





How Much is it Worth?

Estimating Recreational Values for Stockton Beach

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Overview

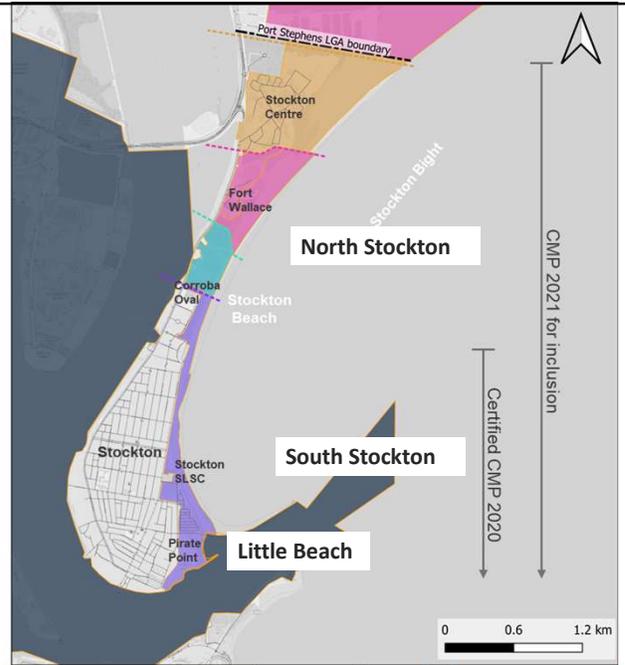
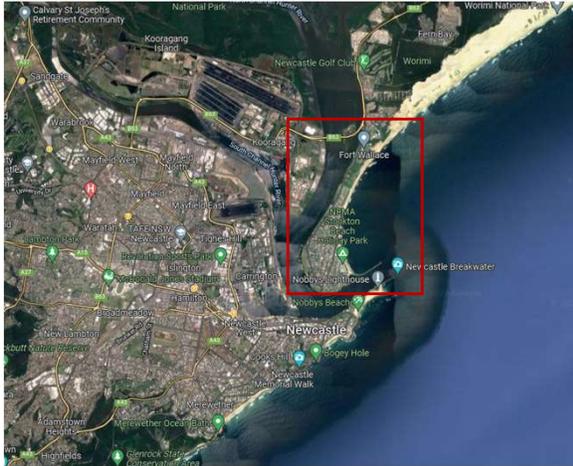
- Economic assessment supports CMPs
 - Many studies adopt values from literature for beach values
 - Locally derived values provide greater certainty and robustness to assessment
- Stockton CMP
 - Developed efficient method for deriving local beach use values
 - Other potential uses of the data beyond economics





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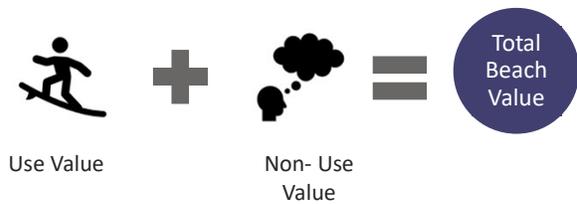
Study Area



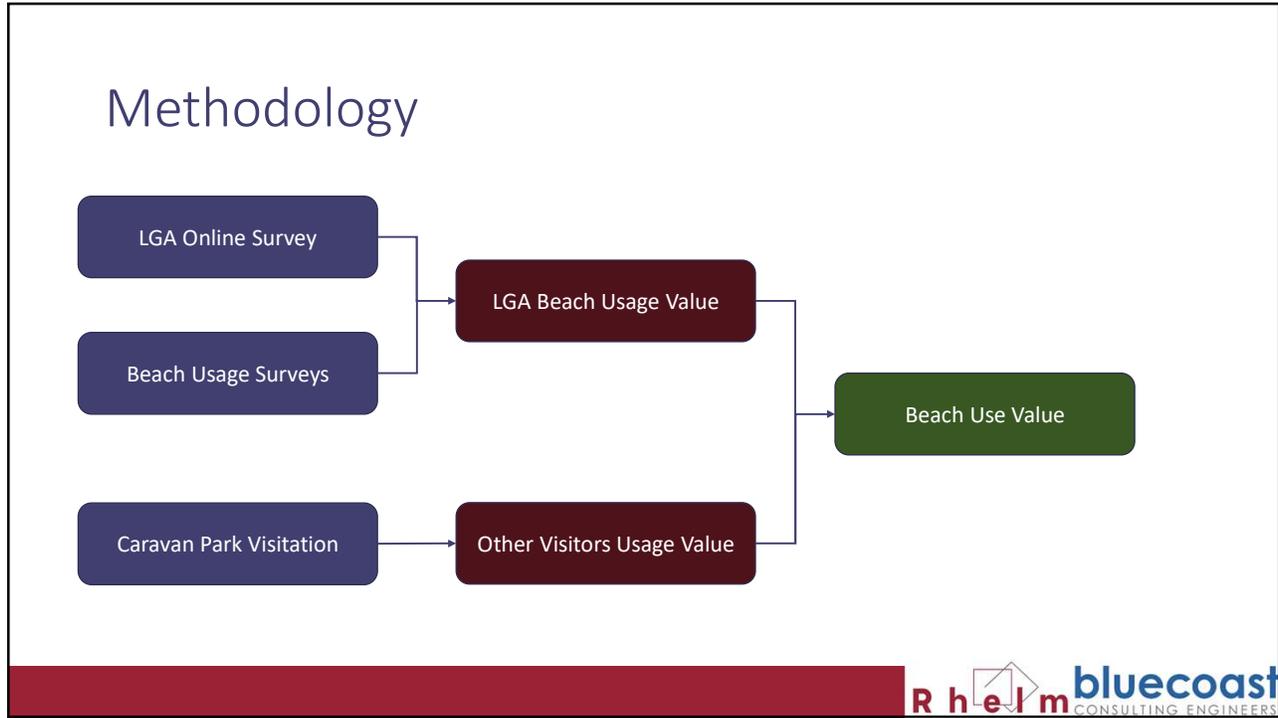
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Valuation Methods

- Beach value can be estimated through a range of methods
- Travel Cost Method provides an estimate of the "Use" Value of the beach
 - Based on cost to travel to the beach
 - Generally conservative estimate



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Beach Visitation Surveys

- City of Newcastle online surveys for entire LGA on beach usage
 - Just over 870 responses across LGA
 - Useful information on frequency of visits, preferences for beaches, expenditure etc
- Note
 - Does not provide information on total visitor numbers
 - Only covers LGA residents

Trips per Year (%)

- 0 - 0.04
- 0.04 - 0.09
- 0.09 - 0.12
- 0.12 - 0.13
- 0.13 - 0.21
- 0.21 - 0.26
- 0.26 - 0.38
- 0.38 - 0.46
- 0.46 - 1.2
- 1.2 - 66.98

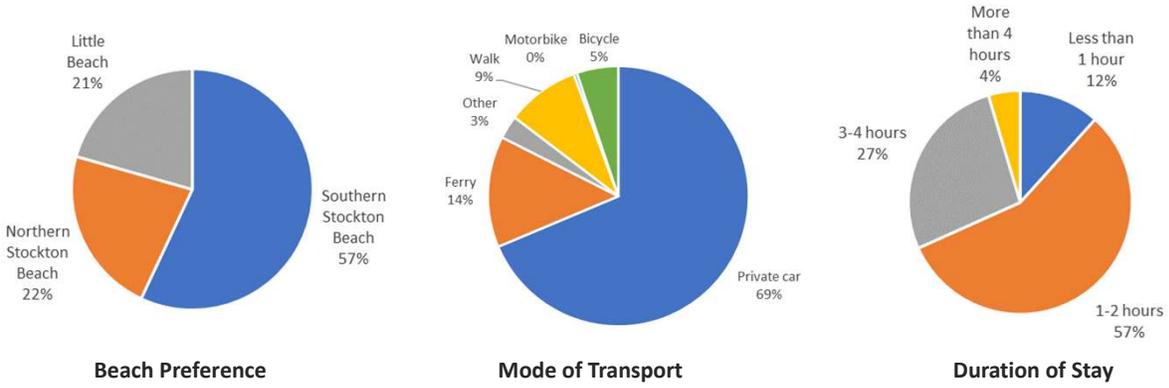
This data generated based on responses where surveyed answers included their suburb. Responses only included where they indicated that they visited the Northern Beaches.
Total number of trips estimated based on the number of respondents as well as the frequency that they indicated.
Approx 11% did not indicate their suburb.

Representative proportion of trips to Stockton across Newcastle LGA

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Beach Visitation Surveys



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LGA Beach Usage Value – Per Visit

- Local LGA users based value
- Value of time at the beach
 - Some studies include this in the value
 - Adopted approach was to exclude it

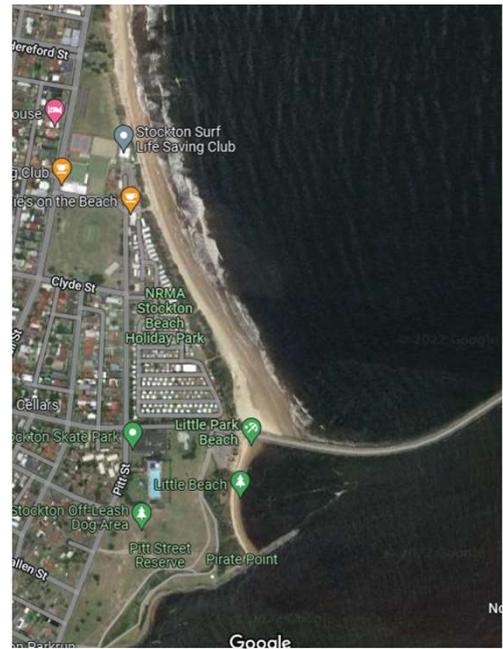
Item	Southern Stockton Beach	Northern Stockton Beach	Little Beach
Average per trip per person - excluding value of time at the beach	\$8.74	\$9.23	\$9.17



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Holiday Park Visitation

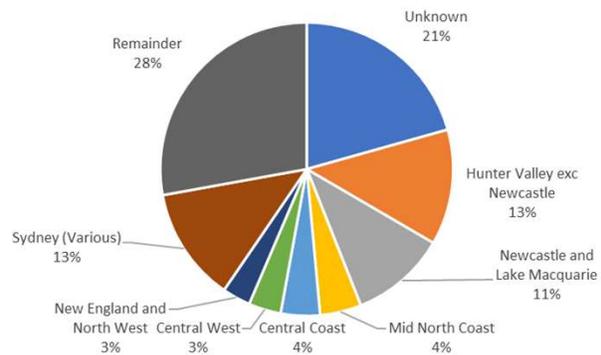
- One caravan park on South Stockton Beach
- Data on the caravan park bookings
 - Number of visitors, length of stay and origin
 - 2018, 2019 and 2020
 - 2020 was excluded due to COVID
- Around 25,900 visitors per year
- Note
 - Cannot assume that their entire trip to Stockton is to visit the beach
 - Cannot assume they visit the beach every day



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Holiday Park Visitation

- Value per visit to the beach combination of:
 - Cost of travel to Stockton
 - Cost of accommodation
 - Typical expenditure
 - Proportion of the trip associated with visiting the beach
- Weighted average value per person per beach visit - \$26.08



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Beach Use Survey

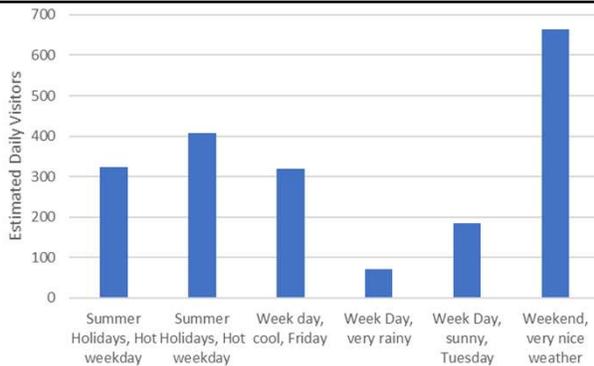
- Beach visitation survey only provides information on beach preference and locality
 - Need to understand total visits to the beach by all users (not just those in the survey)
- On-the-ground beach surveys (walk overs) over 12 hours per day
 - 6 days between January and March 2021
 - Range of weather
 - Good information on types of activities



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Beach Use Survey

- Around 103,000 trips per year estimated at Stockton
- Previous 2013/14 study estimated 100,200 (106,000 with change in population) for Stockton Beach



Beach	Annual visitation	Annual visitation – excluding Holiday Park visitors
South Stockton	82,001	61,439
North Stockton	21,384	13,152
Total Annual Visits – Stockton Beach	103,384	
Little Beach	31,389	24,929

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Beach Use Value Estimate

- Estimates between \$14 to \$18 per person per trip
- Value per m² of \$8 to \$73

	Total Stockton Beach	Southern Stockton Beach	Northern Stockton Beach	Little Beach
Total Use Value (LGA users + caravan park)	\$1,591,905	\$1,204,710	\$387,195	\$437,305
Total Visitors	103,385	82,001	21,384	31,389
Value per person per visit	\$15.40	\$14.69	\$18.11	\$13.93
Area of the Beach	86,140	38,465	47,675	6,015
Value per m²	\$18.48	\$31.32	\$8.12	\$72.70



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Comparison with Literature

- Current study estimates between \$14 to \$18 per person per trip
- If you include value of time at beach, \$30 to \$35 per person per trip

Source	Use Value	Comment
Raybould & Anning (2013). Beach and Surf Tourism and recreation in Australia	\$10.42	Per person per trip
Pascoe et al (2017) – Central and North Coast of NSW	\$11.70	Per person per trip, exclusive of time value at the beach
Deloitte (2016) – Sydney Beaches	\$40.12	Per person per trip, inclusive of time value at the beach.
Deloitte (2016) – Central and North Coast Estimate	\$31.97	Adjusted based on Pascoe (2017) estimate for Sydney vs North Coast, inclusive of time value at beach.
Sydney Coastal Councils (2012)	\$16.13	Per person per trip, exclusive of time value at the beach

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Conclusions

- Combined use of LGA wide online survey, together with on-the-ground beach use survey
 - Relatively efficient way to estimate beach use value
 - Provides more robust estimate than literature alone
 - Could be expanded to other Newcastle Beaches
 - Potential other uses for the data beyond economics
- Potential improvements in approach
 - Use of beach cameras/ AI technology
 - Although potential double counting
 - Non-use value – potential to capture some data through online survey



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Questions



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