Network Rail
Station Route Utilisation Study

An Overview

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Network Rail Station RUS

- Looking at Station Congestion
- Identifying stations where congestion occurs
- Future trends and usage
- Developing a toolkit of solutions

Network RUS: Stations
Draft for Consultation

NetworkRail

Departures

BURGER KING   13   GATWICK EXPRESS   Tickets   14

May 2011

Top London station usage

1: London Waterloo – 91.9m users /year

2: London Victoria – 75.3m

3: London Bridge – 55.8m

4: London Liverpool Street – 53.4m

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9: London King's Cross – 27.6m

16: Stratford – 13.8m

19: Finsbury Park – 9.1m

Top Non-London station usage

1: Birmingham New Street – 29.2m

2: Leeds – 23.9m

3: Manchester Piccadilly – 21.8m

4: Liverpool Central – 18.8m

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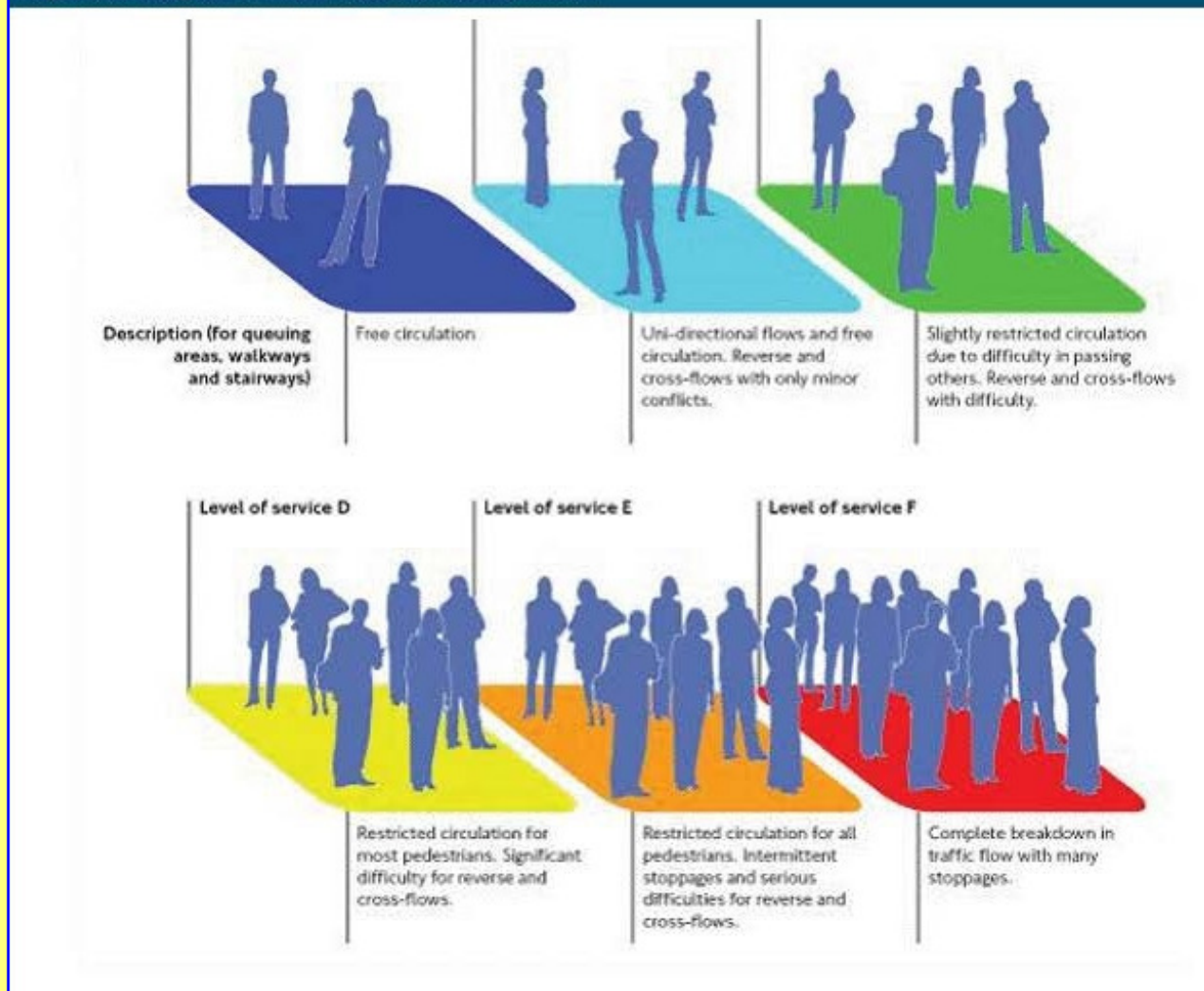East Anglia branch stations:

13: Cambridge – 8.2m

16: Chelmsford – 7.0m

How many station users are there?

- NR lacks full information

- Need to include non-users
  - People seeking information / advanced tickets
  - People meeting rail users
  - People passing through

- How long do people stay at a station?
  - Average 30 minutes at main stations

What is congestion?

Figure 3.1 Diagram of Fruin Levels of Service A to F[2]

Description (for queuing areas, walkways and stairways)

Free circulation

Uni-directional flows and free circulation. Reverse and cross-flows with only minor conflicts.

Slightly restricted circulation due to difficulty in passing others. Reverse and cross-flows with difficulty.

Level of service D — Restricted circulation for most pedestrians. Significant difficulty for reverse and cross-flows.

Level of service E — Restricted circulation for all pedestrians. Intermittent stoppages and serious difficulties for reverse and cross-flows.

Level of service F — Complete breakdown in traffic flow with many stoppages.

Fruin Level

A – least congested (top left)

F – most congested (bottom right)

Possible Congestion areas

- Access into station
- Ticket office
- Ticket gates
- Information points
- Doorways, stairs
- Lifts and escalators
- Platforms

Local station congestion spots 2010

Station	Time	Concourse	Access to Platform	Platform
Cambridge	Peak	C		A
Tottenham Hale	Off-Peak	C	D	B
Chelmsford	Peak	C	B	B
Colchester N	Peak	C	A	A
Finsbury Park	Peak	D	D	D
King's Cross	Peak	C		D
Liverpool St	Peak	E	D	E
Peterborough	Peak	E	D	E
Stratford	Peak	B	B	B
Witham	Peak	C	D	D

A=Lowest F=Highest

Network Rail's Solutions Toolkit

Range of solutions for each station:

- Remove clutter

- Relocate facilities to less congested area

- One-way system for movement

- Improved signage

- Passenger / staff training for ticket machines

- Additional access points

- Wider / additional platforms

Network Rail's Station RUS

Draft issued by Network Rail on 6th May 2011

- 112 pages plus a 78-page Appendix

- Consultation period of 60 days - to 8th July 2011

- See www.networkrail.co.uk

    - Corporate documents

        - Route Utilisation Strategies (RUSs)

East Anglia branch response will feed into *Railfuture*'s single national response.

These slides are on: www.railfuture.org.uk/east.html.