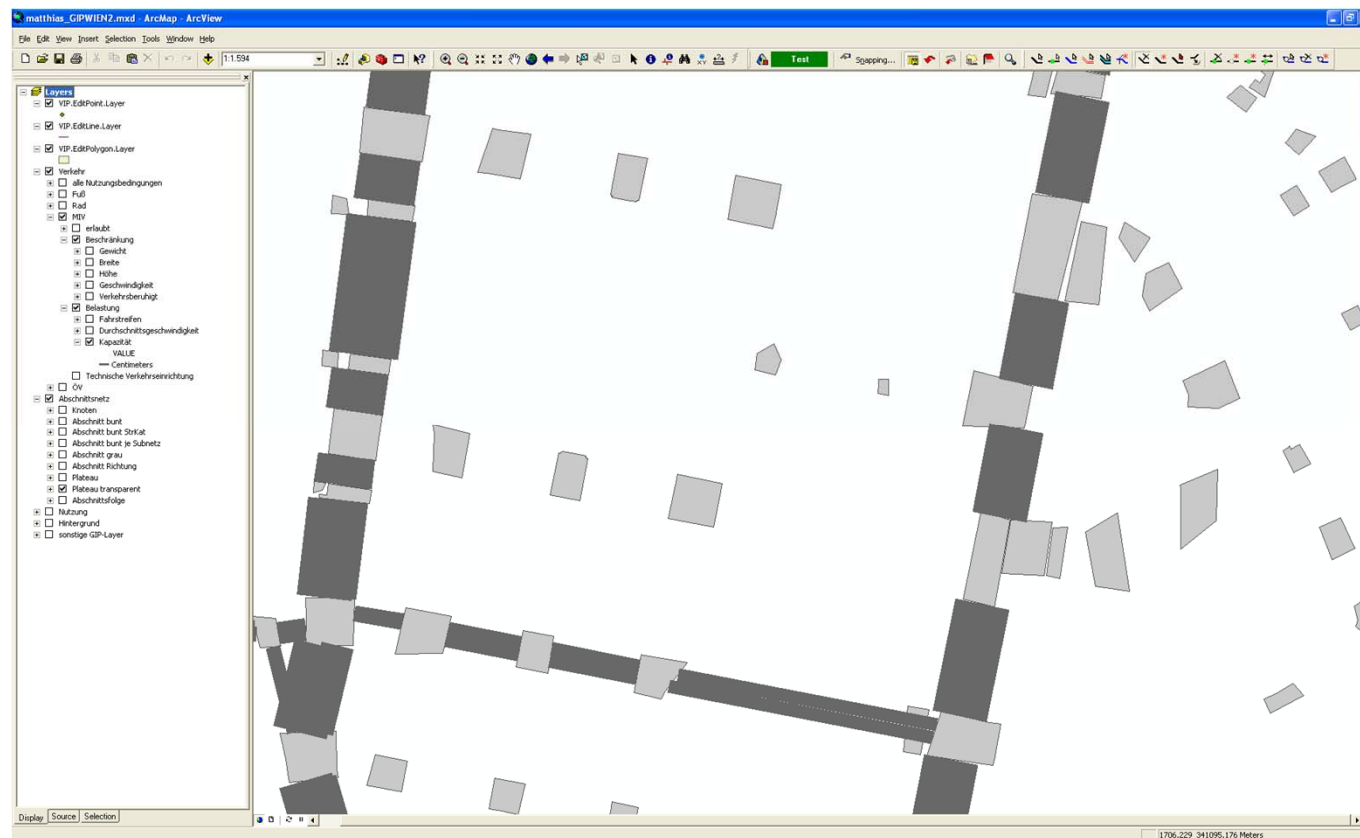... more than just solutions.
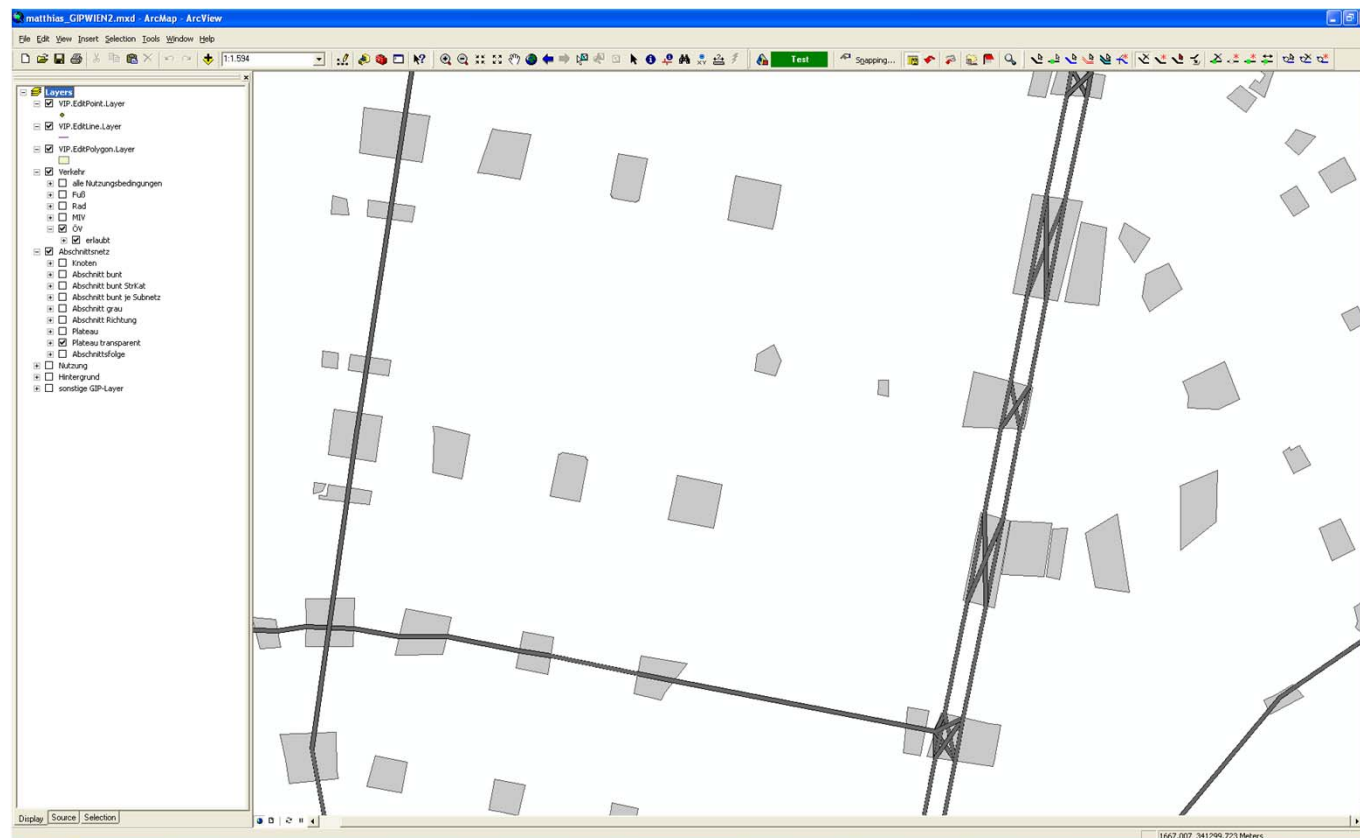
Example: Vienna
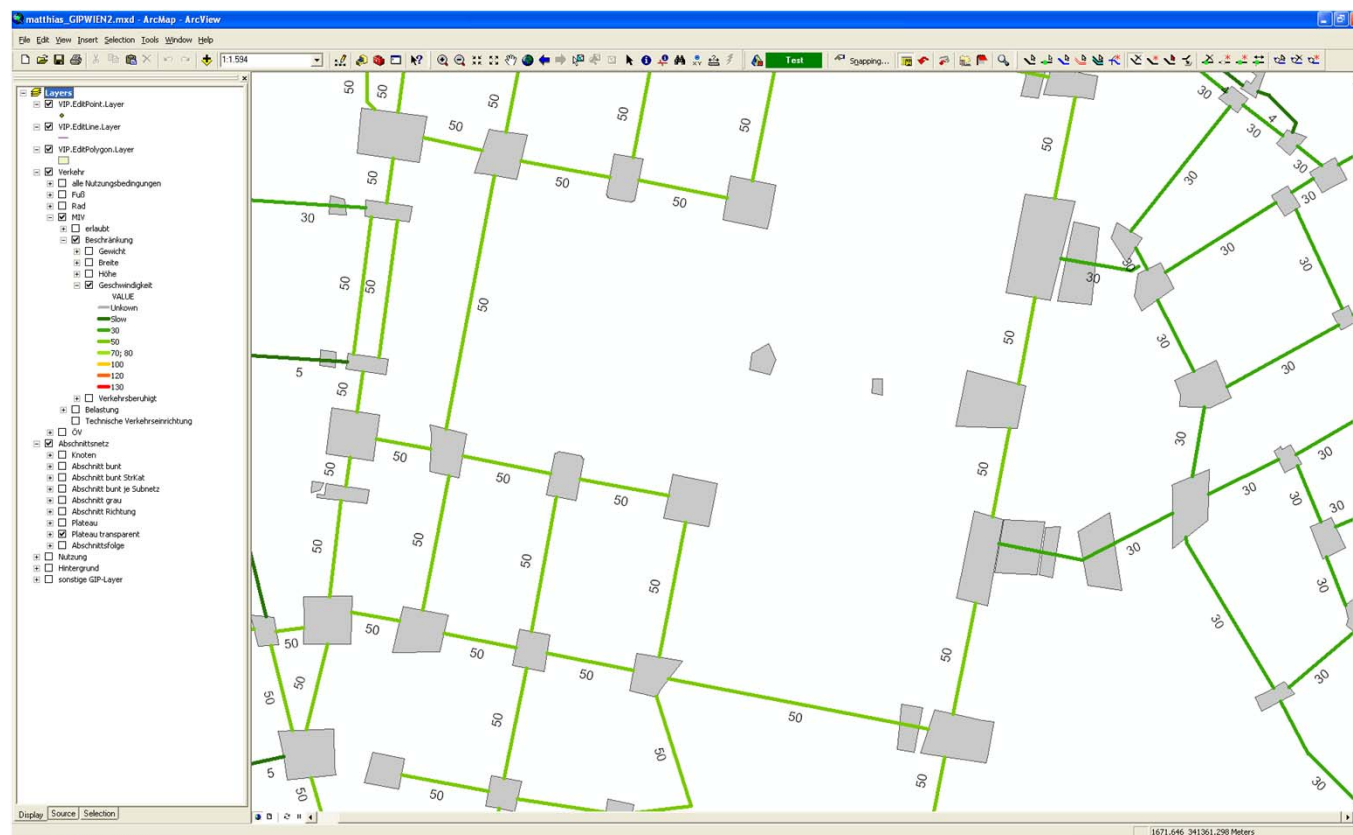
Example: Vienna

Speed Limits for Vehicles

Example: Vienna

Capacities of Main Roads

Conclusion

Maintenance of Information about Reference Network is subject to existing Processes in Public Administration

Data is „waste product" of these Processes

ITS Sevices base on high quality information

GIP is the technical basis !

Nik Widmann
PRISMA solutions

nik.widmann@prisma-solutions.at
www.prisma-solutions.at