How we set Development Contribution charges



Purpose

This document supplies additional information as an aide to understanding how the council calculates development contributions (DCs). It should be read in conjunction with Auckland Council's draft Contribution Policy 2019 which is a separate document.

There are two parts to this document:

Part One: Council's approach to setting development contributions.

Schedule 13 of the Local Government Act 2002 sets out the methodology which councils are required to use to calculate development contributions. Part One details the key steps that the council follows in applying this methodology:

- a) Identify the total cost of capital expenditure that the council expects to incur through the Longterm Plan (LTP) (council's 10-year Budget) to meet the demand caused by growth:
 - 1.1 Forecast the growth expected to occur over the period of the 10-Year Budget
 - 1.2 Identify the level of service
 - 1.3 Identify the total cost of capital expenditure the council expects to incur through the 10-Year Budget
 - 1.4 Identify the growth proportion of capital expenditure in the 10-Year Budget
- b) Identify the share of that expenditure attributable to each unit of demand:
 - 1.5 Determining funding areas
 - 1.6 Setting demand factors for each development type.

When the steps above have been completed the Council stands back and considers the overall impact. Allocation of the cost of growth and the level of DCs may impact on land owners and developers, future buyers, ratepayers and the Council's wider growth objectives. After considering the fairness and affordability of the impacts the Council may adjust the outputs before adopting a final Contributions Policy.

Part Two: Applying development contributions methodology to groups of activities

Part Two describes how the methodology for setting development contributions is applied to each of the activity areas reflecting the specific characteristics of demand for their services. The activities are:

- 2.1 Transport
- 2.2 Stormwater
- 2.3 Reserve acquisition
- 2.4 Reserve development and community infrastructure.



Part One: Council's approach to setting development contributions

1.1 Forecasting Growth

- 1. The council forecasts the scale, location and timing of population growth and related development to inform capital expenditure decisions. This information is also used to set DC prices.
- 2. Population growth is based on Statistics New Zealand population projections (February 2017 release, medium forecast). The locations for growth are based on the Unitary Plan which identifies areas for new development, intensification and outlines the nature of development allowed i.e. residential or non-residential. The timing of development in growth areas is informed by the Future Urban Land Supply Strategy (2015), the Development Strategy and timing of capital expenditure investments set out in the 10-Year Budget.
- Population data is converted into a forecast number of dwellings based on expected occupancy (3.0 falling to 2.6 persons per dwelling by 2046). Forecasts of non-residential floor space are derived from employment growth forecasts.

1...2 Level of Service

- 4. The council uses service levels to establish the nature of investment required to meet the needs of growth. Level of service standards are also used to identify areas of Auckland that are currently underserved by infrastructure. Combined this information helps inform the council's priorities for investment in our capital expenditure programme.
- 5. Level of service statements for each activity are set out in Section 2.0 of volume 2 of the 10-Year Budget. These statements provide the key service level indicators for the activities. Detailed information on levels of service can be found in policies on service provisions which are separate to the 10-Yer Budget. These documents provide the technical detail that is the basis for the council's service levels for each asset class.
- 6. These policies and documents are:
 - Asset Management Plans
 - Open Space Provision Policy 2016
 - Parks and Open Space Acquisition Policy 2013
 - Community Facilities Network Plan.
- 7. For transport, the capital investment programme is based on the 2018 refresh of the Auckland Transport Alignment Project (ATAP). ATAP has involved central and local government agencies agreeing a shared direction and a fundable package of transport investments for Auckland (the ATAP Package). The ATAP Package aims to deliver a transport system that:
 - Unlocks the benefits of growth
 - Enables and shapes the way Auckland grows

- Addresses Auckland's housing challenge
- Provides safe, reliable and sustainable access
- 8. The ATAP Package is incorporated into the Auckland Regional Land Transport Plan (RLTP). The Auckland Transport and City Rail Link (CRL) components have been incorporated into Auckland Council's LTP.

1.3 Identify the total cost of capital expenditure that the council expects to incur through the 10-Year Budget

- 9. The council establishes its capital expenditure (capex) program by prioritising demands for infrastructure through the 10-Year Budget decision making process. The 10-Year Budget sets out the capital expenditure program for each activity in Section 2 of Volume 2.
- 10. The capital expenditure in the 10-Year Budget is identified as specific projects and programmes of investment. The Unitary Plan, Future Urban Land Supply Strategy and the Development Strategy inform the location and types of growth and where and when the council will invest in infrastructure.
- 11. The council's capex programme lists specific projects where these have been planned. Until consent applications are received, the council cannot determine exactly where and when land owners will seek to develop. Therefore, the council generally uses detailed projects for the first few years of the 10-Year Budget. Broader capital investment programmes are utilised for later years.
- 12. This ensures that the council can direct its capital investment to where it is most confident growth will occur. In addition, the council also uses programmes that operate over the life of the 10-Year Budget where the investment is commercially sensitive (such as for reserve acquisitions); and for ongoing programmes that support all of Auckland (such as transport safety).
- 13. The costs of capital projects are inflated based on the assumptions set out in Note 2: Significant forecasting assumptions to the Prospective financial statements in Part 2, Volume 1 of the 10-Year Budget.
- 14. The council will deliver \$26 billion in capital investment over the ten years of the 10-Year Budget. The share of this investment that has been identified as growth related is \$7.2 billion. Of this, \$3.3 billion will be recovered from DCs, with \$2.7 billion to be collected within the ten years of the 10-Year Budget. The table below sets out the DC revenue by activity expected to be recovered under the draft Contributions Policy 2019 over the next ten years.

DC revenue by activity 2018-2028	\$ billion
Transport	1.1
Stormwater	0.5
Parks and community infrastructure	1.1
Total	2.7

1.4 Identify the growth proportion of capital expenditure in the 10-Year Budget

- 15. Projects and programmes may include elements of renewal, service level improvement and growth. In this case, the council apportions the cost between these outcomes based on the cause of the expenditure being incurred and the distribution of benefits between existing residents (renewal and level of service) and new development.
- 16. The council identifies the share of the cost that is attributable to growth by determining the extent to which a programme delivers:
 - Renewal replacement of end of life existing assets
 - Service Level Improvement higher service levels than provided by existing assets
 - Growth additional capacity to support a growing city.
- 17. Some projects and programmes are only delivering benefits to growth areas or only being delivered because of the need to manage the impact of growth. In these cases, the costs will be allocated to growth.
- 18. The approach to apportioning capital expenditure between renewal, level of service and growth is based on the best information available on a project or programme basis. This varies between and within activities. The approach taken within each activity is set out in Part Two.
- 19. For programme budgets encompassing a wide range of related projects being undertaken across the region the costs may be split based on evidence of from similar historical projects or using population growth as a proxy for the share to be attributable to growth. Where population growth is used, the share of the project attributable to growth is based on the expected population growth over the ten years of the 10-Year Budget as a proportion of population at the end of the period.
- 20. In allocating growth costs to DCs the council also considers the factors set out in the following table:

Factor	Considerations for growth cost allocation to DCs
Activity that can be funded from DCs	The Local Government Act 2002 sets out what activities and types of infrastructure can be recovered through development contributions. Any growth related capital expenditure that is not able to be funded by development contributions is excluded.
Other funding sources	Development Contributions cannot be used for any project or part of a project that is funded from another source. Any growth related capital expenditure to be funded by third-parties such as New Zealand Transport Agency (NZTA) is excluded from the allocation to DCs. Funding from other third party sources such as grants, developer funded works and any funding from financial contributions and targeted rates is excluded.

development

Capacity absorbed by existing Some of the increased capacity delivered by a project or programme may be absorbed by existing residential and commercial development. This factor is taken into account in determining the share of growth investment to be paid for through DCs.

Growth capacity over time

The growth capacity of capital projects differs. Some projects will provide capacity for the level of growth forecast over the next 10 years. After that time additional investment will be required to support further development. Other projects will provide sufficient capacity to accommodate the growth expected to occur over a longer time frame than 10 years. DCs only recover the proportion of costs of the project expected to be consumed by growth within the period of the 10-Year Budget. If a project will support 10,000 Household Equivalent Units (HUEs) in the first 10 years and 10,000 HUEs in the following 10 years then only half the project cost is included in calculating the cost attributable to DCs in the period to be covered by this policy.



1.5 Determining funding areas

- 21. The council allocates infrastructure projects and programmes to funding areas based on:
 - the nature of the infrastructure (Transport, Stormwater, Reserves and Community Infrastructure)
 - the population that it serves (regional, sub-regional or local)
- 22. Regional funding areas are used for infrastructure such as the City Rail Link or regional parks that:
 - are an integral part of a regional network
 - enable growth to occur across the region
 - benefit all development across the region to a similar degree
 - are available to the whole community without barriers for access and use
- 23. Sub-regional funding areas are used for infrastructure such as arterial roads and suburban parks that:
 - are an integral part of a sub-regional network
 - enable growth to occur across the sub-region
 - benefit all development across the sub-region to the same extent
 - are primarily for the use of residents within the sub-region.
 - are available to the whole community without barriers for access and use
- 24. Local funding areas are used for infrastructure such as stormwater ponds and neighbourhood parks and transport projects that enable local development that:
 - benefits multiple developments
 - are primarily for the use of residents within the local area.
- 25. Some programmes deliver a range of smaller projects across multiple areas. When the nature of the benefits or the drivers of demand are similar across the region, and the costs of providing the infrastructure likely to be the same irrespective of location, then they will be grouped together at the regional or sub-regional level.



1.6 Unit of demand factors

- The council categorises developments into development types based on the typical demand for infrastructure generated by these kinds of development. Differing units of demand are assigned to each development type so that the level of contributions charged reflect the demand these developments place on the need to invest in infrastructure. A small ancillary dwelling, such as a granny flat, will be charged less for transport and reserves than a standard residential dwelling. This reflects the fact that small ancillary dwellings generally have lower occupancy than standard residential dwellings and place less demand on these council services.
- 27. Units of demand for a development type may vary based on the infrastructure activity. For example, a retail development will be charged the same for stormwater as an attached residential unit with the same amount of impervious surface area but more for transport.
- 28. Unit of demand factors are based on the Household Unit Equivalent (HUE) which is the demand generated by a typical residential dwelling. Depending on the nature of the infrastructure activity, unit of demand factors may be applied as per the table below.

Factor HUE applied to:	When factor is used
Per Unit	Used for some types of residential development where there is a relationship between number of units and demand for an activity (e.g. between units in retirement village and demand for transport.)
Per room	Used for residential care homes and student accommodation
Per set area of Gross Floor Area (GFA)	For residential development, where demand for the activity relates to number of occupants (e.g. transport and reserves). Larger dwellings will be charged more than smaller dwellings, reflecting the fact that larger dwellings tend to have more occupants than smaller ones.
Per set area of Gross Development Area (GDA)	For non-residential development for Transport contributions. The reflects the relationship between development size and demand for transport e.g. a mall will generate significantly more traffic movements than a small office unit.
Per set area of Impervious Surface Area (ISA).	For Stormwater contributions excluding detached dwelling units. Stormwater demand is directly related to the amount of ISA. Developments with large areas of impervious surface will pay more than those with small amounts of impervious surface.
Per allotment	For subdivisions (residential and non-residential)

1.6.1 Development types

- 29. The council sets its development types to attribute units of demand to particular developments or types of development on a consistent and equitable basis. In setting the development types the council considers the:
 - a) need to separate residential and non-residential activities because of the different demands they place on activities of the council
 - b) range of residential development types and scales
 - c) range of non-residential development types and scales
 - d) complexity of trying to make the policy account for every different development type
 - availability of data to support differential unit of demand factors for various types of development.
- 30. The demand on council services varies widely across different forms of non-residential activity. Non-residential developments, particularly Retail and Production/Distribution, can be used for a range of non-residential activity that have differing demands on infrastructure. The nature of the activity undertaken in these developments can vary over time. The council has therefore grouped non-residential development types into broad categories based on average demand.
- 31. Residential dwelling types are set reflecting the generally lower demand more intense development places on the need to invest in infrastructure. In addition, sub-categories of detached and attached dwelling units based on size are used. These reflect the higher average occupancy levels of larger dwellings and hence the demand they place on the need to invest in infrastructure. This analysis was informed by dwelling size and occupancy rates obtained from Statistics New Zealand.



Part Two: Applying development contributions methodology to groups of activities

2.0 Introduction

- 32. This section sets out for the Transport, Stormwater, Reserve Acquisition and Reserve Development and Community Infrastructure activities the approach taken to:
 - planning
 - allocating the cost of projects and programmes between renewal, level of service and growth
 - allocating projects to funding areas
 - determining demand factors for development types.

2.1 Transport

2.1.1 Transport planning

- 33. Auckland has seen rapid growth in recent years, which has a significant impact on travel demand and Auckland's transport system. Auckland is home to almost 1.7 million people. This growth has been reflected in population, but also in increased new car registrations, annual vehicle kilometres travelled, and regrettably, in deaths and serious injuries on our roads.
- 34. Over the next 10 years, Auckland's population is expected to reach 2 million, with a further 400,000 people expected by 2050. Population growth and increase in travel demand have placed significant pressure on Auckland's transport system, leading to congestion, increased travel times, and reduced accessibility to employment, education and other activities.
- 35. The Auckland Regional Land Transport Plan 2018-28 (RLTP) has been developed to enable Auckland to address its transport challenges and take advantage of future growth, while at the same time enabling the creation of an accessible, well-connected, safe and sustainable region. The challenges outlined in the RLTP include:
 - managing the increase in severe congestion on the transport network, in particular for freight,
 as Auckland grows
 - maintaining and improving access to employment
 - reducing deaths and serious injuries on the Auckland transport network
 - managing the unwanted effects of the transport network and projects on Auckland's environment, people and communities
 - maintaining value for money in delivering transport projects
- The RLTP includes Auckland Transport's funded capital programme (appendix 1a of the RLTP), and Auckland Council's contribution to the City Rail Link. These are consistent with the capital programme in the 10-Year Budget. The RLTP also includes the transport programme for the NZ Transport Agency (appendix 2), the Rail Infrastructure Capital Programme (appendix 3) and Department of Conservation programme (appendix 4), although these are not subject to development contributions.

- 37. The RLTP includes significant investment to improve the capacity and functionality of the Auckland transport system. Funded improvements include:
 - Public transport (e.g. new bus lanes and electric trains),
 - Active transport (e.g. new/extended cycleways and footpaths),
 - Network capacity and performance (e.g. dynamic lanes and traffic light synchronisation),
 - Safety (e.g. upgrades to high-risk intersections and routes), and
 - Corridor improvements (including new corridors, e.g. Penlink, and significant upgrades to existing corridors, e.g. Lincoln Road).
- 38. Improvements are designed to work together to deliver a transport system that facilitates Auckland's growth. While some projects provide additional transport capacity specifically targeted to new development (e.g. new and upgraded corridors in growth areas), others provide improved transport choices (e.g. public and active transport) or improved corridors (e.g. safety improvements and upgrades to existing corridors such as Lake Road in Devonport) for the benefit of new and existing Aucklanders.
- 39. Given these considerations, the following sections set out, for the transport activity, the approach taken to:
 - allocate the cost of transport projects between level of service and growth
 - allocate projects to funding areas
 - determine demand factors for development types.

2.1.2 Cost allocation between renewals, level of service and growth

- 40. Due to the nature of the transport network, and the availability of the network to all Aucklanders, a significant portion of the capital expenditure programme included in the RLTP has been deemed to benefit all Aucklanders, existing and new, to the same extent. This recognises that growth is a key investment driver, but the cost of projects may not be fully attributed to new development. For example, public transport capacity improvements provide benefits to new Aucklanders, as well as allowing existing Aucklanders to shift travel modes. In addition, growth is just one of a number of factors contributing to Auckland's worsening safety record since 2014. The costs allocated to development for much of the RLTP transport programme are split based on the population growth as a share of future population.
- 41. However, for some projects, infrastructure can be linked to development in a specific area. In these circumstances, the methodology aims to allocate to the cost to growth in that area.
- 42. For 10-Year Budget projects and programmes where growth is one of the investment drivers, the allocation of costs between growth and renewals and level of service uses one of the following approaches:
 - Projects that have cost allocations from previous policies or legacy councils have had their cost allocations carried forward. Examples include the Eastern Busway and Murphys Rd improvements

- As part of their development, some new projects included in the 10-Year Budget have been the subject of project-specific transport modelling, studies and/or calculations. Where available, the results of this analysis are used to arrive at a project-specific cost allocation. For example Gills Roads Link in Albany, and projects delivered as part of council agreements with developers in Wainui, Drury South (Ararimu) and Tamaki.
- For all other projects and programmes that don't have legacy cost allocations or detailed project-specific information available, costs are split based on the population growth as a share of future population within the relevant funding area.

2.1.3 Allocation of projects to funding areas

- 43. The following types of projects and programmes are considered to have equitable benefits across the region and are therefore allocated to the regional funding area:
 - Extensions of the rapid transit network. These provide network capacity and access improvements for the benefit of all Aucklanders. Examples include the purchase of new electric trains, Rosedale Bus Station and Airport to Botany Rapid Transit Network (including Puhinui bus-rail interchange).
 - Projects that increase the capacity of the wider network with equitable benefits across the
 region. Examples include city centre bus and ferry improvements which provide capacity and
 access improvements to users across the region.
 - Programmes that add capacity or improve the existing network across the region (i.e.
 infrastructure improvements that are spread geographically across Auckland). An example is
 the road safety programme.
- 44. In some cases, several related programmes/projects have been grouped together to form a regionally funded programme. An example is park and ride improvements where the RLTP identifies detailed projects for the first few years, with a broader capital investment programme funded in later years.
- While a significant portion of the infrastructure included in the 10-Year Budget serves the region as a whole, there are a number of infrastructure works that can be attributed to a more localised area. A number of transport projects benefit a sub-regional part of Auckland (i.e. North, West, Central or South Auckland) while others provide benefit to a smaller more localised area. These decisions are informed by an assessment of the area of benefit using either transport modelling or an assessment of the projects scale and interconnectivity.

2.1.4 Unit of demand factors

- 46. Transport demand factors are calculated using data on the daily volume of trips generated from each development type. Development types generating more trips are charged a higher demand factor.
- 47. Research is available in New Zealand and overseas for a range of trip generations by different land use types. Information available for the New Zealand environment, which is still relatively current, has been given a higher weighting than overseas data. The research reports used are set out below:
 - a) RTA Guide to Traffic Generation V2.2 Oct 2002[1]
 - b) NZ Transport Agency Research Report 453 Nov 2011[2]
 - c) Trip Generation rates for assessment of development proposals (Parsons Brinckerhoff) Jan 2014[3]
 - d) RTA Guide to Traffic Generation Updated TDT 2013/14[4]
 - e) ITE Trip Generation Manual 9th Edition.[5]
- 48. Adjustments are made to raw trip generation data for non-residential development types for the following reasons:
 - · weighting to reflect that residential development has the strongest link to population growth
 - type of trip
 - transport scale economies.

Residential development weighting

49. The primary driver of the requirement to provide additional infrastructure, in particular transport infrastructure, is population growth. DCs are charged to development and the strongest connection to population growth is through residential development. Non-residential development creates demand on infrastructure and these developments benefit from regional and sub-regional transport investment. However, given the population growth driver the unit of demand factors for non-residential development are adjusted to reflect the residential origin of the trips. Therefore a 50 percent reduction in primary trips is made to non-residential development types.

Trip Type

- 50. Non-residential development types generate different types of trips, each of which have differing impacts on the transport network.
- 51. Trip generation data identifies different types of trip:
 - Non pass-by trips direct from one location to final destination without stopping
 - Pass-by trips has one or more stops before reaching final destination
- 52. Each of the trip generation types places different demand on the need to invest in transport. Pass-by trips to a location are not the principal drivers of demand for transport services but do measure benefit.

^[1] https://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/guides-manuals/guide-to-generating-traffic-developments.pdf

^[2] http://www.nzta.govt.nz/assets/resources/research/reports/453/docs/453.pdf

^[3] https://www.dpti.sa.gov.au/__data/assets/pdf_file/0011/322004/11542728-v1-DPTI_-

_Trip_Generation_Rates_-_2014.pdf

^[4] https://www.rms.nsw.gov.au/trafficinformation/downloads/td13-04a.pdf

^[5] https://www.ite.org/technical-resources/topics/trip-and-parking-generation/

Raw trip generation data is adjusted proportionately to the share of non pass-by and pass-by trips made.

Transport Scale Economies

53. Non-residential development is generally much less dispersed than residential development and usually more closely aligned to public transport hubs. Economies of scale are made when providing transport infrastructure for non-residential development. Therefore, a further reduction of 33 percent is made to non-residential development types for efficient use of the network.

2.2 Stormwater

2.2.1 Stormwater planning

- 54. Forecasting is used to analyse the cost of infrastructure requirements for the future years of the LTP.

 This forecast is developed using the following inputs:
 - projected growth based on the Auckland Regional Transport (ART) i11 growth model
 - where growth will occur based on the Future Urban Land Supply Strategy 2015, Development Strategy and 30-Year Infrastructure Strategy
 - assumptions on future infrastructure prices based on historic trends, and the topographical and environmental (i.e. flooding and geology) nature of growth areas
 - how much land will cost based on a projection of future land prices
 - levels of service based on several factors including the number of flood events, number of properties affected and water quality standards for our beaches and coastal environments.
- The specific nature of stormwater investment in high growth areas is largely unknown until later in the development cycle (plan changes or resource consent stage). Stormwater investment will depend on developers' exact plans and road layouts.
- As a result, assumptions are made when determining the level of infrastructure provision that may be required. For example, it is assumed that land will be developed to its maximum potential. Standard cost assumptions are used to set the level of infrastructure provision, for example \$150,000 per ha for greenfield land for networks. These standard cost assumptions are used as the separation between council provided trunk infrastructure and developer provided local infrastructure cannot be determined until late in the development cycle.
- 57. The standard cost assumptions are adjusted to reflect the variances in the cost of stormwater provision in different funding areas. The key factors that influence costs are: the geotechnical nature of the area; susceptibility to flooding, land prices and the fragmentation of land ownership.
- 58. Adjustments are made to the overall cost assumptions for projects to reflect how much should be funded by the council and how much funded by developers. Programme cost estimation assumes that some of the works required to serve the catchment, will be undertaken by developers.
- 59. An estimate is made for each funding area based on the degree of land aggregation. Where there are a few large land owners within a catchment they are assumed to undertake some of the works and the

council will not need to make these investments and won't charge these land owners contributions for those works. Where land is more disaggregated the council will need to make the investment and recover the cost from those land owners who benefit. Growth related programme costs are allocated to funding areas using a weighted attribute matrix based on these factors.

- Auckland is moving towards being a water sensitive city and we are changing the way we value and manage stormwater. We are placing a greater emphasis on at-source and onsite management and the retention of streams and channels to provide a resilient network. This may require works within and along streams and channels to manage quicker runoff timings, higher peak flows and longer duration flows. Where these works are required they are included as part of a stormwater management plan or integrated catchment analysis and are reflected in the cost of infrastructure to be provided.
- Where structure planning takes place the cost of this growth is refined based on more detailed information about the nature of development. In these areas if the cost of growth is significantly higher or lower than the broader funding area(s) the structure plan sits within, then we will consider the benefits of applying a specific funding cost to this area to fairly apportion and recover the cost of this growth.
- Developers may benefit from stormwater works in two ways. Stormwater investment by the developer and/or council may manage the increased stormwater flows resulting from development. Developers may also benefit from stormwater investment upstream that reduce flooding thereby enabling land to be developed.
- In some instances, the developer may be asked to construct infrastructure that benefits a wider catchment than just their own. This may be due to the stormwater management or catchment management plan for the area already signalling the need for a stormwater management device or pipe upgrade at that location. In these cases, the developer should discuss this with the council to agree a fair and equitable methodology to apportion the costs to reflect the wider benefit provided.

2.2.2 Cost allocation between renewal, level of service and growth

- 64. Projects costs are allocated between renewal, levels of service and growth as follows:
 - growth, level of service and renewal allocations are assessed on a project by project basis.
 Consideration is given to the number of factors including the area being serviced, the number of assets being renewed, the proportion of environmental works between treated and untreated and the number of houses that are removed from the flood plain
 - if part of a growth project includes an existing asset being replaced, the cost is separated between renewal and growth by excluding the component of that cost that relates to replacement.
 - if a project generates benefits to existing properties such as a reduction in flooding, costs are apportioned between level of service and growth based on the relative areas of impervious surface.
- 65. Programme cost allocation is based on the average split of renewal, growth and service level for historic projects.

2.2.3 Allocation of projects to funding areas

- 66. Stormwater projects that provide a regional benefit for both existing and new residents are allocated to the regional funding area. An examples of a regional programme is regional catchment planning. The majority of programmes and projects are local.
- 67. Local funding areas are based around stormwater hydrological catchments that link areas that generate stormwater with the areas that receive the run-off. This ensures that the costs can be equitably shared between those that generate the demand, and those that receive the benefit of the infrastructure through reductions in flooding.

2.2.4 Unit of demand factors

- 68. Demand for stormwater is based on the impervious surface area of a development.
- 69. For residential development an average approach is used. An average dwelling of between 100 m² and 249m² is assumed to on average create 292m² of impervious surface area, based on legacy council average values.
- 70. All other developments are charged based on the actual ISA to be created. Any increase in impervious surface area will generate the same/ or similar water flows irrespective of the development type. The charge is converted to HUEs for the funding area based on how many HUE equivalents of ISA will be created.

2.3 Reserve acquisition

2.3.1 Reserve Acquisition Planning

- 71. Planning for reserve acquisition starts by forecasting demand for future open space. This forecast is developed using the following inputs:
 - projected growth based on the Auckland Regional Transport (ART) i11 model
 - where growth will occur based on the Future Urban Land Supply Strategy 2015, Development
 Strategy and 30-Year Infrastructure Strategy
 - structure plans that identify the nature of development within growth areas.
 - 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.
- The council has prioritised reserve acquisition in very high growth areas, followed by high growth areas rather than addressing any gaps in the existing parks and open space network. As a result, more than 90 per cent of the open space acquisition budget is forecast to be spent on parks to serve growth areas rather than in existing communities.
- 73. Programme budgets are committed to specific projects over time. The council does not publicly announce its purchasing intentions in advance to preserve its negotiating position. At the end of each financial year a list of purchases completed within that year are outlined in a report to the Environment and Community Committee, which is available on the council's website.

2.2.3 Cost allocation between level of service and growth

- 74. The purchase of land is a one-off event and as such there is no renewal component for land acquisition.
- 75. Costs are apportioned between level of service and growth based on the areas that will benefit from the investment. Where a park will benefit both an existing developed area and new development, the costs are shared in proportion to the forecast population in the land areas that will fall within the catchment area of the park being acquired.

2.3.4 Allocation of projects to funding areas

- 76. Projects and programmes are allocated to funding areas based on the area that will benefit from the investment. The council uses the catchment areas identified the Open Space Provision Policy to determine area of benefit. Catchments will vary depending on the type of park.
- 77. Reserves are broadly allocated to funding areas as follows:
 - Regional Parks, Sports Fields and Civic Spaces: Regional
 - Suburban Parks: Sub-regional
 - Neighbourhood parks: Local

2.3.5 Unit of demand factors

- 78. The council's level of service for open space is based on providing 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.
- 79. 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 3.0 falling to 2.6 by 2046. 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.

80. Non-residential development is not charged for reserves as this is not permitted under the Local Government Act 2002. New parks and open space are not provided by the Council in areas that are purely commercial in nature e.g. industrial parks.



2.4 Reserve development and Community infrastructure

2.4.1 Reserve Development and Community Infrastructure Planning

- 81. Reserve development planning is directly linked to the acquisition of new reserves.
- 82. Community infrastructure planning starts by forecasting the future demand for community infrastructure.

 This forecast is developed using the following inputs:
 - projected growth based on the Auckland Regional Transport (ART) i11 model
 - where growth will occur based on the Future Urban Land Supply Strategy 2015, Development Strategy and 30-Year Infrastructure Strategy
 - structure plans that identify the nature of development within growth areas.
 - the requirements of the Community Facilities Network Plan, which provides a road map for how the council will invest in community facilities over the next 20 years
 - how much infrastructure will cost based on a projection of future prices
 - Local Board priorities as set out in individual board plans.
- 83. The provision of reserve development and community infrastructure usually comes late in the development cycle, once a community has been established. This leads to a significant proportion of the capital expenditure being allocated to programmes rather than projects. Programme budgets are committed to specific projects over time.

2.4.2 Cost allocation between renewal, level of service and growth

- 84. The split between renewal, level of service and growth for reserves development and community infrastructure is undertaken at both a programme and project level.
- 85. The council has set its budget in the Long-term Plan 2018-2028 for reserves development and community infrastructure after prioritisation of all the demands on its capital programme. Given the expected level of growth the council decided that 75 per cent, of the proposed capital investments in reserves development and community infrastructure should be invested to support growth. This is lower than the 90 per cent growth allocation for reserve acquisition. This reflects the lag between the acquisition of reserves and development. Some reserves to be acquired with in the period of the Long-term Plan will not be developed until after this period. The cost of developing these reserves is not included in the Contributions Policy 2019. Non-DC funding sources are used for any renewal or increase level of service requirements needed.
- Prioritisation of the projects from the investment programme is adjusted to ensure a 75 per cent growth 25 per cent service level balance is achieved once the project level cost allocation is undertaken for individual projects, see below.
- 87. The catchment area for asset types is used to determine the areas of benefit on a project by project basis. The share of benefit attributable to existing properties and projected growth within the area of benefit is then assessed. For example:
 - neighbourhood park development will be assessed against current/projected growth within catchment of neighbourhood park (e.g. 400m walking distance)

 sports park investment is assessed against current/projected growth in demand based on a wider network assessment.

2.4.3 Allocation of projects to funding areas

- 88. Projects and programmes are allocated to funding areas based on the area that will benefit from the investment. The council uses the catchment areas identified in relevant planning documents to identify the area of benefit. These documents are the Open Space Provision Policy 2016 which is used for reserve development, and the Community Facilities Network Plan which is used for community infrastructure.
- 89. Programmes and projects are broadly allocated to funding areas as follows:
 - Regional funding area: sports field development and the growth share of major community infrastructure projects that serve all of Auckland
 - Local funding areas: neighbourhood playgrounds and local community infrastructure

2.4.4 Unit of demand factors

- 90. Units of demand for Reserve development and Community facilities are set on the same bases as Reserves acquisition, see section 2.3.5 above.
- 91. Non-residential developments are not charged for reserves or community infrastructure.

