STATION AREA PLANNING & DESIGN TOOLKIT

METRO WESTSIDE SUBWAY EXTENSION
WHO SHOULD USE THE TOOLKIT?
The Metro Station Planning and Urban Design Toolkit is intended to help the designer, developer, planner, and community conceptualize: what a station area should look like, the types of amenities it should have, and how it relates to the surrounding neighborhood.

TOOLKIT CONCEPTS
Station area design is a collaborative and multi-disciplinary process. The design tools in this Toolkit focus on creating attractive, walkable, safe, people-friendly, places that make using transit both convenient and enjoyable. Some of the tools in the Toolkit relate to the design of the station plaza and entrance area, while others relate to the form and uses of the buildings in the neighborhood around the station. The Toolkit offers a set of tools that can be applied to a variety of scales, from dense urban centers to small neighborhood districts, in recognition that station area needs differ according to the activities, density, and character of the neighborhoods around them.

KEY PRINCIPLES
The Station Area Planning & Design Toolkit was created around the following Station Planning and Design Principles:

- Make the station area easy to find.
- Connect to pedestrian, ADA, bicycle, and bus routes.
- Design a welcoming station area.
- Maintain a safe, attractive environment.
- Provide access to other modes of transit.
- Give the station area character.
- Design for the future.
MAKE THE STATION AREA EASY TO FIND
VISIBLE STATION ENTRANCE

- Metro stations must be easy to find for both first-time and everyday subway travelers.
- The station site should be visible from the street, with entrances and exits oriented to primary streets, pathways and/or public spaces.
- Signage, defining lighting, landscaping, and/or public art should accentuate key pathways to station entrance.
- Paving materials with a varied colors and textures help to distinguish it as a transit place.

*Special paving at station entrance area would make it easy to see.*

*Copenhagen, Denmark station entrance is unmarked, with no signage to inform travelers of entrance.*
MAKE THE STATION AREA EASY TO FIND
THE METRO “LOOK”

• Signage should use Metro language and graphics to maintain a sense of “brand” along the Westside Subway Extension and greater LA Metro system.
• Color schemes and fonts for signs should be consistent throughout the Westside Subway Extension.
• Graphics for amenities such as elevators, stairs, etc., should use universal design to communicate beyond language barriers for non-english speaking travelers.
• Station areas should use unified signage and/or the Metro pylon to announce the location.
• Pylon and signage should be located in plain view from primary street intersection(s), and/or pathway(s).
• Pylon and signage should not interfere with flow of pedestrian traffic.
• The station name should be clearly visible, using a font size and typeface that is easy to read for pedestrians approaching station.
• Larger signs to direct autos, buses, and bikes with bigger fonts should be placed around key streets and pathways approaching station.
CONNECT TO PEDESTRIAN ROUTES ADA, BICYCLE + BUS
ORIENTATION OF STATION PORTAL

- Station entrances or “portals” should face the primary street, intersection and/or destination they serve, including iconic or historic buildings.
- Pedestrian entrances should be oriented to the street and connect to crosswalks and bus connections, where possible.
- Auto drop-off and truck loading should be placed on side streets or alleys so as not to impede pedestrian or bus connections.

Portal orientation is important in designing station entrances, especially near iconic buildings such as theatres, museums, churches, etc.

Station portal in Navy Yard Area in Washington, D.C. is oriented toward the main street and intersection for easy pedestrian orientation.
CONNECT TO PEDESTRIAN ROUTES ADA, BICYCLE + BUS
CREATE PATHS WITH LANDSCAPE, ART & LIGHTING,

- Landscaping, lighting, special paving, design, and/or art can be used to guide the user through the station area to destinations.

Well maintained landscaping and amenities.

Station lighting.
CONNECT TO PEDESTRIAN ROUTES

ADA, BICYCLE + BUS

TORTI GALLAS AND PARTNERS, INC.
**DIRECTIONAL SIGNAGE**

- Station sites should provide signage that orients the customers around the station to entrance, exits, elevators, and escalators.
- Signage should direct travelers to additional transportation linkages (bus, bike, shuttle, etc).

*PATCO System, Philadelphia, PA*

*Downtown LA*
Bienvenidos!

Bienvenue!

سلام

Prívets

שלום

안녕하세요

Design A

Welcoming Station Area

Metro
INFORMATIONAL SIGNAGE

- Signage should orient the traveler around the neighborhood/district.
- Map should identify station area, key streets and major points of interest to traveler such as institutions, museums, business centers, theaters, universities, shopping districts, historic buildings, etc.
- Information kiosks can present the history of the area, and offer brochures to local attractions.
WELCOMING

STATION AREA

Bienvenidos! Bienvenue!
سلام  שלום
안녕하세요
Приветс
GROUND FLOOR TRANSPARENCY/ACTIVITY

• The ground floor of development at station areas should be highly transparent (e.g. using large and/or frequent windows, doors, and/or glass walls to see in and out), providing visual interest to the pedestrian.

• Retail and other active uses (such as restaurants and cafes) that attract and/or employ a critical mass of potential transit riders, should occupy ground floor space.

• Tenants and occupants of ground floor space at station areas should host a 24-hour level of activity, collectively, to activate the station area and maintain “eyes on the street” for safety.

• Awnings and pedestrian-scale signage are encouraged to create a lively, welcoming street front.
Bienvenidos!Bienvenue!שלוםPrivetsسلامBienvenidos!שלום안녕하세요안녕하세요WELCOMING
STATION AREA
TOOL

**QUEUING AREA**

- Queuing areas should be large enough to accommodate station foot traffic without creating safety concerns and concentrating customers into uncomfortable claustrophobic spaces.

Consolação Station: Sau Paulo, Brazil. Queuing area does not affect station entrance with perpendicular entrance.

Queuing area is integrated into pathway for easy navigation at Netherlands Transit Station.
DESIGN A

WELCOMING STATION AREA
WAITING AREA/PUBLIC PLAZA

- Waiting areas and plazas should be visible from the street, open, shaded, and provide places to sit.
- Waiting areas can be programmed with public art, community festivals, farmers markets, etc. to create inviting spaces.

Shade and street furniture allow for a gathering place at transit stations.

Public art is incorporated street furniture and landscaping.
DESIGN A WELCOMING STATION AREA
STATION AMENITIES

• Amenities should complement the neighborhood and provide an inviting space for transit customers to gather, wait, or transition to their next location.
• Street furniture and wireless internet access encourage people to visit areas around stations. Wireless internet access is appropriate at the denser, busier stations.
• Street furniture should be designed to withstand the elements, resist vandalism and be easy to maintain.
• All station sites should provide pedestrian lighting, shade, trash and recycling receptacles.
• Vendors, newspaper stands, and kiosks are encouraged to activate the spaces.

Movable chairs and tables in a parking space used as a public gathering space.

Station sites should use recycling bins. Internet access invites patrons to stay and visit.
DESIGN A WELCOMING STATION AREA
FOOD AND DRINK (VENDORS)

- Vendors can transform a transition space into a gathering/social space by providing food, drink, newspapers, etc.
- Coffee, foods, newspaper and magazine kiosks are encouraged since they provide quick, convenient refreshments to travelers.
- Vendors should work with nearby businesses to support the local economy.
- Vendors should not occupy primary paths to station entrances and exits.
DESIGN A WELCOMING STATION AREA

Bienvenidos! Приветс Bienvenue! ترحاب Bienvenidos! سلام 안녕하세요
SHADE

• Public spaces should be light, airy, and shaded so that transit users are protected from the sun, rain, and wind.
• Moveable shade devices, such as umbrellas are convenient for station plaza in major urban centers where people may want to eat lunch outside.
• Awnings, trees, and overhangs provide shade for shoppers and restaurant/cafe patrons along primary streets.
• Shading is important all year round in Los Angeles due to warm temperatures.

Luo-hu, Shenzhen, China

Sun screens, overhangs, and canopies provide shade in public spaces.
DESIGN A SAFE AND ATTRACTIVE ENVIRONMENT
NATURAL SURVEILLANCE

- Station entrances should be designed with windows, large openings, and/or transparent walls to allow transit users to see in and out of the station.
- Transparency allows for “eyes on the street” creating a natural area for observation, making the user feel safer.
- Stations should integrate easily into the street grid and/or pedestrian circulation flow, and be ADA accessible.
- Small, secluded spaces blocked by tall walls and hedges are not recommended.

London, UK

Oporto, Portugal
DESIGN A SAFE AND ATTRACTIVE ENVIRONMENT
LIGHTING

- Stations should be well-lit to allow users to navigate the area, read signage, and move safely.
- Pedestrian-scale lighting can and should be used to light pathways, entrances, and public plazas - designed for safety, as well as beauty.
- Lighting schemes should use energy efficient systems when possible.

Hollywood/Highland Station has well lit platform and concourse level.
DESIGN A SAFE AND ATTRACTIVE ENVIRONMENT

Torti Gallas and Partners, Inc.
TOOL

LANDSCAPING

- Landscaping should be designed to fit with the context of the nearby area to contribute to its character and aesthetic quality.
- Plants, trees, planters, and hedges should not block views to stations.
- Landscaping should use xeriscaping techniques and/or drought-tolerant plants, as well as attempt to address stormwater management using permeable surfaces and vegetation to absorb and clean runoff where possible.

Canary Wharf, London, UK

Planters can help define pathways and separate public routes from private space.
DESIGN A SAFE AND ATTRACTIVE ENVIRONMENT
MAINTENANCE

- Maintenance is essential to offering travelers a quality travel environment.
- Stations should be well-maintained to ensure that lighting, landscaping, ticket equipment, vendors, elevators, escalators are functioning.
- Stations should be designed to withstand the elements and vandalism so as to be easily cleaned and serviced to remain attractive places through which to travel, wait, and gather.
- When designing stations, use materials to ensure ease of maintenance.

Transit repair station.

Landscaping sketch presents green plan; maintenance however will ensure that green space is inviting and consistent.
PROVIDE ACCESS TO OTHER MODES OF TRANSIT
CROSSWALKS

- Crosswalks should be clearly delineated at intersections surrounding transit station. A distinguishing paving material and/or paint help to differentiate crosswalk from roadway.
- Bulbouts and/or sidewalk extensions to shorten crossing distances for pedestrian may be appropriate at major urban centers.
- Scramble crosswalks reduce the number of crossing for pedestrians and improve circulation, while reducing auto/pedestrian interference.
- Crosswalks should be ADA accessible.
PROVIDE ACCESS TO OTHER

MODES OF TRANSIT
RELOCATION OF BUS/SHUTTLE STOPS

- Station sites should be designed to link easily to buses and shuttles.
- Bus or shuttle routes and stops should be moved near stations to allow for convenient transfers.
- Bike paths should be re-routed to connect to station sites.
- Live updates showing when the next bus will be available are helpful to transit user at bus and shuttle stops.

Preferred Design (above): Bus stop is moved to directly connect to Metro station with use of crosswalk. Metro station site is moved to corner of intersection to better access street grid.

Undesirable (above): Bus stop is not directly connected to station area. Station entrance is located mid-block, rather than at intersection.
PROVIDE ACCESS TO OTHER

MODES OF TRANSIT
BICYCLE FACILITIES

- Station areas should provide convenient and protected bike amenities including bike racks, lockers, bike ramps or elevators, and bike showers where possible.
- Public bike rentals and bike share programs should be considered to connect travelers to destinations that are within the area, but beyond a comfortable walking distance.
- Station design should use crosswalks, bike boxes at intersections, and bike path extensions to connect to major bike trails and pathways in area.

Community Bike program, Rome, Italy.

Bike lockers, Taipei

Bike Station, Long Beach, CA
PROVIDE ACCESS TO OTHER MODES OF TRANSIT
CAR-SHARE PARKING AREAS

- Car-share (e.g. Flexcar and Zipcar) should be given priority on-street parking spaces adjacent to stations to encourage “auto independency” (use of carshare to complement mass transit in lieu of auto dependency.)
- Shared vehicles should receive priority parking in parking garages near stations to encourage reduced auto-dependency.

Flex car priority street parking, Portland.  Car share program, Philadelphia.  Melbourne, Australia car share program.
PROVIDE ACCESS TO OTHER MODES OF TRANSIT
**CONNECT TO TAXIS AND SHUTTLES**

- In major entertainment/employment, and tourist centers, station sites should incorporate space for an adjacent taxi queue.
- Taxis and shuttles can be used to fill in “gaps” between major stops throughout the greater LA network, not yet serviced by mass transit to increase mobility and allow for greater auto independency.

_Budapest Airport Station with taxi queue._

_Shuttle connect university to train station in UK._

_DASH Shuttle connects Red Line Station to Griffith Park in Los Feliz._
ENHANCE THE NEIGHBORHOOD AESTHETIC

- Stations should be designed to complement and/or enhance the culture, history, geography, and aesthetics of an area.
- Station design should help define the area, acting as a “place” in itself, rather than a pass-through portal.
- Materials, massing, color, form, and texture of the station should all be easy to maintain and complement the surrounding neighborhood context while being consistent with Metro “look.”

Glass entrance in London, celebrating the coming of the 2012 Olympic games.

Canopy in Paris fits the local aesthetic.

Mural in Stockholm station showcases Swedish stencil patterns.
GIVE THE STATION CHARACTER
PRESERVE CULTURAL RESOURCES

- Station design should attempt to protect, renovate, and preserve cultural resources such as historic buildings, plazas, trees, etc.
- Incorporating historic structures into station entrances can enhance the station design and help the station serve as a real “place” to the community.

Copley Station, Boston, MA

Chicago, Illinois

Los Angeles, CA
GIVE THE STATION CHARACTER
TOOL

PUBLIC ART

• Public art is an opportunity to enhance the character of the station, as well as the neighborhood.
• Artists are encouraged to think of the station places as active spaces of movement that bring people to the next desired destination.
• Concourses, platforms, and plazas may act as artist galleries with rotating or permanent displays.
• Design competitions can be used to involve renowned artists in station design, bringing clout to the neighborhood and district.

Station as Art in Spain.

Station as Art in Portugal.
GIVE
THE STATION
CHARACTER
INNOVATIVE MATERIALS AND FINISHES

- The exterior and interior materials and finishes of the stations should be innovative to arrive at superior energy efficiency.
- Consider materials, paints, and finishes that eliminate indoor air contaminants.
- Windows, doors, and vents can be used to improve air flow.
- Skylights can be used to bring natural light to stations.
- All construction materials should be renewable, recyclable, and/or low energy intensity, as well as easy to maintain against weathering and vandalism.
- Lighting, heat, AC, water and other utilities should have energy efficient elements and run off non-polluting fuels - such as wind and solar power.

Blaak Station, Rotterdam, Netherlands

Yokohama Port Terminal, Japan
FOR THE FUTURE
KNOCK OUT PANELS (KOP)

- Design knock out panels at concourse level of the underground station box to allow for second entrance in future when ridership grows.
- Knock out panel should connect to empty development space for a portal entry and stairs.

Knock out panel should be placed in the station during the design process to allow opportunities for future station connections and expansions.
DESIGN FOR THE FUTURE
SUSTAINABLE, HIGH QUALITY, DURABLE MATERIALS

• Construction materials, energy systems, and amenities should be designed to last (withstand weathering and vandalism).
• Energy systems should be designed to conserve energy, as well as use and/or adapt to use renewable resources (such as wind and solar power).
• Construction and design should consider solar orientation, stormwater management, pollution reduction, and mitigation of the urban heat island effect.
• Education and maintenance are essential for achieving the maximum conservation of energy when using innovative systems and materials.

Solar panel roof generates energy and provides shade.
Permeable paver reduces stormwater runoff.
ADD NEW TOOLS TO THE TOOLKIT