

A VALUE OF THE URBAN REALM TOOLKIT FOR AUCKLAND?

CASE STUDY RESEARCH INTO APPLYING THE
TRANSPORT FOR LONDON VURT METHODOLOGY IN
AUCKLAND, NEW ZEALAND





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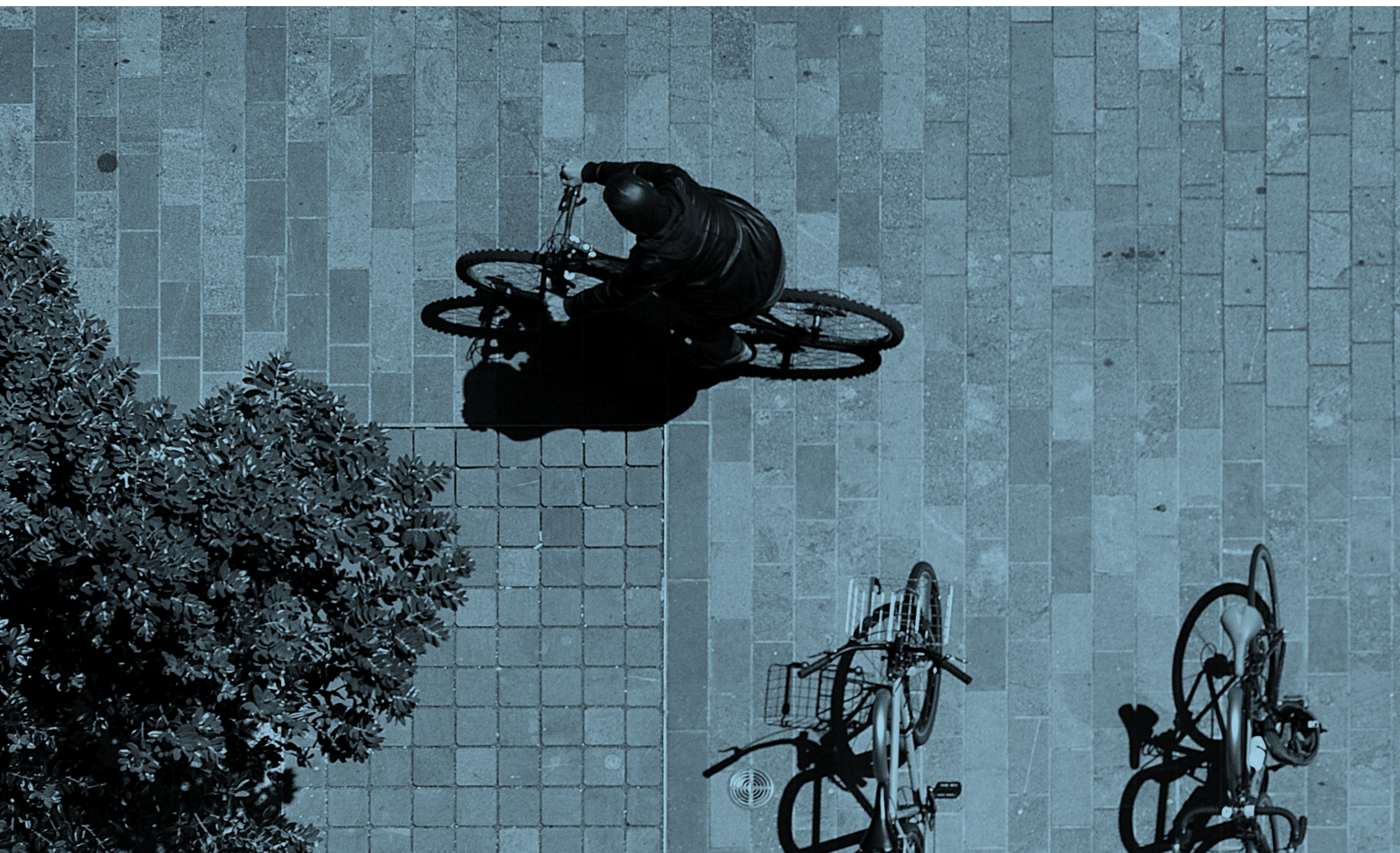
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INTRODUCTION



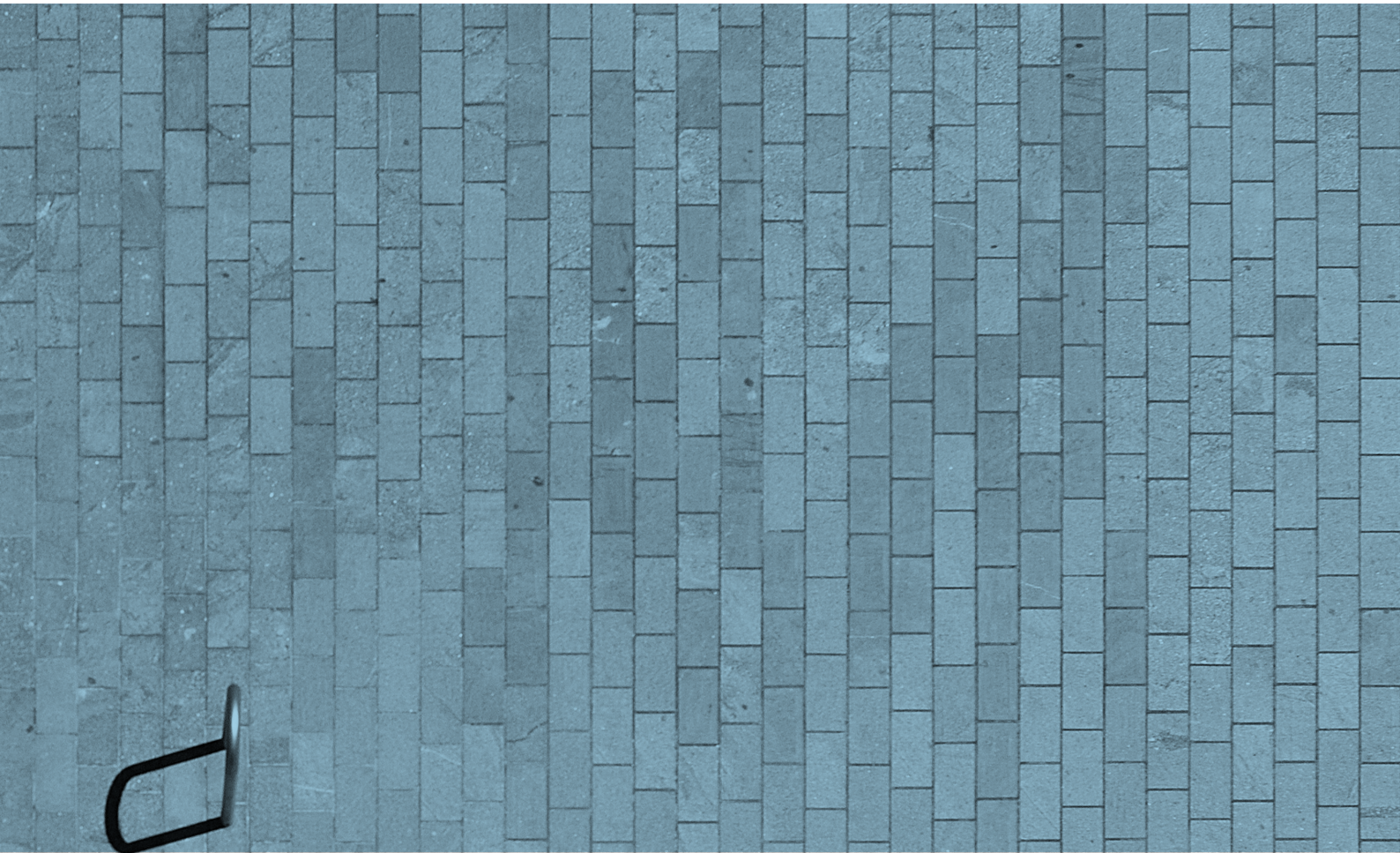


Introduction

This report sets out the findings of urban design research into an economic evaluation tool developed by Transport for London, known as the Valuing Urban Realm Toolkit 2016 (“VURT”). The tool was developed to ascribe a monetary value to the investment cities make in the urban realm.

The research documented in this report, which took the form of three case studies for different streetscape locations and future development scenarios within Auckland’s city centre, was carried out by Boffa Miskell urban designers in the first quarter of 2017. The work has been the result of a collaborative partnership between Boffa Miskell and the Auckland Design Office City Centre Unit at Auckland Council and has fed into a wider programme of work on the Economics of Place being undertaken by the City Centre Design Unit.

This report provides a comprehensive account of the case study research. Part 1 sets out the context of the problem with ascribing value to the urban realm, sets out what the VURT tool is and how it works, the approach taken to identifying and undertaking the three case studies, and summarising the key findings of the case studies themselves. The full results and working data for each of the case studies is included as a technical appendix to this report.



Part 2 examines the findings of the case study research to provide a critical reflection and evaluation of the potential value of such a tool to urban design and transport planning practice in Auckland and New Zealand. This discussion is structured around the following key questions:

What Does This Tell Us?

- Reflects on the key findings of the three case studies and the experience of using the tool.

How Should We Go About It?

- Lessons learned in applying the tool to the local context of Auckland / New Zealand.

Value of VURT for Auckland?

- The potential applications and benefits of such a tool to urban design and transport planning practice in the Auckland / New Zealand context.

Adapt or Adopt?

- A brief discussion on issues relating to the implementation of such a tool in this part of the world.

What Should Happen Next?

- Recommendations on next steps to advance the use of VURT or a similar tool in local practice.



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WHAT IS THE PROBLEM?





What is the Problem?

How do we quantify the benefits of investment cities' make in the urban realm? In particular, what value do we place on the public realm of streets and public spaces for people? Successful public realm recognises the use of streets and public spaces for pedestrian movement, as well as the value of streets and public spaces as places of economic and social exchange - economic benefits that occur when people on foot spend time in our streets and public spaces, rather than just passing through. How do we ascribe a monetary value to these benefits? Can we do this in a way that allows these benefits to be considered beside other more readily quantifiable benefits to other street users?

Every town and city that has been actively investing in public realm can point to local success stories where, intuitively at least, they know this has been money well spent. This is particularly evident where improvements in the pedestrian and public realm have been a catalyst for additional investment by adjoining property owners and businesses, and rejuvenation and growth in the local economies of wider city neighbourhoods and districts.

Traditional economic evaluation models and cost-benefit analysis tools have either ignored or struggled to ascribe a value to the benefits of public realm improvements. This makes it hard to consider them alongside more



conventional measures, such as time-saving and safety benefits. This reinforces the tendency to view public-realm enhancement as a “nice-to-have”, as opposed to an essential component of a well-functioning city.

This is an issue for projects that are purely public realm focused in their investment objectives. It is also an issue for transport or urban development projects and programmes with a broader or alternative focus on other modes. In these cases, the additional benefits of investing in or improving the public realm for pedestrian users are not always adequately captured or considered in evaluating the benefits of schemes.

The need to account for these benefits is becoming more pressing in a world where cities’ growth is once again concentrated in their centres. This reinvigoration and development of dense central city areas has placed a greater emphasis on use of streets and public spaces for economic and social exchange. The ability for exchange is increasingly recognised as fundamental to the urban economy in the 21st century,

These forces are strongly apparent here in Auckland - there has been an explosion in the growth of city centre residents, workers, transit passengers and people getting about by bicycle and foot since the Global Financial Crisis.

FORT STREET SHARED SPACE IS AN OFTEN-CITED LOCAL EXAMPLE OF INVESTMENT IN PUBLIC REALM WITH SIGNIFICANT ECONOMIC BENEFITS. A 47% INCREASE IN CONSUMER SPENDING AND A 429% INCREASE IN HOSPITALITY SPENDING AFTER THE COMPLETION OF THE SHARED SPACE UPGRADE.



Foot traffic on Queen Street has doubled in the five years since 2012.

The exponential rise and rise of Auckland's City Centre is set to continue strongly into the next decade on the back of transit investment such as the City Rail Link and potential Light Rail Transit, as well as record high migration and population growth.

Across New Zealand, these issues are now influenced by the development of the Better Business Case investment model by the New Zealand Government. Its adoption by Auckland Council, Auckland Transport and other central and local government entities has greatly increased the weight being placed on economic benefits of public sector infrastructure investment. This amplifies the need to have a method of quantifying the value of investment in the public realm alongside other investment objectives.

These problems were the genesis for the development of VURT by Transport for London for use in the United Kingdom. This research has been focused on applying the tool to local case studies in Auckland's city centre.

The use of such a tool in Auckland has the potential to bring much-needed empirical scrutiny to the design of Auckland's pedestrian environment. This applies equally to multi-modal transport projects and public-realm focussed schemes; it also relates to wider consideration of place and movement functions across Auckland's street network.

There is an urgent need in Auckland for a substantiated evidence base and quantifiable techniques and tools to measure the value and performance of place. This is apparent whenever expert opinion and anecdotal data around urban realm is being evaluated alongside the long established and accepted modus operandi and techniques of transport planning. While transport planning best practice is evolving from *Predict and Provide* to *Debate and Decide*, this does not remove the need for robust quantitative tools and data. The Valuing Urban Realm Toolkit has the potential to ensure that the benefits of improvements to the pedestrian realm are captured in evaluation and decision-making.

50,000 residents

CITY CENTRE RESIDENT POPULATION 2017

50% in 5 years

GROWTH IN CITY CENTRE RETAIL SPENDING

200% since 2012

QUEEN STREET FOOTFALL INCREASE

^34% pedestrians

ACROSS THE CITY CENTRE (2010-2015)

110,000 jobs

CITY CENTRE EMPLOYMENT 2017



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WHAT IS THE VALUE OF THE URBAN REALM TOOLKIT?

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What is VURT?

The Valuing Urban Realm Toolkit (“VURT”) was developed by Transport for London (TfL) to provide in their words, “*objective, evidence-based justifications for investment in the public realm*”. By putting a monetary value on those hard-to-quantify benefits of investing in better streets and spaces, VURT allows them to be considered alongside conventional time-saving, safety and other benefits, both in assessing options for future proposals and building businesses cases for their implementation.

VURT 2016, the latest version of the TfL tool, focuses on User Benefits, i.e. the benefits to pedestrian users of streets and public spaces. The values are based on the results of stated preference research undertaken by TfL between 2006 and 2010). VURT assigns these values to changes in the quality of the built environment. This survey work is the basis upon which values are ascribed in VURT to the different qualities and attributes of the user public realm experience.



In essence, VURT:

- Compares and measures changes in public realm quality based upon specific design proposals for a future state
- Quantifies user benefits to the proposed changes in public realm quality
- User benefits are assessed for both link (pedestrian movement) and space (spending time in the public space) uses
- Public realm user benefits captured are additional benefits to other benefits captured by other economic evaluation tools
- Based on audits derived from criteria and seven point quality scale of the Pedestrian Environment Review System ("PERS") also developed in the United Kingdom by Transport Research Laboratory ("TRL").

How VURT Works

VURT uses the Pedestrian Environment Review System (PERS) - also developed in the UK - to objectively assess the changes in public realm quality for pedestrian and public space users.

PERS uses a seven quality scale from -3 to +3 where 0 is considered neutral or adequate.



VURT uses the outcomes of its user benefits research to assign a monetary value to the expected changes in streetscape quality that the proposal will achieve if implemented. Quality is described and evaluated in reference to up to 17 different streetscape attributes measured by PERS (11 'Link' [or pedestrian movement] attributes and 6 'Space' [passive place user values]). These attributes relate to people's experience of walking through and staying in the street or public space being studied.

User benefits are calculated according to how many people experience the change in public realm quality, and for how long. Put simply, if no-one is there to experience an improved urban realm, then it is not considered to have any value. VURT therefore uses counts of people walking or staying in the street during a specified time period - assessing link and place attributes at the peak hour identified from a 24 hour count data - to calculate the total user benefit for that period. Standard scaling factors then produce an annualised user benefit value as well as user benefit value for the specified design life of the scheme.

VURT PROCESS

Detailed guidance on how VURT works is outlined in the User Guide produced by Transport for London in November 2016.

In summary, the basic process followed in calculating user benefits following VURT is:

- Assess the existing streetscape quality using PERS on-site audit tool
- Assess the future streetscape quality arising from the proposed scheme / options (plan-based PERS assessment)
- Evaluate the change in streetscape quality between the existing (baseline) situation and the future scenario.
- Assess how many people will experience that change in quality
- Assess how long these people will experience the change for, while passing through or staying in the street / space
- Monetise all user benefits by applying Willingness-to-Pay values to the total number of people using the space
- Calculate user benefits for a single year
- Calculate user benefits over the specified lifetime of the scheme (the period of time can vary with the project)

What is PERS?

VURT utilises the Pedestrian Environment Review System (PERS) to assess the streetscape quality of the existing baseline and future investment scenario for a given segment of street or defined area of public space.

PERS addresses both pedestrian movement attributes of streets and public spaces - referred to as **Link** attributes, and user values relating to staying and spending time in a street or space, referred to as **Space** attributes.



The full PERS tool, which includes a 200 page reviewers' handbook, audit checklist and reporting software, enables reviewers to assess Links, Crossings, Routes, Public Transport Waiting Areas, Interchanges and Public Space. VURT incorporates 11 attributes drawn from PERS to assess Link attributes, and 6 Space attributes, as shown in the Table below.

PERS STREETSCAPE ATTRIBUTES USED IN VURT

LINK ATTRIBUTES	SPACE ATTRIBUTES
Effective width	Moving in the space
Dropped kerbs	Interpreting the space
Obstructions	Personal safety
Permeability	Feeling comfortable
Legibility	Sense of place
Lighting	Opportunity of activity
Personal security	
Surface quality	
User conflict	
Quality of environment	
Maintenance	



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