

Welcome

Agenda:

Transport Forum – Thursday 14th March 2024

1. Welcome and introductions
2. Meeting note / matters arising from last Forum held on: 16th November 2023 - (Chair)
3. Project Progress Update - (Andrew Cockcroft, EDF)
4. Update from Transport Review Group - (Rachel Lister, EDF)
5. Passenger Transport Update - (Andrew Wagstaff, EDF)
6. Any Other Business - (Chair)
7. Date of next meeting: Thursday 11th July 2024 at 6pm

Item 3: Project Progress Update

Andrew Cockcroft

Senior Manager – Stakeholder Relations



Dome Lift

- The 245-tonne steel dome has been successfully lifted into place.
- The lift was carefully planned to take advantage of a weather window to allow the manoeuvre to be completed in low wind conditions.
- The Polar Crane is now protected and the building is now weather-tight.
- This accelerates civil construction work to MEH.



Latest Progress

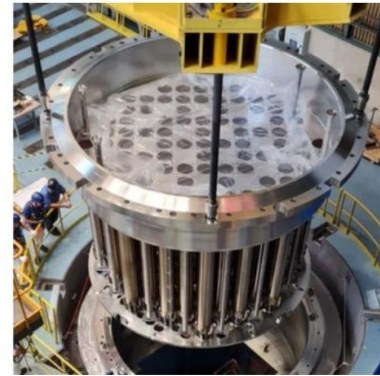
MEH – Marshalling Cabinets

- The MEH team has successfully installed the first 6 Electrical Marshalling Cabinets in the Electrical Building. Five more are currently being stalled.
- The cabinets are manufactured by Staffordshire-based Capula and are part of HPC's instrumentation and control system.



EQUIPMENT – Reactor Core Internals

- The reactor core contains a series of internal components that hold the 241 fuel assemblies, guide the control rods and regulate neutrons around the fuel.
- They were delivered safely by ship to Avonmouth on the 19th February.



Increasing Efficiency

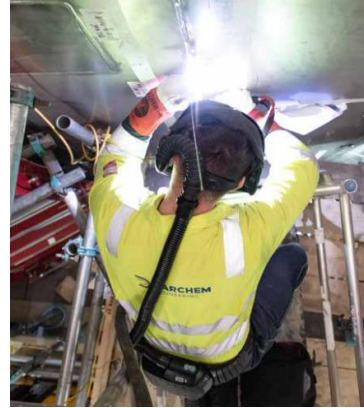
- Applying the lessons learned from the build of the first unit continues to have a positive impact on the progress of Unit 2. On average, **Unit 2 is seeing around a 20% to 30% improvement compared to Unit 1.**
- The efficiencies and innovations can be passed directly to the construction of Sizewell C.

New 3D scanning technology means transferring the 8,000 rooms to the MEH teams is getting quicker. Handover times from completion to painting have **been reduced from 14 weeks to just two weeks.**

Welding work for Unit 2's pools is now being completed **four times faster than on Unit 1** by using a more efficient welding technique.

Unit 2's 52-tonne equipment hatch was installed **six weeks faster than it was in Unit 1.**

The safeguard building foundations have been completed on **Unit 2 in six months - four months quicker than on Unit 1.**

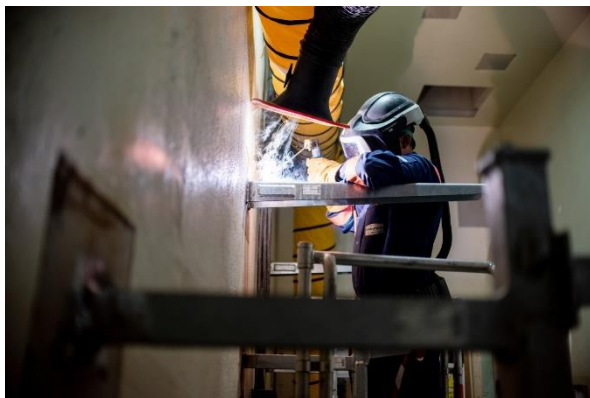


Looking Forward to 2024

Steam generators will arrive at site



**We will install
the reactor
pressure vessel**



**The MEH phase
will accelerate**

Heat
exchanger
installation

Spent fuel
building
pool slab
poured

Unit 2
pumphouse
walls
complete

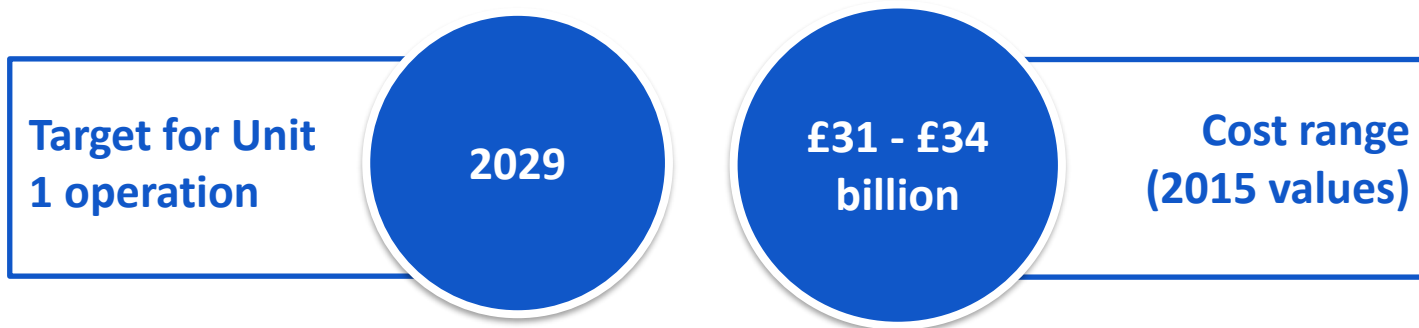
First phase
of pre-
stressing of
reactor
building

Auxillary
transformer
systems ready
for
commissioning

Unit 2
reactor
cavity
installed

Schedule and Cost Update

- Going first in building a design adapted for UK regulations and restarting a nuclear industry after an almost 30-year pause has been harder than anticipated.
- We have had to substantially adapt our design to meet British regulations, making 7,000 changes, adding 35% more steel and 25% more concrete. In common with other major projects, we have also been hit by inflation, labour and material shortages.
- Building something for the first time is hard, but repeating an identical design with the same people and suppliers is easier. We know this through building our identical second unit, which is typically 20-30% faster.



People Update

- As Hinkley Point C moves into peak construction and the workforce grows, we will be working with Somerset Council and wider community groups to ensure that we continue to limit any impact on the local area.

Wider benefits continue to grow;

- Almost 40% of our workforce are local
- 1,300 apprentices trained so far with c.70 percent coming from the local area
- £5 billion has been spent with thousands of local businesses from across the South West
- Centres of Excellence are fully operational and will support the next generation

A new advertising campaign is highlighting some of the 'local heroes' who have been forging careers at HPC.



Thank You

Item 4: Update from Transport Review Group

Rachel Lister



HPC Transport Planning Lead, Site Nuclear Compliance

Transport Review Group Quarterly Report

- This presentation provides a summary of the Transport Review Group Quarterly Report for October to December (Q4)
 - Construction Workforce Travel Plan (CWTP); and
 - Construction Traffic Management Plan (CTMP).
- Presented to the Transport Review Group (TRG) on 29 January 2024.
- This presentation is for information to the Transport Forum.
- Transport Forum is responsible for collating views from the public and forms the key link between the TRG and the wider community and provides an indication of the HPC transport issues that are impacting the general public.

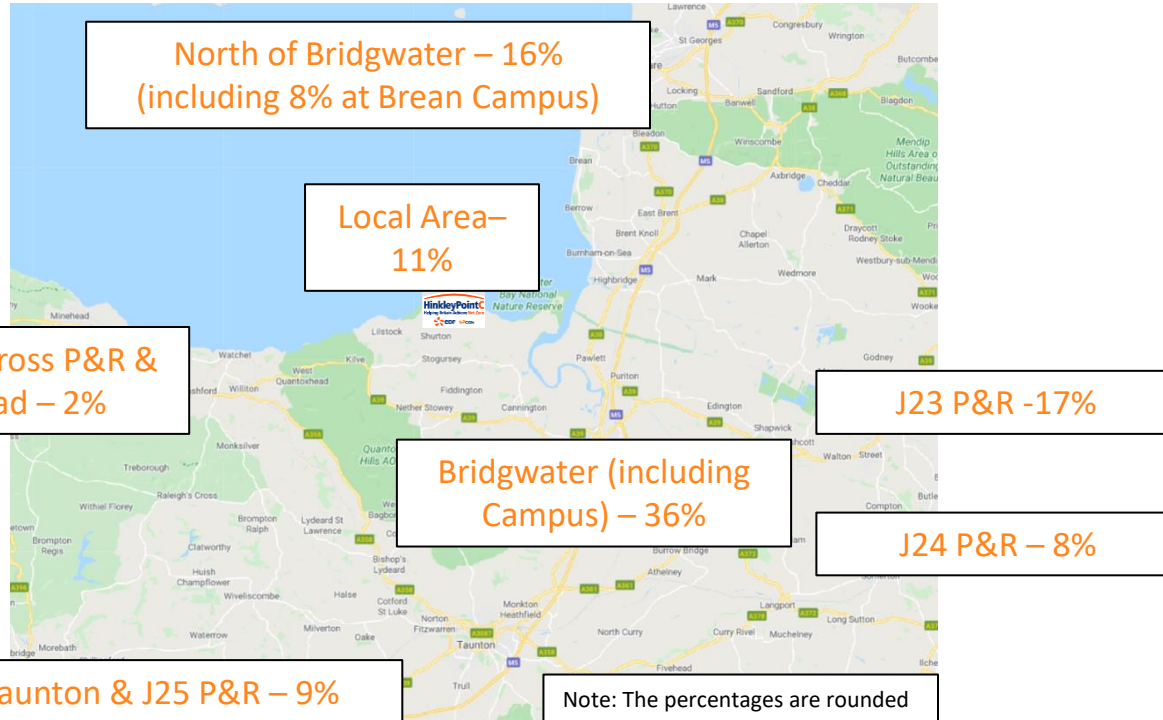


Construction Workforce Travel Plan (CWTP)

Final Journey to HPC	Target	Q3 (13/09/23) Workforce	%	Q4 (22/11/23) Workforce	%
Walk	9%	524	5.5%	522	5.2%
Cycle	0%	74	0.8%	63	0.6%
Motorcycle	0%	48	0.5%	37	0.4%
Car (Driver)	4%	217 (189 car drivers and 28 passengers)	2.3%	222 (202 car driver on own and 20 with passenger)	2.2%
Car Passenger via HPC Car Park	-	-	-	21	0.2%
Car Passenger via Drop Off Location	-	122	1.3%	131	1.3%
HPC Bus Service	87%	8,521	89.6%	8,965	90%
 Total	100%	9,506	100%	9,961	100% 

Construction Workforce Travel Plan (CWTP)

- HPC Bus Passenger Boarding Locations (last Quarter)



Construction Workforce Travel Plan (CWTP)



Bus Movements a Day (DCO)	Bus Movements a Day (Last Quarter on Survey Day)
1,232	1,095

- Note: Current bus movements a day include “empty running” buses which are not included in the DCO number

Construction Workforce Travel Plan (CWTP)

HPC Helpline Complaints	2023 Q3		2023 Q4	
HPC Worker not Fly Parking	24	15%	22	17%
HPC Worker Fly Parking	33	20%	29	22%
Not a HPC Worker	105	65%	82	62%
Total	162	100%	113	100%

- The HPC Fly Parking Team also undertake their own checks and investigated 824 potential observations.
- During the last Quarter, 344 bus passengers were found to be fly parking.
- This represents 3% of the total workforce and based on a full working week (Monday to Sunday) during the Quarter equates to 5 HPC workers fly parking a day.
- The Fly Parking Policy – 3 Stage Approach is applied to all HPC fly parkers.

Construction Workforce Travel Plan (CWTP) -HPC Car Share

- HPC Car Share Strategy and Liftshare App – Launched 28th September 2022
- Promotion of HPC Car Share continues and next event planned for April 2024.
- **28%** of those arriving via car to a Park and Ride were car sharers (3,124 bus passengers arriving via car and of these 875 via Car Sharing– 381 car share drivers and 494 car passengers).

HPC Car Share – based on those arriving via car -2023 Q4

Park and Ride	J23	J24	Cannington	Washford Cross	Quantock Lakes	J25	HLH	Worle	Total
2023 Q4	393 Car Sharers	254 Car Sharers	55 Car Sharers	4 Car Sharers	28 Car Sharers	83 Car Sharers	20 Car Sharers	38 Car Sharers	875
No. Arrived by Car	1,462	641	179	91	122	366	116	147	3,124
% of those arrived by car who Car Shared	27%	40%	31%	4%	23%	23%	17%	26%	28%

Construction Traffic Management Plan (CTMP)

- HGV Movements against HGV Average / Maximum Daily / Quarterly Limit for HGV Routes

		2023 Q3			2023 Q4		
HGV Movements	DCO Cap (Movements)	Average Daily Movements	Maximum Movements on any day (Mon-Fri)	Maximum Movements on any day (Sat)	Average Daily Movements	Maximum Movements on any day (Mon-Fri)	Maximum Movements on any day (Sat)
HGV Movements	500 Average 750 (Mon to Fri) 375 (Sat)	159	278	66	154	290	38
HGV Route 1 (J23)	450	129	218	66	114	196	38
HGV Route 2 (J24)	300	30	86	0	40	104	0

Construction Traffic Management Plan (CTMP)

- Time Restrictions - HGV Movements

		2023 Q3			2023 Q4		
HGV Movements	DCO Cap (Movements)	Average Daily Movements	Max Movements on any day (Mon-Fri)	Max Movements on any day (Sat)	Average Daily Movements	Max Movements on any day (Mon-Fri)	Max Movements on any day (Sat)
07:00 - 07:59	40	25	36	20	11	22	15
08:00 – 08:59	30	18	30	16	14	24	14
09:00 – 09:59	50	24	46	8	19	45	6
10:00 – 10:59	No CAPS	18	34	4	17	39	3
11:00 - 11:59		16	36	10	15	33	8
12:00 – 12:59		16	34	14	14	32	5
13:00 – 13:59		18	41	12	16	36	4
14:00 – 14:59		12	28	0	15	39	2
15:00 – 15:59		7	28	0	12	30	2
16:00 – 16:59	50	3	10	0	1	3	0
17:00 – 17:59	40	2	6	0	0	2	0
18:00 – 18:59	40	2	10	0	0	2	0
19:00 – 21:59	No CAPS	1	4	0	1	7	0

Construction Traffic Management Plan (CTMP)

- 17 breaches (0.15% of total HGV movements) during Quarter Q4:
 - *1 HGV outside of permitted delivery hours*
 - *0 HGV over permitted time limit*
 - *16 HGVs deviated from the approved HGV route*
- All HGV drivers who were involved in these breaches have received a Driver Strike.

Construction Traffic Management Plan (CTMP)

- 2023 Q4 (average):

Daily HGV Movements	Daily HGV Deliveries
154	76

(below 500 DCO average Limit)

- Forecast Next Quarter

Daily HGV Movements	Daily HGV Deliveries
180	90

Thank You



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Item 5: Passenger Transport Update

Andrew Wagstaff

Passenger Transport Service Manager



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Additional Route Assessments

February 2024

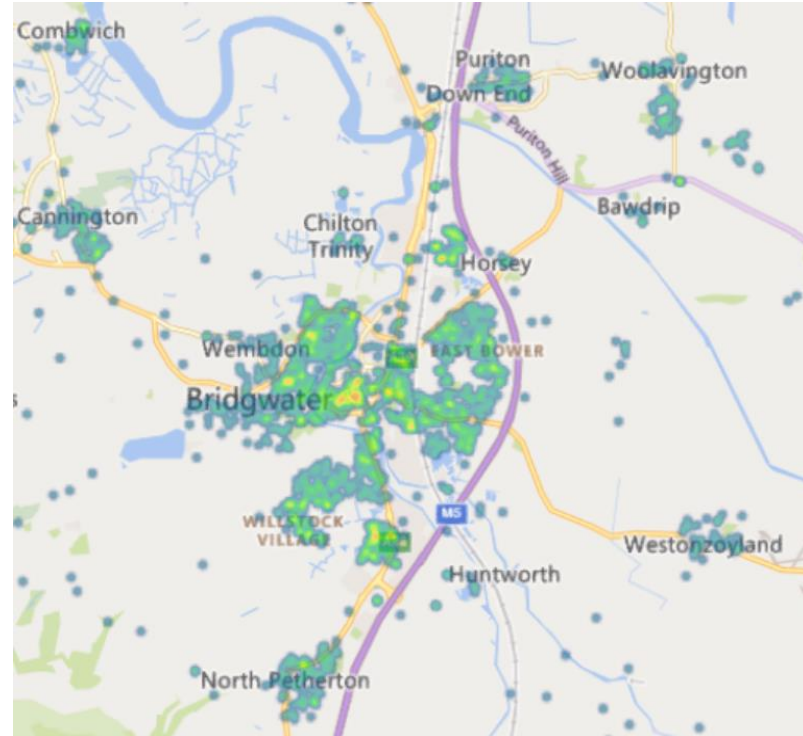
Mapping 1

Passenger Mapping Profile – Bridgwater Area

Bridgwater's mapping profile reveals significant passenger concentrations in areas such as the town centre, NDR, Bristol Road, North Petherton, Lower Lakes (Chilton Trinity) and Fairways Caravan Park.

Proposed additional services aim to cater to these areas, alleviating congestion and optimising park and ride spaces.

Detailed route information and estimated patronage is provided in subsequent slides for further insight.



New Route 1

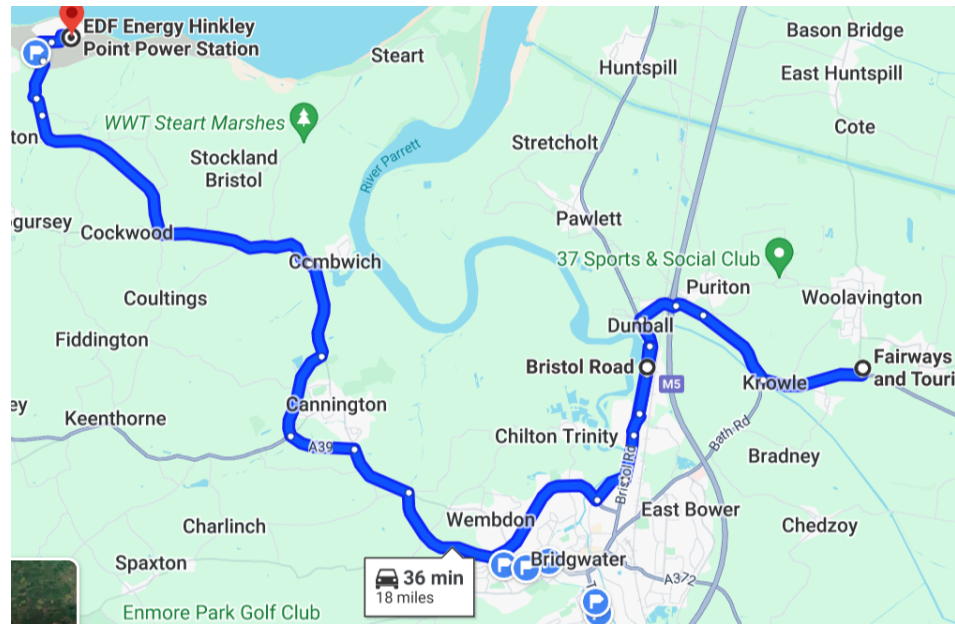
Fairways – Bristol Road – via the NDR - HPC

The proposed route from Fairways to HPC via Bristol Road & The NDR would accommodate 121 additional passengers currently registered on our database.

The service will also alleviate pressures on other services currently serving the NDR by adding additional capacity.

A breakdown of where passengers would be allocated is illustrated on the next slide, along with their current allocations and Tier One contractor.

The journey time for this route would be **38 minutes** plus stopping time for passengers to board.



Fairways > SDC via Dunball > Morrisons RDC > Bristol Road > NDR > HPC

New Route 1 - Breakdown

RAG STATUS	
Route	
Stops	
Risk	

Fairways – Bristol Road – via the NDR - HPC

The proposed route from Fairways to HPC via Bristol Road and Angel Place would accommodate 121 passengers currently registered on our database, all of whom are in accommodation at Fairways Caravan Park.

We have broken down the data via Tier One contractor to allow us to make estimates on when passengers would travel based on shift times, with **82%** of passengers working for **Bylor**.

We have also looked at the current allocations of passengers so we can see where would achieve savings in Parking Allocations, in this case the saving is 120 passengers at **J23 Park & Ride**

Stop Name	PAX
Fairways Caravan Park	121
Total	121

Top 5 Employers		
Employer	PAX	As %
Bylor	99	82.50%
Kierbam	10	8.33%
Balfour Beatty	3	2.50%
Altrad	2	1.67%
EDF	1	0.83%

Current Allocation	PAX
Cannington Park & Ride	1
J23 Park & Ride	120

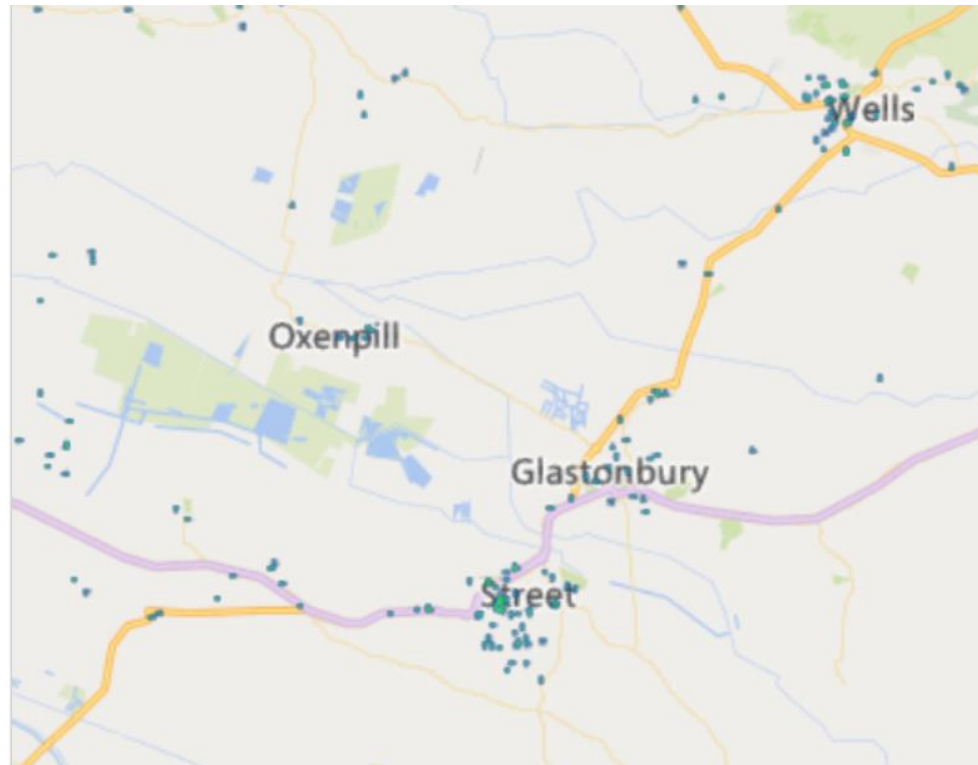
Fairways > SDC via Dunball > Morrisons RDC > Bristol Road > NDR > > HPC

Passenger Mapping Profile – Wells, Glastonbury & Street

Wells, Glastonbury and Street's mapping profile reveals passenger concentrations throughout the town.

Proposed services aim to cater to these areas with the use of the larger roads within the town.

Detailed route information and estimated patronage is provided in subsequent slides for further insight.



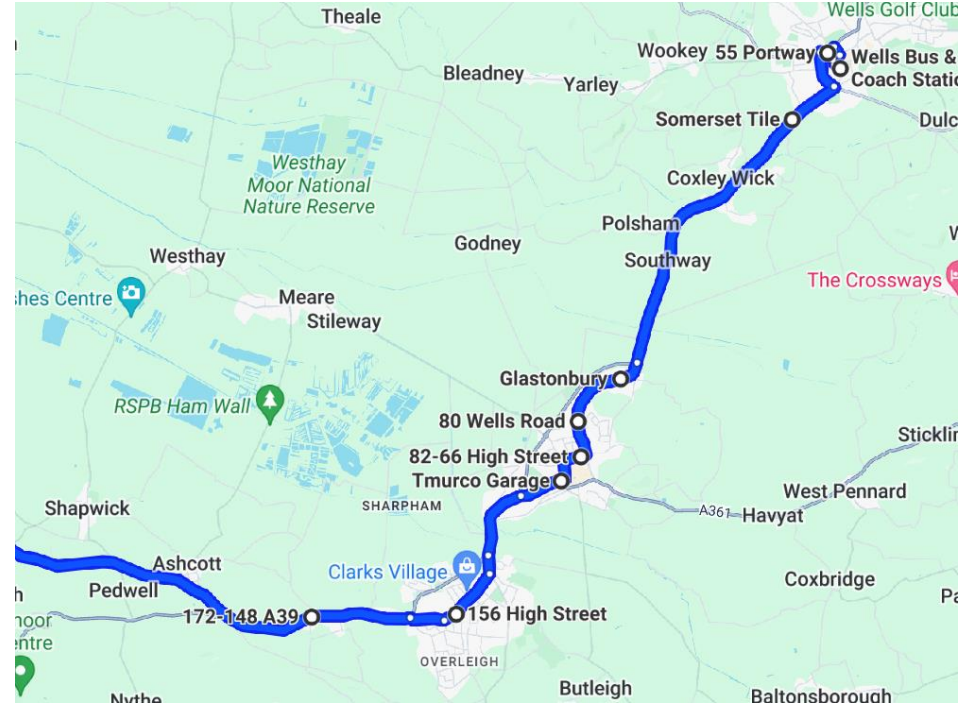
New Route 2

Wells – Glastonbury – Street - HPC

The proposed route from Wells, running through Glastonbury and Street would capture 85 passengers living in the area.

The journey time for this route would be **1hr 10minutes** plus stopping time for passengers to board.

There is also the option for this route to link in with the Fairways service as it would follow the same route once it reached Woolavington.



Wells > Glastonbury > Street > NDR > HPC

New Route 2 – Breakdown

RAG STATUS	
Route	
Stops	
Risk	EU Hours



Wells – Glastonbury – Street - HPC

The proposed route from Wells to HPC via Glastonbury & Street would accommodate 62 passengers currently registered on our database.

We have broken down the data via Tier One contractor to allow us to make estimates on when passengers would travel based on shift times, with **23%** of passengers working for **Bylor**.

We have also looked at the current allocations of passengers so we can see where would achieve savings in Parking Allocations, in this case the largest saving is 59 passengers at **J23 Park & Ride**

Stop Name	Town	PAX
Albion Inn, Ashcott	Ashcott	6
The Ashcott Inn, Ashcott	Ashcott	3
Avalon Estate	Glastonbury	1
Drill Hall	Glastonbury	1
Murco Garage, Glastonbury	Glastonbury	3
Old Wells Road, Glastonbury	Glastonbury	3
Wells Road	Glastonbury	3
Wells Road Cemetary	Glastonbury	2
Wirrall Park Roundabout	Glastonbury	1
Glaston House, Street	Street	4
West End, Street	Street	13
The Old Parsonage, Walton	Walton	4
Cow & Gate Factory	Wells	6
Jocelyn Drive	Wells	1
Littlewell Cottage	Wells	1
Wells Bus Station	Wells	4
Wellsford Avenue	Wells	6
Total		62

Top 5 Employers		
Employer	PAX	As %
Bylor	14	23%
TCI	5	8%
EDF	5	8%
KierBam	5	8%
G4S	3	5%

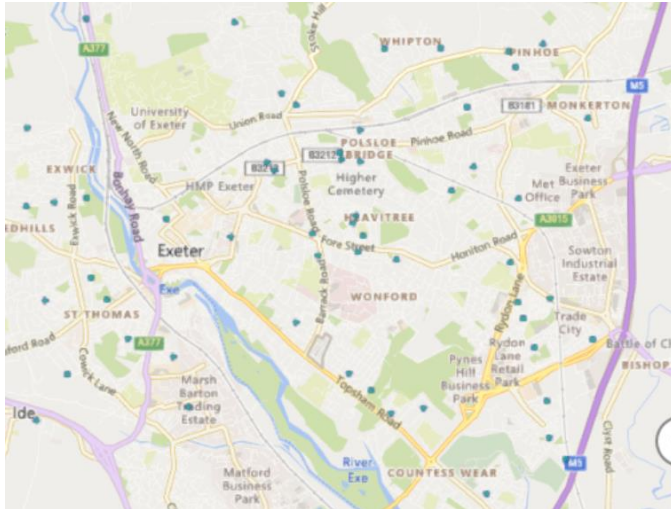
Current Allocation	PAX
Cannington Park & Ride	1
J23 Park & Ride	59
J24 Park & Ride	1
J25 Park & Ride	1

Wells > Glastonbury > Street > NDR > HPC

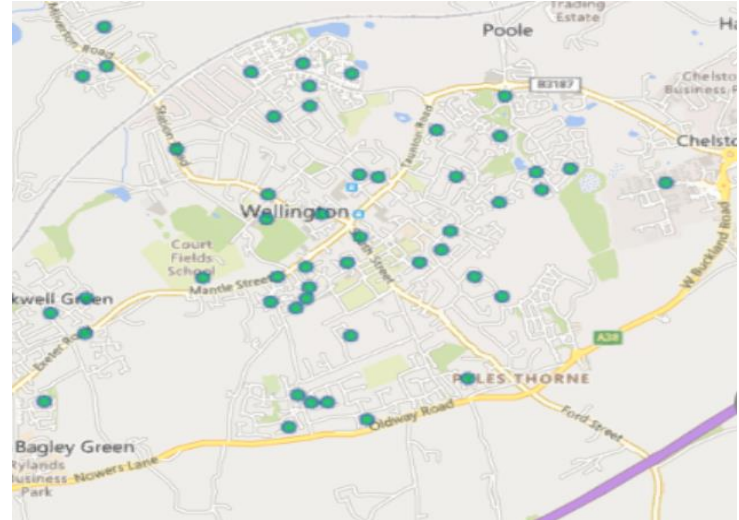
Passenger Mapping Profile – Exeter & Wellington

We have 94 passengers based in Exeter, they are spread very thinly across a large area, meaning the only viable route for our vehicles through Exeter would capture a small number of these passengers. The route is detailed in a later slide.

Similarly, we have 95 passengers based in Wellington, but the only viable option is through the main high street, meaning we would only capture a small number of passengers in the town.



Exeter



Wellington

New Route 3

Exeter – Wellington – HPC

The proposed Exeter to HPC via Wellington route would accommodate 32 passengers:

- Exeter - 14
- Wellington - 18

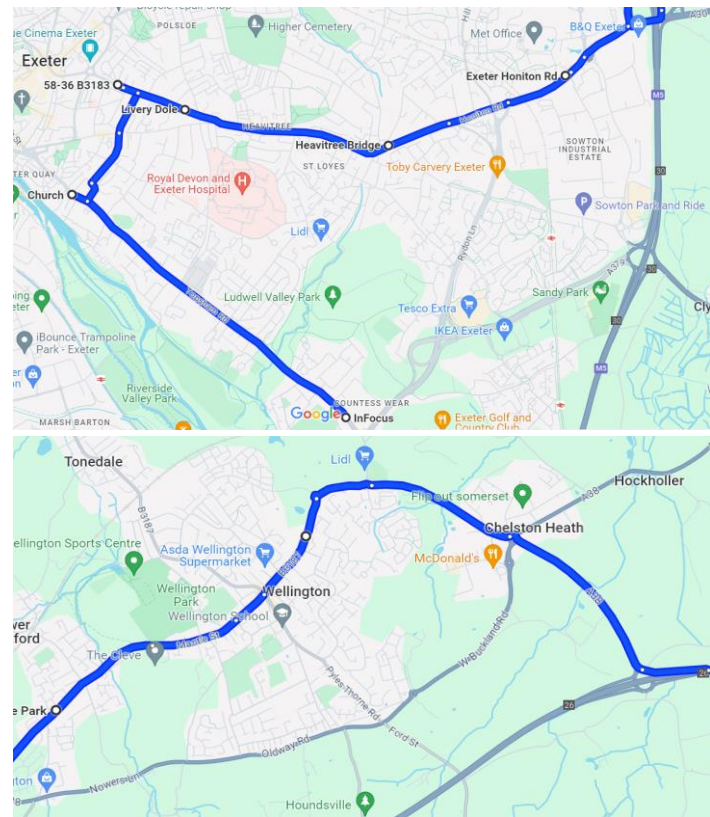
The route would serve Exeter before joining the M5. It would then exit the M5 at J27 and travel through Wellington before rejoining the M5 at J26 and proceeding to J24 and on to HPC.

Although we have 94 passengers based in Exeter, they are spread very thinly across a large area, meaning the only viable route for our vehicles through Exeter would capture 14 of these passengers.

Similarly, we have 77 passengers based in Wellington, but the only viable option is through the main high street, meaning we would capture 18 of these passengers.

One benefit of this route would be that it would add additional capacity to Taunton Road.

The journey time for this route would be **1hr 53minutes** plus stopping time for passengers to board and due to the 77-mile journey, this would also need to run on tachograph.



New Route 3 – Breakdown

RAG STATUS	
Route	
Stops	
Risk	EU Hours



Exeter – Wellington – HPC

The proposed route from Exeter to HPC via Wellington would accommodate 50 passengers currently registered on our database.

We have broken down the data via Tier One contractor to allow us to make estimates on when passengers would travel based on shift times, with **32%** of passengers working for **Bylor**.

We have also looked at the current allocations of passengers so we can see where would achieve savings in Parking Allocations, in this case the largest saving is 22 passengers at **J25 Park & Ride**.

An alternative option to capture all 94 passengers living in Exeter, would be to explore the option of running from Junction 30 Park & Ride

Stop Name	PAX
Buckerell Lodge	1
Butts Road	2
Cadres Farm	1
Crematorium	1
Dobree Park, Wellington	6
Holloway Street	1
InFocus	1
Livery Dole	0
Lower Hill Barton Road	1
Luson Surgery	3
Mantle Street Youth Centre	5
Poole Cross	2
St John Fisher Church	4
Waitrose	2
Wellington Somerset	2
Total	32

Top 5 Employers		
Employer	PAX	As %
Bylor	10	32%
EDF	3	10%
G4S	3	10%
Kierbam	3	10%
Wessex Water	1	3%

Current Allocation	PAX
Cannington Park & Ride	1
HLH	3
J23 Park & Ride	3
J24 Park & Ride	3
J25 Park & Ride	22



Part of **First**  Bus

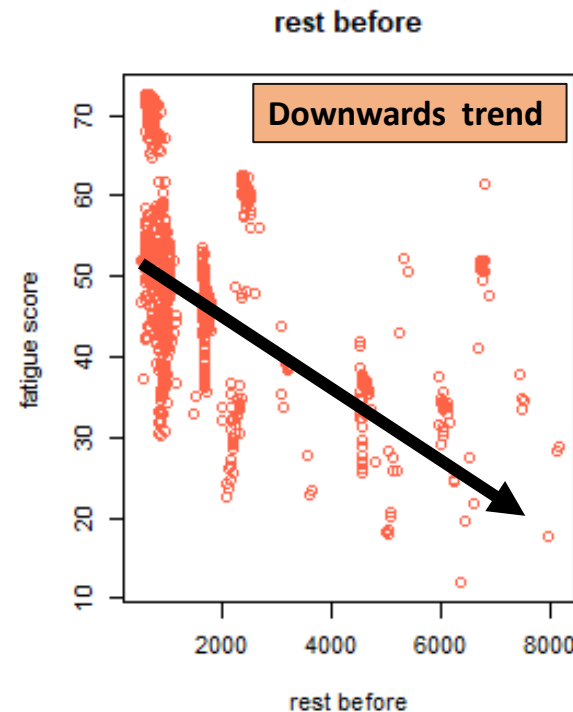
The leading choice for specialist passenger transport

Fatigue Model

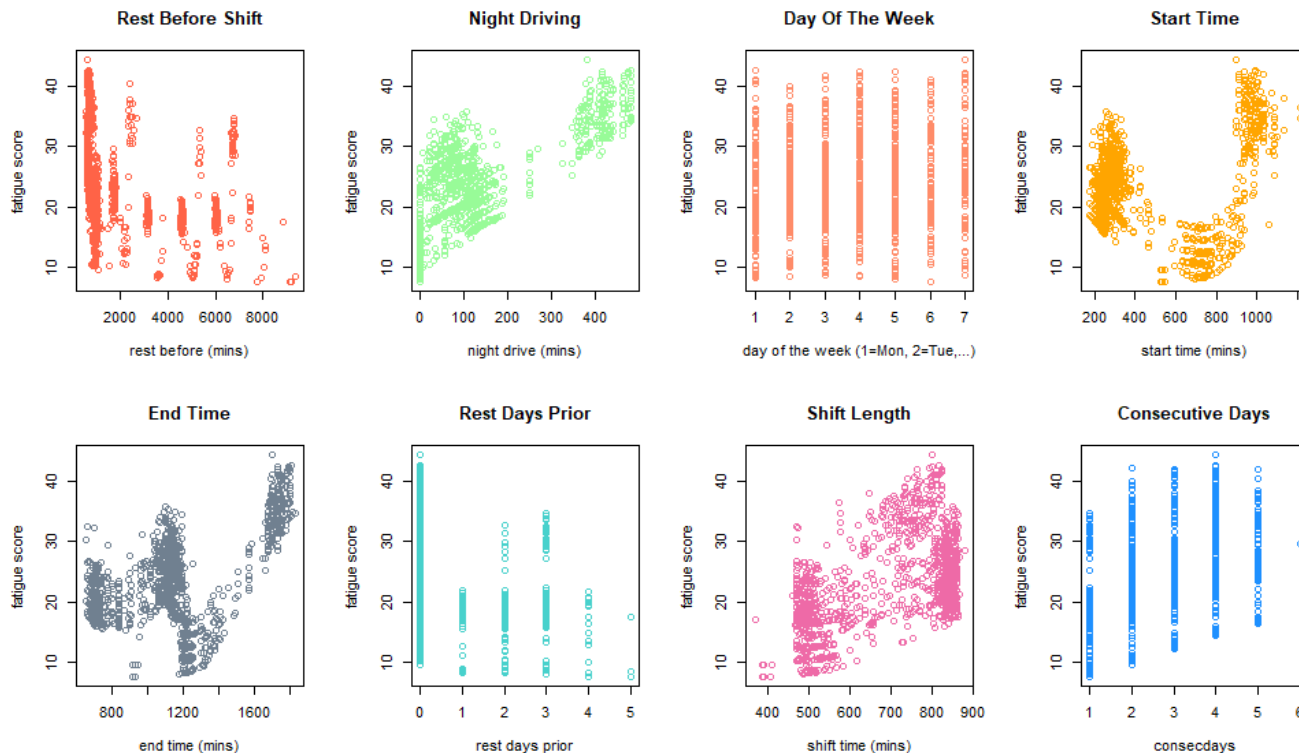
- The model scans a large bus schedule for the entry number, duty number, and day of the week of the desired duty.
- It individually evaluates numerous factors in the duty;
 1. start time,
 2. end time,
 3. night driving,
 4. rest time before the duty,
 5. consecutive days worked prior
 6. the length of the duty.
- The model combines these results and returns a value from 5-55 relating to how 'fatiguing' the duty is.

Scatter Graphs

- The next slide contains lots of Scatter Graphs.
- Scatter Graphs are used to compare how two things relate to each other.
- As you can see on the graph here, typically, as the rest time before a duty increases, the fatigue score decreases.
- This is what we would expect, so the model is performing the right way.



Using the Fatigue Score



- This enables us to check the model is working as it should; accounting for every factor properly.
- All graphs are showing expected results.
- All factors have equal weighting, apart from start and end time which are slightly reduced.

What Makes up the Fatigue Score?



Part of **First** Bus

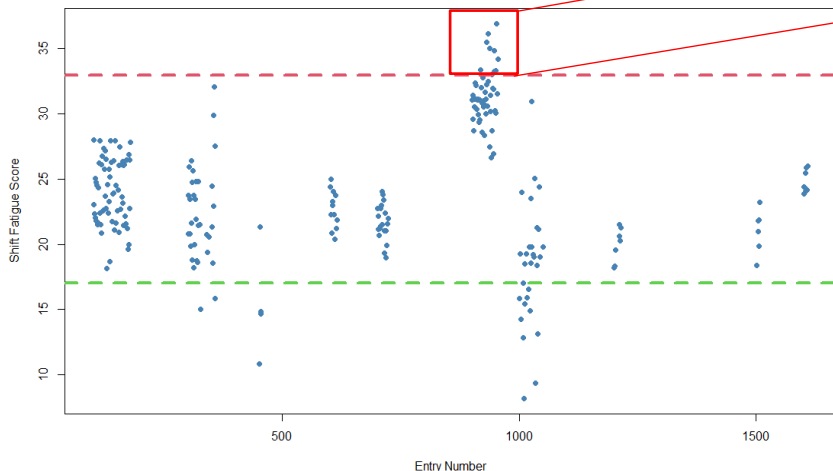
Entry No.	Day of the Week	Duty No.	Type	Start Time	End Time	Shift Duration	Day/Night	Rest Time Since Last Shift	Duration of Night Driving	Consecutive Working Days	Fatigue Rating
952	Sun	9401	Working	15:00	04:20	13h20m	N	9h45m	6h20m	4	44.2808

- This duty is shown to be the most fatiguing from this data set.
- Here is the breakdown of how the score was calculated.

Factors	Score	Max Score
Rest Time Prior	7.98	10.00
Shift Length	7.87	10.00
Duration of Night Driving	7.92	10.00
Start Time	3.39	5.00
End Time	4.12	5.00
Consecutive Days	8.00	10.00
Commute Time (Default)	5.00	5.00
Total	44.28	55.00

Identifying High Fatigue Shifts

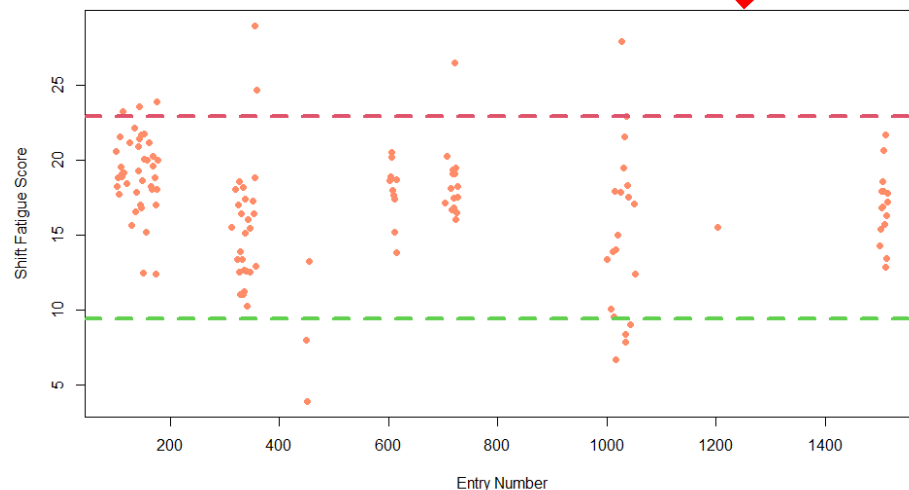
Night Shifts



10 shifts above the 'high' line for nights

7 shifts above the 'high' line for days

Day Shifts



'High Fatigue' Line

'Low Fatigue' Line

How Can We Use This?

- The scheduling team can put a draft schedule through the model, assess the fatigue level of each shift and adjust accordingly.
- These fatigue scores can be compared to data on collisions and absences from drivers to see if there is a relationship between them and potentially reduce the overall absence and collisions for the company.
- Identifying High and Low Fatigue Shifts, as shown in the previous slides, will provide a starting point for reducing the fatigue for those extremes and even the weight among all drivers, taking the pressure off those completing them.

Thank You

Item 6: Any Other Business

Chair

Item 7: Date of next meeting

Transport Forum: Thursday 11th July 2024 at 6pm

Next dates for the Community, Main Site and Transport Forums in 2024

All 6pm start and on Thursdays

Transport Forum	11 th July 2024 / 14 th November 2024
Community Forum	16 th May 2024 / 19 th September 2024
Main Site Forum	20 th June 2024 / 17 th October 2024

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Thank You