Market Street Consultation

February 2019

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Project Team

Please contact us if you have any queries regarding the report, or on any issues that may arise in the future.

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Project Disclaimer

- This public consultation was commissioned by St Andrews Councillor Brian Thomson to identify current perceptions of the town's Market Street and potential areas for improvement.
- The data will be used by Councillor Thomson and Playfair Consultancy Group to determine views on pedestrianisation.
- While the report will be made available to Fife Council as evidence regarding the feasibility of pedestrianisation of Market Street, the findings do not constitute an official position nor guarantee a particular course of future action. This report has no formal status and is only advisory in nature.
- <u>Please note: PCG conducted this research in an unbiased manner with no preconceived opinions, goals, or agenda. Playfair did not received a consultancy fee for producing this final report.</u>

Thanks to 3rd Party Facilitators

PCG would like to express our thanks to the individuals and organisations who facilitated and participated in the Market Street Consultation.

Specific thanks go to:

- Susan Keenlyside of Fife Council
- Valeria Volkova for the artist impressions of street layouts (valeriia.vlk@gmail.com)
- St Andrews Student Union and President - Paloma Paige
- St Andrews Town Library
- St Andrews University Library
- St Andrews Town Hall
- Madras College
- Organisers of the Car Free Day
- Tenby Council
- Renfrewshire Council
- Edinburgh City Council

Contents Table

SECTION ONE

Introduction

Cllr Thomson and Playfair Consultancy Group

Councillor Brian Thomson

- Cllr Brian Thomson (Scottish Labour) was elected as one of the councillors representing St Andrews and Strathkinness, on Fife Council, in 2012.

Playfair Consultancy Group C.I.C

- Playfair Consultancy Group is a student-led consultancy based in St Andrews that runs semester-long projects with local businesses, nonprofits and social enterprises. Currently in its ninth cycle, the aims of the firm are to allow students to develop real life problem-solving skills, as well as to provide tangible and actionable benefit to the clients with whom we work.
- Playfair Consultancy Group has now worked with over 140 students and more than 35 clients on a broad range of products, ranging from market entry, rebranding, market research, feasibility studies, marketing solutions, and strategy.
- The organisation operates as a Community Interest Company registered as SC475488.

Project Description and Deliverables

Background

- This project was initiated by Cllr Brian Thomson, who is interested in the possibility of pedestrianisation and is aware of the public and council's polarised views on the issue.
- The 2004 consultation, which was a precursor to street improvement works conducted in 2009, touched on the idea of pedestrianisation, but since then it has not been considered.
- Nearby cities such as Edinburgh, Aberdeen and Glasgow have introduced strategies centered around reducing the prominence of cars from their centres as part of wider national trends focused around enhancing environmentally friendly initiatives. Additionally, within St Andrews, significant changes such as growth of student numbers, increases in tourism and new housing projects have prompted Councillor Thomson and other supporters of pedestrianisation to see now as the time to begin re-assessing the feasibility and public opinion of such a project.

Key Deliverables

- Gather resident and business opinions on the current Market Street as well as their views on potential improvements, including pedestrianisation.
- Gather views from various key, local organisations and services which use Market Street.
- Examine the experience of case studies of pedestrianisation in other areas to better understand the impact such changes can bring.

Project Description

- The primary objective of this project is to collect the opinions of key stakeholders (town residents, community organisations, and businesses) as well as research the feasibility and desirability of implementation of pedestrianisation through case studies and primary data collection.
- More than gauging support for pedestrianisation, Playfair aims to identify the key values for Market St of the various stakeholders of St Andrews so as to see how those values would be supported by pedestrianisation or by other town improvements in general.
- Stakeholder opinions were gathered through a combination of surveys, focus groups, and interviews. Case studies were carried out with cooperation from the councils of UK towns and cities who implemented pedestrianisation with varied success. Primary data was gathered through resources provided by Fife Council and Space for Cycling as well as manual observations by the Playfair team.
- The team recognises the delay in reporting the results of this project. Due to its contentious and public nature combined with the high consultation response rate, an extended project length was necessary to ensure that all data was examined and analysed with due care.

SECTION TWO

Executive Summary

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Executive Summary

Consultation Overview

- This report provides an analysis and evaluation of businesses, residents and key organisations' views of Market Street in St Andrews. The structure of this report has examined several key areas:
    - **Current Views**
      Perceptions of the current performance, design and layout of the street were assessed. This allowed for the strengths, weaknesses and future opportunities for Market Street to be examined.
    - **Future Ideals**
      This section then sought to understand potential areas for improvement from the attributes of the street which respondents ranked as most important.
    - **Favoured Option Appraisal**
      From the identified future ideals, the option of street layout that best fits these criteria was then examined in greater detail.

Research Approach

- The research approach used was loosely based upon recommended Appraisal Guidance as used by organisations such as Transport Scotland to identify rationale for change.
- Detailed background information on Market Street was received from Fife Council. Playfair also collected data during events such as the St Andrews Car Free Day.
- Extensive engagement was undertaken with residents and businesses through surveys, delivered in both online and paper formats. Overall the consultation gathered 1,520 responses from residents and 55 responses from businesses.
- Two focus groups, involving 6 representatives from local businesses were held. Research was also conducted on case studies of areas with pedestrianised streets to better understand the way they operate and draw applicable findings.

Key Findings

- While approximately 1/3 of responses (474) indicated a preference towards some form of pedestrianisation, overall, the majority of results from town residents and businesses suggests that pedestrianisation of Market Street is not desired at present.
- Instead 'No Change' was identified as the most preferred option which also performed best against the ideals for how respondents wished to see the street laid out in the future.
- The results suggest that while most respondents recognise some form of pedestrianisation may improve the street's social atmosphere, they prioritise high-levels of accessibility. They fear losing vehicle access and on street parking would deter people from using the street, with businesses suffering as a consequence.
- Therefore, improvements to parking and transport flow within St Andrews must take place before the majority in town would consider supporting pedestrianisation. Indeed, plentiful availability of parking was identified as a key factor in case study examples of successful pedestrianisation schemes.
- While 'No Change' is the preferred option for the street layout, there is still demand for smaller scale improvements which would improve user experience for both pedestrians and motorists.

SECTION THREE

Current Situation

Context of Market Street in St Andrews I

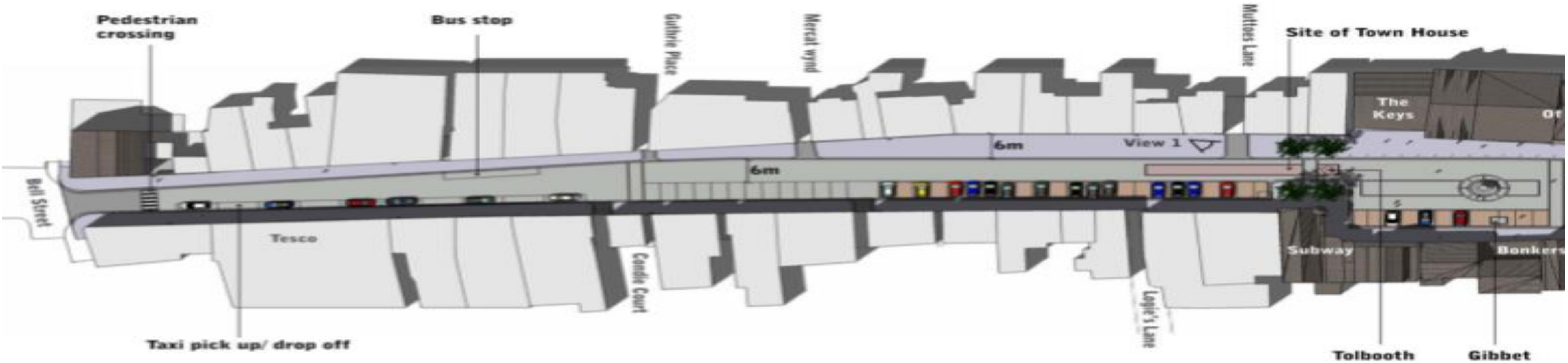


Figure 3.1 - Current layout of Market Street (taken from Ironside Farrar's Consultation Boards)

Overview

- As shown in figure 3.1, Market Street forms the heart of St Andrews, running parallel between North and South Street. It is a concentrated area with a diverse mix of independent and national businesses with residential flats above. The street is a commercial destination to a large part of North East Fife and a popular visiting point for tourists. The town centre is a designated Conservation Area with Outstanding Status.
- In the coming years, **Market Street will need to adapt to significant changes** such as: increasing dominance of internet shopping, rise in electric vehicles, continued high visitor numbers, growth of St Andrews' population through the St Andrews West Development and proposed increases in student numbers to 10,000.
- Additionally, Fife Council's Air Quality Strategy (2015-2020) and Fife Local Development Plan (Approved September 2017) both aim for regional improvements. Policy 14 within the plan, regarding the built and historic environment, specifically states that people and place will be given priority over vehicular movement.
- This context all fits within Scotland wide ambitions to encourage more sustainable living, thereby presenting both future opportunities and challenges for the street's development.

Context of Market Street in St Andrews II

Existing Parking Arrangements

- Market Street is one-way for road users, with vehicle entry from the West. The street includes 80 car parking spaces, restricted to maximum 2 hour stay on the South side. These are ticketed between the hours of 9-5pm Monday-Saturday and 1-5pm on Sundays, generating approximately £180k of revenue in 2017-18 for Fife Council annually. This is in addition to a well-used on-street bus stop, located near the West end.

- On the 26th September 2016 the Council undertook an exercise to study parking occupancy levels on Market Street, shown in figure 3.2. The average duration of stay was 68 minutes and on average 74% of car parking spaces were occupied throughout the day. This exercise was conducted during university term time but outside peak tourist season. It is possible the average occupancy rate fluctuates during the year, however no range of data was available. Despite this, results suggest **the available parking spaces on the street are well used and heavily in demand.**

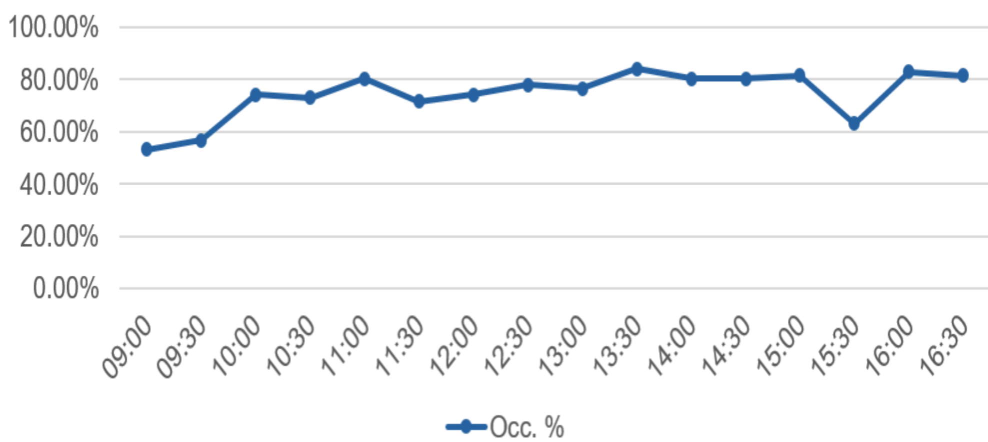


Figure 3.2 - Graph of parking occupancy rate (September 2016)

Pollution and Accident Rates

- While there is no pollution counter on Market Street, 2017 annual pollution figures from nearby Bell Street lie between 24.5 - 27.2 µg m-3, below the National limit of 40 µg m-3.

- Market Street is also relatively safe for both pedestrians and vehicles. Between 2013 - 2018 there were 40 reported traffic incidents directly on the street, of which just 7 occurred within the last three years. 37 incidents caused vehicle damage only and 3 minor accidents involved pedestrians with no reports of serious injuries. Further details are available in appendix 2 i).

- Therefore, statistically speaking, **Market Street is currently a safe environment for all users.**

Context of Market Street in St Andrews II

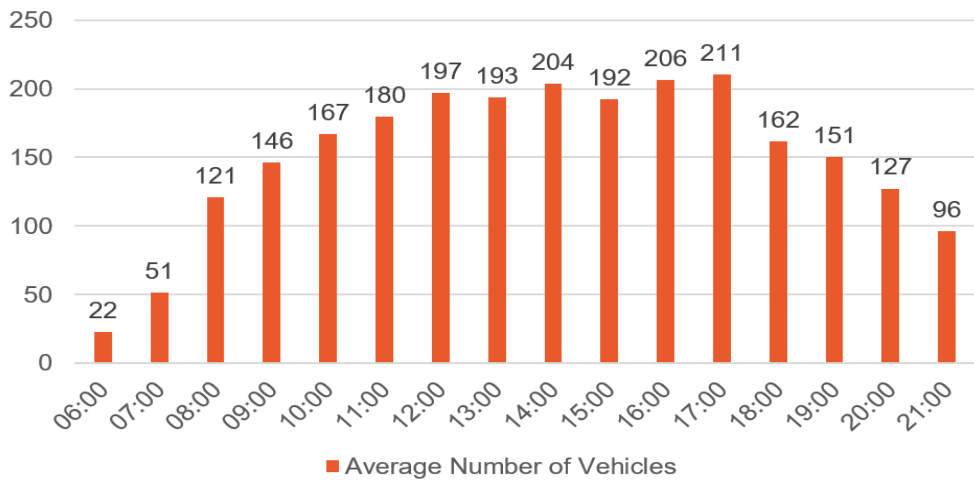


Figure 3.3 - Graph of vehicle numbers during busiest times (2010)

	North Street Daily Average	South Street Daily Average	Bell Street Daily Average
2010	8,499	6,245	4,895
2018	9,762	6,193	4,422
% Change	14.8% increase	0.8% decrease	10% decrease

Figure 3.4 - Comparison of average daily vehicle numbers on key streets

Traffic Volumes

- Market Street sees frequent car movement from shoppers and delivery vehicles. Owing to difficulty with gathering information on Market Street, Fife Council's most recent traffic survey data is from August 2010. While the speed limit on the street is 30mph, average vehicle speed was recorded as only 10 mph. The slow moving traffic suggests it is congested with motorised users but may create a safer, more pedestrian friendly environment.

- The results of vehicle numbers travelling down the street is represented in figure 3.3. On average 2,576 vehicles travelled down the street each day, with peak times occuring at midday and early evening. The maximum traffic flow recorded was 241 vehicles entering the street per hour. This compares to 6,245 average daily vehicles on South Street and 8,499 average daily vehicles on North Street, both measured during 2010.

- Figure 3.4 shows the comparison of recent (2018) traffic volume counts for three other streets in town with their 2010 results - both calculated using the same methodology. There is no consistency in traffic trends across these locations, therefore unfortunately no reliable estimation of 2018 traffic levels on Market Street was able to be inferred.

- **While the available 2010 data indicates Market Street is the quietest main street in town for vehicle traffic, the low average vehicle speed suggests the street may still be busy and congested.**

Previous Market Street Improvements

Overview

- In 2009/10 Fife Council identified that improvements to the quality of the Market Street environment were necessary to ensure it remained a successful commercial, leisure and tourist destination.

- Figure 3.5 shows Market Street before improvement works were carried out. A previous public exhibition held in 2004 identified the street surfacing and lighting was poor, pavements narrow and overcrowded, with the road congested leading to conflict between pedestrians and traffic.

- Fife Council raised £3.5 million of funding to enhance street quality, access, circulation and safety while retaining historic character and offering flexibility for future changes in use.

Figure 3.5 - Google Street-View of Market Street from 2009 looking East towards the fountain

Design Objectives

Improve the pedestrian environment to provide a better quality, safer and more accessible experience

- Increase pavement widths
- Enhance flexibility, accessibility and improve the quality of the surface and make the street a more attractive town centre destination

Retain through traffic and significant levels of existing parking

- Retain high levels of on-street parking in the short term until further central car parking is made available
- Offer flexibility to accommodate future changes, including pedestrianisation

Multifunctional space at Market Square

- Create a multifunctional environment suitable for future uses including markets and other events

Re-use cobbles, retain richness of the materials palette and patterning

Consider reintroduction of trees and retain the fountain

Work Conducted

- Work conducted in 2010 resulted in significant widening of the North side pavement, of up to 6m in the central section. 80 parking places were provided at 90 degrees to the kerb on the South side only.

- The street surface was re-laid using existing natural materials of cobbles and setts along with new dropped kerbs and smooth crossing surfaces to improve north- south links. New street lighting and trees plus additional public benches and cycle parking were also provided.

- The enhancements did not propose immediate pedestrianisation as instead, flexibility was provided in the scheme to accommodate the opportunity for future changes to traffic flow or pedestrianisation. The changes rebalanced the accessibility for pedestrians and cars.

- Therefore, the street layout is designed to allow pedestrianisation to occur, should future conditions warrant it.

Car Free Day - Saturday 22nd September 2018

- A Car Free Day was organised by St Andrews Space for Cycling. Transition University of St Andrews and Fife Council, was held on Saturday 22nd September 2018 to mark World Car Free Day.

- A survey of approximately 180 attendees indicated the vast majority (96%) enjoyed the event with **80% stating they would like to see more such events in the future.** However, since only those enjoying the on-street events responded to the survey, it is unlikely the survey is a representative sample of the town.

- Indeed, overall the response following the event was mixed. Anecdotally, some residents raised complaints regarding difficulty accessing their properties.

- Businesses also expressed concerns, of the 55 who responded to our later consultation, 60% (26) said the event impacted them negatively, with a reduction in footfall the most common complaint. **Only 7% (3) said the event was positive for their business.**

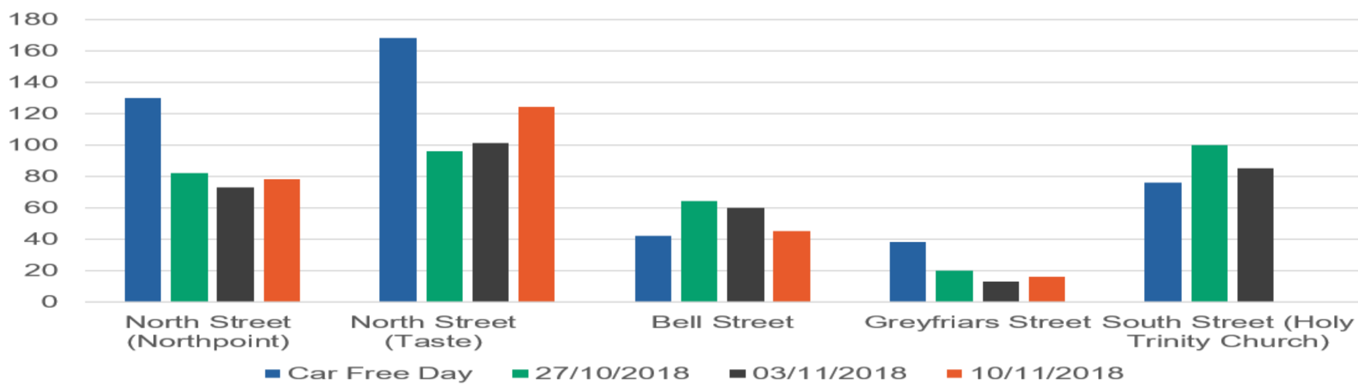


Figure 3.6 - Vehicle Counts in 10 minute intervals at the corresponding dates and locations

Results of Vehicle Counts

- During the Car Free Day event, Playfair conducted 10 minute traffic counts at various locations using hand-held counters. Three subsequent vehicle counts took place from the 27th October onwards. Further details of methodology are available in appendix 2 ii).

- From figure 3.6, North Street saw an average increase of 62% in vehicle traffic during the Car Free Day compared to the subsequently recorded average, while Greyfriars Street witnessed a 144% increase in traffic on the day.. However the traffic volume increases were not observed everywhere, Bell Street decreased by 25%, potentially due to additional pedestrians using the crossing, impeding flow as cars were backed up along its entirety for substantial parts of the day and South Street also decreased, by 19%.

- While firm conclusions cannot be drawn from a single event, it would suggest **the loss of vehicle access on the Car Free Day created a significant increases in vehicle numbers along North Street and Greyfriars Street.** Disruption on other streets would need to be considered if Market Street was to be closed to traffic again.

Research Methodology: Surveys and Focus Groups

Aims

- The aims of the surveys and focus groups were to understand how Market Street is used and perceived currently in addition to providing insight into the “level” of pedestrianisation each responder envisions for the street.. The overall survey was extensively reviewed by the team, Playfair board and Councillor Brian Thomson for objectivity and effectiveness before being distributed to the public. The surveys were open for four weeks until November 9th 2018.

Distribution

Residential Surveys

- An online link was publicised via the St Andrews Citizen, the Courier, Facebook pages, and posters distributed to strategic locations throughout St Andrews. Hard copies were left at advertised drop-in points (St Andrews Public Library, Town Hall, Student Union) for those who were unable to use internet access to respond. Both the internet link and hard copy forms were distributed to local elderly care homes and Madras College. We received 1,520 of which 1291 were fully completed responses.

Business Surveys and Focus Groups

- Approximately 200 letters containing the link to the online business survey were hand delivered to every business on Market Street, North Street, and South Street. The survey link was given to BID to publicise via their newsletter and other channels of communication. We received 55 responses of which 49 were fully completed. The opportunity to participate in a focus group was given at the end of business surveys. Respondents who indicated interest were invited to one of two focus group dates designed to provide maximum convenience to the schedules of respondents. Twenty three businesses indicated interest in participating in a focus group.

Limitations

- Due to lack of resources, many people in the surrounding area, who are a large part of the town economy, may not have had an opportunity to share their views as the consultation was not advertised so heavily to them, save for local newspapers. Visitors to the town were also unable to be included due to scope constraints and the consultation took place outside peak tourist season.

- Several survey responses, particularly hard copies, had to be discarded due to respondent error that made it impossible to accurately analyse with the rest of the data. There is also a possibility that respondents could submit the survey multiple times, possibly skewing data.

- Business responses were relatively low, representing less than a quarter of the businesses in St Andrews. Response rate from national chains was particularly poor. Furthermore low response to focus group invitations resulted in very small groups, which were nevertheless fruitful; however, they may not represent the opinions of the majority of St Andrews businesses.

Resident Respondents

Location Overview

- Playfair asked resident respondents to the consultation to indicate where they live in order to understand their distance from Market Street as those who live further away will likely have different views and use different methods of transport to access the street.
- From figure 3.7, 25% of respondents live less than 10 minutes walk to Market Street, likely indicating they stay reasonably centrally in St Andrews. The largest group of respondents at 39% were those who live 10+ mins walk from the street, encompassing a majority of residential properties as opposed to student/holiday lets. Encouragingly, 36% of participants did not live in St Andrews, suggesting the survey reached those outside the town reasonably successfully. Although not St Andrews residents, the town is a hub for many areas in North East Fife who therefore are still important stakeholders as they also utilise the town centre.
- The geographic mix gives us confidence in the results of this survey, as **the diversity of responses should ensure bias is minimised, with no one particular position favoured.**

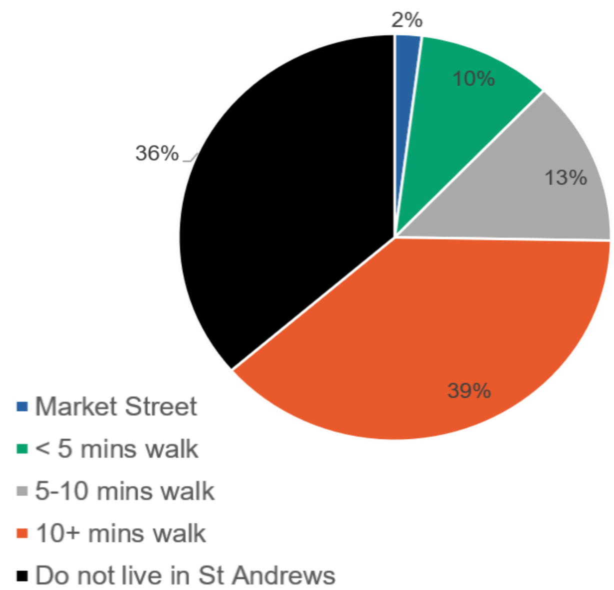


Figure 3.7 - Location demographics breakdown by distance from Market Street

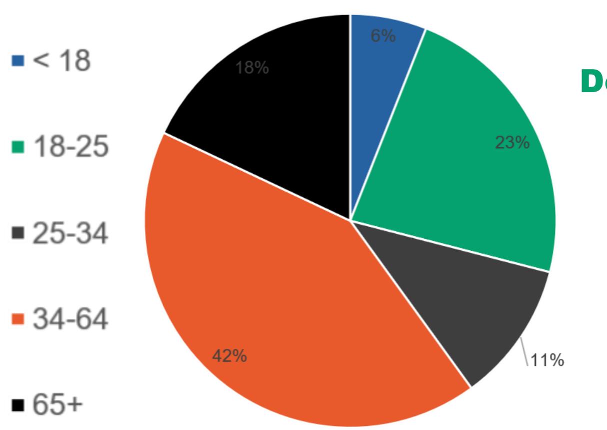


Figure 3.8 - Age demographics breakdown

Demographic Overview

- Overall we collected 1 520 responses originating from 5 different demographic groups. Of the respondents, approximately 8% (118) self-identified as being mobility impaired.
- The consultation was completed by a good mix of age demographics. As can be seen in figure 3.8, the largest portion of responses (42%) was from the 36 - 64 age range. This is to be expected as it was the largest age bracket option given with the majority of the population also in that group.
- The second most responses came from the 18-25 age rage at 23%. This is likely due to the large student population in St. Andrews however owing to the broad demographic, the results are in no-way biased towards a student perspective. The smallest representative group at 6% was the youngest age group of those under 18. The vast majority of these respondents were 6th year pupils at Madras College.

Resident’s Use of Market Street

Analysis

- To understand the role of Market Street in the town, respondents were asked to identify the top three activities they use the street for.
- Figure 3.9 represents the main reasons residents use Market Street. While the street has a variety of uses for respondents, the most common action undertaken was light shopping, with 39%. Light shopping was classed as shopping involving two bags or less.
- Other street uses included Food & Drink (17%), Heavy shopping, classed as three bags of more, (9%) and services, such as hairdressers or banks, (3%). Altogether, this indicates that over 67% of all residents are using the businesses located on Market Street.
- This suggests **most users predominantly use the street to complete smaller, lighter purchases.** Such purchases, potentially do not rely on the buyer having close proximity to their parked vehicle as for able-bodied shoppers, they would be able to manageably carry their purchases.

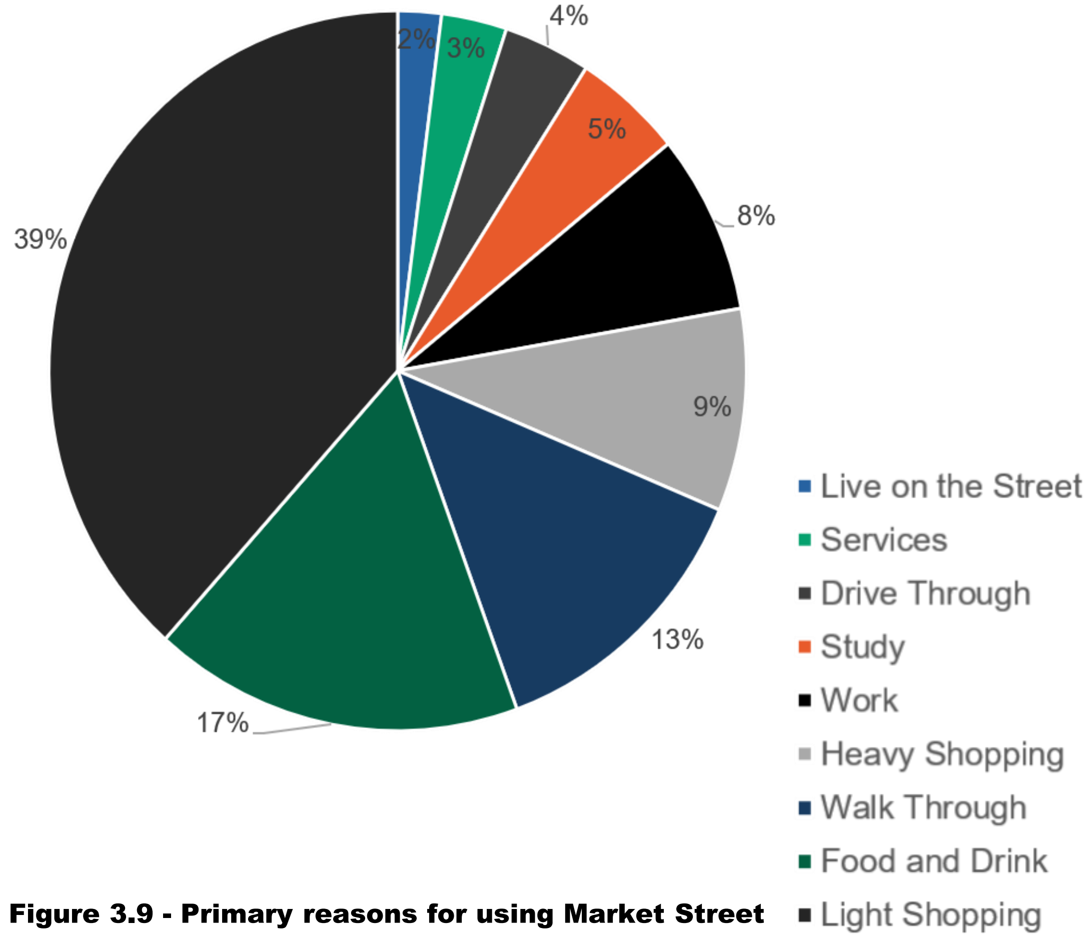


Figure 3.9 - Primary reasons for using Market Street

Resident’s Use of Market Street

Analysis

- Figure 3.10 provides a breakdown in how frequently respondent’s use the businesses on Market Street. Most residents visit these shops regularly throughout the week with 27% going into businesses everyday, 34% visiting 3-5 times a week and 27% going in 1- 2 times a week. Less than 1% of respondents indicated they never used shops on the street. Overall these results are important to understanding the business flow that residents express on Market street. It is clear that there is currently a large and continuous economic presence on Market street.

- Currently, as shown in figure 3.11, the most common average spend by 32% of respondents on Market Street is between £5-£10, with only 14% regularly spending more than £30 per visit. This suggests, in line with the findings from the main uses of the street, that Market Street is used primarily as a light shopping destination as opposed to a destination for making heavy, bulky purchases. The high frequency of respondents indicating they use businesses on the street everyday, coupled with the low average spend suggests **at present Market Street users make frequent brief visits to the shops there, only buying a few items each time. For this activity to be feasible, it requires good levels of access**. If respondents had to walk from a distance to access the street then it is likely a lot of such purchases would not take place.

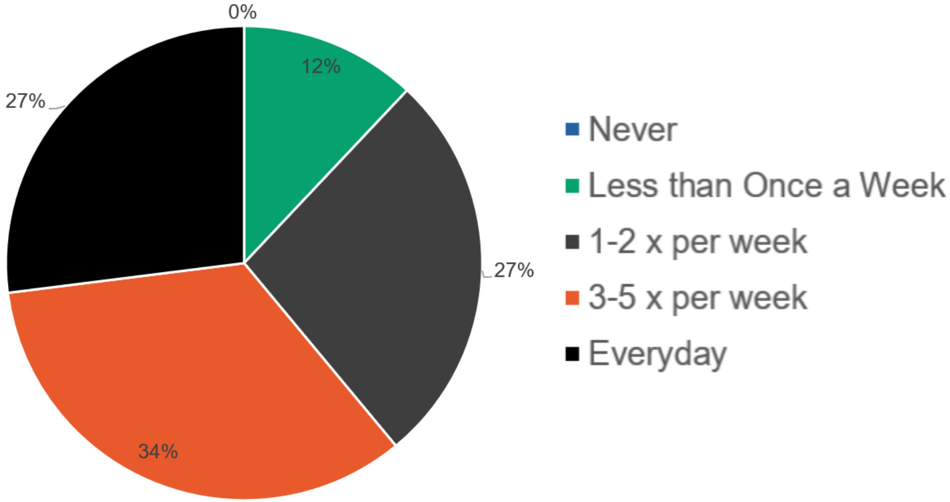


Figure 3.10 - How regularly respondents shop On Market Street

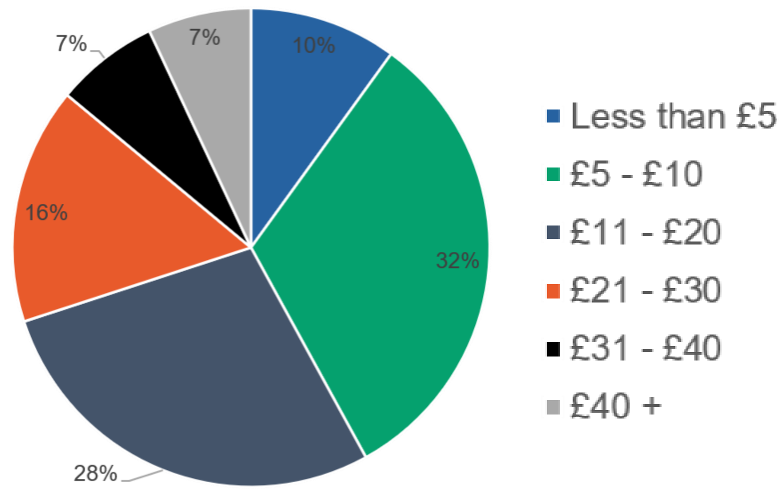


Figure 3.11 - Average Spending Overview

Resident’s Use of Market Street

Sub-Section Analysis - Spending

- Figure 3.12 breaks down respondents’ average spend in businesses on Market Street by the mode of transportation used to access the street. This provides insight into the economic activity level of each group of Market Street users.

- The respondents who used an access method that made it easier to transport more or larger items (i.e. with a car versus a bike) represented those who also spent a greater amount. For example, 50% of those who arrive by vehicle spend over £20 on average compared to only 26% of bus users, 19% of walkers and 16% of cyclists. The most common spend for these three other modes of access is between £5-£10.

- This is important to highlight as it suggests **the most valuable business is generated by individuals who travel to Market Street by vehicle.**

- Furthermore, this also indicates high spending vehicle users are vital for the economic success of the street and measures that would make it harder for such users to access Market Street shops may cause a decrease in economic activity, at least in the short term, were buyer behaviour not to change.

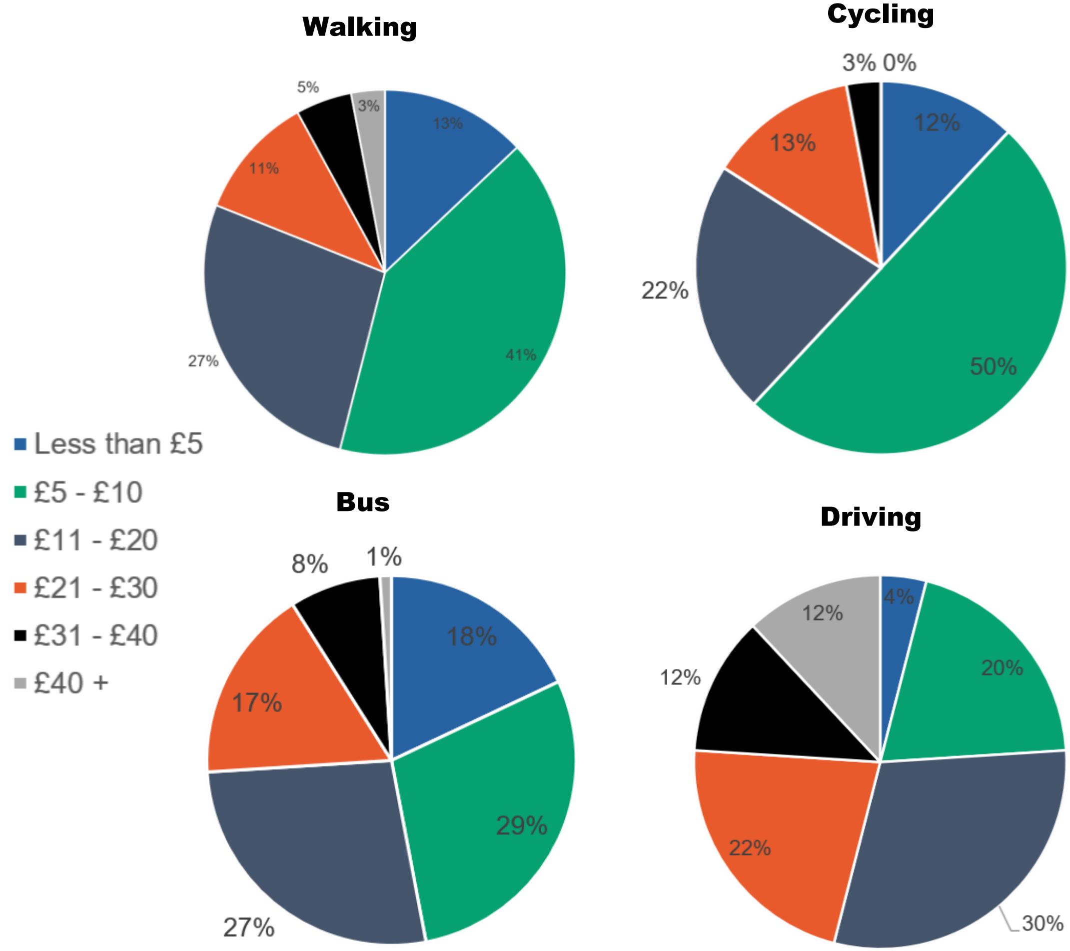


Figure 3.12 - Breakdown in spending by mode of transport

Resident's Use of Market Street

Sub-Section Analysis - Frequency

- Figure 3.13 breaks down respondents' average frequency of how often they use businesses on Market Street by the mode of transportation used to access the street. The purpose of this is to understand how regularly each stakeholder shops on Market Street.

- Walking was the mode of travel most associated with using the shops everyday at 33%, compared with 21% for vehicle users, 17% for bus passengers and 16% for cyclists.

- Indeed both forms of active travel, walking and cycling, typically use the street most frequently. 69% of walkers and 65% of cyclists shop three times per week or more, compared to only 50% of drivers. Drivers also had the highest percentage of respondents who indicated they shop on the street less than once per week.

- While alternative modes of access to the street do use the shops more regularly than drivers who arrive by vehicle, the increase in frequency is too small a margin to offset the effect of drivers' higher levels of spending on their albeit more infrequent visits. Indeed, active travel users would need to shop on Market Street approximately twice as often as drivers to generate the same level of spending. However active travel users only shop on average approximately 30% more.

- **Therefore with pedestrianisation or reduced vehicular access and parking spaces, it is reasonable to conclude that, without a change in buyer behaviour, a decrease in spending would be a likely consequence.**

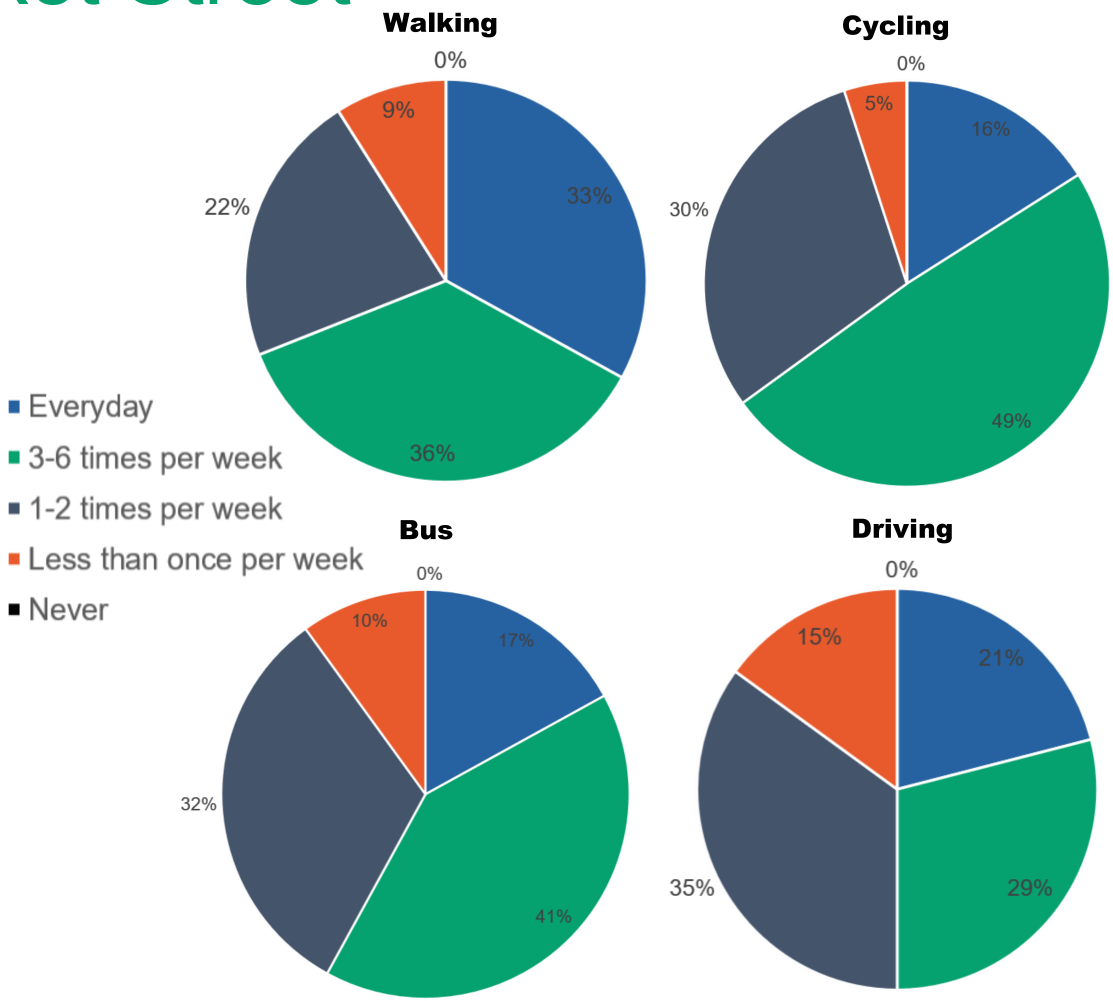


Figure 3.13 - Breakdown in spending by shopping frequency

Residents’ Market Street Access I

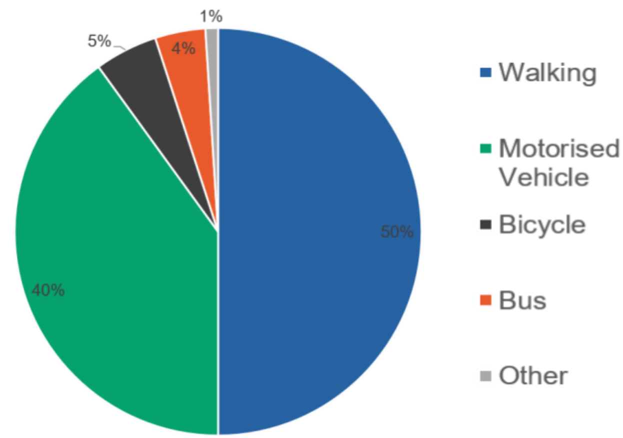


Figure 3.13 - Breakdown in Mode of Street Access

Overview

- From figure 3.13, the most common way to access Market Street is on foot, with half of respondents stating they use this method most often. A close second is to arrive using motorised vehicle, which 40% of respondents selected. The remaining 10% is split between Bicycle (5%), Bus (4%) and Other (1%).
- The number of residents that use vehicles to access Market street increases from 10% for <18s to over 50% for those 65+ as the age group rises. Similarly car use increases the further from the centre respondents live, rising from 9% for those who live less than 5 minutes walk away to 56% for those who live out with St Andrews.

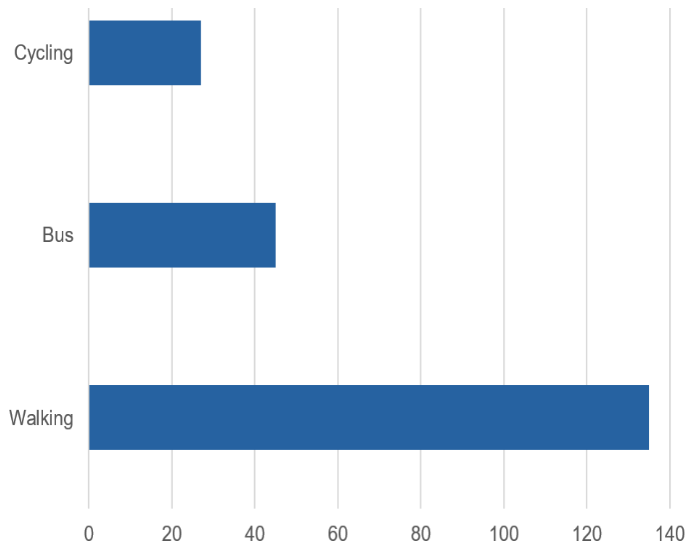


Figure 3. 14 - Alternative modes of transport drivers would consider switching to

Willingness to Change

- Out of the 40% (602) of respondents who indicated they primarily use a motorised vehicle to access Market Street, only 33% (200 respondents) were willing to change their mode of travel. Respondents were then able to select as many alternatives as they pleased, with the results given in figure 3.14 . The most common alternative was to walk instead of driving, which 67.5% (135 respondents) would consider. Next most popular was bus which 22.5% (45 respondents) would potentially switch to, followed by bike 13.5% (27 respondents).

Analysis

- The way residents access Market Street benefits from St Andrew’s relatively small size, reflecting the majority of respondents’ views that they currently or would be prepared to start walking to town. **This suggests the car does not occupy a dominant monopoly position in town,** with viable alternative methods available to reach the centre.
- However alternative methods of cycling or going by bus are not popular, this suggests a lack of availability of the required infrastructure or service to tempt residents to make such a switch. Therefore, **restricting vehicle access may significantly decrease the number of visitors to Market Street if alternative transport options are not suitably improved.**

Residents' Market Street Access II

Key Trends

- As detailed on the previous page, 66% of respondents would be unwilling or potentially unable to rely less on motorised transport in order for Market Street access. These respondents were then asked to elaborate why they wanted to remain with their vehicular mode of transit as opposed to public or active travel.

- The following 5 major underlying trends were then identified from the data collected:

Fulfilling Business Needs

- Several respondents were either business owners or members of staff working on Market Street. Concerns were raised about the need for delivery routes, the ability to conduct home visits for local residents, and access for potential customers. Respondents feared pedestrianisation of Market Street would negatively impact local businesses and the performance of workers .

Insufficient Public Transport

- Widespread issues were raised regarding poor public transport services, and their inability to be an effective substitute if pedestrianisation is to take place. People identified a lack of bus routes from their homes to Market Street, ineffective timetabling, increased costs for using public transport, and poor safety infrastructure for potential cyclists looking to travel into St Andrews.

Distance from St Andrews

- Various respondents argued they lived too far away to simply walk or cycle into town to access Market Street, whilst coupled with trend 2, there was no direct public transport. This resulted in car travel being the only sufficient mode of transport to Market Street.

Mobility Issues

- Several respondents articulated that they had no ability to choose their form of transport to Market Street, simply because of their health. A significant proportion of respondents identified that direct travel by car, with on street parking, is the only feasible way for them to access the local businesses.

Convenience of Current System

- The most significant trend identified was the convenience of the current system, current on-street parking provides quick, ready access which is often necessary when under certain conditions, such as time constraints, bad weather, handling of heavy purchases, and when with young children or immobile family members.

Residents' Market Street Access III

Constructing Key Trends

- The key trends assessing residents' sentiments were developed by qualitative coding techniques. Coding led to the construction of basic, organised and major themes from the data collected. The coding process taken can be found below in figure 3.15:

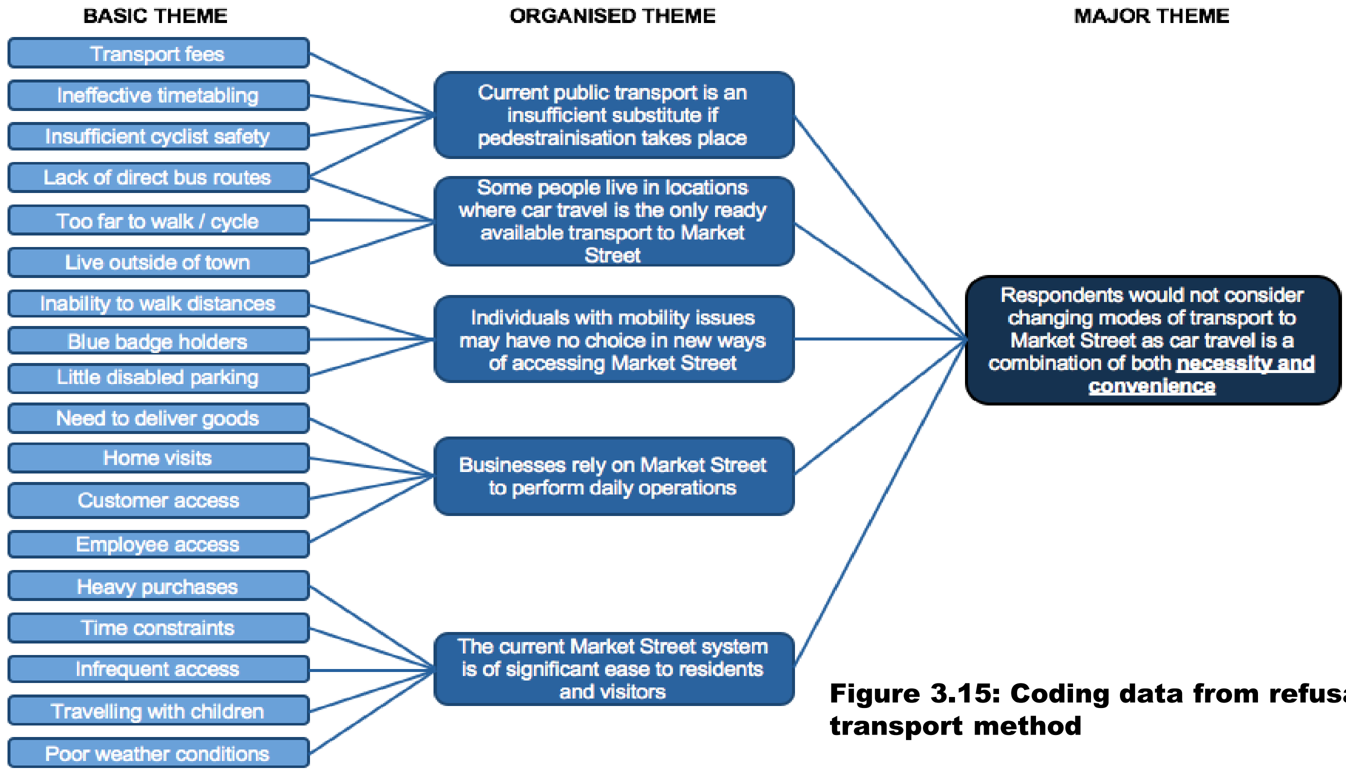


Figure 3.15: Coding data from refusal to change transport method

- Despite only a small number of respondents, the major theme appear to reflect general fears from stakeholders regarding changes to Market Street. **The co-existence of road access as both a necessity and a convenience indicates significant improvements to current substitute transportation must take place if pedestrianisation was to occur.** Even then, multiple groups would still be restricted from future Market Street access, having potentially detrimental effects on quality of life, businesses and services in the local vicinity.

Residents' Perception - Likes I

Categories

- All respondents were invited to state the aspects of the street they enjoyed or felt worked particularly well at present. This was left open-ended for people to list as many likes as they felt appropriate. A total of 1,521 data sets were recorded. However, due to a number of incomplete responses, only 1,328 could be effectively analysed*.
- In total, 8 categories were created as a result of the general trends identified from the responses. These were:
    - **Accessibility:** Responses under accessibility referred to the ability to access Market Street from starting destinations via any mode of transport, and the ability to access services and businesses when on Market Street. The two major themes under accessibility were the ability to drive and park on Market Street, providing quick access to businesses, and the centrality of Market Street to locations across the town.
    - **Aesthetics:** Responses under aesthetics referred to the physical nature of Market Street, including the architecture of buildings, greenery, outside seating areas, fountain, open space and cobble stoned road. The cobble road constituted approximately 31% responses in this category.
    - **Atmosphere:** Responses under atmosphere referred to pervading moods or tones associated with Market Street.
    - **Food & Beverage (F&B) Services:** Responses under F&B referred to the direct mention of eateries, cafes, pubs, bars and restaurants, with a focus on their variety, diversity, quality & outside seating areas.*
    - **General Shops:** Responses under general shops referred to the direct mention of convenience stores and retail businesses across the town, with a focus on their variety, diversity, & quality.*
    - **Pavements:** Responses under pavements referred to the recent widening of the North side pavement on Market Street.
    - **No Likes:** Responses under 'no likes' referred to any comments whereby the individual did not like anything about Market Street currently, often citing the response 'not much' and 'nothing at all'.
    - **Road System:** Responses under 'road system' referred to the one way system, slow traffic flows and crossings.

Footnote: **It is important to note that any responses merely labelled with 'shops' were not included in the count for F&B. Respondents may have referred to 'shops' as both convenience stores and F&B premises, thus limiting the accuracy of total likes for F&B services. Therefore, the true value of likes for F&B services may in reality be higher than recorded*.

Residents' Perception - Likes II

Constructing Key Trends

- As conducted for previous questions, key trends were developed by qualitative coding techniques:

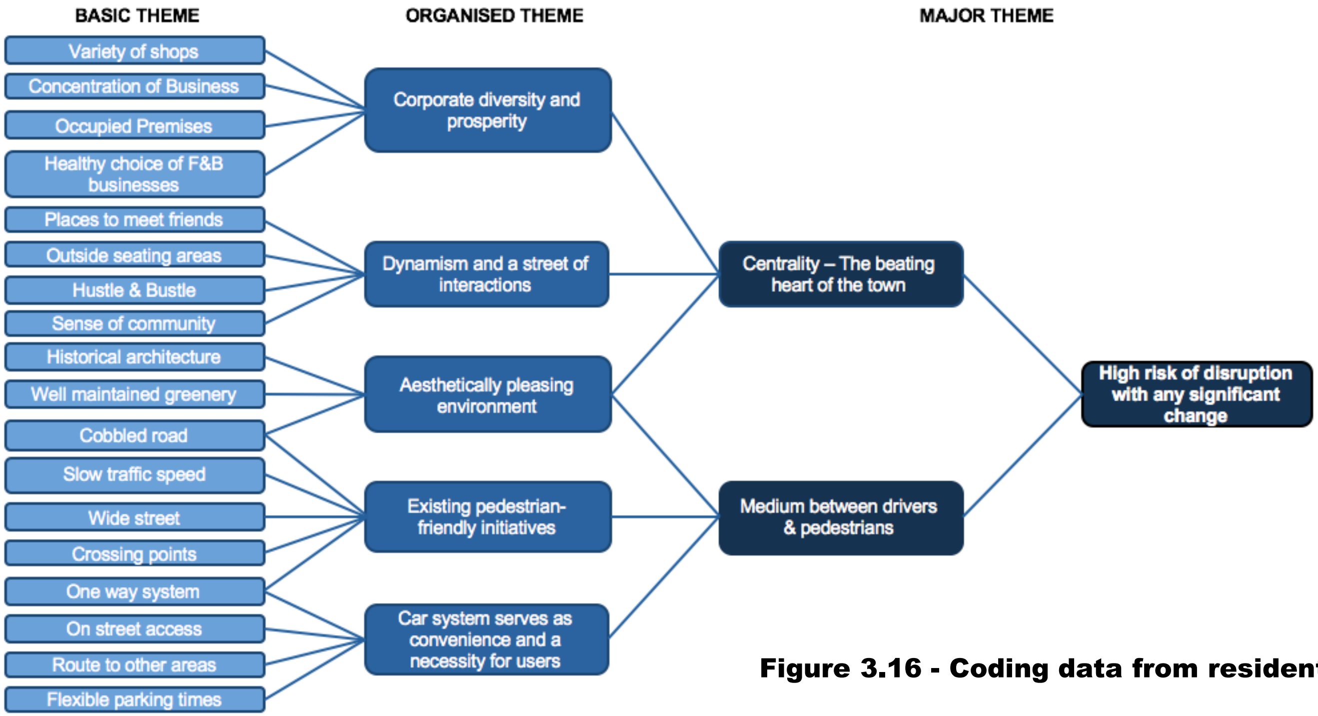


Figure 3.16 - Coding data from residents' likes

- Basic themes were developed from popular comments taken from the 8 major categories used to group the data.
- Organised themes identified that respondents felt there was a high degree of business, the potential for future growth and a bustling consumer atmosphere within a visually attractive street, igniting the sense of centrality and importance that Market Street currently exhibits. In addition, the few positive comments regarding road safety, coupled with good accessibility instils a sense of medium between different users of Market Street, and a healthy balance between motorists and non-motorists. **From this analysis, there is a strong level of risk associated with any significant change that may be made to Market Street, disrupting current processes and creating large-scale dissatisfaction.**

Residents' Perception - Likes III

Key Findings

- Figure 3.17 provides a breakdown of respondents' comments. The most popular category was 'General Shops', accounting for 36.1% of total likes stated – over 1 in 3 comments. The majority of these likes were based on the variety and diversity of the shops, ranging from national chains to local, independent businesses. Respondents also liked the occupancy rates, and the perceived high quality of shops, with a low concentration of boarded up buildings / charity shops. Coupled with 'F&B services' – the third most liked category with 272 likes – it is clear that **the businesses of Market Street are the most liked aspect of the street.** Due to this, any proposed changes to the street must be within the best interests of the on-street businesses, otherwise it could be detrimental to their long term success, and the future footfall on Market Street.

- The second most popular category was 'Accessibility', accounting for 20.8% of total likes. The vast majority of comments referred to on street parking, providing quick and direct access to services. This feature was described as both a convenience – for individuals under time pressure and during poor weather conditions – and a necessity – for those with disabilities, young children and those travelling from afar. Another common theme under accessibility was the ability to quickly get to other areas of the town from Market Street, emphasising Market Street's centrality to the town. From this, Market Street can be considered as the backbone of the town. Furthermore, **any significant changes to the current layout is likely to significantly impact on vehicle accessibility to the street, which is highly likely to generate severe dissatisfaction from current users.**

- After Food & Beverage services, Atmosphere and Aesthetics were other well-liked categories by respondents, constituting 12.3% and 9.8% of total likes respectively.

- Comments regarding atmosphere focused on a bustling, busy street with a diverse group of users. There are fears that this dynamism could risk being weakened if full pedestrianisation is pursued, with the loss of on street cars and parking facilities.

- Comments surrounding aesthetics centered on the cobbled road, architecture and recently installed scenery and greenery. This may indicate an opportunity to invest into the current infrastructure to maintain and reinforce its aesthetic appeal.

- The least amount of likes came from the road system, whilst 'no likes' had the second lowest response. This **may indicate that a large majority of users have at least some favour of the current system.**

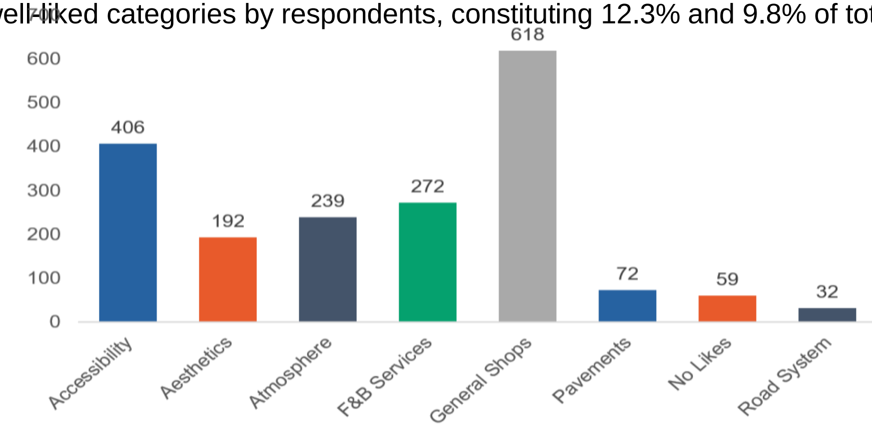


Figure 3.17 - Category responses for resident likes

Residents' Perception - Likes IV

Popular Perceptions

- Respondent feedback provided insightful opinions towards how they viewed Market Street. Despite the open-ended nature of the question, a number of key words and phrases were repeatedly mentioned. The most common descriptions found can be found in figure 3.18 below.
- The varying font sizes used in figure 3.18 illustrates the relative popularity of each description; the larger the font, the more often that description was found in the data set. Three shades of green were then used to group these descriptions to make the differences clearer.
- As illustrated, the most frequently used terms to describe Market Street in question 13 were based largely around the streets current dynamism, driven by both the services located within the vicinity and the varying demographic groups accessing the street. Respondents were found to particularly like Market Street's 'hustle & bustle' and the 'buzz' of the business taking place on a daily basis. There were additional comments from respondents who feared that any pursuit for increased pedestrianisation may negatively impact this, with the loss in footfall from reduced access.
- Less popular yet still regularly made comments emphasised the community feel of Market Street, with services bringing people together and providing the beating heart to the town. Respondents also commented on Market Streets historic character with picturesque architecture and scenery.
- The major findings from these comments raised in question 13 emphasise the importance Market Street's identity has on the local community, and the opportunities it provides to bring people together. Respondents view Market Street as a unique town centre street unlike others in the region. **As a result, it is of critical importance that any future decision made regarding Market Street protects the streets integrity. Any changes must also provide people, of all ages, the ability to fully utilise the services and spaces currently available in the area.**

Hustle & Bustle Liveliness
Centrality Heart of the town Community
Spacious Variety Thriving Buzz
Busy Character Diversity History
Ambience Bumping into familiar faces

Figure 3.18: Popular Descriptions

Residents' Perception - Dislikes I

Overview

- Respondents were also asked regarding the elements they disliked or found frustrating regarding the current situation on Market Street. They were able to give their reply in an open response format, the 1680 individual comments and results have been streamed into 5 broad themes:

Poor and Overly Cluttered On-Pavement Experience

- Many respondents raised issues with pavement clutter, complaining commercial/residential rubbish bins, advertising signage boards and cafe tables frequently impede pedestrian flow. Street beggars were also raised by a minority (18) as creating an intimidating atmosphere.

Congested Road with Inconsiderate Users

- The most common problem indicated by respondents was how busy Market Street was with fast vehicles that take up too much space on the street, making crossing the street difficult for some. Delivery trucks and larger vehicles such as refuse lorries were highlighted for causing disruption. Bell Street's pedestrian crossing was specifically mentioned 16 times as being poorly situated and interrupting traffic flow. Cyclists were also frequently singled-out for not following the Highway Code.

Issues with Parking

- Another common issue raised by over 25% (422) of respondents concerned parking. Numerous, comments regarding lack of availability, including disabled spaces, and the expense of parking tickets were received. Additionally, a major complaint concerned illegal parking on the North Side of the Street, which blocked traffic, parked cars and bus routes creating general disruption. Interestingly a significant number also raised problems with the current 90 degree parking spaces, arguing instead that angled bays would be safer and more practical.

Under Provision of Various Key On-Street Elements

- Responses indicated deficits of on-street cycling infrastructure provision in addition to a perceived lack of safe official crossing points. The recent influx of tourist shops received considerable attention for pushing out other businesses and reducing the variety of goods on offer, suggesting residents value a diversity of practical establishments. Finally, a minority (8) raised concerns that there was no place on the street where it was possible to relax without facing vehicles, suggesting they felt the atmosphere is poor.

Nothing - the Street is Suitable Unchanged

- Over 12% (205) of comments indicated that there was nothing with the street that they disliked or found frustrating, therefore no changes were required. A common argument was that there are better and more important areas that deserve council funding before additional money is spent on Market Street.

Residents' Perception - Dislikes II

Constructing Key Trends

- The key trends were again developed by qualitative coding techniques. The coding process taken can be found below in figure 3.18:

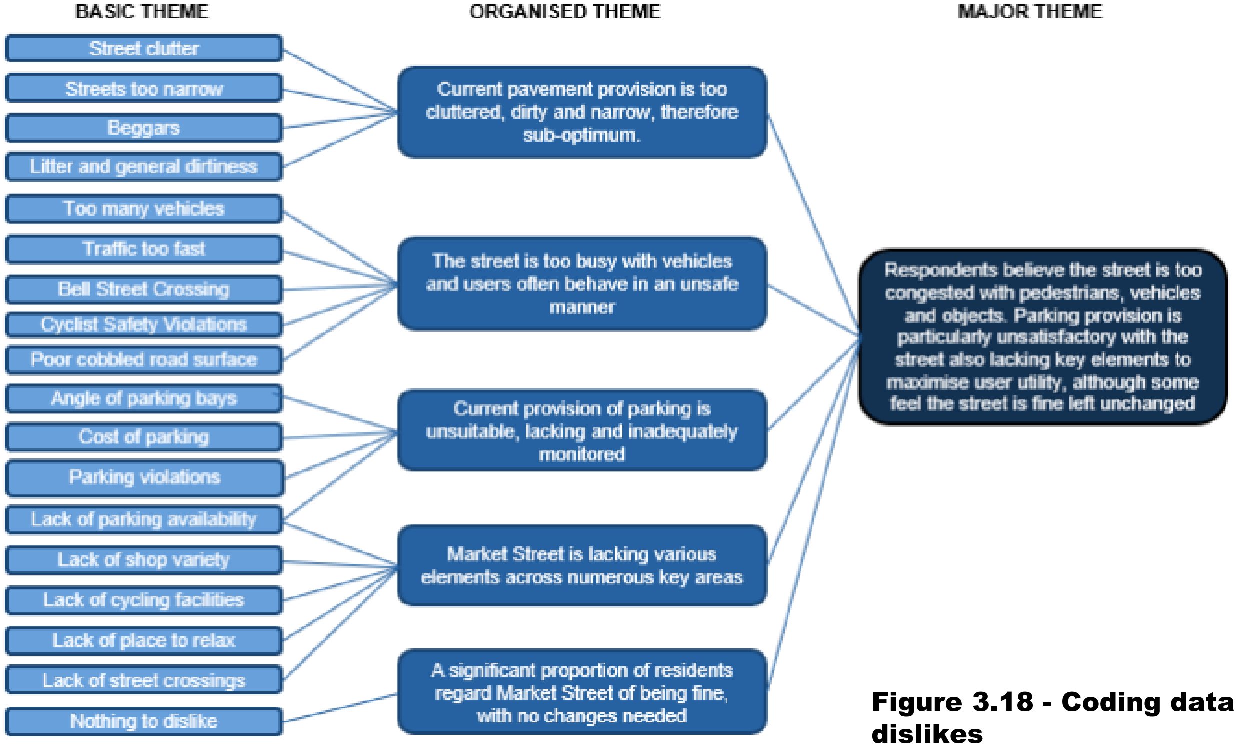


Figure 3.18 - Coding data from residents' dislikes

- While approximately 12% of respondents stated that no changes were needed to improve Market Street, the other 88% of comments focused broadly on issues of: pavement clutter reducing the width and pedestrian flow; the high volume of vehicles using the street, especially deliveries and larger trucks; the parking situation is inadequate in terms of provision, layout and cost; finally the provision of cycling and crossing infrastructure is lacking.
- It is important to note that while pedestrianisation may be able to address a lot of these issues, **many can be addressed without requiring such a bold and radical change.**

Residents’ Perception - Dislikes III

Key Findings

- From figure 3.19, responses were equally split across three main areas- pavement, road and parking - suggesting these problems have similar severity in causing disruption to street users.
- The single most frequent individual complaint overall and within the “problems with road” category derived from the high number of vehicles using the street, the consequence of unrestricted vehicle accessibility. The third most common issue also concerned how congested the pavements felt, owing to high volume of people but also limited by on street clutter and overhanging parked car fronts.
- However, the next most common response was that the street has no issues or frustrations, thereby suggesting the perceived high levels of pedestrians and vehicles on the street is not universally regarded by as a problem.

Popular Perceptions

- The most frequently used key words and phrases by respondents to describe their dislikes of Market Street can be found in figure 3.20 below.
- Aside from a significant proportion of responses which indicated the street requires no improvement, what comes across is respondent’s dissatisfaction with the current on street parking. It is criticised through, lack of provision, illegal parking and the current orientation of the spaces provided. When coupled with the key findings breakdowns, it suggest parking is overall the most significant source of dissatisfaction for street users.
- There is also a dislike for the crowdedness of the street. This runs counter to the findings in the “likes” section suggesting **there are two broad views on the street - those who value more peace and relaxation, with others preferring the bustle of a packed street.** This presents an additional challenge for street layouts to find a design which pleases both camps.

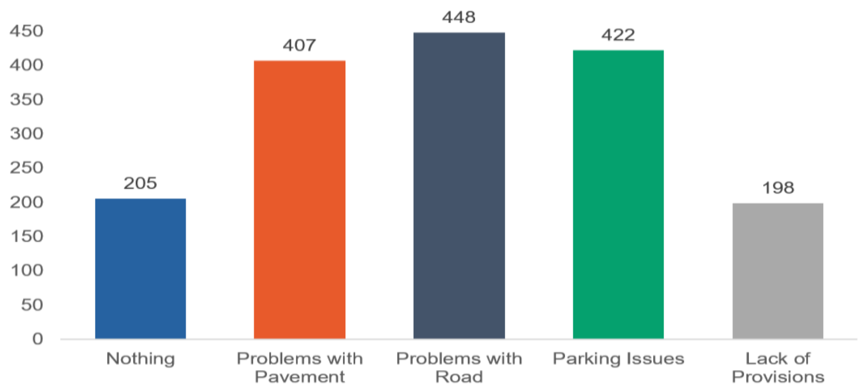


Figure 3.19: Popular categories of residents’ dislikes

Figure 3.20: Popular descriptions used

Business Views I

- From the survey distribution, there was a relatively low level of response from across the town, with less than a quarter of St Andrews businesses responding. Response numbers and locations approximately reflects the distribution of businesses within the town.

- The vast majority of businesses completed the entire survey, with some businesses omitting certain questions. Any omittances will be noted in the presentation of the data concerned.

- As shown in figure 3.21, independent businesses formed the bulk of the respondents, with far fewer national chains completing the questions, despite targeted efforts to encourage replies.

- To provide a view about reliance on physical sales, businesses were asked about the availability of their products online.

- This was then further analysed to view differences between national chains and independent businesses in terms of online availability, shown in figure 3.22:

  - 46.2% of national chains have their products available online.
  - 38.9% of independent businesses have their products available online.
  - Overall availability of 40%. Therefore the majority of businesses are solely reliant on their income received through footfall into their shop premises in town.

Engagement

49 fully complete responses. Location breakdown:

- 8 Bell Street
- 3 Church Street
- 2 Greyfriars Gardens
- 19 Market Street
- 1 North Street
- 12 South Street
- 4 Other

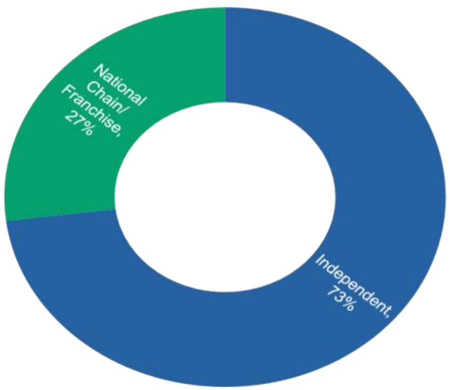


Figure 3.21 - Type of business respondents

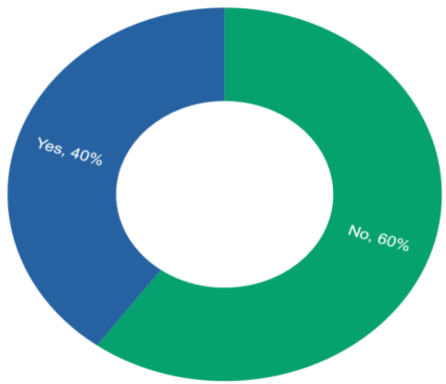


Figure 3.22 - Online product availability

"[Pedestrianisation would lead to] even less parking which is already an issue. If customers can't find parking they won't come into St Andrews or they won't spend long wandering around the shops."

Business Views II

- From figure 3.23, the vast majority of businesses who responded to the survey close before 7pm, with all but one of the locally owned businesses closed by 11pm.
- Out of the three respondents that were open past 11pm, two were catering establishments. The vast majority of retail outlets shut before 7pm, leaving primarily restaurants and bars open into the evening.
- This suggests **St Andrews does not have a high proportion of retail activity occurring throughout the evening,** therefore footfall and vehicle numbers on the street are likely to decrease past 7pm. If pedestrianisation was to be considered, it would unlikely be required overnight when few use the street.
- Businesses located on Market Street were asked if they used Market Street for their deliveries. Every business in Market Street uses the street for their deliveries.
- This suggests for Market Street businesses, the street is the primary, and often sole, access route by which they accept deliveries. Figure 3.24 shows 63% of respondents receive deliveries everyday or multiple times per day in order to remain fully stocked and functional, showing their **dependence upon high levels of vehicle accessibility at all times.**
- This was reinforced in the focus groups, along with a lack of dedicated unloading bays for commercial vehicles. This results in commercial vehicles parking opposite the parking spaces on the north side of the street, restricting the maneuvering space for vehicles trying to enter and exit spaces.

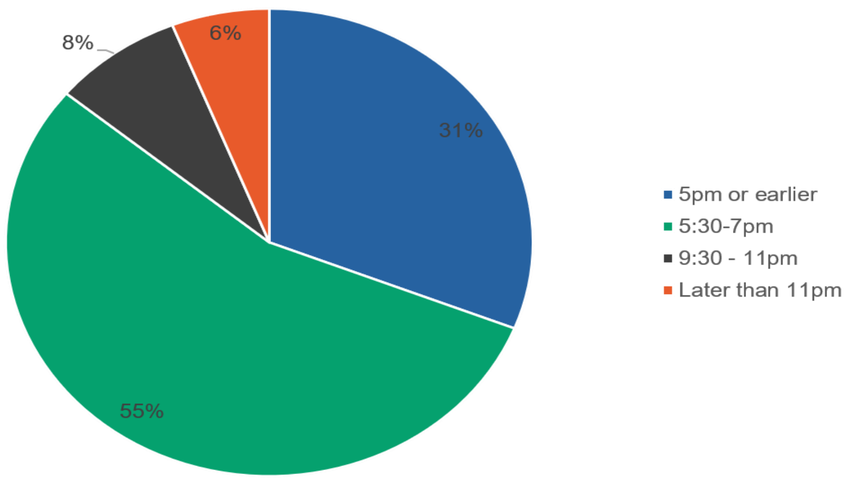


Figure 3.23 - Distribution of closing times

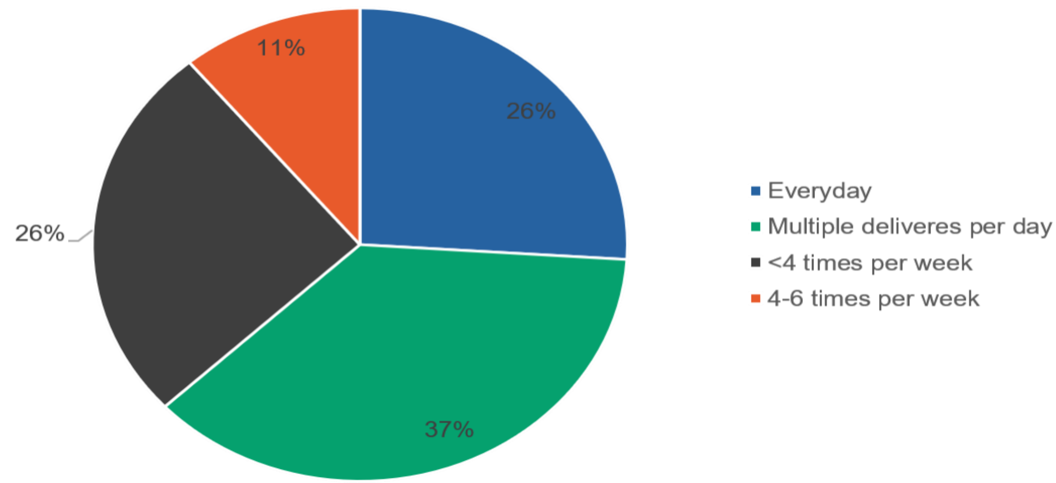


Figure 3.24 - Distribution of regularity of deliveries

Business Likes

- All business survey respondents were asked to provide positive aspects and likes concerning the current layout of Market Street. The question was open ended to allow respondents to highlight as many relevant concerns as required.

- As represented by figure 3.25, the responses fall into several broad categories, namely:
    - Accessibility
    - Vibrance and atmosphere
    - Street condition and environment
    - Parking
    - Range of shops
    - Nothing

- **Vehicle accessibility is the top priority across all responses,** with parking and accessibility frequently mentioned together as allowing individuals who may have impaired mobility the ability to make their way to the shops without issue.

- Also commonly mentioned within the street condition and environment topic are the street furniture, with appreciation for the input of St Andrews in Bloom and their contribution to the overall appeal of the street as a shopping location.

- The diversity and strength of local shops were also viewed as one of the street's primary strengths.

- Separately within the focus groups, the primary appeal of Market Street was again the ease of accessibility. Other positive aspects mentioned included: the wide pavements on the north side of the street, improvement of the general environment through planters and street furniture (with benches providing a resting spot for those with impaired mobility), and embellishments to the pedestrian area.

- Continuing the trends seen in the survey, the vibrancy of the street, and range of local businesses were strongly supported.

- Additionally, the vibrancy of the street and range of local businesses received strong support. The condition of the street and pavement area itself was also noted, with the width of the street noted as being adequate.

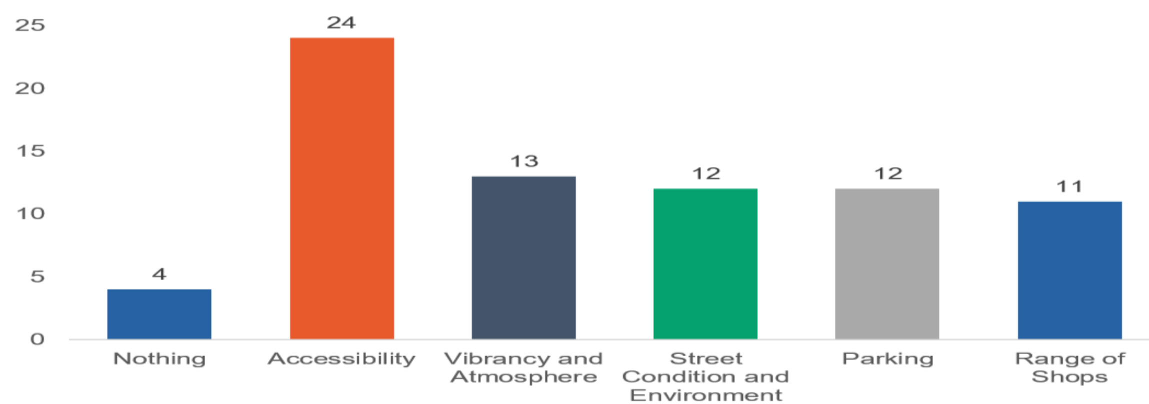


Figure 3.25 - Category summary of business likes from survey

Business Dislikes

- All business survey respondents were asked to provide their dislikes and frustrations concerning the current layout of Market Street. The question was open ended to allow respondents to highlight as many relevant concerns as required.
- As represented by figure 3.26, the responses fall into several broad categories, namely:
  - Nothing
  - Traffic issues
  - Street condition and environment
  - Type of businesses
- While overall, satisfaction rates were high with the current state of Market Street, there were common issues exposed in the responses.
- The two primary complaints in the traffic management category were cyclists traveling up the street the wrong way, and parking on double yellow lines. Vehicles speeding along the street was also raised as a serious concern.
- The dominant theme centred around waste management. Primarily the perception that the council fail to meet the schedule set for commercial waste and recycling collection. Bins on the pavements and beggars on the street were also raised as reducing the appeal of the area to potential customers.

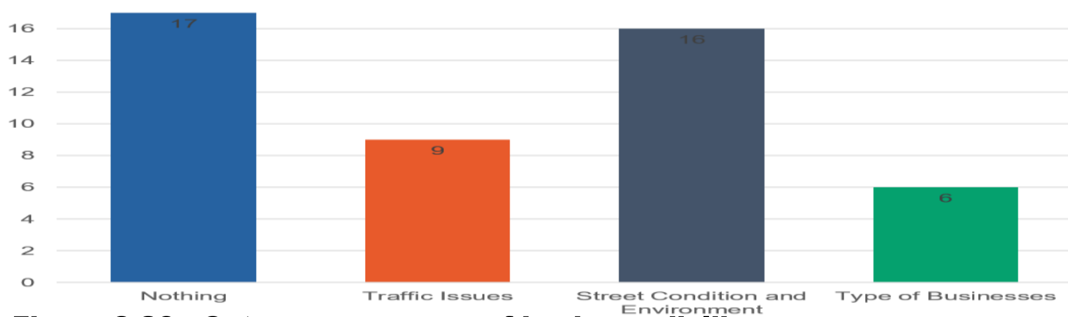


Figure 3.26 - Category summary of business dislikes

- Separately, within the focus groups there was again a strong correlation between the survey responses and their feedback. The discussion provided an opportunity to delve deeper into some issues with the street:
  - Use of A-boards by businesses on the south side of the street where the pavement is narrower.
  - The angle of parking spaces.
  - Lack of loading bays leading to the street filling with commercial vehicles.
  - Aggressive seagulls
  - Poor lighting on the south side of the street.
- The issue of street clutter was brought up regarding the south side of the street. Business A-boards significantly narrow the pavement, impeding the flow of pedestrians and creating accessibility issues for people who are less mobile.
- The angle of parking spaces does not allow for easy maneuvering if a vehicle is double parked across from the bay. The lack of loading bays contributes to this problem by forcing commercial vehicles to double park on the north side in order to complete their deliveries.
- The lighting on the south side of the street is inferior to the lighting on the north side.

Town Organisations Contacted

Overview

- In addition to residents and businesses, a variety of local organisations will also be impacted by any changes to Market Street. Such organisations were identified through observation of Market Street and discussions with Fife Council.

Methodology

- Communication with senior representatives across the organisations was based on the following three general questions:
    - What is the purpose of your organisation in St Andrews and how does it relate to Market Street?
    - What do you consider the positives and negatives of a potential pedestrianisation to be? (in general and in relation to your organisation)
    - What is your organisation's ideal vision of Market Street in the future?
- This allowed us to obtain information that could be compared across organisations in order to understand priorities for individual institutions as well as overall key trends.

Responded and Agreed to Participate

- St Andrews Preservation Trust
- Stagecoach East Scotland
- University of St Andrews
- Scottish Fire and Rescue Service
- St Andrews Space for Cycling
- Environment & Building Services

Responded and Chose not to Participate

- The Royal Burgh of St Andrews Community Council
- St Andrews West LLP
- The Royal and Ancient Golf Club of St Andrews
- The Royal National Institute for the Blind

Did not Respond

- Fife Farmers Market
- Police Scotland
- St Andrews Taxi Services
- Transition University of St Andrews

Reasons for Non-Participation

<u>The Royal Burgh of St Andrews Community Council:</u> *On the 5th of November 2018 it has been agreed by the Community Council that the organisation will wait for the Playfair Consultancy Group Report to be published first before the Council makes any public statement in regard to Pedestrianisation.*

<u>The Royal and Ancient Golf Club of St Andrews:</u> *Due to the sensitivity of the topic the R&A wishes to wait for a formal Fife Council Consultation before getting involved.*

<u>St Andrews West LLP:</u> *At the time of conducting the analysis St Andrews West LLP had a planning application under consideration of Fife Council. For this reason they believe it would not be appropriate to comment on the matter of pedestrianisation.*

<u>The Royal National Institute for the Blind:</u> *No response was available within the consultation time-period.*

Town Organisations - Current Use of the Street

- The organisations which agreed to cooperate with the study can be divided into two groups based on their use of Market Street. The first group physically operates on the street and the second group's purpose is to moderate the way Market Street is developed:

Stagecoach East Scotland

- Stagecoach provides public transport in St Andrews, with Market Street being one of the most popular destinations. Roughly 5,000 people use the Market Street bus stop every week. The popularity of the stop is constant through the year with only slight decrease in January and February.

Scottish Fire and Rescue Service

- The emergency services need constant access to the street in times of potential emergency.

Environment & Building Services

- Waste Operations require access to the street to collect refuse from the street. This can be completed in scheduled windows at almost any time of the day.

St Andrews Preservation Trust

- The ambition of the Trust is to preserve what is left of St Andrews' past in the environment of the 21st century. Market Street is regarded as crucial part of the heritage of the town and its development is important for the Trust.

University of St Andrews

- Everybody who interacts with the university uses Market Street. It is a popular location for students, employees and visitors of the University to eat and do their shopping. As the University is inseparable from the town, the town’s centre plays a key role in the University’s identity.

St Andrews Space for Cycling

- Their aim is to make St Andrews the most cycle friendly town in Scotland. Currently, cycling in the town is difficult, dangerous and impractical for many people (particularly older people and children) because of the traffic congestion in the centre and the speed of traffic on all access roads, as well as on routes to school.

Town Organisations - Views on Current Situation

Overview

- Following the research conducted it is clear that key organisations in the town see Market Street as an essential part of St Andrews' identity. All these organisations use the street in a different manner and therefore there are many different views on what constitute the street's major issues. This slide will outline some of the main topics expressed by local organisations at the time of this study.

Parking

- A view shared by all contacted town organisations was that the parking situation in St Andrews is problematic.
- The parking slots on Market street are regarded as of great value to the town. This, according to St Andrews Preservation Trust, allows people from the whole region to come to the St Andrews high street and benefit from its wide variety of shops and services. This quality of the town is also highly regarded by the University, which sees business variety as something that defines the character of the town itself.

Safety

- The view of St Andrews Space for Cycling is that cars make Market Street dangerous for cyclists and pedestrians.
- The organisation believes that this is a major factor that deters many people from cycling around the town. It not only stops people from being more active, but also increases pollution since many of them choose to drive instead.

Pollution

- According to the Preservation Trust the carbon footprint from cars and other vehicles damages historical buildings.
- The situation is the worst in the areas surrounding Market Street, where most of the historical buildings are located.

Summary

- It is shown that in relation to views of institutions on currents situation, there are three major issues out of which two would benefit from potential pedestrianisation. On the other hand, the matter of parking would be even more problematic if the parking spaces on Market Street were removed.

Summary of Current Situation – Key Trends

What Next?

- These trends help provide insight into what aspects of Market Street work well and where there are potential opportunities for improvement. In the next section we will expand upon these perceptions of the current street to identify stakeholders' priorities for an ideal Market Street.

Current Strengths

- Accessibility, particularly via parking
- Wide pavements
- Aesthetics, including historic aspects of the street and furnishings such as benches and flower planters
- The variety of shops and eateries
- The vibrant atmosphere

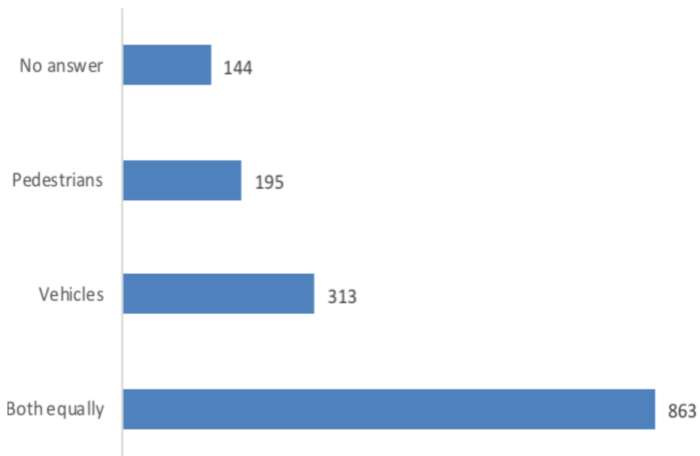


Figure 3.27 - breakdown in respondents' answers stating their perception of Market Street as more designed for pedestrians, cars or both equally

Current Weaknesses

- Parking issues (lack of spaces, illegal parking)
- Pavement and street clutter (e.g. bins, A boards, beggars, gulls)
- Road safety issues (e.g. congestion, lack of crossing points)
- Pollution

Opportunities

- Increased parking provisions
- More waste, recycling collection days
- Greater parking enforcement
- Widening of pavement on south side
- Increasing aesthetic street furnishings
- Introduce more crossing points

Similarities with 2004/2009 Previous Consultations

- Congestion of both pavements and roads
- Safety of pedestrians due to lack of suitable crossing points
- Parking issues related to underprovision, style and parking violations.
- Access for residents and deliveries must be maintained
- Historic character of town must be preserved
- Figure 3.27 shows the majority of respondents, 57.7%, regard Market Space as an area designed for both pedestrians and vehicles equally, as opposed to one dominating at the expense of the other. This suggests the 2009 redevelopment of the street struck an appropriate balance in its design. However 37% of respondents still believe the street is in favour of one group of users, 14% believe it is more for pedestrians while 23% primarily for vehicles, suggesting **some view the street is not optimally laid out and the redevelopment has not solved all previously identified issues.**

SECTION FOUR

Setting Objectives and Ideals

Methodology

Overview

- Having developed an understanding of residents and businesses' perceptions regarding the current Market Street, Playfair then asked respondents to think of their ideal future Market Street and select four qualities such an ideal would possess.

- The purpose of this is to determine priorities for how stakeholders want to use the street in the future and develop an understanding of what a "better" Market Street looks like.

- If shortfalls are identified between the current situation and respondents' desires, then this makes the case for improvement. We need to develop an understanding of the problems before investigating which solutions will fit best.

- The options respondents were able to choose from were deliberately selected to incorporate a variety of views, from those who want to see the street left unchanged, to those who desire full pedestrianisation. The ability to provide their own option was also offered to respondents, of which 129 chose to do so - the majority of which were too niche to have been offered as a general option.

Options Provided

➔ Greater emphasis on dining opportunities (restaurants, cafes, etc.)
➔ Less space dedicated to on-street parking
➔ A reduction of on-street pollution from vehicles
➔ The evening economy is popular
➔ Better options for public transport, walking, and cycling compared to private vehicles
➔ Improvement of pedestrian safety
➔ Pedestrians have priority over vehicle traffic
➔ Good bus access and service
➔ Wider pavements allowing for easier pedestrian movement
➔ Less vehicular traffic
➔ To have festivals, art displays, pop-up market stalls, etc.
➔ Constant accessibility for vehicles is maintained
➔ Greater emphasis on shopping opportunities; a diverse range of shops
➔ An improvement to the street's atmosphere that encourages people to spend more time there (e.g. increased seating, natural greenery, etc.)
➔ Existing parking continues to be available
➔ Local businesses are successful and supported

Limitations

- It was difficult to present options for everyone's individual opinions. While the options, which were subject to rigorous assessment prior to publication, tried to allow for the spectrum of views to come through, some respondents felt they were biased towards pedestrianisation.

- This feeling likely arose due to the inherently complicated nature of the question which may have caused misunderstanding if the guidance was not read or the options not thoroughly reviewed. A balance was attempted to be struck between ease of completion and increased number of options. The question was necessary to be included as it is vital in making the case for change and understanding what stakeholders regard an improved Market Street should incorporate.

Residents' Priorities

Analysis

- By requiring respondents to select only 4 options, it forced them to select the most important options to them, thereby highlighting their primary concerns for Market Street. The number of respondents who selected each option is given in brackets.
- It is clear residents wish to see local businesses prosper. Any changes to the street should be conducted to benefit businesses. Respondents also express a preference for a variety of businesses as opposed to a greater emphasis on restaurants and cafes, with this option the least popular.
- Ensuring existing parking continues to be available as well as maintaining constant access for vehicles ranked highly on residents' priorities, in contrast only 9% selected they wished to see a decrease in the provision of parking spaces. However a substantial percentage selected they wished to have less vehicle traffic on the street and improvements to the street's atmosphere.
- The results suggest residents are primarily concerned about how they can access the street, and do not want to compromise this at the expense of improvements to the street environment. Feasible alternatives would need to be in place first, before alternative measures to enhance the quality of the street can be pursued. Although some smaller scale improvements may be undertaken prior to this.

Results

#1. Local businesses are successful and supported - **64% selected** (853 respondents)

#2. Existing parking continues to be available - **48% selected** (640 respondents)

#3. Improvement to the street's atmosphere - **37% selected** (491 respondents)

#4. Diverse range of shops - **36% selected** (474 respondents)

#5. Constant accessibility for vehicles is maintained - **35% selected** (469 respondents)

#6. Less vehicular traffic - **26% selected** (351 respondents)

#7. Have festivals, art displays, pop-up market stalls etc - **22% selected** (297 respondents)

#8. Wider pavements - **22% selected** (288 respondents)

#9. Good bus access and service - **18% selected** (239 respondents)

#10. Pedestrians have priority over vehicle traffic - **15% selected** (197 respondents)

#11. Improvement of pedestrian safety - **14% selected** (197 respondents)

#12. Better options for public transport than private vehicles - **12% selected** (166 respondents)

#13. The evening economy is popular - **12% selected** (155 respondents)

#14. A reduction of on-street pollution from vehicles - **11% selected** (144 respondents)

#15. Less space dedicated to on-street parking - **9% selected** (120 respondents)

#16. Greater emphasis on dining opportunities - **8% selected** (104 respondents)

Residents' Priorities – Top 5

Analysis

- Filtering the most important factors of the future of Market street by age of respondent, as shown in figure 4.1, demonstrates most of the responses were very similar across the various demographic groups. "Supporting local businesses" was found to be in the top 5 for all groups. Four out of the five groups also selected "Atmosphere" as an important factor.
- It is also interesting to note that under 18 and 18-25 age groups have the same top 5, with slight order variation. Similarly, age groups 26-35 and 36-64 also indicated the same top 5 choices. 65+ age group only had "Bus access" instead of "Atmosphere" compared to groups 26-35 and 36-64.
- Overall these results show a promising consensus regarding the most important factors of Market street to the residents of St. Andrews.

<18	# Responses	18 - 25	# Responses	26 - 35	# Responses	36 - 64	# Responses	65+	# Responses
Supports local business	32	Atmosphere	149	Supports local business	98	Supports local business	406	Supports local business	200
Atmosphere	31	Less traffic	126	Existing parking	66	Existing parking	332	Existing parking	169
Less traffic	28	Supports local business	117	Atmosphere	59	Shop diversity	237	Constant access	126
Wider pavement	27	Wider pavement	109	Constant access	55	Constant access	209	Shop diversity	94
More festivals	25	More festivals	105	Shop diversity	48	Atmosphere	193	Bus access	84

Figure 4.1 - Breakdown by age demographic of residents' top priorities

Businesses' Priorities – Top 5

Analysis

- The results of the business survey, as shown in figure 4.2, were conclusive in terms of trends from businesses. The trends were heavily focused around maintaining ease of accessibility to premises in the town, and continuing support of local small businesses.

- Accessibility by car is the continuing highest priority issue for the future of Market Street for local businesses. Having adequate parking for customers accessing the shopping area by car is also vital. Focus groups and survey replies both suggested an improvement to the parking situation on Market Street would be to angle the bays to enable easier maneuvering when a delivery vehicle is parked opposite the parking space, alongside a free parking period upon arrival in the town to allow customers time to browse rather than visiting a shop for a specific item then leaving.

- While public transport accessibility was rated as a lower priority than personal vehicular access, the results demonstrate that all options to increase throughflow of potential customers are welcomed. Any reduction of footfall and traffic is a negative for the businesses concerned. Focus group results reinforced this with increased public transport provisions being suggested as a way to increase footfall.

- Ensuring support for a vibrant range of local businesses is also of key importance. Concerns have been raised that national chains are displacing some local businesses, raising the rents of units in the centre of the town and threatening the presence of local traders that are not able or willing to pay higher rates for the units.

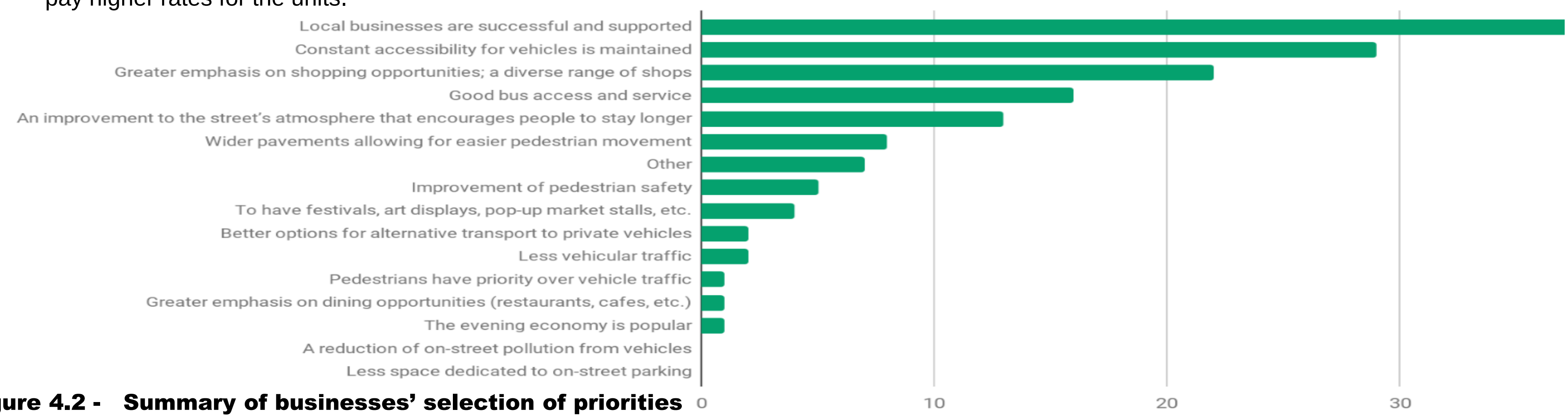


Figure 4.2 - Summary of businesses' selection of priorities

Town Organisations' Views - Likes and Dislikes

- There are various positives and negatives that would arise from pedestrianisation of Market Street. These two graphs, figures 4.3 and 4.4, show their overall importance of issues across the different organisations based on the number of organisations that mentioned them as potential benefit or negative of pedestrianisation.

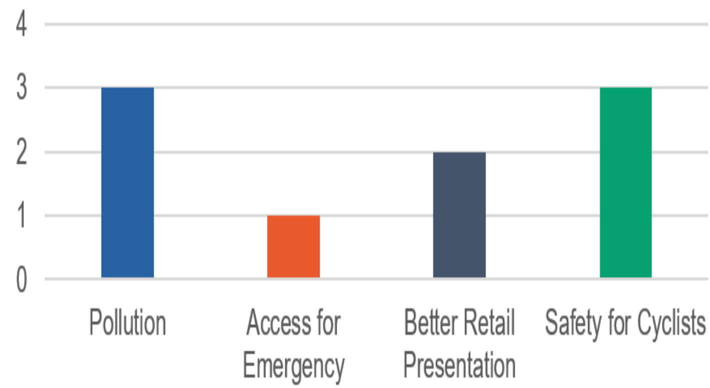


Figure 4.3 - Summary of positive responses

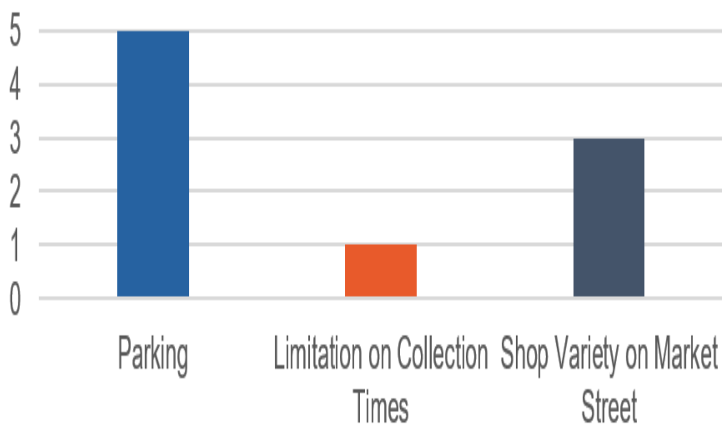


Figure 4.4 - Summary of negative responses

Better retail presentation for vendors: Owing to wider pavements and the potential for increased shop front presence, this may create a more authentic Market like experience for the street.

Pollution: A reduction in traffic results in a corresponding reduction of CO_2 in the air, thereby reducing the risk of damage to pedestrian or building health.

Safety for cyclists and pedestrians: Widening the pavements and reducing the volume of vehicles, results in less danger and a more relaxing atmosphere for other users.

Shop variety on Market Street: Incorporating a fear that pedestrianisation would limit the availability of general stores, replacing them with tourist oriented shops or eateries.

Parking: The parking capacity in St Andrews is limited already and pedestrianisation would restrict this further.

Limitation on organisation to fulfill its purpose: Stagecoach buses would be unable to complete their current town centre route in its present form.

Town Organisations – Key Organisations' Views

- While both St Andrews Preservation Trust and St Andrews Space for Cycling use similar thought processes to argue that Market Street would be safer and less polluted without cars. The Preservation Trust adopts more of a neutral overall view on the proposals, raising several issues that would need to be addressed before such a change could be successfully implemented.
- Space for Cycling not only strongly support pedestrianisation of Market Street but also other parts of the town. The ambition of Space for Cycling has not been defined with specific streets, but they make it clear that the pedestrianisation of Market Street is merely a first step, which must be followed by other parts of the town in order to achieve satisfactory results.
- The issue with pollution in St Andrews is recognised by both institutions and it is suggested that limitation of traffic commenced with Market Street pedestrianisation would have positive effect in efforts to deal with this matter.
- The reasons for their opinions have been outlined in public statements from these two organisations, available in appendix 2 and 3.

MEMORES · SERVATE · PATERNA · ST · ANDREWS · PRESERVATION · TRUST

St. Andrews Space for Cycling

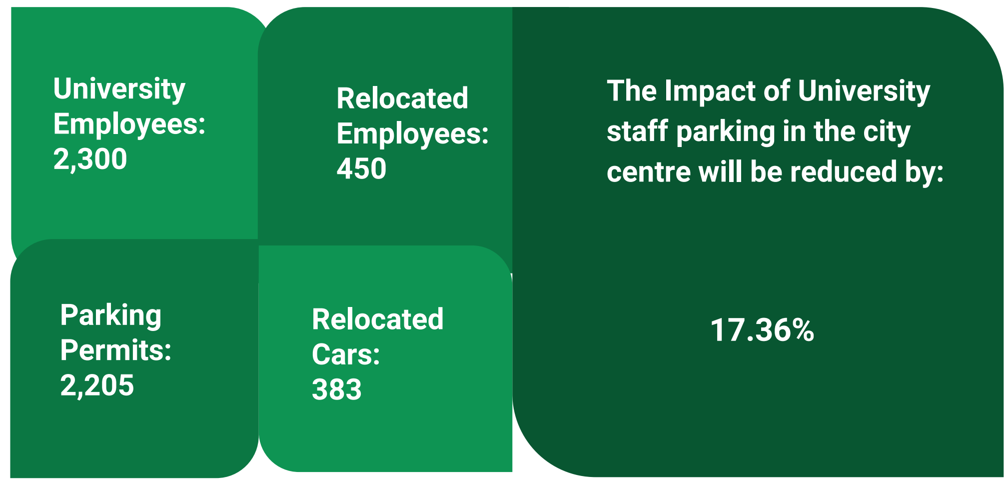
Town Organisations - University of St Andrews

Overview

- Due to the number of stakeholders represented by the university it is not possible for the organisation to give a definitive statement of its position towards the pedestrianisation question.
- Instead, it is possible to look at actions of the university and how they will impact matters relevant to the potential change.
- The question of parking has been mentioned above as one of the issues of potential pedestrianisation. There are two relevant actions taken by the university that relate to parking.

Staff Relocation

- Due to the lack of teaching space at the growing university, the university plans to move around 400 of its staff to a new Eden Campus at Guardbridge. **This will result in a significant reduction of the university's impact on the parking situation in St Andrews.**



Students

- The university no longer discourages students from bringing their own cars to St Andrews due to the fact that out of hours health services are not available within walking distance. In the academic year 2018/2019 there are approximately 700 students who applied for a car permit at St Andrews.

Town Organisations - Other Views

Stagecoach East Scotland

- Following the fact that Market Street stop is regarded to be of the most importance to the bus providers in St Andrews, its closure would cause significant impact on their ability to provide the standard of services as provided today.
- It has been stressed by Stagecoach, that the closure of Market Street would make the problematic traffic situation in South Street and North Street even worse. The company also claims it would significantly limit the their ability to offer adequate transport coverage for the town centre.

Scottish Fire & Rescue Service

- It has been made clear by the St Andrews Fire Brigade that pedestrianisation is not a problem for their ability to conduct their duty. They even recognise that fewer vehicles would make it easier for them since there would be more space to maneuver.
- Their concern is in relation to means that would be installed to stop cars from entering the street such as bollard system.
- Nevertheless, this is not something, which could be analysed at this stage of consultation.

Environment & Building Services

- According to waste operations pedestrianisation does not tend to be problematic.
- The only potential problem could arise from access to the street, which is usually solved by scheduled window at times of the day that tend to be with limited frequency of pedestrians at the street such as very early morning.
- Therefore they do not see any potential issue that would directly intervene with their work.

General Summary

- The general trend among all the institutions outlined above shows vehicle accessibility to be the most significant issue. This has to be considered in regard of the fact that pedestrianisation would be problematic in default only for Stagecoach East Scotland, who would not be able to provide their services on Market Street. On the other hand, Scottish Fire & Rescue Services and Environment & Building Services would benefit from reduction of vehicles on Street as long as they would continue to have unrestricted access.

Summary of Design Priorities for the Street

Overview

- Combining the overall top priorities for Market Street from residents and businesses responses produces the following table.
- There is significant overlap between the two groups, with the top four priorities common to both. An additional priority was included from the residents results to reflect their greater response rate.
- These factors represent the qualities that an ideal Market Street will need to incorporate.
- The option appraisal process will then be conducted using these qualities. **Any proposed changes to the street will need to be in accordance with these priorities, else they risk going against the wishes of St Andrews residents and businesses.**

Ranking	Priority
1st	Local businesses are successful and supported
2nd	Existing parking continues to be available
3rd	Greater emphasis on shopping opportunities; a diverse range of shops
4th	Constant accessibility for vehicles is maintained
5th	Improvement to the street's atmosphere

Analysis

- These criteria reflect a shared desire between residents and businesses that places accessibility at its core. The top two priorities convey the primary view that it is the businesses that define the street and therefore it is vital they are supported in their work. This can take the form of ensuring customer and visitor access is provided through the existing car parking positions available on the street currently.
- In a similar matter, respondents indicate they value a variety of businesses as opposed to seeing the street concentrated with restaurants and cafe establishments.
- The final priority of improving the street's atmosphere comes lower in the rankings. This suggests respondents place a greater emphasis on street functionality rather than on the quality of the environment. Indeed, improvements to the atmosphere may prove to be incompatible without compromising on the initial four priorities.

SECTION FIVE

Case Study Research

Case Studies - Overview

Methodology and Limitations

- To better understand and assess the likely impacts pedestrianisation can cause, existing schemes were studied to draw findings and lessons learned to be applied to St Andrews.
- Two separate strands of research were conducted in this section. Firstly, individual positive and negative case studies were conducted from locations in the UK. They were selected based on the availability of data and relevance to St Andrews.
- Secondly, data collated from the results of existing large sample research was summarised and its findings applied to St Andrews, Relevant results were identified through a literature review process. The availability of recent case study data from UK locations proved to be limited, therefore historic results from locations abroad are also included, as street user behaviour has changed little over the previous 40 years.
- Each case study area is unique and therefore the results in one location may not have the same consequences in St Andrews. However, the case studies do provide an indication of how such schemes have performed.

Key Findings - Businesses

- Studies suggest that in most cases pedestrianisation leads to growth in pedestrian volume on a pedestrianised street even for small cities similar to St Andrews. Increased pedestrian flow usually leads to an increase in business turnover and profits for the majority of businesses on a pedestrianised street.
- However, there are some cases where businesses can experience no changes or even negative results due to the increased costs of rent, as the location becomes more attractive due to the increased street traffic.
- Pedestrianised streets also affect neighbouring streets. Similarly, this effect can be positive, neutral or negative. Therefore findings suggest closing Market Street to vehicles would have an impact on all central streets in town.
- The diversity of businesses can be altered, with a pedestrianised layout often encouraging growth in eateries at the expense of general stores.

Key Findings - Modes of Travel

- Pedestrianisation can lead to higher levels of active travel within the area, as the car becomes a less attractive option, thereby reducing pollution.
- In an example of London, we found that average spending per visit while walking was almost half the average of spending when driving. However, monthly spending by walkers was significantly higher overall due to the greater frequency of visits. Suggesting cars need not be the dominant economic driver in all cases.

Key Findings - Accessibility

- The most successful pedestrianisation schemes provided high levels of accessibility to all users to ensure shopping on the street remained an attractive and feasible destination.
- The best areas, such as Tenby, provide extensive car parking nearby, with shuttle bus infrastructure to facilitate the movement of users to the centre.

Vehicle Emissions and Pedestrianisation

Significance of the problem

- 40,000 annual deaths are attributable to automobile emission air pollution in the UK.
- 10% of the cancer risk from air pollution is attributable to auto emissions in the UK.

Main sources of vehicle emissions

- Ozone - causes brown smog commonly seen over cities.
- Particulate matter (PM) or Ultrafine particles (UFPs). Unlike ozone, PM or UFPs is a mobile source of vehicle emission and is directly related to proximity to source - primarily areas near to or downwind from high traffic areas.

****Common PM consequences: heart diseases; lung function impairment; leukemia; asthma; lung cancer.*

Figure 5.1 - Overview of Market Street displaying key zones indicating most hazardous distances for pedestrians

Rationale

- While the pollution monitor on Bell Street indicates the centre of St Andrews does not suffer from dangerous levels of pollution, any reduction of traffic dominance on Market Street through pedestrianisation will reduce the automobile emissions level from PM / UFPs. As figure 5.1 describes, such change will be caused by reduced traffic volume on the street and transition of the traffic volume to streets nearby. This will lead to the reduction of PM / UFPs in high toxicity zones on Market Street.
- Although, the traffic volume will be transferred to North Street and South Street and therefore pollution from PM / UFPs on these streets may increase, in general, the public will benefit as most of the pedestrian volume is concentrated on Market Street. Additionally, the reduction of car parking spots and traffic dominance will stimulate people to commute by alternative methods. Therefore pedestrianisation has the potential to improve the air quality for the majority of town street users.

Pedestrianisation and Pedestrian Flow

City	Result	Timeline	Population (current)	City Size (in km^2)	Sunny hours (a year)
Aachen	+25%	12 y	245 885	160.8	2370
Bamberg	+39%	1 y	75 743	54.62	2491
Darmstadt	+18%	3 y	155 353	122.2	2583
Herford	+31%	1 y	64 000	79	2276
Nurnberg	+80%	5 y	509 975	186.5	2593
Osnabruck	+26%	2 y	162 403	120	2242
Vienna	+48%	8 y	1 868 000	414.6	2574
Munich	+143%	11 y	1 450 000	310.4	2426
Nurnberg	+246%	20 y	510 000	186.5	2593
Brussels	+266%	2 y	1 200 000	161	2274
St Andrews	For Comparison	-	16 800	4.44	2089

Figure 5.2 - Change in pedestrian flow in German and Belgian cities after pedestrianisation takes place. Analysis conducted on the following page.

Pedestrianisation and Pedestrian Flow

Discussion

- While some of the cities have experienced significant growth in the pedestrian flow after pedestrianisation, other cities have not. It is important to find and highlight the key elements indicating such success to conclude whereas there are any barriers for St Andrews to achieve similar results. As illustrated in the previous slide, St Andrews differs from other cities by small city size and weather. Due to the small sample size and lack of available data we are not able to build a model to see if these variables are significant enough to capture changes in pedestrian volume after pedestrianisation. Neither correlation matrix will be appropriate to capture patterns because of the small sample size, a different timeline of observations and presence of other significant factors such as population growth rate.

- Although, we can still see from the graph that small cities can gain as well. Suchwise, Bamberg, and Herford with a population and city size much smaller than in other cities in our observation list reported an increase in pedestrian volume after the first year of pedestrianisation of 39% and 31% respectively. Alternatively, Vienna that had the biggest population and city size in our observations list reported having an increase of 48% in pedestrian volume after 8 years since pedestrianisation. This recommends both big and small cities can achieve similar results.

- Interestingly, results from the table in the previous slide suggest that neither weather conditions play a significant role in pedestrian volume growth after pedestrianisation. To capture weather conditions, we used sunny hours a year as a proxy. Brussels was detected to have the least sunny hours a year, however, the city achieved the best results in pedestrian volume growth after pedestrianisation. Therefore, there are no patterns detecting weather conditions as a significant variable affecting success in pedestrian volume growth after pedestrianisation.

Analysis

- **The results suggest weather and size of town have a negligible impact on the success of pedestrianisation scheme** - therefore, St Andrews should have no barriers to having its own scheme due to the relatively small size and climate. Our conclusion is that there are other un-observable elements that lead to successful results. This hypothesis matches with information gained in case studies suggesting the main factors for positive results in the pedestrian flow after pedestrianisation are developed infrastructure in the pedestrianised area and easy and comfortable access to the pedestrianised street (public transport routes, bike lanes, and well-maintained walking footpaths).

Pedestrianisation and Businesses I

- A study by the Research Institute of Trade (FfH) on 11 German towns (Augsburg, Gelsenkirchen, Hildesheim, Koln, Nurnberg, Offenbach, Oldenburg, Rheine, Stade, Unna, Wolfenbuttel) in the *19*70s analysed how pedestrianisation affects businesses' (Retailing, Hotels, Restaurants) turnover, both in pedestrianised and non pedestrianised area. The observations have been ongoing for over 20 years.

- **Although, St Andrews businesses express fear that pedestrianisation may reduce their turnover, results from this extensive consultation exercised in this location indicated it can be a benefit to them.** Results suggest that in pedestrianised area retailing and restaurants experience the greatest positive effect where 83% of retailing businesses and 63% of hotels experienced an increase in their turnover. Most of hotels - 64% reported no change and only 28% reported an increase. Importantly, a relatively low percentage of businesses reported a decline in their turnover after pedestrianisation. In non pedestrianised area most businesses did not experience any change while 20-25% of businesses had an increase in turnover. While 2-5% of hotel and restaurants businesses reported a decline, 17% of retailing businesses experienced lower turnover. This suggests that retailing in non pedestrianised area experiences negative influence from pedestrianisation the most, with the area likely drawing away shoppers. However, the majority of businesses still benefitted or at least did not suffer from the introduction of such a layout.

Turnover - Pedestrianised Area			
****Pedestrianised area Sample size: 1066 businesses*	Increase (%)	Decline (%)	No Change (%)
Retailing	83%	3%	14%
Hotels	28%	8%	64%
Restaurants	63%	1%	36%

Turnover - Non Pedestrianised Area			
****Outside pedestrianised area Sample size: 750 businesses*	Increase (%)	Decline (%)	No Change (%)
Retailing	20%	17%	63%
Hotels	20%	2%	78%
Restaurants	25%	5%	70%

Figure 5.3 – Proportions of retailing, hotel and restaurant businesses reporting changes in annual turnover

Pedestrianisation and Businesses II

Discussion

- Further analysis provides a deeper look beyond turnover and focuses also on businesses' costs and profit as well.
- While In pedestrianised area a significant number of businesses experienced growth in turnover and profit, 75% of businesses reported an increase in costs. Our analysis suggests that the increase in cost is mainly caused by an increase in rental prices. As one of the main factors forming rental prices is pedestrian volume and developed infrastructure (pedestrianised streets tend to have more developed infrastructure; developed infrastructure forms rental prices as people spend more time on such streets, so chances that those people will buy goods / services are higher) it is common for costs to increase. Despite an increase in costs, only 16% of businesses in pedestrianised area experienced a decrease in profit, while 37% reported no change in profit.
- Outside of the pedestrianised area, around half of businesses did not experience any change. 51% of businesses were reported to have an increase in costs and 32% and 39% of businesses reported an increase in profit and turnover respectively. 19% and 15% of businesses had a decrease in profit and turnover respectively. Results drawn from the analysis suggests that pedestrianisation has an impact on businesses in outside of a pedestrianised area as well. Although, in general businesses outside the pedestrianised area benefited, this was reduced when compared to businesses in the pedestrianised area.

****Outside pedestrianised area*
Sample size: 750 businesses

****Pedestrianised area*
Sample size: 1066 businesses

	Pedestrianised Area (%)	Outside Pedestrianised Area (%)
Turnover	-	-
Increase	66%	39%
Decrease	7%	15%
No Change	27%	46%
Costs	-	-
Increase	75%	51%
Decrease	1%	4%
No Change	24%	45%
Profit	-	-
Increase	47%	32%
Decrease	16%	19%
No Change	37%	49%

Figure 5.4 – Proportions of businesses reporting changes in turnover, costs and profits

Pedestrianisation and Small Cities

Case Study

- Further, the German Federal Ministry of Regional Planning, Housing, and Urban Development (BMBau) (as cited in Hass-Klau, 1993 - "Impact of pedestrianisation and traffic calming on retailing") analysed the effect of pedestrianisation on small cities.

- In their research, they provided results from Borgentreich city. Borgentreich is a German city with a small population of 9200 people (St Andrews has a population of 16800 people). The research area includes 46 businesses combined (34 businesses in pedestrianised area and 16 businesses outside of pedestrianised area).

Enterprises Turnover ****1985-87*				
	Increase	**Decrease**	**No change**	**Unknown**
Pedestrianised area (%)	32%	0%	50%	18%
Outside pedestrianised area (%)	44%	6%	25%	25%

Figure 5.5 – Proportion of businesses reporting changes in turnover in Borgentreich after pedestrianisation

- The results from the survey different from our previous observations suggesting that businesses in outside pedestrianised area experience more dramatic changes than businesses in pedestrianised area. In pedestrianised area, half of the businesses deported no changes in their turnover, while only 32% experienced an increase. Results from 18% of businesses are unknown. Surprisingly, more businesses - 44% in the outside pedestrianised area reported an increase in their turnover. 25% of businesses experienced no change and only 6% of businesses reported a decline in turnover, while results from 25% of businesses are unknown.

- An important conclusion is that small cities can benefit from pedestrianisation as well. However, it might be admitted that in the case of Borgentreich city the sample size was small and there is no information with regards to businesses' profit (costs might rise as well). Additional analysis from various case studies recommends that an increase in businesses' turnover is mainly caused by an increase in footfall (on average 5-20% for small cities like St Andrews) and increased time spent on the pedestrianised street due to the development of infrastructure.

London Case Study

****A 2011 survey of nearly 5,000 London visitors on the correlation of commuting method and the probability of visiting town shopping center.*

Walking	Cycling	Bus	Driving
50%	37%	27%	14%

****A 2011 survey of nearly 5,000 London visitors on the correlation of commuting method and consumer spending per single visit.*

Walking	Cycling	Bus	Driving
£26	-	-	£41

****A 2011 survey of nearly 5,000 London visitors on the correlation of commuting method and consumer spending per single visit (over the month).*

Walking	Train	Bus	Driving
£373	£239	£282	£226

Figure 5.6 – Changes in street user behaviour

- A 2011 survey in the City of London analysed consumer behavior with regards to town shopping center commuting methods, average spending per single visit and average spending per single visit (over the months period).
- Consumers who commute by walking, cycling and public transport tend to visit the town shopping center more frequently - potentially due to parking difficulties. Despite this, drivers tend to spend much more per single visit than people who commute by active travel- this can be explained by the fact that it is easier to carry purchases in a car. The results here echo the findings of the St Andrews consultation, suggesting this may be a common behaviour.
- While consumers who drive spend more per single visit, consumers who commute to town by walking or public transport spend more over the monthly period due to their higher frequency of visits.

Leicester Case Study

- Wiggings (1993) (as cited in Hass-Klau, 1993 - “Impact of pedestrianisation and traffic calming on retailing”) examined 29 street sections in Leicester city center, including streets which were pedestrianised or were open to traffic. In each section, the proportion of businesses which stood vacant was calculated, and this was compared with the traffic flow, the number of parked cars and location.

Traffic flow	Total number of shops	Number of vacant shops	Vacancy rate (%)
0	64	2	3.1%
Up to 200	250	16	6.4%
200-500	221	23	10.4%
500+	139	21	15.1%

Figure 5.7 – Vacant businesses in relation to traffic flow, Leicester, UK 1992

- Results from the study suggest that there is a statistically significant correlation between the motorised traffic flow and the proportion of businesses vacant. It can be clearly seen, the higher the traffic flow, the more businesses were vacant. This research recommends, that in theory, businesses on Market Street could benefit from less traffic volume, as according to the study decrease in traffic implies less vacancy rate. However, the study does not provide information with regards to what type of businesses were included in the research nor if there was a difference in socio-economic areas for each street. St Andrews is an affluent area compared to many parts of the UK, therefore vacant premises may be naturally lower here as a consequence.

Tenby Summer Pedestrianisation Case Study

Why Tenby?

- Tenby is a walled seaside town in Pembrokeshire, Wales. Its coastal location, resorts, and Ironman Triathlon every summer attract thousands of tourists in similar seasons to St Andrews' own tourist attractions (e.g. its coastal location and golfing opportunities). Tenby's summer pedestrianisation provides a unique case of a town similar to St Andrews with a successful seasonal pedestrianisation.

	Tenby	St Andrews
Area	1.43 km^2	38.0 km^2
Population	14,659 (2015)	19,610 (2017)
Peak Month	July-August	July-September
Average Annual Sunshine	138.9 hours	130.4 hours

Figure 5.8 - Images from Tenby's pedestrianisation scheme. See Appendix 8 for Roads Implementation Plan

Background

Implementation and Costs

- With tourists increasing the population tenfold every summer causing traffic gridlocks, pedestrianisation was implemented in 2002 to decrease vehicle congestion. This lasting from July to September, 11am - 5:30pm.
- A hybrid set of schemes were tested, with the Western and Eastern area accessible only to badge holders plus exemptions, and the core area fully pedestrianised.
- The loss of street parking in the pedestrianised zone did not have any effect as there was limited parking to begin with.
- Numerous car parks are found around the town with shuttle buses going to the town walls (2 min walk from city centre).
- Exact costs towards the pedestrianisation were unable to be obtained as the scheme was, as mentioned, hybrid. However, seasonal staff manually removing the barricades and a company hired to put up signages were mentioned.

A huge success, with keeping children safe as you do not need to keep track of them (no danger to traffic) and good for the disabled with narrow streets and smooth blocks. Retail and the cafe culture has also been good.

-Cllr. Michael Williams,
Tenby North Ward

Tenby Summer Pedestrianisation Case Study

Views and Results

- No numerical studies were done by the Council to prove its positivity across town, but they used the residents’ continuous request for pedestrian extensions over the years as a positive sign.
- For residents living outside the wall, one of their main concerns was the ease of buying goods and passing through by means of car.
- Both businesses and residents were worried about deliveries, as not all companies (e.g. online shops) beyond the town would know their accessible times.
- Since the implementation, illegal street trading has become one of the major concerns for businesses, with a by-law due to be passed in the ‘All Wales Act’.
- The park and ride scheme was also removed due to budget cuts which raised concerns for those with mobility problems, pushing the Tenby mayor to ask for a review (2017).
- Currently, the town is working on finding alternative solutions to manual barricades to decrease implementation costs.

A workable solution to the problem of traffic.

-Andrew Davies, Tenby Town Clerk

Lessons for St Andrews

- The success of Tenby`s scheme can also be attributed to having a wide availability of nearby car parks (pictured below).
- The loss of parking spaces on Market Street and their lack around town would need addressing as it can result in the reduction of visitors and revenue for the Council and businesses.
- Illegal street traders can certainly increase competition for businesses with possibly cheaper products as no rental spaces and other fees are paid.
- Good town accessibility for vehicles will need to be reevaluated and maintained as seen that the loss of Tenby`s park and ride scheme has caused problems.
- Data collection before and after implementation is essential for the reviewal of the scheme`s success.

Figure 5.9 - Map of Tenby displaying availability of parking sites
P (Parking Sites)

Kinross Shared Spaces Case Study

Why Kinross?

- Kinross is a traditional county of the historic town of Kinross-shire located at the western edge of Loch Leven, declared a nature reserve in 1964. Being a Scottish town 45 minutes away from St Andrews and having a similar atmosphere in terms of buildings and structures, its shared space scheme displays another potential option for St Andrews' Market Street.

	Kinross	St Andrews
Area	2.0 km^2	38.0 km^2
Population	12,609 (2016)	19,610 (2017)
Peak Month	July-August	July-September
Average Annual Sunshine	110.5 hours	130.4 hours

Figure 5.10 - Image of Kinross' shared space street

Background

Implementation and Costs

- Shared spaces is defined as design approach of reducing the dominance of vehicles (not removing), allowing pedestrians to walk more freely in the area.
- The shared space initiative was implemented in 2015 as part of the long term proposals to improve the town centre, increase investments, and improve accessibility with a range of transport modes (i.e. increase footfall).
- The cost was approximately £1.5 million for the reconstruction of ~80m.
- Changes included removed road markings, traffic lights, and curbs; pedestrian crossings were replaced with lighter coloured pavings.
- Road pavements were levelled to the same height with bollards and electric lights installed from the ground.
- An alternative way around the High Street (shared spaces) is a bypass to another service road-– made before the implementation of said scheme.

Kinross Shared Spaces Case Study

Views and Results:

- 2014 (Before) vs 2016 (After) Data Results (Roderick Maclean and Associates Ltd; Perth & Kinross Council)

Frequency Of Visits

- From figure 5.11, a 14% increase in the number of respondents who indicated they used the street daily is as a significant improvement upon 2014. This increase may come from those who previously only visited the street once per month or less than once per month. Thus, this data suggests that shared spaces encouraged more frequent visits to the town centre.

Modes of Travel

- Figure 5.12 shows the different modes of transportation used in going to Kinross, with walking as having the most significant increase after the shared space implementation. Other modes of transportation (e.g. taxis, bicycles) were not mentioned in the figure as the 2016 data did not include it within its choices.

Footfall

- Footfall has also increased in specific locations in the High Street in parallel with the increase in walking seen in figure 5.12.

Vacancy Units

- 2014 and 2016's percentage of vacancy units is different not due to a decrease or increase of vacancies but because of a decrease in the total number of units available. The number of vacancy units remained the same (8), showing that the scheme did not have any effect towards the units at all.

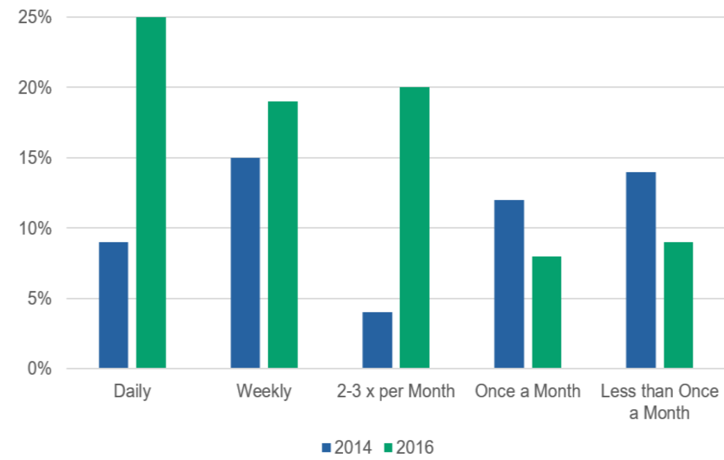


Figure 5.11 Frequency of Visits

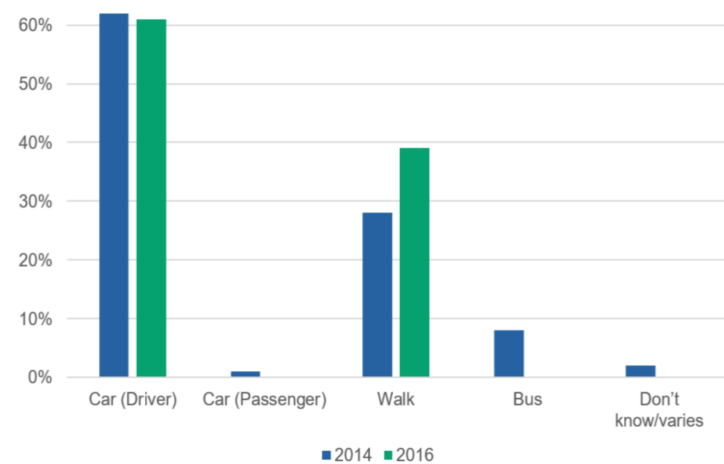


Figure 5.12 Modes of Travel

Kinross Shared Spaces Case Study

Views and Results

- Before the scheme’s implementation, its reconstruction is said to have affected businesses’ sales with the roads seemingly closed.
- After its implementation, it was perceived negatively overall by the residents under the representation of Ken Miles, a local businessman and frequent council critic who deemed it an ‘unacceptable risk to pedestrians’ and a flavour of the month implementation.
- Bollards were also negatively mentioned, causing accidents with drivers ramming into them. The Kinross-shire Civic Trust, called them tombstone-like and highlighted the need for adding lights to them for greater safety.
- The 20 mph speed limit was believed to be ignored based on statistics gathered by the Council, with cars often going past 45 mph.
- With the potential crossing dangers to pedestrians including children and the elderly, an official crossing was petitioned for and implemented.
- Now, a petition has gone to the Scottish Parliament by Sandy Taylor of the East Dunbartonshire Visually Impaired People’s Forum for the intervention and halting of any shared spaces in Scotland due to discrimination, an enterprise backed by the Kinross-shire Civic Trust.

Lessons for St Andrews

- Official crossings and stop lights will need to be maintained no matter the kind of implementation.
- The scheme may have no negative economic effects seen by the Council; however, consultations for its users` (residents) concerns should still be held and prioritised.
- Additional support for children, the elderly and disabled may need to be thoroughly planned out as any type of implementation may cause them harm and difficulties.

Edinburgh Grassmarket with Setted Streets

Why Edinburgh?

- Edinburgh is one of the closest cities in proximity to St Andrews. With 4.6% of its streets being setted, it provides a useful case study for a better understanding of what can be done to the streets of St Andrews in terms of cobbles and partial pedestrianisation.

	Edinburgh	St Andrews
Area	264 km^2	38.0 km^2
Population	513,210 (mid-2017)	19,610 (2017)
Peak Month	June-September, December	July-September
Average Annual Sunshine	118.9 hours	130.4 hours

Figure 5.13 Image of Grassmarket Area

Background

Implementation and Costs

- In 2005, the area was negatively viewed as an excessive drinking and anti-social behaviour scene at night, with it also becoming a huge car park area.
- With the idea of revitalising it as a gathering place once more (like in the 1300s), Partial pedestrianisation was implemented in 2009 to redistribute space to pedestrians for flexible use as a public event space (e.g. markets, films), with vehicle access from 6:30-10:30 am (i.e. deliveries).
- Reports show £5 million was spent to redesign the streetscape, improve links to different parts of the city, and establish a year of event programs.
- New street lightings, CCTV, underground recycling units, furniture, retractable bollard systems, and other public amenities were put in place.
- The centre car park was removed, reducing parking spaces for both residents (paid badges) and visitors whilst incorporating parallel parking (changed from its former 90-degree angled spaces).
- An extension to the tables and chairs licenses into the evening was also done pushing nightly behaviours for later hours.

Edinburgh Grassmarket and Setted Streets

Setts

- With the Grassmarket and numerous areas of Edinburgh becoming World Heritage Sites and Conservation Areas, it has become the city's responsibility to retain its character and historical image, which includes its setted streets.
- In 1986, a policy of protection and retention of setted surfaces was established with 174 of 387 setted streets laying in the World Heritage Site in Edinburgh.
- For the Grassmarket, 40,000 m^2 of setts were lifted and relayed with a mixture of 5,000m^2 of new Caithness Flagstones in the service roads, pedestrian, and event spaces.
- The city used a new 'joint-in' material (Flowpoint) which fills in voids perfectly and reduces any bumpiness effect whilst also decreasing drying time (24 hours) as compared to older versions, making it less of a walking hazard for pedestrians.

Type of Construction	Cost per M^2
Sett Reconstruction	£250-£350
Asphalt Reconstruction	£50-£70
Asphalt Overlay	£15-£20

Figure 5.14 - Price comparison of Sett surface vs traditional asphalt

Views and Results

- Awarded the 2010 Scottish Awards for Quality in Planning: won the Development on the Ground category.
- Retailers were affected during the construction but were warned of the dates and times of the road works which might have reduced its impact. After years of implementation, automatic bollards were often faulty and broken.
- Greater Grassmarket Business Improvement District (BID) delivered a set of events from 2013-2018 with the community and its stakeholders to bring in more additional footfall through weekly markets and festivals.

Figure 5.15 -Image displayed setted streets of Grassmarket (Cobbles-left and Caithness flagstones-right)

Edinburgh Grassmarket and Setted Streets

Overview

- Public Spaces Protocol 2018 report presented specific requirements for the Grassmarket events space, such as types of Council preferred events, mostly low impact and the notification and inclusion of residents 3 weeks before any event.

Results of comparative survey before (2006) and after the implementation (2011)

Vacancy Units

- There was little to no change with its overall number (132:2006 and 131:2011) of available units. The number of occupied premises remained the same, though over ⅓ of businesses changed status or occupancy. This overall suggests that demand for retail space in the Grassmarket is steady.

Businesses and Retail Types

- Higher levels of confidence and optimism were recorded from the 2006 survey, with growth expected in the next 3 years. There was also a noticeable shift from shops to restaurants over the period.

Events

- Events held were positively received by businesses and residents; however, the Council's plan of showing Grassmarket`s potential as an events venue was not successful due to lack of funds.

Residents

- The Council survey conducted states their positive views with its attractiveness, cleanliness and management, though antisocial behaviour was believed not to have been improved. However, the Grassmarket Residents Association report mentioned a number of first hand experiences of homes not being suitable to live in due to noise, dealings with night litters and vomit and more.

Lessons for St Andrews

- If reconstructions are carried out, businesses and residents on the street affected should be well informed of the schedules to minimise disruptions and losses. The opportunity to give their input to the works is also vital.
- After the completion of roadworks, continuous Council administrative and financial support is vital to ensure the initial plan`s success and the town`s progress.
- Alternative options for automatic bollards are needed as it is not recommended.
- The repairs of existing setts with the use improved joints may be more expensive than using new machine cut flatter top setts or Caithness flagstones, it will protect both the pedestrians and the history of St Andrews.

Negative Case Studies Compilation

- Pedestrianisation comes in different forms all basing on the structure of each location; however, these case studies suggest it is not a universal suitable solution as it may lead to negative impacts on the area instead of positive ones as planned.

St John Street, Perth

- St John Street in Perth was pedestrianised in 2004 to attract more visitors into the area and increase the use of its units. Spending was around £1.6-1.8 million for resurfacing, curbs, lighting and street furniture.
- The change was and is viewed negatively by many. No evidence was found or provided by the Council to prove its positivity or negativity after the implementation.
- According to a council contact, its negativity may be related to the closing of McEwens, which had been in St John Street for a longtime and which affected hundreds of people. However, its closing was not only in St John Street.
- According to Scottish Retail Consortium Findings 2018, Perth has the second highest number of closed shops in Scotland.

Paisley

- Paisley is a town situated in the west central Lowlands of Scotland. It is the largest town in the county of Renfrewshire and is one of the largest in Scotland.
- Its pedestrianisation was implemented in 1997; however, since 2015, it has allowed vehicle access (cars and taxis) at night.Due to it being implemented in the late 1900s, much data can no longer be provided.
- Pedestrianisation was blamed for the problems of the city centre: empty shops and the lack of major retailers.
- The huge number of empty shops are said to be due to renters still paying even after leaving the area and private owners simply treating it as empty land investments.
- A survey conducted in 2007/2012 was mentioned, with the majority in favour of keeping the pedestrianisation which may indicate that it was not a complete failure.

Figure 5.16 - Map of Perth displaying location of St John Street

Figure 5.17 -Image of Paisley's pedestrianised area

SECTION SIX

Option Appraisal

PLAYFAIR
CONSULTANCY GROUP

Option Appraisal Process and Results

- Survey respondents were asked to rank the options in order of most-preferred to least preferred. This was to determine how open respondents were to a variety of potential forms of increased pedestrian priority. The results of this exercise are summarised under each option.

- A limitation with this approach is that respondents skipped or only part completed this question, which has resulted in inconsistent numbers of responses across options. However the results still provide clear insight into respondent's preferences.

- From the consultation of residents and businesses, Five design priorities were identified that any future changes must meet. To these priorities an additional factor of "Cost" was added to reflect how easy and affordable it would be to implement each option.

- Each option will then be appraised against these priorities, by assigning a grading of 1-3 where 3 means the option performs well against that criteria and 1 means the option performs poorly. This will allow a preferred approach to be identified, which will then be explored in greater depth.

Option 1 - No Change (received 1191 responses)

- ❑ **53% of respondents (635) ranked this as their most preferred option while 32% ranked this as their least preferred (388).**
- ❑ The most preferred option, with the highest percentage of such responses at (53%)

Option 2 - Reduced Vehicle Prominence (received 962 responses)

- ❑ **13% of respondents (123) ranked this as their most preferred option while 4% ranked this as their least preferred (37).**
- ❑ The second most preferred option, with 45% of people ranking this as their second preference.

Option 3 - Partial Pedestrianisation (received 969 responses)

- ❑ **16% of respondents (152) ranked this as their most preferred option while 3% ranked this as their least preferred (33).**
- ❑ The third most preferred option, with 45% of people ranking this as their third preference.

Option 4 - Full Pedestrianisation (received 1143 responses)

- ❑ **28% of respondents (322) ranked this as their most preferred option while 58% (661) ranked this as their least preferred.**
- ❑ The least preferred option, with 58% of people ranking this as their last preference.

Summary

- The ranked order of resident's preferences for the options above is also the same as for the businesses. Businesses feel more strongly in favour of no change with 84% giving this their first choice. Only 5% ranked full pedestrianisation as their most preferred option.

- While no change is the most preferred option across both residents and businesses, there are still approximately 400 residents, ⅓ of the sample, who rank this as their least preferred ideal - suggesting they do not want to keep things the same. Furthermore approximately 1/3 of total respondents ranked some form of pedestrianisation, either full or partial, as their most preferred. Therefore this indicates the case for examining a potential of change is justified.

Option 1 - No Change

Overview

- As can be seen in figure 6.1, under this option the current layout and vehicle accessibility of the street is unchanged.
- The existing 24 hour vehicle access to the street is maintained for everyone along with the current on street parking facilities. Bus services are able to use the street as normal.
- Additionally, the pavement width is unchanged and road layout is kept the same.

Analysis

- Across both residents and businesses this was the most popular option, indicating that the majority find this layout suits their needs best.
- Breaking down the percentage of those who selected this as their most preferred option within age demographics yields:

Under 18	18-25	26-35	36-64	65+
35% (21)	21% (55)	53% (73)	63% (322)	76% (164)

- As the age of the respondent increases, so does the likelihood they most prefer the no change option for the street. The exception is in the 18-25 years category although this will likely have been swayed by university students' responses who may have different priorities compared to residents.

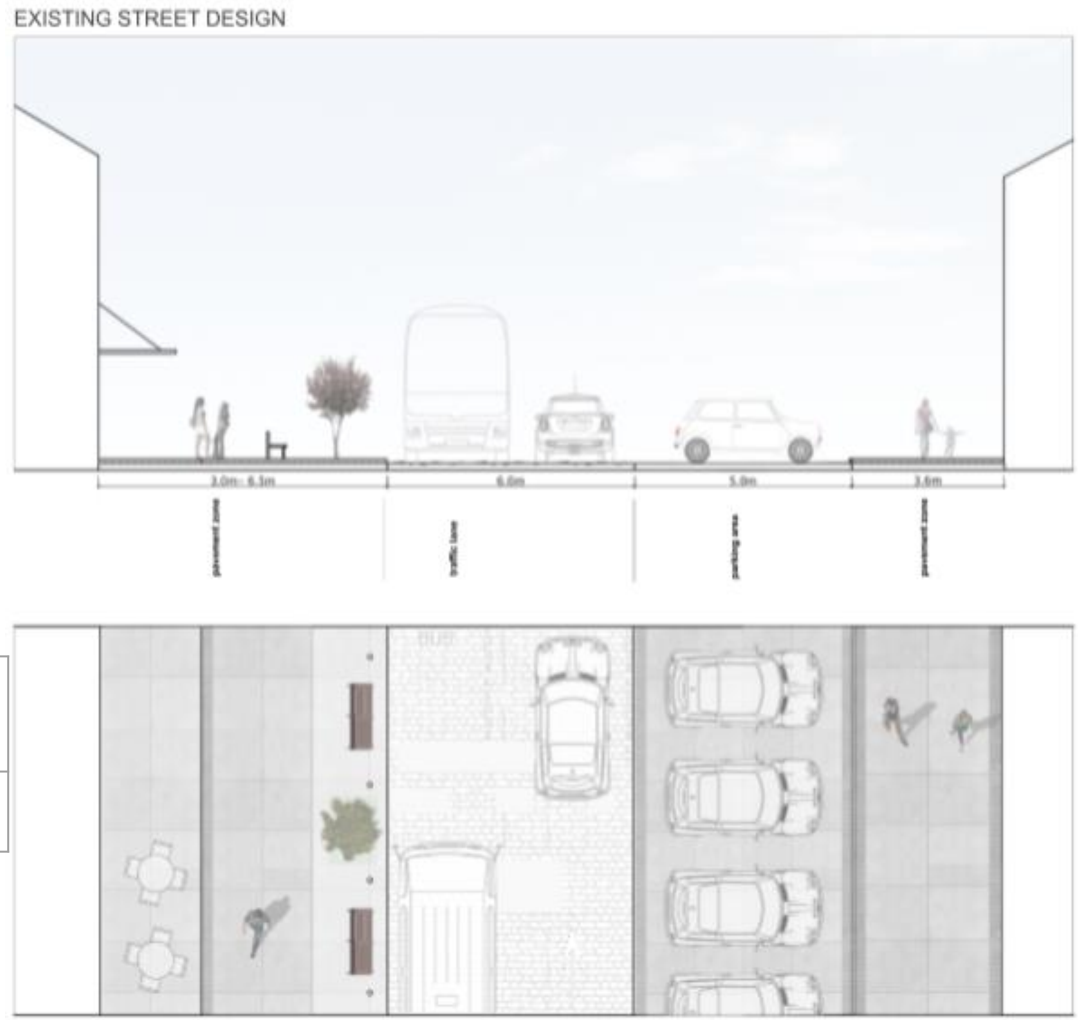


Figure 6.2 - the current layout of Market Street

No Change

Design Priorities	Local businesses are successful and supported	Existing parking continues to be available	A diverse range of shops	Constant accessibility for vehicles is maintained	Improvement to the street's atmosphere	Affordability and Ease of Implementation
Option - No Change	2	3	3	3	1	3

Figure 6.3 - Option Appraisal Results where 1 = performs poorly against the objective, 2 = performs ambivalently, 3 = performs well

Option Appraisal

- Supports Local Businesses - While no change to current vehicle access on Market Street supports the desires of the vast majority of surveyed businesses in the town centre, based on their concerns relating to customers arriving by car and the need for deliveries, this may lead to an opportunity cost where businesses may have performed better than if the layout and functionality of the street is improved.
- Ensures existing parking is maintained - No change to vehicle access or prominence on Market Street would mean no alterations to the current parking scheme.
- Encourages a diverse range of shops - No change to the street's vehicle access has the least immediate consequences on shopping behaviours and profits, which influence the types of businesses able to maintain locations on Market Street.
- Allows constant access for vehicles - Market Street is currently accessible to vehicles 24/7.
- Improves the Street's atmosphere - No change to the street means no direct improvement to its atmosphere, especially in terms of aesthetics (e.g. increased greenery, seating) and family-friendliness.
- Affordability - As there would be no changes to the street layout required, then there would be no need for any construction or alterations and therefore there is no cost approximation necessary for this option.

Option 2 - Reduced Prominence of Cars

Figure 6.4 - potential alternative layout of Market Street with reduced prominence of cars

Overview

- There is substantial scope for variation within this option regarding its specific implementation. Therefore Playfair presented a selection of qualities it may include to allow stakeholders to judge its suitability:
    - Figure 6.4 illustrates the reduction in on-street parking along with widened pavements, additional seating and enhanced greenery.
    - Lower speed limits are introduced with the application of traffic calming measures and a kerb-free single surface between road and pavement. Vehicles have right of access but must move slowly and wait for pedestrians to pass before moving forward.

Analysis

- For resident respondents this option was their most popular second preference.
- Breaking down the percentage of those who selected this as their most preferred option within age demographics yields:

Under 18	18-25	26-35	36-64	65+
21% (12)	19% (47)	12% (13)	8% (31)	14% (20)

- While it was a popular second choice, across the majority of age groups, this option attracted the lowest number of ‘most-preferred’ responses, indicating that respondents either are in favour of no change or would prefer some form of pedestrianisation as opposed to merely restricting the presence of vehicles by a small margin on the street.

Reduced Prominence of Cars

Design Priorities	Local businesses are successful and supported	Existing parking continues to be available	A diverse range of shops	Constant accessibility for vehicles is maintained	Improvement to the street's atmosphere	Affordability and Ease of Implementation
Option - Reduced Prominence	2	2	2	3	3	1

Figure 6.5 - Option Appraisal Results where 1 = performs poorly against the objective, 2 = performs ambivalently, 3 = performs well

Option Appraisal

- Supports Local Businesses - Although vehicle accessibility for customers and deliveries would be maintained and create an improved shopping experience for pedestrians, the reduction of on-street parking could change customer behaviour and potentially reduce customer numbers. Our consultation indicated the highest spenders on the street predominantly arrive by car, therefore this option may have a detrimental effect on businesses.

- Ensures existing parking is maintained - On-street parking would remain but in reduced numbers.

- Encourages a diverse range of shops - The reduction of vehicle prominence influences the type of shopping people would plan to do, most directly with a reduction of on-street parking, which in turn would slowly potentially affect the type of shops popularised on Market Street.

- Allows constant access for vehicles - Though vehicles would be reduced in prominence, they would maintain 24/7 access to the street.

- Improves the Street's atmosphere - A reduced prominence of cars would allow for a positive combination of both the vibrant bustling of a street accessible to both cars and pedestrians combined with being a safer, more pedestrian-prioritised space; however, this score depends on the extent of change to vehicular prominence.

- Affordability - This option suggests making Market street more “pedestrian friendly”. This would be achieved by decreasing the number of parking spots (potentially changing the angle of the spaces), introducing speed bumps, displaying speed limit signs and creating a new pedestrian crossing. Associated costs would likely be similar to the previous round of work completed in 2009. See appendix 4 for approximate cost breakdown.

Option 3 -Partial Pedestrianisation

Overview

- Under this option, as represented by the highlighted portion of figure 6.6, vehicle access to the street is restricted either on a time, day or seasonal basis. For example this could involve no traffic on the street between certain times each day; no traffic at peak times on a Saturday/Sunday or no traffic at peak times during the summer.

- Pedestrians would have absolute priority during the restricted hours with vehicular access limited to emergency access only, with service delivery and resident vehicles allowed only at certain times. Outside these hours, regular vehicle access for all users would be permitted. Note, while figure 6.6 indicates a permanent reduction in parking availability, this option could be implemented without substantially altering the street design, only blocking either end to vehicles at predetermined times.

Analysis

- From 2010 vehicle volume data, 11-5pm is the peak time for traffic using the street each day, with Saturday's typically busier than Sundays for vehicle numbers. Therefore partial pedestrianisation between those hours or on Saturdays would deliver the greatest benefit to pedestrians, but at the same time deliver the greatest disruption to motorists. Alternatively Sundays could be pedestrianised to limit disruption to drivers.

- Breaking down the percentage of those who selected this as their most preferred option within age demographics yields:

Under 18	18-25	26-35	36-64	65+
32% (18)	22% (54)	14% (16)	11% (46)	13% (18)

- While scoring low across all demographics, this option is more favoured by younger residents. This suggests older respondents would prefer the certainty of consistency in street layout, as opposed to a design that varies in access provision.

Figure 6.6 - potential alternative layout of Market Street with Partial Pedestrianisation

Partial Pedestrianisation

Design Priorities	Local businesses are successful and supported	Existing parking continues to be available	A diverse range of shops	Constant accessibility for vehicles is maintained	Improvement to the street's atmosphere	Affordability and Ease of Implementation
Option - Partial Pedestrianisation	2	1	2	1	3	2

Figure 6.7 - Option Appraisal Results where 1 = performs poorly against the objective, 2 = performs ambivalently, 3 = performs well

Option Appraisal

- Supports Local Businesses - From our consultation with businesses, the majority were clear that they perceived ensuring customers have quick and convenient access to their business premises as vital to their success. Under this option, direct vehicle access to shop fronts would be unavailable, although this disruption would be time limited. Case study research presents mixed results regarding performance in pedestrianised areas indicating pedestrianisation has the potential to support or hinder businesses depending on the unique circumstances of individual location's implementation.

- Ensures existing parking is maintained - This option performed poorly against this priority as for a certain period of time when the street was pedestrianised it would not be possible for any parking to take place.

- Encourages a diverse range of shops - Similarly for the reduced prominence of cars option, case study evidence suggests the diversity of shops would be potentially affected as when the street is closed this would lead to changes in shoppers behaviour - encouraging more eateries to open at the expense of more general stores. However this change would be reduced by normal street access outside of pedestrianised hours. .

- Allows constant access for vehicles - This option performed poorly as for a potentially considerable part of the day/week the street would be closed to vehicles.

- Improves the Street's atmosphere - As Market Street would be pedestrianised during the busiest points in the day for pedestrian footfall, this would maintain the hustle and bustle the consultation identified a significant portion of respondents appreciated, while also removing the stress of cars. This option would likely deliver an optimum atmosphere as regarded by the significant majority of residents. However, this score depends on the extent of change to vehicular access.

- Affordability - Estimates for this option vary depending on the extent of permanent changes implemented on the street. If simple barriers are used to closed it to traffic then it is reasonably affordable, however if the streetscape is altered the cost increases. See appendix 5 for approximate cost breakdown.

Option 4 - Full Pedestrianisation

Overview

- The highlighted part of figure 6.8 represents the potential design and layout of Market Street under full pedestrianisation. Access to the street is nearly fully restricted apart from emergency services and Market Street residents, pedestrians would have absolute priority at all times. Services and deliveries would also only be possible out with peak pedestrian hours.
- Car parking would be removed, with the street designed predominantly for pedestrians, leading to associated increases in street furniture and art spaces. A dedicated cycle lane could be introduced and businesses may be able to permanently extend their outside seating/selling areas. Bus services would be unable to use the street and stops would be moved to a nearby location.

Analysis

- Across both residents and businesses this was the least preferred option, indicating that the majority feel this layout would not suit their needs best.
- Breaking down the percentage of those who selected this as their most preferred option within age demographics yields:

Under 18	18-25	26-35	36-64	65+
15% (9)	42% (111)	27% (37)	28% (138)	15% (27)

- 18-25 year olds, which incorporate most university students, is the age group most supportive of full pedestrianisation, likely owing to their reliance on walking or cycling to access Market Street. The middle demographics are also fairly receptive towards the idea, especially when compared to age groups at either end of the spectrum - suggesting those who are more reliant on vehicles to access Market Street, or at least are unable to get there independently without transport, are most likely to be opposed to such an option for the street.

Figure 6.8 - potential alternative layout of Market Street with full pedestrianisation

Full Pedestrianisation

Design Priorities	Local businesses are successful and supported	Existing parking continues to be available	A diverse range of shops	Constant accessibility for vehicles is maintained	Improvement to the street's atmosphere	Affordability and Ease of Implementation
Option - Full Pedestrianisation	2	1	1	1	2	1

Figure 6.9 - Option Appraisal Results where 1 = performs poorly against the objective, 2 = performs ambivalently, 3 = performs well

Option Appraisal

- Supports Local Businesses - The reasoning behind the ambivalent rating in this category is similar to the previous option's, recognising this would present extensive disruption however in many case studies, has improved business' financial turnover.
- Ensures existing parking is maintained - the vast majority of on-street parking would be removed, substantially reducing availability compared to now.
- Encourages a diverse range of shops - this alteration in layout would necessitate a major change in buyer behaviour, as they would no longer be able to drive to door to the shops for a quick-stop purchase. This will likely reduce the diversity of shops as a consequence.
- Allows constant access for vehicles - vehicle access would be constantly restricted for all but a few exceptions such as street residents and deliveries.
- Improves the Street's atmosphere - While vehicles would be removed from the street at all times, ensuring the street would be quieter and more relaxing which responses indicate would suit some residents, pedestrian footfall would not be constantly busy therefore at numerous times during the day Market Street would lose its hustle and bustle other residents identified as a positive quality. As it would not be an improvement to both groups, it has been assigned a middle ranking.
- Affordability - Overall cost depends on the method(s) selected to restrict vehicle access, ranging from simple signage to automatic barriers. Case studies indicate extensive streetscape work is also required, such as levelling the road surface, which would also have a significant impact of increasing the cost. See appendix 6 for an approximate cost breakdown.

Option Appraisal Summary

Design Priorities	Local businesses are successful and supported	Existing parking continues to be available	A diverse range of shops	Constant accessibility for vehicles is maintained	Improvement to the street's atmosphere	Affordability and Ease of Implementation	Totals
Option - No Change	2	3	3	3	1	3	15
Option - Reduced Prominence	2	2	2	3	3	1	13
Option - Partial Pedestrianisation	2	1	2	1	3	2	11
Option - Full Pedestrianisation	2	1	1	1	2	1	8

Figure 6.10 - Option Appraisal Results where 1 = performs poorly against the objective, 2 = performs ambivalently, 3 = performs well

Analysis

- **Using the design priorities indicated as most important by respondents, the no change option is the best fit with these goals.** Indeed two of the priorities concerned ensuring the street retained existing parking and vehicle access, therefore the goals were heavily in this option's favour.

- Reduced vehicle prominence and partial pedestrianisation both performed reasonably well, demonstrating that perhaps some action in those directions is feasible. In contrast, full pedestrianisation performed poorly. This is owed to the option going against a number of the priorities that respondents emphasised as being vital components of an ideal street. A likely improvement in the street's atmosphere, is not enough to counter the low scoring performance on a variety of other issues - notably not supporting local businesses, removing parking and vehicle access, and for requiring expensive remodeling of the streetscape.

SECTION SEVEN

Preferred Option Analysis

Analysis of Preferred Option - “No Change”

Overview

- While the result of the consultation indicates that no change to the street is the preferred option, there are still issues with the street which can be improved without the requirement of large disruptive street layout alterations such as pedestrianisation.
- These issues were raised in the “dislikes” of Market Street section as well as the business focus groups.

Changes to Pavement

- 21% of respondents raised issues with the pavement being too narrow due to the presence of A Boards and Bins.
- While a new policy on bins and bin collections is being introduced this year to rectify their presence on the street, St Andrews should also investigate the possibility of following Edinburgh’s approach and banning A Board. This would create additional pavement capacity and help improve the flow of pedestrians without requiring extension of the pavement surface.

Changes to Roadway

- One of the most common issues raised regarding the current parking on Market Street, concerned the angle of the bays. 6.4% of respondents felt the 90 degree angle was unsuitable.
- Introducing an angle to the bays would improve vehicle accessibility and reduce the amount of street space they would occupy, although as figure 7.1 indicates, this would come at the expense of the number of spaces provided.
- Re-siting the bus stop and introducing delivery vehicle bays would also help to improve vehicle flow along the street, aided by increased policing of parking infringements.

Formation of St Andrews Leadership Group

- This consultation has considered responses from St Andrews residents and businesses in relation to Market Street in isolation. This has highlighted that there are substantial potential opportunities for improvement to the town. While there are a variety of divergent voices and interests that have suggestions or concerns, there is no forum for these views to be adequately aired.
- If St Andrews is to remain a world-class destination, the town needs to have a strategy for how it will develop in 2030 and beyond. To this end, Playfair recommends a St Andrews Leadership Group encompassing representatives from the major stakeholders in the town - residents, businesses, the university, R&A etc - with support from Fife Council to create a joint, coordinated response to the biggest issues plaguing the town such as parking capacity, vehicle congestion and managing growing resident, student and visitor numbers.

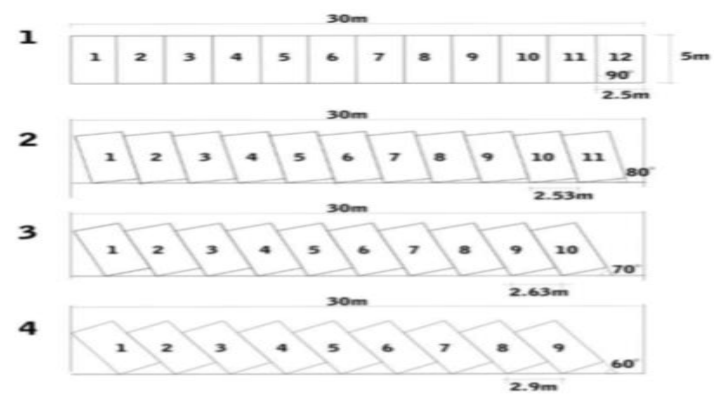


Figure 7.1 - the current layout of Market Street (taken from Ironside Farrar materials)

Analysis of Preferred Option - Parking

- An issue that was consistently raised throughout the consultation concerned the lack of available parking spaces in St Andrews town centre.

- In 2016, Playfair undertook a study into the feasibility of a Park and Ride for the town. While it was ultimately rejected, primarily owing to the cost and difficulty of sourcing suitable land and subsidising running costs, alternative parking solutions were included to help increase capacity.

- The two main suggestions included the creation of car parking facilities at Station Park (figure 7.2), with the potential to house 710 vehicles relatively close to town. Additionally, the report detailed that the 2,710 potential spaces at West Sands has never reached capacity, and the introduction of improved signage as well as a a shuttle bus and bus stop would encourage the use of these spaces, easing pressure in the centre.

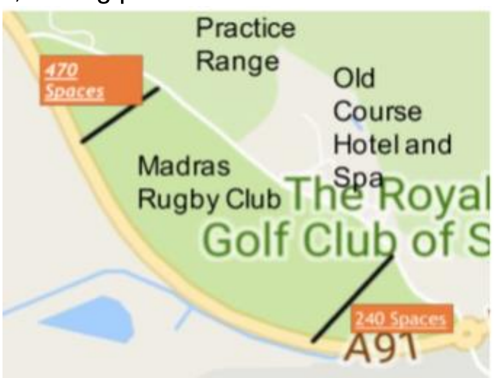


Figure 7.2 - potential additional car park locations with associated capacity

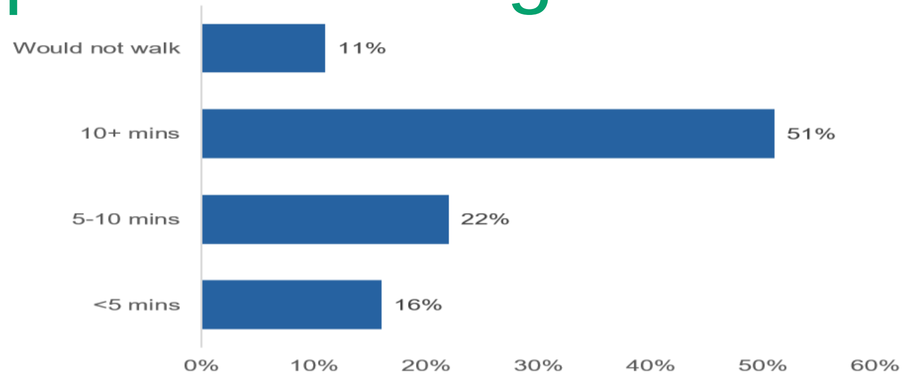


Figure 7.3 - Maximum time respondents would be willing to walk to Market Street

- The majority of respondents indicate they would be prepared to walk for more than 10 minutes from where they parked their vehicle to reach Market Street. This suggests that enhancements to car parking at Petheram Bridge, Station Park and West Sands would be well utilised.

- The spread of responses to the other durations indicates that the town will need to provide spaces at a variety of distances to satisfy everyone's preferences and to maximise customers for businesses. This will also need to include parking provision at the very centre of town as 11% of respondents state they would not or are unable to walk to reach the street.

- To facilitate this, it would be desirable to have shorter length of maximum stay on parking near the centre with no time restrictions on those further away to give users a choice depending on the purpose of their visit.

- Coupled with this consultation's insight into parking behaviour, Playfair's 2016 parking recommendations are still relevant and would help decongest and improve the centre of town without pedestrianisation.

Main Concerns for Full Pedestrianisation

- Based on stakeholder opinions and option appraisal, full pedestrianisation is currently the least desirable and feasible of the analysed options. Our research has highlighted parking, supporting businesses, traffic congestion, and mobility issues as the main obstacles preventing an successful pedestrianisation of Market Street; these obstacles would need to be addressed before pedestrianisation could be considered feasible.

“Fully pedestrianising Market St is a good idea if parking elsewhere is expanded”

Parking

- The largest shared worry of both residents and businesses is the lack of parking that would arise from removing cars from Market Street. The demand it would place on parking elsewhere in town and its potential to drive away possible visitors to St Andrews are valid and serious concerns.

- The outpouring of concern for parking availability indicates that perhaps the the demand for a multi-story car park or park & ride should be considered. Multiple respondents suggested looking into the possibility of such a car park at Petheram Bridge and a free bus service to town centre.

Supporting businesses

- One of the greatest concerns present in survey results was for local businesses. Responses cited a perceived current lack of support for local businesses and independent shops over tourist shops selling goods at inflated prices that edge out more varied retail, an issue that could potentially be exacerbated by pedestrianisation, which our case research has shown can increase costs for businesses in pedestrianised areas. More research on pedestrianisation’s potential effects on the costs and profits of local businesses is necessary.

Traffic Congestion

- The issue of placing more pressure on the already congested North and South Streets was a large factor in many respondents’ fears. Careful research into street flows would need to be conducted to avoid significant traffic problems.

Mobility Issues

- Many responses discussed pedestrianisation as ableist, with pedestrian/vehicle shared spaces posing a particular danger to the mobility, sight, and hearing impaired due to the uneven road surfaces and lack of clear regulations between vehicular and pedestrian spaces. Additionally, the mobility-impaired, especially the elderly, rely on cars and buses to visit the town centre and conduct their shopping.

“Pedestrianisation is physically excluding people with mobility problems from a public space”

Potential Improvements?

- A common suggestion was moving the monthly farmer’s market to the east end of Market Street and closing it down to cars as in Cupar; this would be a good opportunity to introduce a regular, brief pedestrianisation to the town centre, reduce traffic on Market Street, and attract visitors.

SECTION EIGHT

Conclusion and Recommendations

Conclusion and Recommendations

Conclusion

As of February 2019, the Playfair Consultancy Group has concluded the following:

Pedestrianisation of Market Street

The results from the public consultation of St Andrews residents and businesses suggests pedestrianisation should not be pursued at this point in time.

While approximately 1/3 of respondents indicated a desire for some form of pedestrianisation, 'No Change' was the most preferred option for the majority. 'No Change' also performed the best when appraised against the design priorities respondents set for Market Street.

Our results suggest that while there is demand within some sectors of the town for pedestrianisation, the overall priorities of respondents primarily focused around retaining the current levels of vehicle accessibility, hence partial and full pedestrianisation were deemed to be poor fits with these goals. Residents and businesses alike tend to recognise that pedestrianisation would bring improvements to the street's atmosphere, however this is overridden by their strong concerns regarding how they will be able to gain access to the street and how this will affect local business.

Owing to limited/no improvement to the transport situation in St Andrews, the conclusion reached in the 2009 Market Street Consultation is still valid today: "[Pedestrianisation] is not possible until alternative parking and wider transportation policies (including park and ride) are in place."

Only if such issues can be suitably addressed will a majority of residents potentially then regard pedestrianisation as a genuine enhancement to the centre of St Andrews.

Review of current parking and transport situation in St Andrews

- Respondents indicated they regard the current parking provision in the town as inadequate, therefore investigations should take place into considering if Petheram Bridge, Station Park, West Sands or alternative areas could be developed to help meet demand.
- Better data collection is also required to understand how Market Street performs across more up-to-date metrics than are currently available. Regular monitoring would allow for the impacts of events such as Car Free Days to be more accurately gauged. If pedestrianisation was potentially trialled in the future, it would also ensure a valid before-after comparison was possible - something lacking at present and in the majority of case studies we examined.

Formation of a St Andrews Town Leadership group

- Many solutions to the issues identified in this consultation will require cooperation and involvement from a variety of town stakeholders led by Fife Council. If St Andrews is to continue its success, it requires some form of long term, overarching strategy, encompassing the town as a whole, rather than the current piecemeal, isolationist approach.

Consider implementing alternative street improvements

- Until such a strategy determining how the transportation situation in St Andrews can be significantly improved is implemented, the alternative minor enhancements identified in this consultation - such as removing A-Boards, re-angling car parking spaces and stricter policing of parking regulation - could be pursued to deliver short term benefits.

SECTION NINE

Appendices

PLAYFAIR
CONSULTANCY GROUP

Appendix 1

- The appendix includes details that support the results given in the main body of the report.

Case Study Contacts

Tenby

- Ben Blake, *Senior Traffic Engineer*
- Andrews Davies, *Tenby Town Clerk*
- Cllr.Michael Williams, *Tenby North ward*

Perth (St John Street) and Kinross

- John McCrone, *City Development Manager*
- Ken Miles, *Kinross-shire Civic Trust Member*

Edinburgh

- Will Garrett, *Spatial Policy Manager*
- Chris Mcgarvey, *Senior Transport Team Leader*

Paisley

- Cllr. Kenny MacLaren
- Alasdair Morrison, *Head of Regeneration*

Case Study Report References

Kinross

- Retail study and City and Town Centre Review of 2014 and 2016

Edinburgh

- Full Planning Application: Grassmarket
- Public Spaces Protocol 2018
- Here Comes the Night: Grassmarket Residents` Association

Appendix 2

i) Breakdown of accident rates on Market Street

- Market Street is also relatively safe for both pedestrians and vehicles. Between 2013 - 2018 there were 40 reported traffic collisions directly on the street, of which only 7 occurred within the last three years. 37 incidents caused vehicle damage only, with the majority due to driver error while parking. Only 3 accidents involved pedestrians: 1 incident of a collision at a street crossing and 2 separate incidents of slight injury to a pedestrian’s foot. No serious injuries were reported in the monitoring period.

ii) Car Free Day Information

- This involved the closure of Market Street, from Bell Street through to Union Street, to all vehicles during the hours of 9am - 5pm. Organisers estimated approximately 3,000 people attended the event. Additional events held the same day included Dundee Pride and the Student Varsity Rugby at Murrayfield, which may have impacted attendance.
- The survey of event attendees also indicated that 44% arrived by car which may have generated additional traffic owing to restricted parking availability.
- The weather was consistent during all measurement times (cloudy and cool but dry). Breakdown in counting intervals:
    - North Street (Northpoint) was measured from 13:20 - 13:30
    - Bell Street was measured from 13:10 - 13:20
    - North Street (Taste) was measured 13:40 - 13:50
    - Greyfriars Street was measured 15:00 - 15:10
    - South Street (Holy Trinity Church) was measured 15:30 - 15:40

Appendix 3

Statement from St Andrews Space for Cycling on Market Street Pedestrianisation (29/10/18)

St Andrews Space for Cycling is pleased that a survey is being carried out to establish the community's views on pedestrianisation of Market Street.

Our aim is to make St Andrews the most cycle friendly town in Scotland.
Currently cycling in the town is difficult, dangerous and impractical for many people (particularly older people and children) because of the traffic congestion in the centre and the speed of traffic on all access roads and also on routes to school.

We would like to see major changes in the local transport infrastructure to reduce motor traffic, improve public transport, and make cycling and walking much more pleasant, indeed the transport mode of choice for the majority of the population. SASC recognises that this will take some time to achieve and there will be a continuing need for vehicle access to the shops for the disabled and for deliveries for some years, with sustainable transport ultimately taking over.

We support pedestrianisation of the centre of St Andrews for the following reasons: to make the street(s) more pleasant for walking and cycling; to reduce air pollution; and to contribute to the reduction of CO_2 emissions in relation to the urgency of tackling climate change. Pedestrianisation is now the norm in Europe for most ancient towns of the size of St Andrews and would be likely to improve its attractiveness as a destination for tourists. SASC was the main organiser (with the Transition University and Fife Council) of the car free day on 22nd September and sees such days as a means of demonstrating how pleasant the street will feel with no motor traffic. We understand the concerns of businesses and see the need of trialling traffic removal and ensuring that footfall is not adversely affected. There will also be a need to review public transport routes, refuse van access and supply chains to shops and businesses together with access for residents who live on the street.

For SASC this is only one of the changes needed in the town. We would like to see a much improved infrastructure for cycling on all entry routes and in particular on all roads between residential areas and schools. Roundabouts need to be made cycle friendly and there must be a step change in provision of cycle parking. All cycle lanes should be mandatory and protected and whenever possible, off road.

TW Chair of SASC.

Appendix 4

Statement from St Andrews Preservation Trust on Market Street Pedestrianisation

The Planning Committee of the St Andrews Preservation Trust had a full discussion on the benefit/disbenefit of pedestrianising Market Street.

For the Preservation Trust the idea of having a car free zone could be a benefit as it would reduce the carbon footprint and offer some protection to the buildings on the street.

However when the committee looked further into the reality of pedestrianisation a number of issues came to light. There are several little developments leading from Market Street which have car parking for the houses. If Market Street were pedestrianised it could create problems for residents of those properties.

Emergency vehicles might find it slower to approach a property in need and this could be exacerbated if the property was accessed from Market Street rather than being on Market Street. The same problem would arise for residents in Market Street when wishing to bring a vehicle alongside their property.

Delivery vehicles would be restricted to certain times for delivery and this could be a problem for smaller businesses.

Market Street has been selected to be considered for pedestrianisation in isolation from the wider traffic situation in the centre of ST Andrews. Any changes to traffic flow must be a part of the overall traffic management of the town. A traffic impact assessment is essential before any decisions can be taken. At this point in time there is no evidence provided to allow an informed decision to be made.

We do not know how sustainable Market Street or the surrounding shopping streets would be should Market Street become pedestrianised. All those living within the centre of St Andrews are aware that a large number of shoppers in the town come from elsewhere. Further research needs to be done to find out where shoppers come from and what mode of transport was used to get to St Andrews. Further investigation is also needed to ascertain what the average spend is for those coming from further afield. We cannot ignore the attraction of independent shops and several top of the range groups that bring considerable custom into St Andrews.

The loss of parking in Market Street cannot easily be accommodated elsewhere. A few years ago the Playfair Consultancy Group prepared a report on Park and Ride but after several months of detailed research could not find any suitable sport for a Park and Ride in the town. With car parks working to full capacity on a regular basis it would not be possible for those presently parking in Market Street for short periods to park elsewhere and this could present a very real threat to businesses in the town centre and risk their sustainability.

Whilst the image of a car free Market Street may be very attractive with cafes and shops spreading onto the street the reality is that a great deal of work has to be carried out to provide the evidence needed to take a final decision.

Appendix 5

Item	Notes	Approximated cost
Parking lines	Need to be removed first and then repainted, generous leeway since only the corners of spaces are painted (approx. 30m)	(30 * £1) * 2 = £60
Speed bump	2 on market street (beginning and end of street), considering this is a main road installation re-routing must be included as an additional expense.	2 * £1 000 = £2 000 (one-time installment/re-routing cost assuming both are installed at the same time) + £1 000 = £3 00
Speed signs	2	2 * £150 = £300
Pedestrian crossing	1	£35 000

Selected item breakdown for Reduced Prominence of vehicles option (note - does not include labour costs and is purely indicative in nature. Overall project cost will be substantially higher.)

Appendix 6

Item	Notes	Approximated cost
Parking lines	Need to be removed first and then repainted, generous leeway since only the corners of spaces are painted (approx. 30m)	(30 * £1) * 2 = £60
Speed bump	2 on market street (beginning and end of street, considering this is a main road installation re-routing must be included (variable amount)	2 * £1 000 = £2 000 (one-time installment/re-routing cost assuming both are installed at the same time) + re routing cost = £3 00
Speed signs	3 (2 for speed and 1 for access times)	3 * £150 = £450
Pedestrian crossing	1	£35 000
Bus stop	The stop would be moved to an alternative location (potentially North Street or Greyfriars)	£1 000

Selected item breakdown for Partial Pedestrianisation option (note - does not include labour costs and is purely indicative in nature. Overall project cost will be substantially higher.)

Appendix 7

Item	Notes	Approximated cost
Parking lines	Only removal needed (approx. 30m)	30 * £1 = £30
Signs	2 (indicating pedestrian zone, allowance for delivery vehicles)	2 * £150 = £300
Bus stop	The stop would be moved to an alternative location (potentially North Street or Greyfriars)	£1 000
Automatic barriers	Many variations with different pricing and maintenance	N/A
Patrol officers	Part-time employment	£13 500
Benches	4 (estimating at an average of £1 000)	4 * £1 000 = £4 000
Pavement	Depends upon the type of surface from asphalt at approximately £120 per sqm to natural stone at around £230 per sqm - Traffic management during construction Special construction costs	Variable
Trees	4 (estimating an average of £750) with additional planning and installment at £1 000	4 * £750 = £3 000 + £1 000 = £4 000

Selected item breakdown for Full Pedestrianisation option (note - does not include labour costs and is purely indicative in nature. Overall project cost will be substantially higher.)

Appendix 8

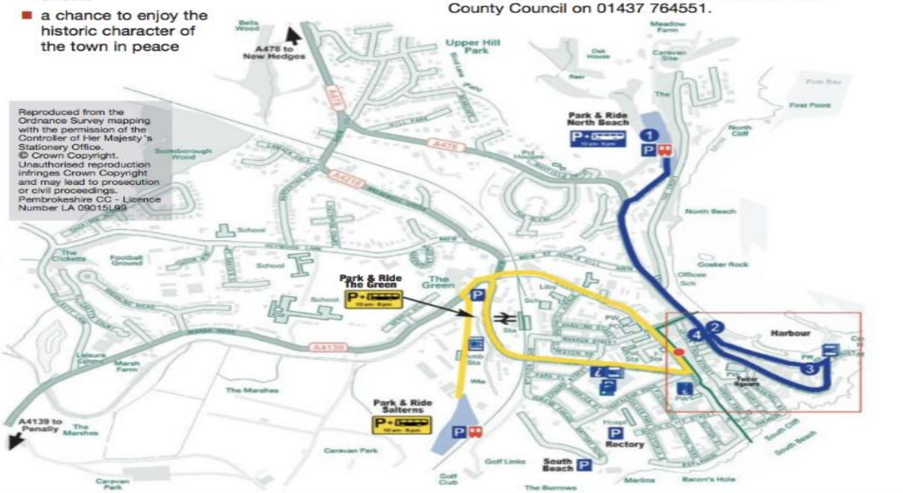
Tenby Pedestrianisation

Pedestrianisation within the walled area of Tenby has been running for a number of years throughout the summer months. One of the key aims of introducing the scheme was to enhance the visitor experience and encourage a café culture in Tenby. The main benefits are:

- improved safety for pedestrians wandering the streets
- a chance to enjoy the historic character of the town in peace
- an opportunity to introduce pavement cafes without traffic noise and fumes

A pedestrianised environment will be introduced within the Walled Town from 16 July to 4 September between 11.00am and 5.00pm each day. The two award winning Park & Ride services will operate daily from 10am until 6.00pm.

For further information please call Pembrokeshire County Council on 01437 764551.



- North Beach Car Park Bus Stop
- Crackwell St/High St Bus Stop
- Tenby Harbour Bus Stop
- South Parade Bus Stop
- Park & Ride Car Parks
- Car Parks
- Tenby Railway Station
- Tourist Information Centre
- Walled Town
- Toilets
- Park and Ride Bus Route from North Beach Car Park
- Park and Ride Bus Route from Salterns Car Park
- Area of plan enlarged below with specific routing information within the Walled Town

www.pembrokeshire.gov.uk

Park & Ride 1 — Yellow Route

Park & Ride from:
The Salterns Car Park (off the A4139 Pembroke Road follow P+ Signs)

This free bus service runs: - every 15 minutes -
10.00am to 6.00pm - 7 days a week
16 July - 4 September 2011

Bus stops at:
1. The Salterns Car Park
2. The Green Car Park
3. South Parade (for access to town centre)

A wheelchair accessible low floor bus will be used to provide this service.

This service is identified by the following logo:

Park & Ride / Parcio a Theithio

Service provided by:
Silcox Coaches (tel. 01646 683143)

This Park & Ride service is funded by Pembrokeshire Coast National Park Authority

Park & Ride 2 — Blue Route

Park & Ride from:
North Beach Car Park (off the A478 follow P+ signs)

This free bus service runs: - every 10 minutes -
10.00am to 6.00pm - 7 days a week
16 July - 4 September 2011

Bus stops at:
1. North Beach Car Park
2. High Street
3. Tenby Harbour
4. High Street

Two minibuses will be used to provide this service, one of which will be wheelchair accessible.

This service is identified by the following logo:

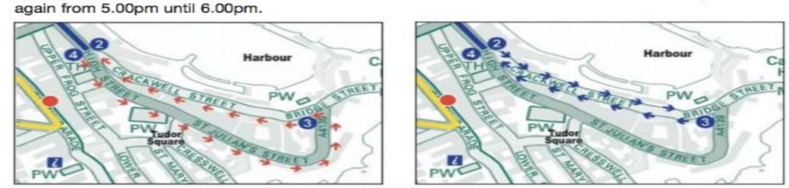
PARK & RIDE INCLUDING HARBOUR / PARCIO A THEITHIO GAN GYNNWYS Y PORTHLADD

Service provided by:
Silcox Coaches (tel. 01646 683143)

This Park & Ride service is funded by Pembrokeshire County Council

Park & Ride bus movements within the Walled Town from 10.00am until 11.00am and again from 5.00pm until 6.00pm.

Park & Ride bus movements within the Walled Town from 11.00am until 5.00pm.



PLEASE NOTE THAT THE SAME BUS STOPS ARE USED

the public transport information service for Wales…
www.travelinecymru.info or call 0871 200 22 33
Traveline Cymru

Overview of Tenby Pedestrianisation Scheme