



CiViTAS FORUM 2016
CIVITAS ANNUAL CONFERENCE | 28-30 SEPTEMBER | GDYNIA

CIVITAS Forum 2016

Long term evaluations of CIVITAS measures in selected European cities: outcomes

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- CIVITAS CAPITAL project “capitalises” on results of CIVITAS to advise on policy to support White Paper and UMP
- Included long-term evaluation of CIVITAS pilot measures
- Today’s presentation:
 - How we selected cities and measures
 - Results from two measures in Donostia – San Sebastian and Funchal
 - Assessment of the long-term evaluation process
 - Conclusions

The process of selecting cities and measures

- Funds available from CIVITAS CAPITAL Activity Fund
- 80+ measure leaders from CIVITAS ARCHIMEDES, ELAN, MIMOSA and MODERN invited to apply
- Two calls in 2015
- Measure leaders asked to show that they could repeat demo project evaluation methods 4-8 years on
- Lack of interest in cities in the long-term evaluation of their measures
 - Measure leaders have left their organisations
 - Unable to collect the data to replicate the methodology
 - Costly exercise, esp. if primary data had to be collected

Participating cities and measures



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CIVITAS Project	City	Measure
CIVITAS ARCHIMEDES	Donostia - San Sebastian	High quality public transport corridors in San Sebastian
CIVITAS ARCHIMEDES	Donostia - San Sebastian	Business district shuttle bus in San Sebastian
CIVITAS ARCHIMEDES	Donostia - San Sebastian	Bus traveller information in San Sebastian
CIVITAS MIMOSA	Funchal	Green PT Line
CIVITAS MIMOSA	Bologna	Road Pricing Policies
CIVITAS MIMOSA	Utrecht	Utrecht road safety label
CIVITAS MIMOSA	Utrecht	City distribution by boat (beer boat)
CIVITAS MIMOSA	Utrecht	More flexible access for cleaner freight traffic (Cargohopper)



Some long-term evaluation results

Donostia - San Sebastian



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- Measure 16: High Quality Bus Corridors
- Main aim of the measure was to encourage people to increase their use of public transport instead of driving their cars or motorbikes
- On two corridors better buses, bus priority, information, new stops etc (bus lines 5 and 28)
- Intended benefits better air quality, lower carbon emissions and reduced noise levels
- Measure implemented within CIVITAS ARCHEMEDES (2008 – 2011)
- Re-evaluated in 2015



Some long-term evaluation results

Donostia – San Sebastian (2)

Indicators used (according to the common CIVITAS evaluation framework)

- **Economy**

- Operating revenues
- Capital costs
- Operating costs
- Maintenance costs

- **Society**

- Feeling of security
- Public perception level

- **Environment**

- CO₂ emissions
- CO emissions
- NOx emissions
- Particulate emissions

- **Transport**

- Accuracy of timekeeping
- Quality of service
- Injuries and deaths caused by transport accidents
- Average speed of buses along the corridors
- Number of PT passengers
- Average journey time
- Number of private cars entering the city along the CIVITAS corridors

Some long-term evaluation results Donostia – San Sebastian (3)

Indicators – Economy

- A decrease in revenues between 2011 and 2015, but regained in 2015
- Capital costs per km maintained decreasing trend since 2011
- Increase in operating and maintenance costs during 2006 – 2011 (higher maintenance of the enlarged bus fleet and higher labour costs)
- These costs stabilised in 2015, or started to fall

		Baseline 2006	After 2011	LTE 2015
Operating revenues (€/km)	Real	4,21	5,22	5,14
	BaU	4,21	4,73	4,83
Capital costs (€/km)	Real	0,00	0,09	0,01
	BaU	0,00	0,00	0,00
Operating costs (€/km)	Real	3,08	3,65	3,73
	BaU	3,08	3,46	3,53
Maintenance costs (€/km)	Real	0,36	0,42	0,42
	BaU	0,36	0,40	0,41

Some long-term evaluation results Donostia – San Sebastian (4)

Indicators – Environment

- A traffic model used within ARCHIMEDES, but no longer available for the LTE
- Instead, used survey of 1500 PT users of lines 5 and 28 to investigate their perception of the improvements implemented by DBUS and the factors affecting modal shift
- 5.52M car km and 0.35M motorbike km per year saved
- Following annual emission savings estimated but not comparable to 2011 results :

	CO ₂	CO	NOx	PM
Emission savings (Tonnes per year)	689,4	12,4	2,7	0,1

- Most important factors affecting modal shift were (in this particular order):
 - Comfort
 - Punctuality
 - Time savings
 - Safety
 - Environmental image
 - Good information

Some long-term evaluation results Donostia – San Sebastian (5)

Indicators – Society

- The public perception of different measures implemented by DBUS measured by a survey of 1500 users of lines 5 and 28 (12% of the daily passengers) in 2011 and 2012; survey repeated in 2015:
 - Punctuality, reduced journey times ranked very high during ARCHIMEDES
 - Perception even better in 2015 – quality standards have been maintained and even improved

	2006	2011	2015
Feeling of security	n/a	8,0	8,0
Public perception level (effectiveness)	n/a	8,9	9,1

Some long-term evaluation results

Donostia – San Sebastian (6)

Indicators – Transport

- PT users up 9.6% 2006 – 2011
- 40% of all new users formerly used car or motorbike
- Passenger numbers dropped in 2012, but due to new integrated ticketing system, and not measure-related; numbers increased in 2015
- Traffic volumes decreased in 2011, but numbers up again in 2015
- Increase in number of cars NOT measure-related, due instead to economic recovery since 2013
- Other positive impacts, such as punctuality of bus services, accuracy of timekeeping, quality of service, safety aspects have been maintained and even improved

	Number of public transport users		Number of private cars on CIVITAS corridor/day	
	Real	BaU	Real	BaU
2006	26.670.005	26.670.005	51.343	51.343
2011	29.216.698	26.907.709	43.720	44.015
2015	28.233.941	27.101.968	44.762	n/a

		2006	2011	2015
Quality of service	Real	7,3	7,6	7,8
	BaU	7,3	6,7	6,7

		2006	2011	2015
Injuries and deaths caused by transport accidents	Real	4,2	3,6	2,4
	BaU	4,2	4,0	n/a

- Measure FUN 2.1: Green Public Transport (PT) Line
- Measure created bus line to provide efficient high performance PT service in corridor with lots of hotels
- High service frequency on main corridor but with fewer bus km overall
- To encourage residents and tourists to use public transport instead of taxis or private cars
- Introduced a marketing tool called “Tourist Kit”, allows tourists to buy PT tickets direct from their hotels in target area
- Part of CIVITAS MIMOSA (2008 – 2011)
- Re-evaluated in 2015 - 2016

Some long-term evaluation results Funchal (2)

Indicators used (according to the common CIVITAS evaluation framework)

- **Economy**
 - Operating revenues
 - Operating costs
- **Environment**
 - NO_x emissions
 - CO₂ emissions
 - PM10 emissions
- **Society**
 - Hotel adhesion
 - Number of spatial equipment/layout in target area bus stops
 - Number of wheelchair users
- **Transport**
 - Quality of service
 - Number of PT users
 - Number of PT related accidents in target area
 - Traffic level
 - Commercial speed of PT service

Some LTE results – Funchal (3)

Indicators: Economy and Environment

- Project period increase revenue, decrease in costs - continued

Indicator	Difference (%) 2011–2008	Difference (%) 2011 – B-a-U (2011)	Difference (%) 2015 – B-a-U (2015)
Op. revenues (€)	10%	8%	17%
Op. costs (€)	-13%	-27%	-49%

- Project period decrease in air pollution - continued

Indicator	Difference (%): 2011–2008	Difference (%): 2011 – B-a-U (2011)	Difference (%): 2015 – B-a-U (2015)
NO _x (t)	-27%	-29%	-39%
CO ₂ eq (t)	-13%	-15%	-27%
PM10 (t)	-47%	-49%	-56%

Some LTE results – Funchal (4)

Indicators: Transport

Indicator	Difference (%)	Difference (%)	Difference (%)
	2011–2008	2011 – B-a-U (2011)	2015 – B-a-U (2015)
Number of PT users (tickets sold)	0,2%	0,2%	23,3%

Indicator	Before (2006)	B-a-U (2012)	Shortly after (2012)	B-a-U(2016)	Long-term effect (2016)
Traffic level (total number of cars)	29,463	25,044	21,900	22,097	23,760

Setting up process

- Many cities just not interested – no longer a priority
- Other political influences (e.g. change of political power) and/or instabilities were also reported

Replicating methodology of original project evaluations:

- Same data sources/methodologies no longer available
- Resources from CAPITAL not enough
- Choosing business as usual (B-a-U) scenario

Other stuff going on affects long term impacts

- Changes in framework conditions/background “noise”

Conclusions

- Long term results from measures evaluated in CAPITAL - positive
- Collecting data on a regular basis is crucial. Participating cities recommended that a range of key performance indicators are monitored and used for a basic assessment of measures on a yearly basis.
- Timeframe of 4-5 years after completion of pilot project thought to be optimal for long-term evaluation
- Needs reasonable resources
- Difficult to isolate one intervention from a whole series of actions to determine the contribution of one particular measure to, say, modal split
- LTE - 'a learning experience', chance to look at processes and re-evaluate previous decisions



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Thank you!

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organization/city



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