4 Urban Design Issues & Goals

Urban design is a primary consideration for preparing a development strategy for State Highway 1. It is crucial for the future vibrancy and vigour of the Kapiti Coast communities that SH1 is appropriately integrated with the surrounding environment and adjacent land uses. To achieve this, the need for a high capacity road through the district must be balanced against the need to maintain and improve:

- Access to services and community facilities;
- Amenity of public spaces; and
- Community cohesion.

Central to achieving these objectives is the need to address the severance resulting from transport infrastructure such as SH1 and the NIMT railway. By identifying the issues, constraints and opportunities for realising good urban design in Paraparaumu, Waikanae and Otaki early in the project, it will be possible to achieve the positive outcomes sought by the community.

This chapter summarises urban design principles, previous urban design work commissioned by KCDC and identifies the known issues, opportunities and constraints that will guide the development of the SH1 strategy, particularly with respect to the three urban areas.

4.1 Principles of Urban Design

The vibrancy of Kapiti Coast is a function of how land is used. The SH1 strategy will need to highlight and take advantage of opportunities to encourage or facilitate the use of areas alongside the corridor. An UK 'Urban Design Compendium' describes developments that epitomises good urban design and states that:

"for places to be well-used and well-loved, they must be safe, comfortable, varied and attractive. They also need to be distinctive, and offer variety, choice and fun. Vibrant places offer opportunities for meeting people, playing in the street and watching the world go by."

The New Zealand Government has been actively seeking to promote good urban design. Two Government publications at the forefront such initiatives are:

- NZ Urban Design Protocol⁵, and
- National Guidelines for Crime Prevention through Environmental Design in New Zealand (CPTED)⁶.

⁶ Ministry for Justice, November 2005





⁽P.14) English Partnerships and the Housing Corporation English Partnerships 2000

⁵ Ministry for the Environment, March 2005

The Ministry of Transport, Land Transport NZ and Transit NZ are all signatories to the Urban Design protocol. The Transit Board has also approved an Urban Design Policy for the development and operation of the State highway Road network. The policy is consistent with Transit's commitment to the protocol and the broader concept of sustainable transportation. Transit NZ has also published an Urban Design Professional Services Guide (PSG/12) which explains when and how urban design assessments should be incorporated within Transit projects.

4.1.1 NZ Urban Design Protocol

The 'Seven C's of good urban design as presented in the NZ Urban Design Protocol are:

- **Context** urban design has a strong spatial dimension and optimises relationships between buildings, spaces, places, activities, and networks. It also recognises that towns and cities are part of a constantly evolving relationship between people, land, culture and the wider environment.
- Character quality urban design reflects and enhances the distinctive character and culture of our urban environment and recognises that character is dynamic and evolving, not static. Fosters strong urban identities.
- **Choice** fosters diversity and offers people choice in the urban form of our towns and cities, and choice in densities, building types, transport options and activities.
- **Connections** good connections enhance choice, support social cohesion, make places lively and safe, and facilitate contact among people. All networks connect and support health towns, and where physical layouts and activity patterns are easily understood, residents and visitors can navigate easily
- **Creativity** adds richness and diversity and turns a functional place into a memorable place.
- Custodianship reduces environmental impacts through environmentally sustainable and responsive design, it creates enjoyable safe public places and a quality environment that is cared for and a sense of ownership and responsibility in all guests and visitors.
- **Collaboration** good communication and coordinated action from all decision-makers and involving communities.

4.1.2 Guidelines for Crime Prevention through Environmental Design (COPTED)

COPTED, published by the Ministry for Justice is designed to improve personal security through better urban design. It highlights that design for personal security is particularly important in the development of public space and transport facilities. The importance is largely due their use for much of the day. Key considerations for creating personal security include:

- Surveillance people are present and can see;
- Access Management attract people to some places, restrict from others;
- **Territorial Reinforcement** clear boundaries give 'ownership';
- **Quality Environments** attract people and support surveillance.



With regard to passenger transport facilities, there is a particular need to encourage activity (i.e. promote surveillance), close to vulnerable locations. Management and maintenance of passenger transport infrastructure and interchanges is also important. A combination of maintenance and active surveillance will help to preserve amenity and reduce the threat of crime.

4.2 Kapiti Coast Urban Design Studies / Local Outcome Statements

SH1 passes through the three main urban areas in the Kapiti Coast. The road and the railway results in segregation of communities can present barriers to movement and can limit the active use or development of land on either side of the corridor. Limiting the use of land within urban areas can result in a reduction in 'activity' and vibrancy leading to degradation in the quality of the public realm.

KCDC have commissioned several studies which aim to provide a framework for developing the three main centres within the district. The previous studies have sought to develop agreed community outcomes and strategies for achieving them. The Council has also sought to develop town centre plans and engineering designs for road-rail alignments and car park layouts.

Each of these studies, strategies or solutions has identified a range of existing issues and opportunities, and in some case giving rise to additional issues and/or opportunities. The following sections set out the urban design issues for Otaki, Waikanae and Paraparaumu and identify the considerations for developing a SH1 strategy.

4.3 Otaki

In Otaki, much of the retail development is linear and follows the SH1 corridor so that large numbers of commercial properties abut or are in close proximity to the state highway. An older centre is located approximately 1km to the north-west of SH1 selling food and other goods. The older centre is equidistant from SH1 and Otaki Beach. Commercial / light industrial development (Winstone's plant) is located on either side of SH1 along the northern bank the Otaki River.

The majority of residential development is located to the west of SH1, but east of the old centre. There is also a smaller residential area, disconnected from the main urban area; east of SH1 and north of the racecourse refer to Figure 4.1.

4.3.1 Previous Studies

The Greater Otaki Project was instigated by KCDC and aimed to engage with the community in order to develop a Vision for Otaki. Residents and business people from the wider community participated in a series of workshops to explore various aspects of development. The opinions expressed in the workshops were used to develop the vision and detailed community outcomes, many of which are relevant to this project.



There is clear consensus within the community that upgrading the Otaki Railway Precinct, Main Street, the (riverside) industrial area and Otaki Beach are important for the area. There was also substantial support for initiatives that address the traffic and parking problems on SH1 through Otaki.

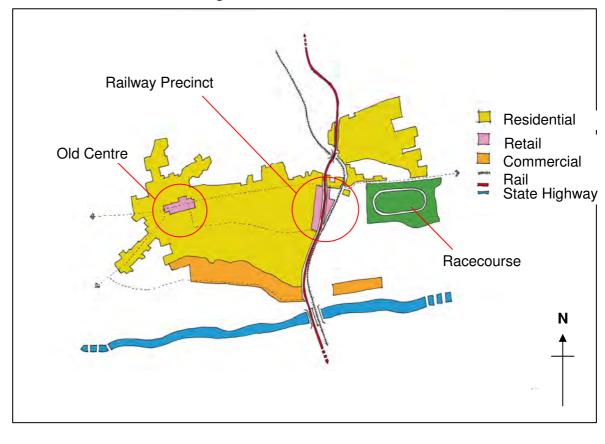


Figure 4.1 – Otaki Urban Form

The community vision recognises the dual centres of Otaki. It highlights the different functions each should serve both now and in the future, and emphasise that it would be counter-productive if they were to compete with each other.

Main Street (the old centre) where the Marae and key services are located will continue to provide local services and act as historic/ tourist attraction. In future the community would like to see local retail activity here grow.

It is envisaged that the "Railway Area" will serve a sub-regional function, providing specialist shops with adequate long-term parking facilities. Problems associated with the existing design of the area relate to traffic congestion (on SH1), parking and severance (see Figure 4.2). In the short term the community will promote commercial development that faces away from SH1 onto a re-developed car park in front of the railway station. Local business opportunities should be promoted at each centre. There is a view within the community that much of the business in the Railway precinct is reliant on passing trade.



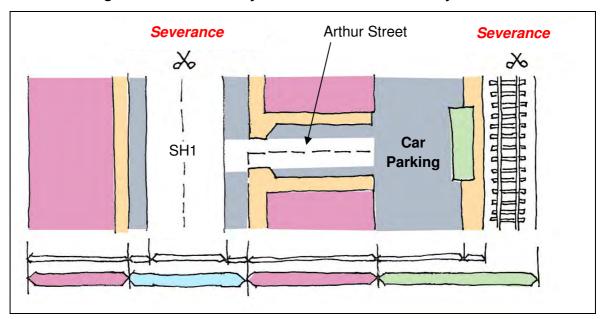


Figure 4.2 – Community Severance in Otaki Railway Precinct

4.3.2 Key Issues / Opportunities and Constraints

One of the main challenges for this study to consider and address are the conflicts between improving the efficiency of SH1 through or past Otaki and providing retail parking and appropriate pedestrian crossing facilities. The Otaki by-pass has been adopted by Transit NZ as the preferred alignment for an upgraded SH1. The alignment is based upon work undertaken by Maunsell's in the late 90's (see chapter 8). Although the alignment was consulted on at the time, it was not designated. There is a risk that the community will now, not favour a by-pass if they see that this will threaten the viability of businesses in the Railway Precinct.

Achieving community support for a by-pass will rely on persuading the stakeholders and the public that there will be adequate access to and from SH1 and that removal of high volume traffic flows from the heart of the Railway precinct will bring opportunities for further streetscape enhancements and the creation of a sense of place.

The development of a central 'node' of activity along Arthurs Street Figure 4.3 is likely to be further encouraged by development of improved car parking adjacent to the railway station. This and identifying further development opportunities in this area may focus activity towards this location to create a centre and potentially curb further ribbon development along the existing SH alignment. The benefits of this location are its proximity to the railway station. The station is a significant heritage site that is visually accessible landmark and which could be used as a theme for developing a sense of place.





Figure 4.3 – View Looking down Arthur Street towards SH1 from the Railway Station

In the short term, back-lot development will go some way to resolving the problems associated with parking in Otaki. It also has the potential to impact on the vibrancy of the area, potentially leading to a sterile feel.

A longer term solution would be to reduce the traffic flows on the existing SH1 alignment and reducing traffic speeds encouraging more pedestrian activity. If the strategic function of the road through the Railway precinct was removed, side friction from parking and pedestrian crossings would not be a problem. Slower traffic speeds may also present opportunities for footway widening and the provision outside seating areas adjacent to bakeries and coffee shops. This would improve the amenity of the street for retail consumers and would increase the attractiveness of Otaki as a destination for rest-breaks thereby encouraging passing trade from motorists using SH1.

4.4 Waikanae

Waikanae is severed by SH1 and the NIMT railway dividing the town between the east and west sides. Residential development is located on both sides of SH1 and the railway as can be seen in Figure 4.4. Retail activity is concentrated on the western side of the SH1 mostly in an inward facing pedestrian mall. There are also small retail units that open onto the western side of SH1 as well as a number of town centre car parks. The railway station is located to the east of the railway and SH1, opposite the town centre. Community facilities are located on either side of the SH1.

Figure 4.5 shows the cross section of SH1 through Waikanae and provides and indication of its severing effect. The railway runs parallel to the SH1 and is immediately outside the left-hand side of the photograph frame.



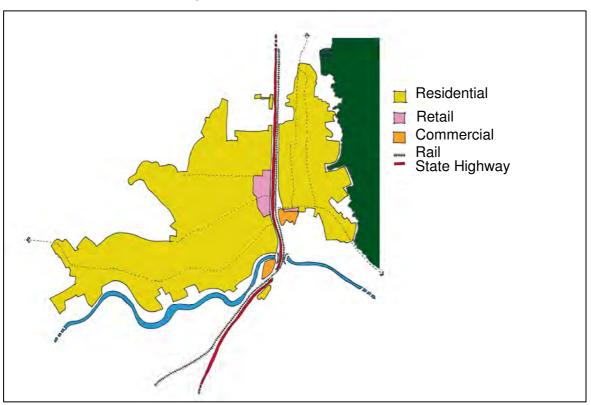


Figure 4.4 – Waikanae Urban Form

Figure 4.5 – Looking Southwest along SH1 towards the Elizabeth Street Intersection





Elizabeth Street provides access from SH1 to the eastern side of Waikanae, Te Moana and Ngaio Roads providing access to the west. Together these local roads act as a staggered cross road for vehicle trips from one side of Waikanae to the other. There are also a number of smaller intersections and accesses from the western side of SH1 to retail and residential areas. The provision of these accesses and connections to local roads perpetuates reliance on SH1 for access and movement within the town centre.

Light industrial development is located on the south-eastern edge of the urban area, south of Elizabeth Street. Also to the south, but on the western side of the SH1 are a gas station and south of the Waikanae River, a cement works.

4.4.1 Previous Studies

Work by Urbanismplus Ltd culminated in a report documenting the process and outcomes of an "inquiry by design" workshop held in June 2007⁷. The workshops aimed to identify the community aspirations for Waikanae and to develop potential transportation options for further development. The study identified the following issues to be addressed:

- severing effect of SH1 and the railway;
- the current poor level of service / amenity for pedestrians and cyclists using SH1;
- town centre connectivity and legibility for pedestrians and cyclists;
- poor access to the railways station from the town centre;
- lack of active edges within the town centre;
- dominance of car parking in the town centre core reducing vibrancy and activity; and
- homogenous development leading to a lack of vibrancy.

During the workshop stakeholders were guided through different options for developing the town centre around an upgraded SH1. Different scenarios including trenching of SH1 so that local connections pass over from east to west and local road underpasses were considered. The option preferred by those that attended the workshop included

- the closure of the connection between Elizabeth Street and SH1;
- an underpass from Te Moana Road to a new connection with Elizabeth Street close to its intersection with Seddon Street;
- a new vehicular underpass from Ngaio Road to Utauta Street
- service lane along the active retail frontages on the western side of SH1;
- a pedestrian bridge across SH1 from the mall to the bottom of Elizabeth Street; and
- a large new car park serving the railway station.

4.4.2 Key Issues / Opportunities and Constraints

Previous town centre studies have identified severance as one of the most significant issues created by the existing SH1 / Rail corridor. As traffic on SH1 has increased, the Waikanae town centre retail node has gradually begun to turn away from the road inwards

⁷ Waikanae Town Centre: Workshop Final Outcomes Document, Urbanismplus Ltd, Sept 2007



to Mahara Place (see Figure 4.6). Despite these changes, retail activity continues at the commercial properties fronting SH1. Any upgrades to SH1 along the existing corridor will need to consider how or whether to accommodate and maintain this active frontage and to address the severance that affects access to the railway station, deter people from travelling between east and west on foot or by bicycle, limit access to community facilities and affect cultural activities such as the tangi procession between the Marae and cemetery.



Figure 4.6 – Mahara Place (Waikanae)

The proposed interchange between SH1 and Te Moana Road⁸ is a full diamond grade separated junction with an additional link to a service lane along the western side of SH1. The interchange would help to reduce severance by making it easier for pedestrians and cyclists to cross the corridor. However it does not completely mitigate the impacts of upgrading SH1 and would negatively impact upon the amenity of the town centre.

The proposed intersection would require large amount of land in the centre of the town which could be used more effectively. This is particularly relevant given KCDC's plans to encourage more dense development within the town centre core making better use of the available land. The proposed intersection would also be visually intrusive and result in severe negative impacts for the urban form of Waikanae and the town's community.

⁸ proposed by Urbanismplus Ltd and designed by Dufill Watts Ltd





Future development in Waikanae is planned on the northern side of the town as an urban extension. There already a number of residential dwellings immediately adjacent to SH1. Although the majority of the proposed urban extension is located some way from the road, the development would increase the number of people potentially affected by noise, vibration and airborne pollutants. Options to relocate Waikanae Railway station to the northern fringe of the town were considered and discounted during the 2007 workshops. Given the desire to retain a town centre passenger transport interchange it will be important to develop the character of the railway station making it a recognisable and admired feature: giving it a 'presence' in the town.

4.5 Paraparaumu

Paraparaumu is the largest settlement in Kapiti Coast District. The town serves a subregional function, offering larger retail facilities and providing the administrative function for the District. A significant proportion of the district's employment opportunities are located in the town.

The SH1 / rail corridor passes immediately through the centre of the Paraparaumu urban area again resulting in community severance. Much of property along SH1 faces away from the road. Often this has taken the form of poorly maintained frontages, or visual barriers such as extensive areas of planting. This affects the amenity of the route making it unpleasant to walk or cycle along and discouraging roadside activity. The town centre has however retained some frontage around the Kapiti lights, and north to the urban fringe just south of Lindale. Figure 4.7 shows the land-use and urban form of Paraparaumu.

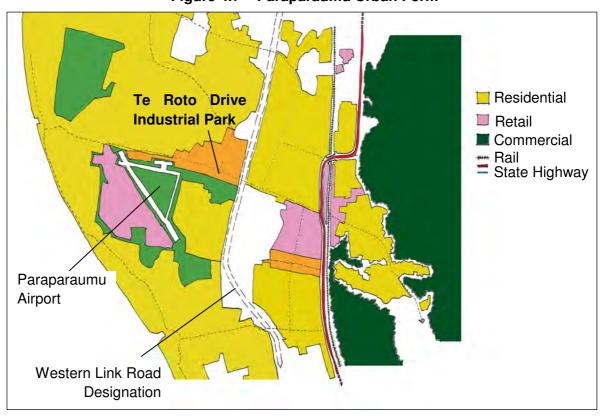


Figure 4.7 – Paraparaumu Urban Form



Large formalised car parking areas dominate the town centre on the western side of SH1 south of the railway station. The large format retail premises and the Coastlands shopping centre tend to face into their car parking areas with only very limited lengths of active frontage. This is shown in Figure 4.8 and Figure 4.9.

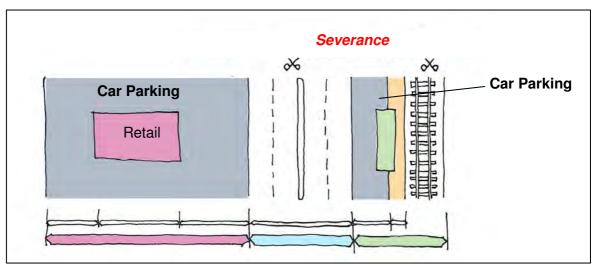
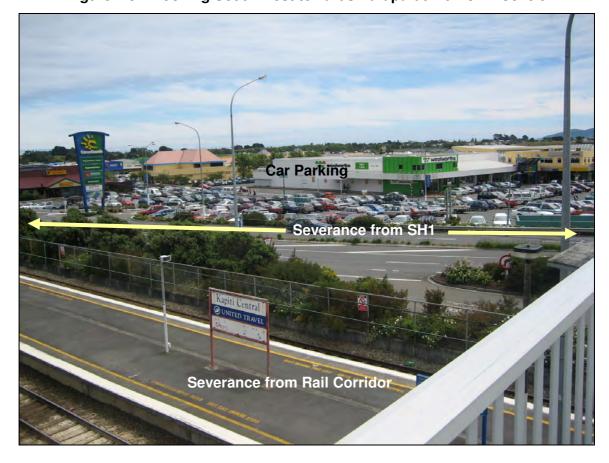


Figure 4.8 – Community Severance in Paraparaumu







The SH1 / Rail corridor is at its widest in Paraparaumu / Raumati resulting in a high degree of severance despite the pedestrian over bridge across the railway. The road and railway also present a physical and visual barrier which affects the way in which the community accesses services and facilities in the town. Significantly in the northern portion of the urban area where the carriageway is only one lane in each direction, active frontage and residential frontages have been retained. There is also much greater separation between road and rail at this point.

Like Waikanae, Paraparaumu railway station is severed from much of the urban area (both employment and residential) to the west. Pedestrians and cyclists access the station via a signalised crossing. While such a crossing does facilitate the desired east-west movement across the corridor, it does not address amenity issues. Increasing the ease in which the community may access the railway station should help to encourage more inter-urban travel by rail rather than by car particularly if the railway station becomes better integrated within the town centre hub.

4.5.1 Previous Studies

Paraparaumu residents have identified the SH corridor as the cause of significant severance between the eastern and western halves of the community. This is exacerbated by the NIMT Railway. KCDC's plans for developing the town centre⁹ would see medium density development with retail units at the ground floor level for most buildings and residential development above. The Council also plans to improve the street scene and identity of separate commercial and civic areas. This will involve landscaping to create new aquatic and recreation centres on Council owned land.

4.5.2 Key Issues / Opportunities and Constraints

Paraparaumu town centre is the primary retail, commercial and administrative centre for Kapiti Coast. As such it is used by residents from throughout the district and attracts visitors from outside the area. It is therefore important that the town centre functions well and presents a positive image to the community and to visitors.

The severance caused by SH1 and the railway is the primary issue that should be addressed to encourage active travel within the town. Addressing severance and increasing access to the railway station will also improve the attractiveness of inter-urban travel by rail.

A key action to increase human activity and hence improve the amenity within the town centre will be to address the large areas of inefficient land development currently used for car parking during the day. There is also an opportunity to make use of existing active edges at the Kapiti Lights development, building upon the activity surrounding commercial, retail and entertainment activity. This development is on the pedestrian desire line from the railway station to Paraparaumu retail quarter and could become a relatively attractive gateway to the town. Consideration could be given to providing a high quality public space / plaza opportunity in this location.

⁹ Paraparaumu Town Centre Local Outcomes Statement, Kapiti Coast District Council





4.6 Development Frameworks

4.6.1 Connectivity and modal choice

Connectivity and modal choice are strongly linked. It is not purely the presence of a link that will determine its success, but also its attractiveness. Attractiveness is linked to amenity and considerations such as activity, vibrancy, safety and convenience (direct and legible routes). This is particularly true for non-motorised activities such as walking, cycling and also passenger transport (bus).

Community workshops organised by KCDC from 2003 onwards highlighted community concerns about physical severance, such as the barrier presented by SH1 and its impact on the attractiveness (convenience, perceived safety etc) of active travel in urban areas. Previous studies investigating transportation solutions for the SH1 alignment have in many cases identified possible east-west links across SH1 for pedestrians, cyclists, and local traffic.

This study will look at opportunities for increasing the permeability of the SH1 / rail corridor and increasing the attractiveness of pedestrian and cyclist routes, alongside and across the SH1 corridor. In some cases this may be achieved by freeing up land that would otherwise be used for car parking, for development as passenger transport interchanges or for amenity improvements that will contribute towards increased pedestrian and cycle use.

4.6.2 Personal Safety

Any development framework for the three urban areas will need to address the issue of personal safety, and the implications that can arise as a result of design, location of development and activity. A development framework for the State Highway will incorporate the concepts presented in "Crime Prevention through Environmental Design" (CPTED).

A number of development plans and strategies have already been identified for the urban areas, and include features that would benefit from CPTED type assessments

