

WELLINGTON REGION INDUSTRIAL LAND SUPPLY STUDY

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Prepared for the Wellington Regional Strategy



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1.0 Project Background

The Wellington Region Industrial Land Supply Study has been undertaken as a component part of the development of the Wellington Regional Strategy (WRS). The aims of the study are to determine:

- How much land in the Wellington region is zoned to be able to be utilised as industrial?
- How much land is currently being utilised as industrial land?
- The impacts of current District Plan rules at each Council regarding land that is/could be used as industrial activity
- Current pieces of work each Council are doing that could impact current rules/allow changes – understand impacts.

The study has been undertaken by Boffa Miskell Ltd in 2009. It is intended that the study outputs will be used as part of the WRS determination as to the sufficiency of the current land supply for this type of land use.

Determining that sufficiency will require the region's aspirations for the future of industry to be qualified in order to enable any gaps or changes to the provision of suitable land to be identified.

This future will require further investigations as to the range of scenarios that are possible for the region's industry over time. This will determine the extent, type, and location of land (and other resources) needed to assist that future to be realised.

The influence of the WRS's constituents can then be applied to make the appropriate provision for the land (and other resource) needs through, for example, District Plans, asset management and investment, transportation, support services, and market development.

2.0 Methodology

The methodology used for the study incorporated the key factors noted below and has resulted in particular assumptions and constraints as also noted. The diagram on page 4 describes the process.

Desk Top

The study was undertaken using existing spatial information – aerials, zones, land use classification, coverage, building footprints, topography, and main transport routes. This information was generally supplied by Greater Wellington Regional Council (GWRC) which had collected it from the constituent territorial authorities (although some data was sourced directly from the authorities themselves). There are inherent assumptions in the use of this data in that any deficiencies in the data (such as its age or accuracy) will affect the outputs.

As described below under the elements mapped, there were by necessity, decisions made about which zones to include and which land use classifications to include that will influence the outcomes.

GIS Based

The study utilized Geographic Information System (GIS) tools to manage the spatial information and to organize and apply the various parameters to provide the outputs. The GIS approach has enabled a collective set of spatial data to be produced which will be provided back to GWRC as a repository resource for future reference. It is intended that this spatial data set would be updated over time (perhaps each 2 years) to enable the industrial land supply resource to be tracked, measured as to change, and to maintain its currency and so functionality into the future.

Trial

In order to understand the most efficient, but also appropriate range of elements to map for the study a trial process was used. The trial process involved mapping the Hutt City data and then reporting to SORT (see note below) on the outcomes. This resulted in some data being resorted and additional elements being added in to the process for the full study.

SORT Input

Throughout the process the Senior Officers Resource Team [SORT] has provided guidance and feedback on the study. This has enabled adjustments in the inputs, format of results and the aims to be made at key steps. Three SORT meetings occurred to the point of the study completion.

Ground Truthing

Following the production of a set of spatial maps of the elements, these were supplied to each of the constituent authorities¹ for their review. The aim was to identify any significant aspects of change that may not have been recognised in the base information originally supplied. Only where these changes were of some size that could influence the final outcomes were they provided for in the study. These are noted separately in the study summary table. Due to the size of study area and the resources available the smaller scale changes or inaccuracies could not be provided for. This is an aspect of the data that could be addressed over time.

Tabulated Data Outcomes

The key output from the study is the tabulated summary table of all the data and the maps which are in a digital format and provided as a hard copy as part of this report.

¹ Except for South Wairarapa and Carterton DC which was undertaken in-house by Boffa Miskell

3.0 Elements Mapped

As noted briefly above, the study has spatially mapped and sorted a series of elements to provide a summary of the industrial land supply in the region. Each of elements mapped is noted below (Diagram 1 describes).

Zones

The District Plan zones for each local authority area that enable industrial land uses was identified by GWRC. This set of data was then used for the study and mapped and the areas for each parcel aggregated. For each of the Districts a map set was produced to enable the distribution of these zoned pockets of land to be examined.

An assumption had to be made about the zones used as the different ways in which each local authority provides for this type of activity varies. The assumption made was that the zones selected allowed for industrial uses, but that excluded retail activities, or other combination of uses.

Although traditionally zone patterns isolated industrial activities from others, there is some change contemporarily towards a more mixed use approach to (at least) the lighter industry mixing with other activities, provided their compatibility can be managed. This movement is partly in response to many of today's industries being cleaner and less impactful in terms of their effects. It is also in response to attempts to reduce transport movements by grouping activities together to form places where work, living and recreation can occur in close proximity and lessens the need to move longer distances (usually by motorised transport) to get between home and work.

A constraint with the approach used for the study is that those District Plan zones which are aiming for a mixed use appropriate (eg Wellington), will most likely also enable a range of other uses to occur [note that WCC data shown currently is suburban centre review 'work' areas - adding the data for all suburban centre zoned areas will change the areas of land that could be used for industrial activities significantly - this data was not available at time of print]. This is positive in terms of urban planning, but means that for this study identification of that zoned land as available for industrial activities cannot recognise that it could also taken up by other types of land uses so reducing the apparent supply.

Regardless of the constraints this issue generates for the study (which is only a tool for the strategy after all), it is an important urban planning consideration for the WRS that an integrated approach to industry is taken to secure the urban form outcome that best provides for employment in close proximity to residential activities and/or an efficient transportation system to enable any larger areas of industries with high employment needs to be efficiently and sustainably accessed from the locations where people live.

Land Use Data

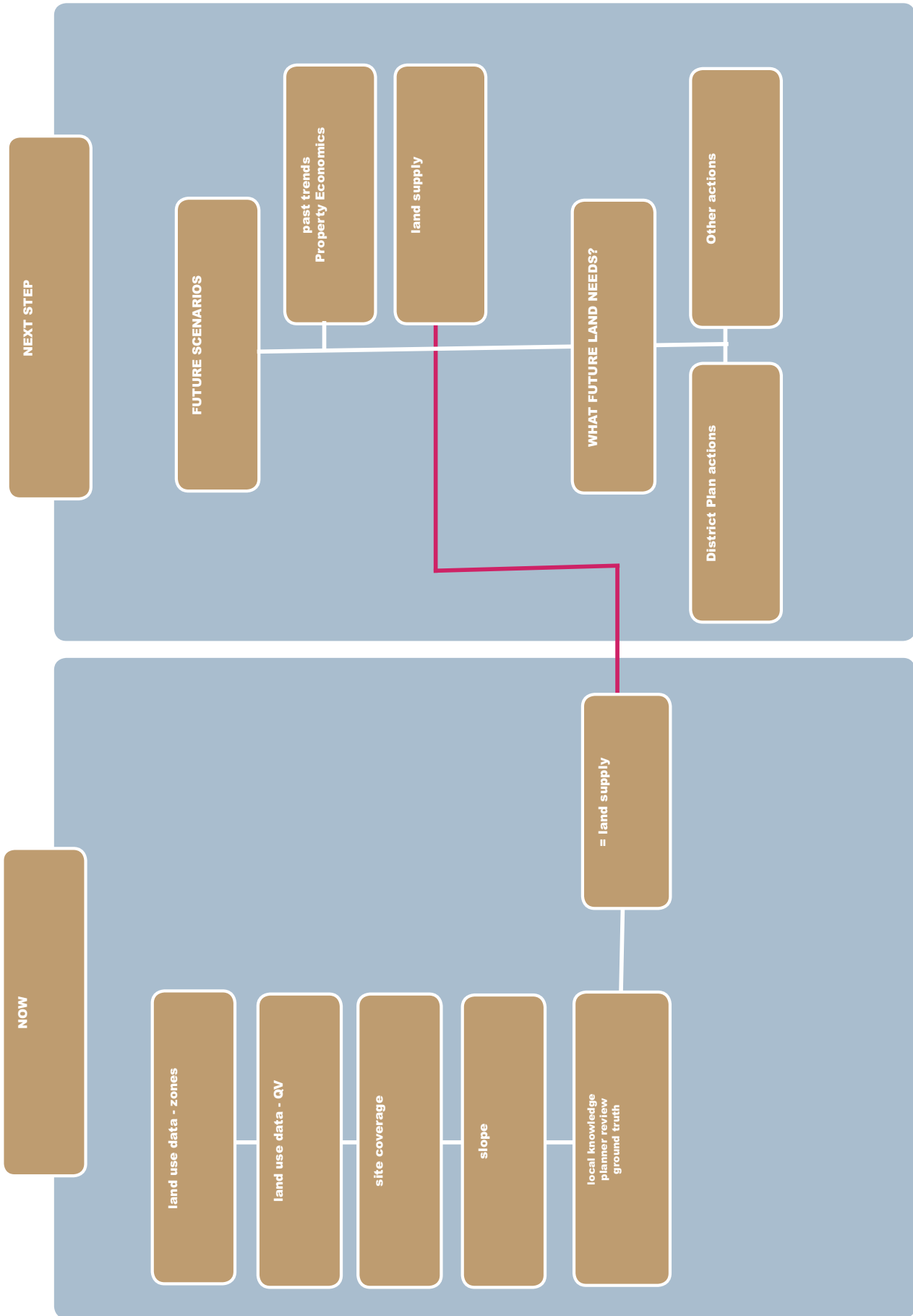
Another measure of the areas of land which have some level of industrial land use currently is the information available from Quotable Value (QV). This is the data used to set rates and provide valuation for property. To enable this data to be used the 99 categories of land use type were reviewed and those relating to industry were selected and again aggregated and mapped. The benefit of this data is that enables land which is being used for industrial purposes, but may not be zoned for that purpose to be identified. In planning terms these maybe considered to be 'existing uses' in that they can be expected to continue into the future, but have some value in terms of being able to be used for new industrial uses provided they are not different in scale or effects. Although this data has been included in the study it is considered to be less than accurate and of only marginal value to the outcomes.

Utilisation and Coverage

In order for the study to determine the availability of industrial land for supply to new uses the percentage utilization of the currently zoned industrial land has been calculated. The basis for this calculation has been the data supplied by each local authority (not all have been able to supply it) which describes the building footprints for each site. The footprints have then been divided by the site area to determine the percentage of site coverage. These have been shown in the tabulated summary table in the different levels of coverage – from 0% in increments to >50%. There are assumptions with this approach which need to be recognised. The assumption that vacant means 'available' is not correct as a parcel of land (a separate title) may be being used for car parking or storage and still be an important part of an existing and perhaps adjacent industrial use. However, the assumption that this land may be more available because it is unbuild will generally be more correct than for a site which has greater than 50% site coverage. For example, it may be possible to rationalise less dense site uses to provide areas that could be 'infilled'.

The other important assumption to note is that a building occupying the site does not always mean it is not available for a new use. Because the mapping cannot determine whether a building is occupied or vacant there are existing buildings that could be available for use. There are frequent examples of reuse of existing buildings by new or relocating industrial uses (eg new uses to Griffins building in Hutt City) which are not able to be recognised by the study in the way it is configured.

A constraint to note with the data used for this calculation of coverage is that because the zone boundaries do not always align with the boundaries for each parcel then the aggregated calculation of coverage will not exactly match with the combined industrial totals.



PROCESS DIAGRAM

Land Slope

The study recognises that generally industrial activities of any scale will generally favour flat land areas. Although there are examples in the region where relatively steep land is modified by earthworks to create large flat land areas (eg at Granada) the expectation is that this is not common. It may also be less than desirable in terms of what the WRS may aim to provide for in land area for future land uses given the landscape, ecological, and energy use costs. To address land slope the study has assumed that a slope greater than 15 degrees will be a constraint to industrial use.

Transport Access

The proximity to transport (road and rail) has been used as a mapping element to understand the relationship between the industrial land areas and the principal transport network. The road and rail network supplied by GWRC is the State High way network and the main rail line. Although the maps show both rail that can be used for freight and the commuter lines the ability to move people or freight to industrial areas is useful.

4.0 Findings

Findings from the study described below are derived from the summary table. Notable points of interest are:

- Hutt City has the largest area of industrial land (zoned 550 ha) followed by the combined Wairarapa local authorities (404 ha).
- The other local authority areas - Wellington, Porirua, Upper Hutt and Kapiti - have in the order of the same proportion of industrial zoned land (ranging from 183 ha to 124 ha).
- There is a high level of variability in the relationship between zoned land and that recognised in the QV data as being land uses of an industrial type. This is due to both the accuracy of the QV data and the number of 'out of zone' industrial activities.
- The Hutt and Porirua City and Wairarapa Councils' land is well located relative to the primary transportation network, with in the case of Porirua all industrial land being within 500 metres of State Highway and/or rail
- Most of the Hutt City land is also relatively flat with only about 20% being over 15 degrees slope.
- Wellington is the local authority with the greatest proportion of sloping industrial land greater than 15 degrees (over half).
- Kapiti is the local authority area with the greatest proportion of its industrial zoned land which is relatively flat.
- Generally there is a high proportion of utilized land as expressed by site coverage in Wellington and Hutt City. Porirua and Kapiti have a relatively larger number of vacant parcels. No coverage data was available for Upper Hutt or the Wairarapa Councils. However, both of these latter Councils have introduced relatively large new areas for industrial activities recently which will tend to suggest they too have larger proportions of vacant land.
- Although the ground truthing process identified a range of changes in terms of the zoned use, take up of apparently vacant land and redevelopment, generally these are of a small scale and make little difference to the overall supply. Only the 'extras' which are of a relatively large size are noted (refer to summary table)



SUMMARY TABLE

The following is a summary table of the industrial land areas as derived from the mapping. Note that there are some gaps in the table that result from the gaps in data provided. The left hand column identifies the territorial authority by initials and the sub area column refers to the areas identified on the maps. At the end of the table the extra areas noted reflect the likely future zone changes identified for larger areas of land by the identified territorial authorities.

TA	Subarea	Comb. Industrial (ha)	Landuse (QV) (storage/industrial) (within Comb. Ind.)	Landuse (QV) (storage/industrial) (TA total)	Slope > 15°	Slope < 15°	Coverage vacant (parcels)	Coverage <25% (parcels)	Coverage 25-50% (parcels)	Coverage 50-75% (parcels)	Coverage >75% (parcels)	No of parcels total	Coverage vacant (relative)	Coverage <25% (relative)	Coverage 25-50% (relative)	Coverage 50-75% (relative)	Coverage >75% (relative)	No of parcels within 500m of transport corridors	Combined area of parcels within 500m of transport corridors (ha)
WCC	1	13.51	5.85		10.39	3.12	0	8	2	2	1	0	0.0	72.7	18.2	9.1	0.0		
	2	41.15	26.57		37.84	3.12	24	37	38	69	73	241	10.0	15.4	15.8	28.6	30.3		
	3	8.56	0.54		7.71	0.85	4	7	7	2	2	1	19.0	33.3	9.5	4.8			
	4	20.84	10.09		15.76	5.08	29	33	20	26	43	151	21.9	13.2	17.2	28.5			
	5	62.15	32.16		29.26	29.26	28	22	23	30	30	108	25.9	20.4	21.3	27.8	4.6		
	6	6.52	0.00		3.97	2.55	0	1	2	0	0	3	0.0	33.3	66.7	0.0	0.0		
	7	67.57	37.36		52.27	15.30	22	28	33	29	4	116	19.0	24.1	28.4	25.0	3.4		
	Total	220.30	112.57	236.81	66.74	153.56	107	136	125	157	126	651	13.1	52.6	22.3	16.0	5.0	46	166.59
HCC	1	5.41	4.35		1.52	3.89	4	19	9	12	12	45	8.9	42.2	20.0	26.7	2.2		
	2	290.08	197.00		38.38	251.70	89	153	122	109	162	635	14.0	24.1	19.2	17.2	25.5		
	3	0.43	0.32		0.08	0.43	1	1	4	1	8	10	4.2	4.2	16.7	33.3	44.1		
	4	83.75	45.50		83.68	0.08	93	99	102	211	398	903	10.3	11.0	11.3	23.4	44.1		
	5	78.95	46.35		71.82	7.14	91	75	56	76	61	359	25.3	20.9	15.6	21.2	17.0		
	6	92.62	75.72		59.60	33.03	4	13	15	11	11	56	7.1	23.2	26.8	19.6	23.2		
	Total	551.25	369.25	414.62	106.71	444.54	282	360	308	427	645	2022	0.0	51.0	24.7	14.8	7.9	115	539.70
PCC	1	160.86			8.61	152.34	199	75	78	37	5	394	50.5	19.0	19.8	9.4	1.3		
	2	22.81			0.43	22.37	50	13	10	3	0	76	65.8	17.1	13.2	3.9	0.0		
	Total	183.76			9.05	174.72	249	88	88	40	5	470	30.8	44.2	16.3	17.0	1.0	2	183.76
UHCC	1	44.05	18.59		3.63	40.42	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	2	87.83	67.01		3.67	84.25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	3	5.83	5.45		1.34	4.48	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	Total	137.80	91.05	122.22	8.64	129.16												17	94.14
KCDC	1	0.15	0.11		0.01	0.15	3	0	1	0	0	4	75.0	0.0	25.0	0.0	0.0		
	2	28.30	7.78		1.33	26.97	47	21	50	28	5	151	31.1	13.9	33.1	18.5	3.3		
	3	40.32	13.06		0.15	40.17	32	11	44	41	6	134	23.9	8.2	32.8	30.6	4.5		
	4	7.54	4.29		0.19	7.35	5	11	15	13	4	48	10.4	22.9	31.3	27.1	8.3		
	5	4.16	0.00		0.00	4.16	0	4	0	0	0	4	0.0	100.0	0.0	0.0	0.0		
	6	44.19	34.92		0.00	44.19	63	55	23	11	7	159	39.6	34.6	14.5	6.9	4.4		
	Total	124.66	80.15	113.52	1.67	122.99	150	102	133	93	22	500	29.4	26.7	18.8	9.8	1.5	10	78.37
WDC	1	2.80			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	2	10.82			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	3	7.62			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	4	21.48			0.00	21.48	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	5	215.00			0.00	215.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	6	46.76			0.10	46.67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	Total	404.35			0.41	403.94												51	404.35
Wellington Region			633.02	887.17	193.22	1,428.91						241						241	1,466.91

EXTRAS new zones
 UHCC Ag Research
 KCDC Eastern Hutt Rd Airport

2.40
 0.90
 12.80