

Tunnels under Albert Park

File No.: CP2017/13874

Item 6

Purpose

1. To seek feedback on a proposal for opening the tunnels under Albert Park.

Executive summary

2. Nick Reid, Transport Planner will attend the meeting on behalf of Subterranean City, a partnership promoting the development of the existing tunnels under Albert Park.

Recommendation/s

That the Auckland City Centre Advisory Board:

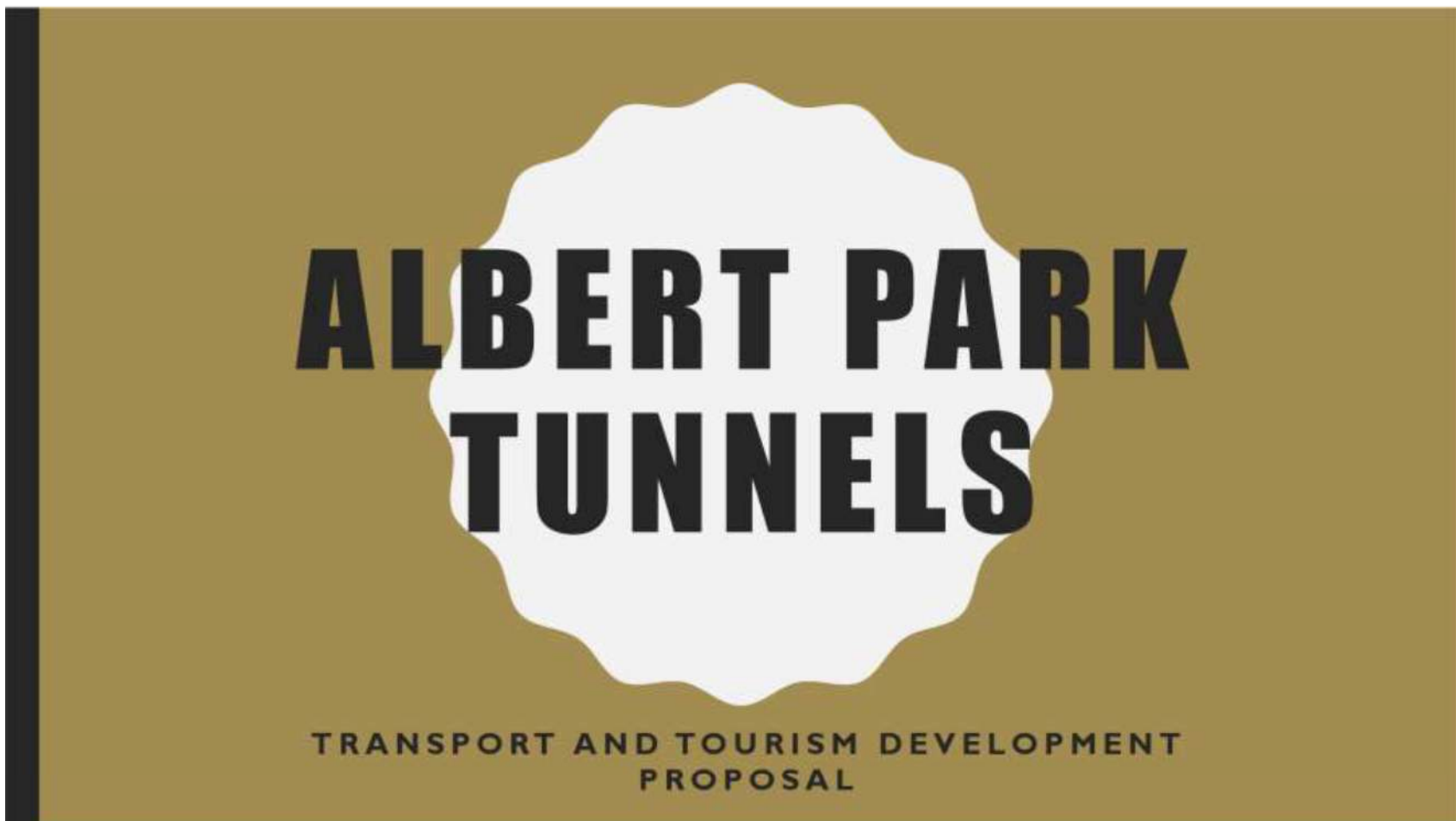
- a) provide feedback on the proposal for opening the tunnels under Albert Park.

Attachments

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Signatories

Author	Kalinda Gopal - Governance Advisor
Authoriser	Barry Potter - Director Infrastructure and Environmental Services



INTRODUCTION

1. Who we are
2. What are the Albert Park tunnels?
3. The proposal
 - University link tunnel concept
 - Tourist and civic uses
 - The glowworm experience
4. Redevelopment cost estimates
5. Next steps

WHO WE ARE

Subterranean City – A joint venture of Bill Reid and Nick Andreef

Bill Reid

- Champion of the tunnels
- Long time advocate for re-use
- Has tunnel access and investigation agreement with Auckland City Council

Nick Andreef

- Waitomo Caves tourism and glowworm specialist
- CEO of Waitomo Adventures Ltd.
- Looking to develop tourist venture in central Auckland

Strategic Transport Planning

Nicolas Reid

- Transportation planner: senior consultant at MRCagney
- Specialist in integrating transit, walking and cycling as urban transport systems
- Experienced in business case development for public transport and urban development projects





HISTORY

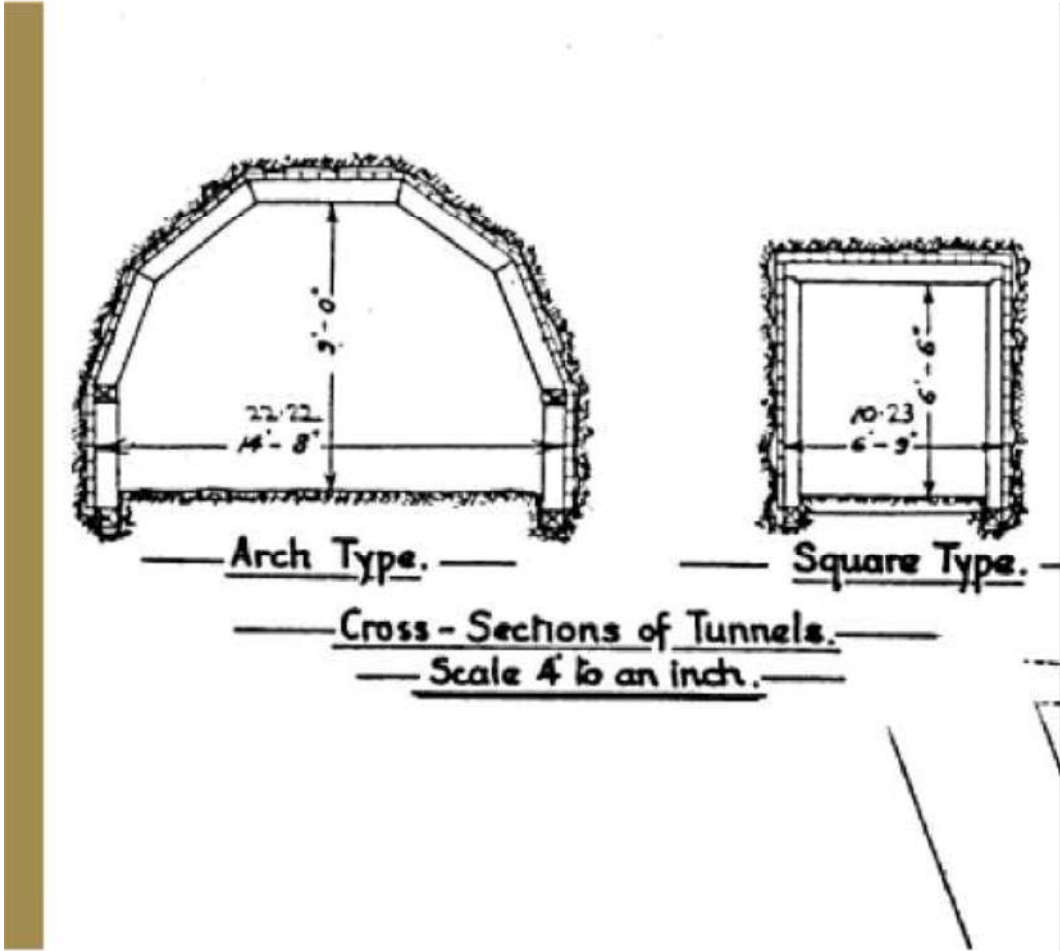
Built as air raid shelters during World War II

Intended to protect city centre population from bombing

Japan never attacked...

Various schemes for their re-use after the war

But eventually back-filled with clay blocks and sealed



FORM

Main tunnels are 4.4m wide and 3m tall

Arch shaped for natural stability

Cut through rock and other geology

Lined with timber beams

EXTENT

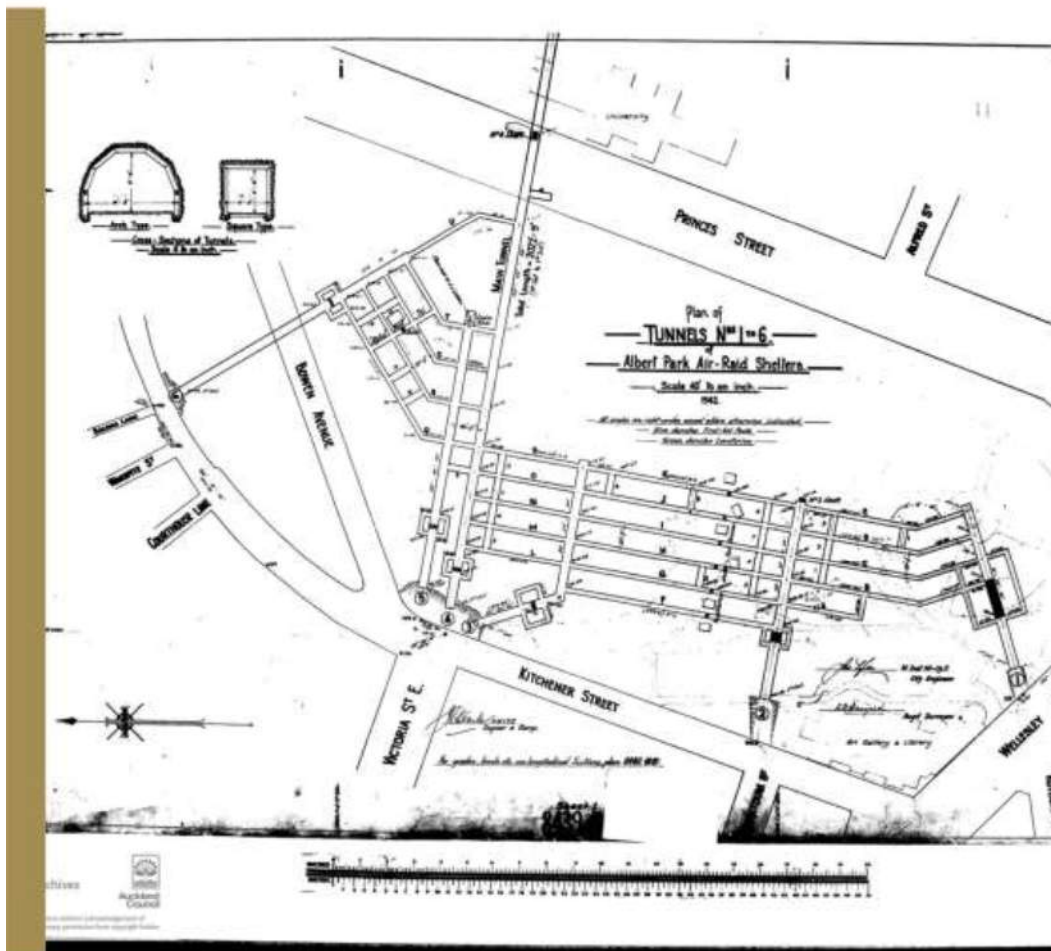
Huge complex under Albert Park, Art Gallery and University

- 3.5km of tunnels
- Entrances at Victoria St, Chancery, Wellesley St and Constitution Hill

Main tunnel runs from City Centre to Parnell

- 660m from Victoria St to Beach Rd
- built big enough to drive supply trucks through

Dozens of smaller side galleries









UNIVERSITY LINK TUNNEL CONCEPT

Basic concept:

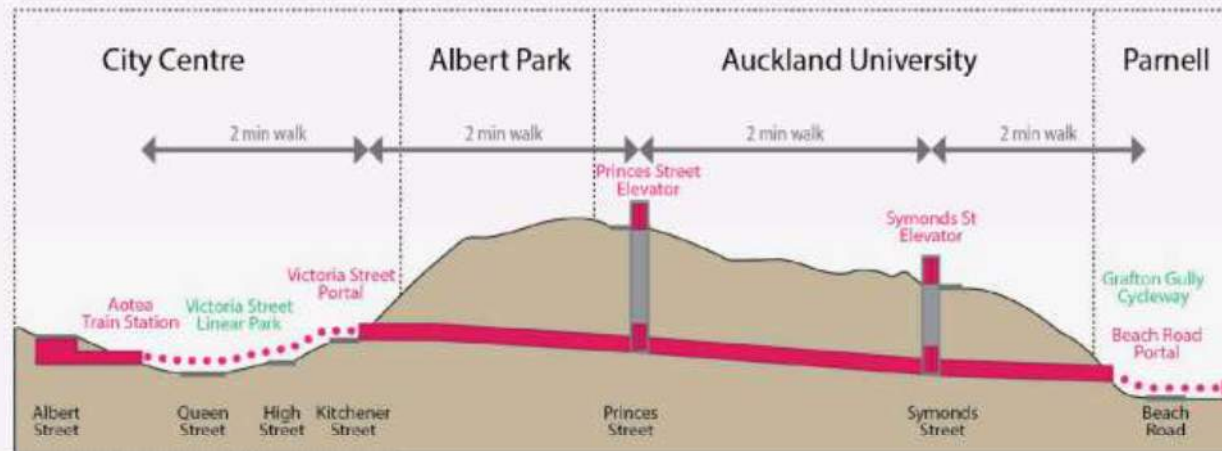
- Re-open the main tunnel from Victoria Street to Beach Rd
- Construct two sets of elevators between the tunnel and Princes Street and Symonds St
- Operate as a pedestrian and cycle connection between the City Centre, University and Parnell
- Charge a small 'bus fare' or shadow toll to recoup capital and operating costs

WHAT PROBLEM DOES THIS SOLVE?

- Access across City Centre limited on the east-west axis difficult on foot, bus, car, cycle
- Access to University hampered by steep hills either side, road topography
- Rail and bus transport in Queen St valley effectively distant from University
- Bus transport to university distant from Queen St valley
- Travel from Parnell to midtown indirect

NETWORK PLAN

- Creates an east-west transport link with four “stations” each about 200m apart (two minutes walk)
- Four portals creates ‘network effect’ with twelve travel options:
- Midtown to Princes St, Midtown to Symonds St, Parnell to Symonds St, Princes St to Parnell, Parnell to Midtown, etc.

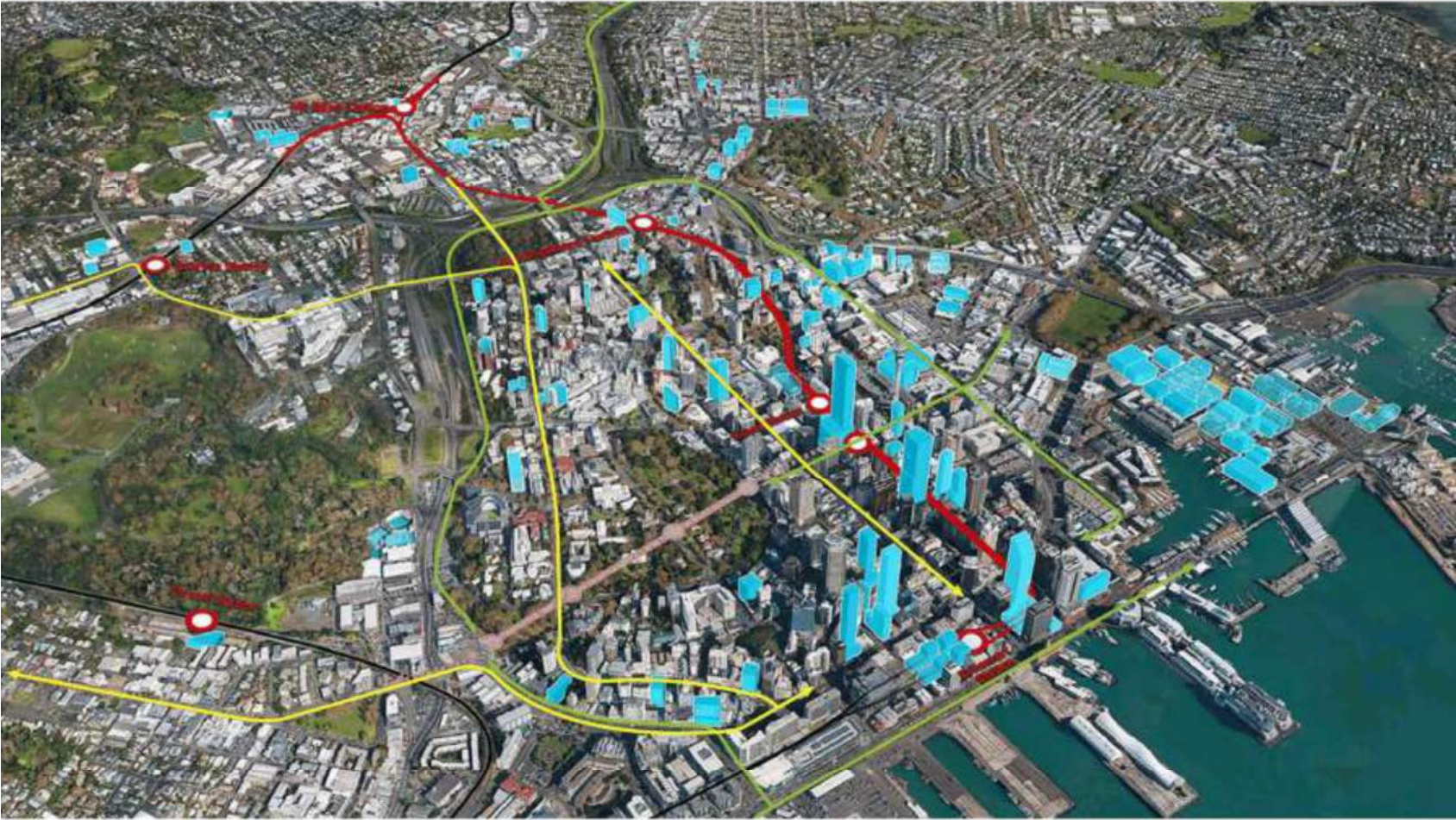


NETWORK INTEGRATION

Integrates with pedestrian, cycle and bus networks:

- Pedestrian link between City, Parnell and University, overcoming long exposed walk up steep hills. Two minutes flat walk Victoria St to Clocktower lift.
- Cycle 'missing link' between Grafton Gully, Beach Rd and Parnell cycleways, and core of the City Centre. Grafton Gully to midtown cycleway in 3 minutes ride.
- Links Symonds St buses (Mt Eden Rd, Eastern Busway) to midtown core.







CITY RAIL LINK INTEGRATION

Aotea Station main Victoria St exit

- Faces tunnel portal directly on linear park via Queen Street
- Tunnel is effectively extension of the station concourse
- Extends City Rail Link to the eastern CBD

**Makes Aotea Station the
University Station**

TRANSPORT USER MARKETS

40,000 students at University of Auckland

- Approximately 30,000 on any given day
- Over 70% currently walk, cycle or take public transport to campus
- 13,000 a day walk to and from campus from bus, train, ferry stops in town
- Many more walk from apartments and flats in town, Carlaw Park, Parnell.

100,000 commuters to City Centre

- approximately 50% walk, cycle or public transport, many potential trips:
- 400 people live in Parnell and walk to work midtown each day (Census 2013)
- 1000s catch eastern bus routes and walk back up from Britomart

50,000 residents live within in the City Centre

- and they walk everywhere.

Plus local and international tourists, day trippers, recreational cyclists...

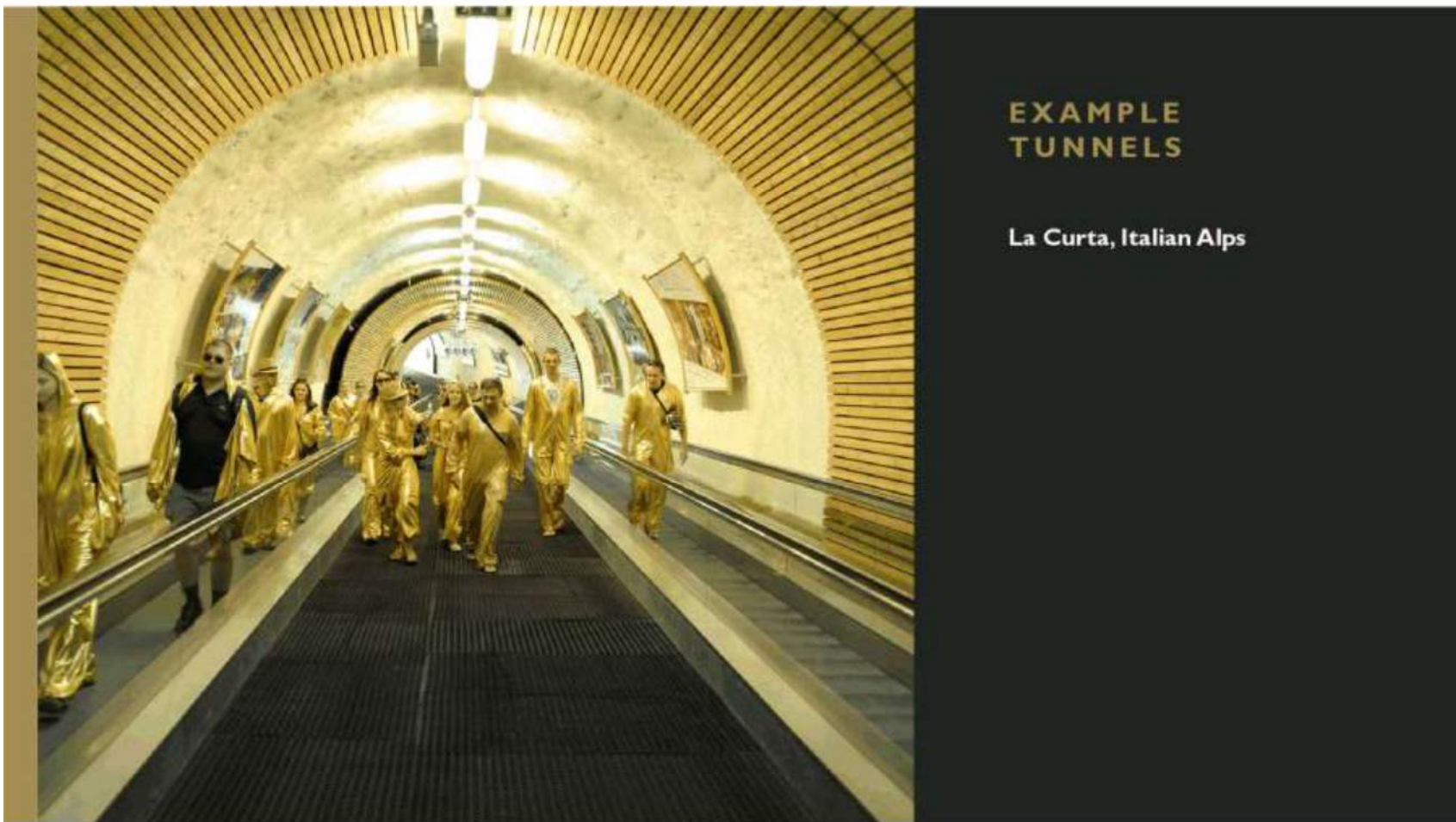
DEMAND ESTIMATE

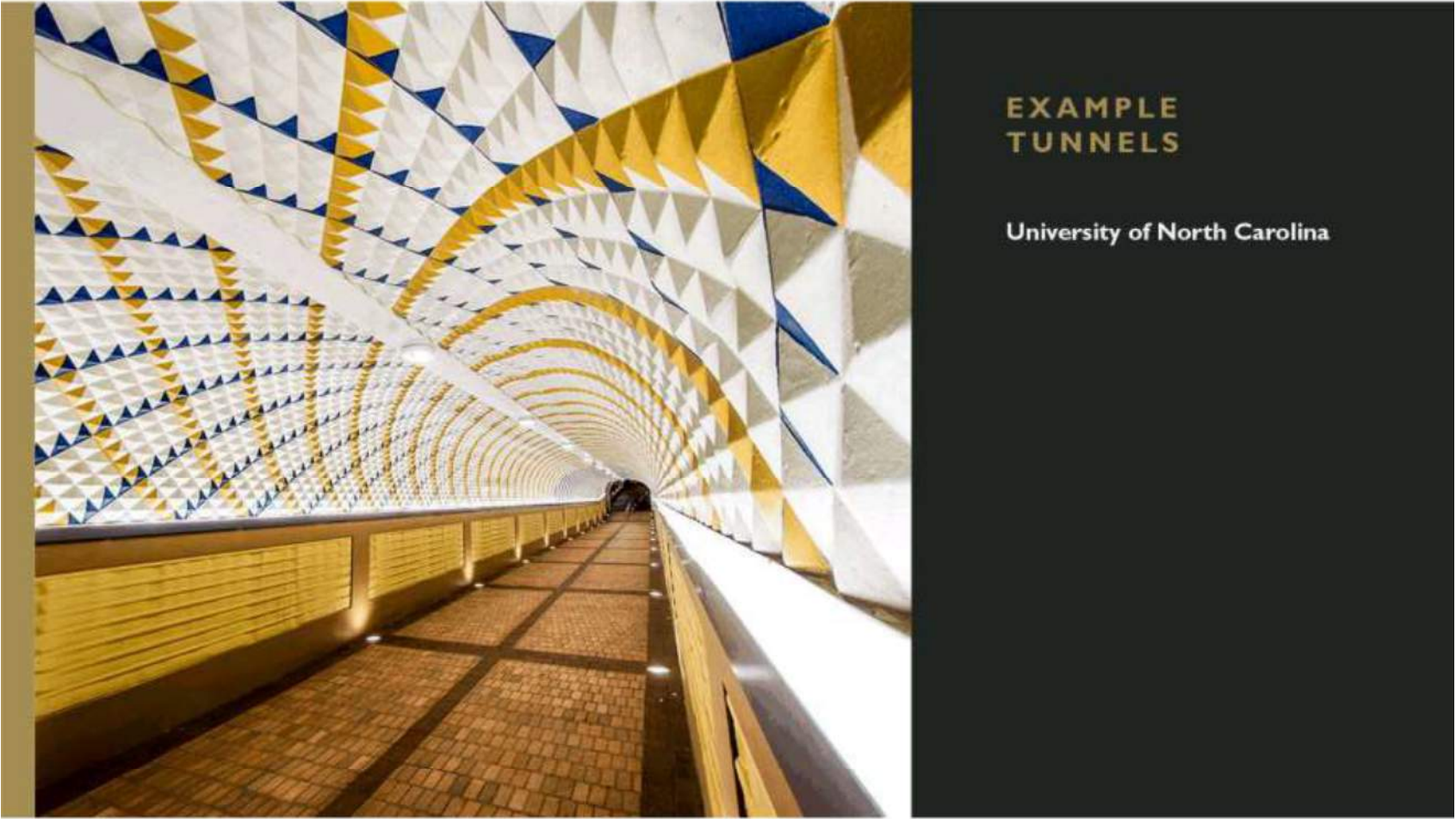
Conservative demand estimate:

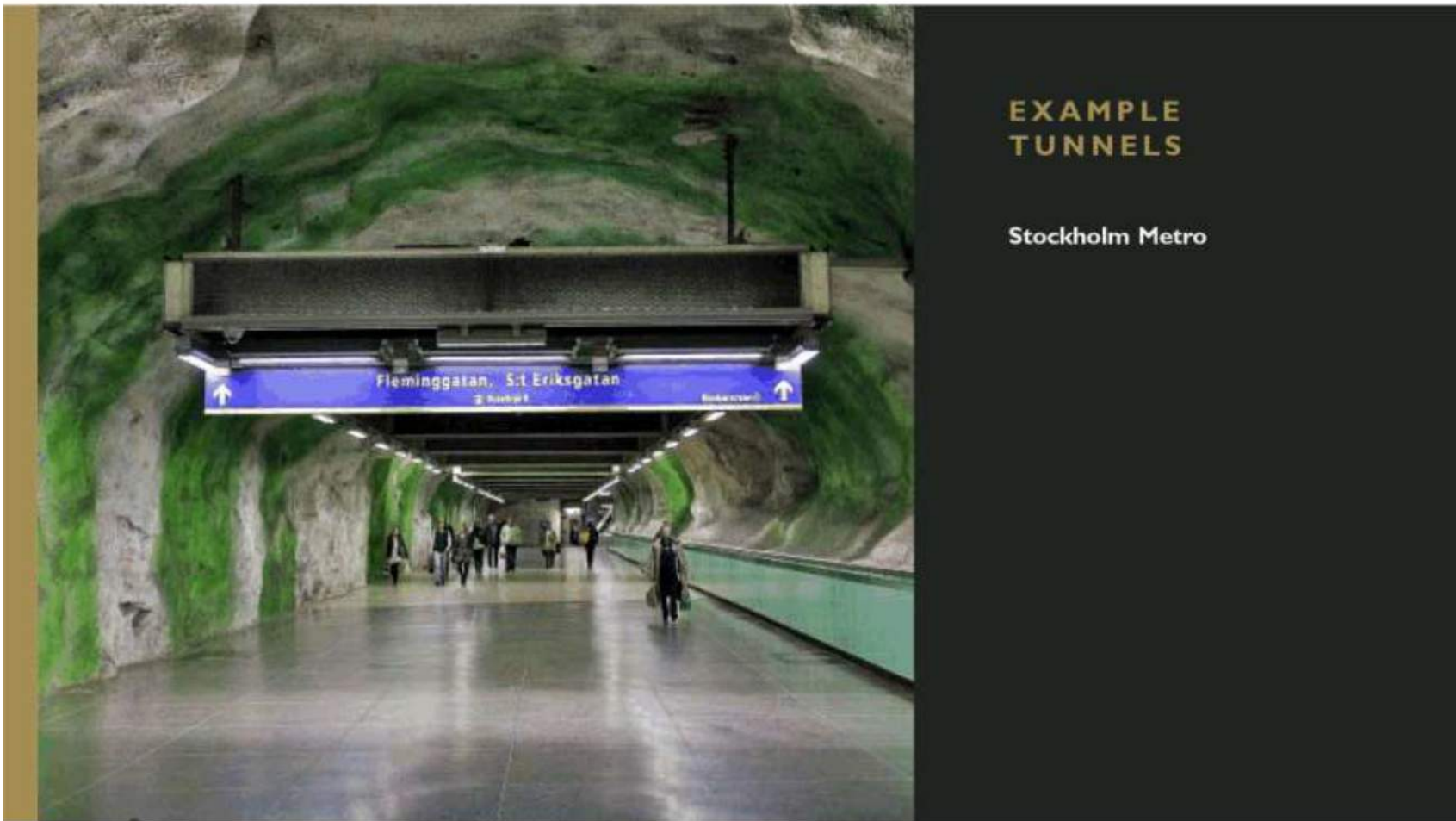
- 3,000 to 3,500 tunnel entries per weekday
- 750,000 to a million users per year

PORTAL CONCEPTS



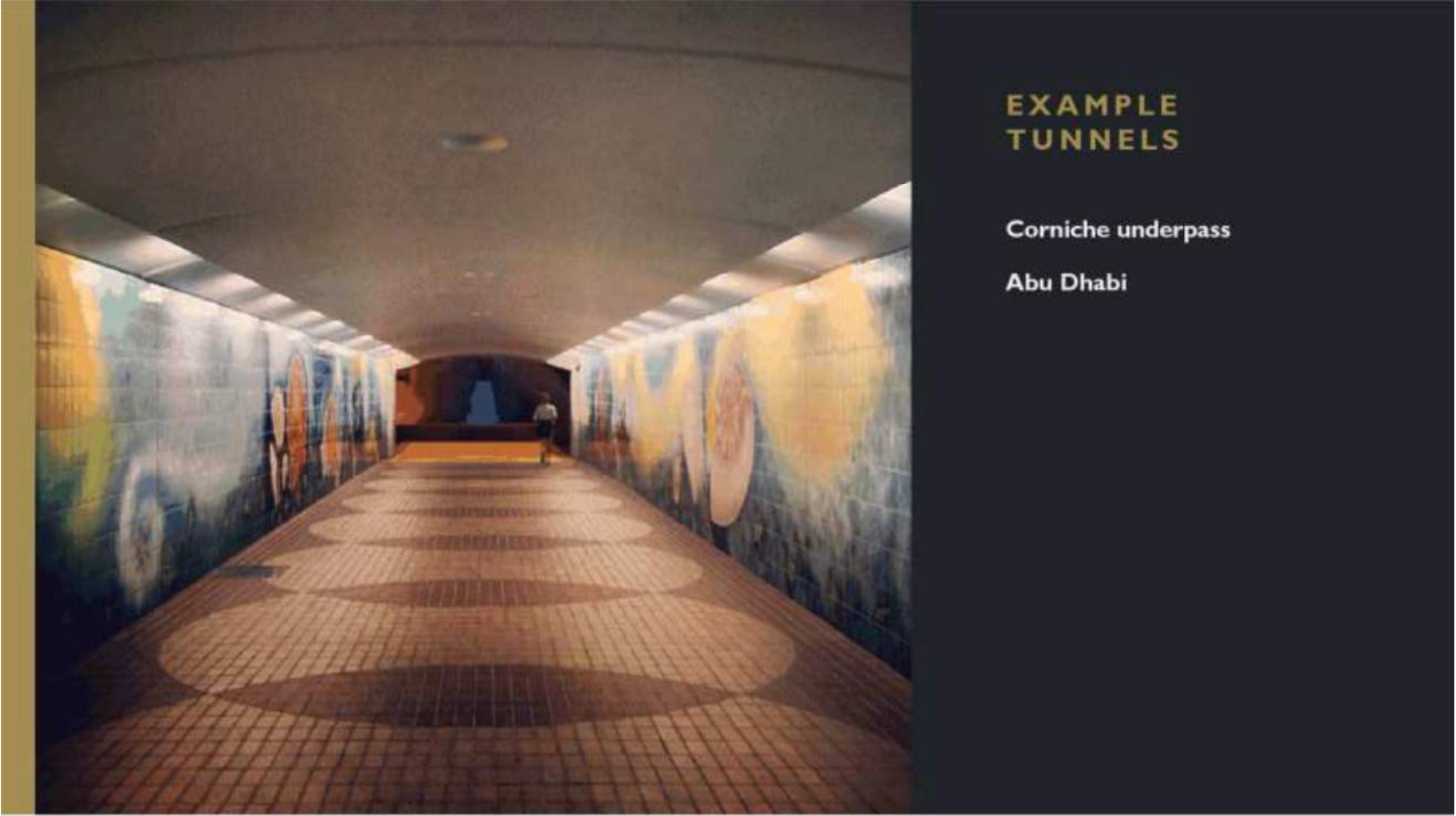


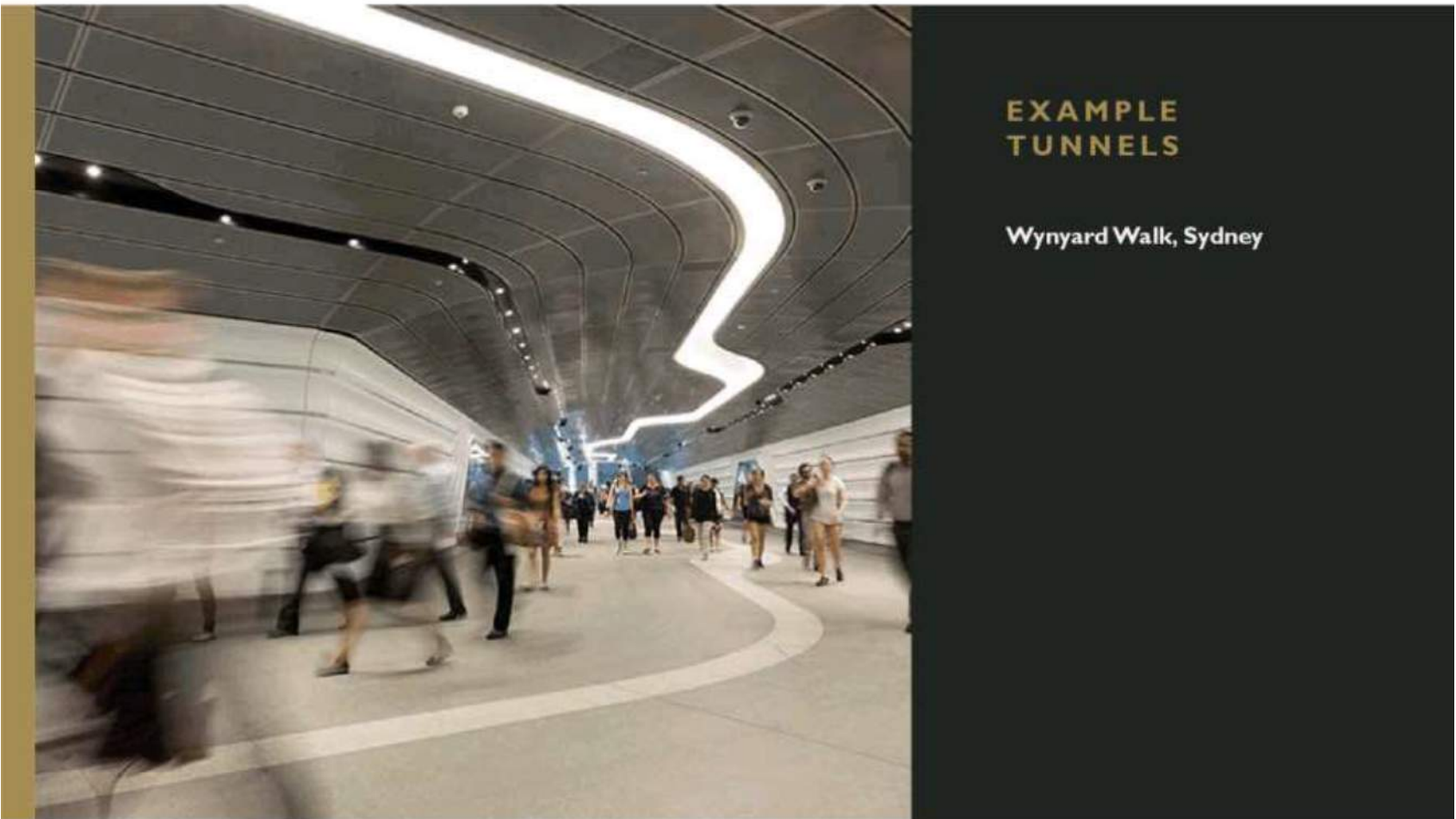




Attachment A

Item 6





Attachment A

Item 6



CIVIC USES

Concept: utilise space in tunnels, side passages and additional tunnel entrances to create new civic spaces in the city centre

Historical display

- Tell the history of the tunnels and their use
- Keep some sections in current condition, restore others to original condition
- Allow people to look through glass panels as a “living museum”

Mini museum and memorial

- Tunnels dug in time of war; use them to present collection of war artefacts
- Display of city centre history and society during wartime?
- Memorial to the 28th Maori battalion; searching for a suitable location to display their memorabilia





CIVIC USES

Public art

Art in the tunnels

- Partnership with Auckland Art Gallery and Elam to exhibit art works?

The tunnels as art

- Use of lighting, sound, texture, finishes to create an art experience

What else?

- Function space, mini theatre, exhibition rooms...

TOURIST AND RETAILING OPPORTUNITIES

Concept: utilise tunnels to create innovative retailing and tourist attractions

- Underground environments are perfect for certain niche applications
- Huge opportunity to present these in the City Centre as the nexus of Auckland tourism and accommodation
- Location perfect for cruise ship passengers and transiting international tourist who don't have time for tours out of the region



WINE CAVE

Ideal environment for storing and presenting wine

Showcase of New Zealand wines at "cellar door" themed tasting room and shop

Strong initial interest in the concept from Auckland wineries



CHEESE CAVE

Also ideal environmental conditions for aging and presenting cheese

Showcase of New Zealand premium dairy products and luxury smallgoods

Kapiti, Puhoi Valley, etc?





GLOWWORM ENCOUNTER

Concept: Deliver a Waitomo Caves style glowworm experience in the heart of the Auckland City Centre

- Natural fit with underground tunnels and cave style environment
- Glowworm experience easy to deliver in tunnels under Albert Park
- Opportunities for additional caving style adventures

Chinese celebrity couple share wedding photos at Waitomo Glowworm Caves

Last updated 11:38, June 14 2016



Nicky Wu and Liu Shishi have millions of fans on Chinese social media.

A Chinese celebrity couple has shared their incredible wedding photos taken in the Waitomo Glowworm Caves.

Taiwanese singer and actor Nicky Wu and Chinese actress Liu Shishi jetted to New Zealand in February with fashion photographer Liy Zongyuan, ahead of their wedding ceremony in Bali.

They were taking "pre-wedding" photos, a Chinese custom where photos of a couple are taken ahead of their nuptials to share with wedding guests.

GLOWWORM ENCOUNTER

Glow worms are extremely popular on the international tourist circuit

- Huge exposure in Chinese media
- Waitomo attracts 600,000 visitors a year, and an estimated \$30m p.a. in revenue

But a Waitomo trip is eight hours return ex Auckland

Inaccessible to short stays, cruise ship passengers and transiting tourists



CONSTRUCTION PROPOSAL

Prepared by tunnelling specialists at McConnell Dowell

1. Establish worksite and yard, open tunnels
 - clear out fill
 - stockpile bricks and timbers or preserve in situ
2. line with steel reinforcing mesh, secure with anchor bolts and shotcrete line
3. Lower tunnel floor 500mm to increase height to 3.5m, pave in concrete
4. Construct elevator shafts at Princes St and Symonds St
 - install two high speed elevators in each
 - construct glass and steel elevator podiums at ground level
5. Install basic lighting, ventilation

CONSTRUCTION COSTING

Cost to refurbish 660m main tunnel from Parnell to City Centre and install two sets of public elevators:

- \$14m

Cost to refurbish additional tunnel space for glowworm experience and retail/civic areas:

- \$2-3m

Excludes planning, consenting, traffic management, and tunnel interior surfacing

- \$1-2m

Total cost estimated at \$17 to \$19 m + retail fit out



NEXT STEPS

- Detailed investigation and business case development
- Determine best funding, operating and ownership model
- Start the conversation with stakeholders, land owners, interested parties
- Discussion with potential investors and funders