

URBAN SUSTAINABILITY CASE STUDIES

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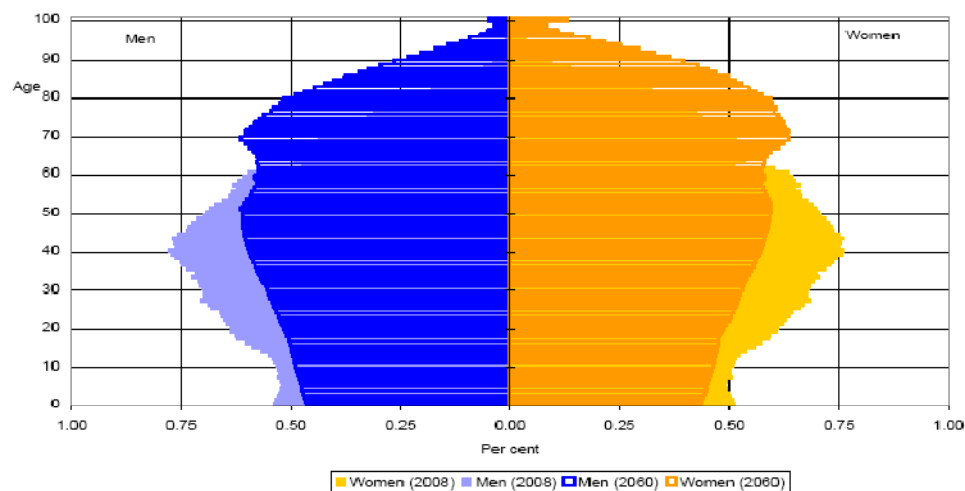
CONTEXT

- CONGESTION
 - 50 billion €/year
 - 10% of network congested daily
- ENERGY/EMISSIONS
 - Road transport - 85% of CO₂ from transport
 - 70% of oil
- SAFETY
 - 38,000 fatalities
 - 1.7 million injuries
 - Human error in 93% of accidents

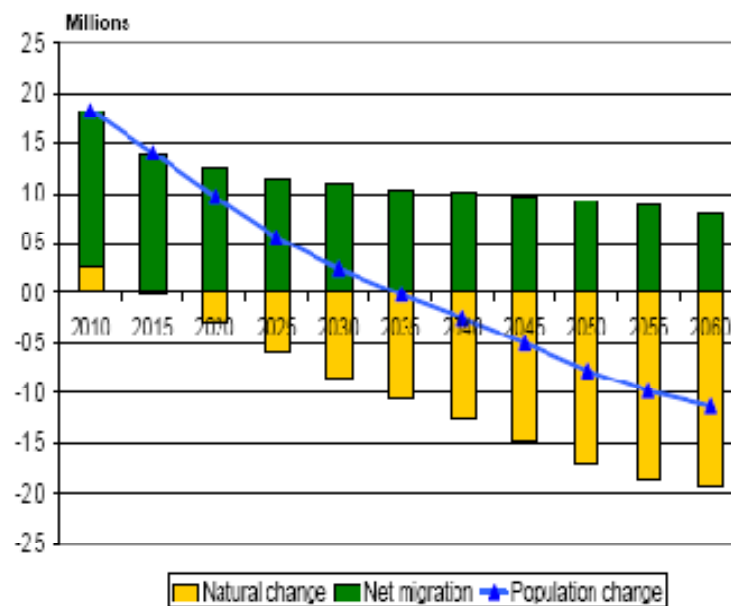
- SOCIO-ECONOMIC
 - Growth (2000-2020 +50% freight/+35% passengers)
 - Ageing
 - Migration
- ECONOMY
 - Transport the major driver of city competitiveness



Multiple challenges: ageing and growing immigration



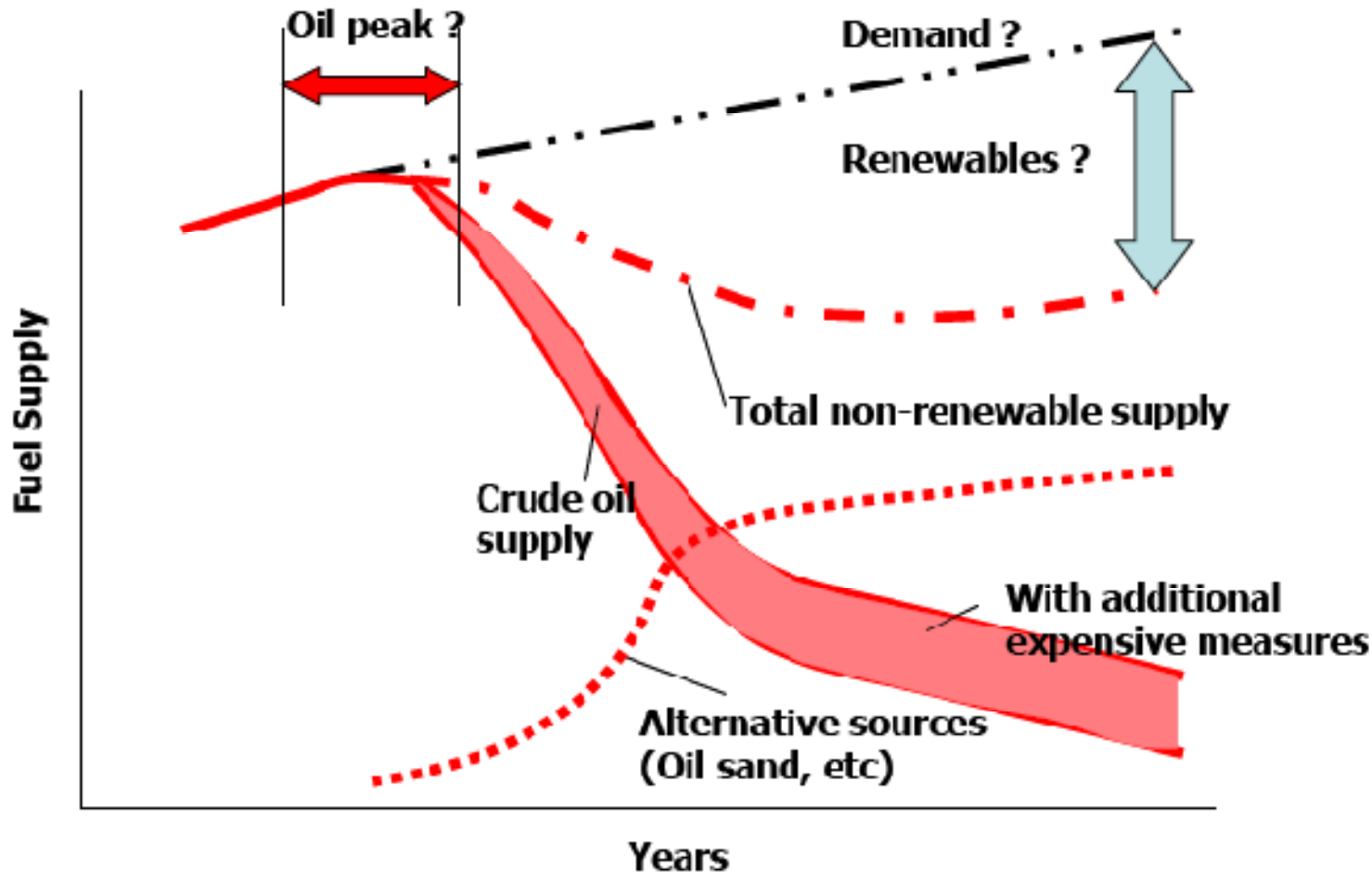
Source: Eurostat, EUROPOP2008 convergence scenario



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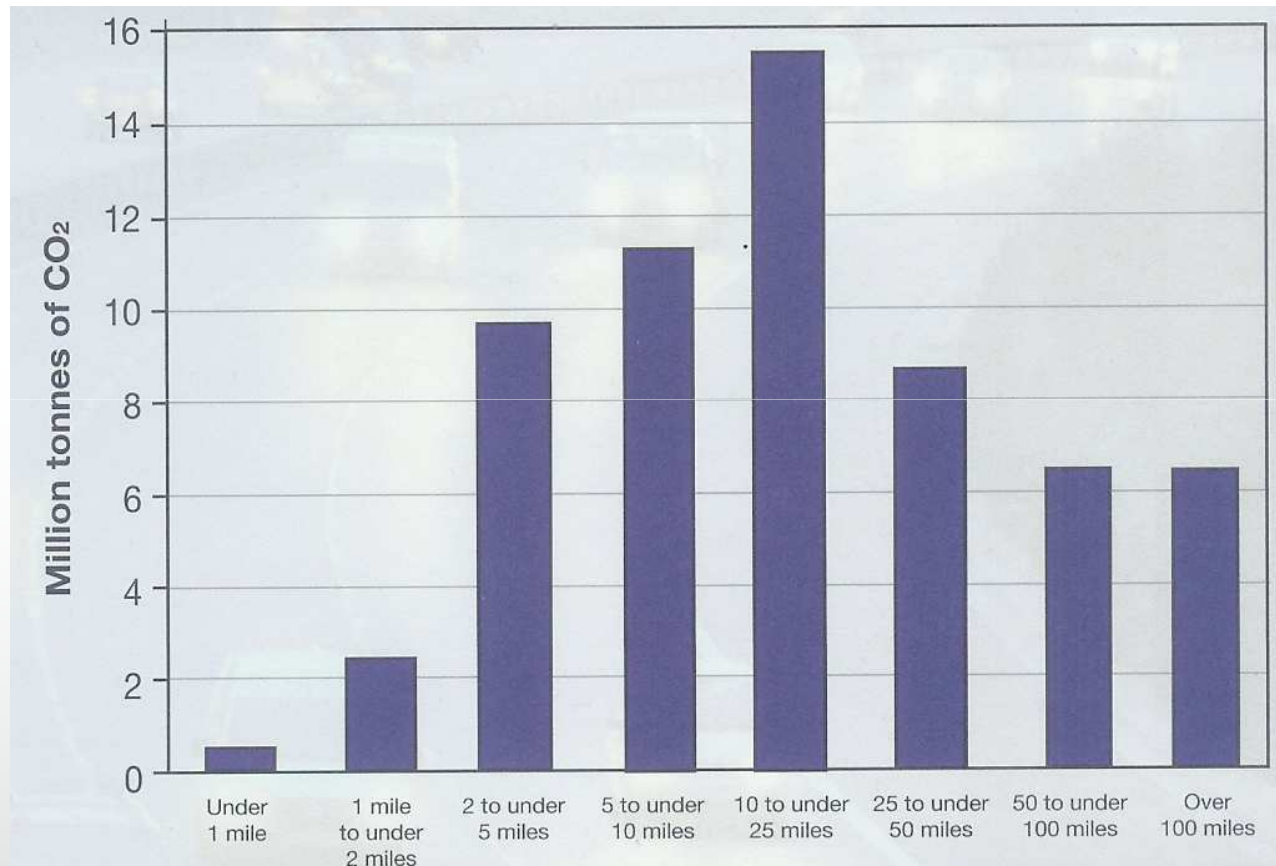


Multiple challenges: **Changing energy supply**



Source: ERTRAC (2008)

Estimated CO₂ Emissions



Estimated CO₂ emissions from household cars by journey purpose (Source: DfT, 2009, Delivering Low Carbon Travel: An Essential Guide for Local Authorities)

MEETING THE CHALLENGES

- Cities are different
- Tomorrow's problems, not today's (Vision)
- New approaches to financing needed
- Managing behavioural change
- Learning from others (Case studies)

CIVITAS

- Alternative Car Use
- Clean Vehicles and fuels
- Cycling and Walking
- Logistics and goods Distribution
- Mobility Management
- Public Transport
- Access and Parking Management

CLEAN VEHICLES AND FUELS

New biodiesel and CNG buses gave reductions of 10, 15, 40% in CO₂, NO and PM₁₀ (Burgos). 90% population supportive of re-use of cooking oil (La Rochelle). Biogas gave net reduction of 431,000 kg of CO₂ (Malmo). NO_x ↓30%, CO ↓55%, HC ↓40%, particulates ↓85% in Toulouse. LPG buses gave 83.5% reduction in CO₂ (Ploiesti). 750% in passengers (Suceava). Major changes in attitudes across all cities.

ACCESS AND PARKING MANAGEMENT

7,600 reduction in vehicles per day (Genoa). Car use fell by 35% (Odense). Cycling up 62% in suburbs (Odense). 60% felt safer (Preston). HGV numbers reduced by 5-30% (Stuttgart). Increased business satisfaction from 43% to 80% (Suceava). Gas powered vehicles rose to 4% (Malmo). Coaches down 5% but tourists up (Venice).

CASE STUDY: BURGOS

CITY OF BURGOS

- Northern Spain
- Historic city of 180,000 inhabitants (360,000 in region)
- Strategic position (Spain/Portugal/France)
- Logistic centre

CASE STUDY: BURGOS

MEASURES

- Clean fuels
 - CNG
 - Bio-diesel (public/private fleets)
- Integrated access restriction
 - Historic centre focus
 - Address consequences on adjacent traffic
- Parking
 - Awareness
 - New regulations and tariffs
- Clean high mobility services
 - Routes/vehicle/frequency improvements
 - Contact less card payment
 - Online information

CASE STUDY: BURGOS

MEASURES:

- Collective mobility services
 - Coordinate itineraries of private companies
- New mobility services for visitors
 - Integration of sustainable services
- Car pooling
 - Pilot project in industrial areas
- City bike scheme
 - Facilities
 - Rental

CASE STUDY: BURGOS

MEASURES:

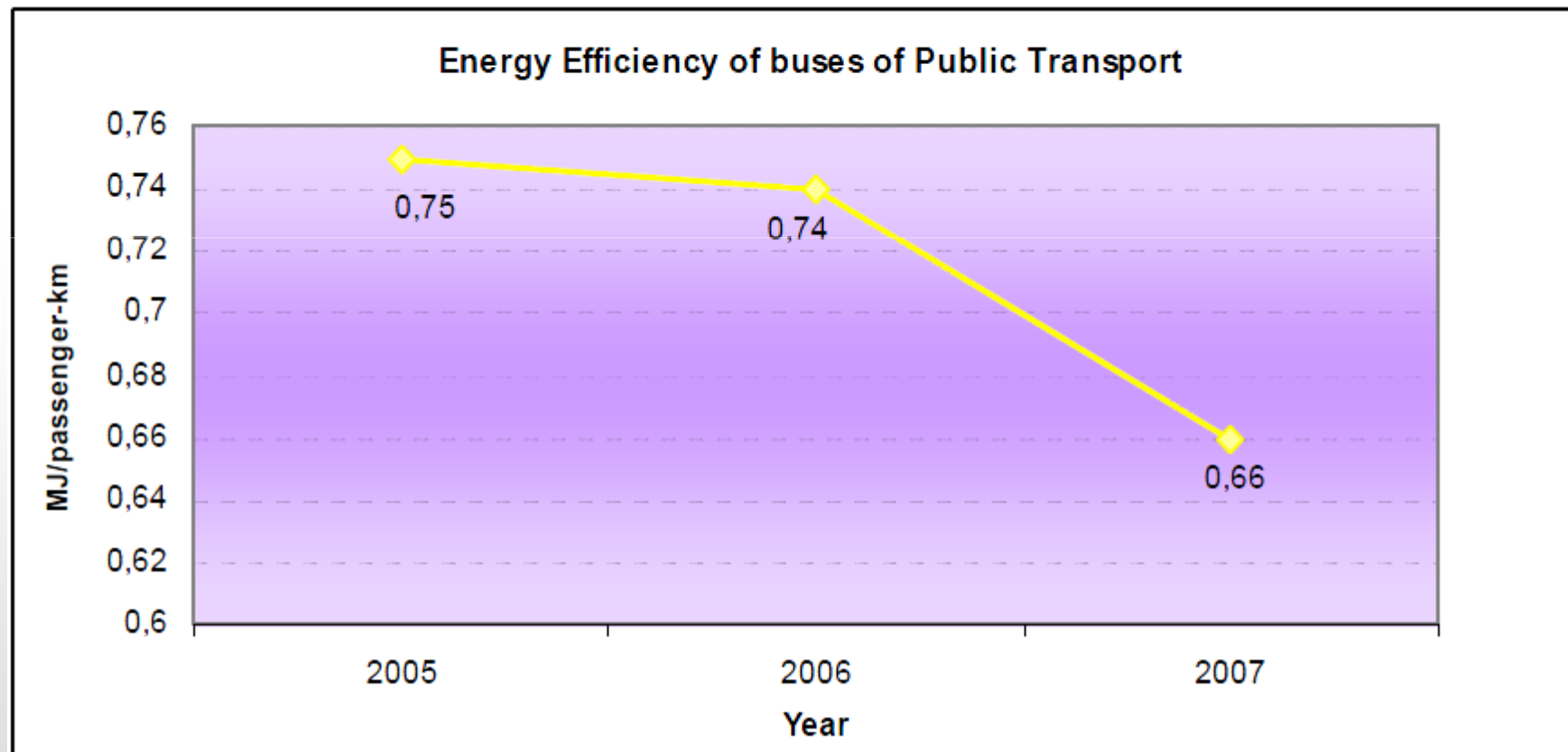
- Goods distribution
 - Clean vehicle for central area distribution
- Sustainable mobility marketing
 - Dissemination activities
- Mobility forum
 - Concerns and event organizations (Stakeholders)
- Mobility impaired
 - New office
 - Range of measure

CASE STUDY: BURGOS

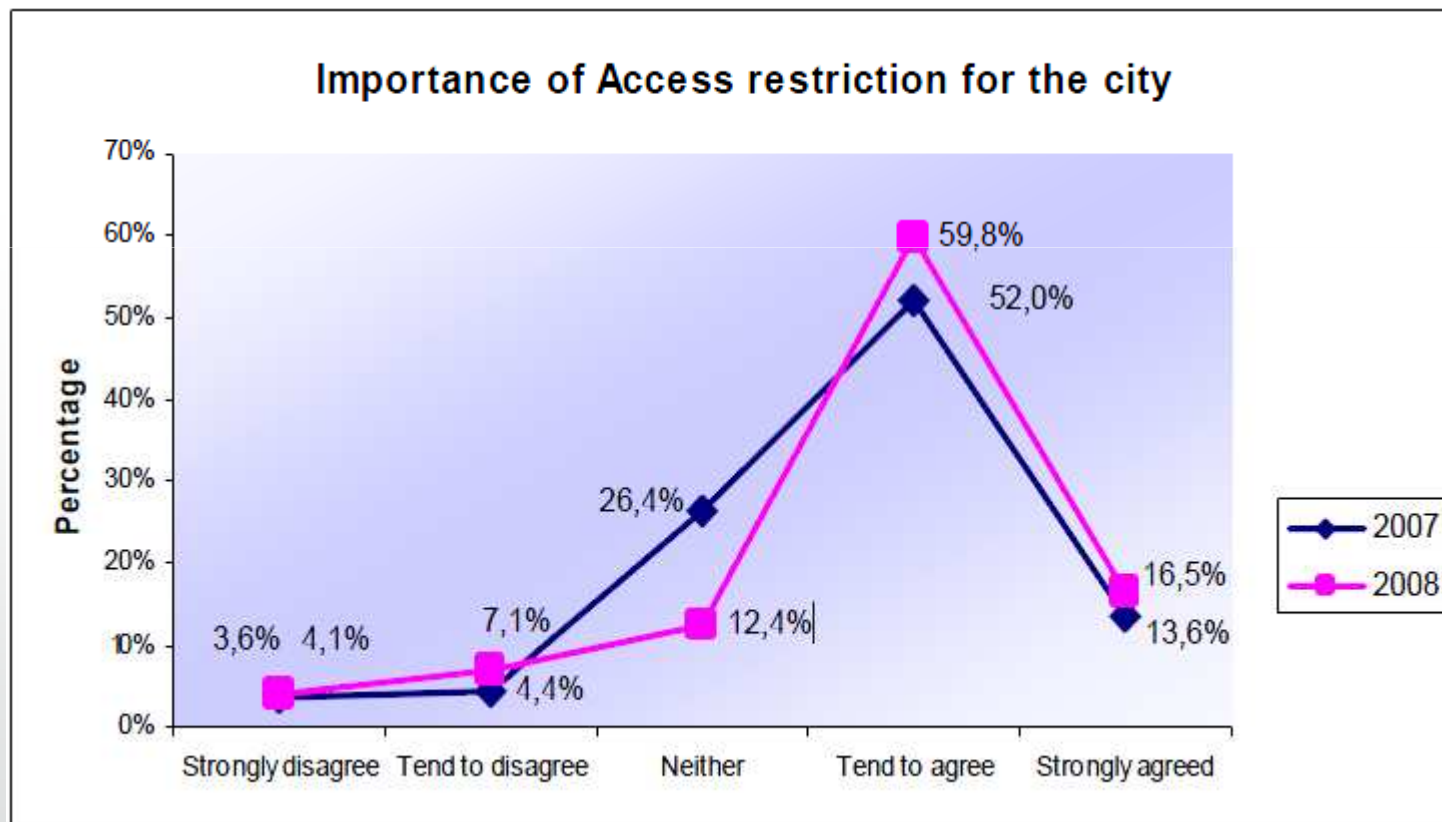
MEASURES:

- Peripheral neighbourhoods
 - Retain village environment
- Cycle use
 - Coherent cycle lanes
 - Secure cycle paths
- Safety
 - Campaigns / education
 - Traffic calming
- Info-mobility
 - New technologies for transport information
- Traffic visualization
 - New traffic control system

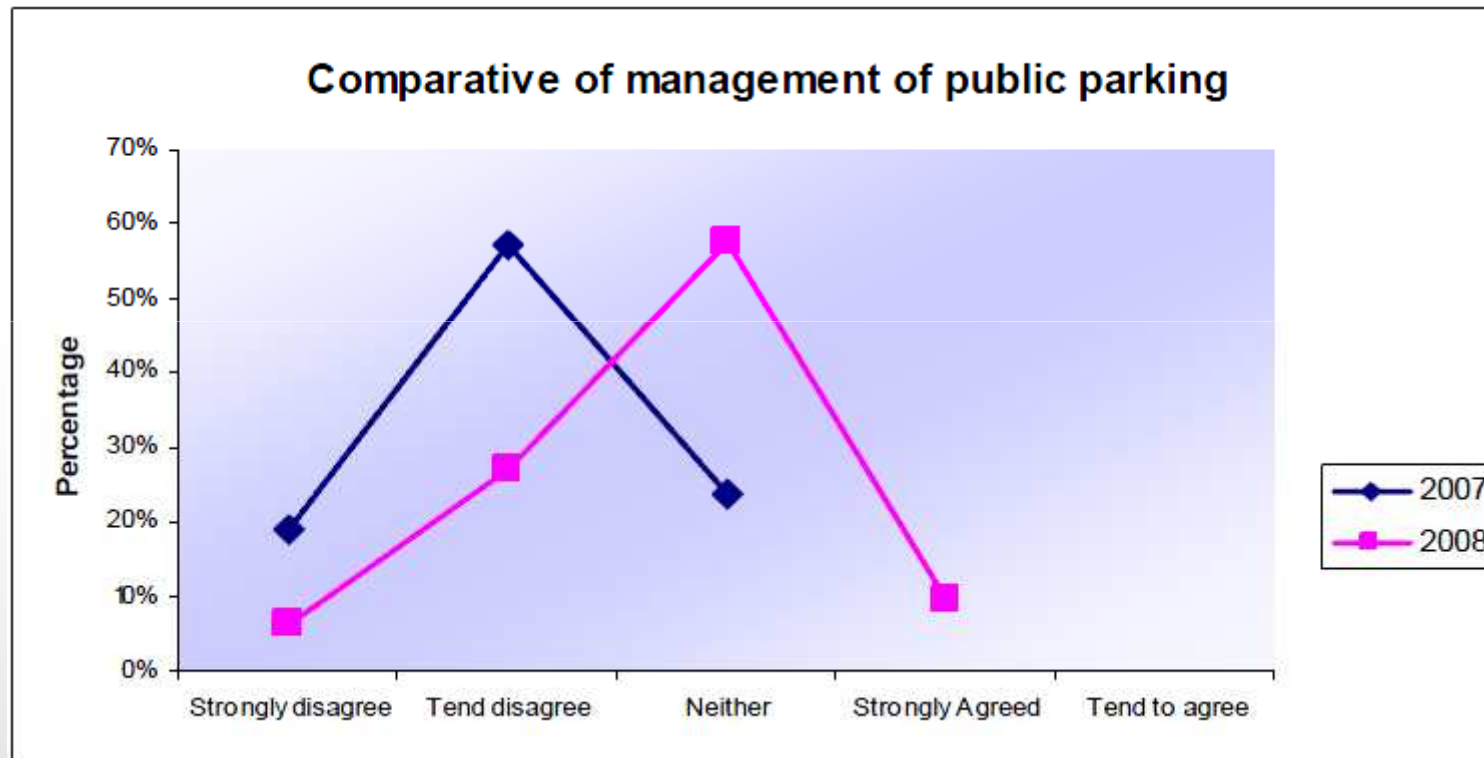
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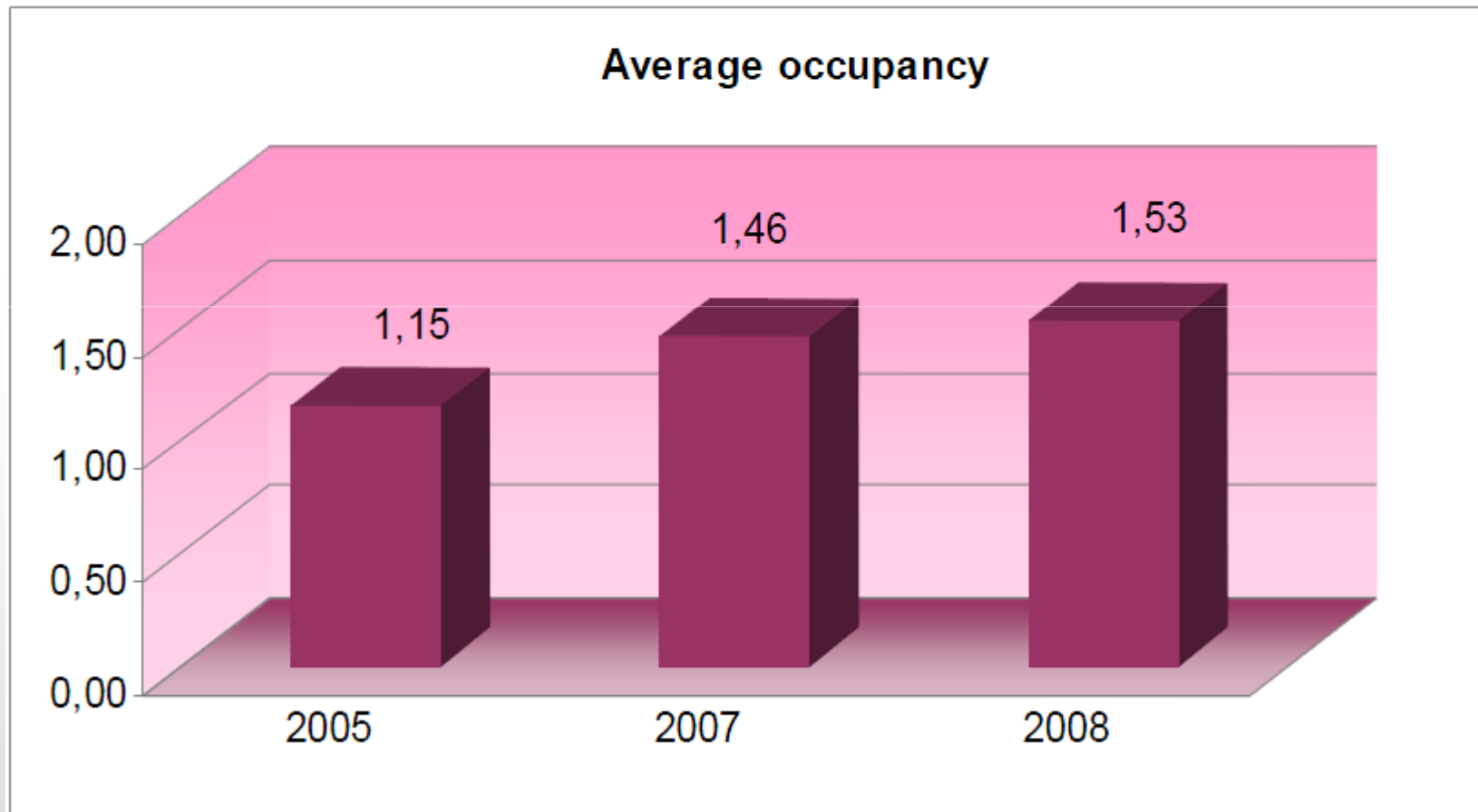
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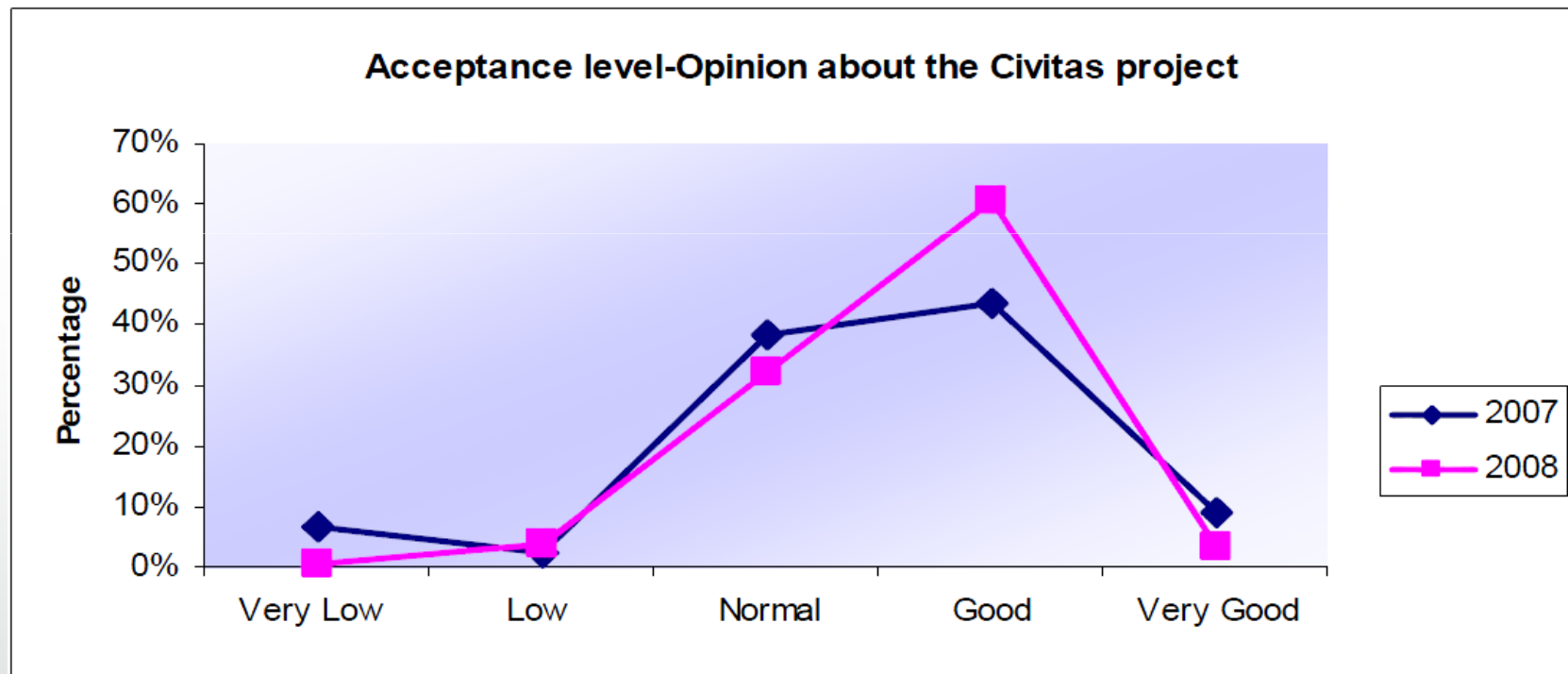
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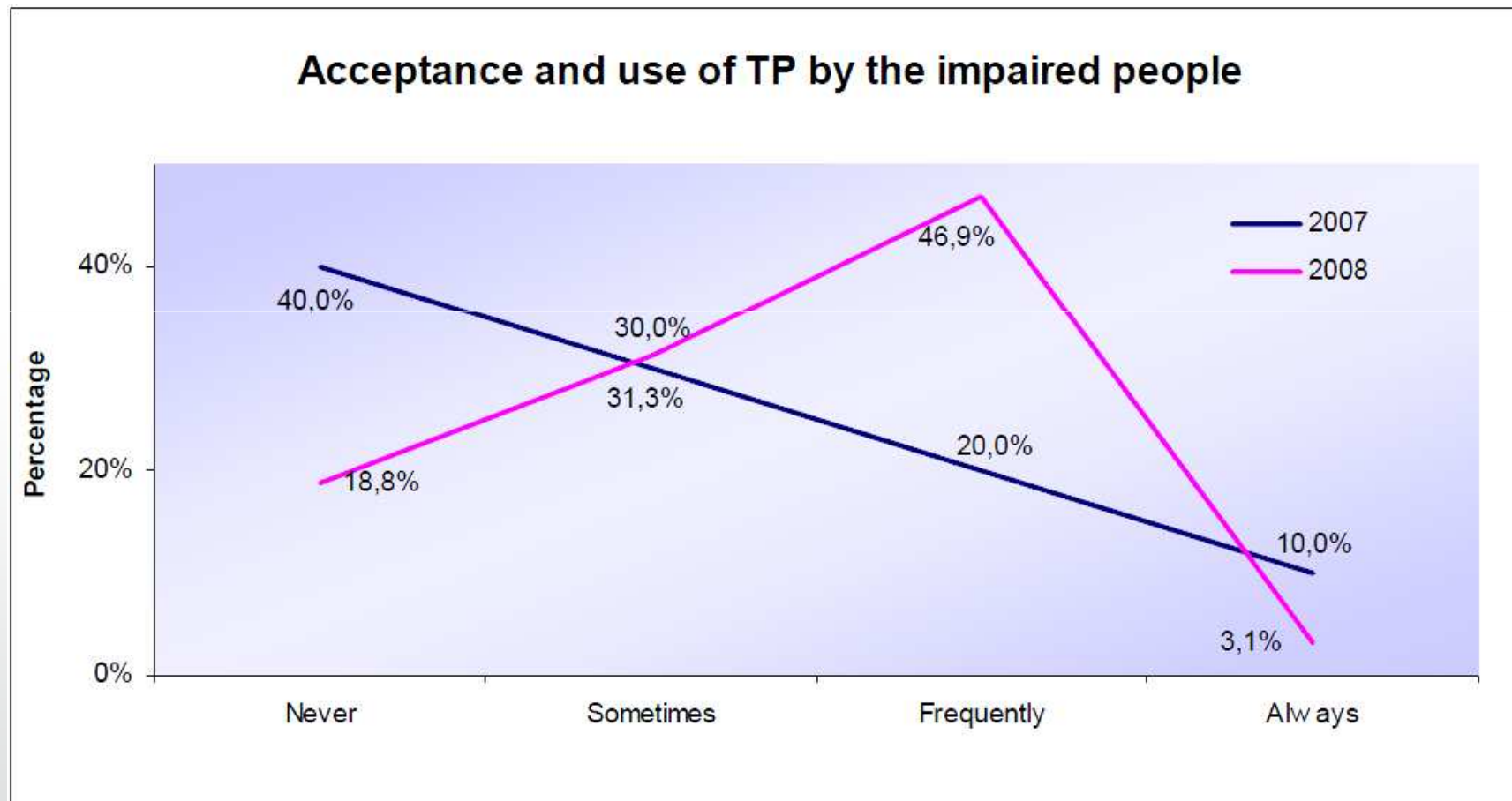
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COMMENTS

- Real environmental benefits
- Information and awareness crucial
- Remain informed/learn from others
- Use focus
- Inter-department cooperation
- Plan well
- Involve all stakeholders
- Promote