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The performance of Park and Ride within the context of a changing transport infrastructure: the case of Malta

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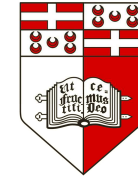
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Sustainable Mobility in Malta: Transport Research in Practice

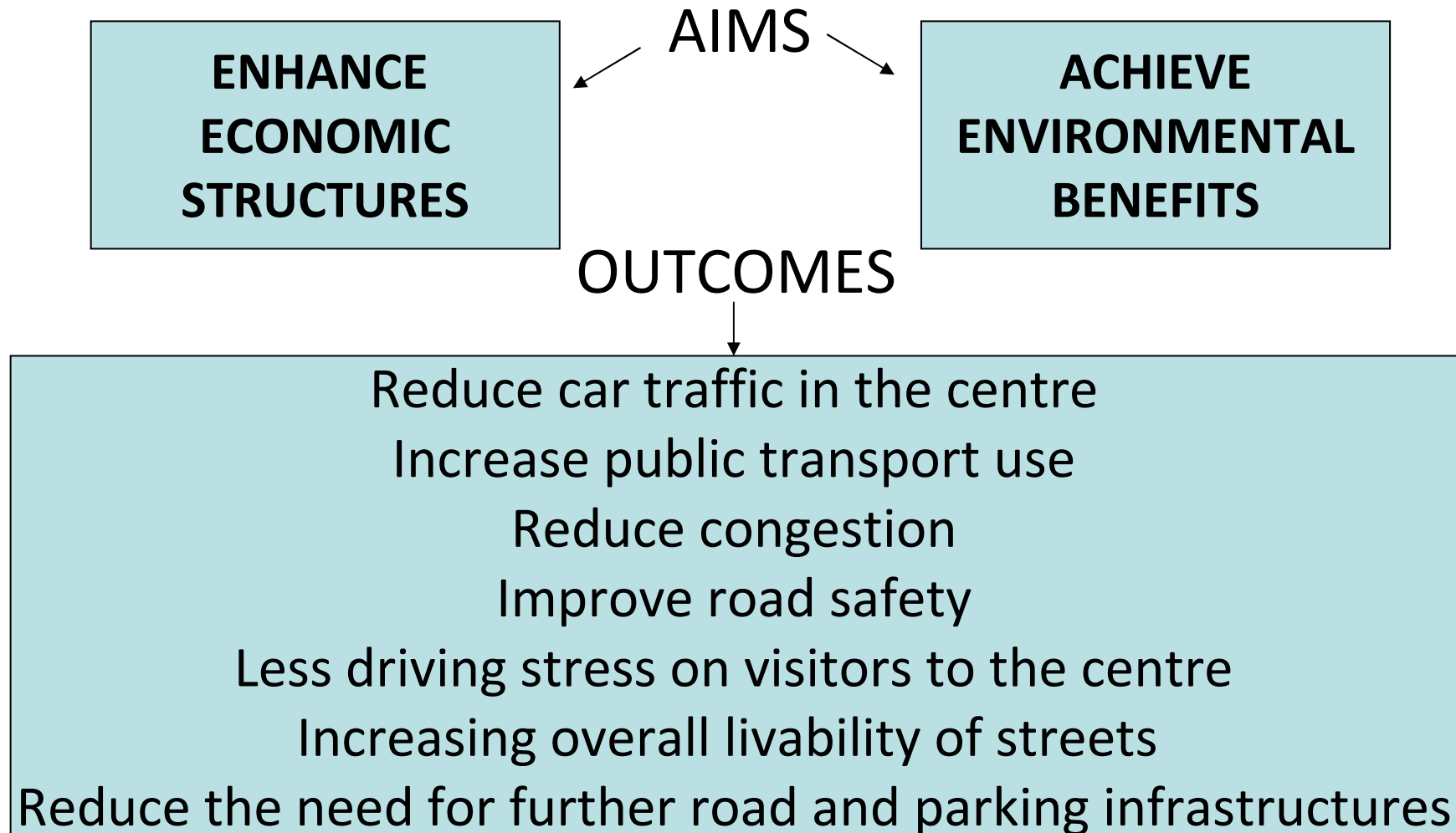
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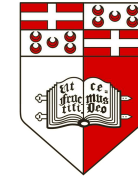
Park and Ride: Overview of the Policy



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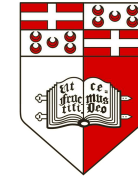
Main Criticism for P&R



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- Parkhurst (1995; 2000) identified four unintended effects of P&R including
 - a modal shift from public transport,
 - a lack of evidence of decongestion,
 - generation of new car trips, and
 - increased car dependence.

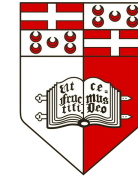
Objectives of the research



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- To present an overview of the development and implementation of P&R in Malta
- To investigate aspects of P&R user behaviour over the period 2006-2011.
- To understand the performance of P&R within the changing context of land transport in the island, and
- To map out the future role of P&R within the increasing need for travel demand management

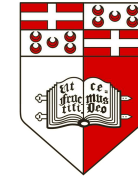
Methodology



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- Survey questionnaires to P&R users about their characteristics and travel behaviour.
- Average of 460 questionnaires collected each year during December between 2006 and 2010. Only half were collected in 2011.
- Secondary sources of information such as policy documents and data published by Government during and after the implementation supplement the research.

Park and Ride in Malta

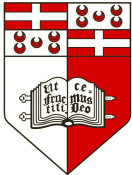


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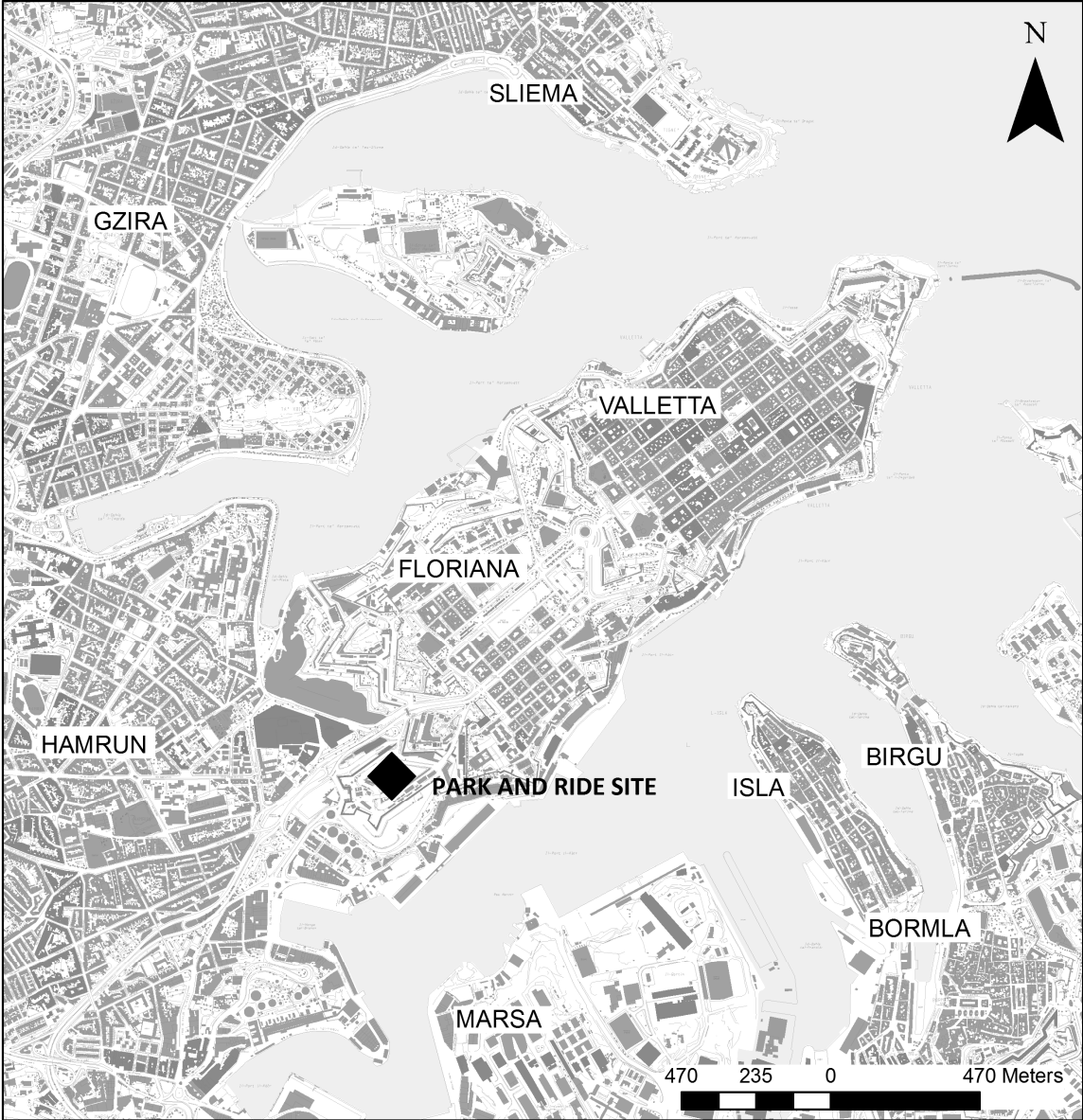
- Proposed in 1992 Structure Plan (Policy PTR10).
- Approved in the Grand Harbour Local Plan in 2002 (Policy GF20 identified the Crownworks and Hornworks Ditch area as suitable site).
- The Cabinet Committee for National Projects published its intentions to develop P&R in 2005.

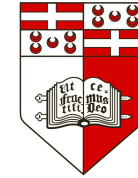


Site and Situation



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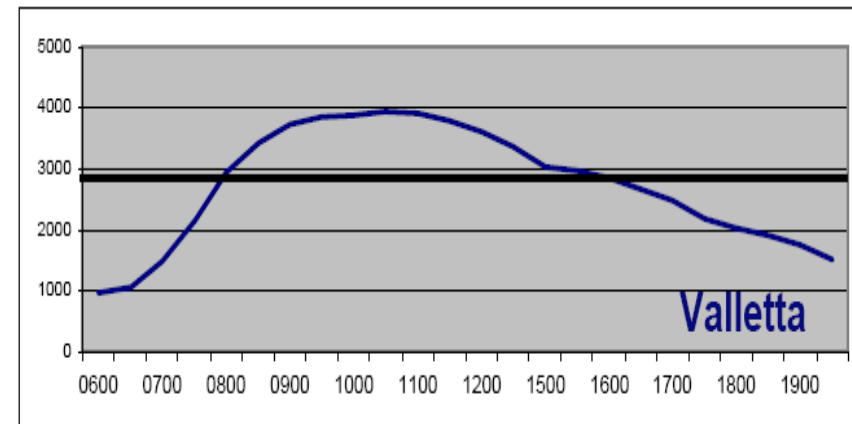




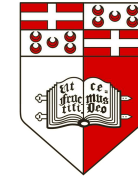
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Parking and the City

- Valletta, a walled city just 0.8km² in area.
- Competing land uses (residential, office and commercial) in a limited space.
- With just under 3,000 parking spaces in 2004, patterns of utilization were unsustainable.
- Resulting effects of congestion, pollution, and legalisation of parking on pavements.



The 2005 Valletta Strategy



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Objectives of the Strategy

- Improve the quality of life of its residents
- Improve its general environment and appearance
- Enhance commercial activity

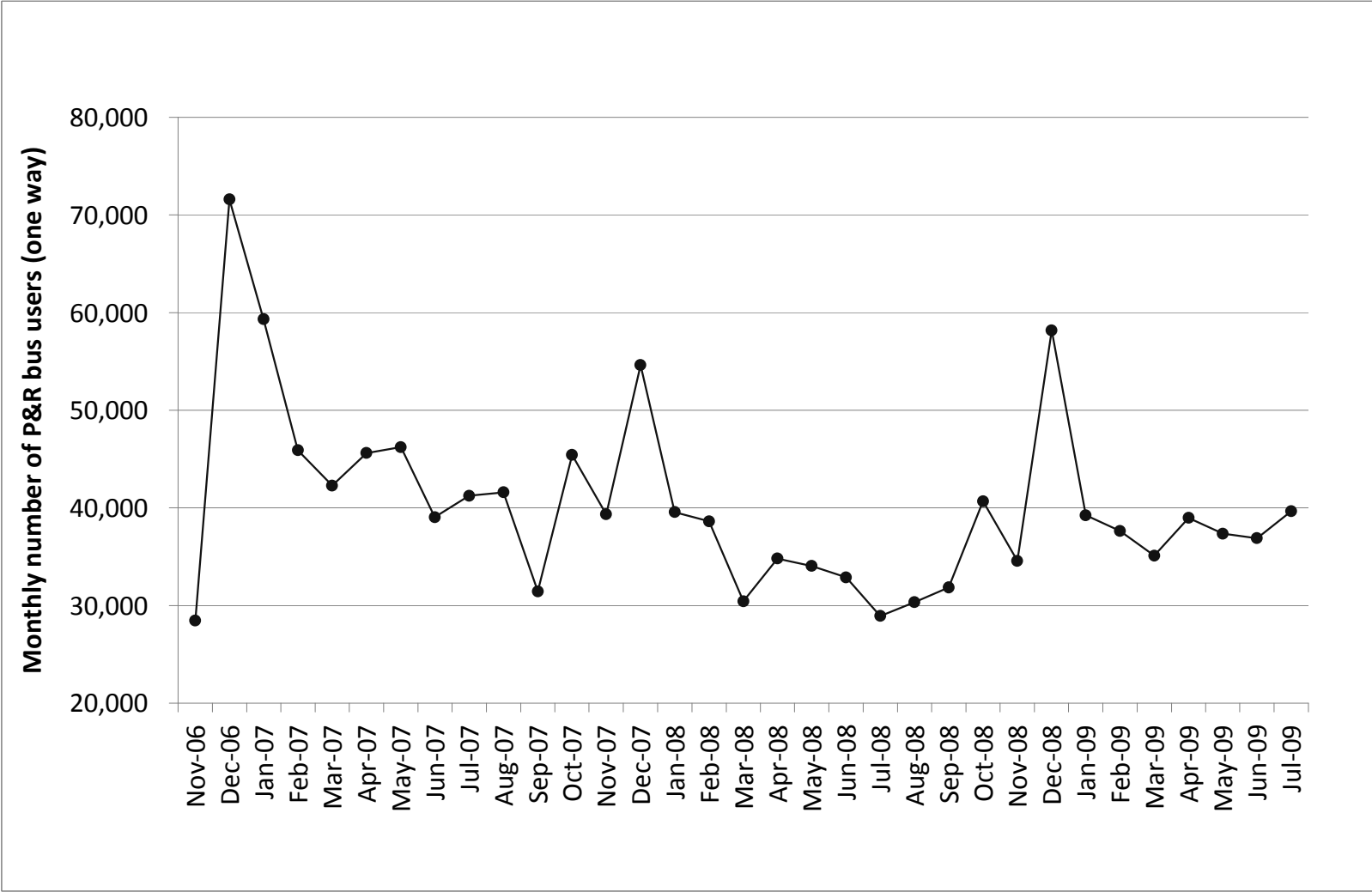
Projects included

- Park and Ride in Floriana (6 Nov 2006)
- Controlled Vehicular Access in Valletta (1 May 2007)
- Pedestrianisation of Merchant Street (1 May 2007)
- Electric Minicabs in Valletta (June 2007)

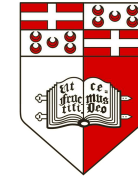
P&R Bus Usage 2006-2009



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Financial Sustainability



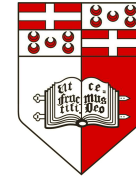
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- Concerns were also raised about the financial sustainability of the free P&R.

Infrastructural and operating costs (in Euros) of the Valletta P&R. Source: Government of Malta, 2010.

	2005	2006	2007	2008	2009	2010
Infrastructure Costs	173,195	749,501	300,601	174,906	158,099	2,993
Operating Costs	-	64,473	581,866	661,846	650,512	519,432

Changes to the P&R Policy



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- Valletta Park and Ride was subsequently tendered with the provision of the scheduled bus service (the Public Transport Reform).
- Charges were introduced for the use of the service as from July 2011.
- Two new sites were opened, in Pembroke and Marsa.

Trip Attraction



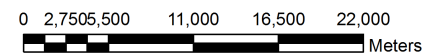
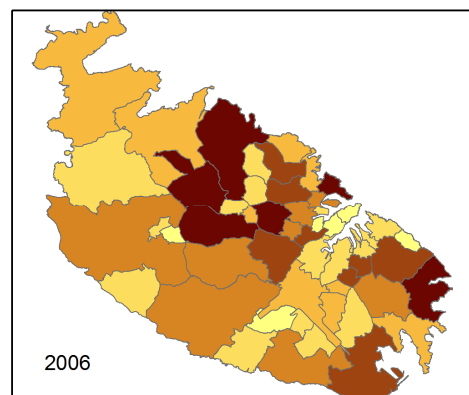
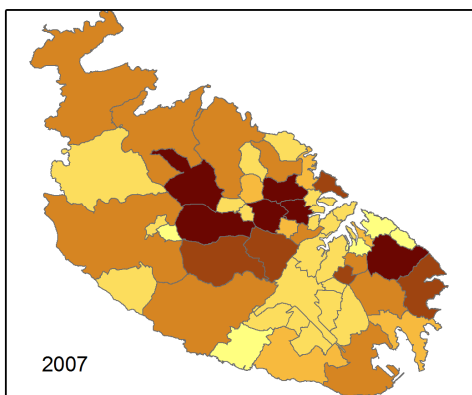
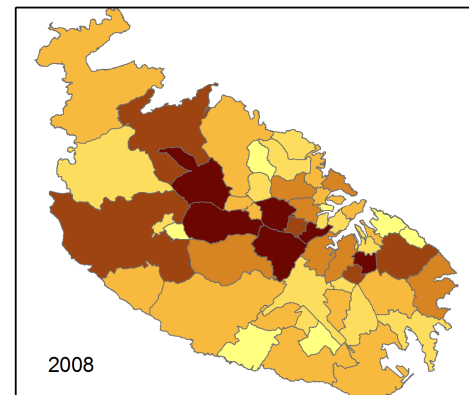
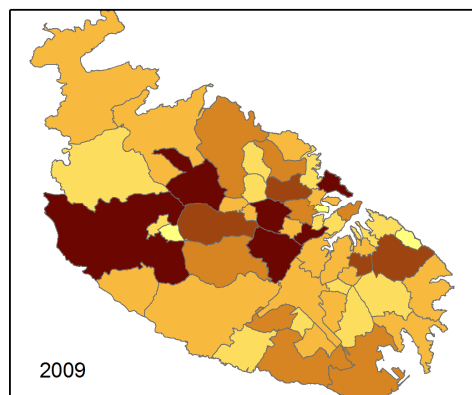
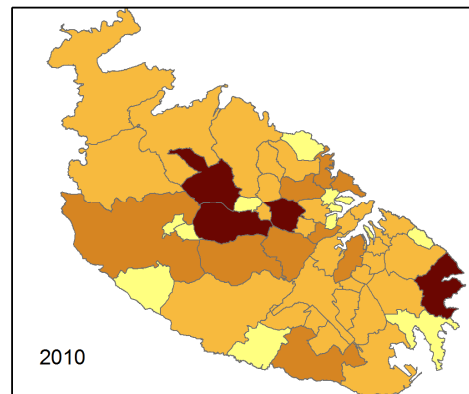
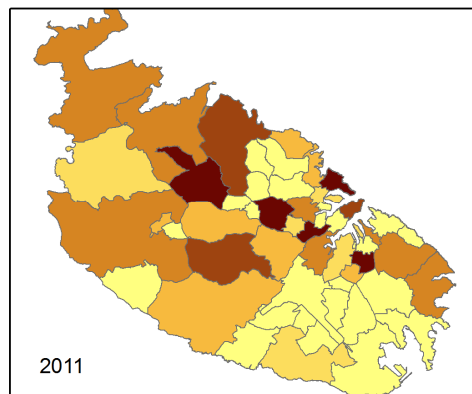
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- In December 2006, 11% of the trips made to the P&R were new trips (53% of which were for the purpose of shopping).
- Over the period 2006 and 2011 trip attraction changed geographically.

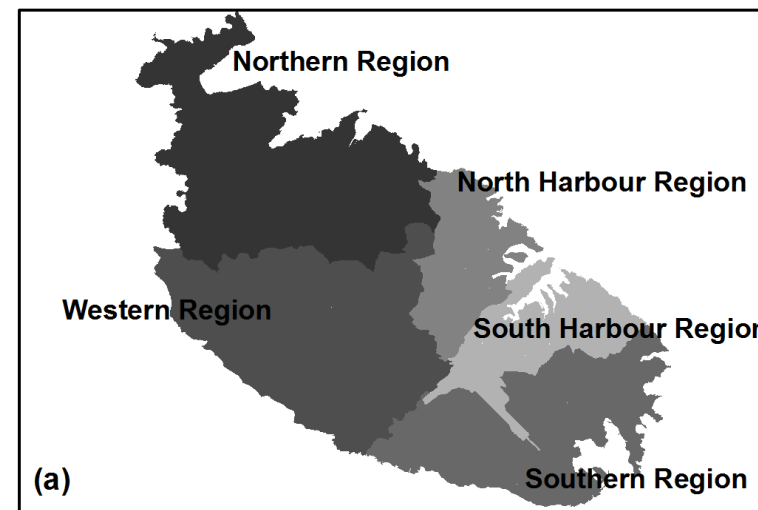
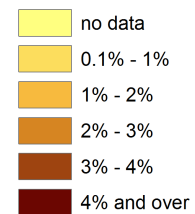
% Change in kms travelled to the P&R 2006 - 2011	
South Harbour Region	+ 5%
Northern Region	- 3%
Central Region	- 6%
North Harbour Region	- 6%
Southern Region	- 8%



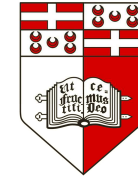
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Legend

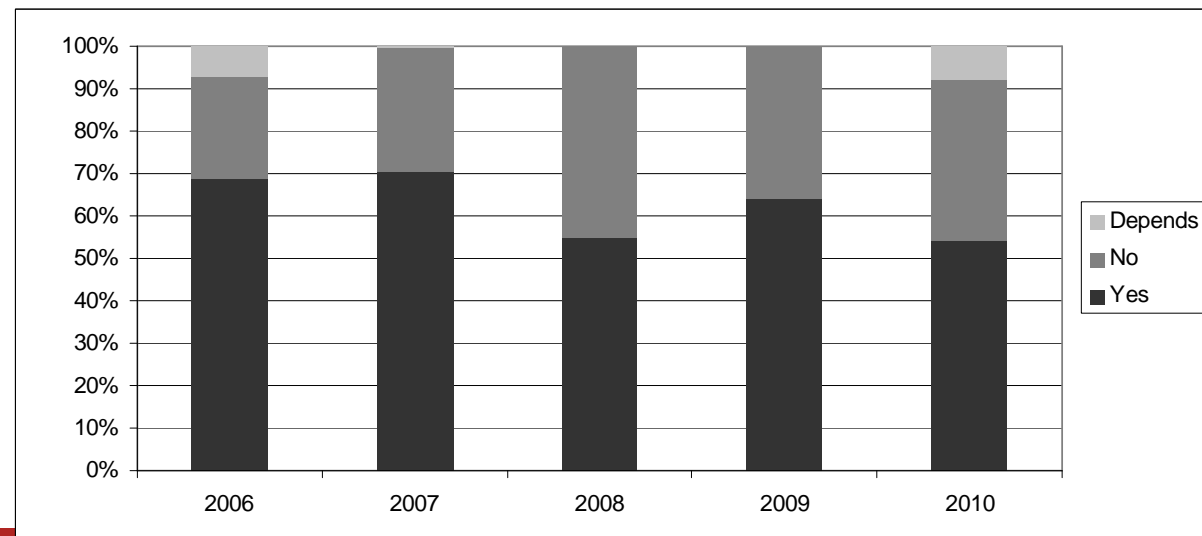


User Preference with a Fee

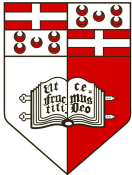


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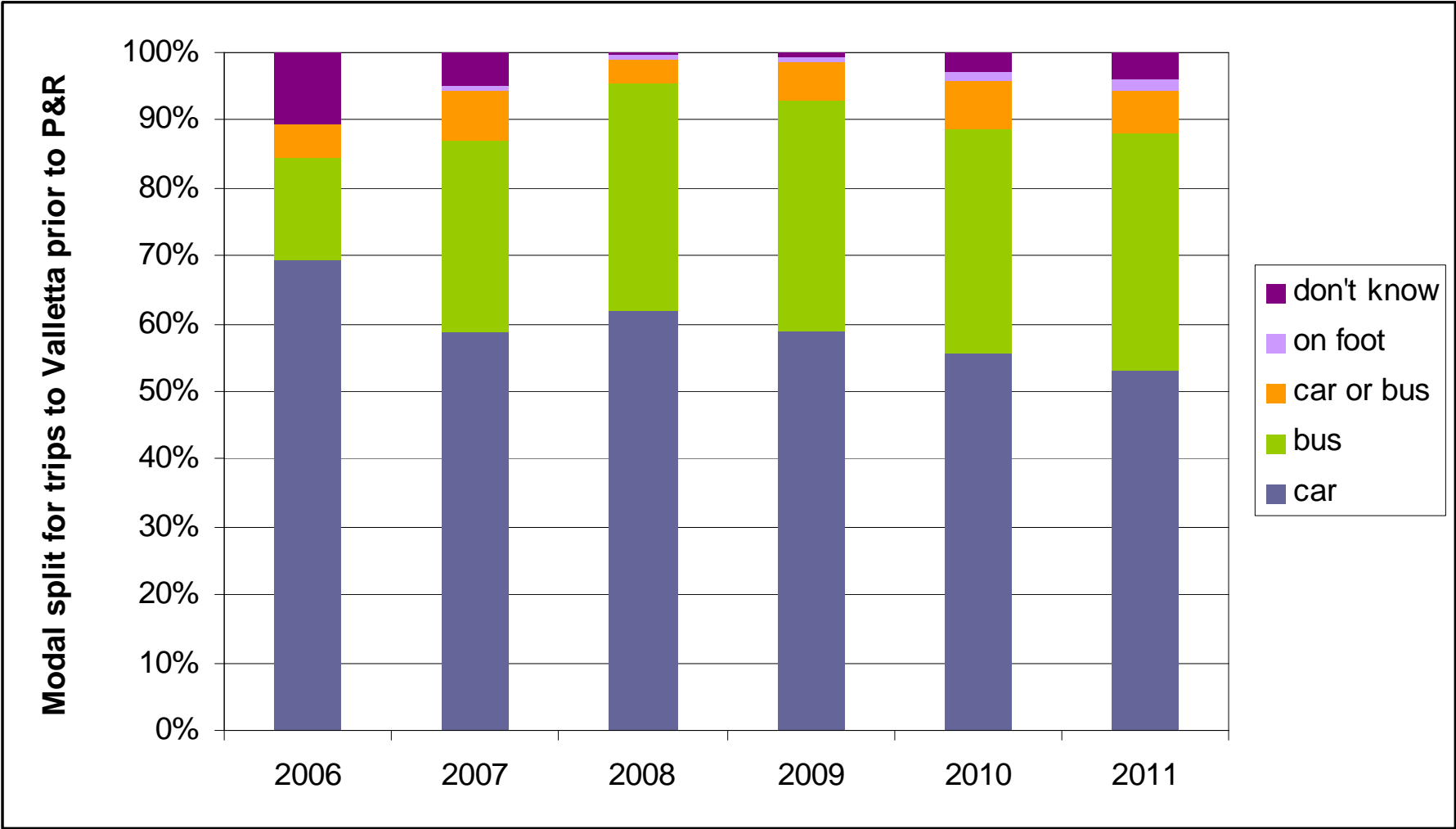
- Between 2006 and 2010 over 50% of users claimed they would still use P&R if a charge was introduced.
- Following the introduction of the charge 62% of users said that the charge had not effected their use of P&R.



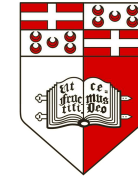
Previous mode choice



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Other supporting evidence

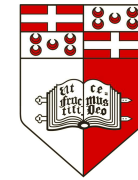


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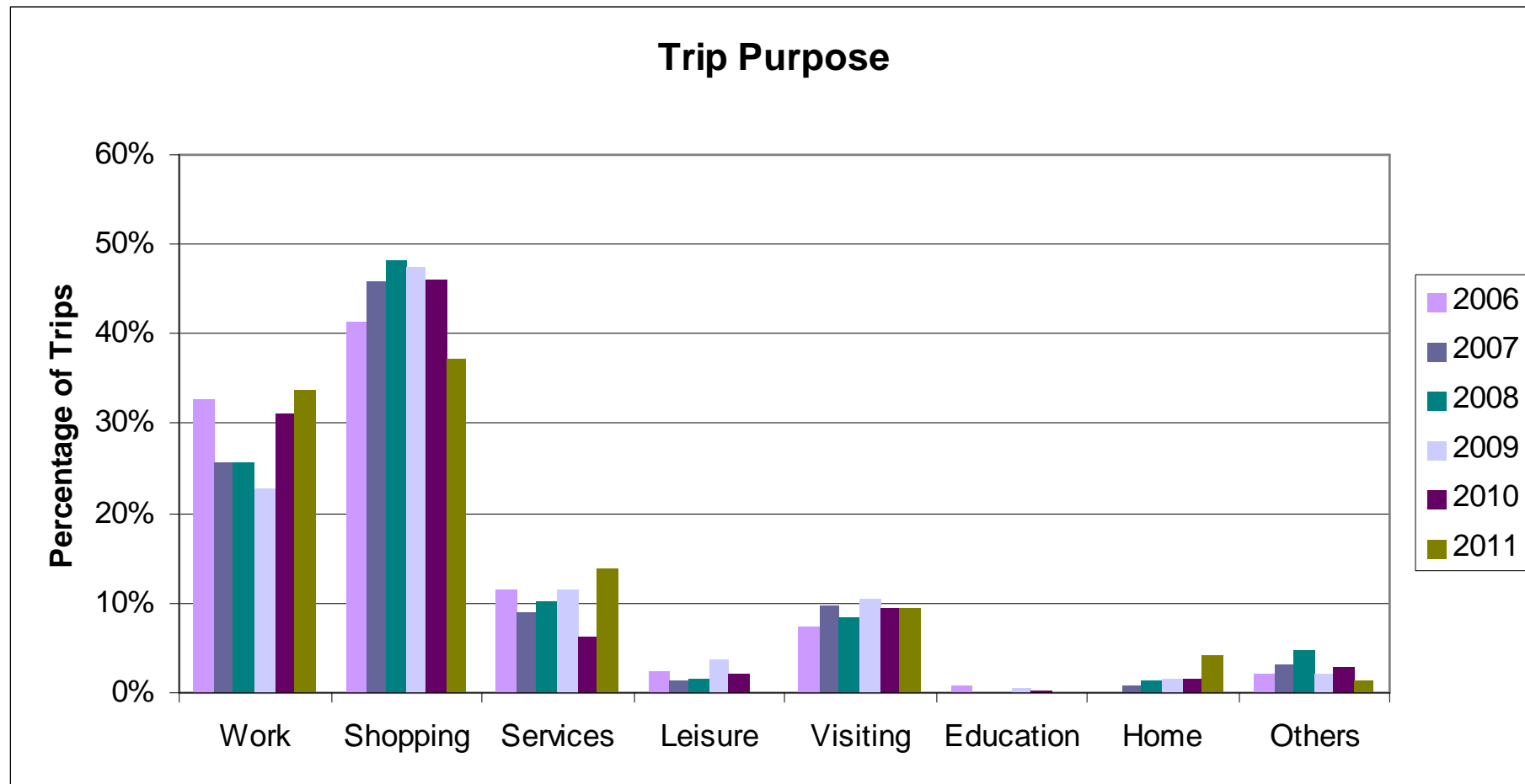
- 21% of P&R users paid the V-licence prior to 2007.
- Traffic in St Anne Street reduced by 30% in August 2007 when compared to 2004.



Trip Purpose



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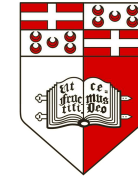
Conclusion (1)



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- According to Meek (2008) *P&R has had a somewhat confused position in transport policy which has led to misunderstanding of both what it is capable of achieving and its unintended impacts.*
- This is potentially true also for the case of Malta.

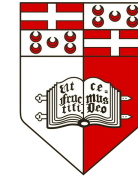
Conclusion (2)



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- The initial effects of the P&R are mixed. An overwhelming attraction of the P&R in the first year stimulated new trips to the city.
- Whilst there is evidence of public transport abstraction, a relatively significant number of cars previously driving all the way to the centre have been diverted to the P&R.
- P&R is popular as it provides motorists an additional choice with considerable time and cost savings when compared to the option of driving to the centre and cruising for parking.

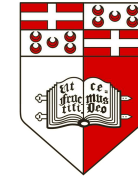
Conclusion (3)



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- Post July 2011 patronage data will reveal more as to the changes that the charge has had on the P&R.
- However there is also the need to investigate the observed low usage of the Pembroke and Marsa P&R.
- The resilience of P&R shows that it will continue to be part of the transport policy and infrastructure of the islands.

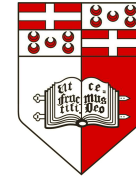
Conclusion (4)



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- The future of P&R lies in the ability of politicians and policy makers to design effective strategies involving a number of carrots and sticks. These measures however should be flexible enough and able to absorb changes in the urban environments in the medium to long term.





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Any questions?

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