



**Longdill and Associates**



# **Wellington Region Sports Field Strategy**

**Prepared for:  
Wellington Region Territorial Authorities**

**September 2013**

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# 1. Executive Summary

## Study Objectives

Territorial Authorities (TAs) are the main provider of fields for community sport in the Wellington Region. Sports fields are used by large numbers of people, particularly children and youth, and younger adults, and are essential facilities in the provision of opportunities for people to undertake physical exercise and enjoy playing sport.

The key objective of this study was to inform decisions on winter sports field provision in the future. The study uses the Sports Field Model to provide sound evidence to support the demand for field space and a basis for establishing capacity increase requirements. It provides information to identify both the size and location where increased capacity would best meet current or future shortfall in supply.

The study includes the following Wellington Region areas:

- Wellington City
- Hutt City
- Porirua
- Upper Hutt
- Kapiti Coast

## Focus of the Report

- This strategy covers the three main winter codes – rugby, football and league
- The focus of the report is on:
  - Determining current demand, matching this demand with current supply, identifying where there are supply surpluses and shortfalls and whether shortfalls can be readily accommodated by surplus supply in neighbouring areas
  - Using population growth, participation rates, popularity of different codes and sport development plans to project future demand, matching this demand with planned future supply, and identifying where they are likely to be supply surpluses and shortfalls
  - Providing information on which to base decisions on how best to provide future supply
  - Providing information to optimise the timing and funding allocation that will be required to meet future demand

## Key Outcomes – Region Wide

### Overview of winter sport

- The senior winter season usually runs from early April to end August / mid September with the junior season adjusted to school term times
- There are 64 clubs based in the Wellington Region – the clubs together with single team clubs and skill development programmes field around 1,935 community teams
- There is one community team generated in the Wellington Region for every 148 people aged 5 to 49
- There is reported pressure on field space at the end of the summer season with winter codes wanting to start training in February and March when summer sport is still playing

#### Current Demand

- Demand for winter fields in the peak of the season is made up of:
  - Regular competition games and associated training
  - Skills development programmes
- Region wide current demand is for:
  - 1,986 full size field equivalent (FFE) hours per week
    - 880 hours at the weekend, mainly for competition games (44%)
    - 1106 hours on weekdays, mainly for training (56%)

#### Current Field Capacity

- There are 457 winter fields secured for community use across the region – 208 full size, 99 junior size (half full field), 87 half junior and 63 quarter junior (secured means a formal agreement with the field owner for use beyond one year)
- The fields are not evenly distributed across the region with Wellington City having both significantly fewer fields overall, and fewer full size equivalent fields, per 1000 population when compared with the other TAs
- The current fields have been assessed as providing 1,942 FFE hours use per week

#### Current Capacity Surplus / Shortfall

- Currently there is a shortfall of **-45** FFE hours per week region wide made up of a surplus of 189 hours for weekend competition and a shortfall of **-234** hours for weekday training
- All TAs have a shortfall of training capacity whilst only Wellington City has a shortfall for competition space, albeit relatively small (**-28 hours**)
- Teams cope with limited training supply by utilising non secured fields (use is at risk without a formal agreement with the field owner that secures use for the season), using indoor venues, using surfaces such as tennis/netball courts and / or reducing their training demand from what they consider to be necessary for effective training – this can have a long term impact on skill development and the team's ability to compete with other teams.

#### Future Demand

- Future demand will be driven by population growth or decline and code growth
- Code growth is the increase or decrease in participation rates, over and above natural population changes, and reflects recent trends and other current or potential influences that can affect the popularity of a particular code
- Projections for future demand have been calculated for two code growth scenarios – conservative and optimistic

- The table below shows the growth in projected demand by 2021 and 2031 under both the conservative and optimistic code growth scenarios

**Projected demand – FFE hours per week**

2012 demand	2021			2031		
	Projected demand	Increase hours	% increase on 2012	Projected demand	Increase hours	% increase on 2012
<b>Conservative</b>						
1,986	2,106	120	6.0	2,216	230	11.6
<b>Optimistic</b>						
1,986	2,237	251	12.6	2,412	426	21.4

- Growth in demand hours will vary across the TAs with growth levelling off for some TAs (Upper Hutt, Porirua, Hutt City) as the ageing population negates the impact of further population growth

**Key Outcomes – By TA**

The following table summarises, **in the blue rows**, the current and projected field supply situation for each TA, based on 2012 winter sports field provision, and, **in the green rows**, with proposed sportsfields in the Long Term Plan and other proposed developments. Where there are high surpluses in 2021 or 2031 this generally indicates that all the sports field developments in Long Term Plans may not be necessary within the 20 year time frame. Note the body of this report details the demand and supply situation at sub TA level.

	Kapiti Coast <sup>#</sup>	Upper Hutt	Porirua	Hutt City	Wellington City
Number of community teams – football, rugby, league	152	152	256	454	921
Current demand FFE hours per week	174	162	301	559	791
Number of secured fields - FFE	33	39	38	81	94
Current field capacity – FFE hours per week	192	233	292	550	665
Current surplus / shortfall – competition (weekend) – FFE hours per week	44	77	52	44	-28
Current surplus / shortfall – training (weekday) – FFE hours per week	-27	-5	-61	-43	-98
Current surplus / shortfall – full week – FFE hours per week	-17	71	-9	1	-126
Projected demand 2021 – FFE hours per week	188 – 200*	165 – 175*	310 – 329*	568 – 603*	875 – 931*
Projected surplus /shortfall – competition (weekend) – FFE hrs/wk – 2012 supply	39 to 34	76 to 72	48 to 41	42 to 28	-74 to -103
Projected surplus / shortfall– training (weekday) – FFE hrs/wk – 2012 supply	-35 to -42	--7 to -13	-66 to -78	-50 to -72	-136 to -163
Projected surplus / shortfall – full week – FFE hrs/wk – 2012 supply	4 to -8	68 to 58	-18 to -37	8 to -43	-210 to -266
Projected surplus / shortfall – full week after proposed sportsfields in the Long Term Plan and other proposed developments	40 to 28	113 to 103	67 - 48	75 to 40	16 to -39
Projected demand 2031 – FFE hours per week	205 to 244	174 to 187	329 to 343	569 to 617	953 to 1,040
Projected surplus / shortfall competition (weekend) – FFE hrs/wk – 2012 supply	32 to 24	71 to 67	46 to 35	39 to 23	-116 to -162
Projected surplus / shortfall training (weekday) – FFE hrs/wk – 2012 supply	--45 to -57	-11 to -21	-69 to -87	-49 to -80	-172 to -213
Projected surplus / shortfall – full week – FFE hrs/wk – 2012 supply	-14 to -33	60 to 46	-23 to -52	-10 to -57	-288 to -375
Projected surplus / shortfall – full week after proposed sportsfields in the Long Term Plan and other proposed developments	29 to 13	104 to 91	62 - 34	73 to 26	11 to -78

\* First figure in the range is for the conservative code growth scenario, the second figure for the optimistic

### Options for future supply

The following table outlines the range and viability of options considered to provide future supply in shortfall areas.

<b>More effective use of existing fields</b>	Optimising code allocation and competition / training balance	The figures in the previous table assume optimal code allocation. The body of the report details supply surplus and shortfall by code and indicates that TAs need to assess the balance on an on-going basis  All TAs have an imbalance between competition and training supply – competition supply should be revisited where the imbalance is large and consideration given to allocating some of the current competition space to training
	Changing sports schedules	Currently most competition games are played on Saturdays . A smaller number of games are played on Sundays with some now moving to Friday evenings. As artificial fields are installed more opportunities will arise to play games at non traditional times.
<b>Increasing the capacity of existing fields</b>	Utilising unused fields	Some of these fields could be returned or added to the current network whilst others are likely to be 'retired' due to the nature of the field and the likely costs involved to bring them to an acceptable standard.
	Drainage	Installing drainage in an un-drained soil field improves the quality of the field but does not significantly increase its capacity.
	Lighting unlit existing fields	Without flood lighting use of the fields is limited to daylight hours. Floodlighting is only viable if the field surface can take increased play without sustaining long term damage. Most Wellington Region fields are soil fields with relatively low capacities. The limited amount of training they can be used for can be accommodated during daylight hours.
	Extending floodlights in partly floodlit fields	Currently many fields available for training are only partly lit reducing the level of usable lit space. However this generally has only a minor effect on the overall capacity available due to the inability of the field to take more than 3 or 4 training hours per week, if that.
	Sand carpeting soil fields	The relatively few sand carpets in the Wellington region do not provide an appreciable capacity increase over a soil field – although the field may provide a better quality surface and not close as frequently in wet weather.
	Dedicated training areas (DTAs)	DTAs generally have a much higher training capacity than a field that has to retain a reasonable surface quality for weekend competition. Floodlit DTAs in Hutt City and Porirua are providing between 10 and 16 hours capacity each week. This option is considered viable.
	Reconfiguring small sided fields	There may be potential to amalgamate a number of small sided fields on a park to provide space for a further field or for a larger field that provides more flexibility for use. Whilst this has not been considered in depth in this study TAs should review.



<p><b>Increasing the capacity of existing fields</b></p>	<p>Artificial turf</p>	<p>Capacity of fields can be extended to 50 hours per week or more through installation of artificial turf. Such turfs can be played on 24/7 regardless of weather, although manufacturer warranties may place some limits on extended use. In recommending artificial turf fields we have not considered the limitations of specific sites or the impact on neighbours (noise, open space, visual amenity), or summer sports.</p> <p>Artificial turf can also be installed in greenfield sites.</p> <p>User charges have the potential to limit use, particularly for training, dependent on the level of cost recovery the TA chooses to apply.</p>
<p><b>Greenfield development</b></p>	<p>Some TAs have space available for the development of new fields on existing or greenfield sites.</p>	<p>These sites have been considered.</p>

## **2. Investment Required**

## 2.1 Kapiti Coast

Whilst there may be support for each Ward to be 'self contained' Council has made a significant investment in Howarth Farm and needs to consider how these fields could best provide for District wide needs.

This investment summary is based on developing Howarth Farm as a competition hub with 5 full size fields for competition only and 1 as a dedicated training area (DTA) to serve local training needs.

The Long Term Plan allocates \$1.5 million in 2023/2024 and a further \$1.7 million in 2029/2030 for development of artificial turf fields in Paraparaumu and Raumati. This study shows the level of capacity increase needed to 2031 can be met through the planned development of Howarth Farm including centralising some competition play and provision of training capacity to alleviate the shortfall in the Waikanae area, and converting a small number of existing soil fields to DTAs.

### Additional Investment Summary (excludes funding already allocated in the Long term Plan)

Year	Area	Development	Current status	Cost Estimate
2014	Paraparaumu	Reinstate Kena Kena	Unused fields	
	Waikanae	6 new fields – Howarth Farm – 5 competition only, 1 DTA	Planned & funded – DTA lights assumed to be additional	\$200,000
	Paekakariki-Raumati	Tilley Rd - 2 junior fields + junior DTA	Developed & available for use from 2014	
2022	Waikanae	1 existing soil field converted to DTA plus drainage + lights	Not currently planned	\$310,000
<b>Total additional investment to 2021</b>				<b>\$200,000</b>
<b>Further investment to 2031</b>				<b>\$310,000</b>
<b>Total investment to 2031</b>				<b>\$510,000</b>
<p>The Long Term Plan allocates \$1.5 million in 2023/2024 and a further \$1.7 million in 2029/2030 for development of artificial turf fields in Paraparaumu and Raumati. As shown in this study the level of capacity increase needed to 2031 can be met through the planned development of Howarth Farm, converting two existing soil fields to DTAs and centralising some competition play at Howarth Farm.</p>				

## 2.2 Upper Hutt

With the Maidstone Park artificial turf field added to the network further investment in capacity increase projects is unlikely to be needed for the foreseeable future.

A re-balancing of competition and training supply will meet the current and projected training shortfall.

If council wishes there is also potential to retire some under-performing fields.

## 2.3 Porirua

Currently there is a significant imbalance in field supply relative to demand between Porirua East and Porirua West. The Ascot Park artificial field, planned drainage improvements on three fields together with the Ole Football artificial turf (training use only included) addresses this imbalance.

There are two further artificial fields planned for 2014 to 2017. Our recommendation is for both these artificial fields to be deferred indefinitely. Much of the projected unmet demand in the east can be satisfied through the Ascot Park artificial turf field and planned field drainage improvements, plus the proposed installation of training lights at Ngatitua Domain, which although in Porirua West, is only a short distance away.

There is also potential to use surplus capacity in Porirua West to provide additional capacity to meet Porirua East demand. Whilst some of the surplus capacity in the west is not a viable option due to transport availability and travel times in the afternoon peak traffic congestion period, there are parks within close proximity that can provide further capacity to ensure there is buffer when fields need to be closed.

### Additional Investment Summary

Year*	Area	Development	Current status	Cost Estimate
2014	Porirua Park	1 full artificial field	Planned but not funded	Defer indefinitely
2014	Porirua East	Adventure Park drainage	Planned and funded	
		Porirua Park drainage	Planned and funded	
		Cannons Creek Park drainage	Planned and funded	
2016	Porirua East	Lighting of 2 fields at Ngatitua Domain	Not planned or funded	\$160,000 <sup>1</sup>
2017	Porirua East	1 new artificial field – Park TBA <sup>2</sup>	Planned but not funded in LTP	Defer indefinitely
<b>Total additional investment to 2021<sup>3</sup></b>				<b>\$160,000</b>
<b>Further investment to 2031</b>				<b>\$0</b>
<b>Total investment to 2031</b>				<b>\$160,000</b>

<sup>1</sup>PCC estimate

<sup>2</sup>We recommend discussions with Wellington City Council over their planned development of an artificial turf in the Grenada / Tawa area to advise of decision

<sup>3</sup>does not include any funding associated with negotiating community use of Ole Football artificial turf

## 2.4 Hutt City

Currently there is a significant imbalance in competition and training supply particularly in Hutt South. There is scope to review competition supply with a view to allowing more training on some fields.

There is also an imbalance in supply relative to demand between Hutt North and Hutt South with Hutt North in surplus and Hutt South in shortfall, although most travel distances are such that the field supply can be considered as catering for district wide demand.

There is a further artificial field planned for 2015. This field together with the Petone Memorial Park artificial should provide sufficient capacity to meet projected demand for the next 20 years, providing Hutt City can be considered as a single network.

No further capacity increase investment is required.

### Additional Investment Summary

Year*	Area	Development	Current status	Cost Estimate
2015	Hutt North	1 new artificial field – Fraser Park	Planned & funded	
<b>Total additional investment to 2022*</b>				<b>\$0</b>
<b>Further investment to 2032</b>				<b>\$0</b>
<b>Total investment to 2031</b>				<b>\$0</b>

## 2.5 Wellington City

### **In summary:**

The artificial turfs planned in the Long Term Plan are well located to meet current and projected demand. However, it is recommended that discussions are held with Porirua City Council in regards to the proposed Tawa/Grenada artificial sportsfield to ensure that the development does not result in over supply.

Consideration was given to drainage improvements, sand carpets and floodlighting – in most instances small size artificial turfs have been included in the programme as they offer a markedly more cost effective means of providing additional capacity on existing soil fields. In general there are too few half size fields in some areas to offer the option of converting to DTAs. Half size artificial turfs could be fully utilised for training and suitable for small sided games currently played on both Saturdays and Sundays on natural grass fields. If sited on sports parks that have a full artificial turf(s) they could serve as warm up areas allowing 'run on run off' games thus maximising the competition use of the full size artificial turf. With Council's policy of 40% cost recovery it is anticipated that fees for using half artificial turfs will be somewhat lower than for full size turfs thus reducing a potential barrier to use.

Whilst artificial turfs do limit some informal open space recreational activities the number of artificial turfs outlined would bring the total number to 6 full size and 4 half size (excluding partner fields), which represents just 8% of full field equivalent fields used for community sport within Wellington City.

Although not capacity increasing, Council may wish to consider including sand carpeting of several number 1 fields in the programme to improve the surface quality for elite level play. Additional funding would be required for this.

This study provides recommendations for future capacity increase projects in general locations across Wellington City. Council should use the opportunity provided by the current asset management plan review to identify the most suitable parks / fields for these capacity increase projects and, in addition, to assess the potential for other smaller scale capacity increase options such as drainage improvements.

**Additional Investment Summary**

<b>Year*</b>	<b>Area</b>	<b>Development</b>	<b>Current status</b>	<b>Cost Estimate</b>
2014	Wellington North	Alex Moore artificial	Planned & funded	\$1.875 million
2014	Wellington West	Nairville Park drainage improvements on 3 soil fields	Planned & funded	\$485,000
2014	Wellington South East	Evans Bay Park upgrade with couch grass	Planned & funded	\$206,000
2015	Wellington South West	Site to be confirmed - 2 soil fields to sand carpet	Not funded	\$200,000
2015	Wellington West	Park to be decided artificial turf	Planned & partially funded – further funding required	\$1.7 million (\$1.05 million currently funded)
2017	Wellington North	Grenada / Tawa artificial* (discussions with PCC recommended to ensure artificial turf development in general area is complementary and does not result in over supply )	Planned & partially funded – further funding required	\$1.7 million (\$1.05 million currently funded)
2021	Wellington South West	0.5 new artificial turf	Not currently planned	\$950,000
2023	Wellington South East	0.5 new artificial turf	Not currently planned	\$950,000
2028	Wellington South West	0.5 new artificial turf	Not currently planned	\$950,000
2029	Wellington South East	0.5 new artificial turf	Not currently planned	\$950,000
<b>Total <u>additional</u> investment to 2021</b>				<b>\$2.45 million</b>
<b>Further investment to 2031</b>				<b>\$2.85 million</b>
<b>Total investment to 2031</b>				<b>\$5.3 million*</b>

## 3. Background

Some areas in the Wellington Region are already facing pressure on sports fields. With on going population growth the region needs to ensure planning for sports fields aligns with likely future demand both in terms of field capacity and field location.

In response to current pressure Councils in the region have already invested in a number of artificial turf surfaces with more in the planning stage. Artificial surfaces are however just one of a number of options that can be considered for increasing sports field playing capacity with alternative solutions including improved drainage, sand carpeting, lighting, re-configuration of field layouts, development of new fields and partnerships with other field providers.

The five councils making up the Wellington Region plan to take a regional perspective to the future provision of sportsfields. This study was commissioned to inform decisions on sportsfield capacity improvement projects in the future.

The key objective of this study was to develop a sportsfield strategy for the Wellington Region, and in particular to:

- provide a region wide picture of field supply and demand both currently and up to 20 years out
- provide sound evidence to support the demand for field space
- analyse and understand the level of weather related closures and the impact these have on sport
- provide a basis for establishing sportsfield capacity improvements and optimisation of use of existing fields, resulting from changes in:
  - population size
  - population make up
  - participation rates
  - popularity of different codes
- provide projections on the size and location of sports field capacity improvements required over the next 20 years based on shortfall information generated from future projections of demand and supply
- provide high level cost estimates and scheduling for capacity improvements
- compare cost estimates with allocated funding in each TLA's Long Term Plan

This study focuses on the three main winter field codes – rugby, rugby league and football.



## 4 Methodology

This study into the supply and demand for sports fields in the Wellington Region has been carried out using the Sports Field Model developed in 2008 by Longdill and Associates in conjunction with Auckland City Council. The Model was peer reviewed by representatives from large and small TAs.

### Model Stages

The model is based on a 7 stage process:

<b>Stage 1</b>	Identification of all teams
<b>Stage 2</b>	Determining current field demand
<b>Stage 3</b>	Identification of all fields
<b>Stage 4</b>	Determining current field capacity
<b>Stage 5</b>	Identification of current surpluses and shortfalls (hours per week)
<b>Stage 6</b>	Identification of future surpluses and shortfalls (hours per week)
<b>Stage 7</b>	Analysis and development of options.

#### Stage 1 Identification of all teams

The model is a peak demand model aimed to determine the surplus or shortfall of fields for regular week by week community use. 'One off' demand such as for representative teams, tournaments and the like is not included unless it occurs on a regular basis at the peak of the season.

For each code all teams, based in the region, or playing in a region based module (centralised competition), have been identified as follows:

- 2012 team lists from the Regional Sports Organisations (RSO)
- Secondary school teams regularly using community fields from College Sport
- Teams in competitions and skill development programmes outside the RSO sourced from competition organisers

#### Stage 2 Determining current field demand

The competition field hours required for each team, based on field size and length of game, have been calculated and agreed with RSOs and TAs. (see Appendix 1 for full details).

Provision has been made for both home and away competitions (teams usually only play at home 50% of the time) and module type competitions where all teams gather in a central location.

Training field hours requirements are based on averages calculated from information provided by the region's clubs and have been shared with and accepted by RSOs and councils. They are calculated from the amount of field space required (full, half, quarter field), the length of a training session and the number of training sessions per week.

(see Appendix 1 for full details)

#### Stage 3 Identification of all fields

Each TA has provided field lists including field size, capacity for both weekend and midweek play, code allocation, soil type and lighting status. Junior and mini field sizes, which can vary from an eighth to a half of a full size field, have been confirmed with RSOs.

Fields owned by other providers have been included where there is a formal agreement for community use for more than one season. This information has been provided by clubs.

#### **Stage 4 Determining current field capacity**

The capacity for each individual field is calculated as the hours the field can be used each week without sustaining long term damage, and divided into weekend and weekday use.

The capacity of the fields has been assessed by Council staff or, if privately owned, based on information provided by the club using the field or allocated an 'average' capacity figure. These capacity figures take account of the type and condition of surface and the presence of lighting. Training capacities of partly lit fields have been adjusted to reflect the size of the lit area.

#### **Stage 5 Identification of current surpluses and shortfalls**

The total current demand has been matched against the current supply and any surpluses or shortfalls identified. This has been carried out in each analysis area on a code by code basis and aggregated to determine the region wide situation.

#### **Stage 6 Identification of future surpluses and shortfalls**

A Team Generation Rate has been calculated by dividing the total population in each age group category by the number of teams in the model area in that age group. This calculation is done for each sports code at an individual council level. It is expressed as how many people in that age group are needed to produce 1 team in that particular code in that area.

The Team Generation Rate has been used with the population projections in each analysis area to project the number of teams likely in the next 10 years. The model has then been re run with the change in number of teams and the projected surplus / shortfall of fields calculated.

To take into account the ageing population current and projected populations are based on the active age group of 5 to 49 years.

Total active populations are calculated at individual analysis areas.

The 2012 active population figures are based on the 2011 population estimates sourced from individual TAs or Statistics New Zealand. As these estimates cover age groupings rather than individual age groups the 2006 census spread of ages within each grouping has been used as the basis for calculating the current individual ages within each age cohort.

The future active population for each analysis area has been calculated using population projections sourced individual TAs or Statistics New Zealand.

In addition to natural population growth sport development factors have also been considered. These can be either positive or negative. These have been based on a quantitative assessment of historic team numbers and growth or decline in recent years above natural population growth, RSO and club projections of growth or decline in team numbers in different grades and other external factors that could affect participation. These factors have been agreed with RSOs and councils. (see Appendix 1 for full details)

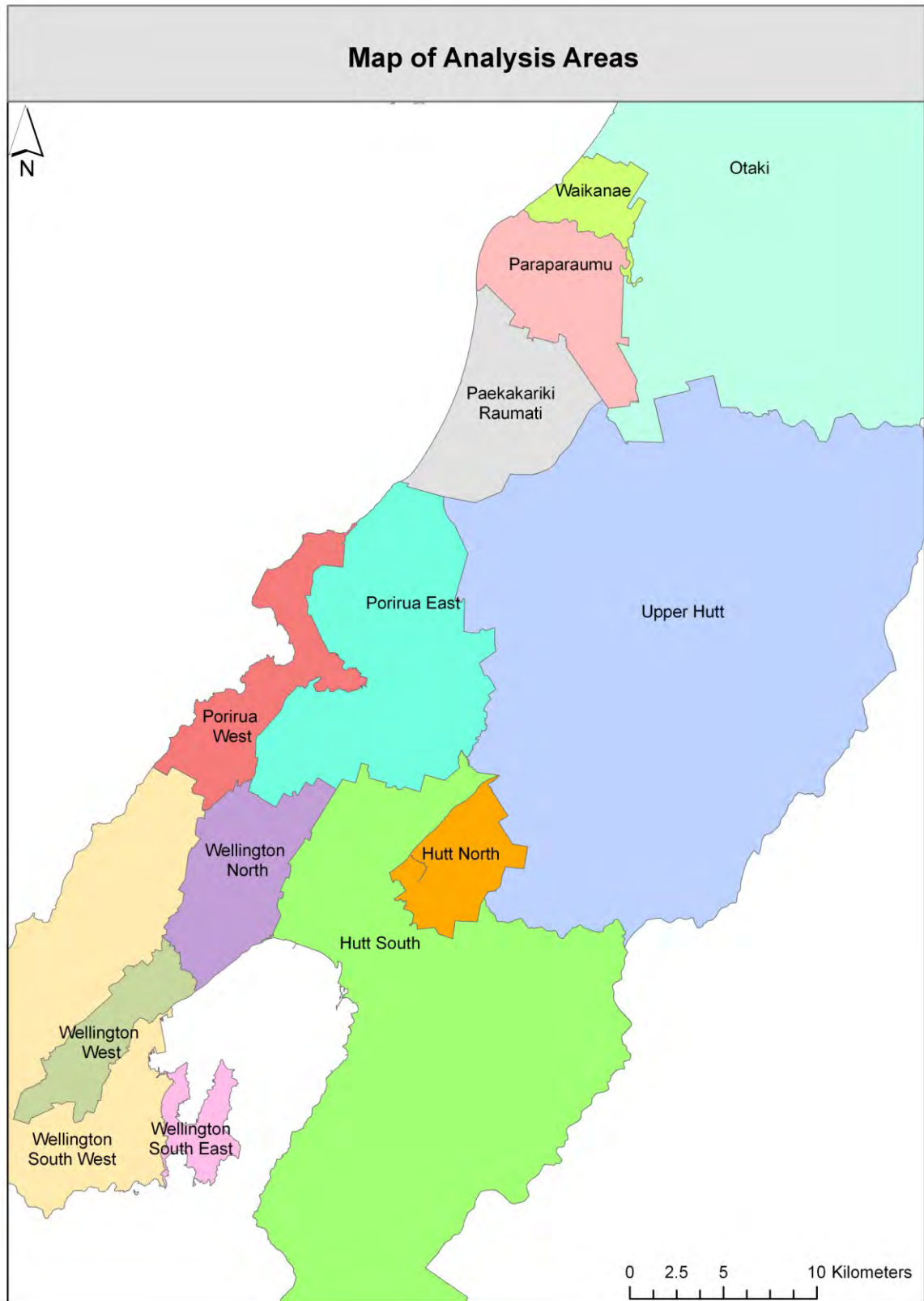
#### **Stage 7 Analysis and development of options**

The resulting data is assessed at analysis area level and options developed. Apart from Upper Hutt analysis areas equate to groupings of suburbs recognised by the TAs.

## Analysis Area Groupings

TA	Analysis areas	Suburbs included
Kapiti Coast	Otaki Waikanae Paraparaumu Paekakariki - Raumati	
Upper Hutt	Upper Hutt	City wide
Porirua	Porirua West	Mana – Plimmerton – Pukerua Bay Titahi Bay Elsdon - Takapuwahia
	Porirua East	Pauatahanui Whitby Waitangirua Ascot Park Aotea – Papakowhai - Paremata Cannons Creek Ranui
Hutt City	Hutt North	Stokes Valley Taita Avalon Naenae
	Hutt South	Boulcott Hutt Central Waterloo Alicetown Woburn Waiwhetu Petone Western Hills Moera Eastern Bays Wainouiomata
Wellington City	North Wellington	Tawa – Grenada North Churton Park – Glenside Grenada Village – Horokiwi Johnsonville Newlands – Ngauranga
	West Wellington	Khandallah – Crofton Downs Northland – Wadestown Karori
	South East Wellington	Hataitai – Oriental Bay Lyll Bay – Rongotai Mirimar – Strathmore Park Seatoun – Breaker Bay
	South West Wellington	Kelburn - -Wellington Central Te Aro – Mt Victoria Brooklyn – Vogeltown Berhampore – Newtown Island Bay – Melrose Ohariu - Makara

Refer map on the next page



## 5. Definitions

Active population		Defined as ages 5 to 49 – the age groups most likely to be playing winter code sports.
Capacity	Defined as field hours per week	The number of hours of play per week that a field can withstand before sustaining long term damage. Is determined by the type and standard of field surface and presence or absence of flood lighting.
Demand	Defined as field hours per week	The number of field hours per week needed for play.
FFE	Full field equivalent	There are a number of small sided fields used by junior players. These fields are defined in terms of full field equivalents, eg a half sized field is ½ full field equivalent.
Full field		A full field is one suitable for senior games. Field measurements vary between codes. To be defined as a full field the measurements need to fall within maximum and minimum length and width.
RSO	Regional Sports Organisation	The regional body running the sport in the district. In general they manage some or all the competitions and act as the link between sports clubs and the National Sports Organisation.
Secure sports fields		Secure fields are those where on going use is secured through ownership (eg council fields) or a formal agreement (lease, partnership etc) for a period of longer than one year.
Surplus / shortfall		The balance when demand is matched against supply. Defined in terms of field hours per week.
TGR	Team Generation Rate	The TGR is calculated by dividing the number of people in the age group by the number of teams in the area in that age group. For example: if there are 10 mini rugby teams in the 5 to 6 year old age group and 2000 5 to 6 year olds living in the area the TGR is 200 (2000/10). This means there is 1 team generated for every 200 5 and 6 year olds in the area. The figure is used as part of the future projection calculation.
Unsecured fields		Unsecured fields are ones where use could be terminated at very short notice.

## **6. Demand**

# **Key Information and Outcomes**

# 1. Overview of Winter Codes

The model covers three winter codes – rugby union, football and rugby league.

The senior winter season usually runs from early April to the end of August . early September. Demand usually peaks between May and August as junior competition is timed to fit the school term and senior competition tapers when teams who have not qualified for the competition play offs drop out.

There is pressure on field space at the end of the summer season with winter codes wanting to start training in February or March whilst summer sport is still playing. Codes also report some pressure at the end of the season when representative fixtures and tournaments are scheduled and TAs are looking to prepare fields for summer use.

## Rugby Background

- There are 21 rugby clubs in the Wellington Region, 18 are under the Wellington Rugby Union and 3 under the Horowhenua-Kapiti Rugby Union
- The 21 clubs field a total of 526 teams
- The junior teams from the 3 Horowhenua-Kapiti Coast clubs play in the Wellington competition whilst the seniors play in the Horowhenua- Kapiti Coast competition
- All regular club rugby is played on Saturdays
- 7 clubs run their own in house nursery grade for very young players
- Demand for field space for representative teams is at the end of the club season and falls outside the peak of the club rugby season
- Youth rugby for both boys and girls is run through College Sport
- Whilst rugby is growing above natural population growth at junior level, senior team numbers are fairly static

## Rugby League Background

- There are 13 rugby league clubs region playing in the Wellington Rugby League competition
- The 13 clubs field a total of 101 teams
- Premier and senior grades as well as junior teams to 11<sup>th</sup> grade play on Saturdays with 12<sup>th</sup> to 19<sup>th</sup> grade and women's league played on Sundays
- Demand for field space for representative teams and significant tournaments falls outside the peak of the club season
- College Sport run their boys and girls league competition in September and October – this allows players to play club league or another code during the main winter season
- League numbers are growing at all levels with expectations for all clubs to field senior and junior teams in the next few years

## Football Background

- There are 30 football clubs in the Wellington Region playing in the Capital Football competition
- Other competition or skills development providers include the Wellington Sunday Football League, Little Dribblers, Ole and Kaizen Academies
- There are 1308 football teams playing in the various competitions or skills development programmes
- Most representative team demand lies outside the peak of the club season
- A number of tournaments, eg, Upper Hutt Ethnic World Cup and the Masters Tournament are also held outside the peak of the season

- Youth football is split between Capital Football (13<sup>th</sup> and 14<sup>th</sup> grade) and College Sport (15<sup>th</sup> grade and over)
- Most First Kicks football for 4 to 6 year olds is played as 'in house' club modules on Saturdays or Sundays
- Fun Football for 7<sup>th</sup> and 8<sup>th</sup> grade is also centralised either being played at the home club or, on Festival of Football days, with neighbouring clubs on mainly Saturday mornings
- Junior mixed grades play either Friday night or Saturday mornings whilst girls play in centralised modules on Sundays
- Senior men's teams play Saturday afternoons and senior women on Sundays
- Football is growing above natural population growth at all levels with growth in junior, youth and girls grades higher than at senior level



## 2. Current Demand

### 2.1. Scope

Demand for winter fields is predominantly made up of regular competition games and regular training by teams involved in winter competitions run by Capital Football, Wellington Rugby Union, Horowhenua-Kapiti Rugby Union, Wellington Rugby League, College Sport, Wellington Sunday Football League, Little Dribblers Football Club, Ole and Kaizen Football Academies and individual clubs. The table below details what has been included and excluded in the demand calculations.

Included in demand	Excluded from demand
Regular competition games on community fields	Representative team requirements (RSOs advise this demand lies outside the season peak)
Regular training on community fields	One off tournaments / events
Regular College Sport use of community fields	School sport played on school fields
Regular use by Academies and other introductory or skills development programmes	
Community sport played on school fields	

Demand for fields for regular competition and training is calculated using the model. It is expressed as hours per week on full size fields.

Demand for regular competition and training is based on the number of teams and the amount of space they need for games and training.

The demand hours for **home and away competition** are calculated by adding all the teams in the grade and applying a 'game time' requirement based on:

- the length of each half
- the half time period
- time to get on and off the field
- allowance for injury and short warm up – senior teams only
- rounding the total to the nearest quarter or half hour

The hours are based on 50% of games being played at home by teams playing in a home and away league. (% provided by the RSOs)

Demand for teams playing in **centralised modules** is included as the total field hours required to run the module each week.

The demand for **training** has been based on:

- information provided by clubs on the size of field needed (full, half, quarter, etc), the length of training sessions and the number of sessions per week. The analysis included an assessment of both averages and most common practice.
- TA assessment of the level of service that could realistically be provided given the field network and pressure on rates funding

The training demand figures used in the model for Wellington City are slightly less than those used for the other four TAs. (refer Appendix 1 for details)

Both competition and training demand figures used in the model calculations were agreed by the relevant RSO and the TAs.

## 2.2. Number of teams

### 2.2.1 Region wide

For the winter 2012 season the Wellington Region hosted about 1,935 community football, rugby and league teams:

- 1308 football
- 526 rugby
- 101 league

Note these figures **do not** include the number of school teams in College Sport competitions which play on community fields. Where these College teams regularly play on community fields the demand is included as a module in demand calculations.

### 2.2.2 By TA and Code

Each football and league club provided information detailing the spread of their senior and junior members across the 48 analysis areas covering the five TAs. Wellington Rugby Union provided a suburb address list for each club's players. The club's teams were then distributed across the club's main catchment area on a pro rata to membership basis. Teams that play in centralised modules have been allocated to their club catchment if they require training space and to the module location if they do not train.

Note that generally the catchment area for junior club members is smaller than for seniors, and more tightly focused around the club's home park as parents tend to choose to enrol their children in the local club. Catchment areas for senior players are generally more extensive reflecting some players opting to by-pass the local club and play for a club of choice. The reasons for this are varied and include a wish to play for a better performing team or under a particular coach, family links, friends' club choice and proximity to work.

The 1935 rugby, football and league teams are not spread evenly across the region.

Kapiti Coast	152 community teams in total
Upper Hutt	152
Porirua	256
Hutt City	454
Wellington City	921

As the table below shows teams are also not spread evenly across analysis areas within the TAs with the spread dependent on population size, club and code popularity and club location.

**Summary Table: Number of Teams Generated within the Wellington Region**

TA	Analysis area	Football	Rugby	League	Total Teams
	<b>Total Region</b>	<b>1308</b>	<b>526</b>	<b>101</b>	<b>1935</b>
<b>Kapiti</b>	Paekakariki-Raumati Ward	9	10	1	20
	Paraparaumu Ward	24	13	1	38
	Waikanae Ward	64	10	0	74
	Otaki Ward	10	9	1	20
	<b>Kapiti - net</b>	<b>107</b>	<b>42</b>	<b>3</b>	<b>152</b>
<b>Upper Hutt</b>	<b>Upper Hutt</b>	<b>90</b>	<b>58</b>	<b>4</b>	<b>152</b>
<b>Porirua</b>	Porirua East	97	56	33	186
	Porirua West	37	30	3	70
	<b>Porirua - net</b>	<b>134</b>	<b>86</b>	<b>36</b>	<b>256</b>
<b>Hutt</b>	Hutt North	57	40	17	114
	Hutt South	208	99	33	340
	<b>Hutt - net</b>	<b>265</b>	<b>139</b>	<b>50</b>	<b>454</b>
<b>Wellington</b>	Wellington North	190	42	0	232
	Wellington West	164	52	0	216
	Wellington South East	115	57	4	176
	Wellington South West	243	50	4	297
	<b>Wellington - net</b>	<b>712</b>	<b>201</b>	<b>8</b>	<b>921</b>

Note:

Single team 'clubs; teams have been allocated to the analysis area of their 'home' ground or where they train

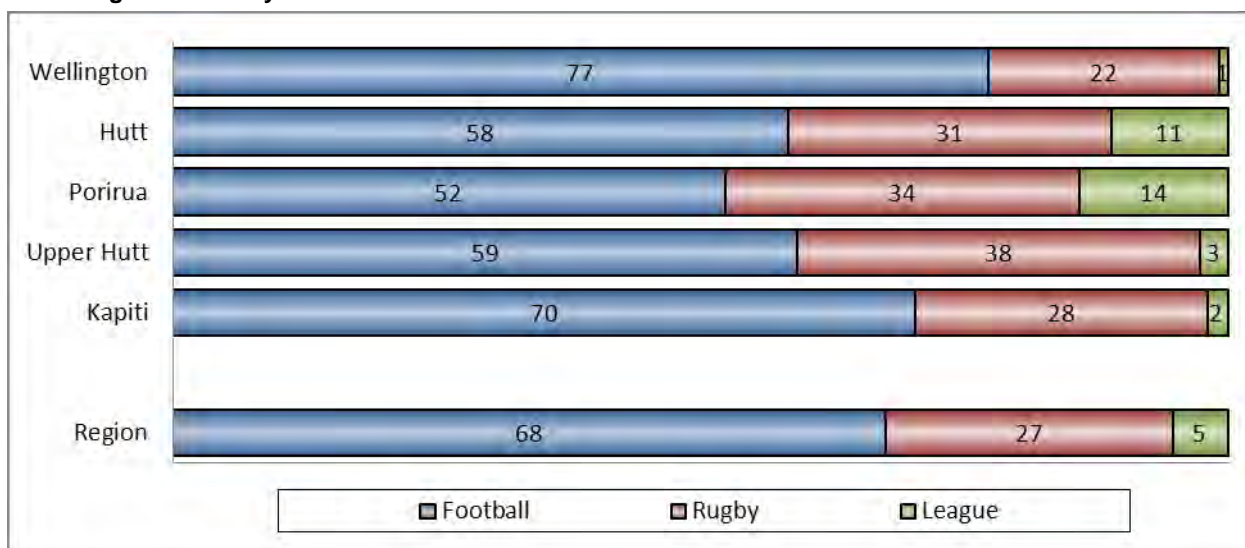
As the chart below shows the teams are not spread evenly across the region either by code or grade.

Football teams make up 68% of all teams across the region with rugby contributing 27% and league 5%. Although football is a very popular code part of the dominance of team numbers is due to the structure of the game at junior levels where team sizes range upwards from 3 to 4 players on the field compared with around 7 for both rugby and league.

There are significant TA differences likely to be partly attributable to the demographic make up of the communities, as Maori and Pacific people are more likely to play league and rugby than football:

- Football is the dominant code across all TAs ranging from 77% of teams in Wellington City sector to 52% in Porirua City
- Rugby ranges from 22% of all teams in Wellington City to 38% in Upper Hutt
- League is very small in Wellington, Upper Hutt and Kapiti (1% to 3% of teams) but much stronger in Porirua (14% of teams) and Hutt City(11%)

Percentage of teams by code and TA



## 2.3 Demand Hours

### 2.3.1 Explanation

Demand for field space is expressed as the number of hours per week required on full size field equivalents (FFE). All TAs have a number of varying sized small sided fields suitable for junior and mini play. Demand on these fields is adjusted for the size of the field, e.g, 2 hours demand on a junior field that is the size of a half full field is expressed as 1 hour demand on a full size equivalent field.

### 2.3.2 Region Wide

Region wide demand is for 1,986 full field equivalent hours per week with 880 (44%) required at the weekend, mainly for games and 1106 (56%) required during the week mainly for training.

Overall for every 1 competition hour a further 1.25 training hours is required.

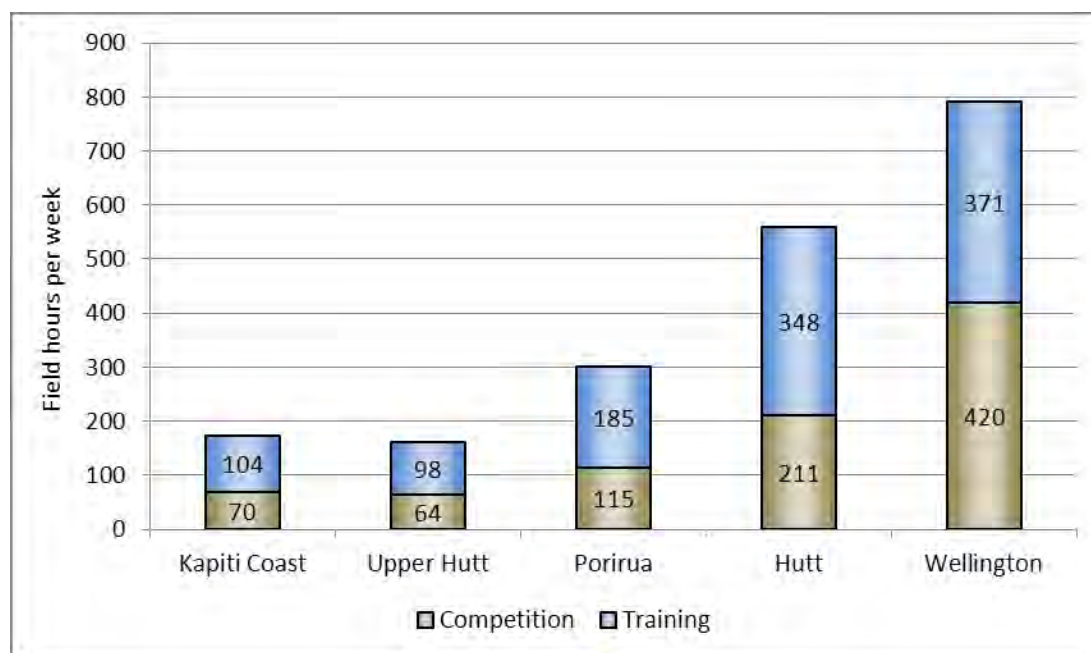
### 2.3.3 By TA

Demand hours vary across the TAs ranging from a high of 791 field hours per week in Wellington City to a low of 162 hours per week in Upper Hutt.

The ratio of weekend to weekday demand varies from a high of 1.6 weekday hours to every 1 weekend hour in Hutt City and Porirua to a low of 0.9 in Wellington City.

The balance between weekend and weekday demand is largely dependent on the popularity of the codes in the area and the mix of junior, youth and senior teams.

#### Demand hours per week (FFE)

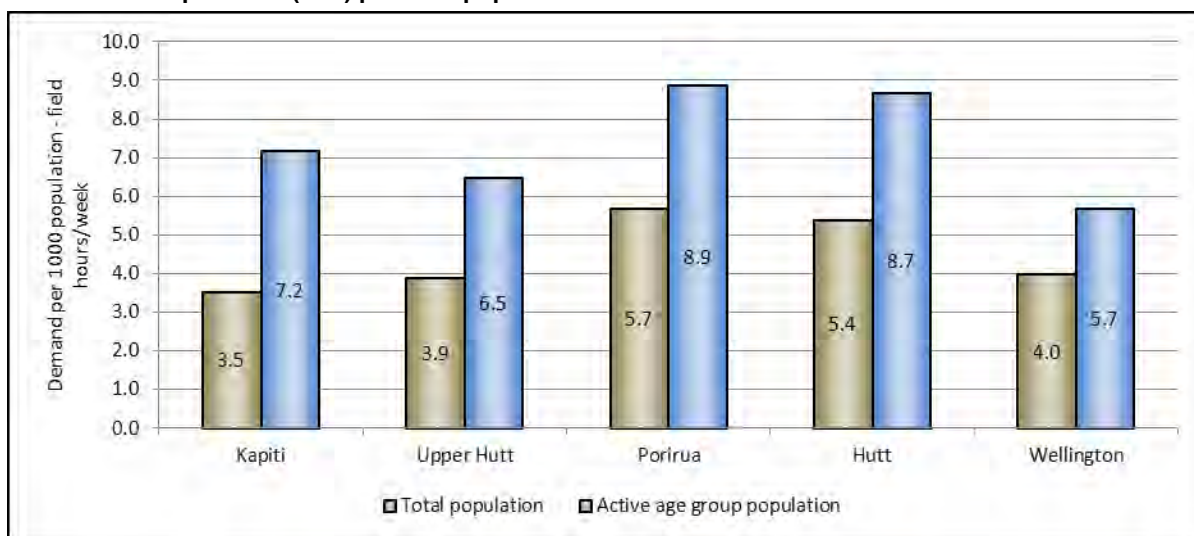


As demand is driven by the size of the population we have re-calculated demand as:

- the field hours per week per 1000 population
- the field hours per week per 1000 population in the active age group (defined as 5 to 49)

The chart below shows there is a wide variation in demand per 1000 population, and per 1000 active population, across the different areas with relative demand higher in Porirua and Hutt City. This variation is likely to be due to a number of factors including differing population make up, participation rates, popularity of the codes, proximity to fields and clubs, centralised module play and the agreed level of training provision across TAs.

**Demand hours per week (FFE) per 1000 population**



### 2.3.4 By Grade

Demand for field space varies across the codes.

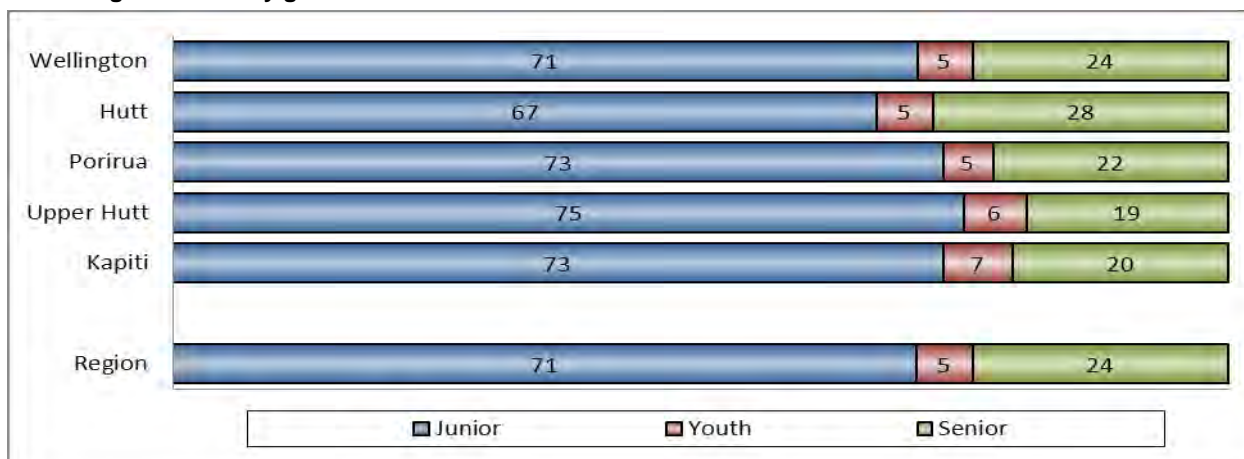
An understanding of the spread of teams across the different age grades is important in that senior teams require more game and training space than juniors, who in turn require more than mini grade teams.

Although there are some age differences across the codes this breakdown gives an indication of the spread of teams across the grades.

Across the region junior teams (age 5 to about 13 and including mini grade teams), make up 71% of all teams with youth contributing 5% and seniors 24%. Note - nearly all youth sport is played through secondary schools rather than clubs. Teams in the College Sport competitions are not included in the community team count.

Hutt City (28%) and Wellington (24%) have a higher proportion of senior teams than other TAs.

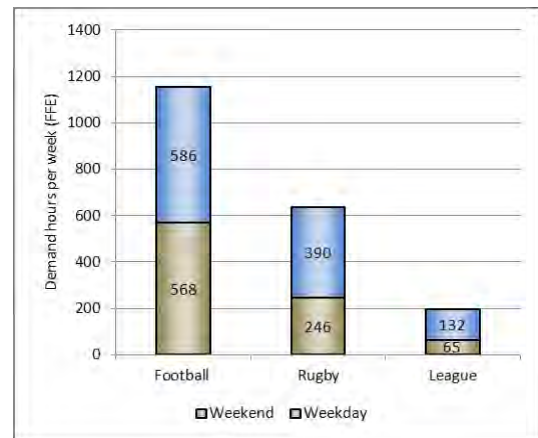
**Percentage of teams by grade and TA**



### 2.3.5. By Code

Region wide demand is for:

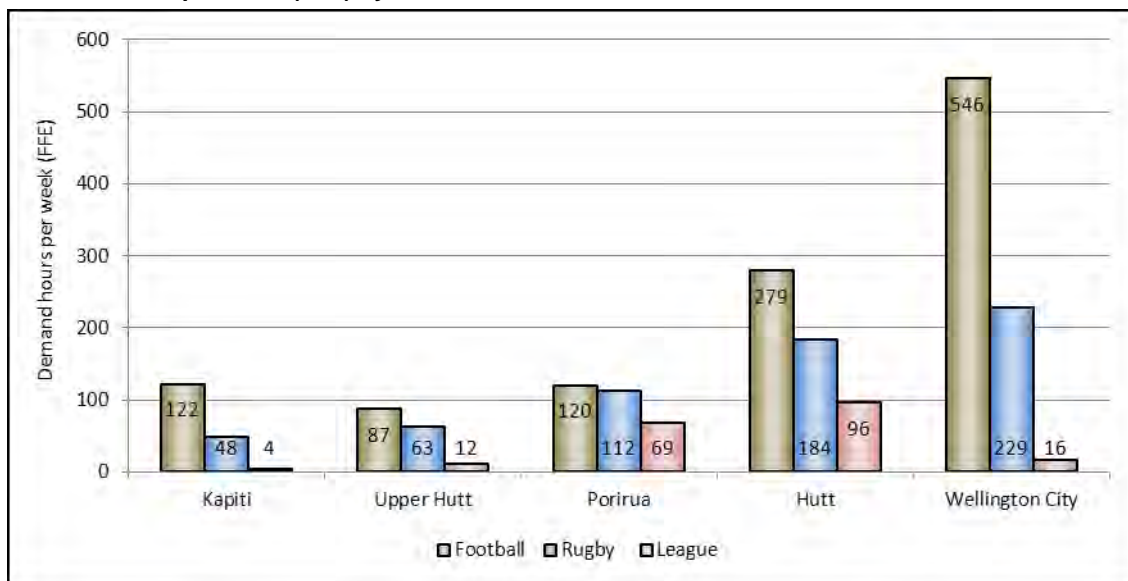
- 1,154 hours per week for football fields (58%)
- 49% on weekends, 51% on weekdays
- 636 hours for rugby (32%)
- 39% on weekends, 61% on weekdays
- 197 hours for league (10%)
- 33% on weekends, 67% on weekdays



As the chart below shows demand for fields for different codes varies across TA areas:

Note that demand for football fields in Wellington City is proportionately higher than in other areas with some of this difference due to centralised competitions that draw players from around the region being played on the artificial turfs in that area.

**Demand hours per week (FFE) by TA and Code**



### 2.3.6 By Analysis Areas

Demand hours vary across different analysis areas as detailed in the table below.

**Summary Table: Demand Hours per Week** (full field equivalent)

TA	Analysis area	Competition	Training	Total Week
	<b>Total Region</b>	<b>880</b>	<b>1106</b>	<b>1986</b>
<b>Kapiti Coast</b>	Paekakariki-Raumati	8	12	19
	Paraparaumu	17	21	38
	Waikanae	35	56	90
	Otaki	10	16	26
	<b>Kapiti - net</b>	<b>70</b>	<b>104</b>	<b>174</b>
<b>Upper Hutt</b>	<b>Upper Hutt</b>	<b>64</b>	<b>98</b>	<b>162</b>
<b>Porirua</b>	Porirua East	87	142	228
	Porirua West	29	43	72
	<b>Porirua - net</b>	<b>115</b>	<b>185</b>	<b>300</b>
<b>Hutt</b>	Hutt North	64	101	165
	Hutt South	147	247	394
	<b>Hutt - net</b>	<b>211</b>	<b>348</b>	<b>559</b>
<b>Wellington</b>	Wellington North	82	74	156
	Wellington West	79	77	156
	Wellington South East	87	80	167
	Wellington South West	172	140	312
	<b>Wellington - net</b>	<b>420</b>	<b>371</b>	<b>791</b>



# **7. Supply**

## **Key Information and Outcomes**

# 1. Number and Distribution of Secured Fields

## 1.1. Number and Type of Secured Fields

There are 457 winter fields (including dedicated and off field training areas) secured\* for community use – 208 full size, 99 half (junior), 87 quarter (mini) and 63 eighth (mini/mini) fields (\*secured means a formal agreement for use for at least one year).

When size of field is considered the 457 fields equate to 287 full size field equivalents (FFE).

### Number and size of fields secured for community use

	Kapiti Coast	Upper Hutt	Porirua	Hutt	Wellington	Total Region
Full size	19	30	30	62	67	<b>208</b>
Junior size	18	12	13	17	39	<b>99</b>
Mini size	14	12	8	27	26	<b>87</b>
Mini/mini size	14	0	5	33	11	<b>63</b>
<b>Total TA</b>	<b>65</b>	<b>54</b>	<b>56</b>	<b>139</b>	<b>143</b>	<b>457</b>
<b>Total FFE</b>	<b>33.2</b>	<b>39</b>	<b>39</b>	<b>81.3</b>	<b>94.4</b>	<b>287</b>

There are

- 112 full size, 66 junior size, 56 mini size and 56 mini/mini size football fields and training areas in the region
- 69 full size, 24 junior size, 22 mini size and 7 mini/mini size rugby fields
- 27 full size, 9 junior size and 9 mini size league fields

### Current Field allocation

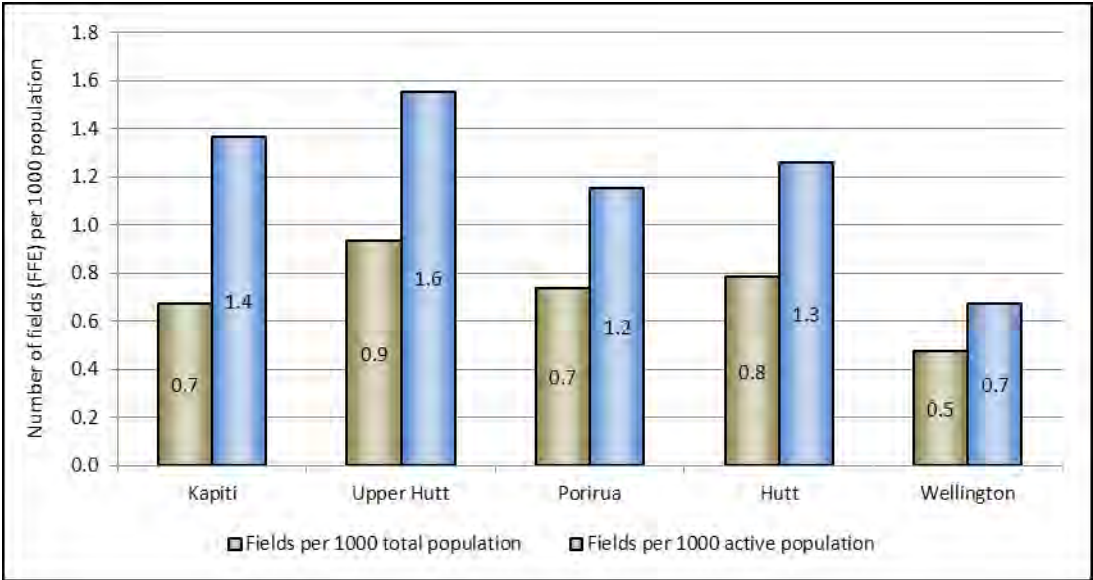
	Kapiti Coast	Upper Hutt	Porirua	Hutt	Wellington	Total Region
Football full size	12	14	11	32	43	<b>112</b>
Football junior	9	6	5	12	34	<b>66</b>
Football mini	11	7	4	12	22	<b>56</b>
Football mini/mini	8	0	4	33	11	<b>56</b>
Rugby full	4	12	12	19	22	<b>69</b>
Rugby junior	9	6	0	4	5	<b>24</b>
Rugby mini	3	5	4	8	2	<b>22</b>
Rugby mini/mini	6	0	1	0	0	<b>7</b>
League full	3	4	7	11	2	<b>27</b>
League junior	0	0	8	1	0	<b>9</b>
League mini	0	0	0	7	2	<b>9</b>
<b>Total</b>	<b>65*</b>	<b>54</b>	<b>56</b>	<b>139</b>	<b>143</b>	<b>457</b>

\*Since the study was completed 2 Ministry of Education owned fields at Pohutukawa Park have been relinquished. These fields had minimal capacity and were mainly used as over flow fields.

441 of the 457 fields are owned, leased or managed by TAs or associated bodies.

To compare field numbers across TAs we have calculated the number of full field equivalents in each area and compared this with both the total and active age group populations in each TA. The relative number of fields per active age population varies across the TAs with the number of fields in Wellington City per 1000 active age population about half that in the remaining four TAs. Wellington City has just 0.7 fields per 1000 active population compared with Upper Hutt which has 1.6 fields and Kapiti, Porirua and Hutt City which have between 1.2 and 1.4 fields.

Number of fields (FFE) per 1000 population



## 2. Capacity of Current Secured Fields

The total weekly capacity is the assessment of how many hours of play each field can withstand before significant damage is caused that would result in field closure or increased maintenance or reinstatement costs. Associated facilities that impact on hours of use, such as lighting, are included in the assessment.

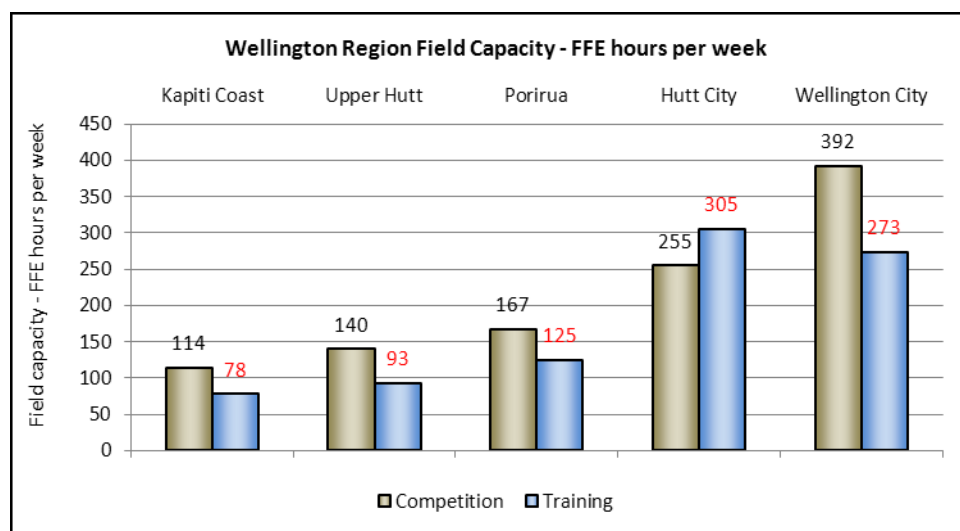
Capacity figures have been provided by the TAs for community owned fields and by field owners or user clubs for fields owned by other providers.

### 2.1. Region wide

The secured fields have been assessed as providing 1,942 full sized field equivalent hours per week across the region, comprising 1,068 hours for competition and 874 hours for training.

Field capacity ranges from a low of 192 hours per week in Kapiti Coast to a high of 665 hours in Wellington City.

In all TAs, other than Hutt City, there is more capacity allocated to competition play than for training.



### 2.2. By code

The assessed 2012 playing capacity for each code is:

Football	1,102 hours
Rugby	581
League	259

Provision varies across TAs.

#### Capacity in Full Field Equivalent hours per week by TA

	Football	Rugby	League	Total Hours
Kapiti Coast	110	68	14	192
Upper Hutt	102	100	31	233
Porirua	111	99	82	292
Hutt	287	154	119	550
Wellington	492	160	13	665
<b>Total Region</b>	<b>1102</b>	<b>581</b>	<b>259</b>	<b>1942</b>

## 2.3 By TA

Playing capacity per code varies across TAs as detailed in the table below.

**Summary Table: Capacity in Full Field Equivalent hours per week by analysis area**

TA	Analysis area	Football	Rugby	League	Total Hours
	<b>Total Region</b>	<b>1102</b>	<b>581</b>	<b>259</b>	<b>1942</b>
<b>Kapiti Coast</b>	Paekakariki-Raumati	28	0	4	32
	Paraparaumu	32	6	0	38
	Waikanae	31	48	0	79
	Otaki	19	14	10	33
	<b>Kapiti - net</b>	<b>110</b>	<b>68</b>	<b>14</b>	<b>192</b>
<b>Upper Hutt</b>	<b>Upper Hutt</b>	<b>102</b>	<b>100</b>	<b>31</b>	<b>233</b>
<b>Porirua</b>	Porirua East	45	42	82	<b>169</b>
	Porirua West	66	57	0	<b>123</b>
	<b>Porirua - net</b>	<b>111</b>	<b>99</b>	<b>82</b>	<b>292</b>
<b>Hutt</b>	Hutt North	131	46	33	210
	Hutt South	156	108	86	350
	<b>Hutt - net</b>	<b>287</b>	<b>154</b>	<b>119</b>	<b>560</b>
<b>Wellington</b>	Wellington North	71	36	0	107
	Wellington West	103	16	0	119
	Wellington South East	39	60	0	99
	Wellington South West	279	48	13	340
	<b>Wellington - net</b>	<b>492</b>	<b>160</b>	<b>13</b>	<b>665</b>

Note that throughout this report numbers are rounded to the nearest decimal place – this rounding may result in some columns of figures not adding exactly to the totals.

## 2.4 Average field capacity (FFE per week)

The average capacity of all secured fields (full size and small sided fields) including dedicated and off field training areas varies across TAs:

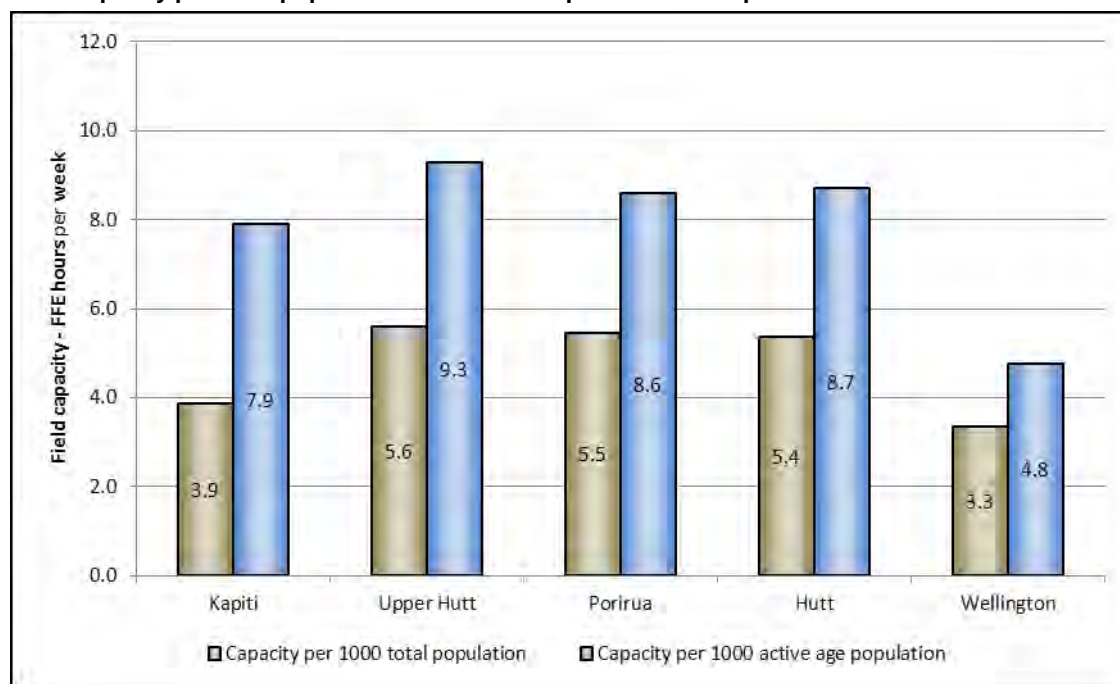
- Kapiti 5.7 full field equivalent hours per week hours per week
- Upper Hutt 6.0
- Porirua 7.6
- Hutt 6.8
- Wellington 7.0 (includes artificial turf fields)

## 2.5 Level of service

To compare field capacity across TAs we have compared the field capacity with both the total and active age group populations in each TA.

The relative field capacity per active age population varies across the TAs ranging from a high of 9.3 full field equivalent hours per week in Upper Hutt to a low of 4.8 hours per week in Wellington City.

Field capacity per 1000 population – Full Field Equivalent hours per week



## 2.6. Club concern about field supply

Clubs were asked to say how much of a concern a range of issues were for them, including access to fields for the number of teams they have.

For **football** clubs the number one issue is funding with 90% concerned about this. Access to fields ranked as the **number two concern** with 87% reporting this was either a big concern or of some concern to them. The number three issue is finding coaches (80%).

For **rugby** clubs the number one issue is also funding with 96% concerned about this. Access to fields was a concern for 56% ranking it as **8<sup>th</sup> in the list of concerns** behind funding, finding volunteers for committee positions, member recruitment and retention, finding coaches and team managers, club room maintenance and member access issues eg cost and transport.

For **league** clubs the number one issue is also funding with 91% concerned about this. Access to fields was a concern for 64% ranking it as **5<sup>th</sup> in the list of concerns** behind funding, finding volunteers for committee positions, finding coaches and member access issues eg cost and transport

Clubs also rated what they considered to be the best and worst fields they played on and offered comments on field supply, quality and maintenance. These ratings and comments are provided in Appendix 2.

## 3.0 Impact of Surface Type on Capacity

The field network comprises three different surface type – natural grass soil fields, natural grass sand carpet fields and artificial turf fields. The winter capacity of natural grass fields is highly weather, soil type and drainage dependent. Generally sand carpet fields should be able to withstand more play in winter due to their freer draining characteristics but may also need summer irrigation. Artificial fields can usually be played on in all conditions.

### 3.1 Soil full size fields

The majority of fields in the Wellington Region are soil fields.

As outlined below TAs have differing approaches to field management with some opting to use fields for both competition and training and others keeping fields for competition and utilising dedicated training areas (DTAs) for training.

Note, for comparison purposes, the figures provided are based just on **full size** fields to provide an indication as to what a typical capacity might be in different locations around the region. (All smaller sized fields, whilst not in this calculation, are included in the model).

As the purpose for this analysis is to decide on a typical capacity for soil, sand and artificial fields we have excluded the odd outlier field where the capacity was markedly higher than other fields in that TA area. (Note the calculations only include fields owned or managed by TAs).

#### Kapiti Coast

Full size soil fields used for:	some competition only and some competition and training
Average capacity of:	5.0 hours per week – just competition use
	7.1 hours per week – competition and training
DTA full size soil	8 hours per week

#### Upper Hutt

Full size soil fields used for:	competition only
Average capacity of:	6.5 hours per week (all competition)
DTA – full size soil	7.4 hours per week

#### Porirua

Full size soil fields used for:	some competition only and some competition + training
Average capacity of:	5.9 hours per week - just competition use
	8.9 hours per week - competition and training use
DTA – full size soil fields	10.0 hour training capacity

#### Hutt City

Full size soil fields used for:	some competition only and some competition + training
Average capacity of:	3.8 hours per week - just competition use
	6.3 hours per week – competition and training
DTA – full size soil fields	16 hour training capacity

## Wellington City

Full size soil fields used for: some competition only and some competition + training

Average capacity of: 3.8 hours per week - just competition use

6.2 hours per week - competition & training use

DTA – full size soil field 6 hours per week

### 3.2 Sand carpet full size fields

The relatively few full size sand carpet fields are not spread evenly across the region with Wellington City the only TA to invest significantly in this surface type for full size fields:

Kapiti Coast no full size sand carpet fields

Upper Hutt no full size sand carpet fields

Porirua 2 fields, at Endeavour park (8 hour capacity each)

1 field at Porirua Park (6 hour capacity)

Hutt City 1 field – premier field and use limited to 4 hours

Wellington 5 fields competition only – 4.6 hour average capacity

3 fields competition + training – 8 hour average capacity

The above figures indicate a focus on surface quality not increased capacity has possibly driven the decisions to upgrade to sand.

### 3.3 Artificial turf fields

Wellington City has developed 4 artificial turf fields and invested in school partnerships to provide two further fields (only 1 was available for the 2012 playing season).

Artificial turfs can provide almost unlimited capacity dependent on resource consent conditions, manufacturer warranties and the time people are available to play or train.

The Wellington City owned artificials are used up to 80 hours per week but are typically booked for between 51 and 55 hours per week during the winter sport season.



## 4. Weather Related Closures

### 4.1. Impact on competition

Each winter weather conditions often require TAs to close fields as further play could cause damage to the surface.

When fields are closed at weekends the RSO tries to transfer games to other available fields. If there are few other available fields the RSOs are forced to cancel games. To avoid wide spread cancellations there is a need to have some surplus field capacity.

Field closures during the week result in clubs cancelling training sessions as most have no other training spaces available to them.

The following information on the likely impact of competition field closures is to be taken as indicative only as the quality of the available information on competition field closures across the season is variable. The information used has been sourced as follows:

TA	Source of closure information
Kapiti Coast	As detailed information was not readily available a standard figure of 10% closures has been used – anecdotal information is that the fields are relatively free draining and are not closed as often as other fields in the region
Porirua	Closure information provided by TA at individual field level
Upper Hutt	As detailed information was not readily available a standard figure of 15% closures has been used – anecdotal information is that the fields are not closed as frequently as those in Porirua, Hutt or Wellington Cities
Hutt	Closure information provided by TA at individual field level
Wellington City	List of field status provided by TA. Dates when all fields in the city, except artificial turfs, are closed, are noted. Days when ‘some restrictions’ apply do not have details about which fields and what level of restriction. An assumption has been made that ‘some restrictions’ applies to all fields in the city and that the capacity of those fields has been reduced by half. Note this may overstate the actual level of closures.

The closure information is expressed as the percentage of weekend days during the season that fields were closed to play. This percentage has been applied to the field capacity figures on a field by field basis and the model re-run using reduced capacities.

In 2012, the average closure rate across the region for competition fields was 16%, ie fields were closed for play, on average for 3.2 competition days in a 20 week season. Closure rates vary by TA as follows:

#### Competition field closure percentage by TA

Kapiti	10%	(estimate not based on individual field data)
Upper Hutt	15%	(estimate not based on individual field data)
Porirua	12%	(based on closure data)
Hutt	23%	(based on closure data)
Wellington	13%	(based on closure data – where play was restricted the closure rate has been estimated at 50%, ie half the scheduled games able to be played. Artificial turfs are included at full capacity, ie open for play all season)

Note that the closure rate for Wellington’s natural grass fields was calculated at 22.5%, i.e these fields, on average, were closed for nearly a quarter of competition days. On this basis, without the artificial turfs, Wellington City would not meet its performance target of 80% provision. Note the other TAs do not have performance targets that state a minimum level of provision.

An analysis of weekday field closures is not provided due to the lack of reliable data.

The timing of closures during the season has a significant impact on the overall effect this has on RSOs ability to complete their competitions. Whilst it appears that the overall seasonal closure rates for the 2011 and 2012 seasons were similar the effect of weather related closures was markedly different. In 2011 field closures were necessary relatively early in the season meaning that the competitions got behind and catch up games were needed later in the season. In contrast, in 2012, the closures happened towards the end of the season by which time a number of competitions were almost complete.

#### 4.2. Competition field closures by code

On average competition fields are closed 16% of the season with league (18%) and rugby (17%) experiencing slightly higher closure levels than football (13%).

The table below details the closure rate for different code fields in each TA

**Summary Table – Percentage of Competition Field Hours Closed**

TA	All Codes	Football	Rugby	League
Kapiti*	10	10	10	10
Upper Hutt*	15	15	15	15
Porirua	12	9	11	16
Hutt	21	21	20	20
Wellington	13	11	20	22
<b>Total Region</b>	<b>16</b>	<b>13</b>	<b>17</b>	<b>18</b>

\*Based on 10% closure rate across all fields in Kapiti and 15% in Upper Hutt

## **8. Key Outcomes**

# **Capacity Surplus / Shortfall**

# 1. Current Capacity Surplus / Shortfall

## 1.1 Region wide

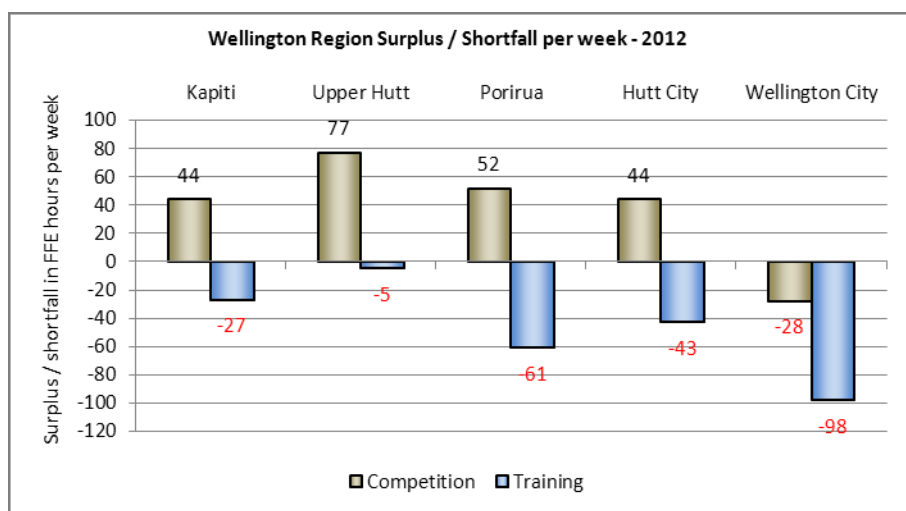
As the field size requirements are fairly similar for the three codes it is feasible to reallocate fields should there be a supply surplus in one code and a shortfall in another. This analysis therefore considers not just surpluses and shortfalls within each code but over all three codes as a whole as well.

Currently most competition games are played at the weekend with mid week training. If this tradition is to continue the weekend and weekday capacity will need to meet demand at those times. Travel times also need to be considered, as while teams are generally willing to travel out of their immediate area for games, if training space is not provided locally, particularly for junior and youth grades, participation rates can be impacted as some people are unwilling or unable to travel a distance to train.

Across the Wellington Region there is a current shortfall of **-45** hours per week made up of a surplus of 189 hours for competition at the weekend and a shortfall of **-234** hours for training during the week. Note where games were played on a week day demand has been included in the training model and where training took place at weekends this has been included in the competition model.

There is a surplus of competition capacity in all TAs other than Wellington City where there is a **-28 hour** shortfall.

In contrast, all TAs have a shortfall of training space, although this is minimal in Upper Hutt.



Note this analysis assumes field allocation is optimised across the codes.

A small proportion of the shortfall in competition capacity in Wellington City is taken up by games being played on unsecured school fields. The balance of the shortfall appears to be accounted for by reported over booking / over use of some fields.

Generally when there is a shortfall in training capacity teams are forced to adopt sub optimal training regimes – training on smaller fields, for less time and less often. This can have a long term impact on skill development and the team's ability to compete with other teams.

**By code**

The table below shows the 2012 surplus / shortfall across each TA for each of the codes. All codes have shortfalls in one or more TA area with football and rugby significantly more impacted than league.

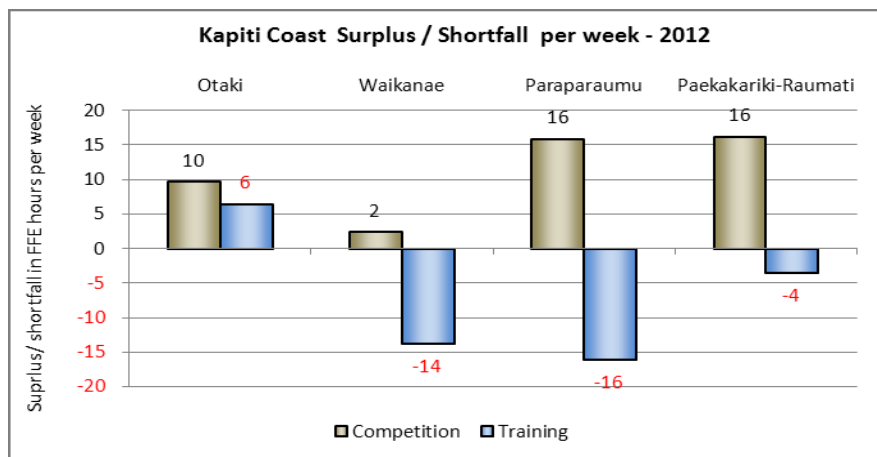
**2012 Surplus / shortfall in capacity in FFE hours per week by sports code**

	TA	Weekend shortfall	Weekday shortfall	Full week shortfall
<b>Football</b>	Kapiti Coast	26	-39	-13
	Upper Hutt	14	2	15
	Porirua	21	-30	-10
	Hutt City	24	-15	9
	Wellington City	-24	-30	-54
	<b>Region total</b>	<b>61</b>	<b>112</b>	<b>-53</b>
<b>Rugby</b>	Kapiti Coast	16	4	20
	Upper Hutt	46	-9	37
	Porirua	5	-18	-12
	Hutt City	-1	-29	-30
	Wellington City	-9	-60	-69
	<b>Region total</b>	<b>57</b>	<b>-111</b>	<b>-54</b>
<b>League</b>	Kapiti Coast	3	7	10
	Upper Hutt	17	2	19
	Porirua	26	-13	13
	Hutt City	22	1	23
	Wellington City	5	-8	-3
	<b>Region total</b>	<b>72</b>	<b>-11</b>	<b>62</b>

Note: where figures don't sum exactly the difference is due to rounding

## 1.2 Kapiti Coast

Although there is an overall weekly surplus of 17 FFE hours this is not evenly distributed across the four Wards. There is a small surplus of competition capacity in all four Wards, balanced by a shortfall of training capacity, particularly in Paraparaumu and Waikanae.



The following table shows the current surplus / shortfall by code across the four Wards. There is a **-39** hour shortfall for football across the District, with most of this in Waikanae.

### Current Surplus / shortfall – FFE hours per week by Code

TA	Football			Rugby			League		
	Full week	Comp.	Train.	Full week	Comp.	Train.	Full week	Comp.	Train.
Otaki	2	2	0	4	5	-1	10	2	8
Waikanae	-46	-13	-33	35	15	19	0	0	0
Paraparaumu	10	18	-8	-8	-1	-7	-2	-1	-2
Paekakariki	21	19	2	-11	-4	-7	3	2	1
<b>Total Kapiti</b>	<b>-13</b>	<b>26</b>	<b>-39</b>	<b>20</b>	<b>16</b>	<b>4</b>	<b>10</b>	<b>3</b>	<b>7</b>

## 1.3 Upper Hutt

In Upper Hutt there is an imbalance between competition and training capacity with a surplus of 77 hours for competition and a small shortfall of **-5** hours for training.

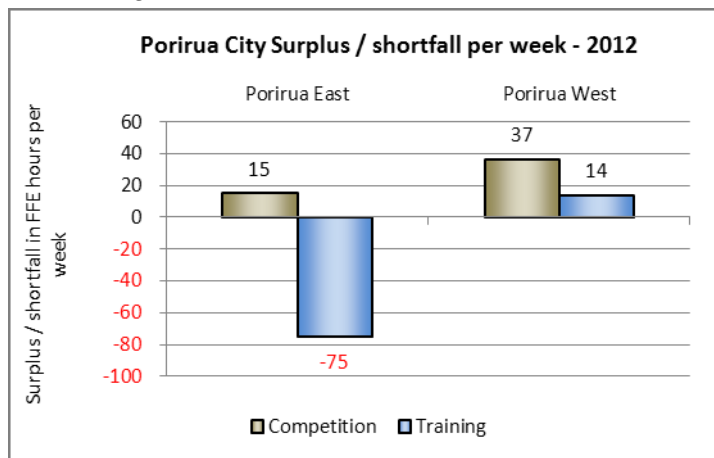
The imbalance is seen across all codes with training capacity at breakeven or just in shortfall for football, rugby and league.

### Current Surplus / shortfall – FFE hours per week by Code

Upper Hutt	Football			Rugby			League		
	Full week	Comp.	Train.	Full week	Comp.	Train.	Full week	Comp.	Train.
<b>Total Upper Hutt</b>	15	14	2	37	46	-9	19	17	2

### 1.4 Porirua analysis areas

Although there is an overall weekly shortfall of -9 hours this is not evenly distributed across Porirua District. There is an overall shortfall of -60 hours in the east including a -75 hour for training.



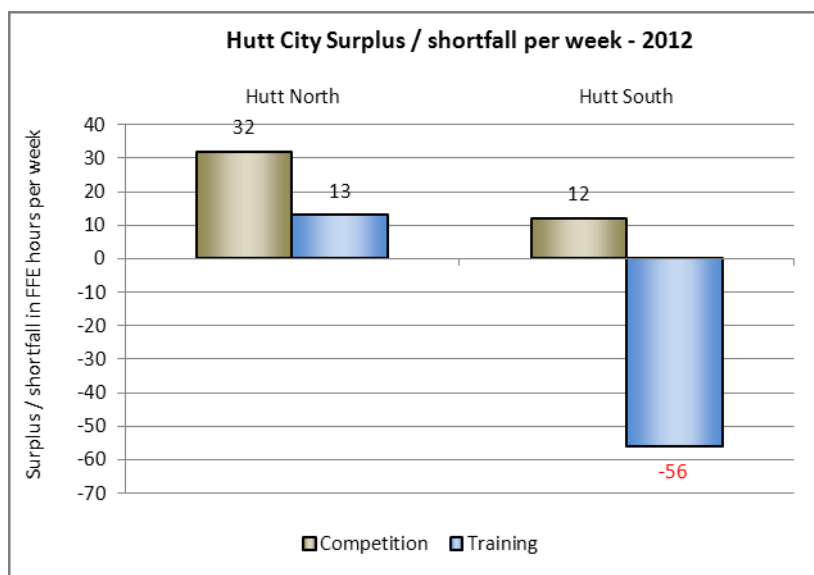
The following table shows the current surplus / shortfall by code across the city. All codes have a training shortfall with this more pronounced in the east than the west.

Current Surplus / shortfall – FFE hours per week by Code

TA	Football			Rugby			League		
	Full week	Comp.	Train.	Full week	Comp.	Train.	Full week	Comp.	Train.
Porirua East	-46	-2	-44	-36	-12	-24	22	29	-7
Porirua West	36	22	14	24	17	6	-9	-3	-6
<b>Total Porirua</b>	<b>-10</b>	<b>21</b>	<b>-30</b>	<b>-12</b>	<b>5</b>	<b>-18</b>	<b>13</b>	<b>26</b>	<b>-13</b>

### 1.5 Hutt City analysis areas

There is an imbalance between competition and training capacity in Hutt City with a 44 hour surplus for competition matched by a -43 hour training shortfall, which includes a -56 hour shortfall in the south.



The following table shows the current surplus / shortfall by code across the city.

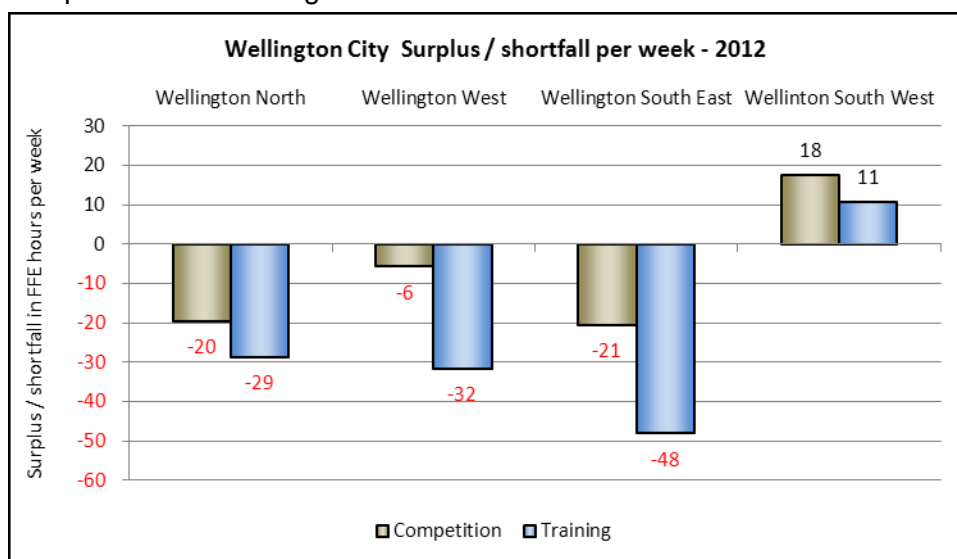
Football has a relatively large training shortfall in the south whilst rugby has more modest shortfalls across the city.

#### Current Surplus / shortfall – FFE hours per week by Code

TA	Football			Rugby			League		
	Full week	Comp.	Train.	Full week	Comp.	Train.	Full week	Comp.	Train.
Hutt North	61	28	33	-17	2	-19	1	2	-1
Hutt South	-53	-5	-48	-13	-3	-10	22	20	2
<b>Total Hutt City</b>	<b>9</b>	<b>24</b>	<b>-15</b>	<b>-30</b>	<b>-1</b>	<b>-29</b>	<b>23</b>	<b>22</b>	<b>1</b>

## 1.6 Wellington City

There is a **-28 hour** shortfall for competition and a **-98 hour** shortfall for training across Wellington City. Of the four sub areas only Wellington South West has a surplus of capacity for both competition and training.



The following table shows the current surplus / shortfall by code across the City.

Football has a capacity shortfall for both competition and training whilst rugby's shortfall is primarily training space.

#### Current Surplus / shortfall – FFE hours per week by Code

TA	Football			Rugby			League		
	Full week	Comp.	Train.	Full week	Comp.	Train.	Full week	Comp.	Train.
North Wellington	-37	-20	-17	-11	1	-12	0	0	0
West Wellington	-8	1	-9	-29	-6	-23	0	0	0
South east Wellington	-56	-25	-31	-5	7	-12	-8	-3	-5
South west Wellington	47	20	27	-24	-11	-14	5	8	-3
<b>Total Wellington City</b>	<b>-54</b>	<b>-24</b>	<b>-30</b>	<b>-69</b>	<b>-9</b>	<b>-60</b>	<b>-3</b>	<b>5</b>	<b>-8</b>



## 2. Impact of weather related closures on competition play

### 2.1 Region Wide

Region wide there is an estimated 16% closure rate for competition fields.

This level of closure reduces the current 189 hour competition surplus to 40 hours per week.

### 2.2 By TA

If competition is looked at as a whole across the region all shortfalls caused by weather related closures can be accommodated in neighbouring areas, other than in Wellington City and Hutt South.

#### Surplus / shortfall – FFE hours per week with field closures deducted

TA	Competition
Otaki	8
Waikanae	-1
Paraparaumu	13
Paekakariki - Raumati	14
<b>Kapiti Coast net</b>	<b>33</b>
<b>Upper Hutt</b>	<b>57</b>
Porirua East	2
Porirua West	30
<b>Porirua net</b>	<b>32</b>
Hutt North	20
Hutt South	-28
<b>Net Hutt</b>	<b>-8</b>
Wellington North	-32
Wellington West	-15
Wellington South East	-33
Wellington South West	2
<b>Net Wellington</b>	<b>-78</b>
<b>Total Region</b>	<b>36</b>

Note where figures do not add the difference is due to rounding

Note this assumes field allocation is optimised across the codes.

### 3. Current Surplus / Shortfall by Sports Code

The following table show the current surplus / shortfall capacity across each TA analysis area for each of the codes.

The three northern TAs – Kapiti Coast, Upper Hutt and Porirua have capacity to cater for weather related closures across all codes, although supply is tight and games may be cancelled if the RSO has difficulty rescheduling onto available fields.

Hutt City is at break even point for football and league but in shortfall for rugby.

Wellington City has shortfalls for football and rugby over much of its area.

#### Shortfall capacity FFE hours – weather related closures included

Code	TA	Competition shortfall
Football	<b>Region Total</b>	<b>-14</b>
	Otaki	2
	Waikanae	-15
	Paraparumu	15
	Paekakariki - Raumati	16
	<b>Kapiti net</b>	<b>18</b>
	<b>Upper Hutt</b>	<b>7</b>
	Porirua East	-5
	Porirua West	21
	<b>Porirua net</b>	<b>16</b>
	Hutt - North	21
	Hutt - South	-22
	<b>Net Hutt</b>	<b>-1</b>
	Wellington North	-28
	Wellington West	-6
	Wellington South East	-30
Wellington South West	10	
<b>Net Wellington City</b>	<b>-54</b>	

Code	TA	Competition shortfall
Rugby	<b>Region Total</b>	<b>12</b>
	Otaki	4
	Waikanae	13
	Paraparaumu	-1
	Paekakariki	-4
	<b>Kapiti net</b>	<b>12</b>
	<b>Upper Hutt net</b>	<b>36</b>
	Porirua East	-14
	Porirua West	18
	<b>Porirua net</b>	<b>4</b>
	Hutt - North	-2
	Hutt - South	-11
	<b>Net Hutt</b>	<b>-13</b>
	Wellington North	-4
	Wellington West	-9
	Wellington South East	-
Wellington South West	-14	
<b>Net Wellington</b>	<b>-27</b>	
League	<b>Region wide</b>	<b>37</b>
	Otaki	2
	Waikanae	-
	Paraparaumu	-1
	Paekakariki	1
	<b>Kapiti net</b>	<b>2</b>
	<b>Upper Hutt net</b>	<b>14</b>
	Porirua East	21
	Porirua West	-9
	<b>Porirua net</b>	<b>12</b>
	Hutt - North	1
	Hutt - South	5
	<b>Net Hutt</b>	<b>6</b>
	Wellington North	-
	Wellington West	-
	Wellington South East	-3
Wellington South West	6	
<b>Net Wellington City</b>	<b>3</b>	

## **9. Key Outcomes**

# **Future Capacity Surplus / Shortfall**

# 1. Information Used to Project Future Demand

## 1.1. Basis for Projections

Future projections take into consideration:

1. Projected active age population growth
2. Team generation rates
3. Code growth or decline and external factors that may impact on individual codes

## 1.2. Projected population growth

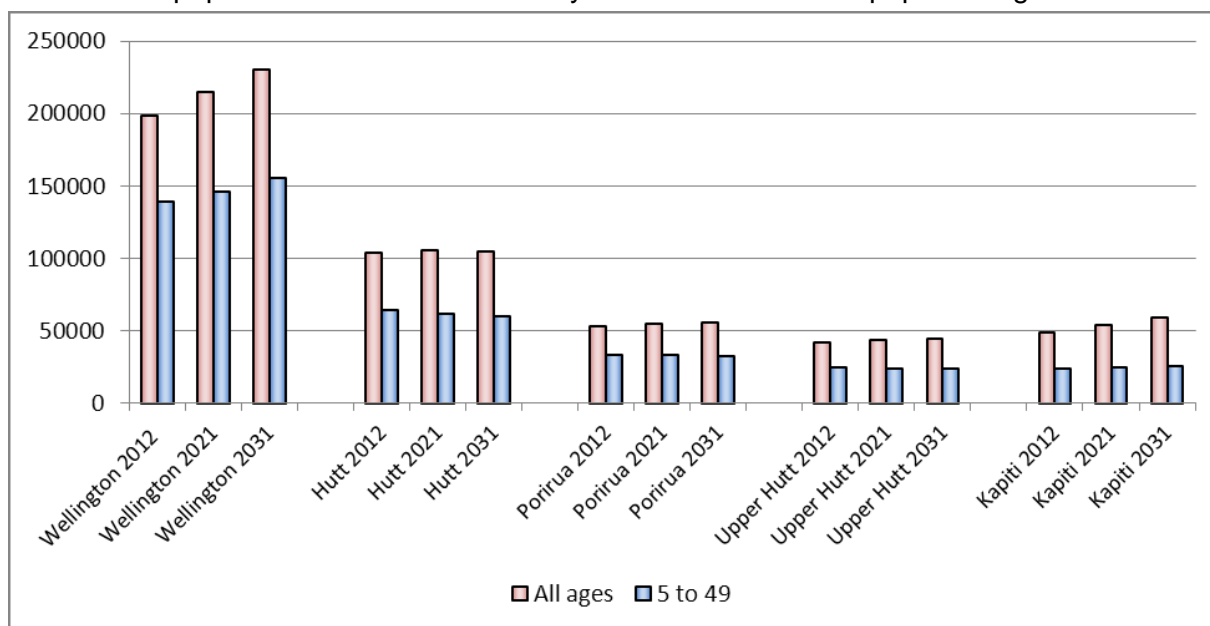
### 1.2.1 Region wide

The region’s population is projected to increase from 446,440 (2012 estimate) to 494,905 in 2031. The overall percentage increase is 10.9%.

Due to the ageing population, growth in the ‘active population’ is lower with the 5 to 49 age group projected to rise from the current 287,243 (2012 estimate) to 298,132, an increase of just 3.8%.

### 1.2.2 By TA

As the chart below shows varying level of growth are projected in the different TA areas. Growth in the active population does not necessarily correlate with overall population growth.



The population increase is not evenly spread across the five TAs with only Wellington City (+11%) and Kapiti (+8%) active age populations projected to grow in the next 20 years with active age population decline projected for Upper Hutt (-4%), Porirua (-3%) and Hutt City (-7%).

#### Active age (5 to 49) population projections

	2012 (estimate)	2016	2021	2026	2031
Kapiti Coast	24238	24319	24607	25100	26145
Upper Hutt	25066	24,650	24,040	23,870	24,050
Porirua	33880	33620	33080	32705	32760
Hutt City	64505	63405	61755	60545	59830
Wellington City	139554	142304	146051	150424	155337
<b>Total Region</b>	<b>287243</b>	<b>288298</b>	<b>289533</b>	<b>292644</b>	<b>298122</b>

The table below shows the active age as a proportion of the total population both now and projected for 2021 and 2031. In all areas the ageing effect is greater over the next 9 years to 2021 than it is projected to be in the following 10 year period from 2021 to 2031.

#### Active age as a percentage of total population

	2012	2021	2031
Kapiti Coast	49	45	44
Upper Hutt	60	55	54
Porirua	64	60	59
Hutt	62	59	57
Wellington	70	68	67
<b>Total Region</b>	<b>64</b>	<b>61</b>	<b>60</b>

## 1.2.3 By TA analysis area

As with the region as a whole, active age population growth or decline is not evenly spread across the analysis areas. The projected change in the active age population by 2021 ranges from a decrease of -4.7% in Hutt South to an increase of 19.5% in Otaki on the Kapiti Coast.

Summary Table: Projected Population Growth – Active Age Population (5 to 49)

TA	Analysis area	2012 Estimate	2021 Projection	2031 Projection	% Change 2012 - 2021	% Change 2012 - 2031
	<b>Total Region</b>	<b>287243</b>	<b>289533</b>	<b>298122</b>	<b>0.8</b>	<b>3.8</b>
<b>Kapiti</b>	Paekakariki-Raumati	4320	4224	4207	-2.2	-2.6
	Paraparaumu	5295	5162	5350	-2.5	1.0
	Waikanae	10327	10089	10432	-2.3	1.0
	Otaki	4296	5132	6156	19.5	43.3
	<b>Total Kapiti</b>	<b>24238</b>	<b>24607</b>	<b>26145</b>	<b>1.5</b>	<b>7.9</b>
<b>Upper Hutt</b>	Upper Hutt	<b>25066</b>	<b>25650</b>	<b>24040</b>	<b>-2.3</b>	<b>-4.1</b>
<b>Porirua</b>	Porirua East	23,407	23,000	22,895	-1.7	-2.1
	Porirua West	10,473	10,080	9,865	-3.8	-5.8
	<b>Total Porirua</b>	<b>33880</b>	<b>33080</b>	<b>32760</b>	<b>-2.4</b>	<b>-3.3</b>
<b>Hutt City</b>	Hutt North	18,926	18,330	17,540	-3.1	-7.3
	Hutt South	45,579	43,425	42,290	-4.7	-7.2
	<b>Total Hutt City</b>	<b>64505</b>	<b>61755</b>	<b>59830</b>	<b>-4.3</b>	<b>-7.2</b>
<b>Wellington</b>	Wellington North	29,444	30,586	32,260	3.9	9.6
	Wellington West	27,589	27,011	27,343	-2.1	-0.9
	Wellington South East	24,768	25,279	26,003	2.1	5.0
	Wellington South West	57,753	63,176	69,731	9.4	20.7
	<b>Total Wellington</b>	<b>139554</b>	<b>146051</b>	<b>155337</b>	<b>4.7</b>	<b>11.3</b>

### 1.3. Team Generation Rate (TGR)

The team generation rate (TGR) is the number of people in the age group required to produce one team in that particular code in that area. It is calculated by dividing the age group population by the number of teams in the area in that age group.

The team generation rate is then applied to the projected population to calculate how many teams there will be in the future based just on natural population growth.

To allow comparisons between codes TGRs for all junior and youth grades have been calculated on total population in the age group (boys and girls). The TGRs for men's, women's and presidents grade are calculated on the total population of that gender.

The TGRs are an indication of both participation levels and code popularity across the region.

Overall, it takes 148 people aged 5 to 49 to produce 1 winter code sports team (football, rugby and league).

#### Team Generation Rates

Code	Grade	Kapiti	Upper Hutt	Porirua	Hutt City	Wellington	Region
Football	Mens (18-49)	345	713	584	416	388	423
	Women's (18-49)	3041	4436	4174	2013	2871	2802
	Youth (11 to 14)	105	102	132	113	59	84
	Junior 7 to 10	68	73	68	62	35	49
	Mini 5 to 6	57	51	41	55	28	38
	<b>All football</b>	<b>217</b>	<b>265</b>	<b>241</b>	<b>232</b>	<b>187</b>	<b>209</b>
Rugby	Men's (18-34)	660	508	354	374	631	507
	Presidents (35-49)	No teams	4376	2622	1378	3597	3131
	Women's (18-34)	No teams	No teams	6257	5985	7374	8012
	U11 – U13	205	172	160	193	216	194
	U8 – U10	116	116	118	133	141	130
	U5 – U7	96	48	58	67	75	68
	<b>All rugby</b>	<b>553</b>	<b>410</b>	<b>375</b>	<b>442</b>	<b>679</b>	<b>526</b>
League	Men's (16-34)	No teams	1299	524	728	11060	1637
	Women's (16-34)	No teams	No teams	7045	3347	35594	10824
	Junior 11 to 15	1513	No teams	398	643	3855	1100
	Junior 9 to 10	No teams	No teams	322	483	4321	930
	Mini 5 to 8	2391	No teams	485	546	No teams	1225
	<b>All league</b>	<b>7744</b>	<b>5951</b>	<b>896</b>	<b>1230</b>	<b>16640</b>	<b>2712</b>

### 1.4 Code growth or decline

A code growth or decline factor is also built into the model to recognise that participation rates can and do change over time. This factor is calculated at grade level and is based on an assessment of historic team number trends relative to natural population growth, club growth projections provided by clubs and RSOs as well as other external factors such as national and international events that can impact the popularity of a code. The factors have been agreed with the TAs and RSOs and form the basis of the optimistic projections in this report. Conservative projections based on code growth at half the optimistic level are also provided.

See Appendix 1 for these input factors



## 2. Projections of Future Demand

Future demand has been modelled for population growth in the active age group and two code growth scenarios:

- Optimistic – active age population growth plus optimistic code growth
- Conservative – active age population growth plus conservative code growth

### 2.1 Region wide

The current 1,986 full size field equivalent hours per week demand will grow to:

**a. Conservative code growth scenario**

2,106 hours in 2022	= 6.0% increase in 9 years	= 120 hours
2,216 hours in 2031	= 11.6% increase in 19 years	= 230 hours

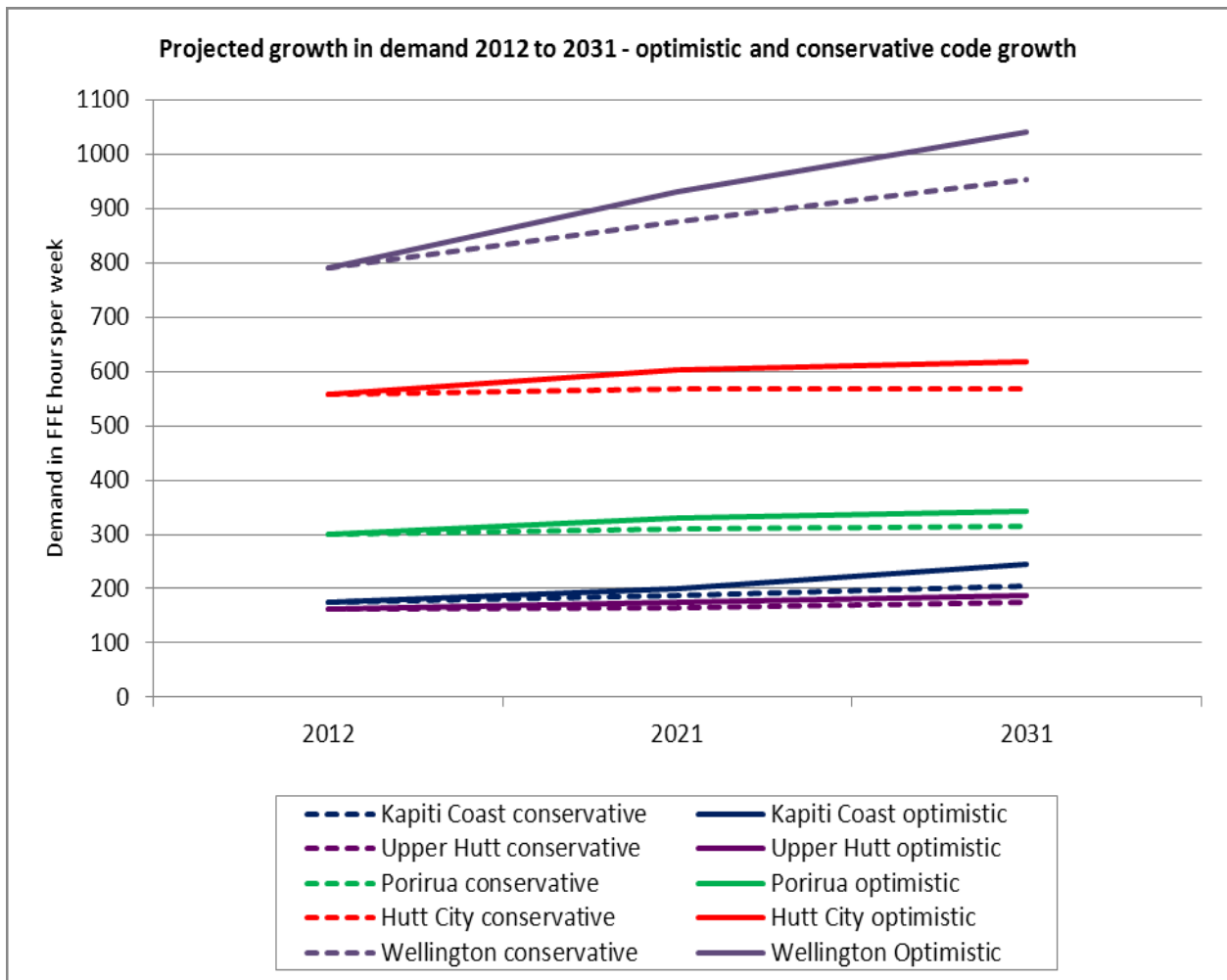
**b. Optimistic code growth scenario**

2,237 hours in 2022	= 12.6% increase in 9 years	= 251 hours
2,412 hours in 2031	= 21.4% increase in 19 years	= 426 hours

### 2.2 By TA

The chart and table below shows the projected demand in each TA until 2031.

Wellington City and Kapiti Coast, both areas of population growth, are projected to have the highest percentage increase on current demand by 2031 with Hutt City the lowest.



### 2.3. By TA analysis area

Projected demand in field hours varies across analysis areas being dependent on projected population growth in the active age group, the popularity of the code in the area both overall and across different levels and projected changes in participation levels (code growth).

Summary Table – Projected Demand by TA analysis area

TA	Sub area	Code growth scenario					Percentage change on 2012			
		2012 Demand	2021 Conservative	2021 Optimistic	2031 Conservative	2031 Optimistic	2012 – 2021 Conservative	2012 – 2021 Optimistic	2012 – 2031 Conservative	2012 – 2031 Optimistic
	<b>Total Region</b>	<b>1,986</b>	<b>2,106</b>	<b>2,237</b>	<b>2,216</b>	<b>2,412</b>	<b>6.0</b>	<b>12.6</b>	<b>11.6</b>	<b>21.4</b>
<b>Kapiti</b>	Paekak. -Raumati	19	20	22	21	23	6.7	13.2	10.2	19.9
	Paraparaumu	38	40	42	43	46	4.8	11.1	12.1	22.0
	Waikanae	90	95	101	101	111	5.1	12.0	12.3	22.9
	Otaki	27	33	35	41	44	22.9	30.4	50.5	63.8
	<b>Total Kapiti</b>	<b>174</b>	<b>188</b>	<b>200</b>	<b>205</b>	<b>244</b>	<b>8.0</b>	<b>14.8</b>	<b>17.9</b>	<b>28.7</b>
<b>Upper Hutt</b>	<b>Upper Hutt</b>	<b>162</b>	<b>165</b>	<b>175</b>	<b>174</b>	<b>187</b>	<b>1.9</b>	<b>8.0</b>	<b>7.4</b>	<b>15.4</b>
<b>Porirua</b>	Porirua East	228	238	253	243	265	4.3	10.9	10.9	16.2
	Porirua West	72	71	76	72	78	-1.3	5.6	-0.8	8.3
	<b>Total Porirua</b>	<b>301</b>	<b>310</b>	<b>329</b>	<b>315</b>	<b>343</b>	<b>3.0</b>	<b>9.3</b>	<b>9.3</b>	<b>13.9</b>
<b>Hutt City</b>	Hutt North	165	169	179	167	181	2.7	9.0	1.3	10.2
	Hutt South	394	399	424	403	436	1.2	7.4	2.2	10.6
	<b>Total Hutt City</b>	<b>559</b>	<b>568</b>	<b>603</b>	<b>569</b>	<b>617</b>	<b>9.3</b>	<b>16.1</b>	<b>17.2</b>	<b>27.7</b>
<b>Wellington</b>	Wellington North	155	170	180	182	199	9.3	16.1	17.2	27.7
	Wellington West	156	164	175	173	189	5.3	12.0	10.6	20.8
	Wellington S.East	167	183	195	196	214	9.7	16.8	17.1	28.0
	Wellington S. West	312	358	380	402	439	14.5	21.7	28.8	40.5
	<b>Total Wellington</b>	<b>791</b>	<b>875</b>	<b>931</b>	<b>953</b>	<b>1,040</b>	<b>10.6</b>	<b>17.6</b>	<b>20.4</b>	<b>31.5</b>

## 2.4. By Sports Code

Demand for football fields is projected to grow at a slightly greater rate than for league or rugby.

**Summary Table – Growth in Demand by Code – 2012 to 2031**

Code	2012 Demand	Code growth scenario				Percentage change on 2012			
		2021 Conservative	2021 Optimistic	2031 Conservative	2031 Optimistic	2012 – 2021 Conservative	2012 – 2021 Optimistic	2012 – 2031 Conservative	2012 – 2031 Optimistic
Football	1154	1233	1315	1308	1431	6.8	13.9	13.3	24.0
Rugby	636	670	710	705	760	5.3	11.6	10.8	19.5
League	197	202	213	203	220	6.0	12.7	11.6	21.4
<b>Total Region</b>	<b>1986</b>	<b>2105</b>	<b>2238</b>	<b>2216</b>	<b>2411</b>	<b>6.0</b>	<b>12.7</b>	<b>11.6</b>	<b>21.4</b>

### 3. Future Projections for Capacity Surplus & Shortfall

#### 3.1 Region wide

Across the Wellington Region there is a projected shortfall of:

**a. Conservative code growth scenario**

-164 hours in 2021

-275 hours in 2031

**b. Optimistic code growth scenario**

-296 hours in 2021

-471 hours in 2031

#### By TA

As the table below shows only Upper Hutt will have sufficient existing capacity to cater for future demand until 2031. Note this assumes that the allocation across codes and between competition and training is optimised.

All other TAs need to add varying levels of capacity.

**Projected surplus / shortfall – full week - FFE hours per week**

TA	2012	2021 Conservative	2021 Optimistic	2031 Conservative	2031 Optimistic
Kapiti Coast	17	4	-8	-14	-33
Upper Hutt	74	68	58	60	46
Porirua	-9	-18	-37	-23	-52
Hutt City	0	-8	-43	-10	-57
Wellington City	-126	-210	-266	-288	-375
<b>Total Region</b>	<b>-45</b>	<b>-164</b>	<b>-296</b>	<b>-275</b>	<b>-471</b>

Note the wide variation between the conservative and optimistic figures for Hutt City are due to active age population decline which increases the impact of code growth

#### By Code

Code projections are provided as an indication only as they are based on the 2012 field allocation and assume that teams will travel anywhere in the region for both competition and training.

**Projected surplus / shortfall – full week - FFE hours per week**

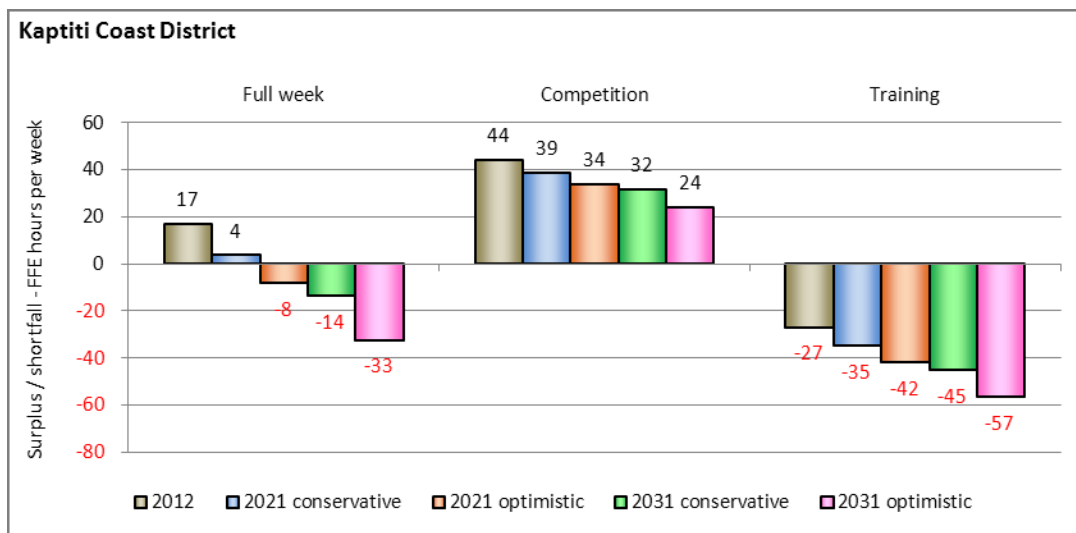
TA	2012	2021 Conservative	2021 Optimistic	2031 Conservative	2031 Optimistic
Football	-53	-133	-213	-206	-330
Rugby	-54	-89	-128	-124	-178
League	62	57	46	55	38
<b>Total Region</b>	<b>-45</b>	<b>-164</b>	<b>-296</b>	<b>-275</b>	<b>-471</b>

### 3.2 Kapiti Coast

#### a. District Wide

When the **full week** is considered there is a:

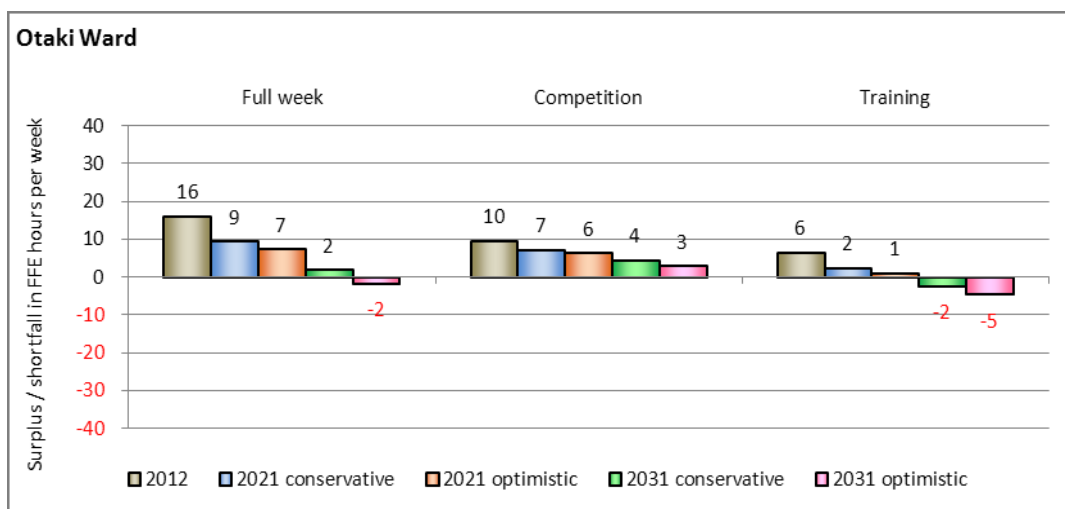
- Current (2012) 17 hour field surplus across the District.
- Reducing to between +4 and -8 hours by 2021 depending on the code growth scenario
- Shortfall increasing further to between -14 and -33 hours by 2031 depending on the code growth scenario
- Significant imbalance between competition and training capacity that is projected to continue to 2031



#### b. Otaki Ward

When the **full week** is considered there is a

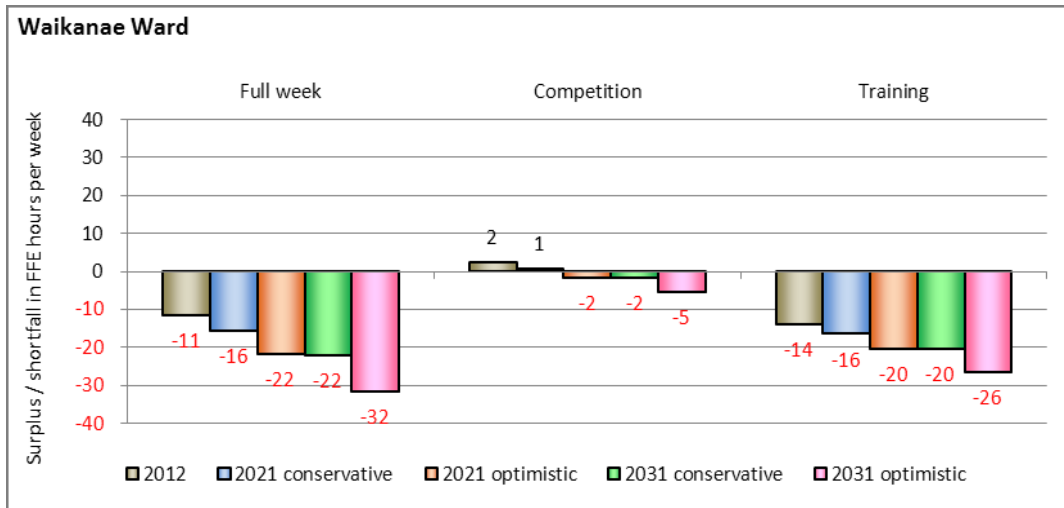
- Current (2012) 16 hour field surplus across the Ward
- Reducing to between 7 and 9 hour surplus by 2021 depending on the code growth scenario
- Reducing further to between +2 and -2 hours by 2031 depending on the code growth scenario
- There is a reasonable balance between competition and training hours



b. Waikanae Ward

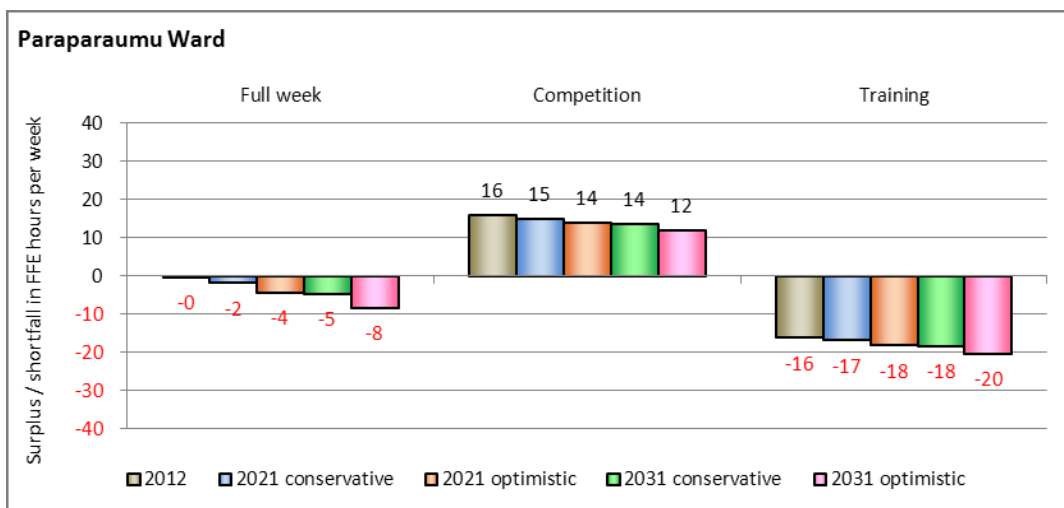
When the **full week** is considered there is a

- Current (2012) **-11** hour field shortfall across the Ward
- Increasing to between **-16** and **-22** hours by 2021 depending on the code growth scenario
- Increasing further to between **-22** and **-32** hours by 2031 depending on the code growth scenario
- The shortfall is predominantly training capacity



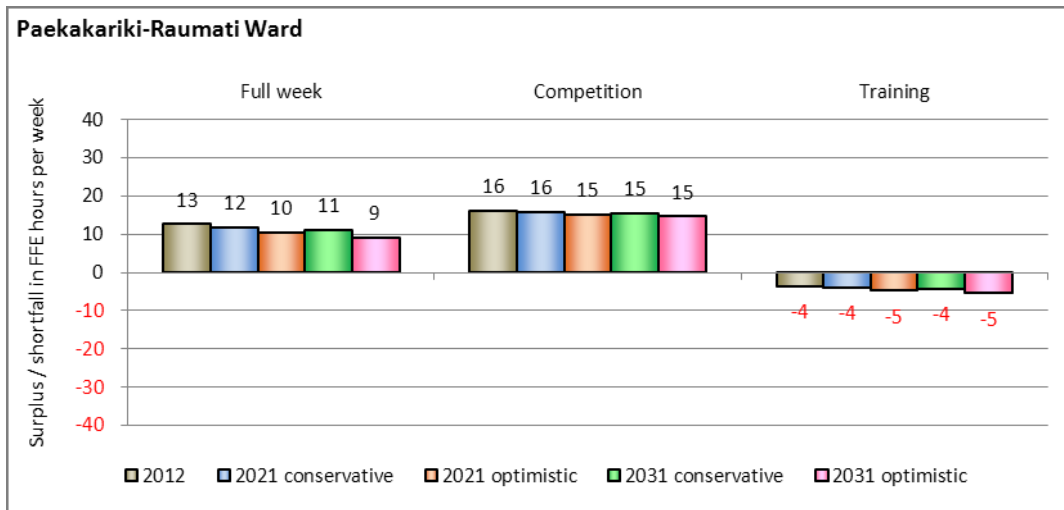
c. Paraparaumu Ward

- Currently supply just matches demand across the full week
- Projecting a shortfall of between **-2** and **-4** hours by 2021 depending on the code growth scenario
- Increasing further to between **-5** and **-8** hours by 2031 depending on the code growth scenario
- There is an imbalance between competition and training with the current training shortfall projected to increase to between **-18** and **-20** hours by 2031



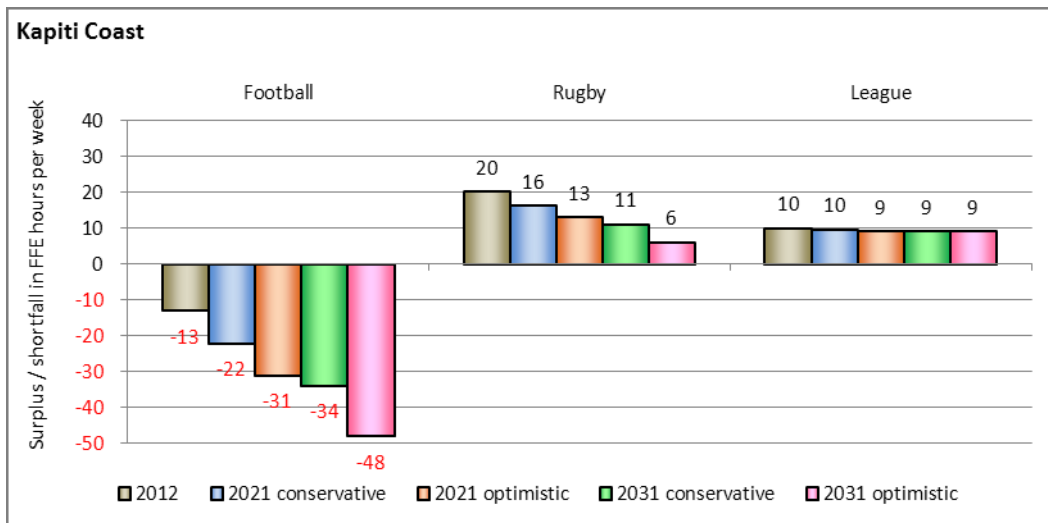
d. Paekakariki-Raumati Ward

- Little change is expected in this Ward with the current full week surplus projected to drop by only 2 to 4 hours by 2031
- There is an imbalance between competition and training with surplus competition capacity but a small shortfall for training



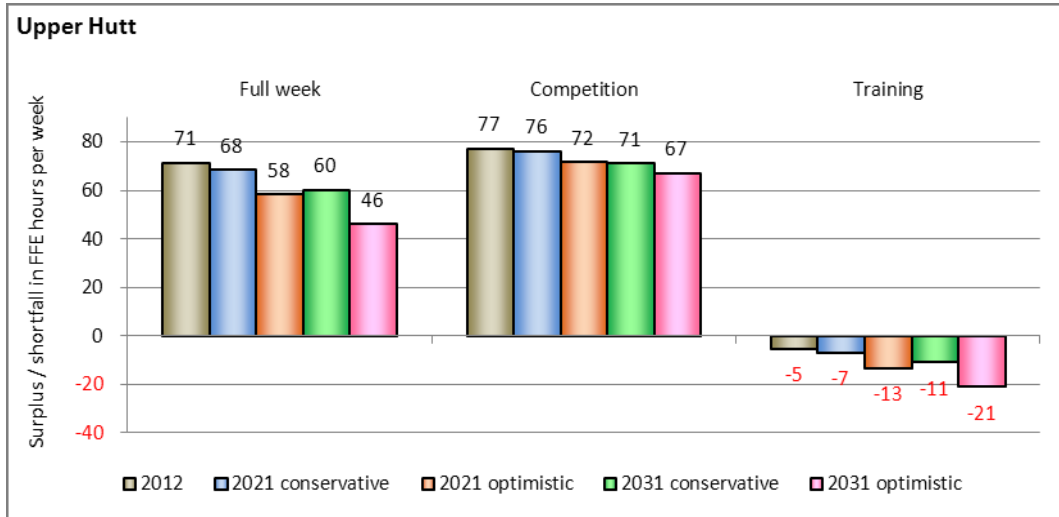
e. By code across Kapiti Coast

- Rugby and league have surplus capacity across the full week, both currently and projected through to 2031
- Football has a current shortfall of -13 hours per week, projected to rise to between -34 and -48 hours by 2031



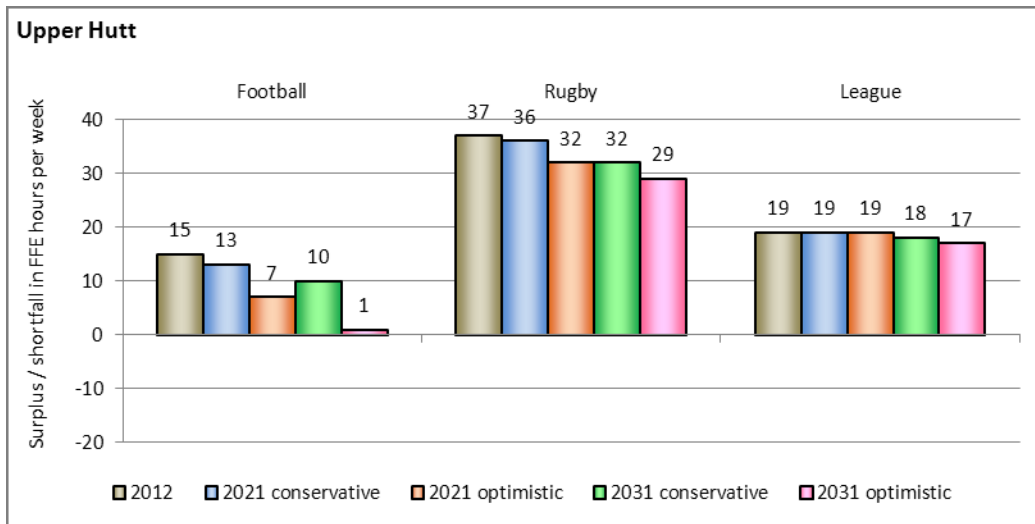
### 3.3 Upper Hutt

- Currently there is a 71 hour surplus across the full week
- Reducing to a surplus of between 58 and 68 hours by 2021 depending on the code growth scenario
- Reducing further to a surplus of between 46 to 60 hours by 2031 depending on the code growth scenario
- There is an imbalance between competition and training with the current small training shortfall of -5 hours projected to increase to between -11 and -21 hours by 2031



#### By code

- Currently all codes are in surplus across the full week
- By 2031 football will be getting close to capacity
- Rugby and league are well supplied

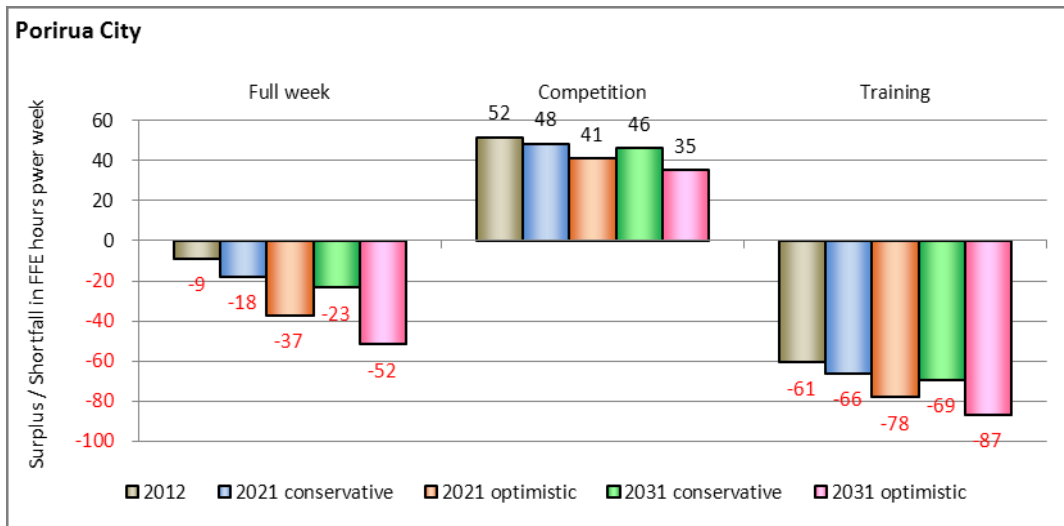




### 3.4 Porirua

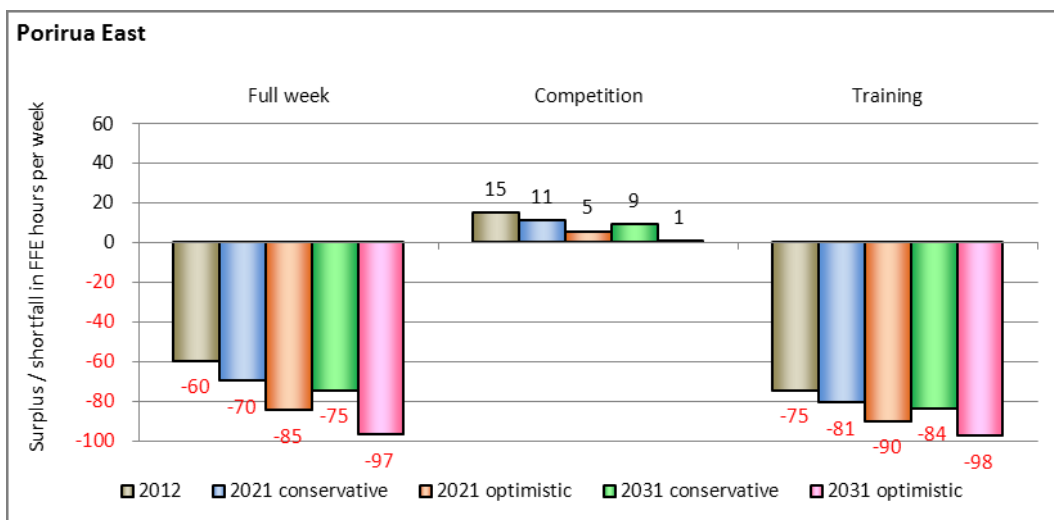
a. City Wide

- Currently there is a **-9** hour shortfall across the full week
- Increasing to a shortfall of between **-18 and -37** hours by 2021 depending on the code growth scenario
- Increasing further to a shortfall of **-23 to -52** hours by 2031 depending on the code growth scenario
- There is a significant imbalance between competition and training with the current training shortfall of **-61** hours projected to increase to between **-69 and -87** hours by 2031



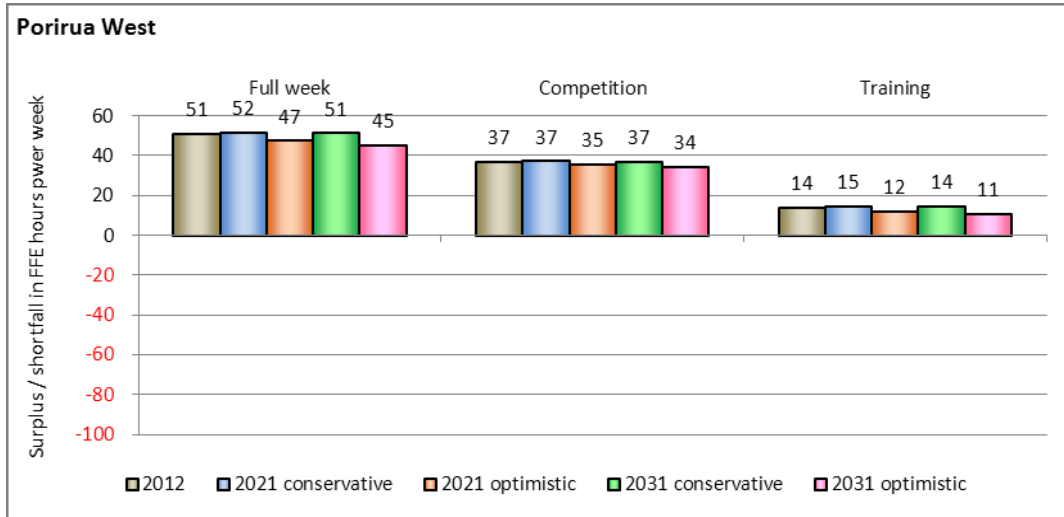
b. Porirua East

- Currently there is a 60 hour shortfall across the full week
- Increasing to a shortfall of between **-70 and -85** hours by 2021 depending on the code growth scenario
- Increasing further to a shortfall of **-75 to -97** hours by 2031 depending on the code growth scenario
- There is an imbalance between competition and training with the current training shortfall of **-75** hours projected to increase to between **-84 and -98** hours by 2031



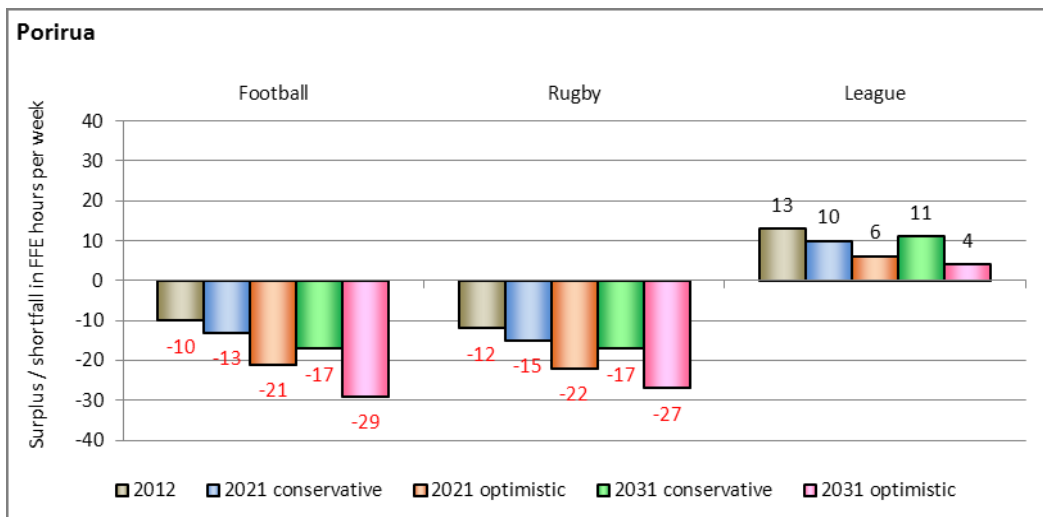
c. Porirua West

- Currently there is a 51 hour surplus across the full week
- Remaining as a surplus of between 47 and 52 hours by 2021 depending on the code growth scenario
- And still remaining as a surplus of 45 to 51 hours by 2031 depending on the code growth scenario
- Whilst there is an imbalance between competition and training both are projected to still be in surplus by 2031



d. By code across Porirua

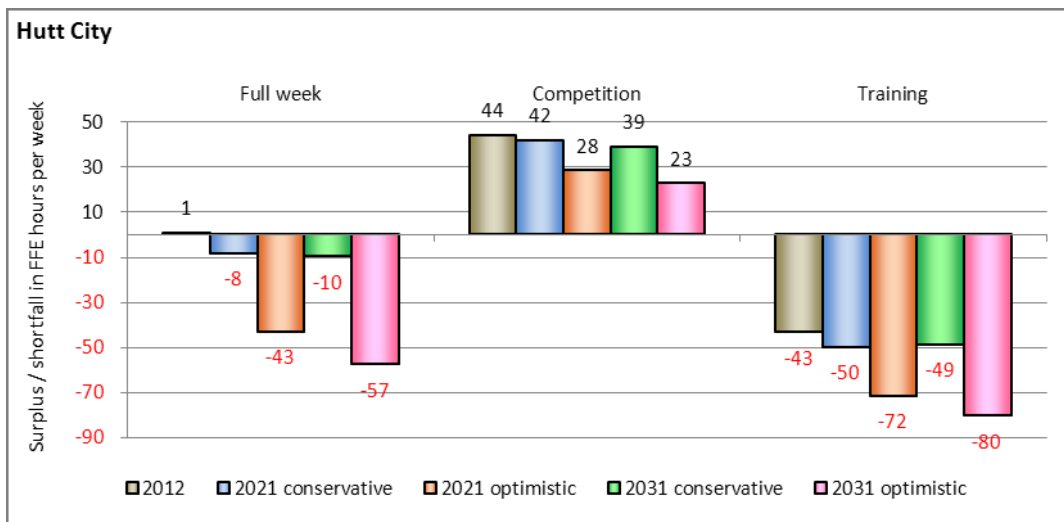
- Currently both football and rugby are in shortfall across the full week
- These shortfalls are projected to extend to between -17 and -29 hours for football and -17 and -27 hours for rugby by 2031
- League has a small surplus and is likely to continue to be in surplus, albeit even smaller, by 2031



### 3.5 Hutt City

a. City Wide

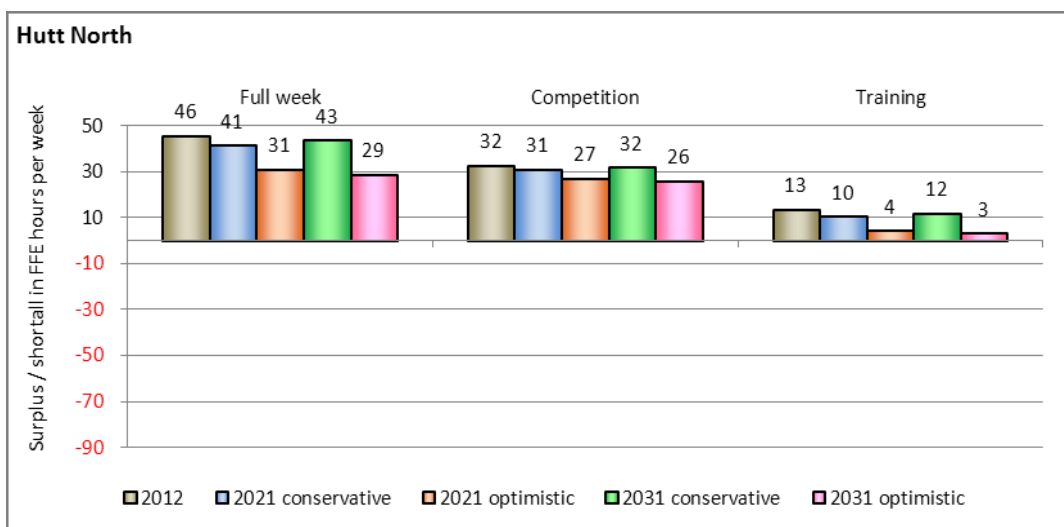
- Currently supply and demand are evenly matched across the full week
- Projections are for a shortfall between -8 and -43 hours by 2021 depending on the code growth scenario
- Increasing further to a shortfall of -10 to -57 hours by 2031 depending on the code growth scenario
- There is a significant imbalance between competition and training with the current training shortfall of -43 hours projected to increase to between -49 and -80 hours by 2031



Note the wide variation between the conservative and optimistic figures is due to population decline in the active age group meaning code growth has a greater influence

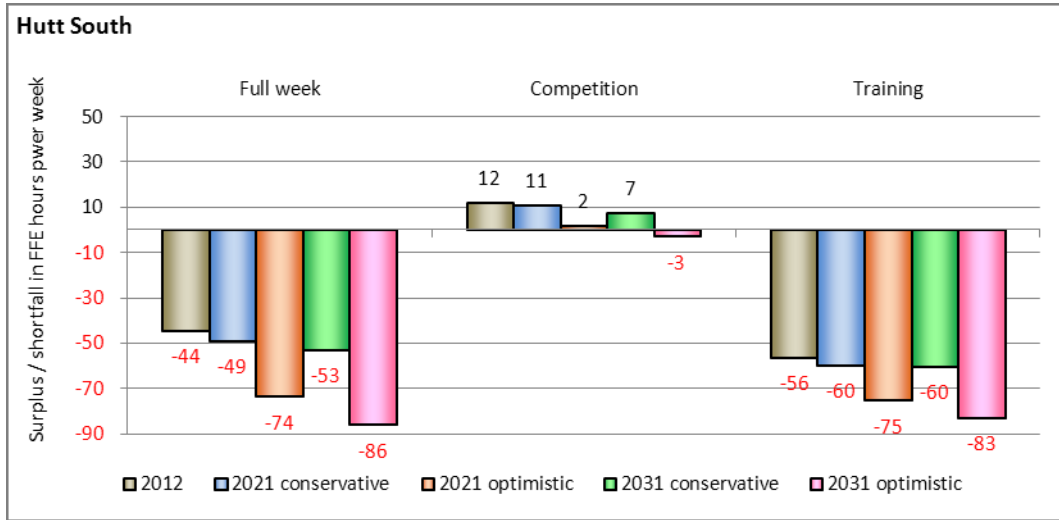
b. Hutt North

- Currently there is a surplus of 46 hours across the full week
- Projections are for this surplus to reduce to between 31 and 41 hours by 2021 depending on the code growth scenario
- Reducing further to a surplus of 29 to 43 hours by 2031 depending on the code growth scenario
- Although there is an imbalance between competition and training both are projected to remain in surplus by 2031, although training capacity will be tight



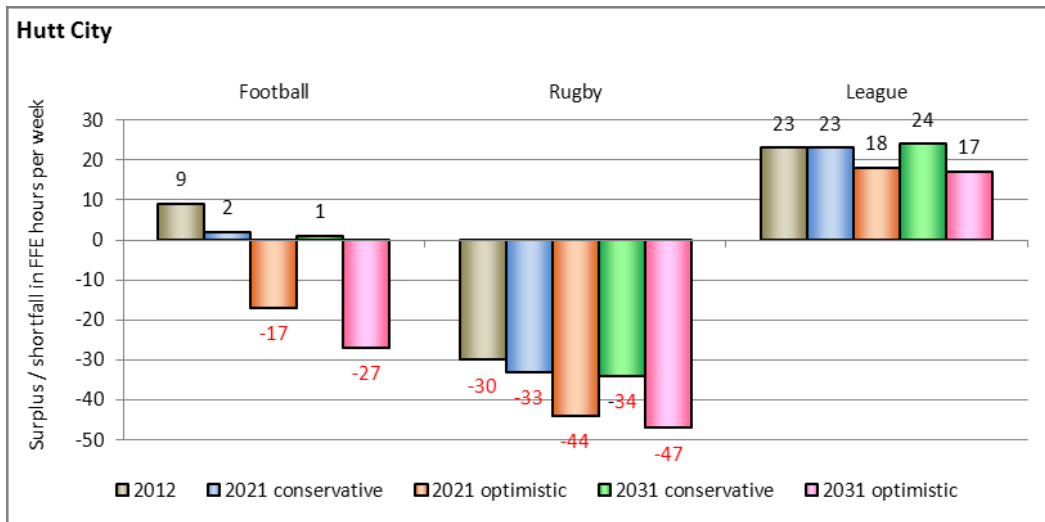
c. *Hutt South*

- Currently there is a **-44** hour shortfall across the full week
- Increasing to between **-49** and **-74** hours by 2021 depending on the code growth scenario
- Increasing further to a shortfall of **-53** to **-86** hours by 2031 depending on the code growth scenario
- There is an imbalance between competition and training capacity with the **-56** hour current training shortfall likely to rise to between **-60** and **-83** hours by 2031



d. *By code across Hutt City*

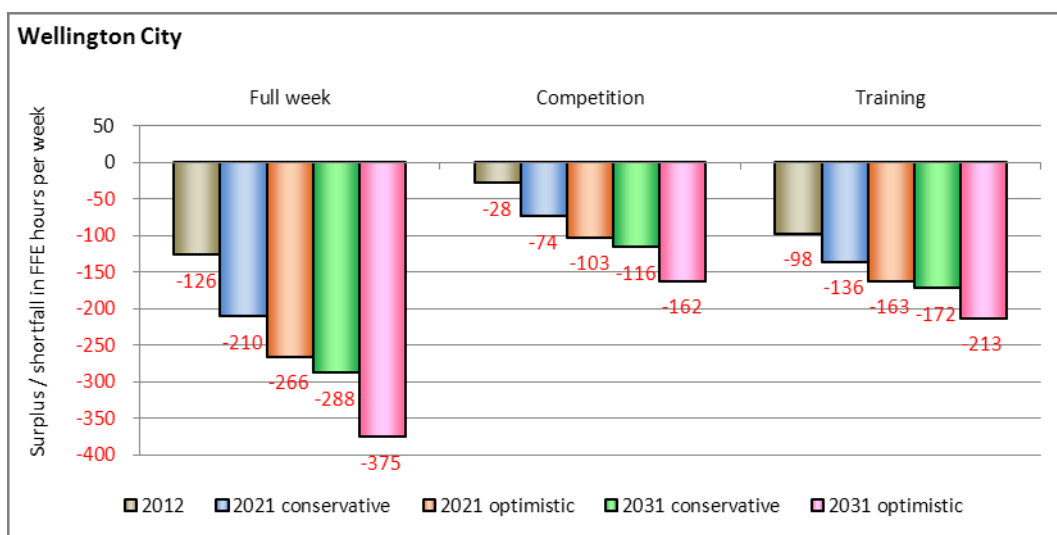
- Rugby has a significant shortfall across the full week, both currently and projected to 2031
- League is in surplus and will continue to be in surplus until 2031
- Football currently has a very small surplus that is projected to fall to between breakeven or **-27** hours by 2031



### 3.6 Wellington City

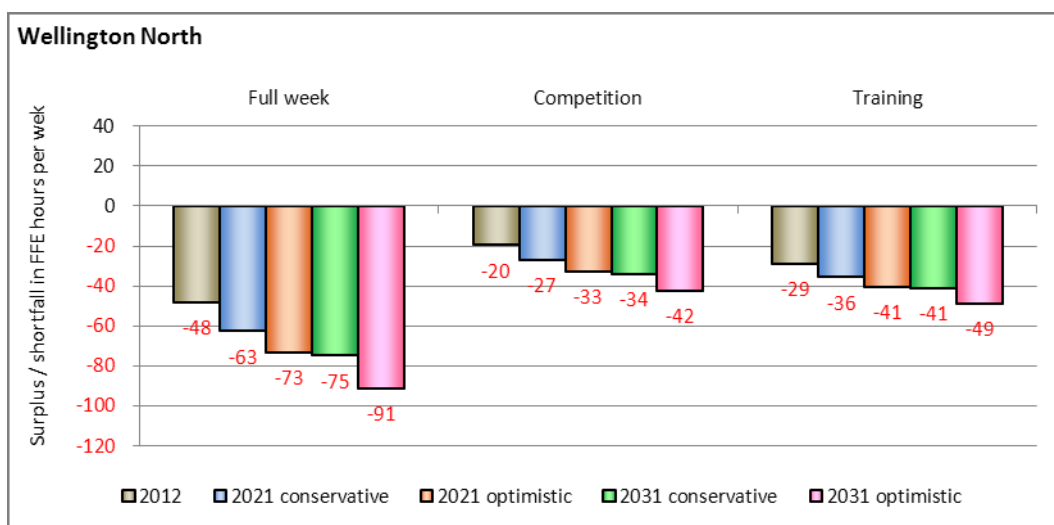
a. City Wide

- Currently there is a shortfall of **-126** hours across the full week
- Projections are for this shortfall to rise to between **-210 and -266** hours by 2021 depending on the code growth scenario
- Increasing further to a shortfall of **-288 to -375** hours by 2031 depending on the code growth scenario
- Whilst both competition and training are in shortfall there is an imbalance in provision with training shortfalls higher than those for competition



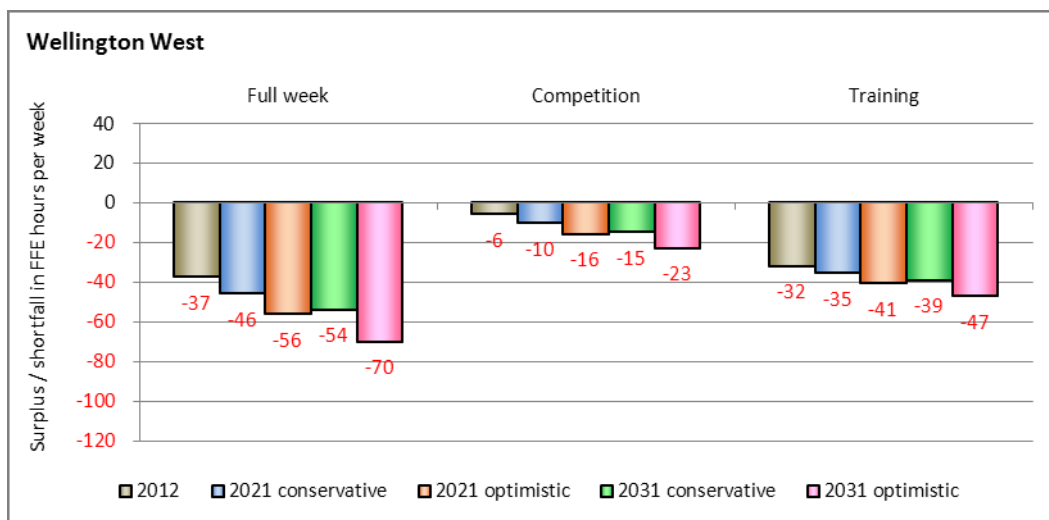
b. Wellington North

- Currently there is a **-48** hour shortfall across the full week (note: the current shortfall does not consider the full size artificial sportsfield that is planned for Alex Moore Park in 2013/14).
- Projections are for this to grow to between **-63 and -73** hours by 2021 depending on the code growth scenario
- Increasing further to between **-75 and -91** hours by 2031 depending on the code growth scenario
- Competition and training supply are reasonably well balanced



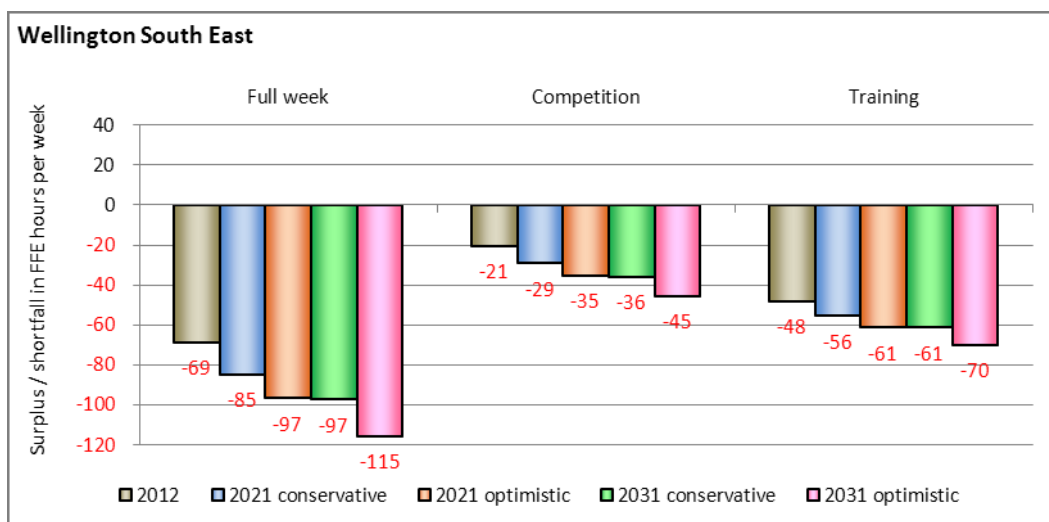
c. Wellington West

- Currently there is a **-37** hour shortfall across the full week
- Projections are for this to increase to between **-46 and -56** hours by 2021 depending on the code growth scenario
- Increasing further to between **-54 and -70** hours by 2031 depending on the code growth scenario
- Whilst both competition and training are in shortfall there is an imbalance with training capacity in shorter supply than competition



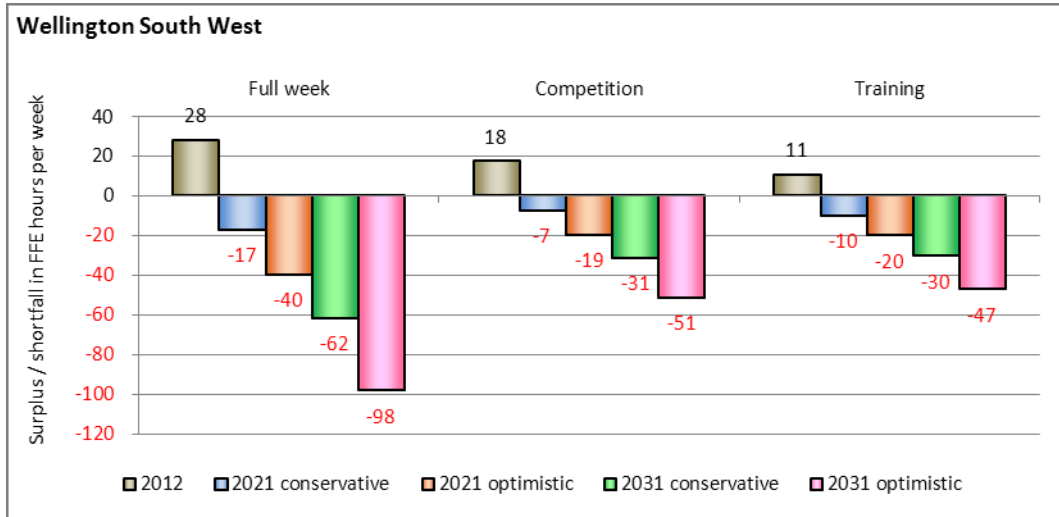
d. Wellington South East

- Currently there is a **-69** hour shortfall across the full week (note: the current shortfall does not consider the St Patricks College full size artificial sportsfield that opened in June 2013).
- Projections are for this to grow to between **-85 and -97** hours by 2021 depending on the code growth scenario
- Increasing further to between **-97 and -115** hours by 2031 depending on the code growth scenario
- Whilst both competition and training are in shortfall there is an imbalance with training capacity in shorter supply than competition



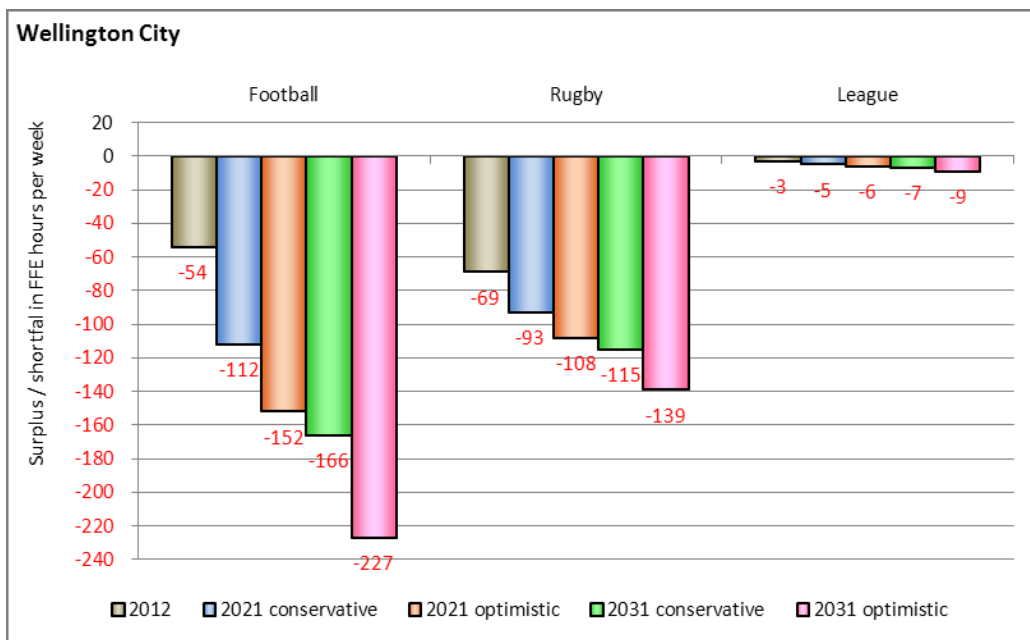
e. Wellington South West

- Currently there is a 28 hour surplus across the full week
- Projections are for this to drop to a shortfall of between -17 and -40 hours by 2021 depending on the code growth scenario
- Increasing further to between -62 and -98 hours by 2031 depending on the code growth scenario
- Competition and training supply are well balanced



f. By code

- All codes are, and will continue to be in shortfall across the full week, although league's shortfall is very small
- Football currently has a -54 hour shortfall, projected to extend to between -166 and -227 hours per week
- Rugby currently has a -69 hour shortfall, projected to extend to between -115 and -139 hours per week



# **10. Future Supply Options to Meet Demand**



## 1. General Location and Size of Needed Capacity Increase

### 1.1 By TA

The table below summarises the current, 2022 and 2031 surplus / shortfall capacity by TA based on 2012 field capacities. The impact of weather related field closures is also shown in the column 2012 Comp Closures.

Whilst there is some scope for Kapiti Coast, Upper Hutt, Porirua and Hutt City to consider reducing competition capacity by allowing more training on fields there does need to be 'spare' competition capacity to allow for weather related field closures and for fields closed for maintenance purposes. If there is little flexibility for RSOs to reschedule games entire competition rounds can be cancelled due to the difficulties involved in rescheduling games and venues at the last minute.

## Summary of capacity surplus/shortfall in FFE per week by TA

The projected 2021 and 2031 figures are presented as a range. The first number in the range in each column is the conservative code growth scenario and the second number the optimistic code growth scenario.

	2012			2012	Projected 2022*			Projected 2031*		
	Comp.	Train.	Full week		Comp. Closures	Comp.	Train.	Full week	Comp.	Train.
Otaki	10	6	16	8	6 to 7	1 to 2	7 to 9	3 to 4	-2 to -5	-2 to 2
Waikanae	2	-14	-11	-1	1 to -2	-16 to -20	-16 to -22	-2 to -5	-20 to -26	-22 to -32
Paraparaumu	16	-16	0	13	14 to 15	-17 to -18	-2 to -4	12 to 14	-18 to -20	-5 to -8
Paekakariki - Raumati	16	-4	13	14	15 to 16	-4 to -5	10 to 12	15	-4 to -5	9 to 11
<b>Kapiti Coast</b>	<b>44</b>	<b>-27</b>	<b>17</b>	<b>33</b>	<b>39 to 49</b>	<b>-35 to -42</b>	<b>4 to -8</b>	<b>24 to 32</b>	<b>-45 to -57</b>	<b>-14 to -33</b>
<b>Upper Hutt</b>	<b>77</b>	<b>-5</b>	<b>71</b>	<b>57</b>	<b>72 to 76</b>	<b>-7 to -13</b>	<b>58 to 68</b>	<b>67 to 71</b>	<b>-11 to -21</b>	<b>46 to 60</b>
Porirua East	15	-75	-60	2	5 to 11	-81 to -90	-70 to -85	1 to 9	-84 to -98	-75 to -97
Porirua West	37	14	51	30	35 to 37	12 to 15	47 to 52	34 to 37	11 to 14	45 to 51
<b>Porirua</b>	<b>52</b>	<b>-61</b>	<b>-9</b>	<b>32</b>	<b>41 to 48</b>	<b>-66 to -78</b>	<b>-18 to -37</b>	<b>35 to 46</b>	<b>-69 to -87</b>	<b>-23 to -52</b>
Hutt North	32	13	46	20	27 to 31	4 to 10	31 to 41	26 to 32	3 to 12	29 to 43
Hutt South	12	-56	-44	-28	2 to 11	-60 to -75	-49 to -74	7 to -3	-60 to -83	-53 to -86
<b>Hutt</b>	<b>44</b>	<b>-43</b>	<b>1</b>	<b>-8</b>	<b>28 to 42</b>	<b>-50 to -72</b>	<b>-8 to -43</b>	<b>23 to 39</b>	<b>-49 to -80</b>	<b>-10 to -57</b>
Wellington North	-20	-29	-48	-32	-27 to -33	-36 to -41	-63 to -73	-34 to -42	-41 to -49	-75 to -91
Wellington West	-6	-32	-37	-15	-10 to -16	-35 to -41	-46 to -56	-15 to -23	-39 to -47	-54 to -70
Wellington South East	-21	-48	-69	-33	-29 to -35	-56 to -61	-85 to -97	-36 to -45	-61 to -70	-97 to -115
Wellington South West	18	11	28	2	-7 to -19	-10 to -20	-17 to -40	-31 to -51	-30 to -47	-62 to -98
<b>Wellington City</b>	<b>-28</b>	<b>-98</b>	<b>-126</b>	<b>-78</b>	<b>-74 to -103</b>	<b>-136 to -163</b>	<b>-210 to -266</b>	<b>-116 to -162</b>	<b>-172 to -213</b>	<b>-288 to -375</b>

## 2. Options for Increasing / Maximising Capacity

There are three main options for increasing / maximising supply capacity:

- more effective use of fields through code allocation and use schedules
- increasing the capacity of existing fields
- expanding the supply of fields

### 2.1. More effective use of existing fields

#### i. Optimising code allocation and competition / training balance

The data provided in this report will help ensure allocation of fields is optimised across competition and training and across codes.

#### ii. Changing Sports Schedules

Currently most competition games are played on Saturdays and many fields are unused on Friday evenings. Although it would require a major cultural change there is potential to make greater use of Friday evenings and Sundays. This change is occurring to a small extent already with some games on artificial turf fields scheduled for Friday evenings and Sundays. As more artificial turf fields are installed across the region it is likely that competition play will spread further across both the weekend and potentially also weekday evenings.

### 2.2. Increasing the capacity of existing fields

#### i. Utilising unused fields and upgrading existing fields

Some TAs have fields that were unused during the 2012 winter season for a variety of reasons including lack of demand, quality and drainage issues. Some of these fields could be returned or added to the current network whilst others are likely to be 'retired' due to the nature of the field and the likely costs involved to bring it to an acceptable standard. Other existing fields have been earmarked for possible artificial turf.

#### ii. Drainage

Installing drainage in an un-drained soil field improves the quality of the field but does not significantly increase its capacity. The cost is likely to be in the region of \$110,000 to \$120,000 being \$85,000 for primary drainage and \$20,000 to \$30,000 for secondary drainage

#### iii. Lighting existing unlit fields

Without lights, training is limited to daylight hours which in winter means before 5pm to 5.30pm. There is concern within the Accident Compensation Commission about contact sports codes (rugby and league) training on poorly lit fields.

Floodlighting extends the time a field is available, particularly for weekday training. With lights teams could train until 8.30 or 9pm. An Auckland City study undertaken in 2005 found that players are reluctant to train after 8.30pm due to work the following day.

It is also unrealistic to expect all junior teams to train from 3pm or 3.30pm as whilst players may be available coaches generally have work commitments meaning any start to training before 4 or 4.30pm is often difficult to manage.

In assessing weekday capacity use at weekends also needs to be taken into consideration as fields in winter cannot take unlimited play without long term damage to the field surface.

Flood lighting is only viable if the field surface can take increased play without sustaining long term damage. As noted earlier most fields in the Wellington Region are soil fields which, if also expected to take competition play, have limited ability to take training. The limited training capacity can be filled late afternoon before there is a need for lighting. Installing lighting is therefore not a viable option unless the field surface is upgraded to a level that allows it to take more play.

#### **iv. Extending flood lighting on partly floodlit fields**

Currently many of the floodlit fields available for training are only partly lit reducing the level of usable lit space. However this generally has only a minor effect on the overall capacity available due to the inability of the field to take more than 4 to 5 hours training per week.

#### **v. Sand carpeting soil fields**

In the northern areas of New Zealand sand carpeting of soil fields often doubles or more the capacity of the field. The analysis of the relatively few sand carpet fields in the Wellington Region indicates this level of increase is unrealistic in this area.

The average cost to sand carpet an existing soil fields is \$350,000 with a further \$200,000 for floodlights.

#### **V1. Dedicated training areas (DTA)**

Dedicated training areas will generally have a much higher training capacity than a field that has to retain a reasonable surface quality for weekend competition. Floodlit DTAs in Hutt City and Porirua are providing about 16 hours training capacity per week. DTAs are a viable option for TAs to consider.

#### **V11. Reconfiguring small sided fields**

All TAs provide a number of junior, mini and mini/mini sized fields for younger children to play on. There is potential for some of these games to be played on full fields using cones to mark off the smaller areas. This would provide an opportunity to reconfigure park layouts to provide the maximum number of full size or half size fields. Such reconfiguration would provide greater flexibility in use as currently these fields are too small for higher grade games and some levels of training.

However, if the junior and lower level of play uses all the capacity available there may be little value in this option unless additional fields can be added.

#### **V111. Artificial Turf**

Capacity of existing fields can be extended to 50 or more hours a week if artificial turf surfaces are used. This is between 6 to 8 times the capacity of most of the region's current fields. Note that whilst turf manufacturers say the fields can be used 24/7, in reality community teams are not 'available' to make use of them right across the day. In addition, manufacturer's warranties tend to be based on limiting use to 2000 hours per year.

The third generation turfs (3G) comprise simulated grass stalks tufted in a weaved rubber backing, with small crumb rubber balls and sand swept into the base of the stalks to hold them upright. They look and play like natural grass and are available in versions approved by all three winter codes.

3G turf can be installed in existing sports parks or on greenfield sites. The cost of installation is dependent on the scope of preparation work needed to level and drain the site, the size of the field, whether a shock pad is installed or not and, to some extent, the brand of turf.

Artificial turf fields have a limited life. At this stage this life is estimated to be between 8 to 12 years depending on the nature and intensity of use and how well the turf has been installed and maintained. The earliest installations are only now reaching this age. Generally just the carpet needs to be replaced at that time providing the foundation has been well prepared in the first instance. The capital cost of a turf, including shockpad and floodlights can lie between \$1.6 and \$1.7 million.

They are lower maintenance, **not** no maintenance, fields. The level of maintenance is dependent on the amount of use. Maintenance costs are estimated to be in the region of \$30,000 per year for an artificial turf receiving 30 to 40 hours use per week. The significant capital investment also needs to be protected in some way from unsuitable use, vandalism and fire.

### 2.3. Cost comparison summary

The table below gives indicative costs for a range of upgrade options, based on the upgrade occurring on an existing field.

Note the cost per hour for capacity increase options on half fields is lower than on full size fields due to the relatively low current capacities of small sided fields across much of the region.

Option – Full size field	Potential capacity FFE hours per week	Average current capacity FFE hours per week	Capacity gain FFE hours per week	Cost estimate	\$ cost per hour of capacity gain
Artificial turf with lights	50	6	44	\$1,700,000	\$38,700
Sand carpet with lights	10	6	4	\$550,000	\$137,500
Soil DTA – drainage, lights	10	6	4	\$310,000	\$77,500
Sand DTA – drainage, lights	14	6	8	\$550,000	\$68,750
0.5 Artificial turf with lights	25	1	24	\$950,000	\$39,600
0.5 Sand carpet with lights	5	1	4	\$300,000	\$75,000
0.5 Soil DTA – drainage, lights	5	1	4	\$175,000	\$43,750
0.5 Sand DTA with, lights	7	1	6	\$300,000	\$50,000

\*note all costs for full size fields are estimates discussed and agreed by the TAs for use in this study. Adjustments have been made for half size fields.

### 3. Planning to Meet Current and Future Demand

The tables on the following pages show the impact of returning currently unused fields to the network, development of proposed fields in the Long Term Plan and additional development required to meet any current and projected capacity shortfall, with a small surplus to provide flexibility when fields are closed for weather related or other reasons.

It assumes that all major imbalances between competition and training supply and between codes, identified through this study, are adjusted through rebalancing field allocation.

It has been developed on the basis that some surplus capacity should be provided

#### 3.1 Kapiti Coast

##### 3.1.1 Potential field supply additions

The table below summarises existing fields not used in 2012 and new fields being planned or considered for the future.

These fields will provide an additional 145.5 FFE hours per week across the district. Projections for 2031 are for a shortfall of between **-14 and -33** hours indicating that much of the possible future field supply is unlikely to be needed, or if developed, would allow retirement of some poorly performing fields or fields located in areas of little demand.

##### Future Field Supply

Ward	Field	Status in 2012	Field Size	Year of supply	Incremental Capacity increase/decrease FFE hrs/week
Otaki					
Waikanae	Howarth Farm	New park	6+ full size	2014 <sup>1</sup>	36
Paraparaumu	Kene Kena Park	Unused	1 junior, 1 mini	2013	4.5
	Pohutukawa Park	Unused	1 junior	2013	3
	Not known	New artificial turf field	1 full	2025 <sup>2</sup>	44
Paekakariki-Raumati	Tilley Road	New park	2 junior + junior DTA	2014 <sup>3</sup>	14
	Not known	New artificial turf field	1 full	2030 <sup>4</sup>	44
<b>Kapiti Total</b>					<b>145.5</b>

Note current fields not used in 2012 have been included as possible capacity from 2013 onwards

<sup>1</sup>60Ha Howarth Farm is intended to have sports fields and recreational areas – initial development likely to be 6 full size fields but potential for many more in the future

<sup>2</sup>Provided for in Long Term Plan 2012 - 2032

<sup>3</sup>Developed and available for play

<sup>4</sup>Provided for in Long Term Plan 2012 - 2032

### 3.1.2 Field supply deductions

Council recently relinquished 2 full size fields at Linwood Drive Recreation Reserve (Pohutukawa Park) in the Paraparaumu Ward. These fields had been leased from the Ministry of Education. The fields had a total capacity of 6 FFE hours per week and were mainly used as over flow fields. Note one junior field remains at the park.

### 3.1.3 Impact of Howarth Farm development

Whilst there may be support for each Ward to be 'self contained' Council has made a significant investment in Howarth Farm and needs to consider how these fields could best provide for District wide needs. Consideration should be given to developing Howarth Farm fields for centralised competition play as teams are generally willing to travel for games. This would ensure the current field network is utilised efficiently by freeing up existing fields in all the Wards for local training by locally based teams, thus maximising their potential use. Howarth Farm should also be used to provide additional capacity to meet local Waikanae training needs.

We note that, despite the climate and sandy soil type, current field capacities appear to be fairly low, with this at least partly due to the need to limit training to ensure the field surface is suitable for competition. Existing full size fields catering for both competition and training have an average weekly capacity of 7.1 hours play – up to 4 hours competition and about 3 hours training. If competition play was removed and the fields developed into dedicated training areas (DTAs) with an average weekly training capacity of 10 hours (currently achieved on existing DTAs) there would be a net gain of about 7 hours per field for training.

It needs to be noted that the centralised competition approach may meet some resistance from clubs due to concern that people may not visit the club house after games and the impact this could have on club spirit and funding.

If 5 of the 6 Howarth Farm fields were developed as competition fields they would provide 25 hours per week, based on the current average of 5 hours for soil fields used for competition only. This equates to about a third of current district wide competition demand, thus still leaving two thirds of competition to be played on club home grounds.

Note that mitigation measures would be needed to limit flooding of the fields due to the impact that would have on competition should they need to be closed for a period of time.

Taking 25 hours of competition play from existing fields would allow 6 to 7 fields that are used for both competition and training to be dedicated just to training, resulting in an incremental district wide increase of around 45 hours training capacity, sufficient to meet projected 2021 training demand with no balancing reallocation of competition and training fields.

The following tables are based on Howarth Farm being developed as 5 competition fields and 1 DTA.

**Impact of unused and planned fields on shortfall by Ward**

Where games are moved to Howarth Farm this allows more training on the existing soil fields.

<b>Otaki Ward</b>	<b>Surplus/ Shortfall FFE hours/week – 2012 capacity*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	10						
Current training	6						
<b>Current full week</b>	<b>16</b>						16 hour surplus
	<b>Incremental demand</b>						
<b>Full week Incremental demand 2012 to 2021</b>	<b>6 to 8 hours</b>						10 to 8 hour surplus
<b>Full week incremental demand 2021 to 2031</b>	<b>8 to 9 hours</b>		1 game per week to Howarth Farm	2			4 to 1 hour surplus

\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

Note:

The competition capacity increase at Howarth Farm is not included in the above figures. When games are transferred to Howarth Farm the demand removed is added to the original field to ensure it is shown in the correct Ward. These fields will be available for other competition or training use. Hence it is shown as a capacity increase.



## Impact of unused and planned fields on shortfall

<b>Waikanae Ward</b>	<b>Surplus/ Shortfall FFE hours/week – 2012 capacity*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	2						
Current training	-14						
<b>Current full week</b>	<b>-11</b>						<b>-11 hour shortfall</b>
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	5 to 11 hours	25 hours in 2014 – 5 x competition fields Howarth Farms	Transfer 5 games per week to Howarth Farm	10			
		1 DTA Howarth Farm with lights		10			4 to <b>-2 hour shortfall</b>
<b>Full week <u>incremental</u> demand 2021 to 2031</b>	6 to 10 hours		1 existing soil field converted to DTA + drainage + lights	7	2022	\$310,000	5 to <b>-5 hour shortfall</b>

\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

## Using unused and planned fields to meet the shortfall

<b>Paraparaumu Ward</b>	<b>Surplus/ Shortfall FFE hours/week*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	16						
Current training	-16						
<b>Current full week</b>	<b>0</b>						
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	2 to 4	Pohutukawa Park = - 6 hours	Reinstate Kena Kena & Pohutukawa junior	8	2014		0 hr to -2 hour shortfall
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	3 to 4						-3 to -6 hour shortfall
<b>Paekakariki - Raumati</b>							
Current competition	16						
Current training	-4						
<b>Current full week</b>	<b>13</b>						13 hour surplus
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	1 to 3 hours	Tilley Rd development		14	2014		26 to 24 hour surplus
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	1 hour						25 to 23 hour surplus

\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

Total of 6 games per week from across the District moved to Howarth Farm

<b>Kaptiti Coast District Wide</b>	<b>2021 Surplus / shortfall with planned / proposed developments</b>	<b>2031 Surplus / shortfall with planned / proposed developments</b>
	40 to 28 hour surplus	29 to 13 hour surplus

**In summary:**

On the basis that Howarth Farm is developed as a competition hub, initially with 5 fields plus a DTA, the following investment is required.

**Additional Investment Summary**

Year	Area	Development	Current status	Cost Estimate
2014	Paraparaumu	Reinstate Kena Kena, Pohutukawa junior	Unused fields	
	Waikanae	6 new fields – Howarth Farm – 5 competition only, 1 DTA	Planned & funded – DTA lights assumed to be additional	\$200,000
	Paraparaumu	2 junior fields + junior DTA – Tilley Rd	Developed and available	
2022	Waikanae	1 existing soil field converted to DTA plus drainage + lights	Not currently planned	\$310,000
<b>Total additional investment to 2021</b>				<b>\$200,000</b>
<b>Further investment to 2031</b>				<b>\$310,000</b>
<b>Total investment to 2031</b>				<b>\$510,000</b>
<p><b>The Long Term Plan allocates \$1.5 million in 2023/2024 and a further \$1.7 million in 2029/2030 for development of artificial turf fields in Paraparaumu and Raumati. As shown in this study the level of capacity increase needed to 2031 can be met through the planned development of Howarth Farm, converting two existing soil fields to DTAs and centralising some competition play at Howarth Farm.</b></p>				

\* As Tilley Road has been developed there is no requirement for the Kena Kena Park fields or the Pohutukawa Prk junior field to be reinstated for capacity reasons.

## 3.2 Upper Hutt

### 3.2.1 Potential field supply additions

The table below summarises existing fields not used in 2012 and new fields being developed or considered possible developments for the future. These fields will provide an additional 132 FFE hours per week across the district. With these hours added the current surplus of 71 hours per week will extend to 103 to 113 hours in 2021 and 104 to 191 hours in 2031.

#### Future Field Supply – Planned and Potential

Field	Status in 2012	Field Size	Year of supply	Incremental Capacity increase/decrease FFE hrs/week
Maidstone Park	Existing field upgraded	Full size artificial	2013	45
Clyma Park	New fields – no platform	4 junior size	Not planned	13
Ngatitama Park	New fields – no platform	2 full size	Not planned	13
Timberley Park	New fields – no platform	2 full size	Not planned	13
Pine Haven Reserve	New fields – no platform	1 full size	Not planned	6
Awakarangi Park	New fields – no platform	7 full size	Not planned	42
<b>Total</b>				<b>132</b>

### 3.2.2 Impact of capacity increase from unused or planned fields

The table below shows the Maidstone Park artificial field will provide sufficient capacity for the next 20 years, providing there is some re-balancing between competition and training supply.

#### Impact of unused and planned fields on shortfall

	Surplus/ Shortfall FFE hours/week – 2012 capacity*	Planned capacity increase FFE hours/week	Recommended option for providing additional capacity	Capacity increase FFE hrs/wk	Year of provision	Cost Estimate	Surplus / shortfall hours with planned / recommended fields developed
Current competition	77						
Current training	-5						
<b>Current full week</b>	<b>71</b>						71 hour surplus
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	<b>3 to 13 hours</b>	45 in 2013 – Maidstone artificial					113 to 103 hour surplus
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	<b>9 to 12 hours</b>						104 to 91 hour surplus

\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

#### In summary:

With the Maidstone Park artificial turf field added to the network further investment in capacity increase projects is unlikely to be needed for the foreseeable future.

A re-balancing of competition and training supply will meet the current and projected training shortfall.

If council wishes there is also potential to retire some under-performing fields.

### 3.3 Porirua

#### 3.3.1 Potential field supply additions

The table below summarises existing fields not used in 2012, fields upgraded in 2013 and new fields being planned or considered for the future. These fields will provide an additional 153 FFE hours per week across the district to set against a projected shortfall of **-18 to -37 hours** per week in 2021 and **-23 to -52 hours** in 2031.

#### Future Field Supply

Area	Field	Status in 2012	Field Size	Year of supply	Incremental Capacity increase/decrease FFE hrs/week
Porirua East	Ascot Park	Not used	1 full artificial	2013	44
	Adventure Park	Current field	Drainage upgrade	2014	4
	Porirua Park	Current field	Drainage upgrade	2014	6
	Canons Creek Park	Current field	Drainage upgrade	2014	5
	Porirua Park	Current field	1 full artificial	2014	40
	Park to be confirmed	Current field	1 full artificial	2017	44
	Ole Football	Not available	1 full artificial	2013	10 <sup>#</sup>
<b>Porirua Total</b>					<b>153</b>

<sup>#</sup>Facility is privately owned and community use and hire charges are at the owner's discretion.

Likely to be available for competition and training. Limited training capacity added as competition not in shortfall

### 3.3.2 Impact of capacity increase from unused or planned fields

The table below shows the impact of developing planned fields on any current and projected shortfall.

The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

#### Impact of unused and planned fields on shortfall by analysis area

<b>Porirua East</b>	<b>Surplus/ Shortfall FFE hours/week*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	15						
Current training	-75						
<b>Current full week</b>	<b>-60</b>						<b>-60 hour shortfall</b>
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	10 to 25 hours	44 in 2013 - Ascot Park artificial 10 in 2013 - Ole Football artificial 4 in 2014 - Adventure Park drainage 6 in 2014 – Porirua Park drainage 5 in 2014 – Canons Creek Park drainage  40 in 2014 - Porirua Park artificial turf <sup>1</sup> 44 in 2017 – Park TBA artificial <sup>2</sup>	Defer indefinitely Defer indefinitely	69 <sup>3</sup>			<b>-1 to -16 hour shortfall</b>
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	5 to 12 hours						<b>-6 to -28 hour shortfall</b>

<sup>1</sup>Recommend deferring indefinitely the Porirua Park artificial field planned for 2014 if capacity increase within Porirua City is the main reason for this development

<sup>2</sup>Recommend deferring indefinitely the 'Park to be confirmed' artificial turf planned for 2017. Wellington City Council should be advised as this may influence their plans for an artificial turf in 2015 in the general Grenada / Tawa area.

<sup>3</sup>Capacity increase assumes both the planned artificial turf for 2014 at Porirua Park and the planned 3<sup>rd</sup> turf at a park to be confirmed are deferred indefinitely

<b>Porirua West</b>	<b>Surplus/ Shortfall FFE hours/week*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	37						
Current training	14						
<b>Current full week</b>	<b>51</b>						51 hour surplus
	<b>Incremental demand</b>						
<b>Full week Incremental demand 2012 to 2021</b>	-1 to 3 hours		Option to install training lights on 2 fields Ngatitoo Domain <sup>1</sup>	16	2016	\$160,000	68 to 64 hour surplus
<b>Full week Incremental demand 2021 to 2031</b>	0 to 2 hours						68 to 62 hour surplus

<sup>1</sup>Although Ngatitoo Domain is located in Porirua West it is close to Porirua East and will provide capacity to meet a shortfall in that area  
The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

<b>Porirua City Wide</b>	<b>2021 Surplus / shortfall with planned / proposed developments</b>	<b>2031 Surplus / shortfall with planned / proposed developments</b>
	67 to 48 FFE hours per week surplus	62 to 34 FFE hours per week surplus



**In summary:**

Currently there is a significant imbalance in field supply relative to demand between Porirua East and Porirua West. The Ascot Park artificial field, planned drainage improvements on three fields together with the Ole Football artificial turf (training use only included) addresses this imbalance.

There are two further artificial fields planned for 2014 to 2017. Our recommendation is for both these artificial fields to be deferred indefinitely. Much of the projected unmet demand in the east can be satisfied through the Ascot Park artificial turf field and planned field drainage improvements, plus the proposed installation of training lights at Ngatittoa Domain, which although in Porirua West, is only a short distance away.

There is also potential to use surplus capacity in Porirua West to provide additional capacity to meet Porirua East demand. Whilst some of the surplus capacity in the west is not a viable option due to transport availability and travel times in the afternoon peak traffic congestion period, there are parks within close proximity that can provide further capacity to ensure there is buffer when fields need to be closed.

**Additional Investment Summary**

Year*	Area	Development	Current status	Cost Estimate
2014	Porirua Park	1 full artificial field	Planned but not funded	Defer indefinitely
2014	Porirua East	Adventure Park drainage	Planned and funded	
		Porirua Park drainage	Planned and funded	
		Cannons Creek Park drainage	Planned and funded	
2016	Porirua East	Lighting of 2 fields at Ngatittoa Domain	Not planned or funded	\$160,000 <sup>1</sup>
2017	Porirua East	1 new artificial field – Park TBA <sup>2</sup>	Planned but not funded in LTP	Defer indefinitely
<b>Total additional investment to 2021<sup>3</sup></b>				<b>\$160,000</b>
<b>Further investment to 2031</b>				<b>\$0</b>
<b>Total investment to 2031</b>				<b>\$160,000</b>

<sup>1</sup>PCC estimate

<sup>2</sup>We recommend discussions with Wellington City Council over their planned development of an artificial turf in the Grenada / Tawa area to advise of decision

<sup>3</sup>does not include any funding associated with negotiating community use of Ole Football artificial turf

### 3.4 Hutt City

#### 3.4.1 Potential field supply additions

The table below summarises new fields being planned or considered for the future.

These fields will provide an additional 82 FFE hours per week across the district against a projected shortfall of **-8 to -43 hours** per week in 2021 and **-10 to -57 hours** per week in 2031,

#### Future Field Supply

Ward	Field	Status in 2012	Field Size	Year of supply	Incremental Capacity increase/decrease FFE hrs/week
Hutt North	Fraser Park	Existing	1 full artificial	2015	41
Hutt South	Petone Memorial	Existing	1 full artificial	2013	41
<b>Hutt City Total</b>					<b>82</b>

### 3.4.2 Impact of capacity increase from unused or planned fields

The table below shows the impact of developing planned fields on any current and projected shortfall.

#### Impact of unused and planned fields on shortfall by sub area

<b>Hutt North</b>	<b>Surplus/ Shortfall FFE hours/week*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	32						
Current training	13						
<b>Current full week</b>	<b>46</b>						46 hour surplus
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	4 to 14 hours	41 in 2015 – Fraser Park artificial		41	2015	\$1.7 m	83 to 73 hour surplus
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	-2 to 2 hours						85 to 71 hour surplus
<b>Hutt South</b>							
Current competition	12						
Current training	-56						
<b>Current full week</b>	<b>-44</b>						-44 hour shortfall
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	5 to 30 hours	41 in 2013 – PMP artificial		41			-8 to -33 hour shortfall
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	4 to 12 hours						- 12 to -45 hour shortfall

\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

<b>Hutt City Wide</b>	<b>2021 Surplus / shortfall with planned / proposed developments</b>	<b>2031 Surplus / shortfall with planned / proposed developments</b>
	75 to 40 FFE hours per week surplus	73 to 26 FFE hours per week surplus

**In summary:**

Currently there is a significant imbalance in competition and training supply particularly in Hutt South. There is scope to review competition supply with a view to allowing more training on some fields.

There is also an imbalance in supply relative to demand between Hutt North and Hutt South with Hutt North in surplus and Hutt South in shortfall, although most travel distances are such that the field supply can be considered as catering for district wide demand.

There is a further artificial field planned for 2015. This field together with the Petone Memorial Park artificial should provide sufficient capacity to meet projected demand for the next 20 years, providing Hutt City can be considered as a single network.

No further capacity increase investment is required.

**Additional Investment Summary**

Year*	Area	Development	Current status	Cost Estimate
2015	Hutt North	1 new artificial field – Fraser Park	Planned & funded	
<b>Total additional investment to 2022*</b>				<b>\$0</b>
<b>Further investment to 2032</b>				<b>\$0</b>
<b>Total investment to 2031</b>				<b>\$0</b>

### 3.5 Wellington City

#### 3.5.1 Potential field supply additions

The table below summarises new fields being planned or considered for the future.

These fields will provide an additional 203 FFE hours per week across the city against projected shortfalls of **-210 to -266** field hours per week in 2021 and **-288 to -375** hours by 2031.

#### Future Field Supply

Area	Field	Status in 2012	Field Size	Status	Year of supply <sup>1</sup>	Incremental Capacity increase/decrease FFE hrs/week
Wellington North	Alex Moore Park	Existing	1 full artificial	Planned and funded	2014	44
	Grenada / Tawa area	Existing	1 full artificial	Planned – partially funded	2015	44
Wellington West	Nairnville Park	Existing	Drainage improvements on 3 soil fields	Planned and funded	2014	9
	To be decided	Existing	1 full artificial	Planned – partially funded	2017	44
Wellington South East	St Patricks College	New field	1 full artificial	Completed	2013	44
	Evans Bay Park	Existing	Upgrade 1 field with couch grass	Planned and funded	2014	6 <sup>2</sup>
Wellington South West	Wakefield Park	Existing	Upgrade 2 fields to sand carpet surface	Planned but not funded	2015	12
<b>Wellington City Total</b>						<b>203</b>

<sup>1</sup>as currently planned

<sup>2</sup> couch grass is a warm season grass that has been proven on sports fields in the northern parts of NZ but, as yet, is unproven on sportsfields in Wellington climatic conditions

### 3.5.2 Impact of capacity increase from unused or planned fields

A range of capacity increase options have been considered including drainage, lighting, sand carpets, artificial turf and DTAs on both full and half size fields. Whilst the cost per hour of providing additional capacity from developing half field soil or sand DTAs is comparable with artificial turf the limiting factor is the number of fields that would need to be converted – it would require 6 fields to every 1 that was developed in artificial turf.

The table below shows the impact of developing planned fields on any current and projected shortfall.

#### Impact of unused and planned fields on shortfall by analysis area

Wellington North	Surplus/ Shortfall FFE hours/week – 2012 capacity*	Planned capacity increase FFE hours/week	Recommended option for providing additional capacity	Capacity increase FFE hrs/wk	Year of provision	Cost Estimate	Surplus / shortfall hours with planned / recommended fields developed
Current competition	-20						
Current training	-29						
<b>Current full week</b>	<b>-48</b>						<b>-48 hour shortfall</b>
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	15 to 25 hours	2014 - Alex Moore artificial turf 2015 - Grenada area artificial turf <sup>#</sup>		44 44	2014 2017	\$1.875 m \$1.7m	25 to 15 hour surplus
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	12 to 19 hours						13 hour surplus to <b>-4 hour shortfall</b>

\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios

<sup>#</sup>Recommend deferring to 2017. Discussions should be held with Porirua City Council to ensure artificial turf development in the general area is complementary and does not result in over supply

**Impact of unused and planned fields on shortfall by analysis area** (\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios)

<b>Wellington West</b>	<b>Surplus/ Shortfall FFE hours/week – 2012 capacity*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision (recommended)</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	-6						
Current training	-32						
<b>Current full week</b>	<b>-37</b>						<b>-37 hour shortfall</b>
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	8 to 19 hours	Nairnville Park – drainage improvements 3 soil fields 2017 artificial turf – TBC park		9 44	2014 2015*	\$485,000 \$1.7m	8 hour surplus to <b>-3 hour shortfall</b>
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	8 to 14 hours						0 hour surplus to <b>-17 hour shortfall</b>

\*Turf planned for 2017. Recommend bringing forward to 2015.

**Impact of unused and planned fields on shortfall by analysis area** (\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios)

<b>Wellington South East</b>	<b>Surplus/ Shortfall FFE hours/week – 2012 capacity*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	-21						
Current training	-48						
<b>Current full week</b>	<b>-69</b>						<b>-69 hour shortfall</b>
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	16 to 28 hours	St Patricks College artificial Evans Bay Park – couch 1 field		44 6	2013 2014	\$206,000	<b>-35 hour shortfall to -47 hour shortfall</b>
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	13 to 19 hours		1 x 0.5 new artificial turf* 1 x 0.5 new artificial turf*	24 24	2023 2029	\$950,000 \$950,000	0 hour surplus to <b>-18 hour shortfall</b>

\*Alternate is 1 full turf in 2023 resulting in cost saving of \$200,000 and **-4 to -22 hour shortfall** in 2031



**Impact of unused and planned fields on shortfall by analysis area** (\*The range for 2021 and 2031 projections covers the range between conservative and optimistic code growth scenarios)

<b>Wellington South West</b>	<b>Surplus/ Shortfall FFE hours/week – 2012 capacity*</b>	<b>Planned capacity increase FFE hours/week</b>	<b>Recommended option for providing additional capacity</b>	<b>Capacity increase FFE hrs/wk</b>	<b>Year of provision</b>	<b>Cost Estimate</b>	<b>Surplus / shortfall hours with planned / recommended fields developed</b>
Current competition	18						
Current training	11						
<b>Current full week</b>	<b>28</b>						28 hour surplus
	<b>Incremental demand</b>						
<b>Full week <u>Incremental</u> demand 2012 to 2021</b>	46 to 68 hours	Wakefield Park – 2 fields sand base	0.5 new artificial turf	12 24	2015 2021	\$400,000 \$950,000	18 hour surplus to <b>-4 hour shortfall</b>
<b>Full week <u>Incremental</u> demand 2021 to 2031</b>	44 to 59 hours		0.5 x new artificial turf	24	2028	\$950,000	<b>- 2 hour shortfall to -39 hour shortfall</b>

Note consideration has been given to drainage improvements and sand carpeting to provide additional capacity – these options proved significantly more expensive than adding artificial turfs for the level of shortfall that needs to be met

<b>Wellington City Wide</b>	<b>2021 Surplus / shortfall with planned / proposed developments</b>	<b>2031 Surplus / shortfall with planned / proposed developments</b>
	16 FFE hours surplus per week to <b>-39</b> FFE hours shortfall	11 FFE hours surplus per week to <b>-78</b> FFE hours shortfall

**In summary:**

The artificial turfs planned in the Long Term Plan are well located to meet current and projected demand. However, it is recommended that discussions are held with Porirua City Council in regards to the proposed Tawa/Grenada artificial sportsfield to ensure that the development does not result in over supply.

Consideration was given to drainage improvements, sand carpets and floodlighting – in most instances small size artificial turfs have been included in the programme as they offer a markedly more cost effective means of providing additional capacity on existing soil fields. In general there are too few half size fields in some areas to offer the option of converting to DTAs. Half size artificial turfs could be fully utilised for training and suitable for small sided games currently played on both Saturdays and Sundays on natural grass fields. If sited on sports parks that have a full artificial turf(s) they could serve as warm up areas allowing ‘run on run off’ games thus maximising the competition use of the full size artificial turf. With Council’s policy of 40% cost recovery it is anticipated that fees for using half artificial turfs will be somewhat lower than for full size turfs thus reducing a potential barrier to use.

Whilst artificial turfs do limit some informal open space recreational activities the number of artificial turfs outlined would bring the total number to 6 full size and 4 half size (excluding partner fields), which represents just 8% of full field equivalent fields used for community sport within Wellington City.

Although not capacity increasing, Council may wish to consider including sand carpeting of several number 1 fields in the programme to improve the surface quality for elite level play. Additional funding would be required for this.

This study provides recommendations for future capacity increase projects in general locations across Wellington City. Council should use the opportunity provided by the current asset management plan review to identify the most suitable parks / fields for these capacity increase projects and, in addition, to assess the potential for other smaller scale capacity increase options such as drainage improvements.

**Additional Investment Summary**

<b>Year*</b>	<b>Area</b>	<b>Development</b>	<b>Current status</b>	<b>Cost Estimate</b>
2014	Wellington North	Alex Moore artificial	Planned & funded	\$1.875 million
2014	Wellington West	Nairville Park drainage improvements on 3 soil fields	Planned & funded	\$485,000
2014	Wellington South East	Evans Bay Park upgrade with couch grass	Planned & funded	\$206,000
2015	Wellington South West	Site to be confirmed - upgrade 2 soil fields to sand carpet	Not funded	\$200,000
2015	Wellington West	Park to be decided artificial turf	Planned & partially funded – further funding required	\$1.7 million (\$1.05 million currently funded)
2017	Wellington North	Grenada / Tawa artificial* (discussions with PCC recommended to ensure artificial turf development in general area is complementary and does not result in over supply )	Planned & partially funded – further funding required	\$1.7 million (\$1.05 million currently funded)
2021	Wellington South West	0.5 new artificial turf	Not currently planned	\$950,000
2023	Wellington South East	0.5 new artificial turf	Not currently planned	\$950,000
2028	Wellington South West	0.5 new artificial turf	Not currently planned	\$950,000
2029	Wellington South East	0.5 new artificial turf	Not currently planned	\$950,000
<b>Total <u>additional</u> investment to 2021</b>				<b>\$2.45 million</b>
<b>Further investment to 2031</b>				<b>\$2.85 million</b>
<b>Total investment to 2031</b>				<b>\$5.3 million*</b>

# 11. Appendix

# 1. Model Input Data

## a. Competition and Training Demand

Field hours per game and training are based on appropriate size of field for that grade. The figure is a combination of field size, length of game / training session and training frequency.

### Rugby

Grade	Field hours for game	Field hours for training – Wellington City	Field hours for training – all other TAs
Senior men	2	1.5	2
Senior women	2	1.5	1.5
President	1	0.5	0.5
U11 to U13	1.5	0.8	1.25
U8 to U10	1	0.3	0.5
U6 to U7	1	0.1	0.1

### League

Grade	Field hours for game	Training – Wellington City	Training – all other TAs
Senior men	2	1.5	2
Senior women	2	1.5	1.5
13s to 15s	1.5	1.5	1.5
11s to 12s	1	1	1
9s to 10s	1	0.5	1
6s to 8s	1	0.25	0.25

### Football

Grade	Field hours for game	Training	Training – all other TAs
Senior men	2	0.74	1.3
Senior women	2	0.74	1.3
Youth 13 to 14	1.5	0.4	1.1
Junior 11 to 12	1	0.4	1.1
Junior 9 to 10	1	0.25	0.25
Junior 7 to 8	1	0.25	0.25
Junior 5 to 6*		-	-
Girls 7 to 10	1 <sup>#</sup>	0.25	0.25
Gilrs 11 to 13	1 <sup>#</sup>	0.4	1.1

\*Played as module

<sup>#</sup>Played as several end on end short games in module

**b. Sport Development Growth**

<b>Growth Assumptions (10 year)</b>		<b>Conservative %</b>	<b>Optimistic %</b>
Football	5 to 8	6.8	13.5
	9 to 10	6.8	13.5
	11 to 12	6.8	13.5
	Boys 13 to 15	6.8	13.5
	Boys 16 to 17	6.8	13.5
	Girls	9	18
	Adult Male	6.8	13.5
	Adult Female	9	18
	Modules*	6.8	13.5
Rugby	Adult Male	6.3	12.6
	Adult female	18	36
	President	2.3	4.5
	U11 to U13	5.9	11.7
	U8 to U10	5.9	11.7
	U6 to U7	6.8	13.5
	Module	6.8	13.5
League	Adult Male	4.5	9
	11 to 15	9	18
	9 to 10	9	18
	5 to 8	9	18
	Adult female	4.5	9
	Module	9	18
	Masters	0	0

## 2. Club Feedback on Fields

### 2.1 Best and worst fields

Clubs were asked to identify what they considered to be the three best and the three worst fields they played on. As clubs play across wider Wellington the best and worst selections included fields in other TA areas. These views are subjective and are not based on any technical ratings.

The information has been collated by TA.

**Summary Table – Best and Worst Football Fields**

<b>Territorial Authority</b>	<b>Best Fields Votes</b>	<b>Worst Fields Votes</b>
<b>Kapiti Coast - Football</b>	Weka Park 1 (3 votes) Campbell Park 1 (1) Haruatai Park 1 (1) Haruatai Park 2 (1)	
<b>Kapiti Coast - Rugby</b>	Otaki Domain (1 vote) Paraparaumu Domain (1) Te Atiawa Park (1)	
<b>Kapiti Coast League</b>	Matthews Park 1 (2 votes)	
<b>Upper Hutt - Football</b>	Trentham Memorial Park (2 votes)	
<b>Upper Hutt - Rugby</b>	Maidstone Park (2 votes)	Davis Park 1 (2 votes) Trentham Memorial Park 4 (2) Trentham Memorial Park 5 (2)
<b>Upper Hutt - League</b>	Whakatiki Park 1 (6 votes)	
<b>Porirua - Football</b>	Endeavour Park 1 (13 votes) Endeavour Park 2 (3) Plimmerton Domain (1)	
<b>Porirua - Rugby</b>	Porirua Park (13 votes) Ngatitoo Domain 1 (1) Ngatitoo Domain 3 (1) Ngatitoo Domain all (1)	Porirua Park 3 (1 vote) Porirua Park Top Level (1) Rangituhi Park (1)
<b>Porirua - League</b>	Ascot Park 1 (3 votes) Cannons Creek Park 1 (1)	Cannons Creek Park 2 (2 votes) Cannons Creek Park 1 & 2 (1)
<b>Hutt City - Football</b>		Fraser Park - All (3 votes) Richard Prouse Park 1 (3) Richard Prouse Park 2 (2) Riverside Park (2) Naenae Park 1 (2) Naenae Park 2 (1) Naenae Park All (1) Brian Heath Park 1 & 2 (1) Delaney Park 2 (1) Petone Memorial Park 1,2 & 4 (1) Te Whiti Park (1)

<b>Territorial Authority</b>	<b>Best Fields Votes</b>	<b>Worst Fields Votes</b>
<b>Hutt City - Rugby</b>	Hutt Recreation Ground 1 (8 votes) Petone Recreation Ground (6) Fraser Park 1 (5) Fraser Park 2 (3) Fraser Park 2 (2) H.W Shortt Park 1 (1) Hutt Park 1 (1)	Delaney Park (3 votes) William Jones Park (2) Wise Park 1 (2) Hutt Recreation Ground 2 (1) Hutt Recreation Ground 3 (1) Hutt Recreation Ground 2 & 3 (1)
<b>Hutt City - League</b>	McEwan Park 1 (9 votes) Petone (1) Te Whiti Park 2 (1) Wise Park 1 (2)	Te Whiti Park 1 & 2 (3 votes) Te Whiti Park 1 (1) Naenae Park 1 & 2 (2) Naenae Park 1 (1) Naenae Park 2 (1) Wise Park 1 (2) Wise Parl 2 (2) Wise Park 2 & 3 (1)
<b>Wellington - Football</b>	Wakefield Park 1 & 2 (12 votes) Wakefield Park 1 (4) Wakefield Park 2 (3) Newtown Park 1 (7) Te Whaea 1 (6) David Farrington Field 1 (5) Wellington College 1 (4) Nairnville Park Artificial (2) Kelburn Park (1) Seatoun Park (1)	Happy Valley 1 (6 votes) Happy Valley 2 (2) Grenada North 1 (4) Liardet St Park – All (4) Crawford Green 1 (3) Melrose Park 1 (3) Karori Park All (2) Miramar Park 1 (2) Redwood Park 1 (2) Wilton Park (2) Alex Moore Park 1 (1) Alex Moore Park 2 (1) Anderson Park (1) Appleton Park (1) Karori Park 1 (1) MacAlister Park (1) Miramar Parl 3 (1) Nairnville Park 1 (1) Nairn St Park (1) Pohutukawa Park 1 (1) Pohutukawa Park 2 (1) Wakefield Park 1 & 2 (1) Wakefield Park 3 (1) Wakefield Park 3 & 4 (1)



<b>Territorial Authority</b>	<b>Best Fields Votes</b>	<b>Worst Fields Votes</b>
<b>Wellington - Rugby</b>	Ian Galloway Park 1 (2 votes) Helston Park 1 (1) Kilbirnie Park (1) Lyndhurst Park (1) Newlands Park (1) Polo Ground 1 and 2 (1)	Ian Galloway Park All (4 votes) Ian Galloway Park 1 (4) Ian Galloway Park 3 (3) Ian Galloway Park 4 (2) Ian Galloway Park 2 (1) Evans Bay Park 1 (3) Polo Ground 1 (3) Polo Ground 3 (1) Hataitai Park (2) Martin Luckie 1 (2) Nairnville Park 1 (2) Helston Park (1) Kilbirnie Park 1 (1) Lyndhurst Park 2 (1) Prince of Wales (1)
<b>Wellington League</b>	Kelburn Park (2 votes) Boyd Wilson Park (1)	Kelburn Park 1 (2 votes) Martin Luckie Park 1 & 3 (1) Martin Luckie – All (1)

## 2.2 Comments about field supply and quality

Clubs also submitted a number of comments about supply and quality of fields. As many of these comments relate to field management they are provided below.

### Kapiti Coast Fields

*The only real issue is the lack of floodlit areas for training. (Waikanae Junior Rugby)*

*Funding for major projects like training lights for juniors. (Paraparaumu Rugby)*

### Upper Hutt Fields

*It is frustrating that the junior league is always getting cancelled, yet you drive past Trentham Memorial Park and there are several games of rugby being played. Why can't they have two fields for rugby, one for league and one for soccer? It should be all about getting as many sports being played as possible. League should get at least one field at Trentham Memorial Park, considering there is now an artificial pitch for soccer and rugby in Upper Hutt now. (Trentham Titans League)*

### Porirua Fields

*Escalating costs from grounds fees charged by Councils and galloping affiliation fees from Capital Football and NZ Football. (Porirua Leste Football)*

*The fields in Porirua generally seem fairly good quality, certainly better than many of the Wellington fields. More artificial turf would be good, but we appreciate they are very expensive. (Pukerua Bay Soccer Club)*

*Because of our expected growth in numbers and time constraints on people, coaching suffers. And ground availability – there are not enough training facilities for wet weather - indoor or outdoor. (Western Suburbs Soccer Club)*

*The lack of an all weather service for rugby at Porirua Park. This is a major ground in Wellington with International teams training here. It is used for Soccer, League and Rugby yet the usage is kept to a minimum in order to keep the ground in good nick. It seems a waste of space, especially when every summer it undergoes a re-fit and touch rugby and flag etc cannot use it in the summer. (Northern United)*

## **Hutt City Fields**

*Hire charges for artificial pitches. Changing Room facilities. Potential loss of some playing areas at Memorial park, Petone with the proposed WRC stop-bank realignment (in the next ten year plan we believe). (Petone FC Inc)*

*Roof needs replacing. Fields are poorly drained because of a cricket block at one side. (Stokes Valley FC)*

*Our changing rooms are in very poor condition and need maintenance (these are done by the Council). The showers are constantly running on cold or lukewarm, and there is water bubbling up from the drain in the ground near the showers. Cleaning is not very good also. This year we struggled to get training sessions in during the week due to closures and the council weed spraying at least four times and leaving signs out saying 'do not enter due to weed spraying'. This impacted mainly on our women as they train on a Wednesday night and it was always done on a Wednesday. Being a small club and nowhere else to train it impacts a lot on how the teams play on a Saturday. (Wainuiomata AFC)*

*Lack of field preparation at Bell Park and minimal maintenance. Also the pitches at Fraser Park are not up to standard. We need more QUALITY sand based grass pitches in the Hutt area. (Lower Hutt City AFC)*

*Hutt Park is an ideal venue for an artificial playing surface - there is significant parking and any development would not attract Resource Consent issues. It is also centrally located within the greater Wellington Region. Stop Out have prepared a feasibility study for a facility of this type, which has been presented to Hutt City Council. We do not believe Hutt City Council is achieving value from Downers re ground maintenance which has declined significantly in recent years. The quality of playing and training surfaces at Hutt Park has gone significantly backwards. We would like to thank Hutt City Council for their assistance despite the performance of their contractors. (Stop Out)*

*Naenae park has no training field. Many Naenae juniors are refugees from Africa and have no transport, so although we could train at Fraser Park on the senior training field, the kids would never get there. A designated junior training field somewhere in Naenae would be great, or better still an artificial pitch. (Naenae Junior Soccer)*

*We have had two fields that we do not play on anymore because they don't drain. Instead of the Council fixing them so they do drain and can be used, they choose to close the fields. To date we have not had satisfactory replacement fields given to us - our main ground, William Jones Park is in urgent need of repair/drainage as it does not drain. On a Saturday, if that ground was drained well, you could play Two Junior games (1/2 field each) in the morning, an U21 game at 11.30am, a Senior-1 game at 1.15pm, and a Premier game at 3.00pm. Our club rooms are on the ground and if the ground is used to its full potential, it brings in good revenue for the kitchen and the bar at the clubrooms, which most clubs survive on. Yet Downers continue to say it is not worth the cost of fixing the drainage problem. I think a hundred rugby players and all the spectators that come to watch the kids and the senior players, and the funds we get from people coming back into the club is definitely a good enough reason for the Council to spend the money to fix the drainage on the ground. Of course a full size, floodlit, artificial turf would fix all problems for Senior and Junior and other codes in Wainuiomata, and would pay for itself in no time. (Wainuiomata RFC)*

*Big concerns around cancelling the grounds even when it is fine. (Avalon Junior Rugby Club)*

*Impact of Petone Sportville on our facilities at North Park. (Petone RFC)*

*Senior team numbers sharing of clubrooms - full utilisation of clubrooms. (Eastbourne RFC)*

*Lack of training facilities, grounds to play on due to ground closures. We need more artificial surfaces and more maintenance work (drainage) on natural turf surfaces. (Hutt Old Boys Marist RFC)*

*Quality maintenance of the grounds - we have had a continuous roll over of grounds men - some have paid more detailed attention to the grounds than others, resulting in various levels of the ground surface being capable of withstanding the winter season. All due to bad drainage. (Te Aroha Eels)*

*Playing numbers are reasonable but the total amount paying their subscriptions is a concern. (Wainuiomata Lions)*

*Hutt Valley parks have big issues with playing fields when the weather packs in. There is little room for juniors when the ground conditions change. Too many cancellations. If clubs are to maintain or grow they need better access to playing fields. More investment needs to be put into maybe artificial parks, or get better drainage at parks. (Petone Rugby League Club)*

*Maintenance and upkeep of clubrooms. I think, personally, drainage is a big issue. Also, not enough fields? (Randwick Rugby Football League Club)*

## **Wellington City**

*A turf in the Western Suburbs is needed - Karori is the biggest club and biggest suburb. (Waterside Karori AFC)*

*Finding volunteers and access to funding are key issues. Training grounds are increasingly becoming an issue, particularly for us as a club in the lower grades looking to improve, not being able to train consistently in match-like conditions limits our ability to challenge for higher grades. Which is why we made the commitment to pay for artificial turf time this year, at some expense and opportunity cost to the club. (Brooklyn Northern United)*

*Finding enough space for our training requirements and alternative arrangements when grounds are closed (we do have one indoor venue we pay for which assists but which is not enough). (North Wellington Junior FC Inc)*

*Availability and quality of playing and training grounds. Apart from the condition and availability of grounds the Wellington Council do very little to maintain and improve the quality of grounds in the Tawa area. History has shown that the investment has gone into the southern end of Wellington eg millions spent on Karori Park, David Farrington and Newtown Parks have had new drainage, artificial surfaces at Te Whaea and Wakefield Parks, and joint projects for artificials at Wellington College and St Pats. (Tawa AFC)*

*Cancellation decisions are made on Friday afternoon and not adjusted for weather changes on Saturday mornings resulting in deterioration of grounds when the weather is poor. No alternatives for practice when grounds are closed midweek. (Brooklyn Northern Utd Junior FC)*

*Island Bay Utd has very good access to fields but with the new artificial that comes at significant cost. Getting good enough and qualified coaching in the senior club especially is hard. Parking around Wakefield and traffic safety on a main road with hundreds of kids arriving to play or train, especially in the darkness of winter - traffic control. A running or exercise loop around the park would be good. (Island Bay Utd AFC)*

*Transport for Students - most are from out of town and have no cars - when they are required to travel out of the Central City to play games this becomes a major issue. Ensuring that all teams get regular games and that social sides are not cancelled on a regular basis. The state of some grounds as the season progresses makes the games a lottery and does not assist in developing players in the game. The cost to certify artificial is ridiculous, and to have to repeat it every two years is a major financial burden. Something needs to be done so that this expense is minimised. (Wellington College Old Boys-Victoria University of Wellington RFC)*

*Remedial work on Kilbirnie Park has been fantastic - this will be a great rugby ground for many years. (Poneke FC Inc)*

*Potential cost issues in relation to artificial turfs (e.g. Te Whaea etc.). A co-ordinated Council and sporting body approach is required to work out a viable proposition going forward. Without this we could see Councils continue to invest in artificial turfs but various sports not being able to afford to play on them. (Johnsonville RFC Inc)*

*Some comments have been made re playing some rugby on week nights and / or Sundays. Marist St Pats Junior Rugby is supportive of Friday evening games for the lower grades, however is not supportive of Sunday rugby or other week nights. (Marist St Pats Junior Club)*

*Consistency for training fields is our biggest concern. All we want is a central base with allocated times so we can invite players to our club. We lost about 50% of original players by having to move around to inadequate training facilities. We don't ask for much, just two nights a week on fields - we are looking to pay for artificial fields, which is a concern, but it addresses a key concern. The weather is an issue, not so much in 2012, but for all the seasons beforehand there was a 4-6 week period where our team couldn't train. The artificial fields have been awesome, but for Boyd Wilson we get crappy times. We have had early conversations with the University this year to rectify this and are hoping for a fruitful outcome. (Victoria Hunters Rugby League Club)*

*Fields being closed regularly. No indoor facilities to accommodate all teams on training nights. (Harbour City Eagles)*

### 3. Key Issues for Clubs

Clubs were given a list of potential issues and asked to say how big a concern each one was to their club.

The table below shows the percentage of clubs who indicated the issue was of some or a big concern to them.

**Percent of clubs identifying issue as either a big or some concern**

Issue	Football clubs	Rugby clubs	League clubs	All clubs
	%	%	%	%
<b>Access to fields for number of teams</b>	<b>87</b>	<b>56</b>	<b>64</b>	<b>72</b>
Funding	90	96	91	92
Finding volunteers to stand for committee positions	74	91	73	78
Finding coaches	80	83	73	80
Finding team managers	50	78	64	63
Membership recruitment / retention	43	83	55	59
Access difficulties for members (cost, transport, etc)	53	61	73	59
Clubroom maintenance liabilities	57	78	36	61