



# Walk21 reflections

John Lieswyn  
ViaStrada

2020  
Transportation  
Conference

# Reflections on Walk21



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# Walking to school in Aotearoa (New Zealand)

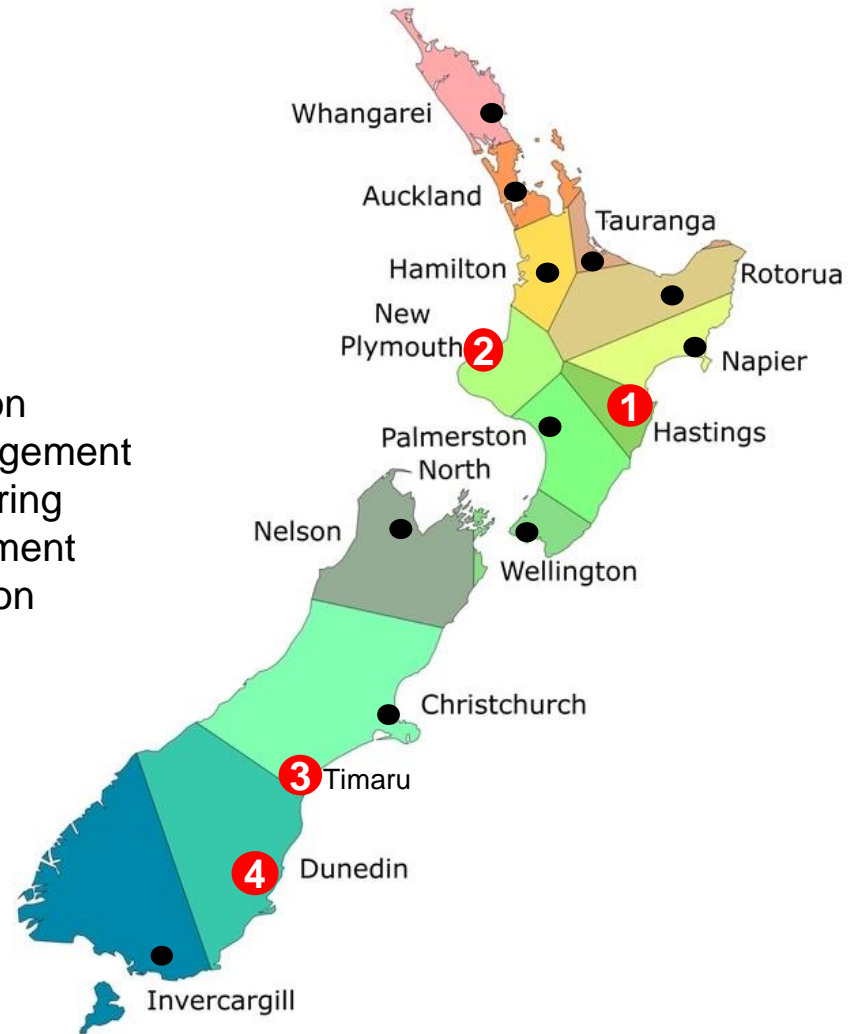
John Lieswyn  
Walk21 Rotterdam 2019

**VIA**STRADA

# Outline

- Why 'active' travel?
- How: travel planning resources
- Examples:
  1. Hastings: MoveIt
  2. New Plymouth: Let's Go
  3. Timaru: Friday Footpath Frenzy
  4. Dunedin: road safety
- When: a national call to action

} Education  
Encouragement  
Engineering  
Enforcement  
Evaluation



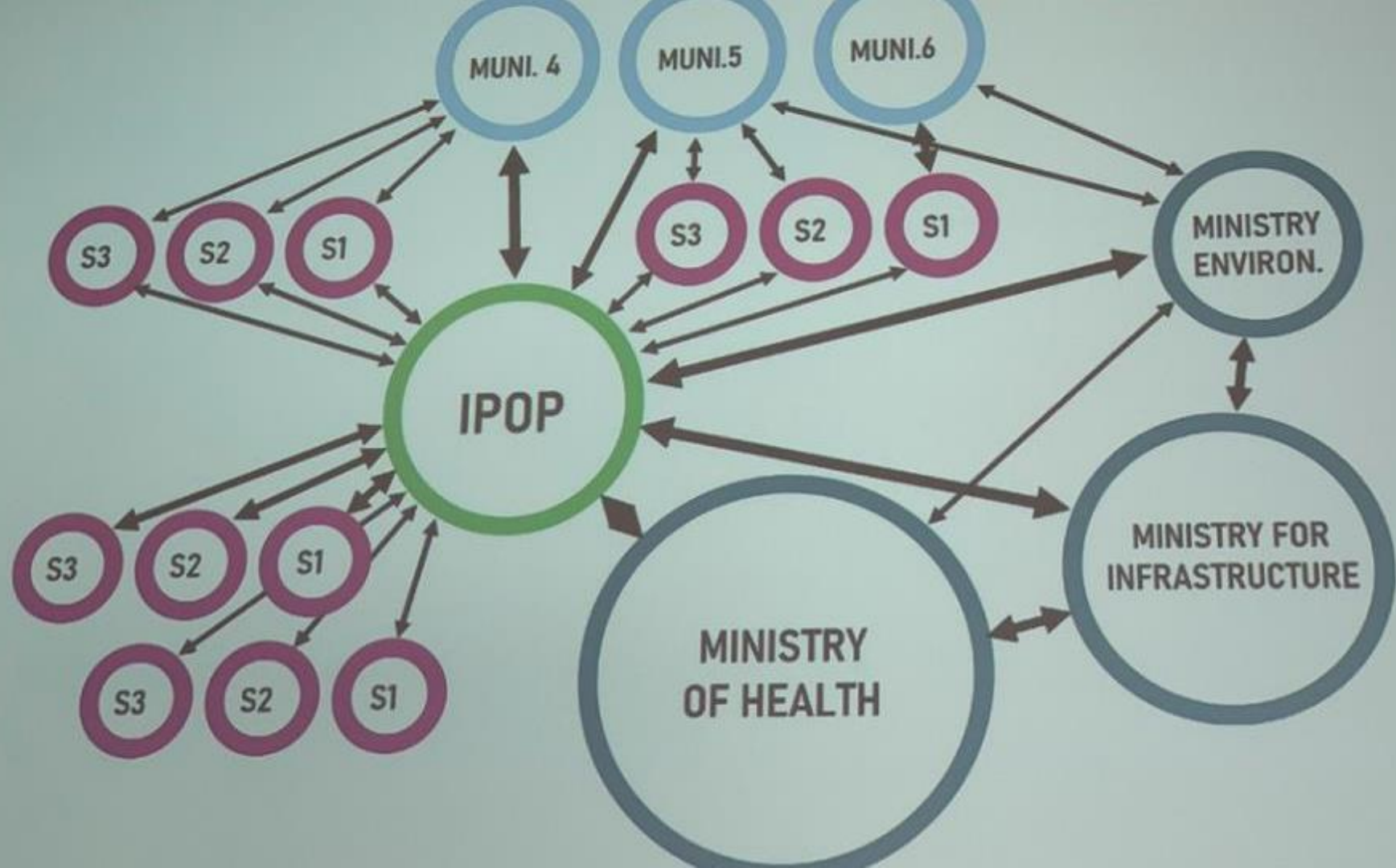




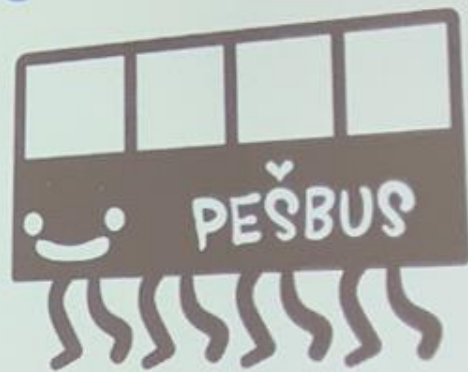
### Autumn 2018:

- 66 schools
- 64 x Pešbus, 2 x Bicivlak
- Ca. 3000 children participating
- 2 schools continuing over the whole year; 2 more once a week the w  
year

Foto: Anže Furlan / naročnik Občina Postojna, financirano iz razpisa za ETM 2018, MOP RS



# PESBUS



NASLEDNJA  
POSTAJA: ŠOLA

8. 05

[www.izobnavozilo.si](http://www.izobnavozilo.si)  [izobnavozilo](#)



REPUBLIKA SLOVENIJA  
MINISTRSTVO ZA ZDRAVJE

COBIC TELX  
Slovenija

Ministrstvo za zdravje  
Ljubljana, 1000

Projekti: Zdravje, 2014-2015



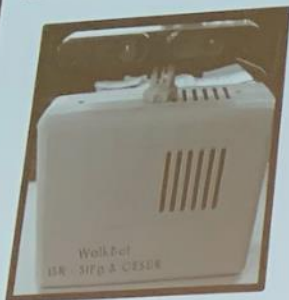


# WALKBOT

3D PORTABLE SIDEWALK  
SCANNING SYSTEM

## How accessible is your city ?

Accessibility standards compliance  
Automated detection of irregularities  
Passing width  
Slopes  
Accurate measurement  
GIS mapping



Paulo Cambra  
Techno Lisboa, University of Lisbon  
MIT Portugal Transportation Systems

## WalkBot

3d sidewalk scan system

Pablo Cantabria | Manuel Marques | Miguel Costa | Filipe Moura | Alexandre Gonçalves

W21 RDM | CERS | 3-Bot | MIT Portugal

### OVERVIEW

- Pedestrians are sensitive to sidewalk conditions
- A deficient sidewalk can be a safety hazard for vulnerable users
- Sidewalks should be accessible to all. The regulations exist but...
- How accessible is your city?
- How safe are your sidewalks?
- Current evaluation methods rely on manual data collection - Expensive, time consuming, subjective

### THE SYSTEM

- RGBD Intel Real Sense Camera
- Single board computer
- Battery

### FEATURES

- Automated recognition of pavement irregularities
- Portable & Affordable
- Georeferenced dataset for GIS mapping
- Accurate measurement



### SAFETY: PEDESTRIAN FALL RISK

### EVALUATION OF ACCESSIBILITY STANDARDS

**Warning - Trip Hazard**  
A sudden change in height of less than 1 cm can cause a pedestrian to trip. This is a common cause of falls, especially for older adults and people with mobility impairments.

**but underreported**  
Most people do not report sidewalk issues. This is because they are often small and localized, and people are often in a hurry. This leads to a lack of data on the most dangerous areas.

**More than meets the eye**  
Large areas of damage can be hidden by a layer of leaves or snow. This makes it difficult to see the extent of the damage and the risk to pedestrians.

**Towards a pedestrian fall risk index**  
We are developing a pedestrian fall risk index. This will be a quantitative measure of the risk of falling on a sidewalk. It will be based on a combination of factors, including the height of the curb, the slope of the sidewalk, and the condition of the pavement.

**APPLICATIONS**  
• Automated detection of pavement irregularities  
• Georeferenced dataset for GIS mapping  
• Accurate measurement

**Sidewalk Passing width**  
There is a minimum standard for the width of a sidewalk. This is to ensure that people can walk safely. However, many sidewalks are too narrow, especially in older cities.

**Accession quality**  
The quality of the sidewalk is also important. A rough or uneven surface can be a tripping hazard. This is often the result of poor maintenance or the use of low-quality materials.

**Towards large scale data inventories**  
We are developing a large scale data inventory. This will be a comprehensive database of sidewalk conditions. It will be used to identify areas that need improvement and to track progress over time.





# State of Place

Browse data

 Download report

VIEW DATA FOR

10th St. NE/Monroe Dr. NE Monroe Dr. NE to Monroe Dr. NE/Kanuga Dr.▼

40.1

SoP Index

SoP Profile for 10th S

The State of Place Index is a walk. Explore each dimension

100

75

50

25

URBAN FABRIC

FORM



Project Total

80.3

42.9

39.9

9.2

13.6

47.4

18.3

36.9

15.7

96.1

10th St.  
NE/Monroe  
Dr. NE

80.3

42.9

39.9

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13.6

47.4

18.3

36.9

15.7

96.1

- More comprehensive than Walk Score
- Input: Streetview
- Processing: 290 indicators
- Analysis: 10 performance categories
- Output: 1 score (0-100)
- Output: scenario testing & BCRs

An aerial photograph of a modern urban park. In the background is a large, multi-story office building with a grid of windows. In the center is a glass-enclosed parking garage with a roof that says "PARKING". A tram line runs along the bottom of the image, with a tram visible. Several footpaths and a cycleway are marked throughout the park, which is filled with young trees and green spaces. There are also some black cylindrical structures and green banners in the park.

GREEN STREET

FOOTPATH

CYCLEWAY

FOOTPATH

TRAM LINE





GOU 002

**VAN ZOOI  
NAAR MOOI!**

JOUW AFVAL IS GOUD WAARD.  
SCHEID HET EN ZIE HET TERUG  
ALS IETS MOOIS.



ROTTERDAMCOLLAAR.NL



VERMINDEREN



HERGEBRUIKEN



RECYCLEN

**GOUD-  
TRANSPORTJE.**

JOUW AFVAL IS GOUD WAARD.  
SCHEID HET EN ZIE HET TERUG  
ALS IETS MOOIS.



Rotterdam  
Colla



ROTTERDAMCOLLAAR

GOU 002

GOUPII-GH  
ROTTERDAM





18

Hoofdingang  
verlaten a.u.b.



Anders naar...  
koffiedik kijken

Wekersgilde

Made possible thanks to: cirkelab selecta PELICAN ROOZE

EBULLIT













ALMOST ZERO “SHARED” PATHS





NOT JUST A CYCLEWAY





A DIFFERENT INTERPRETATION OF LE CORBUSIER'S VISION:  
BICYCLE SUPERHIGHWAY TO ROTTERDAM CITY CENTRE,  
RESIDENTIAL TOWER IN A GARDEN SETTING





# HIGH RISE HAS FOOD GARDEN





## A WALKABLE FAST FOOD JOINT





## 2-MINUS-1 IN ENTERTAINMENT DISTRICT





RURAL



COMMERCIAL



RESIDENTIAL



SUBURBAN





# NEW HIGHWAY IN CITY CENTRE

1974



DURING





AFTER





“Art crossing” doesn’t  
confuse drivers or  
those with visual  
impairment





Median refuge cycle crossing, give way triangles, piano key crossing warning markings



Braille for  
number of  
steps and  
destination







## Electric wheeling channel





Nearside  
cycle signal  
with dual  
countdown  
displays

