

Appendix A: Journey planning exercise – Delegate instructions

Scenario

You are a multi-drop delivery driver working for FE Logistics. FE Logistics provides pallet distribution and operates a fleet of 12 18-tonne rigid curtain-sided trucks from the Green Drive depot. Your shift pattern is 06:00-16:00.

You arrive for work and a key driver has not turned up for their shift. Your manager states there is a priority delivery on the LoCITY schedule and you are to cover this. The LoCITY schedule is completely new to you.

Task

Your vehicle is a rigid 18-tonne with a height of 3.6m and you have been tasked to deliver to five customer locations. This includes a priority delivery to Peak Practice. The five customer locations are:

A. Robin Castings B. Clough Catering C. Peak Practice
D. Dean Fittings E. Ram Interiors

You are to deliver to all five customer locations using the most efficient route. You can deliver to the customer locations in any order, but the Peak Practice delivery must be completed before 08.00. You have been provided with a map with all customer locations plotted. You are to return to the Green Drive depot on completion.

All deliveries are to be made kerbside and Dean Fittings is the only location with turning facilities. The approximate time for each delivery is 15 minutes.

Brief

Your vehicle has been loaded and you have completed your walk around checks. The time is now 06.30 and you are due to depart at 07.00.

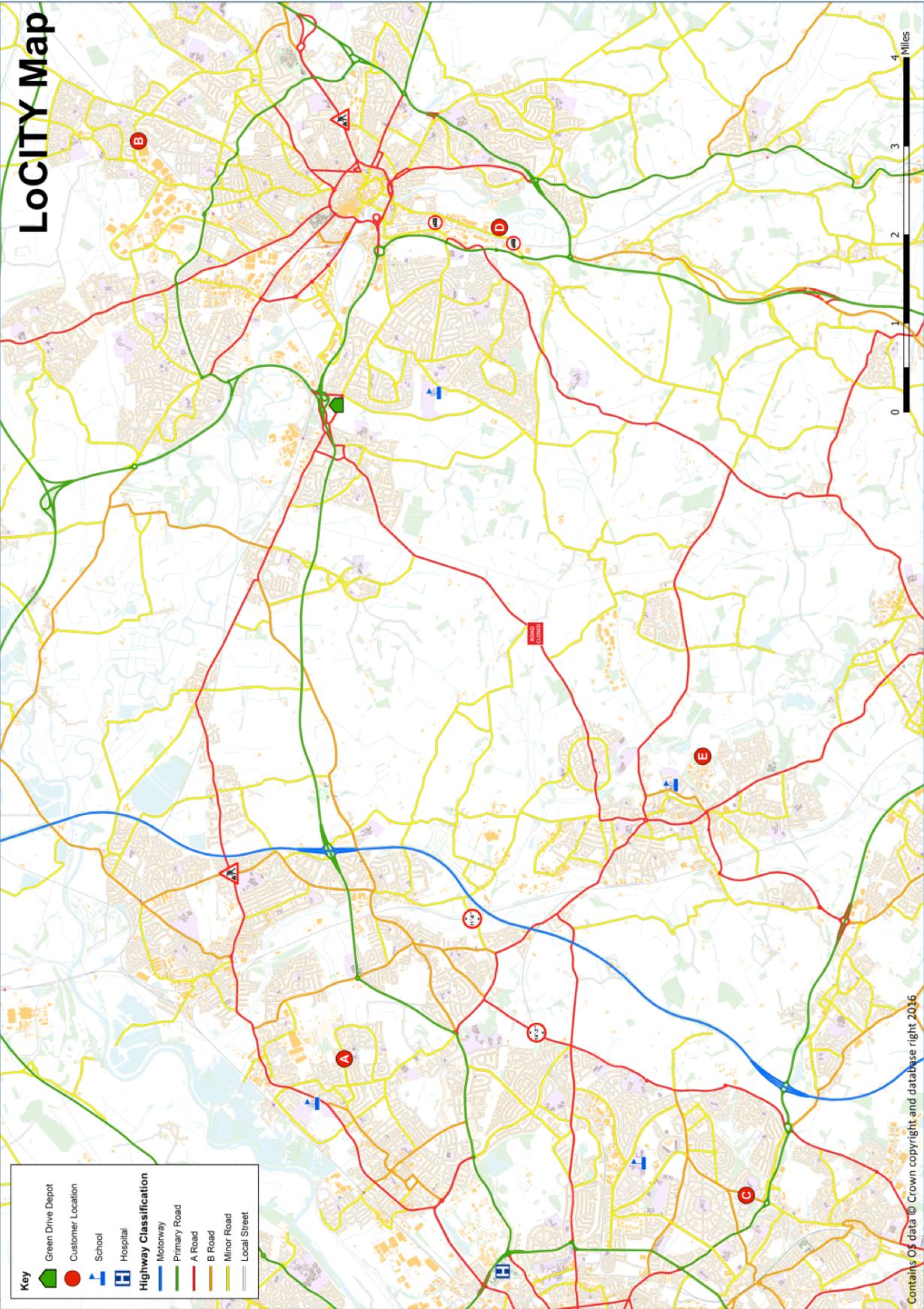
You have 30 minutes to produce a route plan.

- What order would you deliver to each customer to achieve the most efficient route?
- What is the approximate distance of your chosen route?
- What factors did you consider in choosing your route?
- How many different journey combinations are there?

Road conditions

- Today is a weekday in school term time
- The weather is dry but misty and the forecast indicates rain later in the morning
- There is heavy congestion around the hospital following a serious traffic collision

Appendix B



Appendix D: Distance and time matrices

Distance origin destination matrix

Miles	Depot	A	B	C	D	E
Depot	-	9.7	5.9	12.9	4.6	9
A	9.7	-	15.3	6.3	13.5	6.6
B	5.7	15	-	18.3	5.1	14.2
C	13	6.3	18.5	-	16.8	6.6
D	4.2	13.5	5.9	16.7	-	12.1
E	9	6.5	15.3	6.8	12.2	-

Time origin-destination matrix

Minutes	Depot	A	B	C	D	E
Depot	-	20	20	23	13	25
A	20	-	38	23	28	25
B	18	38	-	44	20	44
C	23	23	44	-	30	20
D	10	28	20	30	-	33
E	23	25	44	20	33	-