

# ITP ROADMAP 2020

*Effective utilisation of capital assets by ITPs – A Primer*



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Every effort is made to provide accurate and factual content. The authors, however, cannot accept responsibility for any inadvertent errors or omissions that may occur.

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# EXECUTIVE SUMMARY

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## *This report is a primer for further discussion about how best to use the physical assets of ITPs*

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This paper is a brief introduction to some of the issues that need to be considered when considering how to make the best use of the physical assets of Institutes of Technology and Polytechnics (ITPs).

ITPs in New Zealand collectively own \$2.01 billion of property, plant and equipment assets (TEC 2018). These assets include the land on which campuses are set, buildings used for teaching, research, administration and student accommodation, and related tools, equipment and vehicles.

Over the next five years, ITPs expect to spend almost \$896.3 million on capital assets, primarily to improve the suitability of teaching and learning spaces and replace or refurbish buildings. Key metrics that tell us how well ITPs are using space suggest that the utilisation of these assets will worsen in the five years to 2021. Independent assessments of the quality of asset management by ITPs indicates some variability in the quality of capital asset planning (see Capital spending by ITPs).

The capital spending of ITPs is subject to a range of incentives and limitations, many of which are common to tertiary education organisations (TEOs). These include a focus on internally-driven priorities, changing 'hard' assets such as land and buildings is slow and complex, competitive pressures encourage duplication, there are weak incentives to make effective use of assets, communities and departments can assert strong ownership and influence, and there is a strong bias toward the status quo (see What drives asset planning?).

We argue that these structural problems impact on the capacity of the 'system' to plan and manage land and building assets effectively and collaboratively. Certainly, it is clear that collaborative asset management among ITPs, across TEOs and with other partners tends to be ad hoc and opportunistic (see What needs to change?).

There are examples both locally and internationally of innovative practice. We outline examples of national (or quasi-national) bodies that are responsible for capital planning and ownership, coordinating bodies for higher education or wider public services that undertake capital investments, and other more ad hoc examples of collaborative practice.

We also discuss briefly the growing adoption of the placemaking trend which seeks to develop shared education and community spaces. Placemaking approaches may have application in circumstances where local and central government, ITPs and health and social service organisations may struggle to demonstrate a viable business case working individually, but through some collective action could share the cost and benefits of capital investment.

This paper is a brief introduction to some of the issues that need to be considered when considering how to make the best use of the physical assets of ITPs. It suggests that there is scope to shift collaboration in capital asset management from its current ad-hoc, opportunistic frame to a more systematic approach. The most appropriate mechanisms to achieve this shift are unclear. However, there are numerous examples overseas of more co-ordinated approaches that appear to deliver good outcomes and warrant further investigation.



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***ITPs in New Zealand collectively own \$2.01 billion of property, plant and equipment assets (TEC 2018). These assets include the land on which campuses are set, buildings used for teaching, research, administration and student accommodation, and related tools, equipment and vehicles.***

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## PURPOSE

### *This report is a primer for further discussion about how best to manage the capital assets of ITPs*

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The purpose of this report is to provide context for discussion and analysis about ways to promote the more effective use of the \$1.8b of physical assets owned by ITPs.

This report is a primer for this debate. We provide an introduction to the key issues that influence the utilisation of publicly-owned assets of ITPs, provide context to why these might arise and suggest possible responses.

## METHODS

### *We combined international research, data on asset utilisation and local examples of good practices*

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This report was predominantly a desktop review. The report comprises a literature review and supporting commentary. Some limited data analysis was undertaken to illustrate salient points.

#### *Literature review*

The literature review focused on exploring the approaches taken by governments internationally to manage their property better. The search considered contextual issues relating to the management of publicly-owned physical assets in the ITP sector and suggested innovative models that may support the better use of these assets in education and community settings.

#### *Data analysis*

We received data relating to the ITP sector from the New Zealand Benchmarking Tool and analysis by the TEC of the Capital Assets Intentions Plans submitted by tertiary education institutions (TEIs). These data were used to present a view of the extent and range of utilisation of the relevant assets.

#### *Supporting commentary*

We draw out implications for New Zealand and the ITP sector from the findings of the literature, provide context for the earlier findings and identify some possible models.

## LIMITATIONS

### *This report is an introduction to the relevant issues and is limited to land and buildings*

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Material presented here is not exhaustive and should be considered a preliminary description of ideas and case studies.

Our focus is the more effective utilisation of physical assets of land and buildings. In some cases because of data limitations we refer to the more expansive 'Property, plant and equipment' defined under NZ IAS 16 (NZ Accounting Standards Board 2011). This definition includes machinery, equipment and vehicles. We do not consider matters relating to the effective utilisation of intangible assets such as software.



# INTRODUCTION

## *This paper examines issues relating to the portfolio of building and lands owned by ITPs*

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This paper is about the utilisation of publicly-owned physical assets in the New Zealand tertiary education system, in particular within the ITP sector. It briefly reviews two key aspects to this topic:

- Contextual issues relating to the management of publicly-owned physical assets in the ITP sector and whether different organisational models could improve and support effective asset management.
- Current utilisation of buildings and land in the ITP sector and innovative models that may support the better use of these assets in education and community settings.

This paper explores a range of approaches that might enable the 'better use' of physical assets in NZ's ITP sector.



# KEY CONTEXTUAL CONSIDERATIONS

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*The key considerations and understandings that guided the preparation of this paper are set out below.*

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Management and use of buildings and land can facilitate the achievement of public policy objectives. Coherent asset management and utilisation strategies can benefit efficiency, finances (through the generation of revenue), public wellbeing and community development. Utilisation models that achieve cost savings may do so at the expense of other benefits (e.g. learning opportunities) and vice versa. Additionally, public or private property is inextricably linked to culture and society, with economic, social, spiritual and political value that creates both limitations and opportunities for use (Kaganova 2006).

Inconsistent incentives in the tertiary education system impact on asset management and use. ITPs are expected to efficiently manage and use resources, but some argue that the funding system encourages investments in land and buildings as a way to avoid the appearance of over funding (Whittle 2015), (NZPC 2017). Desirable partnerships and collaboration with others that might enhance the utilisation of assets can be challenging to achieve in the context of a competitive tertiary education environment.

The ITP Roadmap 2020 will drive the future vision and strategic direction of the ITP sector and therefore specific

priorities for the management and use of physical assets. The ITP Roadmap 2020 (the Roadmap) aims to secure a sustainable future for NZ ITPs, enabling a 'world class skills system' aligned with Government regional development goals; workforce needs; and is 'connected to the communities it serves and supports cultural aspirations alongside economic development.' (Office of the Minister of Education 2018).

Better use may refer to use (or a mix of uses) that contributes to efficiency improvements, enhanced learning and teaching, community engagement and development, reflecting student diversity, regional development and regeneration, or increased innovation and collaboration. Material presented here is not exhaustive and should be considered a preliminary description of ideas and case studies.

While the paper identifies some high-level success factors and key lessons where possible, further examination of the merits and potential of these approaches should be informed both by the future policy and political context for the ITP sector (as they become clearer) and the nature of building and land stock.





# ASSET PERFORMANCE AND MANAGEMENT

## *ITPs in New Zealand collectively own \$2 billion of property, plant and equipment assets (TEC 2018)*

The \$2.01 billion of property, plant and equipment assets of ITPs (2016 data) include the land on which campuses are set, the buildings used for teaching, research, administration and student accommodation, and related tools, equipment and vehicles. These assets make up around 5% of New Zealand's social asset base (see Appendix one: Public assets – an overview).

ITPs expect to spend almost \$896.8 million on capital projects between 2017 and 2021, primarily to replace or refurbish buildings (\$495.2 million or 55.2%) or improve the suitability of teaching and learning spaces (\$334.4 million or 37.3%). Responding to changes in demand is a less significant driver accounting for \$36.1 million (or 4.0%) over the same period.

These investments will drive an increase in the total value of property, plant and equipment which is expected to peak at \$2.254 billion by 2021, an increase of 12.1% compared to 2016. A modest reduction is then forecast through to \$2.161 billion by 2026.

These investments are expected to improve the overall condition of these assets albeit from a low base – the Facility Condition Index for ITPs as a whole is expected to improve from 102.5% in 2016 to 38.2% by 2021 (a percentage greater than 30% normally indicates that the condition of an asset is critically poor).

Key metrics used by the TEC suggest a modest worsening in utilisation between 2016 and 2021 before an overall net improvement through to 2026. Measures such as the total value of property, plant and equipment, floor space per staff member or student will peak sometime between 2017 and 2021 before beginning a recovery to a better (more efficient) position by 2026.

The TEC's data suggests that depreciation costs are expected to increase from \$97.2 million per annum in 2016 to \$114.8

million per annum in 2021, an increase of 18.1% from 2016. Deferred maintenance will decline from approximately \$1.5 billion in 2016 to around \$722.9 million in 2021.

The sale of plant, property and equipment is not a significant consideration – the current forecasts suggest just \$38.5 million will be recovered over the 2017-2021 period.

A summary of key capital asset metrics is presented in Appendix two – Capital asset performance.

### **CAPABILITY TO EFFECTIVELY MANAGE ASSETS**

TEIs undertake annual self-assessments of their capability to effectively manage the assets that they control against 17 criteria using a 10-point scoring scale. The TEC coordinates an independent assessment of these capabilities on a biannual basis. These independent assessors set capital management targets specific to each TEI taking account of the assets the relevant entity controls. A five-level capability scale is also used: aware (lowest); minimum; core; intermediate; advanced (highest).

In 2017, all ITPs demonstrated either a 'core' or 'intermediate' capability. Six recorded an overall assessment which placed them, if ranked, in the top ten of all TEIs. Nonetheless, only three met or exceeded their target and seven recorded an overall assessment more than ten points lower.

The independent assessments indicate that in general the producing of complete asset management plans requires urgent attention, although this gap relates primarily to a failure to integrate physical and information technology capital plans. To align with best practice ITPs generally need to work on financial and funding strategies, levels of service and performance management, asset condition assessment, maintenance planning, operations planning and reporting, and improvement planning.



# WHAT DRIVES ASSET PLANNING?

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## *The incentives for the effective use of assets in the tertiary education sector tend to favour institution-led and focused responses*

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The incentive framework for the use of capital assets has dimensions that are both:

- formal (the legal obligations, rules and procedures that apply); and
- informal (cultural norms and the way other aspects of the wider system interact).

The formal requirements for capital asset management by public entities involve Cabinet-mandated expectations relating to the management of both physical and intangible assets. These expectations promote a systematic process for optimising the value of new and existing investments and make clear the responsibilities of various actors such as the Boards of Crown entities which are responsible for the performance of the relevant agency's investments and assets (DPMC 2015).

The TEC requires TEIs to submit 10-year Capital Intentions Plans annually to provide the agency with a long-term view of the current and planned capital investments and self-assess their asset management capability (TEC 2016b). In some cases, consolidated reporting about 'whole-of-Government' intentions incorporates the information in these plans (NIU 2016). The informal dimensions of the incentive framework including internal priorities, investment incentives, flexibility and ownership considerations.

**Internal priorities:** There is a strong institutional bias in capital asset planning as entities will tend to focus on activities that align with their immediate, internal priorities reducing the incentives for sourcing co-investment and exploring shared investment. For similar reasons, Government agencies will tend to emphasise certain types of planning-related activities such as comprehensive data collection and risk management in preference to a direct role in shaping capital investment decisions.

**Investment incentives:** The capital-intensive nature of TEIs may reflect weak incentives to make effective use of assets, and the desirability of certain types of assets because of the prestige they generate, or as opportunities to capture the benefits of government funding (NZPC 2017).

**Competition.** The competitive funding model encourages TEIs to develop a physical presence near to their competitors to ensure access to particular markets. This dynamic can lead to TEIs maintaining a presence in areas distant from their regional market, and, in at least one case, four TEIs owning or leasing buildings on or adjacent to a regional ITP's campus.

Still most assets of ITPs are geographically distant suggesting these arguably perverse outcomes arise from competitive pressures between sub sectors.

**Hard to build, hard to change:** Adjusting the portfolio of land and buildings can be difficult. Physical assets are much harder than assets such as information technology systems (or indeed softer assets such as staff) to engage and employ. Planning and construction processes are often complex, time-consuming and expensive.

The location and size of these assets are fixed, they can be subject to planning restrictions and covenants may require assets to be offered back to the original owners. It is also difficult to make incremental changes to or dispose of physical assets. Teaching and learning spaces can be in use for significant parts of the year limiting access for maintenance or redevelopment work.

**Legal constraints:** The process of disposing of or transferring the ownership of public building and lands can be complex and time-consuming. Crown agencies are required to follow the processes set out in the Public Works Act (1981) which can take between 12 months and three years to complete, and TEIs may be required to meet additional tests including Ministerial assent depending on the nature of the ownership interest (TEC 2016c). Certain parcels of land may be subject to planning restrictions.

Conversely limitations in the Education Act on the powers of TEIs do not extend to the building of assets from cash reserves.

**'Ownership':** Communities may assert perceived ownership over local assets and the associated service delivery. In this way, communities can seek to limit the range of permissible activities by the Crown and its agents, and provide a richer sense of the value of certain kinds of assets (Hudson 2017). Similarly, a kind of de facto ownership over teaching space can be asserted by staff or departments limiting the availability of that space for other uses.

**Accounting issues.** Some assets can have a higher 'book' value than their underlying value warrants. This difference can arise when the recorded value of a building reflects its depreciated replacement cost, but the building itself is no longer fit for purpose.

The book value reflects that the asset is not fully depreciated as the accounting policy end of life age hasn't been reached. Applying a zero rather than negative (depreciation cost) end of life value compounds this issue. Retaining a poor quality asset can be the most cost-effective option but will tend to understate the efficiency of a TEI's operations or overstate the amount of deferred maintenance.

**Spirals.** Autonomous institutions can lack the resources to make necessary investments in their future because they have failed to generate sufficient internal surpluses. There is no systematic mechanism to redistribute resources toward TEIs that are under investing, except perhaps in extremis.

**Status quo bias.** Cultural norms within the higher education system have implications for the way TEIs and staff construct employment relationships, how they organise academic years and can generate a preference for the ownership of buildings.

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***Capital intensive industries are generally characterised by over-capacity and low-returns on investment reflecting long operating times and need for regular rebuilds, replacements and expansions (Komonen, 2006).***

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# WHAT NEEDS TO CHANGE?

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## *Structural problems with the way the assets of ITPs are managed need to be addressed*

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The ITP sector is facing significant financial challenges (TEC 2018a), falling demand for the products and services it provides and competition from other TEOs (TEC 2018b) and constraints on its ability to respond to changing demand and student and stakeholder needs (NZPC 2017).

The challenges that ITPs collectively face can arguably be characterised as a 'burning platform'. This concept refers to the cumulative effect of demands for increased efficiency, enhanced service delivery, limited or fragmented delivery, a mismatch between demand and the available assets in the context of buildings that are valuable, but may be inflexible or not fit for purpose (AECOM 2015).

A better utilised, more effective asset base for ITPs could better support their mission by:

- enhancing the intersections between home/family, community, work and study life for learners who are typically older, employed and looking to enrol part-time to upskill or retrain within the context of their industry's or profession's requirements;
- better meeting the needs of diverse learners whose poor outcomes have, in part, been attributed to the poor use of space (NZPC 2017); and
- leveraging the physical assets of other partners such as the models that underpin the industry training system (i.e. by using the capital assets of workplaces).

There is some evidence to suggest that there are structural problems that impact on the capacity of the 'system' to plan and manage land and building assets effectively and collaboratively. Certainly, it is clear that collaborative asset management by the tertiary sector with other partners tends to be ad hoc and opportunistic, although there are several examples of long-standing collaborations and partnerships (Whittle 2015), (University of Otago undated).

Delivering better use of buildings and land offers a range of potential benefits. These benefits include:

- better meeting the expectations of communities and businesses that they have access to the kinds of public services that enable them to realise their aspirations;
- underpinning transformational economic, social and cultural changes for communities from strategic, well-managed investments (NIU 2015); and
- the avoidance of opportunity costs and stranded assets (see Utilisation of publicly-owned assets).

For the providers of tertiary education changes to the use of land and buildings can offer benefits across a range of learning, collaborative, and efficiency areas. The providers of tertiary education increasingly see learning activity extending beyond the edges of the campus environment (Dugdale 2009) and requiring the colocation of staff and students in ways that reflect 'real-world' environments (AUT 2018).



# WHAT MODELS MIGHT WORK BETTER?

*There are a variety of collaborative models covering a spectrum from large-scale urban redevelopment to leveraging community hubs; each is underpinned by the idea of 'placemaking'.*

There are a variety of approaches internationally to the planning and resourcing of publicly-owned higher education capital assets. These activities are distinguished by the extent to which they are locally-led or centrally-led. Ownership, the availability of local or alternative (non-government) revenue sources and socio-cultural context all play a part.

Some countries have established national (or quasi-national) bodies that are responsible for capital planning and ownership on behalf of institutions (see Akademiskahus (Sweden)), undertake capital planning as part of wider co-ordination (see The California Community College system), or direct investment as an integral part of the provision of public services (See The Scottish Futures Trust).

Collaboration need not always be centrally determined although examples of effective, collaborative practice that operate at a regional or local level appear rare. The Manawa facility provides an example of a collaborative teaching and research space, the College of the Canyons shared campus shows the potential for colocation of higher education and the EIT Institute of Sport and Health is indicative of a growing trend toward shared education and community spaces (see also Placemaking).

## AKADEMISKAHUS (SWEDEN)



AKADEMISKA HUS

Akademiska Hus is a company owned by the Government of Sweden. The company provides 3.3 million square meters (or 60% of the total) of floor space used for higher education and research in Sweden. The organisation which is broadly equivalent to a Crown entity in New Zealand manages a property portfolio valued at \$13 billion NZD (80 billion Swedish kroner) and has a Standard & Poors AA credit rating.

The company is required to both promote sustainable long-term development of university and college campuses and operate on a commercial basis including by generating profits. The company manages teaching, learning and accommodation space which caters to around 300,000 students each year.

Swedish higher education institutes rent their premises from Akademiska Hus using funding drawn from their operating grants from Government. Akademiska Hus oversees mixed-use developments designed to combine public (higher education) and private (often commercial uses). Most Swedish higher education institutions also rent properties from other (private) providers.

In 2018, the company is overseeing the construction of 30,000 sqms of teaching space, building 700 student housing units and managing a major campus redevelopment to accommodate a mix of higher education institutions and commercial companies focused on life sciences teaching and research. The company also plays a leading role in promoting energy efficiency and is developing a common platform to collect data generated by buildings.

The Akademiska Hus model has been criticised because of the effective monopoly it holds, and the requirement to generate commercial returns given the limited alternative uses for the buildings it develops (Akademiska Hus 2018), (Johansson 2004).

## THE CALIFORNIA COMMUNITY COLLEGE SYSTEM



The California Community College system is the largest provider of post secondary education system in the world serving around 2.1 million students annually. The system consists of 5,720 buildings with a usable floor space of 4.8 million square meters. These buildings are distributed across 113 college campus, 78 off-campus centres and numerous off-campus outreach centres set on 24,479 acres of land.

Decisions about capital infrastructure planning are made by the California Community Colleges Chancellor's Office which is responsible for preparing a five-year capital outlay plan for the state's Governor. These plans are based on projections of future enrolments, analysis of excess capacity and modernization requirements, and proposals submitted by the network's 24 districts. Such models are common in the United States of America with many states mandating the use of 'building board' processes (Mullin and Honeyman 2007).

The Chancellor's Office maintains web-based project planning and management tool which is used by colleges to collect data on the condition of the network's buildings and assist with managing capital projects. These data inform assessments of excess capacity, critical safety needs exist and buildings renovation or replacement.

Community colleges seek funding through a two-stage process. The first stage involves an initial assessment of a three-page concept paper that informs systemwide needs analysis and prioritisation. Successful proposals proceed to a second stage involving a final project proposal which includes detailed information along with the relationship between the project and the district's education and facility master plans.

The 2017-18 Five year Capital Outlay Plan sought \$20.1 billion (USD) for capital investments of which 43.8% was intended to respond to enrolment growth, and the balance for modernisation of existing facilities. The plan also highlighted how the network is responding to the level of unmet space need and strategic approach to sustainability (Skinner 2016).

The state's approach to capital planning has been criticised with a particular focus on its reliance on targeted, variable revenue sources, inconsistent priority setting and a disconnect between operating and capital funding (Lenz 2017).

## SCOTTISH FUTURES TRUST



The Scottish Futures Trust (SFT) is an infrastructure delivery company established in 2008 by the Scottish government. The company has a land and building management arm in addition to investment, construction, technology, housing and climate divisions.

The trust has specialist expertise in the collaborative deployment of joined-up health, education, housing and other services that achieve better outcomes for communities, deliver efficiencies and provide leverage for economic growth.

The trust has built 50 schools, 160 community hubs, 2,700 houses, refurbished around 300,000 streetlights and attracted \$1.6b in private sector co-funding. The trust coordinated the sale of surplus public property in 2016/17 worth approximately \$100m (NZD), reduced office space use of local government by 30% in the last five years and generated around \$23m (NZD) in energy savings annually.

The trust's Growth Accelerator programme plays a role in coordinating skills and training including establishing a skills and training academy to support a commercial redevelopment in central Edinburgh which is expected to generate 3,000 jobs (Scottish Futures Trust 2017).



## MANAWA



The 2010/2011 Canterbury earthquakes resulted in significant loss of life and considerable damage including to the built environment of Christchurch city (Potter 2015). There was significant damage to the buildings of the Canterbury District Health Board and TEIs in Christchurch.

Part of the response was the development of anchor projects and precincts in Christchurch city including Te Papa Hauora Health Precinct (Otagaro undated).

Te Papa Hauora is a partnership between the University of Canterbury, the University of Otago, Ara Institute of Canterbury and the Canterbury District Health Board (CDHB), working with Matapopore (the Ngāi Tūāhuriri earthquake recovery steering group) and the Crown. The precinct aims to co-locate clinical care, teaching and research to improve the quality of training and accelerate the translation of research findings to the clinical environment (Health Precinct Advisory Council 2015).

A key component of the precinct is Manawa which houses researchers, teaching programmes catering to 1,800 nursing and allied health students and specialist training for the DHB's 8,000 staff. Manawa is a seven-story building built to the very latest seismic building standards. It contains simulation suites including ward areas, a mock operating theatre and a home environment. It also features lecture rooms and flexible learning spaces for supervision, tutorials and large group sessions (Ara 2018).

## EIT INSTITUTE OF SPORT AND HEALTH



The EIT Institute of Sport and Health is a multi-purpose facility for sport and other physical activity, healthy eating and physical literacy education programmes. The \$25m facility is intended to be a world-class sports and recreation hub and community health centre at the Hawke's Bay Regional Sports Park and will house a Centre of Excellence in Human Performance.

The facility will offer training programmes delivered by Auckland University of Technology, AUT Millennium (a charitable trust focused on sport and physical activity) and Eastern Institute of Technology (EIT) (Hawke's Bay Community Fitness Centre Trust Undated).

EIT is the naming sponsor of the facility and intends to offer vocational certificates, applied degrees and postgraduate programmes at the facility's teaching spaces and research lab. The facility's staff will also collaborate with recreation centres in Waipukurau and Wairoa to deliver satellite services. The first stage of the facility will be completed in mid-2019 with an accommodation hostel to follow by April 2020 (Hawkes Bay Today 2018).

## COLLEGE OF THE CANYONS



The University Center at College of the Canyons is a partnership between the community college and six American universities. The centre comprises 23 "smart" classrooms, two computer laboratories, six meeting/seminar rooms and a lecture hall/ theatre. The centre hosts advanced undergraduate and graduate programmes that would not otherwise be available through the community college.

The partnering universities and community college advisors collaborate to assist learners with course planning, credit transfer and offer priority admission. Students can study concurrently at the community college and one or more universities (College of the Canyons 2018).

# PLACEMAKING

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*Placemaking facilitates patterns of public space utilisation, paying particular attention to 'the physical, cultural and social identities that define a place and support its ongoing evolution.'* (PPS 2018a).

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Placemaking is characterised by novel partnerships amongst creatives, city planners, community, architects, business owners and public leaders (Jackson 2017).

Placemaking examples have been described as 'self sustaining microcosms' that provide living (student housing or accommodation for refugees), working (co-working and multipurpose spaces for creative and technological research), entertainment (shops, food stores, cafes, restaurants), support services (health clinics, child care), education (workshops and classes, guided tours of sites) and culture facilities.

Commonly, a balance will be struck between creativity and capital - projects have revenue gathering elements, such as restaurants, concert venues and theatres, but commercial restraints are accepted to advance other non-financial benefits. Focus is given to creating as many synergies between activities as possible (Lieb 2014), (Bodenstein 2014).

These initiatives are often stimulated by local government. Health and social sector organisations are also developing competence in the development of 'hub-like' health and well-being centres as the requirement for co-located and integrated health services becomes more embedded in health policy (Waddington 2008), (Cumming 2011).

A 'hub' is a collection of facilities and services clustered together on the same or adjoining sites that together create enhanced efficiencies and a focal point for activity. Community hubs in the United Kingdom provide examples of co-located services such as the:

- Raploch Community Campus combines primary and continuing education, sports and recreation, library services, commerce and hospitality; and
- Tidemill Academy and Deptford Lounge contains co-located education and community facilities with separate access points (school and library) that are open at different parts of the day to provide access to different sections of the community (AECOM 2015).

Libraries are also broadening their role and becoming multipurpose spaces becoming 'integral to the civic and social health of towns'. These hubs offer a range of enhanced services through partnerships with other organisations or adding resources to create 'makerspaces' (Fallows 2016). There are also examples of co-investment/co-ownership models for libraries involving TEOs and local government (Lenz 2017).

This role for libraries reflects the mission-orientation of such organisations which, in this case, involves staff committing to a vision of being free and open by responding to the needs of a diverse population. These conceptions include seeking to serve the needs of the most vulnerable members of communities (PPS 2017) and the 'blended librarian' who aims to be an indispensable asset for the delivery of a complex set of interrelated services (Dugdale 2009).



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*Short term leasing arrangements (5 years or less) are maintained for parts of the space to avoid closing off developments and can provide a 'second life' to iconic yet underused buildings in a city.*

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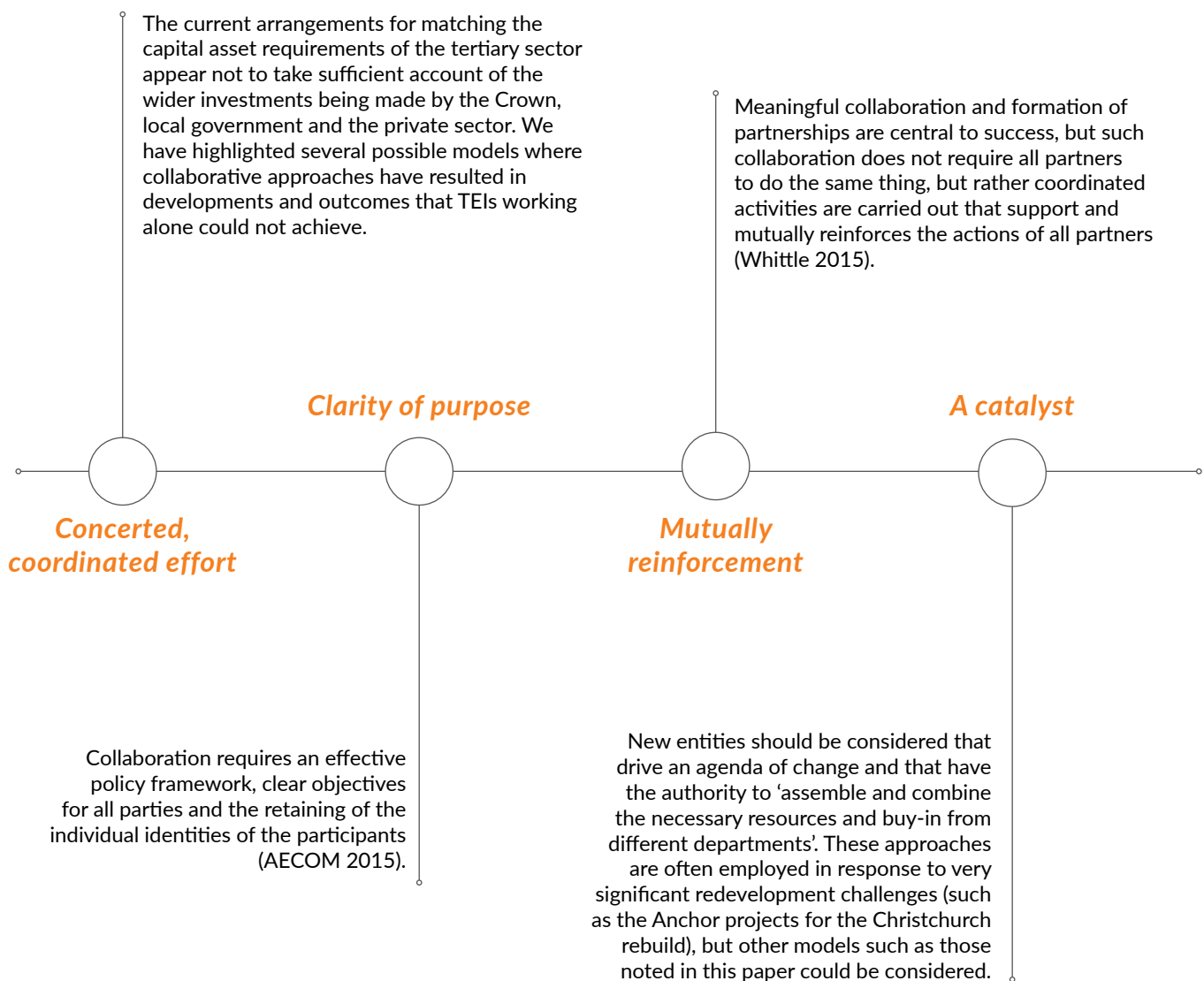




# HOW COULD WE SCALE THESE APPROACHES?

*Placemaking facilitates patterns of public space utilisation, paying particular attention to ‘the physical, cultural and social identities that define a place and support its ongoing evolution.’ (PPS 2018a).*

We suggest that making more effective use of the land and buildings of ITPs requires the following:





# FUTURE WORK

*The propositions in this paper should be a starting point for future discussion and debate.*

This paper is a brief introduction to some of the issues that need to be considered when considering how to make the best use of the physical assets of ITPs.

We argue that there are structural factors that work against co-ordinated planning, point to some examples of successful collaboration in New Zealand and overseas and suggest that there are opportunities to promote collaboration in capital asset management system. Delivering more effective collaboration has the potential to deliver a shift from the current ad-hoc, opportunistic frame to a more systematic approach.

The most appropriate mechanisms to achieve this shift are unclear. However there are numerous examples overseas of more co-ordinated approaches that appear to deliver good outcomes and warrant further investigation.

These propositions need to be validated with others with an expert understanding of the processes used by the Crown including crown entities like ITPs, local government and the private sector.

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# APPENDIX ONE: PUBLIC ASSETS – AN OVERVIEW

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*The public owns a significant portfolio of building and lands, and the assets of tertiary education institutions make up a significant proportion of these assets*

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The value of the property, plant and equipment owned by the New Zealand Government as at 31 May 2018 was \$148.5b. These assets are distributed among the 'Core Crown' (\$40.0b or 26.9%), 'Crown entities' (\$75.3b or 50.7%) and 'State-owned enterprises' (\$33.2b or 22.3%) (Treasury 2018). Local Government authorities own significant plant, property and equipment assets ranging from Auckland Council with \$43.3b (Auckland Council 2018) and Chatham Islands Council with \$58.8m (Chatham Islands Council 2018).

These assets are also ageing, the average age of the schooling estate is 42 years, half of social housing is over 42 years old, and some parts of the water network are over 100 years old (NIU 2015).

## PHYSICAL ASSETS OF TERTIARY EDUCATION INSTITUTIONS

TEIs in NZ (especially universities) are capital intensive. In 2014, TEIs collectively owned or managed assets (mainly land and buildings) with a net book value of around \$9.4 billion (TEC 2016a).

The land and buildings of tertiary education institutions account for around one-quarter of New Zealand's social asset base - the \$44b of property, plants and equipment assets in the health, education, justice, social housing and defence) (NIU 2015). Collectively these assets are the fourth-largest social-asset portfolio across government (Productivity Commission, 2017).

## OWNERSHIP AND MONITORING

There is growing interest in New Zealand better planning and use of capital assets. This interest in reflects general observations that governments tend to own a vast array of real property that often is managed in a highly fragmented way by different bureaucracies with different policies and processes for decision making and implementation (Kaganova 2006).

The Crown closely monitors the financial performance of TEIs and keeps close control over how TEIs use and dispose of assets. This monitoring role is partly because the government bears legal liability for TEI debts in the event of failure (NZPC 2017).

## UTILISATION OF PUBLICLY-OWNED ASSETS

A review commissioned by the Office of the Auditor General in 2014 highlighted that a historic focus on planning for growth would need to give way to a more nuanced approach that recognises that some regions will require considerable capital investment, others will have more muted demands for some investment, and still others need to plan for declining requirements (OAG 2014).

The Government's National Infrastructure Unit (a division of New Zealand Treasury) is part of a Government and industry response to the need for a more sophisticated approach to the management of infrastructure assets. The 'Thirty Year New Zealand Infrastructure Plan 2015' points to the need for systematic co-ordinated planning and the effects of disruptive technologies, economic and population growth, competition for resources and cost pressures on infrastructure development (NIU 2015).

The utilisation of public buildings is one indicator of the extent to which they are serving a useful purpose. Variable utilisation rates suggest suboptimal decision-making at the time of building or changes over time in the demand for certain kinds of assets. Inefficient asset management runs the risk of pressured assets in growing areas, stranded assets in shrinking areas, a growing number of asset renewals and outmoded means of service delivery as technology expands (Treasury 2014).

Publicly available data on asset utilisation both in New Zealand and overseas tends to be inconsistent, limited in scope and not necessarily useful for assessing the outcomes and impact of these assets (NIU 2015).

Certainly, many public buildings are very well-utilised, for example:

- Christchurch airport which caters to 6.85 million travellers annually (Christchurch Airport 2018);
- on average 84.7% of the available classrooms in the compulsory school system were in use in 2016 (New Zealand Parliament 2016); and
- Counties Manukau Health conducted 21,746 elective surgeries in the 2016/17 year (CMH 2018).

Conversely, many public buildings are less well-utilised, for example:

- District Court courtrooms may only be used on average around half (54%, with a range between 78% and 3%) of their available time (New Zealand Parliament 2012); and
- There are around 80 schools that have 25% or more classrooms not in use or surplus to requirements (MoE 2018).

More significantly there is evidence of significant latent and current deficits in New Zealand's infrastructure asset base, particularly in housing and the 'three waters' sector (NIU 2015).

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*The land and buildings owned by the government and local government include airports, railways, dams, schools, hospitals, courts, prisons and farms. Other public facilities are leased from private owners. These assets take a variety of forms including sites generally dedicated to a single user or tenant (such as courts and hospitals) and those that combine multiple users (such as community hubs or combined library/museum spaces).*

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# APPENDIX TWO – CAPITAL ASSET PERFORMANCE

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## *The capital asset intentions of ITPs provide a reasonable guide to performance through to 2021*

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TEIs including ITPs prepare capital intentions plans annually forecasting relevant expenditure for the next ten years. The capital intentions plans are used by the TEC to monitor the utilisation of capital assets by individual ITPs and for the subsector as a whole.

A complete set of data is available covering forecasts for the 2017 to 2026 period (a complete set of updated forecasts covering the 2018 to 2027 period will be available later this year). These data provided a general guide to the planned capital expenditure by ITPs and expected income and expenses.

Most ITPs submit their plans with caveats reflecting uncertainty about the future. Additionally, ITPs collectively forecast their total revenue by 2021 to be 10.0% higher than 2016 which may prove optimistic given analysis such as (TEC 2018a). Nonetheless, the TEC staff consider the capital intentions data to be reasonably reliable through 2021. Some selected metrics are set out in Table 1.

Table 1: Key capital asset performance metrics, ITP sector, 2016 to 2021

Metric	2016	2017	2018	2019	2020	2021
Total property, plant and equipment	\$2,009,767	\$2,063,094	\$2,131,646	\$2,212,014	\$2,253,090	\$2,254,745
Estimated backlog maintenance	\$1,524,361	\$1,426,326	\$1,225,287	\$1,026,525	\$724,660	\$722,923
Total gross square meterage (annual figure - buildings)	757,291	770,416	775,489	767,727	754,376	694,611
Total gross square meterage (annual figure - land)	2,266,646	2,184,099	2,181,788	2,088,613	2,087,661	2,087,661
Sqm per FTE (buildings)	87.8	89.8	90.2	89.1	87.9	80.6
Sqm per EFTS (buildings)	9.5	10.3	10.3	10.1	9.8	8.9
Property, plant and equipment per EFTS - (\$)	\$25,321	\$27,618	\$28,308	\$29,081	\$29,305	\$28,979
Depreciation	\$97.3m	\$92.4m	\$99.8m	\$100.8m	\$106.0m	\$114.9m
Facilities Burden Ratio	8.8%	8.6%	9.0%	8.8%	8.8%	9.2%
Facilities Condition Index - (%)	102.49%	84.65%	69.61%	55.60%	38.33%	38.19%

**Note:** 2016 data is based on actual performance. 2021 data is drawn from forecasts prepared by individual ITPs.

The *facility condition index* is a measure of condition relative to the reproduction cost of the building. A lower number indicates an asset is in better condition with a rate between 0-5% considered good, 5-10% fair and 10-30% poor. A rate higher than 30% is internationally considered critical. The *facilities burden* ratio measures the total annual cost of facility ownership in relation to the net value of facilities.

*Depreciation* includes all fixed assets.

