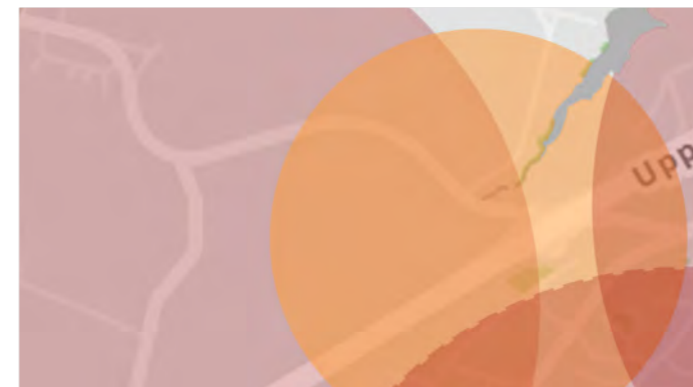
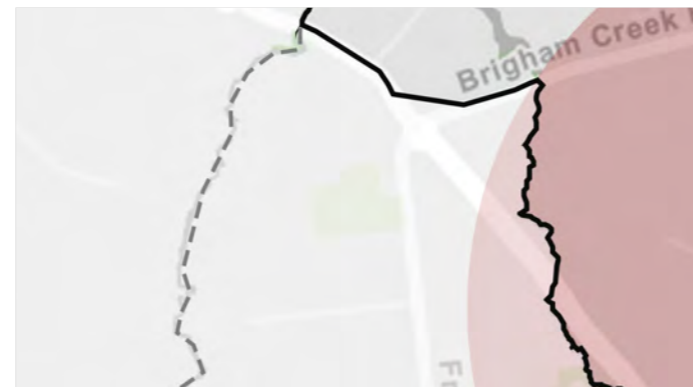


UPPER HARBOUR WHEELED RECREATION ASSESSMENT

UPPER HARBOUR LOCAL BOARD, AUCKLAND



STUDY AND STRATEGIC ADVICE

NOVEMBER 2021

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INTRODUCTION

PURPOSE

The purpose of this study is to assess current wheeled play provision in the Upper Harbour Local Board area and evaluate the wider network of facilities to establish a holistic understanding of relationships between:

- Facility types and wheeled recreation activities they support.
- Current distribution, associated catchment level of service and provision.
- Network synergies and relationships with other assets.
- General overall condition of facilities.
- Current population distribution and forecast projections.

Then, through mapping and targeted site analysis identify:

- Gaps in wheeled recreation provision, either of activity type or user groups serviced, and opportunities for improvement.
- Relationships between facilities, identification of synergies, and opportunities for complementary provision of activities.
- Forecast population projections as they relate to shifts in demand.
- Facilities to be considered for renewal and / or the location of potential new facilities.

In addition identify opportunities for the improvement of the wheeled recreation network to enable the Upper Harbour Local Board to make informed decisions on future provision in a holistic manner.

WHEELED RECREATION CONTEXT

Open Space Typologies

Key public open space types are identified within Part 2 of Auckland Council's Open Space Provision Policy with information provided on indicative amenities and provision targets. Open space types / typologies relevant to this study include:

- Neighbourhood Parks
- Suburb Parks
- Destination Parks

These typologies are intrinsic to considering the types of activities and supporting amenities provided within each reserve or park. Ultimately, wheeled sports should provide for anticipated user groups within parks and reserves, though due to the increased mobility of wheeled patrons, provision within open spaces is considered independently of the reserves themselves when reviewing accessibility and provision at a network level.

Wheeled Recreation Catchments / Service Areas

The Open Space Provision Policy also identifies proposed service / catchment area requirements for each open space type. These relate to acceptable baseline walking distances within applicable density residential areas.

However, for wheeled recreation it is assumed that a significant percentage of the target user group would be accessing facilities on their associated wheeled equipment (bike, skateboard, scooter and the like).

Adjustments have therefore been researched and catchment distances adjusted to reflect anticipated modes of wheeled recreation transport.

For the purpose of this report, radial distance proxies have been adopted in lieu of defining extensive 'pedsheds' / equivalent wheeled play distances. This approach is aimed at providing a high-level informed understanding of geographic provision only.

Refer to Catchment Assessment Parameters for further definition.

POLICY CONTEXT

Several documents have informed the development of this report and relevant strategies, plans and policies considered to ensure alignment where applicable. Refer to Appendix D for Bibliography of documents consulted

SCOPE AND LIMITATIONS

The following outlines scope and associated limitations associated with this wheeled sports provision assessment:

- This study requires the assessment of wheeled recreation provision within the Upper Harbour Local Board area. Reporting considers facilities in adjacent suburbs and associated local board areas at a high level to ensure a holistic view of the wider network relationships and wheeled recreation facilities.
- Adjusted high level radial catchment analysis in line with Open Space Provision Policy provides an acceptable level of information to enable gap analysis assessment, though it is acknowledged that assessment of walking distances is indicative, with related topographical and physical constraints considered at a high level only.
- In order to alleviate bias in evaluation and provide opportunities for debate and creative discussion, assessments and targeted site investigations were conducted by two individuals on site and moderated by a third to agree required network outcomes.
- Community or user group consultation was not conducted in the preparation of this report. Future investigation and consultation, particularly with local community, will be required to inform design and implement wheeled recreation improvements.
- For the purpose of this study, Learn to Ride (LTR) facilities are considered as off road facilities that provide opportunity to improve bike skills in a safe environment, and are not necessarily limited to the microcosmic reproduction of the road network. Refer to Appendix D for wheeled recreation typologies and associated definitions.
- Desktop evaluation (and site validation where applicable) of wheeled recreation facilities within schools has been conducted. These have been indicated on the maps as they are generally accessible to the general public outside of school hours and contribute to provision within local communities.
- Specific in-depth analysis of greenway, cycle and walkway facilities outside of identified assets associated with parks and reserves within the study area, does not form part of this scope. It is acknowledged however, that greenways and connecting riparian open spaces present opportunities for further investigation to include experiences that transcend walkway / cycleway provision, and provide alternate routes with features (where practical) to improve general bike skills and experience.
- Data collection is largely quantitative with high level qualitative assessment of facilities and associated value / experience. Where applicable, high level commentary is provided to address gaps and inform investment.
- Population growth data from the Transport Modeling Population Projection (previously ART model) has been used to obtain an understanding of population growth and density projection in relation to play provision.
- Data from the MSM has been cross references against Census 2018 information (Stats NZ) medium projection predictions to enable evaluation of specific age group information to determine extent and nature of wheeled recreation required to accommodate anticipated age user groups. No post COVID-19 correction or economic impact on household income has been investigated.

METHODOLOGY

NETWORK ASSESSMENT PROCESS

Assessment was executed in four stages to establish gaps in wheeled sports and potential sites to improve provision at network level:

- Desktop study to establish the nature and extent of existing facilities and wheeled sports activities.
- Targeted site visits to assess the nature of existing facilities and open space opportunities for wheeled recreation
- Research to establish logical network catchment areas in relation to acceptable traveling distances.
- Mapping of existing provision and catchment areas to enable the assessment of network distribution, synergies and geographical gaps in provision.
- Review of the above to establish network provision requirements, opportunities, potential priorities and sites for optimization, further investigation and / or high-level feasibility analysis.

As outlined above, geographic distribution and activity provision has been considered in a holistic manner by ensuring adjacent suburb and associated local board area provision is taken into account.

CATCHMENT ASSESSMENT PARAMETERS

Based on review of empirical research that investigate the theory behind traveling distances, the following catchment provisions have been adopted to assess high level gaps in network provision:

Neighbourhood Level

- A 1.25km distance (or 5min cycle / skate @ 15km / hr). This equates to a radial proxy assessment radius of 837.5m

Suburb Level

- A 2.5km distance (or 10min cycle / skate @ 15km / hr). This equates to a radial proxy assessment radius of 1675m

It is important to note that although related, distances sit independent of relationships with open space typologies and represent global thinking on acceptable traveling distances as they relate to the travel / time accessibility of public destinations.

With regard to travel times, research indicates that timing for skate and non-commuter / recreational cycling are comparable. Assessments have therefore been carried out on this basis.

It is noted that destination facilities also serve neighbourhood and / or suburb catchments for those living in their immediate vicinity. A suburb level catchment has therefore been applied to destination level facilities / parks to evaluate localised network provision in urban areas

NETWORK ANALYSIS AND OPPORTUNITIES

EXISTING PROVISION

The following list outlines the current provision of Bicycle Motocross (BMX), Mountain Biking (MTB), Learn to Ride (LTR) and related Skatepark / wheeled recreation facilities within Upper Harbour, area;

Upper Harbour Local Board area

- Harrowglen Reserve - Pump / Bike Skills Track
- Hooton Reserve - Skate and BMX
- Collins Park - Skate
- Meadowood Reserve - Skate
- Unsworth Reserve - MTB
- Upper Harbour Primary School LTR / Bike Skills Track
- Sanders Reserve - MTB
- Luckens Reserve - Skate

Relevant destination facilities, or facilities with catchment overlap contributing to the Upper Harbour network by proximity association include;

Rodney Local Board area

- Riverhead Forest – MTB and pump track (BMX / MTB)

Henderson-Massey Local Board area

- Kopupaka Playground - LTR
- Royal Road Reserve - LTR
- Morie Park - Pump Track

Devonport-Takapuna Local Board area

- Greville Reserve – Skate, MTB and LTR
- Sunnynook Park / Square – Skate and LTR

Kaipatiki Local Board area

- Marlborough Park – Skate and BMX
- Normanton Reserve – Skate and LTR
- Glenfield Intermediate School Pump Track – BMX and MTB

Refer to Appendix A for associated current network maps and analysis for the location, description and commentary on provision within the Upper Harbour area.

NETWORK REVIEW

QUANTITY & DISTRIBUTION (GEOGRAPHIC GAPS)

Individual wheeled sports catchment areas are clearly articulated in Appendix B to provide an understanding of network gaps and overlaps in provision.

Independent of activity provision, the quantity and distribution of existing wheeled recreation facilities requires investment to improve geographical network coverage and catchment gaps in the Upper Harbour Local Board area.

Gaps in the provision of dedicated wheeled recreation facilities exist in the Lucas Heights, Pinehill, Windsor Park, Schnapper Rock, Rosedale, Hobsonville and Whenuapai areas.

It is noted however that an absence of facilities and / or opportunities to address gaps is influenced by:

- Future urban zoning of the Whenuapai area (under development) and significant land holding associated with the airbase
- Limited opportunities in Hobsonville and Herald Island areas due to intensity of residential development and limited public open space opportunities to accommodate outside of esplanade walkways, localised pocket parks or Hobsonville War Memorial Park and Herald Island Domain
- Limited public open space opportunities to accommodate facilities in Schnapper Rock and Rosedale areas due to existing residential and industrial land use, and the presence of schools, Massey University, North Shore Memorial Park and several (public and private) organised sports facilities with associated land holdings
- Limited public open space opportunities in Lucas Heights due to existing residential land holdings and complexities associated with topography and / or appropriateness of establishing MTB tracks in conservation areas (though parks infrastructure and recreation trails are permitted activities under the Auckland Unitary Plan)

There are also significant arterial and state highway vehicular routes that sever catchments and provide a barrier to cross corridor / suburb connectivity in some instances.

In particular, the Northern (SH1) and Upper Harbour (SH18) Motorways present significant barriers to less independent members of the population. East Coast Road in conjunction with SH1 also affects potential safe access to Hooton Reserve facilities, Fairview Heights, Oteha, Pinehill and Windsor Park for less independent individuals.

It is therefore appropriate to consider existing facility locations and the potential establishment of new facilities within the Upper Harbour area to address identified geographical gaps and associated barriers to access at a network level.

In addition to existing facilities, the following parks and reserves were assessed at a high level to gauge their potential to accommodate wheeled sports and address network gaps:

- Bill Moir Park
- Whenuapai Town Park
- Herald Island Domain
- Hobsonville War Memorial Park
- Observation Green, Hobsonville Point (also a planned LTR facility)
- Schnapper Rock Reserve
- Northwood Reserve
- Rosedale Landfill Reserve
- Glen Bay View Reserve
- Hosking Reserve

Planned open spaces were also assessed in terms of their potential contribution to the wheeled sports provision and include:

- Sports / active recreation reserve, corner Trig and Spedding Roads, Whenuapai
- Sports / active recreation reserve, Brigham Creek Road, Hobsonville
- Scott Point Sports Park, Hobsonville
- Massey North - proposed Skate Park (Henderson-Massey Local Board Area)

The geographic location of the above parks and reserves presents several opportunities to address network gaps, though further investigation is required to assess the feasibility of establishing facilities in relation to site constraints and legislative context.

Refer to Appendix A for associated open space opportunity analysis for the location, description and nature of existing and proposed provision within the Upper Harbour area.

ACTIVITY GAPS

Following network analysis and mapping, the following gaps in activity provision have been identified:

- Geographic gaps in several areas directly correlates with limited activity provision in the Lucas Heights, Pinehill, Windsor Park, Schnapper Rock, Rosedale, Hobsonville and Whenuapai area's
- Other than Sanders and Unsworth Reserve provision, MTB activities are limited in the network
- There are no public pump track or learn to ride facilities in the Upper Harbour area other than limited provision and quality associated with schools and Harrowglen Reserve
- Other than Hooton and Collins Reserve, and to a lesser extent Meadowood and Luckens Reserve provision, Skate / BMX freestyle activities are limited in the network

Refer to Appendix B for supporting Network Gap Analysis Maps.

POPULATION DYNAMICS

GROWTH AND DENSITY

Population growth data from the Transport Modeling Population Projection has been used to obtain an understanding of population growth and density projection in relation to wheeled recreation provision.

Based on review and mapping of the above, the following areas are projected to experience significant population growth and increase in density:

- Albany
- Hobsonville / Scott Point
- Whenuapai
- West Harbour (Northern)

Remaining areas within the Upper Harbour catchment are projected to experience minor or neutral / negative population growth.

It is also important to note that there is significant projected growth in the surrounding areas of North Massey and Riverhead that from a wider network perspective, would also influence demand on facilities.

AGE AND INCOME (CENSUS 2018)

Legacy 2018 (moderated) Census data articulates that:

- There has been a 17.1% increase in population between 2013 and 2018
- 87.9% of the Upper Harbour population are pre-retirement age (<65) with a median household income of \$89K which was the second highest in Auckland at the time
- The median age in the Upper Harbour area was 35.7 with 69.5% of the population aged between 15 and 64
- Ethnic distribution was largely European (55.3%) and Asian (39.6%) with Maori (5.1%) and Pacific (2.4%) minorities
- Almost all schools received a higher than average decile rating

Based on the above it can be assumed that on average, the Upper Harbour population is relatively active with a level of income that would enable participation in wheeled recreation activities at a basic level (minimum).

With almost 70% of the population over the age of 15 it can also be expected that patrons will have an independence that allows them to travel and access facilities outside of their immediate areas. It can also be assumed that user groups will require a higher level of challenge to excite, encourage participation and enable skill progression

DEMAND

As with most recreational activities that have an affiliation with organised sport, accurately evaluating the extent of participation in wheeled sport and recreation activities and provision of appropriate is complex, as participants are often engaged in varied and independent recreation outside of organised clubs making the recording of information and associated demand difficult to measure.

However, available data indicates that the popularity of wheeled sports and recreation is likely to grow in the future due to:

- Increased population growth (projected) in the Upper Harbour area
- Improvements in infrastructure and opportunity to participate in activities
- The high profile of wheeled sports on various media platforms and participation on a global scale including the olympic status of MTB, BMX and skateboarding typologies

Pressures associated with projected levels of population growth and age distribution will require balancing the provision of entry level and advanced facilities. It must also be noted that participation and level of interest is directly related to the quality of facilities provided for wheeled recreation.

The development of new facilities in Scott Point, Whenuapai and Pinehills, and upgrade of existing provision at Hooten, Unsworth and Luckens Reserves would provide a good level of service depending upon level of investment.

Establishing facilities in the above areas would also provide improved opportunity for wheeled sports access in the highest anticipated growth areas within the Upper Harbour Local Board area.

NETWORK OPPORTUNITIES

Post assessment of existing activity types, geographical distribution and associated synergies from a holistic network perspective, there are several opportunities to provide meaningful wheeled recreation facilities in the Upper Harbour area.

Due to the level of current provision, age distribution and perceived level of independence, strategic investment in the improvement of existing, or development of new suburb level facilities, (complemented by neighbourhood level facilities as funding allows) is considered an appropriate baseline development model for the Upper Harbour area.

This effectively focuses investment on the provision of quality facilities in strategic locations to accommodate a wide range of user groups and abilities. The following articulates opportunities to address gaps in wheeled recreation provision:

Skate / Freestyle BMX facilities

- Investigate the potential to establish a large neighbourhood (600m²+) to suburb level (900m²) skate facility in Luckens Reserve to improve catchment complement suggested activities in Scott Point and Observation Reserves
- Consider elevating existing quality facility in Collins Park (from neighbourhood to suburb level provision) to improve catchment with the inclusion of a bowl facility to accommodate additional skating discipline and increased challenge
- Consider investment in Meadowood Reserve facilities to improve existing neighbourhood provision. It is noted that Investment in Meadowood Reserve is preferred over proposed Rook Reserve given significant catchment overlap,

the presence of existing elements, supporting playspace and synergies with community centre and creche

BMX / Mountain Bike (MTB) Pump Track facilities

- Investigate potential to establish a large suburb level (600m²) pump track in Spedding / Trig Road Reserve to address geographic network gap and establish potential complementary relationship with proposed suburb / destination skatepark in Massey North (via future Northside Drive road extension to Trig Road)
- Consider investment in a large suburb / destination level (600m²+) pump track at Scott Point Sports Park to address geographic network gap and complement (potential suburb level) skatepark facility in Luckens Reserve
- Investigate potential to include a perimeter pathway with bike skills / pump elements in Collins Park to improve activity provision and complement existing neighbourhood level skatepark facility
- Consider implementing a large suburb level (600m²+) pump track facility in Hooten Reserve to improve existing activity provision and complement adjacent BMX competition track and playspace facilities

Mountain Bike (MTB) facilities

- To ensure an appropriate level of provision at Sanders Reserve, implement proposed network adjustments in accordance with the Sanders Reserve Bike Facility Analysis and Development Strategy (July 2019) to improve user experience, opportunities for skill progression and interest for experienced riders
- Consider working with the Unsworth Mountain Bike Club volunteers to formalise and improve existing MTB tracks. Formalising tracks will improve catchment, awareness, safety and sense of ownership in facilities and complement wheeled recreation activities / facilities in Meadowood Reserve and adjacent Kaipatiki Local Board area
- Investigate the potential to establish beginner / intermediate neighbourhood level MTB track at Rosedale Landfill Reserve to activate the park, and address geographical network gap on northern side of SH1. This would also complement existing Hooten Reserve skatepark (and potential pump track facility). Balanced provision with investment in Sanders and Glen Close Reserves is required.

Learn to Ride (LTR) Skill facilities

- Implement the proposed bike path / learn to ride facility at Observation Point Reserve. Consider reviewing existing concept and elevating to provide broader loop pathway and learn to ride line marking (potentially abstracted) to complement proposed pump rollers and improve general bike skills and experience
- Consider supporting proposed pump track facility in Spedding / Trig Reserve with supplementary LTR elements such as loop walkway and pump rollers with appropriate line marking
- As development progresses and opportunities arise, investigate the potential to incorporate LTR features in the north-western Whenuapai area to address perceived geographic network gap and complement proposed suburb level facilities in Spedding / Trig Road Reserve
- An opportunity also exists to establish a LTR / pump elements in Bill Moir Reserve due to its favorable geographic location, though spatial restrictions, existing facilities and CPTED considerations warrant consideration of other reserve opportunities should they arise as the Whenuapai area develops
- Brigham Creek Road Reserve could also be considered for lower level investment in LTR / pump run elements at a neighbourhood level to complement crossover with proposed Trig / Spedding, Luckens and Scott Point suburb level provision on northern side of SH18

- An opportunity also exists to establish a perimeter skills track in Herald Island Domain due to its favorable geographic location, though spatial restrictions, existing facilities and CPTED issues will need to be addressed as part of wider park development at renewal
- Consider investment in neighbourhood level LTR / pump skill elements in Schnapper Rock, Northwood and Glen Bay Close Reserves to address geographic network gaps and complement adjacent playspaces
- As development progresses and opportunities arise within Hosking Reserve, establish general use shared pathway network and accommodate localised LTR / bike skill progression features to complement proposed facilities in Sanders and Hooten Reserves

A higher level of investment can of course be considered providing funding, governance and long term sustainability for facilities (including future renewal obligations) are favorable.

In this regard, small scale, skate, pump run and / or LTR elements should be considered for inclusion in the establishment or renewal of network playspaces at a neighbourhood level to improve wheeled play provision where funding allows.

Investment in pump tracks is also recommended as they are fundamentally wheeled play and training facilities for bikers, skateboarders and / or scooter riders of all skill levels.

Refer to the Network Provision Map that articulates the proposed radial catchment coverage, activity provision and facility type for the Upper Harbour area. Appendix A provides additional information on network provision and opportunities that have informed the above commentary and proposed network provision.

NETWORK PRIORITY AND INVESTMENT

The following open spaces been identified as future development opportunities to address network gaps and / or improve existing provision:

- Scott Point Sports Park
- Observation Green
- Luckens Reserve
- Sanders Reserve
- Hooten Reserve
- Unsworth Reserve
- Collins Park
- Glen Bay Close Reserve
- Northwood Reserve
- Schnapper Rock Reserve
- Meadowood Reserve
- Whenuapai Reserves
- Herald Island Domain
- Hosking Reserve
- Rosedale Landfill Reserve

The above are prioritised from high - low based on relative demand in terms of population density and growth. Investment in high and medium priority locations would provide significant improvement in the quality and provision of facilities, particularly within the high growth / high patronage areas.

Low priority areas have the potential to complement provision and address network gaps, noting the establishment of facilities in the Whenuapai area will be essential to address population growth and demand in the future.

Refer to proposed Network Provision Map(s), Network Priority and Investment table for location of facilities, recommended provision and suggested level of investment.

PROPOSED NETWORK PROVISION MAP 01

NOTE




This map locates facilities, identifies proposed radial catchment coverage, activity provision and facility type for the Upper Harbour area.

It is important to note that opportunities to address gaps in provision within the Lucas Creek and Rosedale areas is currently limited by existing land use and associated geographical constraints.



Refer to Network Analysis and Opportunities for supporting commentary

KEY


Facility Typology (Level of Service)

-  Destination Level Facility
-  Suburb Level Facility
-  Neighbourhood Facility


Local Board Boundaries

-  Upper Harbour Local Board extent
-  Adjacent Local Board Boundaries



Neighbourhood Catchment

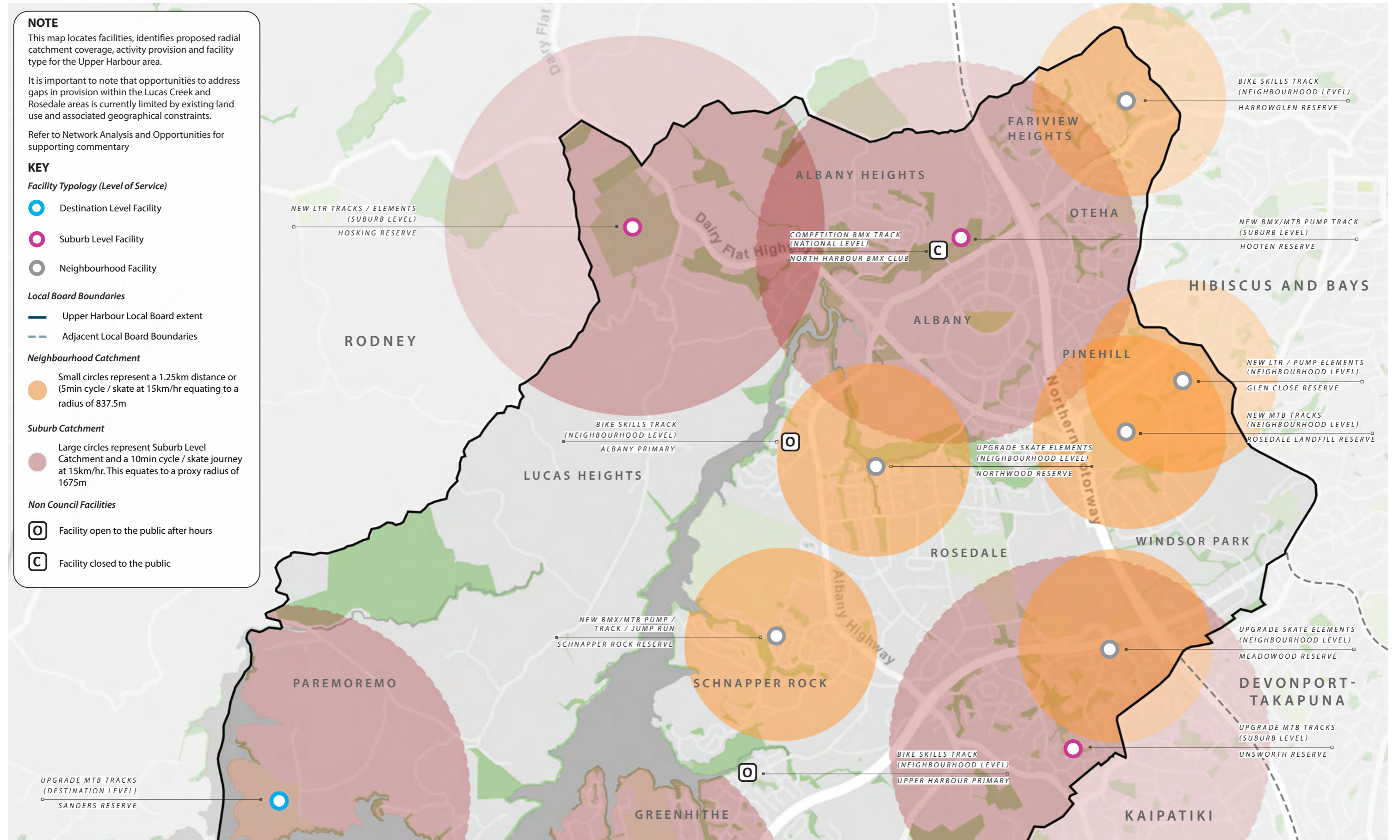
-  Small circles represent a 1.25km distance or (5min cycle / skate at 15km/hr equating to a radius of 837.5m)

Suburb Catchment

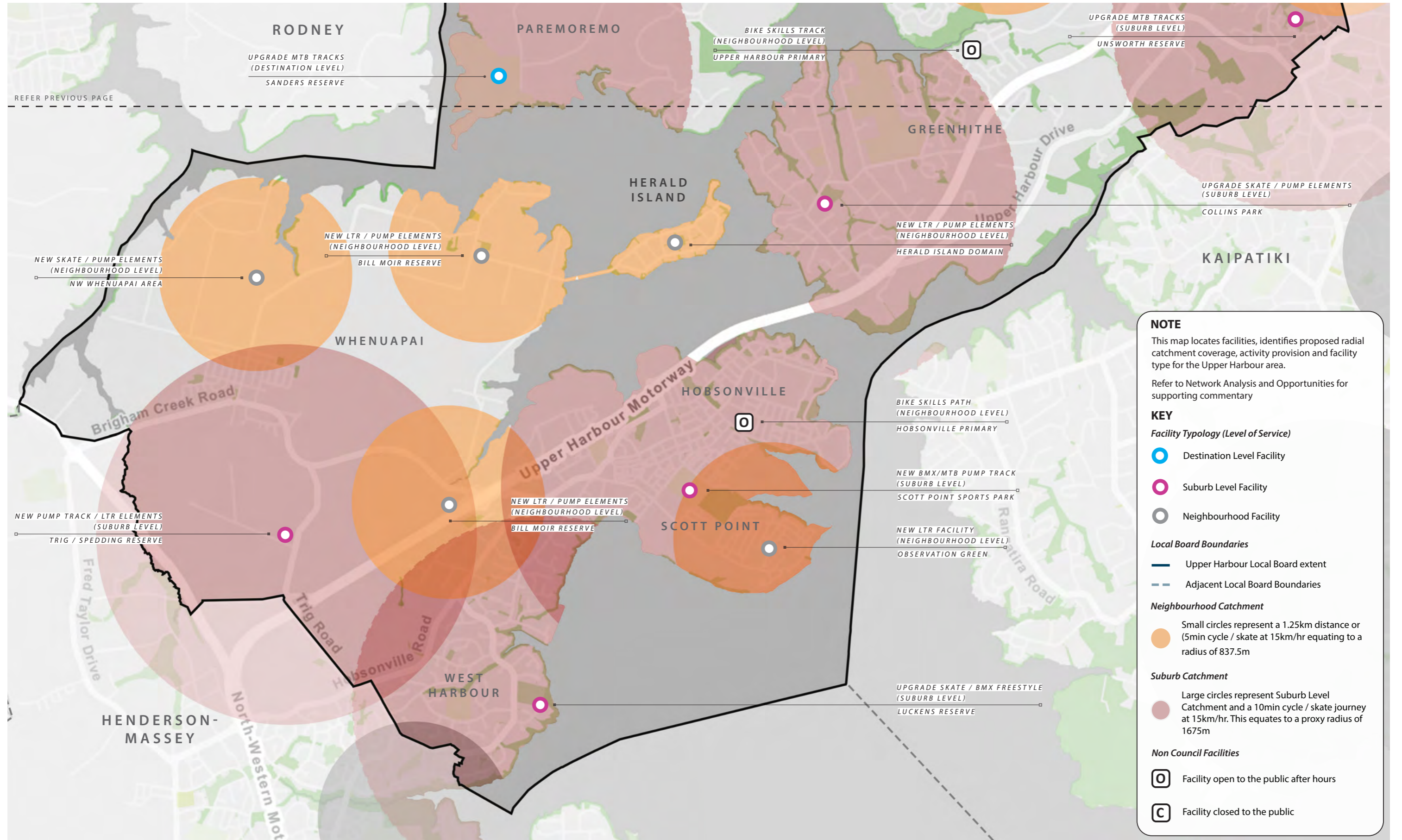
-  Large circles represent Suburb Level Catchment and a 10min cycle / skate journey at 15km/hr. This equates to a proxy radius of 1675m

Non Council Facilities

-  Facility open to the public after hours
-  Facility closed to the public



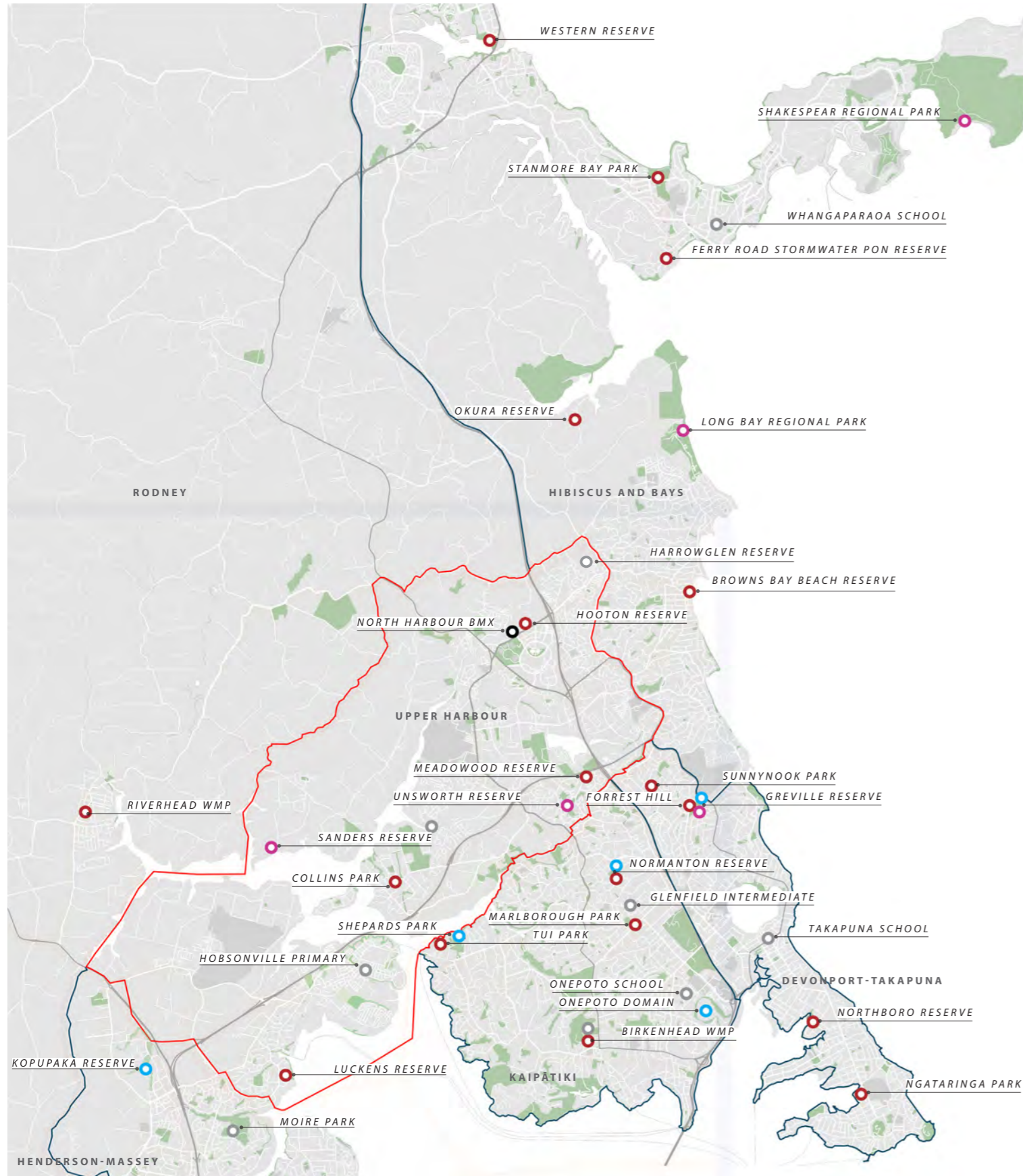
PROPOSED NETWORK PROVISION MAP 02



APPENDIX A

EXISTING NETWORK MAPPING AND ANALYSIS

WHEELED RECREATION FACILITY CONTEXT MAP



KEY

Wheeled Recreation Activities

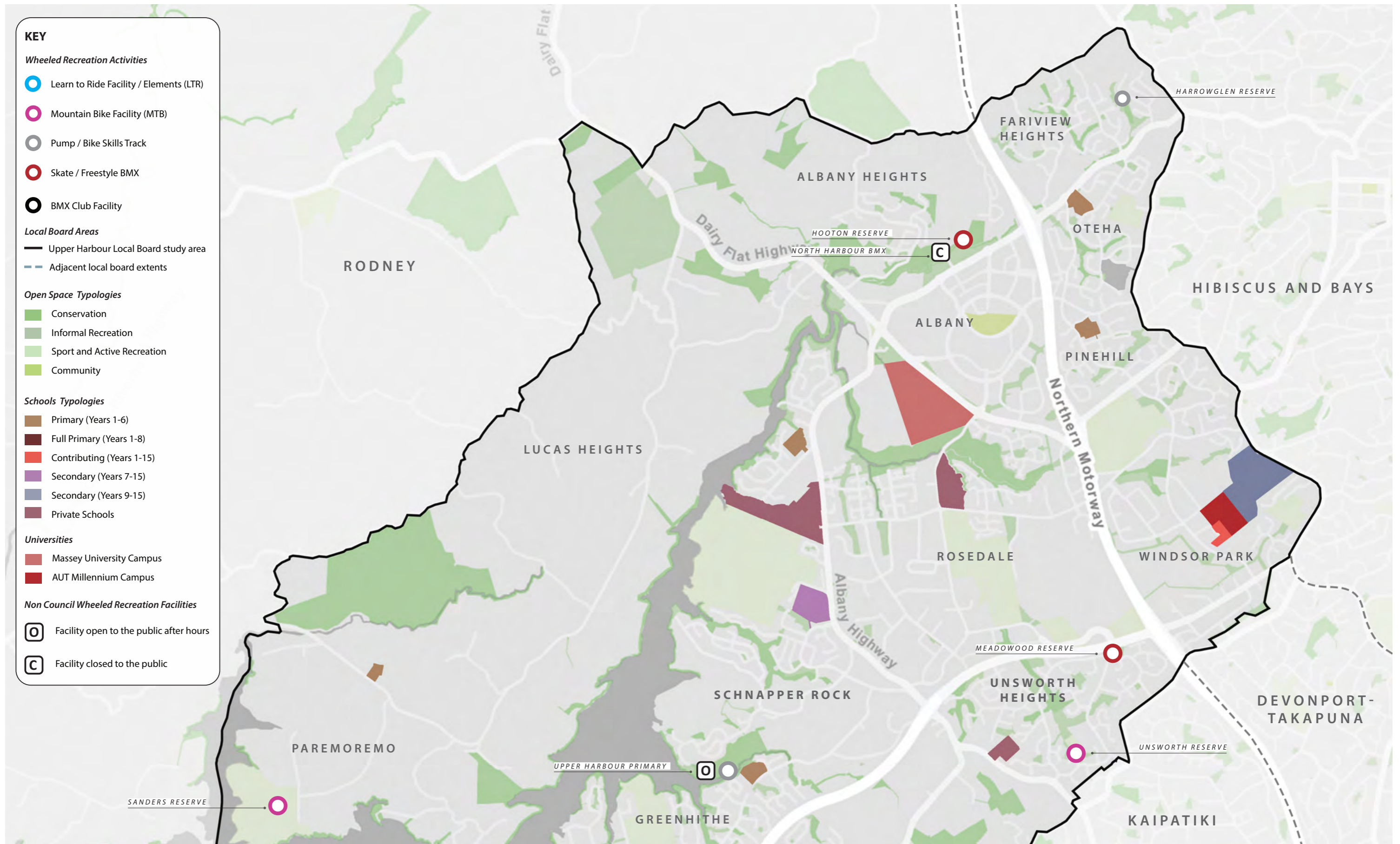
- Learn to Ride Facility / Elements (LTR)
- Mountain Bike Facility (MTB)
- Pump / Bike Skills Track
- Skate / Freestyle BMX
- BMX Club Facility

Local Board Areas

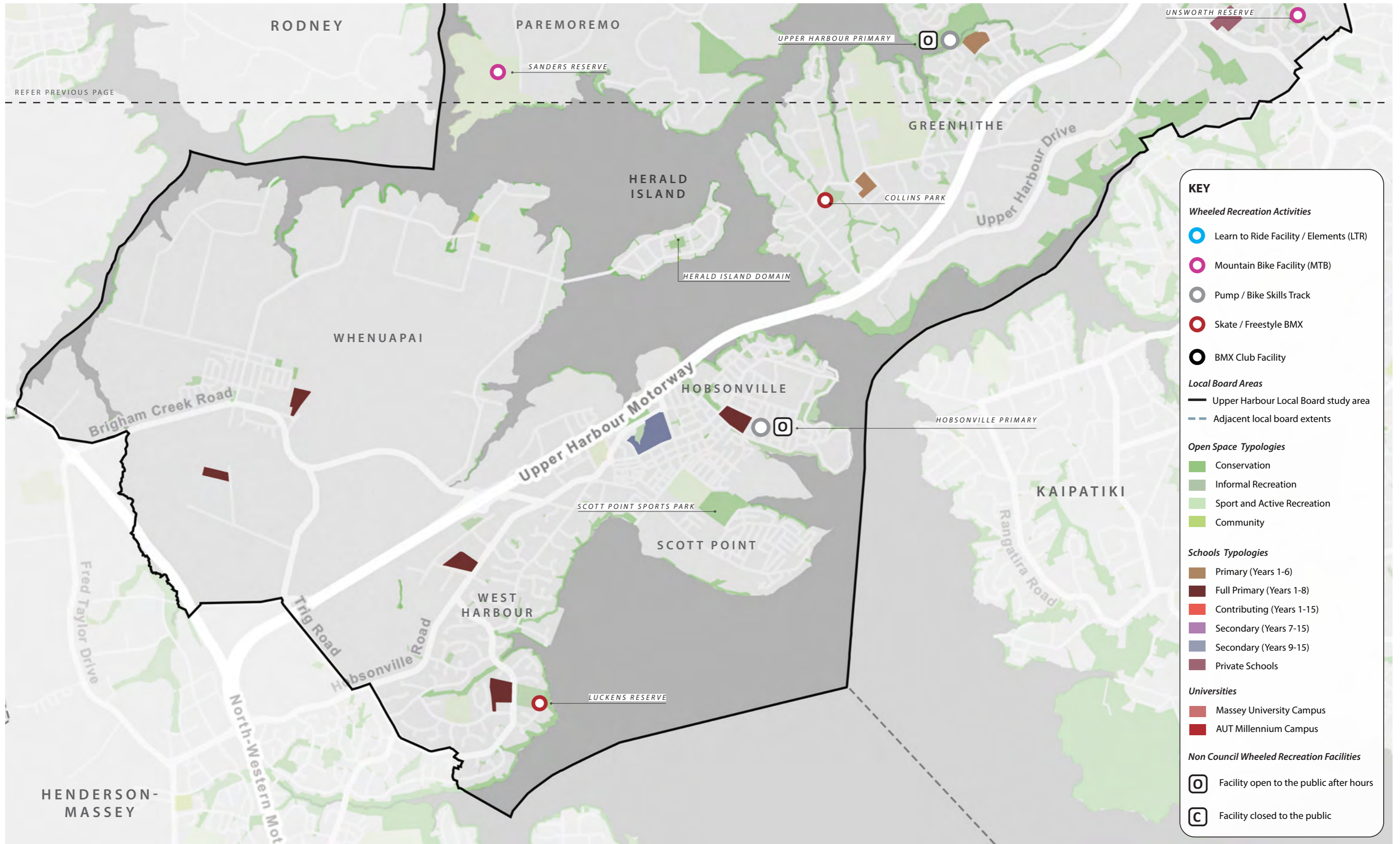
- Upper Harbour Local Board study area
- Adjacent local board extents



CURRENT FACILITIES PROVISION MAP 01



CURRENT FACILITIES PROVISION MAP 02



CURRENT PROVISION ANALYSIS

Location	Local Board	Facility Type	Description	Comments
Harrowglen Reserve	Upper Harbour	Bike skills path	Concrete bike path loop with pump bump features including bank turns and undulations. Adjacent facilities include a playspace that provides a good range of experiences and accommodates a wide age range, and shaded social spill out area complemented by grassed open space and landscape setting.	From a network perspective, the inclusion of a neighbourhood level bike skills track with pump bump features is an appropriate and positive contribution to play and wheeled recreation provision. However, from a technical and usability perspective, drainage is poor in some areas and the profiling of features is not forgiving for beginners, or safe if taken at pace by intermediate or experienced riders. It is therefore recommended that pump feature profiling is adjusted and re surfaced to improve the experience and functionality of this facility.
Hooton Reserve	Upper Harbour	Skate / BMX	Suburb scale / level skate park with offshoot path accommodating grinding boxes, edges and rails. The park includes 1/4 pipe, beginners bowl, advanced bowl and street style element / features for a range of abilities. Park also accommodates scooter use. Nearby facilities include playground and toilets. BMX facility is leased and managed by North Harbour BMX. It is fenced and closed to the public.	Currently Hooton Reserve provides good skate provision is considered to serve a suburb level catchment with a broad range of skate features. There is potential to implement a complementary pump track facility adjacent the skate park with access via open space pathways and car parking, and good synergies with North Harbour BMX club, existing toilet and youth facilities. Support for long term improvements to Oteha Valley road also has the potential to improve connectivity and wider catchment access. Further investigation and consultation is required to determine feasibility, location and extent of pump track facility.
Meadowood Reserve	Upper Harbour	Skate	Provision of neighbourhood level Skate elements that supplement adjacent play facilities. Elements include pathway connection to box ledge and manual pad. Nearby facilities include basketball hoop, playground and toilets.	Potential to upgrade existing provision and extend to create a loop path with pump bumps and / or skateable features to improve network provision. It is noted that Waka Kotahi (NZTA) commissioned a concept for Rook Reserve that includes 'scooter terraces' and a design that has limited value in terms of skater / scooter able features, excitement, skill progression or play value. This facility is currently under construction and nearing completion. Given the residential catchment overlap is significant, Meadowood Reserve should be considered as the preferred location for investment given synergies with existing community facilities and playspace.
Unsworth Reserve	Upper Harbour	Mountain bike course	Informal mountain bike trails and small jump / downhill runs in the bush created by primary user group (assumed as Unsworth MTB Club). The course appears to be well used and signage indicates the trails cater for multi level use. The reserve features a network of walking cycling trails that connect to the playground and toilet facility.	Unsworth Reserve provides different types of cycle trails that present opportunity for improvement to service a suburb level catchment. Further investigation and consultation is required with current user group (Unsworth Mountain Bike Club) to gain a greater understanding of MTB trail aspirations and potential in this location. It is noted that due to existing features, context and topography, Unsworth Reserve has the potential to provide complementary function to Sanders Reserve with provision for more advanced features in combination with opportunity for beginner and intermediate skill progression.
Collins Park	Upper Harbour	Skate	Neighbourhood scale / level street style facility with ledges, rails, pump bump., 1/2 pipe and 1/4 pipe. The facility offers predominantly beginner to intermediate level experience though features are of a scale and arrangement that provide interest for more advanced skaters.	There is potential opportunity for improvement to service a suburb level catchment by the inclusion of a perimeter path with pump bumps to diversify user group to include scooters and support entry level users. Further investigations are needed to identify a location in Greenhithe for advanced level skate elements such as a bowl or vert ramp.
Hobsonville Primary	Upper Harbour	Bike skills path	Basic concrete perimeter bike path with beginner level features including bank turns and undulations. School feature that is available after hours.	Considered an entry level facility for early development of bike skills. Offers limited challenge or interest above beginner level user group.
Luckens Reserve	Upper Harbour	Skate element	Dysfunctional skate feature with 1/4 pipe transitioning to bank feature and concrete pad associated with basketball half court. Elements offer little interest and limited skate value	An existing master plan for Luckens Reserve has been prepared by others which highlights the opportunity to upgrade existing skate / wheeled recreation facilities. The existing play provision assessment also identifies Luckens Reserve as an opportunity for development to improve network provision. Development of large neighbourhood - suburb (community) level facilities is supported by the above reporting. Further investigation and consultation is required to determine feasibility, location and extent of skate facilities including establishing potential complementary relationships with Scott Point Sports Park and Observation Green.
Upper Harbour Primary	Upper Harbour	Bike skills path	Perimeter bike path around field with low level bike skill elements. Elements include a series of wooden ramps and dirt banks. Public access limited to after school hours and weekends.	Considered an entry level facility for early development of bike skills. Offers limited challenge or interest above beginner level user group.
Sanders Reserve	Upper Harbour	Mountain bike course	This destination facility accommodates mountain bike trails and offers predominantly beginner to intermediate level experiences and an entry level pump track for younger patrons.. Tracks range from 500m to 5km and consist of a combination of lime chip, loose chip aggregate and exposed earth. The park also provides playground, toilets, changing rooms, walking tracks, horse-riding area, picnic tables and seating, drinking fountains and barbecues.	Following assessment of previous development intent, it is clear that the initial extensive track network with multiple 'scissor' loops was underutilised. An opportunity therefore exists to rationalise the track network and improve user experience. Refer to the Sanders Reserve Bike Facility Analysis and Development Strategy (July 2019) for recommendations. These include route connections and surface improvements as well as new ride features and signage to improve the overall user experience and functionality of the existing track network.

OPEN SPACE NETWORK OPPORTUNITIES

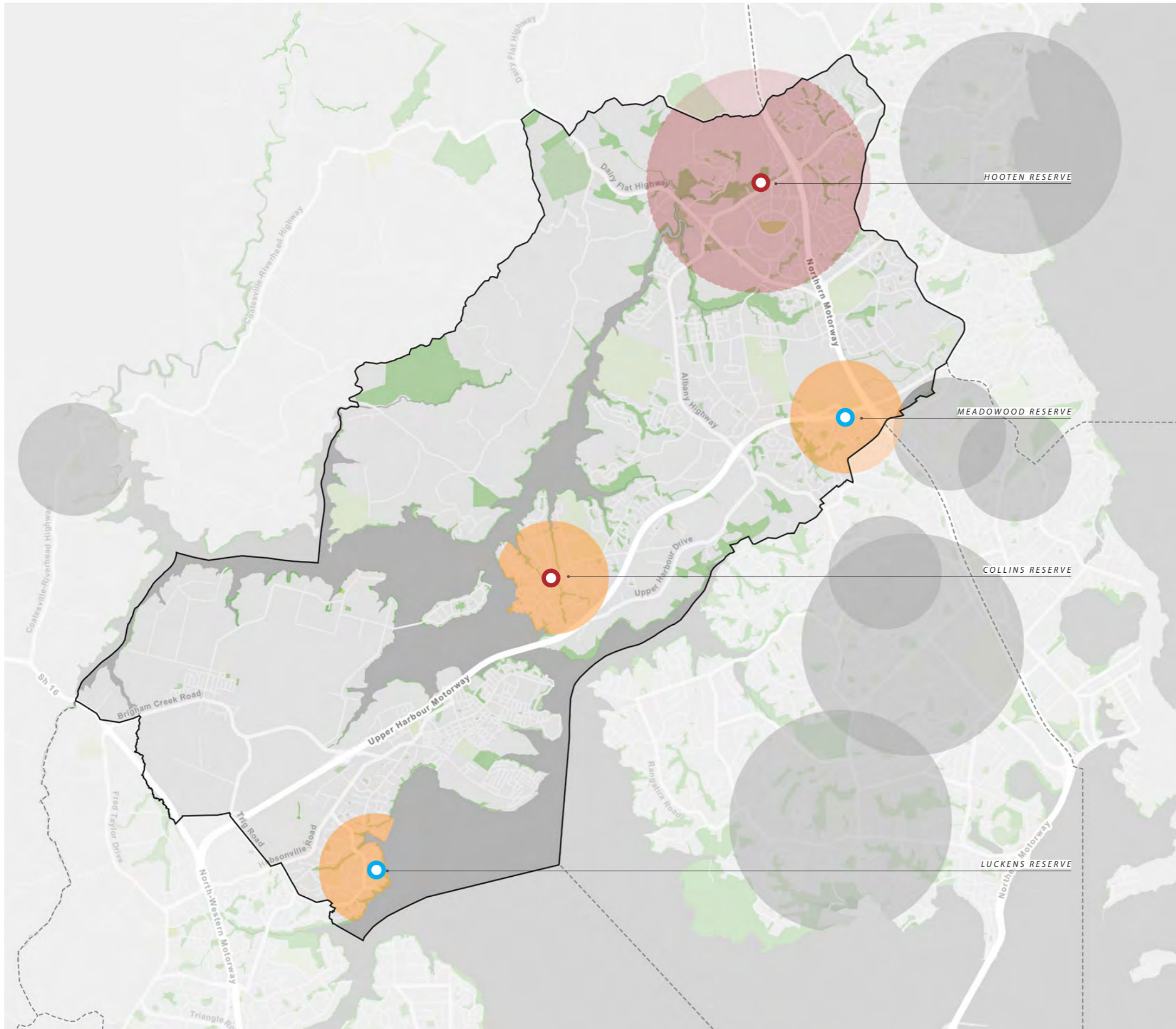
Location	Local Board	Open Space Zoning	Description	Comments
Bill Moir Reserve / Northern Whenuapai Area	Upper Harbour	Informal Recreation	Neighbourhood park with playground, gravel path circuit with fitness equipment, shade structure and toilet facility. The park is land locked and accessed from a discrete entrance off Waimarie Road, with limited surveillance from adjacent residential properties.	From a network perspective, an opportunity exists to address a geographic gap in wheeled recreation provision at a neighbourhood level. However, its scale and existing elements facilities limit capacity to accommodate no more than the provision of pump or skate elements as part of an upgrade to existing perimeter pathway. Moreover, the Whenuapai Structure Plan stipulates that 11 new neighbourhood parks, two neighbourhood/civic spaces, two suburb parks and a sports park will be required to meet the open space demands for the new communities. It is therefore recommended that potential alternative opportunities should also be investigated to address identified network gaps in the northern Whenuapai area.
Whenuapai Town Park	Upper Harbour	Informal Recreation	A neighbourhood level park and associated play facilities. Includes a short serpentine path as part of the playground that connects to loop walkway in the adjacent open space area. Incorporates grade change and rolling seat feature which has skateboard deterrents on the exposed edges.	Facilities / pathways are usable by scooters and bikes though presence of skate deterrents illustrates wheeled recreational activities are not encouraged and contribution to the wheeled recreation network is limited. Capacity to extend play area for wheeled recreation and opportunities is also limited to potential incorporation of LTR elements or graphics of on the main loop path although this may deter from the intent and use of space as the village green and further consultation would be required to establish appetite for adjustment. Given potential catchment overlap it is suggested investment be directed at potential suburb level facilities in other Whenuapai sites.
Whenuapai Reserves	Upper Harbour	Sports and Active Recreation	Council have acquired land for reserves in Whenuapai on the corner of Trig and Spedding Roads and also at the southern end of Brigham Creek Road. These are generally identified for the provision of sports and active recreation purposes, but both sites need further analysis to determine wheeled recreation provision options.	From a network perspective an opportunity exists to address a geographic gap in wheeled recreation provision at a suburb level. This would ensure coverage and provision over a significant extent of the whenuapai area. A pump track facility supported by LTR line marking / elements should be considered to provide for a wide range of user groups. This could be complemented by adjacent neighbourhood level facilities that offer lower level, alternative experiences as part of reserve or playspace development.
Herald Island Domain	Upper Harbour	Informal Recreation	Herald Island Domain services the community at a neighborhood level. There is limited visibility to the reserve facilities which include a community hall, toilets, playspace, basketball hoop and hardstand area.	From a network perspective, an opportunity exists to address a geographic gap in wheeled recreation provision at a neighbourhood level. However, there are several CPTED issues and existing facility location and topography contribute to a general lack of visibility through the park. If wheeled play were to be considered facilities should be limited to the provision of a perimeter bike skills track, potentially with pump run or bumps for added interest. Any development should be considered in an holistic manner including relocation of playspace should funding allow at renewal. A low priority given existing urban fabric, population density and anticipated growth.
Hobsonville War Memorial Park	Upper Harbour	Sports and Active Recreation	Suburb level sports park with playground, car parking and toilet facility and an existing pedestrian/cycle connection across SH18 to Whenuapai. The Hobsonville Bowling Club occupies the northern section of the park and the facility is complemented by adjacent retail / catering amenities on arterial transport link and bus route.	The <i>Strategic Play Provision Assessment</i> (June 2018) recommends the addition of skate elements at teen level and incorporation of a 'Learn-to-Ride' track with creative painted graphics in the secondary carpark. However, Scott Point Sports Park is considered a superior geographic location for investment and it is suggested that any wheeled play provision within this park be limited to a small scale elements and / or line marking associated with perimeter pathway to playspace.
Scott Point Sports Park	Upper Harbour	Sports and Active Recreation	Proposed new suburb level sports park and recreation reserve that will provide for a range of sports, recreational and community activities via sports field and court provision, a multi purpose hub, and a range of play opportunities including a destination playspace, nature play and provision for wheeled recreation via a flexible plaza space.	In principle the diversity offered in the proposed park development will provide for a diverse variety of play types and cater to a variety of ages and abilities. It is understood that the local board support the development of a destination experience park at Hobsonville Point area. However, limited open space opportunities in the Hobsonville area suggest Scott Point would be a logical location for a destination facility as proposed. It is suggested that investment is focused on establishing suburb level pump track and skate facilities to complement the potential establishment of suburb level skate facilities in Luckens Reserve.

OPEN SPACE NETWORK OPPORTUNITIES

Observation Green	Upper Harbour	Informal Recreation	Neighbourhood park. Currently an empty grassed open space surrounded by residential development. A playspace with supporting wheeled recreation elements is currently proposed for this space.	The establishment of a bike skills path incorporating pump bumps and LTR elements / line marking is supported. Consider reviewing existing concept and elevating to provide broader pathway loop and complement proposed pump track at Scott Point.
Greenhithe War Memorial Park	Upper Harbour	Sports and Active Recreation	Greenhithe WMP features a small playground, sports fields, and tennis club. It services the catchment on a suburb level, though playspace provision is of neighbourhood scale.	The existing playspace is scheduled for renewal 2021 / 22 financial year. Investment in the Greenhithe area should be prioritised in Collins Park given the significant geographic overlap between open space / facility catchments.
Pin Oak Reserve	Upper Harbour	Informal Recreation	Neighbourhood Park with generous , flat grassed open space area on the corner of Oakway Drive and Bur Oak Terrace, and a'central' playspace transition to a moderately sloped grassed open space with profiled grassed mounds off Pin Oak Drive.	From a network perspective, an opportunity exists to address a geographic gap in wheeled recreation provision at a neighbourhood level. It is suggested that investment is focused on establishing neighbourhood level pump / LTR bike skills perimeter track to flat grassed open space, and elevate surface, profiling and extent of existing profiled mounds off Pin Oak Drive to establish a pump / jump run, enable skill progression and accommodate older children / youth in the area.
Northwood Reserve	Upper Harbour	Informal Recreation and Conservation	Neighbourhood Park with generous , flat grassed open space areas flanked by residential development to the south, and the Oteha Stream riparian corridor with associated vegetated escarpment to the north. Open space provision includes an existing playground at the termination of Northwood Ave, and existing pathway that connections to immediate residential streets.	From a network perspective, an opportunity exists to address a geographic gap in wheeled recreation provision at a neighbourhood level. Given the proximity to Albany Primary bike skills track and Pinehurst School, it is suggested that investment is focused on establishing neighbourhood level pump / bike skills perimeter track that enables elevated beginner - intermediate skill progression. This could be implemented in the flat grassed open space associated with the existing playground and include upgrade to this aging facility and improvement of landscape setting if budget allows. Note that additional investment to renew and widen existing pathways within the reserve should also be considered long term.
Rosedale Landfill Reserve/Unsworth Reserve	Upper Harbour	Informal Recreation	Rosedale is a closed landfill site with extensive grassed open space area and access road / track. However this has significant issues with landfill settlement and it unlikely to be usable in the short to medium term. Unsworth Reserve is a considered a good alternative option in the catchment in the interim period.	From a geographic perspective an opportunity exists to address a gap in wheeled recreation provision and in tandem with park activation. However, the complexities around development within a closed landfill context are noted. Further investigation and consultation is required to determine feasibility, potential location and extent of MTB facilities including establishing potential complementary relationships with Sanders, Unsworth Reserve and Glen Bay Close Reserve.
Glen Bay Close Reserve	Upper Harbour	Informal Recreation	Neighbourhood Park with generous grassed open space area and playspace adjacent Hugh Green Drive entrance with perimeter path. It is noted that Glen Bay Close is a storm water reserve area with associated overland flow pathways. The playground has been recently renewed and sits outside of overland flow path.	The <i>Strategic Play Provision Assessment</i> (June 2018) recommends the addition of a painted loop perimeter track around the existing junior playspace which could extent or accommodating abstracted learn to ride elements. The strategy also suggests establishing a path network in the wider reserve and associated provision of bike skill elements for intermediate and teen riders. This would address a geographic network gap independent of the potential development of broader / longer distance MTB trails within Rosedale Landfill Reserve or Unsworth Reserve.
Hosking Reserve	Upper Harbour	Informal Recreation	Hosking Reserve is a large (53 Ha comprised of several land parcels) suburb park. A development strategy has been prepared for the park that proposes a range of recreational and community activities within several activity zones. The park also has the potential to offer unique experiences associated with the enhancement of existing regenerating native bush.	The <i>Hosking Reserve Open Space Development and Feasibility Report</i> proposes the incorporation of wheeled recreation / bike skills as part of wider community facilities development within the park. The potential length of walkways and proposed facilities will provide for a suburb level (minimum) catchment. The provision of wheeled recreation facilities within the park has the potential to addresses a geographic network gap in eastern Lucas Creek area, and the park has the capacity to address a suburb or higher level catchment. However, investment will need to be balanced against provision in Sanders` and Hooten Reserves. It is therefore suggested that general wheeled recreation be accommodated as part of the parks shared path network with localised areas providing opportunity for low level skill development. This approach is consistent with the feasibility report, will avoid over investment in wheeled recreation and ensure facilities complement Sanders Reserve MTB (that will provide for skill development and opportunities for more advanced rider experiences) and Hooten Skate / BMX provision.

APPENDIX B

NETWORK GAP ANALYSIS MAPPING



NOTE
 This map locates facilities, identifies existing radial catchment coverage, activity provision and facility type for the Upper Harbour area.
 Refer to Network Analysis and Opportunities for supporting commentary

KEY

Facility Typology

- Skate / BMX Freestyle Facility
- Skate Elements Only

Local Board Boundaries

- Upper Harbour Local Board extent
- Adjacent Local Board Boundaries

Neighbourhood Catchment

- Small circles represent a 1.25km distance or (5min cycle / skate at 15km/hr equating to a radius of 837.5m)

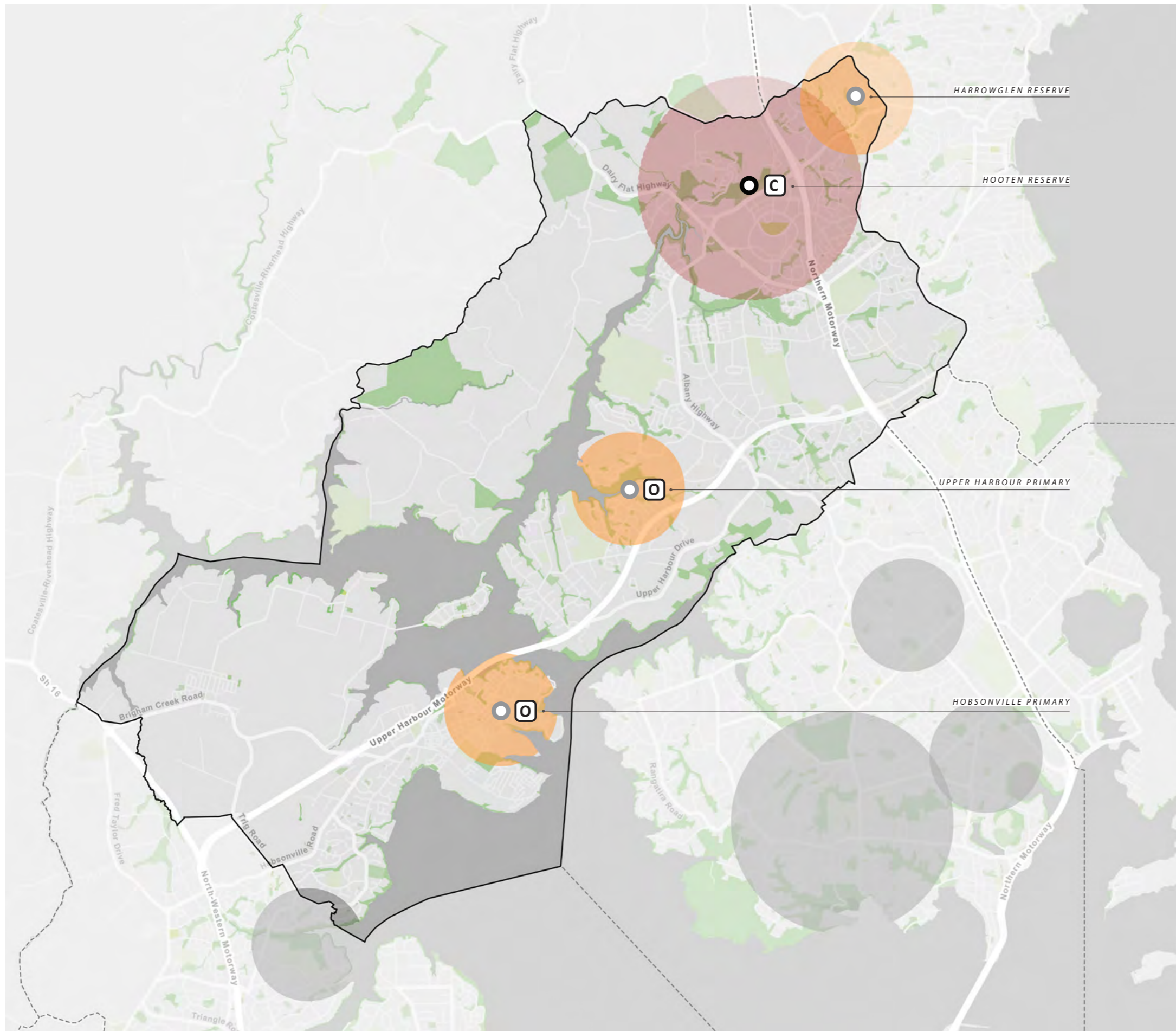
Suburb Catchment

- Large circles represent Suburb Level Catchment and a 10min cycle / skate journey at 15km/hr. This equates to a proxy radius of 1675m

Adjacent Local Board Catchments

- Small and large circles represent neighbourhood and suburb level facility catchments respectively







NOTE



This map locates facilities, identifies existing radial catchment coverage, activity provision and facility type for the Upper Harbour area.

Refer to Network Analysis and Opportunities for supporting commentary


KEY Facility Typology

-  Pump / Bike Skills Track
-  BMX Club Facility


Local Board Boundaries

-  Upper Harbour Local Board extent
-  Adjacent Local Board Boundaries


Neighbourhood Catchment

-  Small circles represent a 1.25km distance or (5min cycle / skate at 15km/hr equating to a radius of 837.5m



Suburb Catchment

-  Large circles represent Suburb Level Catchment and a 10min cycle / skate journey at 15km/hr. This equates to a proxy radius of 1675m

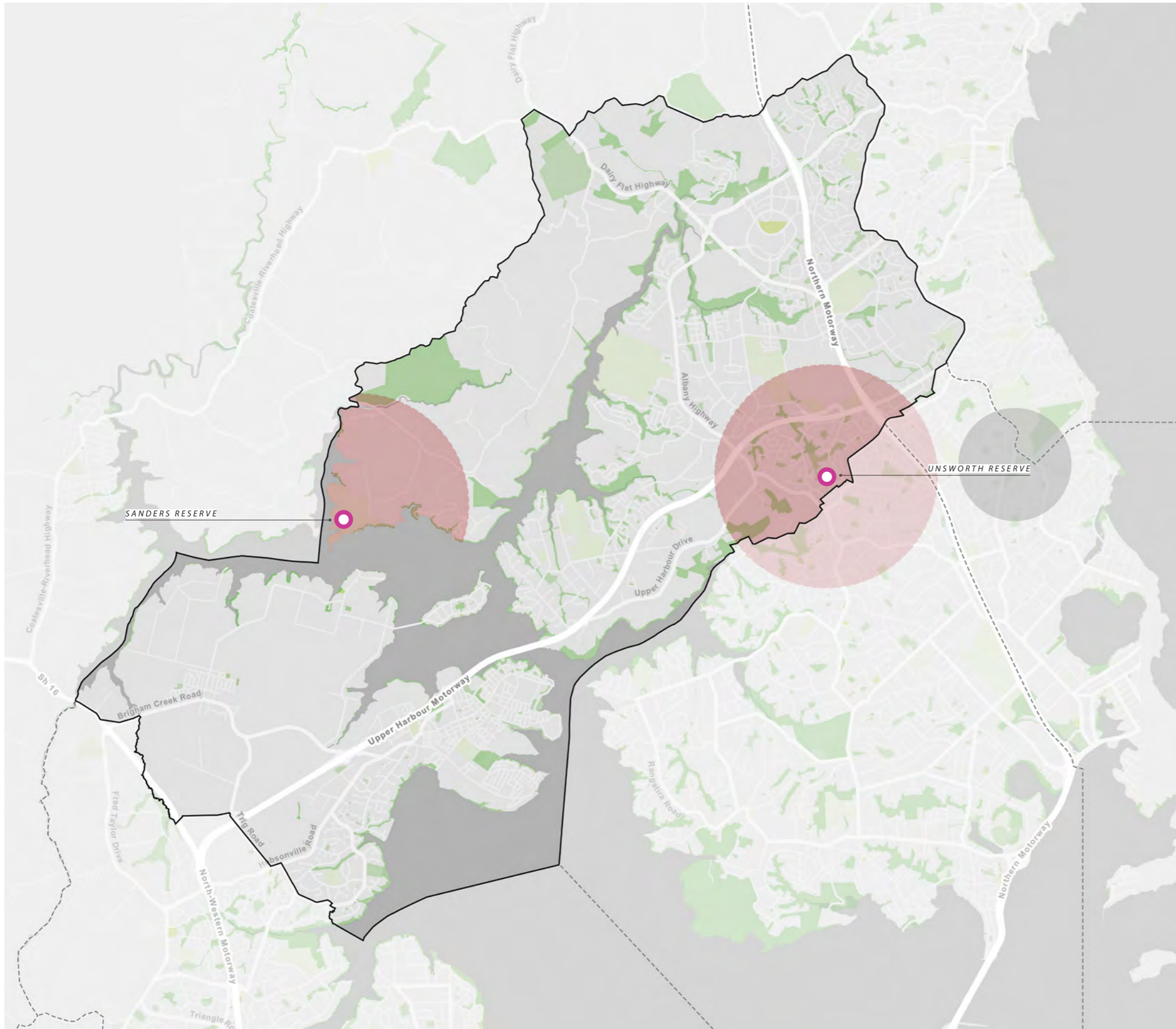
Adjacent Local Board Catchments

-  Small and large circles represent neighbourhood and suburb level facility catchments respectively

Non Council Facilities

-  Facility open to the public after hours
-  Facility closed to the public





NOTE

This map locates facilities, identifies existing radial catchment coverage, activity provision and facility type for the Upper Harbour area.

Refer to Network Analysis and Opportunities for supporting commentary

KEY

Facility Typology

○ MTB Facility

Local Board Boundaries

— Upper Harbour Local Board extent

- - - Adjacent Local Board Boundaries

Suburb Catchment

Large circles represent Suburb Level Catchment and a 10min cycle / skate journey at 15km/hr. This equates to a proxy radius of 1675m

Adjacent Local Board Catchments

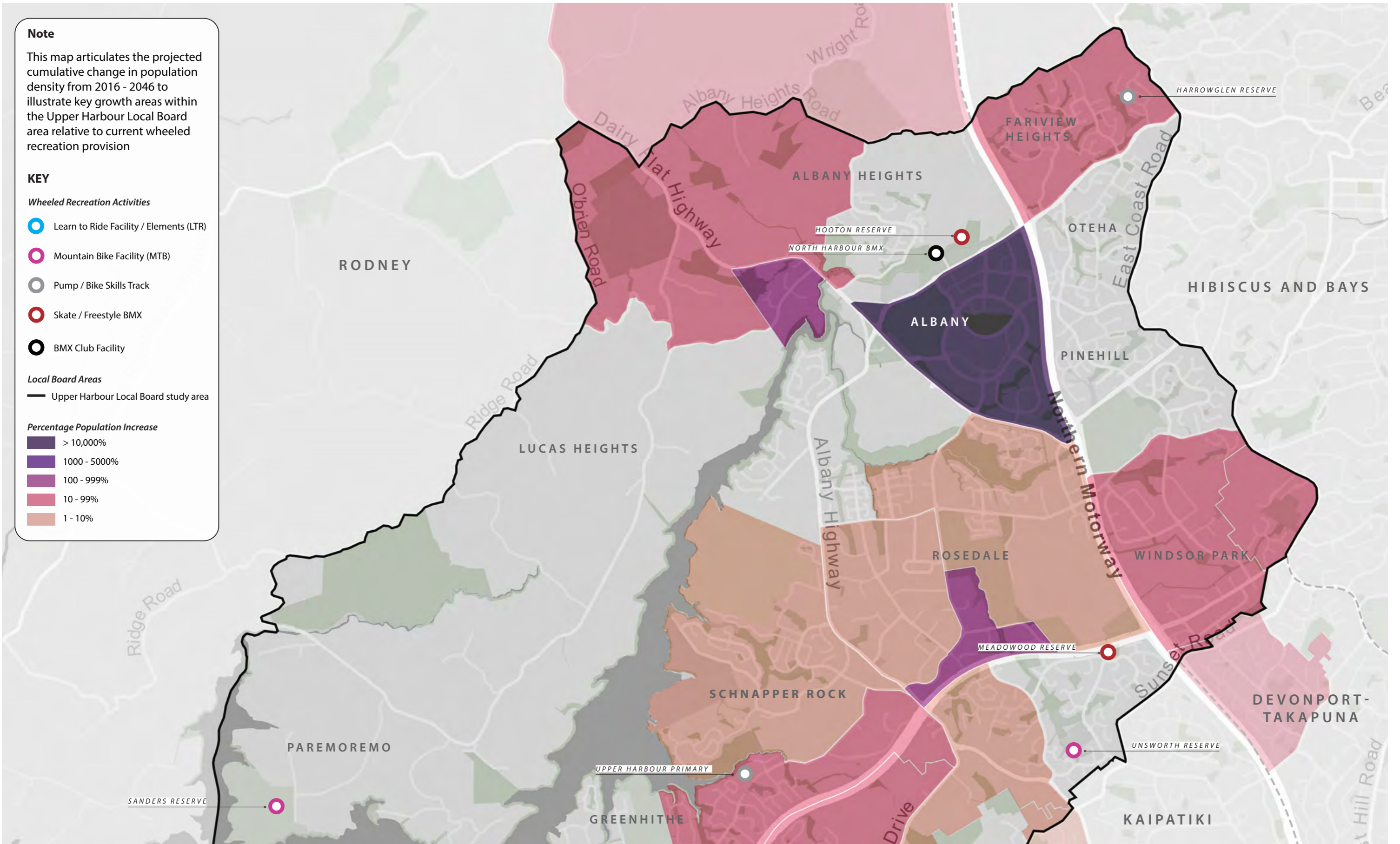
Small and large circles represent neighbourhood and suburb level facility catchments respectively



APPENDIX C

POPULATION DENSITY AND GROWTH MAPS

POPULATION GROWTH MAP 01



Note

This map articulates the projected cumulative change in population density from 2016 - 2046 to illustrate key growth areas within the Upper Harbour Local Board area relative to current wheeled recreation provision

KEY

Wheeled Recreation Activities

- Learn to Ride Facility / Elements (LTR)
- Mountain Bike Facility (MTB)
- Pump / Bike Skills Track
- Skate / Freestyle BMX
- BMX Club Facility

Local Board Areas

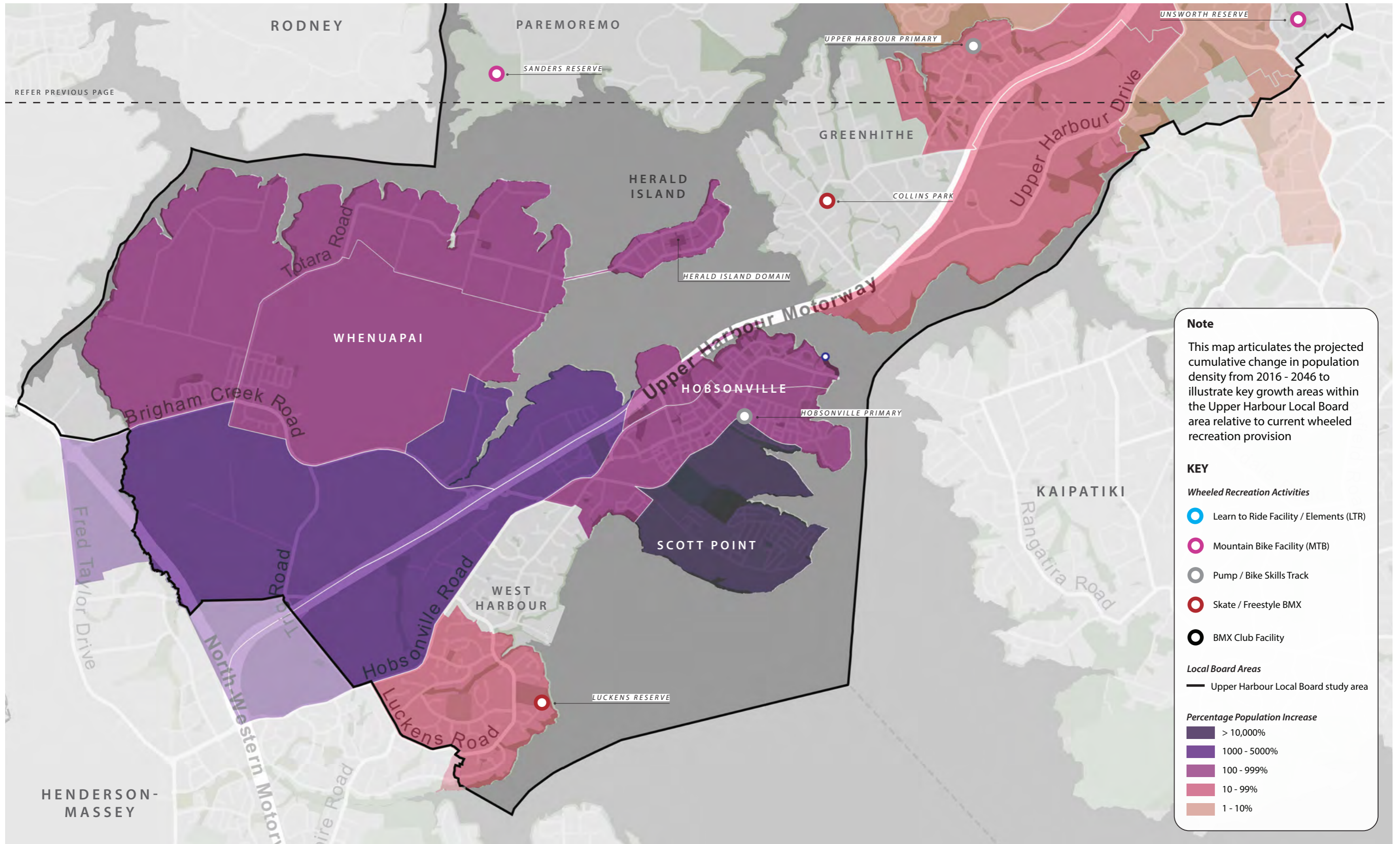
- Upper Harbour Local Board study area

Percentage Population Increase

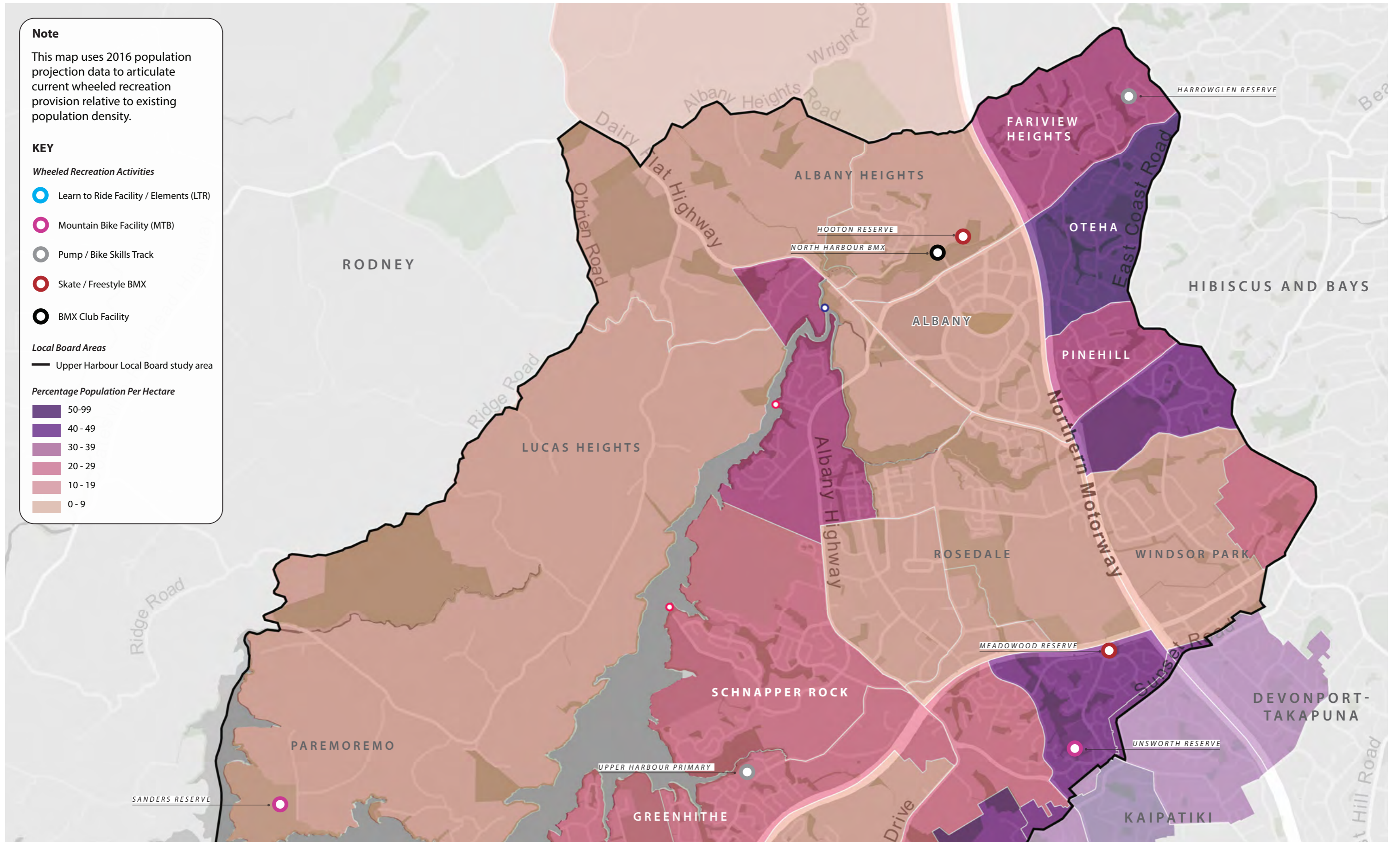
- > 10,000%
- 1000 - 5000%
- 100 - 999%
- 10 - 99%
- 1 - 10%



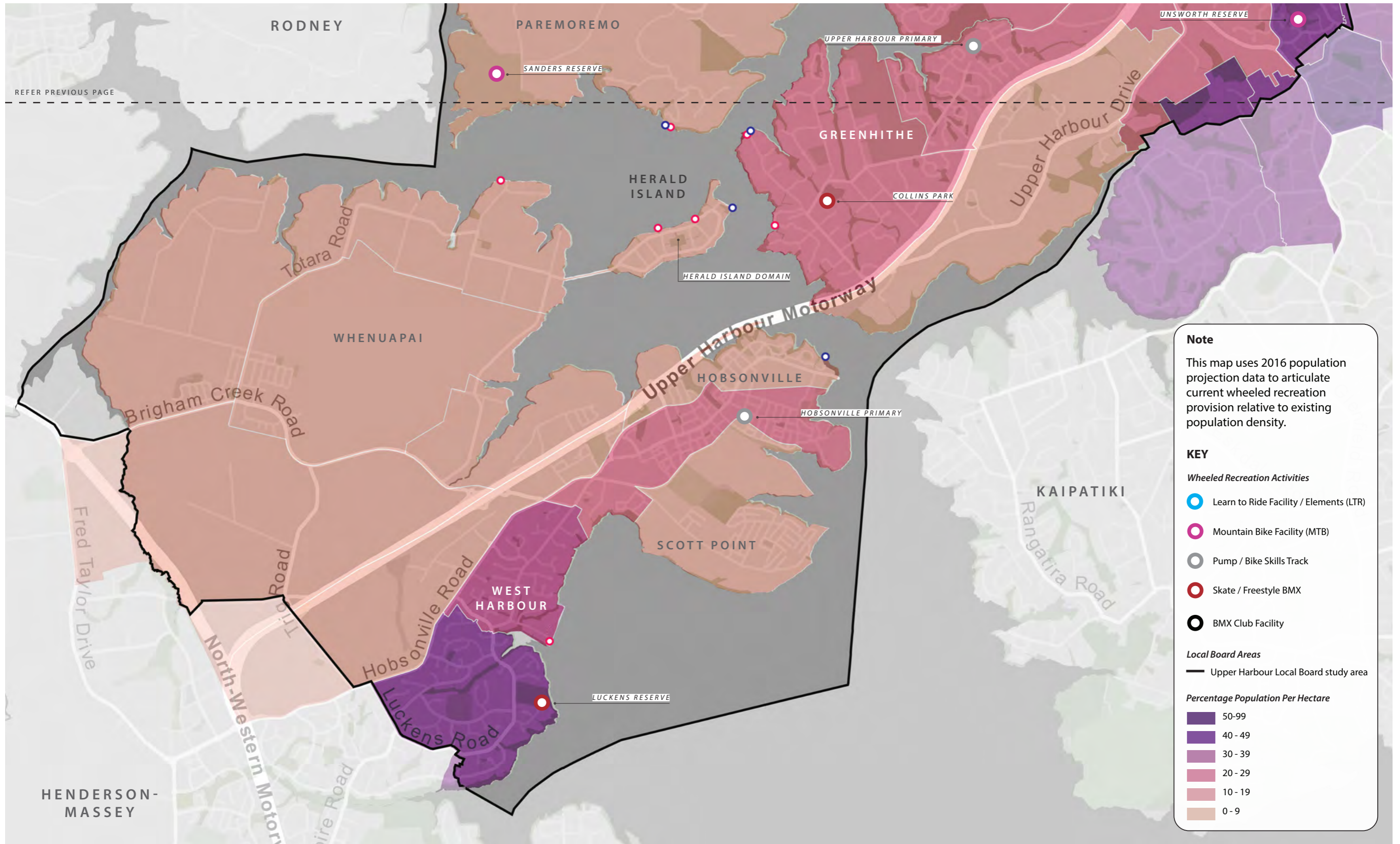
POPULATION GROWTH MAP 02



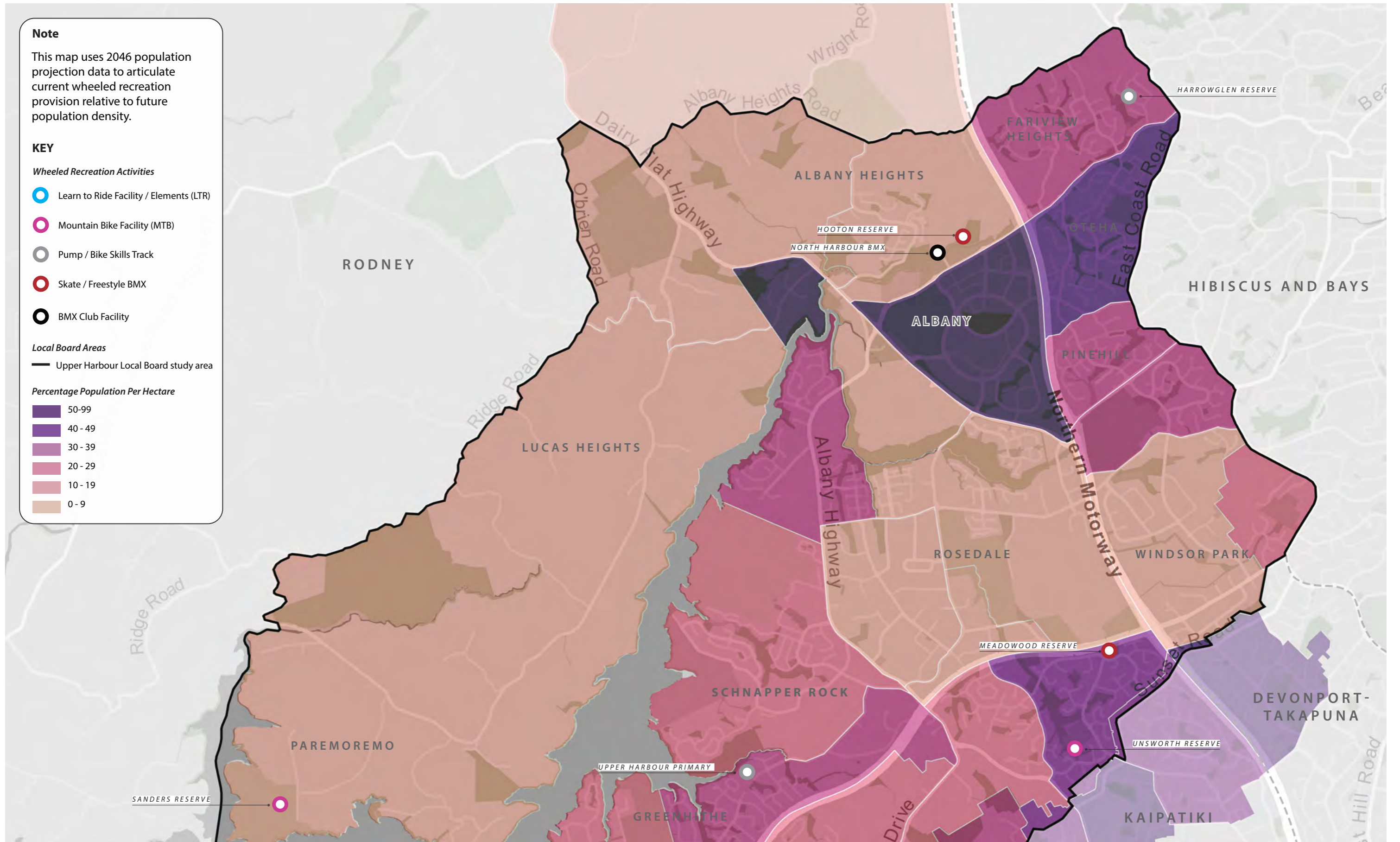
EXISTING POPULATION DENSITY MAP 01



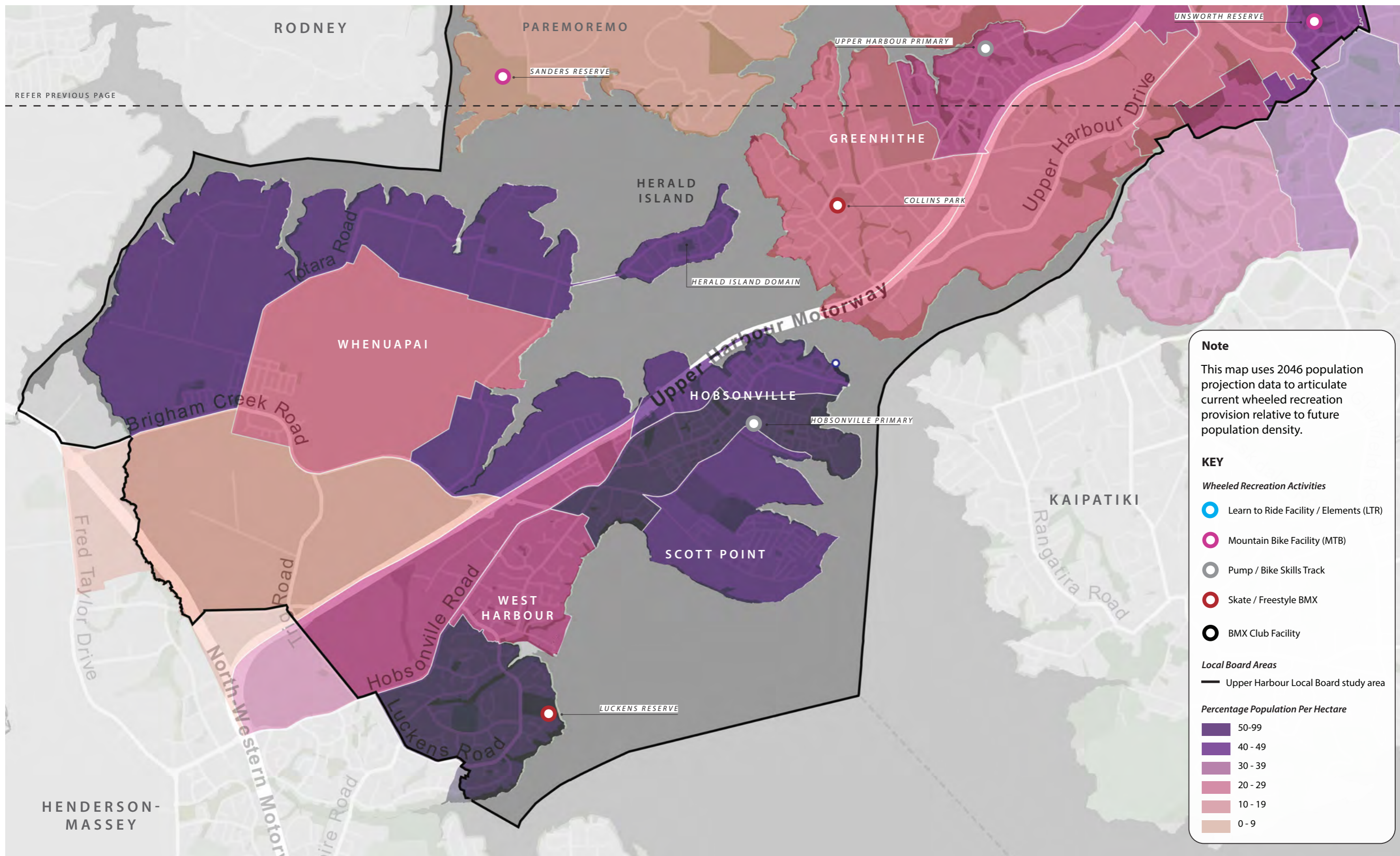
EXISTING POPULATION DENSITY MAP 02



FUTURE POPULATION DENSITY MAP 01



FUTURE POPULATION DENSITY MAP 02



APPENDIX D

WHEELED RECREATION DEFINITIONS

DEFINITIONS AND RATES

INTRODUCTION

The role of the definitions is to enable the assessment of function and provision in a systematic manner.

The following identifies the key terms and assessment parameters used in this report to classify and evaluate wheeled recreation provision relative to existing context and proposed typologies.

The definitions and parameters are intended to provide clarity with regard to decision making in the reporting process, and as resource to guide future design development and review as applicable.

It is noted however, that definitions and parameters are neither fully comprehensive nor definitive. They articulate key considerations as they relate to level of service, scale, likely benefits and the merits different types of facilities.

SKATEPARK TYPOLOGIES

The following outlines attributes of skate park typologies and associated provision.

NEIGHBOURHOOD SKATEPARKS

Neighbourhood skateparks provide the immediate local community with a selected range of skate equipment with a focus on accommodating beginner and intermediate skill level.

Neighbourhood facilities provide skate opportunities for skill progression of children under 10 years of age to complement community and destination skatepark provision at a network level.

Skatepark Scale

- Neighbourhood playspaces that accommodate an acceptable baseline provision of experience are typically $\pm 400\text{m}^2$ in area.

Skate Provision

- Neighbourhood skateparks should provide a range of entry level features to accommodate beginner to intermediate level skaters (typically >10 years of age)
- A neighbourhood skatepark would typically accommodate one or two skate disciplines and up to 3 element variations
- The skatepark should be supported by neighbourhood level facilities including street furniture, and social spill out areas

Catchment Area

- 1.25km distance (or 5min cycle / skate @ 15km / hr). This equates to a radial proxy assessment radius of 837.5m

SUBURB SKATEPARKS

Suburb skateparks provide the community with a selected range of skate equipment with a focus on accommodating beginner and intermediate skill level.

Skatepark Scale

- Suburb skateparks that accommodate an acceptable baseline provision of experience are typically $\pm 900\text{m}^2$ in area.

Skate Provision

- Suburb skateparks should provide a range of features to accommodate intermediate level skaters, and include elements for beginners to enable skill progression (typically 10+ years of age)
- The skatepark should include a several skate disciplines and up to 5 element variations with capacity to accommodate both community events
- The skatepark should by suburb level facilities including street furniture, drinking fountains, social spill out areas and preferably toilets

Catchment Area

- 2.5km distance (or 10min cycle / skate @ 15km / hr). This equates to a radial proxy assessment radius of 1675m

DESTINATION SKATEPARKS

Destination skateparks provide the community with a wide range of skate equipment for all skill levels.

Skatepark Scale

- Destination skateparks that accommodate an acceptable baseline provision of experience are typically $\pm 1500\text{m}^2$ in area.

Skate Provision

- Destination skateparks should provide a range of challenging features to accommodate intermediate and advanced level skaters (typically 13+ years of age)
- The spatial layout and combination of elements should provide for several different 'lines' through the park and upon exit from features.
- A separate beginner's area should be provided where space allows up to approx 400m² in area
- The skatepark should include a wide variety of skate disciplines (street and flow bowl elements for example) and have capacity to accommodate both community and national events
- Unique skateable art installations or designed features relevant to context may also be considered for inclusion
- The skatepark should be supported by suburb or destination level facilities including toilets, street furniture, drinking fountains, social spill out areas and parking
- Depending upon arrangement and design, destination skatepark facilities have the potential to accommodate national level competition.

Catchment Area

- 2.5km distance (or 10min cycle / skate @ 15km / hr). This equates to a radial proxy assessment radius of 1675m
- It also must be noted that patrons will travel significant distance outside of immediate catchment by vehicular transport in order to access quality facilities

LEARN TO RIDE (LTR) TYPOLOGIES

The function of learn to ride facilities is to provide the opportunity for individuals to develop into confident, capable riders who will have the basic skills necessary to prepare them for riding in a range of environments.

They are vehicular free and typically non technical in nature, though some facilities may offer the opportunity for technical progression whilst still accommodating beginners.

Riders should be able to ride their bike on a all weather surfaces with confidence in their bike handling ability. They will be able to mount, travel and get off their bikes / wheeled craft safely, brake effectively, corner, and / or ride with other riders without feeling anxious.

Learn to ride facility typologies include flat surfaces / courts, pathways, dedicated bike skills, pump track and model road facilities. The following outlines the key attributes of these typologies.

FLEXIBLE ALL WEATHER SURFACES

Flexible all weather surfaces also provide for the development of entry level motor and balance skills.

Where dedicated facilities are not available, courts and pathways provide an important contribution to the wheeled recreation network, as they can be utilised for the purpose of learning to ride in a safe environment.

MODEL ROAD FACILITIES

As the title suggests, dedicated model road facilities replicate elements experienced in road environments as a micro scale.

The facilities typically serve to provide a safe environment to educate riders on road rules and safety and may include roundabouts, intersections, pedestrian crossings, signage, signals and road marking.

Facilities range in scale, with an appropriate sized small facility requiring 1500m² + to provide a meaningful range of elements and arrangement.

BIKE SKILL TRACKS

Bike skill tracks typically provide for the development of entry level motor and balance skills.

Skills courses may include ramp, low platform, tunnel, roller / pump bump, slalom see saw and similar elements connected by a flat or gently undulating track.

Pump tracks are also a form of bike skill track for all user groups, but represent a step up in momentum based bike handling and skills progression. Refer below for additional information.

PUMP TRACK TYPOLOGIES

Pump tracks provide opportunities for skill development and progression for a wide range of user types (bike, skate, scooter) and age ranges.

The tracks are designed to build handling skills including cornering and weight distribution that aid in generating and managing momentum.

Consolidating bike handling skills and progression is all about muscle memory and practice, and a pump track allows you to roll through a variety of features repeatedly to build muscle memory until it becomes second nature.

NEIGHBOURHOOD TRACK

Track Scale

- Dedicated neighbourhood pump tracks are small scale facilities typically ± 40 linear metres in length (or $\pm 200\text{m}^2$ area)

Track Provision

- Neighbourhood facilities provide for an elevated level of provision and experience over simply including pump bump skill elements as part of path network
- Track arrangement is simple in layout (typically a loop) which has the capacity to accommodate approx. 3- 5 beginner to intermediate level users at a time depending upon length of straights
- A neighbourhood pump track would typically accommodate 2 - 3 features per straight, with straights linked by a simple berm or cambered corner

SUBURB TRACK

Track Scale

- Dedicated suburb pump tracks are medium scale facilities typically ± 80 linear metres in length (or $\pm 400\text{m}^2$ area)

Track Provision

- Suburb facilities provide appropriate features and profiling to enable skill progression of beginners to intermediate level users, whilst providing variety and interest for the experienced at increased speed
- Track arrangement is typically, but not necessarily linear and has the capacity to accommodate 10 - 15 beginner - experienced level users at a time
- A suburb pump track would typically accommodate 5 - 6 features per straight linked by several berm or cambered corners

DESTINATION TRACK

Track Scale

- Dedicated destination pump tracks are large scale facilities typically $\pm 120 - 200$ linear metres in length (or $600 - 900\text{m}^2 +$ area)

Track Provision

- Destination facilities provide appropriate features and profiling to enable skill progression of less experienced riders. However, features and arrangement are designed in a manner that is fun, but challenging for the experienced when riding at increased speed
- Track arrangements can be linear, but are typically comprised of a series of interlinked switchback (zig-zag) sections with several features linked by cambered corners.
- Destination facilities have the capacity to accommodate 20 - 25+ users at a time depending upon length of track, level of experience and speed.
- Depending upon arrangement and design, destination facilities also have the potential to accommodate national and international UCI (Union Cycliste Internationale) level competition.

APPENDIX E

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