

03

URBAN DESIGN EVALUATION

As part of the process to develop the Naenae Spatial Plan, an urban design analysis was undertaken. In March 2020, independent on-site and desktop urban design analysis of the town centre was conducted and reported back to community workshops and online via pre-recorded presentations. This was necessary as this period coincided with covid-19 lockdown periods. The following urban design evaluation is a record of that analysis, findings, and recommendations for the Spatial Plan.

03.01 WHAT IS URBAN DESIGN?

Urban design is concerned with the quality of public spaces and places in urban areas. These are the streets, parks, plazas, and public facilities such as the public pool, railway station and bus stops. It is focused on the way buildings and landscapes relate to these public places, on the design and function of buildings.

Positive urban design is when buildings support the function and safety of public places and spaces. For example, buildings which have many windows and doors facing the street have a positive relationship to the street, while buildings with blank walls facing streets contribute very little to street life and in fact reduce the sense of safety in streets.

Many of these aspects of urban design were mapped and measured.

03.02 WHAT IS THE NAENAE TOWN CENTRE?

For the purposes of the urban design evaluation, the area of the town centre is shown in Figure 7. The area includes one section depth beyond Treadwell and Vogel Streets, the Naenae bowling club, and extends north-west to Oxford Terrace to incorporate the Naenae railway station. The line surrounding the area is intentionally dotted, indicating that there is a “zone of influence” around the town centre which is heavily residential. It contributes to its function and its network of streets provides access to the centre.

To read the Urban Design Background Analysis please go to:

<https://haveyoursay.huttcity.govt.nz/60543/widgets/314978/documents/187973/download>

To watch and hear a video outlining the Urban Design Background Analysis please go to:

<https://haveyoursay.huttcity.govt.nz/naenaespatialplan/widgets/314981/videos/23600>

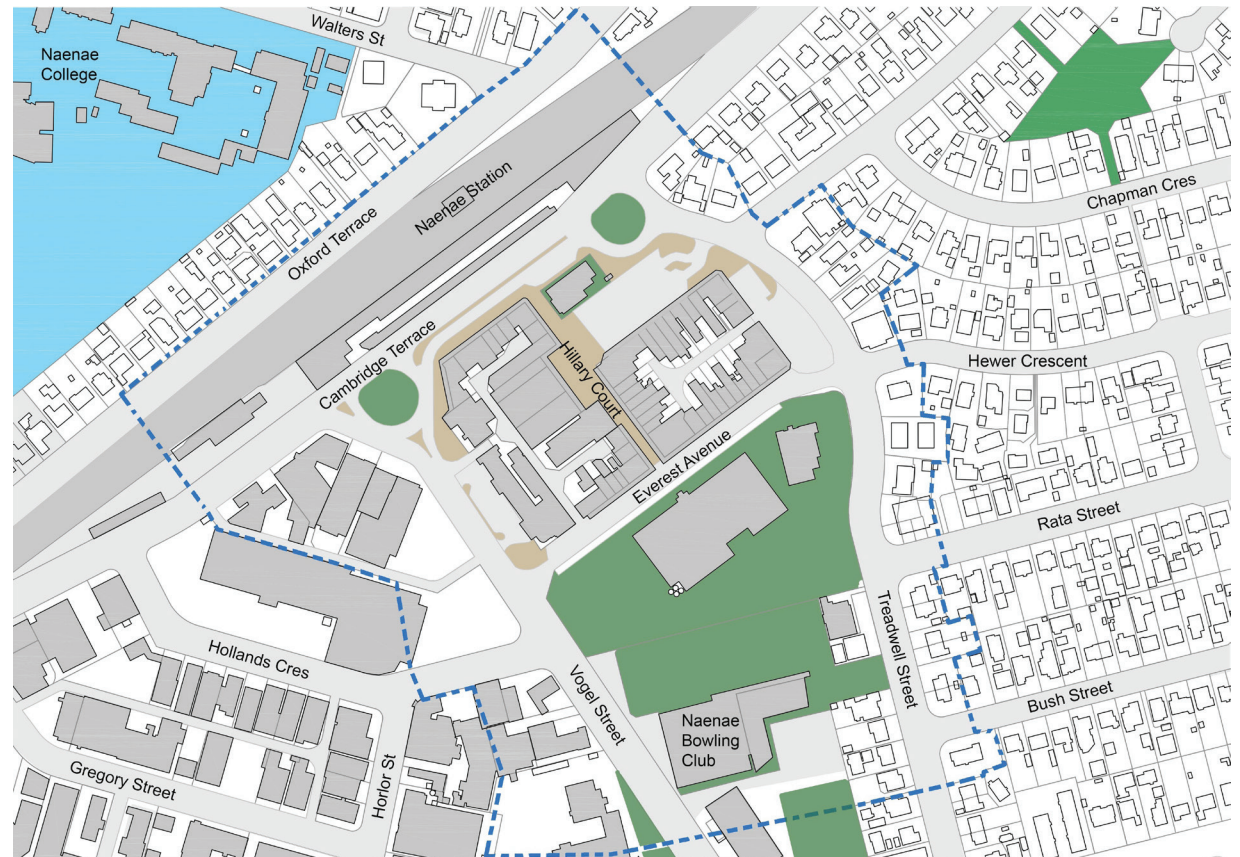


Figure 7 - The Naenae town centre represented by the dotted blue line

03.03 URBAN DESIGN EVALUATION CRITERIA

The following urban design criteria were measured to assess the performance of the Naenae town centre.

Pedestrian Access

Questions asked were: Can I get to the town centre? How easy is it to access the shops and services for pedestrians, cyclists, public transport users and motorists? Is walking to the town centre an easy, safe, and convenient option for those who do have access to a car? These questions were answered by measuring the pedestrian catchments and the routes to the town centre. If the town centre is accessible for pedestrians along a well-defined network of streets it follows that other modes are likely to get to the town centre in a safe and convenient manner.

“Backs and Fronts”

Do buildings contribute to the quality of the public spaces by facing them or do they present their backs to streets, plazas, parks, and public facilities?

Active Building Fronts

How buildings relate to public spaces has a direct effect on personal safety and people's perception of safety. Blank walls or rows of roller-shuttered facades reduces surveillance of public places and reduces a sense of safety in those places. Active building frontages are those where there are frequent doors and clear windows and where people can easily see from inside to the public spaces outside. How do the buildings in the Naenae town centre perform in terms of providing active frontages to public spaces?

Exposure to Streets and Parking

Shops perform better when there is good exposure to streets and passers-by, and where there is parking available nearby. How have buildings responded to exposure to passing pedestrian and



Images of Naenae today

vehicular traffic and how easy is it to find parking nearby in the Naenae town centre?

Comfort and Amenity

When you get to the Naenae town centre, are there places for people to sit without having to spend money? Is there weather protection and are there trees to provide shade in summer?

Projected Character

What are the messages being projected by the Naenae town centre to the rest of the city? Can these be characterised, compared, and evaluated?

Historical Perspectives

Can we learn anything from the past in relation to the Naenae town centre? Was there better urban structure? Can people still do the basics? Were buildings presented better? Have we lost anything through incremental changes made over the past decades?

Meeting Places

Where are the places where the community can meet to celebrate special occasions, interact with each other, and socialise? Are they performing at their optimum level or are improvements possible or obvious?



Images of Naenae today

03.04 PEDESTRIAN ACCESS

Walkable catchment measurements, sometimes referred to as “ped-sheds”, are maps showing the catchment or area within a five-minute walking distance from a centre, or a ten-minute walking distance from a station.

It is widely accepted that most people can walk approximately 400 metres in five minutes. It is also accepted that people are prepared to walk slightly further to get to public transport, and so a circle of 800m radius represents a theoretical ten-minute walking distance to the station and bus stop near the Naenae library. Figure 8 shows a map of Naenae with two circles drawn in red. These circles are centred on Hillary Court and represent a theoretical five and ten-minute walking distance, respectively. These give a sense of the *potential* catchment of people able to get to the town centre within five or ten minutes.

It should however be understood that these circles are theoretical because the public street network determines where we can *walk*.

If we follow the street network, then Figures 9. and 10. show the “ped-sheds” or areas which can get to and from the town centre in a convenient timeframe. To assess how well the catchment and street network performs, the actual walkable area is expressed as a percentage of the theoretical walkable area. The higher the percentage the better the walkability performance of the area. A good target for a walkable catchment is to have at least 60% of the theoretical area represented by the circles able to get to the centre or station within five or ten-minutes, respectively.

Figure 9. shows the measurement of the area able to walk to the Naenae town centre within five minutes. This is expressed as a percentage of the theoretical walkable catchment represented by the 400 metre radius circle.

The result shows that the street network is not operating at an optimal level as only 39% of the walkable catchment is able to get to the town centre within five-minutes. The network is particularly poor to the north-west of the centre and to some extent to the south and south-east of the centre. These are areas where improvements to the street network, and other means of access such as the tunnel under the railway line, can be examined for improvements and alternatives.

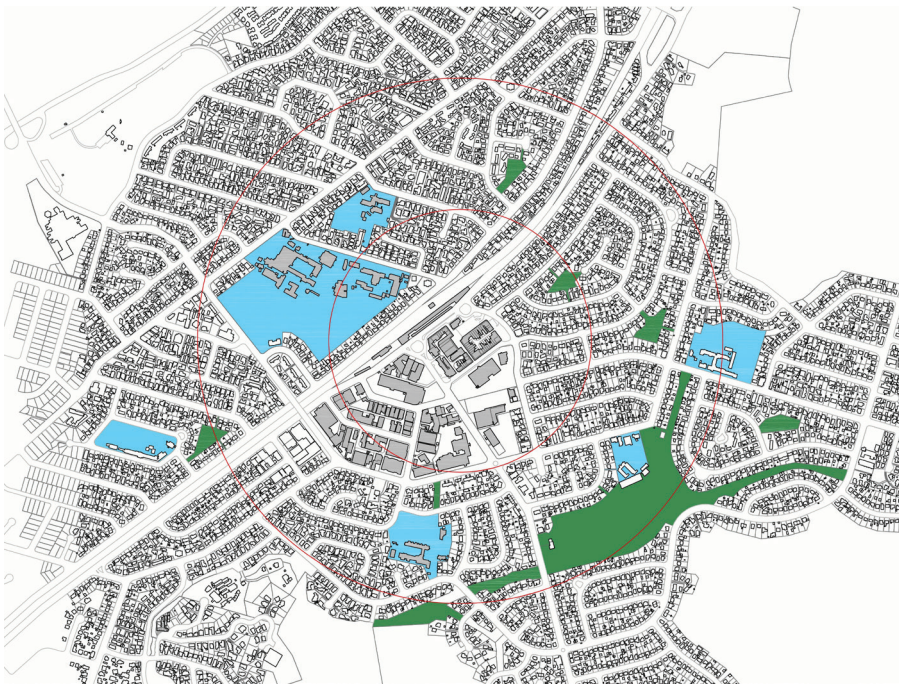


Figure 8. - Showing two circles of 400m and 800m radius. Represents five and ten-minutes walking distance from Hillary Court

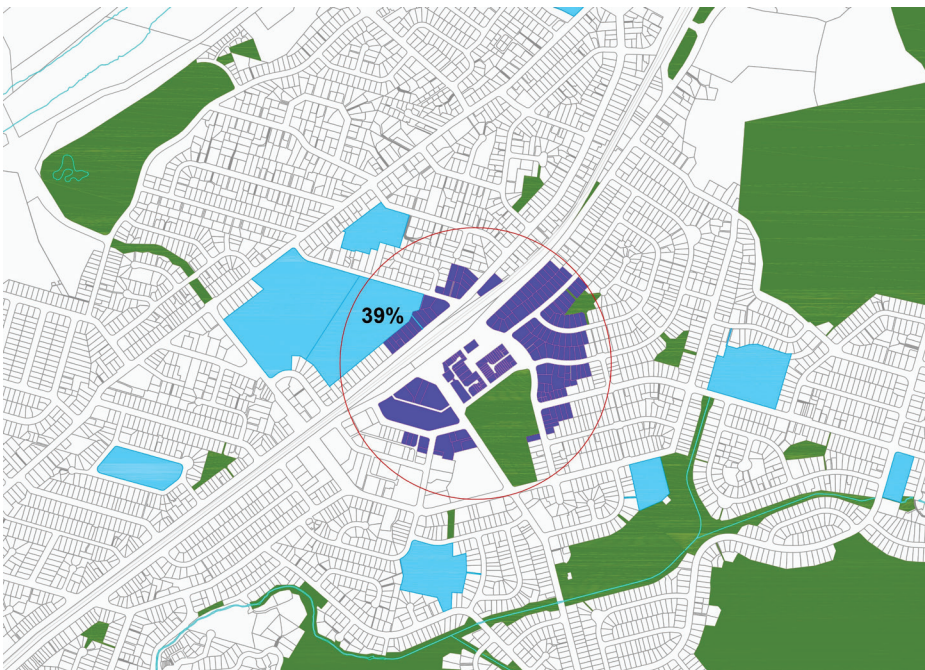
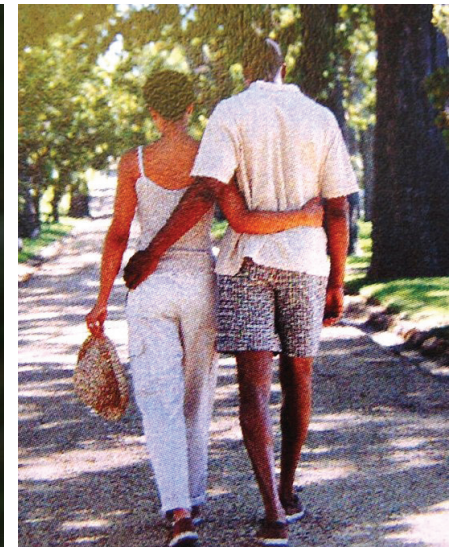
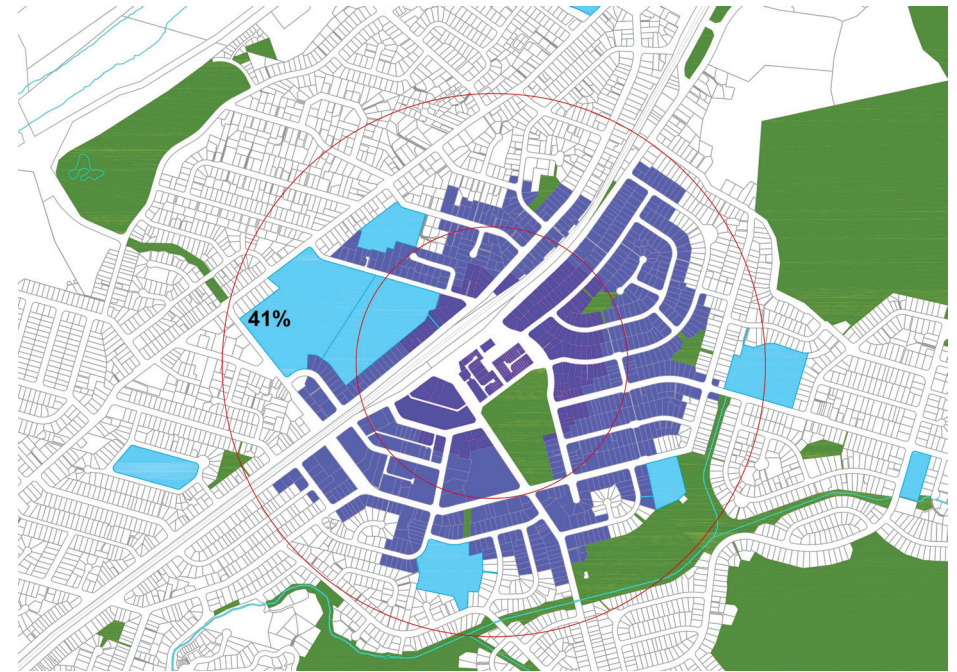


Figure 9. - “Ped-shed” diagram showing the area able to get to and from Hillary Court in five-minutes.

Using the same methodology, but using an 800m or ten-minute walking distance Figure 10. shows the measurement of the area able to walk to the Naenae railway station and the bus stops on Cambridge Terrace. (Note that the diagram includes the 400m catchment from Figure 9.)

The measured walkable catchment or “ped-shed” is only 41% of the potential catchment which indicates that the street network is underperforming. In other words only 41% of the area that should be able to walk to the station in ten-minutes, can actually do so because of the poorly connected street layout. Once again, the area to the north-west is poorly connected to public transport, as are areas to the south and south-east. These are areas which need better connection to public transport and the town centre.

Figure 10. - “Ped-shed” diagram showing the area able to get to and from Hillary Court in ten-minutes.



03.05 “BACKS AND FRONTS”

Buildings all have a clear “front” and a clear “back”. For the overall town centre to perform well and have safe and pleasant public spaces, it is essential that buildings face the public streets, parks, plazas and other public facilities such as the railway station.

Figure 12 shows the fronts of buildings in green and the backs in red. Generally, the retail area of the centre performs well with shops mainly facing out to Everest Avenue, Cambridge Terrace, Vogel Street, Treadwell Street and Hillary Court.

There are also locations where buildings are performing poorly. For example at the railway station where blank walls face both the station and Cambridge Terrace. The other area of concern is between the old swimming pool and the bowling club where there are poor relationships between buildings, public walkways, public places and parks.

Figure 11. shows two different relationships of buildings to the public realm. The first shows the interface of buildings with the Naenae railway station. This is clearly the “back” of the building as there are no doors nor windows, just a blank facade.

Figure 11. also shows a local building which faces the street and has many openings in the form of doors and windows.

These relationships to public space are critical to achieve CPTED (Crime Prevention Through Environmental Design) standards and requirements because safe public places occur when buildings provide a high level of surveillance and “eyes on the street” from buildings. This is either actual eyes, or implied by the way the building addresses the public space.



Figure 11. - Images showing the Back of buildings (left) and an obvious Front (right).with doors and windows.

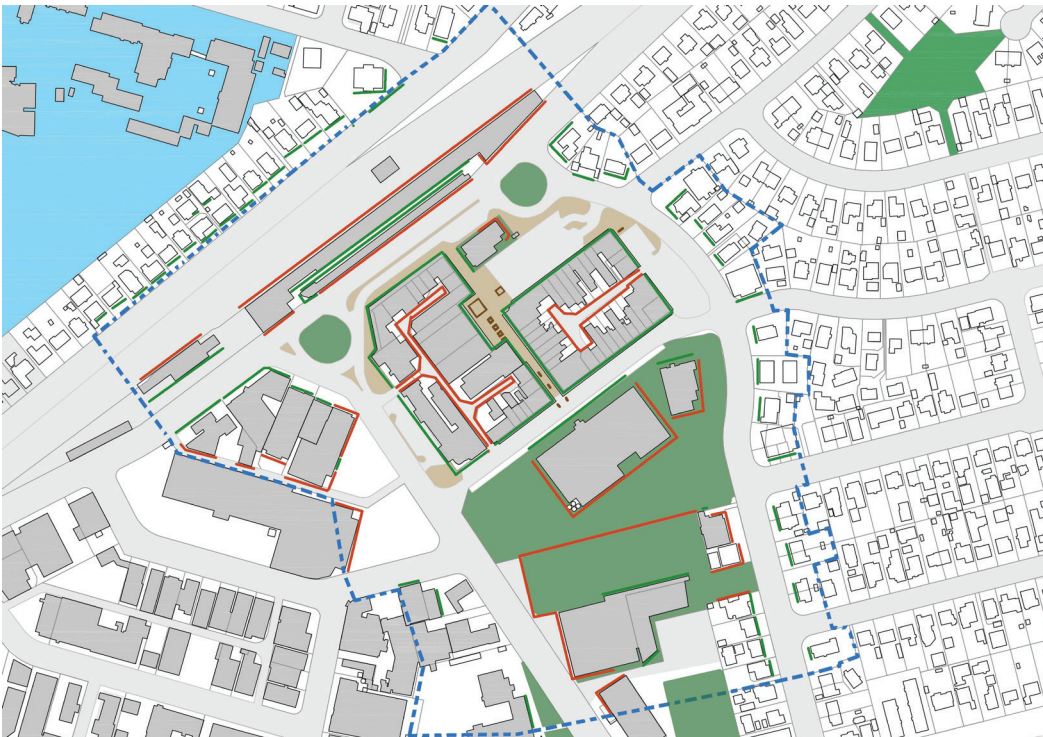


Figure 12. - Backs (red) and Fronts (green) in the Naenae town centre. Note how backs of buildings face the Naenae railway station, Cambridge Terrace, and the open spaces around the existing pool and community hall. The opaque fence along the bowling club is effectively a Back facing onto public open spaces.

03.06 ACTIVE BUILDING FRONTS

A survey of the frontages of buildings in the Naenae town centre was undertaken. “Active frontages” are an important factor in the performance of urban centres such as Naenae. It is desirable to have a high proportion of frontages which are said to be “active” so that there is a high level of surveillance of streets, plazas, parks and other public places.

What does “active frontage” mean? Buildings which have an “active frontage” are buildings adjacent to public space that have activities which are easily seen or activities which play a role in the public space at the ground floor level. For example, a shop with large windows and a door facing onto the street, or a café with windows and doors facing the street.

The frontage survey assessed the frontages of buildings and assigned a value to each. The values used were either “good”, “average” or “poor”. Examples of each are shown in Figure 13. Each value is recorded with a colour and the overall mapping of the frontage conditions is shown in Figure 14.

This shows the result of the frontage survey in the town centre. As can be seen there are far too many areas where the buildings rate a “poor” active frontage result. When measured this is 61% of the frontages in the town centre which are rated as “poor”. It is recorded in Kiddle, R. (2020) that the tunnel from the town centre to the station is “*the worst public space in Naenae*” and would be rated well beyond poor. It is perceived as dangerous according to Kiddle, especially for young people and the elderly.

There is a big opportunity to improve the social and economic performance of the town centre simply by improving the frontage of buildings and their relationship to streets and public places.

Again if CPTED standards are to be met a significant number of buildings need to improve the quality of their frontage and relationship to the Public Realm.



Figure 13. - Active Frontage Measures. Good (green), Average (Orange) and Poor (Red)

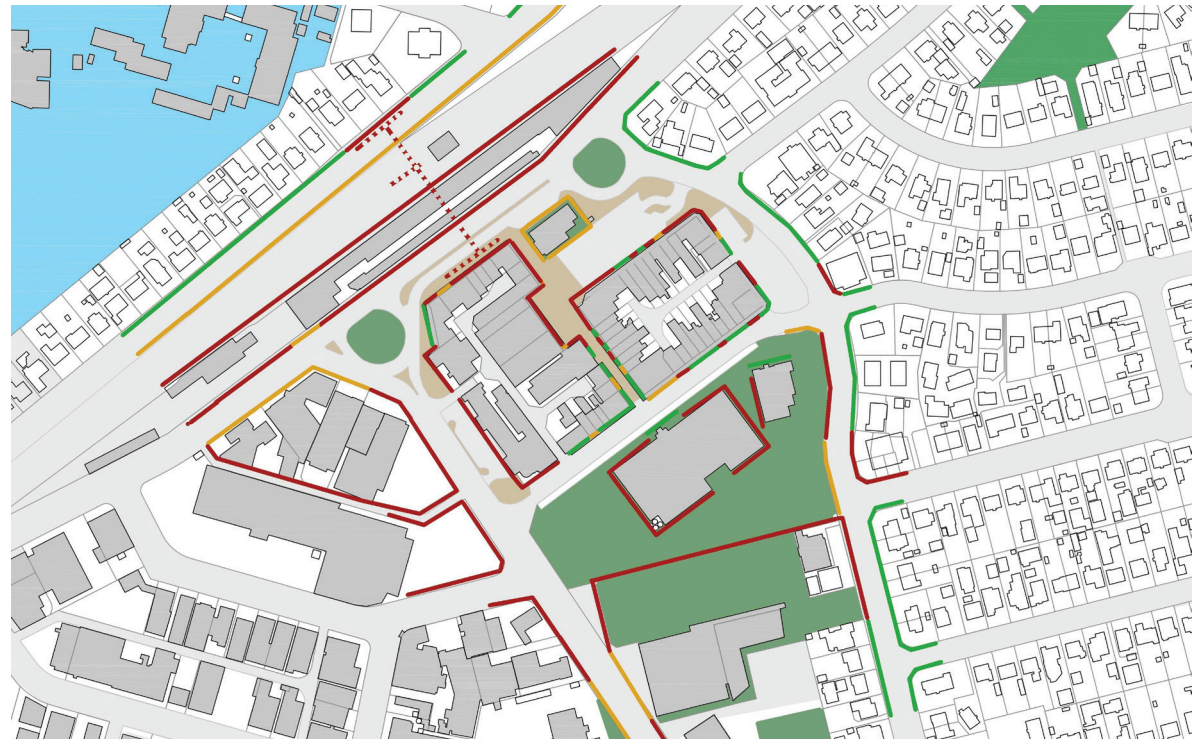


Figure 14. - Shows the results of the survey of frontage conditions in Naenae town centre. As can be seen there are many areas where the buildings rate a “poor” active frontage result. Unfortunately 61% of the frontages in the town centre are rated “poor”.

03.07 EXPOSURE TO STREETS AND PARKING

Streets, plazas and parks in Naenae town centre provide a variety of degrees of exposure to passers-by, or in retail terms, to “passing trade”, or “footfall”. A high level of exposure is desirable for shops to attract potential customers. This has a direct impact on their ongoing viability.

Figure 15 shows streets assigned values in terms of the level of exposure they provide as “good” (green), “average” (orange), and “poor” (red).

Many of the “streets” are back service lanes and not expected to provide a high level of exposure, and typically service the “backs” of buildings. These are shown in red, along with a disconnected section of Hillary Court.

Streets or pathways shown as “average” are places where local conditions reduce their exposure to passers-by. For example the ramps to the railway station tunnel reduce access and exposure of shops and businesses which face Cambridge Terrace. Similarly, places in Hillary Court have limited exposure owing to the fact that these are pedestrian-only spaces with limited connection to other places. The same issues apply to the pedestrian pathway between the swimming pool and the bowling club fence.

The evaluation includes exposure to parking lots and on-street parking, which provide ease of access for motorists arriving at the shops by car.

The Naenae Spatial Plan is intended to improve the exposure to streets and parking for retail, access and parking for community facilities such as the swimming pool, and increase exposure delivered through new infrastructure.

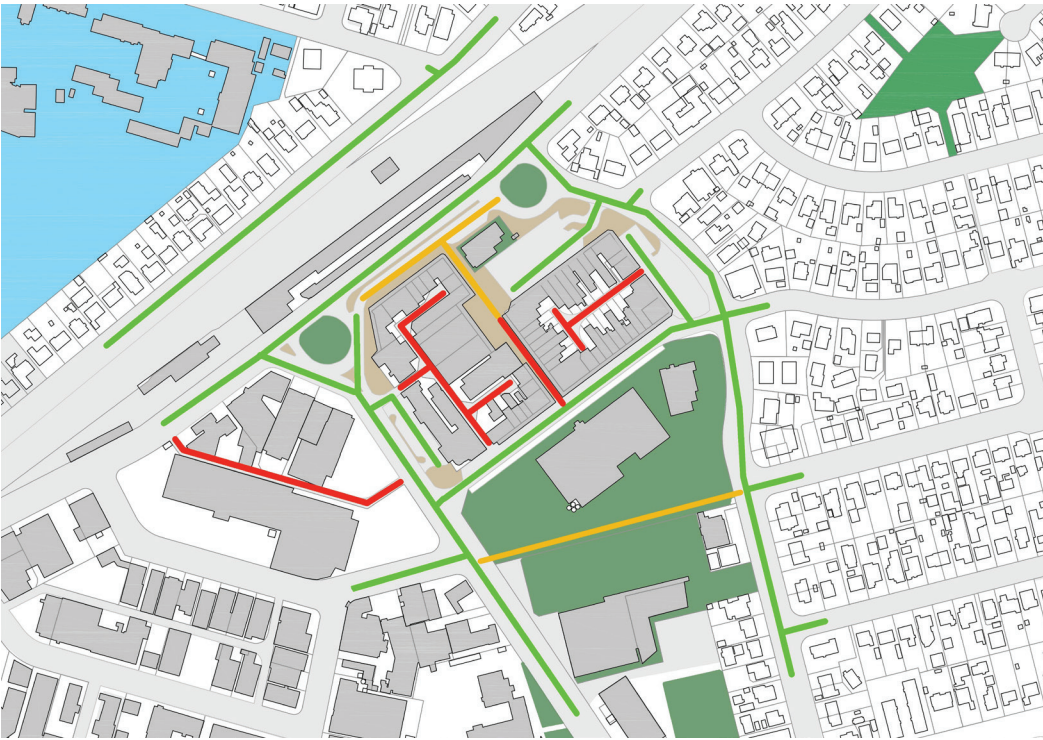


Figure 15. - The level of exposure to passers-by and access to parking offered by streets. Green indicates “good” exposure, orange, “average” exposure, and red indicates “poor” exposure to “passing trade”.

03.08 COMFORT AND AMENITY

If people are to linger in a town centre, then protection from the weather is important. Figure 16. shows the extent of weather protection shown in blue. Generally, the shopping areas are well catered for, with the exception of buildings facing Vogel Street, and newer additions to Hillary Court.

There is limited public seating in the town centre. This is seating where people are able to sit without spending money.

03.09 PROJECTED CHARACTER

The way the Naenae town centre is presented to the external world can have an impact on its social and economic performance.

In general terms the town centre presents the following:

- Poor and uncoordinated signs;
- Poor colour choice for buildings and signs;
- Pricing signs dominate buildings, and;
- Poor pedestrian environment owing to poor presentation and low activation of building frontages.

The centre presents an unappealing message which partly explains its poor performance.

Other places have a coordinated approach to colour, signs and present an open and optimistic message to the external world. See Figure 17.

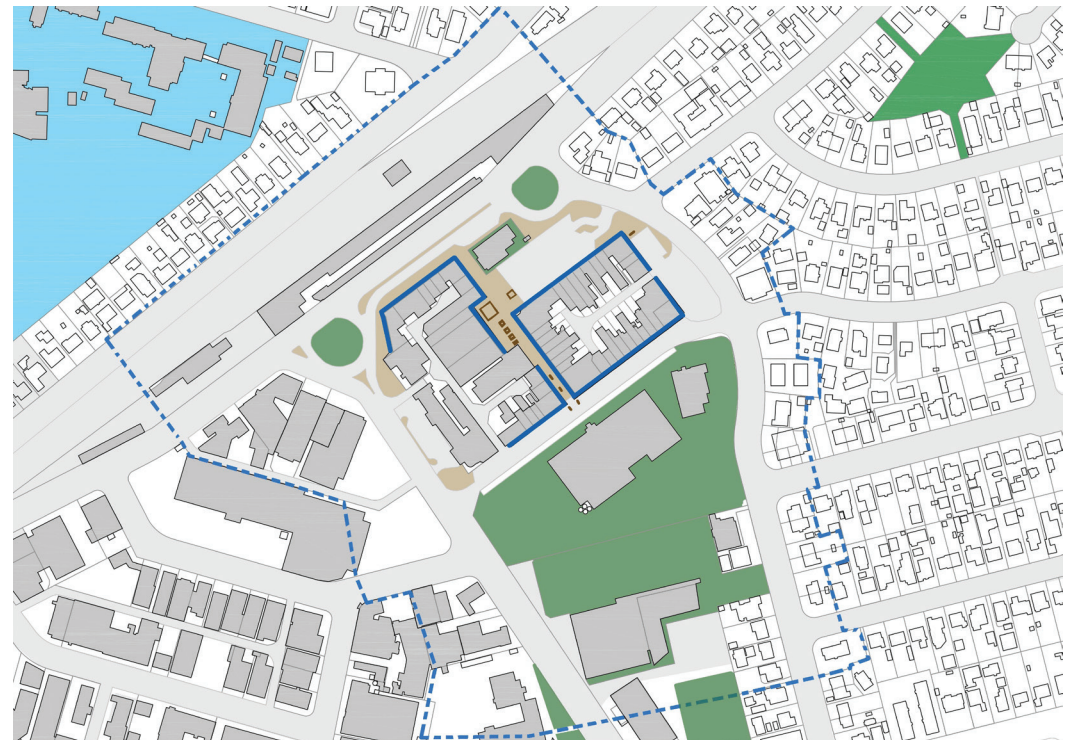


Figure 16. - Weather protection (blue) and public seating in the Naenae town centre.



Figure 17. - Poor presentation of buildings (left). New Regent Street in Christchurch (right) is a good example of how colour co-ordination and regulation of signs can assist.



Figure 18. - 1941 Aerial photograph showing the Holland's Crescent link to Treadwell Street before the construction of the Naenae town centre. The later plan of Naenae is overlaid. (Image Source: NZ Aerial mapping limited)



Figure 19. - 1958 Aerial photograph taken during the construction of the Naenae pool and the town centre. The Rata Street to Holland's Crescent link has recently been removed.



Figure 20. - Photo taken in March 2020 showing the alignment of the link road from Vogel Street to Treadwell Street. The street trees are original.

03.10 HISTORICAL PERSPECTIVE

When the Naenae town centre was constructed several key links were removed. For example, Holland's Crescent was once linked to Treadwell Street, along the alignment of Rata Street.

Figure 18. shows an aerial photo from the 1940's currently on display at the Naenae library. In this photograph the street connection from Holland's Crescent to Treadwell Street is clearly visible. Figure 19. is an aerial photograph from 1958 which the swimming pool under construction and the street in the process of being removed. Figure 20. shows that the alignment of this street is still visible. The view is from Vogel Street looking east along the alignment of the former street. The street trees which are apparent in Figure 19. are still clearly visible in Figure 20. a photograph taken in March 2020.

03.11 MEETING PLACES

The *Voice of the Community* publication records a strong community desire to have places where the public can gather for special occasions. Figure 21. shows the places where the community could gather, paved areas shown brown and grassed areas shown green. Figure 22. shows an image of Hillary Court, a prime meeting space.

The urban design analysis defined the area of the Naenae town centre and indicated it by the blue dotted line on Figure 21. This is an area of approximately 14.7 Hectares, or 147,000 square metres.

Of this, 8% or 1.2 Hectares is useable public space available for special gatherings, namely the paved areas in brown, and grassed areas in green. This is an appropriate area set aside in a town centre for public gathering, but what is the quality of the spaces?

The quality of public spaces is heavily dependent on the quality of development and buildings at their "edges", in other words the relationship between buildings and those public spaces. Unfortunately, 77% of the buildings which face onto the spaces in Naenae have blank facades and inactive frontages. There is an

urgent need to enhance the quality of these spaces beyond just brick paving by improving the relationship between the buildings which frame the spaces, and the gathering spaces themselves. Active frontages to these spaces are the key to this enhancement.

03.12 CONCLUSION

The urban design evaluation showed that the Naenae town centre was underperforming and failing to meet urban design criteria and the aspirations of the community.

From the analysis it is clear that a number of improvements could be made to meet community expectations. This forms the basis of the Naenae Spatial Plan. Key issues to be addressed are:

- improved access
- a wider range of retail services
- improved safety
- better parking
- activated frontages to buildings
- better gathering places and open spaces with active frontages to these
- A new pool which catalyses growth and vitality in the town centre

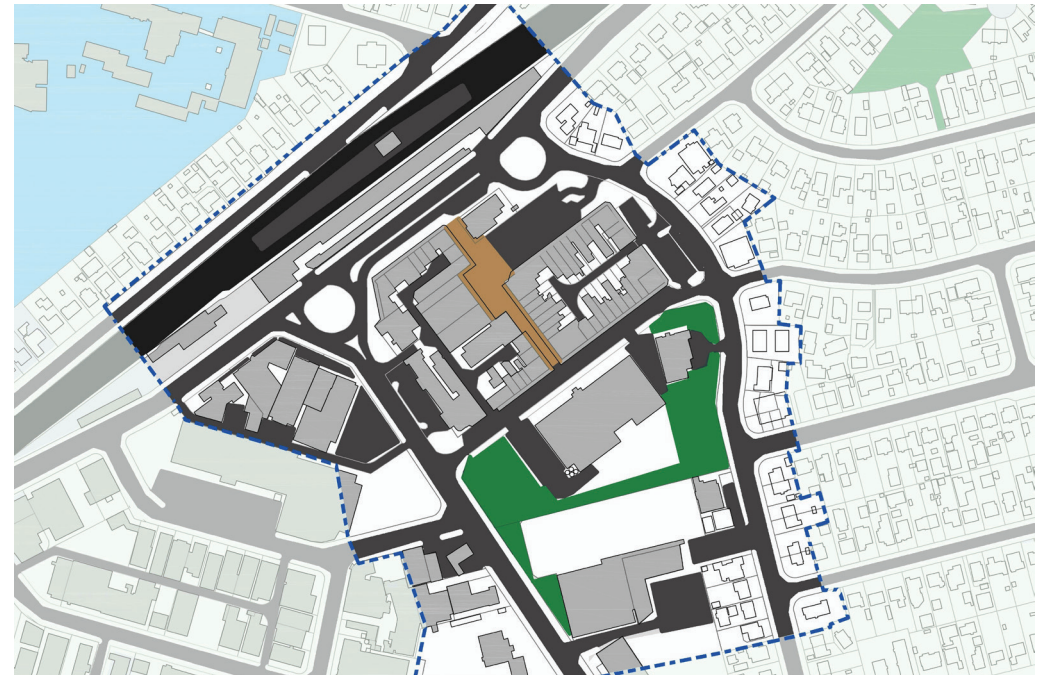


Figure 21. - Open space in Naenae town centre is dominated by roads and parking lots (black), however there are public gathering space. These are paved pedestrian spaces such as Hillary Court (brown) and grassed areas around the existing pool (green).



Figure 22. - Hillary Court is a key gathering place in Naenae town centre.