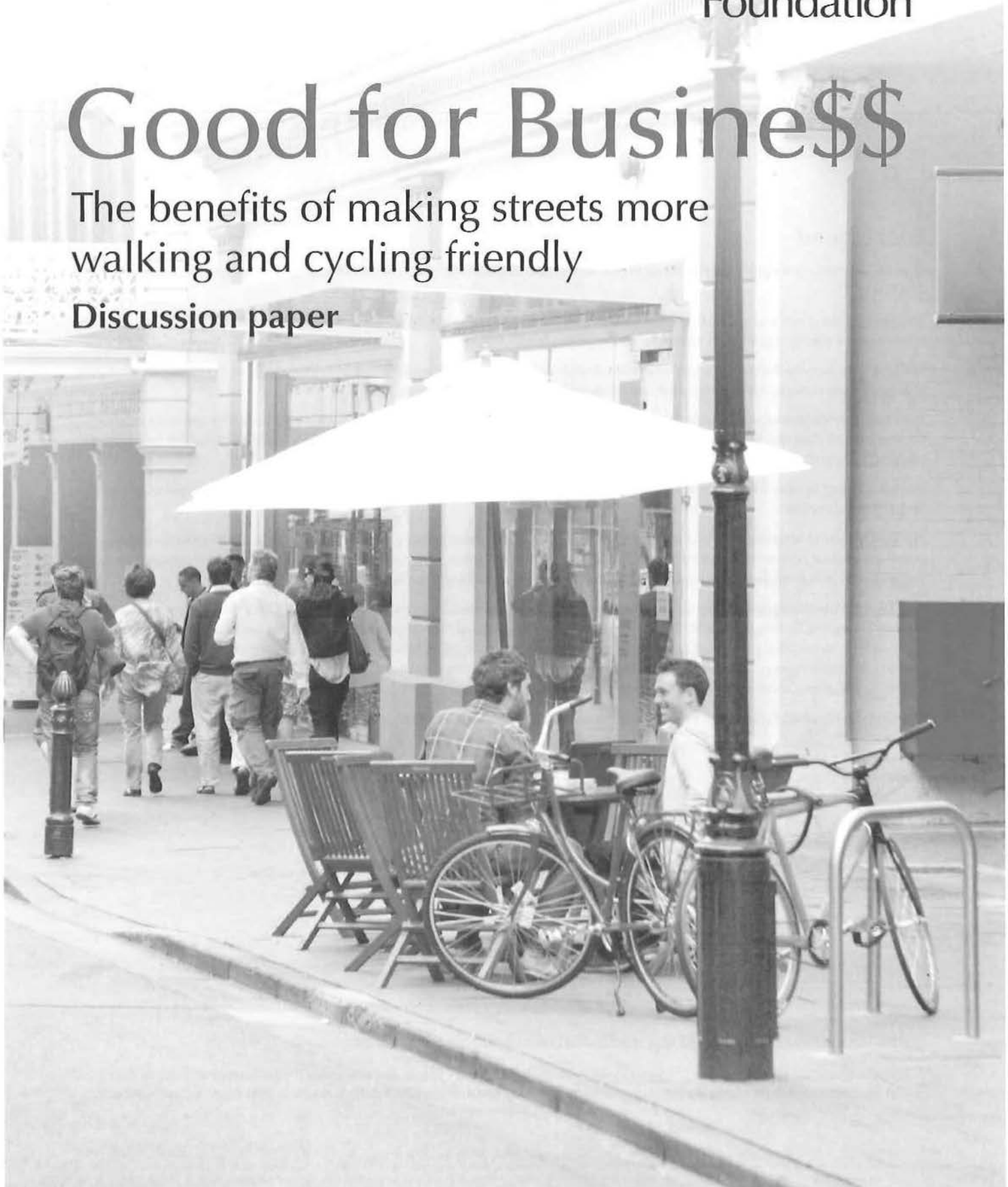




Good for Business\$

The benefits of making streets more walking and cycling friendly

Discussion paper



Introduction

The Heart Foundation has commissioned a discussion paper that explores the economic benefits of making streets more walking and cycling friendly.

Background

Physical inactivity is a significant risk factor for cardiovascular disease and other chronic diseases, such as type 2 diabetes and some cancers.

The growing prevalence of physical inactivity in Australia, along with the alarming rise in the number of South Australians who are overweight or obese, is putting an enormous strain on the health system.

Walking is an activity that will not just benefit the health system. Increasing walking will also provide gains in relation to economic vitality, climate change, traffic congestion, social cohesion and community safety.

The Heart Foundation works towards creating an environment that encourages people to walk more often. The Heart Foundation SA is asking all state and local government departments to consider walking first when developing policies, strategies, guidelines, projects, programs, planning and events.

We are working to raise the profile of walking, to initiate discussions and debate, and to put walking onto the agenda of a broad range of departments.

A potential barrier identified in 2010 was around retailer perceptions that creating pedestrian and cycle friendly streets would negatively impact on the retail sales of the traders located on those streets. Retailers and trading associations had opposed reducing traffic speeds in high pedestrian areas and had called for more car parking near local shops.

As a result of identifying this barrier to creating walking and cycling friendly environments the Heart Foundation commissioned Dr Rodney Tolley, the Director of Walk21, to develop an independent discussion paper that explored the benefits to retailers, residents and councils. In particular it looked at case studies from around the world that show the increased business and vitality that catering for pedestrians provides. The discussion paper concludes that there needs to be collaborative support from government, private and business sectors for walking and cycling friendly environments.

The *Good for Business* discussion paper was released on **22nd November 2011**.

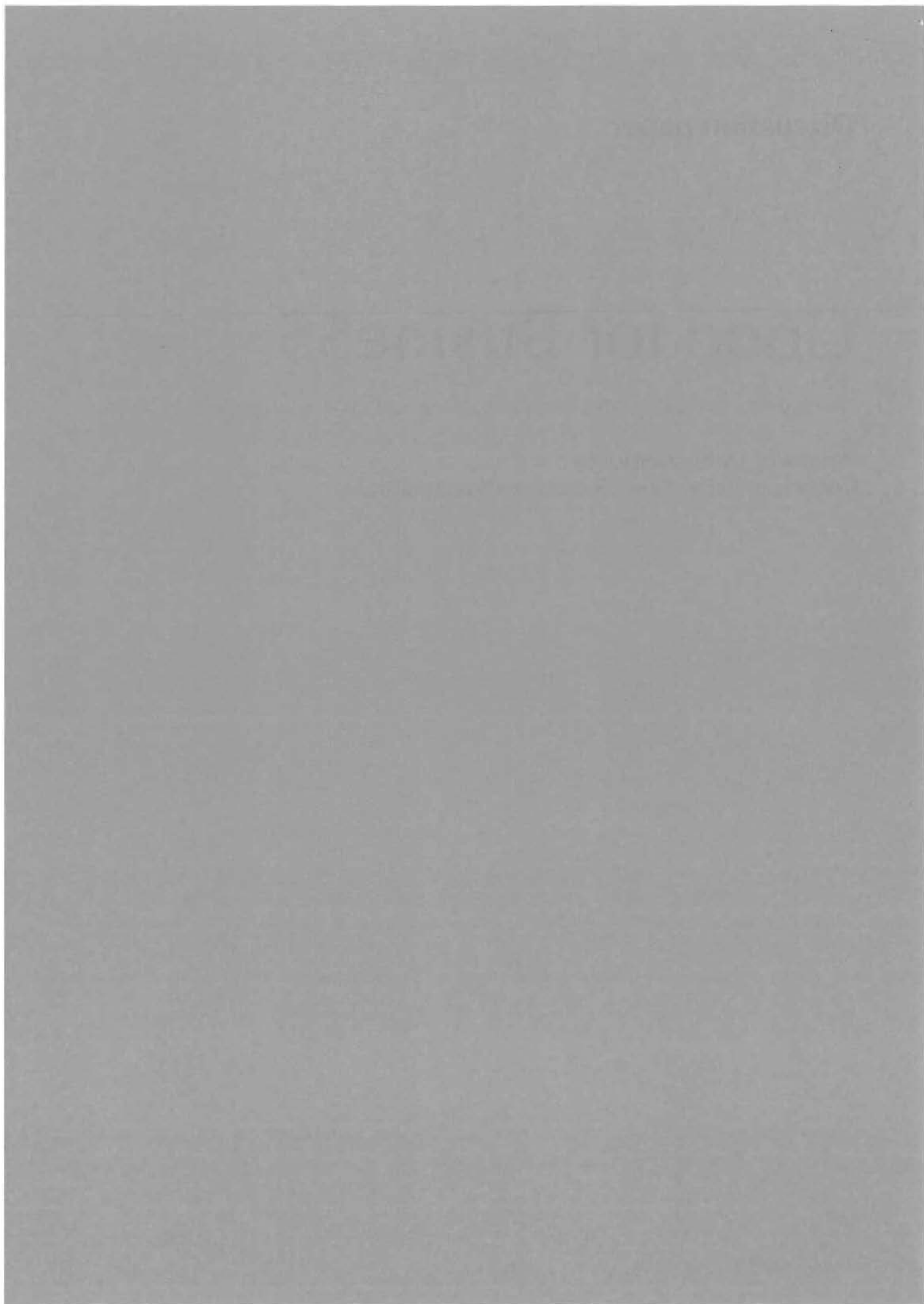
Discussion paper

Good for Busine\$\$

The benefits of making streets more walking and cycling friendly

Written by Dr Rodney Tolley

Commissioned by Heart Foundation South Australia





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Executive summary

Good for Busine\$\$ is a discussion paper for built environment professionals and business people to show the positive financial benefits of making streets more walking and cycling friendly.

This report asserts that a well-designed, quality street environment that promotes walking, cycling and public transport is good for business.

*"... it would be advantageous to local businesses to support measures aimed at attracting more pedestrians and bus passengers to the local shopping centre rather than car users ... wider pavements (sidewalks) and traffic restraint measures should result in attracting more regular, dedicated custom to the area and have a positive impact on retailers and customers alike."*¹

The Heart Foundation (SA) commissioned this discussion paper to bring together the evidence around the financial benefits to retailers and residents in making commercial streets more walking and cycling friendly.

Walking and cycling to local shops is good for business and good for the local economy and is essential to the success of revitalisation strategies.

Streetscape enhancements add value to an area and are associated with higher rents and the attraction of new businesses. In addition there is good evidence to show that improving walking and cycling environments raises private property values by significant amounts.

This report has shown that:

- A high proportion of all retail expenditure comes from local residents and workers.
- Space allocated to bicycle parking can produce much higher levels of retail spend than the same space devoted to car parking.
- Many car-borne shoppers are "drive-through" shoppers, stopping to pick up one item on the way to their eventual destination, rather than people for whom shopping is their main purpose for visiting the area.
- It is difficult to estimate the value of non-drive-in spend for main streets. However, it is always bigger than we think.
- Retail vitality would be best served by traffic restraint, public transport improvements, and a range of measures to improve the walking and cycling environment.

The Heart Foundation is calling on Local Governments, built environment professionals, planners, private developers, retailers and businesses to support better environments for walking and cycling. This will require:

- Measures to reduce speed.
- Reallocation of road spaces.
- Widening footpaths and providing cycle and bus lanes.
- Using local knowledge to determine what the problems are and devise solutions.
- Improving public transport.
- Greening the street and making it more attractive with landscaping and street furniture.
- Investing in maps, street signs and wayfinding.

As this report and the case studies have shown, making streets more walking and cycling friendly will:

- Increase retail rental values.
- Increase sale prices of nearby homes.
- Significantly increase pedestrian and cyclist activity.
- Generate more business and stimulate the local economy.
- Revitalise 'drive-through' districts into lively places that people want to visit.
- Encourage people to spend time outside of their homes.
- Reduce noise levels.
- Create attractive and popular places for Adelaide and South Australia.

High quality walking and cycling environments around shops, neighbourhood activity centres and mainstreets are vital for the economic health of South Australia.

Introduction

Improvements in the walking and cycling environment have the potential to increase the value of residential and retail properties.

The Heart Foundation supports built environments that promote active living. People who are not physically active are more likely to have risk factors for cardiovascular disease and other chronic diseases. Encouraging all South Australians to incorporate physical activity such as walking and cycling into their daily lives is associated with a wide range of health, social, economic and environmental benefits. The Heart Foundation works to increase opportunities for all South Australians to walk and cycle for recreation, transport or health.



The *30-Year Plan for Greater Adelaide*² encourages new development on existing urban land and the establishment of development around existing transport hubs that are walkable, connected and mixed use (residential and commercial together). These types of developments require that built environment professionals and developers consider the role of streetscapes as not solely the domain of cars but also spaces for pedestrians and cyclists. Additionally our streets will increasingly become important as public spaces for social and commercial interaction.

The Heart Foundation has investigated the barriers to walking and cycling and found they are numerous, including actual and perceived safety. In Australia we are highly dependent on the motor vehicle, have segregated land use, disconnected streets, low residential density and limited public transport and local employment.³ Our investigations have concluded that walking can be increased through a mixture of interventions and planning that focus on mixed use developments, street connectivity, neighbourhood aesthetics, as well as micro-level changes such as street lighting, shade trees, footpaths and street crossings.⁴

Creating a more walking and cycling friendly environment in established neighbourhoods and streets presents additional challenges. Retrofitting and rejuvenating are terms that relate to the redesign or upgrade of existing neighbourhoods to enhance their capacity for active living. One of the barriers to this type of development is the formidable public and private sector costs.⁴

But there are additional benefits of well-designed, quality streets beyond the increased levels of physical activity. Benefits range from long term health benefits to direct, measurable financial benefits. Evidence shows that replacing short distance car trips with walking and cycling can have a significant impact on the environment; considering that 40% of all private car trips made in Australia are less than 3km.⁵ Improvements in the walking and cycling environment have the potential to increase the economic value and activity in the local area, as reflected in the sale price of residential properties and the rental price of retail properties.



The Heart Foundation commissioned Dr Rodney Tolley to research this discussion paper. The aim was to review case studies and ascertain the financial benefits for shop owners and residents of improving the street environment - with a specific focus on the Healthy by Design⁶ considerations. Shop owners and residents have an interest in the changes that local government make to the transport infrastructure and streetscape in the vicinity of their shops as such changes can make a significant positive or negative impact.⁷ 'Streets' in this report refer to the typical shopping strip and town centres of Australia or the high street of the UK. These streets may include shops and cafes, as well as non-commercial community facilities such as libraries, community centres and churches, and private residences.

This report seeks to:

- Summarise the current national and international literature relating to retail and economic value and activity of improvements to streets. This includes peer reviewed papers, existing literature reviews and grey literature.
- Compile relevant case studies from Australia and overseas.

Better streets

Shopping streets that hinder pedestrians and cyclists along with poor public transport risk losing business, productivity and employees.

In many cities and towns around the world an urban renaissance is under way, creating pedestrian-friendly urban areas by enhancing their quality and environment and, in turn, improving their amenity, viability and vitality. The creation of safe and attractive walking and cycling environments in towns and cities is a necessary condition for success and is central to improving them for shoppers, visitors, workers and residents alike. In other words, quite apart from pro-walking and pro-cycling arguments based on sustainability, the environment, health, community cohesion or social inclusion, there is a strong business case for improving walking and cycling conditions.

As the UK report *Making the Case for investment in the walking and cycling environment*⁸ shows, interventions to improve the walking and cycling environment are successful in:

- Significantly increasing pedestrian activity (footfall).
- Improving safety: leading to fewer road casualties, injuries to pedestrians and traffic collisions.
- Reducing vehicle speeds.
- Delivering social benefits: these interventions increase opportunities for social interaction which can facilitate the development of social capital. They can also lead to higher numbers of people taking part in outdoor activities and spending time outside their homes.
- Delivering economic value: the schemes have increased the sale prices of nearby homes and increased retail rents.
- Encouraging more physical activity: this is particularly noticeable in, for example, increases in the proportion of children walking to school.
- Reducing noise levels.
- Reducing the number and distance of car trips, implying a modal shift away from the car to walking.
- Providing attractive and popular places: the public are positive about investments in the walking environment, and the schemes usually have the support of visitors and residents. People tend to report that investments in the walking environment lead to more attractive and safe places.

Interventions to improve the walking and cycling environment currently being implemented internationally include:

- Safe routes to schools
- Speed reduction
- Public realm improvements
- Mixed priority routes
- Shared use paths
- Reallocation of space
- Shared space
- Mixed measures

Transport 2000⁹ has argued that we can turn mainstreets into places for people by:

- Reducing traffic speeds and traffic danger. Slower speeds are essential if road casualties are to be reduced and pedestrians and cyclists are to feel safe. Encouraging drivers to slow down requires traffic calming measures such as narrowed carriageways or raised tables.
- Widening footpaths and providing cycle lanes. Wider footpaths create a safer pedestrian environment and allow people to shop comfortably and to socialise. They also open up space for seating and tree planting. Cycle lanes can help give cyclists equal priority as cars and make cycling safer.
- Using local knowledge to find out what the problems are and what the solutions might be. Local communities and businesses need to be fully involved in street improvements. An approach is needed that ensures solutions are community-led and are not imposed on local people by well-intentioned professionals.



- Improving public transport so people are encouraged to use buses instead of cars. More frequent services, improved bus stops with lowered kerbs for those with impaired mobility, and well designed shelters with seating would make public transport more accessible.
- Greening the street and making it more attractive. Trees, grass verges, street furniture and art help to create streets that are sociable places where people enjoy spending their time. Trees and street furniture help create space in which the car is no longer dominant and drivers get the message that they are driving through a place for people, not just vehicles.
- Reducing the amount of traffic. Travel plans with schools and commuter plans with employers can help reduce the actual volume of traffic and reduce pollution and noise at the same time.

Complete Streets

The 'main street into people place' approach has been championed in North America recently under the banner of 'Complete Streets':

"Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a Complete Street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations."

What do Complete Streets policies do?

"Creating Complete Streets means transportation agencies must change their approach to community roads. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation."

Source: <http://www.completestreets.org>

Case study 1

Valencia Street, Mission District, San Francisco

Traffic lanes in this street were slimmed to slow down cars and accommodate other users. Merchants reported that street changes enhanced the area. Nearly 40 per cent of merchants reported increased sales, and 60 per cent reported more area residents shopping locally due to reduced travel time and convenience. Overall, two-thirds of respondents described how the increased levels of pedestrian and cycling activity and other street changes improved business and sales. A network of complete streets appears to be more safe and appealing to residents and visitors, which is also good for retail and commercial development.

Source: <http://www.completestreets.org>

Case study 2

Barracks Row, Washington DC¹⁰

Street design that is inclusive of all modes of transportation, where appropriate, not only improves conditions for existing businesses, but also is a proven method for revitalising an area and attracting new development. Washington DC's Barracks Row was experiencing a steady decline of commercial activity due to uninviting sidewalks, lack of streetlights, and speeding traffic. After many design improvements, which included new patterned sidewalks, more efficient public parking, and new traffic signals, Barrack's Row attracted 44 new businesses and 200 new jobs.

Economic activity on this three-quarter mile strip (measured by sales, employees, and number of pedestrians) has more than tripled since the inception of the project.



Before



After

Photo Credit: <http://www.completestreets.org>

Case study 3

Hillsborough Street, Raleigh, NC, USA¹¹

In 1999, a group of more than 500 citizens and other stakeholders mobilised in Raleigh, North Carolina, around Hillsborough Street, the N.C. State University "town/gown" connector, which was then listed as the state's most dangerous street for pedestrians. At that time, the street was run down and home to a few businesses that appeared to be hanging on by a thread. Through a design-driven consultation, the community learned how street making is integral to their development. By the time the first major phase of the street remake was finished in October 2010, four roundabouts had been installed, a road diet (reduced space for motorised traffic) was in place, and streetscape improvements included new medians, more parking, wider sidewalks, and ample crosswalks.



Today, the street is complete and alive. More than \$200 million in new mixed-use development investments are coming to the street, traffic is flowing well, and students and motorists are safer and more comfortable. A hearty business environment is in place and growing. Even Raleigh's own city councillors have been amazed at how the complete streets movement has affected the entire social and political process. These leaders consider themselves well versed in how transportation investments can be leveraged to build a sustainable future and more enjoyable present for the community.

In the same paper, Burden and Litman¹¹ comment:

"The community can benefit from investments that improve walking, cycling, and public transit. Such projects, when combined with new land use patterns, support local economies by leveraging public investments and often include a revival in retail activity, private investment, social capital, and tourism. Investments typically increase retail sales by an average of 30 percent and land value from 70 to 300 percent."

Photo Credit: <http://www.hillsboroughstreet.org>

Case study 4

Pavements to parks, San Francisco

Background

San Francisco's streets and public rights-of-way make up fully 25% of the city's land area, more space than is found in all of the city's parks. Many of the streets are excessively wide and contain large zones of wasted space, especially at intersections. San Francisco's "Pavement to Parks" projects seek to temporarily reclaim these unused swathes and quickly and inexpensively turn them into new public plazas and parks. During the temporary closure, the success of these plazas is evaluated to understand what adjustments need to be made in the short term, and ultimately, whether the temporary closure should be a long term community investment.



Precedent

San Francisco's Pavement to Parks projects are inspired by the recent success of similar projects in New York City - where plazas and seating areas have been created in excess roadway simply by painting or treating the asphalt, placing protective barriers along the periphery, and installing moveable tables and chairs. Streets such as Broadway have been transformed into much more inviting and pedestrian-friendly spaces through New York's efforts.

Design

Each Pavement to Parks project is intended to be a public laboratory where the City can work with the community to test the potential of the selected location to be permanently reclaimed as public open space. Materials and design interventions are meant to be temporary and easily moveable should design changes be desired during the trial-run. Seating, landscaping, and treatment of the asphalt will be common features of all projects.

Location Selection

Locations for Pavement to Parks projects are selected based on the following criteria:

- Sizeable area of under-utilized roadway.
- Lack of public space in the surrounding neighbourhood.
- Pre-existing community support for public space at the location.
- Potential to improve pedestrian and bicyclist safety via redesign.
- Surrounding uses that can attract people to the space.
- Identified community or business steward.

Source: <http://sfpavementtoparks.sfplanning.org/>

The economic benefits of walking and cycling

People that walk and cycle spend money. A number of case studies have been selected to illustrate the positive financial benefits that are clearly gained from investing in walking and cycling.

In the past there has been very little data about walking and cycling and its linkages to the economy. However, evidence is emerging of the general economic significance of cycling and walking to towns and cities. At the level of the city as a whole, there is clear evidence that walkability and quality-of-life go hand in hand, so the city is more attractive to inward investment. For example, when cities are ranked according to quality of life, those with much walking (and cycling) are high on the list because they are healthy and have good air quality. It is no coincidence that the top three 'Livable Cities' in the world – Melbourne, Vienna and Vancouver – are regarded as amongst the most walkable cities anywhere.¹²

At the level of the individual street there is now increasing amounts of research on walking and cycling and economic activity. Both walking and cycling are sufficiently slow and flexible to allow their adherents to stop and spend en route more easily than can a car driver or bus passenger. Indeed, given their heightened awareness of the environment around them - of shops, window displays, stalls etc - walkers are more likely to notice the opportunities to spend. The key issue though is the improvement in the quality of the urban environment that results from a rise in the volume of walkers and a fall in the dominance of cars. It is that quality which results in higher visitation levels and frequencies, longer dwell times, and higher levels of expenditure per head. In other words, 'a good physical environment is a good economic environment.'¹³

The Sustrans document *Traffic restraint and retail vitality*¹⁴ argues that retail vitality depends in large measure on an attractive environment. Heavy and/or fast-moving traffic drives people away. It argues that traffic restraint should always be combined with measures to improve the street environment, such as:

- Footpath widening
- Seats
- Planting
- Decorative surfaces
- Raised footpath crossings
- Improved cleaning and maintenance regime.

Increasing retail turnover

The London study *Quality streets: why good walking environments matter for London's economy*¹⁵ examined economic impacts of walking and public realm improvements, through a series of interviews across a range of business sectors: landowners and developers, retailers, developers and entertainment service providers. It emerged that:

- All businesses rely on attracting customers whether they are passing retail trade, or tenants for an office block.
- 85 per cent of respondents identified the quality of the streetscape as "important" in the ability to attract customers or tenants.
- 89 per cent of respondents felt that "their front door is the street" and critical to self-image.

Various studies indicate that well-planned non-motorised transportation improvements can increase customer visits and local business activity.¹⁶ In a 2009 study in Toronto, people who biked and walked to the area reported they spent more money in the area per month than those who drove there (see case study 16).¹⁷ A German study¹⁸ showed that:

- Motorists are not better customers than cyclists, pedestrians, or public transport users.
- Because they buy smaller quantities, cyclists shop more frequently (11 times a month on average, as opposed to seven times a month for motorists).
- Approximately 75 per cent of motorists purchase two or less bags of goods, and so could carry their goods by foot or bicycle.
- Most shopping trips involve distances that could be walked or cycled.

Moreover, in walkable cities there is good customer retention for local shops: in the Netherlands, the town of Houten, with its high levels of cycling (and walking) has retail turnover 2.5 times higher per square metre than elsewhere in the country.

Furthermore, a dollar spent at an independent business generates about 3 times as much benefit to the local economy as spending a dollar at a chain retailer. Locally-owned businesses thrive in densely-built, walkable communities, and



Photo Credit: Nigel Flammigan

are more likely to stock local products, supporting other local businesses.¹⁹

Increasing retail property values

“A high quality streetscape and a pro-active improvement programme add to the value of a property, protecting and enhancing the value of your asset.”¹⁵

The importance of a high quality streetscape can be seen by comparing it to the impact where the streetscape is poor. Oxford Street offices command a lower rent than the surrounding areas due to the concentration of traffic¹⁵ and in other London shopping streets, tenants on the asphalted side of a road compare their situation unfavourably with the tenants on the other side of the road, which is paved with York stone. One of the interviewees stated that the company has ‘considered disinvesting’ from areas where the streetscape was felt to be very poor.

A London study found that improvements in the street design quality can add an average of 4.9 per cent to retail rents of all shops and premises located on the high street.²⁰ The most important street elements for users were: lighting, footpath quality and maintenance, vehicles not parked on the footpath, provision of crossings, local area maps, information boards and signed routes.⁸

The *Quality Streets* report¹⁵ finds a number of key lessons:

- Landowners, developers and businesses clearly perceive the importance of streetscape in maintaining and enhancing the value of their assets.
- Streetscape enhancement adds value to an area: this is associated with higher rents or the attraction of new tenants/businesses.
- The reputation of certain areas and the businesses that are resident in them is based on the quality of the public realm.
- Streetscape improvements create the impression of a prosperous area, and businesses in the same vicinity that have not benefited from this perception are keen to buy into it.
- High levels of maintenance and revenue funding are as important as the quality of the initial design.

Increasing private property values

Improved walking and cycling conditions and shifts from motorised to non-motorised modes can increase property values. In 2009 Cortright²¹ evaluated the effects of walkability on housing prices using the WalkScore (see www.walkscore.com) and 95,000 real estate transactions, controlling for house and neighbourhood characteristics. He found that walkability had a statistically significant, positive impact on housing values. In a typical metropolitan area in the USA, each WalkScore point increase was associated with a \$700 to \$3000 increase in home values. Shifting from average to above-average WalkScores typically increased a home’s value by \$4,000 to \$34,000, depending on the metro area. For example, in Charlotte, NC, houses in the Ashley Park neighbourhood, with WalkScore values averaging 54 have median prices of \$280,000, while an otherwise similar home in the Wilmore neighbourhood, which has WalkScores averaging 71, would be valued at \$314,000. Controlling for all other factors, shifting a house from Ashley Park to more walkable Wilmore would increase its value by \$34,000 or 12%.

This reflects the value consumers attach to walkable neighbourhoods, which tend to be denser, mixed use neighbourhoods with good accessibility, including high quality public transport.

These outcomes are corroborated by Pivo and Fisher²² who studied apartments, retail, office, and industrial properties and concluded that “on a 100 point scale, a 10 point increase in walkability increases property values by 5 to 8 percent, depending on property type.” Carol Coletta, President and CEO of CEOs for Cities in the US commented:²³

“These findings are significant for policy makers. They tell us that if urban leaders are intentional about developing and redeveloping their cities to make them more walkable, it will not only enhance the local tax base but will also contribute to individual wealth by increasing the value of what is, for most people, their biggest asset.”

Lower speeds are important too: evidence shows that a 5 to 10 mph reduction in traffic speeds increases property values for adjacent residences by 18% to 20%.²⁴

Case study 5

Achieving high quality streetscapes through innovative design and by questioning standard approaches: Kensington High Street, London⁸

Kensington High Street is not only a major east-west radial route to the centre of London, but also an important commercial/retail street flanked by highly desirable residential areas. In recognition of this the Borough Council initiated a programme of streetscape improvements in the mid-1990s to improve the quality of the public realm as an attractive place to live and work, and to sustain the vitality and viability of the High Street as a major shopping destination in the face of other competing retail developments.

Despite agreement that the new street should accommodate existing traffic flows, the design objectives started to shift away from standard traffic engineering solutions to a more radical streetscape design. This redressed the balance from vehicles to pedestrians and created a coherent, legible and easily accessible street.

The south footway was widened and a new 3m central reserve was achieved by reorganising traffic lanes to provide cycle parking and tree planting in the centre.



Before



After

Rearrangement and simplification of pedestrian crossings and the extension of the central reserve allows the road to be crossed easily and safely. The removal of barriers to movement, especially guardrails at staggered crossings, provides a sense of liberation to the pedestrian, trusting both pedestrians and drivers to use the street responsibly. The removal of guard railing has been controversial, with traditional views holding that railing is essential to pedestrian safety. However, the first three years of the scheme saw a 47 per cent reduction in accidents in High Street compared with a 35 per cent fall elsewhere in the Borough. Pedestrian casualties fell by 59 per cent and latest figures indicate that this reduction has been maintained.

Completed in 2003 the revamped street has removed all unnecessary visual and physical clutter, coordinated the design and location of new street furniture, and coherently defined the footway/carriageway boundary. There has been a 12.9 per cent growth in sale prices of flats within 200m of the scheme.

The improvements have proved a tremendous success and have reinforced the image of the High Street as a premier shopping destination and show what can be achieved with the vision and will to push the boundaries of accepted practice.

Case study 6

London²⁵

London has many examples of revitalisation based around walkability. It is the Mayor's vision "to make London one of the world's most walking friendly cities by 2015." Currently the city is investing £17m per year on wayfinding and signage schemes and streetscape improvements. There have been some spectacular results. For example in Great Queen Street, the removal of guard rails and widening of footways has created room for window shopping. The economic benefits are estimated to be between £6.3m and £28.4 m for an outlay of £2.4m.

A second example is the rebuilding of the North Terrace of Trafalgar square, a £25m investment under the World Squares for All Project. Since completion, there has been an increase in visitors of over 300 per cent, to the point where this is now the third most popular attraction in London.

Case study 7

Newlands Avenue, Hull, UK⁸

The recent refurbishment on Newlands Avenue has been commended, particularly due to its attention to detail and use of pioneering features. The Newlands project was aimed at improving road safety on a busy shopping street and making it more pleasant for all road users. The initial performance of the scheme is very encouraging, with road casualties dropping by 67 per cent (within the 4 months for which data is available)

- Overall pedestrian crossing movements increased by 18 per cent
- Crossing movements by people with reduced mobility increased by 15 per cent
- Cycle flows on Newland Avenue increased by 17 per cent
- Average property values within the Newland Avenue postcodes increased by 65 per cent between July 2003 and December 2005.

Increasing retail vitality

Michael Loveday's work on many European city centres has shown the direct economic benefits of improvement of retail environments.²⁶ These benefits can be classified as immediate or strategic.

Immediate

- Increased footfall (defined as the number of people who go into a shop or business in a particular period of time)
- Longer stays (hours/days)
- More expenditure
- More intensive commercial exploitation of the area
- More uses and spend on the street
- Increased property values
- Higher rents
- More repair/regeneration of sites, therefore spin off construction investment
- New business formations
- New traders and therefore increased 'pulling power'
- More and varied jobs.



Photo Credit: Rodney Tooley

Strategic

- Improvement in the town's retail rankings
- New strategic roles for public space, stimulating tourism spend
- Confidence booster, prompting wider urban regeneration
- Ability to integrate latent economic assets
- Creation of new economic quarters
- Improvement in quality of life, assisting workforce recruitment and retention
- Creation of new image – cafe society, festival city, seasonal city, evening economy hub – to stimulate profile and investment.

Walkable retail areas with unique visual, cultural, social and environmental qualities provide competitive advantages. Their "place-making dividend" attracts people to visit often, stay longer and spend more money.²⁷

Case study 8

Times Square and Broadway, New York City⁸

Mid-town Manhattan in the past was deficient in public space. Times Square is a world famous square, but it was filled with traffic, with nowhere for people to sit or linger.

There was a need to reduce traffic congestion and improve journey times whilst also improving safety, particularly of pedestrians who were often forced to walk on the road because there was not enough space for them. There was also the desire to make the key destinations of Times and Herald Squares into more pleasant walking environments and spaces for people to congregate.

A demonstration project created a pedestrian plaza almost overnight in late 2009, using cheap materials, moveable seating and paint. Many sceptics predicted that traffic gridlock would result. After an eight month trial, Mayor Bloomberg confirmed that the plaza would be made permanent and that Broadway from 47th to 42nd Streets and 33rd to 35th Streets would remain closed to traffic.

This closure yielded some startling results:

- 84 per cent more people are staying (e.g. reading, eating, taking photographs) in Times Square than before the projects.
- 42 per cent of NYC residents surveyed in Times Square say they shop in the neighbourhood more often since the changes.
- 26 per cent of Times Square employees report leaving their offices for lunch more frequently.
- 74 per cent of New Yorkers surveyed by the Times Square Alliance agree that Times Square has improved dramatically as a result of this project.
- The expansion of pedestrian space and the resulting reduction of overspill footfall in to the road (for example, by 80 per cent in Times Square) has reduced injuries to pedestrians by 35 per cent.

In the words of Janette Sadik-Khan, the NYC Transportation Commissioner, "It has shifted the paradigm for what a street and sidewalk experience is supposed to be like in New York City." She went on to say:²⁹

"Once you realise that you can use your streets to improve the quality of life, the economics and the environmental health of your city, I think that's a transformative moment"



Before



After

Case study 9

City of Melbourne, Australia^{8,30}

Melbourne city has been undertaking a whole city renaissance to revitalise city life, transforming the city centre from an empty place where only workers go, to a vibrant centre with a resident population and 24 hour destinations. Substantial changes to the city centre from 1994 to 2004 included wider footways, more greenery, street art and usable 'laneways' (10 times more active and accessible lanes, alleys and arcades).

Overall there has been a 39 per cent increase in pedestrian traffic on weekdays and a 98 per cent increase on weekday evenings. The central area has seen an 830 per cent increase in residents and a 275 per cent increase in cafés.

What was described formerly as an 'empty, useless city centre' has been transformed. As the report on the progress says³⁰ "The results clearly illustrate that places designed to be people-friendly attract people, and public life will follow."



Before



After

Photo Credit: Rodney Tolley

Case study 10

Wanstead High Street, London⁸

This street runs between two underground train stations approximately a mile apart. The High Street and its surrounding areas underwent significant improvements to the walking environment, including new footpath surfacing, accessible crossings, new street lighting on the main road and two crossing routes to the park, de-cluttering, improvements to street furniture and the installation of CCTV. Transport for London have supported this as part of a 'Key Walking Routes' initiative, linking important local destinations by improving the walking environment.

The objective was to increase walking for short trips by taking a holistic approach to the whole area around the high street and enhancing walking routes to the two stations, bus terminus, school, library and High Street.

The main outcome recorded is that Wanstead High Street has achieved an average 98 per cent increase in pedestrian numbers. The impact of this on retail activity has not been measured but is likely to be substantial.



Photo Credit: Transport for London

Case study 11

Changing car parking to bicycle parking in Lygon Street, Melbourne, Australia³¹

Lygon Street, Carlton, is a popular cycling route near Melbourne University. It is a mixed use mainstreet – groceries, cinema, comparison goods, cafes, etc. It has few bicycle parking spaces.

Surveys have shown that the average cyclist's expenditure is 73 per cent of a car user's, but space required to park a bike is only 12 per cent of the space required to park a car. Cyclists spend more on comparison goods, such as clothing and eating out, and less on groceries/cinema per visit.

In Lygon Street:

- Each m² of space allocated to cars generates \$6 per hour.
- Each m² of space allocated to bicycles generates \$31 per hour.

Put another way, the researcher estimated that:

- 1 car space produced \$27/hr retail spend, but
- 6 bike spaces replacing the car space would produce \$97/hr in retail spend.

The report concludes that incrementally replacing car parking with bike parking would therefore make economic sense.

Shopping and modal choice

The relationships between mode used, shopping frequency and amount spent have been the subject of a number of studies. Sustrans¹ studied shoppers and how they travel in the UK and noted that:

"It is very instructive to analyse how many businesses a shopper will visit according to their mode of travel. Cyclists and car users make four times as many single-shop visits as pedestrians – on foot, it is so much easier to call in to another shop on the same trip.....The figures suggest that many car-borne shoppers are "drive-through" shoppers, stopping to pick up one item on the way to their eventual destination, rather than people for whom shopping is their main purpose for visiting the area. This will have a negative impact on a busy retail street, which is likely to be disproportionate to the extra business that it generates."

In the Australian suburb of Yarra (inner suburb of Melbourne) 82 per cent of local residents, 48 per cent of local workers and 41 per cent of visitors travel by foot, bicycle or public transport to get to the five local main shopping streets.³² Most local residents and workers visit a main street very frequently (many daily and 80-90 per cent more than once a week). Even though they spend less per visit (about half) than the "visitors", local residents/workers provide 75 per cent of local retail and services turnover. The amount of "non-drive-in spend" (\$/visit x frequency x active transport mode share) is estimated to be 50 per cent on average for Yarra's shopping streets.

Grant and Herbes have commented:³²

"It's difficult to estimate the value of non-drive-in spend for main streets. It's 80 per cent in London, 50-75 per cent in inner-area main streets with tourists and reasonable public transport, and possibly 30 per cent at suburban centres like Ringwood in Melbourne. However, it is always bigger than we think. In any case, people who drive in still have to walk to spend, so in the end everyone benefits from a better walking environment."

Comparing retailers' and shoppers' interests and concerns

Retailers in the Austrian city of Graz were asked how they thought their customers travelled to the shop, and shoppers were then interviewed to determine the reality. The results were fascinating: retailers hugely overestimated the importance of the car, and underestimated how many of their customers walked, cycled and used public transport (see Figure 1).¹

Since then, this study has been replicated on two neighbourhood shopping streets in Bristol, UK and again retailers overestimated the importance of the car. It was also found that they overestimate how far their customers travel and underestimate how many shops each customer visits.

A third study in Edinburgh supports these results. Local shoppers, visitors and retailers in Edinburgh city centre were asked what positive and negative factors affected them most. The shoppers' main concern was a good range of shops in an attractive comfortable environment. Parking was not identified as important (see Figure 2). The retailers' views were completely out of line with their customers. Parking was the only issue mentioned by more than 10% of retailers.

A New Zealand survey found that retailers and shoppers have different priorities.⁷ When asked about transportation and urban design of local shopping areas, it was found that shoppers placed a high importance on crossings, wide footpaths and frequent bus services, but not a lot of importance on on-road parking. Retailers considered parking as the primary concern. High quality urban design and provision for sustainable transport were identified as important by both shopper and retailers.

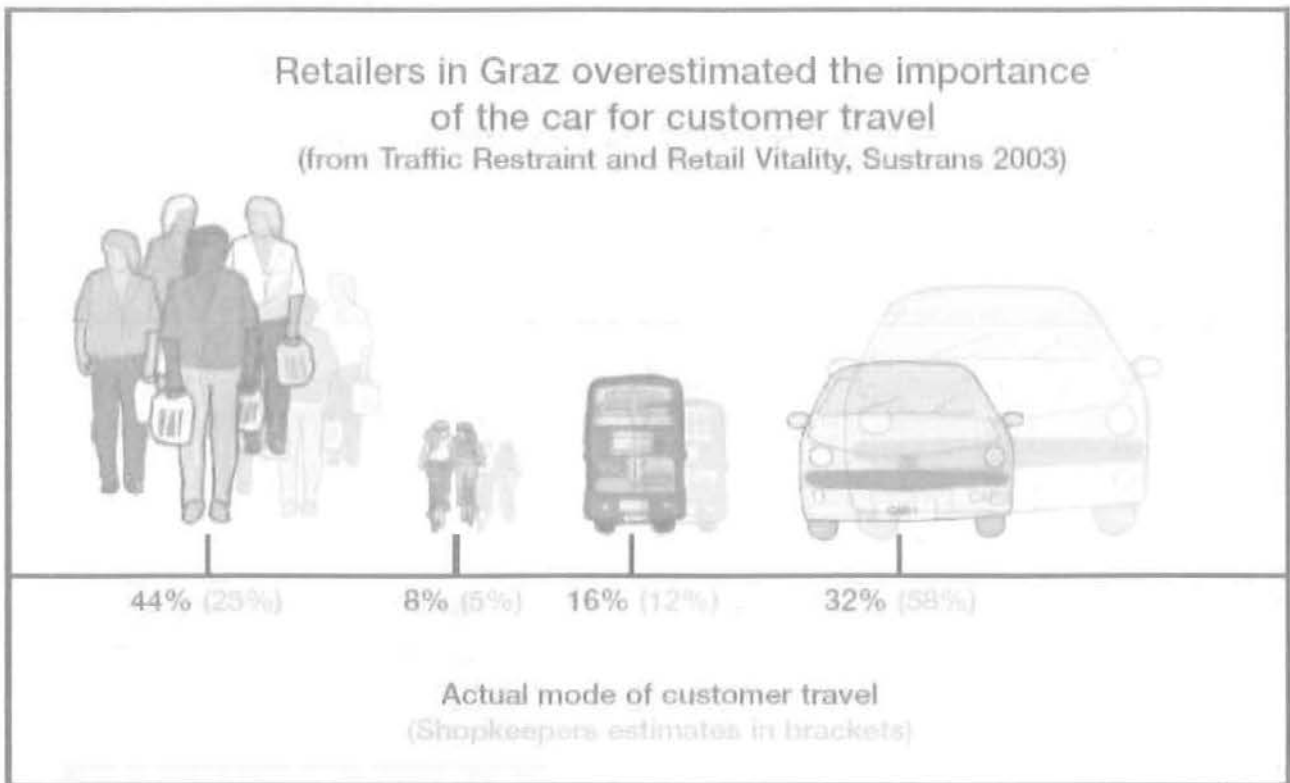


Figure 1 Estimates of shoppers' modal split by retailers and shoppers'



Figure 2 Comparison of shoppers' and retailers' concerns'

Sustrans comments:

"These findings have real significance for business planning – as well as land use and transport. It is traditional for retailers to pursue more car access and parking, and to resist measures to promote walking, cycling and public transport use – although pedestrian shopping areas tend to be commercially most successful. Our findings suggest that retail vitality would be best served by traffic restraint, public transport improvements, and a range of measures to improve the walking environment."

Case study 12

Columbus Avenue, San Francisco³⁶

The Columbus Avenue Neighborhood Transportation survey was conducted during two weeks in March 2008. The purpose of the survey was to understand the travel patterns, area preferences and preferred transportation improvements of Columbus Avenue corridor visitors and residents. Findings included:

- Transit users and walkers spend less on average per visit than auto users, but come to the area at twice the frequency for recreational purposes.
- Because of the higher frequency of visits, transit riders and pedestrians spend more than drivers on recreational activities on a monthly basis.
- The majority of respondents indicated that what they liked the most about the area is the pleasant atmosphere and the restaurants. This indicates that enhancing Columbus Avenue's sidewalk culture is key to attracting visitors as well as San Franciscans to the area.

Case study 13

Acland Street, City of Port Phillip, Victoria^{33,34}

Observations of pedestrian movements in 2003 showed that the main section of Acland Street was subject to chronic congestion, preventing the safe and comfortable passage of pedestrians. This was brought about by the narrow footpath, high level of footpath trading and heavy 'window shopping' (cake shops). As a consequence, the Council proposed effectively widening the clear footpath area by relocating existing footpath trading to the parking bay area for 85 metres and removing nine parking spaces.

This proposal was opposed by the Acland Street Traders Association. In response it commissioned its own market research study in June 2003. It found that:

- *'Walking to the precinct is important and popular'* – Of locals interviewed, over 50 per cent walked to the centre. All walk within the centre.
- Local residents comprise over 50 per cent of all visitors and local residents account for over 85 per cent of the total expenditure.
- 57.2 per cent of expenditure is 'walked' to the centre, and a further 16 per cent comes from cycling / public transport. Only 26 per cent of total expenditure share emanates from those driving to the centre.

The traders realised that removing car spaces would only affect around a quarter of their customers (and at least some of those would return on other forms of transport, anyway). But more importantly, they recognised that their largest and most loyal customer group was actually local. Improving the walking environment for them was likely to actually increase their loyalty and might help attract them back to the area more often – which would translate into a bonus for local business.

As a consequence, the Association withdrew its opposition to the Council proposals, which have since been carried out. Indeed, it actually transformed the traders association into one of the strongest supporters of the change. Acland Street is undoubtedly more walking-friendly than it ever was, and everyone has benefited.

This case study reaffirms research carried out in many other cities which shows that car parking is of less significance to local retail activity than is often thought, and that space for people on foot is a more significant attribute.



Case study 14

Northcote, City of Darebin, Victoria³⁵

In 2008, Darebin City Council was considering installing accessible tram stops at several locations on High Street. The aim of the survey was to gain an understanding of travel and shopping behaviours of visitors to the Northcote shopping precinct to assist in assessing the potential impact of a reduction in on-street parking resulting from the introduction of the tram stops.

The key findings of this research are that:

- High street visitors tend to walk or catch public transport, while visitors to Northcote Central and Plaza tend to drive to those centres.
- High Street visitors are more willing to lose car parking spaces to accommodate streetscape improvements than visitors to Northcote Central or Plaza.
- Visitors to Northcote Shopping precinct place a higher level of importance on cleanliness and maintenance, pedestrian access and safety than business respondents who thought car parking was most important.
- Business respondents tended to overestimate car-based travel and underestimate walking and public transport use amongst visitors to Northcote Shopping precinct.

This study reaffirms in an Australian context the overemphasis placed on car travel and parking by business respondents compared to shoppers.

Case study 15

New Road, Brighton, UK⁶

New Road is a busy commercial street with bars, restaurants, shops, a library and two theatres. It has been redesigned to create a shared space with high quality granite paving across the whole area. The area has been de-cluttered with road markings and signs all but removed. This has resulted in a pedestrian friendly environment without the need to apply formal restrictions to motor traffic. Seating and lighting have been used to ensure the space is attractive to travel through and spend time.

The objective was to enable the street to fulfil its potential as a place. The result is an environment which is vibrant and welcoming. It has won numerous awards for urban design and has received overwhelming public support from both users and local businesses. Local restaurants and bars have invested in tables and chairs for outside their premises, enhancing the lively and social atmosphere. Local businesses feel that the shared space has improved the sense of community in the area, improving the perception of the road and the businesses on it by providing a better environment for customers.

The outcomes in figures are:

- 162 per cent increase in pedestrian activity.
- 93 per cent reduction in traffic volume.
- Reduction in traffic collisions from 3 in 2004 to 2006 to zero since completion in 2007.
- Research participants from the business community unanimously agreed that the scheme had benefited their business.



Before



After

Costs and benefits of investing in the walking and cycling environment

Cost benefit analysis

The *Making the case* report⁸ argues that:

“Investments in the walking environment are good value for money – even accounting for the fact that most evaluations only consider a small number of potential benefits. Cost-benefit analyses tend to underestimate the value of the walking environment, because very few studies have accounted for the impacts of increased walking on road casualties, congestion, fuel costs and other motorised travel costs, noise and air pollution, carbon dioxide and reduced public costs of providing for motorised transport. There are likely to be substantial benefits arising in these areas where investment in walking leads to modal shift.”

Hard evidence for the value of active travel investments is provided by Davis:³⁷

“This review assesses the evidence base from both peer reviewed and grey literature both in the UK and beyond. Almost all of the studies identified (UK and beyond) report economic benefits of walking and cycling interventions which are highly significant, and these average 13:1. For UK interventions only the average figure is higher, at 19:1.”

Davis summarises:

“Investment in infrastructure and to facilitate increased activity levels amongst local communities through cycling and walking is likely to be a ‘best buy’ for our health, the National Health Service at large in terms of cost savings, as well as for the road transport sector.”



Photo Credit: complete streets coalition

Car parking cost savings

There are also savings to be had from car parking management. Litman²⁴ observed that a typical car parking space requires 13–19 square metres of land. There is usually an opportunity cost associated with devoting land to kerbside parking, as the land could be used as a bus lane, bike lane or additional footpath width. Brisbane has parking costs which are among the highest internationally, indicating the potential financial savings presented by walking and cycling as a replacement for driving to Brisbane's CBD.³⁸



Case study 16

Bike lanes, on-street parking and business, Bloor Street, Toronto¹⁷

Proposals to install bike lanes on major streets are often met with opposition from merchants who fear that the reallocation of road space from on-street parking to on-street bike lanes would hurt business. The purpose of this study is to understand and estimate the importance of on-street parking to business on Bloor Street, a medium-to-high-density, traditional commercial street in downtown Toronto.

The study surveyed the opinions and preferences of 61 merchants and 538 patrons on Bloor Street and analysed parking usage data in the area. It incorporated a series of surveys to:

- Determine the relative importance of on-street parking to business activity on Bloor Street West.
- Project the impacts on business activity of reallocating space from on-street parking to bike lanes or widened sidewalks.

Among the study's findings:

- Only 10 per cent of patrons drive to the Bloor Annex neighbourhood.
- Patrons arriving by foot and bicycle visit the most often and spend the most money per month.
- There are more merchants who believe that a bike lane or widened sidewalk would increase business than merchants who think those changes would reduce business.
- The reduction in on-street parking supply from a bike lane or widened sidewalk could be accommodated in the area's off-street municipal parking lots.

Conclusions

High quality pedestrian and cycling environments are integral to retail and business success.

Sustrans¹ summarise:

"Evidence indicates that it would be advantageous to local businesses to support measures aimed at attracting more pedestrians and bus passengers to the local shopping centre rather than car users. Major investment in the walking environment, such as wider pavements (sidewalks) and traffic restraint measures, should result in attracting more regular, dedicated custom to the area and have a positive impact on retailers and customers alike."

There have often been misperceptions – underestimates – in the retailing community of the value of walking and cycling to main streets and neighbourhoods centres. This misperception creates the risk of mistakes in transport and planning policy. It is important that transport arrangements in main streets are not managed on the basis of myth and misunderstanding. Of course the views of retailers are important, but that does not mean that they should become the de facto transport planners in the city.

Walking and cycling are essential to the success of revitalisation strategies. Streets, laneways and squares that are dirty, dangerous and unattractive discourage walking and reduce the quality of urban life. This is not just about walking and cycling as a means of getting from A to B. It is also about sitting, talking, meeting neighbours, helping strangers and allowing children to play. If centres are not connected to surrounding residential areas and public transport, pedestrian volumes will fall. Poor urban design will have the same effect. People feel safest in places that are busy with others going about their ordinary business, so falling numbers of pedestrians becomes a vicious circle. Reduced footfall inevitably means reduced turnover for retail and other businesses, a reduction in the quality of the retail offer and further retrenchment of the area. It is no exaggeration to say that high quality pedestrian and cycling conditions are absolutely integral to retail and business success in Activity Centres.

There is a strong business case for improving walking and cycling conditions:

- There are direct economic benefits of improvement of retail environments, which can be both immediate and strategic.
- Streetscape enhancement adds value to an area: this is associated with higher rents or the attraction of new tenants/businesses.
- The reputation of certain areas and the businesses that are resident in them is based on the quality of the public realm.
- There is evidence that improving walking and cycling environments raises property values by statistically significant amounts.

This report has shown that

- It is difficult to estimate the value of non-drive-in spend for main streets. However, it is always bigger than we think.
- A high proportion of all retail expenditure comes from local residents and workers.
- Complete Streets have led to more retail sales, more people shopping locally, revitalisation of areas, new businesses and higher land value.
- Space allocated to bicycle parking can produce much higher levels of retail spend than the same space devoted to car parking.
- Car parking is of less significance to local retail activity than is often thought. Space for people on foot is a more significant attribute.
- In some cases, patrons arriving by foot and bicycle visit Main Streets the most often and spend the most money per month.
- Many car-borne shoppers are "drive-through" shoppers, stopping to pick up one item on the way to their eventual destination, rather than people for whom shopping is their main purpose for visiting the area. This has a negative impact on a busy retail street, which is likely to be disproportionate to the extra business that it generates.
- Retail vitality would be best served by traffic restraint, public transport improvements, and a range of measures to improve the walking and cycling environment.

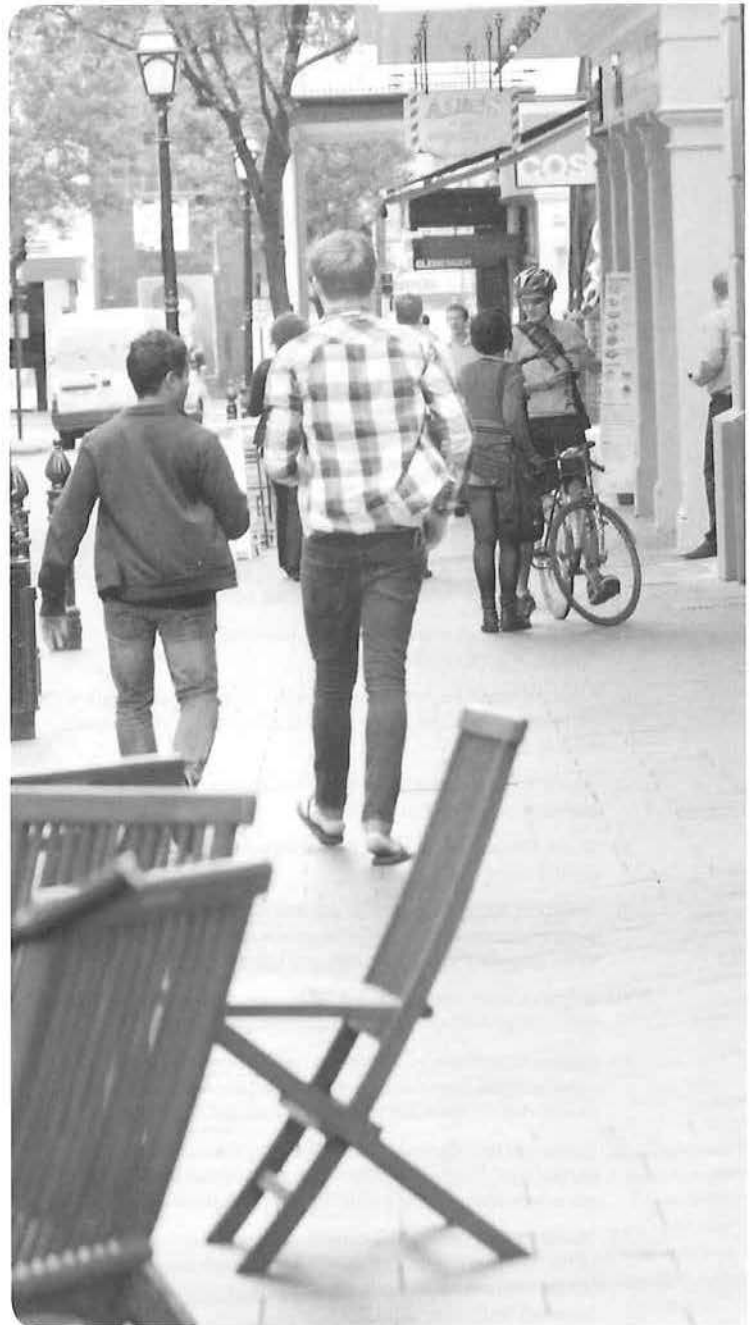
The Heart Foundation is calling on Local Governments, planners, development agencies, private developers and businesses to invest in and support better environments for walking and cycling. This will require:

- Reducing traffic speeds and road danger.
- Widening footpaths and providing cycle lanes.
- Using local knowledge to determine what the problems are and devise solutions.
- Improving public transport.
- Greening the street and making it more attractive.

As this report and the case studies have shown, making streets more walking and cycling friendly will:

- Increase retail rents in the area.
- Increase sale prices of nearby homes.
- Significantly increase pedestrian and cyclist activity (footfall).
- Generate more business and stimulate the local economy.
- Revitalise 'drive-through' districts, into lively places that people want to visit.
- Encourage people to spend time outside of their homes.
- Reduce noise speed.
- Create attractive and popular places for Adelaide and South Australia: the public are positive about investments in the walking environment, and schemes usually have the support of visitors and residents.

High quality walking and cycling environments around shops, activity centres and main streets are vital for the economic health of South Australian cities.



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