

StreetsAhead

Integrated Transport Strategy



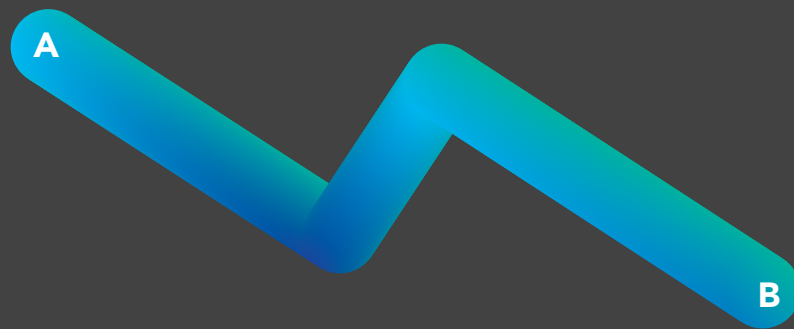


—

This strategy provides
guidance and direction
on investment and
improvements to all
modes of transport.

—

Executive Summary



The City of Casey is experiencing rapid population growth and development. It has the highest car ownership rate per household in Victoria. The City faces significant transport challenges.

StreetsAhead, is an evidence-based forward-thinking Integrated Transport Strategy for the City.

The Strategy provides guidance and direction on investment and improvements that are required for all modes of transport to be improved so the City effectively plans for and gains the required level of investment in key infrastructure and mode shift required for a Connected City.

The Integrated Transport Strategy recognises transport conditions will worsen if targeted infrastructure is not prioritised and a change in mode share is not achieved.

The *StreetsAhead* objectives, outcomes and actions are based on technical analysis of the network and findings from community consultation.



The average household in Casey makes 10 trips a day, with 83% made by the private car. The projected 59% population growth in Casey by 2046 exhibiting the current mode split is unsustainable.

Modelling of the transport network anticipates significant congestion across the network and continuing a business as usual approach will result in negative effects on the transport system and residents daily lives.

The vision of *StreetsAhead* is underpinned by the Council Vision to be Australia's Most Liveable City which is set out in the Council Plan 2017–2021.

The four strategic objectives of the strategy required to realise the vision are:

- » **Establishing 20-minute neighbourhoods**, where residents have access to basic services within 20-minutes by walking, cycling or public transport.
- » **Support and enhance sustainable modes** of transport, by prioritising investment to make alternative modes of transport legitimate transport options.
- » **Efficient and reliable network** enables freight, vehicles and residents to undertake day-to-day activities in a safe and timely manner.

» A 'smart city' approach to transport planning is fundamental in improving transport conditions and reducing the stress of commuting on residents.

Applying a 'Smart City' approach will help understand transport issues and develop effective solutions to address such issues.

Achieving the strategic objectives of *StreetsAhead*, will see positive transport and community outcomes, and create a connected City for everyone to work, live and thrive in.

This Integrated Transport Strategy does not prescribe the specific actions or detail particular transport programs of improvement, but provides the strategic basis for Council decision making and prioritising these decisions.

Contents

01

Executive
summary

Page 03

02

Introduction

Page 05

03

Background

Page 06

04

Transport
conditions
in Casey

Page 08

05

Roles and
Responsibilities

Page 10

06

Planning
context

Page 11

07

Community
consultation

Page 13

08

Vision

Page 17

09

Objective 1:
Establish 20-minute
neighbourhoods

Page 19

10

Objective 2:
Promote and
enhance sustainable
modes of transport

Page 20

11

Objective 3:
Create an efficient
and reliable
network

Page 21

12

Objective 4:
Adopt a 'smart city'
approach to
transport planning

Page 22

Introduction

Transportation is the movement of people and goods from one place to another. The transport system underpins the ability to move around and carry out day-to-day activities. A safe, efficient and accessible transport system can increase quality of life and enable economic development.

The performance of a transport system carries social, economic and environmental consequences that impact on the community. Different modes of transport have different requirements regarding provision of infrastructure, behaviour and perceptions, cost and sustainability.

Research shows private cars whilst effective are the least efficient mode of transport, whilst active modes of transport are the most sustainable.

Integrated transport planning involves providing for all modes of transport. Both integrated transport and land use planning help address the municipality's long-term challenges, such as substantial population growth and automobile dependence.

Casey is one of the fastest growing municipalities in Australia, with a population of 313,000 and projected population of over 500,000 by 2040. Increasing population growth and record car ownership and use is placing pressure on transport infrastructure and impacting the everyday life of Casey residents.

The provision of transport infrastructure has not kept pace with the population growth, resulting in congestion and most significantly, lack of transport alternatives. Rapid growth and associated development has resulted in a high proportion of car ownership and automobile-dependent communities.

Deficiencies in the transport network is impacting economic productivity, and residents' health and wellbeing.

The local government maintains and operates the local road network, footpaths and cycle facilities and provides bus transport infrastructure.

City of Casey plans for local transport and land use, playing a critical role in achieving integrated transport planning. This Integrated Transport Strategy sets out the current transport conditions and the mandate for improvement.



Background

An Integrated Transport Strategy plans for all modes of transport in conjunction with land use planning.

Being *StreetsAhead* will mean facilitating efficient and effective sustainable transport options.

A refreshed Integrated Transport Strategy is required for Casey to reflect and keep pace with the growing community needs and current pressures facing the transport network. A technical document was prepared alongside the Integrated Transport Strategy to understand transport conditions, pressures and patterns currently and projected future conditions. The technical document details the following information:

- » Strategic alignment
- » Land use and transport network modelling covering the current, 2031 and 2046 scenarios
- » Demographic, economic and lifestyle factors
- » Travel patterns

- » Public transport services analysis covering current and future needs
- » The requirement for mode shift away from the private car
- » Outcome from community engagement undertaken for the strategy
- » Future opportunities that could support transport outcomes.

The City of Casey currently has a population of around 313,000 (2017) people, making it the most populated municipality in Victoria.

The projected population growth is to reach 514,800 by 2041 with an average of 7,600 people moving to Casey each year.

The current mode share split of 83% by private car, and an average of 10 trips per household results in an unsustainable transport system in Casey (Overleaf).

Approximately 95,000 households in Casey make almost one million trips on an average day, at this rate, total trips made by Casey households are expected to grow more than 1.6 million trips on an average day in 2046.

Continuing a business-as-usual approach to transport will result in congestion, transport disadvantage and devastating impacts on health and overall quality of life for Casey residents. A forward-thinking integrated transport strategy is required to develop alternative transport options to car and create some connected City for Casey residents.

The roles and responsibilities of transport planning in Victoria require a co-ordinated approach to achieve integrated transport planning.

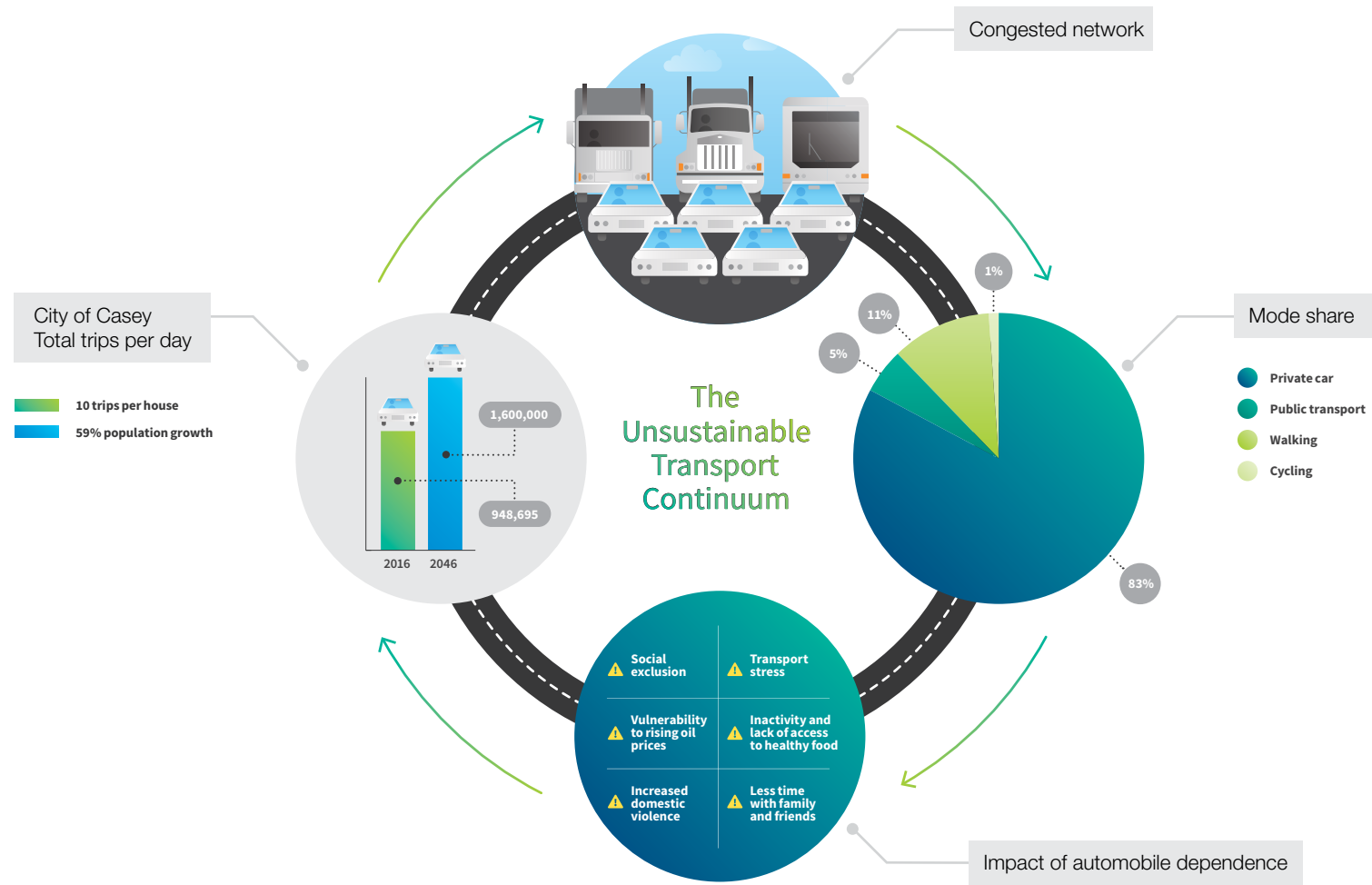
There is a necessity to advocate to the Victorian State Government for the transport needs of Casey residents that are beyond the control of Council.

Council has modelled the performance of the transport network currently and to 2046, concluding extensive investment is required to keep pace with population growth that we are currently behind on.

A list of priority infrastructure has been concluded from network modelling and extensive community consultation. The *StreetsAhead* action plan requires various stakeholders to work together to achieve desired outcomes.

FIGURE 01

Unsustainable
Transport



Transport conditions in Casey

The City of Casey has the highest rate of car ownership in Victoria, where over 60% of households own two or more cars and households average 10 trips per day, with 83% of trips made by car (Census, 2016).

The current transport patterns, and lack of transport alternatives is not a sustainable transport system.

Indicators of an unsustainable system include: the network being frequently congested, negative impacts on economic productivity and the wellbeing of our residents. These unsustainable transport indicators are frequent in the Casey transport network.

The City of Casey is growing rapidly, evident by new residential greenfield developments, which is forecasted to continue. New Greenfield areas have been developed with little or no alternative transport options to the car, resulting in exacerbated traffic and social exclusion. Transport infrastructure has not

kept pace with population growth and with growth predicted to continue, more car trips are being added to the network.

Automobile dependence is prevalent in Casey, resulting in negative social, environmental and health implications. Car dependency is resulting in disproportionate amounts of time spent travelling and residents are susceptible to increasing fuel prices. Development has resulted in unequal access to essential food outlets¹ across the municipality, where 84% of residential properties are more than 400m from an essential food outlet (Healthy Food Connect, 2016). Unequal access to health food and car dependence has resulted in poor nutrition, inactivity and obesity becoming a significant issue in Casey.



Public transport is infrequent and poorly used, with only 8% of all trips made by public transport (Census, 2016).

There are large residential catchments in Casey that are poorly serviced by public transport, giving little or no alternatives to the car. Majority of public transport trips are for trips towards central Melbourne and not within Casey.

Many residents do not have easy access to public transport and for short trip around Casey, the car is the most convenient transport option. Those who do not have easy access to public transport include the transport disadvantaged; young people, elderly, low income earners and those with mobility challenges. Transport disadvantage and social exclusion is exacerbated, specifically in the Growth Areas of Casey. Investment into alternative modes of transport is imperative to ensure transport disadvantage and social exclusion is improved and Casey becomes a connected City.

Pedestrian and cycling infrastructure provides access to affordable transport, physical fitness and recreation. In addition, appropriate active transport infrastructure reduces the first and last mile effect of public transport², making sustainable transport

modes a viable alternative to the car. Casey has seen a significant decline in walking and cycling to school over the past years, which aligns with the habits of much of Australia.

There is poor active transport access in many parts of the municipality, due to a culture change and poor walking and cycling infrastructure. There is a significant opportunity to facilitate mode shift of short trips from the car to sustainable transport, through both planning for and investing in sustainable transport infrastructure, and influencing travel behaviour. An increase in transport by active modes have the potential to dramatically improve health and congestion, and allow for more time to be spent with their family and friends.

In addition, the technical analysis of the transport network found:

- » The coverage of the bus network is currently inadequate to many of the new estates in Casey. The reliability and frequency of the bus network is not as good as what is required for a connected transport system. Proactive planning and

FIGURE 02

City of Casey – Vehicle kilometres travelled (VKT)

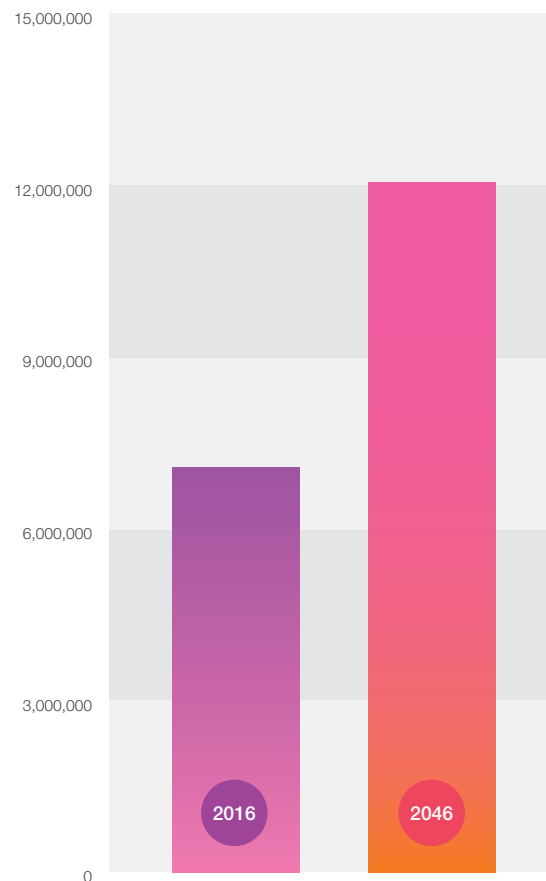


investment into the bus network are required if a mode shift away from the car is going to be achieved and to make the transport system accessible for all.

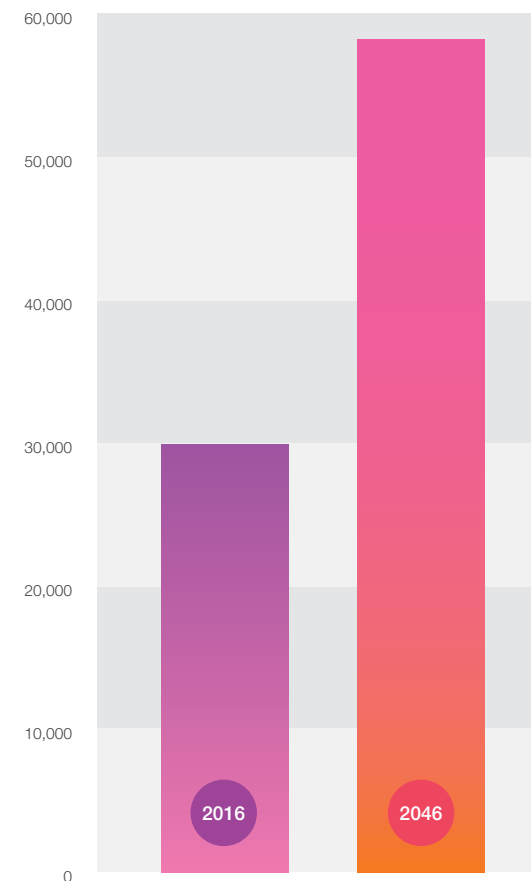
- » Parking at railway stations is a significant pain point in the integrated transport system and the ability for residents to travel to work.
- » Connectivity of the walking and cycling network reduces the ability for people to use active transport modes for short trips.
- » The accessibility to transport in Casey is not as good as what it should be. This requirement for a better-connected transport system is fundamental to the functioning of the community and health and well-being of Casey residents.
- » There is significant congestion on the network that requires upgrades to key arterials and intersections for the transport network to function effectively.

¹ Essential food outlet refers to those outlets that provide items essential for a healthy diet.

² The first and last mile effect refers to the beginning and end of the journey between taking public transport.



City of Casey – Vehicle hours travelled



Roles and responsibilities

The provision of transport infrastructure, planning and delivery of transport services is:

Federal government

Responsible for the framework underpinning road, rail, maritime and aviation transport in Australia. Federal Government is also involved through funding, in transport projects largely carried out by the State.

The Department of Infrastructure and Regional Development provides strategy policy advice to assist the Federal Government to shape the framework underpinning road, rail, maritime and aviation transport across Australia.

State Government

Transport for Victoria (TfV) – responsible for the planning and coordination of all transport systems in Victoria, essentially acting as the umbrella agency for Public Transport Victoria and VicRoads.

Public Transport Victoria (PTV) – responsible for providing, coordinating and promoting public transport in Victoria.

VicRoads – responsible for the planning and operation of the declared arterial network.

VicTrack – owns, maintains and operates rail infrastructure and associated railway land corridor.

Department of Economic Development, – transport regulatory policy and supports major transport projects to improve public and private transport infrastructure in urban and rural Victoria.

Infrastructure Victoria – provide independent and expert advice about Victoria's current and future infrastructure needs.

Local Government

City of Casey Council – responsible for maintenance and operation of the local roads.

Council is also responsible for the planning and design of paths and trails, walking and cycling infrastructure within the City of Casey.

Local Government is a responsible authority for the integrated transport planning of its area.

Planning context

The development of *StreetsAhead* considers relevant transport and land use strategies in place covering Casey prepared by the Federal and State Government, regional authorities and within the City of Casey.

The Council Plan 2017–2021 adopted a vision for Casey to create Australia's most liveable City. One of the strategic objectives of the Council Plan is to create a *City with an accessible and well-connected transport network*.

Sustainable transport is a major focus for Council's long-term goals. Casey C21 is Council's long-term blueprint for shaping the City of Casey's future.

Casey C21 identifies congestion as an issue forecasted to get worse.

Council continues to actively work to improve public transport, provide and advocate for better infrastructure and prioritise investment. The vision and strategic objectives of *StreetsAhead* builds on the issues identified

in C21 with specific objectives, outcomes and actions to improve the transport network.

The Casey Planning Scheme details the local planning provisions regarding land-use transport. The Planning Scheme specifies that planning in Casey should ensure an integrated and sustainable transport system, providing access to opportunities and contributes to environmental sustainability. *StreetsAhead* aligns with the Casey planning scheme, giving further strategic direction to achieving an integrated and sustainable transport system.

Sustainable Transport is a key enabler for the success of many of Council's strategies and policies. These strategies and policies aim to create a more connected and accessible transport system for Casey residents. *StreetsAhead* has a strategic objective that focuses on promoting and enhancing more sustainable modes of transport. Key strategies and policies include:

- » Municipal Health & Wellbeing Plan 2013-2017;
- » Municipal Strategic Statement 2017;
- » Sustainability Plan 2010;

- » Diversity Access and Inclusion Policy 2016, including the Accessibility Action Plan;
- » Paths and Trails Strategy 2012;
- » Road Management Plan 2015; and
- » Various Urban Design Frameworks.

The Accessibility Action Plan includes improving the accessibility of the transport system and best practice planning for transport. Achieving these are imperative to achieve the vision of Casey being a connected City for all.

Outside of Casey, *Plan Melbourne 2017–2015* is the Victorian Government's vision of the City, and guides Melbourne's growth and challenges over the next thirty years.

Plan Melbourne identifies the need for better connected services and infrastructure in the suburbs. The strategy identifies that future prosperity and liveability is influenced by how well we manage and develop the transport system.

This idea is reiterated in *StreetsAhead*, as it is acknowledged the transport network is fundamental in improving quality of life. Plan Melbourne includes establishing 20-minute

neighbourhoods, where residents have access to basic services and jobs within 20-minutes. This concept has been incorporated into *StreetsAhead* as strategic objectives, where local jobs and access to basic services becomes a fundamental requirement to reduce congestion and promote alternative modes of transport.

Other relevant State Government policies and plans include:

- » Cycling into the Future 2013–23: Victoria's Cycling Strategy that aims to grow and support cycling in Victoria.
- » Network Redevelopment Plan – Metropolitan Rail: The PTV Network Development Plan is a long-term development plan for the public transport network. The Network Development Plan details the network redesign to meeting the growing demands of Melbourne, maximise opportunities for coordination and expansion of the network.

Planning context continued

- » Regional Network Development Plan: guides short, medium and long-term priorities required to improve public transport in regional Victoria.
- » Victoria's 30-year Infrastructure Strategy: sets out required infrastructure initiatives to be delivered to help create the best possible future for Victoria. This includes the Clyde Rail extension as a key infrastructure priority.

Figure 03 demonstrates the relationship of *StreetsAhead* and other Council planning documents.



FIGURE 03

Strategic alignment of the transport strategy



Council Plan vision

Casey C21: Council's long-term blueprint for shaping the City of Casey
City of Casey Vision – Creating Australia's Most Liveable City of Casey
City of Casey Council Plan 2017–2021

Strategy

StreetsAhead Integrated Transport Strategy

Sustainability Plan

Municipality Health & Well Being Plan

Implementation

StreetsAhead Action Plan
Advocacy
Council Plan Annual Action Plan

Paths & Trails Strategy
Cycling Strategy
Diversity, Access and Inclusion Policy

Smart City Strategy

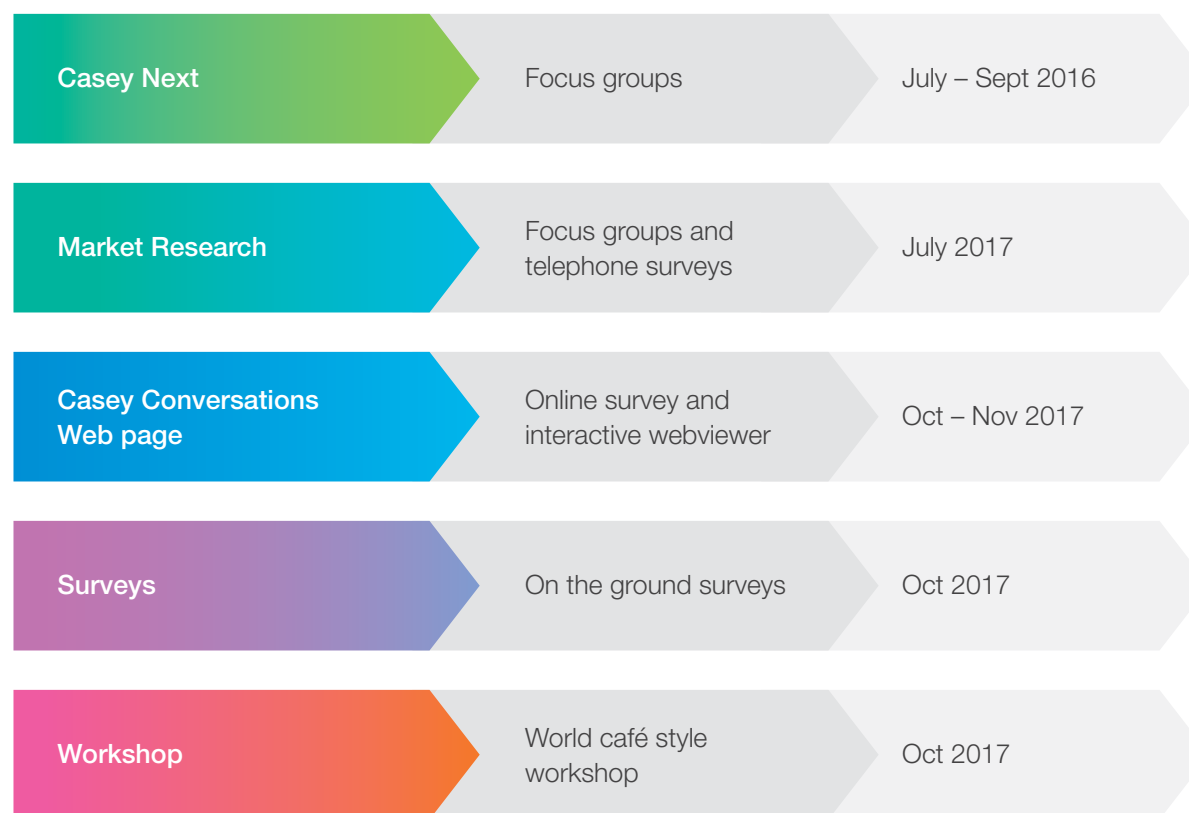
Various Development Plans

Accessibility Action Plan

Community Consultation

The development of the Integrated Transport Strategy has been informed by robust community consultation. Casey City Council engaged with the community, key stakeholders and transport experts to get a thorough understanding of the transport challenges in Casey and to develop innovative solutions to achieve desired transport outcomes.

Consultation took place in the form of:



Community Consultation continued

Those engaged in the consultation process were particularly responsive regarding transport improvements, challenges and what is desired for the transport network in Casey. Specific findings from community engagement are highlighted below:

Casey Next

Casey Next is the engagement program that was undertaken between July and September 2016, designed to build a deeper understanding of the growing Casey community and their needs and expectations of Council.

Casey Next engagement involved a seven-week engagement program with local businesses, residents and visitors to Casey. Those involved could share their vision, needs and what they deemed the most important Council services. *Casey Next* reached around 480,000 people, with more than 3,600 people being directly involved. Particular effort was made to reach out to those who are typically harder to reach in engagement processes, such as Culturally and Linguistically Diverse (CALD), youth and children, Aboriginal people, elderly and those with a disability.

From the 2,538 individual responses over a seven week period, ten key vision statements emerged as the most commonly referred to aspiration for Casey. One of these vision statements included: *A well-connected place*. Specifically, a well-connected place, where residents can get from place to place easily, in a timely and comfortable manner made up 10% of the reported aspirations by the community. A safe place where everyone feels safe spending time in and moving around the streets, in local neighbourhoods, on public transport and at home makes up 17% of recorded aspirations.

Improving transport was the most important council service theme for the Casey community. To address the service theme of improving transport, the following was identified as the key issue:

- » Advocating for better public transport and arterial roads (protecting the environment and improving transport).

The community has expressed the requirement of Council to advocate to State Government and other agencies to invest in the network to meet the transport needs of the residents.



“Casey would be a very welcoming place to live knowing there is regular and reliable transport.”

Casey Resident

Market Research

Research was conducted to identify community views on priority projects to inform the advocacy efforts of Council. The research involved eight focus group discussions and a telephone survey of 800 people from within the City of Casey.

Comparable to the findings from *Casey Next*, the Market Research found that there are significant projects in the municipality that residents believe are highly important and Council advocacy is critical.

Casey Conversations

An interactive webpage on Casey Conversations (Casey's community consultation tool) was launched during October 2017. The online webpage is open to the public and was also distributed via weblink to a database of approximately 2,000 residents. The page allowed for residents to participate in community consultation regarding the Integrated Transport Strategy through a survey, interactive web map and to register attendance of an evening workshop.

Over 2,800 people visited the Casey Conversations page including more than 180 survey responses and 248 markers places across the network identifying areas of improvement for different modes and areas of the transport network that currently work well. The survey on Casey Conversations tested the strategic objectives, allowing residents to communicate their view of what a connected City in Casey could look like and what would it take for them to use alternative modes of transport.

Analysis of community feedback from residents found:

- » Of the 248 markers placed across the network, the most common feedback included the extension of the railway line in Cranbourne to Clyde, major arterial road upgrades and additional walking and cycling facilities.
- » When asked what a connected City in Casey would look like the four most common themes includes:
 - Better buses (20%)
 - Better reliability/frequency/coverage of current transport options (19%)
 - Better integration/integrations between modes (15%)
 - More investment into sustainable transport infrastructure (14%)
- » In response to what would encourage residents to use public transport, walking and cycling instead of the car, the following four themes were most common:
 - General PT improvements (23%)

- Safety improvements (10%)
- Bus improvements (8%)
- More walking facilities (8%)

The top two services that residents would like to be within 20 minutes of walking, cycling or public transport:

- » Public transport to key centres (78%), and
- » Local shops and services (70%)

On-the-ground Surveys

Over four days, on the ground surveys were undertaken at key locations across Casey. These surveys looked to get residents feedback on their current travel patterns and how transport could be improved for them. Approximately 40 residents participated in these surveys across Cranbourne and Narre Warren Activity Centres. The following conclusions were drawn from the surveys:

- » The most commonly cited reason for choosing their transport mode was because it is well connected to their origin and destination.

- » The most common suggestion residents believed how transport could be improved for them was faster and more frequent public transport.
- » Footpaths and cycle facilities were the most common suggestion for how residents could be encouraged to take sustainable transport modes for more trips.



“I dream of the day the Cranbourne train line is extended to provide high capacity transport to the housing boom east of Cranbourne.”

Casey Resident

Community Consultation continued

Workshop

A diverse range of residents attended an evening workshop to test the strategic objectives. For each strategic objective, three questions were asked at the table allowing the group to think of innovative ideas and communicate their thoughts on the transport network in Casey.

An example of some of questions workshopped included:

- » What are the current barriers and constraints for you to access services within 20 minutes?
- » What would encourage you to walk/ cycle for short trips?
- » What are the current pain points for you in the Casey transport network?
- » What are the current barriers to behaviour change/ moving away from automobile dependence?



A summary of the findings of the workshop are provided below.

Most common concerns:

- » Feel unsafe walking and cycling throughout Casey
- » Existing active transport infrastructure is not connected
- » Significant areas of congestion affecting daily travel
- » Parking at train stations is inadequate

Barriers to behaviour change

- » Car is more timely and convenient than any other transport option
- » Public transport does not adequately serve travel habits of residents
- » Must travel significant distance to work
- » Poor perception of public transport (safety concerns)

Strongly desired

- » Real time information across the network
- » Rail extension from Cranbourne to Clyde
- » Connected and extensive cycling infrastructure
- » Better road infrastructure
- » Better disabled access to transport options

Frequently cited ideas included:

- » On demand transport services
- » Express shuttle buses connecting estates to train station
- » Incentivise people to use alternative modes instead of the car
- » Park and ride scheme

Summary of feedback

The community has consistently provided feedback regarding the following five themes:

Transport issues are impacting day to day activities

Improved connection across modes and between facilities

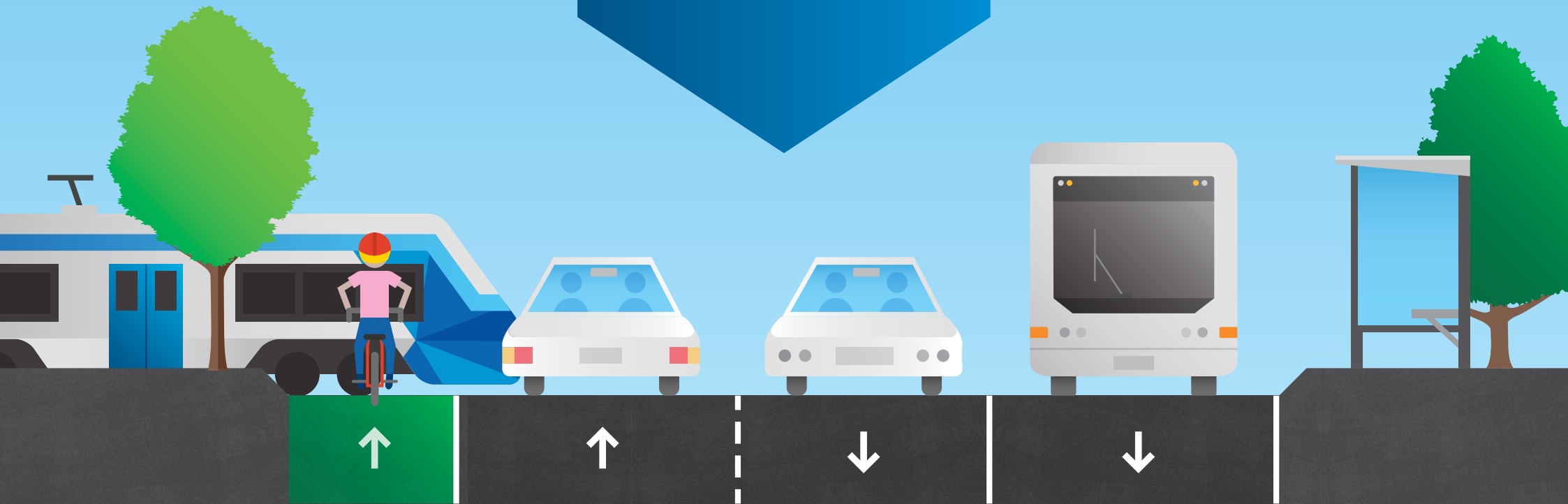
Support the need for a program of bus and rail upgrades

Better active transport facilities

Desire a well-connected City

Vision

The City of Casey is
a connected City for
everybody to work,
live and thrive in.



Strategy

StreetsAhead is a long-term plan that provides the framework to effectively plan for and invest into the transport network. The vision of a connected City looks to establish a connected transport network that reduces travel time and promotes economic development and social inclusion.

A connected city offers transport options which are both safe and convenient alternatives to the car. Advocated by the 20-minute neighbourhood concept, a better-connected transport network enables easy access to local services (social, recreational, retail) and provides local jobs. The vision of *StreetsAhead* for the City of Casey to be 'a *Connected City*' is ambitious and forms the basis for developing strategic objectives, design outcomes and provide actions to improve the transport system.

StreetsAhead is driven by the needs of the community and reflects the residents vision for the transport system. Four strategic objectives have been developed that underpin the overall vision of Casey as a connected City. Outcomes for each strategic objective have been developed, reflecting what is required and desired for the transport network.

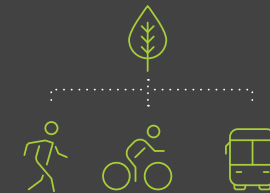
The *StreetsAhead* action plan sits beside this document, detailing the initiatives, programs and undertakings required to make Casey a connected City.

Strategic Objectives



01

Establish 20-minute neighbourhoods



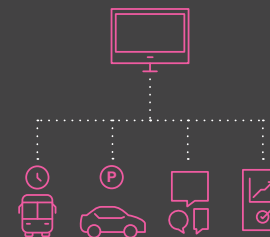
02

Promote and enhance sustainable transport modes



03

Create an efficient and reliable network

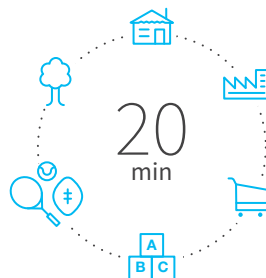


04

Adopt a 'smart city' approach to transport planning

OBJECTIVE 01

Establish 20-minute neighbourhoods



The '20-minute neighbourhood' concept centres on residents having access to all amenities and basic services within 20-minutes by walking, cycling or public transport.

The idea of a 20-minute neighbourhood originates from the Portland Plan, describing a measurable neighbourhood strategy where 'quality, reliable basic services must be provided for all' (City of Portland, 2012, pp. 6, 84). Therefore, day-to-day activities don't require large commute times, resulting in positive economic, environmental and social outcomes.

Schools, shopping centres and recreational facilities are concentrated near residential areas. A fundamental aspect of the 20-minute neighbourhood is access to local jobs, open space and the natural environment.

City of Casey residents make approximately 10 trips per household per day, with 83% made by car. Adopting the 20-minute neighbourhood concept strives to reduce the number of trips taken, and decrease

time spent in the car. Active transport would become prevalent, having positive impacts on social and physical wellbeing of the community. Residents would feel safe using the transport network by all modes of transport.

To achieve 20-minute neighbourhoods, investment is required into alternative transport infrastructure in areas that are currently underserved. Specifically, areas of Greenfield development need alternative transport provisions in the form of public transport and walking and cycling infrastructure. Local jobs, council-run, and state-run services are required to be in suitable distances to residential catchments.

Having local jobs and services as well as alternative transport provisions will make the car less convenient. With safe and appropriate infrastructure, walking and cycling short distances across Casey will become an attractive and convenient option. Residents of all ages can incorporate active transport in their daily journeys and feel safe doing so.

The benefits of 20-minute neighbourhoods are numerous, including a reduction in commute time and stress, so residents can spend more time with family and friends.

Further benefits include a reduction in expenditure on transport costs and more physical exercise is incorporated into daily life.

Proposed 20-minute neighbourhoods could result in a concentration of jobs in key activity centres with good accessibility by all transport modes, facilitating social inclusion and high density, mixed use developments. Activities benefit from economies of scale, establishing these in key activity centres in Casey has benefits for businesses, residents and the urban form.

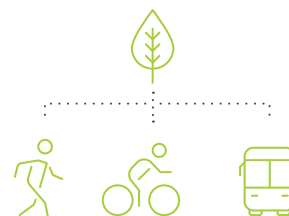


Establishing 20-minute neighbourhoods anticipate the following outcomes:

- » Majority of Casey residents can access their day to day needs within 20 minutes by walking, cycling or public transport.
- » Walking and cycling are convenient transport modes for short trips.
- » Footpaths and bicycle facilities effectively link from residential areas to shops and services.
- » Public transport is an accessible mode for residents.
- » Maximise local employment opportunities.

OBJECTIVE 02

Promote and enhance sustainable modes of transport



Sustainable transport includes walking, cycling and public transport. Sustainable modes of transport help meet the needs of the current population with the least harmful effect on future generations.

Specifically, the goal of sustainable transport is to ensure that environmental, social and economic concerns are taken into consideration in all decisions affecting transportation design and construction (MOST, 1999).

City of Casey requires a more sustainable transport system, to give residents legitimate transport options and incentives to use different modes.

Currently, automobile dependence is causing social exclusion and transport stress by reducing alternative transport options and increasing total transport costs. Better

provision for sustainable transport modes will aid social inclusion and reduce transport stress associated with transport costs and congestion.

Increased public transport and walking and cycling trips are required to move away from automobile dependence. The benefits of more trips made by sustainable transport include increased health benefits.

Amenity is increased when sustainable transport modes are prevalent and popular. Making alternative modes of transport more attractive is critical in attaining a greater mode split. Through safe design, connectivity and greater priority to sustainable transport modes, they will become a convenient and legitimate transport alternative to the car.

There have been strong growth rates in public transport usage across several cities in Australia.³ It is recognised by all levels of government that public transport investment is critical and fundamental to a city's mobility and overall functioning. Public transport

investment needs to ensure both greater coverage and frequency throughout Casey.

There are also significant greenfield developments that are not serviced by public transport or pedestrian connectivity.

Better connection of the path network has potential for modal shift to walking and cycling. Shared and linking paths and bike lanes on local roads, cycling maps, signage, parking and end of trip facilities are critical in encouraging a greater mode share of cycling. Ensuring that design maximises safety, so cyclists do not have to be 'brave' to cycle will facilitate greater mode shift from the car to cycling.

School trips are mostly made by driving to and from school and for extra-curricular activities. There is a significant opportunity here to encourage more sustainable modes of transport (walking and cycling) through a behaviour change and investment into infrastructure.



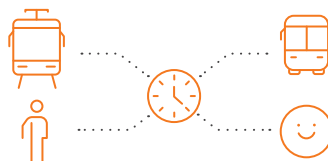
By promoting and enhancing sustainable transport modes, the following outcomes are anticipated for the transport network and Casey community:

- » Increase in school trips made by active transport
- » The community feels safe and confident using active transport modes for short trips.
- » Increased investment in sustainable transport infrastructure.
- » Community acceptance of sustainable transport modes as being legitimate transport choices.

³ http://atrif.info/papers/2012/2012_Curtis_Scheurer.pdf

OBJECTIVE 03

Efficient and reliable network



An efficient and reliable transport network moves people and goods safely, in a timely manner and is accessible for all.

This objective strives for an efficient use of resources to enable economic productivity and social connection. Connectivity across modes and distance, accessible land use and support of alternative modes are key factors in ensuring an efficient and reliable transport network in Casey.

The transport network is designed to enable the movement of people and goods, often with conflicting priorities and incompatible transport modes. Transport systems are more efficient when they provide for multiple modes of transport, giving users choice on the most suitable mode for each trip. Creating priority for different modes such as bike and bus lanes and applying technology to improve and encourage resource efficient modes.

The City of Casey's increased growth and lack of alternative transport provision has resulted in higher proportion of car ownership and car-based commuting trips. There are

high numbers of road-based freight movements, often exacerbating traffic congestion on the network. Traffic congestion is associated with loss of productivity, increased travel times, and environmental impact that all reduce liveability in Casey.

Funding is required from all stakeholders in the network to improve infrastructure and make the network more efficient.

Safety is a key component of an efficient and reliable network. Areas of high road safety risk require investigation and intervention measures developed to increase reliability and ensure a safe network. The use of alternative modes of transport is not safe in some parts of the network, reiterating that investment into active transport infrastructure is necessary. It is acknowledged that local government plays a critical role in managing road safety.

Reliable travel time is important to economic productivity and commuters alike. There are routes along the Casey network that are unreliable for drivers, and some public transport services deliver unreliable arrival times. As travel time becomes unreliable, residents get frustrated which leads to unsafe driving manoeuvres and stress. Reliable travel

times are also important for freight to ensure deliveries are met, costs are kept down, and their journey is safe.

Strategic investment into the road and public transport network plays a key role in making the network efficient and reliable. The duplication and extension of the Cranbourne rail line the most significant piece of infrastructure required in Casey to help meet the transport needs of residents. Rail and bus network improvements will provide residents with alternative transport options to the car, reducing congestion and create a more efficient and reliable transport network for residents. Many roads and intersections across the network are at capacity and in peak times suffer significant congestion that exacerbates existing safety issues. Investment needs to be prioritised into infrastructure upgrades at these key locations.

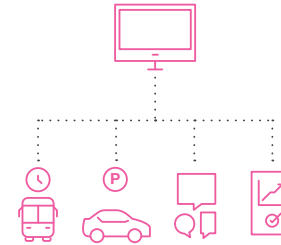
Forward and co-ordinated planning of our transport network is required to keep pace with population growth and establish a connected City. Through appropriate planning channels, effective transport planning should be undertaken to understand transport effects of new developments and ensure they are being appropriately provided for.

Establishing an efficient and reliable network is anticipated to have the following outcomes:

- » Proactive and effective planning of our transport network to respond to the growth pressures in Casey.
- » Transport infrastructure and services are delivered in a timely manner responding to network and community needs.
- » Cranbourne rail line duplication and extension are delivered in the next five years.
- » Fast, frequent, reliable and connected bus network across Casey.
- » Existing transport infrastructure and resources are used efficiently and effectively.

OBJECTIVE 04

Adopt a 'smart city' approach to transport planning

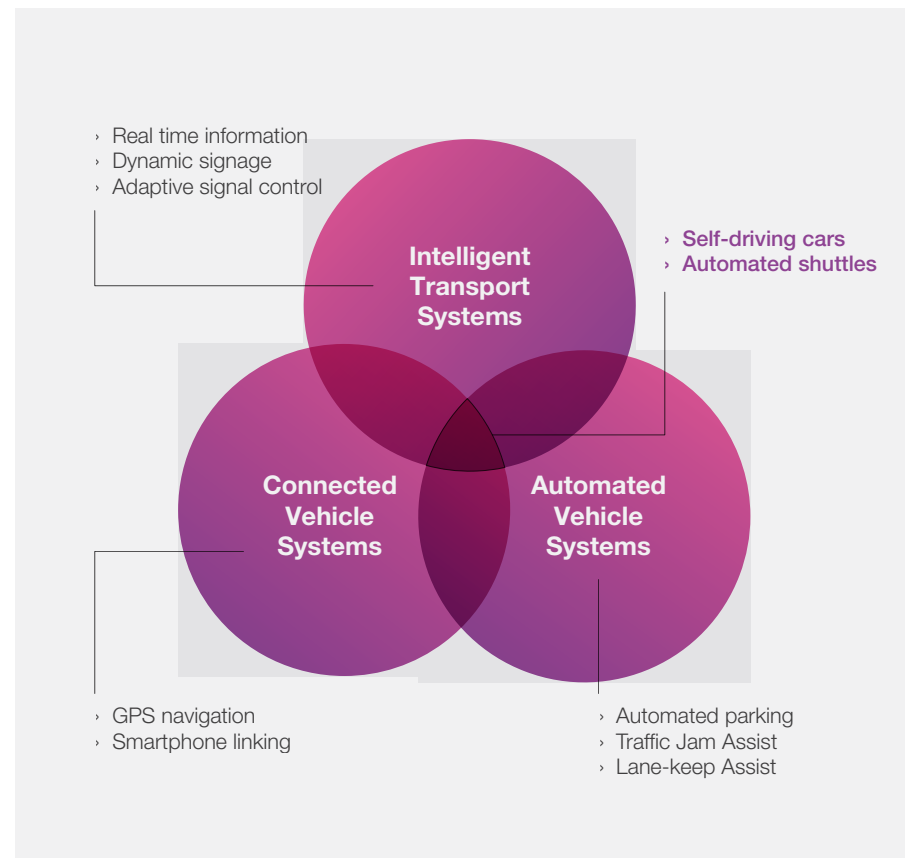


The concept of a 'smart city' involves how both information and communication technologies can improve the functioning of the urban environment.

Smart cities harness technology to increase the quality of life of its residents. As cities grow, transport challenges increase, however, the application of technology and data can help develop transport solutions.

As Casey continues to grow, smart transport solutions including using real time data and analysing transport data of the transport network become increasingly important to ensure mobility and become better connected.

Intelligent transport solutions and both information and communication technology can provide residents with up-to-date, convenient information on all modes of transport. Residents should have access to information on all modes of transport in Casey to make informed travel choices.



Through this technology, transport planning can ensure greater participation and shared knowledge of the transport network.

Currently, there are no intelligent transport solutions in the form of real-time public transport information along the Casey bus routes. Data is not well harnessed to improve network efficiencies and to improve access. There is significant opportunity to improve transport planning in Casey through the analysis of data.

Integrating the transport system with technology will also maximise the use of existing resources and infrastructure.

A smart city approach includes integrating sources of mobility data, including the data from public transportation, road sensors, surveys and social statistics, and social media. Transport systems have large amounts of data, utilising this data to its full potential to create valuable strategies should be undertaken. The application of data analytics helps us understand how our transport network operates and provides opportunity for solutions and improvement.⁴

Transport models driven by smart technology can better connect Casey.

Real-time demand tracking allows for on-demand services to operate efficiently across the network. Ridesharing can complement public transport when a service is not available or suitable for the trip. Ridesharing is also a valuable economic opportunity for facilitating local jobs in Casey.

⁴ http://discovery.ucl.ac.uk/1388243/1/Batty_art%253A10.1140%252Fepjst%252Fe2012-01703-3.pdf



The following outcomes are sought after by adopting a smart city approach to transport planning:

- » Smart data analytics inform transport decisions.
- » Intelligent transport solutions are applied across the transport network.
- » Transport options driven by smart technology are encouraged.
- » Casey residents have easy access to information of available transport choices.
- » Real time information is available.



Contact

Contact City of Casey

03 9705 5200

NRS: 133 677 (for the deaf, hearing or speech impaired)

TIS: 131 450 (Translating and Interpreting Service)

caseycc@casey.vic.gov.au

PO Box 1000

Narre Warren VIC 3805

Customer Service Centres

Narre Warren

Bunjil Place, Patrick Northeast Drive

Cranbourne

Cranbourne Park Shopping Centre

CASEY.VIC.GOV.AU

 [facebook.com/CityOfCasey](https://www.facebook.com/CityOfCasey)

 [@CityOfCasey](https://twitter.com/CityOfCasey)

Document Control Council policy documents change from time to time and it is recommended that you consult the electronic reference copy at www.casey.vic.gov.au/policiesstrategies to ensure that you have the current version. Alternatively you may contact Customer Service on 9705 5200.

