

GÖTEBORG STRATEGIC MODEL - TRAINING WEBINAR 3

GÖTEBORG STRATEGIC MODEL - TRAINING SESSIONS

Overview of the 4 Webinars

- ▶ 11.5.2020
 - Overview of the calculation procedures
 - Congestion Charging Implementation
 - PrT and PuT Assignment

- ▶ 18.5.2020
 - Scenario Manager - General Presentation
 - Updating future year person groups

- ▶ **25.5.2020**
 - Scenario Manager - a practical example

- ▶ 1.6.2020
 - Model Management: how users should work with the model

CONTENT

1. Overview (reminder)
2. Modifications
3. Scenario's
4. Evaluations

1. OVERVIEW

Scenario Manager of Göteborg Strategic Model

► Main characteristics

- Nearly everything is in the base version
 - Current PrT network
 - Current PuT network
 - Current socio-economics
 - Future year PrT projects (nodes, links, main nodes)
 - Future year PuT projects (PuT lines, future PuT transport systems like Metrobus, Linbana, Stadsbana)
 - All matrices
 - All user defined attributes

→ allows for maximum compatibility and unbroken PuT lines

- Not in base version
 - Future year socio-economics
 - Procedure parameter sets

1. OVERVIEW

Scenario Manager of Göteborg Strategic Model

► Main characteristics

- Base year PrT network is activated
 - Base year PuT network not activated
 - Needs to be activated by a modification
 - Future years PrT and PuT network is inactive as standard
 - Needs to be activated in modifications
 - Modifications do not add, modify or delete network infrastructure
 - Modifications only activate PrT and PuT projects
 - PrT: 1 modification = 1 project
 - PuT: 1 modification activates 1 PuT transport system or all transport systems of horizon
- ➔ allows for very light modifications, quick to load, as no new network elements need to be loaded into memory

1. OVERVIEW

Scenario Manager of Göteborg Strategic Model

- ▶ Active/Non active
 - PrT: controlled via Link Type
 - link types are set to "Strict" in base version
 - Link type 99 "PrT & PuT Projekt": future year project, Capacity 0 → link is inactive
 - Other link types: current year link types with v0, capacity... → link is active
 - PuT: controlled via Line UDA "Active_Line"
 - Value 0 → line is not active
 - Value 1 → line is active
 - Utilized by the only filter applied of the procedure parameters: "PuT_Active_Line.fil" and PuT assignment (only use active lines)

List (Links)										
Select list layout...										
Number: 221,704	No	FromNodeN	ToNodeN	Typ	Link Type\Name	TSysSet	Length	NumLane	CapPr	V0PrT
220694	1171934653	10000821	700286	36	Sekundär länsväg - 1 kf - 70	Bike,Bus,Car,Ca	0.037km	1	1700	74km/h
220695	1171934654	742780	99730183	9	Avfart/påfart, Motorväg - 1 kf - 70	Bus,Car,Car no	0.437km	1	1600	69km/h
220696	1171934656	99730183	868631	9	Avfart/påfart, Motorväg - 1 kf - 70	Bus,Car,Car no	0.111km	1	1600	69km/h
220697	1171934658	981901	1252950	93	Cykelbana	Bike,Citybus,Lin	0.321km	1	300	50km/h
220698	1171934658	1252950	981901	93	Cykelbana	Bike,Citybus,Lin	0.321km	1	300	50km/h
220699	1171934659	8701326	10000015	99	PrT & PuT Projekt	Bus,Citybus,Fen	1.580km	1	0	50km/h
220700	1171934659	10000015	8701326	99	PrT & PuT Projekt	Bus,Citybus,Fen	1.580km	1	0	50km/h
220701	1171934660	8701326	10001603	99	PrT & PuT Projekt	Bus,Citybus,Fen	1.049km	1	0	50km/h
220702	1171934660	10001603	8701326	99	PrT & PuT Projekt	Bus,Citybus,Fen	1.049km	1	0	50km/h

1. OVERVIEW

Scenario Manager of Göteborg Strategic Model

- ▶ Activation of PrT network elements
 - For new links, switch link type from project (type 99) to appropriate link type
 - For existing links, switch to link type necessary for project (2 to 3 lanes, reduces speed...)
 - If existing links need to be "deactivated" due to PuT projects, use link type 100 "Stängd för PrT pga PuT Projekt"

- ▶ Activation of PuT lines
 - Set Line UDA "Active_Line" to 1 to activate
 - Set Line UDA "Active_Line" to 0 to deactivate

- ▶ Socio-Economic Data
 - Needs to be calculated outside Visum (Excel file available)
 - To be used in a Modification changing population in persons groups and zone characteristics (workplaces...)

1. OVERVIEW

Scenario Manager of Göteborg Strategic Model

► Adding new network element to reference model

- Base version only to be modified by model owner
- 2-step approach (same logic as base version + modifications)
 1. Add all network elements
 2. Activate network elements



- 1 Modification for all new network elements
- 1 Modification per project activating the new network elements
 - This Modification must be dependent on Modification that introduced new network elements
- Best working with specific network ID ranges for node and link numbers, to be handed out by model manager (TK)
 - Greatly reduces network ID conflicts if several consultancies work on model the same time

2. MODIFICATIONS

Exercise

► Add Urban Project

- Zone **1480030313**

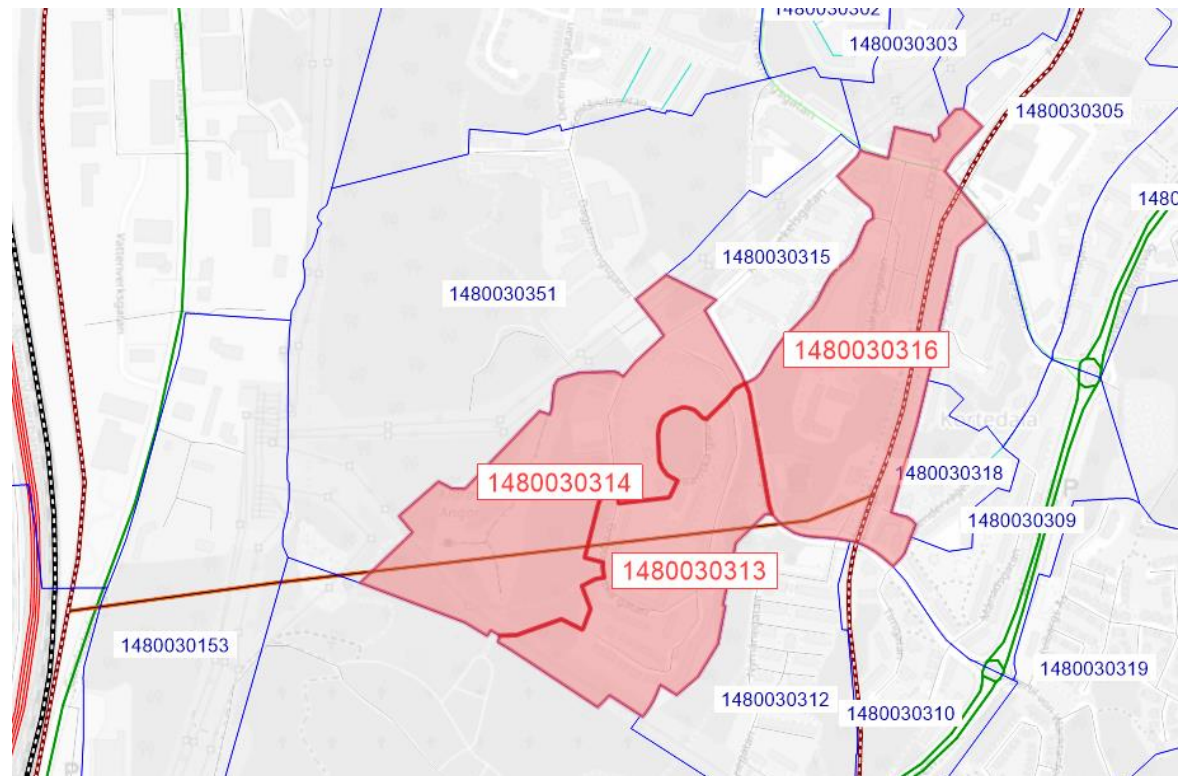
- 1000 dwellings
- 8000 m² office space
→ 320 workplaces
(4 workplaces for 100 m²)

- Zone **1480030314**

- 1000 dwellings

- Zone **1480030316**

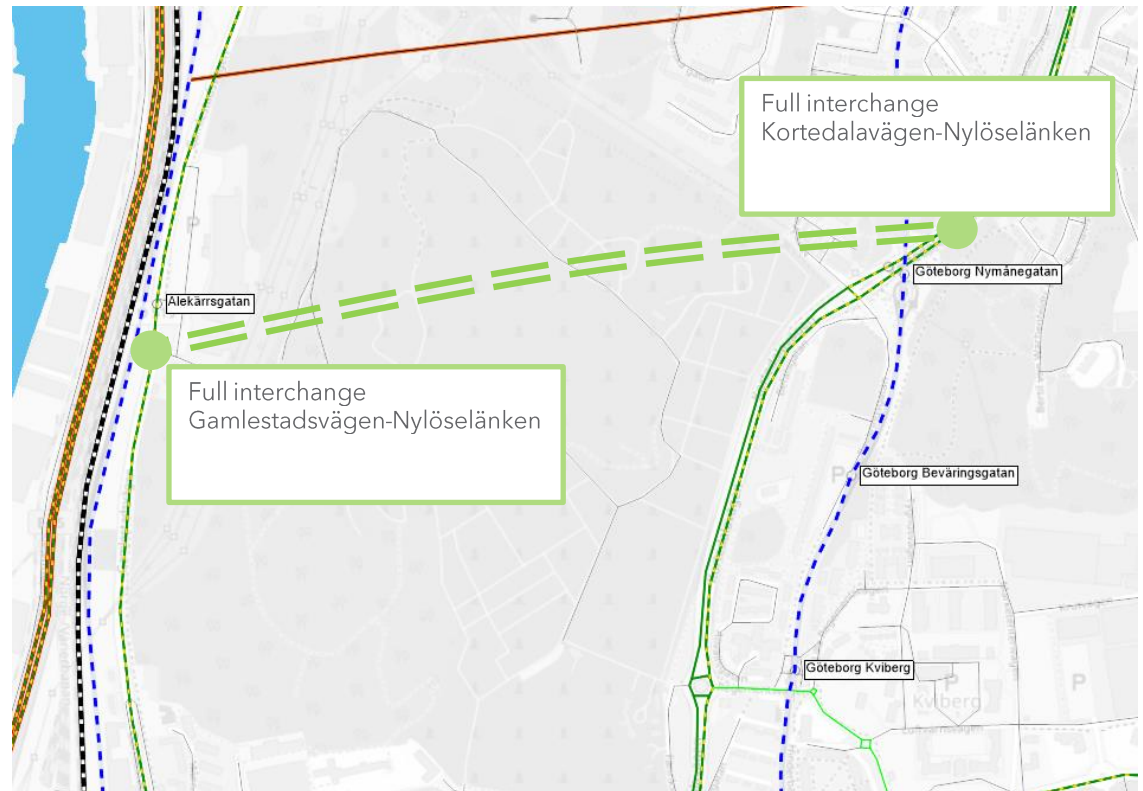
- 1500 dwellings
- 4000 m² stores
→ 52 workplaces
(1.3 workplaces per 100 m²)



2. MODIFICATIONS

Exercise

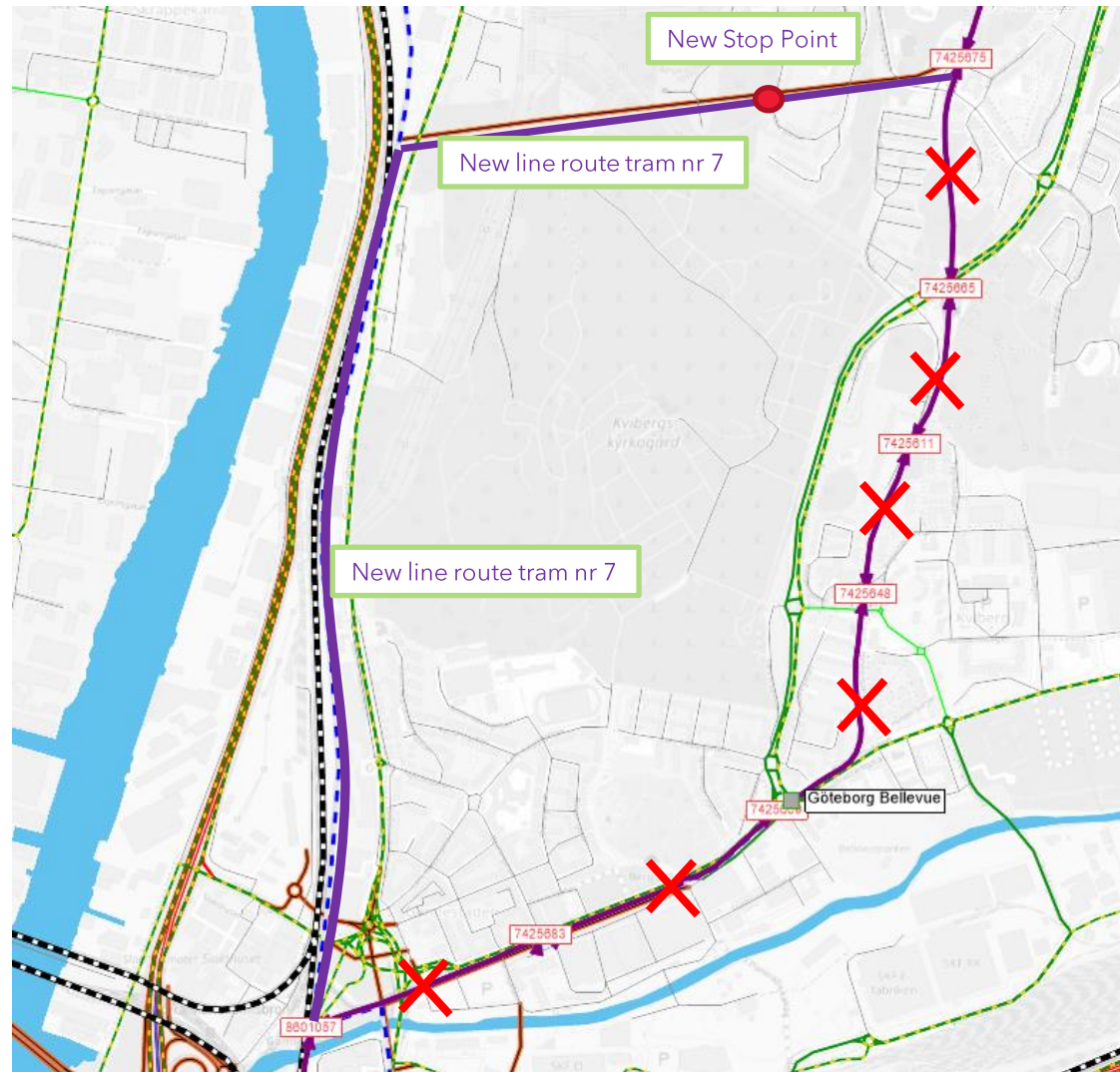
- ▶ Add PrT-tunnel (Nylöselänken)
 - Full interchange
 - Linktype: 42 (Huvudgata- 2kf -50)



2. MODIFICATIONS

Exercise

- Add PuT tunnel
 - New route tramline 7
 - New PuT stop inside tunnel



3. SCENARIOS

Exercise

- ▶ Add 4 scenarios
 - Urban project (socio economic data only)
 - Infrastructure PrT
 - Infrastructure PuT
 - Urban project + infrastructure PrT & PuT

4. EVALUATIONS

Exercise

- ▶ Compare scenarios
 - Predefined comparison template

THANKS !

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