Investing in Open Spaces and Community Spaces

The method to project the costs for investing in open spaces and community spaces over 30+ years for the Auckland region.

These cost projections update the July 2024 analysis to inform plans for delivery and the 2025 Development Contributions Policy.

The method and results focus on greenfield areas including the priority areas of Drury and the inner north west. The Auckland Housing Programme areas: Mt Roskill, Tāmaki, and Māngere are also a focus for investment.

19 May 2025

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Contents

This document adds to the high level summary in the *Methodology for Calculating DCs, Auckland Council's cost allocation methodology, 2024.* Section 5 and 6 are copied from that document with additional detail appended here.

Introduction

This summary document describes how council has estimated the investments needed for open spaces (reserves) and community spaces over 30 years and beyond to support growth. The updated cost projections cover the whole Auckland Region providing an information base for future planning and the Development Contributions Policy.

New growth investments in community infrastructure are expected within the period of the 2024-2034 Long-term Plan (LtP) and beyond. The projections use the most current information and are updated at least every three years to apply the commitments in the LtP. These updates provide an opportunity to apply any new information.

This summary supplements *the Methodology for Calculating DCs, Auckland Council's cost allocation methodology, 2024*. That document provides a high level overview of the council investments to support growth, including open spaces, community spaces, and transport and water infrastructure. The *Methodology for Calculating DCs* also details how housing units and demand factors are applied for the Development Contributions Policy.

The Development Contributions Policy includes investments in the Investment Priority Areas (Inner North-West, Drury, Mt Roskill, Tāmaki, Māngere) over 30 years to 2054, and over 10 years in other areas. However, while the investment needed for community spaces and open spaces was reviewed over more than 30 years for the whole region, the DC Policy for each area only included the relevant 10 year or 30 year period of investment.

To assist the reader, the sections from the *Methodology for DCs* have been copied here so the first part is numbered Section 5: Reserves Investment followed by Section 6: Community Spaces. The **additional information about costs for open spaces and community spaces and the share attributable to growth is appended to the relevant sections.**

Unless noted within this document, all prices stated exclude GST and include the impact of inflation.

The changes between the information prepared in July 2024 for consultation on the DC Policy and the final projections applied now May 2025 include:

- a small change to the land price escalations expected in 2025/26 and 2026/27, resulting overall in 1.5% lower land prices over the projection period. Similarly a slight increase in the construction cost inflation factors for the same years resulted in a 0.9% overall increase in development costs for the projection period.
- These changes were applied in the model with increased and decreased costs accordingly. The slightly decreased land price means the open space acquisition budget of $397m could acquire a small amount of additional land by 2034, resulting in less required after 2035, decreasing costs over the long term.

Location-specific changes were

- the growth forecasts updated timing for north Opaheke to develop resulting in some parks being acquired sooner.

- Changes in the funding areas and beneficiary calculations over which Development Contributions will be charged for some community spaces: library projects previously listed in DC Policies were retained as “Auckland-wide” to align with historical assumptions, the beneficiary calculations for Whau aquatic-recreation centre were updated to account for overlapping provision between the new investments and adjacent spaces like Mt Albert aquatic, and the cause attribution was adjusted for Tamaki-Pamure library spaces to focus on the marginal amenity for the new space caused 100% by the new growth. These changes had very small impacts on the DC price to be charged.

Reserves investment

5.0 Reserves Investment

This Section 5.0 is copied from the *Methodology for DCs*.

Appendix A has more detail about reserves planning and the cost estimation process.

Appendix B summarises the open spaces to be acquired and developed.

Appendix C adds more information to Section 5.4 about how the funding areas are defined and the growth shares for parks costs are determined.

5.1 Reserves planning

Planning for reserves starts by forecasting demand for future open space using the following inputs:

- projected growth based on the Auckland Growth Scenario model (AGS23v1), based on the vision for how and where growth will happen over the next 30 years is set out in the Future Development Strategy Policy Statement
- structure plans that identify the nature of development within growth areas.

Additional reserve acquisitions planning inputs are:

- the Open Space Provision Policy 2016, which sets provision metrics which guide the type, size and location of reserves required to support growth.
- the requirements of the Parks and Open Space Acquisition Policy 2013, which sets out the process by which the council prioritises and acquires land for parks and open space.
- how much land will cost based on previous expenditure and a projection of future land prices (refer, the Land Development Stage Price Model to be covered in later appendices).

Additional reserve development planning inputs are

- local area development plans and/or open space network plans
- how much infrastructure will cost based on a projection of future prices
- local board priorities as set out in individual local board plans.

Reserve development is of two broad types:

- development of new open space, generally on land acquired for that purpose in greenfield or large-scale brownfield development areas
- redevelopment of existing open space to support more intensive use that arises from population growth within the relevant catchment.

See Appendix A for further information about aspects of the Reserves Planning process

5.2 Project Requirements

The requirement for parks is assessed in accordance with the provision metrics set out in the council's Open Space Provision Policy[1]. These provision metrics identify the:

- amount of land required for different park types
- area to be served for each park type based on a walking distance catchment, with reference to the density of housing to be provided. For greenfield areas such as Drury, a radial distance is used as a proxy for the walking distance catchment.

Civic, suburb, sport and neighbourhood parks, and greenway connections provided by council in growth areas have a share of costs funded by Development Contributions. Civic parks are provided in commercial areas (town centres and smaller centres called local centres). Suburb, sport and neighbourhood parks are in residential urban areas.

Programme budgets for reserve acquisitions are committed to specific projects over time. The council does not publicly detail its purchasing intentions in advance to preserve its negotiating position. Indicative locations may be found in area structure plans and private plan changes.

On 15 May 2025 Council adopted the Manaaki Tāmaki Makaurau: Auckland Open Space, Sport and Recreation Strategy in place of previous policies including the Open Space Provision Policy and Open Space Acquisition Policy. Resolutions to implement it included that the 2026 Annual Plan and 2027 Long-term Plan prioritise open space acquisitions early in the land development process, and that the next Development Contribution Policy review take account of the new strategy.

5.3 Reserves Cost Estimation

For parks we assume that larger sport and mid-sized suburb parks will be acquired earlier in the development cycle than neighbourhood parks, as the former require large land blocks. We apply the relevant dollars per square metre rates for from the Land Development Stage Price model to the phased requirements for park land to be purchased at each stage, and use the "super-lots" value estimates for 1000-4000m2 blocks if part of the acquisition is projected at the "sub-divided into urban lots" stage.

5.3.2 Reserve Development Costs for Parks

The cost of developing new parks is modelled based on a standard provision of amenities required for each park type. Almost all new park development occurs in greenfield areas. Our modelling is informed by the cost of recent park developments to develop a cost per square metre rate based on the level of amenity to be delivered for each park type. These rates are then multiplied by the total area of each park type to be delivered and phased over time dependent on the type of park and the assumed acquisition timeframe.

The costs for upgrading neighbourhood, suburb and civic parks in existing urban areas are modelled several ways. Impending developments in the near term are costed in the Regional Work Programme recently approved. Costs for projects from year four onwards are estimated using needs analyses by

[1] www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-policies/Pages/open-space-provision-policy.aspx, especially page 30-40 for park size and location guidance.

parks specialists and local network reviews. Costs provided present a mix of renewals and growth elements. See the following ‘Assessing the Growth Share section’.

Greenways and connections are an essential open space infrastructure on parks and through neighbourhood connections, and along waterways. While transport provision covers movement of people for the transport system, council also invests in trails for recreation purposes. Committed greenway connection projects are examined for inclusion in the Development Contributions Policy, which the open space provision policy states are those parts not on road corridors and not on riparian margins – thus the project costs for new path sections on council reserves and through greenway connections are considered.

See Appendix A for more information about aspects of the Reserves Cost Estimation process

5.3.3 Sports fields

The costs to provide sports fields requires some acquisition and development of new sport parks, and upgrading facilities at existing parks for more playing and training time. Sports fields provide for a range of uses, including playing field sports, informal recreation, walking paths, enjoying nature, and playground and exercise trails. The latter of these are considered local amenities, and are similarly also provided on neighbourhood and suburb parks. The costs for these local amenities on sport parks are counted as for local parks.

Sports field use constraints arise for winter football sports due to weather and high participation rates, so while court sports and other sport uses like cricket and hockey also present demands for council provision, the primary constraints and therefore investment relate to playing surfaces, lighting and ancillary facilities like changing rooms for winter sports. The broad modelling assumptions for the winter sport codes reasonably covers investments needed for other sport uses as well.

Council operational monitoring records capacity needs and supply variations by 70 local areas, for weekday and weekend winter use. Monitoring shows that adjacent areas and use types can adjust so supply and demand as an Auckland-wide analysis is considered balanced in the most recent analysis.

As population grows, more participants place demands for team sport training and competition. Future population growth will express demand for investment in acquisition and development of new parks, and upgrades of lighting, surfaces and changing rooms to accommodate more use per week. As the current state represents balanced supply and demand, almost 100% of new investment is caused by, and provides benefits to new growth.

The operational monitoring and future projection of needs by population projects the number of usage hours needed in the next 10 years, and the costs for that. The costs and hours to be provided by planned acquisitions in that time and development of fields in that time is recorded as planned investment in years one to four, and the costs for the region of the remainder to deliver the projected usage hours is appended to the cost projection for years 5-10.

5.3.4 Contingency for Parks projects

Contingency allowance is included for reserves development for the costs for specific projects as adopted in the Long-term Plan and associated Regional Work Programme for years 1-4.

No contingency allowance is applied to reserves acquisition or reserves development costs for park upgrades in the outyears (year five onwards) or new park development as costs are projected on an average basis for the network of parks. Any discrepancy between amount of funds collected and final project costs for the network of parks can be managed by adjusting the scope of the final project design, and through choices of regarding the size and location of parks within the network.

See Appendix B for further information about the open spaces to be acquired and developed

5.4 Assessing Growth Share of Parks Costs

The Open Space Provision Policy provides for new parks in greenfield areas (including those in mature development) by zoning density and walking distance for various park types. By definition there is no renewal component, and acquisition of and development these parks is 100% caused by new growth, and the benefits are shared between existing and new residents.

In existing urban areas there are few neighbourhood park gaps and investment is prioritised to optimise existing parks for existing and new residents. If a park acquisition is progressed via naturally occurring opportunities, the cause of the acquisition is not growth but a long-standing gap.

Most park development projects in existing urban areas have elements of renewal and growth. Some growth elements are caused by land exchanges, where large scale developers 'swap' land with council for better housing development configurations and park access and flow. The development costs for the parts exchanged are considered caused by development.

Upgrades could include adding new playgrounds, paths, seating, courts or informal play, or planting where there was none before, or moving from a basic swing set to a "local-sized" or destination-sized playground, or widening or extending the path.

In the existing urban Auckland Housing Programme (AHP) areas (Tāmaki, Mt Roskill, and Māngere) many park upgrades are planned and projected to accommodate new growth. The existing level of service and additional amenity was assessed by inspecting park upgrades proposed, and assessing the cost of the upgrade portion, against collective costs for each area provided by park specialists. Whole upgrades like court surfacing are invariably renewal, the average for investments with a mix of renewal and growth found the existing service portion was between 25-35%, hence 30% was applied to the overall investment projected for each AHP area, and 70% caused by new growth.

The council prefers purchasing land rather than contributions in-kind in lieu of development contributions, where purchase price is based on a willing-buyer/willing-seller arrangement for best use of land at the applicable land development stage. The provision policy expects this arrangement will ensure the land meets the required configuration and location.

The council also does not have any expectation of third-party funding for reserve acquisition or development. As such, no allowance is made for developer mitigation works or third-party funding, except where historic agreements exist. Aside from riparian margins vested under the Resource Management Act or any Infrastructure Funding Agreement arrangements, developers may offer additional input to provide paths, pocket parks or other local amenity. While not a substitute for development contributions, these are assessed for network alignment and ongoing maintenance commitments.

See Appendix C for further information about aspects of Assessing Growth Share of Parks

5.4.1 Reserve costs allocation to Funding Areas

The council uses the catchment areas (walking distance) identified in the Open Space Provision Policy 2016 to determine area of benefit. Catchments will vary depending on the type of park. Projects are allocated to funding areas, balancing the differentiation of costs and benefits across the funding area, so costs and benefits are fairly shared and the number of funding areas is simple for payers to understand and for council to administer.

Reserves are allocated to funding areas for acquisition and development as follows:

- Regional funding areas: sports fields
- Local funding areas: Civic, Suburb, Neighbourhood parks, Greenways

In practice this means there are separate local funding areas for Red Hills, Whenuapai, Scott Point, but Riverhead/Huapai/Kumeu are combined as one.

New funding areas for Mt Roskill, Tāmaki and Māngere focus costs and benefits on those areas for which higher investment is projected, also in greenfield areas like Warkworth, Hibiscus, Drury, Hingaia, Takaanini, and Pukekohe and outlying areas on the coasts as large collective funding areas.

Reserve development across other areas considered the maturing development in Flat Bush and the North Shore and incremental investment recognising growth and renewal in other urban areas.

See Appendix C for further information about how funding areas are defined

5.4.3 Demand factors

The council's levels of service for open space are set in council's relevant policies and aim to provide Auckland residents with easy access to parks.

Residential developments differ in terms of their occupancy and hence potential demand for and benefit from parks. Residential development types have been determined based on average occupancy for different types and size of development e.g. detached dwelling or apartment.

Residential development types are charged for reserves based on their occupancy relative to the occupancy of a detached residential dwelling of between 100m2 and 249m2. The average occupancy of a detached residential dwelling unit of between 100m2 and 249m2 is 3.1 falling to 2.7 by 2050. Other development types have lower average occupancies and have unit of demand factors set at lower levels e.g. apartments of between 100m2 and 249m2 have a unit of demand set at 0.75 of the charge for detached residential dwelling of the same size. This analysis was informed by dwelling size and occupancy rates obtained from Statistics New Zealand.

New parks and open space are not provided by the council in areas that are purely commercial in nature e.g. industrial parks.

Appendix A – More information about reserves planning and costing

Planning for open space development differs from community spaces. Delivering a new community facility (e.g. library or pool) generally requires a significant capital expenditure in a specific place to serve a large catchment aligned with the provision metrics in the Community Facilities Network Plan.

On the other hand, delivering a local open space network requires multiple smaller investments to acquire individual pieces of land or develop them. Each investment contributes incrementally to delivering the required network over several years. For example, a recently acquired neighbourhood park provides basic amenity with simple planting. Paths, a playground, or a half court may be added over years, with each stage adding to the capacity and functionality of the local network.

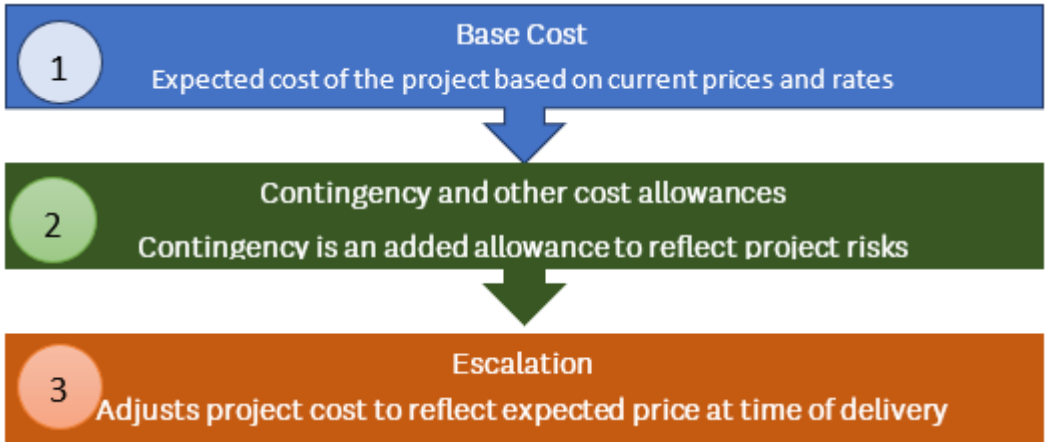
There are over 300 open space initiatives expected to be delivered to meet growth needs over the next 30 years and beyond. Typical open space investments range from $0.5m to $10m.

Most of these 300 open space initiatives are new parks to be acquired. The council identifies that around 275 new parks are needed to support growth over 30+ years. Almost all of these are in greenfield areas. The costs to acquire a local parks network to support growth needs depend on timing, location and size of the open spaces needed.

Three stages for cost estimation: base costs, contingency, and escalation

There are three key stages to establish a project cost for the required investment in the local open space network. The method considers the Base Cost, Contingency for risk, and Escalation as shown in the diagram below:

Fig-1 Stages to produce cost projections for open space and community spaces



Stage 1: Base Costs

The Base Cost phase considers the projects that are required for open spaces using the following inputs:

- the sub-areas identified in the Future Development Strategy (FDS) and the focus areas in the Auckland Housing Programme (AHP).

- projected population growth in the Auckland Growth Scenario model (AGS23v1).
- the Open Space Provision Policy 2016 (provision policy) that sets target provision metrics that guide the type, size and location of reserves to support growth in greenfield areas[2].
- structure plans and precinct plans that identify the nature of development in growth areas.
- how much land will cost, based on recent and pending acquisitions, and a projection of future land prices by sub-area (refer, the Land Development Stage Price Model).
- phasing for expected acquisition by park type from the Open Space Acquisition Cost Modelling review in 2019 (a greater proportion of large parks are expected to be acquired from stages earlier development land stages, and a higher proportion of small parks later as development stages mature).

The Parks and Open Space Acquisition Policy 2013 sets out the process by which the council prioritises and acquires land for open space. The methods for acquiring land can include land exchange between public entities, vesting, gifting, compulsory acquisition, and willing buyer-willing seller negotiations. For almost all open spaces, costs are projected by estimating the future market price of a willing buyer-willing seller negotiation.

A fair share of the costs of open space will be recovered from new growth areas. Development contributions are one way to enable that. Development contributions are usually required in cash rather than land. As such, the projections estimate the overall cost and the proportionate shares for existing residents and new growth areas – so these projections provide an estimate for cost, quantum and timing for developers and council planners.

Some areas are excluded from open space development contributions: berms, pocket parks, conservation areas, and stormwater areas. As riparian and esplanade areas are usually required to be remediated and vested under consent conditions, open space development contributions are not considered for riparian and esplanade margins.

In addition to all the factors above, the timing of acquisition and development of open space also considers the priorities as set out in local board plans and reflected in the Long-term Plan and budget.

Open space cost projections consider how a group of parks are acquired and developed over time, where priorities and timing can change across the local area. Past delivery informs the assumed service level within provision policy guidelines - for example the assumed size of parks to be acquired, or the average cost of amenity delivered on a new park.

In the short-term work programme, open space projects are defined for a site with specific investment in desired features in a similar way to community spaces projects. Where park development plans have not yet formed, the provision policy is applied to spatial plans to guide the needs and costs for land acquisition and development to support growth as a group of park investments in a sub-area.

[2] The essential open space types are defined as neighbourhood parks, suburb parks, sports parks (as a large type of suburb park), civic parks, and connections (also called trails or greenways). The policy describes the size, ideal configuration and accessibility for local communities.

Land price model and pricing of park requirements

Using the information gathered during this Base Cost Phase, assessments are made about the required acquisitions for neighbourhood parks, suburb parks, sport parks, and civic parks. An assessment is also made about the required development of those park-types and some greenway developments on existing open space.

The inputs for open space acquisitions provide details about the quantum and type of open space required by sub-areas of the FDS and the timing for shifts through the land development stage prices: Future Urban Zone (FUZ), Urban Zoned (UZ), Infrastructure Installed (II) and Subdivided Urban Lots (SUL).

The planning exercise reviews each sub-area of the FDS against provision standards to determine the number and location of neighbourhood parks and suburb parks, connected to residential areas. Civic parks are planned in commercial areas as required by the provision policy.

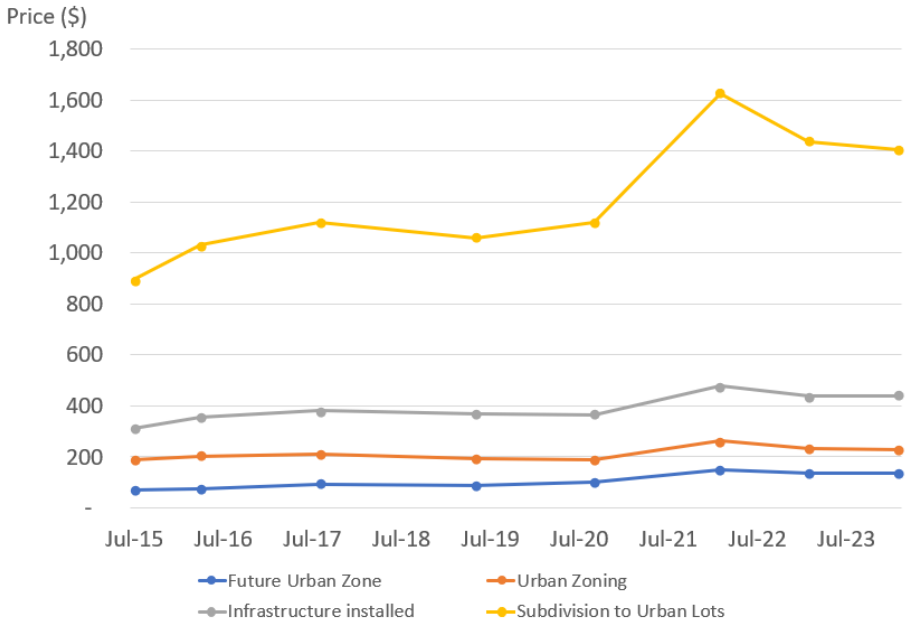
The number and ideal location of new sport parks is determined by population-capacity modelling. These are shown in structure plans aligned with the demand for organised sports field capacity within 18 minutes drive associated with residential areas.

The acquisition costs for new parks applies the Land Development Stage Price Model. The Model is used across council to estimate the price of land in greenfield areas, including recently live-zoned areas. The model observes that land progresses through four identifiable stages. By predicting the timing of sub-areas in the Future Development Strategy (FDS) a price over time for sub-areas is estimated for these four stages:

1. Future Urban Zone (FUZ): is land identified for future development, but is still subject to rural development controls
2. Urban Zoned (UZ): is land rezoned for urban development
3. Infrastructure installed (II): is land where the major road, water/wastewater and stormwater services are connected to the edge of the development site.
4. Subdivided urban lots (SUL): developers have provided the local infrastructure and subdivided land into urban sized lots. These lots are ready for housing or commercial units to be constructed.

The movement of the value of land as it changes through stages FUZ to SUL is significant. The following graph shows the average price per square metre over greenfield areas in Auckland to illustrate the price by stage from 2015 to 2021:

Fig-2 Average price per square metre of land by development stage in greenfield areas



External professional valuation and council information is used to estimate the land price values in sub-areas of the FDS and recently live zoned areas, with the latest estimates for February 2024.

For each sub-area comprising a group of MSM zones[3], the Land Development Stage Price Model:

- starts with the average per square metre cost of land for the development stage of the sub-area in 2024
- increases this price in a step-wise fashion to the next development stage land price, based on the projected phasing of development overall in that sub-area, to project land prices for each sub-area for each year from 2024 to 2054
- escalates those prices by the land price escalation rates advised by the council's Chief Economist Unit.

The Land Development Stage Model provides an average forecast price per square metre within each sub-area for each year.

The acquisition costs for new parks applies this Land Development Stage Price Model, where large parks are assumed to be acquired earlier in the development cycle than smaller neighbourhood parks. The proportions for phasing the proportion of parks to be acquired by stage is shown in Table 1 below, as established in the 2019 Martin Jenkins review of open space modelling. It assumes council will to begin to negotiate and transact for parts of the large sport and suburb parks starting in the FUZ stage.[4]

[3] MSM zones are cells in the Macro-Strategic Model, the growth model for housing, population, and employment projections. The projection applied is AGS23v1.

[4] Table 1 shows that council expects to acquire a greater proportion of larger parks earlier in the development cycle if the opportunity exists. Smaller neighbourhood parks are typically acquired after minor infrastructure has been installed, or in some cases after titles have been issued (the SUL stage). If the area being modelled is already advanced, for example if 2025 is understood to be at II stage, then the model assumes all the required sports field land will be acquired at that II stage. In this case

Table 1: proportion of park types assumed to be acquired in development stages

Park type	Future Urban Zoned (FUZ)	Urban Zoned (UZ)	Infrastructure Installed (II)	Subdivided Urban Lots (SUL)
Suburb Park	15%	50%	25%	10%
Neighbourhood Park		20%	30%	50%
Organised Sport	40%	40%	20%	
Civic park			50%	50%

The Land Development Stage Price Model assumes that if council has capital budget available and can negotiate for acquisitions from the early stages, that three years of land acquisitions could occur at FUZ, four years at UZ, four years at II, and that council will complete acquisitions by the first three years of SUL. The three-four-four-three year phasing for acquisitions is derived from the 2019 Martin Jenkins review of Open Space cost projection modelling and observations of development phasing in recent large scale developments over time.

While park land is often acquired in separate tranches of several contiguous sites from different sellers or in several payments over time, the model breaks the development stages up further with an expected proportion of park land to be acquired in a sub-area for each year. The model collates park needs in sub-areas of the FDS where the timing for land stage phasing is the same. For example if five neighbourhood parks are expected to be acquired in an area then the model could project the following acquisition profile:

Table 2: example proportions of acquisition expense expected by year for a group of neighbourhood parks over an 11-year period:

	Y1 UZ	Y2 UZ	Y3 UZ	Y4 UZ	Y1 II	Y2 II	Y3 II	Y4 II	Y1 SUL	Y2 SUL	Y3 SUL
Proportion of expense by year	0.050	0.050	0.050	0.050	0.075	0.075	0.075	0.075	0.167	0.167	0.167

Per Table 1, for neighbourhood parks four years of UZ add to 20%, four years of II add to 30%, and three years of SUL add to 50%.

Similar profiles of acquisition portions by year are applied for the parcel of parks by type in contiguous areas that have aligned land price stages. The method does not attempt to predict the specific one or two years in which transactions would occur as a specific park project. It models the expected expense profile by year for a network of many independent park transactions so the probability distribution over time approximates the mean cost of acquisition for each sub area.

Park locations are indicated in structure plans, precinct plans, and in plan changes as indicative locations. A standard size, acquisition timing, location and price is applied for almost all parks included in the cost model. The modelling also includes a few parks with detail derived from pending negotiations (size, location, timing, and/or price). To maintain the commercial sensitivity of that

suburb parks are expected to be acquired with ratio 25:10 between II and SUL in the right hand columns of Table 1. This means 71% of suburb park land will be costed at II and 29% at SUL.

process, these details are redacted in the model versions to be prepared for release after the 2025 Development Contributions Policy is adopted.

The cost of a small number of parks to be acquired in the near term are informed by negotiations in progress. The price struck through those willing buyer – willing seller negotiations is expected to be a fair market rate, informed by specific valuations of the particular site. The longer-term land price estimates in this modelling are not suitable for site-specific negotiations.

Stage 2 for cost estimation: Contingency and Other Cost Allowances

All cost estimates are completed at a point in time (current date) and escalated to a future date. As time progresses, many changes can occur in the environment, including plan changes, technical/design assumptions and project cost assumption changes. To manage this risk, each asset-type considers an allowance for contingency. The level of contingency applied differs based on the relative risks and options for non-cost contingency.

The regional work programme for park development initiatives in the first four years are approved and commissioned for development of specified playgrounds, furniture, planting and paths site by site over that period. These also have a contingency applied for the specific costing for each project. The cost contingency is 10% as included by park development specialists administering the programme.

For other investment in open spaces (land acquisition and longer-term park development costs for modelled park development costs) the risk of cost increases is managed by considering non-cost contingency methods. This includes negotiation to acquire alternate sites or different sized sites, or in the case of park development, changing project specifications or phasing the delivery of them across the local network. The inclusion of non-cost contingency enables the cost projection in the long-run to tend towards the average cost.

Transaction costs were analysed in 2022, comprising $30,000 for specific site valuations and internal costs. The same approach was applied in the recent modelling, phased and escalated by labour cost inflation over the assumed acquisition profile shown as an example in Table 2.

Stage 3: Cost Escalation

Prices for land, labour and materials will change over time. We adjust our base cost estimates assessed for current project costs for the expected prices at the time the project is to be delivered. The following escalation rates from the council's Chief Economist Unit as of December 2024 were used across the cost projections:

Table 3 – cost escalation rates

Measures (percent)	2024/25	2025/26	2026/27	2027/28 (long-run projection)
Construction cost	3.20%	3.20%	3.10%	3.10%
Land price	2.80%	7.00%	4.30%	7.10%
Labour cost	3.5%	3.3%	3.2%	2.2%

For construction, the long-run cost escalation factor is 3.1% per year. It is based on changes in prices for the supply of goods and services (outputs) in the construction industry over 1994 to 2022.

In addition to the Land Development Stage Price escalation, the long-run cost escalation factor for land acquisition is 7.1% per year, based on the compounding average growth rate for the median house price between 1992 and 2022.

The labour cost inflation is the Labour Cost Index, and is applied for a small portion of the transaction costs as part of land acquisition: for valuation, negotiation, and legal expenses.

Appendix B: Open Spaces to be acquired and developed

By applying the process of reserves planning, project requirements and cost, the number of new open spaces to be acquired and developed and their costs are estimated. Further information about the assumptions and key outputs are provided in this Appendix.

Number of new open spaces to be acquired and costs projected

The Open Space Provision Policy 2016 sets provision standards for parks to be acquired. It sets the expected park layout and configuration in the network, for example neighbourhood parks are expected to be between 3,000 – 5,000 sqm. The policy describes targets for expected provision[1], for example that a neighbourhood park should be within a 600m walk in low density areas, and 400m walk in high and medium density areas.

Standard sizes for parks are derived from recent empirical evidence. They are applied for future park acquisitions for modelling purposes. They are: 4,000 sqm for neighbourhood parks, 30,000 sqm for suburb parks, and 100,000 sqm for sport parks (as a dedicated type of suburb park), and small civic spaces as 1,000 sqm and larger town centre spaces as 2,000 sqm.

For pending acquisitions, anticipated sizes (when known) are used for modelling purposes.

Table 4 below shows the number of parks projected to be acquired over more than 30 years to meet provision standards. It includes the equivalent of 239 neighbourhood parks, 33 suburb parks, 1.5 sport parks, and 6 civic parks. Pocket parks and open space for connections and linkages, and riparian open space are not expected to be acquired through land sales.

All but two of the acquisitions in Table 4 are in greenfield areas. The provision policy supports the opportunity available from large scale developments in Mt Roskill and Mangere to address gaps in the network.

Table 4: projected parks to be acquired for 30+ years[5]

Beneficiary Funding Area	Parks to be acquired
Rural North	4
Warkworth	20
Hibiscus	4
Dairy Flat	57
Wainui east / Milldale	8
North Shore	1
Rural NW	3
Kumeu-Huapai-Riverhead	26
Whenuapai	21
ScottPt-BombPt	2
Red Hills	16
Mt Roskill	1
Māngere	1
South (West)	1
Flat Bush	4
Takanini North	9
Takanini South	1
Hingaia	8
Drury	39
Rural SE	5
Pukekohe-Paerata	40
Rural SW	11
Sports fields (in Red Hills and Warkworth)	1.5
Total	**284**

As many factors influence the timing of acquisitions a probability profile for acquisitions is applied (refer Table 2 in Appendix A). The probability profile anticipates that small portions of each group of parks are expensed each year so as the land is developed through stages the price averages over a relevant timeframe for the group of parks at that location.

Acquisitions modelled in the LtP period align with the open space acquisition budget of $397m for 2025-2034, for an average of $39.7m p.a. As the amount available each year varies from $24m to 61m, the acquisition probability profiles are adjusted to form the total expense expected for each year. However, from 2035 onwards the model anticipates any acquisitions that have some expense prior to 2034 will be completed, as well as the next acquisitions required to meet provision policy standards.

[5] Table 4 represents the number of "standard" parks modelled: 4,000 sqm for neighbourhood parks, 30,000 sqm for suburb parks, 100,000 sqm for sport parks, and 2,000 or 1,000 sqm for civic parks. There are two sports fields to be acquired, but the land area equivalent to half of one has already been acquired.

The model applies 7.1% p.a. land price inflation in the outyears, which means land prices are expected to double every 10 years. In 2018 $50m of open space land was acquired. Considering just the 7.1% land price inflation factor, the same parcels of land at the same land stage phasing would cost $100m in 2028, and $200m in 2038. That level of acquisition activity in the years prior to the pandemic ($50m) guided the achievable level of delivery beyond 2035.

Table 5 shows the open space acquisition costs expected over time. The model expects all acquisitions to be complete by 2056.

Table 5: acquisition costs by decade

Period	2025 – 2034	2035 – 2044	2045 – 2054	2055-2056	All years
Open space acquisition costs ($m)	397	1,748	1,752	1,335	5,231

The Development Contributions Policy only includes investment up to 30 years for the priority areas (Drury, inner north west, and AHP areas of Mt Roskill, Tāmaki, and Māngere), and only up to 10 years for other areas like Pukekohe, Hingaia, Dairy Flat, and Kumeu-Huapai.

Open space development costs

Reserve development to upgrade existing open spaces is considered differently to the development of yet-to-be-acquired and recently acquired parks that are to be developed for the first time:

- The costs to develop recently acquired and to-be-acquired parks applies an average cost per square metre by park-type. This recognises that while each park does not have the same layout, over the network the costs will tend towards an average according to the type of park. The timing for the development expense is phased for several years after the sub-area is expected to move to Subdivided Urban Lots (SUL) stage. By this stage acquisitions are expected to be completed.
- In contrast upgrading existing open space to enable more intensive use involves replacing or upgrading existing amenities and investing in additional features to support new growth.

All the parks in Table 4 are expected to be developed. There are also around 90 park development initiatives expected on local parks already acquired[6]. These have a similar focus on greenfield areas as per the acquisition plan of Table 4, but over 30 development initiatives are also expected in the AHP areas.

The cost for developing parks for 2025 to 2034 considers the approved work programme projects budgeted for $127m overall. These are applied directly in the model. An additional $235m is anticipated for parks recently acquired or yet-to-be acquired as per Table 4. In addition Eke Panuku is leading development of parks in specific regeneration areas for $165m, and $119m for the Viaduct-Wynyard area. The overall cost for the period of the Long-term Plan to 2034 is $645m.

The $235m modelled is expected to be funded from the $440m portion of the LtP park development budget to be used for this purpose. Hence there is $205m of capital proposed for park development in the Long-term Plan that is not anticipated to be expensed in that period by this model.

Park development will continue over the outyears for $2.3b overall to 2061. However the 2025 Development Contributions Policy iteration does not include the investment expected beyond 30 years to 2054. Investments up to 2054 are included for the DC Policy for priority areas: Drury, the inner north west, and AHP areas (Mt Roskill, Tāmaki, and Māngere). Investments in all other areas are only included in the DC Policy up to 2034.

Park development costs of $2.3b to 2061 only include sports field development up to 2034, as the population model considers iterative periods of 10 years for development contributions. In the period to 2034 $100m is expected to be spent to upgrade sports fields. Some of these are being developed for the first time, while others in brownfield areas will have lighting, sand carpets, and drainage improvements to increase playing capacity. Similar levels of development will be expected for each decade beyond 2034, escalated by construction cost inflation of 3% p.a.

Open space cost projections considered greenway and connection plans for developing areas where the route is principally for recreation. Transport cost projections consider paths and cycleways for people movement as part of the transport system. The cost for a small number of proposed greenway routes were reviewed and included. These are on parks or through nature corridors that are not riparian.

[6] Park development initiatives can be as small as adding a toilet or to $10m to develop a suburb park, or more for a sport park. Work programmes stage development with several phases for some parks.

Sports field acquisition and development costs

The council applies analysis from the Sports Supply and Needs Study (SANS) last reviewed in 2023 to plan for sports field capacity needs over 10 years. It shows the available capacity and deficits in 70 sub-areas of the region for winter field sports in 2023 by the type of use (weekday, weekend, weekday lit fields). Overall in 2023 current demand meets capacity overall across the region, despite localised variances and variances by use type.

The SANS model predicts a deficit in capacity by 2033 if no change is made to uplift fields or make new parks available. It models a number of winter field sport teams expected from the increasing population, and estimates the demands those teams will place on fields for training at various times of the day and for weekend competition. The demands vary by code, the age of participants, and the competitiveness of the league. While other winter and summer sport codes, and informal pick-up games also place demands on sports fields, the peak predictable demands for winter sport codes accounts for some of these needs also.

The sports field part of the development cost model applied the same parameters from the SANS model to generate teams and demands on field time, and then updated the model to the new AGS23v1 population for the region.

Assuming team sport participation by population remains constant to 2034 an additional 790 hours per week of playing time is needed across the region. This will be delivered by upgrades to existing fields (drainage, sand carpeting, artificial turfs, lighting, changing rooms, and toilets) and through acquisition and development of new fields.

Past analysis shows $1.67m is needed in 2024 terms to upscale an existing field for 20 hours playing time in a week ($83,500 per playing hour per week). Of the 790 hours per week estimated to be needed in the 10 years to 2034 across mixed uses, council plans[7] to invest $48m to 2030 in upgrades to existing fields and creating new playing surfaces for open spaces previously acquired, being developed for the first time. This is estimated to provide an additional 350 hrs of use per week. Hence upgrades across the region will be needed to provide an additional 440 hours of use per week from 2030 to 2034.

While some new fields will be made available for use in the next 10 years, more development of new fields is expected from 2035 onwards, including in locations like Flat Bush and Whenuapai where open space land has been acquired, and new sites to be acquired in Red Hills and Warkworth.

As the investment in growth for 790 hours will provide for the demand that is expected from new growth between 2025 to 2034, the DC Policy will iteratively update this demand model for each policy review, considering the future growth and future plans to bring those parks into use.

[7] Long-term Plan Budget decisions, including the Regional Work Programme for open spaces

Appendix C – defining funding areas and assessing the growth shares of park costs

This appendix provides further information about the funding areas and the method to assess the growth share of parks costs over 30+ years for the Auckland region.

Beneficiary funding areas

Funding areas are defined to allocate the costs of growth to the developing properties that will benefit from and create the need for the investments in infrastructure. The size of the area that benefits from a project delivered to support growth varies depending on the nature and scale of the project.

It is impractical to create and administer funding areas for each park project. Instead, several park initiatives are aggregated in a funding area, and the share of the cost of growth of is expressed related to that funding area as described below.

In determining funding areas to aggregate park initiatives, the council exercises judgement balancing the difference between pricing in smaller sub-areas relative to the average for a larger funding area. The process of averaging charges for fewer larger funding areas will result in some charges being lower and others higher than would be the case if smaller funding areas were used. We weigh variations in the level of benefit received and associated charge within a larger funding area against the administrative cost of having many smaller funding areas.

This process is undertaken in two steps:

Step 1: Establish the area of benefit for each investment or collection of investments.

This starts with catchments described in the provision policies for each type of investment, then considers the geography of the beneficiary area.

The beneficiary area for a single local park is much smaller than the beneficiary funding areas applied so funding areas are identified that collate similar investments across an identifiable growth area, defined by MSM boundaries or identified growth areas.

Where the catchments of neighbouring libraries or aquatic spaces overlap we identify a beneficiary funding area where the new growth area of benefit is the space closest to / shortest travel time to the assumed location for the new investment. Boundaries of the area need to apply population projections, so the boundary of the funding area often aligns with MSM areas or geographical features.

Step 2: Balance factors to determine appropriate funding area aggregation.

This considers the difference in how costs are allocated to beneficiary areas by timing, or by different levels of existing service and therefore different future investment in contiguous areas. It also considers the administrative effort to communicate and maintain the funding regime with smaller funding areas.

Some investment programmes deliver a range of smaller projects across a wider area. When the nature of the benefits or the drivers of demand are similar across the region, and the costs of providing the infrastructure are likely to be the same irrespective of location, then

they will be grouped together at the regional, sub-regional, or local level. Table 6 shows aggregated open space (reserve) investments as "regional" for sports fields or "local" for investments in neighbourhood, suburb and civic spaces.

Table 6 – layers of funding areas by type of infrastructure investment

Layer	Type of Community Investment	Description
Regional	Reserve acquisition and development	For infrastructure that provides equivalent benefit to all growth across the region. Sport competitions rely on a region-wide network of sports fields where local teams host teams from across the region. The regional costs allocated consider acquiring land for sports parks, and providing lights, drainage, surfaces and changing rooms, toilets and storage spaces for field sports.
Local	Reserve acquisition and development	While the same areas are applied for acquisition and development costs, each funding area will group the relevant share of new investment in acquisition separately to the costing of park development factors. The local funding area (reserves) includes the acquisition and development costs for neighbourhood parks, suburb parks, civic parks, and greenways/connections, and the development of "local" amenities like playgrounds or paths outside the playing surfaces of sports fields.

In practice this means separate local beneficiary funding areas for open space investment in Whenuapai, Red Hills, Scott Point, and Kumeu/Huapai/Riverhead, and separate areas for Dairy Flat, Milldale, and Orewa/Whangaparaoa. Other greenfield areas aggregate the costs for acquisition or development respectively in similar ways: greenfield areas like Drury, Pukekohe/Paerata, Flat Bush, Hingaia and Warkworth.

High growth is planned in the Auckland Housing Programme (AHP) areas: Tāmaki, Māngere, and Mt Roskill, so local open space funding areas are configured for each of these.

Where there are small pockets of development over the rural areas or on the edge of existing urban areas, larger local funding areas apply. The Upper Rural North funding area collectively recognises that small developments in Algies Bay and Wellsford will require investments for open space. The Rural South East and Rural South West local beneficiary funding areas for reserves operate similarly.

Where there are small housing developments on the edge of an existing area for example Albany Village or Swanson, these developments are included with other developments and costs in the contiguous urban area. For Albany Village and Swanson the North Shore and West funding areas apply respectively.

In future as developments mature additional more granular local areas may be formed in some of funding areas to fairly allocate costs and benefits.

Expenditure attributable to growth for development contributions

Council determines the nature of investment in renewal, increasing levels of service, and/or investments to support growth as follows:

Table 7 – projects may have a mix of renewal, level of service, or growth components

Type	Definition
Renewal	The investment is principally to maintain and continue the provision of services by increasing the physical integrity and remaining life of assets with no change to the asset base. A renewal project/programme may include a level of service and/or growth component
Level of service (LOS)	Results in improved standards of quality, reliability, responsiveness, safety, comfort, flexibility, regulatory requirements or similar. May or may not result in new or additional assets. A service level improvement project/programme may include a growth component. Council evaluates how the investment may meet existing LOS needs, or provide additional amenity uplift for growth.
Growth	Investment principally associated with the above categories may also include a component to support growth. An investment primarily associated with growth will increase the availability and capacity to cater for increased people and range of uses or length of time it may be used for. The investment typically increases the asset base (the number of assets, total area or length) to support growth. While principally proposing investment for anticipated growth an initiative may include renewal or level of service components and may include demand generated by the existing community.

Example renewal projects or projects that maintain the existing level of service could be:

- recladding, fixing the roof and re-wiring of a community centre
- resurfacing outdoor courts, or replacing worn playground equipment
- optimising community spaces and divesting some sites in an area (library, community centre, venues for hire, etc), replacing them with a single multi-function space that delivers a similar size and range of amenities.

A renewal project that also provides a LOS improvement might involve:

- while renewing and optimising spaces, a larger space or additional type of space is added
- if in addition to resurfacing outdoor courts additional capacity is provided by introducing multi-code uses, adding court area, adding lighting, and/or improving or adding access ways.

Some proposed investments help fill a gap by providing a LOS that the existing population could reasonably expect to already exist: examples are new neighbourhood parks in Māngere and Mt Roskill, and the north west aquatic-leisure space. These spaces are in growth areas and will benefit new communities but are not primarily caused by new growth. A large portion of the provision to be provided was already needed, thus a smaller share of investment is allocated to new growth.

Investments principally for growth may have a LOS or renewal component as well, for example replacing an older basic playground with a larger playground, or replacing a toilet block/changing room with a larger space at a sports field. This is considered when allocating the share of costs between ratepayers and developers associated with areas of new growth.

Examples of cost allocations

Analysis of the share of investments allocated to new growth for local parks considers the expected location and relative beneficiaries between existing and new populations, provision of existing and new parks, and projected development/upgrades of parks for each funding area. The portions of cause and beneficiaries between existing and new populations differ for areas like Drury where development is getting underway, Scott Point where recent development is maturing, and park developments in the West local funding area[8] where some infill is expected, as for any long-standing urban area. These example areas are contrasted below.

Drury open space acquisition and development

As a greenfield area the cause of the investment is to serve Drury is 100% caused by growth. However the growth share between existing and future residents recognises that existing and new residents all benefit. Around 90% of new beneficiaries of park development will be new growth, and 10% are from the existing population. The 100% cause and approximately 90% future beneficiaries are combined for a 95% share of the costs allocated to growth.

Scott Point open space acquisition and development

Some parks have been recently acquired and developed and further parks are expected to be acquired. Like Drury, the cause for acquiring new parks and developing new parks in maturing greenfield areas like Scott Point is 100% caused by growth as the area would not need these parks except for the planned developments.

The share of benefits for the growth differs from Drury because around two thirds of the full population expected in the local area is already resident in 2024. The share allocated for new growth contributions combines cause and beneficiaries so new growth is allocated 68% of the coming investment in addition to a share for the parks already acquired and developed there. Areas like Hibiscus, Flat Bush, and Long Bay as part of the North Shore are similarly maturing areas.

Existing urban areas like the 'West' funding area (Henderson-Massey, Waitakere Ranges and Whau)

While the council has focused investment in the priority areas, there are a few reserves to be developed in other parts of the existing urban area. One area is the "West" funding area that includes some park developments in New Lynn and Glen Eden

The cause for these developments is not solely new growth and the investment may be initiated by naturally occurring opportunities or long-standing plans to develop the open space. In these cases the cause is shared between existing and new residents, and the benefits are shared also. As long-standing urban areas the portion of this investment for growth allocated to new developments is low. For example 12% of the development costs for a small number of investments is included for the "West" funding area.

Mt Roskill, Māngere, Tāmaki AHP areas

The council and Kainga Ora have engaged on large scale plans for these Auckland Housing Programme (AHP) priority areas for investment. In the few areas where additional open space might

[8] Includes Henderson-Massey, Waitakere Ranges, and Whau Local Board areas

be needed in the existing urban area, the large scale developments underway create naturally occurring opportunities to add two neighbourhood parks to the network.

As existing gaps in the network, the cause of the investment in purchasing new parks is not linked to growth. However existing and new residents will both benefit from the new investment. As above, these are well established areas, so the overall share allocated for new growth for acquiring one park in Māngere is 24%, and 16% for Mt Roskill.

The development of many parks in the AHP areas considered the investments needed to improve access with more connections through the area and the upgrades needed for a wider range and a larger number of users.

The cause impact considered the detailed future plans by parks planners and analyses in the most recent Local Board Open Space Network Plans. Plans for park development are typically planned as an overall project cost, even if there is an existing path, playground or furniture that may be replaced.

To understand the investment in uplift for new amenity the current level of service park by park was reviewed to estimate the cost for the upgrade (overall cost planned less the cost to provide the existing items). Examples of uplift investment for growth could involve: planting areas and adding new paths over land exchanged to improve access or the size and layout of a park, and the marginal difference between existing and new playgrounds, park furniture, paths, and court areas.

The average for investments with a mix of renewal and growth found the existing service portion was around 30% for AHP areas, so the need or cause for the investment to support new growth was considered to be 70%. The benefits between existing and future residents was calculated as for areas like Drury and Scott Point, resulting in the share associated for new growth of around 50% to 60% in these AHP areas.

Sport park development

The sport park analysis undertaken projected the cost of acquiring and developing new open space for sport fields for the region. The need for the additional space overall for the region was caused by the growth in population over the 10 year period 2024 to 2034, and future beneficiary share of the investment in additional capacity is also 100% attributed for new growth.

Community spaces investment

6.0 Community spaces Investment

This Section 6.0 is copied from the *Methodology for DCs*.

Appendix D has more information about the cost estimate process for community spaces.

Appendix E has more information about the costs of the community spaces to be developed, growth shares, and Funding Areas.

6.1 Community spaces planning

Planning for community spaces starts by forecasting the future demand for community infrastructure. This forecast is developed using the following inputs:

- projected growth based on the Auckland Growth Scenario model (AGS23v1), based on the vision for how and where growth will happen over the next 30 years is set out in the Future Development Strategy Policy Statement
- structure plans that identify the nature of development within growth areas
- how much infrastructure will cost based on a projection of future prices based off knowledge of recent projects
- needs assessments and business cases
- local board priorities as set out in individual local board plans.

6.2 Project Requirements

The requirement for community facility provision is assessed by applying the available provision metrics identified in the council's Community Facility Network Plan[9]. Network needs analysis assessments progress from indicative business case, detailed business case, and then when approved, to design stages.

Near term projects are at the latter stages, so in-progress costs are applied.

The requirement for community facility provision is assessed by applying the available provision metrics identified in the CFNP to produce a needs analysis for a relevant area. Assessments progress from indicative business case, detailed business case, and then when approved, to design stages.

At the other end of the investment horizon projects may be indicated to begin beyond 2034 to provide for a need emerging from new growth. The need for these projects may have been indicated, with a study to be re-done closer to the time. These projects are updated or quantified in this long-term capital programme for the first time.

Between the near-term detailed project plans, and the outyears of the investment horizon are projects with business cases or needs analyses that are expected to progress from 'indicative' to

[9] www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/community-social-development-plans/docscommunityfacilities/community-facilities-network-plan.pdf

‘detailed’. Updated business cases will apply new information about any changes to site specifications, costs to build, and timing, so budgets can be allocated or revised in the next Long-term Plan.

The Community Facility Network Plan (provision policy) identifies the need for the different kinds of community facilities based on population thresholds within a specific catchment area being met, with the need for different community spaces based on walking and driving distances.

6.2.1 Libraries and Community Centre specification

The Community Provision Network Plan expects 41 m2 of library floor area per 1,000 people within the catchment. In practice libraries are expected to be developed near applicable civic centres, and co-located with community centre spaces. A combined building has dedicated library spaces and community spaces and may also have many shared areas like foyers, generic storage, public toilets, café, and informal gathering spaces. Recent projects provide these inputs:

- Sub-regional networks of established libraries in the urban area are observed to have more than 1,200 people per 41 m2 of space, so new libraries were estimated by size at this smaller size (for smaller investment per population increase)
- Dedicated library floor, collections, and library office space comprised 62.5% and community spaces like creative rooms, community service rooms, creative storage, halls and meeting rooms 37.5%. These proportions were applied to the 41m2 for 1,200 people library metric.

6.2.2 Aquatic and recreation centre specification

Unlike libraries, the CFNP has less detail on the size for aquatic spaces. It describes a local space and larger “destination” space for different population capacities.

The policy indicates for a 5km catchment area:

- a standard 500m2 pool as part of a local pool complex for 35,000 people
- 500m2 pool and as teaching and leisure pool areas to service 35-50,000 people.

It further describes a destination pool that people will travel further to reach, with additional leisure functions like deep water, diving, slides, and splash areas that will take usage loads off a standard lane pool. It expects catchments for this to be 10km travel, so allowing for route constraints, a catchment area of about three-times larger than a local pool.

The policy also indicates fitness and indoor courts co-located with aquatic spaces. While the provision policy finds a metric considered elsewhere as one court for a small population like 9,000 people, it also expects private provision, such as schools to contribute. For specifications included in the cost projection two courts are expected for each of the four projects included, being the Northwest, Whau, Flat Bush, and Drury.

The 2020 indicative business case for the north west aquatic-leisure spaces describes a destination pool specification of 5,920m2 for a catchment of 150,000. A similar size is specified in the 2017 case for the Whau aquatic-leisure spaces. An analysis of the overlapping catchments in the isthmus (including the ‘at-capacity’ Mt Albert) indicates a 150,000 population catchment for this.

The council's aquatic demand analysis also supports the notion that a local pool has a capacity of 50,000. A breakdown from relative specifications for the north-west aquatic-leisure spaces suggests the gross floor area for a space of this size would be 4,770 m2. The smaller beneficiary funding areas for Flat Bush and Drury indicate that a "local" aquatic and recreation space would apply.

6.3 Community Spaces Cost Estimation

6.3.1 Land acquisition costs for community spaces

Analysis of recent and established projects provided floor area and footprint ratios compared to typical site sizes. The land needed for a community spaces initiative is of a similar size as a suburb park. The costs for community spaces land applies phasing of land price and the price of land as for a suburb park for the relevant site size.

Each of the nine projects in the cost projection has project-specific assumptions about size of site, timing and phasing depending on project funding timing, or development timing for new areas like Drury.

The Whau Library (Te Hono) to replace the Avondale library-community centre will be built in a new location with land to be acquired. Land is planned to be acquired for the other projects (Whau aquatic, Northwest aquatic, Whenuapai Library/Community Centre, and two Drury spaces). While council may ultimately choose to site some of these facilities within existing reserves, additional land is expected to substitute for the repurposed land area.

The two Flat Bush projects and Tamaki projects are assumed to be developed on existing sites – so no land acquisition costs are assumed.

6.3.2 Construction costs for community spaces

Similar to reserves, construction costs for community spaces are estimated based on standard construction cost per square metre rate for facility type multiplied by the floor area for the facility type to be delivered. The construction rates we use include building works, infrastructure services, and hard and soft landscaping works, professional fees, internal costs, consents, and furniture. The costs for community spaces projected are updated for benchmark rates based on recent projects.

6.3.3 Contingency for community spaces projects

The timing, phasing, and contingency are informed by recent projects. As community spaces projects describe a specific build and location to achieve a defined purpose it is appropriate to consider contingency for consistency. Four of nine projects in the cost projection have substantive budgets allocated in the Long-term Plan. These costs and best assumptions for the specification have been applied as provided (including contingency). Similarly as specific builds by location, the other five projects apply contingency as part of the assumed cost per square metre.

See Appendix D and E for further information about the cost estimate process for community spaces

6.4 Assessing growth share of community spaces costs

Development contributions can only be charged for the share of project costs attributable to growth. To determine this share, the council must first exclude any project costs attributable to renewals, developer mitigation works or third-party funding.

The swimming pool and leisure centre spaces included in the contributions charges are generally new facilities and not replacing existing facilities. As such there is no renewal component associated with the provision of these facilities.

There is no mechanism for any share of community space costs to be delivered though developer mitigations. The council also does not have any expectation of third-party funding for these facilities. As such, no allowance is made for developer mitigation works or third-party funding for parks project costs.

Existing residents contribute to the need for the project if:

- under our provision metrics[10], there is service gap for those residents, that will be addressed by the project and.
- we would deliver some or all of the project even if there was no growth occurring.

Our provision metrics differ between facility type, and between rural and urban areas. Depending on the type of infrastructure, low or no provision of services in rural areas does not constitute a service gap. For greenfield areas this means that the need for investment is primarily driven by growth. For example, Drury's current population does not meet the trigger point for an aquatic/recreation facility. As such causation for the aquatic/recreation facility is attributed 100 per cent growth. Our provision standards do recognise an existing service and a service gap for a community centre/library so in this case causation is apportioned between the existing and future provision size needed.

Even if the existing population does not contribute to the need for the project, they receive the benefit of any increased level of service the project provides to them. We assess the share of benefits attributable to existing residents as the proportion of the population within the catchment for the project at the start of the benefit period compared to the population in the same beneficiary funding area at the end of the benefit period. Conversely, the share of benefit attributable to growth is the proportion of the growth population to the population at the end of the benefit period.

The total share of benefit attributable to growth ("the growth share") is determined by adding together the growth shares of causation and future benefit and dividing by two. Once we have the total growth share by catchment, we can apply the applicable percentage to projects within that beneficiary funding area.

Table 6.4.1 shows the assessed causation and benefit shares for the existing and growth populations, and the overall growth share for community infrastructure projects included in the 30-year investment programme. Causation and benefit shares can differ for different types of infrastructure within the same area. This reflects differences in service level provisions standards and catchment areas for different facility types.

[10] www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/community-social-development-plans/docscommunityfacilities/community-facilities-network-plan.pdf

Table 6.4.1 Causation, Benefit and Growth share of community infrastructure investment

		Causation		Benefit		
Facility	**Funding Area**	**Existing Share**	**Growth Share**	**Existing Share**	**Growth Share**	**Overall Growth Share**
Te Hono (Whau Library-Community centre)	Auckland-wide	75.2%	24.8%	75.2%	24.8%	24.8%
Whau Aquatic-Recreation spaces	Whau	26.0%	74.0%	50.0%	50.0%	62.0%
Flatbush Library-Community spaces	Auckland-wide	75.2%	24.8%	75.2%	24.8%	24.8%
Flatbush aquatic-leisure spaces	Flat Bush	80.5%	19.5%	80.5%	19.5%	19.5%
Northcote Community facility	Northshore					15.0%
Drury Aquatic-Recreation spaces	Drury	0.0%	100.0%	10.9%	89.1%	94.6%
Drury Library-Community spaces	Drury	13.5%	86.5%	9.2%	90.8%	88.7%
Northwest Aquatic-Recreation spaces	Northwest sub-regional	47.7%	52.3%	47.7%	52.3%	52.3%
Whenuapai Library-Community spaces	Northwest 2025	0%	100%	43.6%	56.4%	78.2%
Tamaki-Panmure Library spaces	Tamaki	0%	100%	60.0%	40.0%	70.0%

6.4.4 Community Spaces allocation to funding areas

Costs for pools and leisure are allocated to the sub-regional community spaces funding area. New Libraries and community centres are allocated to local funding areas, while those with past project allocations are in the Auckland-wide funding area. These funding areas are applied for the cause and beneficiary analysis set above.

See Appendix E for further information about the costs estimated for community spaces, growth shares, and Funding Areas.

6.4.5 Unit of demand factors

Units of demand for community infrastructure are set on the same basis as reserves acquisition. Residential developments differ in terms of their occupancy and therefore the potential demand for and benefit from community spaces. Residential development types have been determined based on average occupancy for different types and size of development e.g. detached dwelling or apartment.

Non-residential developments are not charged for community infrastructure.

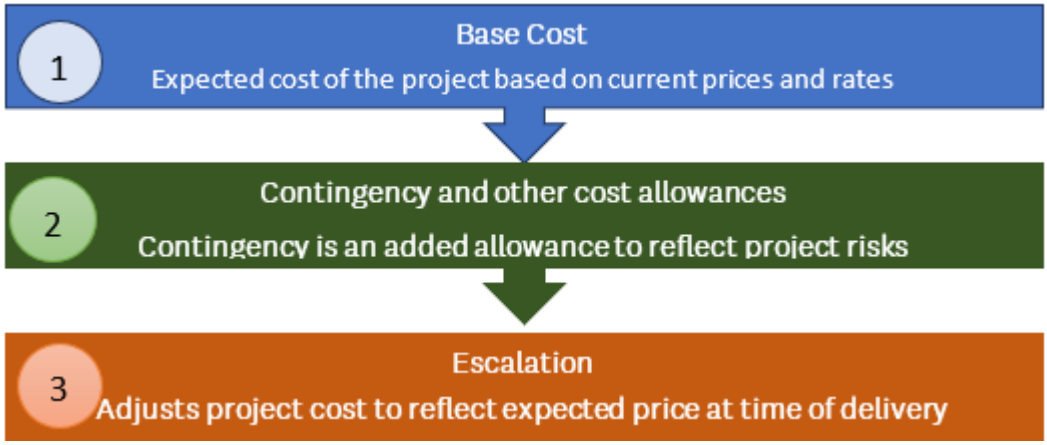
Appendix D – Community spaces cost estimation

This appendix provides further information about the method to project the costs for investing in community spaces over 30+ years for the Auckland region.

Three stages for Community Spaces Cost Estimation

There are three key stages to establish a project cost for the required investment in community spaces. The method considers the Base Cost, Contingency for risk, and Escalation as shown in the diagram below:

Fig-1 Stages to produce cost projections for open space and community spaces



Stage 1: Base Costs

Planning for community spaces starts by forecasting the future demand for community infrastructure using the following inputs:

- the sub-areas identified in the Future Development Strategy (FDS) and the focus areas in the Auckland Housing Programme (AHP)
- projected population growth in the Auckland Growth Scenario model (AGS23v1)
- structure plans that identify the nature of development within growth areas
- how much infrastructure will cost by projecting future construction prices from knowledge of recent projects
- the provision policy: Community Facilities Network Plan (CFNP)[11]
- needs assessments and business cases
- local board priorities as set out in local board plans and reflected in the Long-term Plan and budget.

Projects are initiated through a needs investigation that informs an indicative business case guided by provision parameters from the CFNP. As projects progress through budget cycles, more detailed business cases produce detailed design specifications and costs to enable projects to be commissioned.

Each community spaces project has size according to type of space and population it serves, and landscaping and potential land acquisition costs. There are two costing methods:

1. where the costs in the model are applied from budget commitments identified in the Long-term Plan, based on the most recent business case.
2. for projects beyond the Long-term Plan to be developed after 2034, a cost estimate is applied by area multiplied by rate per square metre. Price rates are applied for land acquisition, build costs, and landscaping (refer, the previous section 6.3.1 and 6.3.2, and Appendix E for a summary of the project costs).

Stage 2: Contingency and Other Cost Allowances

All cost estimates are completed at a point in time (current date) and escalated to a future date. As time progresses, many changes can occur in the environment, including plan changes, technical/design assumptions and project cost assumption changes. To manage this risk, each asset-type considers an allowance for contingency. The level of contingency applied differs based on the relative risks and options for non-cost contingency.

Community spaces cost projections include contingency when costing a specific project in a specific location to meet growth needs in a community. A 15% contingency is applied for costing future build projects as advised by internal and external specialists.

As land acquisition for indicative sites for community spaces applies the Land Stage Price Development Model as for suburb parks, and because some community spaces projects consider development on parks with substitute park land acquired elsewhere – the land acquisition part of community spaces assumes non-cost contingency methods will be deployed.

Acquisition costs for open space are based on 2024 values derived from external valuation and council sources. As transactions are subject to willing buyer and willing seller negotiations and negotiations can apply non-cost contingencies like size, location and timing of land transactions, no contingency is applied so the modelling tends towards the mean cost.

Stage 3: Cost Escalation

Prices for land, labour and materials will change over time. We adjust our base cost estimates assessed for current project costs for the expected prices at the time the project is to be delivered. The following escalation rates from the council's Chief Economist Unit as of December 2024 were used across the cost projections:

Table 3 – cost escalation rates (as shown as Table 3 in Appendix A for open spaces)

Measures (percent)	2024/25	2025/26	2026/27	2027/28 (long-run projection)
Construction cost	3.20%	3.20%	3.10%	3.10%
Land price	2.80%	7.00%	4.30%	7.10%
Labour cost	3.5%	3.3%	3.2%	2.2%

For construction, the long-run cost escalation factor is 3.1% per year. It is based on changes in prices for the supply of goods and services (outputs) in the construction industry over 1994 to 2022.

For land acquisition, the long-run cost escalation factor is 7.1% per year, based on the compounding average growth rate for the median house price between 1992 and 2022. Land prices are also escalated by stage of development (refer the Land Development Stage Price Model).

The labour cost inflation is the Labour Cost Index, and is applied for a small portion of the transaction costs as part of land acquisition: for valuation, negotiation, and legal expenses.

Appendix E - Costs, growth shares and funding areas for community spaces

Number of new community spaces to be acquired and costs projected

There are ten significant community space investment projects planned over the next 30 years to support growth. Each has an estimated cost ranging from $50m to $150m. Each investment is planned as a single project in a specific location as part of the wider network. Unlike open spaces, it is only once a community space has been completed that the community can enjoy the benefits of the investment.

Several of the projects below are budgeted in the Long-term Plan. The next development to get underway will be the Whau Library-Community Centre (Te Hono). The Te Hono costs budgeted for 2025-2028 are informed by the detailed design undertaken for commercial contracts to be let in 2024. Costs for other projects expressed in the Long-term Plan were provided by the most recent business cases. Those previous calculations were applied directly as approved budgets for these proposed projects: the Whau aquatic-leisure and the Flat Bush library-community and aquatic-leisure spaces.

Community provision investigations (applying the Community Facilities Network Plan) also indicate other community space developments needed with delivery dates out to 2060 that are beyond the Long-term Plan period. The costs estimates consider current provision and future growth and the size and catchment guidance in the Community Facilities Network Plan informed by how completed and pending developments interpreted layouts, site coverage, and costs to build.

Costs for all these projects vary due to size, whether land is available or needs to be acquired, and the inflation effects of land and construction costs over time. The investment needed will be refined over time as market parameters change, and as timing, location, and population growth projection updates are provided. The portfolio of community spaces costs over 30 years and beyond is updated at least every three years, and these updates inform updates to the Development Contributions Policy on a similar cycle.

Size, catchment and capacity, timing and cost inputs

Land and building costs

The average of recent and pending comparable projects indicated the cost per square metre (psm) of gross floor area[11] to build community spaces was $13,348, with $2,070 psm for landscaped land. These costs are in 2024 terms including 15% contingency as advised by internal and external specialists.

Some projects have identified existing land held by the council for the prospective project, but others will require land to be acquired. While any land to be acquired was assumed to align with suburb park acquisition phasing, the timing for acquisition is also constrained by available budget and the need for project completion to deliver when CFNP population levels have been met.

[11] Gross floor area is the overall sum of the floor area of each level.

Where required, land was assumed to be acquired over two years, using the Land Development Stage Price Model. The model escalates land price by stage and inflation. Like open space acquisition, contingency was not applied to land prices for community spaces because non-cost options like the size or location of the land can apply as for park projects.

The build and landscaping costs are escalated over time using forecasts of construction cost inflation.

Size, layout, catchments, and capacity

Library-community centre spaces are assumed to be combined in a multi-functional development, located in a town or metropolitan centres. Similar spaces in the region and recent project layouts were reviewed, comparing dedicated library areas to dedicated community centre spaces to apportion common areas like stairwells, toilets and the foyer. The library : community centre ratio in multi-function spaces was 62.5 : 37.5 on average over recent projects.

Modelling for libraries-community centre spaces (including venues for hire) applied the following parameters from the reviews of recent developments:

- The library area to align with population parameters was 62.5% of the overall floor area.
- The Community Facilities Network Plan sets provision of 41 sqm for every 1,000 population, however operational experience showed that existing libraries across the contiguous urban area served 1,200 population per 41 sqm. The latter parameters were applied.
- multi-story buildings were assumed, with 60% on the ground floor
- site coverage of the building footprint was assumed to be 55%

Like libraries-community centres, the parameters for aquatic-leisure spaces were derived from the Community Facilities Network Plan and informed by applied examples for proposed spaces.

Table 7: summary of aquatic-leisure specifications in the Community Facilities Network Plan

Scale-size	Expected amenity and capacity
Local	Lane pool, teaching pool, leisure water, fitness area (classes, weights), and court areas big enough for two full size basketball courts. Target populations of 35-50,000 for pools, and 18-40,000 for courts, where that population is within 5km.
Destination	As for local pools, with additional diverse amenities: deepwater, dive boards, slides, splash pads, and court areas big enough for four basketball courts, within a population of 10km.

The overall size of an aquatic-leisure space depends on whether it is a “local” space supporting a smaller population, or a larger destination space.

The detailed specifications from the north west aquatic space, and a review of large and small aquatic-leisure centres across the region suggests a small level two space of 250 sqm and 35% site coverage of the ground floor to determine the site area needed.

Size and capacity of aquatic-leisure spaces: 'Local' spaces for Drury and Flat Bush

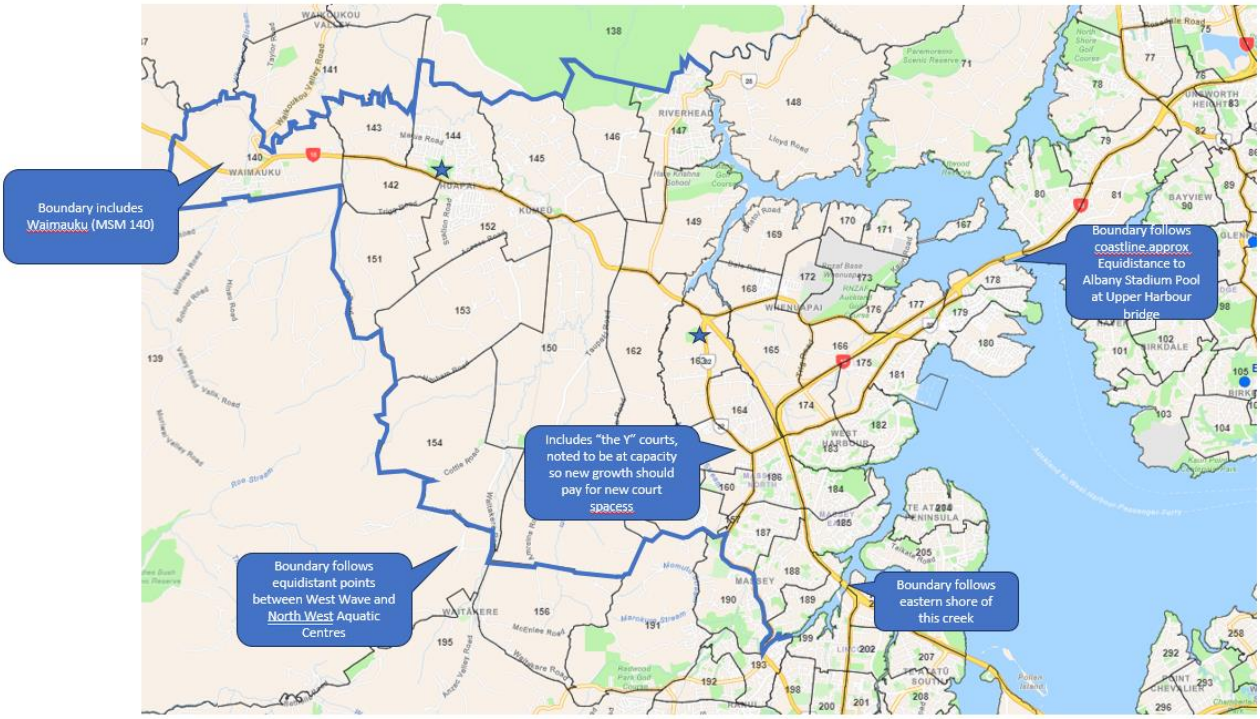
When Drury and Flat Bush are fully developed the aquatic-leisure spaces will each support a population of around 50,000 people, suggesting these areas meet the CFNP provision guide for "local" spaces. 'Local' amenities conduct one or more activities of teaching, leisure, and/or lane swimming in a particular water area. The cost modelling applied 50,000 as the capacity for a local aquatic-leisure space.

A destination pool is expected to provide dedicated water areas for lanes, teaching, leisure, as well as spa and more diverse water amenities. The 2020 North West Aquatic-Leisure Centre business case described a layout for a destination pool in some detail, but only indicated two indoor courts[12]. The specification provided for an overall gross floor area of 5,920 sqm. Hence, a comparable 'local' pool that also has two indoor courts would require 4,770 square meters of floor area if water spaces have multiple uses.

Size and capacity for destination spaces (North West and Whau)

The CFNP indicated a capacity for 'local' spaces but not for destination spaces. However the 2020 business case for the North West Aquatic-Leisure Centre reported that the 5,920 sqm space would support a population of 150,000. The AGS23v1 population projection showed the area that will benefit in Fig-3 will reach 150,000 in 2061.

Fig-3: the beneficiary funding area for the Northwest aquatic-leisure space



[12] Indoor courts are more frequently provided by other providers (e.g. education sector, commercial providers). Indoor courts for Huapai have been considered through a separate indicative business case. At the time of this cost projection more information was needed about timing, funding sources, and costs so it was not included in this 2024 cost projection

The earlier business case for the Whau aquatic-leisure spaces closely matched the more detailed 2020 analysis for the north west, also indicating 5,920 sqm, including only two indoor courts.

Considering the capacity of the Whau project as 150,000, the overlapping catchments of nearby spaces in Fig-4 and Fig-5 were reviewed indicating that the population in the beneficiary funding area for the Whau aquatic-leisure spaces in Fig-5 would reach 150,000 in 2049.

Fig-4: overlapping 5km catchments (approx. 3.75km radial) for aquatic spaces overlaid on MSM zones

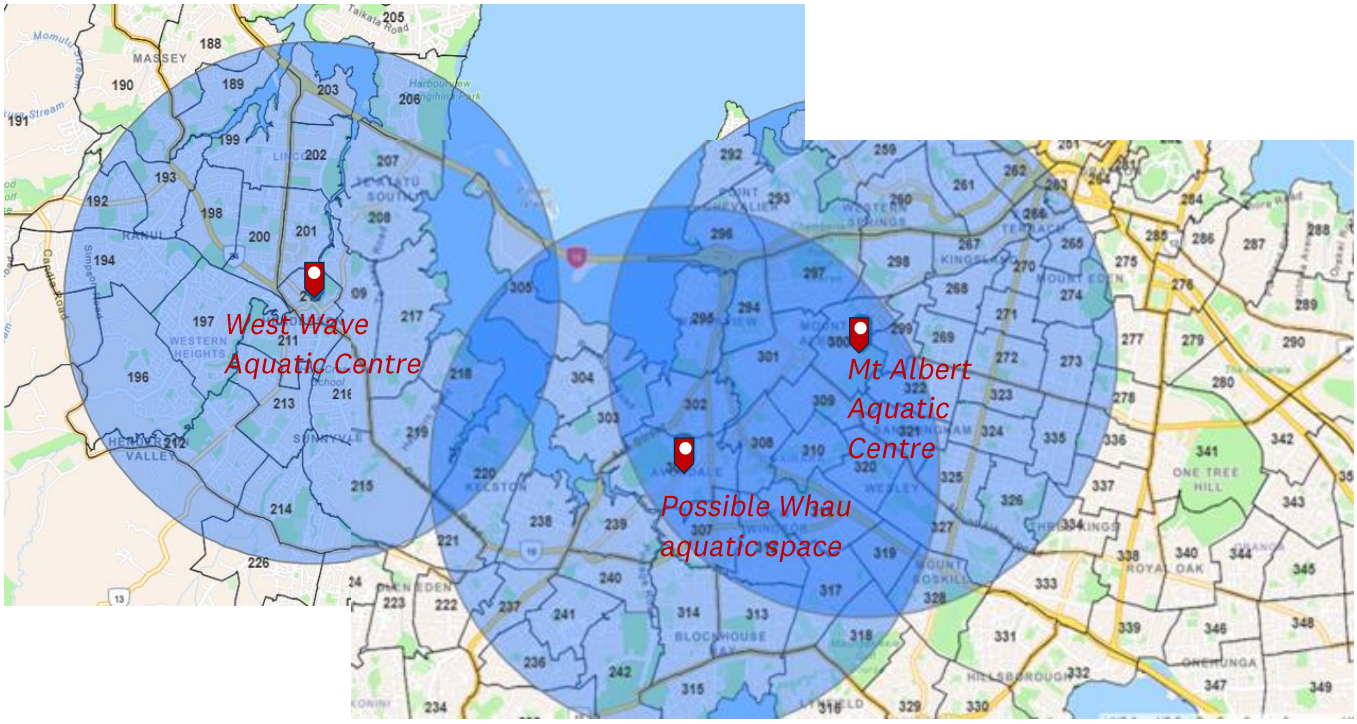
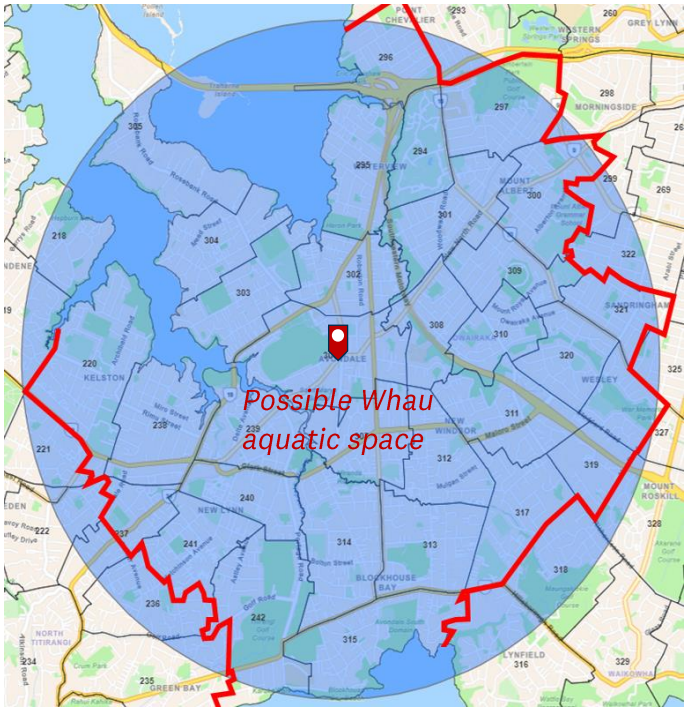


Fig-5: funding area/beneficiary area for Whau aquatic overlaid on MSM zones



Costs projected and growth shares for community spaces

Table 8: summary of investment in additional community spaces over 30 years to support new growth

New Community Spaces	Funding Area	DC Policy Growth share	Cost projected[13] ($m)
Te Hono (Whau Library/Community Centre)	Auckland-wide	24.8%	51.8
Whau aquatic-leisure spaces	Whau	62.0%	89.0
Flat Bush Library-Community spaces	Auckland-wide	24.8%	35.5
Flatbush aquatic-recreation spaces	Flat Bush	19.5%	48.0
Northcote Community Centre	Northshore	15.0%	25.2
Drury aquatic-recreation spaces	Drury	94.6%	136.8
Drury library-community centre spaces	Drury	88.7%	74.3
NW aquatic-recreation spaces	Northwest (sub-regional)	52.3%	161.1
Whenuapai/northwest library-community centre spaces	Northwest 2025	78.2%	82.1
Tamaki library-community centre spaces	Tamaki	70.0%	30.4

[13] Cost projected includes expense prior to June 2025.

The costs and growth shares for each of the new spaces in Table 8 are described below.

Te Hono (Whau Library-Community Centre) budget of $40.1m was approved as part of the Long-term Plan, in addition to $11.6m already expensed. The project budget suggests completion in 2028.

The existing Avondale library and community centre in Rosebank Rd provides a library building of 797 sqm. The 2024 population in the funding area projects a need for additional space representing a current service gap.

The Whau aquatic-leisure spaces budget is $89m for the Whau Library-Community Centre project, with completion in 2032. A detailed design and updated costs will be progressed before the project is commissioned.

The beneficiary funding area in Fig-5 reaches 150,000 in 2049. The same area has a population of 110,000 in 2024. However around 72,000 of the 2024 population can reasonably access and benefit from the Mt Albert Aquatic Centre. The 2021 analysis of the Mt Albert Aquatic Centre reported it would now be at capacity.

The area not served by the Mt Albert Aquatic Centre that could expect an aquatic service to be provided by the new Whau aquatic-leisure space (MSM 305 to 221 to 242) has a population of 39,000 in 2024. This LOS gap is 26% of the future Whau aquatic capacity of 150,000, so new growth causes 74% of the need for this new space.

However the existing population in the beneficiary funding area is 111,000 of the overall aquatic space beneficiaries of 222.000, so half of the capacity of the Mt Albert aquatic centre and the new Whau space will benefit future residents in the funding area. The overall allocation of the Whau aquatic-leisure investment to new growth combines the cause of 74% and future beneficiary share of 50%, so the new growth share is 62%.

Flat Bush library-community centre spaces, and Flat Bush aquatic-leisure spaces have similar starting circumstances to each other. The budget for these spaces has been carried forward from past costing exercises with $83m overall. Land has been earmarked in the commercial centre for the library-community centre spaces and at Barry Curtis Park for the aquatic-leisure spaces. The beneficiary funding area does not have a library-community centre or aquatic-leisure space, but the population there in 2024 is nearly 36,700 people, expected to rise to 45,600 by 2052.

As this new growth area has matured, the existing population represent a service gap, so new growth causes only 19% of the need for the aquatic-recreation spaces. The Flatbush library-community centre spaces were counted in the Auckland-wide network, with new growth financing 25%.

While $83m is budgeted for these spaces in the LtP, business cases will be needed to update the specifications and costs to progress each project.

The Drury aquatic-leisure and library-community centre spaces are projected to commence in 2035. It is assumed land will need to be acquired and both are expected to be complete by 2039. These spaces may be co-located as one multi-functional space, but as the beneficiary patterns of use differ they are modelled separately. The library-community centre is assumed to be located in the commercial centre of Drury East and the aquatic centre nearby. The next indicative business cases for these spaces will identify the most appropriate locations.

Residents of new housing planned for Opaheke can reasonably access the Sir Edmund Hillary Library and the Massey Park Pool in Papakura. The beneficiary funding area for both the library and aquatic spaces for Drury excludes the northern area above Opaheke Sports Park to recognise this.

These two projects are expressly to respond to the growth expected. The aquatic-leisure space is expected to reach capacity of 50,000 in 2046, for $137m for land acquisition and development. As the existing population in the beneficiary area is 11%, 89% of the future population will benefit from the investment. When the need and future populations are considered, the new growth share to 2046 of the costs is 95%.

There are existing rural library and community spaces in Drury comprising 434 sqm. The future population demand from 41 sqm per 1,200 population requires an investment of $74m. As 434 sqm is 13% of the new space requirement, the current level of service (434 sqm) is more than the existing population requires. Thus only 87% of the new space is counted as amenity needed by new growth. The share of future beneficiaries is 91%, so when combined with 87% of new need, the new growth share of the costs is 89%.

The north west aquatic-leisure spaces have sufficient budget identified in the LtP for land acquisition to occur in 2030 and 2031. The construction part of the project can get underway from 2035 to be developed by 2037. The cost projected for the development overall, including land is $161m.

The beneficiary funding area shown in Fig-3 has a population of 71,600 in 2024, rising to the 150,000 capacity of a destination space in 2061. As 71,600 of 150,000 cannot access this space currently, the cause and the share allocated to the existing population is 48%, so the share of investment for new growth is 52%.

The inner north west library-community centre provision analysis confirmed an earlier needs analysis that additional space is needed in Whenuapai to complement the Westgate library-community-centre space that opened in 2019 (called Te Manawa). The beneficiary funding area includes the area served by Te Manawa: south to a line equidistant between Ranui Library and Te Manawa, equidistant in the north between Te Manawa and Kumeu Library, and east to the SH18 bridge including West Harbour and Scott Point.

Te Manawa is a 3,600 sqm library and community centre space already included in the Development Contributions Policy. At 41 sqm per 1,200 population, the Te Manawa library can support 65,900 people. While the 2024 population of the beneficiary area is only 55,000, Te Manawa is expected to be at capacity[14] by 2027. The Community Facilities Network Plan suggests a library is needed in a new greenfields area when population is 30,000, so a new library space is assumed to be needed when Te Manawa has demand to serve 95,900 people. This is expected to occur in 2041.

The investment in the new library-community centre space in Whenuapai to serve the inner north-west is 100% caused by growth, for cost of $82m to be completed by 2040. While the population projections estimate a full-build out population for 2080, it is assumed the new space would be developed in stages, with an investment to cater for population of 126,300 by 2060. The current population of 55,000 is 44% of 126,400, so the future beneficiaries comprise 56%.

[14] Where operation capacity is 20% over the stated 41 sqm per 1,000 population, so 41 sqm per 1,200 population is applied.

When 100% cause and 56% future beneficiaries are combined, the growth share for the DC Policy is 78% for the new space. New growth areas are also funding a share of the cost of the recent library space, Te Manawa.

Additional Tamaki community spaces will be needed by 2054. The Tamaki area includes Glen Innes and Panmure community spaces. The library and community centre spaces have available capacity for some future growth, but not enough by 2054.

Considering population growth to 2054 for the catchments of the Glen Innes and Panmure libraries together, the library space will be at capacity from 2032 when the beneficiary population will be 79,100. An investment between 2051 to 2054 is required for additional spaces to be added to existing sites to support the additional 25,200 people to make 104,300 people by 2054.

The costing only considers the new amenity needed for the new growth so the cause for the investment is 100% new growth. However as of 2024, 60% of the future population is present, so the future share is 40%. Together the share of costs for new growth is 70%%.