VENICE
SITE PROPOSAL

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APRIL 15, 2021

KEY FINDINGS

- **Venice presents a unique wayfinding problem.** The city is highly pedestrianized, based almost totally on a centuries-old scatter-point road network, and does not use conventional modern addressing systems.

- **Venice's public transit is heavily utilized but convoluted.** Despite being the main method of longer travel, Venice's vaporetti network is complex and may be responsible for bottlenecks in navigation.

- **Getting lost is part of Venice's allure.** A wayfinding system that honours Venice's traditions must encourage a degree of openness and an appreciation for the variety of possible routes between any points A and B.

- **Impediments to tourists eventually become impediments to locals.** Venice's tourism-driven economy produces a high concentration of low-information navigators. Improving the efficiency of getting tourists around the city will have knock-on benefits for overburdened locals.

- **Venice's long history has produced a fragmented, adversarial approach to wayfinding.** There is little communication between the existing systems of signage and navigation within the city. Often, these systems are competing with another for visual space and reader attention.

USER GROUPS IDENTIFIED

DAY TOURISTS

Tourists who are visiting for a single day are likely to arrive at a major terminus: Tronchetto, Lido, Piazzale Roma, or Ferrovia. They generally spend less time in Venice and tend to seek out major attractions.

OVERNIGHT TOURISTS

Tourists staying for a longer period are more likely to have trips to a variety of destinations across the archipelago. As part of their stay, they may seek to avoid larger crowds and see quieter attractions.

System Overview

RATIONALE

The following four principles were derived from the site analysis and employed throughout the system design process.

Encourage spatial rather than linear wayfinding. It's not feasible to assume enough signage density in such a complex city to guarantee a complete linear solution. Instead, then, we need to empower users with an overall spatial sense of their immediate area.

Venice is best enjoyed by *vaporetti* and on foot. By drastically simplifying the service structure of Venice's waterbuses, this system can both increase ridership and help to enmesh the transit options throughout the more 'landlocked' areas of the city. Most routes across the city are encouraged to incorporate both travel by foot and vaporetto.

Unify Venice's existing iconic components. The 'white bedsheets' or *nizioleti* and distinctive yellow tourist signs are part of Venice's appeal. Rather than being replaced, this system integrates their most effective aspects into a wider, more cohesive system. This includes new iconography that transfers these components' effectiveness into other signage components.

Maintain Venice's spirit of discovery. Not only is complete linear navigation infeasible in a city of this nature, it's also not desirable. Venice's mercantile roots and rebellious history should be respected and incorporated into the system design.

ICONOGRAPHY & TYPOGRAPHY

This system attempts to distil and update the most successful aspects of Venice's existing signage. Abstracting these previously separate systems of navigation allows them to be interspersed, providing a network of purpose-specific sign types that mutually reinforce one another.

Transport New Heavy 24
Transport New Medium 24
Transport New Light 24

Transport New
Transport New is an updated version of the iconic font, designed at the beginning of the 1960s by Jock Kinneir and Margaret Calvert. Its use in road signs in both the United Kingdom and Italy makes it a good candidate for this unified system. [A2-Type]

The vaporetti V
This icon's shape is designed to evoke both individual vaporetto service lines and the system as a whole. The V's meaning is easily substituted between Venice and 'vaporetto'. The inverted colour scheme and heavy stroke on the outer circle helps to differentiate it from line markers.

Vaporetti lines
In combination with a conversion to New York-style service line trunking, these line markers are designed to simplify and improve the recall of Venice's vaporetti service map.
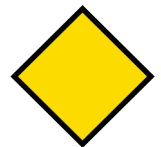
Yellow diamond
This basic icon is used to broaden the utility of Venice's existing yellow signs, used to indicate proximity to popular tourist attractions. This icon and colour are reserved throughout the wayfinding system for buildings and areas of this stature, allowing them to be referenced from other, non-'yellow line' signage.

ACCESSIBILITY

This system was designed to improve the legibility, readability and predictability of navigation signage around Venice.

S Marco
S Zaccaria

Transport White

Transport Black

Accessibility markers
Larger-format signage includes markers signifying changes in grade, staircases, and other objects that reduce the city's accessibility.

Transport New
Transport New meets ADA guidelines for legibility. Per best practices, leading exceeds twice the x-height, word spacing exceeds the x-height, and abbreviations omit periods.

Throughout the system, font sizes are chosen to ensure legibility beyond the expected average user distance (according to ADA guidelines).

High-contrast colour system
Text elements on all signage components conform to ADA contrast requirements.

COLOUR

This system uses a combination of bright colours and contrast-friendly whites and blacks to provide a readable, memorable system. Key colours such as Yellow and 3005 Blue are strictly reserved for specific components throughout the system to improve user retention of their meaning.

Pantone Name RGB CMYK Hex	Usage	Contrast with white	Contrast with black
Yellow C 254, 221, 0 0, 1, 100, 0 #FEDD00	Yellow line and major attractions	1.34	15.6
3005 C 0, 120, 200 100, 35, 0, 2 #0077C8	Vaporetto logo Canal markers on signage All references to water	4.62	4.53
137 C 255, 164, 0 0, 36, 100, 0 #FFA400	Vaporetti line	1.98	10.56
7488 C 120, 214, 75 51, 0, 86, 0 #78D64B	Vaporetti line	1.82	11.5

| Pantone Name RGB CMYK Hex	Usage	Contrast with white	Contrast with black
226 C 208, 0, 112 0, 100, 0, 2 #D00070	Vaporetti line	5.36	3.9
2607 C 80, 8, 120 85, 100, 0, 13 #500878	Vaporetti line	12.8	1.64
562 C 0, 111, 98 92, 7, 55, 35 #006F62	Vaporetti line	6.1	3.45
7621 C 171, 35, 40 0, 100, 87, 22 #AB2328	English translations	6.99	3.00

System Components

VAPORETTI SYSTEM MAP

The new vaporetti system map overhauls the visual and service design of Venice's famous waterbus network. While the existing map *(see right)* features no fewer than 24 separate lines and service patterns, the new map serves the network with a more manageable nine lines.

Placement

These are large-format maps, designed to be shown in full at vaporetti stations.

The strip maps *(see page 12)* are designed to be placed at docks specific to those lines to provide additional detail and a more linear method of planning travel.
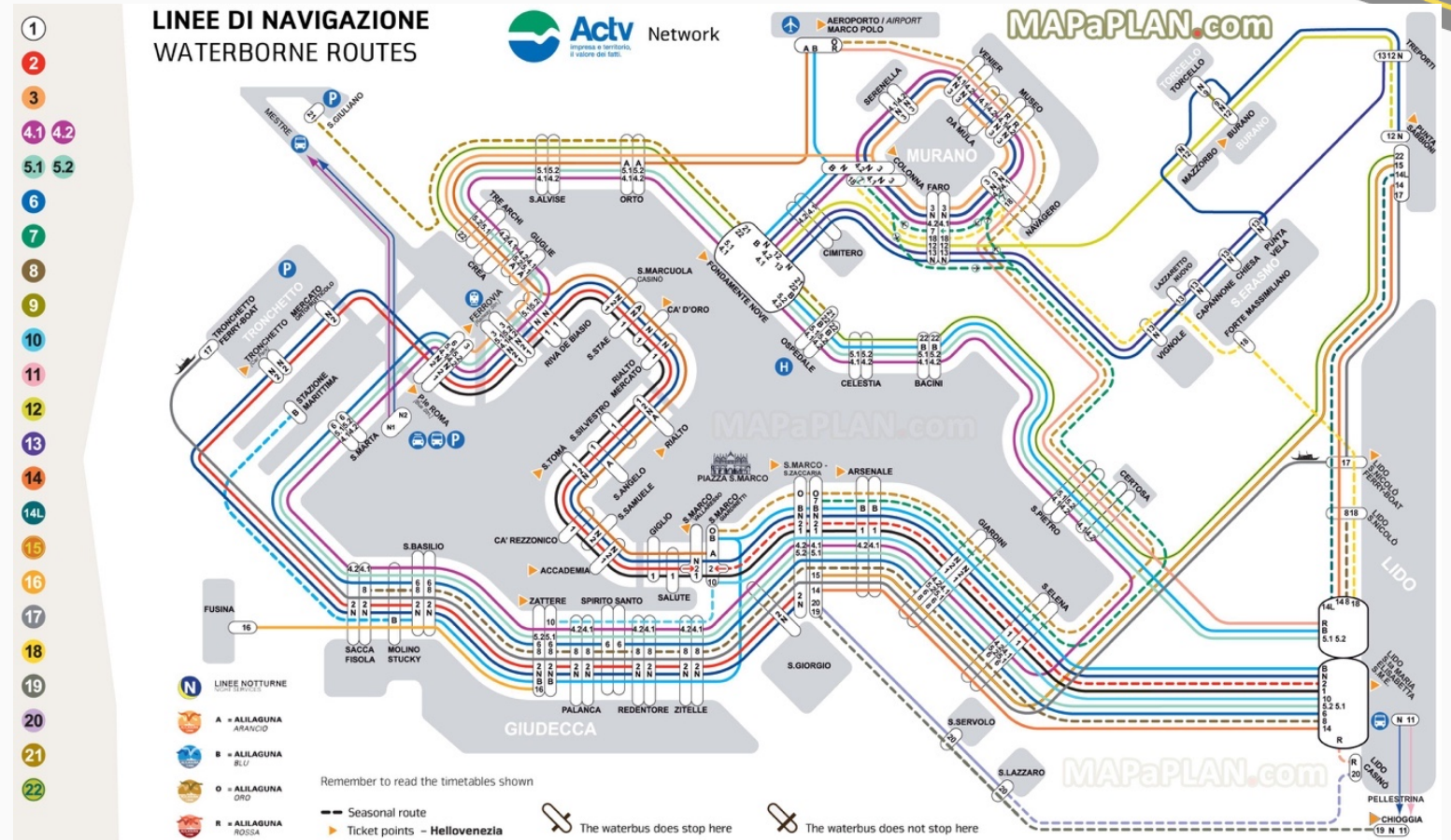
A key enhancement in this system is the use of **trunk lines**, which collects multiple common lines into sub-categories by colour. Trunk lines, most famously used in the New York subway system, have several advantages beyond their useful visual simplification. They provide multiple related travel options in high-traffic areas, help to associate and collect distinctive destinations and regions, and are more easily memorized and communicated with others.

Linee di navigazione
Waterborne routes
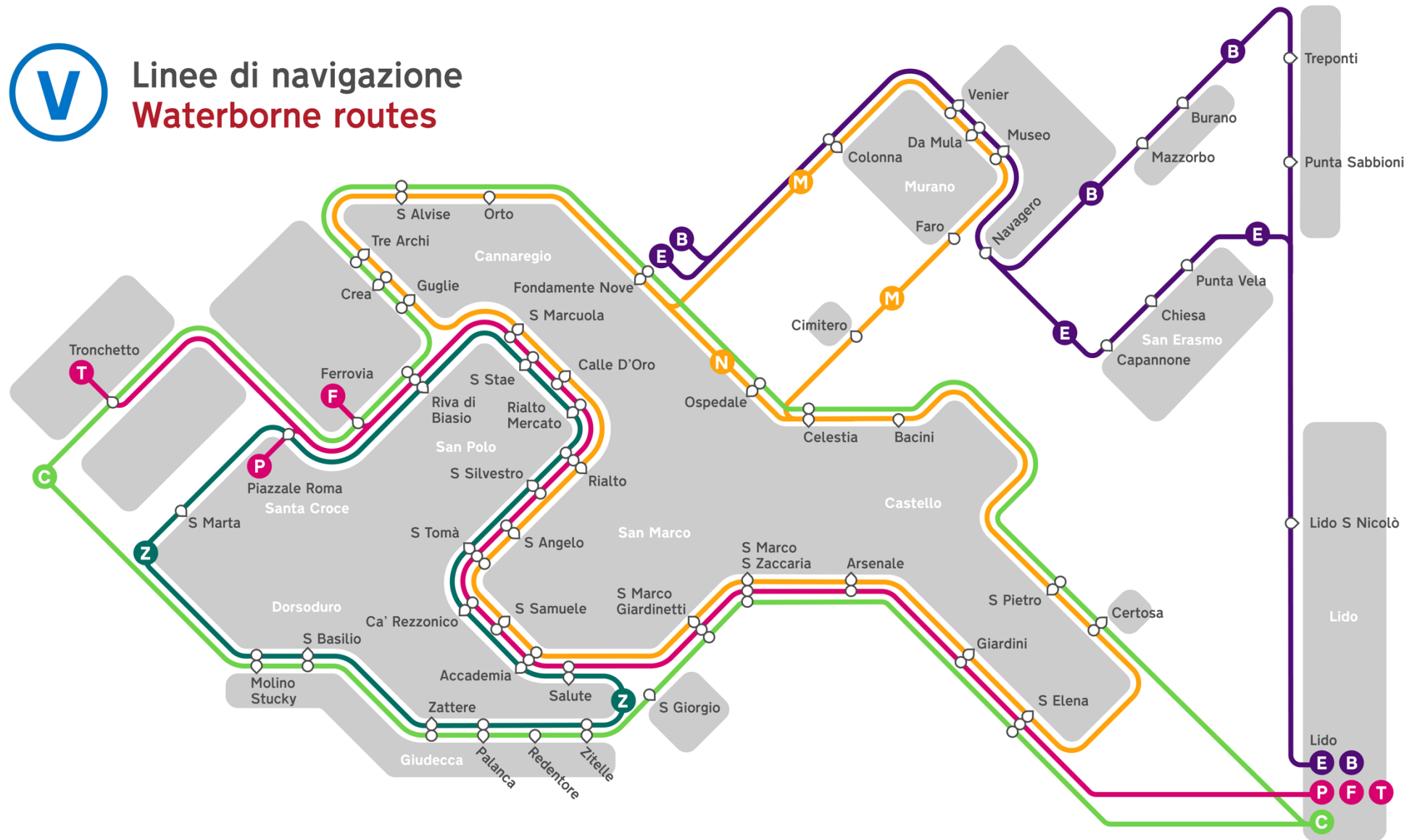
P	Piazzale Roma-Lido	Z	Circolare Zattere	C	Circolare Veneziano
F	Ferrovia-Lido	N	Circolare Fondamente Nove	B	Fondamente Nove-Burano-Lido
T	Tronchetto-Lido	M	Circolare Murano	E	Fondamente Nove-San Erasmo-Lido

Stazione
Stop

Stazione terminale
Line terminus

Impact on Day Tourists

The pink lines P, F, and T are designed to provide high-frequency, local access to destinations along the Grand Canal. Travelling east, users can take any pink-line boat to reach some of the most famous destinations in Venice.

Returning home in the evening, tourists need only remember the first letter of their initial embarkation point to be shuttled home: **P**iazzale Roma, **F**errovia, or **T**ronchetto.

Impact on Overnight Tourists

Similarly, tourists with the time to see more of Venice can use similar simple mnemonics to derive their own travel plans. Travelling to **M**urano, **B**urano, or San **E**rasmo is streamlined, and common destinations along those lines are served by all three.

Finally, three circular ring routes are provided: the Circolare **Z**attere, which serves the half of Venice south of the Grand Canal; the Circolare Fondamente **N**ove, which serves the northern areas of Venice; and the **C**ircolare Veneziano, which circles the main islands.

Note: All sign measurements are provided in centimetres. All font specifications are provided in points (285 pt = 100mm).
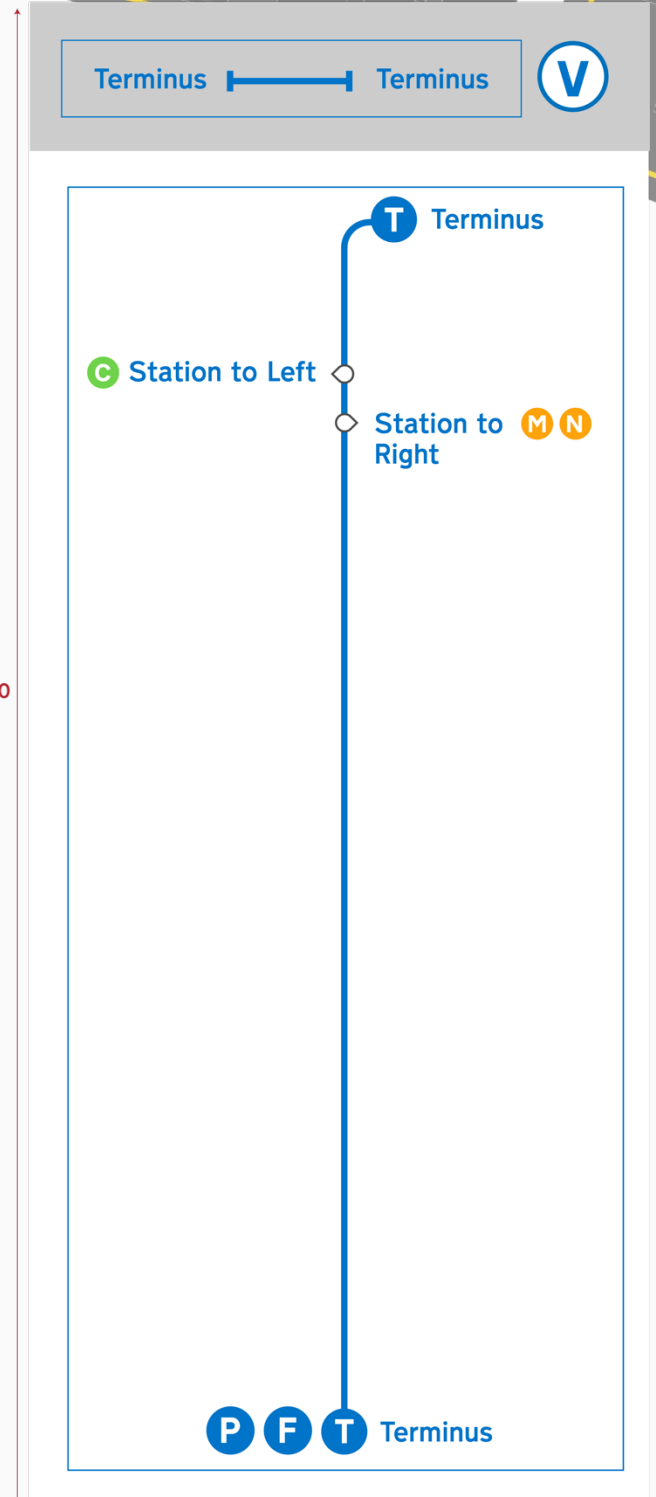
NIZIOLETI

Updates to Existing Components

Venice's most famous existing navigation element, the white rectangular *nizioleti* ('bed sheets'), are the primary destination signage in the city. The site analysis identified a number of issues with existing *nizioleti*. A lack of standardization has led to compound *nizioleti* signs featuring several levels of administrative information but lacking any discernible hierarchy *(see right)*. Additionally, historical typesetting standards result in reduced legibility.

Details

The updated *nizioleti* incorporate the following updates:

- Using the system font, Transport New, in a mixed case setting improves the legibility of each sign
- Inspired by London's iconic street signs, including the local *sestiere* improves users' cognitive mapping of the area at large
- Enforcing a strict visual and typographic hierarchy to help users maintain their own navigational hierarchy
- Providing nearby *vaporetti* stations and tourist attractions to provide better interconnectedness between system elements, including approximate walking distances
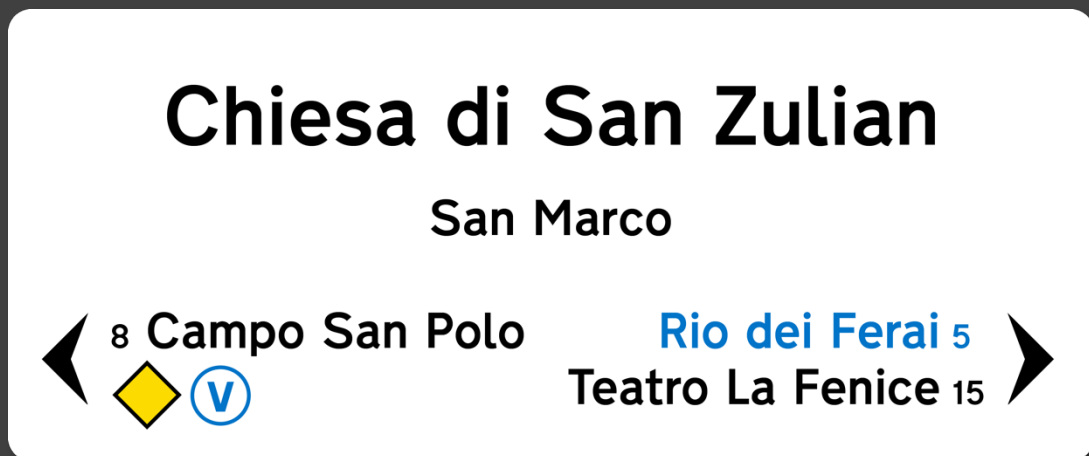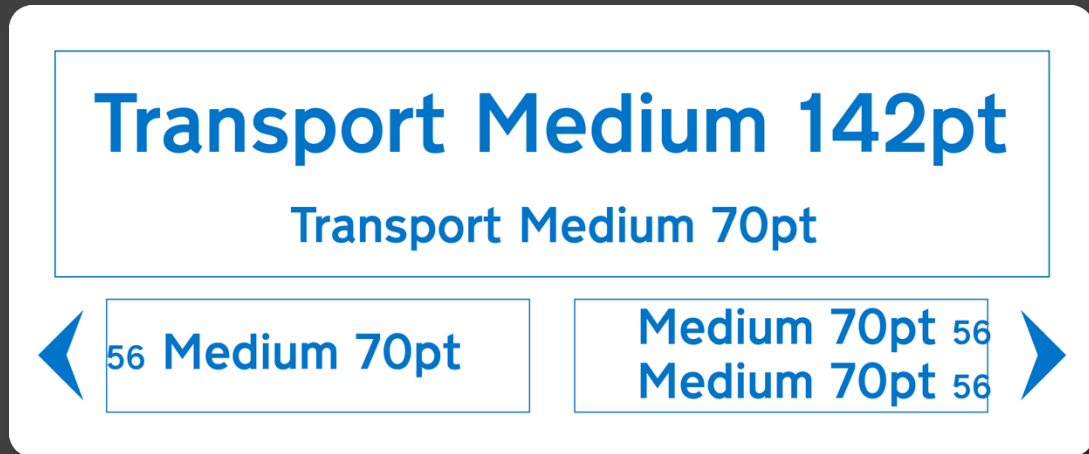

Google Maps

Calle Contarini Corfù

Dorsoduro

◀ 5 Accademia Ⓥ   Zattere Ⓥ 20 ▶

Street Name

Sestiere

◀ 8 Nearby left

Nearby right A 7
Nearby right B 10 ▶

96 · 48 · 4 · 8 · 20 · 4 · 2 · 10 · 4 · 4

Transport Medium 142pt

Transport Medium 70pt

◀ 56 Medium 70pt

Medium 70pt 56
Medium 70pt 56 ▶

Chiesa di San Zulian

San Marco

◀ 8 Campo San Polo

Rio dei Ferai 5
Teatro La Fenice 15 ▶

Placement

Like existing *nizioleti,* these signs are designed to be placed parallel to users' travel. They are slightly smaller, on average, than existing *nizioleti*. The text is designed, however to be large enough for these signs to be placed above doorways and windows, providing viewing ranges for all text of at least 25 feet.

Optimally, each street in Venice should include at least one identifying *nizioleto*, either where it meets perpendicular to another street or at a key corner.

Impact on Day Tourists

For day tourists focusing their travel on the more attraction-heavy *sestieri* of San Marco and San Polo, these signs will help confirm their rough location in the city. Additionally, the more strictly enforced information hierarchy can be easily used in conjunction with other wayfinding systems such as mobile GPS. Finally, the inclusion of the yellow diamond near popular destinations can help to orient users quickly towards important attractions.

Impact on Overnight Tourists

For tourists spending more time on the islands, the nearby suggestions encourage short-term exploration. Reaching the required density of signs in the city will help reassure users that there is a limit to the degree to which they can get lost.

THE YELLOW LINE

These distinctive signs are used throughout Venice to signal points of interest along the 'yellow line', the main tourist route through the city. This system seeks to build on the signs' strong cultural familiarity, refining the design and slightly increasing the density of information.

Double-pointing arrows for single destinations *(see right)* have been replaced by clear, cardinal directions and support for multiple destinations.

Google Maps

Specifications

Using the same proportions as *nizioleti* (to assist with fabrication standardization), yellow line directional signs use the same margin and spacing specifications as the rest of the system. Line items are grouped in sets of up to three destinations.

Cardinal directions are separated with larger gutters, and longer destinations wrap with smaller leading than subsequent line items.

Right-associated elements are right-aligned, including directional arrows.

Transport Med 142pt 56 ◀

▲ 15 **Chiesa della Madonna dell'Orto**

Ponte Chiodo 10 ▶
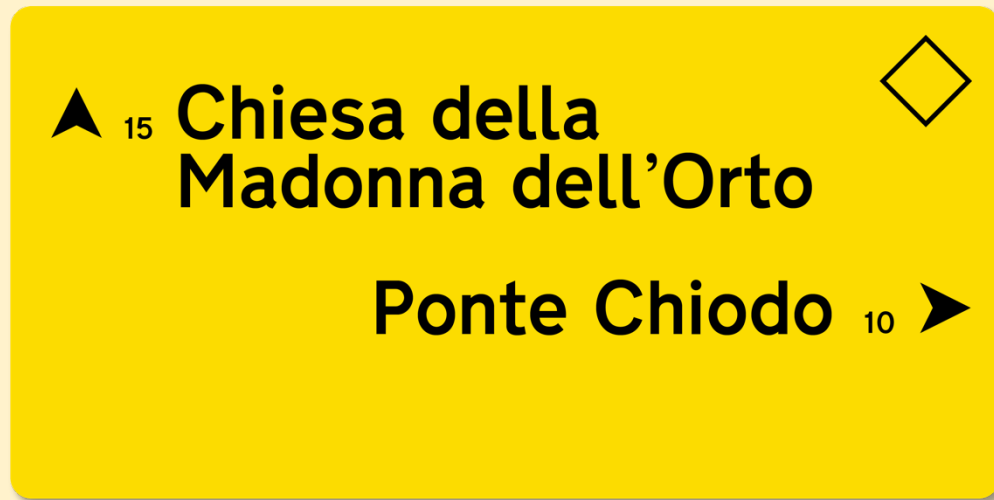
Placement

As with *nizioleti*, these signs are designed to supplant and expand the existing network of yellow signs. Their density across the city should correlate with the area's proximity to Yellow Line points of interest. From the far eastern tip of Castello, for example, you may need only a single northwest-facing sign indicating the variety of Yellow Line attractions available to the north west.

Within a few hundred metres of the line itself, an increased density will help more tentative tourists hew closely to a guided route. On the line itself, the signs should be used only sparingly to reduce fatigue.

Impact on Day Tourists

These signs are intended to provide satisficing directions towards the most popular points of interest within Venice. They are intended to be noticeable to day tourists who seek a more conventional travel experience while visiting the islands.

Impact on Overnight Tourists

For overnight and more flexible tourists, these signs will be a useful signifier of the more crowded routes and areas, which they may possibly wish to avoid or visit during off-peak hours. They also serve as anchors for the most memorable landmarks of the city.

BERSAGLI

Inspired by radial navigation systems such as radar, *bersagli*, from the Italian for 'target', are intended to provide users with a rough sense of their orientation and location, while encouraging Venice's unique sense of creation and exploration. These maps prioritize notable nodes within an approximate fifteen-minute walking radius.

In the event that no notable nodes are within a fifteen-minute walking distance, the next nearest points of interest are provided along the outer edge *(see right, page 18)*, along with a direction marker and approximate walking time marker. Finally, a north-pointing compass marking provides an ultimate directional aid to those seeking a wider context.

Specifications and Placement Considerations

These circular, enamel signs should be placed at an elevation of approximately 150 cm (to the centre) in areas where other signage is sparse. This lower placement encourages gathering, discussion, and reinforces a 'scavenger hunt' mode of creativity.

They can also be used effectively alongside *nizioleti* or yellow line signs, providing additional context on the immediate surroundings.
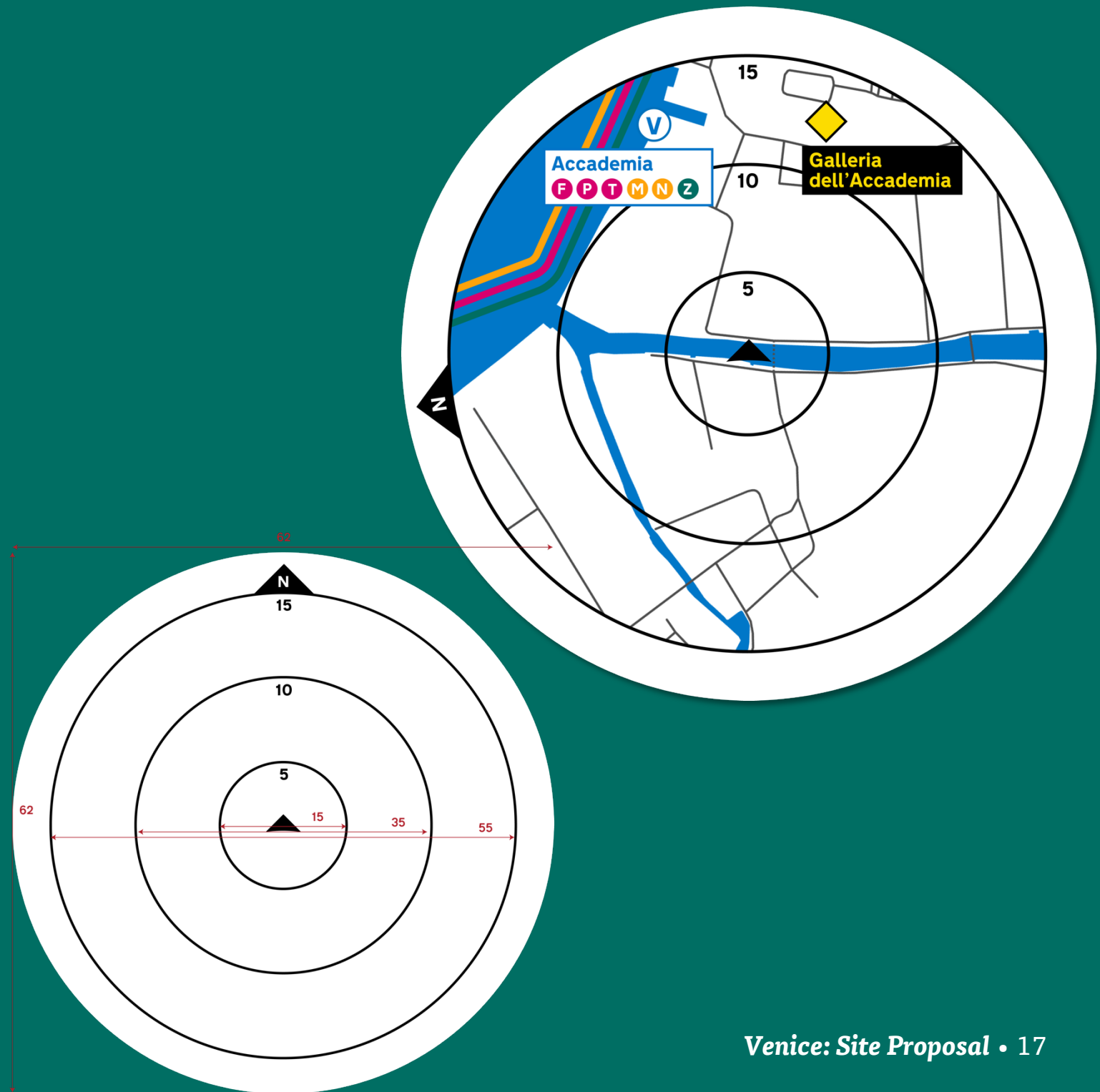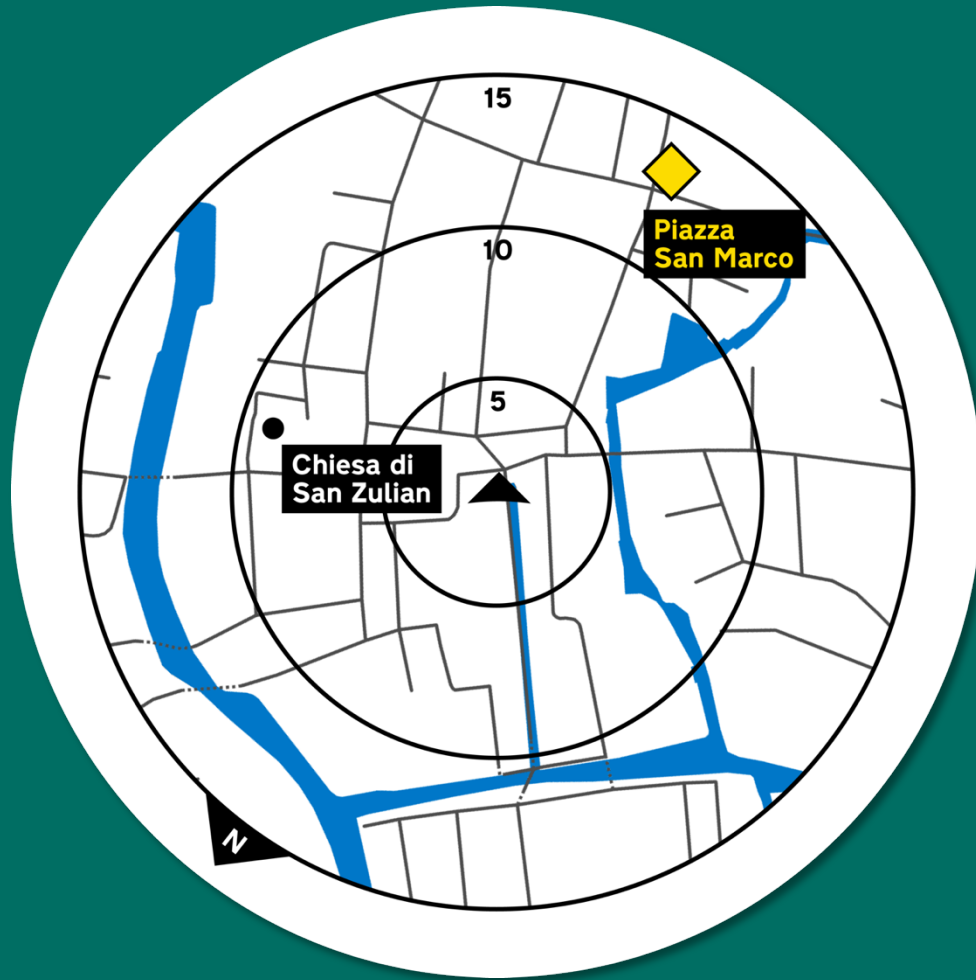
Impact on Day Tourists

One of this sign type's applications is to re-orient users navigating towards a specific attraction or point but who may have left a primary route. For day tourists, these signs function as important navigational backstops during travel towards a specific destination, preventing total disorientation.
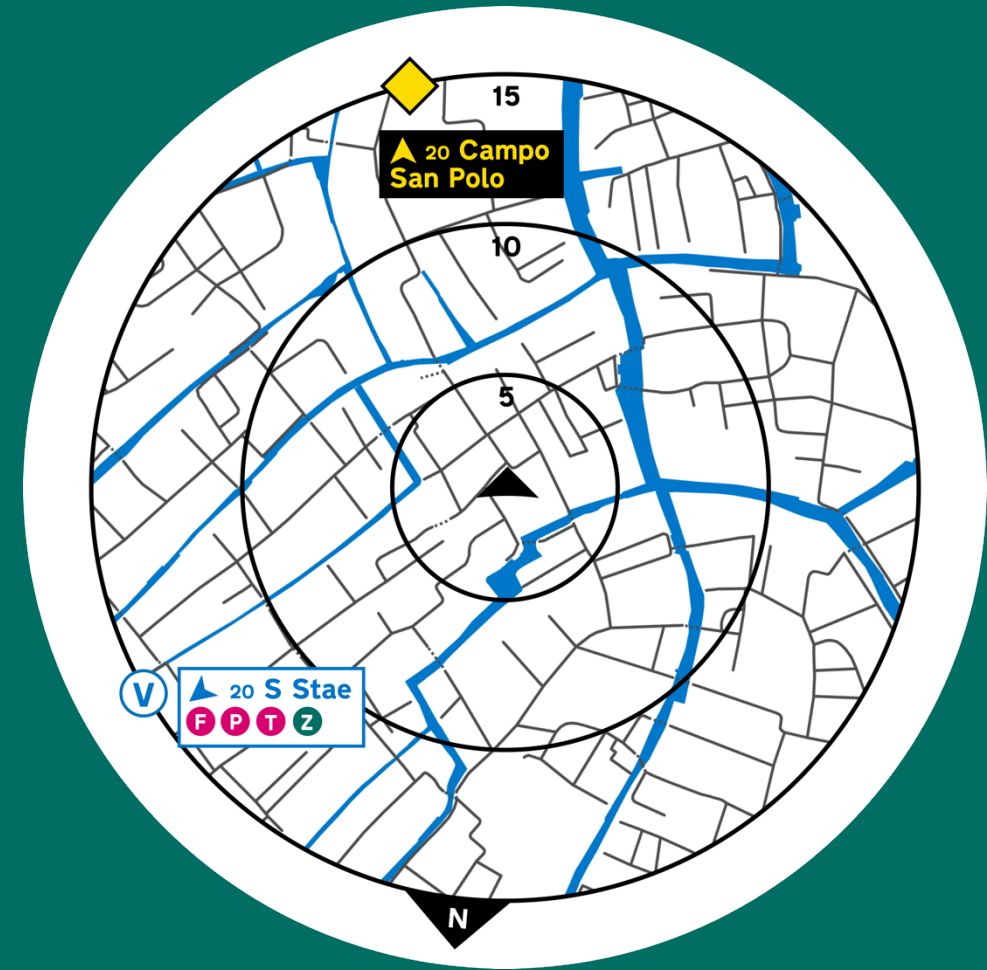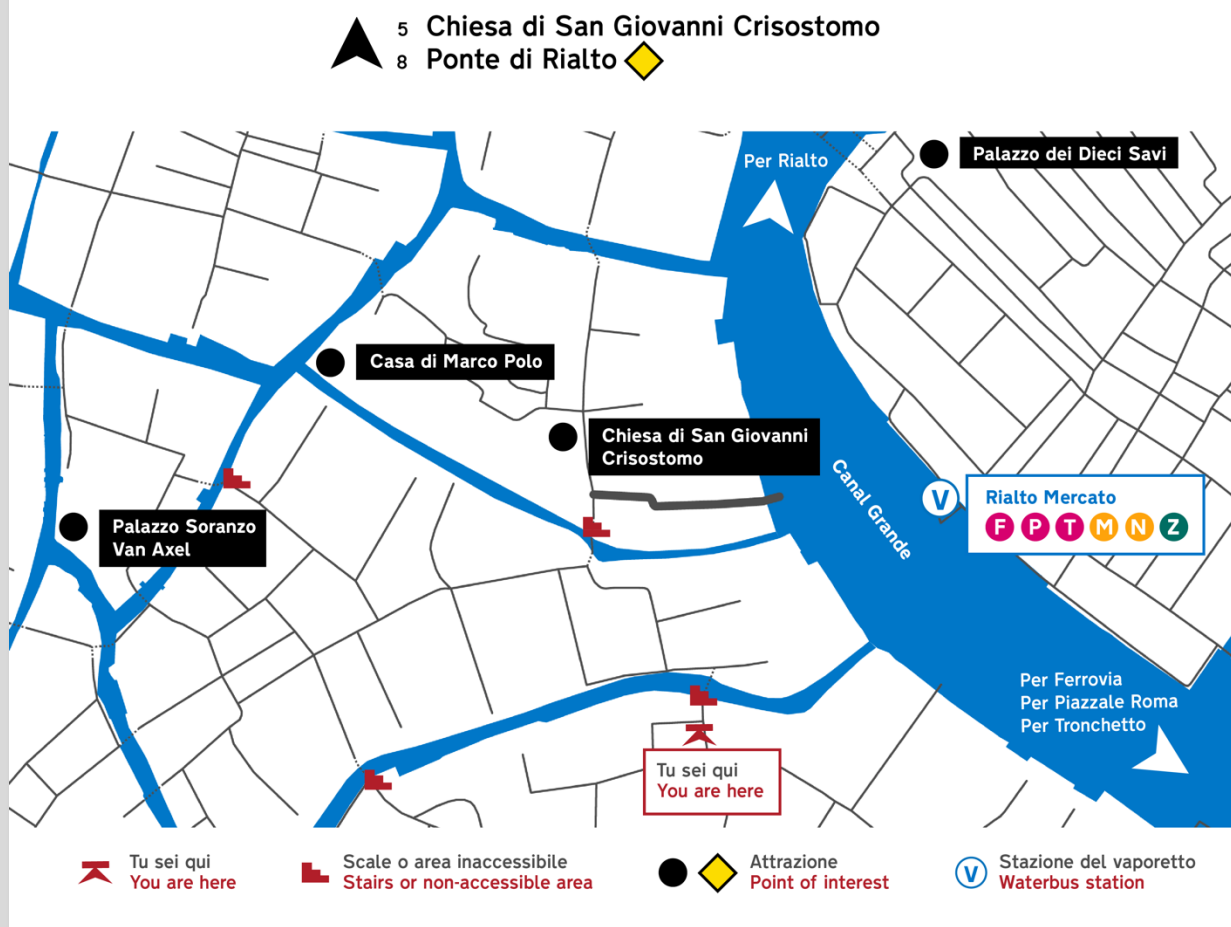
Impact on Overnight Tourists

Overnight tourists may use these signs to extend a direct path to a specific destination with a more circuitous route. *Bersagli* are designed to provide a comfortable 'sandbox' for the user, providing context for exploration on any given bearing for fifteen minutes.

STANDING AND WALL MAPS

Standing and wall maps combine elements of *nizioleti* with a larger-format map. The upper component replicates a conventional street sign. The lower third reserved on *nizioleti* for left and right-facing destinations is replaced by destinations ahead.

The lower component is a larger-format map, including an oriented place marker to situate the user in both location and direction. The same bilingual colour scheme is employed here as with other signage types. A selection of nearby destinations is provided, including vaporetto stations.

Standing maps are self-supported and double-sided, anchored on metal legs. ***Wall maps*** have the same design but are single-sided and fastened to an existing surface.

Placement
In contrast with *nizioleti*, which should be placed parallel to the direction of travel (i.e. along walls and above doorways), these standing maps are designed to stand on metal legs perpendicular to the direction of travel, in larger squares and near bridges and other open nodes. For this reason, destinations ahead replace the *nizioleti*'s left and right-facing destinations, matching the direction of travel for readers.

Wall maps using this format are best installed in squares or plazas, where a wider context is required for users considering their next waypoint.

96

Transport Medium 142pt

Transport Medium 70pt

12

4

34

5 **Transport Medium 56pt**
8 **Transport Medium 56pt**

4

96

Map

54

Transport Medium 40pt
Transport Medium 40pt
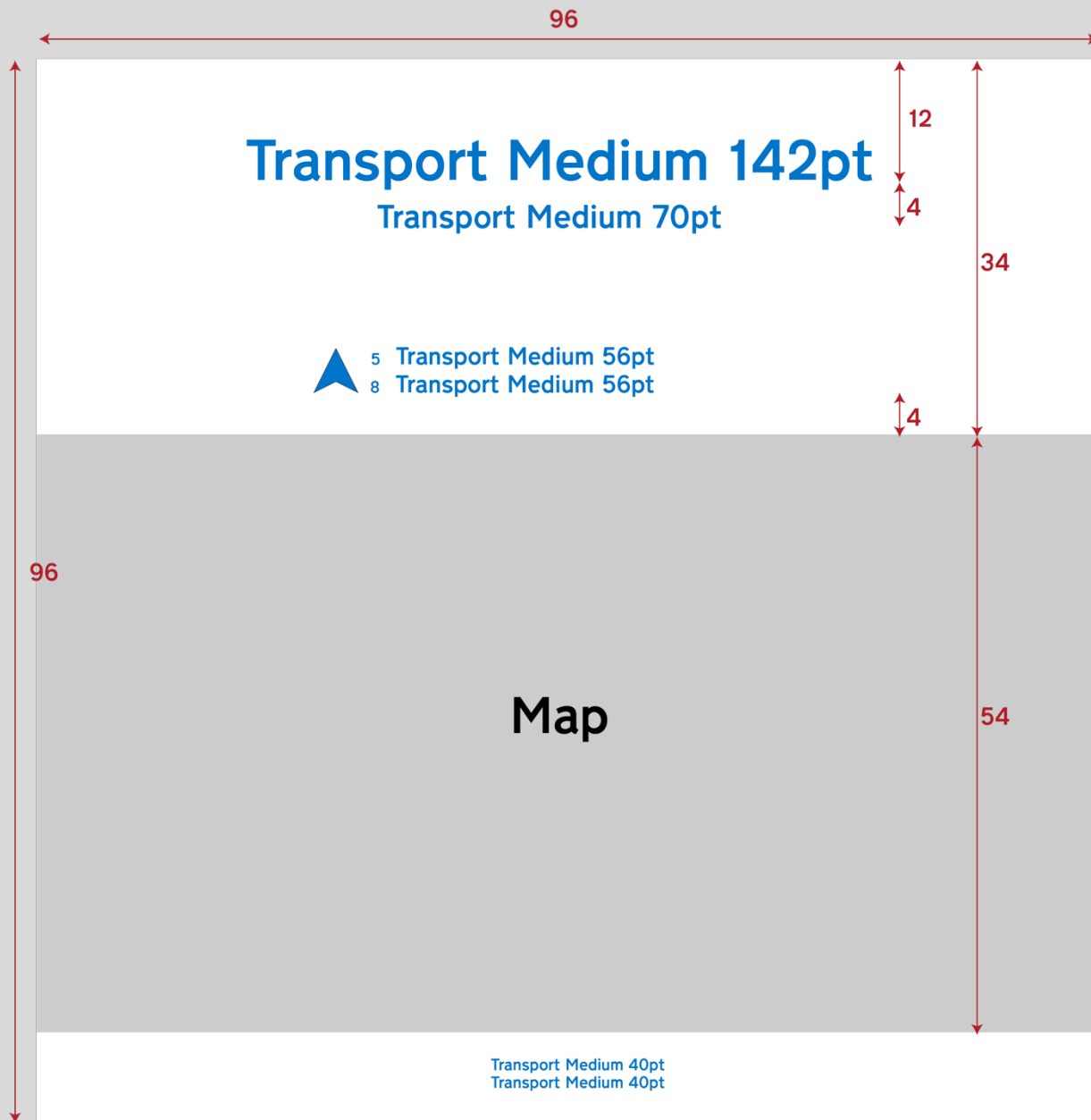
Impact on Day Tourists

Day tourists will encounter this as one of the highest-information maps in the design system. For *sestieri* bordering on the Grand Canal, important destinations are signposted along the canal to help orient day tourists towards either their destined attraction or their departure station.
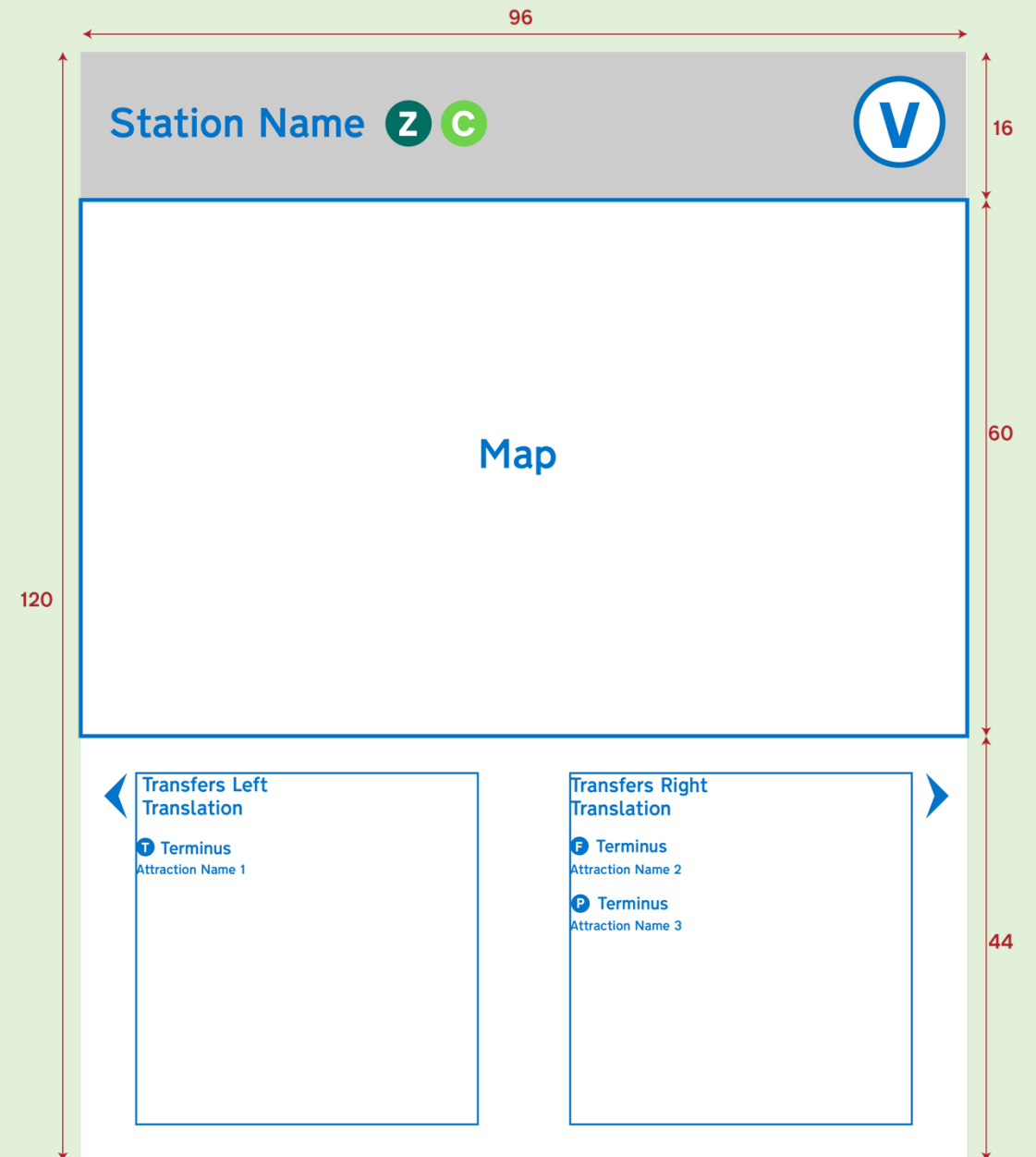
VAPORETTI STATION MAPS

The largest format of sign in the design system, these standalone, double-sided signs are intended to reside at *vaporetti* docking stations. To the disembarking user, the sign displays an overview map, along with an orienting marker. To the user arriving at the *vaporetti* station from land, the map displays a complete *vaporetti* system map contextualized to their current location.

For both types of user, the lower area of the map is dedicated to common points of interest in either direction, and the optimal *vaporetti* routes for those destinations.

The disembarking side of the sign includes a *sestiere* label and highlights any nearby yellow line attractions, in addition to the visible network of *vaporetti* stops.

Placement

Because of their heavy focus on *vaporetti* connections and destinations, these signs are intended for use only at *vaporetti* stations. A similar format to the central map may be used on walls in heavy-traffic areas, omitting most of the *vaporetti* information.

96

Station Name Z C

V

16

Map

60

120

Transfers Left Translation

T Terminus
Attraction Name 1

Transfers Right Translation

F Terminus
Attraction Name 2

P Terminus
Attraction Name 3

44

Riva di Biasio F P T Z C (V)

Linee di navigazione
Waterborne routes

Treponti · Venier · Da Mula · Museo · Colonna · Murano · Faro · Burano · Mazzorbo · Punta Sabbioni · S Alvise · Orto · Tre Archi · Cannaregio · Guglie · Crea · Fondamente Nove · S Marcuola · Cimitero · Navagero · Punta Vela · Chiesa · San Erasmo · Capannone · Ferrovia · Calle D'Oro · Riva de Biasio Tu sei qui You are here · S Stae · Rialto Mercato · Ospedale · Celestia · Bacini · Tronchetto · Piazzale Roma · Santa Croce · S Silvestro · Rialto · Castello · Lido S Nicolò · S Marta · San Polo · S Tomà · S Angelo · San Marco · S Marco Zaccaria · Arsenale · Dorsoduro · Ca' Rezzonico · S Samuele · S Marco Giardinetti · S Pietro · Certosa · Lido · Molino Stucky · Accademia · Salute · S Giorgio · Giardini · Zattere · S Elena · Giudecca · Palanca · Redentore · Zitelle · S Basilio

‹ Cambi in partenza da questo pontile
Connections from this landing

F P T Lido
Ponte di Rialto
Piazza San Marco
Lido

C per Lido
Fondamente Nove
Murano e Burano
Lido

Z per Salute
Campo San Polo
Galleria dell'Accademia
S Maria della Salute

Cambi in partenza da questo pontile ›
Connections from this landing

F Ferrovia
Ferrovia

P Piazzale Roma
Piazzale Roma

T Tronchetto
Tronchetto

C per Tronchetto
Ferrovia
Tronchetto
S Giorgio

Z per S Marta
Piazzale Roma
Zattere

Riva di Biasio
Santa Croce (V)

S Silvestro · Rialto · S Maria dei Frari · Campo San Polo · Rialto Mercato · Piazzale Roma · Campo San Giacomo · Calle D'Oro · Ferrovia · S Stae · Riva di Biasio Tu sei qui You are here · S Marcuola · Guglie

‹ Cambi in partenza da questo pontile
Connections from this landing

F Ferrovia
Ferrovia

P Piazzale Roma
Piazzale Roma

T Tronchetto
Tronchetto
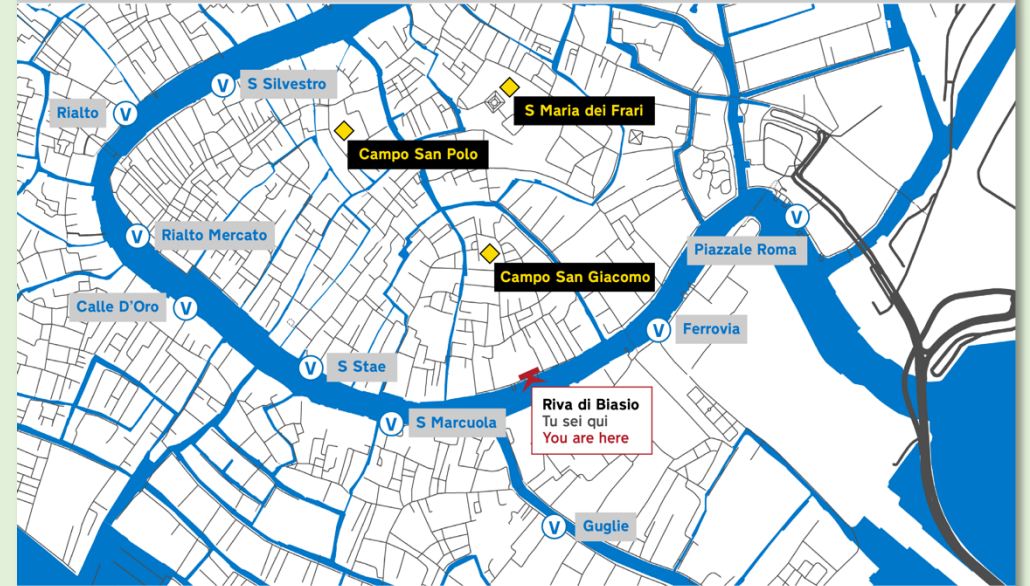
C per Tronchetto
Ferrovia
Tronchetto
S Giorgio

Z per S Marta
Piazzale Roma
Zattere

Cambi in partenza da questo pontile ›
Connections from this landing

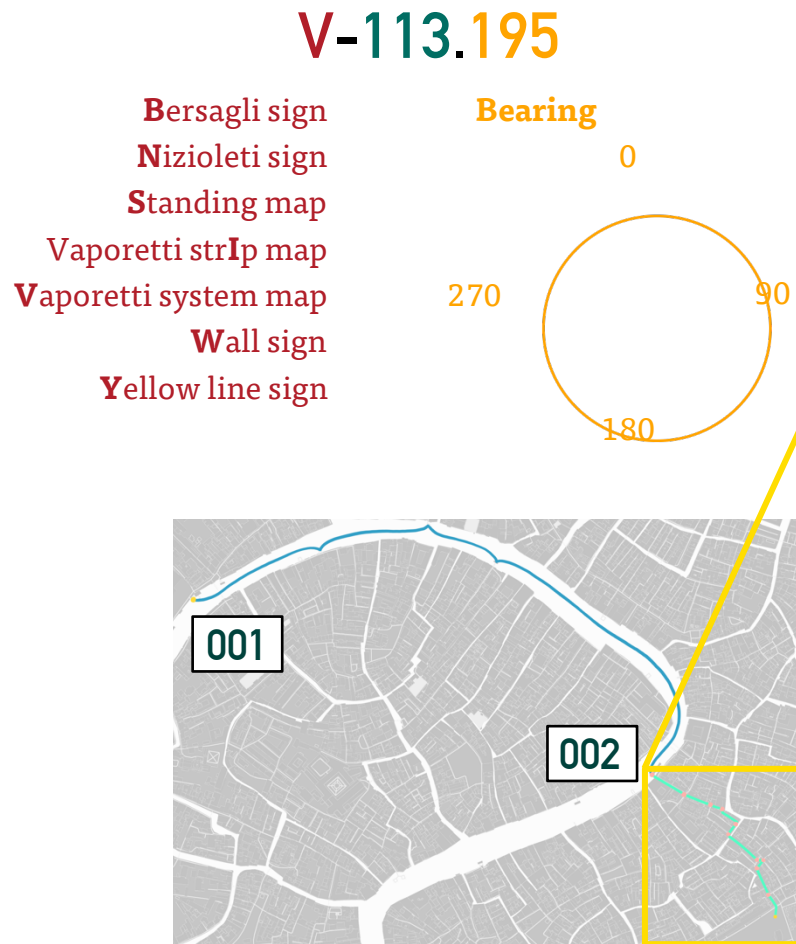**F P T Lido**
Ponte di Rialto
Piazza San Marco
Lido

Z per Salute
Campo San Polo
Galleria dell'Accademia
S Maria della Salute

C per Lido
Fondamente Nove
Murano e Burano
Lido

Travellers arriving from land at a *vaporetti* station are met with a full system map, customized to show their current location and help them plan travel via *vaporetti*.

Travellers disembarking from a waterbus are met with an overview of the wider area, customized to show their current location.

SAMPLE MESSAGE SCHEDULE

Because of Venice's total lack of grid system, an easy-to-use message schedule should work on bearing rather than cardinality. Using a sample route from the Site Analysis component, the following signs should be installed:

V-113.195

Bersagli sign
Nizioleti sign
Standing map
Vaporetti str**I**p map
Vaporetti system map
Wall sign
Yellow line sign

Bearing

0

270   90

180

Location	Sign code	Mounting location	Bearing	Quantity	Text
001	I-001.150	STATION WALL	150	1	P, F, T strip map
001	V-001.150	STANDALONE	150	1	Ferrovia vaporetti system map
		STANDALONE	330	1	Ferrovia land map (facing 330 bearing)
002	I-002.130	STATION WALL	130	1	P, F, T strip map
002	V-002.130	STANDALONE	130	1	Rialto land map (facing 130 bearing)
		STANDALONE	310	1	Rialto vaporetti system map
003	N-003.040	WALL	40	1	**Calle Larga Mazzini** San Marco ← 5 Rialto (V). Piazza San Marco 20 (Y) →
004	N-004.130	WALL	130	1	**Campo San Salvador** San Marco
005	N-005.200	WALL	200	1	**Merceria San Salvador** San Marco ← 15 Piazza San Marco (Y) Rialto (V) 10 →
006	B-006.130	WALL (LOWER)	130	1	Bersaglio: Piazza San Marco depicted at 030 relative bearing, 15-minute circle; Rialto vaporetti station depicted at 180 relative bearing, 10-minute circle
007	Y-007.140	WALL	140	1	↑ 15 Piazza San Marco
007	W-007.140	WALL	140	1	**Merceria San Salvador** San Marco ↑ 15 Piazza San Marco (Y)
008	Y-008.215	WALL	215	1	← 10 Piazza San Marco Rialto (V) 15 →
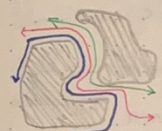
008	N-008.215	WALL	215	1	**Marzaria Del Capitello** San Marco
009	Y-009.150	WALL	150	1	↑ **10 Piazza San Marco**
009	N-009.150	WALL	150	1	**Marzaria San Zulian** San Marco ← Chiesa di San Zulian
010	N-010.140	WALL	140	1	**Ramo San Zulian** San Marco
011	Y-011.250	WALL	250	1	← **5 Piazza San Marco** **Rialto 20** →
012	N-012.160	WALL	160	1	**Calle Larga San Marco** San Marco
012	B-012.160	WALL (LOWER)	160	1	**Bersaglio: Piazza San Marco depicted at 015 relative bearing, inner circle**
013	N-013.60	WALL	60	1	**Merceria Orologio** San Marco Piazza San Marco (Y) 2 →
014	S-014.140	STANDALONE	140	1	**Piazza San Marco** San Marco ↑ 2 S Marco S Zaccaria (V)
		STANDALONE	320	1	**Piazza San Marco** San Marco ↑ 20 Rialto (V) (Y)

VENICE – PROPOSAL

SOLUTION COMPONENTS

1 NEW VAPORETTI MAP

- simplify
- trunk the lines (NY-style)
- reduce lines/detail

2 NEW NIZIOLETI

SOTOPORTEGO DI SAN MARCO

- add hierarchy
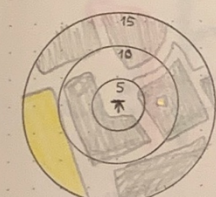- add detail
- London-style (NW1)
- DESTINATION

3 NEW YELLOW SIGNS

RIALTO >>

- keep ethos of simplicity
- add detail
- keep arrow style?
- DIRECTION

COMMON ←——————————————→ RARER

4 BERSAGLI

- lt: targets
- encourage exploration
- provide multiple routes
- minimize language
- orient w direction
- floors or walls?
- reuse yellow.
- ORIENTATION

5 PLINTH MAPS

DORSODURO 10 SAN MARCO
VIA ROMANA 5 GIUDECCA

- same sign system as #2 and #3
- add local map below
- add sestieri markers by colour
- COMBINATION/ORIENTATION

6 WALL MAPS

- full-format maps
- rarer than plinth maps

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NIZIOLETI

- 25×60cm (museum reference)

- Destination signs
  Should mainly focus on current loc.

- Could also reference nearby streets and attractions

- Eyeballing, size seems to be roughly 3ft. wide
  Would imply height of ~ 15in.

A

Main area		
Nearby	Sestieri	Nearby

Calle Goldoni
← 10 Rialto T   SAN POLO   Accademia 7 →
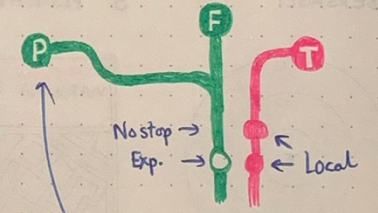
B

Main area SESTIERE	
Nearby	Nearby A / Nearby B

Calle Goldoni
SAN POLO
← 10 Rialto T   Accademia 7 →

VAPORETTI

Use NYC trunking system to simplify maps
Common routes use common colours.
How to mark direction of service/local/express?
↓
Make entire stops local or express for all lines.

Name lines by terminus for tourists.

No stop →
Exp. →
← Local

must always use letters, even when it adds clutter!
eg. P, F not 'green'

REFERENCES

Selected Italian translations: Marco Monaco.

A2-Type. "New Transport." New Transport. Accessed April 13, 2021. http://www.newtransport.co.uk/.