

Standard for TfL products

MAYOR OF LONDON

Transport for London



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Foreword

With over 11 million passengers every day, Transport for London runs one of the busiest and most complex transport systems in the world.

A well designed, confident and consistent visual identity is highly effective in communicating the strengths of our organisation. It is essential that Transport for London (TfL) maintains a high standard for co-ordinated design in every aspect of our operations.

Originally published in 1999 to detail approved products, this document has been significantly revised to reflect the new structure of TfL.

I would like to thank key stake-holders from each of the modes who have contributed to the production of this document. Its content and structure have been influenced directly by their experiences and insights.

I hope that you will find the revised document relevant and engaging.

Nigel Marson
TfL Group Marketing Director

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1.1 | Interchange totem

The interchange totem provides Transport for London (TfL) with an authoritative street presence for its modern interchange facilities.

The totem encompasses the future aspirations of London's public transport system. It communicates a strong corporate message in a calm and contemporary design.

To suit specific sites without altering the overall design of the totem, the facing panel can be changed to include, for example, bus, Docklands Light Railway (DLR) and national rail logos. An agreed hierarchy of logos can be found in the specific design standard for interchange signage.

The curved profiles and stove enamel finish are self-cleaning and resistant to vandalism and wear and tear. The totems are constructed from aluminium and stainless steel. They are internally illuminated and lamp replacement is quick and convenient. Installation to the ground or walls is straightforward.

Electricity and lamp replacement costs are low. Built-in component compatibility ensures low maintenance via secured access points. The totem has no horizontal surfaces within reach, which discourages litter and prevents the concealment of suspect packages.



1.2 | Triple-sided totem

The triple-sided totem provides TfL with a more authoritative street presence for its modern interchange facilities.

The totem encompasses the future aspirations of London's public transport system. It communicates a strong corporate message in a calm and contemporary design.

To suit specific sites, without altering the overall design of the totem, the facing panel can be changed to include, for example, bus, Docklands Light Railway (DLR) and national rail logos. An agreed hierarchy of logos can be found in the specific design standard for interchange signage.

The curved profiles and stove enamel finish are self-cleaning and resistant to vandalism and wear and tear. The totems are constructed from aluminium and stainless steel. They are internally illuminated and lamp replacement is quick and convenient. Installation to the ground or walls is straightforward.

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1.3 | Wall-mounted totem

Wall-mounted signage aims to identify various TfL stations at street level. Its design is intended to support customer perceptions of a modern service.

Its appearance is compliant with TfL station sign guidelines.

While colours must comply with TfL guidelines, the size can be tailored to suit the message and the site. Signs should be positioned in a clear line of sight.

The aluminium frame and pressed aluminium panels are self-cleaning and require little maintenance. Site assembly and installation are straightforward, and minimum repair is required after removal.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



1.4 | Exterior roundel (wall)

Designed specifically for prestige sites, this wall-mounted variation of the exterior roundel clearly communicates the TfL corporate identity and helps customers locate station entrances. Other options for the exterior roundel exist, including soffit and gantry mounted.

The roundels are internally illuminated and lamp replacement is quick and convenient via secured access points. The unit has component compatibility with other exterior roundel designs and is constructed from cast and sheet aluminium and polycarbonate.

The exterior roundel has clear sight lines, which discourage the concealment of suspect packages. Installation is straightforward and spare parts are readily available.



1.5 | Exterior roundel (ground)

Designed specifically for prestige sites, this ground-mounted variation of the exterior roundel clearly communicates the TfL corporate identity and helps customers locate station entrances.

The unit is powder-coated in the silver and bronze colours from the standard TfL palette. This colour standard aims to limit variation and give consistency across all products.

All roundels are constructed from cast and sheet aluminium and polycarbonate. The roundel is internally illuminated and lamp replacement via secured access is quick and convenient.

The exterior roundel has no horizontal surfaces accessible from the ground, discouraging litter and preventing the concealment of suspect packages. Installation is straightforward and spare parts are readily available.



1.6 | Taxi pole

Designed specifically for taxi ranks, this ground-mounted pole and lozenge clearly communicates the Public Carriage Office (PCO) and TfL corporate identity and helps customers locate ranks.

The unit is constructed from an anti-graffiti finished stainless steel pole with cast lozenge frame and canopy, which displays the PCO roundel and taxi logo using colours from the standard TfL palette. This colour standard aims to limit variation and give consistency across all products.

All taxi stops are constructed from stainless steel and cast aluminium. The roundel is internally illuminated with lights powered by Photo Voltaic (PV) solar panels mounted on the top canopy. Energy is stored in rechargeable batteries housed within the pole. Replacement via secured access is quick and convenient.

The taxi stop has no horizontal surfaces accessible from the ground, discouraging litter and preventing the concealment of suspect packages. Installation is straightforward and spare parts are readily available.



1.7 | Bus stop

Designed specifically for all bus stopping points, this ground-mounted flag pole clearly communicates London Buses' and TfL's corporate identity and helps customers locate stopping points.

The unit is constructed from an extruded aluminium pole with vitreous enamelled bus flag using colours from the standard TfL palette. This colour standard aims to limit variations and give consistency across all products.

All bus stops are constructed from satin anodised aluminium, stainless steel fabrications, injection moulded polycarbonates, aggregate cast concrete base, toughened clear glass and steel components finished in neutral silver and dark grey. The roundel is externally illuminated with LED lamp powered by solar PV panels on the top and with rechargeable batteries. Replacement via secured access is quick and convenient.

The bus stop has no horizontal surfaces accessible from the ground, discouraging litter and preventing the concealment of suspect packages. Installation is straightforward and spare parts are readily available.



1.8 | Platform roundel (passenger side)

The clarity of London Underground's (LU's) signage is as much part of the organisation's design heritage as the roundel itself. The colour contrast and bold graphic of the platform roundel provides operational and customer benefits helping passengers to quickly recognise their destination.

This rear illuminated Victoria line example is unique to the design of the line. Details of the roundel's exclusion zone and application are available in a specific design standard.

Platform roundels can be mounted on curved or flat surfaces and backlit for extra visibility. The Victoria line example is screen printed onto the rear of toughened glass. It is resistant to every-day wear and tear.



1.9 | Platform roundel (track side)

The clarity of LU's signage is as much part of the organisation's design heritage as the roundel itself. The striking colour contrast and bold graphic of the trackside roundel provides operational and customer benefits in aiding customers to quickly recognise their destination.

This design has changed little over the years but has continued to be refined as new material and processes become available. A specific design standard on signage is available.

Trackside roundels can be mounted on curved or flat surfaces. The durable vitreous enamel finish is self-cleaning, long-lasting and resistant to wear and tear.



1.10 | Signage system

The vitreous enamel-faced signing system is a modular design and uses TfL's corporate font, New Johnston. The system has great flexibility, allowing station designers and planners full scope to sign stations effectively.

The crisp lines, clear matrix and the striking contrast of the white background and dark blue text make it highly visible over distances. Only the yellow 'Way out' signs are internally illuminated.

A specific design standard on signage is available.

Virtually maintenance free, the system is self-cleaning and resistant to wear and tear. The frames are constructed from cast aluminium corners and extruded cut-lengths with internal hinges. Installation of ceilings or walls is straightforward. Site work is minimal and spare parts are readily available.

Ceiling-hung signs have joints to allow movement in windy environments. The lamps behind the 'Way out' signs will need to be inspected and replaced periodically.



1.11 | Directional information signage - wall-mounted

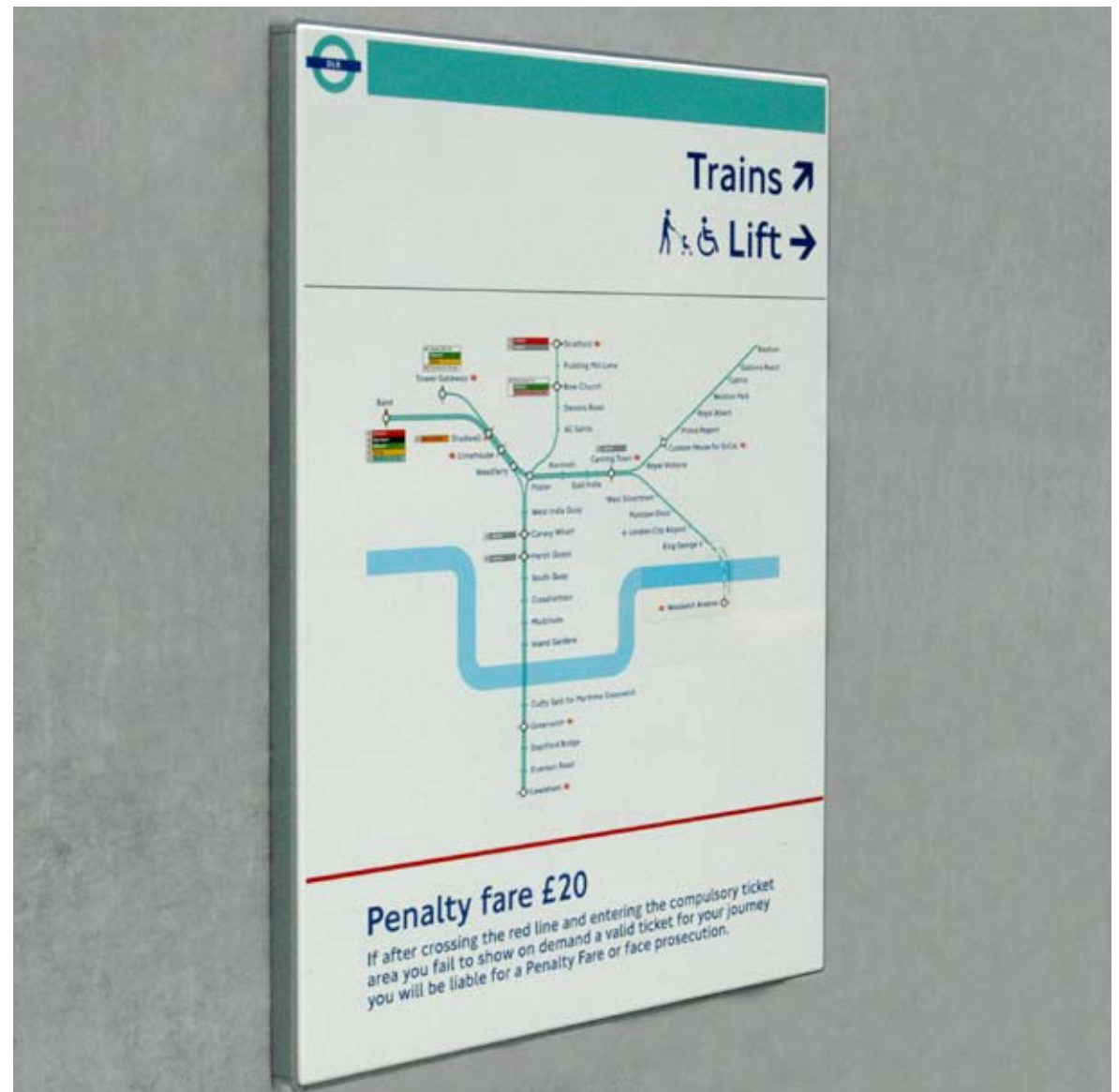
Standard for TfL products - Identification

Directional signage provides customers with both written and pictorial descriptions of station amenities and local features. Its appearance is compliant with TfL station sign guidelines, and provides the customer with consistency and value for money.

While colours must comply with TfL guidelines, the size can be tailored to suit the message and the site. Signs should be positioned in a clear line of sight and may be ceiling, wall or floor-mounted.

The aluminium frame and pressed aluminium panels are self-cleaning and require little maintenance. Site work is minimal and spare parts are readily available.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



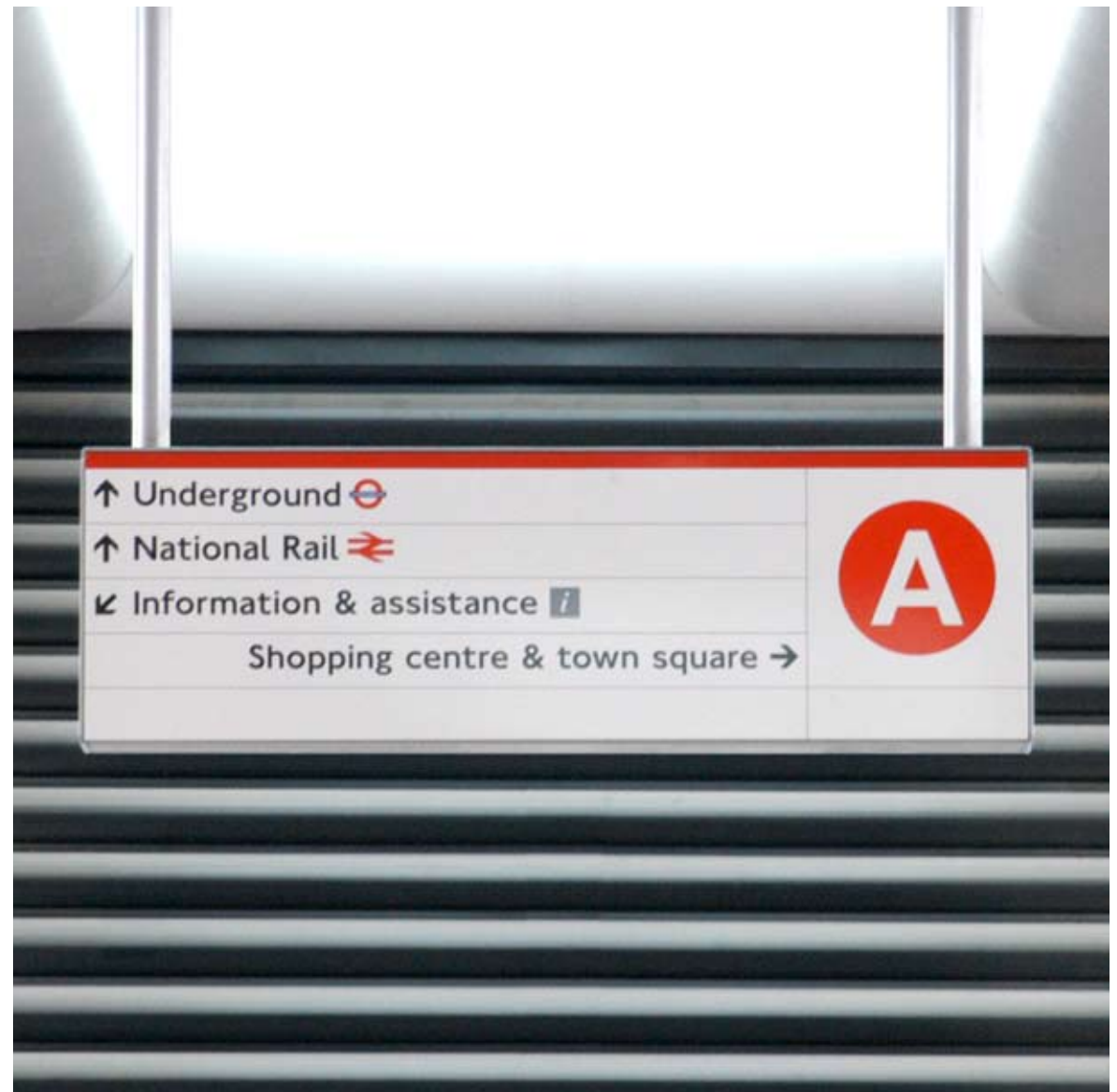
1.12 | Directional information signage - suspended

Directional signage provides customers with information on station amenities and local features in both written and pictogram form. Its appearance is compliant with TfL station sign guidelines, and provides the customer with consistency and value for money.

While colours must comply with TfL guidelines, the size can be tailored to suit the message and site. Signs should be positioned in a clear line of sight and may be ceiling, wall or floor-mounted.

The aluminium frame and pressed aluminium panels are self-cleaning and require little maintenance. Site work is minimal and spare parts are readily available.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



1.13 | Information way finding finger post

Information way finding finger posts provide customers with directions and descriptions of station amenities and local features in both written and pictogram form. Its appearance is compliant with TfL station sign guidelines, and provides the customer with consistency and value for money.

While colours must comply with TfL guidelines, the size can be tailored to suit the message and the site. Signs should be floor-mounted and positioned in a clear line of sight.

The aluminium extruded post can be finished with either stainless steel tube or polyester powder-coated mild steel. Pressed aluminium panels are self-cleaning and require little maintenance. Site work is minimal and spare parts are readily available.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



1.14 | Local signage

Local signage is designed to identify station amenities and local features and can be both pictorial and written.

The signs enable the customer to recognise their destination and offer clarity and a feeling of security by consistent use of the same system. If pictograms are used, they may have to adhere to British Standards (BS) and European Union (EU) regulations.

While colours must comply with TfL colour guidelines, the size can be tailored to suit the message and the site. Signs should be positioned in a clear line of sight.

The powder-coated and vitreous enamel panels are self-cleaning and require no maintenance.

This is a commercial solution, and selection must be considered in sympathy with the location and environment.



1.15 | Bus stopping point

The bus stopping point sign is designed to establish exactly where services arrive and depart from.

While colours must comply with TfL bus stop sign guidelines, the size can be tailored to suit the message and the site. Signs should be positioned in a clear line of sight, and may be wall, ceiling or floor-mounted. In listed properties and those of special architectural interest, consent is required prior to installation.

The powder-coated finished and extruded aluminium construction is self-cleaning and requires little or no maintenance. Site work is minimal and spare parts are readily available.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



1.16 | Vinyl signage - standard

These screen-printed, self-adhesive uPVC vinyl signs are particularly useful for providing effective signage in temporary situations and environments.

While colours must comply with TfL bus stop sign guidelines, the size can be tailored to suit the message and the site. Signs should be positioned in a clear line of sight. In listed properties and those of special architectural interest, consent is required prior to installation.

The sign is produced from UV stable, adhesive-backed vinyl. Images are printed onto the face prior to installation.

This is a commercial solution, and selection must be considered in sympathy with the location and environment.



1.17 | Vinyl signage - glass-mounted

Standard for TfL products - Identification

These screen-printed, self-adhesive uPVC vinyl signs are particularly useful for providing effective signage in temporary situations and environments.

While colours must comply with TfL bus stop sign guidelines, the size can be tailored to suit the message and the site. Signs should be positioned in a clear line of sight. In listed properties and those of special architectural interest, consent is required prior to installation.

The sign is produced from UV stable, adhesive-backed vinyl. Images are printed onto the face prior to installation.

This is a commercial solution, and selection must be considered in sympathy with the location and environment.



2.0 Customer information

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- 2.9 Free-standing whiteboard

2.1 | Digital clock

Clocks can be either digital or analogue and are designed to be a deliberate point of calm within station environments. Clean modern lines reflect the aspirations of TfL for its clocks are to be an icon of time-management and efficiency.

The strong colour contrast and height of the digits affords clarity over a long distance - a ratio of one metre per 2mm height of digit (ie a 100mm digit can be seen 50 metres away). Due to the transfective quality of the LCD characters, their image is intensified in direct sunlight.

In some prestige or listed stations, it may be desirable to maintain or refurbish existing analogue clocks.

The clock is constructed from cast aluminium and non-reflective, safety glass and is enclosed in an IP65 protective case to prevent dust and liquids from entering. The LCD digits were chosen for their proven long life and minimal maintenance.

Installation is straightforward and minimal repair is required after removal. The clock's powder-coated surfaces are self-cleaning and resistant to wear and tear.



2.2 | Analogue clock

Clocks can be either digital or analogue and are designed to be a deliberate point of calm within station environments. Clean modern lines reflect the aspirations of TfL for its clocks are to be an icon of time-management and efficiency.

All colours, finishes and materials are to conform to TfL standards. The clock frame and digits are to be of a size that is legible from a distance of at least 30 metres, and have a very high level of contrast. The clock can be fitted to either the walls or ceiling inside buildings and in open areas to the ground or outside walls.

Installation is straightforward and minimum repair is required after removal.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



2.3 | Countdown

The Countdown display is designed to provide accurate bus arrival time and destination information. It enables customers to select the best method or route for their journey, promoting customer confidence.

Countdown units are a standard size, but a smaller slim line design has been created for use on narrow roof bus shelters. They should be fitted in prominent locations.

On installation, site work should be minimal. The sign is single-faced and is constructed from aluminium sheet, polycarbonate and LED electronics. All mechanical maintenance is to be carried out by the LBSL Technical Service Group (TSG) contractors.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



2.4 | Ticket office LED sign

Situated above and within the ticket windows, these high-visibility LED signs indicate which services are available and enable customers to decide which window to approach.

LED matrix signs are easy to clean and resistant to wear and tear. The font is a close replica of TfL's corporate font, New Johnston. LEDs were chosen for their long lives and trouble-free workings, and further LU's commitment to digital technology.

The design will fit into any standard Underground Ticketing System (UTS) suite window frame.

Station staff can select text from one of six preset messages by switching a control on the rear of the unit.

The LED signs are constructed from sheet aluminium and safety glass. Electrical running costs are low and built-in component compatibility ensures reliability and low maintenance.



2.5 | Free-standing poster frame unit

The integrated poster unit provides a focused and cost-effective point for travel information. Paper posters are contained in a clean, simple non-intrusive aluminium frame, which can be replaced independently of the supporting unit. The unit can be manufactured to any length to suit the quantity of poster frames required.

The design uses the same specification of support and base casting as the confectionery machine and free-standing telephone housing.

The unit was designed as a pragmatic and economic solution to address the need for a standard free-standing unit. They are constructed from sheet and angle steel and cast aluminium. The powder-coated surfaces are self-cleaning and resistant to wear and tear.

Component compatibility ensures low maintenance and the lack of flat horizontal surfaces discourages litter and concealment of suspect packages. Installation is straightforward and the site requires little repair after removal.



2.6 | Poster frame

These standard-sized, glass-fronted individual poster frames provide a secure unit for TfL travel information and publicity. The frames have modern, clean lines and no protrusions or sharp corners.

The majority of frames are made to TfL's standard Double Royal and Quad Royal sizes. Other standard and special sizes are available.

The poster frames are constructed from aluminium extrusions with 4mm safety glass fronts. The glass and powder-coated surfaces are self-cleaning and resistant to wear and tear. Access is via secured access points. A lack of significant horizontal surfaces discourages litter and concealment of suspect packages.

Installation is straightforward and little repair is required after removal.



2.7 | Information timetable display

Timetable information is vital to journey planning and promotes the feeling of a well-managed service. The pragmatic and economic design of the timetable panel clearly presents customers with detailed travel information.

Frames can be produced in standard sizes to suit their applications. The powder-coated aluminium frames are self-cleaning. However, attention should be given to the toughened glass, locks and hinges. Wall-mounted frames should be securely fixed to clean, flat surfaces, or pole-mounted.

Component compatibility ensures low maintenance and the lack of flat horizontal surfaces discourages litter and concealment of suspect packages. Installation is straightforward and the site requires little repair after removal.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



2.8 | Leaflet rack

This award-winning design is an adjustable display system for holding customer leaflets. The dividers have no bases and so litter cannot clog the unit when temporarily empty.

The ergonomic design and height within the poster frame allows wheelchair users and children to take a leaflet. The units can be retro-fitted to previously installed LU standard poster frames and, in non-LU applications, can be wall-mounted independently of frames

The leaflet rack is constructed from cast aluminium with extruded supporting brackets. The powder-coated surfaces are self-cleaning and resistant to wear and tear.

Units that are mechanically attached to the poster frames require no making good. The design provides clear sight lines and litter or suspect packages cannot be concealed.



2.9 | Free-standing whiteboard

Free-standing whiteboards can be positioned wherever required. They are only used to provide essential real-time travel information to keep customers informed of operational changes that may interrupt their travel plans.

The reverse of the unit may have the same information details as the front, different information or a TfL publicity poster. When not required, the free-standing whiteboards are to be removed from the flow of customers and the information wiped clean.

Free-standing whiteboards are constructed from aluminium extrusions, laminated VE face panels and a fabricated mild steel base.

The white, laminated panel can be written on using appropriate pens, or a poster can be fixed to the top and bottom using built-in clips. Their ergonomic design and manoeuvrability enable them to be easily moved, and they will pass through standard height door frames.

The design provides clear sight lines and litter or suspect packages cannot be concealed. Apart from the face panels all surfaces are powder-coated and are resistant to wear and tear.



3.0 Gateline and ticketing equipment

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- 3.1 Gateline attendant's point
- 3.2 Underground Ticketing System (UTS) gate
- 3.3 Manual gate and fixed barrier
- 3.4 Roadside ticket machine

3.1 | Gateline attendant's point

The open and welcoming design of the gateline attendant's point actively encourages public interaction. Large convex windows provide TfL staff with near all-round vision, while the size of the windows make them a focal point for customers.

The unit also acts as a storage facility for customer leaflets and staff equipment. The ergonomic design, co-ordinated colour and consistent detailing blends well with the gateline barrier system.

The attendant's point is constructed from stainless steel, aluminium and curved safety glass. Surfaces are self-cleaning and resistant to wear and tear. Comfort features such as heating, ventilation and an ergonomically-designed seat have been included.

The design provides clear sight lines so litter and suspect packages cannot be concealed.



3.2 | Underground Ticketing System (UTS) gate

Standard for TfL products - Gateline and ticketing equipment

The electrically-operated Mk2 gates are a more compact design than the previous air-operated Mk1 gates. Their smooth operation provides a gentle, but secure, transition from the unpaid to paid sides of the network.

An indication of the success of the design is that the range has been supplied by the manufacturer to other rail systems.

The gates are constructed predominantly from stainless steel, which is self-cleaning and resistant to wear and tear. It is not coated or painted which prolongs the gate's appearance. Other parts, including the signage headpiece, are powder-coated. The vertical paddles and floor kick plates are finished in a rubber compound similar to that of the train car interiors.

The design provides clear sight lines and means litter or suspect packages cannot be concealed. Access points for maintenance are discreet and secure.



3.3 | Manual gate and fixed barrier

The manual gate and fixed barriers are part of the UTS suite of gateline equipment.

The manual gate is to help customers with pushchairs, awkward luggage or wheelchair users to pass onto the network more easily. The gate will take the widths of most objects and there is a second, slimmer gate which can be opened for greater accessibility.

The fixed barrier (not shown) is a very similar design but without a hinge arrangement and has a white TfL roundel on a blue background instead of a pictogram.

The manual gates and fixed barriers are constructed from stainless steel and safety glass. All surfaces are self-cleaning and resistant to wear and tear. The stainless steel is not coated or painted, which helps to prolong its appearance.

All electrics are sunk into the floor, or are carried in cableways at the bottom of the fixed barrier. Maintenance is via secure access points and component compatibility ensures that spare parts are readily available.

On plans, dotted lines represent the version of the manual gate which includes a luggage chute.



3.4 | Roadside Ticket Machine (RTM)

Standard for TfL products - Gateline and ticketing equipment

The Roadside Ticket Machine (RTM) is designed to give bus passengers the facility to purchase single journey and day pass tickets using cash.

The cabinet is visually integrated and compliments the existing range of associated London Buses infrastructure items. Access to the main enclosure is via two security locks positioned on the right-hand side, which enables the entire front panel hinge to open.

The design incorporates natural-finished materials including stainless steel, lacquered polyester, powder-coated stainless steel fabrication, a polyethylene moulded header and compression-moulded recycled PVC base. Materials and finishes are durable, easy to maintain and resistant to vandalism, with all parts being interchangeable.

The design minimises the amount of excavation required for foundations, so as to avoid underground services, cellars and shallow pavements on bridges.

The RTM has no gaps and horizontal surfaces which discourage the deposit of litter and the concealment of suspect packages.



4.1 | Help point

Ever since its first installation the Help point has proved to be a significant security asset. Its presence has helped to cut crime, providing customers with a greater sense of safety.

The unit has three functions: fire alarm, emergency and information. Operating any of the functions activates a CCTV system to provide greater security and a reference to operations staff.

The vitreous enamel surface is self-cleaning and very resistant to wear and tear. Minimal maintenance is necessary and is via a secure access point. The elimination of gaps and horizontal surfaces discourages litter and the concealment of suspect packages.

Installation in prominent locations on walls, or on a base fixed to the ground, is straightforward and removal requires very little repair.

Every Help point must be signed above and monitored by a CCTV system.



4.2 | CCTV cameras

The provision of CCTV equipment gives customers a greater feeling of security and well-being.

The design of each CCTV installation may vary in accordance with specific locations, but should always be robust in construction. A degree of flexibility in the application of cameras is permissible (ie mounting on walls, ceilings or posts). If the cameras are to be installed at listed or heritage sites, heritage groups should be consulted prior to work commencing.

No mechanical maintenance is required. All parts are to be secure and to be removed by a professional contractor only. Site work on installation is minimal and all cabling is to be fully integrated.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



4.3 | PA speakers

Clear, concise and audible travel information is provided to customers through PA speakers and are not to be used for commercial purposes.

Acoustic requirements are of primary concern when choosing a location for installation, provided that the final speaker placement is sympathetic to the environment.

All installation and maintenance is to be carried out by expert contractors.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



4.4 | One Person Operation (OPO) equipment

The console enables the driver to confirm the position of customers along the length of the train. The unit is ergonomically designed to give the seated driver a view via a mirror and monitors. Operational benefits include helping to reduce train dwell times. The unit is part of the One Person Operation (OPO) system, developed as an interim solution prior to the introduction of in-cab CCTV.

The design photographed is the two-monitor, below-ground version. There are also four and six-monitor, below-ground versions and over-ground versions of all three different configurations.

The powder-coated surfaces are self-cleaning and resistant to wear and tear. The unit has the same design language as many other products developed by TfL.



4.5 | Platform end barrier

The platform end barrier is an authoritative, high-visibility divider that warns passengers of danger and prevents idle trespass. Health and Safety pictograms and TfL corporate text are printed onto the gated panels.

They are consistent to all LU stations and other rail networks have shown an interest in specifying the design.

The design is robustly constructed from tubular steel and mesh. The vitreous enamel and powder-coated surfaces are resistant to wear and tear. Installation is straightforward and requires minimum pre-site work.

A lack of significant horizontal surfaces discourages the deposit of litter and concealment of suspect packages. The mesh panels provide both a lightness of touch and prevent anything from being hidden behind the barriers.



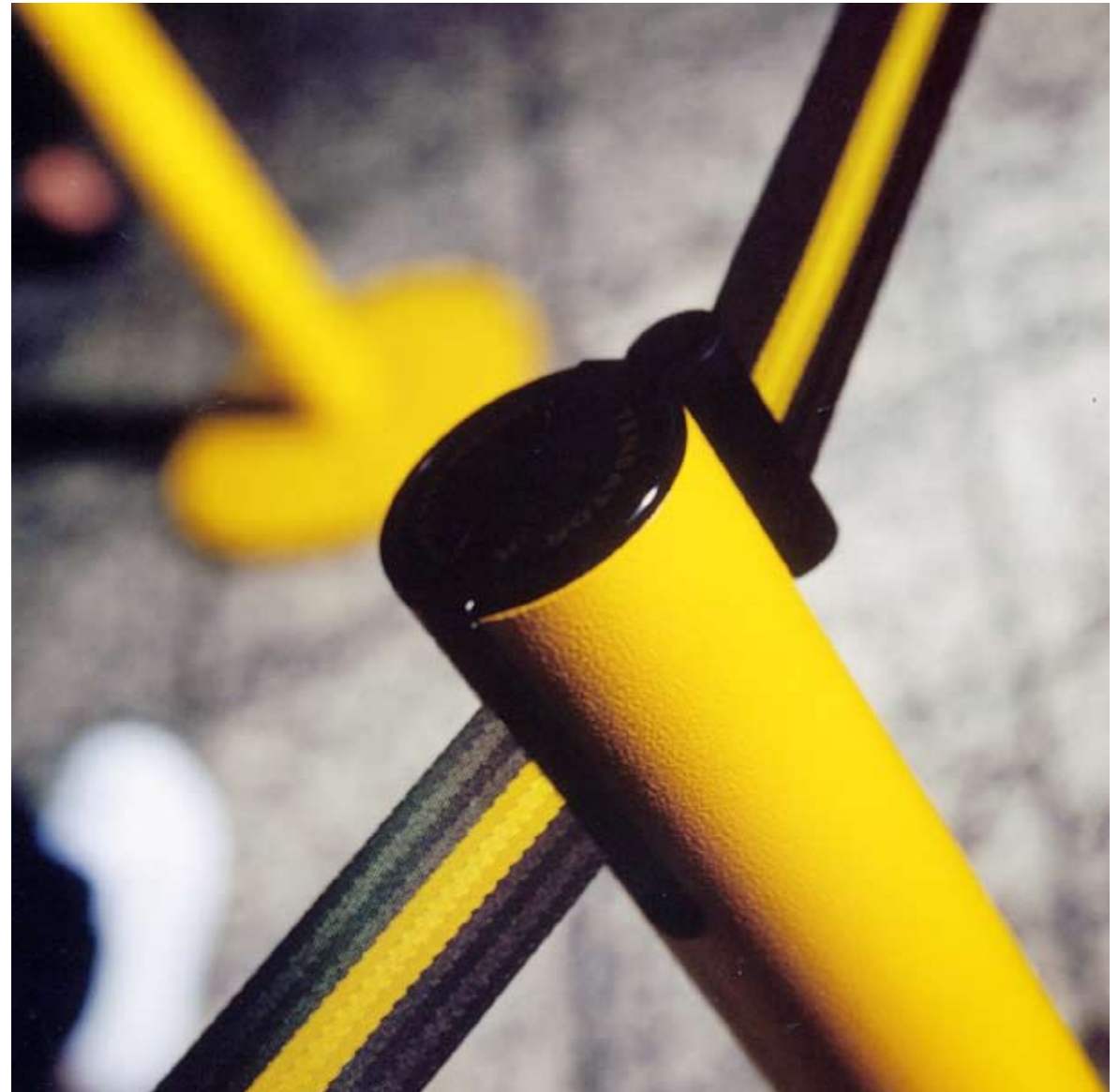
4.6 | Temporary barrier

The temporary barrier is a highly flexible and efficient people management system that can also help warn customers of hazards or restricted areas.

The spring-loaded webbing pulls out of the hub and can be connected to another post or wall bracket. The system can be arranged by one person into multiple combinations.

The temporary barrier should be stored in a non-customer area when not in use. TfL uses a standard off-the-shelf product for reasons of availability, cost and maintenance.

This style of barrier has been specified in safety yellow to be highly visible and requires neither site work nor repair. The clear lines and lack of significant horizontal surfaces discourage the build up of litter, and prevents concealment of suspect packages.



4.7 | Barriers - internal

Barriers are designed to be in sympathy with the architecture of the surrounding environment with clean and simple details, and no visible fixings or sharp edges. Wall-mounted barriers should return at the ends.

The barriers should be round or oval and at least 45mm in section. Their colour should contrast with the surrounding environment. When used in sites of special architectural interest, prior consent is required before installation.

A steel rail with a damage resistant coating is used instead of stainless steel. It is self-cleaning and resistant to wear and tear. Installation is straightforward and, upon removal, the site requires little repair. A lack of flat, horizontal surfaces discourages litter and concealment of suspect packages.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



4.8 | Barriers - external

Barriers are designed to be in sympathy with the architecture of the surrounding environment with clean and simple details, and no visible fixings or sharp edges. Wall-mounted barriers should return at the ends.

The barriers should be round or oval and at least 45mm in section. Their colour should contrast with the surrounding environment. When used in sites of special architectural interest, prior consent is required before installation.

A steel rail with a damage resistant coating is used instead of stainless steel. It is self-cleaning and resistant to wear and tear. Installation is straightforward and, upon removal, the site requires little repair. A lack of flat, horizontal surfaces discourages litter and concealment of suspect packages.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



4.9 | Bollards

Bollards are used to physically separate pedestrians and vehicular space. Their use can discourage vehicles from entering pedestrian spaces thus reducing the risk of injury and preventing damage to footway surfaces and street furniture.

Bollards should be a minimum height of 1,000mm and be cylindrical with a slightly domed top (with the exception of bell bollards). Diameter and fixing detail will depend upon material, safety and security requirements. These are specified in TfL's Streetscape Guidance document.

Bell bollards may occasionally be required where over running at side road junctions is a problem. In isolation, bell bollards present a trip hazard and so must only be used in conjunction with other street furniture (eg guard railing).

Where bollards are provided they should be finished in a manner that is consistent with existing street furniture, as recommended by the guidance document. The use of visibility bands may be required in areas of heavy pedestrian activity. Bollards which have security function must be fixed and specified in accordance with British Standards Institute (BSi) Publicly Available Specification (PAS) 68 and 69.

A number of traditional historic bollards exist on the Transport for London Road Network (TLRN), some of which are listed and should be retained. Formal risk assessments may be required for the provision and retention of bollards.



4.10 | Goodwin Cable Management System (CMS)

Standard for TfL products - Safety and security

The Goodwin CMS has curved steel profiles and clean lines which blend in with existing curved surfaces, ceilings and walls.

It is a product where the long-term operational benefits are significant. Because the cables are held within separate conduits, laying new cables and scheduled maintenance can be carried out with minimum disruption.

The luminaire unit is rated IP54 against the ingress of liquids and dust.

The Goodwin CMS is fabricated from sheet and angle steel. It is then powder-coated to be self-cleaning and resistant to wear and tear. The system is simple, robust and very flexible, allowing installation to take place with little impact on the station environment.

A lack of horizontal surfaces and gaps discourages the deposit of litter and concealment of suspect packages.



5.1 | Centro seating

Centro is designed for stations with narrow platforms. The design is economic, functional and ergonomic. All surfaces are perforated and the unit has a clearly visible support structure to prevent the concealment of suspect packages. The two outside arms are yellow to present a more visible unit for the visually impaired.

A standard unit has four seats. Units of differing lengths can be specified to suit operational and architectural requirements.

Centro is constructed from steel and is easy to install with minimum pre-site work on floors or walls. The powder-coated surfaces are resistant to day-to-day wear and tear. The arms and seat pans can be easily replaced on-site.

The cast end caps of Centro, Toro and Woodro are all branded with the corporate roundel.



5.2 | Toro seating

Toro is designed for 'cut and cover' stations with wide platforms. The design is economic, functional and ergonomic. All surfaces are perforated and the unit has a clearly visible support structure to prevent the concealment of suspect packages. The two outside arms are yellow to present a more visible unit for the visually impaired.

A standard unit has four seats. Units of differing lengths can be specified to suit operational and architectural requirements.

Toro is a standard product from an external supplier. LU has identified this seat as being attractive, economic solution which is fit for its function, with low maintenance costs.

Toro is constructed from steel and is easy to install with minimum pre-site work on floors or walls. The powder-coated surfaces are resistant to day-to-day wear and tear. The arms and seat pans can be easily replaced on-site.



5.3 | Woodro seating

Woodro is designed for use in suburban stations not affected by LU's material and fire regulations. The design is economic, functional and ergonomic. The unit provides clear sight lines and has a clearly visible support-structure which prevents the concealment of suspect packages. The two outside arms are yellow to present a more visible unit for the visually impaired.

A standard unit had four seats. Units of differing lengths can be specified to suit operational and architectural requirements.

Woodro is constructed from powder-coated steel and treated hardwood and is easy to install with minimum pre-site work on floors or walls. Arms and timber slates can be easily replaced on-site. All surfaces are self-cleaning and resistant to wear and tear. The timber seats will require periodic maintenance.



5.4 | Lean bar seating

The lean bar is a temporary seat to provide support to those customers who would prefer to perch, rather than sit, on a 450mm high seat. It is a valuable addition to, but no substitute for, platform seating. A standard four-seat unit must be found on all platforms where the lean bar is installed.

The lean bar is an economic, functional and ergonomic solution. It is manufactured using a standard off-the-shelf yacht mast extrusion with various different bracket profiles to suit different sizes and type of location. Its length can be cut to suit specific locations. The lack of small gaps and horizontal surfaces helps to prevent the concealment of suspect packages.

The design is easy to install with minimum pre-site work to walls. Visibility is enhanced by the strong colour contrast of the end cap detail. The anodized finish is self-cleaning and resistant to wear and tear. All parts are accessible for easy maintenance.



5.5 | Bicycle rack

Bicycle racks outside TfL stations help encourage people to cycle. Installing bicycle racks also meets the future aspirations of TfL in making the transition from bike to bus or train as convenient as possible. The rack also discourages the inappropriate chaining of bikes to street furniture, keeping station frontages and railings free from clutter.

Clear lines and the lack of horizontal surfaces discourage the build up of litter and prevent the concealment of suspect packages.

TfL use a standard, off-the-shelf product for reasons of cost, availability and low maintenance.

The bicycle rack is robustly manufactured from tubular stainless steel. Upon installation, it requires very little repair after removal. The surfaces are self-cleaning and very resistant to wear and tear.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



5.6 | Glazed wind-breaks

Windbreaks create an area of seclusion and provide customers with protection against the elements. They are designed to be sympathetic to their surrounding environment and have clean and simple details with no visible fixings.

The steel framework and glass panels should require no maintenance. Site work on installation is minimal.

Sites of architectural significance, or those that are listed properties, will require consent prior to installation.

This is a preferred corporate solution, but variation within TfL guidelines is permitted depending on environmental issues.



5.7 | Litter bins

The highly visible colour is chosen to contrast with the surrounding environment and be self-cleaning and resistant to wear and tear. A lack of flat, horizontal surfaces discourages people to place litter outside the bin and clear sacks help to prevent the concealment of suspect packages.

Installation is straightforward with a steel mounting plate supporting the hoop, which is secured either with bolts to masonry or steel straps to available verticals. These should be correctly installed to avoid sharp edges, which may cause injury. Upon removal the site requires little repair.

A degree of flexibility in the application of litter bins is permissible (ie mounting on walls, ceilings or posts). This is a preferred corporate solution, but variations within TfL guidelines is permitted depending on environmental issues.

When used in sites of special architectural interest, formal consent is required before installation.



5.8 | Lamp standards

Street lighting contributes to the safety of all street users by helping to reduce night-time collisions. Lighting enhances both actual security and the perception of security, particularly for pedestrians during darker hours.

The overall objectives of street lighting on the TLRN is to ensure lighting levels along adjacent footways aid public transport users. All lighting schemes must be designed to meet the requirements of BS 5489-1:2003 and BS EN 13201:2003, referred to in 'Street Lighting' in the Streetscape Guidance document.

TfL aims to minimise the visual intrusion of TLRN lighting columns into the daytime streetscape and to reduce light pollution at night. The number of lighting columns should be kept to a minimum by using luminaires that allow wider column spacing.

Column heights should be as tall as possible provided they do not exceed the height of adjacent buildings and trees. Where large numbers of mature trees exist and canopy heights are low, consideration should be given to column heights that place the luminaires where the canopy (allowing for natural growth) will not affect performance of the lighting installation. Where safety permits, lighting column positions should align with building lines and not be placed in front of doors or windows.

On most of the TLRN network, TfL makes a presumption in favour of a simple contemporary style in preference to reproduction pastiche.



5.9 | Tree surrounds

Trees are an important visual and environmental asset on the TLRN, creating contrast to the built environment, shade, shelter and a place for wildlife. They not only help to define and/or reinforce the character of a locality, making attractive places for people to live and work, they also help to modify the local climate by providing shade and trapping pollutants. TfL therefore aims to protect and maintain its existing tree resources.

Porous tree surrounds are the preferred solution as opposed to metal tree grilles and grids which present maintenance difficulties and create an obstacle or trip hazard to pedestrians. Porous tree surrounds are an adaptable solution which allows essential water and air to enter the root bowl, preventing roots from rising.

Trees often make an important contribution to the appearance of Conservation Areas, and so are given special protection. Liaison with the Local Planning Authority Department is required with regard to the removal of any trees in a conservation area or those protected by a Tree Preservation Order (TPO).



| For further information

These standards intend to outline basic principles and therefore cannot cover every application or eventuality.

In case of difficulty or doubt as to the correctness in the application of these standards, please contact TfL Corporate Design.
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All TfL corporate design standards are available from the TfL internet site.
tfl.gov.uk/corporatedesign

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