Longdill and Associates

Quantifying the Supply and Demand for Winter Sports Fields in the Auckland Region

Prepared for Auckland Council

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A. Executive Summary

Study Objectives

This study has been undertaken as part of the planned mid-term review of Auckland Council's Sports Field Capacity Development (SFCD) Programme. This review is being conducted in response to a number of key changes, in particular, adoption of the Auckland Plan that envisages an additional 1 million people living in the Auckland Region within the next 30 years. To accommodate this increase the Proposed Unitary Plan puts measures in place for significant intensification within the urban limits as well as further growth in rural areas. This intensification and its projected distribution over the next 10 years will have a significant impact on both the level and location of future sports field demand.

This study is a comprehensive review and update of the previous 2011 sports field supply and demand study that informed the development of the SFCD Programme. The focus is community use of winter sports fields. School use of school fields is not included.

Field demand

There are around 5,054 community football, rugby and league teams playing in the Auckland Region, up 8.3% from 4,666 in 2011.

Overall demand is for 6,771 field hours per week, down from 7,849 hours identified in the 2011 study. The reduction is due to more accurate reflection of training demand. The 6,771 field hours per week is made up of 2,382 hours at the weekend, mainly for competition and 4,389 hours during the week, mainly for training. This equates to 7.4 field hours for every 1,000 people in the 5 to 49 age group in the Auckland Region.

Demand hours vary across the region and are largely dependent on the popularity of the codes, the mix of senior and junior teams and the number and grade of centralised modules played in each area.

Field supply

There are 818 winter fields secured for community use, up from 777 in 2011.

The assessed playing capacity of these fields is 8,769 hours per week, up from 8,544 field hours in 2011 due to projects delivered through the SFCD programme. The 8,769 hours comprise 3,258 hours for weekend competition and 5,511 hours for weekday training. This equates to 9.5 field hours for every 1,000 people in the 5 to 49 age group in the Auckland Region.

As with field demand, playing capacity varies across the region and is largely dependent on the location and size of sports parks, the nature of the field surface and the provision of flood lighting.

Since 2011 Council officers have reviewed the playing capacity of all fields. The capacities of a number of fields were reduced, including capacities of partially floodlit fields to reflect the hours of lit space available after dark.

Weather related field closures

Each winter weather conditions often require Council to close fields as further play could result in long term damage to the field surface. When fields are closed at weekends the RSO revisits the game schedule and tries to transfer games to other available fields. If few other fields are available games often have to be cancelled due to difficulties in rescheduling. Weekday field closures result in club's cancelling training sessions as few have other fields available to them

Current field capacities have been reduced by each field's average closure rate over the three year period from 2011 to 2013, with adjustments made as appropriate to fields that have been upgraded during that time.

The three year average field closure rate across the region was 18%, comprising 13% for competition fields and 21% for training fields

Field closures reduce the available capacity from 8,769 hours per week to 7,446 hours per week, 2,886 hours for competition and 4,560 hours for training

Whilst the potential capacity is higher, sports field capacity, based on field closure data, is the practical reality that sports clubs experience on a day to day basis

Current capacity surplus or shortfall

Three current scenarios have been modelled, based on field allocation and field closures. Most fields are allocated to a particular club or code with allocation based on club association, historic links and need.

Scenario	Explanation
1. Current code allocation Impact of weather related field closures not included	This is what clubs experience on a day to day basis. Based on field availability – current field allocations apply with weather related field closures deducted from field capacity.
2. Current code allocation No weather related field closures	This is what clubs would experience if there were no weather related field closures.
3. Optimal code allocation	Each code is assumed to have the same level of field supply relative to demand, i.e., field allocation is optimised. Fields are assumed to be available for play, i.e., no closures. Note: although allocations are reviewed regularly it is unrealistic to expect optimal allocation each year[1].

[1] Changes in the size and nature of the population, participation trends, code popularity, club strength and viability and historic field associations all add to continuing changes in demand

A 2006 Auckland City sports club study found the limiting factor for parents was travel time to training with much more than 10 minutes likely to see a drop in child participation. For analysis purposes the region has been divided into 67 smaller analysis areas. It is assumed that a capacity shortfall in one area can be accommodated by a capacity surplus in a neighbouring area providing the travel distance or time is not too great. The analysis for this study is based on a maximum 15 minute travel time in urban areas.

The table below summarises the regional sum of local shortfalls under each of the three scenarios once neighbouring area surpluses are considered.

All three scenarios are based on providing local capacity to meet local need (within 15 minute travel time).

Scenario 1, based on current field allocation and applying an average of the last three year's weather related field closures, is considered the best indicator of club and RSO 'on the ground' experience. This scenario shows a:

-772 hour weekly shortfall, comprising

-144 hours for weekend competition

-772 hours for weekday training

Regional sum of local shortfalls - hours (FFE per week)

	Scenario 1 What sports clubs experience day to day Includes full weather related closures	Scenario 2 What sports clubs would experience if there were no weather related field closures	Scenario 3 What sports clubs would experience if field allocation was optimised AND there were no weather related field closures
Competition	144	58	
Training	628	203	63
Full week	**772**	**261**	**63**

2025 Projected capacity surplus or shortfall

Projections for 2025 are based on a scenario of optimised allocation, population growth in the 5 to 49 age group and an allowance for some code growth based on current growth trends (albeit at a lower trajectory than recent years).

Under this scenario projections for 2025, taking into account neighbouring surplus and shortfalls, are for:

1,833 hour weekly shortfall, comprising

558 hours for competition

1,275 hours for training

Whilst several other scenarios, based on current field allocation and 'reduced code growth', have been considered it is our considered view that the above scenario should be used as the basis for future planning based on the following rationale:

- That provides for a level of growth which, whilst reflecting historic trends, is a lower growth trajectory than recent years
- A growth level which will see winter sport play its part in helping council achieve its annual plan participation targets
- The 'some code growth' is considered a conservative approach and the 'reduced code growth' level, based on available evidence, is considered to under-estimate future participation
- That allows for the use of all available fields to be maximised and allocated to codes based on the demand for competition and training
- That reflects that it is likely that field allocations will change over the next 10 years with a continued move away from traditional / historical field allocations towards more shared fields which will allow field allocations between codes to be more finely tuned based on needs

The supply and demand study is a 'slice in time' and is based on 2014 demand and supply. During 2014/15 the SFCD programme will deliver a further 210 playing hours per week.

Once this capacity is considered and taking into consideration surplus and shortfalls between neighbouring areas, the projected shortfall is:

1,682 hour shortfall per week, comprising

519 hours for competition

1,163 hours for training

The sports field supply and demand study in 2011 projected a shortfall of 2,904 hours per week. Since then capacity has been added and more accurate information on current training demand has reduced projected demand.

There are significant differences across the 67 analysis areas. The table below shows the projected shortfall area by area once the 2014/15 SFCD programme capacity increase projects are delivered.

Projected 2025 shortfalls (FFE hours per week) – some code growth – optimal field allocation

Sector	Local Board	Analysis Area	Competition	Training	Total
North	Takapuna Devonport	Takapuna	38	57	95
		Devonport	7		7
		Hauraki Belmont	6	7	13
	Hibiscus & Bays	East Coast Bays	22	20	42
		Long Bay Torbay	6	16	22
		Silverdale		21	21
	Upper Harbour	Brighams Creek Hobsonville	19	28	47
	Rodney	Kumeu Huapai		19	19
		TOTAL NORTH	**98**	**168**	**266**

Sector	Local Board	Analysis Area	Competition	Training	Total
West	Henderson Massey	Henderson Glendene	14	55	69
		Te Atatu Peninsula	3	18	21
		Massey West Harbour		9	9
	Waitakere Ranges	Waiatarua Henderson Valley	3	23	26
		Glen Eden Oratia		60	60
		Titirangi Laingholm		36	36
	Avondale	Blockhouse Bay		39	39
		TOTAL WEST	**20**	**240**	**260**
Central	Orakei	Remuera	60	86	146
		Eastern Bays	39	13	52
		Meadowbank St Johns	12	13	25
		Ellerslie	4		4
	Maungakiekie Tamaki	Mt Wellington Mt Richmond	16		16
		Panmure Glen Innes	9		9
		Onehunga One Tree Hill		48	48
	Albert Eden	Mt Albert Morningside	45	119	164
		Mt Eden Balmoral	44	84	128
		Epsom	33	89	122
		Pt Chevalier Waterview	7	73	80
	Puketapapa	Mt Roskill Hillsborough	58		58
		Lynfield Waikowhai	1	15	16
	Waitemata	Herne Bay Westmere	3	78	81
	Waiheke	Waiheke		11	11
		TOTAL CENTRAL	**331**	**629**	**960**
South	Papakura	Papakura	24		24
	Manurewa	Manurewa	16	14	30
	Franklin	Ardmore Hunua Bombay	1	21	22
		Pukekohe	29	44	73
	Howick	Dannemora Botany North		26	26
		Howick		21	21
		TOTAL SOUTH	**70**	**126**	**196**

Note: Some of the 2014/15 additional capacity is in areas too distant too accommodate shortfalls

Investment required to meet projected playing hours shortfall
It is estimated that an investment of around $99 million will be required to provide the additional playing capacity to projected 2025 demand.
This estimate is based on the estimates used to develop the SFCD programme.

Region wide approach to provision

The current and projected surplus / shortfalls outlined in this report are based on capacity being provided within an acceptable travel distance, i.e., local supply to meet local demand.

An alternate view is to consider the total field supply and demand for the region as a whole. Under this scenario it is assumed that:

- Excess demand can be met in any area, ie, people would have to travel to use spare capacity (e.g. junior training demand in Mt Albert could be met by capacity in Warkworth)
- Fields are optimally allocated between codes based on demand
- Future growth is based on the agreed code growth

Three Scenarios have been modelled based on the level of field closures:

Scenario 1 Assumes no field closures

Scenario 2 Assumes closures are within the Auckland Plan target of no more than 10%

Scenario 3 Assumes closures at the current level

As the tables below show, implementing a region wide approach to provision would see a current supply surplus under all three scenarios turning in to a shortfall under all three scenarios by 2025.

Using Scenario 2 as the example, as this would see the Auckland Plan 10% closure target reached, the current surplus of 1,425 hours would become a shortfall of -1,272 hours by 2025 unless additional capacity is added.

Whilst this approach of considering the region as a whole is unrealistic given the travel distances (especially for junior training) it clearly highlights that maximising the use of existing fields through optimising field allocations at a local level and reducing field closures to the 10% target has a significant impact on future availability.

However as the tables below show even after these considerations have been fully implemented, significant additional capacity is required,

Current surplus / shortfall - region wide provision

	Current surplus / shortfall- assumes no field closures (Region Wide)	Current surplus / shortfall if 10% closure target achieved (Region Wide)	Current surplus / shortfall - current closure rates (Region Wide)
Competition	876	659	504
Training	1122	766	171
Full week	1998	1425	675

2025 Projected surplus / shortfall – region wide provision

	Projected 2025 surplus / shortfall – assumes no field closures (Region Wide)	Projected 2025 surplus / shortfall if 10% closure target achieved (Region Wide)	Projected 2025 surplus / shortfall - current closure rates (Region Wide)
Competition	-125	-342	-497
Training	-573	-930	-1525
Full week	-698	-1272	-2021

B. Background and Objectives

In 2011 Auckland Council commissioned Longdill and Associates to undertake a study looking into the supply and demand for winter sports fields across the Auckland Region. The main purpose of the study was to provide a region wide perspective to the demand and supply of fields and highlight the areas of greatest need for increased playing capacity.

In December 2011 Auckland Council allocated a further $87.5 million to a regional fund for sports field capacity improvements for the next 10 years. This was in addition to varying levels of provision by legacy councils for sports field capacity increase projects. Under the Auckland Council this legacy council funding was allocated to the relevant Local Board budgets.

During 2012 a multidisciplinary project team developed the Sports Field Capacity Development Programme (SFCD). This programme, developed against the sports field shortfall information provided through the Sports Field Supply and Demand Study, outlines the capital works projects to be undertaken each year to 2022. It includes capacity increase projects funded through both Local Board budgets and the Regional Fund, as well as asset renewal projects.

The 2011 study was based on assumptions from earlier studies undertaken for several of the legacy councils, the best field capacity, population and population projection information available at the time. Since that time Auckland Council has adopted the Auckland Plan that envisages an additional 1 million people living in the Auckland Region within the next 30 years. To accommodate this increase the Proposed Unitary Plan puts measures in place for significant intensification within the urban limits as well as further growth in rural areas. The level of intensification effected through the Proposed Unitary Plan will have a significant impact on both the level and location of future demand for sports fields in the region.

As a result of these changes Auckland Council is undertaking the planned mid-term review of the SFCD programme, starting with a comprehensive review and update of the sports field supply and demand study.

The information gathered in this study will inform the 2015-2025 Long Term Plan.

C. Project Methodology

This study into the supply and demand for sports fields in the Auckland Region has been carried out using the Sports Field Model developed by Longdill and Associates in conjunction with Auckland City Council. Team numbers have formed the base for determining demand and the playing capacity of each individual field to calculate field supply.

The following provides a brief outline of the Sports Field Model process.

The model is based on a 7 stage process:

Stage 1 Identification of all teams

Stage 2 Determining current field demand

Stage 3 Identification of all fields

Stage 4 Determining current field capacity

Stage 5 Identification of current surpluses and shortfalls (hours per week)

Stage 6 Identification of future surpluses and shortfalls (hours per week)

Stage 7 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. Team information has been sourced from Regional Sports Organisations (RSO), league and module organisers, College Sport and Auckland Council's Sports Field Booking System.

Stage 2 Determining current field demand

Hours of use for competition are calculated for different grades and are based on the field size and the length of the game including half time, warm up etc. This information was sourced from the RSOs, league and module organisers and College Sport.

Provision is 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.

Nearly all (94%) of Auckland Region winter code clubs provided data on training requirements at the different levels. This was through a web based survey, phone calls or emails. Responses have been aggregated and averages used in the model. Training demand has been based on the field space required, the level of sharing of that field space, the length of training session, and the frequency of sessions required for effective training. The training demand figures were discussed and agreed with the RSOs.

Stage 3 Identification of all fields

All Auckland Council owned fields in the Auckland Region allocated for community sport use are included. Fields under non council ownership for which there are formal use agreements with council, regional sports organisations or clubs are also included.

Stage 4 Determining current field capacity

Auckland Council has a playing capacity assessment for every field. This assessment takes into consideration the ability of the field to withstand play without sustaining long term damage and the provision of infrastructure such as lighting, change rooms etc. The Sports Turf Advisors reviewed the current capacity assessments.

Stage 5 Identification of current surpluses and shortfalls

The total current demand is matched against the current supply and any surpluses or shortfalls identified. This is 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 is calculated by dividing the total population in each age group category by the number of teams in the region in that age group. This calculation is done at sub area level for each sports code. 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 is then used with the population projections in each sub area to predict the number of teams likely in the next 10 years. The model is then re-run with the change in number of teams and the projected surplus / shortfall of fields calculated.

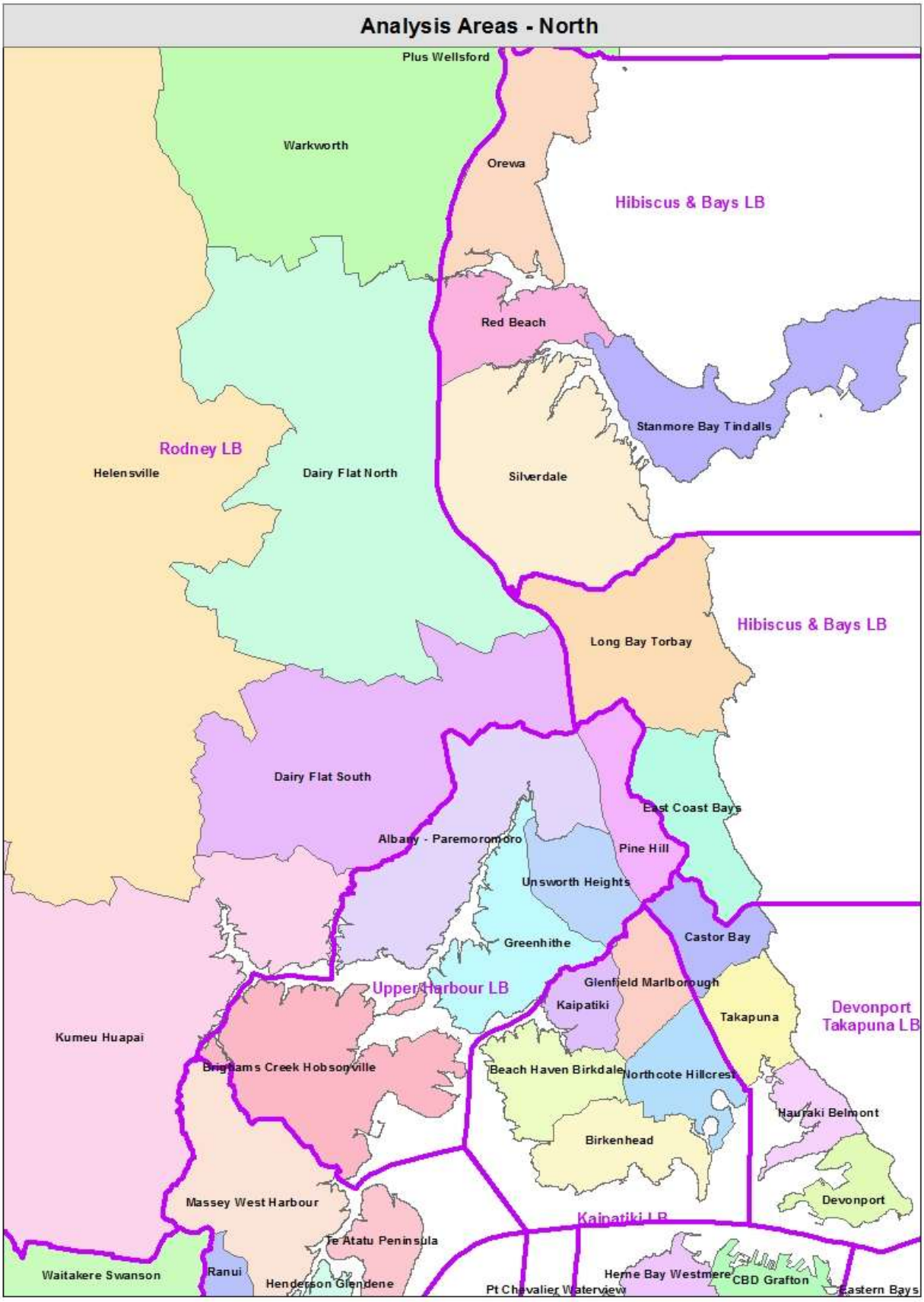
In addition to natural population growth sport development factors are also considered. These can be either positive or negative. These are based on a qualitative assessment of historic team numbers and growth or decline over natural population growth, RSO predictions and sport development targets, club predictions of growth or decline and other external factors that could impact participation.

The figures used in the study were discussed with and confirmed by the RSOs.

Stage 7 Analysis

Analysis Areas

The Auckland Region has been divided into 67 smaller analysis areas. These areas, together with Local Board boundaries are shown in the maps on the next 4 pages.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Hibiscus & Bays LB
Red Beach
Stanmore Bay Tindalls
Rodney LB
Helensville
Dairy Flat North
Silverdale
Hibiscus & Bays LB
Long Bay Torbay
Dairy Flat South
East Coast Bays
Albany - Paremoremoro
Pine Hill
Unsworth Heights
Castor Bay
Greenhithe
Upper Harbour LB
Glenfield Marlborough
Kaipatiki
Takapuna
Devonport Takapuna LB
Kumeu Huapai
Brigtams Creek Hobsonville
Beach Haven Birkdale
Northcote Hillcrest
Hauraki Belmont
Birkenhead
Massey West Harbour
Devonport
Kaipatiki LB
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Waitakere Swanson
Ranui
Henderson Glendene
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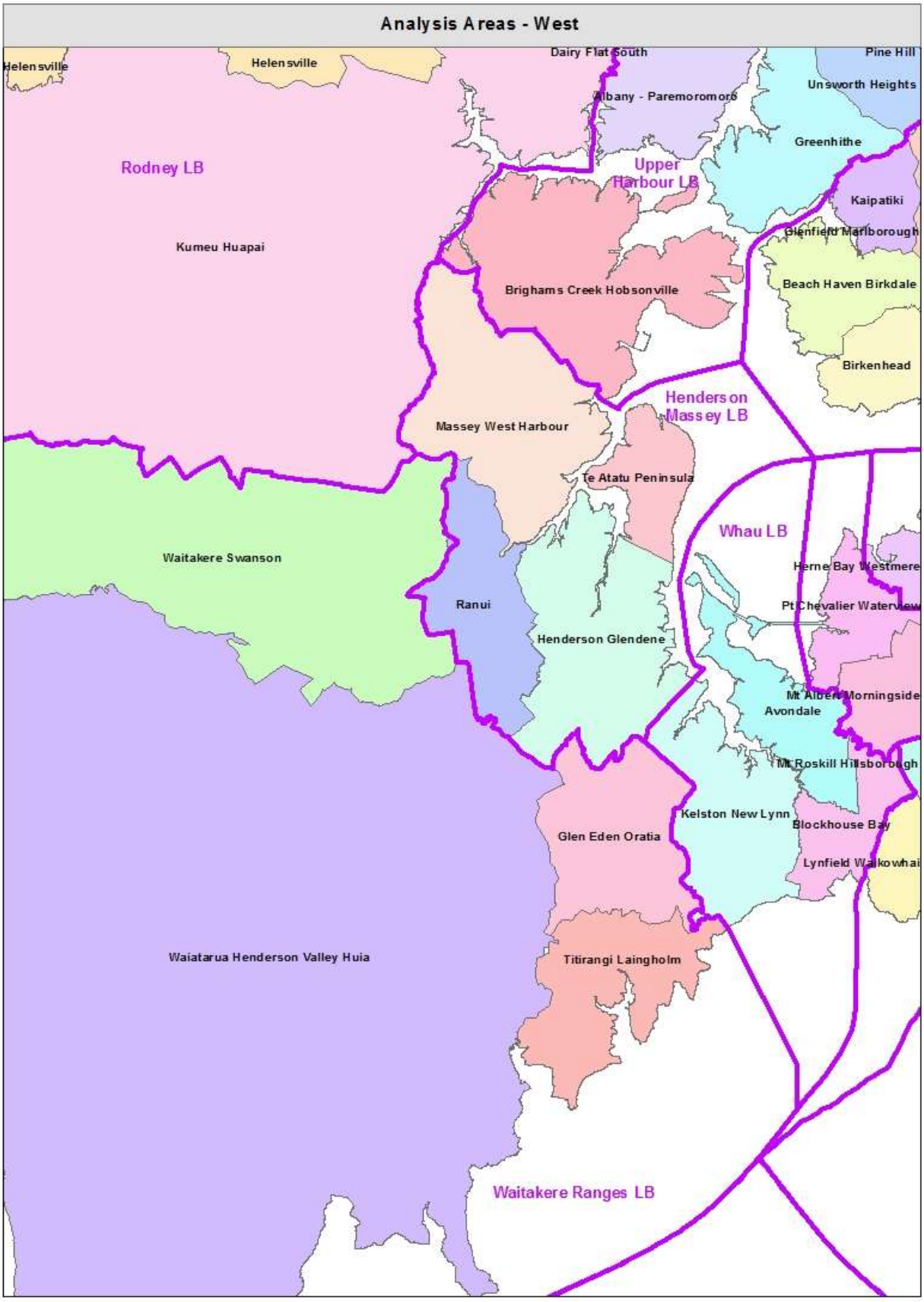
CBD Grafton
Pt Chevalier Waterview
Eastern Bays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Kumeu Huapai
Brighams Creek Hobsonville
Beach Haven Birkdale
Birkenhead
Henderson Massey LB
Massey West Harbour
Te Atatu Peninsula
Whau LB
Waitakere Swanson
Herne Bay Westmere
Ranui
Pt Chevalier Waterview
Henderson Glendene
Mt Albert Morningside
Avondale
Mt Roskill Hillsborough
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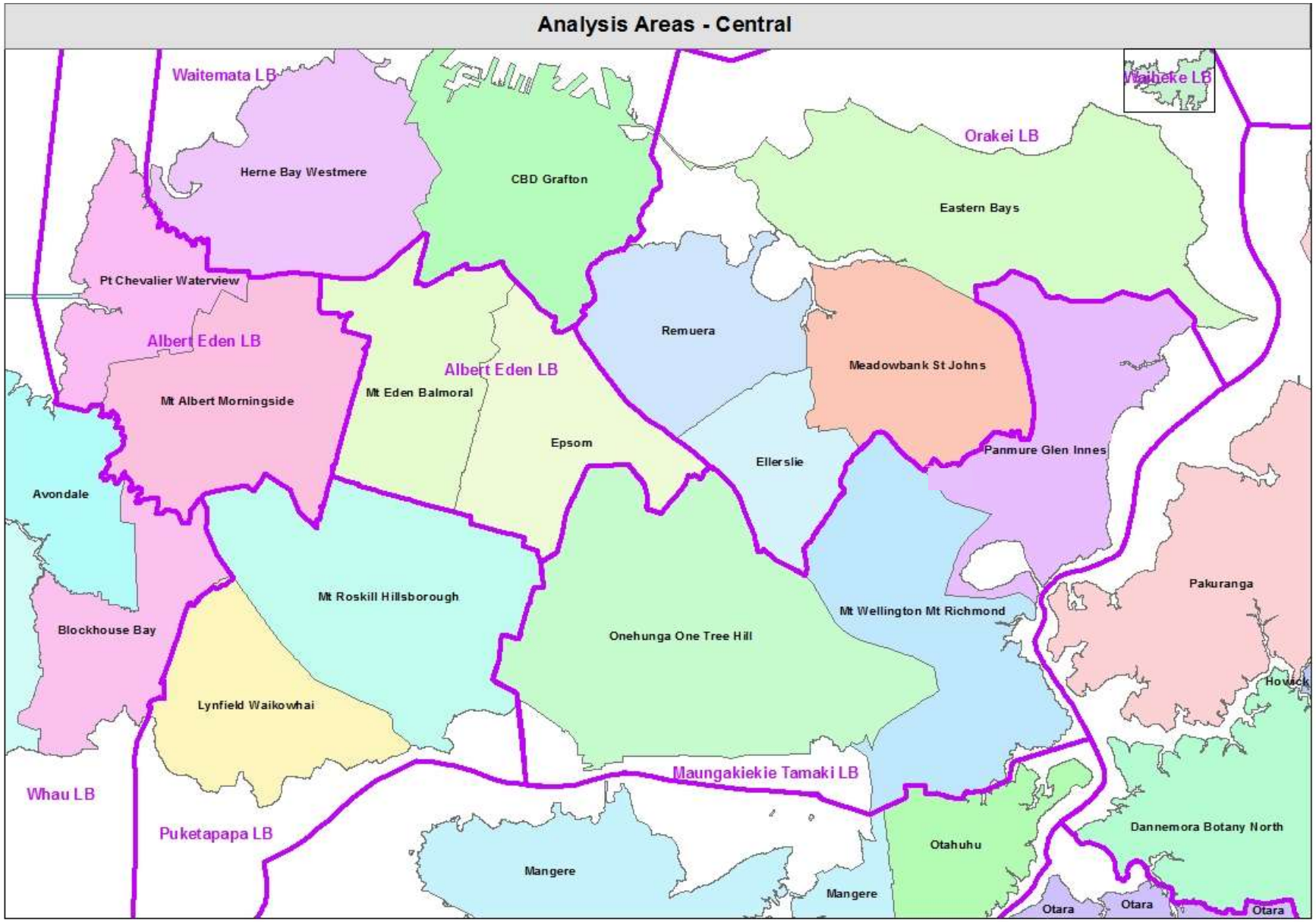
Titirangi Laingholm
Waitakere Ranges LB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Albert Eden LB
Remuera
Meadowbank St Johns
Mt Albert Morningside
Mt Eden Balmoral
Epsom
Ellerslie
Panmure Glen Innes
Avondale
Pakuranga
Mt Roskill Hillsborough
Mt Wellington Mt Richmond
Blockhouse Bay
Onehunga One Tree Hill
Howick
Lynfield Waikowhai
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Whau LB
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Dannemora Botany North
Otahuhu
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Otara
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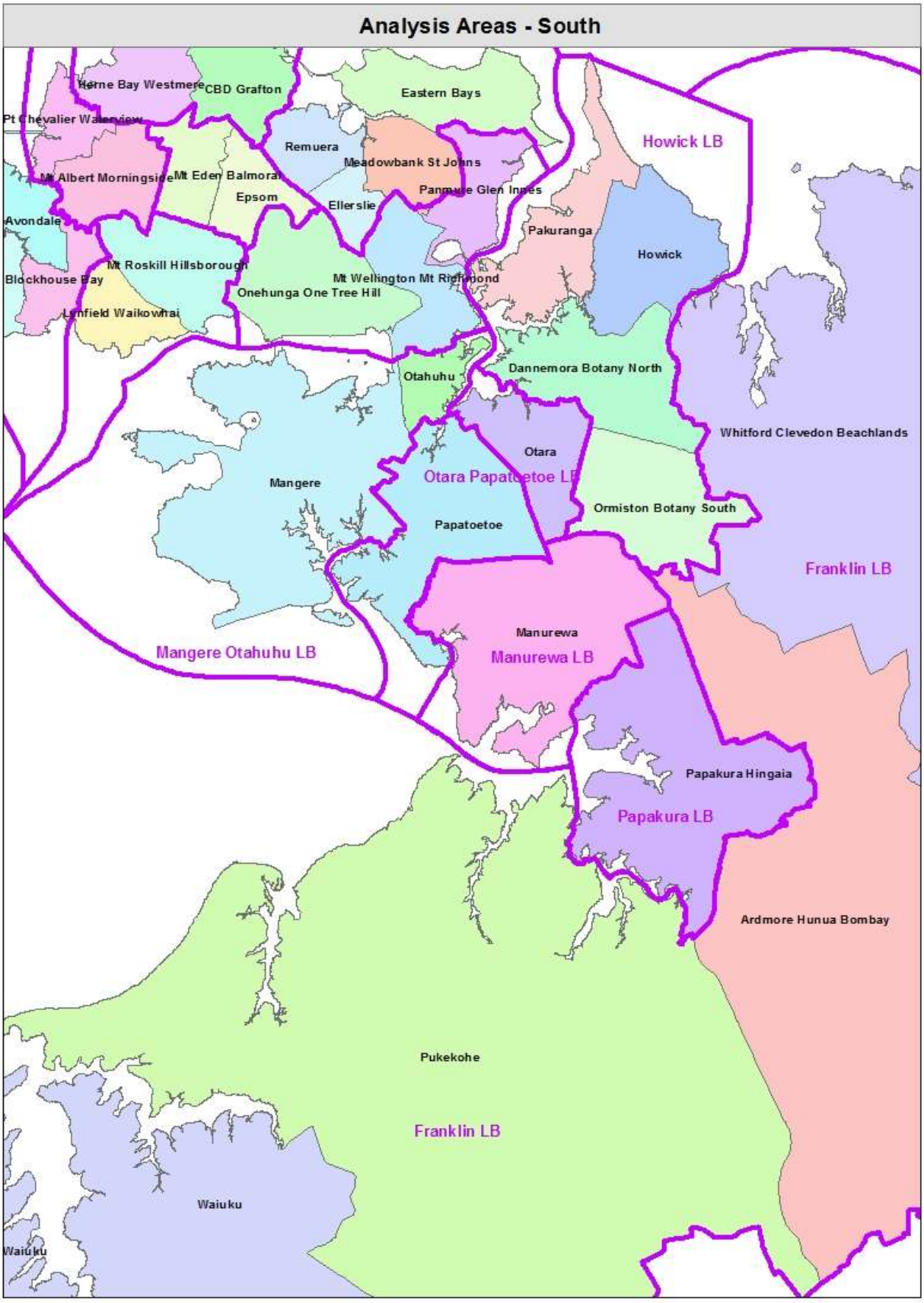
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Eastern Bays
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Howick LB
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Mt Eden Balmoral
Epsom
Panmure Glen Innes
Ellerslie
Avondale
Pakuranga
Howick
Mt Roskill Hillsborough
Blockhouse Bay
Mt Wellington Mt Richmond
Onehunga One Tree Hill
Lynfield Waikowhai
Otahuhu
Dannemora Botany North
Whitford Clevedon Beachlands
Otara
Mangere
Otara Papatoetoe LB
Ormiston Botany South
Papatoetoe
Franklin LB
Manurewa
Manurewa LB
Mangere Otahuhu LB
Papakura Hingaia
Papakura LB
Ardmore Hunua Bombay
Pukekohe
Franklin LB
Waiuku
Waiuku

D. 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, e.g. 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 (e.g. 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.

E. Main Findings

1. Current Demand

1.1 Scope

The study covers the main winter season running from 1 April to 31 August.

Note:

There is a significant level of unmet demand for fields for pre-season training by winter code teams and shoulder / early summer season demand for ethnic tournaments and leagues. Football is keen to extend to more year round play but are limited by access to fields.

College Sport report increasing difficulty catering for school demand on school fields.

Included in demand	Excluded from demand
Regular competition games on community fields	Pre-season training and games
Regular training on community fields	Shoulder season training and games including ethnic leagues and tournaments e.g. Pacific Village Rugby and League, Maori Rugby and League, Fijian and other ethnic football etc.
Regular use by Talent Centres, Academies and other introductory or skills development programmes	Events or tournaments held one off or very infrequently at the same sports park
Regular use by representative squads or teams during the winter season	
Regular use by social teams	
Regular College Sport use of community fields	
Regular use of winter fields for other activities, e.g. summer sports codes	

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
- injury time – senior teams only
- rounding the total to the nearest quarter 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** is based on information provided by clubs through a web based survey and confirmed as being realistic and appropriate by the RSOs.

1.2 Team numbers

For the winter 2014 season the Auckland Region hosted around 5,054 community football, rugby and league teams. This is an increase of 388 teams or 8.3% since 2011 when 4,666 teams were identified.

Community team numbers by code and grade

	Football	Rugby	League	All codes
Senior teams	754	230	141	1125
Youth teams[1]	339[2]		68	407
Junior teams	2214	941	367	3522
Total teams 2014	**3307**	**1171**	**576**	**5054**

[1] Youth team ages vary by code
Excludes secondary school teams playing in secondary school competitions
Excludes representative teams

Each club or RSO provided information detailing the spread of their members across the 67 analysis areas. This was provided at both senior and junior level in recognition that club catchments for senior players are generally much larger than for junior.

Each club's teams were then distributed across the club's main catchment area on a pro rata to membership basis. Note this means demand is spread to match where players come from and not allocated solely to the club's location.

Teams playing in centralised modules have been allocated to the area where they train, or if they do not train, to the area of the centralised module.

Representative team, Talent Centre and Academy demand has been allocated to where it is based or to the area of choice of the RSO or organiser. For representative teams there is some flexibility to move to other areas within their geographic location should this be required by a lack of field supply.

The 5,054 rugby, football and league teams are spread across the analysis areas as shown in the table below.

As the table shows teams are not spread evenly across analysis areas with the spread dependent on population size and, to a lesser extent, club location.

Several areas show no teams from a particular code, or in one instance, Dairy Flat South, no teams at all. This does not mean there are no players in that area. Rather it indicates there were too few players from the area at any one club for the area to be considered by the club as part of their catchment. This may be due to a small population or to players radiating out to a number of clubs.

Summary Table: Number of Teams Generated within the Auckland Region

Sector	Analysis area	Football	Rugby	League	Total Teams
	Total Region	**3307**	**1171**	**576**	**5054**
Northern	Wellsford	32	11	0	46
	Warkworth	67	20	4	91
	Dairy Flat North	1	4	0	5
	Dairy Flat South	0	0	0	0
	Helensville	5	16.5	1	22.5
	Kumeu Huapai	68	20.5	0	88.5
	Orewa	26	8	3	37
	Red Beach	26	15	5	46
	Stanmore Bay Tindalls	33	9	4	46
	Silverdale	23	4	4	31
	Long Bay Torbay	43	10	7	60
	East Coast Bays	80	23	5	108
	Pine Hill	25	9	0	34
	Castor Bay	55	8	0	63
	Takapuna	63	13	0	78
	Hauraki Belmont	42	13	0	55
	Devonport	47	25	2	74
	Northcote Hillcrest	11	16	8	35
	Birkenhead	51	9	3	63
	Beach Haven Birkdale	63	9	7	79
	Kaipatiki	9	1	3	15
	Glenfield Marlborough	51	7	8	66
	Unsworth Heights	5	0	0	5
	Greenhithe	47	7	0	54
	Albany - Paremoromoro	66	20	2	90
	Brighams Creek Hobsonville	8	3	0	11
	Total Northern Sector	**953**	**281**	**66**	**1300**

Sector	Analysis area	Football	Rugby	League	Total Teams
Western	Massey West Harbour	49	28	8	85
	Te Atatu Peninsula	40	6	9	55
	Ranui	22	5	7	34
	Henderson Glendene	64	30	27	121
	Waitakere Swanson	20	0	3	23
	Waiatarua Henderson Valley	26	0	0	26
	Glen Eden Oratia	152	8	11	171
	Titirangi Laingholm	55	10	0	65
	Kelston New Lynn	16	13	22	51
	Avondale	43	12	11	66
	Blockhouse Bay	26	0	7	33
	Total Western Sector	**513**	**112**	**105**	**730**
Central	Lynfield Waikowhai	**Football**	**Rugby**	**League**	**Total Teams**
	Pt Chevalier Waterview	66	15	19	100
	Herne Bay Westmere	53	33	20	106
	CBD Grafton	19	11	0	30
	Waiheke	18	9	3	30
	Mt Eden Balmoral	89	24	0	113
	Epsom	74	20	0	94
	Mt Albert Morningside	110	27	38	175
	Mt Roskill Hillsborough	121	14	17	152
	Lynfield Waikowhai	20	0	7	27
	Onehunga One Tree Hill	45	28	4	77
	Mt Wellington Mt Richmond	22	15	9	46
	Panmure Glen Innes	2	35	14	51
	Meadowbank St Johns	59	42	0	101
	Remuera	118	48	0	166
	Ellerslie	66	0	0	66
	Eastern Bays	140	59	0	199
	Total Central Sector	**1022**	**380**	**131**	**1533**

Sector	Analysis area	Football	Rugby	League	Total Teams
Southern	Otahuhu	6	14	15	35
	Mangere	44	33	52	129
	Papatoetoe	89	21	38	148
	Otara	10	11	45	66
	Howick	137	25	19	181
	Pakuranga	98	24	11	133
	Dannemora Botany North	58	19	6	83
	Ormiston Botany South	16	6	0	22
	Manurewa	89	62	52	203
	Papakura Hingaia	108	64	29	201
	Whitford Clevedon Beachlands	51	11	0	62
	Ardmore Hunua Bombay	13	8	0	21
	Pukekohe	75	78	5	158
	Waiuku	25	22	2	49
	Total Southern Sector	**819**	**398**	**274**	**1491**

1.3 Field Hours Demand

The overall demand is for 6,771 field hours per week, with 2,382 hours at the weekend, mainly for competition and 4,389 hours during the week mainly for training.

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

Demand in field hours per week

Sector	Competition field hours/week	Training field hours per week	Total field hours per week
Northern	587	1046	1633
Western	339	660	999
Central	714	1361	2074
Southern	743	1322	2064
Total Region	**2382**	**4389**	**6771**

Overall for every 1 competition hour a further 1.8 training hours is required.

As demand is driven by the size of the population we have re-calculated demand as the field hours per week per 1000 population in the active age group (defined as 5 to 49).

Across the Auckland Region current demand is for 7.3 field hours per week for every 1000 active age population (5 to 49), consisting of 2.6 hours for competition and 4.7 hours for training.

Demand varies across the sectors ranging from a low of 6.7 in the western sector to a high of 8.0 in the northern sector.

The balance between total demand, competition and training is largely dependent on the popularity of the codes, the mix of junior and senior teams and the number and grade of centralised modules played in the area.

Demand in field hours per week per 1000 active population (2014 estimate age 5 to 49)

	Active age population	Competition field hours/week	Training field hours per week	Total field hours per week
Northern sector	204,744	2.9	5.1	8.0
Western	148,547	2.3	4.4	6.7
Central	262,890	2.7	5.2	7.9
Southern	303,912	2.4	4.3	6.8
Total Region	**920,093**	**2.6**	**4.7**	**7.3**

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

Summary Table: Demand hours per week

Sector	Analysis area	Competition	Training	Total Teams
	Total Region	**2382**	**4389**	**6771**
Northern	Wellsford	30	31	61
	Warkworth	37	77	115
	Dairy Flat North	3	7	10
	Dairy Flat South	0	0	0
	Helensville	9	16	25
	Kumeu Huapai	28	46	74
	Orewa	16	37	53
	Red Beach	19	31	50
	Stanmore Bay Tindalls	27	45	73
	Silverdale	11	23	34
	Long Bay Torbay	31	67	98
	East Coast Bays	51	88	138
	Pine Hill	14	24	38
	Castor Bay	30	53	83
	Takapuna	35	58	93
	Hauraki Belmont	16	33	49
	Devonport	34	67	101
	Northcote Hillcrest	28	43	72
	Birkenhead	19	41	59
	Beach Haven Birkdale	31	59	90
	Kaipatiki	12	19	32
	Glenfield Marlborough	32	57	89
	Unsworth Heights	5	9	14
	Greenhithe	25	41	66
	Albany - Paremoromoro	35	63	98
	Brighams Creek Hobsonville	8	12	20
	Total Northern Sector	**587**	**1047**	**1634**

Sector	Analysis area	Competition	Training	Full Week
Western	Massey West Harbour	41	73	114
	Te Atatu Peninsula	26	53	78
	Ranui	14	31	45
	Henderson Glendene	61	122	183
	Waitakere Swanson	10	17	26
	Waiatarua Henderson Valley	13	25	38
	Glen Eden Oratia	65	113	178
	Titirangi Laingholm	18	36	54
	Kelston New Lynn	28	62	90
	Avondale	50	76	126
	Blockhouse Bay	14	52	66
	Total Western Sector	**339**	**660**	**999**
Central	Analysis Area	**Competition**	**Training**	**Full Week**
	Pt Chevalier Waterview	47	99	147
	Herne Bay Westmere	68	174	241
	CBD Grafton	34	48	82
	Waiheke	13	24	37
	Mt Eden Balmoral	35	91	126
	Epsom	26	61	88
	Mt Albert Morningside	74	160	234
	Mt Roskill Hillsborough	113	120	234
	Lynfield Waikowhai	8	26	35
	Onehunga One Tree Hill	47	108	154
	Mt Wellington Mt Richmond	24	40	64
	Panmure Glen Innes	32	67	99
	Meadowbank St Johns	31	43	74
	Remuera	50	95	145
	Ellerslie	31	57	88
	Eastern Bays	80	146	226
	Total Central Sector	**713**	**1361**	**2074**

Sector	Analysis area	Competition	Training	Full Week
Southern	Otahuhu	18	50	67
	Mangere	80	165	245
	Papatoetoe	84	142	225
	Otara	33	73	106
	Howick	79	124	203
	Pakuranga	50	90	140
	Dannemora Botany North	28	53	81
	Ormiston Botany South	11	18	29
	Manurewa	116	216	331
	Papakura Hingaia	117	159	276
	Whitford Clevedon Beachlands	25	31	56
	Ardmore Hunua Bombay	9	29	38
	Pukekohe	72	129	202
	Waiuku	22	43	66
	Total Southern Sector	**743**	**1321**	**2064**

2. Supply of Fields

2.1 Number of fields

There are 818 winter fields (including dedicated training areas) secured for community use – 591 full size, 25 three quarter size, 83 junior (1/4), 84 mini (1/4) and 35 midget (1/8) fields (secured means a formal agreement for use beyond one year).

Note: Full size fields are also used for ½, ¼ or 1/8 field games with cones marking the field boundaries.

Number and size of fields secured for community use

	Northern	Western	Central	Southern	Total Region
Full size	132	88	144	227	**591**
Three quarter size	22	0	3	0	**25**
Junior (1/2)	7	16	18	42	**83**
Mini (1/4)	7	10	17	50	**84**
Midget (1/8)		2	16	17	**35**
Total Region	**168**	**116**	**198**	**336**	**823**

Excludes fields not used in winter or used but not secured

- There are
  - 284 full size, 25 three quarter, 59 junior (1/2), 61 mini (1/4) and 24 midget (1/8) size football fields
  - 205 full size, 11 junior (1/2), 10 mini (1/4) and 8 midget (1/8) size rugby fields
  - 102 full size, 13 junior (1/2), 13 mini (1/4) and 3 midget (1/8) size league fields

Current Field allocation (FFE - full field equivalents)

	Northern	Western	Central	Southern	Total Region
Football full size	68	52	70	94	**284**
Football three quarter	22		3		**25**
Football junior (1/2)	3	15	15	26	**59**
Football mini (1/4)	5	1	10	45	**61**
Football midget (1/8)		1	11	12	**24**
Rugby full	53	18	44	90	**205**
Rugby junior (1/2)	4	1	3	3	**11**
Rugby mini (1/4)	2	4	3	1	**10**
Rugby midget (1/8)			4	4	**8**
League full	11	18	30	43	**102**
League junior (1/2)				13	**13**
League mini (1/4)		5	4	4	**13**
League midget (1/8)		1	1	1	**3**
Total Region	**168**	**116**	**198**	**336**	**818**

2.2 Assessed playing capacity

Since 2011 Council officers have reviewed the playing capacity of all fields. The capacities of a number of fields were reduced, including capacities of partially flood-lit fields to reflect the hours of lit space available after dark. A small number of privately owned fields that, in 2011, were understood to have formal use agreements have since been identified as being at risk due to the lack of the lack of a formal agreement and, as such, have not been included in the field supply.

The secured fields have a total assessed playing capacity of 8,769 full size equivalent hours.

The playing capacity for each code is:

- Football 4614 full size equivalent hours
- Rugby 2776
- League 1379

Assessed playing capacity – FFE hours per week

	Northern	Western	Central	Southern	Total Region
Football	1329	756	1179	1350	4614
Rugby	881	232	634	1029	2776
League	181	196	426	577	1379
All codes	**2391**	**1184**	**2238**	**2956**	**8769**

3/4 fields capacity assessed as half field for competition and full field for training

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

Areas with no capacity in a particular code or overall have no winter fields, or no fields allocated to that particular code, within their boundaries.

Summary Table: Capacity in FFE per Week by Analysis Area

Sector	Analysis area	Football	Rugby	League	Total Hours
	Total Region	**4614**	**2776**	**1379**	**8,769**
Northern	Wellsford	85	63	0	148
	Warkworth	90	72	29	191
	Dairy Flat North	0	0	0	0
	Dairy Flat South	0	0	0	0
	Helensville	0	90	28	118
	Kumeu Huapai	91	40	0	131
	Orewa	48	0	0	48
	Red Beach	36	111	0	147
	Stanmore Bay Tindalls	106	0	44	150
	Silverdale	0	0	0	0
	Long Bay Torbay	103	0	0	103
	East Coast Bays	16	19	29	64
	Pine Hill	50	65	0	115
	Castor Bay	91	17	0	108
	Takapuna	36	0	0	36
	Hauraki Belmont	48	0	0	48
	Devonport	44	97	0	141
	Northcote Hillcrest	123	107	17	246
	Birkenhead	0	73	34	107
	Beach Haven Birkdale	59	0	0	59
	Kaipatiki	0	46	0	46

Sector	Analysis area	Football	Rugby	League	Total Hours
Northen cont.	Glenfield Marlborough	0	0	0	0
	Unsworth Heights	131	0	0	131
	Greenhithe	66	18	0	84
	Albany - Paremoromoro	92	64	0	156
	Brighams Creek Hobsonville	14	0	0	14
	Total North	**1329**	**882**	**181**	**2391**
Western	Massey West Harbour	81	72	3	156
	Te Atatu Peninsula	32	0	41	73
	Ranui	76	0	30	106
	Henderson Glendene	102	34	15	151
	Waitakere Swanson	0	0	0	0
	Waiatarua Henderson Valley	0	0	0	0
	Glen Eden Oratia	130	0	29	158
	Titirangi Laingholm	0	0	0	0
	Kelston New Lynn	140	60	19	218
	Avondale	176	66	33	275
	Blockhouse Bay	20	0	28	48
	Total West	**756**	**232**	**198**	**1185**
Central	Pt Chevalier Waterview	20	0	44	64
	Herne Bay Westmere	151	75	49	276
	CBD Grafton	50	31	60	141
	Waiheke	24	18	10	52
	Mt Eden Balmoral	33	0	0	33
	Epsom	12	0	0	12
	Mt Albert Morningside	79	50	80	209
	Mt Roskill Hillsborough	299	58	0	357
	Lynfield Waikowhai	0	0	31	31
	Onehunga One Tree Hill	90	77	30	197
	Mt Wellington Mt Richmond	16	32	73	120
	Panmure Glen Innes	54	85	23	163
	Meadowbank St Johns	36	44	0	80
	Remuera	0	105	0	105
	Ellerslie	109	16	27	152
	Eastern Bays	206	43	0	249
	Total Central	**1179**	**634**	**426**	**2238**

Sector	Analysis area	Football	Rugby	League	Total Hours
Southern	Otahuhu	45	25	14	84
	Mangere	140	68	121	329
	Papatoetoe	91	76	81	247
	Otara	99	37	94	229
	Howick	137	0	32	169
	Pakuranga	106	112	33	251
	Dannemora Botany North	29	0	0	29
	Ormiston Botany South	81	0	0	81
	Manurewa	144	117	90	351
	Papakura Hingaia	210	306	67	582
	Whitford Clevedon Beachlands	113	19	7	138
	Ardmore Hunua Bombay	0	23	0	23
	Pukekohe	100	203	28	331
	Waiuku	58	44	12	114
	Total South	**1350**	**1029**	**577**	**2956**

3. Change to Model Input Factors

The 2011 Sports Field Supply and Demand Study was based on the best information available at the time. Some of this information dated back to earlier studies undertaken by several legacy councils in 2008 and 2009. In addition, since 2011, there have been a number of developments that will impact future demand projections, including:

- The Auckland Plan, which sees the region's population growing by one million people over 30 years
- The Proposed Unitary Plan (public feedback now being considered) which gives effect to the Auckland Plan by identifying the location and extent of intensification to accommodate future growth
- Confirmation of Special Housing Areas, where development will be fast tracked
- The 2013 Census provides an accurate population count
- Council has purchased new land to add to the sports field network e.g. Colin Maiden Park
- Council's knowledge of the level of play individual fields can withstand during winter has increased

The table below highlights the key changes to model input factors for this study and notes the resultant effect.

Input factor	Change	Resultant effect
Club catchment areas	• Teams are allocated to analysis areas based on information provided by RSOs and clubs on where most of their members live • Senior and junior player catchment areas have been separated to reflect the increasing trend for senior players to travel to the club of their choice whilst juniors tend to join their local club • More clubs now keep electronic records and were able to provide better quality information	• Some movement of demand between analysis areas to reflect updated catchment areas
Model grade categories	• Teams at different levels / grades require different sized fields for different lengths of time • The model has been updated to allow more subdivision of different levels of play	• More accurate reflection of demand by teams at different levels
Training demand	• A web survey of Auckland Region clubs provided updated information on training requirements for teams at different levels • An additional survey question on field sharing was added	• A marked reduction in training field demand mainly at senior level • Reduction may be due to several factors including previous under reporting of field sharing, a change in training habits eg shorter, less frequent sessions necessitated by player availability and/or pressure on field space
Other field use	• In 2011 'other' field use in winter was assumed to be at the same level as in 2008/09 • The Sports Field Booking System has been used to identify booked use outside the regular RSO and club bookings • College Sport provided data on the current use of community fields for College Sport competitions • RSOs, Council staff and local knowledge provided data on known non booked use	• More accurate reflection of other demands on winter sports fields
Field capacities	• The Sports Turf Advisors regularly review the playing capacity of sports fields	• Up to date field capacities • Partial floodlighting taken into account • More consistent capacities for like fields across the region

Input factor	Change	Resultant effect
Population projections	• Auckland Council Growth Model projections from 2011 have been replaced by the Auckland Transport Model projections in line with all infrastructure planning for the 2015-2025 Long Term Plan • These projections reflect the intensification noted in the Auckland Plan and given effect through the Proposed Unitary Plan • The projections were run in November 2013 and do not include all Special Housing Areas	• The Auckland Transport Model projections distribute growth differently from the Auckland Residential Futures Model which has superseded the Auckland Growth Model • Very significant changes to the distribution of population growth in the next 10 years and consequent changes to the spread of future sports field demand • Projected decline or very limited growth in the active age population in some areas where growth was previously projected

4. Current Capacity Surplus / Shortfall

Three current scenarios have been modelled to illustrate the current field supply and demand situation.

Competition and training supply and demand are considered separately.

Scenario	Explanation
1. Current code allocation Impact of weather related field closures not included	This is what clubs experience on a day to day basis. Based on field availability – current field allocations apply with weather related field closures deducted from field capacity.
2. Current code allocation No weather related field closures	This is what clubs would experience if there were no weather related field closures.
3. Optimal code allocation	Each code is assumed to have the same level of field supply relative to demand, i.e., field allocation is optimised. Fields are assumed to be available for play, i.e., no closures. Note: although allocations are reviewed regularly it is unrealistic to expect optimal allocation each year[1].

[1] Changes in the size and nature of the population, participation trends, code popularity, club strength and viability and historic field associations all add to continuing changes in demand

4.1 Field allocations

Fields are generally allocated to particular codes. These allocations are based on where the club is sited, historical links and need. Allocations are reviewed annually. It is unrealistic to expect field allocation to accurately match field demand as club team numbers fluctuate year on year.

4.2 Calculating field closure rates

Each winter weather conditions often require Council to close fields as further play could result in long term damage to the field surface.

When fields are closed at weekends the RSO revisits the game schedule and tries to transfer games to other available fields. When few other fields are available games often have to be cancelled due to the difficulties in rescheduling, particularly if closures are advised late in the week. This can have a ripple effect across the region.

Field closures during the week result in clubs cancelling training sessions as few have other fields available to them.

Auckland Council keeps records of field closures. We have used the last three years' records (2011, 2012, and 2013) and taken the average weather related closure rate for each field over that period. Where fields have been upgraded the impact of the upgrade on the closure rate has been reviewed and the closure figure amended as appropriate.

Field closure percentage by sector – 3 year average (based on FFE hours)

	North	West	Central[1]	South
Competition	18%	11.5%	11%	5%
Training	23%	28%	20%	5%[2]
Full week	21%	24%	17%	5%

[1] April to June closure data from 2010 used as data for the 2011 period was not available

[2] Southern clubs have the responsibility to monitor training fields and close when needed – as the details of these closures are often not passed to council it is likely the training closure figure is under stated.

The three year average field closure rate across the region was 18%, comprising 13% for competition fields and 21% for training fields.

Field closures reduce the available capacity from 8,769 hours per week to 7,446 hours, comprising 2,886 hours for competition and 4,560 hours for training. Whilst the potential capacity of fields is higher, sports field capacity, based on field closure data, is the practical reality that sports clubs experience on a day to day basis.

4.3 Competition and training

Currently most competition games are played at weekends with mid-week training. If this tradition is to continue the weekend and weekday capacity will need to meet demand at those times.

4.4 Travel time and distance

Travel distance and time is a factor. A 2006 Auckland City Council study found that participation rates, particularly of junior players, would likely decrease if travel times, particularly for training were much longer than 10 minutes.

This report has used a maximum travel time of around 15 minutes to determine whether a capacity shortfall in one area can be accommodated in a neighbouring area.

4.5 Scenario 1 – current field allocations + allowance for weather related field closures

4.5.1 Capacity shortall

Scenario 1 (current field allocation and reduction of field capacity to reflect field closures) models the day to day reality for sports clubs.
Under this scenario there is a current capacity shortfall of:

-772 hours shortfall, of which
-144 hours are for competition
-628 hours for training

All codes have some areas of capacity shortfall that cannot be accommodated by other areas within a reasonable travel distance.
Training space is the greater issue for all codes with football more affected than rugby or league.

Scenario 1 - Region – Sum of local shortfalls - current shortfall FFE Hours

Code	Competition	Training	Total
Football	63	316	379
Rugby	64	176	240
League	17	136	153
Total	144	628	772

The shortfall is not evenly spread across the region. The tables below shows the shortfall areas by code.

Rugby – current shortfall FFE Hours – Scenario 1 - current field allocation plus weather related field closures

Sector	Analysis Area	Competition	Training	Total
North	Kumeu Huapai		6	6
	East Coast Bays	2		2
	Hauraki Belmont	1		1
West	Henderson Glendene	13	15	28
	Blockhouse Bay		20	20
	Te Atatu Peninsula	3	3	6
	Ranui	1		1
Central	Herne Bay Westmere	11	58	69
	Epsom	7	27	34
	Mt Eden Balmoral		32	32
	Eastern Bays	13		13
	CBD Grafton	7	5	12
	Onehunga One Tree Hill	6		6

South	Manurewa		10	10

Football – current shortfall FFE Hours – Scenario 1 - current field allocation plus weather related field closures

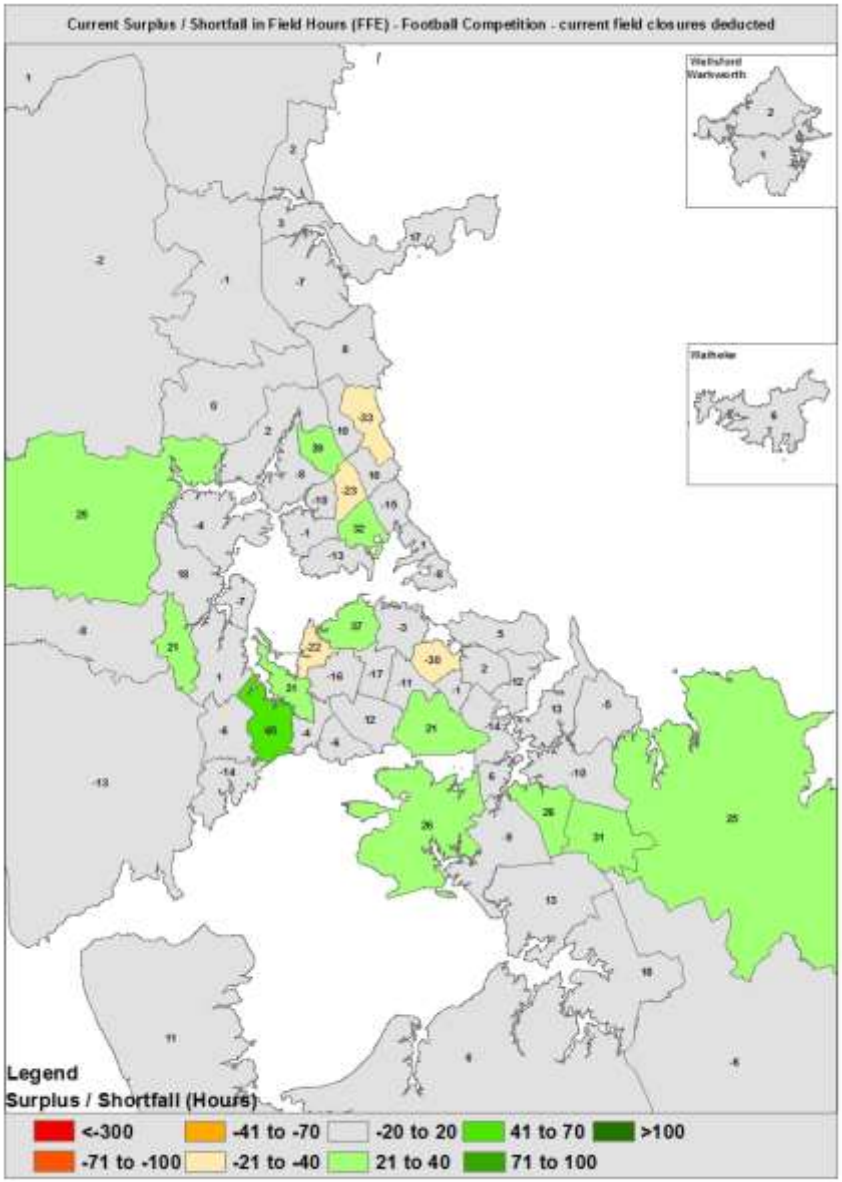
Sector	Analysis Area	Competition	Training	Total
North	Devonport	7	21	28
	East Coast Bays		24	24
	Warkworth		12	12
	Castor Bay		10	10
	Kaipatiki		5	5
	Takapuna	4		4
	Helensville	2	2	4
	Kumeu Huapai		4	4
	Brighams Creek Hobsonville		3	3
	Beach Haven Birkdale		2	2
	Silverdale		2	2
West	Glen Eden Oratia		36	36
	Te Atatu Peninsula	6	19	25
	Titirangi Langholm		13	13
	Blockhouse Bay		10	10
	Waiatarua		11	11
Central	Remuera	28	46	74
	Epsom		28	28
	Mt Albert Morningside		24	24
	CBD Grafton Parnell	3	17	20
	Onehunga One Tree Hill		19	19
	Mt Eden Balmoral	11		11
	Mt Wellington	2	4	6
	Waiheke		4	4

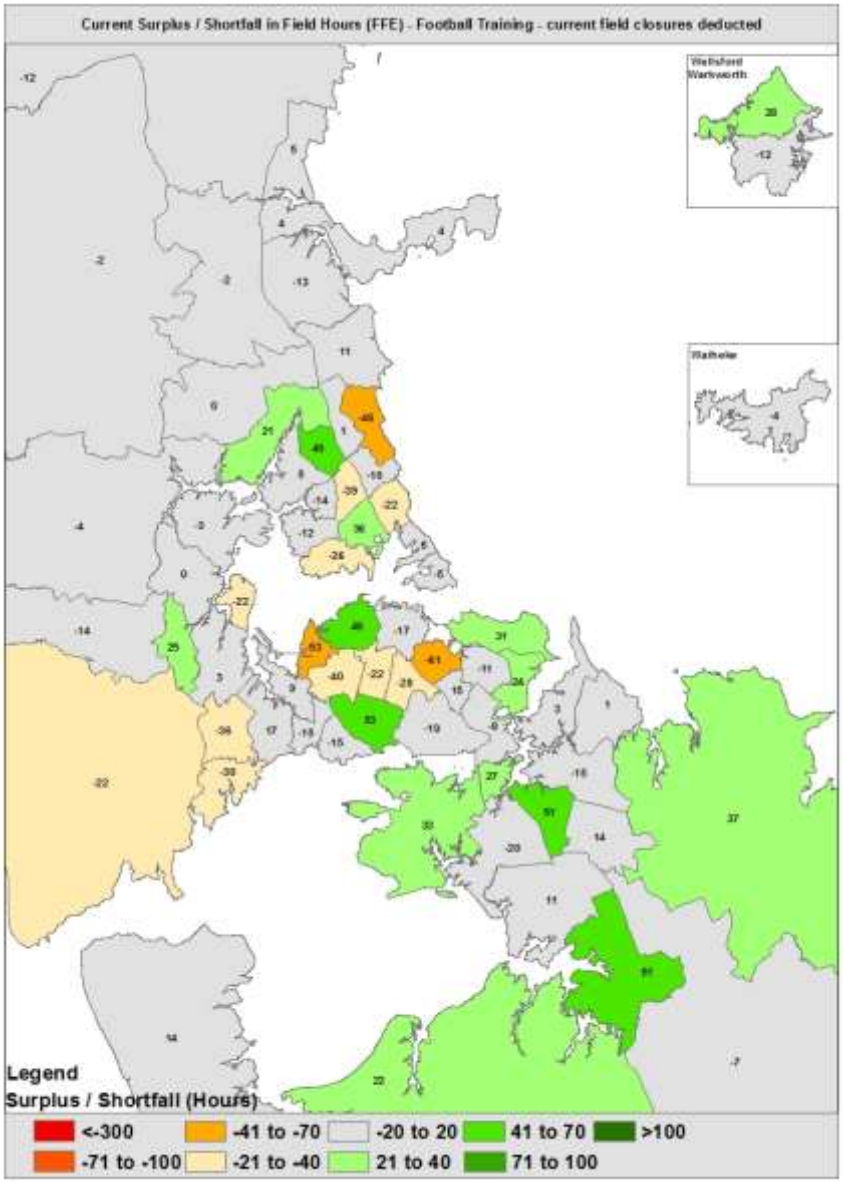
League – current shortfall FFE Hours – Scenario 1 - current field allocation plus weather related field closures

Sector	Analysis Area	Competition	Training	Total
North	Glenfield Marlborough	2	7	9
	Devonport	2	3	5
	Albany Paremoremo		2	1
	Silverdale		1	1
	Long Bay Torbay		1	1
	Kaipatiki		1	1
West	Henderson Glendene		28	28
	Kelston New Lynn		18	18
	Massey West Harbour		10	10
	Glen Eden Oratia		6	6
	Avondale		5	5
	Waitakere Swanson		1	1
Central	Mt Albert Morningside		19	19
	Mt Roskill		16	16
	Pt Chevalier Waterview		11	11
South	Manurewa	13	1	14
	Mangere		4	4
	Howick		2	2

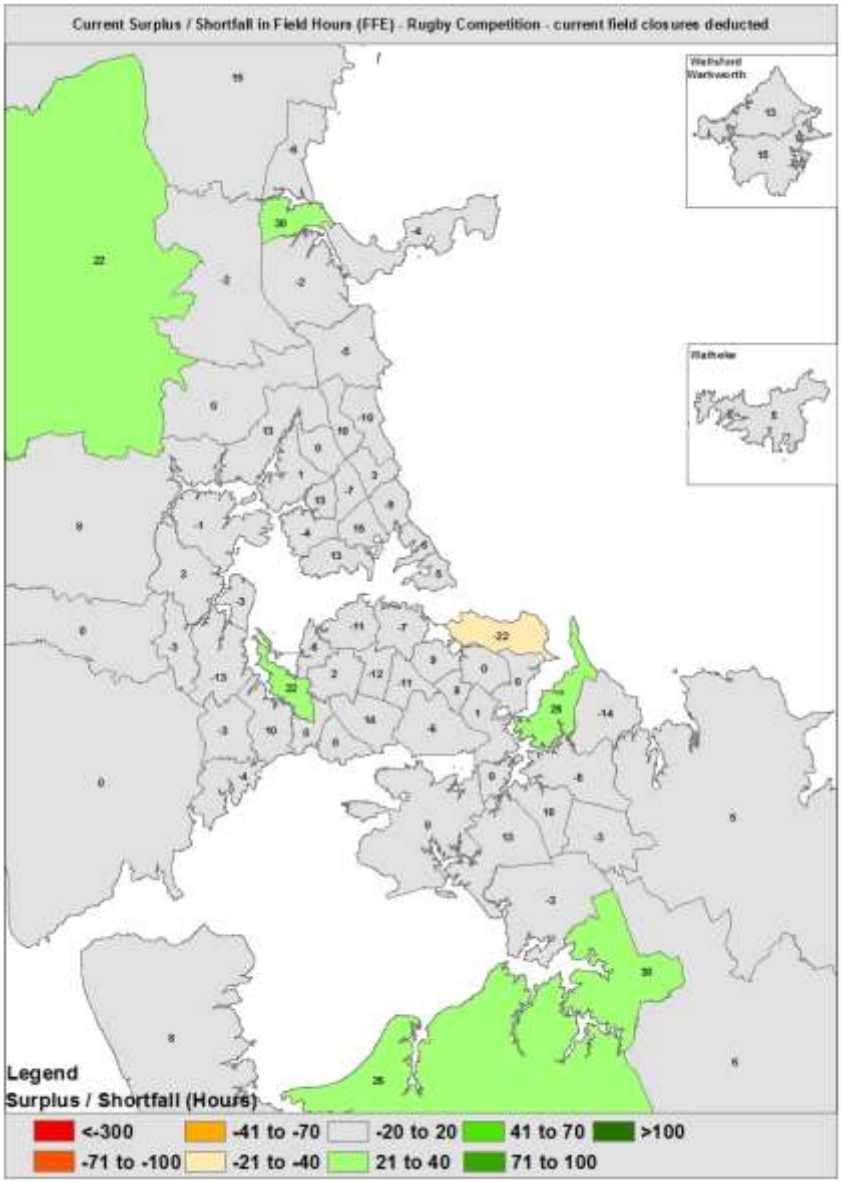
(Refer maps on the next 3 pages and Technical Appendix for detailed analysis)

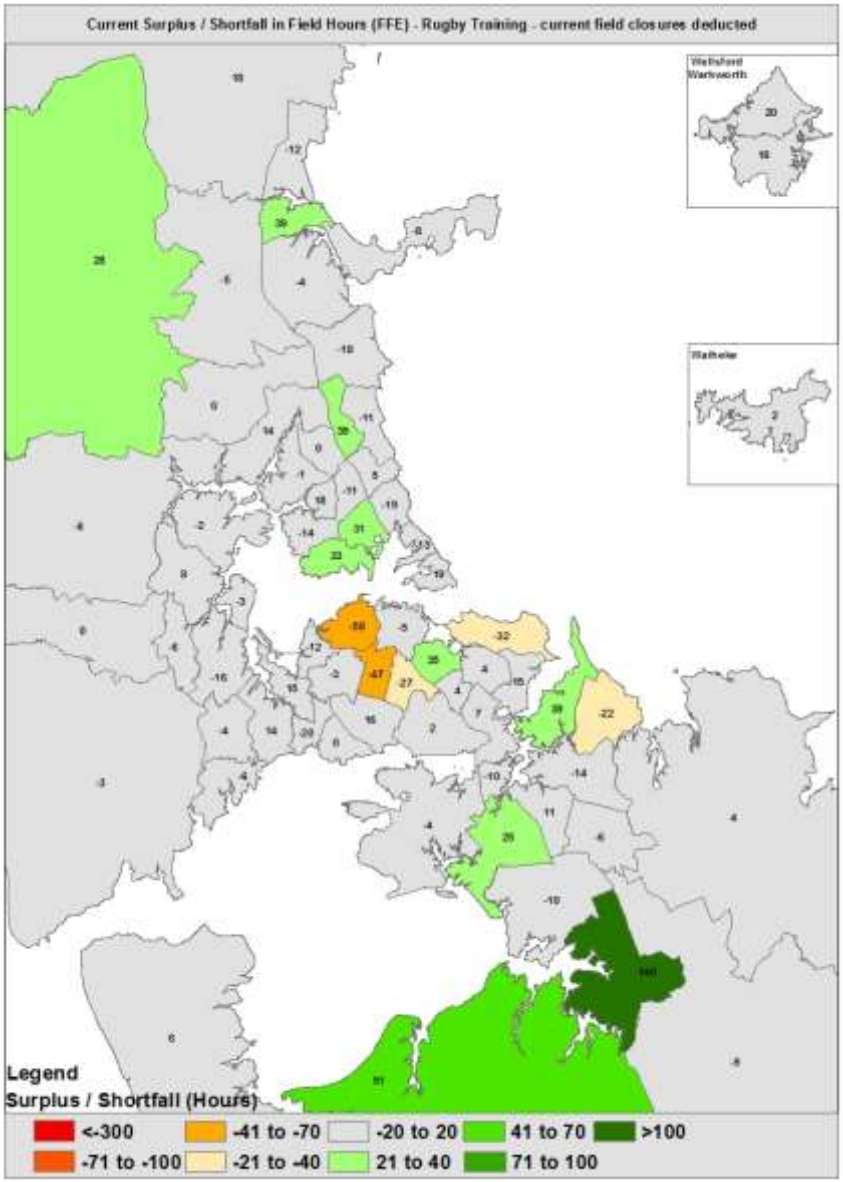
Scenario 1 - Football Competition and training surplus and shortfall – current field allocation plus weather related field closures



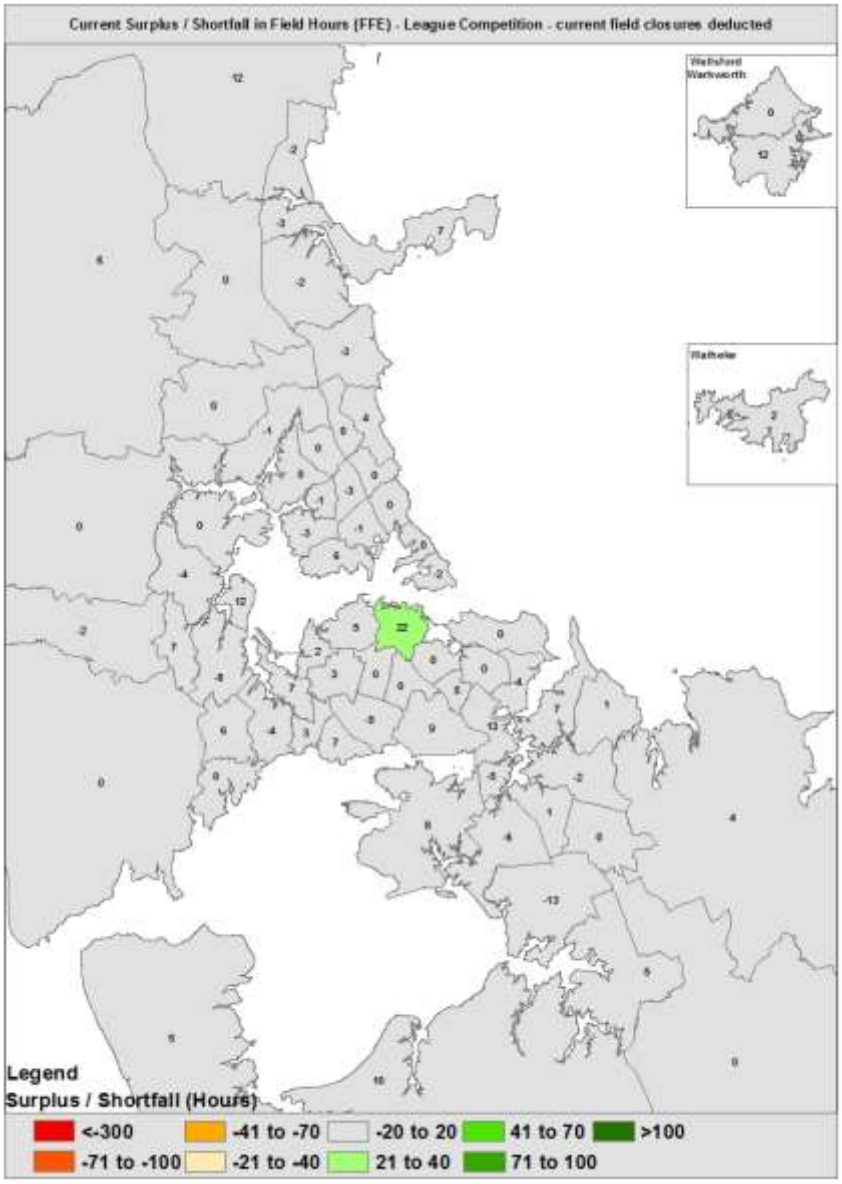


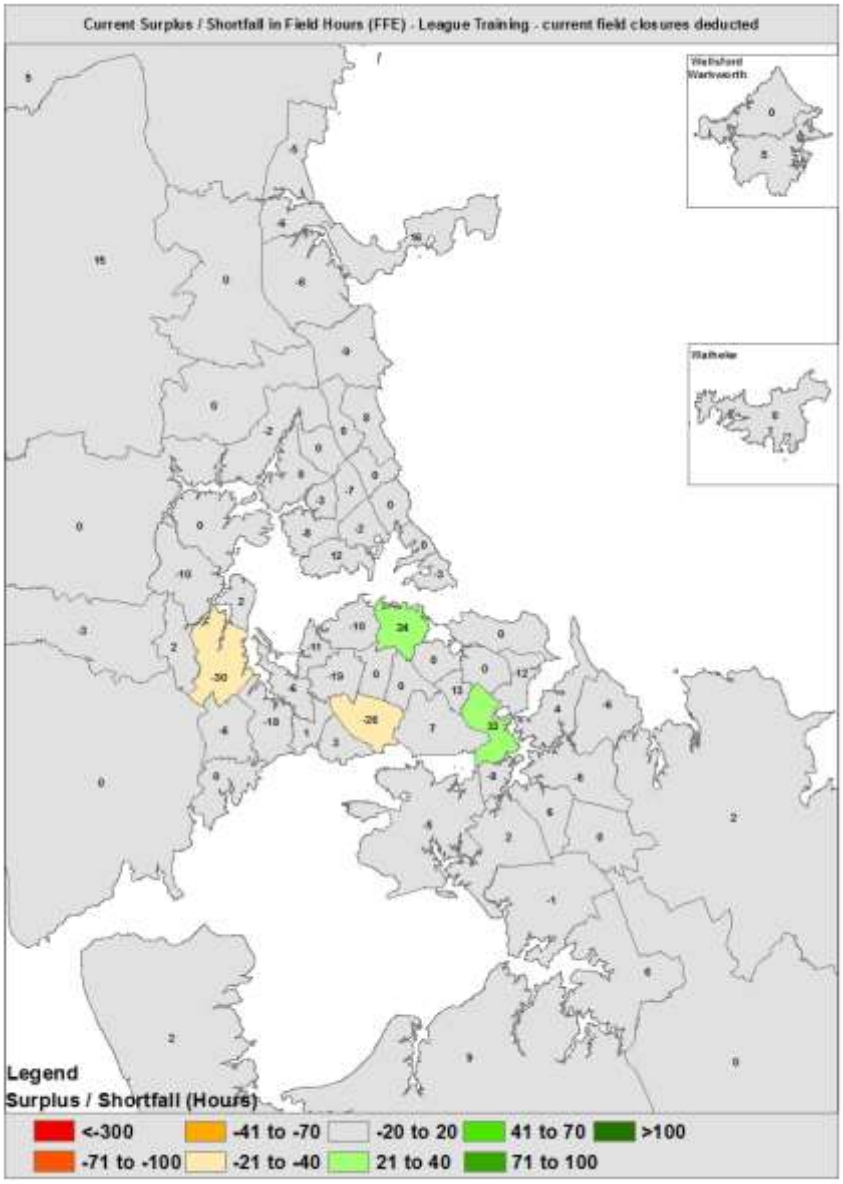
Scenario 1 - Rugby Competition and training surplus and shortfall – current field allocation plus weather related field closures





Scenario 1 - Rugby Competition and training surplus and shortfall – current field allocation plus weather related field closures





4.2 Scenario 2 – Current code allocation – no weather related field closures

If it is assumed that fields were available for play up to their capacity, i.e., no weather related field closures the -772 hour shortfall in Scenario 1 which included field closures, reduces under Scenario 2 to:

-261 hour shortfall across the week, comprising

-58 hours for weekend competition play

-203 hours for weekday training

Region - sum of local shortfalls - FFE Hours under current field allocations

Code	Competition	Training	Total
Football	25	48	73
Rugby	25	96	121
League	8	59	67
Total all codes	58	203	261

The tables below show the local shortfalls by code once neighbouring area surpluses are considered. These shortfalls have been aggregated to provide the region wide picture.

All codes have some areas of capacity shortfall that cannot be accommodated by other areas within a reasonable travel distance. Training space is the greater issue for all codes.

Football - current shortfall FFE Hours under current field allocations and no weather related closures

Sector	Analysis Area	Competition	Training	Total
North	Devonport	1		1
	Helensville	2	2	4
West	Glen Eden Oratia		7	7
Central	Remuera	22	35	57
	Waiheke		3	3
	CBD Grafton Parnell		1	1

Rugby - current shortfall FFE Hours under current field allocations and no weather related closures

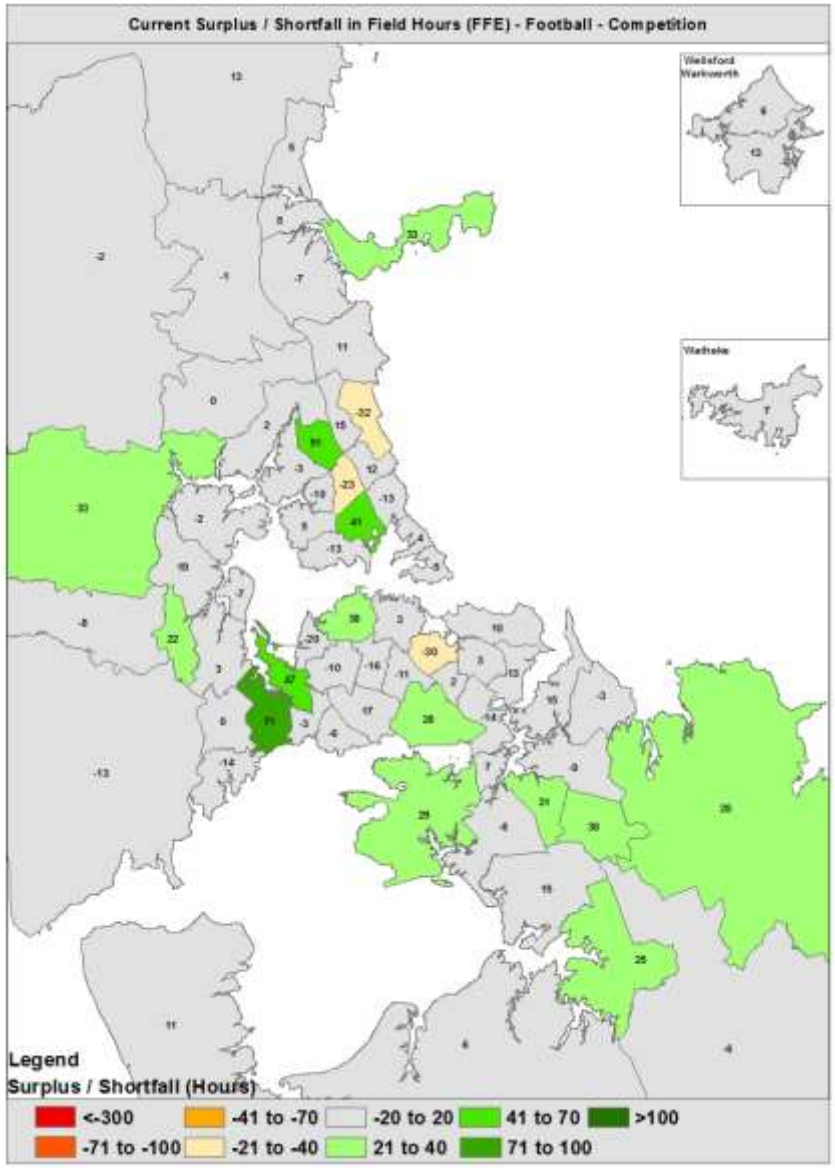
Sector	Analysis Area	Competition	Training	Total
North	Long Bay Torbay	2		2
West	Henderson Glendene	6		6
	Te Atatu Peninsula	3		3
	Ranui	1		1
Central	Eastern Bays	6		6
	Herne Bay Westmere	7	47	54
	Mt Eden Balmoral		24	24
	Epsom		21	21
	Pt Chevalier Westmere		4	4

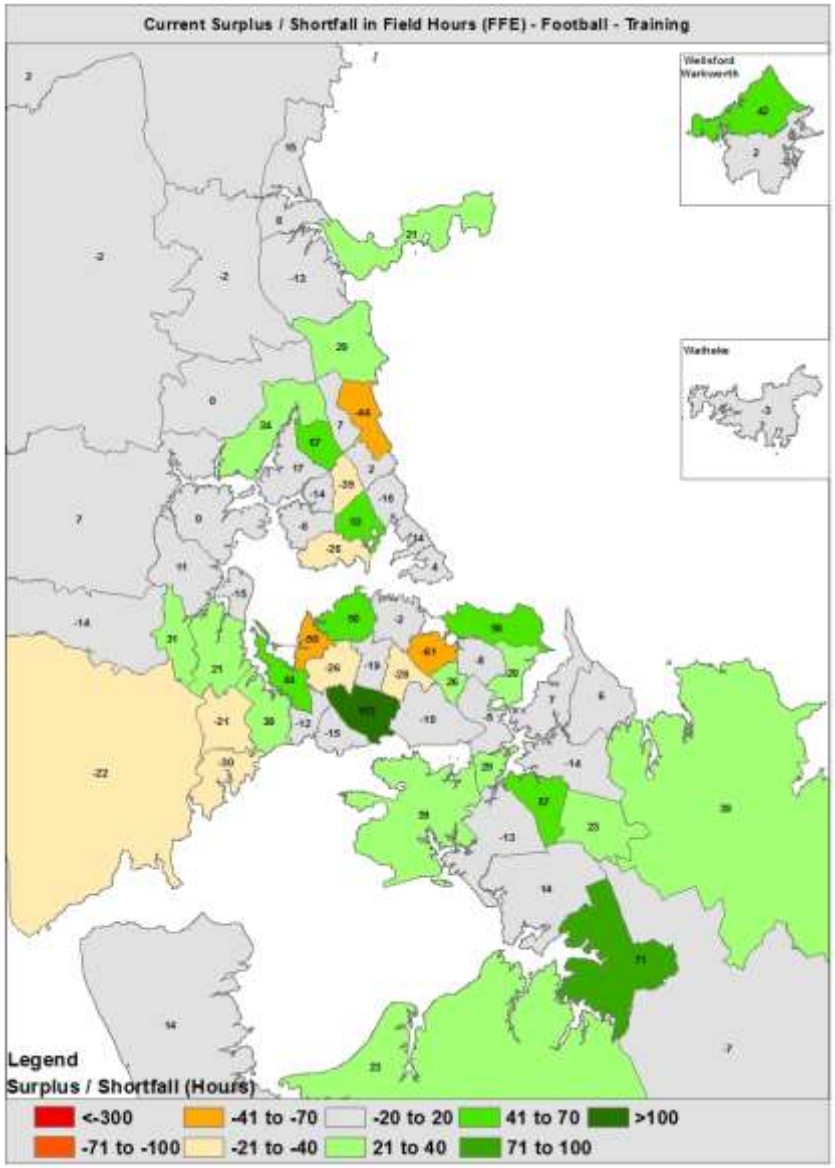
League - current shortfall FFE Hours under current field allocations and no weather related closures

Sector	Analysis Area	Competition	Training	Total
North	Devonport	2	3	5
	Albany Paremoremo	1	2	3
West	Henderson Glendene		17	17
	Kelston New Lynn		7	7
	Massey West Harbour		6	6
Central	Mt Roskill		17	17
	Mt Albert Morningside		7	7
South	Manurewa	5		5

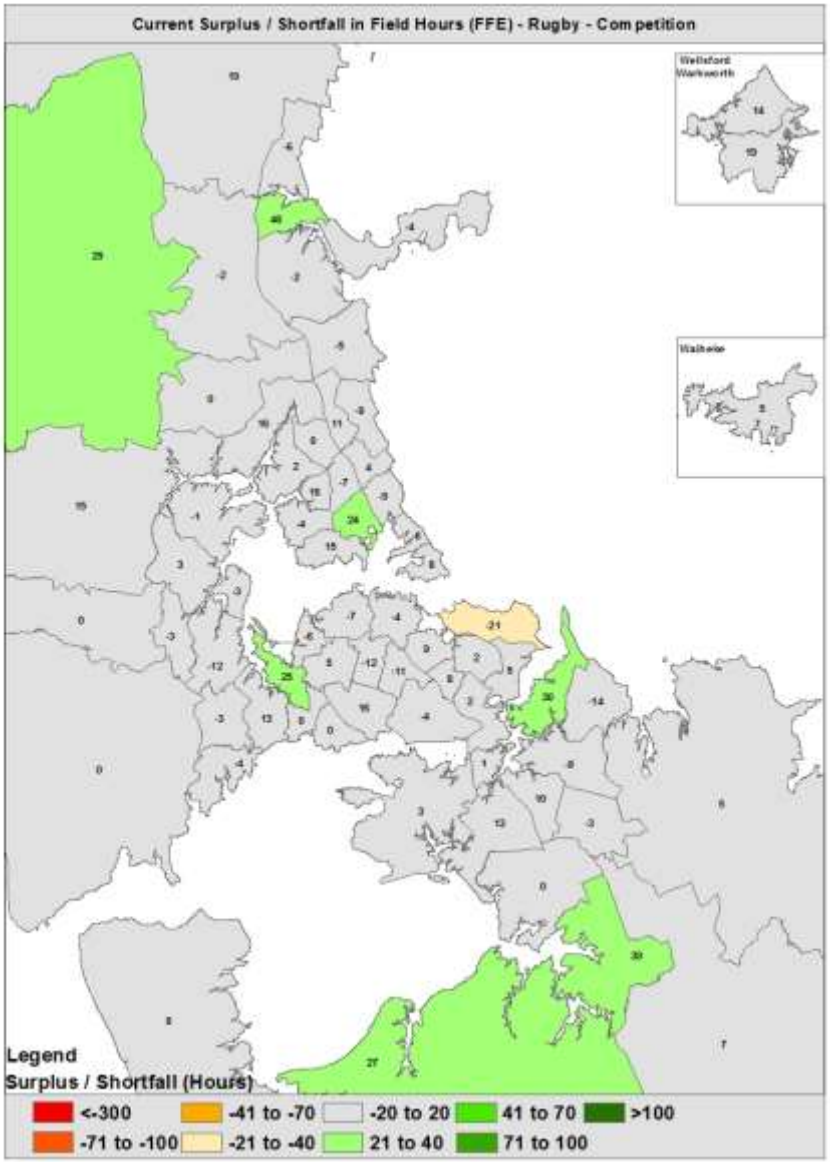
(refer to the maps on the next 3 pages and the Technical Appendix for detailed analysis)

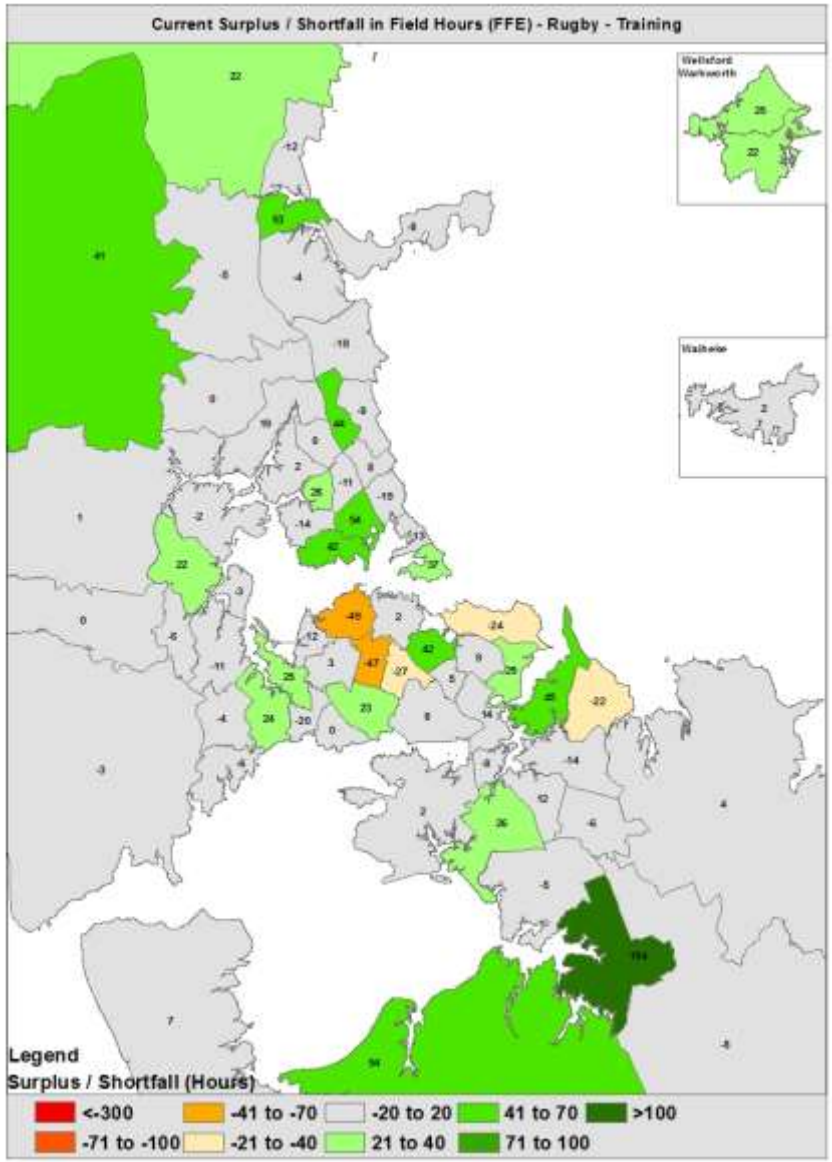
Scenario 2 - Football Competition and Training – current field allocation assuming no weather related field closures



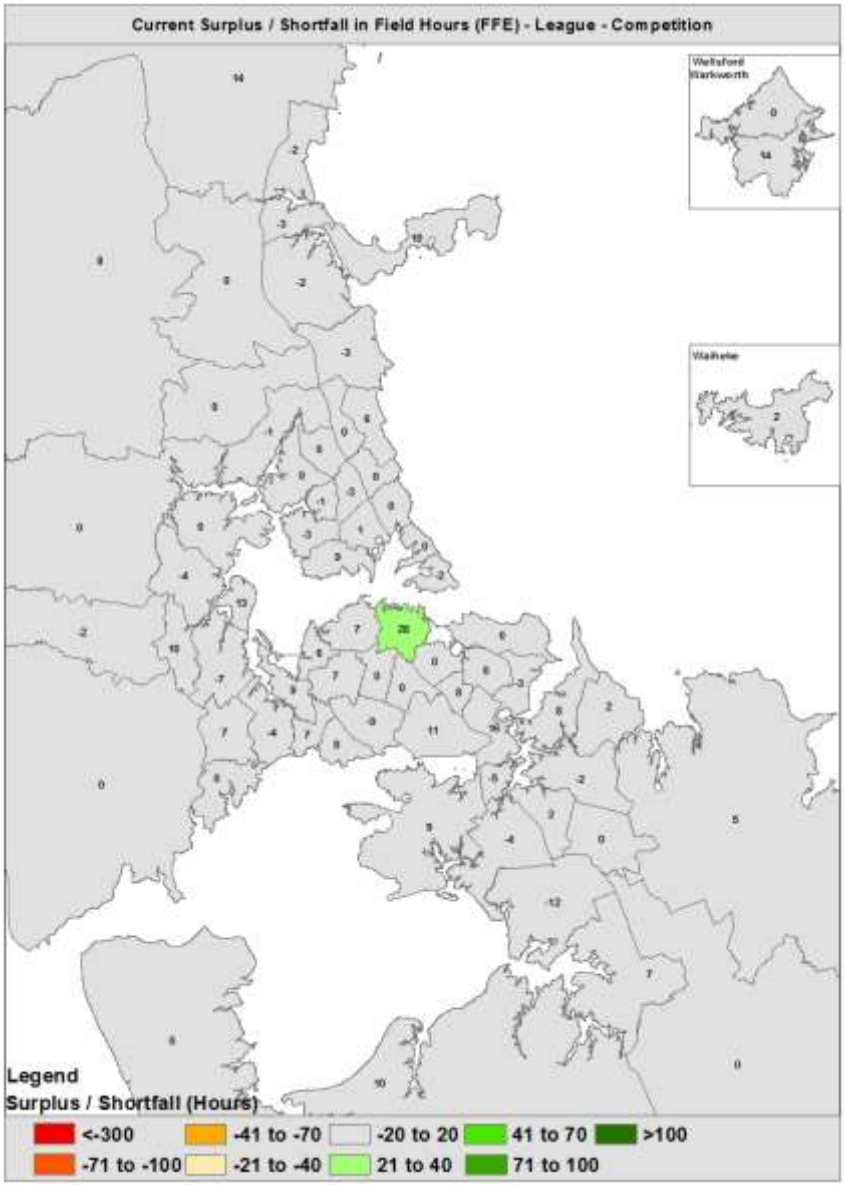


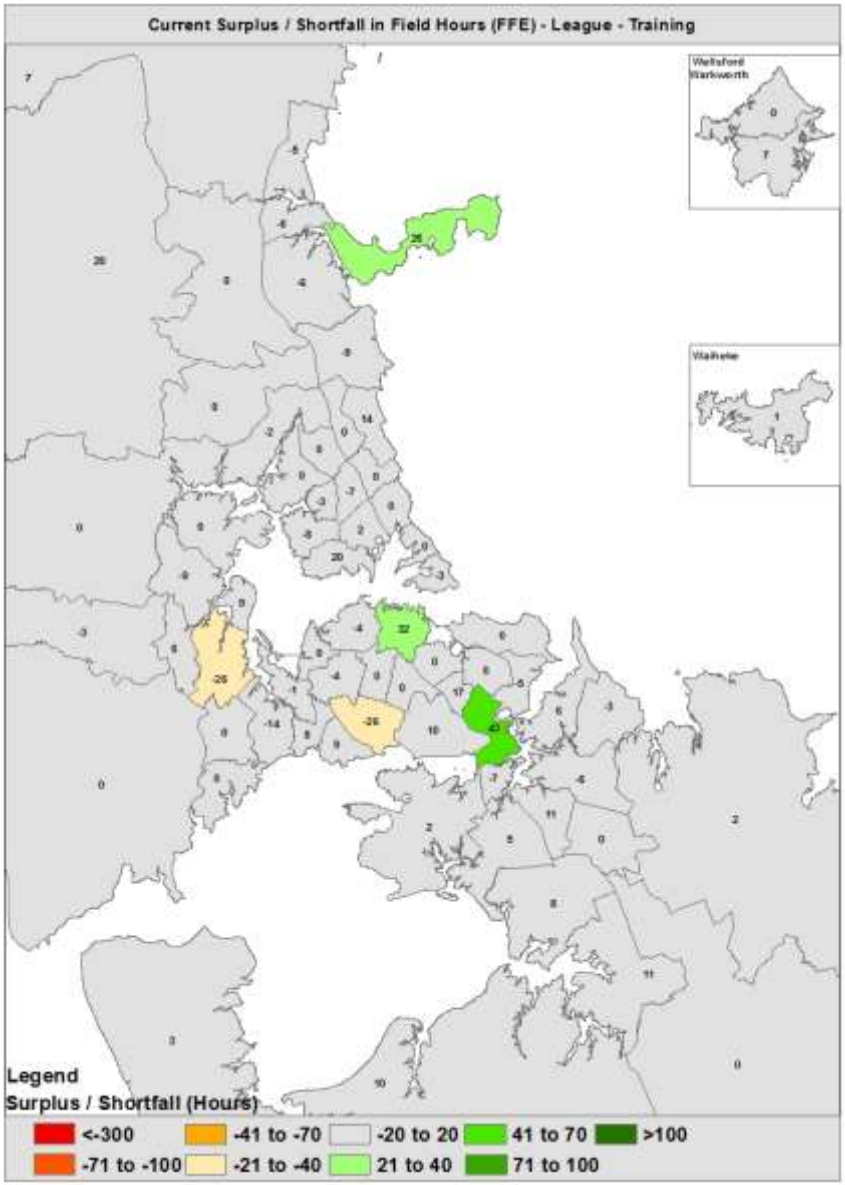
Scenario 2 - Rugby Competition and Training – current field allocation – assuming no weather related field closures





Scenario 2 - League Competition and Training – current field allocation – assuming no weather related field closures





4.3 Scenario 3 – Optimal allocation of fields & no weather related field closures

Under Scenario 3, field allocation is optimised across the three codes, i.e. each code has the same level of field supply relative to demand. This scenario ignores the practical difficulty in utilising capacity for one code by a different code in a different area.

a. Competition

Whilst there are a number of individual areas with a shortfall of competition capacity these can be accommodated in neighbouring areas, although some areas are close to break-even point. Note this assumes optimum allocation across codes and all fields open for play.

b. Training

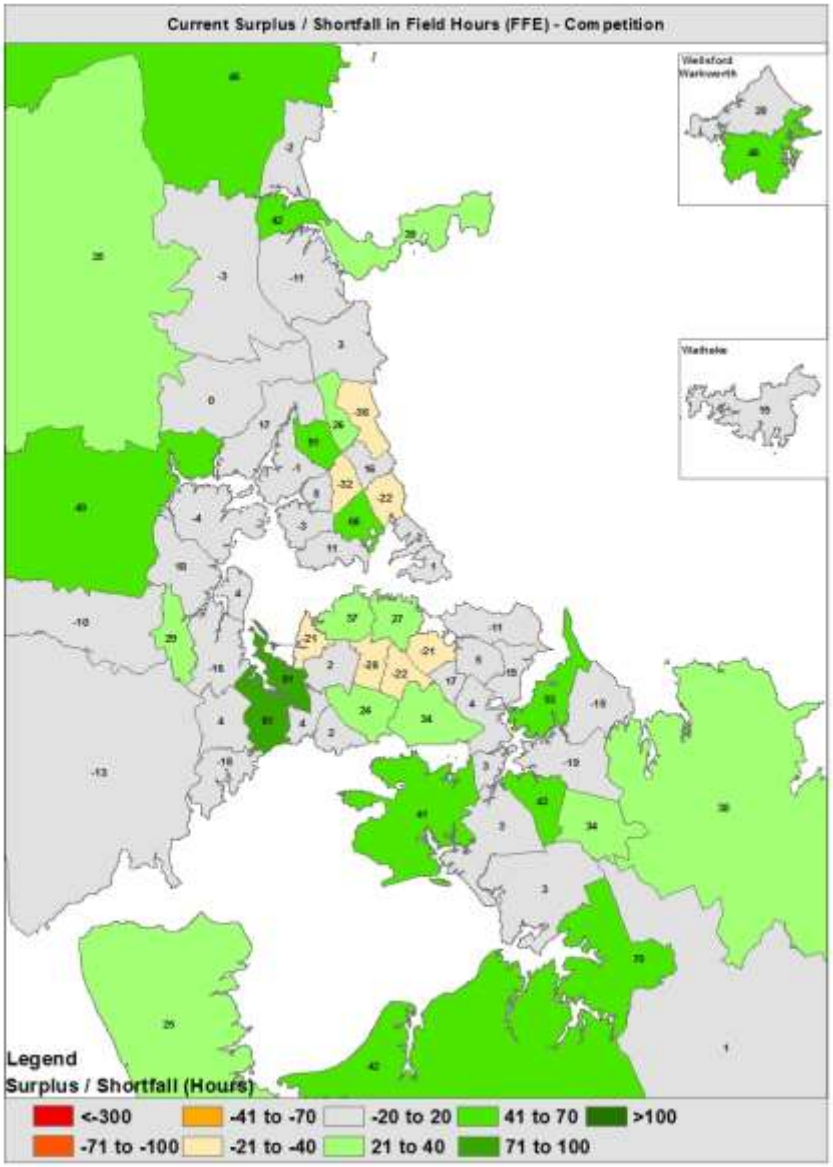
There is a current 63 hour training shortfall across the following areas.
A number of other areas are close to break even.

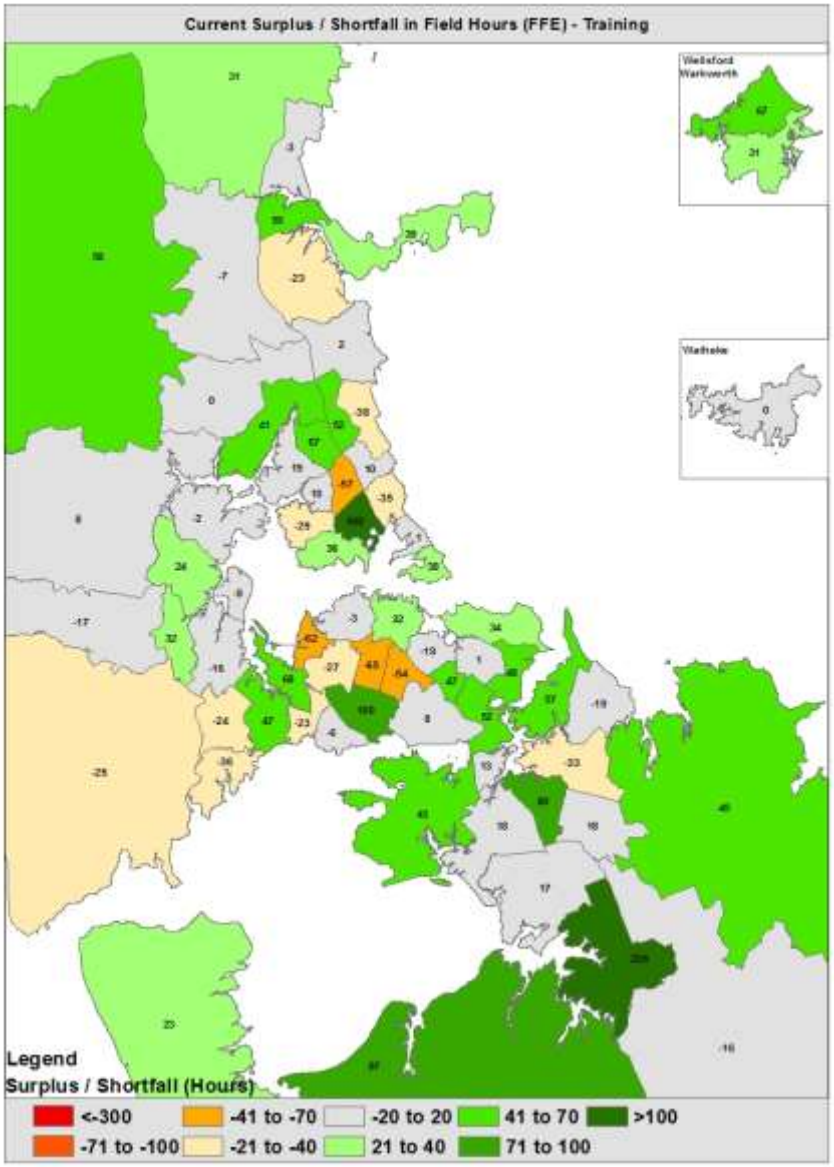
Region wide sum of local shortfalls – optimal field allocation & no weather related field closures

Central Sector	Shortfall Hours	West Sector	Shortfall Hours
Pt Chevalier Waterview	17	Glen Eden Oratia	24
Mt Albert Morningside	15	Henderson Glendene	5
		Te Atatu Peninsula	2

The uneven distribution of surplus and shortfalls in both competition and training capacity is illustrated in the maps on the next page.

Scenario 3 – Surplus / shortfall in FFE hours per week – optimal field allocation – no weather related field closures





4.4 Summary – Current scenarios

The table below summarises the regional sum of local shortfalls under each of the three scenarios once neighbouring area surpluses are considered.

All three scenarios are based on providing local capacity to meet local need (within 15 minute travel time).

Scenario 1 based on current field allocation and applying an average of the last three year's weather related field closures is considered the best indicator of club and RSO 'on the ground' experience.
This scenario shows a:

-772 hour weekly shortfall, comprising

-144 hours for weekend competition

-772 hours for weekday training

Regional sum of local shortfalls - hours (FFE per week)

	Scenario 1 What sports clubs experience day to day Includes full weather related closures	Scenario 2 What sports clubs would experience if there were no weather related field closures	Scenario 3 What sports clubs would experience if field allocation was optimised AND there were no weather related field closures
Competition	144	58	
Training	628	203	63
Full week	**772**	**261**	**63**

5. Future Demand

5.1 Information Used to Project Future Demand

Demand for future years is based on the number of teams produced by the current population factored up by population growth and any sport development growth.

A Team Generation Rate (TGR) is calculated by dividing the total active population in each grade by the current number of teams, i.e., the TGR is the size of the active population at that particular level that is required to produce 1 team.

This Team Generation Rate, together with population projections, is used to project the likely number of teams in the future and hence future demand (assuming game lengths, field sizes and training requirements remain constant) based on projected population growth.

In addition to population growth sport development factors are used (these can be positive or negative) to account for changes in sport popularity, demographics etc. These factors are assessed using information from a range of sources including historic team number trends over and above natural population growth, sport development targets from Regional Sports Organisations, club membership projections and other factors that could affect team numbers such as sport marketing programmes, new formats, local, regional, national and international events, changing sport popularity and changing demographics.

5.2 Population Growth and Trends

The region's active age population is projected[1] to increase by 176,472 by 2025, from 920,093 to 1,096,564, an increase of 18%.

The increased population growth is not evenly distributed across the region with the central sector projected to grow at a much faster rate over the next 11 years than other sectors.

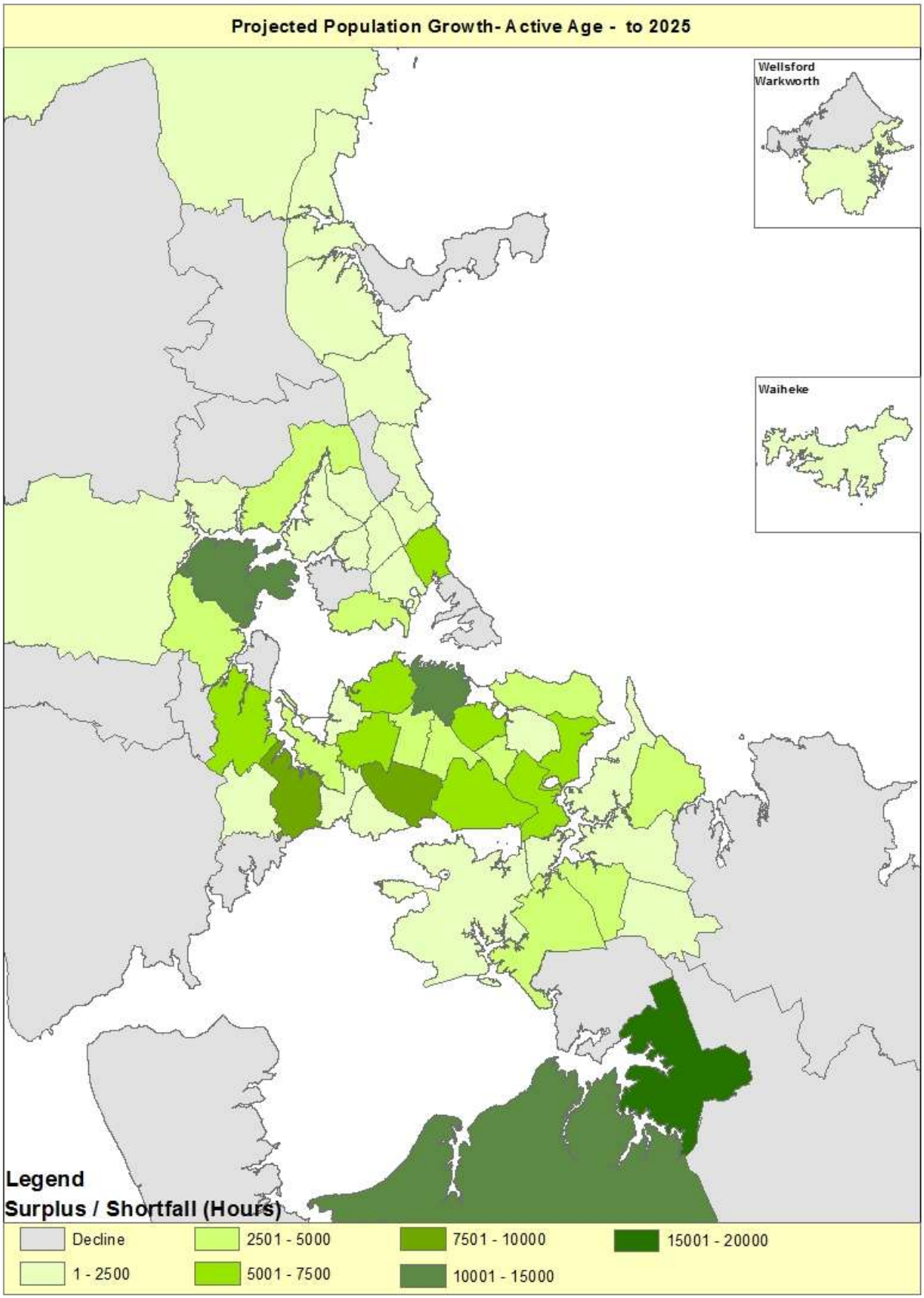
Demand in field hours per week per 1000 active population (2014 estimate age 5 to 49)

	Active age population Current estimate	Active age population 2025 projection	% change
Northern sector	204,744	235,119	15
Western	148,547	169,203	14
Central	262,890	341,626	30
Southern	303,912	350,616	15
Total Region	**920,093**	**1,096,564**	**18**

Projected population growth varies across analysis areas. Negative growth occurs when either the population declines or population ageing counteracts the effect of any growth. They may also be a result of a 'boundary' effect where the Census Area Units do not line exactly with transport zones or between Censuses. Caution is needed when looking at individual analysis areas.
The map on the next page indicates the level of population growth in each analysis area.

See Appendix 3 for population data for each analysis area

[1]Population projections are from the Auckland Regional Transport Model I 8b November 2013. Auckland Council is using this data for key non-financial forecasting information for the 2015-2025 Long Term Plan and Infrastructure Strategy. The model does not reflect political decisions made through the proposed Auckland Unitary Plan. A number of Special Housing Areas (SHAs) are not included.


Projected Population Growth- Active Age - to 2025
Wellsford
Warkworth
Waiheke
Legend
Surplus / Shortfall (Hours)
Decline
1 - 2500
2501 - 5000
5001 - 7500
7501 - 10000
10001 - 15000
15001 - 20000

5.3. Team Generation Rate (TGR)

Overall is takes 179 people aged 5 to 49 to produce 1 winter sports code team. The TGR's vary between codes with:

1 football team for every	277 people aged 5 to 49
1 rugby team for every	744 people
1 league team for every	1,575 people

Note varying team sizes have a significant impact on the TGR figure, e.g., football across the grades generally have fewer players per team than league or rugby.

To allow comparisons between codes, TGRs for all junior and youth grades and the totals for each code have been calculated on the total population in the age group. In reality, youth rugby and league is boys only and whilst there are some girls playing in mini grades, most players in junior grades in both codes are boys.

Team Generation Rates

Code	Grade	Region
Football	Men's	516
	Women's	2,772
	Youth	233
	Junior 9 to 12	87
	Mini 5 to 8	59
	All football	**277**
Rugby	Men's	927
	Presidents	3,339
	Women's	11,231
	Junior 10 to 12	136
	Mini 5 to 9	130
	All rugby	**774**
League	Men's	1327
	Master's	5,982
	Women's	23,616
	Youth	773
	Junior 9 to 10	420
	Mini 5 to 8	363
	All league	**1,575**

Caution is needed when comparing with the TGR from the 2011 study (170 people aged 5 to 49 producing 1 winter sports team).
The 2011 figure understates the TGR. It was based on the best information available at the time, i.e., the 2011 population estimate projected from the 2006 Census.
The 2013 Census found that population growth in the Auckland Region since 2006 was lower than projected and therefore the 2011 population estimate was overstated.

5.4. Sport development factors

Sport development growth is influenced by two key factors – strategic direction and priorities and growth within the code.

5.4.1 Strategic direction

Auckland Council encourages and actively supports participation in sport and recreation through The Auckland Plan. Relevant sections from the Auckland Plan include:

Strategic Direction 5	Promote individual and community wellbeing through participation and excellence in recreation and sport
Targets	Increase the number of school-aged children participating in organised sport and informal activities by 2040
	Increase the number of Aucklanders actively participating in recreation and sport every week from 79% to 90% by 2040
	Increase the number of sports fields that are useable throughout the year from 80% to 90% by 2020

The Sport and Recreation Strategic Action Plan, to be implemented over the next 10 years, has a focus 'to get Aucklanders more active, more often' with participation one of the four priority areas.

Football, rugby and league are key participation sports.

5.4.2 Growth within the code

Historic team number trends, RSO and club growth projections and other external factors such as national and international events that can impact the popularity of a code have been used to calculate a growth or decline factor in the model.

Since the first model was developed in Auckland City in 2008 it has been identified that participation within the three main winter codes has increased at a higher rate than population growth as a result of a combination of these factors. Over the last three to five years especially, all codes have grown well above the level of natural population growth, particularly at junior level. This level of recent growth is not considered sustainable long term.

These factors have been discussed and confirmed with the relevant RSOs.

See Appendix 2 for these input factors

5.5. 2025 Projected demand

Two scenarios have been modelled. Both include some increase in participation rates as organised winter sport will need to play its part if council is to achieve its future participation targets.

Scenario 1 Increase in participation levels at a lower trajectory than has been seen in the recent years (agreed and confirmed by RSOs)

Scenario 2 Increase in participation rates at 50% of the level in scenario 1

Overall there is a difference in demand of 684 FFE hours per week (8%) between the two scenarios.

2025 Projected Demand in field hours per week

	Scenario 1 – Participation increase – lower trajectory than in recent years			Scenario 2 – Participation increase – half the level of scenario 1		
	Competition hours/week	Training hours/week	Full Week hours/week	Competition hours/week	Training hours/week	Full Week hours/week
Northern sector	803	1415	2218	743	1315	2058
Western	446	845	1291	414	787	1201
Central	1092	2000	3092	1010	1857	2867
Southern	1041	1824	2865	961	1696	2657
Total Region	**3383**	**6084**	**9467**	**3128**	**5656**	**8783**

Scenario 1 is considered the most likely future scenario based on historical data and the strategic priorities of the region and individual codes.

6. 2025 Projected Capacity Surplus / Shortfall

All projections are based on current field capacities with allowance for field closures to be no more than the Auckland Plan target of 10%. Note in the Southern Sector where closure targets have been met the field capacities have not been adjusted.

Four scenarios have been modelled. All include a level of code growth to align with Auckland Council's strategic intent to increase participation levels. All scenarios are based on the Auckland Plan target of 90% field availability, i.e. an average closure level of 10% or less.

Scenario	Explanation
1a Some code growth – optimal field allocation	Increase in participation levels at a lower trajectory than recent years – agreed and confirmed by RSOs Weather related field closures no greater than 10% Field code allocation optimised relative to field demand
1b Some code growth – current field allocation	Increase in participation levels at a lower trajectory than recent years – agreed and confirmed by RSOs Weather related field closures no greater than 10% Current field allocation
2a Reduced code growth – optimal allocation	Increase in participation reduced to 50% of the level in Scenario 1 Weather related field closures no greater than 10% Field field allocation optimised relative to field demand
2b Reduced code growth – current field allocation	Increase in participation reduced to 50% of the level in Scenario 1 Weather related field closures no greater than 10% Current field allocation

6.1 Scenario 1a – some code growth (increase in participation rates) – optimal allocation

The table below details the shortfall areas that cannot be accommodated by a surplus in a neighbouring area assuming optimal code allocation.

The region wide sum of shortfalls is:

-1833 hours shortfall per week, comprising

-558 hours for competition at the weekend

-1275 hours for training at the weekend

Projected 2025 shortfalls (FFE hours per week) – some code growth – optimal field allocation

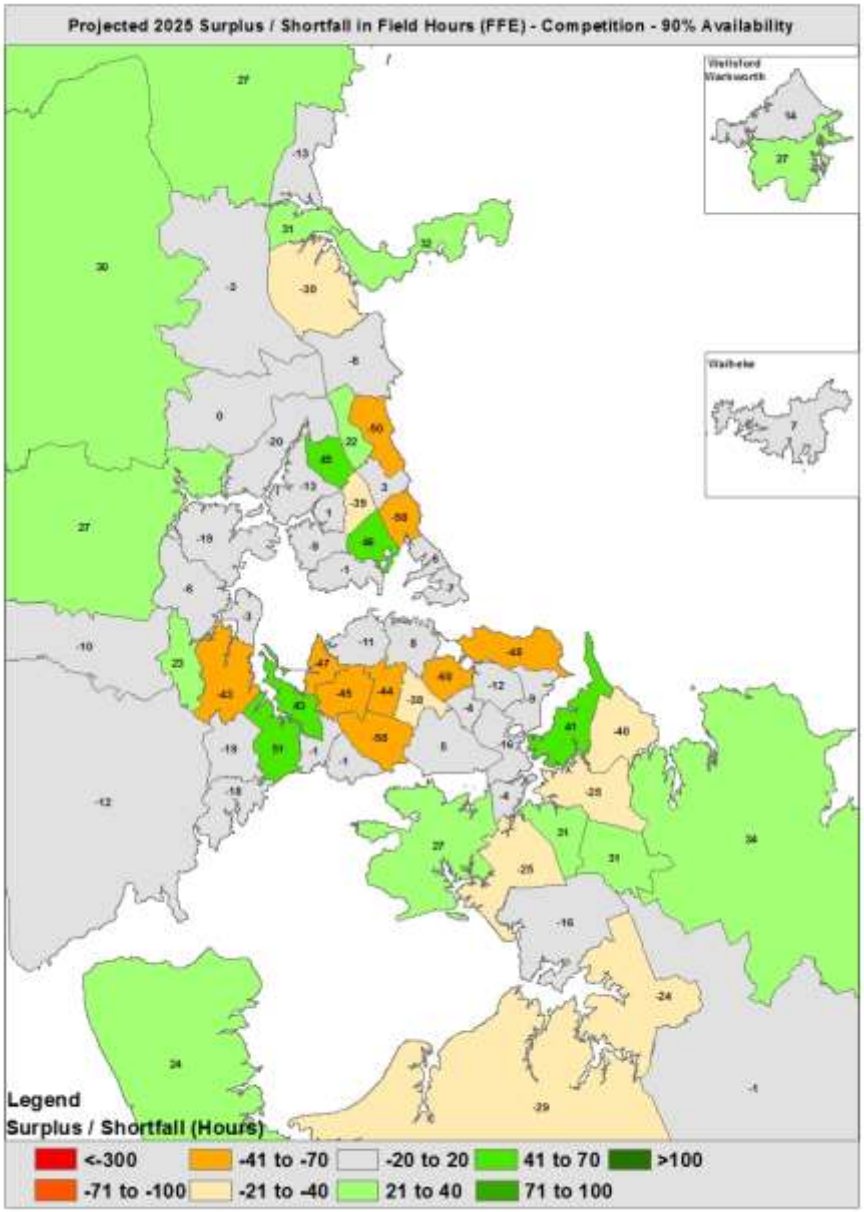
Sector	Analysis Area	Competition	Training	Total
North	Takapuna	48	72	120
	East Coast Bays	25	20	45
	Brighams Creek Hobsonville	19	28	47
	Silverdale		26	26
	Long Bay Torbay	6	16	22
	Kumeu Huapai		19	19
	Castor Bay		10	10
	Hauraki Belmont	6	7	13
	Devonport	7		7
	Warkworth		1	1
	TOTAL NORTH	**111**	**199**	**310**

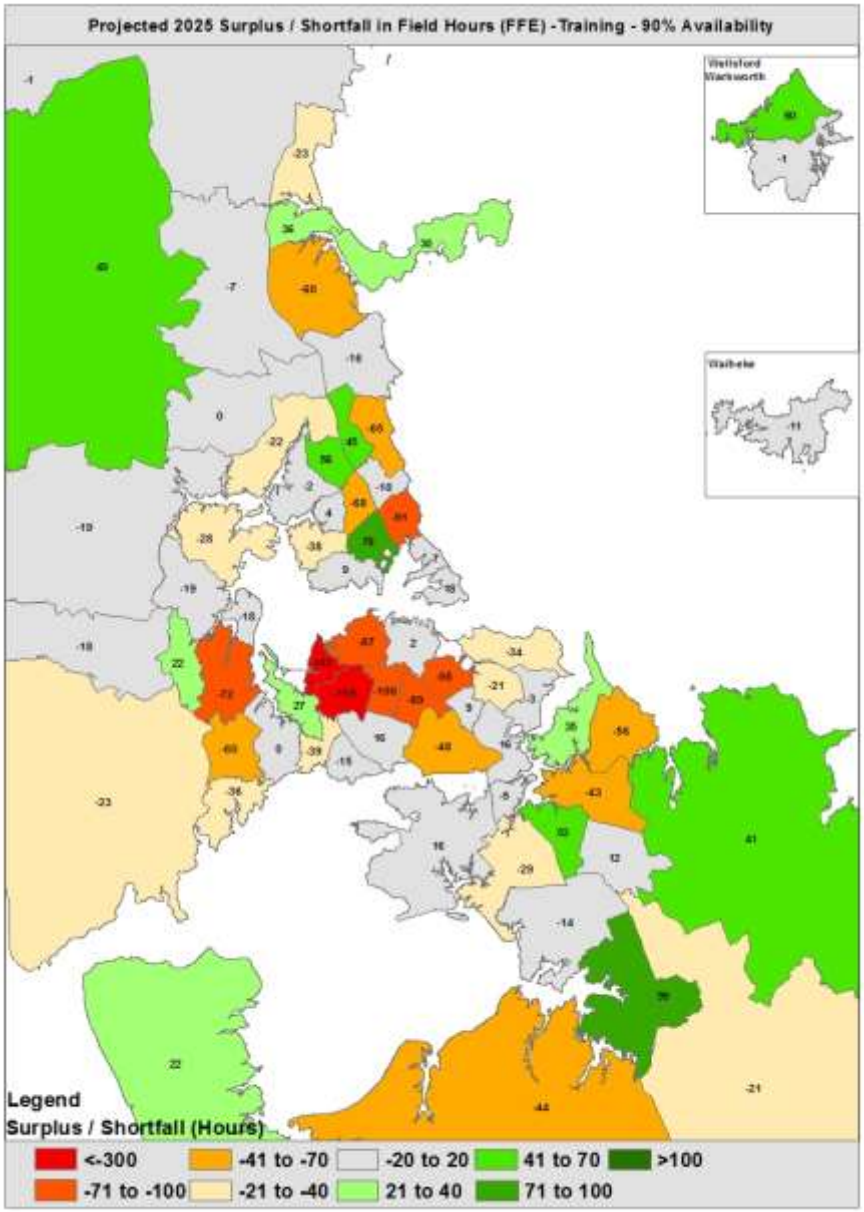
Sector	Analysis Area	Competition	Training	Total
West	Henderson Glendene	29	72	101
	Waiatarua Henderson Valley	5	23	28
	Te Atatu Peninsula	3	18	21
	Glen Eden Oratia		60	60
	Blockhouse Bay		39	39
	Titirangi Laingholm		36	36
	Massey West Harbour		15	15
	TOTAL WEST	**37**	**263**	**300**
Central	Remuera	60	86	146
	Mt Roskill Hillsborough	58		58
	Eastern Bays	48	34	82
	Mt Albert Morningside	45	119	164
	Mt Eden Balmoral	44	84	128
	Epsom	33	89	122
	Mt Wellington Mt Richmond	16		16
	Meadowbank St Johns	12	13	25
	Panmure Glen Innes	9		9
	Pt Chevalier Waterview	7	85	92
	Ellerslie	4		4
	Herne Bay Westmere	3	85	88
	Lynfield Waikowhai	1	15	16
	Onehunga One Tree Hill		48	48
	Waiheke		11	11
	TOTAL CENTRAL	**340**	**669**	**1009**
South	Papakura	24		24
	Manurewa	16	14	30
	Ardmore Hunua Bombay	1	21	22
	Pukekohe	29	44	73
	Dannemora Botany North		31	31
	Howick		21	21
	Papatoetoe		13	13
	TOTAL SOUTH	**70**	**144**	**214**

(See the Technical for detailed analysis)

Maps showing shortfall areas are on the next page

2025 Projected surplus shortfall – competition and training – optimal code allocation – weather related field closures no greater than 10%





6.2 Scenario 1b – some code growth – current field allocation

This scenario is similar to Scenario 1a but is based on current field allocation.

Under this scenario the shortfall seen in Scenario 1a extends by a further 262 hours, from -1833 hours per week to -2095 hours per week. This is due to surplus capacity in one code not being available to offset a shortfall in another code.

The regional sum of local shortfalls is:

-2095 hours shortfall per week, comprising

-690 hours for competition at the weekend

-1405 hours for training at the weekend

The tables below show the region wide and local shortfall by code once neighbouring area surpluses are considered.

All codes have some areas of capacity shortfall that cannot be accommodated by other areas within a reasonable travel distance. Training space is the greater issue for all codes. (refer maps on following pages and the Technical Appendix for detailed analysis)

Regional sum of shortfalls – 2025 Projected shortfall FFE Hours

Code	Competition	Training	Total
Football	430	753	1183
Rugby	217	381	598
League	43	271	314
Total region	**690**	**1405**	**2095**

6.2.1 Football – 2025 Projected shortfall FFE Hours

Sector	Analysis Area	Competition	Training	Total
North	Takapuna	39	55	94
	East Coast Bays	24	39	63
	Brighams Creek Hobsonville	7	20	27
	Silverdale		19	19
	Warkworth		17	17
	Kaipatiki		16	16
	Castor Bay		15	15
	Beach Haven Birkdale		12	12
	Kumeu Huapai		11	11
	Albany - Paremoromoro	19	3	22
	Helensville	2	3	5
	Devonport	8		8
	Total North	**99**	**210**	**309**
West	Glen Eden Oratia		51	51
	Waiatarua Henderson Valley Huia		20	20
	Te Atatu Peninsula		19	19
	Titirangi Laingholm		10	10
	Henderson Glendene		5	5
	Massey West Harbour		2	2
	Total West		**107**	**107**

Sector	Analysis Area	Competition	Training	Total
Central	Remuera	53	107	160
	Mt Albert Morningside	36	67	103
	Pt Chevalier Waterview	5	55	60
	Epsom	6	49	55
	Mt Roskill Hillsborough	54		54
	Onehunga One Tree Hill		36	36
	Lynfield Waikowhai	8	19	27
	Ellerslie	18	9	27
	Mt Eden Balmoral	27		27
	CBD Grafton	6	19	25
	Meadowbank St Johns	4	19	23
	Eastern Bays	15		15
	Waiheke		9	9
	Mt Wellington Mt Richmond	9		9
	Total Central	**241**	**389**	**630**
South	Pukekohe	21	22	43
	Howick	13	17	30
	Papakura	26		26
	Papatoetoe	22		22
	Pakuranga		8	8
	Ardmore, Hunua, Bombay	8		8
	Total South	**90**	**47**	**137**

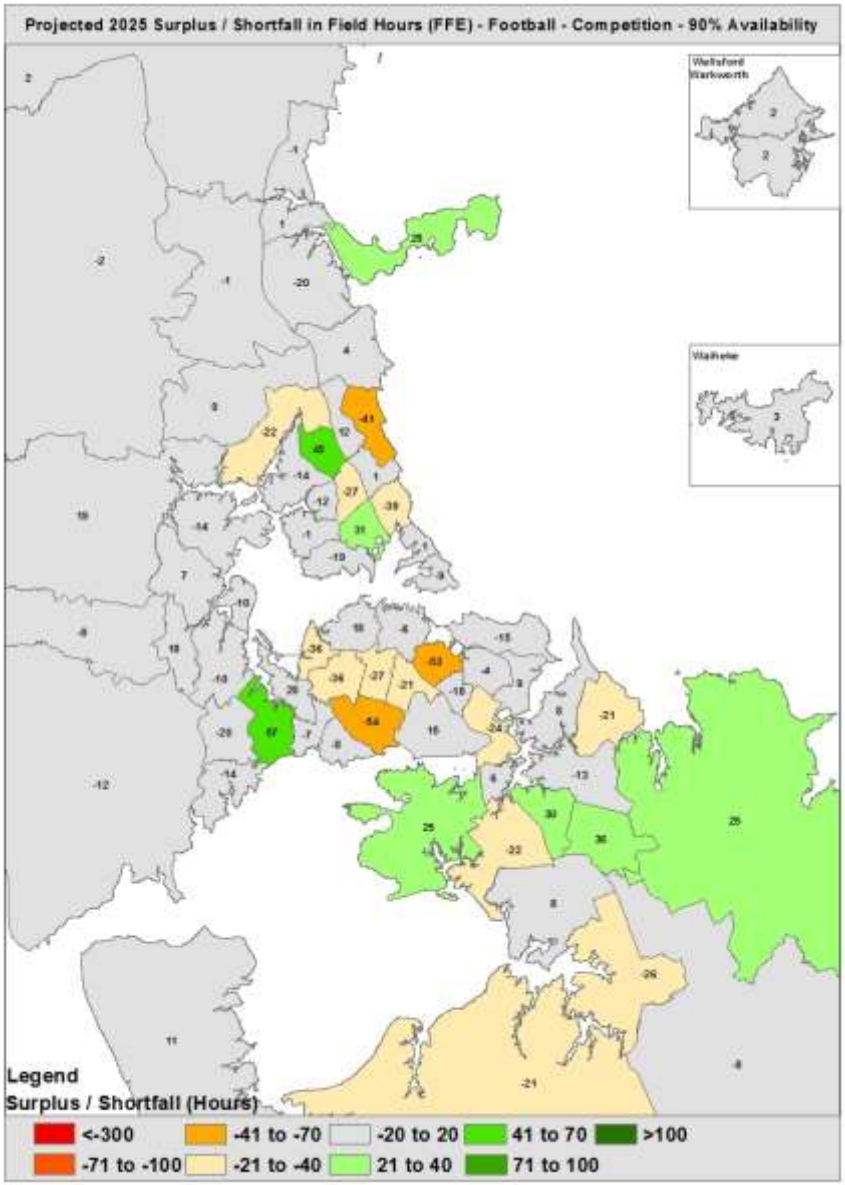
6.2.2. Rugby - Projected shortfall FFE Hours

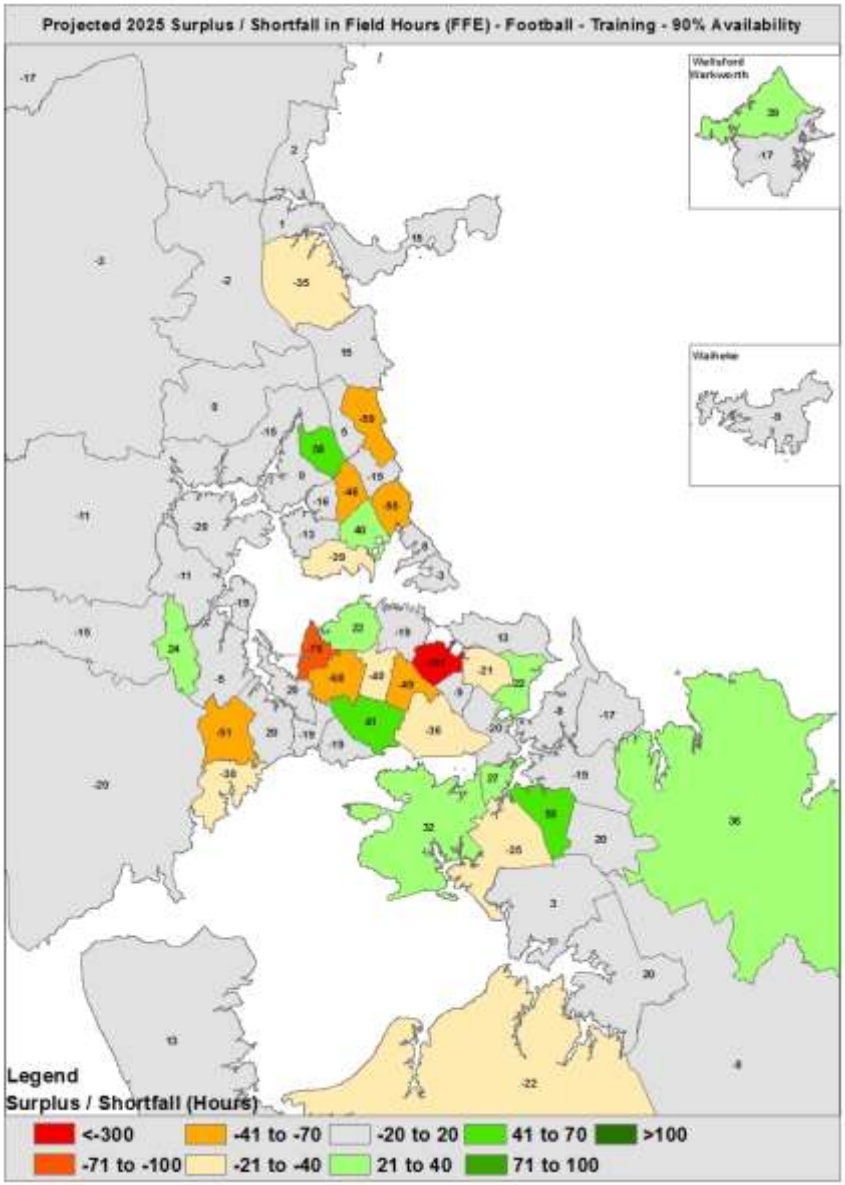
Sector	Analysis Area	Competition	Training	Total
North	East Coast Bays	10		10
	Kumeu Huapai		8	8
	Silverdale		8	8
	Brighams Creek Hobsonville	4	3	7
	Hauraki Belmont	3		3
	Albany Paremoremo	0	3	3
	Takapuna	1		1
	Total North	18	22	40
West	Henderson Glendene	21	28	49
	Ranui	3	6	9
	Massey West Harbour	7		7
	Te Atatu Peninsula	3	4	7
	Glen Eden Oratia	3	3	6
	Blockhouse Bay		6	6
	Total West	37	47	84
Central	Herne Bay Westmere	29	86	115
	Eastern Bays	33	35	68
	Mt Eden Balmoral	17	48	65
	Epsom	17	40	57
	Onehunga One Tree Hill	17	17	34
	CBD Grafton	11	8	19
	Pt Chevalier Waterview		18	18
	Mt Albert Morningside		14	14
	Panmure Glen Innes	10	1	11
	Meadowbank St Johns	8		8
	Mt Wellington Mt Richmond	3		3
	Waiheke		1	1
	Total Central	145	268	413
South	Pukekohe	15	26	41
	Otahuhu		12	12
	Dannemora Botany North		6	6
	Manurewa	2		2
	Total South	10		10

6.2.3 League – Projected 2025 shortfall FFE Hours

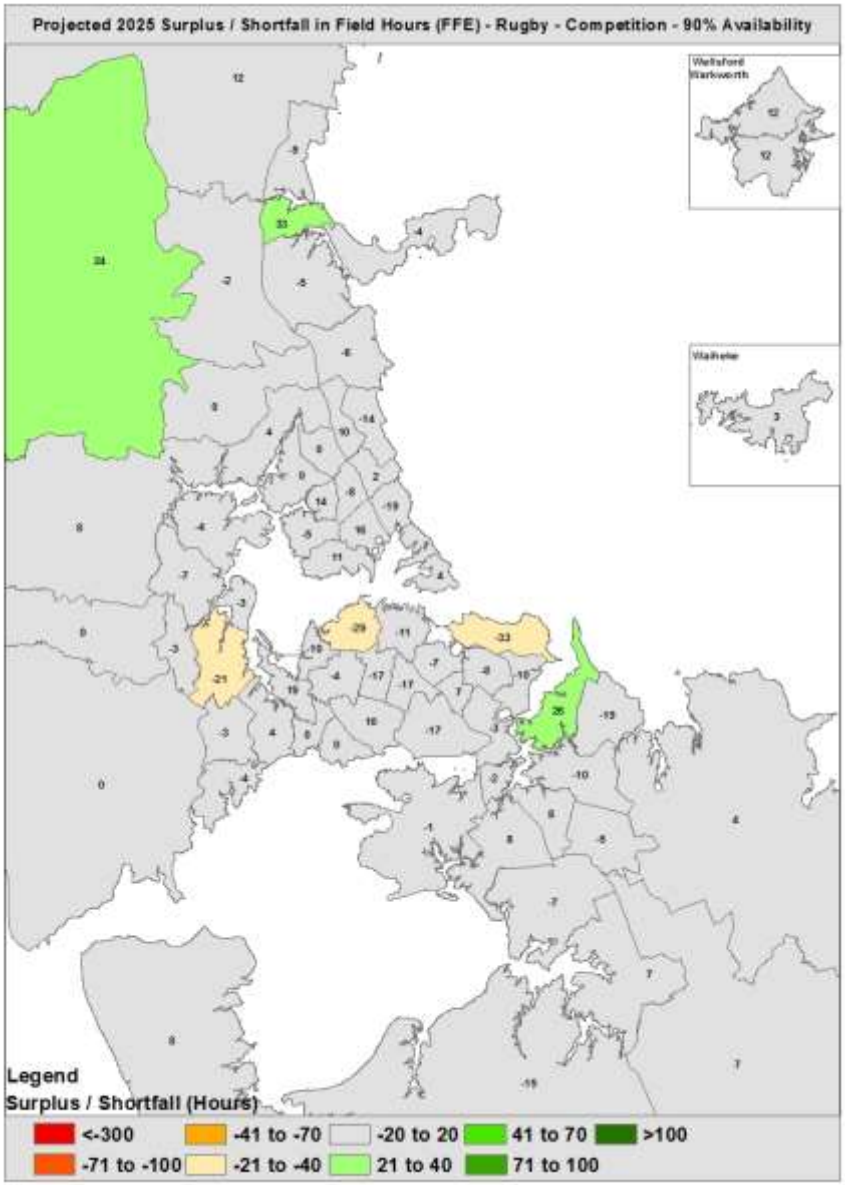
Sector	Analysis Area	Competition	Training	Total
North	Silverdale	1	8	9
	Red Beach		8	8
	Albany Paremoremo	2	4	6
	Devonport	2	3	5
	Glenfield Marlborough	2	2	4
	Total North	**7**	**25**	**32**
West	Henderson Glendene		34	34
	Kelston New Lynn		32	32
	Massey West Harbour		12	12
	Glen Eden Oratia	4	5	9
	Avondale		7	7
	Total West	**4**	**90**	**94**
Central	Mt Albert Morningside		37	37
	Mt Roskill Hillsborough		35	35
	Pt Chevalier Waterview	1	15	16
	Waiheke		1	1
	Total Central	**1**	**88**	**89**
South	Papakura	4	19	23
	Manurewa	17	1	18
	Mangere		14	14
	Papatoetoe	4	11	15
	Otara	6	9	15
	Howick	0	7	7
	Dannemora Botany North	0	7	7
	Total South	**31**	**68**	**99**

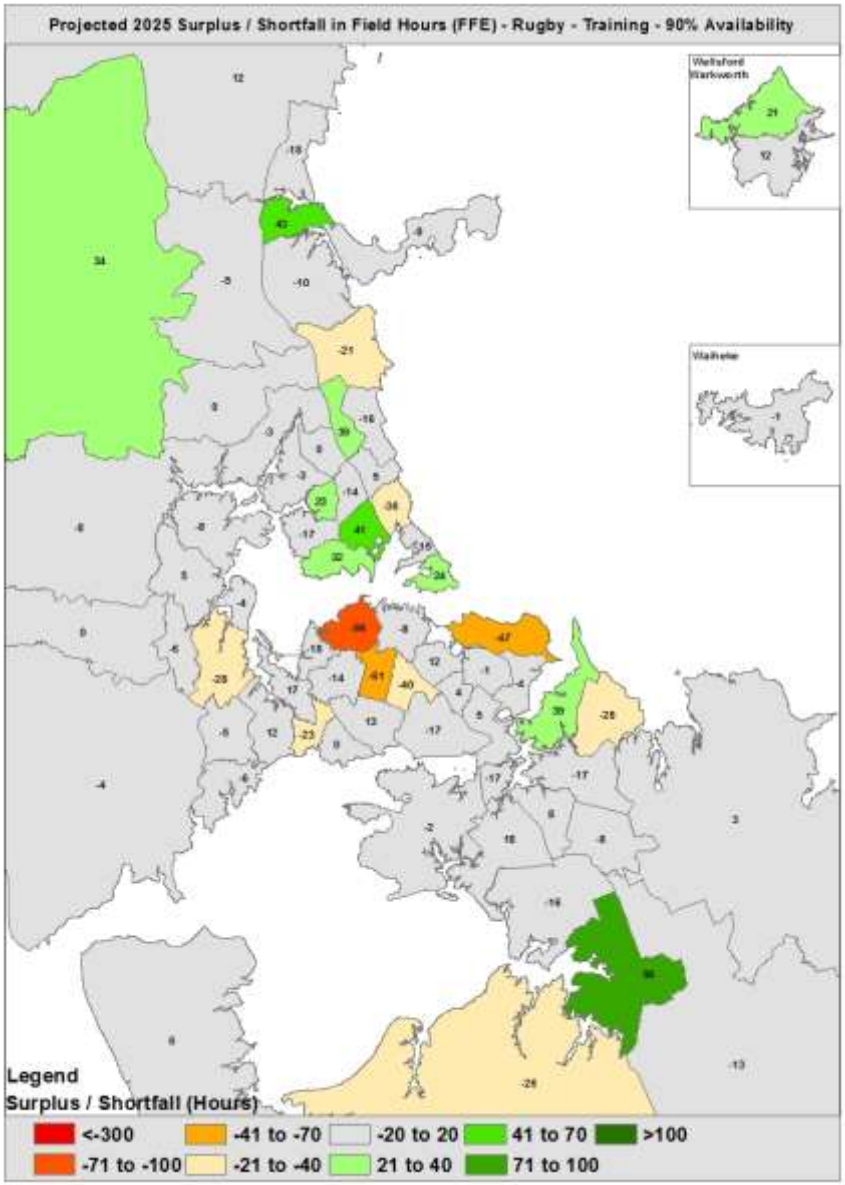
2025 Projections – Scenario 1b - Football Competition and Training



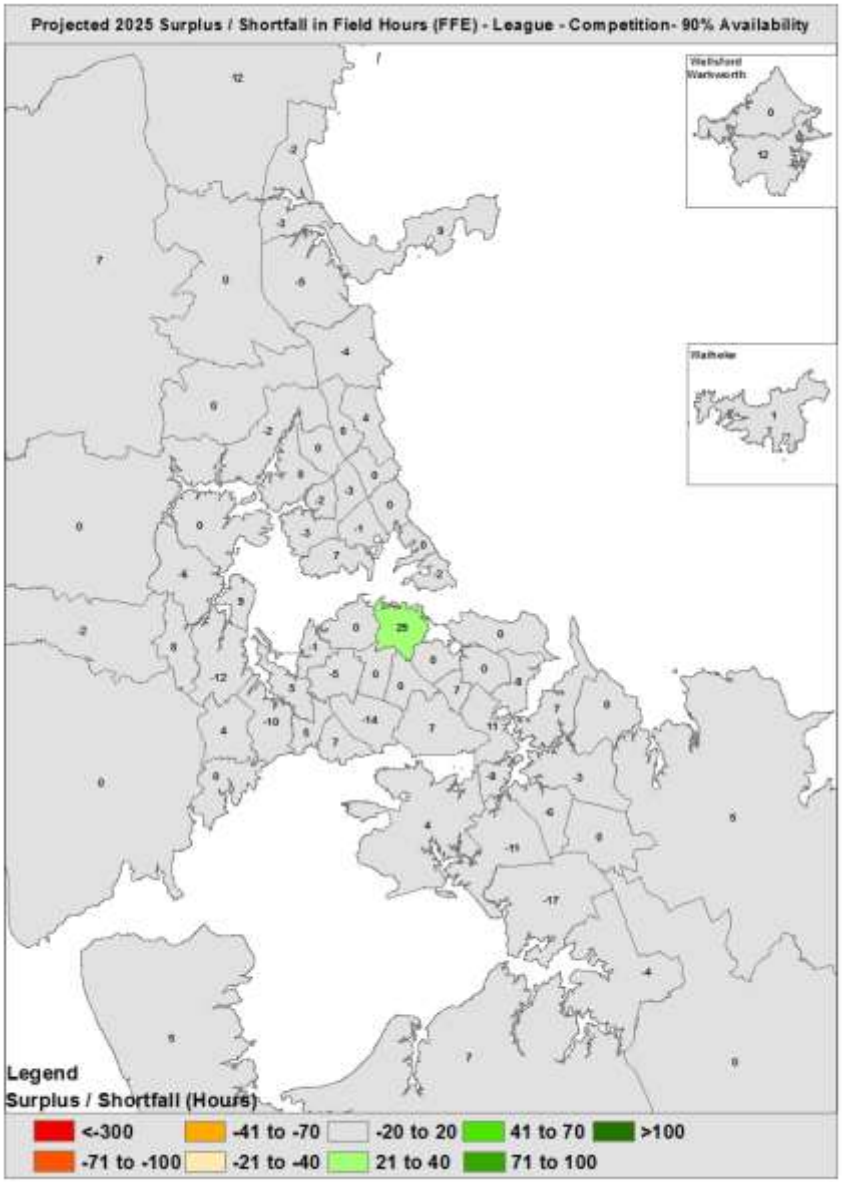


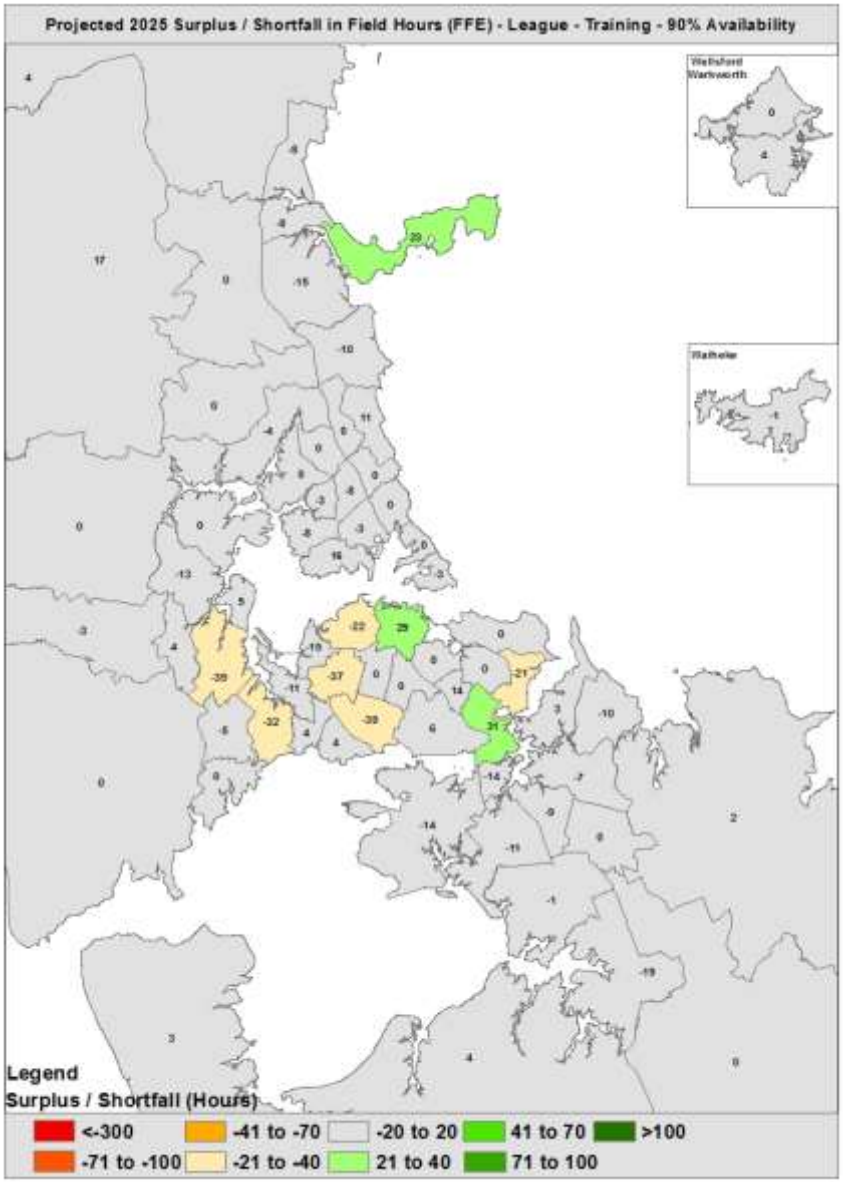
2025 Projections – Scenario 1b - Rugby Competition and Training





2025 Projections – Scenario 1b - League Competition and Training





6.3 Scenario 2a – reduced code growth – optimal field allocation

This scenario is similar to Scenario 1a but is based on a lower level of code growth.

The table below details the shortfall areas that cannot be accommodated by a surplus in a neighbouring area.

Under this Scenario 2a the regional sum of local shortfalls is:

-1246 hours per week, comprising

-358 hours for competition at the weekend

-888 hours for training at the weekend

Projected 2025 surplus / shortfall (FFE hours per week)

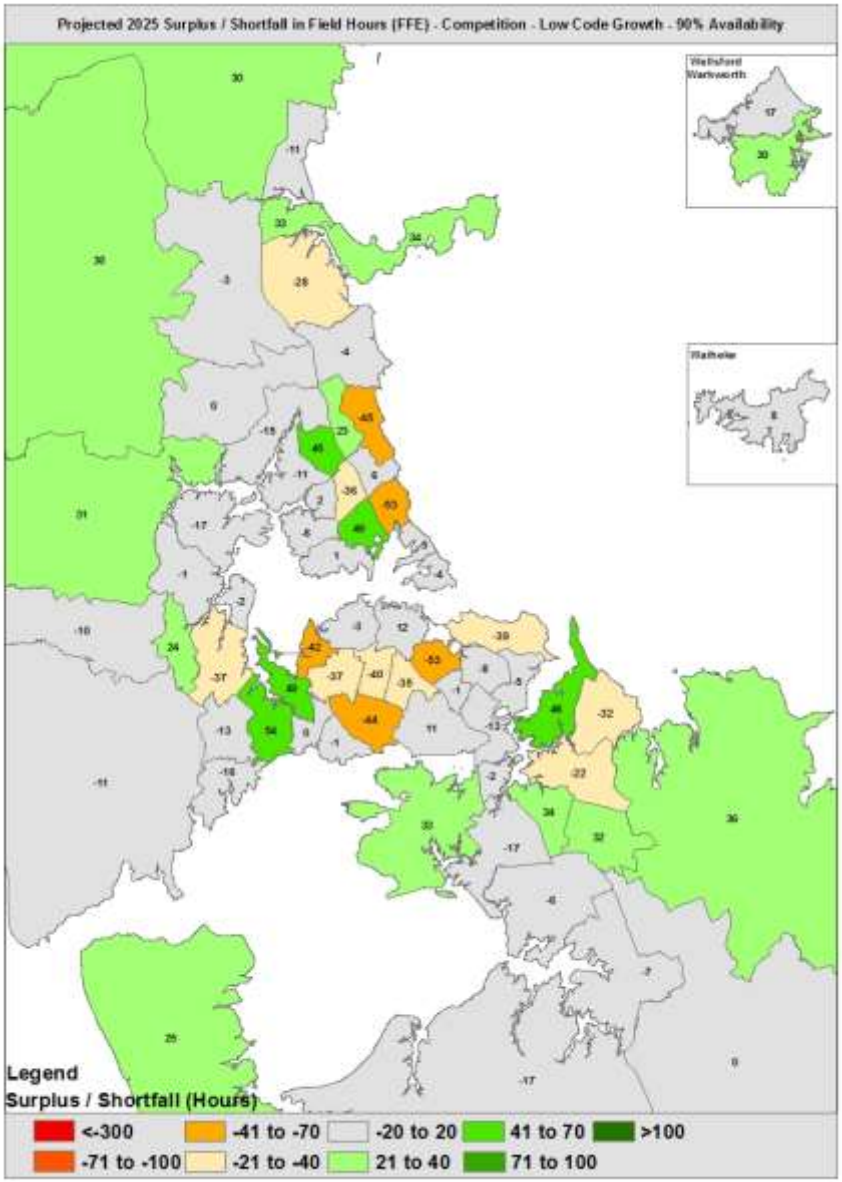
Sector	Analysis Area	Competition	Training	Total
North	Takapuna	24	35	59
	Brighams Creek Hobsonville	17	25	42
	East Coast Bays	16	10	26
	Long Bay Torbay	4	11	15
	Kumeu Huapai		13	13
	Silverdale		8	8
	Castor Bay		6	6
	Hauraki Belmont	5		5
	Devonport	4	0	4
	TOTAL NORTH	70	108	178
West	Henderson Glendene	10	60	70
	Glen Eden Oratia		50	50
	Blockhouse Bay		34	34
	Titirangi Laingholm		26	26
	Waiatarua Henderson Valley		22	22
	Te Atatu Peninsula	2	14	16
	Massey West Harbour	0	5	5
	TOTAL WEST	**12**	**211**	**223**
Central	Mt Albert Morningside	28	103	131
	Remuera	53	68	121
	Epsom	24	81	105
	Mt Eden Balmoral	40	62	102
	Pt Chevalier Waterview		69	69
	Herne Bay Westmere		63	63
	Eastern Bays	30	15	45
	Mt Roskill Hillsborough	44		44
	Onehunga One Tree Hill		36	36
	Mt Wellington Mt Richmond	13		13
	Lynfield Waikowhai		13	13
	Waiheke		9	9
	Meadowbank St Johns	8		8
	Panmure Glen Innes	5	0	5
	Ellerslie	1	0	1
	TOTAL CENTRAL	**246**	**519**	**765**

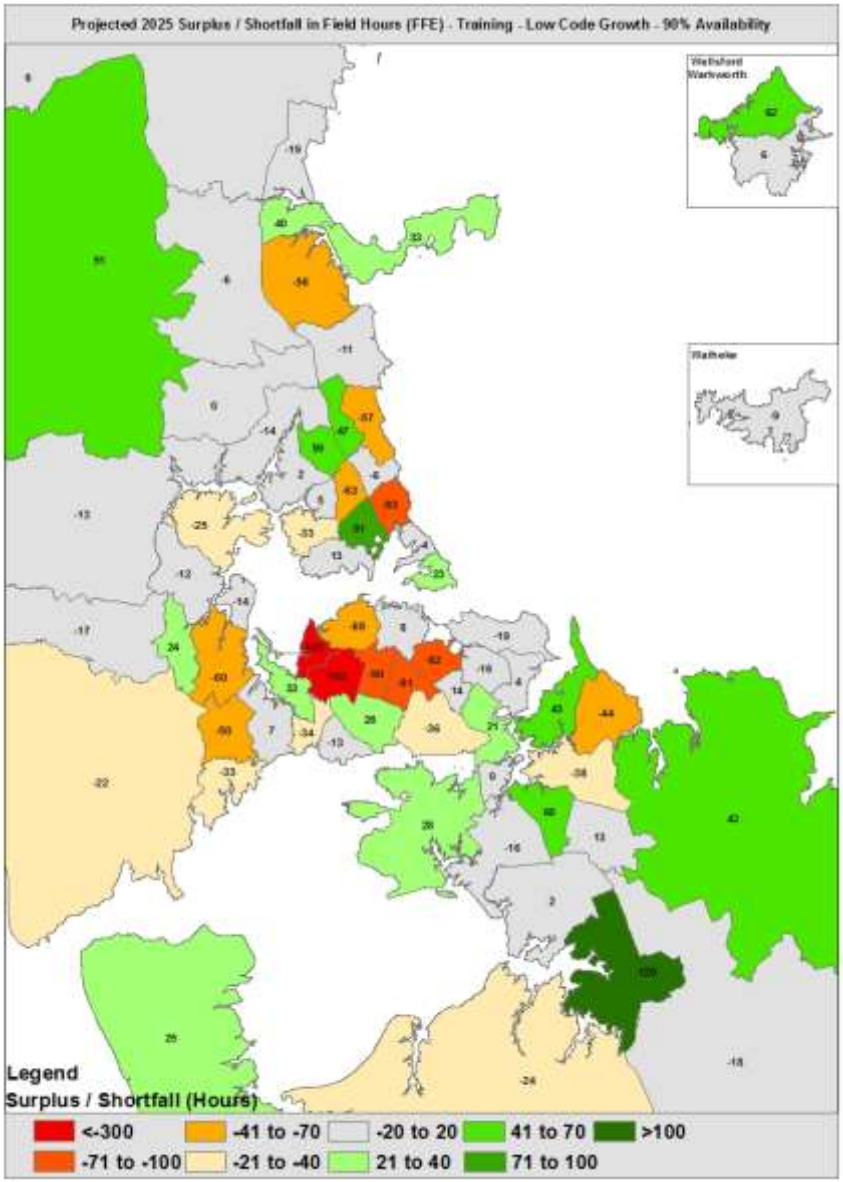
Sector	Analysis Area	Competition	Training	Total
South	Pukekohe	17	24	41
	Dannemora Botany North		25	25
	Papakura	7		7
	Manurewa	6		6
	Howick	0	1	1
	TOTAL SOUTH	**30**	**50**	**80**

See Technical Appendix for detailed analysis

Refer maps showing surplus and shortfall areas on the next page

2025 Projected surplus shortfall – Scenario 2a – reduced code growth - competition and training – optimal code allocation





6.4 Scenario 2b – reduced code growth – current field allocation

This scenario is similar to Scenario 2a but assumes the current field allocations apply.

Overall the regional sum of shortfalls seen in Scenario 2a extends to:

-1545 hours per week, comprising:

-489 hours for weekend play (competition)

-1056 hours for mid-week play (training)

All codes have some areas of capacity shortfall that cannot be accommodated by other areas within a reasonable travel distance. Training space is the greater issue for all codes.

Regional sum – current shortfall FFE Hours

Code	Competition	Training	Total
Football	300	555	855
Rugby	158	284	442
League	31	217	248
Total region	**489**	**1056**	**1545**

6.4.1 Football - current shortfall FFE Hours

Sector	Analysis Area	Competition	Training	Total
North	Takapuna	36	50	86
	East Coast Bays	16	29	45
	Brighams Creek Hobsonville	4	18	22
	Warkworth		13	13
	Castor Bay		11	11
	Silverdale		10	10
	Kumeu Huapai		7	7
	Albany Paremoremo	7		7
	Devonport	6	0	6
	Kaipatiki		5	5
	Beach Haven Birkdale		4	4
	Helensville	2	2	4
	Total North	**71**	**149**	**220**
West	Glen Eden Oratia		42	42
	Waiatarua Henderson Valley Huia		13	13
	Te Atatu Peninsula		17	17
	Titirangi Laingholm		7	7
	Total West		**79**	**79**

Sector	Analysis Area	Competition	Training	Total
Central	Remuera	49	99	148
	Mt Albert Morningside	19	45	64
	Pt Chevalier Waterview		40	40
	Epsom	2	45	47
	Mt Roskill Hillsborough	42		42
	Onehunga One Tree Hill		30	30
	Lynfield Waikowhai	7	17	24
	Ellerslie	15		15
	Mt Eden Balmoral	24		24
	CBD Grafton	5	17	22
	Meadowbank St Johns	2		2
	Eastern Bays	10		10
	Waiheke		7	7
	Mt Wellington Mt Richmond	7		7
	Total Central	**182**	**300**	**482**
South	Pukekohe	17	15	32
	Papakura	18		18
	Howick	5	10	15
	Ardmore, Hunua, Bombay	7		7
	Pakuranga		2	2
	Total South	**47**	**27**	**74**

6.4.2 Rugby - Projected shortfall FFE Hours

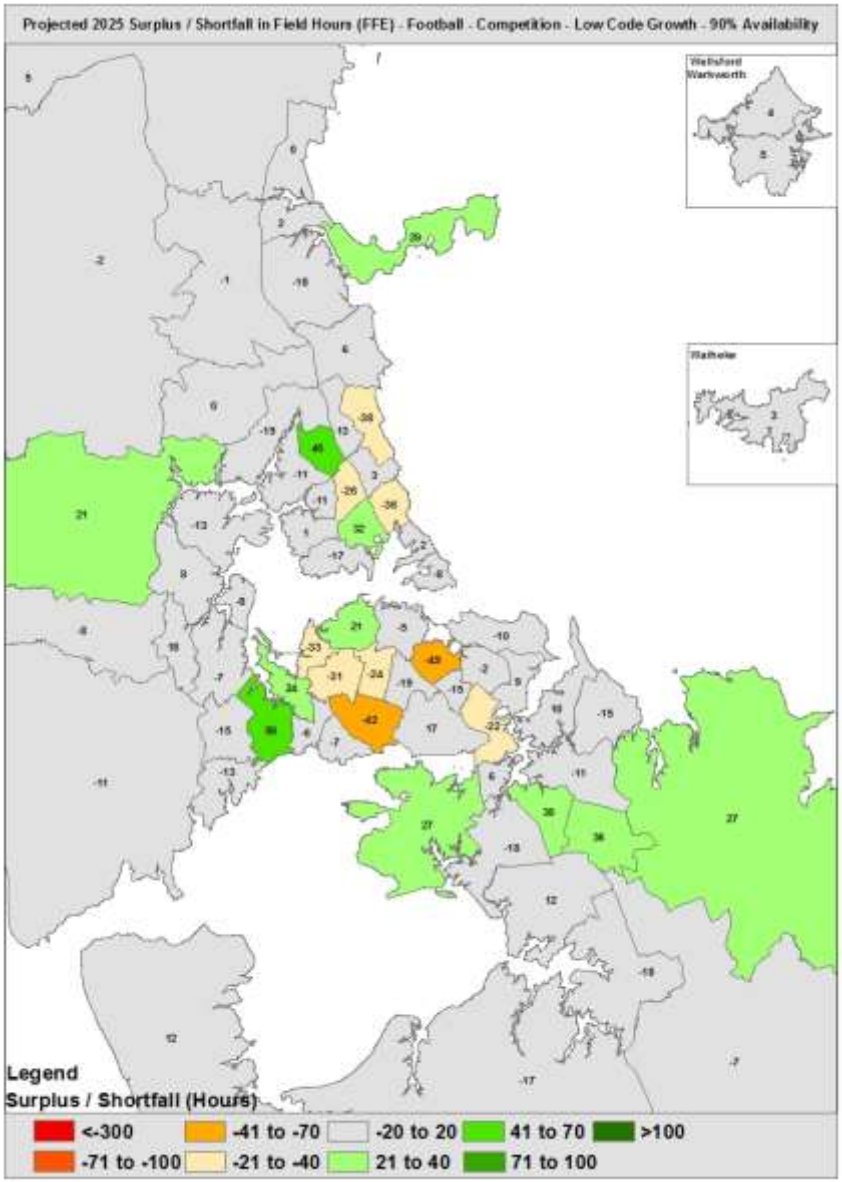
Sector	Analysis Area	Competition	Training	Total
North	Kumeu Huapai		6	6
	East Coast Bays	5		5
	Brighams Creek Hobsonville	4		4
	Hauraki Belmont	2		2
	Total North	**11**	**6**	**17**
West	Henderson Glendene	18	23	41
	Ranui	3	6	9
	Te Atatu Peninsula	3	3	6
	Massey West Harbour	5		5
	Blockhouse Bay	0	3	3
	Total West	**29**	**35**	**64**
Central	Herne Bay Westmere	25	76	101
	Eastern Bays	30	23	53
	Epsom	16	37	53
	Mt Eden Balmoral	5	40	45
	Onehunga One Tree Hill	14	12	26
	CBD Grafton	9	6	15
	Pt Chevalier Waterview		16	16
	Mt Albert Morningside		11	11
	Panmure Glen Innes	7		7
	Meadowbank St Johns	3		3
	Mt Wellington Mt Richmond	2		2
	Waiheke		1	1
	Total Central	**111**	**222**	**333**
South	Pukekohe	7	14	21
	Otahuhu		7	7
	Total South	7	21	28

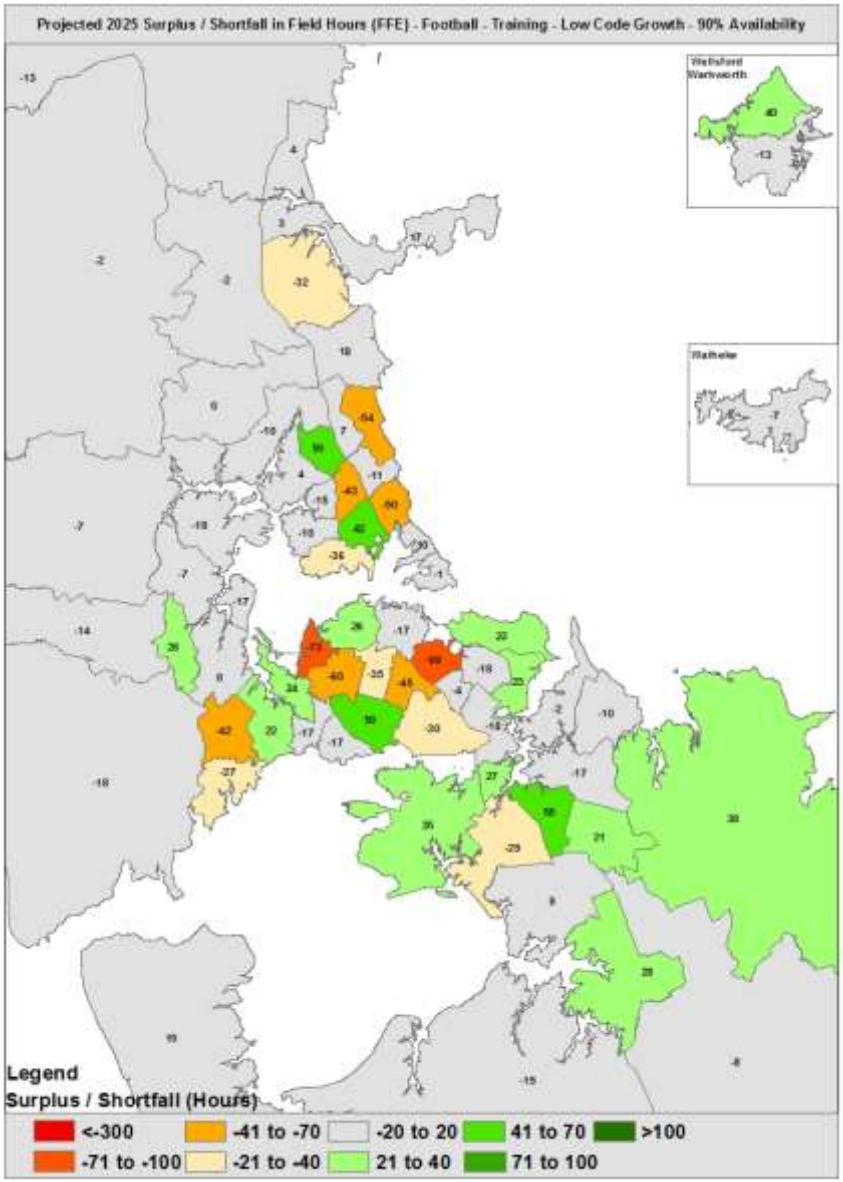
6.4.3 League – Projected 2025 shortfall FFE Hours

Sector	Analysis Area	Competition	Training	Total
North	Glenfield Marlborough	1	5	6
	Silverdale	1	4	5
	Albany Paremoremo	1	4	5
	Devonport	2		2
	Total North	**5**	**13**	**18**
West	Henderson Glendene		30	30
	Kelston New Lynn		29	29
	Massey West Harbour		11	11
	Glen Eden Oratia		5	5
	Avondale		4	4
	Total West		**79**	**79**
Central	Mt Albert Morningside		32	32
	Mt Roskill Hillsborough		33	33
	Pt Chevalier Waterview		13	13
	Waiheke		1	1
	Total Central		**79**	**79**
South	Papakura	3	15	18
	Manurewa	15		15
	Papatoetoe	4	7	11
	Mangere		9	9
	Otara	4	5	9
	Dannemora Botany North		6	6
	Howick		4	4
	Total South	**26**	**46**	**72**

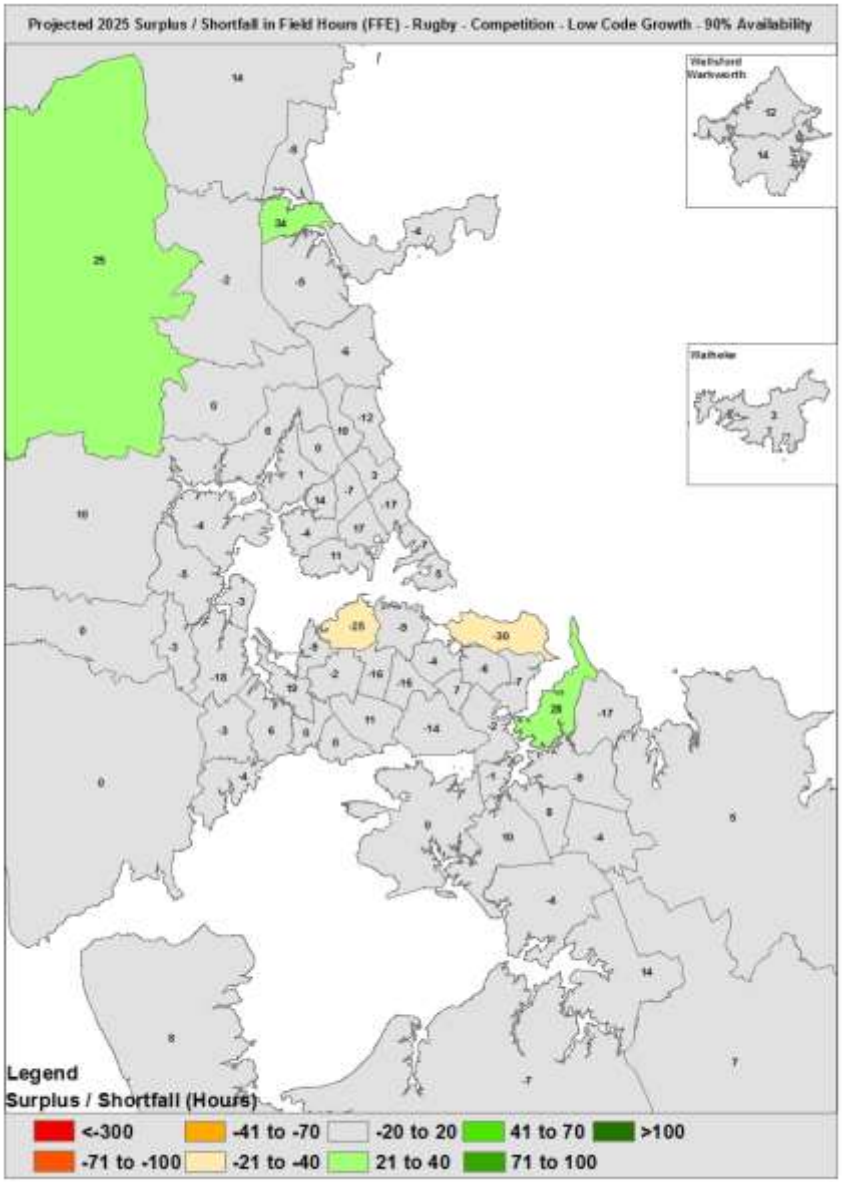
(refer maps on following pages and Technical Appendix for detailed analysis)

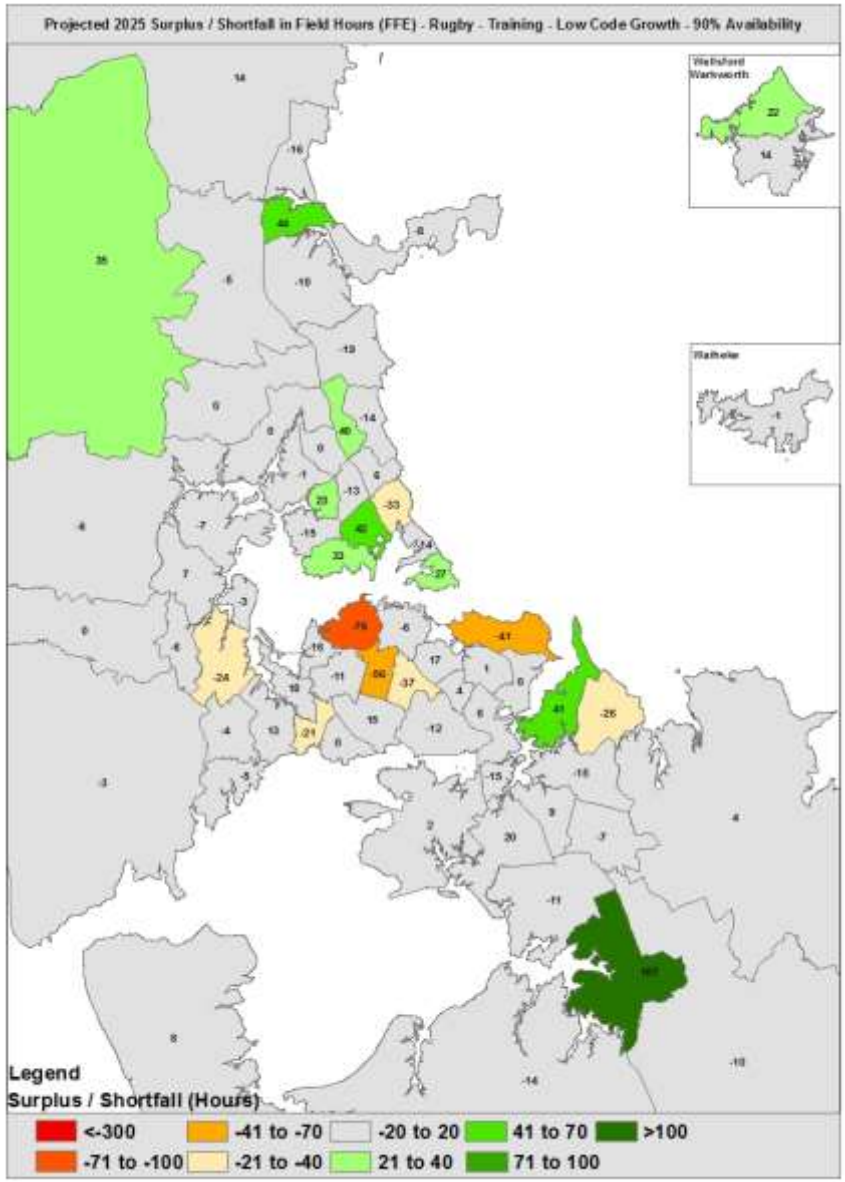
2025 Projections – Scenario 2b Football Competition and Training – reduced code growth – current field allocation



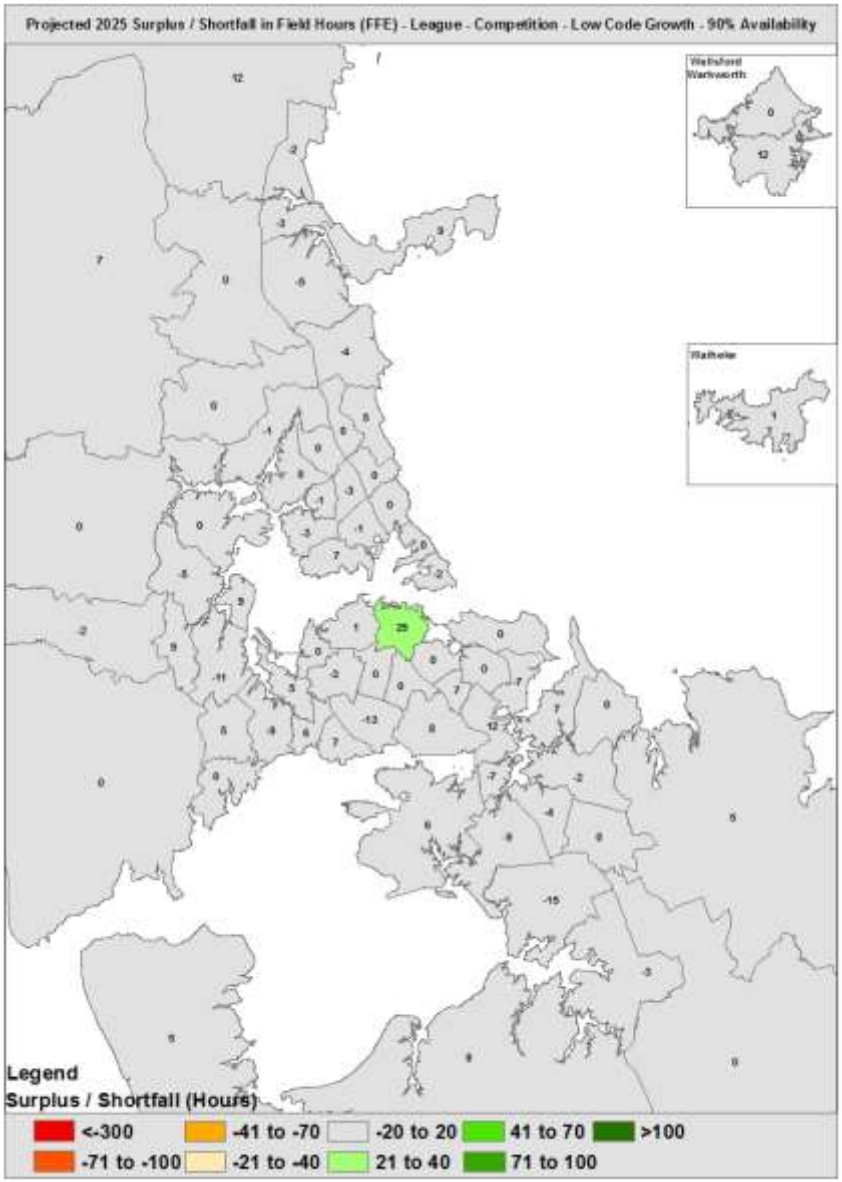


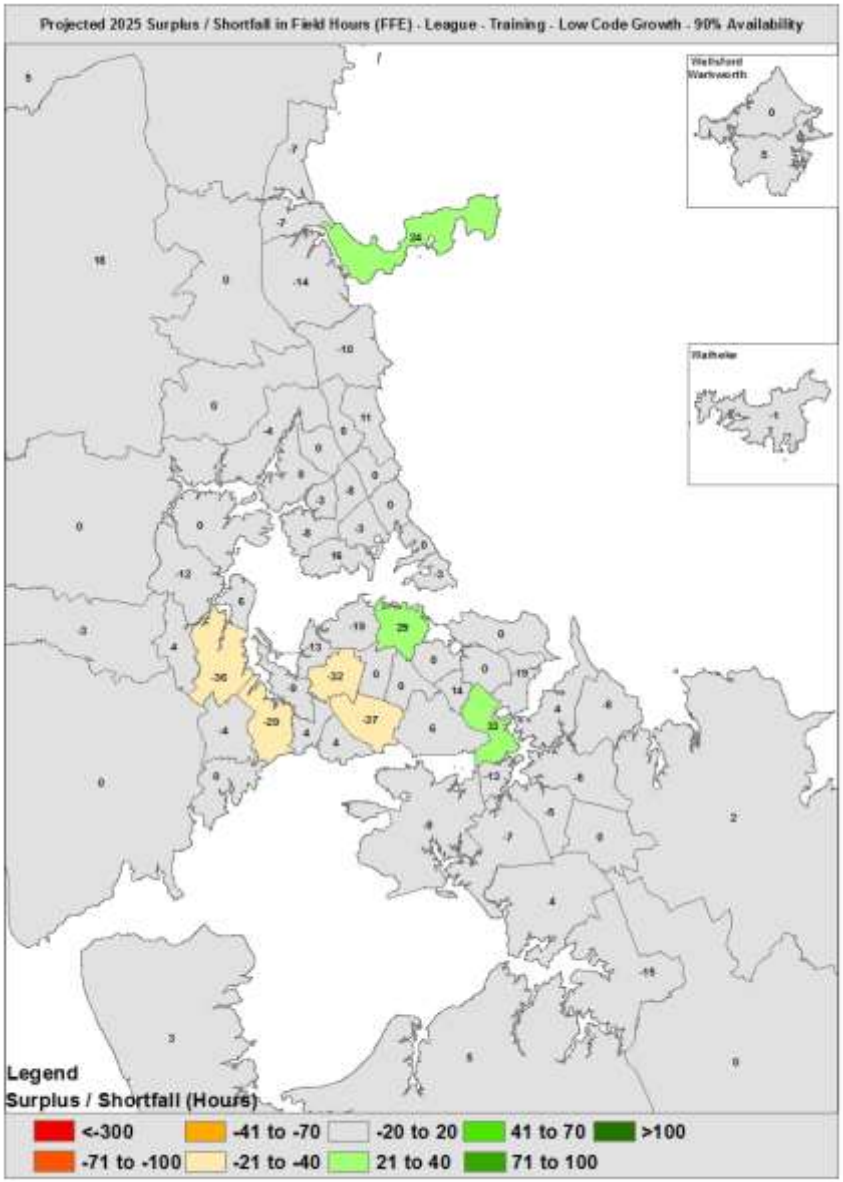
2025 Projections – Scenario 2b Rugby Competition and Training – reduced code growth – current field allocation





2025 Projections – Scenario 2b League Competition and Training – reduced code growth – current field allocation





6.5 Summary – 2025 Projected scenarios

The table below summarises the region-wide shortfalls under each of the four scenarios once neighbouring area surpluses are considered.

It is our view that Scenario 1a – some code growth and optimal field allocation should be used as the basis for future planning based on the following rationale:

- This provides for a level of growth which, whilst reflecting historic trends, is a lower growth trajectory than recent years.
- A growth level which will see winter sport play its part in helping council achieve its annual plan participation targets.
- The 'some code growth' is considered a conservative approach and the 'reduced code growth' level, based on available evidence, is considered to under-estimate future participation.
- This allows for the use of all available fields to be maximised and allocated to codes based on the demand for competition and training.
- That reflects that it is likely that field allocations will change over the next 10 years with a continued move away from traditional / historical field allocations towards more shared fields which will allow field allocations between codes to be more finely tuned based on needs.

Scenario 1a shows a:

-1833 hour weekly shortfall, comprising

-558 hours for weekend competition

-1275 hours for weekday training

Regional sum– 2025 Projected Shortfall hours (FFE per week)

	Scenario 1a Some code growth Optimal field allocation	Scenario 1b Some code growth Current field allocation	Scenario 2a Reduced code growth Optimal field allocation	Scenario 2b Reduced code growth Current field allocation
Competition	558	690	358	489
Training	1275	1405	888	1056
Full week	1833	2095	1246	1545

6.6 Capacity to be added in 2014/15 SFCD programme

All 2013/14 SFCD programme projects were included in the field capacities used in this study, regardless of whether they were completed in time for the 2014 winter season use or not.

The SFCD programme will add a further 210 hours field capacity during 2014/15. The table below shows the analysis areas where this capacity is being added.

SFCD Programme 2014/15 - hours being added to field capacity

Sector	Analysis Area	Competition	Training	Total
North	Castor Bay	10	25	35
	Wellsford		7	7
	Warkworth		16	16
	Kaipatiki		11	11
	Red Beach		5	5
	Albany Paremoremo	3		3
	Helensville		3	3
West	Kelston New Lynn	15	17	32
	Ranui		6	6
	Massey West Harbour	2	6	8
Central	Eastern Bays	9	21	30
	Herne Bay		7	7
	Pt Chevalier Waterview		12	12
South	Otara		5	5
	Mangere		30	30

The 2014/15 has capacity has been deducted from shortfall areas where the travel distance is considered acceptable.

Once this capacity is added the projected shortfall across the region, under Scenario 1a, drops to:

-1682 hours per week

-519 hours for competition

-1163 hours for training

This shortfall is not evenly distributed across the region. The table below shows the projected shortfall area by area once the 2014/25 SFCD programme capacity increase projects are delivered.

Projected 2025 shortfalls (FFE hours per week) – some code growth – optimal field allocation (Scenario 1a)

Sector	Analysis Area	Competition	Training	Total
North	Takapuna	38	57	95
	East Coast Bays	22	20	42
	Brighams Creek Hobsonville	19	28	47
	Silverdale		21	21
	Long Bay Torbay	6	16	22
	Kumeu Huapai		19	19
	Hauraki Belmont	6	7	13
	Devonport	7		7
	TOTAL NORTH	**98**	**168**	**266**

Sector	Analysis Area	Competition	Training	Total
West	Henderson Glendene	14	55	69
	Waiatarua Henderson Valley	3	23	26
	Te Atatu Peninsula	3	18	21
	Glen Eden Oratia		60	60
	Blockhouse Bay		39	39
	Titirangi Laingholm		36	36
	Massey West Harbour		9	9
	TOTAL WEST	**20**	**240**	**260**
Central	Remuera	60	86	146
	Mt Roskill Hillsborough	58		58
	Eastern Bays	39	13	52
	Mt Albert Morningside	45	119	164
	Mt Eden Balmoral	44	84	128
	Epsom	33	89	122
	Mt Wellington Mt Richmond	16		16
	Meadowbank St Johns	12	13	25
	Panmure Glen Innes	9		9
	Pt Chevalier Waterview	7	73	80
	Ellerslie	4		4
	Herne Bay Westmere	3	78	81
	Lynfield Waikowhai	1	15	16
	Onehunga One Tree Hill		48	48
	Waiheke		11	11
	TOTAL CENTRAL	**331**	**629**	**960**
South	Papakura	24		24
	Manurewa	16	14	30
	Ardmore Hunua Bombay	1	21	22
	Pukekohe	29	44	73
	Dannemora Botany North		26	26
	Howick		21	21
	TOTAL SOUTH	**70**	**126**	**196**

Note that a small proportion of Local Board funded additional capacity is in rural areas too distant to accommodate projected shortfalls.

Appendix

1. Key Assumptions

Projections for the future have been based on the following key assumptions:

- Population growth will be in line with Auckland Transport Model projections
- The population will age in line with Statistics New Zealand age projections
- Winter sport will be played in the same manner as currently, i.e. field sizes, game lengths, training requirements and the timing of each code's playing season will continue as now
- Clubs will continue to draw most of their players from their existing geographic catchment areas
- The growth or decline in participation rates of different ethnic groups will balance out so that growth in demand in one code is matched by a similar drop in another
- Demand from any new winter code is matched by a drop in demand from an existing code
- School demand for use of community fields will continue at the current level
- Demand for winter fields for non-sport or irregular use will be managed through the booking system and not significantly exceed current levels
- There will be no increase in training or competition demand by representative teams, development or talent centres
- There will be a small increase in participation rates in line with Auckland Plan participation targets
- There will be no new clubs formed in areas where a code does not already have a presence
- There will be no unexpected changes to field supply

2. Model Input

Game time information was provided by the RSOs. It includes time to get onto into the field, short warm up, actual playing time, half time and, for senior teams, 5 minutes for injury time. The resulting times are rounded to the nearest quarter hour to better match game scheduling.

Training times are based on information provided by Auckland Region clubs through a web survey. The responses to four questions have been aggregated for each club's teams for each level, then aggregated across all clubs and averaged to training minutes. The four questions were:

1. *What field area does a team in each 'grade' required for training. Please answer for what area is required for effective training, not what you may currently have available.*
   (5 answer categories ranging from full size field to 1/8 full size, plus a 'teams do not train' category)

2. *Please tell us whether a team need exclusive use of that field area for part or all of the training session, or whether it can be shared for some or all of the time with another team? (5 answer categories ranging from exclusive use for all training to can share all the field all training time, plus a 'teams do not train' category).*

3. *How long does each training session need to be for effective training? (6 answer categories ranging from more than 2 hours to 30 minutes or less, plus 'teams do not train' category*

4. *How many of your teams in that grade train …(3 training frequency answer categories plus 'teams do not train' category*

Football

Grade	Field size and game time	Training minutes on FFE	Training minute closest equivalent to
Adult men / women	1 x 2 hours	102	½ x 2 hours x 1.5
Boys 17 to 19	1 x 2	86	½ x 90 x 1.5
Boys 15 to 16	1 x 1.75	69	½ x 90 x 1.5
Boys 13 to 14	1 x 1.5	60	½ x 90 x 1.5
Boys 11 to 12	$^1/_2$ x 1.25	34	$^1/_2$ x 60 x1
Boys 9 to 10	$^1/_4$ x 1.25	26	$^1/_2$ x 60 x1
Mixed 7 to 8	$^1/_8$ x 1	10	$^1/_8$ x 60 x 1
Mixed 5 to 6	$^1/_8$ x 1	6	$^1/_8$ x 45 x 1
Girls 9 to 10	$^1/_8$ x 1.25	11	¼ x 60 x 1
Girls 11 to 12	$^1/_4$ x 1.5	20	¼ x 60 x 1.5
Girls 13 to 14	1 x 1.5	43	½ x 60 x 1.5
Girls 15 to 17	1 x 1.75	66	½ x 90 x 1.5

Rugby

Grade	Field size and game time	Training minutes in FFE	Training minutes equivalent to
Premier / reserves	1 x 1.75	180	1 x 90 x 2
Other senior	1 x 1.75	180	1 x 90 x 2
Social	1 x 1	43	½ x 90 x 1
President	1 x 1.25	30	½ x 60 x 1
Women	1 x 1.75	135	1 x 90 x 1.5
U11 to U13	1 x 1.25	90	½ x 90 x 2
U9 to U10	½ x 1	35	½ x 60 x 1
U6 to U8	½ x 1	15	¼ x 60 x 1

League

Grade	Game field size	Training minutes on FFE	Training minutes equivalent to
Senior men	1 x 1.75	180	1 x 90 x 2
Women	1 x 1.75	180	1 x 90 x 2
Masters	1 x 1.25	0	0
U18 to U21	1 x 1.5	180	1 x 90 x 2
U14 to U17	1 x 1.25	114	½ x 90 x 2
U12 to U13	1 x 1.25	91	½ x 90 x 2
U10 to U11	¾ x 1	44	¼ x 90 x 2
U6 to U9	½ x 0.75	28	¼ x 60 x 2

2015 to 2025 – Growth assumption

Football	Grade	%
	5 to 8 grade	2
	9 to 12 boys	2
	13 to 17 boys	2
	Senior men	1
	9 to 12 girls	3.5
	13 to 17 girls	3.5
	Senior women	2.5

Rugby	Grade	%
	U6 to U8	2.5
	U9 to U10	2.5
	U11 to U13	2
	Premier/reserves	1
	Other senior	0.5
	Social	0.5
	President	0.5
	Senior women	5

League	Grade	%
	U6 to U9	2.5
	U10 to U11	2.5
	U12 to U13	2.5
	U14 – U15	2
	U16 – U17	0.5
	Senior men	0.5
	Masters	0.5
	Senior women	0.5

3. Active age population growth by analysis area

Summary Table: Active age population growth to 2025

Sector	Analysis area	Active age population Current estimate	Active age population 2025 projection
Northern	Wellsford	2770	2391
	Warkworth	9124	10000
	Dairy Flat North	1986	1760
	Dairy Flat South	1245	1012
	Helensville	7178	6517
	Kumeu Huapai	8547	10474
	Orewa	4627	6168
	Red Beach	4767	5318
	Stanmore Bay Tindalls	13648	11595
	Silverdale	1447	3301
	Long Bay Torbay	10913	11116
	East Coast Bays	15841	16803
	Pine Hill	8961	7382
	Castor Bay	12168	13152
	Takapuna	7436	12453
	Hauraki Belmont	7160	6961
	Devonport	6579	6502
	Northcote Hillcrest	10617	12764
	Birkenhead	10022	12751
	Beach Haven Birkdale	13726	12898
	Kaipatiki	8941	9121
	Glenfield Marlborough	10413	10715
	Unsworth Heights	5608	5632
	Greenhithe	6546	7718
	Albany - Paremoromoro	7030	11351
	Brighams Creek Hobsonville	7444	19264
	Total Northern Sector	**204,744**	**235,119**

Sector	Analysis area	Active age population Current estimate	Active age population 2025 projection
Western	Massey West Harbour	18148	22193
	Te Atatu Peninsula	7782	7320
	Ranui	16189	15758
	Henderson Glendene	29012	34398
	Waitakere Swanson	3506	3277
	Waiatarua Henderson Valley	4891	3649
	Glen Eden Oratia	17973	19074
	Titirangi Laingholm	5045	4221
	Kelston New Lynn	20464	28889
	Avondale	14375	18102
	Blockhouse Bay	11162	12323
	Total Western Sector	**148,547**	**169,204**
Central	**Analysis Area**	**Active age population Current estimate**	**Active age population 2025 projection**
	Pt Chevalier Waterview	8631	11099
	Herne Bay Westmere	22020	28901
	CBD Grafton	39333	49918
	Waiheke	4289	4996
	Mt Eden Balmoral	20093	23901
	Epsom	12134	16483
	Mt Albert Morningside	22867	29998
	Mt Roskill Hillsborough	23609	31693
	Lynfield Waikowhai	11341	12678
	Onehunga One Tree Hill	19116	25391
	Mt Wellington Mt Richmond	14962	21734
	Panmure Glen Innes	13764	19607
	Meadowbank St Johns	10633	12585
	Remuera	12629	18800
	Ellerslie	8789	12188
	Eastern Bays	18681	21653
	Total Central Sector	**262,890**	**341,626**

	Analysis Area	Active age population Current estimate	Active age population 2025 projection
Southern	Otahuhu	9227	10951
	Mangere	39169	39605
	Papatoetoe	31169	35755
	Otara	21649	25731
	Howick	27324	30478
	Pakuranga	24557	26208
	Dannemora Botany North	18434	18644
	Ormiston Botany South	9320	10789
	Manurewa	54700	54337
	Papakura Hingaia	29754	47691
	Whitford Clevedon Beachlands	6979	6674
	Ardmore Hunua Bombay	5437	5219
	Pukekohe	18659	31888
	Waiuku	7534	6647
	Total Southern Sector	**303,912**	**350,617**

4. Issues concerning clubs

As part of the club web survey clubs were asked to say how much of a concern, if at all, each of a number of issues were for their club.

Access to funding

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	59	70	59
Of some concern	33	24	34
Not much of a concern	4	2	7
Not a concern at all	2	4	
Not applicable			
Can't say	2		

Finding volunteers to stand for committee positions

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	47	30	55
Of some concern	35	40	35
Not much of a concern	14	28	7
Not a concern at all	4	2	3
Not applicable			

Finding coaches

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	45	38	45
Of some concern	43	30	45
Not much of a concern	8	32	7
Not a concern at all	2		3
Not applicable	2		

Finding team managers

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	20	26	45
Of some concern	45	34	45
Not much of a concern	33	38	7
Not a concern at all	2	2	3
Not applicable			

Membership recruitment and retention

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	16	23	31
Of some concern	47	45	38
Not much of a concern	35	26	17
Not a concern at all	2	6	14
Not applicable			

Access issues for members (cost, transport, etc.)

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	22	23	34
Of some concern	27	34	52
Not much of a concern	39	30	7
Not a concern at all	10	13	7
Not applicable	2		

Access to fields to support the number of teams

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	69	34	62
Of some concern	22	45	14
Not much of a concern	6	13	17
Not a concern at all	3	6	7
Not applicable		2	

Keeping the maintenance up on clubrooms

Percent of clubs who said issue was:	Football	Rugby	League
A big concern	35	41	49
Of some concern	31	38	24
Not much of a concern	22	15	10
Not a concern at all		6	7
Not applicable	10		10
Can't say	2		