



# Making sense of rail links

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When we look at a map of the London Underground or of any transport system for that matter, one of the key features is the interchange, the means to move between routes in close proximity to each other.

For many travellers, particularly those who do not have local knowledge of the system they are travelling on or the districts they are passing through, this can be a daunting problem and they are totally reliant on the information provided by that map. As the distance between stations varies, the map maker has the problem of deciding what constitutes an interchange and what does not.

When our railways were built, the private companies responsible selected routes that they considered affordable and suitable and quite often declined the opportunity to create simple interchanges between routes.

The reasons for this include ill-sited or omitted interchanges that reduce the utility of the transport system. Creating new interchanges or relocating existing ones is expensive but could we make better use of existing facilities? In many cases, sta-

tions may be in close proximity to one another but are they recognised as an interchange? It is largely a question of the distance between them coupled with the simplicity or otherwise of the route.

Clearly when two lines are in close proximity such as the Central and District Lines at Mile End, then they are shown as an interchange. Stations such as Bow Road and Bow Church on the District Line and Docklands Light Railway are some distance apart but still shown as an interchange.

By contrast, Camden Town and Camden Road are not, despite being a similar distance apart. Sudbury Hill and Sudbury Hill Harrow are also close but not shown as an interchange on most maps. There are many more such examples in the London area alone.

The problem of defining an interchange is not new. Harry Beck – the creator of the well-known London Underground map – paid much attention to the escalator connection between Bank and Monument despite the only significant factor being the different names for what are otherwise just parts of one station. His contribution to

public transport, the map with lines running horizontally, vertically and at 45 degree diagonals has rightly been adopted for many transport systems, but does have one drawback.

Because it does not have a uniform scale and is not geographically accurate, it creates a false perception of the distance between stations. Additions to the original Beck design have also led to inconsistency between versions of the map.

Despite this, the Beck map is the way forward and perhaps the solution is to have different categories of interchange, those in close proximity and those that are distant.

Different interchange symbols should be used on maps to distinguish between the two types and to warn travellers of the distance between them. A rule of thumb could be that stations within half a mile of each other, that is ten minutes walk for a reasonably fit person, should be regarded as “distant” interchanges while those within two minutes walk, or which do not require the traveller to leave railway property, should be regarded as “close” interchanges. Another feature could be to give an indication of the

distance between two stations (or remote platforms within the same complex) by using a connector with a number on it giving the walking time in minutes between them. (A walking speed of three miles per hour is assumed.) This approach would be used sparingly and applied where more than two minute’s walk is required.

Clearly some flexibility would have to be applied to this convention otherwise we may lose interchanges between some lines by a matter of a few yards while replicating others and greatly complicating the map.

Some “international” locations such as Waterloo, Paddington and Stratford will also need special consideration on account of their size and the number of routes that are or will be serving them. Ideally, train operators will also provide interchange directions at stations.

An exercise like this also needs to take an overall view of the transport system and not focus on one element alone. For example, a map of the London Underground that largely ignores overground routes, particularly the orbital routes, will be of significantly less benefit to the traveller.

## Interchange possibilities outside London

In general, the stations listed below are located within about a mile of each other and are not connected by a direct service. Providing suitable directions are available, they could still be regarded as interchanges.

Where a connecting service is available, long gaps in the service may make walking between stations a viable alternative at certain times of day. The frequency of services will be an issue to consider when deciding which distant interchanges to show.

The time to travel between stations is an estimate based on a walking speed of three miles per hour. This method of representation, although less precise than a distance, will be easier to print on a map where space is limited. It will also be more meaningful to

the reader than a figure such as 616 yards or 560 metres (about seven minute’s walking time).

The Blackpool stations are further apart than others in the list but the presence of the tramway nearby raises the question of whether this mode of transport should appear on heavy rail maps.

The logical way of developing the distant interchange concept is to show the Blackpool stations having interchanges with the tramway. This point applies equally to other light rail systems.

Readers with local knowledge may be able to add additional stations to the list below and revise the estimated walking times:

Bicester North to Bicester Town 20, Birmingham Moor Street to New Street 5, Birmingham Moor Street to Snow Hill 8, New Street to Snow Hill 8, Blackpool North to South 30, Bradford Exchange to Forster Square 5, Edenbridge to Edenbridge Town 20, Enfield Chase to Enfield Town 12, Farnborough (main) to Farnborough North 13, Gainsborough Central to Lea Road 15, Glasgow Central to Glasgow Queen Street 8, Hertford East to North 20, Maidstone East to Barracks 7, Maidstone East to West 13, Manchester Piccadilly to Victoria 20, Southend Central to Victoria 7, St Albans Abbey to City 20, Wakefield Kirkgate to Westgate 15, Windsor and Eton Central to Windsor and Eton Riverside 5.