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Community Safety Open Data Initiative



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Open Data Initiatives

- data.gov.au (5,751 datasets)
- data.govt.nz (2,829 datasets)
- Range of geospatial data
 - National Public Toilet Map => Public & private toilet facilities (public access)
 - ESTA Emergency Markers => Unique location identifiers in Victoria
 - Local datasets => Car parking, parks, facilities, boat ramps, etc.



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Where are you?

- Loads of signage, but how do you communicate where you are?



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ESTA in Victoria



4-1

ESTA in Victoria



4-2

Problems in other States

- Individual Councils working in isolation => same codes / different locations
- Different identifiers used by different agencies => identifiers within descriptions



5-1

Problems in other States

- Individual Councils working in isolation => same codes / different locations
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5-2

Non-Emergency Usage

- Point of reference for public reports (e.g. issue near "XYZ123")
- Internal point of reference (e.g. tracking services nearby)
- Meeting point



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Globally Unique Identifiers

- Private sector infrastructure
 - Location identification
 - Equipment information (drawings, cable schedules, etc.)
 - Maintenance logging



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Globally Unique Identifiers

- Public sector locations
 - Location information
 - Multi-purpose workflows
 - Hazard communication



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Where location markers are useful



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From a CPTED perspective

- Legibility
 - The ability of people who are unfamiliar with an area to find their way.
 - Legibility instills a sense of confidence in users of public space
 - identifying designated pedestrian routes
 - clear sightlines
 - clear and unambiguous signage
 - lighting
 - landscaping.

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Combined with..

- Visibility
 - The ability of users of a place to see and be seen
 - Visibility = opportunity for informal surveillance
- Facilitating understanding
- Recognising the needs of different user groups
- The three 'D's...

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Designation

- What is the designated purpose of this space?
- What was its original intended use?
- How well does the space support:-
 - its current use?
 - its intended use?
- is there conflict?

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Definition

- How is the space defined?
- Is ownership clear?
- Where are its borders?
- Are there social or cultural definitions?
- Are rules clear and supported by policy?
- Are there signs?
 - are they correct? / are they appropriate?

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Design

- How well does the design support the function?
- How well does the design support desired behaviours?
- Does the design conflict with productive use of the space, or intended activity?
- Is there confusion or conflict?

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Signage issues

- In vehicle
- On foot
- On bicycle
- Multi-mode?
- Special events
- Contacts
- Language
- Weather



Avoid clutter & confusion



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Kangaroo Point Bikeway

- 2 kilometres along river bank
- Multiple defined access points
- Numerous tangential access opportunities
- Frequent interpretative signs
- Infrequent location signs



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Plot & Audit: data & images



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Infrequent “you are here”



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Frequent asset identifiers (not recognised by most users)



Multiple numbering schemes – not unique
Luminaires too granular for emergency location ID

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Frequent interpretative signage



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Interactive sign opportunity

- Single or multi- purpose
- Instructions / accessibility
- Local users vs. Visitors
- Adaptability
 - Initial deployment
 - Enhanced functions
 - Special events



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Interactive signage/markers

- QR Codes
 - Wide range of options
 - Passive display or interaction
 - User device required (standard Applet)
 - Signage media requirements
- Near Field Communications (NFC-RFID)
 - Wide range of options
 - Passive display or interaction
 - User device required (device limitations)
 - Environmental/ read range issues



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Interactive Signage Considerations

- Signage material/substrate (encoding options)
- Device/App compatibility (encoding options)
- Phone friendly target web page
- Target web page changes (content / URL)



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Consolidated Location Marker dataset

- Leverages existing infrastructure
- Globally unique identifiers
- Context dependent data access
- Scheduled updates / on-demand API

- ESTA in place
- PSBA in progress
- Other jurisdictions in discussions



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