

Pedestrian wayfinding signs guidance note – how to use and design

Pedestrian Network Guidance

NZ Transport Agency Waka Kotahi 7 May 2024

1.0





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1. Purpose of Wayfinding Signs for People Walking

This guidance note will focus on the types of wayfinding signs, their design and uses. The wider information about the need for a signing plan, the need to take a network view and the alternative forms of wayfinding (e.g. markings and surface treatments) beyond signs is covered in the Waka Kotahi Pedestrian Network Guidance section on wayfinding (wayfinding)

This guide will not cover other uses of "signs" where wayfinding is not the primary purpose. This might include, and not be limited to, environmental signs and graphic design, emergency signs, Cultural installations, Heritage and visitor information, wildlife signing etc. Often this type of sign is part of an integrated approach to "place" and therefore subject to urban design considerations and reference should be made to the Waka Kotahi Urban design and landscape page (urban design and landscape)

Clear wayfinding for pedestrians supports and encourages people to walk to their destination more directly and easily. Pedestrian wayfinding can include physical features directional signs, information boards, maps, surface markings, as well as virtual maps and the internet.

The purpose of pedestrian wayfinding is to:

- help people orientate themselves and easily find their way to their destinations with confidence.
- help people to plan their journeys.
- help people to create and reinforce a mental map of the area (city/town/place).
- help people to gauge travel distances and times between places.
- help people to move easily between transport modes.
- improve people's experience of an area.
- improve links to local businesses and attractions.
- encourage more people to walk.

In order to do this the style of information and the content used in wayfinding will typically fall into three broad styles. These are:

- Directional point people to one or more destinations.
- Informational tell people where they are in relation to their destination and / or indicating which way to go to reach that destination or alternative destinations.
- *Identification* label a route or facility with logos, symbols or maps creating a brand but also reassurance that people are on the correct route.

It is important that wayfinding offers a consistent experience and information about distances between areas, what facilities and features are at the destination, and that this information is made accessible to all people. Consistency is vital, not only along a route or within a local network but also at a national level so that people do not have to relearn the information language on display when walking around another city or town.

Wayfinding for people walking should be also integrated with other transport modes so, for example, when people are leaving the bus station, railway station or airport they can quickly identify the route to their destination. Also, wayfinding for people cycling could include the walking aspect particularly when shared paths are being used, but with the considerations discussed in section 2.

There are broadly three types of wayfinding sign.

• Free standing plinths, totems, pylons – Vertical free-standing oblongs. These signs often includes a 'heads-up' map with information covering a wide area. Provides details of the location (name) and explains how the location relates to their destinations and how to reach them.

Typically found at transport hubs, at important network intersections and decision points, public

places and major destinations. Additional information about the immediate environs will often be provided on the basis that the reader will dwell a while and read.

- Wall mounted information boards, map boards, wall maps Vertical boards fixed to walls and structures. Creates a visual picture of the area including maps and diagrams. Useful at major arrival points.
- Flag, finger post / blade sign Signs that typically point to one or more destinations. They will
 also offer information at decision points on paths and route and provide reassurance about travel
 direction. They provide instantaneous directional decision-making information when there is no
 need to stop and look at a map or read information that might otherwise be presented on a freestanding plinths, totems, or pylons.

2. Multi-modal wayfinding signs; combining walking and cycling information

In some cases integration of wayfinding information with other modes on signs can present problems when routes are shared, and it is assumed that the reader will not stop to read information but rather travel past the wayfinding sign absorbing the directional information as they pass. This is typically most likely when people on cycles, scooters and walking share the same path and route. The complexity lies in presenting directional destination information to the moving person that:

- Can be clearly read by both those on wheels and those on foot given the travelling speeds are different. The size of the minimum legible font or symbol size will be dictated by the larger travelling / viewing speed, and
- Will reflect the typical travelling times.
 - o For people cycling this tends to be a suburb to suburb or within suburb destination.
 - For people walking the destination information is more typically equivalent to 10–15minute walking distance.

Consequently presenting destination information on directional wayfinding signs (Flag, finger post, blade) on dual walking and cycling routes takes some consideration if the aim is to use a single set of signs.

As noted above the ability of users to read the detail on the directional wayfinding sign will in part be controlled by the speed at which they approach or pass the wayfinding sign. On shared cycle / walking paths and facilities the travelling speed of people cycling will dictate the size of the fonts (and resultant sign sizes) for directional wayfinding. As a result, on shared facilities the tried and tested New Zealand cycling network wayfinding sign types should be used (TCD Sign references A51-1 to A51-9) but with the pedestrian symbol added to establish the dual purpose of the wayfinding (refer Figure 1).



Figure 1 – Example of a cycle wayfinding sign (A51-1) with the pedestrian symbol added.

Note: The lilac coloured square indicates location of optional route symbol when used; when not used, omit the lilac square reducing the height or width of the sign as appropriate. When indicated a shared route the pedestrian symbol

should be located in the top right-hand corner (when a route symbol is being displayed or co-located with the cycle symbol in the absence of a route symbol). Note also the use of the optional use of the pedestrian symbol on the A51 sign set is pending a TCD Rule change.

If the wayfinding is providing much more locational details, maps, etc, then the wayfinding sign format will be a different type and there will be an expectation that readers will stop to look at the detail. Whilst there is a recognised map-based cycle wayfinding sign for this purpose (A51-9), where information for both walking and cycling is desired then the map content, geographic coverage and supporting information needs to reflect the scale of the journeys possible both by cycle and on foot.

Details of the cycling wayfinding signs can be found on the Cycling Network Guidance website (supporting-infrastructure - wayfinding).

3. The approach to wayfinding – types, purpose, and location

When considering pedestrian wayfinding signs there are broadly three categories, each of which has a different type of wayfinding sign with its own content, layout and location of use.

Be consistent about how and why the wayfinding information is used and presented. The following tables and images cover the three main types of wayfinding signs.

Remember that each wayfinding type is made up of sets of discrete panels that contain certain information (e.g. location title, destination list, direction to travel, map, points of interest and general information, tactile information etc). These panels should be ordered consistently.

3.1 Free standing plinths, totems, pylons, monoliths etc

Details of free-standing plinths, totems, pylons, monoliths etc are described in Table 1 and illustrated in Figure 2.

Table 1 – Free standing plinths, totems, pylons, monoliths wayfinding sign types.

Туре	Free standing plinths, totems, pylons, monoliths, etc Typically, vertical free-standing rectangles.			
	Typically, vertical free standing restaingles.			
Purpose	Provides mainly directional information from a specific location but may also include geographic context in the form of a local map for orientation when this assists in raising awareness of other nearby features, such as landmarks or just helps journey planning. Map coverage will normally be 10 to 15 min walking radii (equates to roughly 1km).			
	Additional information about the immediate environs will often be provided on the basis the reader will dwell a while and read.			
Content	Location name in the standard font on the standard contrasting colour title panel.			
	Directional information provided in the standard font on the standard colour background.			
	May include symbols.			
	May include a small multi-coloured map placed on the standard contrasting colour background.			
Location of use	Significant arrival locations and where the network or location offers multiple decisions.			
	Typically found at transport hubs, at important network intersections and decision points, public places, and major destinations.			



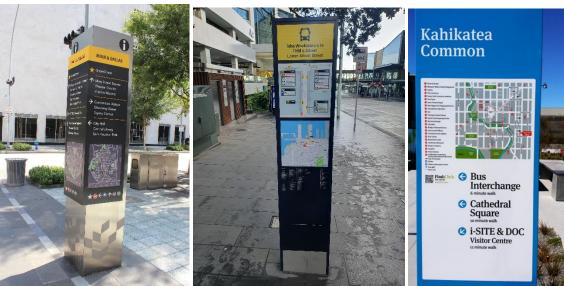


Figure 2 – Example of wayfinding free standing plinths, totems, pylons images from Legible London Transport for London, Houston, Texas, USA, Auckland Transport and Christchurch Photos (Photos Mark Edwards, Malcolm McAuley and Jeanette Ward)

3.2 Wall mounted information boards, map boards, wall maps

Details of wall mounted information boards, map boards and wall maps are described in Table 2 and illustrated in Figure 3.

Table 2 – Wall mounted information boards, map boards, wall maps wayfinding sign types.

Type Wall mounted information boards, map boards, wall maps Vertical boards fixed to walls and structures. Typically, rectangular (vertical) or square. **Purpose** Provides geographic orientation from the immediate area via a map (can be two different scales of map image) to help with journey planning and local knowledge. The map will typically show the urban layout in aerial view showing the street layout, buildings of interest and landmarks plus any dedicated pedestrian, cycling and public transport networks. Location name in the standard font on the standard colour title panel. Content Multi-coloured map(s) placed on the standard contrasting colour background. Index and key in the standard font contrasting with the background. Location of use Major arrival points to a central area where there is high footfall such as public transport hubs and interchanges, city / town civic squares, airports, and cruise ship terminals.



Figure 3 – Example of wayfinding wall mounted information boards, map boards, wall maps (City of New York and Wayfound Victoria)

3.3 Flag, finger post, blade sign

Details of flag, finger post and blade signs are described in Table 3 and illustrated in Figure 4.

Table 3 – Flag, finger post, blade sign types, route indicators.

Flag, finger post, blade sign (usually pole based wayfinding but may be fixed to walls).

Can include route marker and route reminder signs that confirm the direction and route.

Tend to be rectangular but can be square.

Purpose

Provide instantaneous directional decision-making information to recognised destinations and popular attractions (no need to stop and look/read to gain the information).

Can be used where a map-based sign may not fit.

They support the other wayfinding methods and help reassure people that they are heading in the right direction.

Will usually be double-sided with destination information on both sides.

Directional information provided in the standard font on the standard colour

background.

May include symbols.

Location of use Interse

Intersections and other complex decision points.











Figure 4 – Example of wayfinding Flag, finger post, blade signs and wall mounted signs from Manchester, UK, Auckland and Christchurch (Photos Mark Edwards, Malcolm McAuley and Jeanette Ward)

Irrespective of the wayfinding sign type some basic locational principles apply:

- Be consistent about what wayfinding signs are used and where they are located.
- Information needs to be visible from a distance so that people will go to it to read it if they need to
- The information should be mounted at an accessible height and be located in a well-lit area.
- The wayfinding sign should be placed so it is **not blocking the route**, path or ramps. There should be **ample room** to view the information should several people be there simultaneously, and they should be able to do so without blocking other people moving passed.
- The wayfinding location and manner of installation should be sympathetic to and take account of the streetscape and good urban design principles.

Indicative best practice designs for the three categories of wayfinding signs is set out in Figures 11 to 15.

4. Wayfinding sign design

4.1 Overarching principles

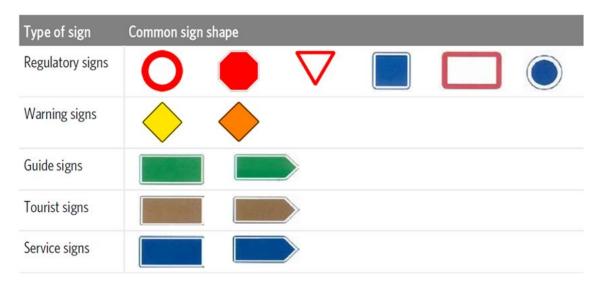
Getting the basic design elements correct is key to providing good wayfinding signs. These basics relate back to general sign design principles and good practice in reinforcing existing "sign grammar" (colour, shape, symbols etc).

These include:

1. **Colour** - Use contrasting colours. Signs should have contrasting background and font colours (light on dark or dark on light). Remember that certain colours have implicit meanings, and their extensive use should be avoided (e.g. yellow is often a warning colour, red is often a regulatory

- colour, etc). Recognise that certain colour combinations, colours and presentational styles can create visual issues for those with sight conditions (e.g. colour blindness).
- 2. **Sign Shapes** Sign shapes are associated with style of the message contained in them. Repeating and reinforcing this within wayfinding is important. Wayfinding signs consequently tend to be rectangular or rectangular with a chevron end (refer Table 4).

Table 4 – Example of how sign shapes and colours carry an associated meaning.(extract taken from Traffic Control Devices Manual Part 1).



- 3. Fonts The information on the wayfinding needs to be legible. Choose easy to read fonts that are tried, tested and work at different scales. Remember that the font needs to be clear, and that minimum font size will vary when viewed on the go or when stationary. Be succinct in the length of the message, especially with directional information. It is often a good idea when using new designs or new fonts to user test these, full size 1:1 scale mock-ups tested in situ before committing to fabrication of signs could be undertaken.
- 4. **Sign Symbols** Internationally recognised symbols transcend language barriers and keep the information in message to a legible length. Symbols are also easily understood by everyone, regardless of what their first language is or age or cognitive abilities. Don't reinvent symbols where they already exist nor use existing symbols to mean something else.
- 5. Maps Maps should be sourced from a reputable source that maintains and updates maps regularly. Ideally this will be from within Councils. Do not use maps that contain commercial or brand logos / names as these are likely to be subject to change. Be careful in how maps are orientated, traditionally maps are displayed in "heads up" manner with North at the top of the map. This, however, may not be an intuitive orientation for the viewer. The maps should reflect the orientation of the sign in the location it is situated and may also need to be oriented with regards to the primary access or exit route from the location.
- 6. **Utilise negative space** Negative space (intentional blank space) in a sign design layout helps break up the message and enhance legibility. The space gives the sign balance and allows the reader time to mentally relax (Too much text, and graphics will make it harder to read and be less legible). On the flip side, too much blank space and this will attract graffiti and risk diluting the information message. The upper picture in figure 5 illustrates lots of information, different types of messages and a general lack of use of negative space to segregate the information whilst the lower image in figure 5 suffers from too much unused space which dilutes the sign information and design and creates a maintenance issue.





Figure 5 – Example of the use of negative space and providing information, examples from Nelson and Tyldesley, UK, (Photos Mark Edwards)

- 7. Follow convention There are places on a sign where certain information is best placed and an order in which destination names are listed and where arrows are placed. For example straight ahead at the top, arrow to the left of the destination name(s), then left direction (arrow on the left) and right direction (arrow on the right). Where multiple destinations are shown in the same direction the nearest is list first (at the top). Similarly there is a need to manage the number of possible destinations in any one location to avoid sensory overload. Recognise the distances people walk and where the next set of wayfinding signs are. Sign to the immediate destinations within a network bearing in mind walking speeds and wayfinding locations, a destination 30 minutes away may be irrelevant at a given location, however significant that destination may be, so destinations should be introduced progressively as people move through the network. Information text should always appear in sentence case. Avoid wording in full uppercase and avoid the use of abbreviations.
- 8. **Be consistent** Within a wayfinding network present all the information consistently all the way along the journey. The principles of familiarity and consistency in sign design are important to

adhere to, but in certain circumstances other principles may have a higher priority or take precedence for some design decisions (e.g. to achieve a better level of differentiation, cultural appropriateness).

4.2 Detailed design

4.2.1 Signs - General look and feel

Sign shapes have meaning. Wayfinding signs are likely to be large squares or rectangles (map boards, information panels, totems, plinths etc). Smaller directional signs (flag, finger post, blade etc) will either be rectangular with a square end or pointed (chevron) end. Use these shapes consistently. This consistency is particularly important given the wider range of people using them (elderly, children, mobility impaired, those with spectrum disorders, etc)

For some sign types there will be the opportunity to attract attention and at the same time provide some degree of branding. Several cities around the world use a bright yellow top "title" panel. This yellow top panel acts as a beacon, providing high visibility in a busy urban setting. Other bright colours may be equally applied, but contrast to the text in the top panel needs to be considered. Only one colour should be needed, given the purpose of the signs is for people walking, not using multiple modes.

The overall sign is often made up of sets of panels. Each panel contains certain information types; the overall sign is a sum of its parts (panels). Order the panels consistently and use the fonts and colours appropriately to help with legibility. For example, a free-standing plinth, totem, pylon, monolith etc would have a beacon or colour title, the location title and destination information at the top in panel one (presented in that order). The next panel down (panel two) might contain a general location map, panel three below would then have a more detailed map, location index, and places of interest information.

4.2.2 General sign position

Sign height has two elements. The mounting height of the sign, and the height at which key information is being provided.

Directional wayfinding signs (flag, finger post, blade etc) will carry a larger font size and will be normally mounted on a free-standing pole or some other vertical structure (lighting pole). Here, signs will be typically mounted upward of 2.1m for clearance purposes under the sign with the top of the signs being potentially 3m from the ground surface. Font size will generally be larger on these signs in order to make them readable at their higher mounting height. For map boards, information panels, totems, plinths etc that are usually free-standing objects or are wall mounted, the installation height will be lower normally to reflect the presentation height of the sign content (and font sizes). Typically the top of a wall map might be no more than 1.5m from the ground surface. Conversely the top of a free-standing totem or plinth might be some 2.3m or more from the ground surface but with core information presented in the 1.0 m-1.7m height zone (though the main information area is up to 2m above the ground).

Figures 11 to 15 illustrate example designs for the various form of wayfinding signs. These illustrate where font sizes change within the sign, the positioning of symbols etc and support the details set out in table 5 and 6.

Table 5 Summary of typical wayfinding mounting and sign heights.

Wayfinding type	Maximum overall height (top of the wayfinding to ground level)	Mounting height (bottom of the wayfinding to ground level)	Size of the wayfinding sign (vertical height dimension for the wayfinding)	Key information position above ground level	Notes
Wall mounted information boards, map boards, wall maps	2.0m to 2.3m	0.8m to 1.0m	0.9m to 1.5m in vertical height	In the range 0.9m to 1.8m	Map image size and orientation will influence the final size.
Plinths, totems, pylons, monoliths, etc	2.3m to 2.8m high	0.0m to 0.5m (depending on construction method for the wayfinding)	2.3m to 2.7m in vertical height. (Depending on map size and orientation).	Key information in the top 1.4m to 1.7m Larger text features nearer to the top, maps at or about eye level.	Content will determine the overall height. Up to 3.0m could be reasonable in some locations
Flag, finger post, blade sign (maybe vertical rectangular flag or horizontal rectangular finger post / blades)	2.7m to 3.2m (depending on the number of blades or if a flag type is being installed)	Typically 2.1m to 2.5m but can be lower (site dependant).	Horizontal rectangular type Typically 0.2m vertical height 0.9m to 1.2m width / length. Vertical rectangle type Typically 0.75m to 0.9m vertical height but may be larger. Typically 0.5m wide.	2.3m to 2.7m	Blade dimensions will be influenced by the content. Route markers maybe mounted and located much lower given their small dimensions

4.2.3 General sign content - Font type

Fonts have been tried and tested on road signs for decades. Whilst it would be legitimate to use an existing road font type for wayfinding signs, using a different font can be a mechanism by which to separate walking wayfinding from the general set of traffic signs, marking them out as being for a different audience. The font should always be a San Serif type not a Serif font as they tend to have less stroke width variation than serif typefaces and appear visually cleaner to the viewer. Also use case sensitive text not all capitals; this is best practice for ease of reading.

For pedestrian wayfinding it may be possible to drop the character height below that used on traditional road signs, for example font sizes in the order of **50mm** for the title panel, perhaps to **30mm** for the main text (destination panel – larger font sizes for finger blades) with smaller heights again for distance / time and detailed information (approx. **25 to 21mm**). Suggested font sizes are described in Table 6.

Table 6 Summary of typical wayfinding font sizes and how these vary on the signs.

Design element	Upper Case height size	Lower Case height size	notes
Location main name	50mm	35mm	Example below with the top line being the main location. Wynyard Quarter Bloggs Street
Location subtitle name	43mm	30mm	Example below with the second line being the subtitle location. Wynyard Quarter Bloggs Street
Destination text (finger blade)	48mm	41mm	Finger Blade sign type Pedestrian symbol 110mm high and 65mm wide. For all other signs Pedestrian symbol 80mm high and 50mm wide.
Time - numeral / text (finger blade)	45mm (numeral)	37mm (letters)	
Destination text (other signs)	30mm	23mm	
Time - numeral / text (other signs)	25mm (numeral)	21mm (letters)	
Map title	23mm	19mm	
Map sub-title	14mm	10mm	
Map information	8mm	6mm	
Arrow	n/a	n/a	30mm high by 35mm wide (reverse for vertical)

4.2.4 General sign content - Bilingual sign content

The use of Te reo Māori should be actively considered on wayfinding signs, especially in relation to destination place names. Te reo Māori must be presented in a culturally appropriate way to reflect the mana of the language. For instance the use of italic fonts can create the impression that italicised text is outside the norm. The same might be said of the use of a bold font format. It is however useful if Te reo Māori and English are sufficiently differentiated on wayfinding signs. For example this might be achieved by using different colour fonts. Whatever method is chosen this should be consistently applied.

For some destinations it's vital that agreement is achieved with local lwi or representative groups on what is the most acceptable Te reo Māori destination name. Recognise that destination names or wording may have cultural significance, for example Welcome to" has two translations to account for dialectal

differences (Haere Mai Ki' and 'Nau Mai Ki). Similarly recognise the value and importance in the appropriate use of the macron or double vowel "a" in Te reo Māori and how this varies across the motu. In summary, get specific advice from local lwi regarding local preferences.

When presenting Te reo Māori and English on a pedestrian wayfinding sign as a destination it is good practice place the Te reo Māori above the English equivalent. Some examples are illustrated in Figure 6.



Figure 6 Example of possible pedestrian wayfinding signs presenting Te Reo Māori and English forms of destination names additionally with and without travel times and different arrow angles.

The minimum expectation would be to present the Te reo Māori on the same line as English but before the English as read by the viewer (e.g. always to the left of the English). This is illustrated in Figure 7 using a Welsh example.



Figure 7 Example of the presentation of Welsh and English on single line destinations (Photo Malcolm McAuley).

4.2.5 General sign content - Dual names

Only those places and features that have been accorded official dual name status by

the New Zealand Geographic Board (NZGB) should be shown on pedestrian wayfinding signs as dual names. Dual names are typically only used to designate major tourist destinations. The incorporation of dual names will require consultation and approval by the appropriate Road Controlling Authority (RCA).

Dual names may be used on pedestrian wayfinding signs. The NZGB convention for dual names is to separate the primary name from the secondary name with a '/' character, (e.g. Primary Name/Secondary Name). This sequence of primary and secondary names is set by the NZGB and cannot be changed in order to be accommodated on a wayfinding sign. However, it may not be possible to use a single line format to show dual names on wayfinding signs, even for two short names.

Where a secondary name is longer than a primary name, its letter size should be reduced to make its length approximately equal to that of the primary name. It should be noted that the longest name on a sign, primary or secondary, could influence overall wayfinding sign width. All primary names on guide signs should be checked for correct letter size. A letter size less than the minimum specified previously should never be used, except for secondary names which should conform to the minimum sizes specified.

Te Reo Māori names need to be checked for their correct wording with the Māori organisation which has mana whenua status in the area in which the wayfinding is to be installed. This is particularly important when showing longer names on two lines because the inappropriate breaking of these can alter their meaning or interpretation. Māori names may use macrons or double vowel form. All Māori names must be checked with the NZGB for correct presentation.

Dual names are considered to be two separate names. This needs to be taken into account when determining the overall number of destination names to be shown on any given wayfinding sign.

4.2.6 General sign content - Background colour and colour choices

The choice of colours for using on wayfinding signs is vital in order to achieve a good wayfinding system that is instantly recognisable for what it is, that will stand the test of time and that is easy to maintain (durability and longevity). Colour choices also impact on legibility.

Dark colours present good contrast to the maps and text presented on the signs. Dark colours are also likely to attract less graffiti.

Contrast between the foreground and background is one of the most important factors for the ease of reading. If coloured text is used on a bright background the contrast will be weak, for optimal contrast use white text against dark coloured backgrounds. This format will also separate pedestrian wayfinding signs from road traffic signs (that tend to reverse this presentational style (e.g. dark on white)).

Arthur & Passini (Wayfinding: People, Signs and Architecture. McGraw-Hill 1992) developed a method to calculate the contrast difference between two colours, for example background and font. The formula is based on the light reflectance (LR) readings in percentages for each of the two colours involved. In essence this involves subtracting the darker colour reading from the lighter colour reading and creating a percentage value from this difference to create a brightness differential. When the brightness differential is 70 percent or higher the legibility is assured, and this value is a good rough guide to a good colour combination for choices of font and background colour (refer Figure 8).

HUE	LR(%)	CONTRAST VALUE AND RELATIONSHIP										
RED	13	82	13	62	24	28	56	7	38	32	84	78
YELLOW	71	82	79	52	76	75		80	89	73		
BLUE	15	13 79		56	12	17	50	7	47	21	82	75
ORANGE	34	62 52	56		50	47	12	59	76	44	60	44
GREEN	17	24 76	12	50		6	43	18	53	11	80	72
PURPLE	18	28 7	17	47	6		40	22	56	5	79	70
PINK	30	57 58	50	12	43	40		53	73	37		
BROWN	14	7 80	7	59	18	22	53		43	26	84	77
BLACK	8	38 89	47	76	53	56	73	43		58	91	89
GREY	19	32 73	21	44	11	5	37	26	58		78	69
WHITE	85	84 16	82	60	80	79	65	84	91	78		28
BEIGE	61	78 14	75	44	72	70	51	77	89	69	28	

Figure 8 Colour brightness differential to support choices of font and background colour (Arthur & Passini (Wayfinding, 1992))

Not only is the contrast important but also the chosen font will make the difference to the visual presentation. When using a bold font the text will look like its expanding off the sign, when using a light-weighted fonts the text will fade into its background. Medium or Regular weights are usually the best options to choose for a good and readable sign.

There is a good explanation of colour contrast, legibility and accessibility in the "Acceptable Colour Contrast and Accessibility" section of the Surf Coast Victoria "Draft Torquay Wayfinding Signage - Strategy and Design Guidelines" Surf Coast Wayfinding Sign Strategy Design Guidelines.

4.2.7 General sign content - Symbols and arrows

Walking wayfinding signs should use symbols rather than words whenever possible given they are instantly recognisable, and the image speaks to those who may not read the language on the sign. Symbols should be used consistently, and the symbols used should be of the type widely used and recognisable from existing traffic signs (refer Table 7). There are existing symbols for most situations and ISO Standard 7001:2007 offers a full range of symbols. If new symbols require development these should have been tested for legibility and comprehension. Use symbols in a targeted manner within the sign layout and do not use commercial or brand logos, wayfinding signs are not an advertising media and in the longer term these logos may fall from use.

Table 7 Common existing sign symbols currently in use

A place where tourist and other local information is available.



A place where 24hour emergency medical service is available.



A place where a telephone is available to members of the public.



A place where a public toilet facility is available.



Bicycle repair or maintenance facilities.



Bicycle parking available



A place where a restaurant is available.



A place where a cafe or other place serving light meals and drink is available.



NZ Cycle Trail (NZCT) symbol — Symbol.



Te Araroa logo.



A place of historical significance.



A place where there is scenery or other photo opportunity.



A location of a lookout or viewpoint.



A winery or vineyard that is open to the public.



Museum.



A place where accommodation – hotel, motel, guest house, etc is available.



A place where camping is provided.



A caravan park.



Tsunami evacuation route.



Table note, for copyright images The copyright of the camera symbol and Look Out Symbol is owned by Standard New Zealand. The symbols are Figure A76 and Figure A67 respectively in NZS 8603:2005, Design and Application of Outdoor Recreation Symbols. Reproduction of the symbol is subject to copyright and requires the purchase of NZS 8603:2005 CD ROM. For more information please contact Standards New Zealand. (www.standards.govt.nz)

In a similar manner to symbols, arrow (and chevron) types are widely used on existing sign types. These can be used on walking wayfinding signs although the use of a different arrow type (e.g. a more open arrowhead) can reinforce the different nature of walking wayfinding signs. Arrows should be positioned ahead (up), left and right and angled up 45 degrees (left / right). Hooked arrow shapes are useful when

the destination is reached via a turn in the path, and it is impractical to install a second directional sign at the turn.

Arrow size should be proportionate to the adjacent font and position on the sign.

4.2.8 General sign content - Destination order and arrow position

The order in which destinations should be presented to the viewer will, in part, reflect the mental decision-making process and the position of the destinations at the intersection point ahead.

If viewed from above when someone walking gets to a decision point or an intersection the turn closest to the person will be for a left turn; the next closest will be the right turn, with the straight-ahead movement being after both the left turn and right turn locations have been passed. To mirror this view from above the sign destinations will be laid out as though a person walking is reading the sign from top (furthest away) to bottom (nearest) examples are shown in Figure 9.

- Straight-ahead destinations.
- Destinations to the right.
- Locality to the left.

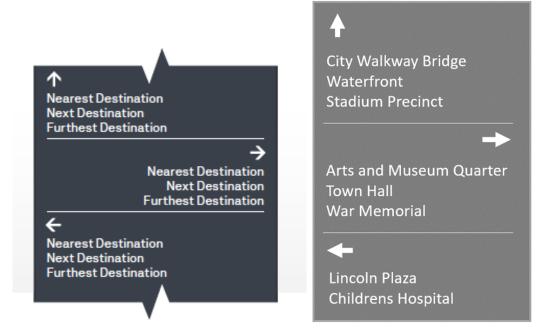


Figure 9 Example of segregated destination panels and ordered destinations, mock-up illustration on the right.

In each direction there may be multiple destinations. When this is the case the nearest of those destinations is presented first through to the one furthest away. Realistically three destinations per direction is about the maximum that can be presented when there is a full set of straight, right and left. Bear in mind that, when presented in bilingual form this is 18 separate destinations not three in each direction.

When using arrows on wayfinding signs the arrow position will be influenced by the order in which the destinations are shown as detailed above. Arrows should be arranged from the top of the sign to the bottom:

- Ahead arrow
- 45° ahead arrow (left or right) (or ahead then left or right hooked arrow),
- Horizontal arrows (left or right)

The arrow itself should be positioned with the point of the arrowhead at the edge of the sign, inset slightly.

Arrows can be placed either above a group of destinations that have a common direction of travel of adjacent to the destination(s) or by placing the arrow to the side of the common destinations (refer figure 9). The first approach makes adds "lines" of height to the sign and the second approach adds width to the sign. The choice of approach will vary depending on the sign type in question.

When the destinations and arrows are combined, they are combined as follows:

- Straight-ahead destinations: arrow will be on the left at the top,
- Destinations to the right: arrow will be on the right-hand side of the sign,
- Locality to the left: arrow will be on the left-hand side of the sign.

4.2.9 General sign content - Destination time and distance

Whilst distance presenting as metres or km is the norm for vehicular traffic for people walking, it is more real to present distance in terms of the walking time to that destination. Research shows people can more easily understand the proximity of places if they know how long it will take, rather than the distance they have to travel. Therefore it is good practice to present distances for walking by time rather than distance. Walking times may be supplemented with distance but generally walking times are more meaningful to the viewer. Any decision should be applied consistently within a region for each sign type. Preferably walking time to the destination should be provided supported by distance information in metres or km. 15 min walking equates to roughly 1km; any estimated walking time over 10 minutes should be rounded up to the nearest 5 minutes. Busy areas or adverse gradient will increase the time and reduce the travel distance. Similarly tourist areas or city centres are likely to cater for a wider range of pedestrians and walking speeds, here a walking speed in the order of 1.0m/s is typical of a slower pedestrian (e.g. children, elderly, vision impaired or mobility impaired). Conversely approximately 1.2m/s is a general design walking speed. This means that it is important to understand the locational context of the wayfinding and the likely pedestrian types in the location. Note that when a sign includes some form of map walking time is usually omitted from the directional information as normally the map size / scale will cover this aspect. Walking time should be included on flag, finger post, blade signs etc, unless the time is less than one minute.

Some destinations will need directions to them detailed using arrows, this includes arrow types that show something other than a straight path to the destination.

4.2.10 General sign content - Additional measures to guide vision impaired people

Audible, visual and tactile cues can help in providing additional information to guide vision impaired people. These are covered in more depth in *RTS 14: Guidelines for facilities for blind and vision-impaired pedestrians* as described in the Designing for blind and low vision people section (PNG: Designing for blind and low vision people)

Braille is a vital language used by thousands of visually impaired people around the world including visitors to New Zealand who may be unfamiliar with our environment and wish to navigate on their own. Braille should be integrated into pedestrian wayfinding signs affixed to signal poles and at the entrance to and within public transport facilities. An example is shown below in Figure 10.



Figure 10 Braille wayfinding, Christchurch bus exchange. (Photo: Daisy Bea Scrase)

However, note that many independent people who are blind or vision-impaired use adaptive technology. People with a vision impairment will increasingly use technical aids rather than braille to assist with wayfinding.

4.3 Best practice wayfinding design examples

4.3.1 Free standing plinths, totems, pylons

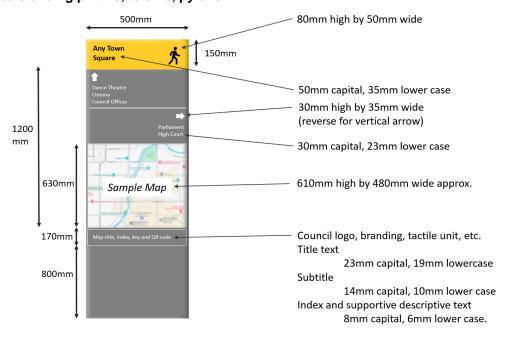


Figure 11 Free standing plinths, totems, pylons

Figure 11 notes:

- Overall dimensions will vary according to the sign content.
- Indicative mounting height off the ground to base of the sign approximately 20-50mm.
- The location name can be a two line "main" location name, or a "main" location then subtitle location in a smaller font two-line name.

- QR code, Council branding, tactile unit etc are optional.
- A "mini version" without a map may be useful where there are space constraints, this would enable a narrower width.
- Sign depth would be approximately 75-100mm.

4.3.2 Wall mounted information boards, map boards, wall maps

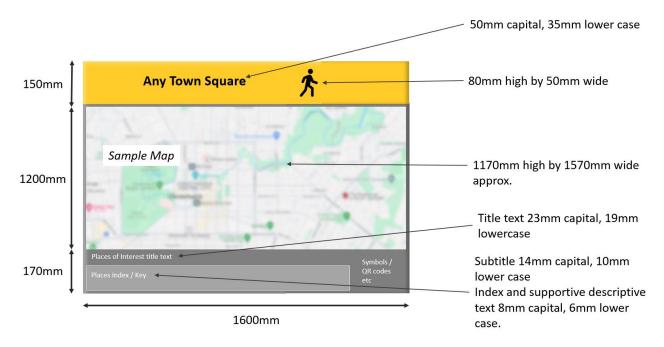


Figure 12 Wall mounted information boards, map boards, wall maps

Figure 12 notes:

- Overall dimensions will vary according to the sign content.
- Indicative mounting height off the ground to base of the sign approximately 800mm.
- The location name can be a two line "main" location name, or a "main" location then subtitle location in a smaller font two-line name.
- QR code, Council branding, tactile unit etc are optional.
- The sign can be in landscape format (as shown in figure 12) or may be presented in portrait format.

4.3.3 Finger post / blade sign

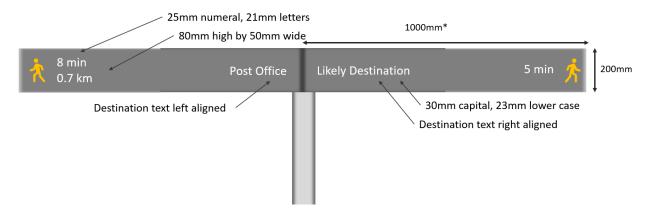


Figure 13 Finger post / Blade sign

Figure 13 notes:

- Overall dimensions will vary according to the sign content. Sign width (*) variable depending on number of letters in the destinations / directions but should be no longer than 1200mm.
- Indicative mounting height to base of the sign specific tactile unit, mounted on the sign post should be no more than 1000mm above the ground surface.
- Indicative mounting height to base of the sign will be site specific but no more than 2500mm.

4.3.4 Flag sign

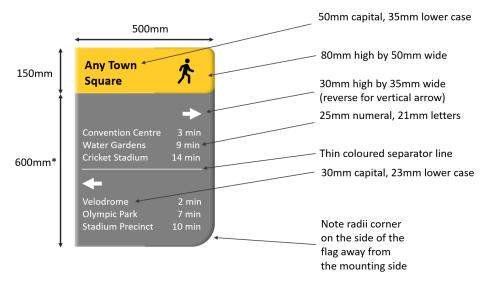


Figure 14 Flag sign

Figure 14 notes:

- Overall dimensions will vary according to the sign content.
- Sign height (*) Variable depending on number of destinations / directions.
- Indicative mounting height to base of the sign specific tactile unit, mounted on the sign post should be no more than 1000mm above the ground surface.

- Indicative mounting height to base of the sign will be site specific but no more than 2500mm.
- Note that the sign has corner radii on the edge furthest away from the mounting pole / post.

4.3.5 Wall mounted destination sign

It may be appropriate to provide destination and direction information normally associated with finger post / blade or flag signs on a wall mounted sign.



Figure 15 Wall mounted destination / direction sign.

Figure 15 notes:

- Overall dimensions will vary according to the sign content.
- Sign height (*) Variable depending on number of destinations / directions.
- Indicative mounting height to base of the sign will be site specific but no more than 900mm.
- The location name can be a two line "main" location name, or a "main" location then subtitle location in a smaller font two-line name.
- QR code, Council branding, tactile unit etc are optional (not shown above).

4.4 Good design - Top tips summary

- Audience. Remember who the audience is and design the sign for people on foot; this in itself
 covers a range of users and needs. Some people will know the area, others will not. Use wellknown terms and names; localisms may have little meaning to some people, additionally
 acronyms are ambiguous and should not be used. Remember that whilst important sign-based
 wayfinding is part of a wider set of tools people use to get around.
- **Visibility.** Information needs to be visible from a distance so that people will go to it to read it. The information should be mounted at the correct height and well lit. Locate wayfinding in good light level locations or under streetlights.
- Legibility and font type. Text should always appear in sentence case. Avoid wording in full
 uppercase and avoid the use of abbreviations. The appropriate font (size and type) should be
 used; For walking wayfinding it is possible to drop the character height below that used on

traditional road signs in order to create a point of difference for walking wayfinding and to ensure they do not get confused for traffic signs. For example 50mm for the title panel, perhaps to 30mm for the main text (destination panel – larger font size on blades / finger post format) with smaller heights again for distance / time (approx. 21 to 25mm) and detailed information. Ideally sign design fonts should be used and minimum font sizes established. For example, the header text should be readable from approximately 10 to 15m, and other text should be readable from approximately 5m. The font should always be a San Serif type not a Serif font. Also use case sensitive text not all capitals is best practice for ease of reading. The font and background should offer a colour contrast to each other. Spacing between blocks of text should be consistent.

• Sign Clutter. Too many signs in one place represents sensory overload, can be distracting and unsafe in some locations. Consider what other signs are located nearby and there may be opportunities to consolidate signs to help reduce sign clutter. At worst uncoordinated signage in the wrong location can impede safe movement and be a hazard. Similarly too much information on one sign detracts from the core message, remember that maximum content is approximately three destinations per destination direction, less if presented bilingually. In these cases the outcome is poor for the reader and for the urban streetscape. There can be pressure or the temptation to add local symbols, colours and art to the sign in order to brand the sign or create a local identity. However these features can detract from the sign message. In the case of art if art has its value in a given location, then showcase it in its own right on a separate installation rather than providing it on a wayfinding sign. In other situations art could be integrated into the structure the sign is on rather than the sign (refer Figure 16).

Often cultural expression or public art can be integrated into furniture and streetscapes without impacting the legibility of the sign in own right. Avoid hiding art and design on a wayfinding sign that will obscure the intent and legibility of the sign. Designs may be incorporated into the background colour but be aware that this may distract readers and cloud the message when viewing the sign and may make maintaining and fixing signs more complex (refer Figure 17).



Figure 16 Example of artwork being incorporated into a sign structural support rather than the sign itself (Photo Mark Edwards).



Figure 17 Example of an artwork being incorporated into a sign background (Auckland Transport).

- Colour. Colours should offer contrast between the information and the background. Colours
 should be sympathetic to the needs of those with low vision and the surroundings. Colours should
 be visible in low light conditions. Colours should be of a type and shade that will not date quickly
 and that can be easily maintained.
- Language. Bilingual (or multi-lingual) language should be provided when appropriate. Avoid abbreviations and punctuation. Consider the use of different colours as a means of presenting languages. Do not overly emphasise differences in the language, avoid using italics and bold text. Both of these approaches draw attention to one language when the aim may be to normalise its use, by "showcasing" the text they separate it from the norm; they can also create issues for those with sight impairment. Be aware of the need to check the use of, and correct wording of, Te Reo Māori names with the Māori organisation which has mana whenua status in the area in which the wayfinding is to be installed. Also ensure that dual names are used when and where appropriate.
- Graphics, symbols, pictograms etc. Recognised and approved symbols should be used (refer Table 7). Arrows and chevrons should mirror the types used on traffic signs. Internationally recognised symbols are important for people who have difficulty reading English and people with dyslexia. It may be relevant and helpful in some locations to provide VR, QR codes and interactive sign elements, but place these features on the sign in a manner that does not detract from the main purpose of the sign and where features of this type are easily accessible.
- Maps Map orientation should be carefully considered when incorporated into wayfinding. The
 traditional "Heads up" with North at the top format in which maps are displayed may not be
 intuitive or logical for the viewer. The map orientation should be made to reflect the orientation of
 the sign in the site or the primary access or departure points when using the wayfinding.
- Layout. Think about using a title panel with a common theme or design across the whole wayfinding sign set. Title headings should catch the eye, maps and text should be balanced, 'less is more' when using text. Beware of adding extra height to the layout unintentionally.
- Height of information. Aim to keep most of the core information at eye height or just above.
 Important information is located in the range 1.0 m-1.7m (title panel / wayfinding heading could be higher), although recognise that wheelchair users and children are nearer a height of 0.9 m as illustrated below in figure 18.

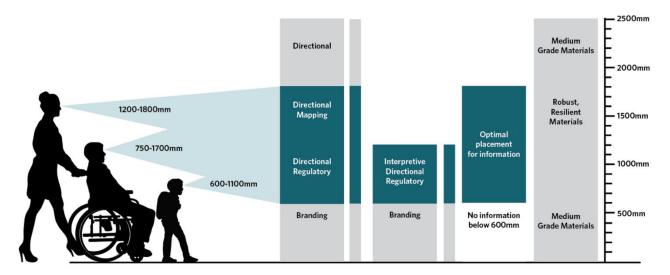


Figure 18 Fields of vision for different users (from PNG)

- Placement and viewing space. There should be ample room to view the information should several people be there simultaneously, and they should be able to do so without blocking other people moving past. Installing the information board in the street furniture or frontage zones of the footpath can assist with this. The immediate area should be level, step free and even, well-lit, and accessible (refer to SOS Principles). The sign itself should not need to be lit nor ideally will the sign be internally lit. This means the location in which the sign is located should be well lit, both to enable the sign to be legible but also to maximise the safety of those viewing the sign.
- **Audible and tactile information**. Audible, tactile and high contrast cues can help in providing additional information to guide vision impaired people.
- Materials and maintenance. The installation should be easy to maintain and the materials sustainable; a matte finish should be used to help readability, particularly for those with low vision. Sign surfaces need not be reflectorised. Ideally materials will be high quality and low maintenance. For example signs could be a baked enamel finish on metal panels with a galvanized chassis frame. Dark backgrounds also deter graffiti. Satin rather than gloss finishes are easier to maintain. Maps could be self-adhesive vinyl decals with an anti-vandal laminate coating. Glass and polycarbonate tend not to be good long term material choices. Powered signs; digital or variable message or internally illuminated signs should be avoided. Existing poles are often used when practical. The use of off-the-shell components (as opposed to bespoke designs) reduces the cost considerably.
- Longevity. Pick colours and fonts that a resilient to change and trends. Wayfinding should not
 date in its appearance. Similarly, avoid using brand names and business names on the signs,
 these may change in time.