States of Jersey
Transport and Technical Services

JERSEY'S SUSTAINABLE TRANSPORT POLICY

PROGRESS REPORT

18 Dec 2013

ECO-ACTIVE TRAVEL

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FOREWORD

In December 2010, the States approved Jersey's Sustainable Transport Policy which provided a clear direction for the future, calling for a 15% reduction in peak traffic. Included in the Policy was a high level plan as to how this change was to be achieved. This first progress report provides details on how much has been achieved to date.

Initially our work has been very much about enabling change to happen. If we want more people to travel by bus we must ensure that bus travel is attractive and there is sufficient capacity at appropriate times. We are continually making improvements to the bus service. The new operator has introduced a fleet of new attractive vehicles along with a more comprehensive network and is currently working with my Department to develop a range of initiatives to improve and encourage bus travel. We are also improving the cycle network, an ongoing process which will take several years. Pedestrians are vulnerable road users and we are making safety improvements through the provision of more refuges, crossings and pavements.

Transport is important to us all, but this policy is not just about reducing the levels of traffic congestion, though that will be a noticeable benefit. It is also about reducing our energy needs, our local air pollution, our global carbon emissions and encouraging more active travel for a healthier lifestyle.

My Department, along with several others with a shared interest in the policy, has made good progress but much more needs to be done to achieve a significant shift towards more sustainable forms of transport.

A longer period of time is needed for people to realise that the alternatives to travel by private car may be viable and attractive to them, but at this early stage the signs are encouraging, more people are cycling and using public transport and levels of road-side pollution have decreased noticeably. We look forward to the challenge of building upon this trend.

Deputy Kevin Lewis
Minister for Transport and Technical Services

EXECUTIVE SUMMARY

1. INTRODUCTION

The Sustainable Transport Policy (STP) is very much in the enabling phase. Transport and Technical Services (TTS) has had to prepare for the desired change in people's travel habits; the move away from the reliance on the car and towards an increase in walking, cycling and bus ridership. It has been necessary for TTS to concentrate mostly on improvements to public transport and infrastructure.

2. DELIVERY OF THE POLICY

PUBLIC TRANSPORT

Key to reducing our Island's reliance on the private car is a better bus service.

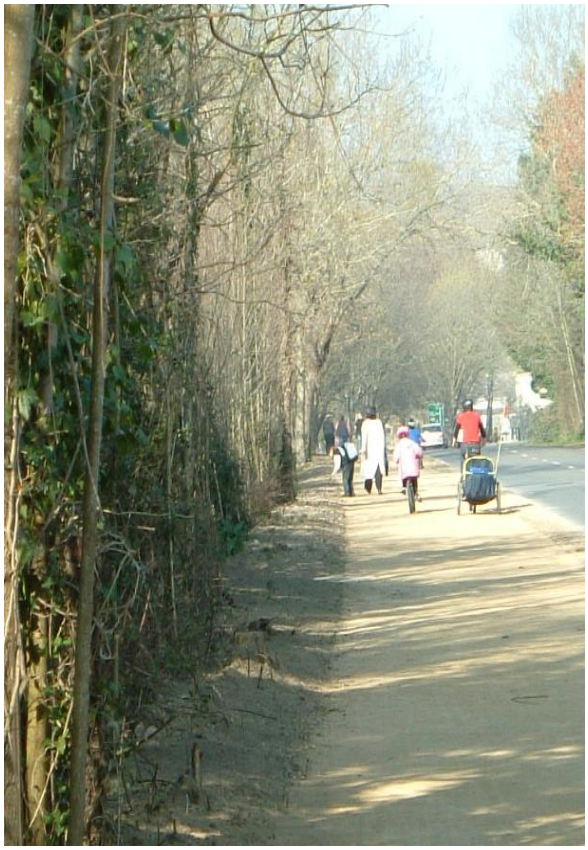
TTS has installed 23 new bus shelters in the last 4 years and several improvements to the bus service have been introduced as part of the new contract that commenced in January 2013:

Liberty bus Double Decker

- a programme of new bus shelters;
- peak hour capacity improved;
- better coverage to rural areas and on Sundays; and
- a fleet of new vehicles.

CYCLING AND WALKING INFRASTRUCTURE

A significant aspect of the STP is encouraging walking and cycling. TTS has undertaken infrastructure improvements to enable better provision for walkers and cyclists:



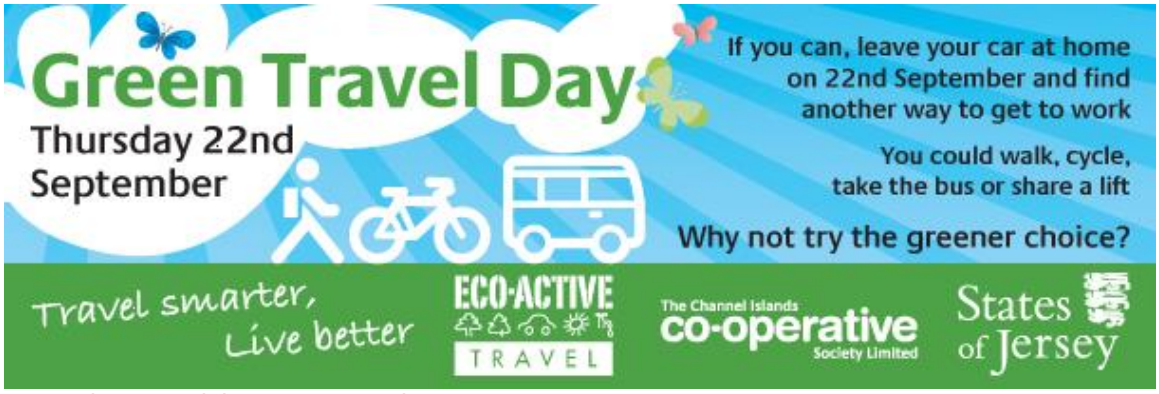
Eastern Cycle Route

- the southern cycle route from the west into St Helier has been extended along Commercial Buildings;
- work is ongoing to provide a continuous cycle route through to Havre des Pas;
- the first stage of the eastern cycle network has been completed between Gorey Pier and Lavender Villa and design work is ongoing to develop its continuation;
- more cycle stands have been and will be installed, particularly in the town centre; and
- Several improvements to encourage walking have been completed including new crossing facilities and new sections of footpaths. (See appendix 1)

AWARENESS

Encouraging people to make better travel choices is an important aspect of the policy. TTS has engaged in several awareness increasing activities between 2011 and 2013:

- September 2011 – Jersey's Green Travel Day
- annual "Walk to School" fortnight;
- working with schools to develop travel plans – 26 were completed in 2011 and '12; and
- workplace Cycle Challenge took place in June 2013.



Promotion material - Green Travel Day

LOW EMISSIONS VEHICLES

TTS provides half price parking for low emissions vehicles. Vehicle Emissions Duty also incentivises the choice of lower emissions vehicles by charging a graduated duty based on a vehicle's gmCO_2/km.

A fleet of 10 electric staff cars has been introduced by the States of Jersey and reserved spaces for electric cars with charging points have been implemented at all St Helier's TTS multi storey car parks.

PARKING

Although the demand for commuter parking will reduce through more sustainable travel choices, the STP recognises that short stay parking is essential to protect the vibrancy of the town. Approximately 200 public shopper parking spaces are proposed to be provided as part of the housing development at Ann Court, with works programmed to commence in 2015. A feasibility study to add an extra floor of parking at Snow Hill has been completed. This would provide an additional 90 shopper spaces. The shortage of parking in the north of town is acknowledged. Opportunities have been investigated and proposals will be progressed to provide approximately 200 commuter spaces in the north town area, to partially replace those lost for the town park.

ROAD SAFETY

Jersey suffers far fewer road injuries than in the 70s, 80s and 90s, but the rate of decline has not continued in recent years and the cost to our society is estimated to be in excess of £18 million per year. A road safety strategy is in development with a draft white paper for consultation expected by early in 2014. The strategy will identify appropriate injury reduction targets and the measures needed to achieve those targets.

3. PROGRESS AGAINST THE GOALS

Jersey needs to adopt a cultural change in travel behaviour before significant reductions in car use are apparent and that will take time. The early years of the STP are an enabling stage, steadily improving the alternatives to private car use so that people will start to recognise that there are viable alternatives for some journeys. The trends however are encouraging:

- use of public transport has increased by 9% since 2007;
- use of road fuel is down 10% since its peak in 1994;
- air quality monitoring shows significant reductions in pollutants at the road side; and
- a small reduction in peak time traffic levels (1.7% in the last 4 years) has been recorded and overall traffic levels have remained constant over the past 6 years despite a population increase of 1% per annum during that period.

A longer period of time is needed before the public realise that the alternatives to travel by private car may be viable and attractive to them. Facilities for walking, cycling and public transport will continue to be improved and it is also important to invest in the marketing and awareness of them as well as measures such as travel plans, which encourage behavioural change. In developing the STP, research concluded that a combination of 'carrot and stick' measures would be needed to achieve the targets, the most obvious disincentive being the cost of car use, particularly parking cost. Initiatives during the first three years following approval of the STP have been aimed at making the alternatives to private car use more attractive, and the impact of these measures will continue to be assessed before the appropriateness of significant above inflation increases to car parking charges is determined.

1. INTRODUCTION

The Sustainable Transport Policy (STP) was approved by the States in December 2010.

The policy identifies eight reasons why we need to change the way we travel about our Island:

- **reduce congestion;**
- **reduce local air and noise pollution;**
- **reduce our greenhouse gas emissions;**
- **increase our levels of physical activity;**
- **protect and improve the built environment;**
- **reduce the number of road injuries**;
- **provide access for everyone**; **and**
- **reduce oil dependency.**

Although the STP aims to reduce car dependence Island wide and encourage more sustainable forms of transport at all times, a specific target is to reduce peak hour traffic levels to and from St Helier by 15% by 2015. Sub targets to achieve that reduction are:

- 100% increase in peak time bus users;
- 100% increase in peak time cyclists;
- 20% increase in walking;
- 20% increase in school bus use; and
- 100% increase in cycling to school

This report summarises and reports upon the data available to monitor the success of the STP against the goals and targets above.

2. DELIVERY OF THE POLICY

Initiatives during the first three years following approval of the STP have been aimed at making the alternatives to private car use more attractive and raising awareness of sustainable travel options.

The policy is also supported by the Island Plan 2011, which seeks to ensure that future development is consistent with and supportive of the STP.

2.1 Public Transport

Key to reducing reliance on the private car is a better bus service. Several improvements to the network have been introduced, both before and after the new contract commenced on Jan 2013. Peak hour capacity has been increased and better coverage provided to rural areas and on Sundays. An early morning airport bus service has been introduced which enables travellers to use the bus to catch the first flight, but has also proved popular for early morning trips into St Helier.

A new bus shelter at First Tower

The new operator has introduced a fleet of new improved vehicles, including 6 double-decker buses on the route 15 to the airport and 16 to Les Marais. Smaller buses have been introduced for some rural routes where the roads are too restricted for access by the larger vehicles.

The new contract provides an enhanced Island wide main bus network, with incentives to ensure that the operator and States can work in partnership to grow and improve both the main and schools networks to meet the requirements of the STP.

Options for a town bus service are being developed with the new operator though funding has not been identified.

The opening hours of Liberation Station have been extended until 10pm each evening.

18 new bus shelters were installed between 2011 and mid 2013,

A thorough review of the taxi service has been carried out and a white paper with proposals to improve the quality of the service will be published by end of 2013.

2.2 Cycling and Walking Infrastructure

The western cycle route has been improved in several areas and its southern section has been extended south from the New North Quay past the steam clock along Commercial Buildings. A section of cycle route was provided as part of the Energy from Waste contract works connecting La Collette through to Green Street slip in 2011. Proposals to move the harbour walls in order to provide a cycle route by English and French harbours on Commercial Buildings were withdrawn following public concern regarding cost and heritage impact. Other design options are under consideration to enable a valuable continuous off-road cycle route to be provided between the steam clock and Havre des Pas.

The first stage of the eastern cycle network has been completed between Gorey Pier and Lavender Villa and design work is ongoing to develop its continuation.

Approximately pedal cycle stands have been installed per year since 2009, mostly in the town centre, increasing the number of stands by approximately 20%. Several minor improvements to encourage walking have been completed including new crossing facilities and new sections of pavements (see appendix 1).

Eastern Cycle Route

Proposals for pedestrian improvement schemes at the junctions of Wellington Hill/St Saviours Rd, Bath Street/Beresford Street, Green Street Car Park/Grenville Street and Queen's Road roundabout have been developed and are programmed for implementation in 2014, subject to consultation. Proposals for a pedestrian improvement scheme at Midvale Road are also under development and programmed for implementation in 2015.

Encouragement of walking and cycling is an essential component of the STP and an 'active travel' strategy is under development. This will draw together the work of various States departments as well as the private sector to provide a detailed strategy to ensure that future developments both private and public will enable and encourage walking and cycling both in the rural and urban environments.

2.3 Awareness

Encouraging people to make better travel choices is an important aspect of the policy, particularly for commuters and for school trips. If school children are encouraged to travel more sustainably and more actively, good habits can be instilled and carried on into later life.

TTS has organised two 'green commuter travel' awareness days to promote sustainable travel and is working with schools to develop travel plans. 'Walk to School Fortnight' and school green travel days are now an annual feature. 26 School travel plans were completed in 2011 and 2012. (A travel plan is a package of practical measures to encourage people to choose alternatives to single occupancy car use).

A workplace cycle challenge was developed by TTS with financial support from the Health and Environment Departments and held in June 2013. 1171 people registered for the challenge including 258 occasional and 457 non-cyclists.

Promotion material – Cycle Challenge

Transport is a key theme of the 'Eco Active States' programme commenced in 2011. It encourages less private car use amongst States employees. The private sector is also encouraged to adopt sustainable travel habits through the Eco Active Business initiative (of which 103 businesses are now members) as well as through the requirement to produce travel plans when applying for planning permission for major new developments over 2500m².

2.4 Low Emissions Vehicles

With regard to the goals of reducing pollution, greenhouse gas emissions and oil dependency, it is essential that in addition to reducing the proportion of people choosing to travel by private car, the use of more 'environmentally friendly' cars is encouraged.

TTS provides half price parking for low emissions vehicles qualifying for an 'eco-permit' (vehicles emitting up to 100 gmCO_2/km). 266 'eco-permits' had been issued as of Aug 2013. The new town park is serviced by an electric pick-up truck and 10 electric fleet cars have been added to the States leased fleet. Reserved spaces and charging points for electric cars have been provided in all the St Helier TTS multi storey public car parks.

Reserved Spaces for Electric Cars at Sand Street Car Park

Vehicle Emissions Duty also incentivises the choice of lower emissions vehicles by charging a graduated duty based on a vehicle's gmCO_2/km.

Motor cycles and mopeds take up less road space and are generally less polluting than cars. 60 new motor cycle spaces were created on the Esplanade in December 2010, increasing the public motor cycle parking availability in the town area by 10%.

2.5 Parking

Although the demand for commuter parking will reduce through more sustainable travel choices, the STP recognises that short stay parking is essential to protect the vibrancy of the town.

A number plate recognition system, enabling pay on exit, was introduced at Sand Street car park in Nov 2012. This provides a more user friendly shopper parking arrangement, removing the threat of a parking fine if a motorist returns to their vehicle later than expected. The current three hour time limit has been removed, though the pricing structure continues to encourage shopper rather than commuter use. The system is being monitored and assessed for use at other car parks (including commuter).

Although the demand for commuter parking will reduce through more sustainable travel choices, the STP recognises that short stay parking is essential to protect the vibrancy of the town. Approximately 200 public shopper parking spaces are proposed to be provided as part of the housing development at Ann Court, with works programmed to commence in 2015. A feasibility study to add an extra floor of parking at Snow Hill has been completed. This would provide an additional 90 shopper spaces at a cost of £4.8 million. Funding for this scheme is unresolved. The shortage of parking in the north of town is acknowledged and proposals are being progressed to provide approximately 200 commuter spaces in the north town area, to partially replace those lost for the town park.

A review of the blue badge disabled parking system has also been commenced.

2.6 Road Safety

Although Jersey suffers far fewer road injuries than in the 70s, 80s and 90s the rate of decline has not continued in recent years. The cost of road injuries in Jersey is estimated to be in excess of £18 million per year. The STP will result in more pedestrians, cyclists and motorcyclists using our roads and they are more vulnerable in accidents. The STP commits to developing a road safety strategy which will identify appropriate injury reduction targets with an ultimate 'vision zero' target, and to apply appropriate measures to achieve the targets. The States proposition was to complete that work in 2011, though that has not proved possible due to limited resources. The work is however in development with a white paper consultation expected by early in 2014.

3. PROGRESS AGAINST THE GOALS

The requirement of the States was to report against the 8 goals identified in the STP and listed on page 8 of this report. Various statistics are gathered which enable progress to be assessed against those goals and these are reported below.

3.1 Reducing Congestion

Congestion occurs when traffic demand exceeds capacity. The STP sets a specific target of reducing peak hour traffic by 15% by 2015. TTS continuously monitors traffic flows on several main routes. The highest levels of congestion occur during the morning peak period when schools and commuter traffic combine. At Beaumont the busiest hour for traffic heading into St Helier is 7am to 8am, whereas at most other sites 8am to 9am is the busiest time period. In order to monitor peak period traffic flows, an analysis of a typical winter period during school term time with fair weather is carried out on 9 main routes for vehicles heading towards St Helier for the time period 7am to 9am (see appendix 2).

The average traffic flows recorded are as follows: -

Year	**2009**	**2010**	**2011**	**2012**	**2013**
Average traffic flow towards St Helier on 9 main routes (7am – 9am)	**10761**	**10713**	**10710**	**10601**	**10574**
% Reduction on 2009 base		**0.4%**	**0.5%**	**1.5%**	**1.7%**

Table 1 – Peak Hour Traffic flows on Main Routes into St Helier

It can be seen that the total number of vehicles on those key routes has remained almost unchanged between 2009 and 2013. The trend would suggest a slight reduction though that reduction (1.7% over 4 years) may be too small to be statistically significant.

In addition to the automatic traffic counting system, a manual survey of every road leading into St Helier is conducted on a dry working day in May, to record types of vehicle, travel mode, and vehicle occupancy rates (see appendix 3). Although the figures are only a one day snapshot survey and therefore vary from one year to the next, they also show a slightly reducing trend in cars and vans (2% from 2008 to 2013) along with an encouraging trend of increases in walking, cycling, motorcycling, and bus use, as indicated in charts 1 to 6 below.

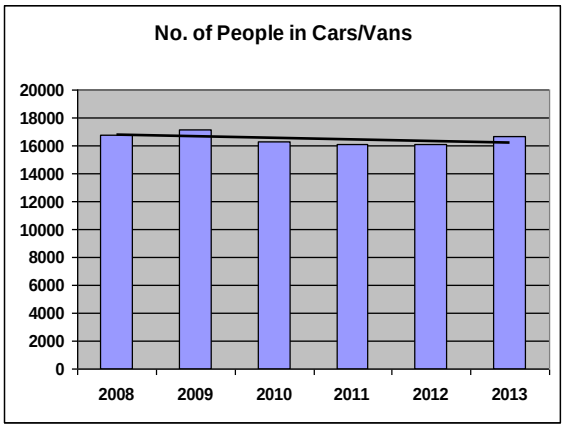


Chart 1 People entering St Helier by car/van 7.30 – 9am

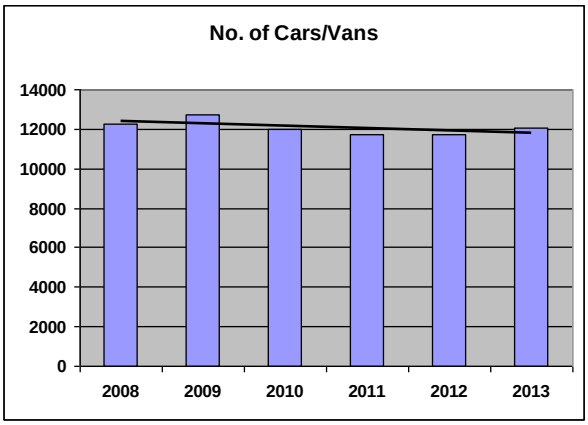


Chart 2 No of cars/vans entering St Helier 7.30 – 9am

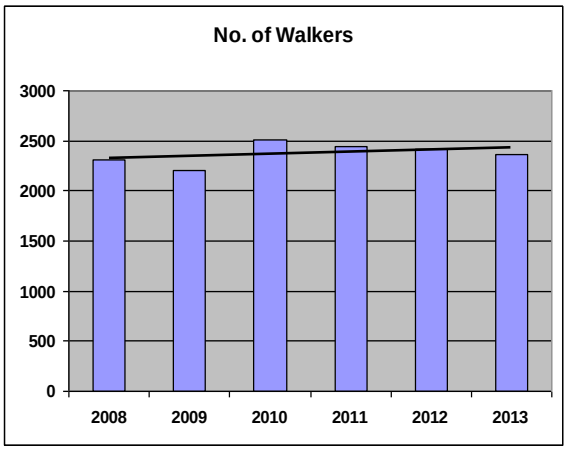


Chart 3 People walking into St Helier 7.30 – 9am

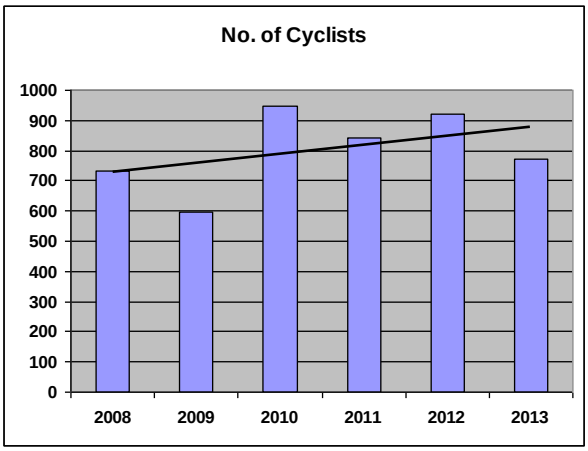


Chart 4 People cycling into St Helier 7.30 – 9am

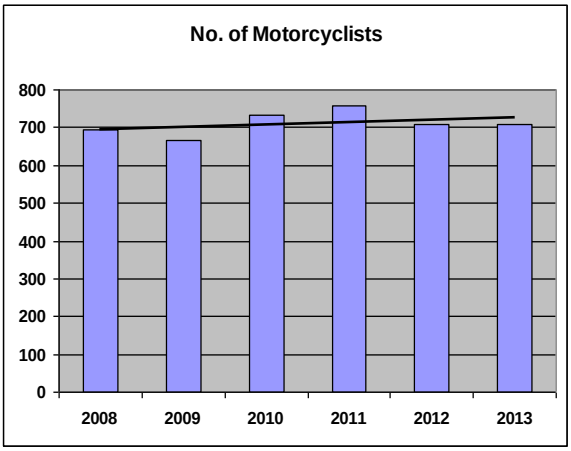


Chart 5 People entering St Helier by motorcycle 7.30 – 9am

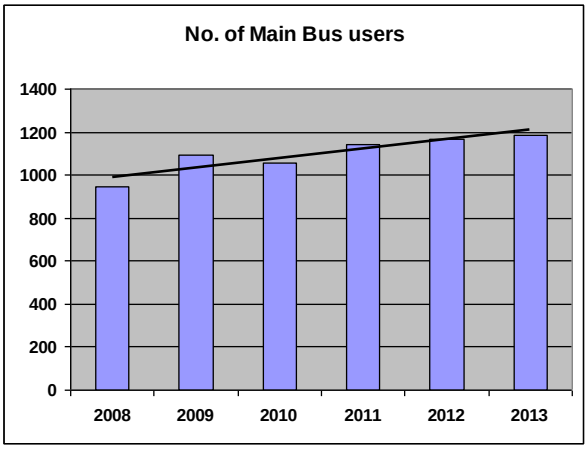


Chart 6 People entering St Helier by main bus 7.30 – 9am

The Island Census asks respondents how they travel to work and indicates that although change in the past decade has been small, there has been an increase in sustainable travel habits.

% Mode of Travel To Work	2001	2011
Car	57	56
Motorcycle	2	3
Walk	23	25
Bus	4	4
Cycle	3	4
Work from Home	5	6

Table 2 - Jersey Island Census - Mode of Travel to Work

The Jersey Annual Social Survey (JASS) also asks respondents how they travel to work. Because of the census no JASS was carried out in 2011. The results are based on a sample of the population (approximately 2400 households in 2012) whereas the census covers the entire population. Although there is some variance between years, the JASS results show a small decrease in travel to work by car (NB - the structure of the question was changed in 2012, though the general outcomes are broadly comparable).

% Mode of Travel to Work	2005	2006	2007	2008	2009	2010	2011	2012
car	62	66	56	60	57	57	-	57
walk	25	22	32	22	28	26	-	24
cycle	6	4	5	8	7	8	-	6
motor cycle	3	4	3	5	5	4	-	5
bus	3	3	4	5	3	5	-	4

Table 3 – Jersey Annual Social Survey - Mode of Travel to Work

Traffic volume data has been recorded continuously at the following permanent road side counting sites since 2007:

- La Route de la Haule (east of Beaumont);
- St Peter's Valley;
- La Grande Route de St Laurent;
- La Route des Issues;
- La Grande Route de St Jean;

- Trinity Hill;
- St Saviour's Hill;
- Bagatelle Road;
- Bagot Road;
- La Greve D'Azette;
- La Route de la Liberation; and
- The Tunnel (Route du Fort).

Chart 7 below shows that the total annual volume of traffic 24 hours per day over those 12 main routes has changed little during the last six years. The total in 2012 was almost identical to the first recorded year (2007) and slightly lower (1.6%) than the highest recorded volume which occurred in 2009. Assuming a linear population growth between the census of 2001 and 2011, the population will have grown by about 5% during that period. That the volume of traffic has not increased is consistent with other evidence that shows that there has been a small change in favour of sustainable travel habits.

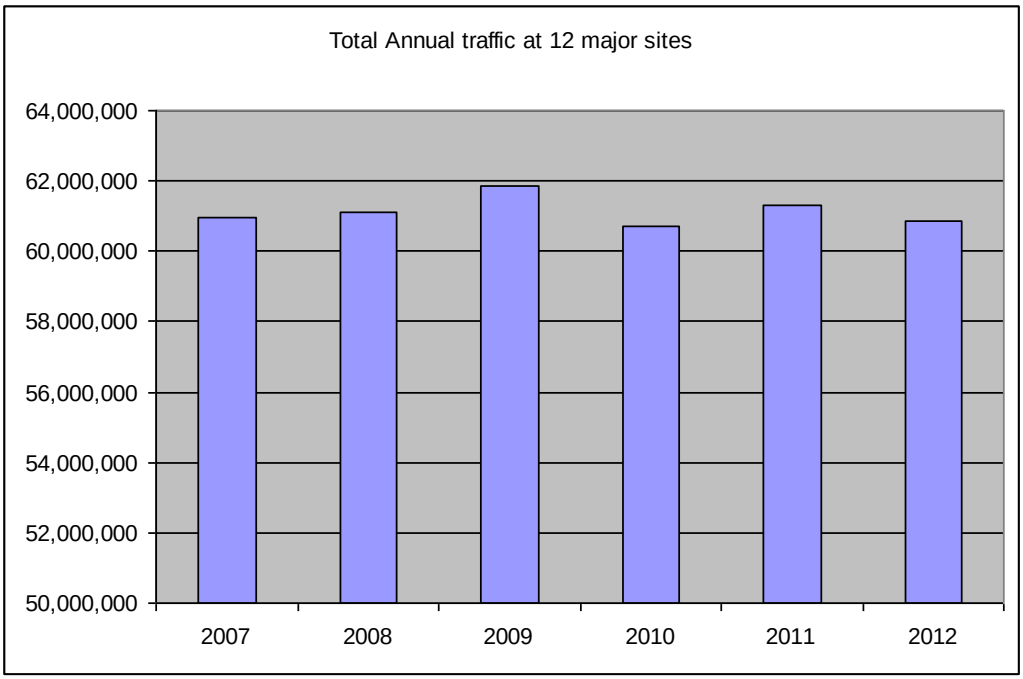


Chart 7 – Total Annual Number of Vehicles at 12 Main Routes

Increased use of public transport is key to reducing congestion. Bus passenger figures show significant increases since the States appointed a new bus operator in 2002. Chart 6 above shows an increasing bus use in the morning peak hour, though overall recorded ridership has remained at approximately 3.2 million passengers per year for the last 5 years. The chart below shows a small (1%) reduction on the previous year for the 2012 to 2013 period, though if allowance is made for days lost due to industrial action and snow, a small (1%) increase can

be shown. Furthermore, fare income in 2013 under the new contract is predicted to be 3 to 4% higher than 2012, despite fares having not risen, which would indicate an increase in bus use.

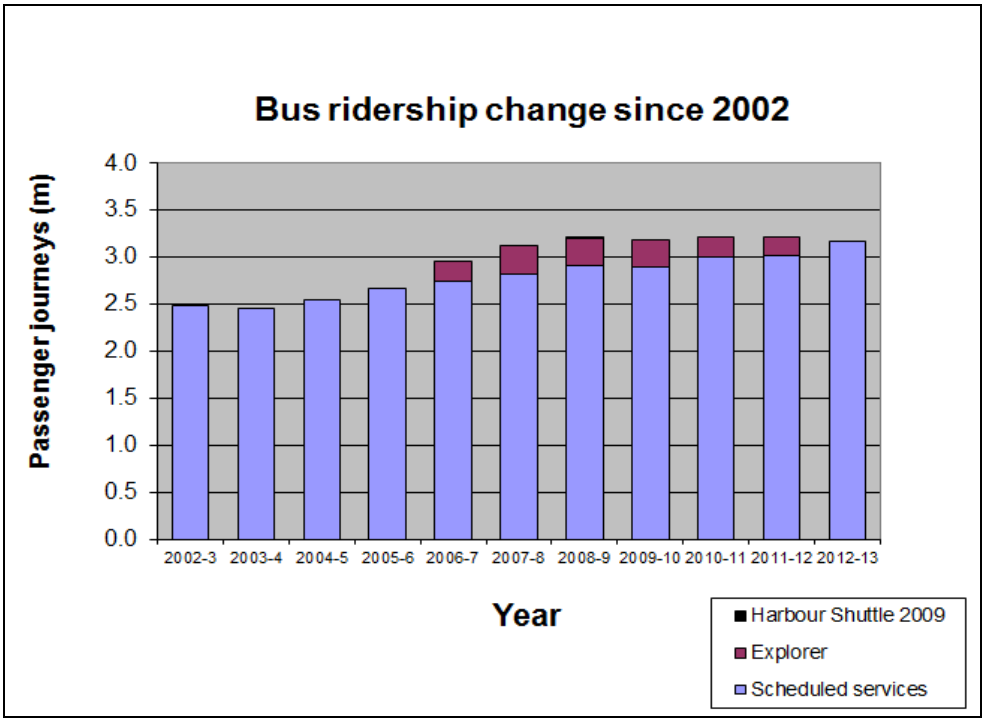


Chart 8 Annual total Bus passengers on Main bus Service (Contract Years)

School bus use has also increased as shown in Chart 9 from 284,000 journeys per year in 2007 to 338,000 in 2012 (up 19%) though with no significant increase in the last 3 years.

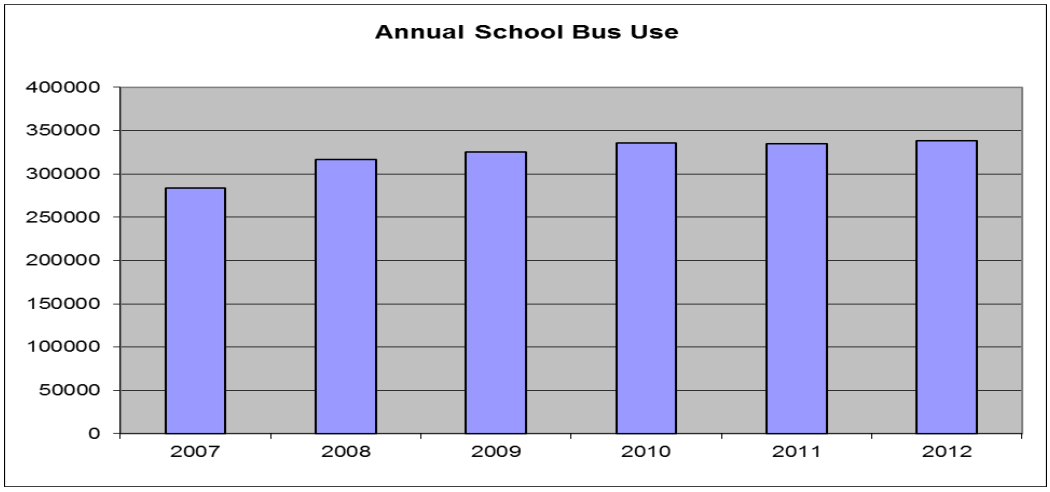


Chart 9 – Annual School Bus Use (To and From School)

3.2 Reducing Local Air and Noise Pollution

Local air pollution is monitored by the Health Protection Service (HPS) of the Health and Social Services Department.

Nitrogen dioxide (NO_2) is monitored at eight roadside sites and has shown significant reductions over the last decade. All sites are within the World Health Organisation's guideline for protection of human health of an annual mean of 40 micrograms/cubic metre.

(NB. The diffusion tubes are not EU type approved and cannot directly be compared with the EU health limits, but they do provide a valuable screening level. The diffusion tubes are economical and easy to use, but only provide monthly averages rather than real-time data. At Halkett Place a chemiluminescent analyser, which is EU type approved, is used to record NO_2 and provide real-time data. This is located alongside the diffusion tubes used in triplicate in order to validate the diffusion tube accuracy and a bias adjustment factor for 2011 was calculated to be 0.92. The adjusted value would therefore be lower by that factor. As no adjustment values were available before 2002 the unadjusted data has been used for comparison purposes.)

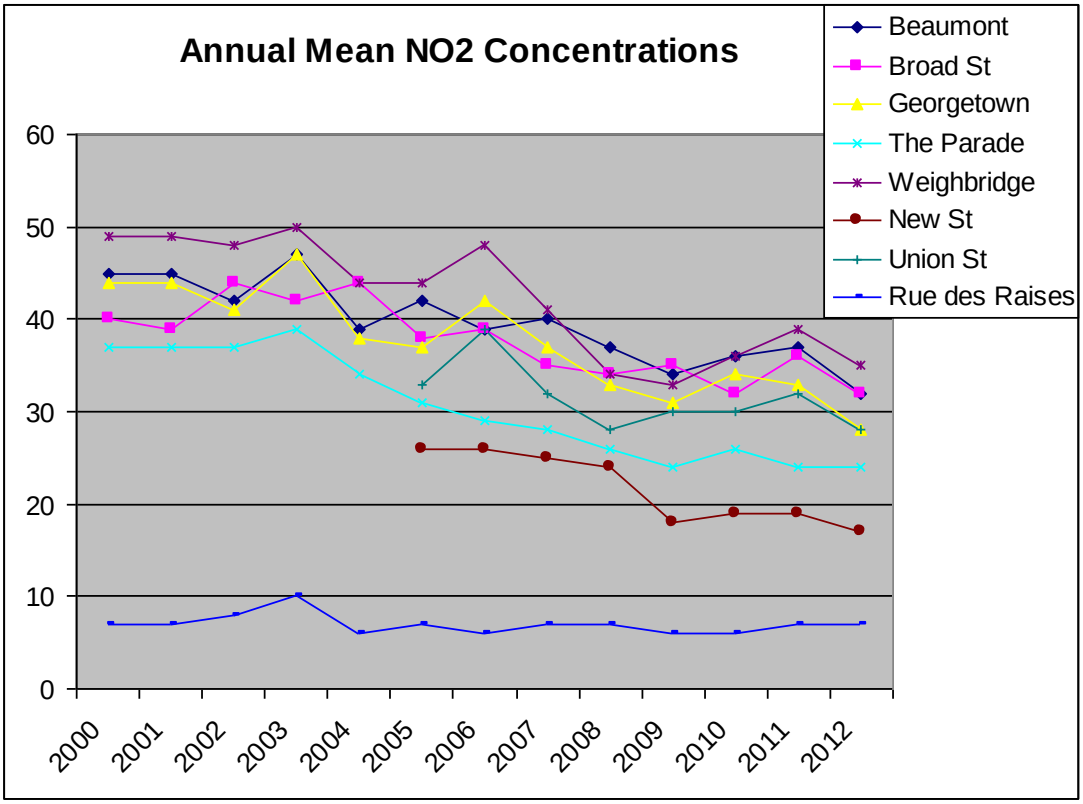


Chart 10 – Nitrogen Dioxide Diffusion Tube results (unadjusted)

Hydrocarbons (benzene, Toluene, Ethel Benzene and Xylene) have been monitored by diffusion tube in Beresford Street for several years but the equipment had to be moved to Halkett Place following repeated tube thefts during 2011. Data for annual mean levels (µg m^{-3}) in 2011 in chart 11 below have therefore been calculated for only five months. Nevertheless, the data shows a clear trend of reducing emissions until mid 2011. The annual mean value for Benzene has been significantly below the EC directive limit value of 5 µg m^{-3} since 2000. There are no set annual mean values for the other hydrocarbons.

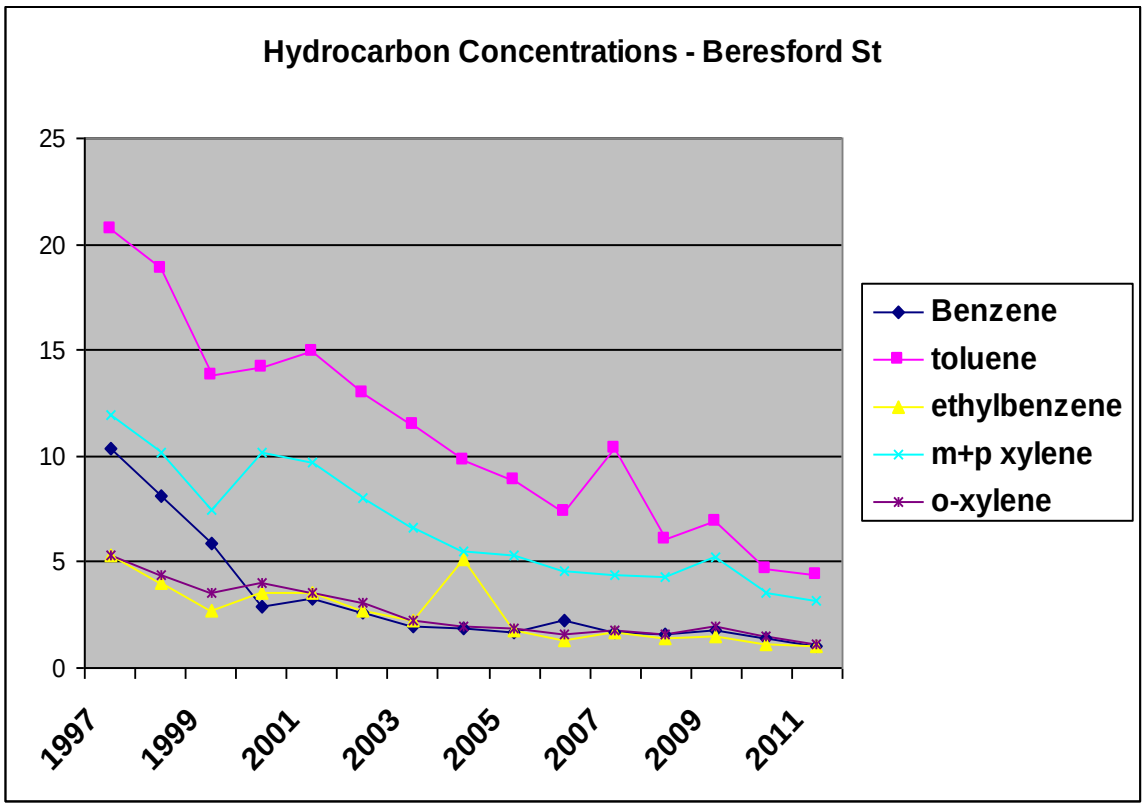


Chart 11 – Hydrocarbon Concentrations in Beresford Street

These figures have been taken from a report prepared by AEA Technology on behalf of the HPS. The full report "Air Quality Monitoring in Jersey 2012" is available on Gov.je at:

http://www.gov.je/Environment/ProtectingEnvironment/Air/Pages/AirQuality.aspx

Roadside particulate monitoring is also carried out by the HPS, in Halkett Place (by the central Market) and Havre des Pas (by De la Plage Apartments). This unit was moved to a background monitoring site at Howard Davis Park in November 2011). Chart 12 below shows the number of exceedances in 24hr daily mean of 50 µg/m^3 (Pm10 particulates). EU objectives specified that at stage 1 (by 2005)

the number of exceedances should be less than 35 and at stage 2 (by 2010) the number should be less than 7 (nb. the stage 2 value is under review). The results indicate that in the last 6 years, particulates readings have reduced at Havre des Pas but increased in Halkett Place. Both sites now pass the original EU objective but fail the more stringent 2nd stage value.

The monitoring of particulate matter is a complex science. Results are affected by meteorological conditions, and road motor vehicles are only one of several sources of particulates. As Jersey is an island, levels of particulates will also be affected by sea salt and silica. For a more comprehensive understanding of the results refer to the HPS report 'Report on Turnkey Osiris Particle Results at the Market and Havre des Pas sites in Jersey for 2012' also available on gov.je at the above link.

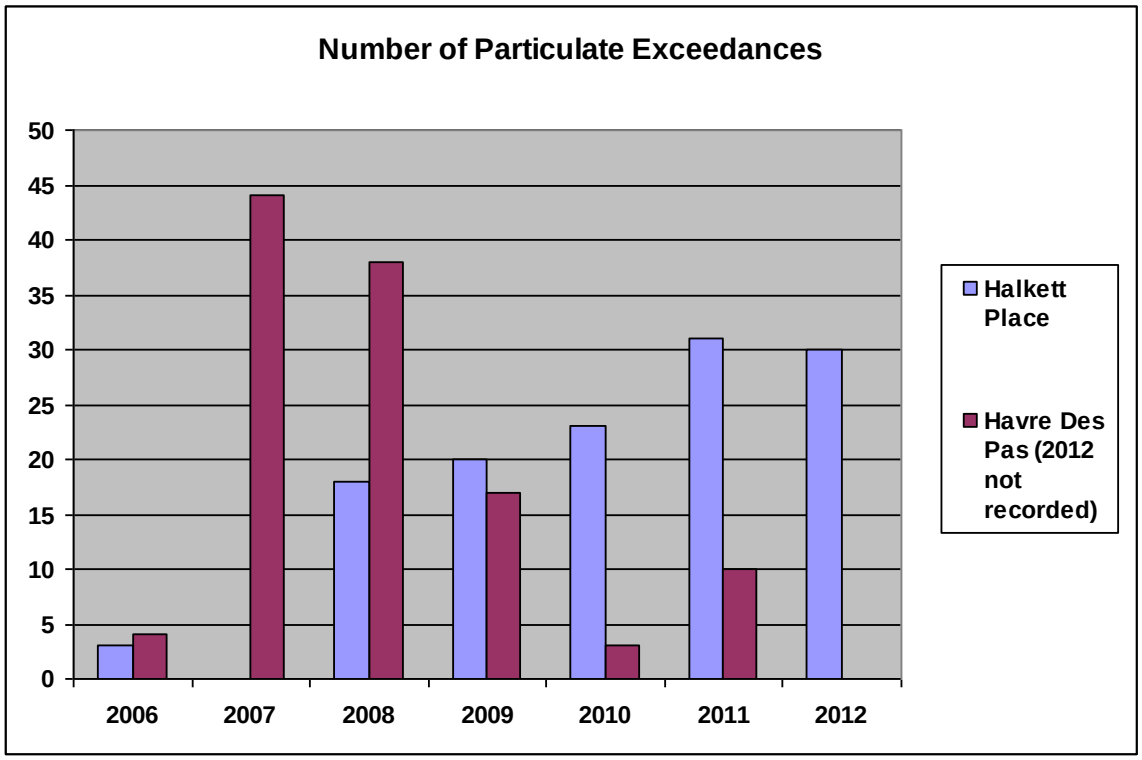


Chart 12 – Particulate Monitoring 2006 to 2012

Traffic noise can be annoying and cause stress and illness to people living near busy roads. Reduction in traffic noise can therefore be a significant benefit of an effective sustainable transport policy, however the monitoring of traffic noise is complex requiring significant resources and there are no current allocated resources or proposals to introduce a traffic noise monitoring system. As the volume of traffic is reduced it follows that traffic noise will fall unless individual vehicles become noisier. The trend is for vehicle engines and tyres to become quieter, and European Union vehicle noise standards are in place to ensure that

manufacturers consider this aspect of vehicle design. With the anticipated increase in electric vehicles, noise levels could reduce significantly. Manufacturers of electric vehicles are actually developing systems to generate some noise to combat concerns over their impact on pedestrian safety. The necessity for formal monitoring systems will be reviewed against progress with the STP.

3.3 Reducing Greenhouse Gas Emissions

Jersey recognised its international environmental obligations when it became a signatory (through the UK) to the Kyoto Protocol in 2005. The UK (and therefore Jersey) and the EU has adopted a Kyoto target of an 80% reduction in emissions from 1990 to 2050. To meet the target, the Island needs to reduce emissions by nearly 500,000 t/$CO_{2\ eq}$ by 2050. The Department of the Environment estimate that over a third of Jersey's greenhouse gas emissions (122,000 t/$CO_{2\ eq}$) are produced by road transport and it is therefore vital that emissions through transport are reduced.

Greenhouse gas emissions from road transport can be reduced both by reducing the numbers of motor vehicles on our roads and by encouraging more fuel efficient vehicles. Chart 7 above shows that the number of vehicle trips has remained stable over the last five years despite an increasing population. The quantity of greenhouse gas emissions emitted by road transport is proportional to the quantity of road fuel used. Chart 13 below shows that there has been a declining trend in total road fuel used, with a noticeable switch from petrol to diesel. The amount of road fuel used reached a peak in 1994 and by 2011 had fallen by over 10%.

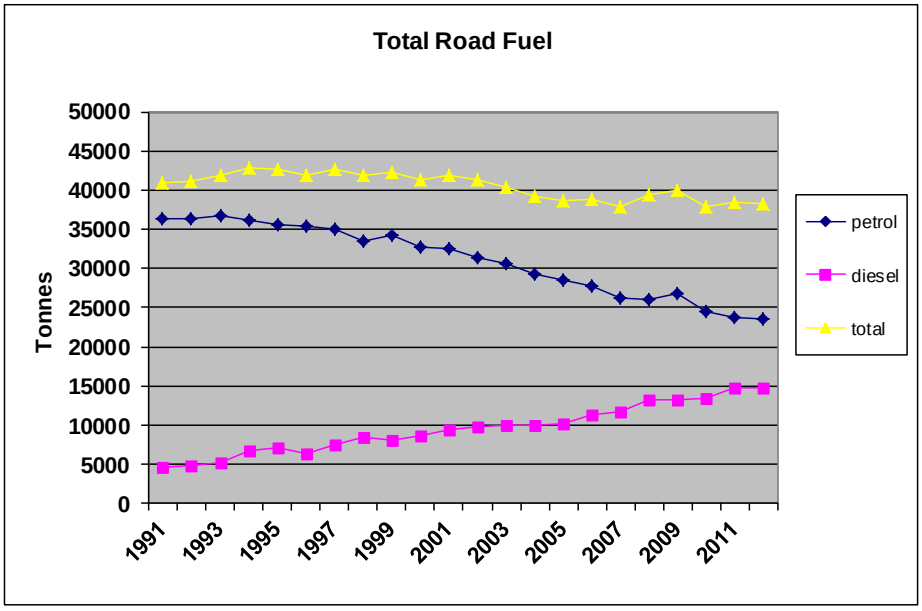


Chart 13 – Tonnes of Road Fuel Used in Jersey per Annum

Jersey will benefit from the European policy to reduce the fleet average carbon emissions from new cars (manufacturers are required to meet a car fleet average of 130 gmsCO_2/km by 2015 with a stricter standard of 95 gmsCO_2/km expected for 2020 (147 gmsCO_2/km for vans)). The industry is adapting rapidly and low emissions cars are quickly entering the market place, though zero emissions cars such as fully electric are still in their infancy. Jersey with its low speed limits and short travel distances is highly suitable for low or zero emissions vehicles and as these vehicles become financially more competitive the proportion on our roads will inevitably increase significantly. Whilst on average 3.5 fully electric cars, vans or scooters were registered per year in Jersey between 2007 and 2010, 13 were registered in 2011 and 47 in 2012. The number can be expected to continue to grow exponentially. Reserved spaces and charging points for electric vehicles have been installed in the main TTS town public car parks, to promote and facilitate usage.

TTS operates an 'eco-permit' scheme which offers a 50% discount on parking card charges for low emissions vehicles (all vehicles with emissions under 100gms CO_2/km). With only 266 permits issued (as of Aug 2013) the loss of income is modest. However as technological advances occur, a much higher proportion of private cars will qualify, and it is envisaged that other vehicles would then have to pay an increased rate to compensate for the loss of income, or the qualifying criteria will need to be reviewed.

Vehicle Emissions Duty (VED) also incentivises the purchase of the most fuel-efficient vehicles and penalises those who purchase vehicles with the highest carbon dioxide emissions.

The effect of VED in incentivising the transition of Jersey's fleet to vehicles with low carbon emissions and maintaining a sufficient revenue stream to support the STP needs to be monitored. More punitive charging bands may be needed in future years to accelerate this process if current bands are not effective.

3.4 Increasing the Level of Physical Activity through Travel

Key to increasing the level of physical activity through travel is the encouragement of walking and cycling. Although the one day TTS survey in 2013 recorded a low cycle number, chart 3 (for survey data see appendix 3) shows an encouraging overall trend of increased cycling at peak times into St Helier. The proportion of trips by bicycle in Jersey is very low however and the increase in real terms therefore modest. Although the survey of peak time travel into St Helier shows cycling to be about 4% of all trips, a more comprehensive Island-wide traffic survey in 2007 showed cycling to be only 1.5% of all trips. A cultural change is required to establish cycling as a main stream mode of travel.

The Island census identified a small increase from 23 to 25% of people walking to work from 2001 to 2011. The TTS mode of travel to work survey also recorded a small increase in walking over the last four years, though this may not be statistically significant.

Encouraging active travel amongst school children is also a key benefit of the STP, and base data has been collected for the majority of schools as part of the school travel plan process. This will enable identification of trends as future year data is compiled.

3.5 Protecting and Improving our Built Environment

The goal of protecting and improving our built environment is difficult to measure in the short term. Ultimately a successful sustainable transport policy will result in less pressure to give over land to the motor car for parking and for road capacity. It is encouraging to note that the removal of 390 public and 230 private parking spaces at Gas Place (with only 190 new spaces created at Ann Court) to enable construction of a town park in January 2011 has not resulted in increased usage at other town commuter car parks. This can be seen in chart 14 below which indicates the number of unused spaces at 11am on a week day in the five main town commuter car parks. (nb. The three occasions where the chart shows that spare capacity has increased to over 500 are during school holidays and the one occasion where capacity has fallen to under 300 is during the last few weeks leading up to Christmas.)

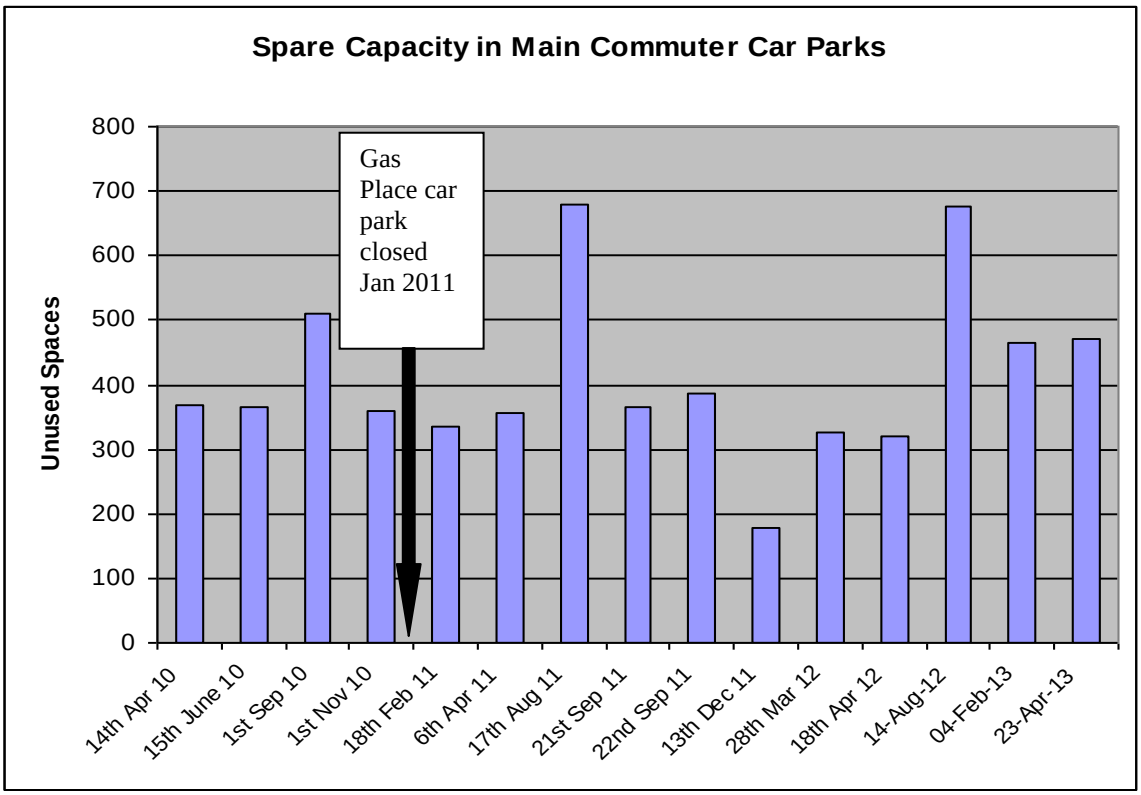


Chart 14 - Spare Capacity at Main town Commuter Car Parks

3.6 Reducing the number of Road Injuries

Chart 15 below shows that the injury rate on Jersey's roads reduced significantly during the 1980s and 90s but that reductions in serious injuries have not continued over the last decade. About 400 injuries occur on our roads every year, of which typically about 50 are serious or fatal. TTS is leading the development of a Road Safety Strategy which will identify specific trend targets for accident reduction and identify the measures necessary to achieve them. Lack of resources prevented this work from being completed in 2011 as originally intended, but resources have been allocated in 2012 and 2013 and the work is well advanced with a white paper consultation anticipated in early 2014.

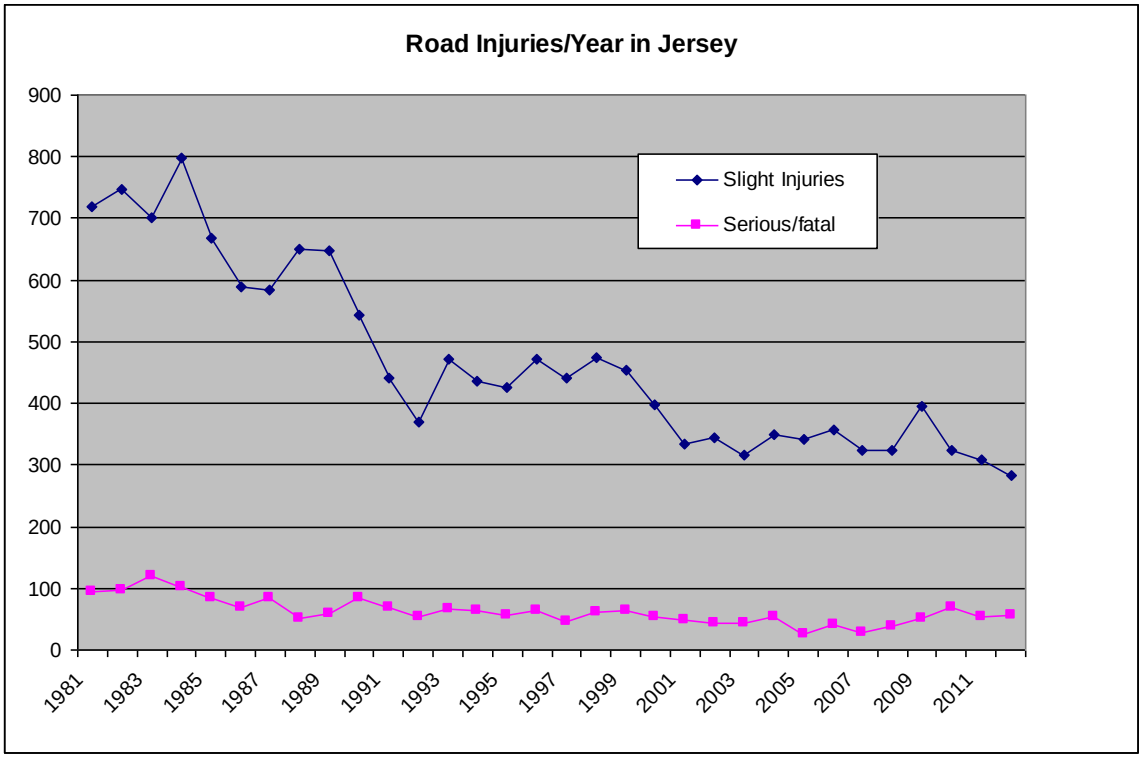


Chart 15 – Road Injuries per year

3.7 To Provide Access for Everyone

The 2011 census identified that 16% of households do not have a car. A comprehensive public transport system is vital to provide access for non car users or those who may not consider cycling or walking to be an option for the majority of their journeys. The coverage of the main bus service, both with regard to area and times has been improved considerably in recent years to better suit the changing demographics of the Island due to an increasing local population and a declining number of tourists. More rural areas, particularly St Ouen, St John, St Mary and St Peter now have earlier morning, later evening and Sunday services throughout the year.

The new bus contract, which commenced in January 2013, has ensured that all main bus fleet vehicles are now fully wheel chair accessible.

3.8 Reducing Oil Dependency

In common with the goals of reducing local air pollution and greenhouse gas emissions, reducing our dependency on oil for road transport will be achieved both be reducing the numbers of motor vehicles on our roads and by a shift towards more fuel efficient vehicles. Chart 13 shows that the tonnage of road fuel has reduced by 10% since its peak in 1994 and the increased use of low or zero emissions vehicles can be expected to result in much greater reductions in future years.

4. CONCLUSIONS

Jersey needs to adopt a cultural change in travel behaviour before significant reductions in car use are apparent and that will take time. The early years of the STP are an enabling stage, steadily improving the alternatives to private car use so that people will start to recognise that there are viable alternatives for some journeys. The trends however are encouraging, use of public transport has increased by 9% since 2007 and cycling (at peak times) also shows a small increasing trend since 2008. Use of road fuel is down 10% since its peak in 1994 and air quality monitoring shows significant reductions in pollutants at the road side. A small reduction in peak time traffic levels (1.7% in the last 4 years) has been recorded and overall traffic levels have remained constant over the past six years despite a population increase of 1% per annum during that period. This may have been due in part to the current financial recession, though if the public wish to reduce their travel costs by using private cars less, it is important to support the alternatives.

Increased use of public transport is key to achieving significant reductions in traffic levels. Its use has grown significantly since the award of the first States bus services contract in 2002 and the new contract, which commenced in January 2013, provides incentives for the operator to improve the service and grow its patronage in line with the STP targets.

It is less than three years since the States approved the STP and a longer period of time is needed before people realise that the alternatives to travel by private car may be viable and attractive to them. Facilities for walking, cycling and public transport will continue to be improved and it is also important to invest in the marketing and awareness of them as well as measures such as travel plans which encourage behavioural change.

The STP is a key policy in contributing to improvements in physical health and wellbeing and in reducing obesity levels in Jersey. Investment in cycle tracks and footways encourages active travel, which will contribute to reducing the burden on health services in the future.

In developing the STP, research concluded that a combination of ‘carrot and stick’ measures would be needed to achieve the targets, the most obvious disincentive being the cost of car use, particularly parking cost. Initiatives during the first three years following approval of the STP have been aimed at making the alternatives to private car use more attractive, and the impact of these measures will continue to be assessed before the appropriateness of significant above inflation increases to car parking charges is determined.

Appendix 1

Sustainable Transport Infrastructure Minor Works Schemes 2009 to 2013

Bicycle Shelter Les Quennevais School
La Route des Quennevais/Pont Marquet junction pedestrian crossing refuge
Rue des Pres, Grouville, road side footpath
Le Rond Collas, St Martin road side footpath
La Rue de la Pointe/la Rue du Bocage road side footpath St Peter's Village
Petite Route des Mielles road side footpath on Railway track land (with PoStB)
La Rue de Pont Marquet (Lavender Farm) Road side footpath
St Aubin Zebra Crossing with improved central island
Footpath opposite St Clement Parish Church phase 1 widening
Le Chemin des Maltieres footpath (Gorey Village)
La Route de Veule La Collette Pedestrian crossing refuge, junction and pavement/cycle track improvements
St Clements Coast Road/La Mare pedestrian crossing refuge
Wellington Hill bus layby
Devonshire Place/Garden Lane traffic calming
Bethlehem Chapel St Mary Road Safety Improvement
Grouville Common Cycle Track
Cycle Track widening Bel Royal to Millbrook
Cycle track extension by Steamclock - the Weighbridge
Cycle Track widening La Route de la Liberation
La Route des Quenevais junction with Pont du Val pedestrian refuges
St Clements Road pedestrian refuge
La Route de St Aubin (Millbrook) Pedestrian Refuge
L'Avenue de la Reine Elizabeth II Refuge
L'Avenue de la Commune Refuge
Gloucester Street/Parade pedestrian improvements
La Route du Fort/St Clements Road pedestrian crossing
La Rue des Buttes St Mary traffic calming
100 cycle stands installed, St Helier area
Electronic Part Time 20 mph speed limits at schools: - La Moye Mont Nicolle St John St Lawrence Bel Royal First Tower Trinity Victoria College Prep Springfield St Lukes St Saviour Grouville St Clement La Rocquier
Bus shelters installed at: - Mermaid site (Avenue de la Commune - Airport) Belle Vue (La Route des Quennevais) Tabor Park (La Route des Genets) Mont Nicolle(La Route des Genets)

First Tower (St Aubin's Inner Road)
Gorey Slip (Coast Road)
Long Beach Gorey (States £6k contribution)
La Bourg (Coast Road)
La Mare (Coast Road)
La Providence (2) (St Peters Valley)
Jardin des Carreaux, (Queens Road)
Ville Emprie,(Mont Felard)
Trinity Hill
Royal Hotel, St Martin
Portelet Common
La Perquage La Route de la Haule
La Haule
Le Marias Estate
Becquet Vincent
Bagatelle Rd
Avenue de la Commune (Pont Du Val)
Grande Route de St Jean (Mont a'L'Abbe School)
NB. (some paid for by Planning obligations or Parish contributions)

Sustainable Transport Infrastructure implemented through Planning Obligations

St Clement's Coast Road/Plat Douet Road junction pedestrian crossing refuges (Delgano Site) and road side footpath
Princes Tower Road Footpath (Diary Site)
La Rue des Landes (Rugby Club) Footpath (part funded by States)

Appendix 2

Vehicular Traffic flows into St Helier 7am to 9am (on 9 Main Routes)

	Peak hour comparison into St helier						
		dry	dry	dry	dry	mostly dry	
March dry week		**wc 16/3/09**	**wc 7/3/10**	**wc 28/2/11**	**12/03/2012**	**w/c 25/2/13**	**% Change**
		2009	**2010**	**2011**	**2012**	**2013**	**2009 to 13**
La Route de la Haule	7am	1184	1191	1177	1156	1166	**-1.5**
	8am	1144	1180	1167	1110	1150	**0.5**
	7am - 9am	2328	2371	2344	2266	2316	**-0.5**
St Peters valley	7am	696	652	654	643	630	**-9.5**
	8am	575	638	615	672	714	**24.2**
	7am - 9am	1271	1290	1269	1315	1344	**5.7**
Gr Rt de St Laurent	7am	307	291	277	276	303	**-1.3**
	8am	284	295	304	326	316	**11.3**
	7am - 9am	591	586	581	602	619	**4.7**
Gr rt de St Jean	7am	568	502	488	465	453	**-20.2**
	8am	587	568	585	594	508	**-13.5**
	7am - 9am	1155	1070	1073	1059	961	**-16.8**
La Rt de la Trinite	7am	279	305	305*	249	276	**-1.1**
	8am	285	293	293*	278	296	**3.9**
	7am - 9am	564	598	598	527	572	**1.4**
st Saviours Hill	7am	424	444	425	458	458*	**8.0**
	8am	376	366	434	428	428*	**13.8**
	7am - 9am	800	810	859	886	886	**10.8**
Bagatelle Road	7am	580	541	534	523	530	**-8.6**
	8am	614	608	617	609	577	**-6.0**
	7am - 9am	1194	1149	1151	1132	1107	**-7.3**
Bagot Rd	7am	536	546	515	520	511	**-4.7**
	8am	641	691	619	691	641	**0.0**
	7am - 9am	1177	1237	1134	1211	1152	**-2.1**
Greve D'Azette	7am	810	701	785	775	784	**-3.2**
	8am	871	901	916	828	833	**-4.4**
	7am - 9am	1681	1602	1701	1603	1617	**-3.8**
Total	**7am - 8am**	**5384**	**5173**	**5160**	**5065**	**5111**	**-5.1**
Total	**8am - 9am**	**5377**	**5540**	**5550**	**5536**	**5463**	**1.6**
TOTAL	**7am - 9am**	**10761**	**10713**	**10710**	**10601**	**10574**	**-1.7**

*Red figures missing data – previous year used.

Appendix 3

TTS Manual Survey (taken on a May dry day)

	2008	2009	2010	2011	2012	2013
no. of cars/vans	12281	12699	12011	11735	11708	12050
vehicle occupancy rate	1.36	1.35	1.36	1.37	1.37	1.38
no. of people in cars/vans	16772	17156	16323	16110	16072	16649
no. of people walking	2314	2207	2503	2440	2416	2358
no. of people cycling	732	598	947	841	921	770
no. of people on motorcycles	693	667	733	756	709	709
no. of people on main bus service	948	1090	1058	1144	1167	1188
Total no. of people	21459	21718	21564	21291	21285	21674

People entering St Helier town area by mode 7.30AM to 9AM