

## Manchester Area Simulation - Operational Notes

The timetable corresponds to the current winter working timetable which has been taken from information contained in RealTimeTrains' website at <https://www.realtimetrains.co.uk/> for 1 February 2024. It covers eight hours from 06:00 until just after 14:00, and illustrates very clearly the capacity problems in Manchester, especially at Manchester Piccadilly - the traffic in and out of this station is relentless!

The simulation is best run at half speed for most of the time, with occasional brief periods of normal time and sometimes quarter time when traffic build-up is severe.

Specific platforms are advised in train descriptions for Piccadilly and Victoria, and these should be used unless there is a build-up of delays, when in some cases it might be preferable to use other platforms, but please check all relevant train station entry and exit times or trains might be held for longer periods than necessary. It pays to keep a sharp eye on these times because some trains have plenty of excess time whereas others have little. Just because a train enters the railway before another it doesn't always mean that the first to enter is the first to arrive at a station. Often the first can be held at a signal without it being delayed - the important thing is to keep to or before scheduled arrival times as far as possible.

If the starting session is loaded there are several routes already set for running trains, so there is a short time available before any action is required. 5D40 and 5S35 are shown as needing attention before other trains, but nothing can be done for 5D40 until it reaches the signal outside platform 4, when it should be called into the platform. There is no rush at all for 5S35 as it isn't required to arrive until 06:11, so it should be held at the route end signal until after 1B61 has reached p14 and 2K30 has left p12. Then it can safely cross to p9 and still arrive in plenty of time.

Be aware that 5K07 enters from Ardwick at 06:02 immediately after 2E61 passes - so it needs a route to be set towards p1. P1 already contains 2E64, but comparing its departure time (07:30) with that of 5K07 (06:13) shows that 5K07 can enter p1 while 2E64 is still present by calling it in. Often that is the case, but sometimes the existing train is seen to depart first, so the approaching train should await its departure. Mistakes are easy to make, but careful use of signaller control to move obstructing trains out of the way can usually remedy the situation without too much loss of time.

The track layout outside Piccadilly can usually accommodate three moving trains at the same time, two exiting and one entering, or vice versa. Trains often need to cross tracks in order to reach their designated platforms, and there is usually more than one way to make the crossing, so some advanced planning is needed to determine which crossing to use to avoid holding up other traffic. In these cases try to make use of any excess time that is available by holding those trains with the most excess.

Trains arriving at Salford Crescent from Swinton have a lot of excess time available between those stations so they can be held at Swinton to allow trains from Bolton to enter the station first.

This is a difficult simulation as indeed is real traffic control in the Manchester area, but it can be done with relatively short delays, as evidenced by the included log file for the complete timetable.

Good luck!