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THEMATIC PRIORITY 1.6
SUSTAINABLE DEVELOPMENT, GLOBAL CHANGE & ECOSYSTEMS
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CityMobil

Towards advanced transport for the urban environment

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Annex 4 MCA tables

1.1 Indicator Description as Provided by Models

Social indicators:

Accessibility indicators are measured as the number of workplaces which can be reached from a zone weighted by generalised costs. For the low-income non-car accessibility, this has been calculated for defined low-income zones based on public transport costs only.

The **accident** rate is speed dependent. It is assumed that dual mode vehicles don't have an influence on the accident rate.

Environmental indicators:

CO₂ related indicators are calculated well in to wheel while **NO_x and particle (PM₁₀)** emissions are calculated pump to wheel (PW).

The **land take** is an index of the development of the built-up area, measured at the level of zones.

Economic Indicators:



1.2 Model Results for MCA Indicators

Table 1: Model Results Tyne and Wear 2030

Results Tyne and Wear	Without Complementary Measures						With Complementary Measures					
	Do Nothing to Base	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing to Base	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Results Medium Growth compared to Do Nothing												
Social												
Accessibility of key services	2.86%	0.28%	3.81%	0.96%	0.34%	0.36%	2.94%	0.28%	3.48%	0.96%	0.34%	0.35%
Low income zones non-car accessibility	13.73%	-3.75%	18.32%	0.30%	0.87%	0.35%	13.88%	-3.74%	15.45%	0.29%	0.86%	0.34%
Number of accidents	8.22%	-0.25%	-0.99%	-0.61%	-0.18%	1.39%	7.28%	-0.26%	-0.97%	-0.60%	-0.21%	1.38%
Environmental												
Annual CO ₂ emissions	-13.61%	-0.29%	-1.22%	-0.71%	-0.21%	0.47%	-14.68%	-0.30%	-1.19%	-0.70%	-0.24%	0.48%
Annual NO _x emissions	-81.23%	-0.28%	-1.18%	-0.69%	-0.21%	0.76%	-81.45%	-0.29%	-1.15%	-0.67%	-0.24%	0.76%
Annual PM ₁₀ emissions	-49.52%	-0.30%	-1.25%	-0.72%	-0.22%	0.51%	-50.17%	-0.31%	-1.22%	-0.71%	-0.25%	0.51%
Change in area classified as urban	0.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic												
Average delay in person hours	-3.74%	-0.19%	-0.78%	-0.49%	-0.21%	-5.81%	-5.53%	-0.17%	-0.77%	-0.48%	-0.25%	-5.77%
Financial result	<i>n.a.</i>	2.58	2.48	3.04	-0.16	<i>n.a.</i>	<i>n.a.</i>	2.61	2.51	3.08	-0.14	<i>n.a.</i>
Economic vitality index Households	-3.28%	0.00%	0.00%	0.00%	0.00%	0.00%	-3.28%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic vitality index Workplaces	-0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.59%	0.00%	0.00%	0.00%	0.00%	0.00%
Results High Growth compared to Do Nothing												
Social												
Accessibility of key services	9.66%	0.25%	3.65%	0.93%	0.34%	0.35%	9.75%	0.25%	3.31%	0.93%	0.34%	0.35%
Low income zones non-car accessibility	18.90%	-3.99%	17.70%	0.15%	0.84%	0.35%	19.06%	-3.98%	14.71%	0.14%	0.83%	0.34%
Number of accidents	14.19%	-0.24%	-0.96%	-0.59%	-0.18%	1.60%	13.17%	-0.25%	-0.93%	-0.58%	-0.21%	1.59%
Environmental												
Annual CO ₂ emissions	-8.43%	-0.28%	-1.19%	-0.70%	-0.21%	0.50%	-9.59%	-0.29%	-1.16%	-0.68%	-0.25%	0.50%
Annual NO _x emissions	-80.14%	-0.27%	-1.15%	-0.67%	-0.21%	0.82%	-80.38%	-0.28%	-1.12%	-0.66%	-0.24%	0.83%
Annual PM ₁₀ emissions	-46.52%	-0.28%	-1.23%	-0.71%	-0.22%	0.52%	-47.22%	-0.29%	-1.19%	-0.69%	-0.25%	0.52%
Change in area classified as urban	0.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.65%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic												
Average delay in person hours	5.46%	-0.19%	-0.79%	-0.51%	-0.22%	-6.16%	3.41%	-0.17%	-0.75%	-0.50%	-0.26%	-6.13%
Financial result	<i>n.a.</i>	2.62	2.53	3.11	-0.13	<i>n.a.</i>	<i>n.a.</i>	2.65	2.56	3.15	-0.12	<i>n.a.</i>
Economic vitality index Households	4.63%	0.00%	0.00%	0.00%	0.00%	0.00%	4.63%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic vitality index Workplaces	-0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.59%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 3: Model Results Trondheim 2030

Results Trondheim	Without Complementary Measures						With Complementary Measures					
	Do Nothing to Base	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing to Base	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Results Medium Growth compared to Do Nothing												
Social												
Accessibility of key services	21.02%	0.00%	0.00%	6.54%	3.74%	0.34%	20.94%	0.00%	0.00%	6.54%	3.75%	0.35%
Low income zones non-car accessibility	15.76%	0.00%	0.00%	12.20%	10.76%	0.58%	15.76%	0.00%	-0.01%	12.20%	10.76%	0.58%
Number of accidents	39.07%	0.00%	0.05%	0.14%	0.93%	3.48%	39.18%	0.00%	0.04%	0.13%	1.04%	3.54%
Environmental												
Annual CO ₂ emissions	11.03%	0.00%	0.02%	-0.08%	0.77%	0.88%	10.12%	0.00%	0.02%	-0.10%	0.83%	0.91%
Annual NO _x emissions	-76.18%	0.00%	0.03%	-0.05%	0.78%	1.05%	-76.36%	0.00%	0.02%	-0.08%	0.85%	1.08%
Annual PM ₁₀ emissions	-46.70%	0.00%	0.02%	-0.09%	0.76%	0.68%	-47.18%	0.00%	0.02%	-0.12%	0.82%	0.70%
Change in area classified as urban	0.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.47%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic												
Average delay in person hours	163.54%	0.00%	-0.22%	-2.70%	-0.47%	-13.28%	143.34%	0.00%	-0.25%	-3.03%	-1.07%	-13.81%
Financial result	n.a.	n.a.	-0.82	2.30	0.72	n.a.	n.a.	n.a.	-0.82	2.35	0.75	n.a.
Economic vitality index Households	26.87%	0.00%	0.00%	0.00%	0.00%	0.00%	26.87%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic vitality index Workplaces	3.37%	0.00%	0.00%	0.00%	0.00%	0.00%	3.37%	0.00%	0.00%	0.00%	0.00%	0.00%
Results High Growth compared to Do Nothing												
Social												
Accessibility of key services	26.06%	-0.01%	-0.01%	6.56%	3.72%	0.31%	25.89%	0.00%	0.00%	6.59%	3.73%	0.40%
Low income zones non-car accessibility	19.34%	-0.03%	-0.03%	12.42%	10.91%	0.51%	19.32%	0.00%	-0.01%	12.46%	10.92%	0.58%
Number of accidents	45.13%	-0.04%	0.01%	0.08%	0.90%	3.57%	44.96%	0.00%	0.04%	0.14%	0.99%	3.78%
Environmental												
Annual CO ₂ emissions	18.35%	0.00%	0.02%	-0.08%	0.77%	0.90%	17.26%	0.00%	0.02%	-0.09%	0.82%	1.01%
Annual NO _x emissions	-74.65%	-0.01%	0.02%	-0.06%	0.77%	1.08%	-74.86%	0.00%	0.02%	-0.06%	0.83%	1.18%
Annual PM ₁₀ emissions	-43.10%	0.00%	0.02%	-0.09%	0.76%	0.70%	-43.66%	0.00%	0.02%	-0.10%	0.80%	0.79%
Change in area classified as urban	0.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.56%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic												
Average delay in person hours	215.05%	0.27%	0.07%	-2.05%	-0.18%	-12.35%	193.07%	0.00%	-0.26%	-2.59%	-0.58%	-12.56%
Financial result	n.a.	n.a.	-0.82	2.33	0.74	n.a.	n.a.	n.a.	-0.82	2.38	0.76	n.a.
Economic vitality index Households	33.74%	0.00%	0.00%	0.00%	0.00%	0.00%	33.74%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic vitality index Workplaces	3.37%	0.00%	0.00%	0.00%	0.00%	0.00%	3.37%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 4: Model Results Vienna 2030

Results Vienna	Without Complementary Measures						With Complementary Measures					
	Do Nothing to Base	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing to Base	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Results Medium Growth compared to Do Nothing												
Social												
Accessibility of key services	-0.37%	0.10%	1.06%	0.10%	0.09%	0.17%	-0.31%	0.10%	1.07%	0.10%	0.10%	0.17%
Low income zones non-car accessibility	0.44%	0.03%	1.90%	0.03%	0.34%	0.09%	0.47%	0.04%	1.92%	0.03%	0.35%	0.08%
Number of accidents	24.69%	0.02%	0.21%	0.20%	-0.07%	1.03%	20.57%	0.03%	0.19%	0.16%	-0.09%	1.03%
Environmental												
Annual CO ₂ emissions	-6.00%	0.02%	0.18%	-0.04%	-0.08%	0.15%	-10.45%	0.03%	0.15%	-0.04%	-0.10%	0.15%
Annual NO _x emissions	-75.65%	0.02%	0.18%	-0.03%	-0.08%	0.21%	-76.78%	0.03%	0.15%	-0.03%	-0.10%	0.21%
Annual PM ₁₀ emissions	-45.91%	0.02%	0.18%	-0.06%	-0.08%	0.13%	-48.56%	0.03%	0.15%	-0.05%	-0.09%	0.14%
Change in area classified as urban	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic												
Average delay in person hours	-4.33%	-0.28%	-2.46%	-4.62%	-0.48%	-11.47%	-23.24%	-0.34%	-2.94%	-3.47%	-0.59%	-11.78%
Financial result	<i>n.a.</i>	-0.61	-0.65	-0.81	-0.96	<i>n.a.</i>	<i>n.a.</i>	-0.61	-0.65	-0.81	-0.96	<i>n.a.</i>
Economic vitality index Households	-2.16%	0.00%	0.00%	0.00%	-0.01%	-0.01%	-2.18%	0.01%	0.01%	0.00%	0.01%	0.00%
Economic vitality index Workplaces	0.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%
Results High Growth compared to Do Nothing												
Social												
Accessibility of key services	-0.36%	0.09%	1.06%	0.10%	0.09%	0.17%	-0.31%	0.10%	1.07%	0.10%	0.10%	0.16%
Low income zones non-car accessibility	0.44%	0.02%	1.90%	0.02%	0.34%	0.09%	0.48%	0.03%	1.92%	0.03%	0.35%	0.08%
Number of accidents	20.69%	0.02%	0.21%	0.19%	-0.07%	1.04%	16.68%	0.03%	0.18%	0.15%	-0.09%	1.05%
Environmental												
Annual CO ₂ emissions	-8.47%	0.01%	0.17%	-0.06%	-0.08%	0.15%	-12.82%	0.02%	0.15%	-0.04%	-0.10%	0.15%
Annual NO _x emissions	-76.29%	0.01%	0.17%	-0.05%	-0.08%	0.21%	-77.40%	0.02%	0.15%	-0.03%	-0.10%	0.21%
Annual PM ₁₀ emissions	-47.29%	0.01%	0.17%	-0.07%	-0.08%	0.13%	-49.88%	0.02%	0.15%	-0.05%	-0.10%	0.14%
Change in area classified as urban	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%
Economic												
Average delay in person hours	-7.22%	-0.29%	-2.52%	-4.59%	-0.49%	-11.40%	-25.52%	-0.35%	-2.99%	-3.47%	-0.60%	-11.67%
Financial result	<i>n.a.</i>	-0.61	-0.65	-0.81	-0.96	<i>n.a.</i>	<i>n.a.</i>	-0.57	-0.58	-0.76	-0.95	<i>n.a.</i>
Economic vitality index Households	-2.16%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-2.18%	0.00%	0.01%	0.00%	0.00%	0.00%
Economic vitality index Workplaces	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%

1.3 MCA Result Tables

Table 5: MCA Results Tyne and Wear Medium Growth

Tyne and Wear Results	Scores Medium Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	19.1	21.0	45.2	25.7	21.4	21.5	19.6	21.6	43.5	26.2	22.0	22.0
Low income zones non-car accessibility	67.5	58.9	109.1	68.1	69.4	68.3	67.8	59.2	102.9	68.4	69.7	68.5
Number of accidents	-16.4	-15.9	-14.3	-15.1	-16.0	-19.4	-14.6	-14.0	-12.5	-13.3	-14.1	-17.5
Environmental												
Annual CO ₂ emissions	67.5	68.2	70.5	69.2	68.0	66.3	70.5	71.3	73.4	72.2	71.1	69.4
Annual NO _x + PM ₁₀ emissions	73.4	73.6	74.2	73.9	73.5	73.0	74.2	74.4	75.0	74.6	74.4	73.8
Change in area classified as urban	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
Economic												
Average delay in person hours	63.9	64.3	65.5	64.9	64.3	76.3	67.9	68.2	69.5	68.9	68.4	80.0
Financial result	50.0	114.5	112.0	126.0	46.0	50.0	50.0	115.2	112.7	127.1	46.4	50.0
Economic vitality index of target zones	53.7	53.7	53.7	53.7	53.7	53.7	53.8	53.8	53.7	53.8	53.8	53.8
Total weighted score (local)	49.6	54.6	62.9	57.3	50.0	51.0	51.0	56.0	63.5	58.8	51.4	52.4
Rank	6	3	1	2	5	4	18	9	3	7	17	16
Improvement to Do-Nothing		10%	27%	16%	1%	3%		10%	24%	15%	1%	3%
Total weighted score												
<i>Average</i>	49.5	53.8	62.3	56.4	49.9	50.8	50.9	55.2	62.7	57.8	51.3	52.1
<i>Congestion</i>	49.5	53.9	59.6	56.0	49.8	51.2	50.9	55.4	60.5	57.5	51.3	52.6
<i>Mobility</i>	47.7	52.8	61.5	55.7	48.1	49.2	49.0	54.2	61.9	57.0	49.5	50.4
<i>Environment</i>	51.9	55.1	63.2	57.5	52.4	52.9	53.3	56.5	63.8	58.9	53.8	54.3

Table 6: MCA Results Tyne and Wear High Growth

Tyne and Wear Results	Scores High Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	64.4	66.3	91.1	71.2	66.9	67.0	65.0	66.8	89.2	71.8	67.5	67.6
Low income zones non-car accessibility	77.8	68.3	119.9	78.2	79.8	78.6	78.1	68.6	113.2	78.4	80.1	78.9
Number of accidents	-28.4	-27.8	-26.2	-27.0	-28.0	-32.0	-26.3	-25.8	-24.2	-25.0	-25.9	-29.9
Environmental												
Annual CO ₂ emissions	52.7	53.4	55.8	54.5	53.2	51.4	56.0	56.7	59.0	57.7	56.6	54.7
Annual NO _x + PM ₁₀ emissions	69.7	69.9	70.5	70.1	69.8	69.3	70.5	70.7	71.3	71.0	70.7	70.2
Change in area classified as urban	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
Economic												
Average delay in person hours	43.4	43.9	45.3	44.6	43.9	57.9	48.0	48.4	49.7	49.1	48.6	62.1
Financial result	50.0	115.6	113.1	127.8	46.6	50.0	50.0	116.3	113.9	128.9	47.1	50.0
Economic vitality index of target zones	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
Total weighted score (local)	52.7	57.7	66.3	60.6	53.2	54.3	54.3	59.3	66.9	62.2	54.8	55.8
Rank	6	3	1	2	5	4	6	3	1	2	5	4
Improvement to Do-Nothing		9%	26%	15%	1%	3%		9%	23%	15%	1%	3%
Total weighted score												
<i>Average</i>	52.7	57.0	65.7	59.8	53.2	54.1	54.2	58.5	66.2	61.3	54.7	55.5
<i>Congestion</i>	51.2	55.6	61.5	57.9	51.5	53.1	52.8	57.3	62.5	59.5	53.2	54.7
<i>Mobility</i>	52.6	57.7	66.6	60.6	53.0	54.1	54.0	59.1	67.0	62.1	54.5	55.5
<i>Environment</i>	52.9	56.0	64.4	58.6	53.4	54.0	54.4	57.6	65.0	60.2	55.0	55.5

Table 7: MCA Results Madrid Medium Growth

Madrid Results	Scores Medium Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	194.4	195.0	194.8	195.1	198.3	195.9	194.3	194.8	194.7	195.0	198.2	195.7
Low income zones non-car accessibility	85.6	85.5	85.6	85.5	88.1	85.9	85.4	85.3	85.4	85.3	87.9	85.8
Number of accidents	-207.0	-206.6	-201.1	-206.6	-204.9	-208.6	-204.5	-204.1	-198.3	-204.1	-202.3	-206.0
Environmental												
Annual CO ₂ emissions	-116.2	-115.8	-110.0	-115.7	-113.6	-116.1	-111.4	-111.0	-104.9	-111.0	-108.7	-111.4
Annual NO _x + PM ₁₀ emissions	37.6	37.7	39.0	37.7	38.2	37.6	38.7	38.8	40.2	38.8	39.4	38.8
Change in area classified as urban	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Economic												
Average delay in person hours	-95.3	-95.8	-93.4	-95.9	-94.3	-134.3	-96.5	-96.5	-94.3	-96.4	-94.6	-132.6
Financial result	50.0	62.3	59.5	53.8	29.5	50.0	50.0	62.4	59.8	53.9	29.5	50.0
Economic vitality index of target zones	295.6	295.6	295.6	295.6	295.6	295.6	295.5	295.5	295.5	295.5	295.5	295.5
Total weighted score (local)	18.4	19.3	21.1	18.8	18.5	13.8	19.3	20.4	22.2	19.8	19.6	15.1
Rank	5	2	1	3	4	6	5	2	1	3	4	6
Improvement to Do-Nothing		5%	15%	2%	1%	-25%		6%	15%	3%	2%	-22%
Total weighted score												
<i>Average</i>	18.4	19.3	21.1	18.8	18.5	13.8	19.3	20.4	22.2	19.8	19.6	15.1
<i>Congestion</i>	17.2	18.1	20.0	17.6	17.2	10.7	18.0	19.0	20.9	18.5	18.2	12.0
<i>Mobility</i>	29.9	31.1	32.7	30.4	29.9	25.2	30.7	31.9	33.6	31.3	30.8	26.3
<i>Environment</i>	2.6	3.4	5.4	2.9	3.1	-1.6	3.7	4.6	6.7	4.2	4.4	-0.1

Table 8: MCA Results Madrid High Growth

Madrid	Scores High Growth											
	Results	Without Complementary Measures					With Complementary Measures					
		Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus
Social												
Accessibility of key services	239.8	240.4	240.4	240.6	243.9	241.4	239.9	240.5	240.5	240.7	244.0	241.5
Low income zones non-car accessibility	95.2	95.1	95.2	95.1	97.9	95.6	95.2	95.1	95.2	95.1	97.9	95.6
Number of accidents	-235.3	-234.9	-228.6	-234.9	-233.3	-237.0	-232.6	-232.2	-225.6	-232.2	-230.4	-234.3
Environmental												
Annual CO ₂ emissions	-148.4	-148.0	-141.3	-148.0	-145.9	-148.4	-143.4	-143.0	-135.9	-142.9	-140.7	-143.4
Annual NO _x + PM ₁₀ emissions	30.2	30.3	31.8	30.3	30.7	30.2	31.4	31.4	33.1	31.5	32.0	31.4
Change in area classified as urban	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Economic												
Average delay in person hours	-78.9	-79.3	-77.5	-79.4	-78.1	-115.7	-80.0	-80.0	-78.2	-80.0	-78.3	-114.2
Financial result	50.0	62.5	62.5	59.9	29.5	50.0	50.0	62.6	60.2	54.0	29.5	50.0
Economic vitality index of target zones	363.2	363.2	363.2	363.2	363.3	363.2	363.0	363.0	363.0	363.1	363.2	363.1
Total weighted score (local)	24.5	25.5	27.7	25.3	24.6	20.2	25.7	26.8	28.9	26.2	26.0	21.8
Rank	5	2	1	3	4	6	5	2	1	3	4	6
Improvement to Do-Nothing		4%	13%	4%	1%	-17%		4%	13%	2%	1%	-15%
Total weighted score												
<i>Average</i>	24.5	25.5	27.7	25.3	24.6	20.2	25.7	26.8	28.9	26.2	26.0	21.8
<i>Congestion</i>	25.5	26.5	28.7	26.3	25.5	19.4	26.6	27.7	29.8	27.1	26.8	21.0
<i>Mobility</i>	39.4	40.5	42.5	40.4	39.3	34.9	40.4	41.7	43.6	41.0	40.5	36.3
<i>Environment</i>	4.2	5.0	7.4	4.9	4.7	0.2	5.7	6.5	9.0	6.1	6.3	2.0

Table 9: MCA Results Trondheim Medium Growth

Trondheim Results	Scores Medium Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	140.1	140.1	140.1	192.9	170.3	142.8	139.6	139.6	139.6	192.4	169.8	142.4
Low income zones non-car accessibility	71.5	71.5	71.5	99.8	96.4	72.9	71.5	71.5	71.5	99.8	96.4	72.9
Number of accidents	-78.1	-78.1	-78.3	-78.5	-80.7	-87.8	-78.4	-78.4	-78.5	-78.7	-81.2	-88.2
Environmental												
Annual CO ₂ emissions	-3.0	-3.0	-3.0	-2.7	-5.4	-5.8	-0.3	-0.3	-0.4	0.0	-3.0	-3.2
Annual NO _x + PM ₁₀ emissions	66.3	66.3	66.2	66.3	65.7	65.7	66.9	66.9	66.8	66.9	66.3	66.3
Change in area classified as urban	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
Economic												
Average delay in person hours	-307.9	-307.9	-306.6	-292.1	-305.1	-230.1	-263.0	-263.0	-261.6	-246.6	-257.2	-188.3
Financial result	50.0	50.0	29.5	107.5	68.0	50.0	50.0	50.0	29.5	108.7	68.7	50.0
Economic vitality index of target zones	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5
Total weighted score (local)	31.0	31.0	29.8	49.1	40.0	38.3	35.9	35.9	34.7	54.2	45.2	42.9
Rank	5	4	6	1	2	3	5	4	6	1	2	3
Improvement to Do-Nothing		0%	-4%	59%	29%	24%		0%	-3%	51%	26%	20%
Total weighted score												
Average	15.1	15.1	13.8	31.0	22.4	22.9	20.7	20.7	19.4	36.7	28.4	28.1
Congestion	-0.9	-0.9	-2.1	12.8	4.6	10.5	6.8	6.8	5.6	20.6	12.7	17.6
Mobility	17.2	17.2	15.7	34.7	25.3	25.7	23.0	23.0	21.5	40.7	31.5	31.1
Environment	12.2	12.2	11.2	25.9	18.5	19.1	17.5	17.5	16.5	31.3	24.0	24.0

Table 10: MCA Results Trondheim High Growth

Trondheim Results	Scores High Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	173.8	173.7	173.6	228.9	205.0	176.4	172.6	172.6	172.5	227.9	203.9	175.9
Low income zones non-car accessibility	78.7	78.6	78.6	108.3	104.7	79.9	78.6	78.6	78.6	108.4	104.7	80.0
Number of accidents	-90.3	-90.1	-90.3	-90.5	-92.9	-100.6	-89.9	-89.9	-90.1	-90.3	-92.8	-100.9
Environmental												
Annual CO ₂ emissions	-23.8	-23.8	-23.9	-23.6	-26.4	-26.9	-20.7	-20.7	-20.8	-20.4	-23.5	-24.1
Annual NO _x + PM ₁₀ emissions	61.6	61.6	61.6	61.6	61.0	61.0	62.3	62.3	62.3	62.4	61.7	61.6
Change in area classified as urban	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
Economic												
Average delay in person hours	-422.3	-424.3	-422.8	-408.0	-421.1	-335.9	-373.5	-373.5	-371.8	-356.6	-369.7	-291.7
Financial result	50.0	50.0	29.5	108.3	68.5	50.0	50.0	50.0	29.6	109.5	69.1	50.0
Economic vitality index of target zones	190.4	190.4	190.4	190.4	190.4	190.4	190.4	190.4	190.4	190.4	190.4	190.4
Total weighted score (local)	23.3	23.1	22.0	42.0	32.5	31.5	28.6	28.6	27.5	47.7	38.1	36.4
Rank	4	5	6	1	2	3	5	4	6	1	2	3
Improvement to Do-Nothing		-1%	-6%	80%	39%	35%		0%	-4%	66%	33%	27%
Total weighted score												
<i>Average</i>	4.1	3.9	2.6	20.3	11.5	12.8	10.2	10.2	8.9	26.8	17.9	18.3
<i>Congestion</i>	-17.4	-17.8	-18.9	-3.6	-12.1	-4.8	-9.0	-9.0	-10.2	5.3	-3.2	2.8
<i>Mobility</i>	7.1	6.9	5.3	25.0	15.3	16.5	13.4	13.4	11.9	31.7	21.9	22.2
<i>Environment</i>	0.0	-0.2	-1.1	14.0	6.4	7.7	5.8	5.8	4.9	20.1	12.4	12.9

Table 11: MCA Results Vienna Medium Growth

Vienna Results	Scores Medium Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	-2.5	-1.8	4.6	-1.8	-1.8	-1.3	-2.1	-1.4	5.0	-1.4	-1.4	-1.0
Low income zones non-car accessibility	40.9	40.9	44.7	40.9	41.6	41.1	40.9	41.0	44.8	41.0	41.7	41.1
Number of accidents	-49.4	-49.4	-49.9	-49.9	-49.2	-51.9	-41.1	-41.2	-41.6	-41.5	-40.9	-43.6
Environmental												
Annual CO ₂ emissions	45.7	45.7	45.3	45.8	45.9	45.3	58.4	58.4	58.0	58.5	58.7	58.0
Annual NO _x + PM ₁₀ emissions	65.1	65.0	64.9	65.1	65.1	64.9	68.5	68.5	68.4	68.5	68.6	68.4
Change in area classified as urban	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
Economic												
Average delay in person hours	65.2	65.8	70.4	75.0	66.2	89.6	107.2	107.8	112.2	113.1	108.2	127.3
Financial result	50.0	34.8	33.8	29.8	26.0	50.0	50.0	34.8	33.8	29.8	26.0	50.0
Economic vitality index of target zones	60.5	60.6	60.5	60.5	60.5	60.5	60.5	60.6	60.6	60.5	60.5	60.5
Total weighted score (local)	38.7	37.6	38.8	37.8	37.2	40.0	44.8	43.8	44.9	43.7	43.3	45.8
Rank	3	5	2	4	6	1	3	4	2	5	6	1
Improvement to Do-Nothing		-3%	0%	-2%	-4%	3%		-2%	0%	-2%	-3%	2%
Total weighted score												
<i>Average</i>	36.5	35.6	37.2	36.3	35.2	39.1	44.8	43.9	45.4	44.1	43.4	46.9
<i>Congestion</i>	38.8	37.9	39.4	39.1	37.5	42.5	48.9	48.0	49.4	48.5	47.6	51.9
<i>Mobility</i>	35.3	34.2	35.9	34.9	33.7	38.1	43.5	42.4	44.1	42.6	41.8	45.7
<i>Environment</i>	38.2	37.5	38.9	38.2	37.2	40.5	46.6	45.9	47.3	46.2	45.6	48.4

Table 12: MCA Results Vienna High Growth

Vienna Results	Scores High Growth											
	Without Complementary Measures						With Complementary Measures					
	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)	Do Nothing	Cyber-car (inner city)	Cyber-car (PT feeder)	PRT	High tech bus	DMV (city wide)
Social												
Accessibility of key services	-2.4	-1.8	4.6	-1.8	-1.8	-1.3	-2.1	-1.4	5.0	-1.4	-1.4	-1.0
Low income zones non-car accessibility	40.9	40.9	44.7	40.9	41.6	41.1	41.0	41.0	44.8	41.0	41.6	41.1
Number of accidents	-41.4	-41.4	-41.9	-41.8	-41.2	-43.9	-33.4	-33.4	-33.8	-33.7	-33.1	-35.8
Environmental												
Annual CO ₂ emissions	52.8	52.7	52.3	52.9	53.0	52.4	65.2	65.1	64.8	65.3	65.4	64.8
Annual NO _x + PM ₁₀ emissions	66.9	66.9	66.8	66.9	66.9	66.8	70.3	70.2	70.2	70.3	70.3	70.1
Change in area classified as urban	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
Economic												
Average delay in person hours	71.6	72.2	76.8	81.1	72.6	95.1	112.3	112.8	117.2	118.0	113.3	131.6
Financial result	50.0	34.8	33.8	29.8	26.0	50.0	50.0	35.8	35.4	30.9	26.2	50.0
Economic vitality index of target zones	60.6	60.5	60.6	60.5	60.6	60.5	60.5	60.6	60.6	60.5	60.6	60.5
Total weighted score (local)	41.4	40.4	41.6	40.6	39.9	42.7	47.4	46.4	47.7	46.4	45.9	48.3
Rank	3	5	2	4	6	1	3	4	2	5	6	1
Improvement to Do-Nothing		-2%	0%	-2%	-4%	3%		-2%	1%	-2%	-3%	2%
Total weighted score												
<i>Average</i>	39.6	38.7	40.2	39.3	38.2	42.1	47.6	46.7	48.4	47.0	46.3	49.6
<i>Congestion</i>	42.1	41.2	42.6	42.3	40.8	45.6	51.8	51.0	52.5	51.5	50.6	54.7
<i>Mobility</i>	38.2	37.1	38.8	37.8	36.5	40.9	46.1	45.1	46.9	45.3	44.5	48.3
<i>Environment</i>	41.5	40.8	42.2	41.4	40.5	43.7	49.6	49.0	50.4	49.3	48.7	51.4