Health Impact Assessment as an Urban Planning Tool – Flaxmere Case Study

The Health Impact Assessment undertaken by the Hawke’s Bay District Health Board in cooperation with the Hastings District Council, on an urban design framework for the Flaxmere town centre has provided a valuable input to the planning process seeking to implement this Framework.

An Urban Design Framework on the Flaxmere Town Centre was completed in 2007 by Chow Hill in association with Patrick Partners, Flow Transportation and the Hastings District Council. The aim of this exercise being to help implement the objectives of the 2003 Flaxmere Community Plan (generally seeking to improve the Flaxmere urban environment for its residents) by the use of best practice urban design and vacant Council land holdings in the town centre. Also in 2007, a presentation was given to staff at the Hastings District Council by the Hawke’s Bay District Health Board (DHB) regarding the availability of a tool to assess the impacts of proposals on a populations health, known as Health Impact Assessment (HIA). This ultimately resulted in an agreement with the DHB to undertake an HIA of the Flaxmere Urban Design Framework. As this paper will explore, the result has been mutually beneficial to the two organisations and to the ongoing implementation of the Flaxmere Urban Design Framework project.

The following paper gives a brief background about the settlement of Flaxmere; a summary of the Urban Design Framework completed for its town centre; a summary of what HIA is, the HIA process undertaken and the resulting recommendations; a summary of the progress of implementing the Urban Design Framework to date; and conclusions on the benefits or otherwise of using the HIA in this context.

Flaxmere Background

In the 1950’s and 1960’s the City of Hastings was seeking to deal with population growth and the need to expand onto land within the jurisdiction of the then Hawke’s Bay County Council. The County sought to protect the fertile Heretaunga Plains land immediately adjoining the existing city and directed new development to an area of the Plains west of Hastings City onto ‘poor quality’ gravelly soil of little value for livestock farming, cropping or orcharding. Hindsight has shown that this land is in fact immediately adjoining and sharing similar attributes to the famed Gimblet Gravels red wine viticultural area.

In 1965 the then Hastings City Council purchased and subdivided over 160ha that would become the new ‘elite suburb’ of Flaxmere. In 1967, Council and the master builders of the area launched the “parade of homes” boasting “a new concept in modern living becomes a reality.” New homes embodied the latest ideas of the ‘sliding age’, open plan living, breakfast bars and aluminium ranch sliding doors. Sections sold quickly and by 1969, over 1200 had been sold.1

During the 1970’s the Flaxmere shopping centre was developed. As was the trend at the time Flaxmere was developed on the basis of curving streets and cul de sacs. This extended to the town centre which was deliberately planned off the principle collector road into the suburb and was defined by a ring road (see Figure 1 below).

Figure 1: Flaxmere Street Map

---

1 Flaxmere Town Centre Urban Design Framework, Chow Hill, October 2007
The circular area of land within the ring road was intended to be developed in segments. The shopping centre was developed on such a segment of land with the buildings framing three sides of a central car park. The shopping centre was sold into private ownership with various Council facilities being developed on the vacant land behind it. There are also several other commercial developments within the central ring road separate from the shopping centre.

By the 1970’s inflation and property speculation started to derail the concept of quality affordable housing. During the 1980’s the development of Flaxmere took a turn for the worse with a combination of mass produced low quality housing and infill subdivision. Economic pressures and government reforms amplified social issues and negative community perceptions. Like many Rural communities, Hastings suffered unemployment and recession following the 1987 stock market crash, magnified by the closure of two significant freezing works in the late 80’s and early 90’s, none of which helped the plight of the Flaxmere community.\(^2\)

From 2005 - 2007 Flaxmere began to benefit from the housing boom with first home buyers seeking to take advantage of comparatively lower prices and the development of several new subdivisions within Flaxmere. New development has however stalled again with the current recession. Throughout the hard times however, Flaxmere has developed and retained a strong sense of community, with strong resident leadership of community groups and organisations.

The Flaxmere urban area had a usually resident population of 9,804 at the 2006 census. Flaxmere has some unique demographics that provide an important context to the Flaxmere Town Centre Urban Design Framework and the associated Health Impact Assessment. In summary the Flaxmere population: is young (32.8% under 15 years old compared to a New Zealand average of 21.5% of the population in this age bracket); has a high proportion of people of Maori (55%) and Pacific (20%) ethnic origin, (compared to national averages of 15% and 7% respectively); and has a low annual household income ($48,798 compared to the national average of $64,403 based on 2008 figures).

**Flaxmere Town Centre Urban Design Framework**

A Flaxmere Community Plan was developed by Hastings District Council in association with the community in 2003 and set the following vision:

“She 2015 Flaxmere will be a beautiful, vibrant place of opportunity with people working together”.

This vision was supported by a series of actions which form the Flaxmere Community Plan and require the input of a wide range of people and groups. During the development of the plan, three main goals were identified as priorities:

- To create and maintain a safe environment;
- To improve economic opportunities and raise the domestic income in the Flaxmere area;
- To promote and enhance community identity, pride and a sense of belonging.

The current design of the Flaxmere town centre was not seen as conducive to the realisation of the Plan’s three priority goals. The orientation of the buildings and lack of connectivity creates a cul-de-sac effect. The area behind the shopping centre, is barren and very dark at night. It appears to be a congregation point for young people and a number of anti-social activities occur there. The shopping centre and nearby public toilet block are regularly vandalised and the whole area is in need of beautification. There is a lack of quality retail within the shopping precinct and the supermarket is far smaller than what is required to serve a community the size of Flaxmere. With these issues in mind, Council agreed to develop an urban design framework for that area to help make the Community Plan priorities a reality.

The Chow Hill lead team engaged to produce the Framework reviewed background documents and consulted with residents, retailers, businesses, property owners, developers, community groups,

\(^2\) Flaxmere Town Centre Urban Design Framework, Chow Hill, October 2007
government departments and Council staff. Most of this consultation was carried out in a three day inquiry by design workshop, which included two public sessions, held in August 2007. This workshop provided consistent feedback that people wanted a town centre with a sense of place and ‘community heart’; good connections and improved access; where they and people of all ages felt safe; and where they could fulfill their day to day shopping needs. It also confirmed that people still supported the priority objectives of the Community Plan.

The resulting document was the Flaxmere Town Centre Urban Design Framework, Chow Hill, October 2007. It starts with an assessment of the wider context of Flaxmere and concludes with the recommendation of four alternative concept plans for the redevelopment of the Flaxmere town centre. An example of one of the plans is shown as Figure 2 below:

Figure 2 Flaxmere Town Centre Urban Design Framework Concept Plan Example

![Flaxmere Town Centre Concept Plan Example](image)

All of the four plans share the following principles: a new full service supermarket (large red rectangle); various new streets to ensure the existing shopping centre (semi circle of red buildings around label 1) is connected to the new supermarket, library/community centre (labeled 10) and swimming complex (labeled 2), and better connected to existing streets; a new public space adjacent to the library and community centre including local art or some playscape which links the old shopping centre with the new supermarket and is identifiable as the heart or centre of Flaxmere; and medium density residential development (shown in yellow labeled 12 and potentially some of the brown).

The investigations associated with the Framework identified that the disconnected cul de sac nature of the Flaxmere Street design generally and the standalone layout of the shopping centre and other town centre businesses and facilities is a major contributing factor to the poor performance of the current shopping centre. Another factor is the lack of a retail anchor in the shopping centre. Many Flaxmere residents currently tend to utilise the full service competitively priced supermarkets in Hastings for their shopping needs. It was considered that the increased activity generated by a full service supermarket in a modified town centre with a connected street layout will also provide the opportunity to create a better sense of place and recognisable heart to Flaxmere within the proposed public spaces of the new town centre.

Health Impact Assessment (HIA) Rationale

A Health Impact Assessment (HIA) is a systematic way of identifying the potential impacts on the health and wellbeing of a population of any proposed policy, strategy, plan or project, prior to its implementation. The systematic use of a number of procedures, methods and tools can enable assumptions to be checked against the potential and sometimes unintended effects on the health of a
population, the aim being to ensure that no population groups will be disproportionately affected. Put simply an HIA is based on the principle of identifying wider environmental influences on the health of communities and to ensure the best health outcomes can be achieved by the proposal under consideration. This is a proactive approach to healthcare.

The Public Health Advisory Committee produced a report titled “Healthy Places. Healthy Lives: Urban Environments and Wellbeing”. This report was published by the Ministry of Health in April 2010. The following is extracted from the executive summary of this report and highlights the link between town planning / urban design and health outcomes:

“Opportunities for good health are reduced when urban areas are not conducive to physical activity for either recreation of ‘active transport’, and when urban areas have fewer opportunities for social interaction, more motor vehicle emissions, greater risk of road traffic injuries, and differential access to healthy food. The populations whose health is most affected by urban environments are those that are most constrained in getting around urban areas as a result of financial limitations, limited mobility or dependency on others. These populations include children, older people, people living with disabilities and people living in more socioeconomically deprived neighbourhoods.

To respond to some current health issues, such as chronic conditions, which place a major and increasing burden on the health system, we must plan and design our cities to promote health. The permanence and costs of infrastructure render it necessary to create an urban form that will promote health, while having regard to the environment, economy and society and being adaptable to population changes.

To achieve healthy urban form, health perspectives need to be firmly considered alongside economic, environmental and social concerns in urban planning decisions …In spite of connections between urban form and health, health outcomes do not feature as a major consideration in most urban planning decisions in New Zealand.”

The health sector spends the majority of its budget on treating people when they are unwell, with only a small amount (2%) being directed to services and programmes that prevent illness. Other public sector areas also have the ability to affect, protect, and promote population health. Their actions can have a significant impact on environmental and social health.

Given the above background of Flaxmere and in particular the population demographics and existing urban form, it would seem very relevant and logical to consider how any proposed changes to the urban form and function of the town centre may impact on the health of the Flaxmere community.

Health Impact Assessment (HIA) Methodology

The HIA was carried out by the Hawke’s Bay District Health Board (DHB) during 2008 and 2009 and this involved a literature review (of relevant social science literature) and a number of targeted consultation workshops (community representatives, relevant organizations target groups and the Hastings District Council). The HIA explored both positive and negative pathways (flow on effects) that could potentially result from the implementation of the Flaxmere Town Centre Urban Design Framework. These pathways were informed by the literature review and feedback from the consultation meetings.

In this instance, the HIA compared the status quo (the existing town centre) with the proposed concept of a town centre urban design framework for Flaxmere. The HIA focused on the wider

---

3 & 4 Health Impact Assessment, Flaxmere Town Centre Urban Design Framework Proposal, Hawke’s Bay District Health Board (August 2009)
concept of the town centre urban design framework. It did not address the merits or otherwise of the four individual design options.

The four key stages in an HIA process are: screening; scoping; appraisal; and evaluation / reporting.

**Screening:** assesses a proposal’s suitability for HIA. Clearly the Flaxmere Town Centre Urban Design Framework was considered to be suitable.

**Scoping:** highlights the key issues that need to be considered and sets out what will be done in the HIA. In this case a scoping meeting was facilitated by Quigley & Watts consultants and held with stakeholders and it was decided to focus on the framework’s potential effect on transport, economic factors, safety and neighborhood housing on the population groups of Pacific families, Māori youth and the elderly. These factors and population groups were selected, as they were considered likely to be most affected by the proposal. The scoping meeting also decided upon an Aim and Objectives for the HIA. The Aim was as follows:

*To improve the health and wellbeing of Flaxmere residents by assessing the positive and negative health and wellbeing impacts of the Flaxmere Urban Design Framework and make recommendations about how to enhance the positive and mitigate the negative impacts.*

**Appraisal:** involves the assessment of how the proposal is likely to affect well being and population health within the scope defined by the previous stage. The appraisal includes the literature review and stakeholder workshops and any other necessary data gathering, which in this case included community profile information.

Given the population profile of Flaxmere and the target population groups, it is worthwhile noting that both the scoping meeting and several appraisal workshops were undertaken in Te Aranga Marae (the Flaxmere Urban Marae) which is run as a Marae for all peoples and cultures. Those involved in preparing the HIA believe that this venue and the input of Marae host, Flaxmere community leader and Hastings District Councillor Henare O’Keefe was beneficial in facilitating constructive and positive input from participants. With regard to the appraisal workshops venues were selected that the target population group is local to, familiar with and comfortable with.

An evaluation of the HIA process has been undertaken by the HIA Research Unit at the University of Otago. The purpose of the evaluation is to review the process to provide useful information for future HIAs and to assess the successfulness of the outcome of the HIA.

**Health Impact Assessment (HIA) Recommendations**

The recommendations of the HIA were presented to and adopted by the Hastings District Council on 19 November 2009. The recommendations essentially supported the implementation of the Urban Design Framework, with some specific issues to be addressed and investigated in the implementation.

There were a total of nine recommendations in the HIA report. The following table summarises these recommendations:

<table>
<thead>
<tr>
<th>No.</th>
<th>Key Word Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Proceed with implementing the Town Centre Plans</td>
</tr>
<tr>
<td>2.</td>
<td>Ensure sense of place and connectedness issues are addressed</td>
</tr>
</tbody>
</table>

---

5 Health Impact Assessment, Flaxmere Town Centre Urban Design Framework Proposal, Hawke’s Bay District Health Board (August 2009)

3. Incorporate the concept of the Te Aranga Maori Cultural Landscape Design Strategy and other local initiatives

4. Ensure quality building design of new buildings, insuring noise protection in mixed use housing

5. Incorporate the principles of CPTED

6. Explore the economic and employment opportunities for Flaxmere

7. Work with community regarding control on additional fast food and alcohol outlets

8. Investigate increased public transport and active movement options

9. Undertake benchmarking exercise of current health and wellbeing indicators and monitor after implementation at regular intervals

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Incorporate the concept of the Te Aranga Maori Cultural Landscape Design Strategy and other local initiatives</td>
</tr>
<tr>
<td>4.</td>
<td>Ensure quality building design of new buildings, insuring noise protection in mixed use housing</td>
</tr>
<tr>
<td>5.</td>
<td>Incorporate the principles of CPTED</td>
</tr>
<tr>
<td>6.</td>
<td>Explore the economic and employment opportunities for Flaxmere</td>
</tr>
<tr>
<td>7.</td>
<td>Work with community regarding control on additional fast food and alcohol outlets</td>
</tr>
<tr>
<td>8.</td>
<td>Investigate increased public transport and active movement options</td>
</tr>
<tr>
<td>9.</td>
<td>Undertake benchmarking exercise of current health and wellbeing indicators and monitor after implementation at regular intervals</td>
</tr>
</tbody>
</table>

It is relevant to note that the principles of an HIA correlate directly with that of best practice planning and urban design, in that successful plans are based on a sound understanding of the wider context of a place, including its people and of the effects (direct and indirect) of implementing the plans. The endorsement of the Framework by the HIA (recommendation 1) is therefore significant and is based on the conclusion that the implementation of the plans for the town centre will result in long term health benefits for the community of Flaxmere. This would of course be predicated on the basis that the other recommendations are adhered to.

Although many of the recommendations would need to be actioned as part of the implementation of the Flaxmere Town Centre Plans, they are generally consistent with the Framework design and are intended to be part of the implementation plan. Nevertheless in making these explicit recommendations, the HIA provides a useful checklist and reference point to ensure that these actions are taken in the implementation. As such these recommendations will be referred back to in the development of the Plan Change and subsequent stages of the project.

**Implementation of Urban Design Framework**

Land and business owner consultation was held during 2009 (in parallel with the HIA process). This consultation was facilitated by Mike Cullen of Patrick Partners and sought to explain the benefits of the framework to the land and business owners as well as potential implementation options. On the basis of this consultation, Kobus Mentz of Urbanism+ was commissioned to produce an amended urban design plan (based on the principles of the Framework) for the Flaxmere Town Centre and to help try and accommodate the wishes of the shopping centre owners who did not want their land to be involved.

Hastings District Properties Ltd was formed in May 2010 by Council and was requested to validate the town centre concept plan (prepared by Urbanism+) in terms of commercial viability and to prepare a business case to implement the concept plan. From this review the concept plan was further amended with Figure 3 below being finalised by Hastings District Properties in December 2010 and adopted by Council in February 2011. A District Plan Change is currently being prepared to implement the Flaxmere Town Centre Urban Design Framework on the basis of the plan below (Figure 3) and the recommendations of the HIA. The HIA is a significant reference document with regard to Council’s Section 32 RMA evaluation.
On this plan the existing shopping centre (shown in purple) is proposed to be bisected by an extension of Henderson Road to connect the existing shops to the proposed new supermarket (dark pink). Other features of this plan include a new north south road going between the proposed new supermarket and the existing centre and utilising the existing Waterworld, Flaxmere Community Centre and Library driveway. The existing library/community centre and swimming pool are shown in blue. The purple colour represents existing retail and commercial buildings, with the large brown areas representing residential development in future stages. The exact shape and form of the residential development is yet to be determined and will require further investigations. It would be expected that this plan would continue to evolve overtime. From an urban design perspective there is significant importance in the detail of the resulting built form and public space design.

Conclusions on Appropriateness of HIA Process

Undertaking of an HIA on the Flaxmere Town Centre urban Design Framework has had a number of benefits in the process of implementing the Framework. These benefits are summarized as follows:

- Consideration of different perspectives in considering the wider effects and costs and benefits of the Framework.
- Additional community and stakeholder consultation increasing the robustness of the Framework Implementation.
- Efficiencies in consultation with workshops being able to double up on informing the HIA and consulting on the implementation of the Framework and town centre plans.
- The HIA report is a useful reference document for the preparation of the District Plan Change necessary to implement the framework, particularly with regards to the Section 32 RMA assessment.
- The HIA recommendations form a useful and ongoing checklist to guide implementation.
- In this case the HIA was beneficial in endorsing the Flaxmere Town Centre Urban Design Framework and in recommending areas for improvement or ongoing care.
- A positive working relationship has been formed between the DHB and HDC staff which has flowed into other work.
- Undertaking the HIA has been good professional development for the staff involved from both organizations.

The Plan Change for implementing the Flaxmere Town Centre Urban Design Framework is proposed to be notified for submissions in May 2011. It is anticipated that the HIA will also be a useful reference document for the preparation of the section 42A submission reports.
The opportunity to improve public health outcomes through best practice planning and urban design can be enhanced by undertaking HIA. This is particularly the case for plans and proposals relating to socio economically disadvantaged areas such as Flaxmere.

PA McKay
March 2011