

Analysis of illegal parking behavior in Greece

Christina Spiliopoulou & Constantinos Antoniou

Presentation: Christina Spiliopoulou

Second Joint EPA-Polis Parking Workshop
20 September 2012, Helsinki

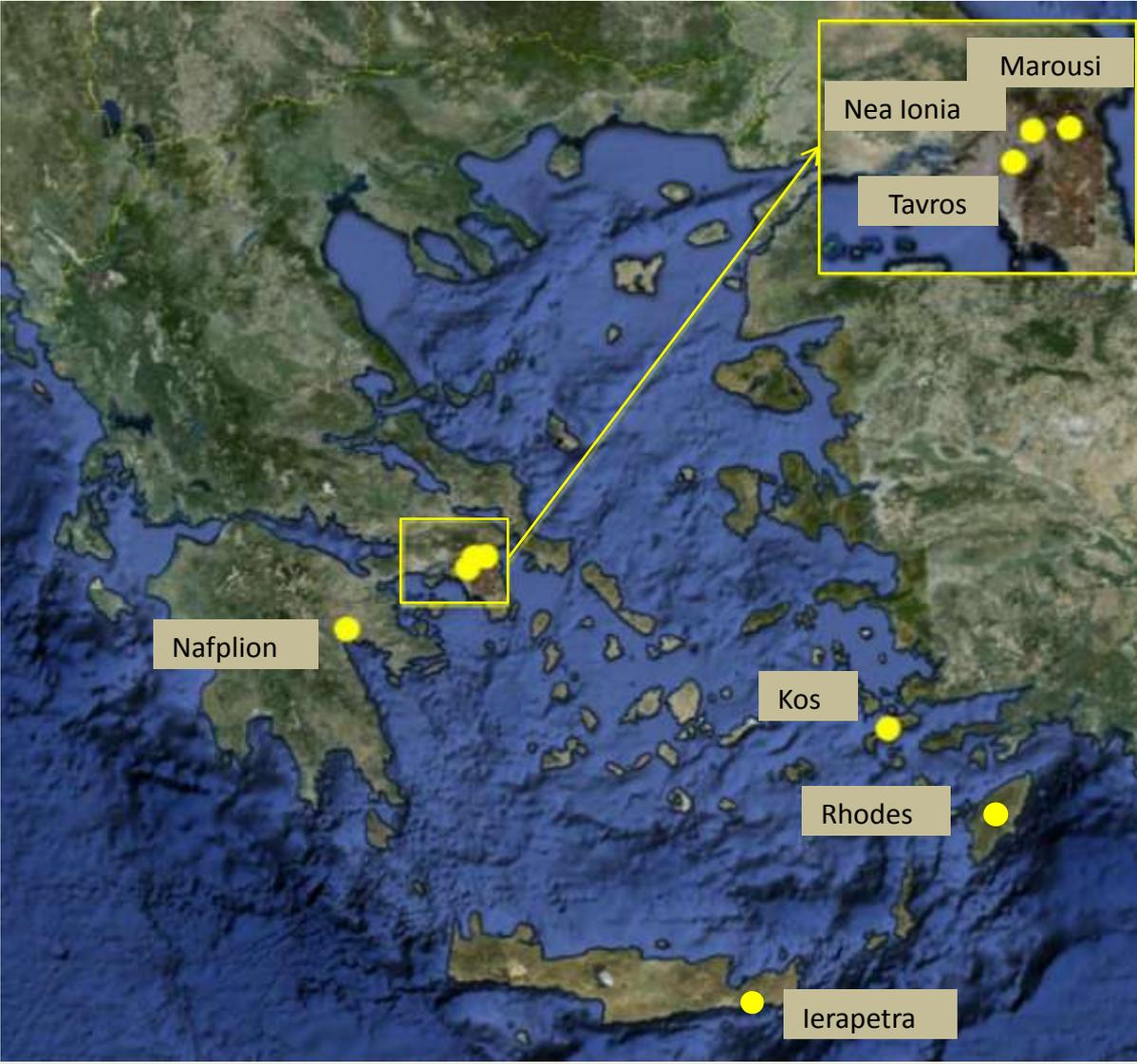


City of Helsinki
City Planning Department



Analysis of parking behavior
based on parking surveys
conducted at 7 Greek cities

Evolution of the
controlled parking system
established in Athens
municipality on 2006



Seven Greek cities

3 urban cities within the Athens conurbation

4 smaller provincial cities

**U
R
B
A
N**

CITY	PRIMARY LAND USES	COMMENTS
Marousi	Commercial /services, residential	Two examined areas: One that includes an urban train station and one that is mostly residential / commercial
Nea Ionia	Commercial /services	The examined area includes an urban train station
Tavros	Residential	Two areas are examined: One that includes an urban train station and one that is mainly residential.

**R
U
R
A
L**

Ierapetra	Commercial /services, residential	Touristic region. Data for summer and winter period.
Kos	Commercial /services, residential	Touristic region.
Rhodes	Commercial/services	Touristic region.
Nafplion	Residential	Data for three days: Friday, Saturday and Sunday.

Parking data from traffic studies performed during the last 8 years

Parking survey conducted:

- Typical day
- Typical route
- 06:00 - 21:00

Data analyzed and compared:

- Parking accumulation diagrams
Hourly demand for parking supply
Fluctuations

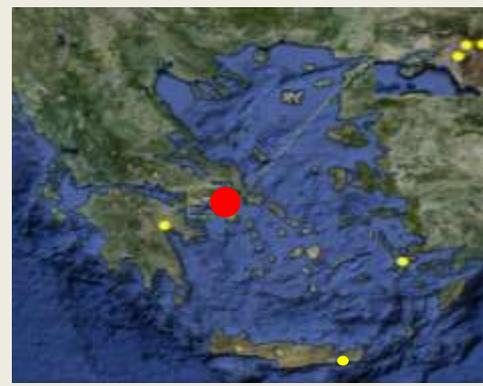
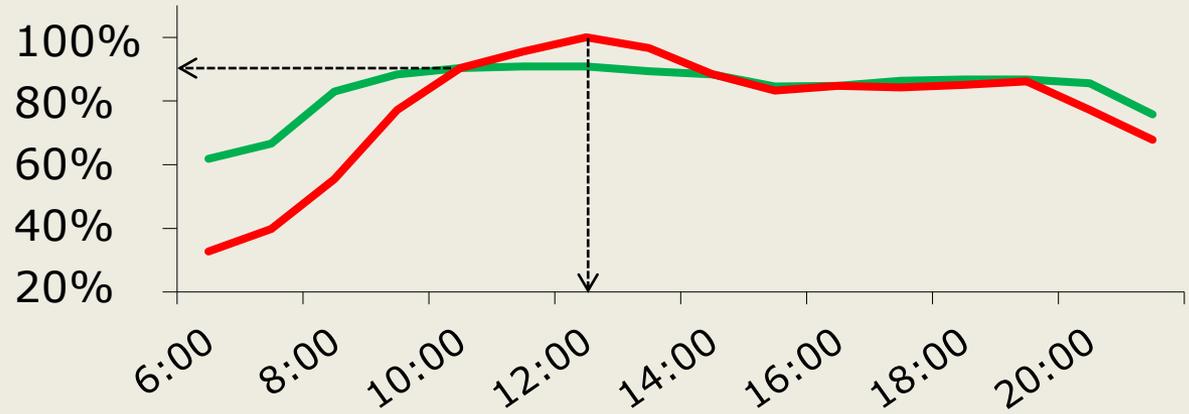
Separate data for legal and illegal parking



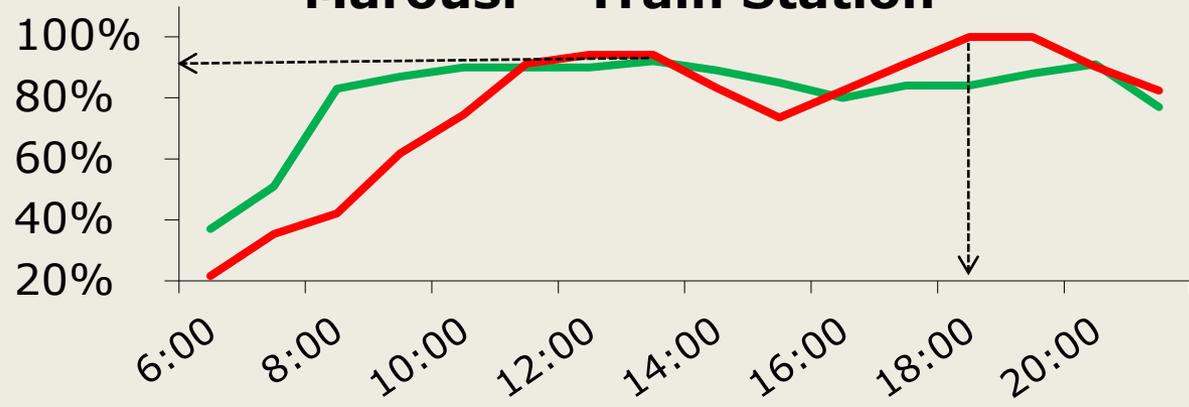
Direct comparison of fluctuation and behavior

PARKING ACCUMULATION DIAGRAMS

Marousi Residential / Commercial area

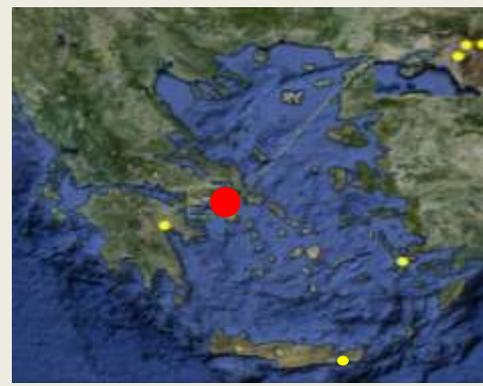
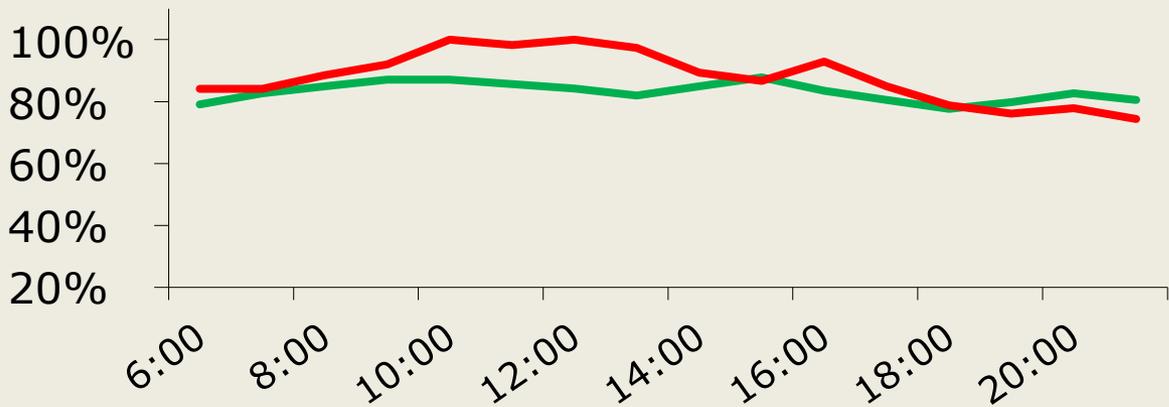


Marousi – Train Station



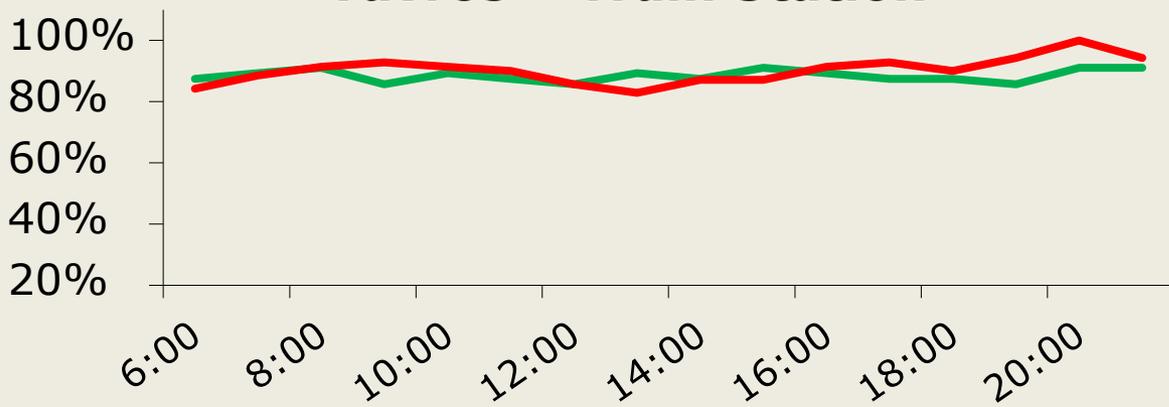
— Legal parking
 — Illegal parking

Tavros – Residential



Many social housing blocks and warehouses in the area

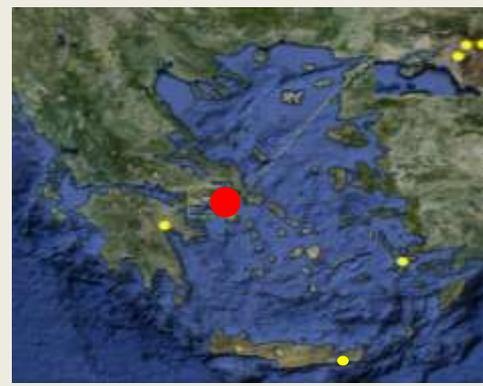
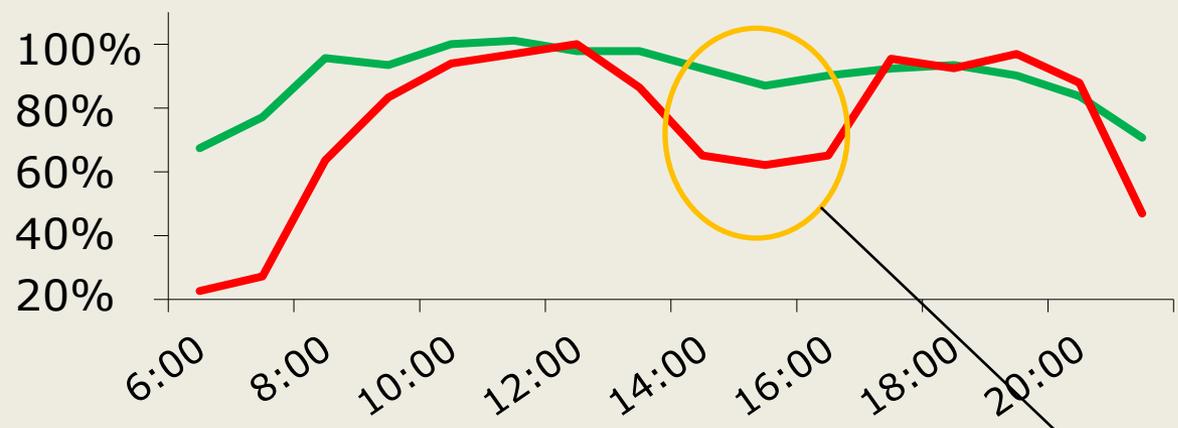
Tavros – Train Station



Many apartment buildings in the area

— Legal parking
— Illegal parking

Nea Ionia – Train station



— Legal parking
 — Illegal parking

URBAN AREAS

Parking demand raises from

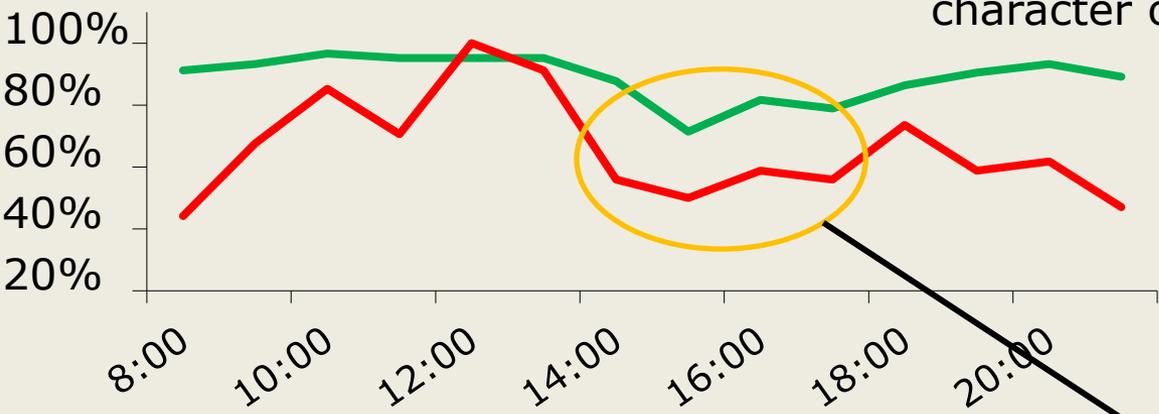
- People who will take the train and go to work
- People who want to shop

Parking demand influenced by income

Commercial character:
 Shops are closed 15:00-17:00

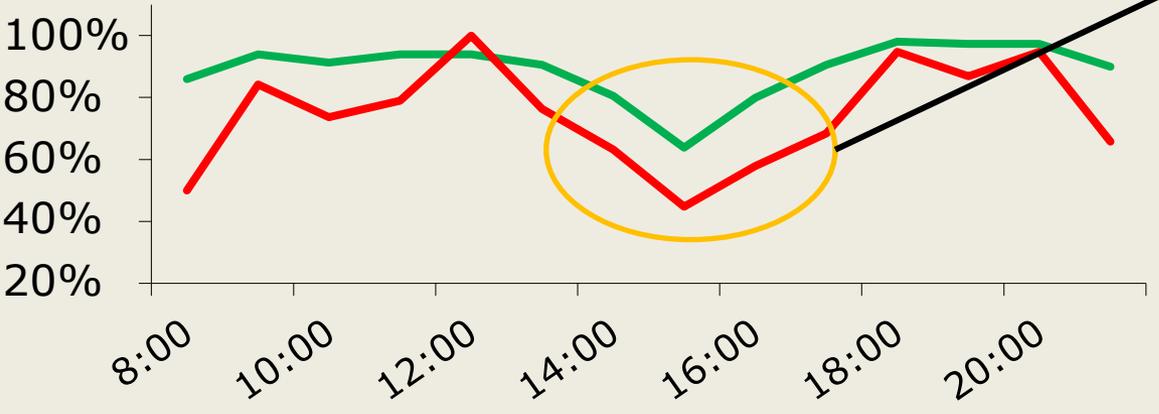
Ierapetra - Summer

Higher demand due to the touristic character of the area



Ierapetra - Winter

Decrease revealing:
 • Commercial character
 • The fact that people tend to return at home for their lunch break



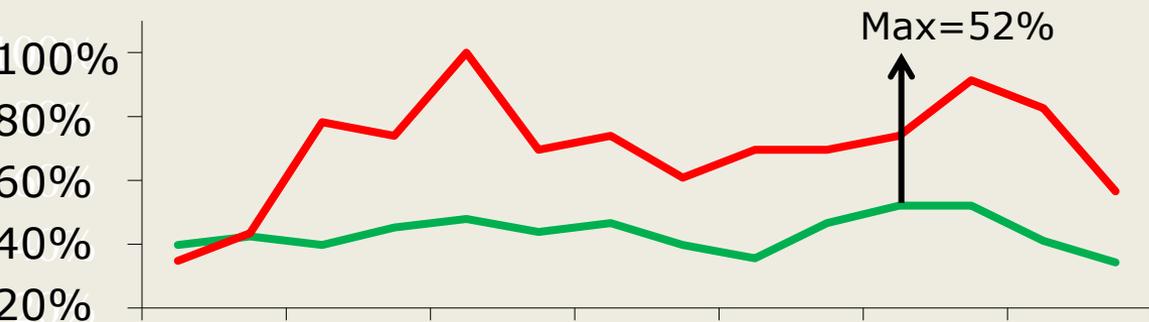
— Legal parking
 — Illegal parking



Nafplion Friday



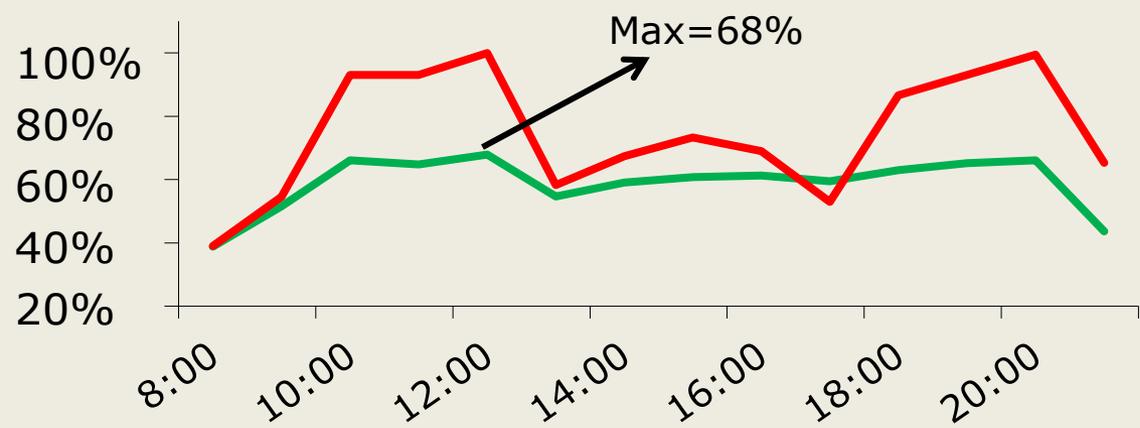
Nafplion Saturday



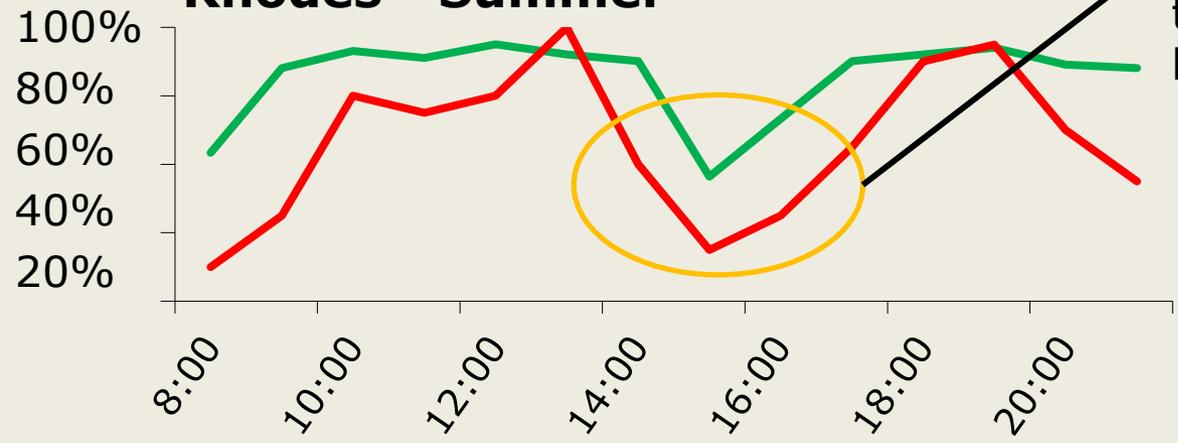
Nafplion Sunday

— Legal parking
 — Illegal parking

Kos - Summer



Rhodes - Summer



Decrease revealing:
 •Commercial character
 •The fact that people tend to return at home for their lunch break

— Legal parking
 — Illegal parking

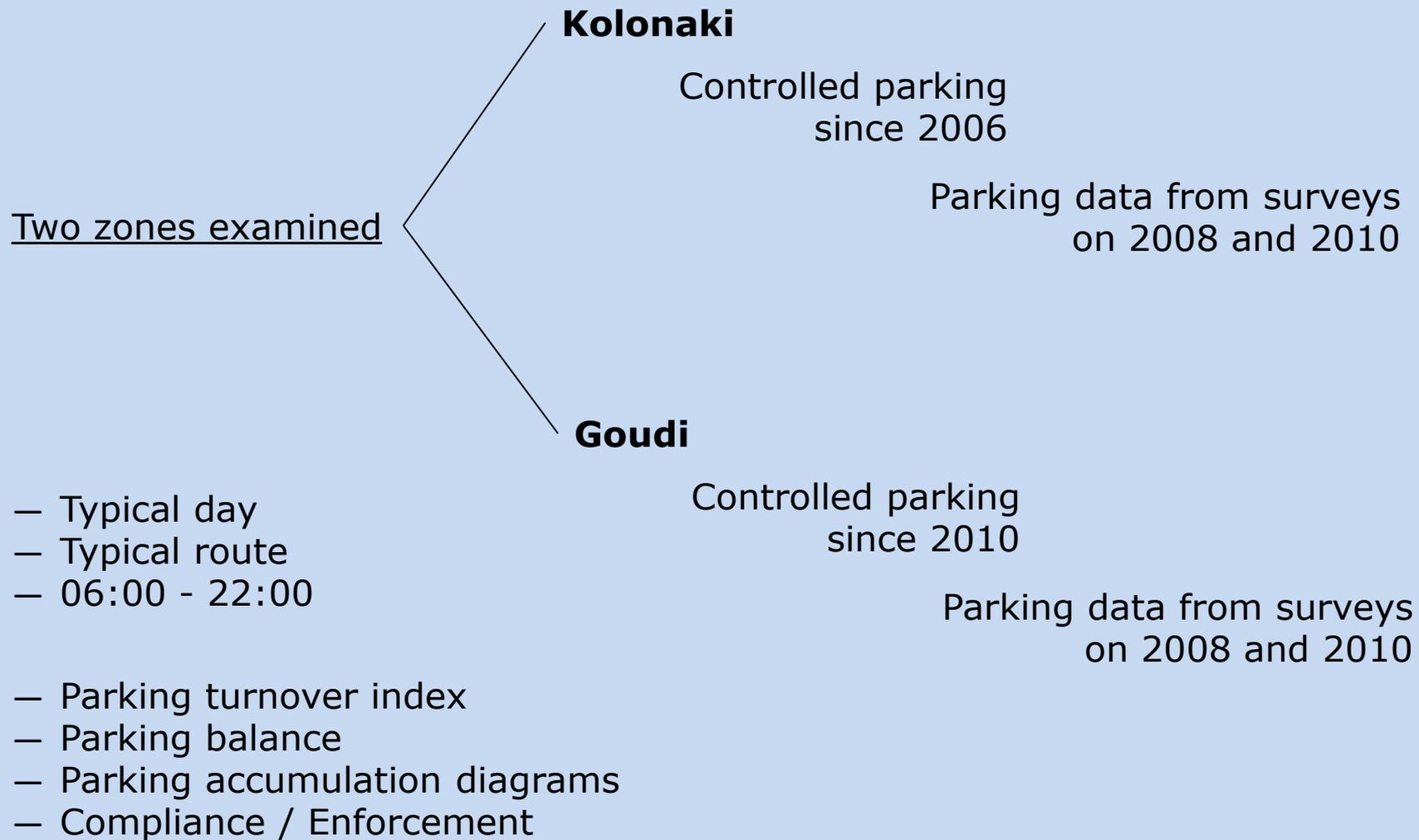
URBAN AREAS

- Illegal parking occurs rationally, after the legal parking spaces begin to saturate
- Diagrams reveal the main land use of the studied areas
- Diagrams reveal the car use at the studied areas, probably related to the level of income

RURAL AREAS

- Illegal parking serves people's convenience to park as near to the destination as possible
- Illegal parking linked to low enforcement probably deriving from the fact that policemen may know the violators personally
- Residents tend to return home for the lunch break, something that is reflected in a decrease of parking accumulation





Parking turnover index

Measured in vehicles/parking space/study period.

Reveals how many times a parking space is used throughout the study period.

KOLONAKI			
	Residents Zone	Visitors Zone	Illegal parking
2008	2.2	5.8	4.5
2010	1.8	5.1	3.2

GOUDI		
	Legal parking	Illegal parking
2008	2.4	3.0
2010	Residents Zone	Visitors Zone
	2.2	4.8
		3.8

KOLONAKI

- Residents zone: low parking turnover, thus high parking durations
- Visitors zone: satisfactorily high despite the drop on 2010

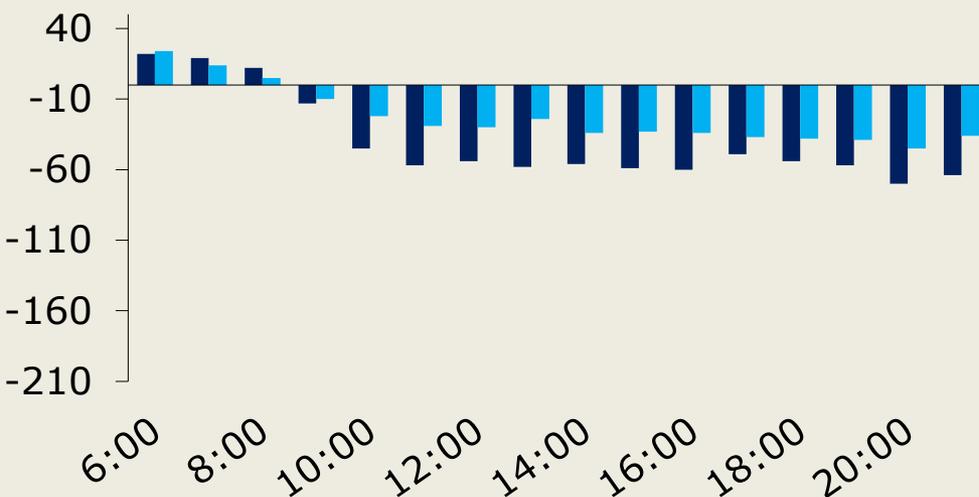
GOUDI

- Rise of the index at the visitors zone and decrease at the residents zone revealing the expected influence of the controlled parking system

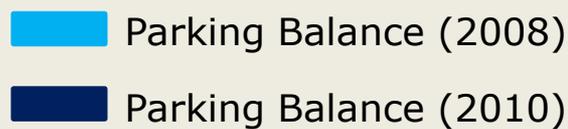
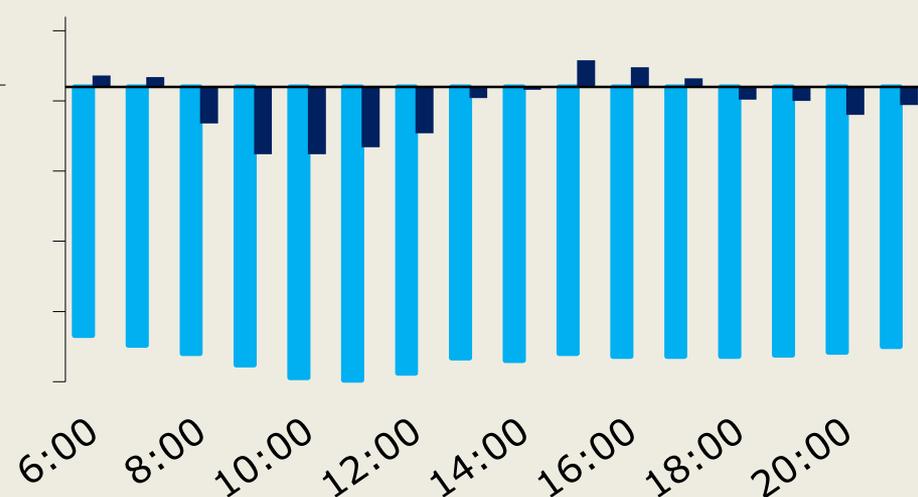
Parking Balance

Defined as the parking supply minus the parking demand, hourly.
Reveals the parking excess or deficit in an area.

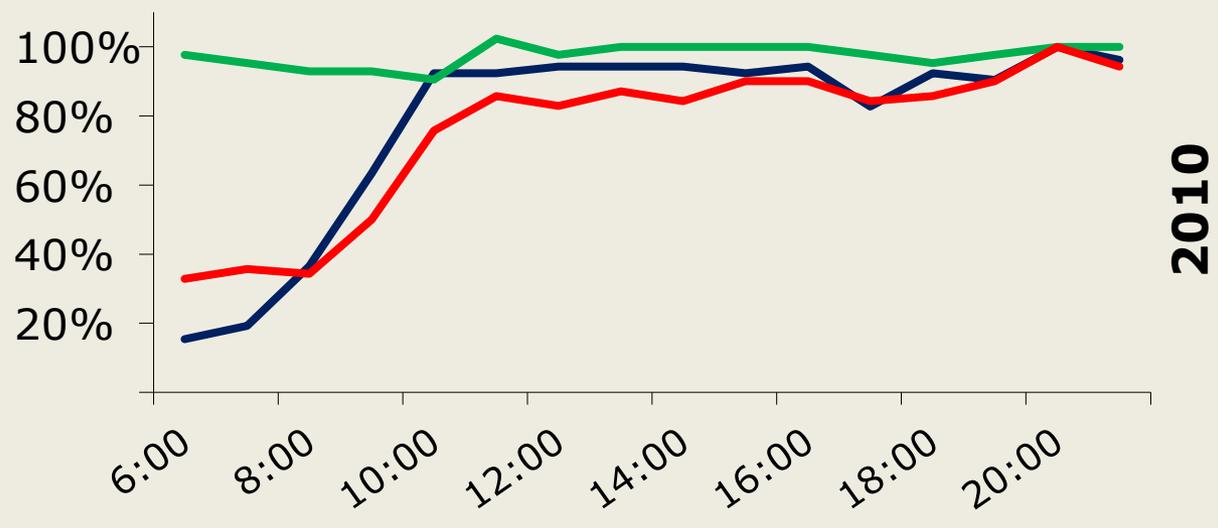
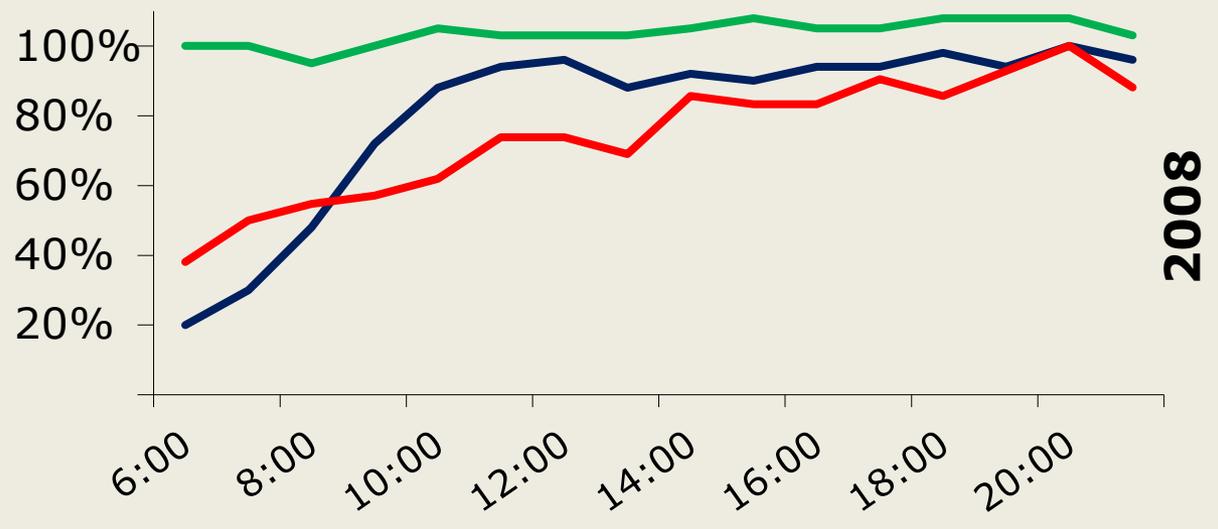
Kolonaki



Goudi

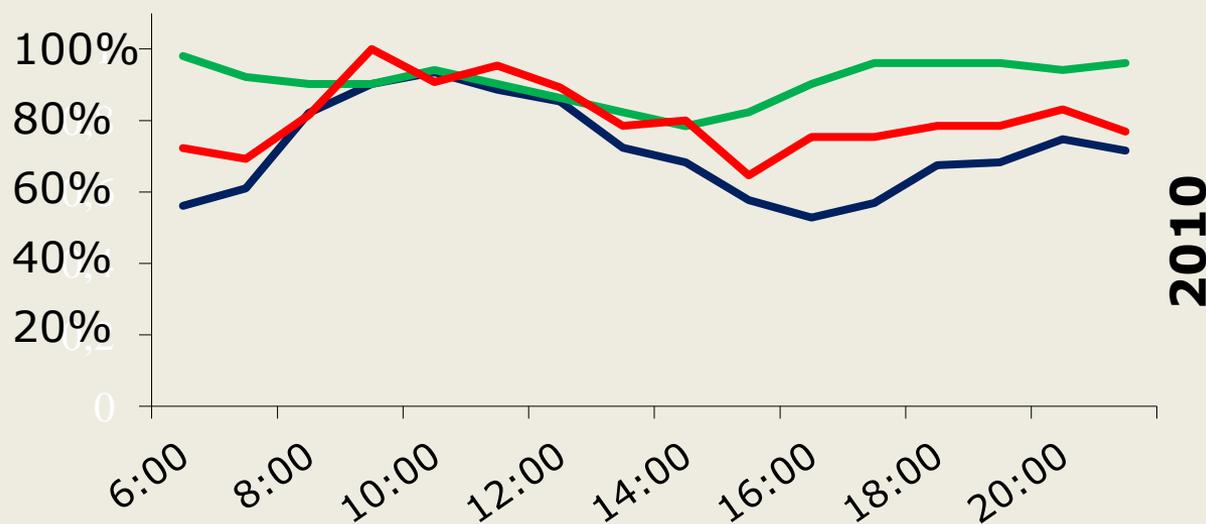
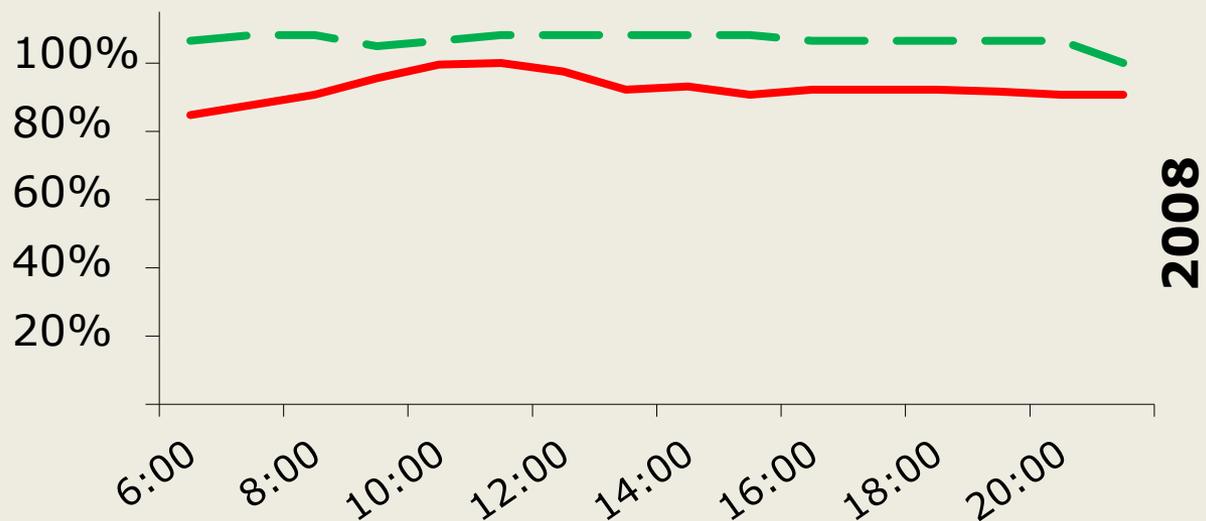


Accumulation - Kolonaki



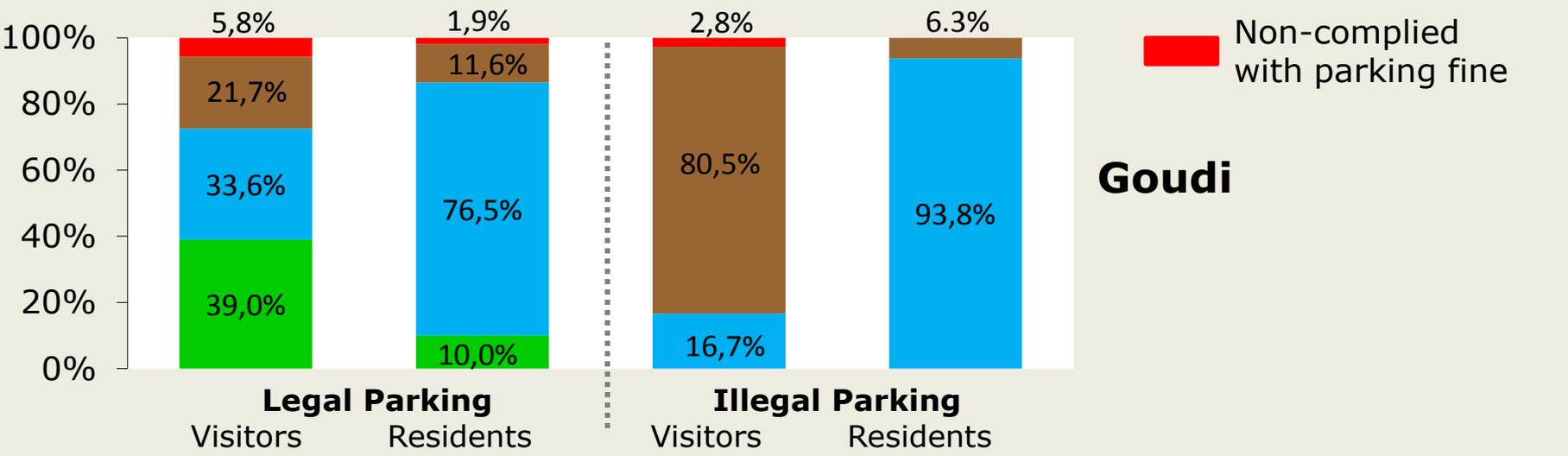
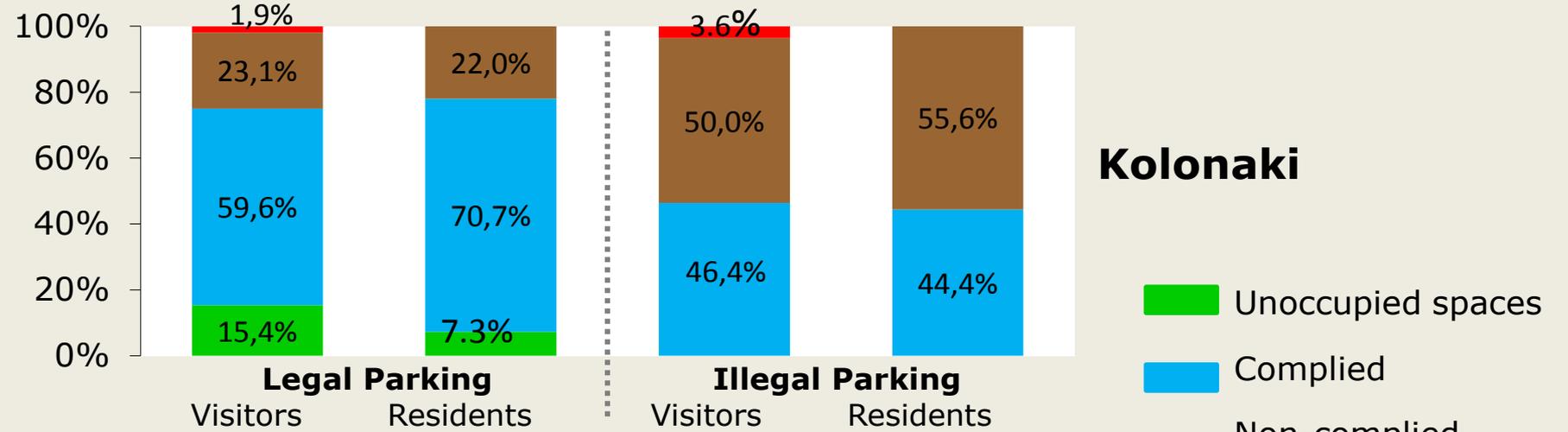
- Residents zone
- Visitors zone
- Illegal parking

Accumulation - Goudi



- 2008:Legal parking
- Residents zone
- Visitors zone
- Illegal parking

Enforcement / Compliance (2010)



Concluding . . .

- At rural areas illegal parking is usual in order to park near to the destination and enforcement is minimum whereas at urban areas illegal parking occurs when the legal places begin to saturate.
- At areas with lower income, parking behavior reveals the use of public transport.
- The controlled parking system in Athens functions satisfyingly in terms of parking turnover and parking balance.
- The accumulation diagrams reveal a rational illegal parking behavior.
- Need for better enforcement, especially at the illegally parked vehicles.

Thank you very much!

Christina Spiliopoulou
cspiliopoulou@gmail.com

Second Joint EPA-Polis Parking Workshop
20 September 2012, Helsinki

