

PROPERTY **E**ECONOMICS



WELLINGTON CITY

QUALIFYING MATTERS

CAPACITY ASSESSMENT

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SCHEDULE

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1. INTRODUCTION

Property Economics has been engaged by Wellington City Council (**WCC**) in conjunction with Urban Edge Planning (UEP) (the partnership), to assess feasible residential capacity within Wellington City and develop a functional and dynamic residential capacity model for the city.

Councils are required to give effect to the National Policy Statement on Urban Development (**NPS UD**) and the Resource Management Act (Enabling Housing Supply and Other Matters) Amendment Act 2021 (**Enabling Housing Supply Act**). This includes the introduction of the Medium Density Residential Standards (**MDRS**) under the Enabling Housing Supply Act. This Act also requires councils to implement changes to their plans to give effect to Policy 3 of the NPS-UD which enforces increased height limits within Commercial Zones and within the walkable catchment around rapid-transport stops and Commercial Centres.

Included within these statutory documents is the allowance for Qualifying Matters (QFM). These are matters that may make the prescribed building heights and density standards unsuitable for a particular area. These are varied by the use of Policy 4 of the NPS-UD. Primarily, this is to give effect to Section 6 matters of the Resource Management Act but there is the allowance for Councils to define their own matters. However, doing so requires further reporting and evidence that will likely be more heavily scrutinised by the Ministry of Housing and Urban Development.

The residential capacity modelling that the partnership has been involved in serves to provide WCC with an assessment of their ability to meet their housing capacity requirements under the Proposed District Plan. This is the subject of the reports already provided to Council earlier this year. The partnership has subsequently used this model to quantify the impact that the Qualifying Matters proposed by WCC will have on capacity.

This report is designed to present the results of the Qualifying Matters Modelling and provide council with an economic costs and benefits assessment for each of the proposed QFM's. It is intended to be used to inform the Council's Section 32 report for the Proposed District Plan and should establish a robust economic foundation to ensure WCC has a strong position during the PDP hearing processes.

1.1. GLOSSARY & ACRONYMS

- **Theoretical Yield / Plan Enabled Capacity** – The total number of properties that could be developed according to the PDP provisions within the permitted building envelope, irrelevant of market conditions.
- **Feasible:** A development is considered Feasible if its assessed profit margin exceeds 20%.
- **Comprehensive Development** – A development option that assumes the removal of all existing buildings for a comprehensive redevelopment of the entire site with fewer restrictions.
- **Infill Development** - A development option that assumes the existing building is retained, and new residential house(s) are developed on balance of the site (i.e., the backyard).
- **Standalone House** – Single detached dwelling.
- **Terraced** – Dwellings that are attached horizontally to other dwellings but not vertically. This typology is always built to the ground floor (i.e., does not include homes built above retail stores).
- **Apartments** – Dwellings that are attached vertically and potentially horizontally. Usually in multi-storey developments of higher density.
- **Total Yield**- The total number of dwellings developed.
- **Net Yield** – The total number of dwellings constructed net of any existing dwellings removed. For Infill development, the total yield is equal to the net yield, while for Comprehensive development the net yield is equal to the total yield less the existing dwellings.
- **WCC** – Wellington City Council
- **PDP** – (Wellington) Proposed District Plan
- **HBA** – Housing and Business Capacity Assessment
- **QFM** – Qualifying Matter
- **NPS UD** – National Policy Statement on Urban Development 2022



- **Enabling Housing Supply Act** - Resource Management Act (Enabling Housing Supply and Other Matters) Amendment Act 2021
- **MDRS** – Medium Density Residential Standards
- **MRZ** – Medium Density Residential Zone
- **HRZ** – High Density Residential Zone
- **MCZ** – Metropolitan Centre Zone
- **SNA** – Significant Natural Area
- **SASM** – Sites and Areas of Significance to Māori

2. THEORETICAL CAPACITY

2.1. METHODOLOGY AND ASSUMPTIONS

Residential Capacity Modelling can be broken down into four stages:

1. **Theoretical Capacity:** - What could be built within the permitted building envelope.
2. **Feasible:** An assessment of which developments are financially feasible to develop.
3. **Realisable Capacity:** An assessment of which developments are likely to be realised given varying development motivation and risk factors
4. **Demand Reconciliation:** Reconciling the capacity that has the potential to be realised against what is demanded in the market by location and typology to ensure an appropriate range of options is provide for in the market.

The methodology and assumptions for each of these modelling stages have been presented and detailed in previous reports. Urban Edge, who were responsible for the Theoretical part of the Capacity Modelling have updated their methodology report to include an outline of how the PDP rules were modelled to assess each of the identified QFM's.

For more details on Property Economics Feasible Capacity Model, refer to the previous capacity report titled Wellington City Commercially Feasible Residential Capacity Assessment (May 2022).

3. QUALIFYING MATTERS OUTLINE

3.1. BACKGROUND

The Resource Management (Enabling Housing Supply and Other Matters) Amendment Act and NPS-UD identify a range of 'Qualifying Matters'. These are allowable reasons why a council can make District Plan provisions less enabling than otherwise required by the Act or the NPS-UD. The mechanism to make provisions less enabling than required is through the use of policy 4:

- a) Matters recognised under Section 6;
- b) Matters required to give effect to national policy statements (other than the NPS-UD or the New Zealand Coastal Policy Statement 2010);
- e) To ensure the safe or efficient operation of nationally significant infrastructure;
- f) Open space provided for public use;
- g) Give effect to a designation or heritage order;
- h) A matter necessary to implement, or to ensure consistency with, iwi participation legislation; and
- j) Other matters that make higher density inappropriate in an area, but only if section 77L is satisfied. (This requires additional reporting and justification).

The QFMs proposed by WCC are as follows:

- Restricting Development in areas subject to Coastal and Natural Hazards including flood risks, coastal inundation, tsunami risks and fault lines.
- Significant Natural Area (SNA) Overlay. (A reduction in the extent of this overlay between the DDP and PDP means that this is no longer a QFM).
- Heritage buildings, structures and areas;
- Sites and Areas of significance to Māori (**SASM**);
- Airport Noise Overlay
- Viewshafts. (Found to have little to no impact on capacity and therefore not counted as a QFM.).
- Restricting Development within the City's Waterfront Zone.
- Notable Trees.
- Designations – (Protect areas for specific uses such as Infrastructure and Schools).
- Character precincts including the Mount Victoria North townscape precinct.

The planning response to manage some qualifying matters differs. Some qualifying matters utilise policy 4 to vary buildings heights and densities while others do not, and alternatively have a tangible impact on development capacity by restricting the amount of a site that development could occur on, or by requiring a resource consent for a development that would otherwise be permitted by the MDRS. For the purpose of this report, all qualifying matters with the effects outlined above have been modelled and assessed.

Urban Edge have modelled each of these qualifying matters to identify their impacts on the plan-enabled capacity. Included in the updated report is a table that outlines for each of these QFM's, the rules from the District Plan and how they have been modelled.

For reference, this table has been reproduced here.

TABLE 1: URBAN EDGE APPROACH TO MODELLING QUALIFYING MATTERS

Qualifying Matters	Approach
Heritage Buildings, Structures, and Areas	<p>As the base data included provision for heritage, the approach taken for modelling the heritage features as a QFM was to include all heritage sites in the modelling, as if the heritage rules did not apply. The following heritage rules have been modelled:</p> <ul style="list-style-type: none"> • HH-R16 total demolition of contributing buildings and structures – Discretionary.
Notable Trees	<p>Select all sites which have a notable tree canopy cover over 10% or more of a modelled dwelling. Apply a proportional impact on development based on the area of the dwelling that is covered by the canopy. The relevant rules that have been modelled are:</p> <ul style="list-style-type: none"> • TREE-R2 Activity and development within the root protection area of notable trees – Restricted Discretionary. • TREE-R3 Destruction, relocation, or removal of notable trees – Discretionary.
Character Precincts	<p>Character precincts were removed from the underlying data and were processed through the model without the overlay. This is then compared to the results with the overlay included.</p>
Significant Natural Areas	<p>Significant Natural Areas were included in the base data. The approach to modelling was to remove all Significant Natural Areas from the underlying data and then process through the model. The relevant rule modelled is:</p> <ul style="list-style-type: none"> • ECO-R1 Trimming, pruning or removal of vegetation within a Significant Natural Area – Restricted Discretionary.
Natural Hazards	<p>Natural hazards were modelled in the following ways:</p> <ul style="list-style-type: none"> • Low coastal hazards – dwellings within the low coastal hazard areas are permitted under Rules: <ul style="list-style-type: none"> ○ CE-R21 Potentially Hazard Sensitive Activities in the Low Coastal Hazard Area – Permitted. ○ CE-R22 Hazard Sensitive Activities in the Low Coastal Hazard Area – Permitted. • Medium and High Coastal Hazards – these were excluded from the modelling process as a dwelling within them is at least a Restricted Discretionary Activity, under Rules: <ul style="list-style-type: none"> ○ CE-R23 Potentially hazard sensitive activities in the medium coastal hazard area, excluding the City

	<p>Centre Zone or Airport, operation port activities, passenger port facilities and rail activities – Restricted Discretionary.</p> <ul style="list-style-type: none"> ○ CE-R25 Potentially hazard sensitive activities within the high coastal hazard area, excluding the City Centre Zone or Airport, operation port activities, passenger port facilities and rail activities – Discretionary. <ul style="list-style-type: none"> • Flood Hazards – Dwellings within flood hazards are at least a Restricted Discretionary Activity, under Rules: <ul style="list-style-type: none"> ○ NH-R11 Hazard Sensitive Activities in the Inundation Area of the Flood Hazard Overlay – Restricted Discretionary ○ NH-R12 Potentially Hazard Sensitive Activities in the Overland Flowpath of the Flood Hazard Overlay – Restricted Discretionary. ○ NH-R13 Hazard Sensitive Activities within the Overland Flowpaths of the Flood Hazard Overlay – Discretionary. ○ NH-R15 Potentially Hazard Sensitive Activities and Hazard Sensitive Activities within the Stream Corridors of the Flood Hazard Overlay – Non-Complying. <p>The approach was to remove the flood hazard overlay from the underlying data. This meant that when ran through the model, the model will only produce results on areas that are leftover.</p> <ul style="list-style-type: none"> • Fault Hazards – The Wellington Fault is the only fault which has implications on residential dwellings. Within the Wellington Fault, only two dwellings are allowed. The approach to modelling was to restrict the model from developing any more than 2 dwellings on each site within the Wellington Fault area only. The relevant rules modelled are: <ul style="list-style-type: none"> ○ NH-R6 Construction of a Residential Unit or Conversion of any Non-Residential Building into a Residential Unit in the Wellington Fault and Ohariu Fault Overlays – Permitted where no more than 2 dwellings.
Sites and Areas of Significance to Māori	The approach to modelling SASMs was to isolate all sites which had a SASM overlaying. Then a manual analysis was undertaken to remove all sites from analysis which had 50% or more of the site covered by a SASM. Through this analysis, it was found that SASMs

	<p>either cover an entire site or a very small portion of the site, which would not affect development. The relevant rule is:</p> <ul style="list-style-type: none"> • SASM-R4 New Buildings or Structures within a Site or Area of Significance to Māori in Category A or B – Restricted Discretionary.
Mt Victoria Townscape Precinct	The Mt Victoria Townscape Precinct was modelled by removing all properties within the area from the underlying data. This was then processed through the model.
Airport Noise Overlay	The Airport noise overlay restricts developments to two dwellings within the inner air noise boundary. Therefore, the modelling has limited development on that basis. The Airport Noise Overlay also require insulation and noise mitigation measures, which the modelling assumes will be met.
Open Spaces – Building Controls Adjacent to Open Space	On properties adjacent to Open Space areas, the recession plane requirement of 2.5m+45° is required along the boundary adjoining the open space area. The modelling applies this recession plane along all boundaries, for simplicity.
Waterfront Zone	<p>The waterfront zone allows for limited development. This was included in the modelling. The relevant Rule is:</p> <ul style="list-style-type: none"> • WFZ-R15 Construction of new Buildings and Structures – Permitted where the new building or structure has a site coverage of less than 30%, is less than 4m in height, and the area of all buildings does not exceed 200m².
Viewshafts	<p>Viewshafts were found to have little to no impact on development capacity, for the reasons set out below.</p> <ol style="list-style-type: none"> 1. Viewshaft 1 (The Beehive). This viewshaft looks down Bunny Street towards the Beehive. It crosses the parliament grounds, where the Cenotaph is, and will not be obstructed by buildings due to the viewshaft being within the street corridor. 2. Viewshaft 2 (The Inner Harbour). This viewshaft looks down Bunny Street from parliament entrance to the inner harbour. It is largely within the street corridor and crosses the front of the rail station across Open Space. The only impact would be if the ferry terminal were to be redeveloped and this would be a Discretionary Activity. 3. Viewshaft 3 (North Queens Wharf and Inner Town Belt). This viewshaft looks down Whitmore Street towards the harbour and will not be built within due to the street corridor. The impact on development will be negligible as buildings can be designed to avoid this viewshaft where the viewshaft crosses into parcels.



	<ol style="list-style-type: none"> 4. Viewshaft 4 (The Beehive and the Cenotaph). This viewshaft looks up Whitmore Street towards parliament and is mostly protected by the street corridor. The impact on development will be negligible as buildings can be designed to avoid this viewshaft where the viewshaft crosses into parcels. 5. Viewshaft 5, 6, 7 and 8 (Waring Taylor Street, Johnston Street, Brandon Street, Panama Street). These viewshafts look down streets and will largely not be obstructed due to the protection by the street corridor. Viewshaft 7 and 8 cross buildings on the waterfront. However, viewshaft 7 will have negligible effects on capacity due to only one building being impacted and Viewshaft 8 has a height intrusion limit higher than what is permitted on the waterfront. 6. Viewshaft 9 (Lambton Quay/Grey Street). This viewshaft looks at the MLC Building and AON Centre down Lambton Quay. It is mostly within the street corridor and will be protected by the street corridor. 7. Viewshaft 10, 11 and 12 (Hunter Street, Willeston Street, Chews Lane/Harris Street). These viewshafts look towards the harbour from Lambton Quay/Willis Street. All these viewshafts look down street corridors which will not be built within. There are no or very limited opportunities on the waterfront for development which would obstruct these viewshafts. 8. Viewshaft 13, 14, 15, and 18 (Cable Car Station). Any building that would obstruct these viewshafts would need to be 122m in height. The underlying height limits prevent this as a permitted option. 9. Viewshaft 16 and 17 (Taranaki Street and Tory Street). These viewshafts look down the respective streets and are protected by the street corridor. Any development on the waterfront obstructing these views is very unlikely given the location of Te Papa.
Designations	Designations were modelled by removing the designation overlay from the underlying data and treating designated sites based on the underlying zoning of the site.

Source: Urban Edge

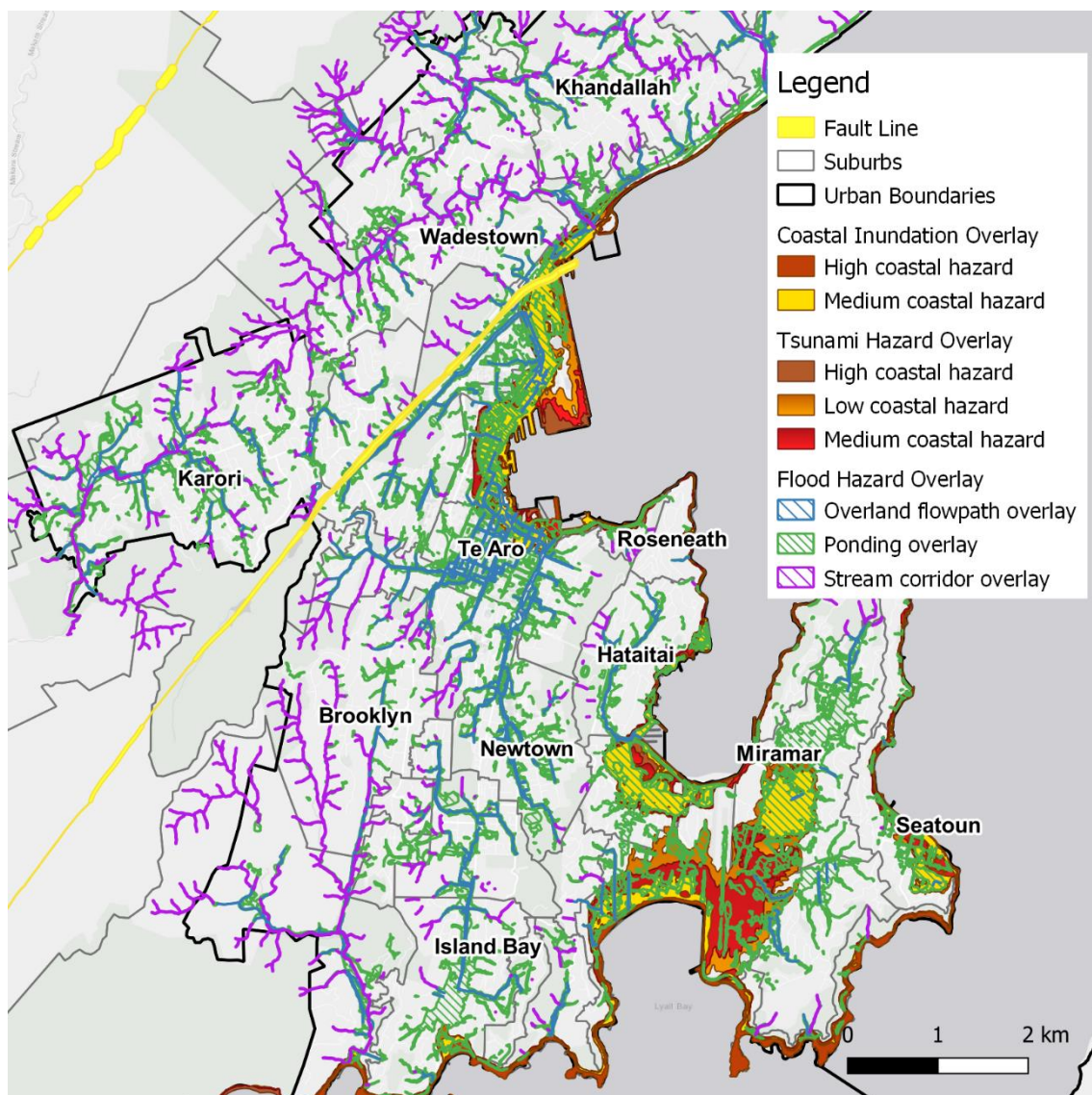
3.2. NATURAL AND COASTAL HAZARDS

Figures 1 and 2 shows a map of the Hazard areas for the Wellington City Proposed District Plan.

Many of the Hazard Overlays affect the same areas, particularly in regard to the coastal areas which are subject to both Tsunami and Inundation Coastal Hazards and in some places, the Flood Hazard area as well.

In particular, the low-lying areas around the Airport including Miramar to the east of the Airport and Kilbirnie to the West are affected by all three of these hazards to varying extents.

FIGURE 1: MAP OF HAZARD AREAS



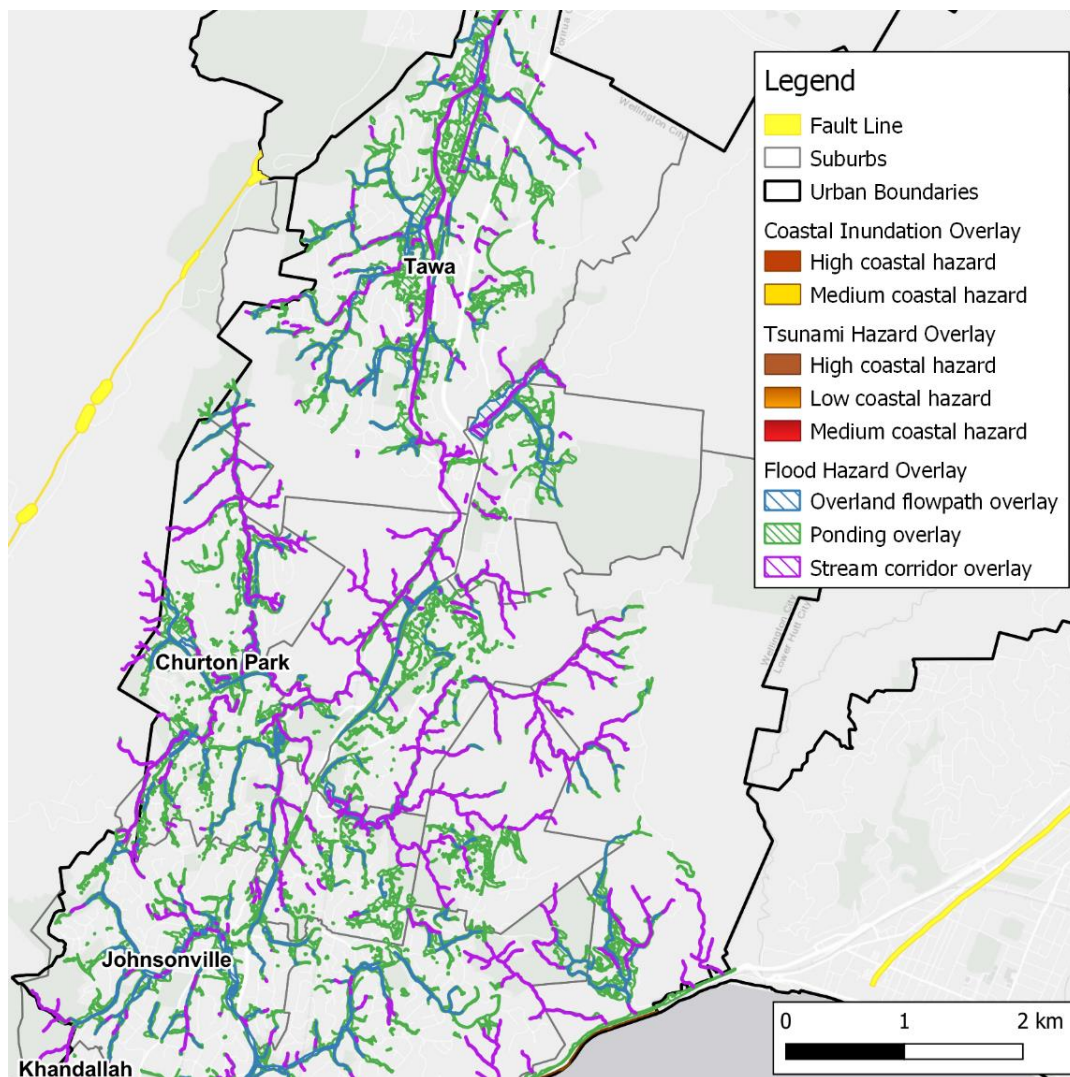
Source: Property Economics, WCC

Figure 1 also shows that the Flood Hazard Overlays are extensive, running all throughout the city. Most of this is relatively contained to running through roads and only affecting parts of sites. However, in Island Bay and Karori in particular (in addition to the aforementioned areas

around the Airport), the Ponding Overlay is extensive, affecting the entirety of a large number of sites.

As outlined in Table 1, Urban Edge's approach to the QFM modelling was to remove all development that is not permitted for the purpose of the MDRS. This included removing the areas covered by the Flood – Ponding overlay in which development is a Restricted Discretionary Activity.

FIGURE 2: MAP OF HAZARD AREAS (NORTH)



Source: Property Economics, WCC

For the purposes of this assessment Property Economics has assessed an outcome where development in the Ponding Overlay is included but has additional mitigation costs to meet the requirements of the plan. Additionally, there is an increase in the requisite profit margin for these sites to be classified as Realisable to account for the additional risks associated with applying for a Restricted Discretionary Consent.



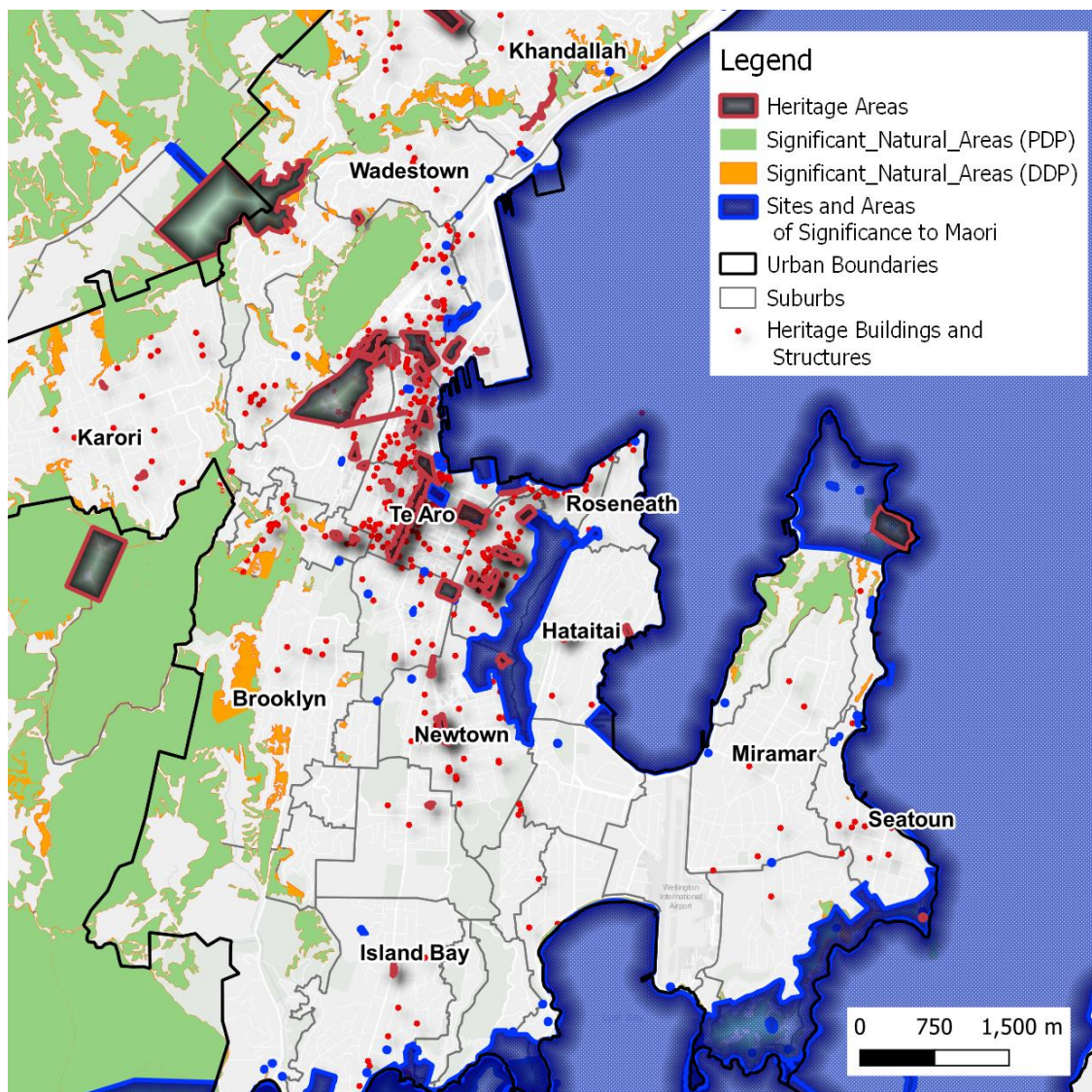
Finally, the only Fault Line that overlaps the Urban Area of Wellington is the Wellington Fault that can be seen on Figure 1. The number of sites affected by this overlay is therefore comparatively limited.

3.3. HISTORIC HERITAGE, SITES AND AREAS OF SIGNIFICANCE TO MĀORI AND SIGNIFICANT NATURAL AREAS

Figures 3 and 4 show a map displaying the extent of Heritage Buildings, Structures and Areas, Sites and Areas of Significance to Māori (SASM), and Significant Natural Areas.

Between the Draft District Plan (which the previous report was modelled against) and the Proposed District Plan, the extent of the Significant Natural Areas was reduced so that it no longer covered residential or commercial zones. The change in extent is highlighted on Figures 3 and 4 with all of the orange areas showing land that was previously included in the SNA overlay.

FIGURE 3: MAP SHOWING HERITAGE SITES, SITES AND AREAS OF SIGNIFICANCE TO MĀORI, AND SIGNIFICANT NATURAL AREAS.



Source: Property Economics, WCC, StatsNZ

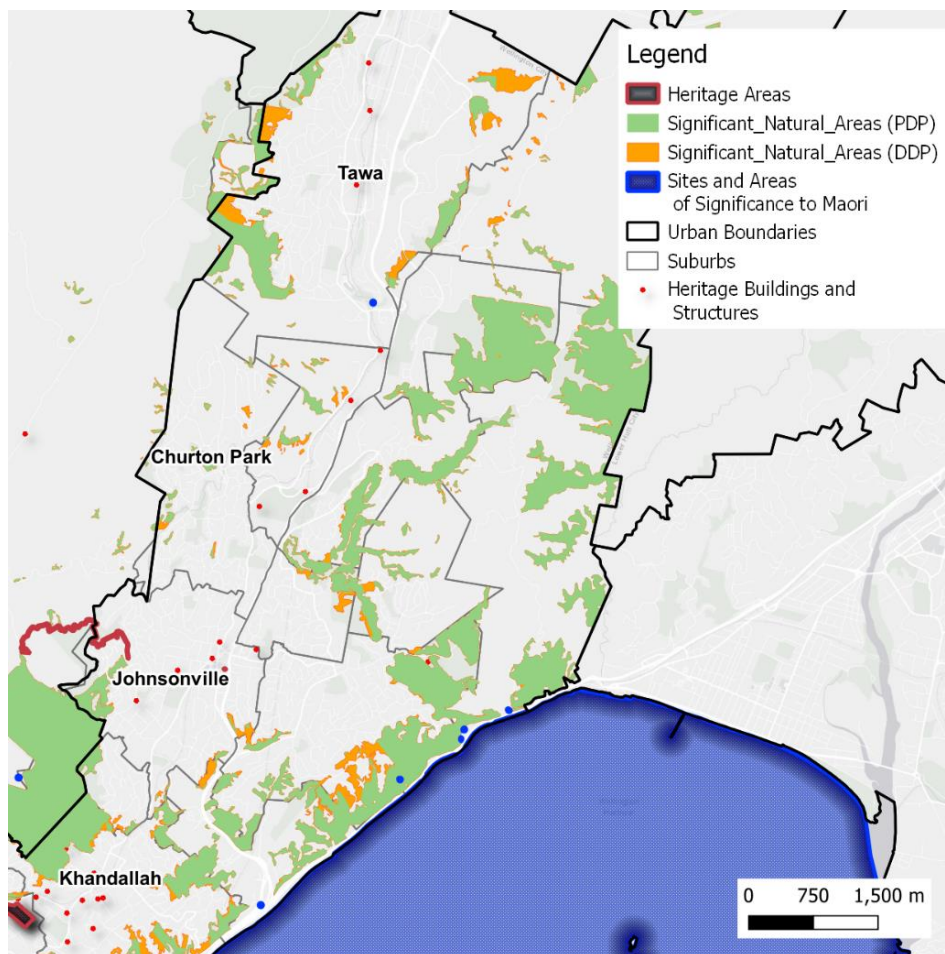
Most of the SASM overlay covers land not zoned for urban development, (e.g., Open Space or Rural zones). The SASM overlay primarily affects the development potential of sites in the coastal areas of Island Bay, Seatoun and the properties along Moa Point Rd / Great Harbour Way south of Seatoun. However, the Te Aro Pā covers 2.6ha of the City Centre Zone and therefore removes apartment development opportunities.

The changes to the SNA overlay have meant that it no longer affects development zones and therefore is no longer a QFM.

The Heritage QFM has a major impact on the Wellington CBD, notably the Cuba Street Precinct, Civic Square and Waterfront along with several other smaller pockets and individual sites.

It is important to note that the three larger blocks of Heritage Areas do not cover urban land available for development with the large block to the west of Te Aro covering the Wellington Botanic Garden. Therefore, these areas do not have an impact on the Residential Capacity.

FIGURE 4 MAP SHOWING HERITAGE SITES, SITES AND AREAS OF SIGNIFICANCE TO MĀORI, AND SIGNIFICANT NATURAL AREAS. (NORTH)

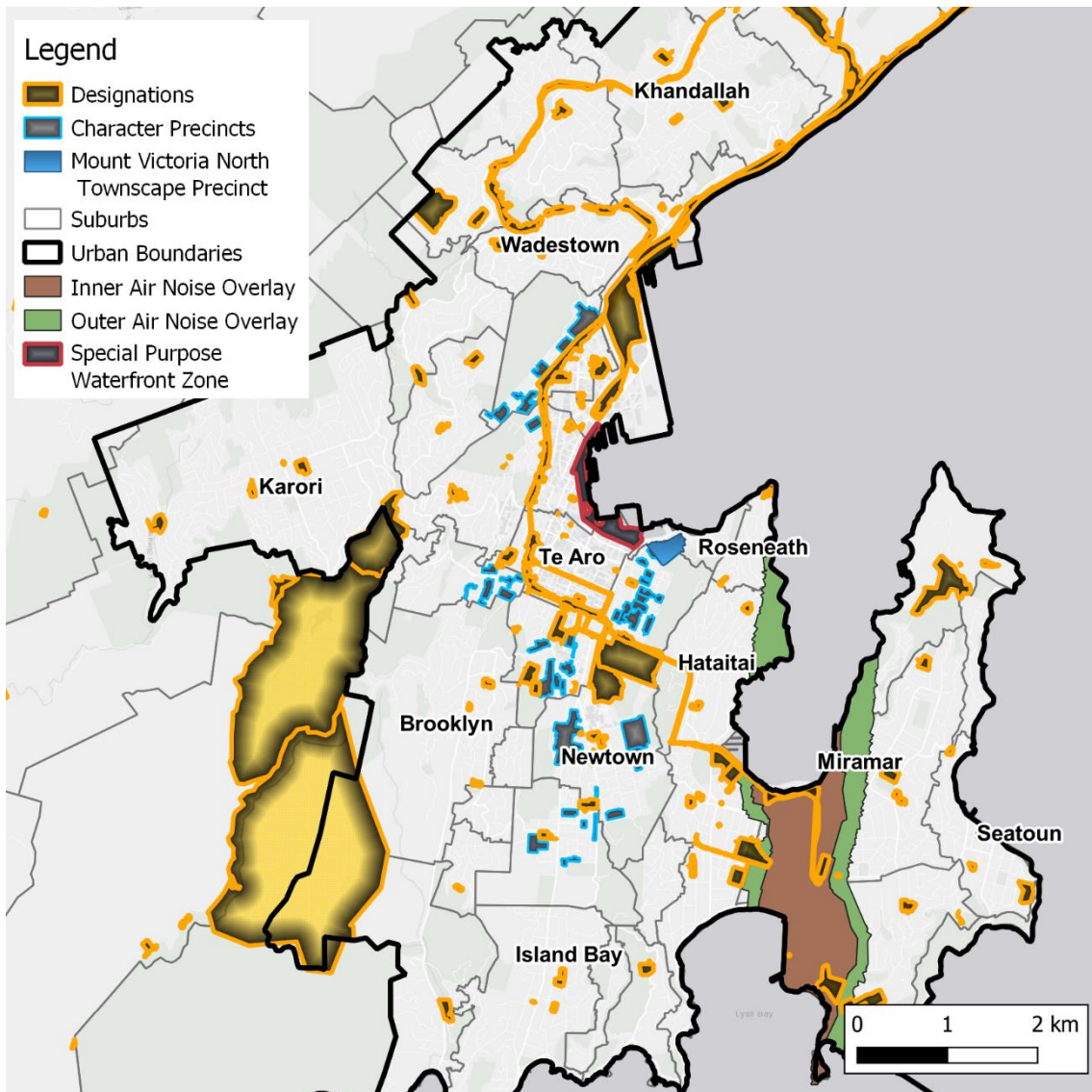


Source: Property Economics, WCC, StatsNZ

3.4. CHARACTER PRECINCTS, WATERFRONT ZONE, DESIGNATIONS AND AIR NOISE OVERLAY

Figures 5 and 6 shows a map of the Character Precincts, Waterfront Zone, Designations and Air Noise Overlay.

FIGURE 5: MAP OF DESIGNATIONS, CHARACTER PRECINCTS, WATERFRONT ZONE AND AIR NOISE OVERLAY



Source: Property Economics, WCC, StatsNZ

The Character Precincts cover a number of areas but are predominately located as a ring around the City Centre. Notably, in absence of the Character Area overlay, the underlying zone would be High-Density Residential. However, due to the character area, the affected sites have been zoned Medium Density Residential Zone and have been modelled as such.

The effect of the Character Areas as far as the QFM modelling is concerned, is the removal of capacity within the affected sites on the basis that it is a Restricted Discretionary Activity. "Activity with development restricted to *"Enable residential intensification within Character Precincts provided that it does not detract from the character and amenity of the Precinct in which it is located"* (MRZ-PREC01-P3 of the PDP).

Given that it is enabled as a RD activity, it would not be entirely accurate to assume that no development will occur within these precincts. However, the design guides do indicate that intensification will be significantly restricted on these sites. Although RD activities were considered in regard to the Flood - Ponding overlay due to the expansive nature of the overlay, no infill or comprehensive redevelopment options have been considered under the Character Area QFM.

Although the Outer Air-Noise Overlay does not reduce permitted capacity potential, it does create additional sound proofing requirements. This additional mitigation cost has been included for developments in both the Inner and Outer Noise Overlay as an increase in construction costs.

Designations under the RMA allow a Minister of the Crown or a local authority (i.e., council, Minister or utility operator) who is responsible for the safe or efficient operation of public work, to bypass the normal requirements of the District Plan. Section 77M (subsections 5 and 6) allow the Ministry of Education to rely upon the MDRS standards for land where they are the requiring authority and the land either is contained within or adjoins a relevant residential zone.

Although it may be possible for development to occur in these areas, the authors believe it is unreasonable to assume that any designated land would be used for residential or business activity including schools owned by the Ministry of Education.

4. IMPACT OF QFM'S ON CAPACITY

4.1. CUMULATIVE RESIDENTIAL CAPACITY IMPACT OF QFM – COMPARISONS TO MAY REPORT

Table 2 summarises the cumulative impacts of the QFM on the Residential Capacity.

It is important to note that the results published in this report which are based on the PDP are not directly comparable to the Residential Capacity Assessment that was provided to WCC previously (May 2022). This is because some, but not all, of the QFM's were incorporated (including the now reduced Significant Natural Areas) and the extent of the High-Density Residential Zone has been reduced with the reduced walkable catchments and declassification of the Johnsonville Line as rapid transit. The impact of this decision is outlined in the appended report.

In total, Table 2 shows that the total QFM impact on Feasible Capacity is around 33,150 dwellings and the impact on Realisable Capacity is just over 32,800 dwellings. The impact on Realisable Capacity is proportionally higher due to how the effect of the Flood - Ponding Overlay has been modelled (increased risk of RD consent).

TABLE 2: COMPARISON OF PREVIOUSLY PUBLISHED CAPACITY ASSESSMENT AGAINST THE NO QFM AND ALL QFM CAPACITY ASSESMENTS.

Capacity Overview	Theoretical	Feasible (Max Profit)	Realisable
Capacity without QFM's	271,794	158,068	141,010
Capacity with All QFM	226,232	124,919	108,205
Total QFM Impact on Capacity	-45,561	-33,149	-32,805

Source: Property Economics

4.2. QFM IMPACTS ON SCENARIO 2

As an extension to the feasibility modelling, Property Economics tested a scenario (Scenario 2) where sales prices drop by 10% while construction costs continue to rise (in this case by 10%). This represents a possible market situation following recent trends and was included in the previous report.

Table 3 identifies the impact that the QFM have on this scenario. This shows that the total QFM impact on Realisable Capacity is numerically smaller, but proportionally similar. That is that the cumulative QFM impact represents a 24% reduction in Realisable Capacity which is only marginally higher than the 23% impact on Scenario 1.

Importantly, Table 4 shows that even in this less favourable economic climate, WCC has more than sufficient Realisable Capacity to meet the projected demand of 31,300 dwellings after accounting for all the QFM.

TABLE 3 – QFM IMPACTS UNDER SCENARIO 2

Capacity Overview	Theoretical	Feasible (Max Profit)	Realisable
Capacity without QFM's	271,794	102,012	81,096
Capacity with All QFM	226,232	79,170	61,750
Total QFM Impact on Capacity	-45,561	-22,842	-19,346

Source: Property Economics,

TABLE 4: COMPARISON OF CITY-WIDE RESIDENTIAL CAPACITY SUFFICIENCY WITH AND WITHOUT QFM

Wellington City Residential Sufficiency	Dwelling Demand	Realisable Dwellings	Required Uptake
Without any QFM's	31,242	81,096	39%
With All QFM's	31,242	61,750	51%

Source: Property Economics

To further this reconciliation of dwelling capacity with demand, we repeat the Demand Reconciliation that was undertaken in the previous May report in Table 5 following for Scenario 2 with all of the QFM. In this May report, it was identified that there was a potential undersupply of realisable capacity the Wellington North Catchment under Scenario 2.

Table 4 shows that with the addition of all QFM's this is still the case, but that no additional areas are expected to have insufficient supply.

TABLE 5: DEMAND RECONCILED FOR ALL QFM APPLIED TO SCENARIO 2

Catchment	Type	Demand	Sufficiency	Estimated Capacity Uptake %
North	Standalone	4,898	NO (68%)	100%
	Attached	7,009	NO (25%)	100%
West	Standalone	3,989	YES	38%
	Attached	1,725	YES	18%
East	Standalone	1,572	YES	56%
	Attached	1,479	YES	47%
Inner	Standalone	788	YES	68%
	Attached	1,962	YES	53%
Central / CBD	Standalone	417	NO (13%)	100%
	Attached	4,913	YES	69%
South	Standalone	1,874	YES	41%
	Attached	616	YES	38%
Total		31,242	YES	49%

Source: Property Economics,

The underlying reason for undersupply in the northern capacity compared to demand is not necessarily representative of an undersupply of enabled capacity, but a result of the lower feasibility rate of intensification. This is driven by the difference in land values, with properties closer to the City Centre typically being more valuable and therefore feasible to subdivide.

Additionally, the demand that has been attributed to these Northern Suburbs is significantly higher than the other areas. With the level of intensification that is enabled across the city by the PDP, it is not unrealistic to expect that a redistribution of this growth is possible with the Western Suburbs having more than sufficient capacity to support this potential undersupply.

4.3. COMMERCIAL LAND ADJUSTED CAPACITY

To this point in the assessment process, Feasible and Realisable Residential Capacity have been assessed on 100% of the theoretical (plan enabled) capacity within the Commercial Zones. Accounting for the competing land uses is something that was previously applied only in the Demand Reconciliation stage of the modelling.

However, in order to assess the impacts of QFM's on both Residential and Business Capacity, Property Economics has opted to modify this approach and apply the proportional split of land uses into the Feasible and Realisable Capacity. This enables the QFM impacts on Residential and Commercial to be accounted for as additions to each other as opposed to being mutually exclusive.

The proportions used for this Commercial and Residential Split were provided by Urban Edge and are as follows:

- Metropolitan Centre Zone: 80% Commercial and 20% Residential
- Mixed Urban Zone: 60% Commercial and 40% Residential
- Central City Zone (Wellington Central): 90% Commercial and 10% Residential
- Central City Zone (Te Aro): 70% Commercial and 30% Residential
- Local Centre Zone: 70% Commercial and 30% Residential
- Neighbourhood Centre Zone: 70% Commercial and 30% Residential.

These proportions are utilised to ensure consistency with the previous capacity modelling. It is also important to note that these thresholds may not be reached by the resulting feasible capacity assessment (e.g., if the feasible capacity in the Local Centre Zone does not reach >30% then the proportions do not affect the outputs).

Table 6 below shows the split of Feasible Capacity (without QFM's) between Residential and Commercial Zones. It also shows how applying the percentages above reduces the estimate of total Theoretical capacity in Wellington City from over 271,794 to around 239,025 and Feasible Residential Capacity from 158,068 to 128,970.

TABLE 6: IMPACTS OF COMMERCIAL ADJUSTMENTS ON FEASIBLE (MAX PROFIT) CAPACITY (NO QFM SCENARIO 1)

Feasible (Max Profit)	Theoretical	Apartment	Standalone	Terraced	Total
Residential Zones	227,426	9,601	19,737	89,297	118,635
Commercial Zones	44,368	39,433	0	0	39,433
Total	271,794	49,034	19,737	89,297	158,068
Commercial Adjusted	239,025	19,936	19,737	89,297	128,970

Source: Property Economics,

Table 7 provides an indication of how the total QFM impact on residential capacity changes after removing sites / capacity that is expected to be used for commercial activities. This is the difference between the Original (which assumes 100% of capacity in the commercial zones is residential) and the Adjusted (which applies the Commercial proportions indicated above).

TABLE 7: COMPARISON OF QFM IMPACTS ON ORIGINAL AND COMMERCIALY ADJUSTED CAPACITY (NUMBER OF ADDITIONAL DWELLINGS)

	Capacity Overview	Theoretical	Feasible (Max Profit)	Realisable
Original	Net Yield without any QFM's	271,794	158,068	141,010
	Net Yield with All QFM	226,232	124,919	108,205
	Total QFM Impact on Capacity	-45,562	-33,149	-32,805
Commercially Adjusted	Net Yield without any QFM's	239,025	128,970	113,785
	New Yield with All QFM	208,399	109,183	93,407
	Total QFM Impact on Capacity	-30,626	-19,787	-20,378

Source: Property Economics

4.4. RESIDENTIAL IMPACT BY QFM

Tables 8 and 9 summarises the impact on Residential Feasible and Realisable Capacity for each of the QFM's identified (adjusted for the Commercial / Residential split). Included on the tables is an indication of how each QFM overlay affects the model (Impact Type).

Those labelled as impacting on Capacity directly means that development is not enabled within that overlay and any development capacity within the overlay has been removed. In the first row, the Pondering Hazard is included as a possible RD activity. Dwellings built within this overlay, however, are modelled to require additional mitigation costs and have a lower realisation rate (higher risk) than other dwellings.

It is also important to note that Tables 8 and 9 show the mutually exclusive impacts of the QFM's on capacity (i.e., if only that set of controls is applied). Many sites are subject to multiple QFM's (e.g., overlapping hazards within the Airport Noise area) and therefore the total impact of the QFM's is not the sum of the impacts shown below.

TABLE 8: IMPACT ON RESIDENTIAL FEASIBLE CAPACITY BY QFM

Feasible (Max Profit)	Impact Type	Apartment Standalone Terraced			Total
		Apartment	Standalone	Terraced	
Hazards	Cost, Risk & Capacity	-3,967	-308	-5,313	-9,588
Airport Noise Overlay	Cost and Dwelling Limit	-145	-155	-1,858	-2,158
Waterfront Zone	Capacity	-45	0	0	-45
Character Precincts	Capacity	-2,572	-59	-1,311	-3,942
Designations	Capacity	-923	-259	-474	-1,656
Heritage	Capacity	-2,352	-300	-149	-2,801
Sites and Areas of Significance to Māori	Capacity	-472	-278	-850	-1,600
Notable Trees	Capacity	-3	-	-15	-18
Fault Line	Dwelling Limit	-71	-64	-453	-588

Source: Property Economics

TABLE 9: IMPACT ON RESIDENTIAL REALISABLE CAPACITY BY QFM

Realisable Capacity	Impact Type	Apartment	Standalone	Terraced	Total
Hazards	Cost, Risk & Capacity	-3,925	-852	-8,329	-13,106
Airport Noise Overlay	Cost and Dwelling Limit	-152	-246	-1,595	-1,993
Waterfront Zone	Capacity	-28	0	0	-28
Character Precincts	Capacity	-608	-86	-1,412	-2,106
Designations	Capacity	-791	-352	-345	-1,488
Heritage	Capacity	-1,690	-197	-6	-1,893
Sites and Areas of Significance to Māori	Capacity	-298	-428	-642	-1,368
Notable Trees	Capacity	-1	6	-18	-13
Fault Line	Dwelling Limit	-31	-77	-424	-532

Source: Property Economics

The QFM that has the largest impact on the Residential Feasible Capacity is the Flood and Coastal Hazard Overlay which is unsurprising given the extent shown on Figures 1 and 2. Notably, if we were to remove capacity from the Ponding Overlay completely, the impact on both Feasible and Realisable Capacity more than doubles.

This is indicative of the extent to which the Ponding Overlay affects sites. In the Realisable Capacity this is not the case as the additional risk is added to account for the reduced likelihood of RD development occurring.

The next biggest QFM impact is the Character Precincts, which would otherwise be zoned for High Density Residential. As these areas are close to the City Centre, they typically have higher underlying land values making the apartments more realisable within the Character Precincts under the HDRZ.

Notably, the Heritage QFM has the second largest on realisable apartments. This is due to the impact of height restrictions and the extent of Heritage coverage in the City Centre.

It should also be noted that the impact of the Airport Noise Overlay is likely to be superseded by the hazard overlays that cover many of the same sites.

4.5. COMMERCIAL FLOORSPACE IMPACTS

Table 10 below shows the Commercial Floorspace (sqm) impacts of each of the Qualifying Matters. Note that in accordance with the requirements of the NPS-UD, this assessment has been undertaken on the plan-enabled capacity only and no financial feasibility has been assessed. Additionally, only permitted development has been included, although commercial development may be possible in affected areas with a resource consent.

As with the Residential floorspace, the total QFM impacts is not intended to be the sum of the individual QFM impacts. A good example is with the Hazard and Waterfront Zone QFM's. As the Medium and High Coastal Hazard Overlay extends across almost all the Waterfront Zone, these QFM's both affect the same properties, and the net total effect is simply the highest of these two.

TABLE 10: QFM COMMERCIAL FLOORSPACE (SQM) IMPACTS

QFM	City Centre Zone	Commercial Centre Zones	Mixed Use Zone	Waterfront Zone	Total
Additional Floorspace (SQM)	3,946,283	357,667	349,353	138,337	4,791,639
Hazards	-1,151,080	-38,546	-140,196	-122,630	-1,452,452
Designations	-214,913	-8,833	-	-	-223,746
Heritage	-339,661	-1,432	-7,863	-	-348,956
Character Areas	-	-	-	-	-
Airport Noise	-	-	-	-	-
SASM	-122,921	-	-16,342	-	-139,263
Tree Canopy	-	-	-	-	-
Fault	-3,851	-	-9,974	-	-13,826
Waterfront Zone	-	-	-	-138,337	-138,337
All QFM	-1,480,831	-45,823	-156,726	-138,337	-1,821,717

Source: Property Economics

Some qualifying matters such as the Character Precinct has no impact on commercial capacity as the extent of this overlay is limited to Residential Zones.

In other cases, the effect of the QFM's is different due to the differences in the provisions applied to Retail and Commercial Floorspace.

Commercial and retail activities are not included in the list of Noise Sensitivity Activities (albeit some community facilities are included). On this basis, the Airport Noise QFM has no impact on Commercial Floorspace.

Retail and commercial activities are classified as a Potentially Hazard Sensitive Activity in the PDP.

This means that unlike residential activities, retail and commercial activities are permitted are within the Ponding Flood Hazard Overlay subject to the finished floor levels of the building being located above the 1% Flood Annual Exceedance Probability level. The effect of this requirement has not been assessed and the Ponding Overlay is assumed to have no impact on commercial capacity.

In the Fault Overlay, additions to buildings relating to a Potentially Hazard Sensitive Activity is limited to 30m² within the Wellington Fault Overlay. This limit has been imposed.

4.6. SUMMARY OF IMPACTS

Table 11 provides a summary of the effect of each of the QFM's on residential and commercial capacity. This highlights that most of the QFM's have a proportionately greater impact on the Commercial Floorspace potential than it does on the Residential Realisable Capacity. This may partially be due to the difference in approach as Realisable Capacity is a subset of the total Theoretical Residential Capacity. However, both the Coastal and Flood Hazard Overlays have extensive coverage in the City Centre Zone and therefore have a greater impact on capacity.

TABLE 11: SUMMARY OF QFM IMPACTS

QFM	Residential		Commercial	
	Realisable Dwellings otherwise lost	% Impact	Floorspace	% Impact
Total Potential	113,778		4,791,639	
Hazards (Coastal and Flooding)	-13,106	-11.5%	-1,452,452	-30.3%
Airport Noise overlay	-1,993	-1.8%	0	0.0%
Waterfront Zone	-28	0.0%	-138,337	-2.9%
Character precincts	-2,106	-1.9%	0	0.0%
Designations	-1,488	-1.3%	-223,746	-4.7%
Heritage	-1,893	-1.7%	-348,956	-7.3%
Sites and areas of significance to Māori	-1,368	-1.2%	-139,263	-2.9%
Notable trees	-13	0.0%	0	0.0%
Fault line	-532	-0.5%	-13,826	-0.3%
All QFM	-20,371	-17.9%	-1,821,717	-38.0%

Source: Property Economics

NB: The Residential Realisable Capacity reflects the capacity adjusted for Commercial / Residential Ratio

4.7. QFM IMPACT ON AFFORDABILITY

Table 12 shows a comparison of the Price distribution between the Realisable Capacity with and without QFM. This shows that the cumulative effect of the QFM is unlikely to result in a significant change to the distribution of the price of dwellings that is likely to be delivered into the market.

Nevertheless, it does decrease the number of dwellings in each price bracket, which affects the number of dwellings that could be delivered at more affordable prices. Property Economics has not reconciled this capacity against demand for each of these price brackets. Nevertheless, it is noted that despite the lost capacity from the QFM, all of the 31,000 dwelling demand could be supplied by dwellings under \$1m. This outcome, however, would likely not meet the demand profile when disaggregated by location and typology.

TABLE 12: COMPARISON OF PRICE DISTRIBUTION FOR THE REALISABLE CAPACITY WITH AND WITHOUT QFM

Price Band	Without QFM		Without QFM		Difference	
	Dwellings	%Share	Dwellings	%Share	Dwellings	%Share
Under 800k	22,861	16%	18,439	17%	- 4,422	-19%
\$850k - \$1m	44,018	31%	33,248	31%	- 10,770	-24%
\$1m - \$1.25m	55,353	11%	40,845	12%	- 14,509	-26%
\$1.25m - \$1.5m	14,830	39%	13,149	38%	- 1,681	-11%
Over \$1.5m	3,948	3%	2,525	2%	- 1,424	-36%
Total	141,010		108,206		- 32,805	-23%

Source: Property Economics

5. ECONOMIC COST-BENEFIT ANALYSIS OF WELLINGTON QFMS

Economic costs and benefits are valued based on a combination of the extent and the likelihood of occurring. An economic cost or benefit that has a small extent and is unlikely to occur represents a minor or less than minor economic cost or benefit. An economic cost or benefit that has a large extent and is likely to occur will have represents a significant economic cost or benefit.

An economic cost or benefit that has a large extent but a small likelihood of occurring, or vice versa, will represent an economic cost or benefit with an indeterminant impact. These costs and benefits are difficult to assess and hinge heavily on professional opinion and experience in judging the relative extent and likely occurrence to determine the breadth of the impact.

Each one has been given a generalised estimate of its relative economic consequence from:

Critical > Moderate > Meaningful > Minor

and Probability from

High > Medium > Low

An economic benefit or cost labelled Critical/LOW is one that has a low probability of occurring but if it does occur is expected to be of high consequence. In contrast, an economic cost or benefit labelled Minor / HIGH is one that has a high probability of occurring but is of low consequence.

In general, imposing more restrictive controls on development will result in a greater number and extent of economic costs than economic benefits. This is because restrictive controls add costs and reduce the efficiency of the market's ability to allocate resources appropriately. The exception to this, however, is market failure where an inefficient market outcome arises from costs and benefits that are borne by entities outside of the market (negative or positive externalities).

An example of a negative externality is when the subdivision of a property increases the flood risk of a neighbouring property. Although the Natural Hazard Overlay imposes a cost on a developer, this cost forces them to account for the potential cost that may be imposed on neighbours and future owners of the property where the market fails to appropriately account for the property risk.

In these situations, government regulations/interference in the market can achieve a more efficient economic outcome by forcing costs and benefits to be internalised in the market.

5.1. HERITAGE BUILDINGS, STRUCTURES, AND AREAS

Economic Benefit	Economic Consequence / Probability	Comments/Notes
Wellington tourism economy would directly benefit from the preservation of the current character and amenity and cultural significance of the Heritage Buildings and Areas.	Moderate/ MEDIUM	
If the areas are subject to a QFM, the public's appreciation of the heritage values of these sites and areas would be enhanced. This would further lead to a more cautiously planned land use of the area.	Meaningful / MEDIUM	
A QFM would safeguard the economy of industries that rely on the existing character and amenity of these heritage areas (e.g., the tourism and movie industries)	Moderate/ HIGH	A previous survey done by Tourism NZ indicated a very large number of visitors (one-third of international visitors) are not only coming to New Zealand for its landscape and wildlife, but also to participate in, and understand its cultural heritage.
Retaining the current heritage value of the areas through a QFM would secure the potential for increased property valuation where heritage is appreciated	Moderate / MEDIUM	Auckland Council's 2018 research found that properties located within 50m of a scheduled heritage place have a price premium of 2.3 per cent – around \$21k more than the average Auckland house price. Within 100m of a heritage place, properties have a 1.6 per cent premium – \$15k more than the average house price.
Secure the employment opportunities for specialists in heritage protection and promotion (relative to the demolition of heritage buildings for new development)	Minor / HIGH	
Without further intensification development, the heritage properties with the current offerings may facilitate the floorspace requirement of small businesses	Minor / MEDIUM	Start-up businesses are often not located in the office park or the shopping centre as they cannot afford the rents there. Heritage buildings with comparatively more affordable rents can be expected to better accommodate the office demand of these businesses.
Economic Costs	Economic Consequence	Comments/Notes

<p>Controls on heritage development may lead to fewer brownfield development capacity if further intensification is not enabled. As a result, more greenfield land may need to be rezoned to accommodate housing demand, consuming a proportion of the productive land in Wellington City or the Wellington Region requiring additional infrastructure and reducing greenspace.</p>	<p>Critical / LOW</p>	<p>Given the quantum residential capacity estimated in this report relative to the demand, the likelihood that heritage protection will have a material impact on the development is minimal.</p>
<p>The property owners affected by these constraints incur a cost in the form of lost development potential.</p>	<p>Moderate / HIGH</p>	<p>This is an issue of fairness. Owners on whom these development restrictions are placed face an additional cost for the benefit of the wider community. However, these controls are already in play within the ODP and therefore should already be reflected in the market value.</p>
<p>The heritage features of some buildings would be able to incorporate higher-intensification development. Subjecting to a QFM may prevent these buildings and properties from further development opportunities</p>	<p>Moderate / MEDIUM</p>	<p>This cost depends on the locational characteristics and current structure of the heritage buildings and properties.</p>
<p>A cost would occur to the wider community through less efficient urban form through the decreased ability for intensification.</p>	<p>Moderate - Critical / LOW</p>	<p>Although the potential cost of this is high, the likelihood of it becoming an issue within the next 30 years is extremely low. This is based on the total supply and demand making it unlikely the loss of these sites will undermine intensification.</p>

5.2. NATURAL AND COASTAL HAZARDS

Economic Benefits	Economics Consequence	Comments/Notes
A QFM would avoid accelerating or worsening the adverse effects of the natural hazard on the land or properties in these areas (relative to higher rise and higher density developments)	Critical / HIGH	Under the PDP, residential units are identified as <i>Hazard-Sensitive Activities</i> within the Wellington City District.
Retain the design and built form that have accounted for the potential risks of natural hazards in the area.	Moderate/ HIGH	
A QFM would recognise the risks in the existing natural and coastal hazard areas and articulate the outcomes for future development in these areas	Moderate / HIGH	
Enhance public awareness of the potential risks posed by natural and coastal hazards in these areas and avoid potential investment losses	Meaningful / MEDIUM	
Lower intensification levels (or prohibiting development) in the area via a QFM would minimise the area's recovery costs in natural hazard events	Critical / MEDIUM	New Zealand is vulnerable to natural hazards due to its geographic characteristics. The Kaikoura 2016 earthquake and Canterbury 2010-2011 earthquakes cost over \$25b in damages
A QFM would ensure the efficiency of incorporating mitigation measures to reduce the consequences from natural hazards	Moderate / HIGH	Under the PDP, potential mitigation measures that can be incorporated into developments to reduce the consequences of natural hazards include building design (e.g., minimum floor levels or the ability for buildings to be relocated over time)
Economic Costs	Economic Consequence	Comments/Notes
Increase the consent and development cost of areas with lower natural hazard risks in the district	Moderate / HIGH	
The economic potential and land use efficiency of areas with lower natural hazard risks may not be maximised	Moderate / HIGH	This cost depends on the existing land use or activities on the land; If the land has no

		existing activities due to high natural hazards, there is no such cost
Directly reduce the land that can be utilised for urban intensification in the district	Critical / HIGH	The Hazard QFM has the greatest impact on both commercial and residential capacity, with an almost 30% reduction in commercial floorspace potential.
The hazard overlays are extensive. There will be inherent inaccuracies so that some properties in the area will be incorrectly identified while others may be left out	Moderate / LOW	

5.3. SITES AND AREAS OF SIGNIFICANCE TO MĀORI

Economic Benefits	Economic Consequence / Probability	Comments/Notes
A QFM would recognise the importance of Māori properties and lands to Wellington City's economy and urban planning and	Moderate / HIGH	
Protecting SASM would ensure that local communities would benefit from the existing landscape and natural amenity in SASM. These matters contribute to the economic, cultural and social well-being of residents.	Moderate/ MEDIUM	
Economic Costs	Economic Consequence / Probability	Comments/Notes
Land and property owners of the properties in these sites and areas would be less likely to enhance their income from the existing lower intensification levels (relative to higher density multi-unit developments)	Meaningful / MEDIUM	The SASM are already in the Operative District Plan and therefore, would be reflected in the property values.
Give rise to additional consent and time cost for development in the area	Moderate / HIGH	The consenting requirements for the removal or development of activity on affected sites is necessary to enable the Council to appropriately manage and protect these values.

5.4. AIR NOISE

Economic Benefits	Economic Consequence / Probability	Comments/Notes
Protects the safe and efficient operation of the Wellington Airport.	Critical / HIGH	The Wellington Airport predicts that by 2040, the Airport will make a direct contribution to the region of \$4.3 billion per year and facilitate more than 22,000 jobs. ¹
The controls in the Noise Chapter seek to manage potential adverse noise effects by minimising the number of noise sensitivity activities and enforcing healthy sound limits, thereby ensuring the built homes are usable over the long term.	Moderate / HIGH	Noise is an environmental pollutant that adversely affects the health and amenity values for the affected residents.
Enhance public awareness of the potential reverse sensitivity effects of the Airport.	Minor / MEDIUM	Providing consumers with information helps them make informed decisions, thereby leading to a more efficient market.
Economic Costs	Economics Consequence / Probability	Comments/Notes
Land and property owners of the properties in these sites and areas would be less likely to enhance their income from the existing lower intensification levels (relative to higher density multi-unit developments)	Moderate / MEDIUM	
Give rise to additional consent and time cost for development in the area including noise engineering requirements.	Moderate / HIGH	The consenting requirements for the removal or development of activity on affected sites is necessary to enable the Council to appropriately manage sound.

¹ [Benefits to the region \(wellingtonairport.co.nz\)](http://www.wellingtonairport.co.nz)

5.5. WATERFRONT ZONE

Economic Benefits	Economic Consequence / Probability	Comments/Notes
The Controls in the Waterfront Zone are designed to provide WCC with controls to ensure the activities reflect the unique and special components that makeup the waterfront.	Critical / HIGH	The Waterfront Zone caters to a mix of cultural, recreation and entertainment activities including Te Papa. It therefore represents an important part of the City Centre's amenity, vibrancy and attraction for both locals and visitors.
The restrictions safeguard the economy of industries that rely on the existing design of the Waterfront Zone (e.g., restaurants)	Moderate/ HIGH	
An attractive coastal area creates amenity and vitality that attracts and retains businesses.	Critical / HIGH	
Economic Costs	Economics Consequence / Probability	Comments/Notes
Give rise to additional consent and time cost for development in the area which increases costs.	Moderate / HIGH	The consenting requirements for the removal or development of activity on affected sites is necessary to enable the Council to appropriately manage appropriate development types.

5.6. CHARACTER AREAS

Economic Benefits	Economic Consequence / Probability	Comments/Notes
A QFM would retain the existing living experience and place vitality of the character areas based on the current density and rise of the character buildings.	Moderate / MEDIUM	
A QFM would allow WCC to reduce the amount of development in the character areas so that the infrastructure burden that would be caused higher intensification levels could be controlled in the area.	Critical / LOW	This is relevant only in cases where infrastructure issues are present.
Economic Costs	Economic Consequence / Probability	Comments/Notes
Lost development opportunities multi-unit developments), on sites that are close to the City Centre and could support High Density Apartments.	Moderate / MEDIUM	Reduces Residential Capacity by around 2%
Give rise to additional consent and time cost for development in the area.	Moderate / HIGH	The urban design requirements and restrictions applied upon Character Area developments are significant.

5.7. DESIGNATIONS

Economic Benefits	Economic Consequence / Probability	Comments/Notes
The designations are designed to protect the efficient and safe operation of critical infrastructure.	Critical / HIGH	This includes Schools, transportation and utilities, all of which a City cannot function without.
Economic Costs	Economic Consequence / Probability	Comments/Notes
Directly reduce the land that can be utilised for urban intensification in the district	Meaningful/ HIGH	Reduces Residential Capacity by 1.6% and Commercial Floorspace by 5%.

5.8. NOTABLE TREES

Economic Benefits	Economic Consequence / Probability	Comments/Notes
Notable Trees contribute to an attractive urban environment that provides social, economic, and cultural wellbeing.	Moderate / HIGH	Studies have shown that mature trees contribute to people's decision to choose a property, thereby increasing property values.
Economic Costs	Economic Consequence / Probability	Comments/Notes
Land and property owners of the properties in these sites and areas would be less likely to enhance their income from the existing lower intensification levels (relative to higher density multi-unit developments)	Minor/ High	Modelling suggests the notable tree overlay will only reduce realisable capacity by 13 dwellings.
The inability to remove specific trees may make development on those sites less efficient due to the reduced flexibility in site designs.	Minor / HIGH	

PROPERTY **E**ECONOMICS



WELLINGTON CITY

QUALIFYING MATTERS

CAPACITY ASSESSMENT

Client: Wellington City Council

Project No: 52144

Date: November 2022



SCHEDULE

Code	Date	Information / Comments	Project Leader
52144.13	November 2022	Report	Phil Osborne / Tim Heath

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1. INTRODUCTION

Property Economics was engaged by Wellington City Council (**WCC**) in conjunction with Urban Edge Planning (UEP) (the partnership), to assess feasible residential capacity within Wellington City. Following the resulting analysis, WCC identified a number of changes to the underlying assumptions they wanted implemented, specifically:

- testing a High Density Residential Zone (HDRZ) in lieu of character precincts and Waterfront Zone and;
- reductions in the extent of walkable catchments between the Draft District Plan and the Proposed District Plan, and removal of High Density Residential Zone around stops on the Johnsonville Line.

An outline of the Methodology used to assess the Theoretical Capacity differences under the HDRZ is provided in Appendix 1.

This report details the realisable capacity of the proposed district plan as notified and as the development capacity impacts of qualifying matters.

2. APPLICATION OF THE HIGH-DENSITY RESIDENTIAL ZONE

Character Precincts

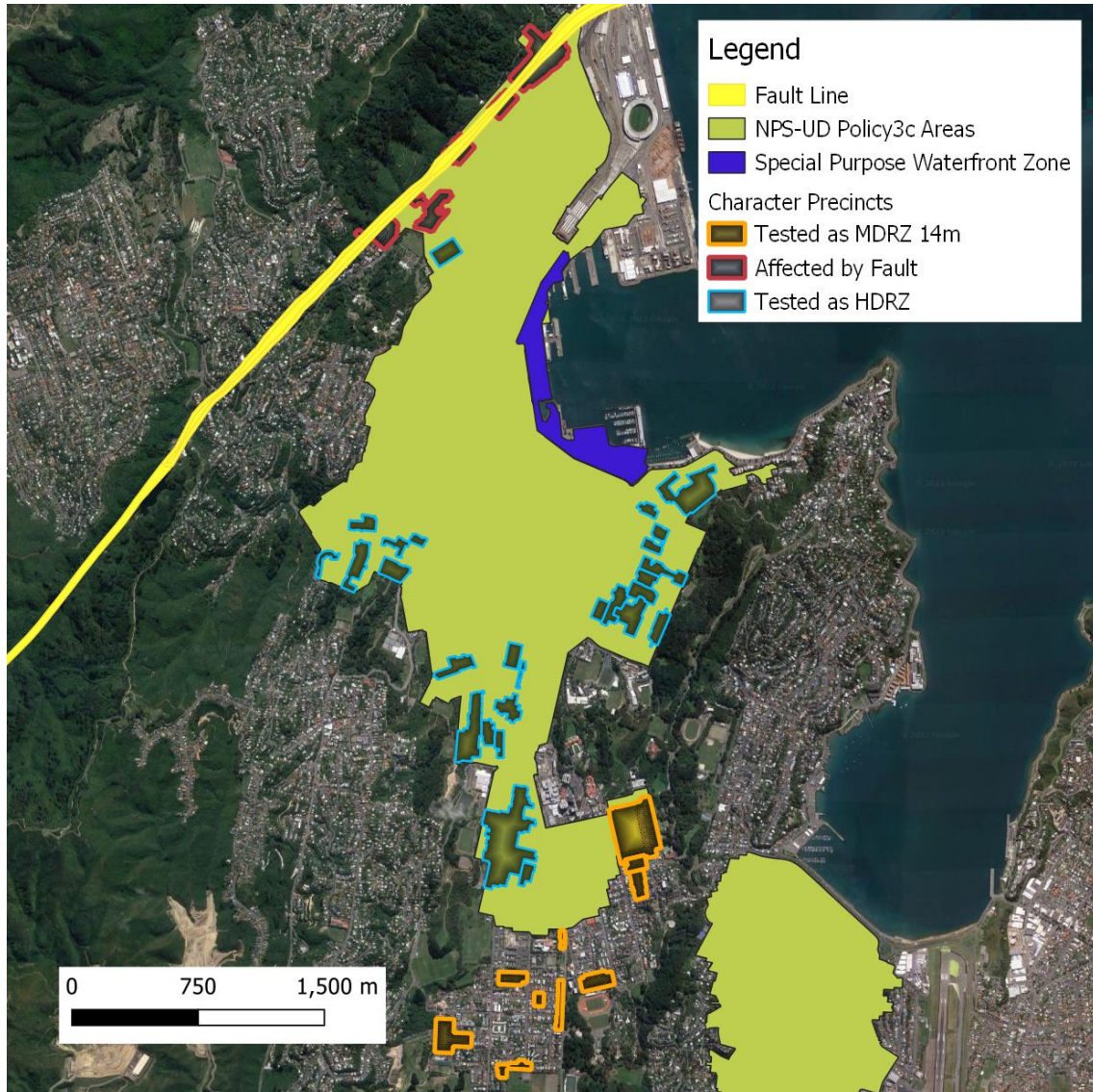
In the Theoretical Capacity Modelling, the proposed district plan provisions were implemented on each property based on the underlying zone they were located in. As part of this, the Character Areas were assessed as having a more restricted Medium Density Residential Zone as this is the zone of the sites in the proposed plans. The Qualifying Matter was then tested as development being restricted as any new developments are Restricted Discretionary.

However, Council have identified that in the absence of the Character Zone overlay, then the underlying zone would be High Density Residential Zone. The location of the Character Areas in relation to the NPS-UD Policy 3c Areas (Walkable Catchments) are shown on Figure 1. In addition, some character precincts outside of NPS-UD Policy 3c areas would otherwise have a greater height limit in the medium density residential zone.

Specifically, there are three categories of Character Areas shown on Figure 1 that were identified by WCC. These are:

- The Character Areas indicated in Blue have been tested as a High-Density Residential Zone (provisions that enable multi-unit housing up to 6 storeys).
- The Orange Character Areas in the South which lie on the edge / outside the Walkable Catchment have been tested as Medium Density Residential with an 14m height limit (4 storeys).
- The Red Character Areas in the Northwest are affected by the Fault Line and therefore have been excluded from this increased density modelling.

FIGURE 1: CHARACTER AREAS AND WATERFRONT ZONE IN COMPARISON TO THE NPS-UD POLICY 3 AREAS (WALKABLE CATCHMENTS)



Source: Property Economics, WCC

Waterfront Zone

Figure 1 also indicates the location of the Waterfront Zone. Under the proposed plan, most development in this zone requires at least a Restricted Discretionary Consent, with restrictions on total site coverage and height. No additional building height beyond that already existing is enabled.

These restrictions were included in the previous modelling leading to a lower-than-expected development potential. Similar to the Character Precincts, this modelling update has tested and underlying High Density Residential Zone across the applicable sites excluding the area identified as Public Open Space and a few sites unlikely to be redeveloped for residential or commercial (i.e., Te Papa Museum).

2.1. ESTIMATED IMPACTS

Table 1 shows the estimated capacity in the Waterfront and Character Precincts following the modelling of increased density across the zones. Under the High-Density Residential Zone provisions and no restrictions on development in the Character Precincts the total Feasible Capacity increases to 3,942, over half of which are apartments.

Consequently, the realisable capacity is significantly lower at 2,106 to reflect the reality that many of these sites will be developed as terraced or standalone developments or will not meet the additional risk factor associated with high capital projects.

In the Waterfront Zone only apartment capacity is tested as an option, with the potential for 454 feasible apartments that could be built if the existing non-residential activities were removed.

By default, all of this capacity is assumed to be lost as part of the Qualifying Matter. Although development in both zones is possible through the consenting process, the limitations, particularly of the character precincts discourage the density increases intended in the MDRZ.

TABLE 1: ESTIMATED THEORETICAL, FEASIBLE AND REALISABLE CAPACITY OF WATERFRONT AND CHARACTER AREAS UNDER HIGHER DENSITY

	QFM	Theoretical	Apartment	Standalone	Terraced	Total
Feasible	Waterfront Zone	856	454	0	0	454
	Character Areas	7,573	2,572	59	1,311	3,942
Realisable	Waterfront Zone	856	278	0	0	278
	Character Areas	7,573	608	86	1,412	2,106

Source: Property Economics

Although this increases the economic cost of the Qualifying Matters regarding the total lost development potential, both of these areas are Qualifying Matters that are modelled as having no development with the QFM in place. Therefore, the total capacity with all QFM's in place

remains the same and consequently there is no reduction in the previously assessed capacity sufficiency. That is, there is still more than sufficient capacity in Wellington City to meet the projected dwelling demand over the next 30 years even with all the QFM's in place.

The additional economic cost in regard to the Character Precincts is primarily the loss of development potential close to the City Centre. These sites have high underlying land values which leads to comparatively high feasibility rates of apartments. This simply means that with the Character Precincts QFM, more residential development is likely to occur either within the Commercial Centres or further afield that may have otherwise located in the walkable catchments.

Table 2 provides an updated summary of the effect of each of the QFM's on residential and commercial capacity. There is an increase in the capacity affected by the hazard and heritage QFM's due to the overlap between with the Waterfront Zone and Character Precincts.

TABLE 2: SUMMARY OF QFM IMPACTS

QFM	Residential		Commercial	
	Realisable Dwellings otherwise lost	% Impact	Floorspace	% Impact
Total Potential	113,778		4,791,639	
Hazards (Coastal and Flooding)	-13,106	-11.5%	-1,452,452	-30.3%
Airport Noise overlay	-1,993	-1.8%	0	0.0%
Waterfront Zone	-28	0.0%	-138,337	-2.9%
Character precincts	-2,106	-1.9%	0	0.0%
Designations	-1,488	-1.3%	-223,746	-4.7%
Heritage	-1,893	-1.7%	-348,956	-7.3%
Sites and areas of significance to Māori	-1,368	-1.2%	-139,263	-2.9%
Notable trees	-13	0.0%	0	0.0%
Fault line	-532	-0.5%	-13,826	-0.3%
All QFM	-20,371	-17.9%	-1,821,717	-38.0%

Source: Property Economics

NB: The Residential Realisable Capacity reflects the capacity adjusted for Commercial / Residential Ratio and is equivalent to Table 11 in the QFM report. The Waterfront Zone was assumed to be the same as the Central City Zone (Wellington Central) with only 10% Residential.

3. REDUCED WALKABLE CATCHMENTS

Figures 2-4 shows the extent of the walkable catchments that were previously zoned for 6 storey apartments (21m height limit) but are now zoned either MDRS or MDRS with a 14m height limit following the Councillors decision in notifying the Proposed District Plan. This includes the complete removal of the HDRZ around the Johnsonville Line (by declassifying the Johnsonville Line as rapid transit) and reducing the walkable catchments around the Takapu road and Redwood train stations in Tawa. Additionally, the Walkable Catchment around the Linden Station (10 minutes to 5 minutes) and the City Centre (15 minutes to 10 minutes) were reduced.

FIGURE 2 EXTENT OF REDUCED HEIGHT LIMITS AROUND JOHNSONVILLE LINE WHICH WERE OTHERWISE 21M

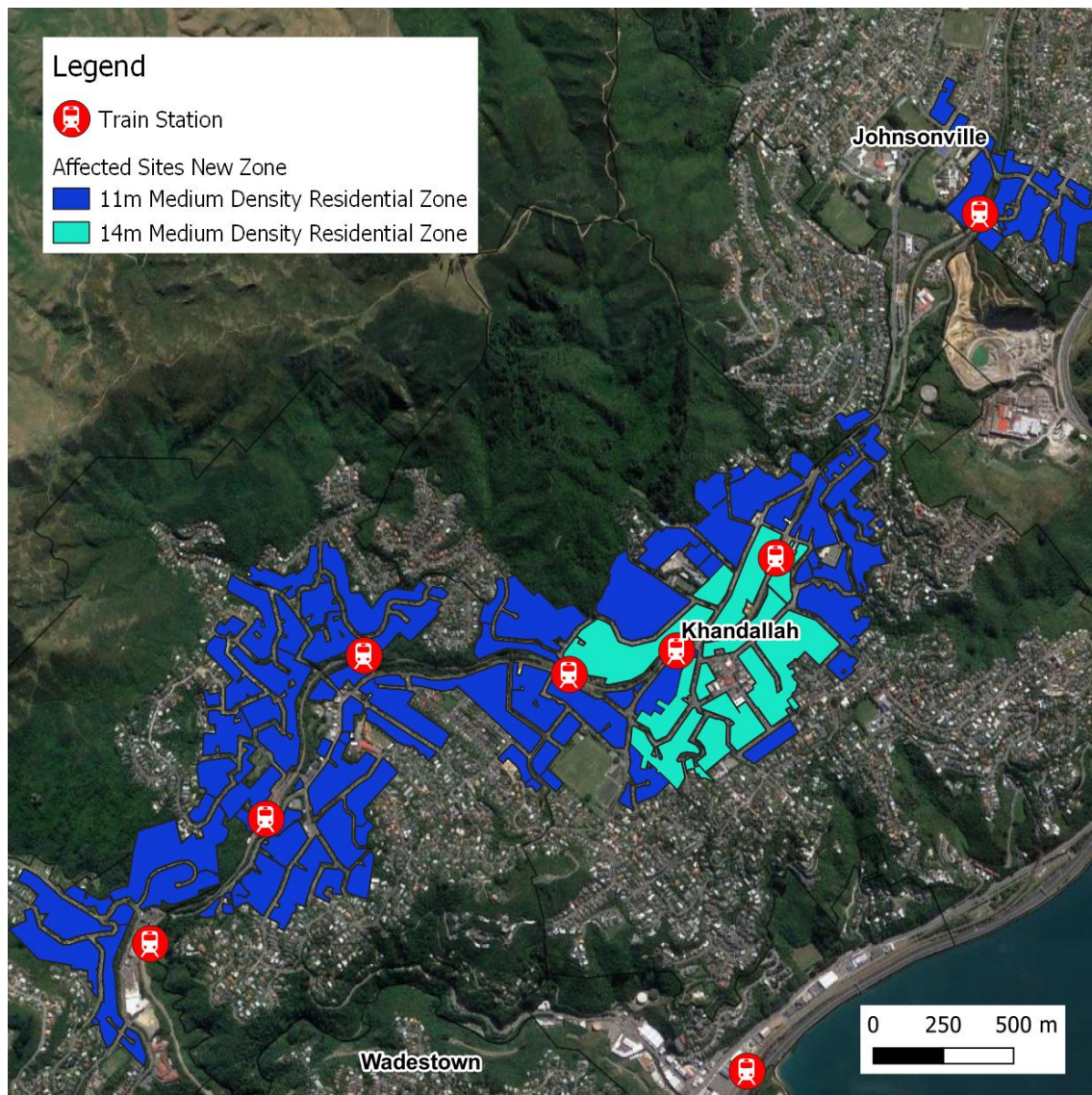
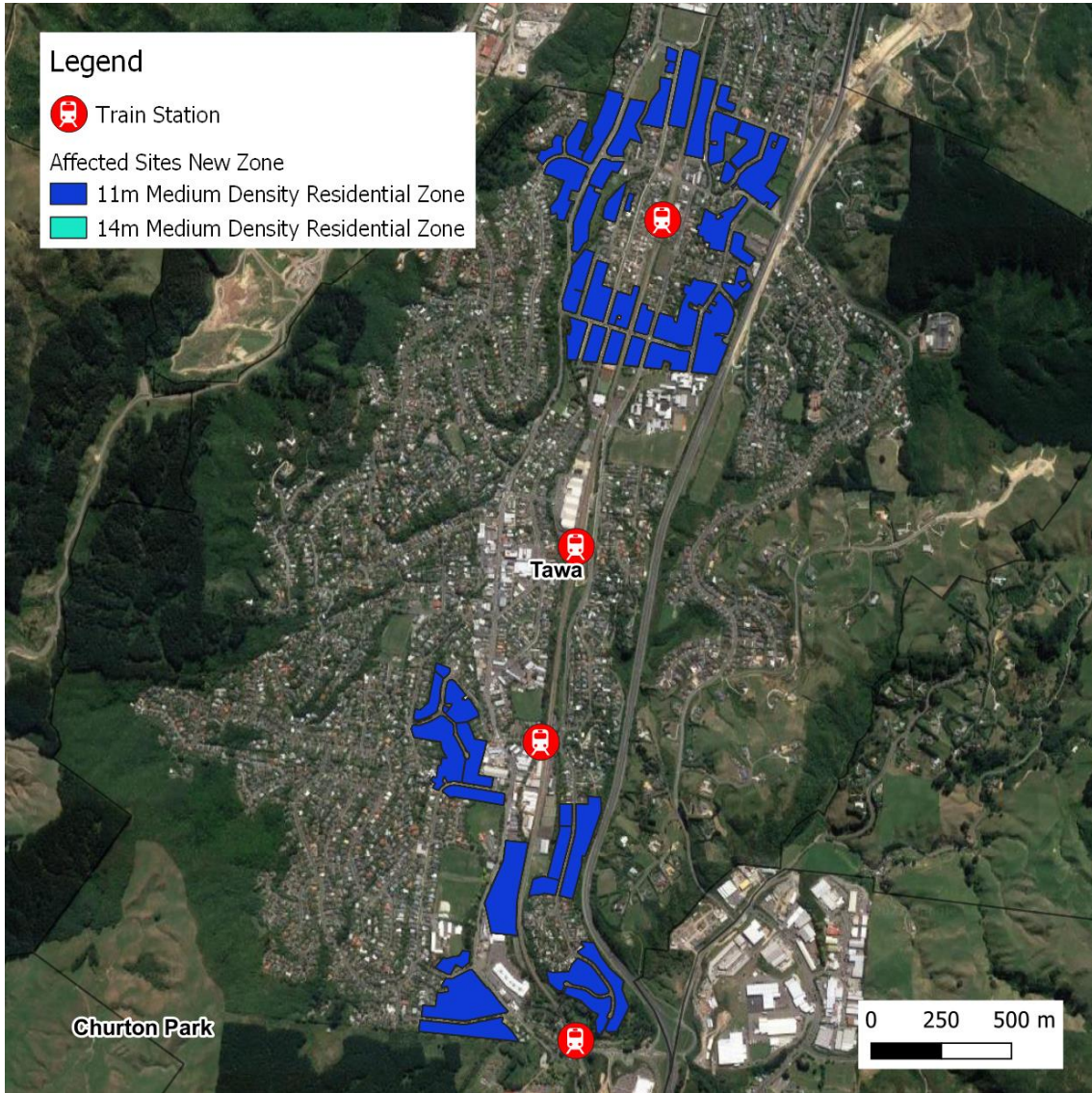
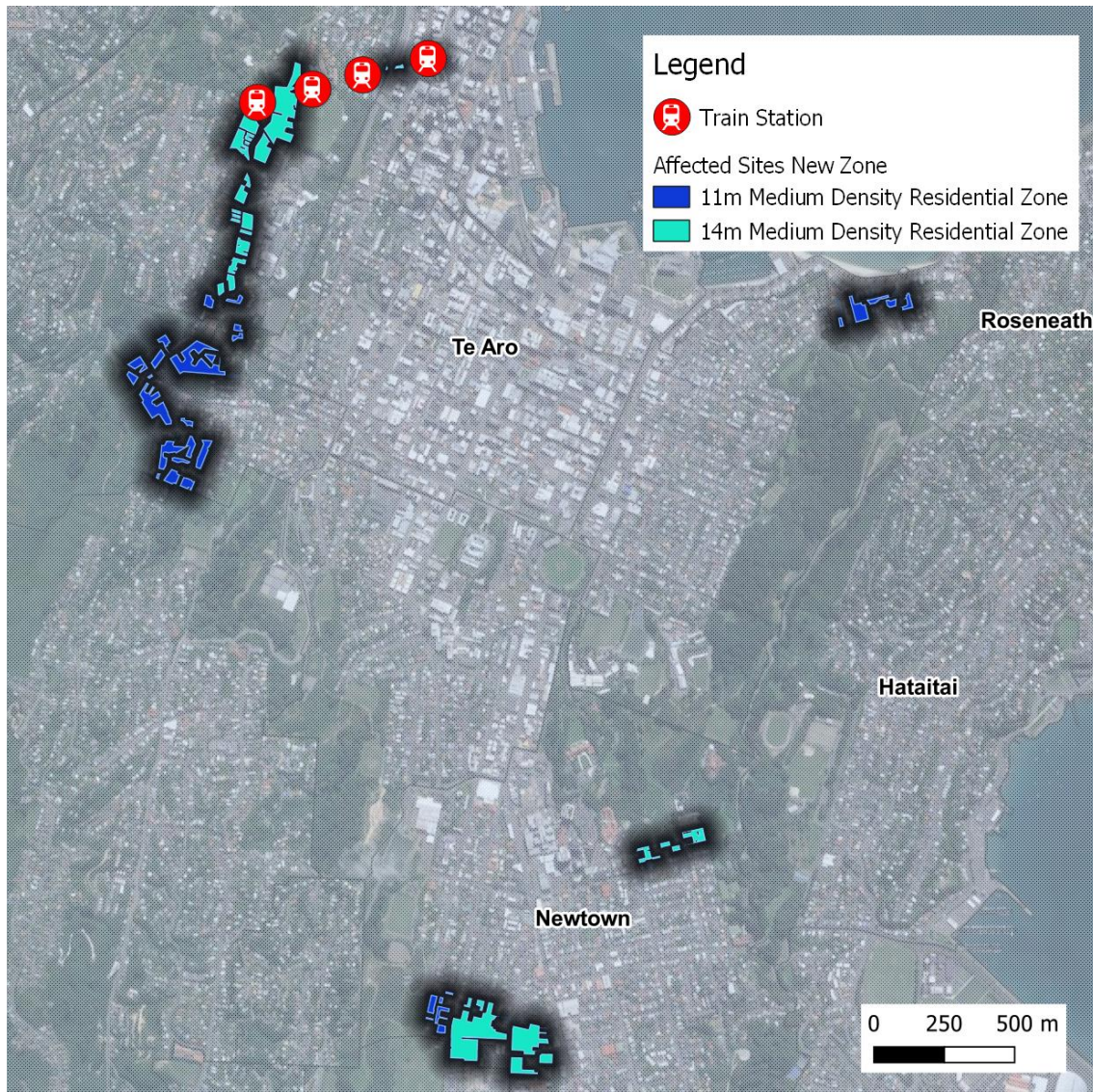


FIGURE 3: EXTENT OF REDUCED HEIGHT LIMITS IN TAWA WHICH WERE OTHERWISE 21M



Source: Property Economics, WCC

FIGURE 4: EXTENT OF REDUCED HEIGHT LIMITS AROUND CITY CENTRE WHICH WERE OTHERWISE 21M



Source: Property Economics, WCC

Blurred to increase readability of smaller sites.

The Theoretical Capacity outputs that Urban Edge provided for the QFM report was based on the Proposed District Plan. Therefore, this change does not represent a change to the final after QFM capacity results that were previously published. The purpose of this report is to show the effect of the change..

Table 3 shows the summarised positions loss in capacity after taking into account all QFM's for the difference between the DDP (with the original walkable catchment areas and Johnsonville line identified as rapid transit) and the PDP (with the reduced walkable catchment area and Johnsonville line not identified as rapid transit)).

The impact on the Theoretical Capacity is substantial at more than 10,000 potential dwellings however only just over a quarter of these additional dwellings are feasible. The resulting impact on capacity of the reduction in walkable catchments and declassification of the Johnsonville Line as rapid transit after all QFM's are taken into account is only 951 realisable dwellings.

TABLE 3: SUMMARISED COMPARISON OF CAPACITY WITH THE REDUCTION IN WALKABLE CATCHMENTS AND DECLASSIFICATION OF THE JOHNSONVILLE LINE AS RAPID TRANSIT

All QFM	Catchment	City Centre	Johnsonville Line	Tawa Stations	Total
Theoretical	DDP	1,677	17,387	6,348	<u>25,412</u>
	PDP	1,034	10,500	3,698	<u>15,232</u>
	Difference	-643	-6,887	-2,650	<u>-10,180</u>
Feasible	DDP	906	8,876	1,741	<u>11,523</u>
	PDP	622	6,730	1,398	<u>8,750</u>
	Difference	-284	-2,146	-343	<u>-2,773</u>
Realisable	DDP	713	6,848	898	<u>8,459</u>
	PDP	549	6,075	884	<u>7,508</u>
	Difference	-164	-773	-14	<u>-951</u>

Source: Property Economics, WCC

Notably, the additional higher density capacity is more feasible for the Johnsonville Line and City Centre Walkable Catchments than the sites around Tawa. This change has the greatest impact on total capacity.

TABLE 4: OVERVIEW OF QFM IMPACTS UNDER SCENARIO 2

Capacity Overview	Theoretical	Feasible (Max Profit)	Realisable
Capacity without QFM's	271,794	102,012	81,096
Capacity with All QFM	226,232	79,170	61,750
Total QFM Impact on Capacity	-45,561	-22,842	-19,346

Wellington City Residential Sufficiency	Dwelling Demand	Realisable Dwellings	Required Uptake
Without any QFM's	31,242	81,096	39%
With All QFM's	31,242	61,750	51%

Source: Property Economics, WCC

APPENDIX 1 – MODELLING METHODOLOGY

The provisions in the PDP that enable up to six storey apartments in the HDRS only apply to multi-unit development (more than three dwellings on a site) which requires a Restricted Discretionary Consent. Otherwise, the permitted development baseline has the same standards as the Medium Density Residential Standards.

For the purpose of the Waterfront Zone, only Apartment comprehensive redevelopment options has been tested. It is assumed that Terrace and Standalone options would not be suitable or likely outcomes for the Wellington City's Waterfront.

For the purpose of the Character Areas, only the Comprehensive Redevelopment options have been assessed under the HDRS with the existing infill options under the Urban Edge Modelling being retained. On inspection, none of the sites in the Character Areas had sufficient backyard space that would feasibly enable multi-storey apartments being built without the removal of the existing dwelling.

In both cases, the potential apartment comprehensive redevelopment capacity has been assessed in accordance with the 8m60° height in relation to boundary standards for all non-road boundaries up to the 21m height limit. Additionally, the lower 5m60° recession plane has been modelled on boundaries adjacent to the MDRZ, Schools, Heritage and Wellington Town Belt Zone.

For the reduction in the Walkable Catchment, Urban Edge have modelled both capacity under both the increased 21m height limit (for the Original Capacity Report produced in May) and the reduced height limits under the PDP for the QFM report. Therefore, assessing the difference in capacity was done by comparing the previous theoretical yield on the affected sites with those provided subsequently for the QFM.