

October 2023

# London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 8 Additional Submissions (Examination)

**8.64 ISH4 Action 2 Interim Response - Presentation on the  
Interim Findings of the Covid-19 Modelling Update**

Infrastructure Planning (Examination Procedure) Rules 2010

Application Document Ref: TR020001/APP/8.64

**The Planning Act 2008**

**The Infrastructure Planning (Examination Procedure) Rules 2010**

**London Luton Airport Expansion Development Consent  
Order 202x**

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**8.64 ISH 4 ACTION 2 INTERIM RESPONSE – PRESENTATION OF  
THE INTERIM FINDINGS OF THE COVID-19 MODELLING UPDATE**

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<b>Deadline:</b>	Deadline 3
<b>Planning Inspectorate Scheme Reference:</b>	TR020001
<b>Document Reference:</b>	TR020001/APP/8.64
<b>Author:</b>	Luton Rising

<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Issue 1	October 2023	Additional Submission - Deadline 3

# Our airport.

Transport Modelling

Accounting for COVID-19 in transport  
modelling

Trends Analysis

September 2023

**Luton  
Rising**  
Our airport.  
Our community.  
Our planet.

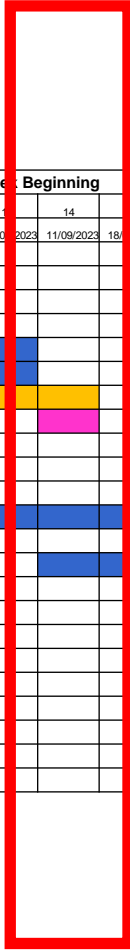
- Programme
- Trends analysis
- DfT traffic growth projections
- Future years modelling updates
- Initial conclusions
- Next steps



# Programme



Task/Activity	Week Beginning																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0 Scoping and Responding to 13 June 2023 Letter	█	█	█	█																						
1 Stakeholder Meetings 1 - Scope						█																				
2 Collate available 2016 to 2023 SRN traffic count data (on-line)					█	█	█																			
3 Request 2016 to 2023 LRN traffic count data from LHAs					█	█	█	█	█	█	█	█	█	█	█											
4 Review of DfT Rail COVID-19 Scenarios					█	█	█	█	█	█	█	█	█	█	█	█										
5 Analyse traffic count and patronage data to determine trends since 2016					█	█	█	█	█	█	█	█	█	█	█	█										
6 Technical Note 1 on 2016 to 2023 trends									█	█	█	█	█	█	█	█										
7 Stakeholder Meetings 2 - Recent trends															█											
8 Update future years (FY) Uncertainty Log (UL) for development and infrastructure					█	█	█	█	█	█	█	█	█	█	█											
9 Update (FY) travel demands for UL, NTEM8 & NRTP22 - 2027, 2039, 2043				█	█	█	█	█	█	█	█	█	█	█	█											
10 Produce transport demands for new additional year 2023					█	█	█	█	█	█	█	█	█	█	█	█										
11 Run highway and public transport models - 2023, 2027, 2039, 2043															█	█	█	█	█	█	█	█	█	█	█	█
12 Compare 2023 forecasts with 2023 counts and 2016 modelled base year															█	█	█	█	█	█	█	█	█	█	█	█
13 Determine future year risks and need (if any) for adjustment factors															█	█	█	█	█	█	█	█	█	█	█	█
14 Technical Note 2 Risk Assessment																	█	█	█	█	█	█	█	█	█	█
15 Stakeholder Meetings 3 - Risk Assessment																		█								
16 Produce adjusted FY road and rail forecasts (if required and subject to TN2)																		█	█	█	█	█	█	█	█	█
17 Change and risk assessment																		█	█	█	█	█	█	█	█	█
18 Growth factors for VISSIM micro-simulation model																										
19 Traffic data for environmental assessment																										
20 Reporting																										
21 Stakeholder Meetings 4 - Reporting																										
22 Submission to planning inspectorate																										



- Data analysis to track impact of COVID-19 on traffic volumes
- Strategic road network
- Local road network
- Trends over 2016 to 2023 period
- 2016 for base year for CBLTM-LTN strategic model
- 2023 for current year



## Strategic road network – selection criteria

### Timescale

- 2016 to 2023
- September - to capture the trends post Covid-19, assumed to commence September 2022
- October – to capture base model data month
- April – to capture most recently available WebTRIS data

### Weekday times

- AM peak hour: 08:00 - 09:00
- Interpeak hour : average 10:00 – 16:00
- PM peak hour: 17:00 – 18:00
- Daily: in a form of Annual Average Daily Traffic (AADT)

### Vehicle types

- Cars
- Light Goods Vehicles (LGVs)
- Heavy Goods Vehicles (HGVs)



## Strategic road network

### Initial long list of locations

- M1 mainline sections between J8 and J12
- A1081 between M1 J10 and J10a
- A414 east of M1 J8 (south of St Albans)
- M25 west and east of J21&21a (with M1)
- A1 north and south J8
- A5183 (west of M1 and Slip End)

### Final list of locations, with all selection criteria applied

- M1 mainline sections between J8 and J12
- A1081 between M1 J10 and J10a
- M25 west and east of J21&21a (with M1)

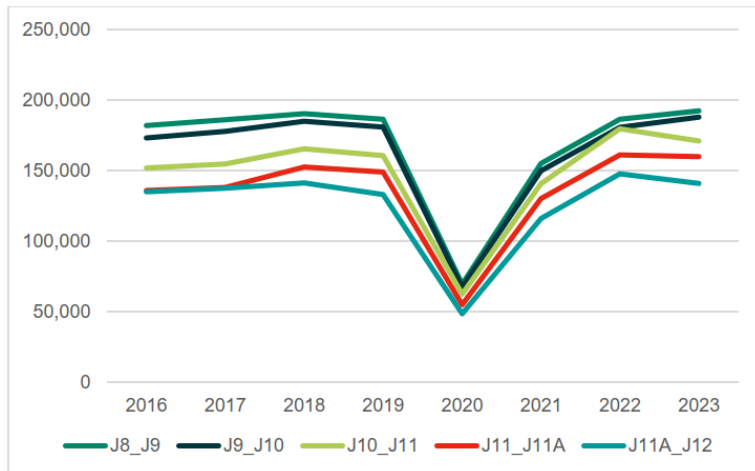




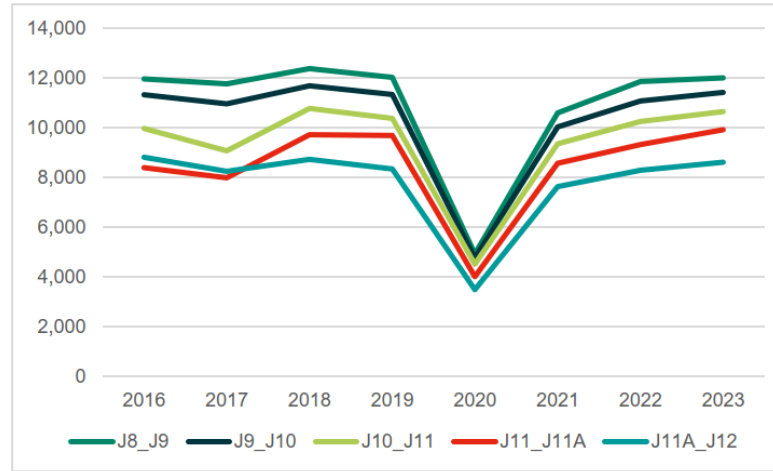
# M1 mainline 2-way flows 2016-2023



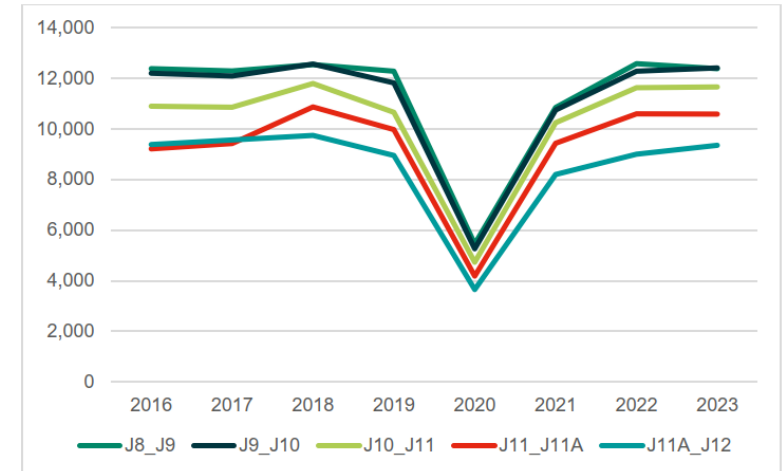
### AADT



### AM Peak Hour



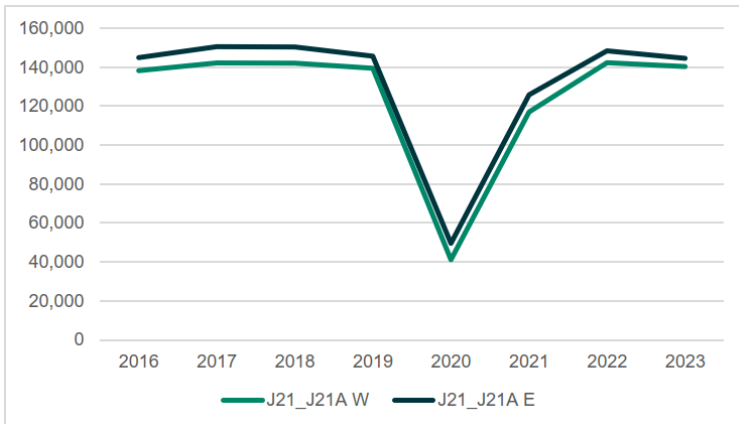
### PM Peak Hour



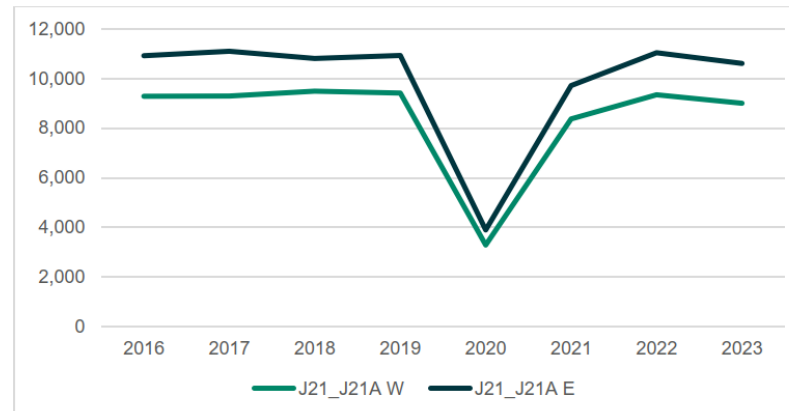


# M25 mainline 2-way flows 2016-2023

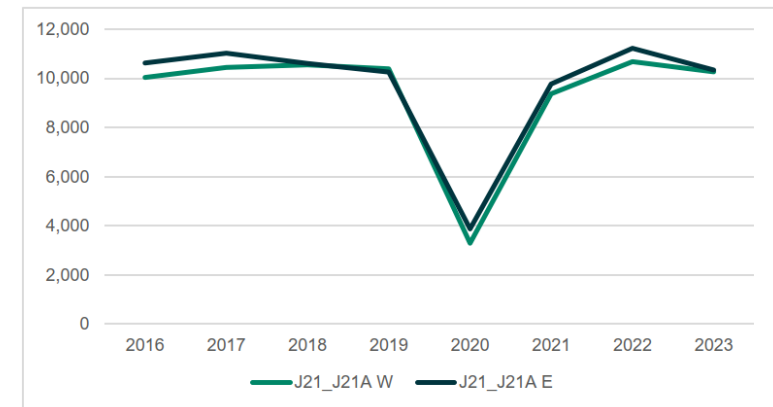
### AADT



### AM Peak Hour



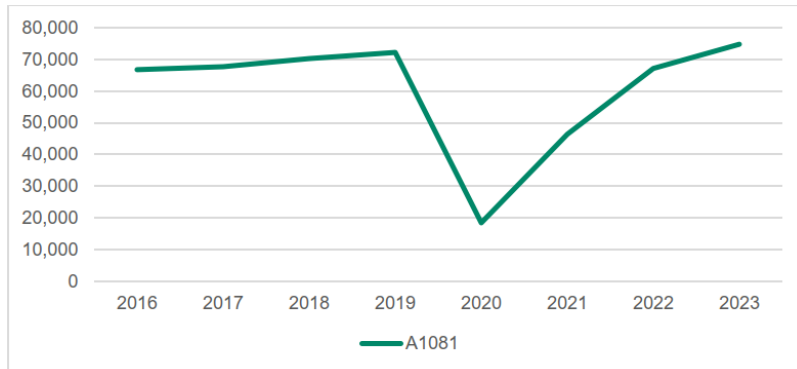
### PM Peak Hour



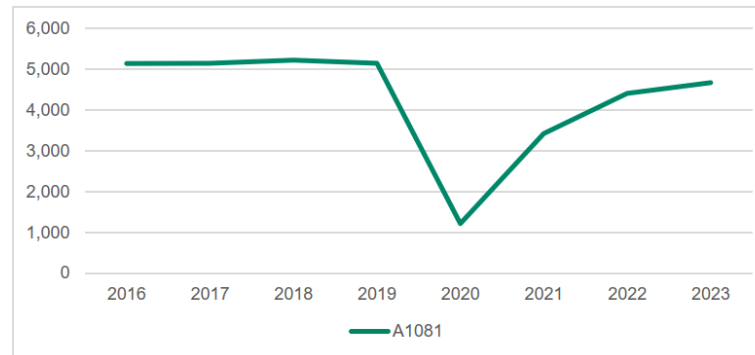


# A1081 J10 to J10A mainline 2-way flows 2016-2023

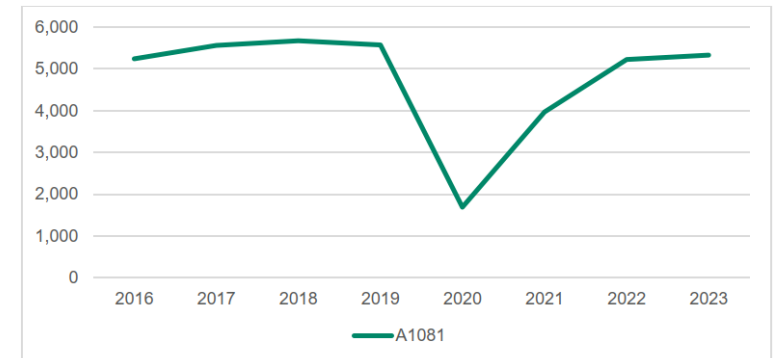
### AADT



### AM Peak Hour



### PM Peak Hour

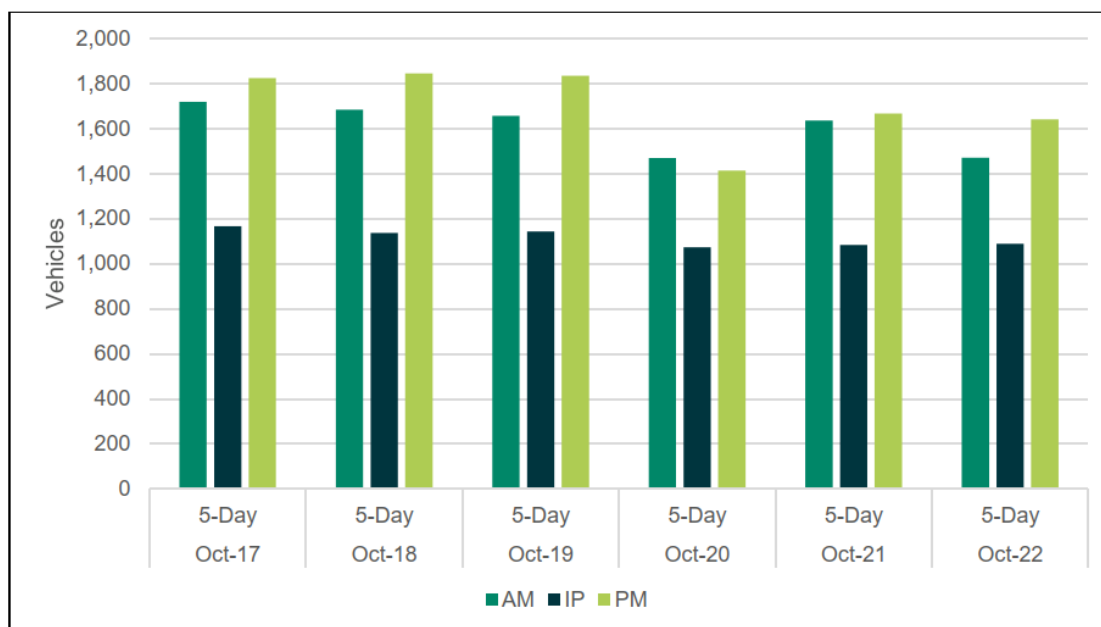


# Local road network – initial locations for selection criteria

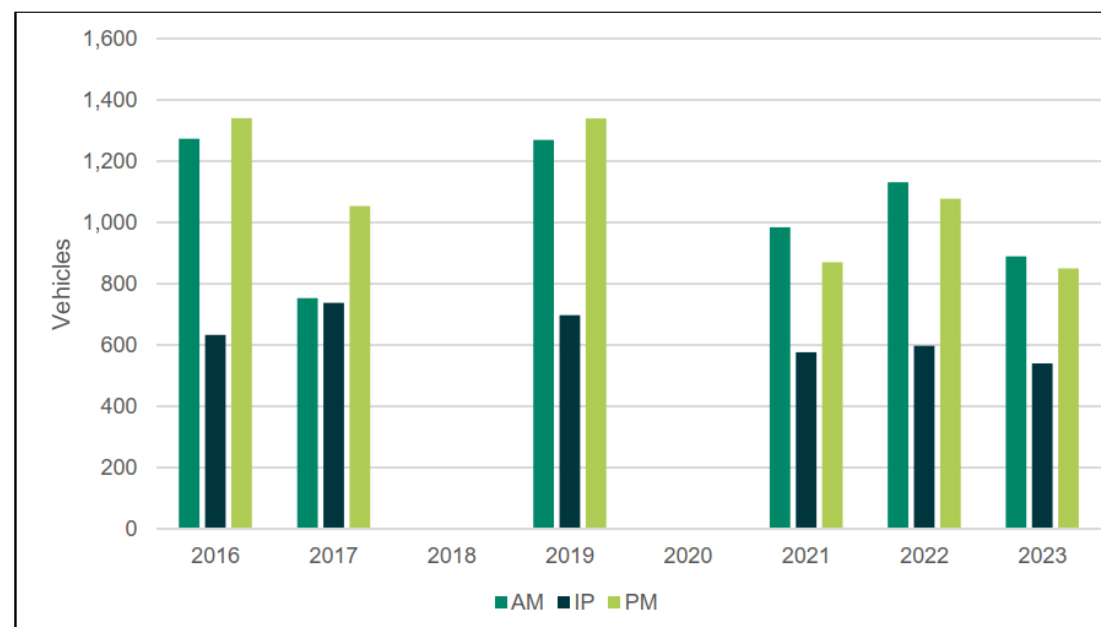


Note: Luton Borough Council sites – work still in progress and to be reported once complete

### Site 128 - A5183 East of Markyate

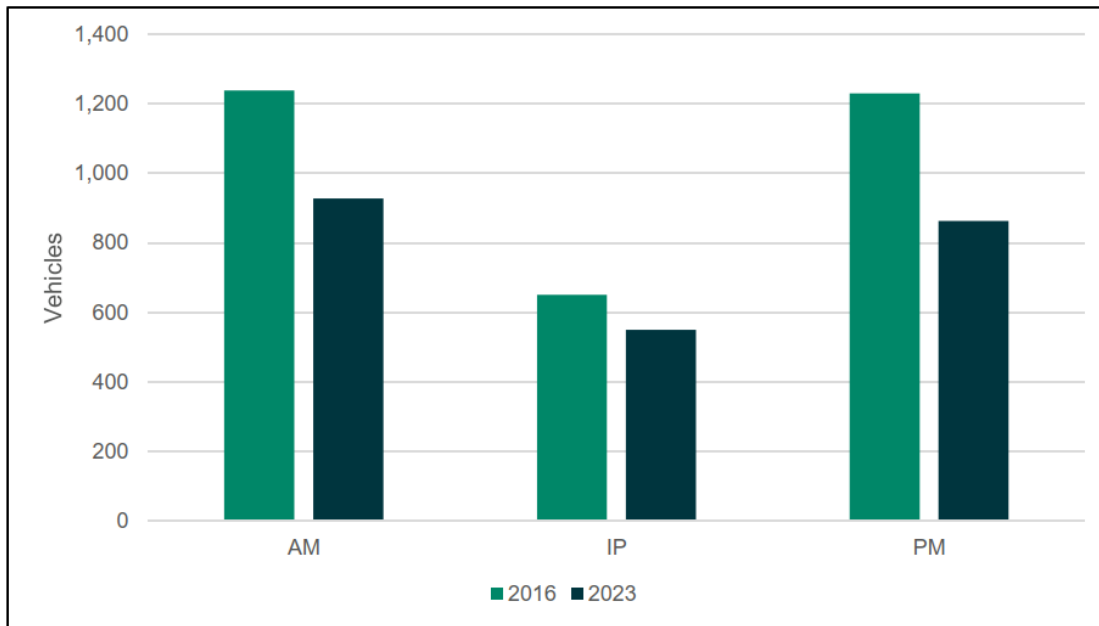


### Site 372 - B653 between Bower Heath and East Hyde



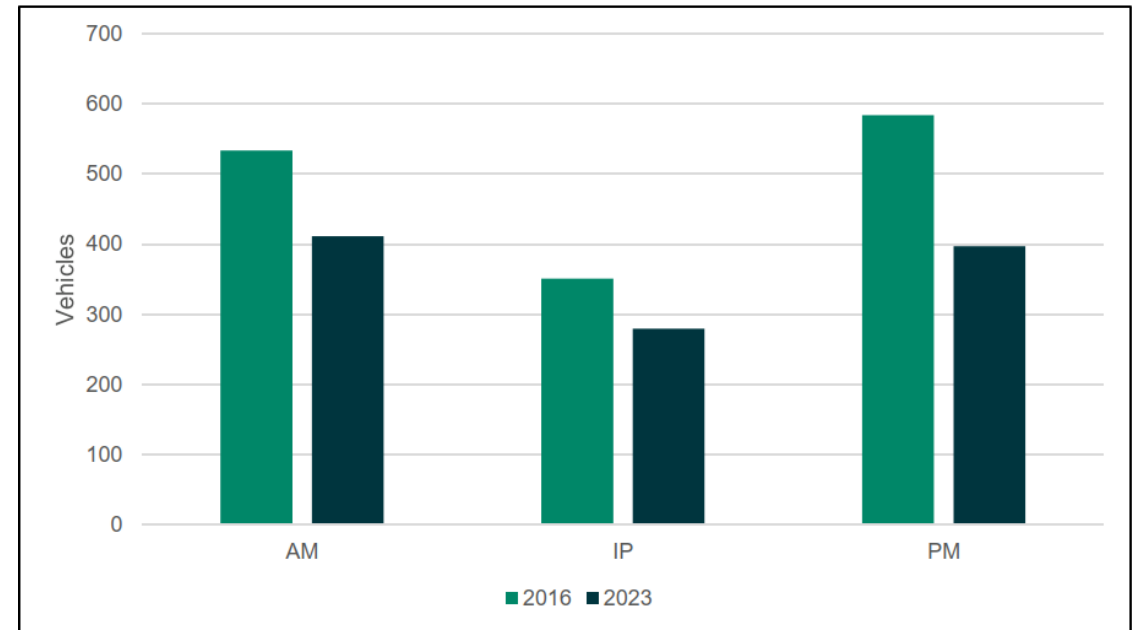
Note: October was the only month available to assess the full trend

### Site 40 - Lower Harpenden Road



Note: Only two years available

### Site 57 - B540 Church Road



Note: Only two years available

- Published in July 2023 and updated in August 2023
- Summarised by Local Transport Today, 7<sup>th</sup> September 2023, as:
  - “Average trips made by people living in England increased by 14% in 2022 compared to 2021, but trip rates remain lower than in the pre-pandemic period, being 10% down on 2019, with 862 trips made on average in 2022, the newly released National Travel Survey reveals.*
  - There were increases in trip rates amongst all transport modes compared to 2021, apart from cycling and London Underground trips which remained broadly similar. The rates for all modes were however still lower than 2019.”*

# DfT National statistics - Provisional road traffic estimates, Great Britain: July 2022 to June 2023



- Published 7<sup>th</sup> September 2023
- Headline figures state - “Overall traffic levels in the year ending June 2023 were higher than in year ending June 2022 **and below pre-pandemic levels.**”
- Note - “These provisional estimates are based on traffic data collected continuously from a network of around 300 automatic traffic counters. Final annual figures also incorporate manual traffic count data.”





## Trends analysis – key findings

- SRN flows – M1 and M25 mainline largely ‘recovered’ with peak hour and daily flows above 2019 (and also above 2016 base year)
- SRN flow exception – A1081 between J10 and J10A not quite fully ‘recovered’
- LRN – HCC and CBC data show volumes not ‘recovered’ with flows lower than 2019 (pre-COVID-19) and lower than 2016 (base model year)
- LRN for LBC – work still in progress and to be reported once complete
- Trends analysis conclusion – SRN largely ‘recovered’, LRN not ‘recovered’ and there may therefore be a case for post model slight downward adjustment to traffic forecasts



# DfT traffic growth projections

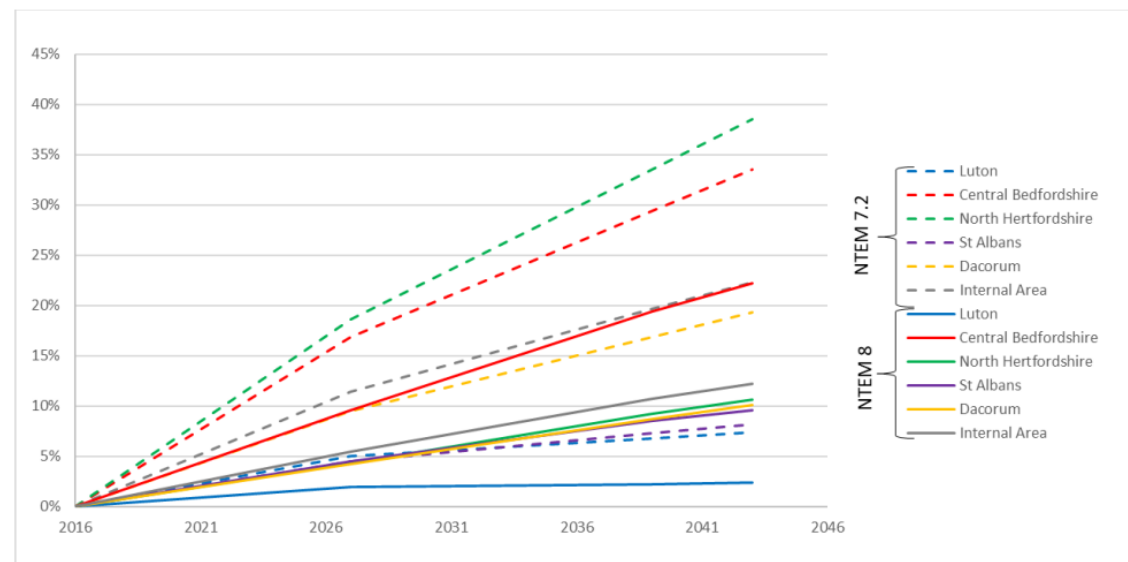
## Analysis of

- Latest growth from National Trip End Model version 8 (NTEM8) versus previous NTEM7.2 for cars
- Latest growth from National Road Traffic Projections 2022 (NRTP22) versus previous Road Traffic Forecasts 2018 (RTF18) for LGVs and HGVs

# NTEM8 versus NTEM7.2 – detailed model area



## Households



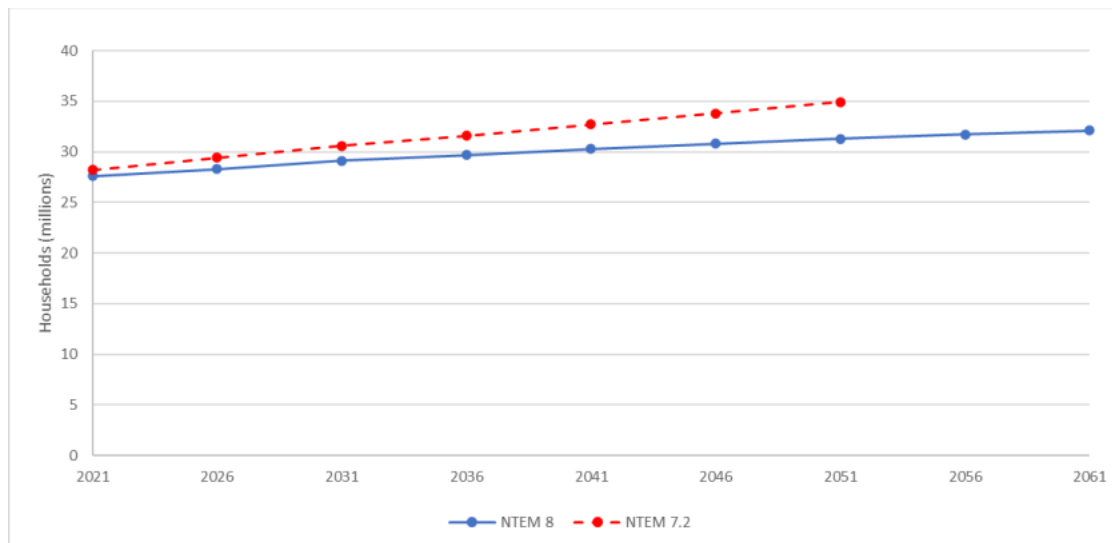
## Employment



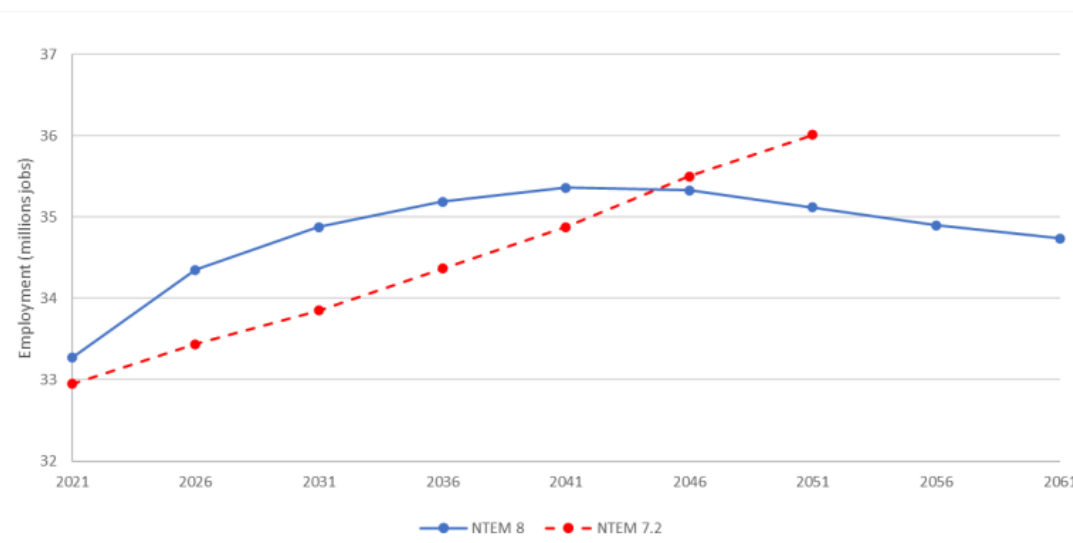


# NTEM8 versus NTEM7.2 – national

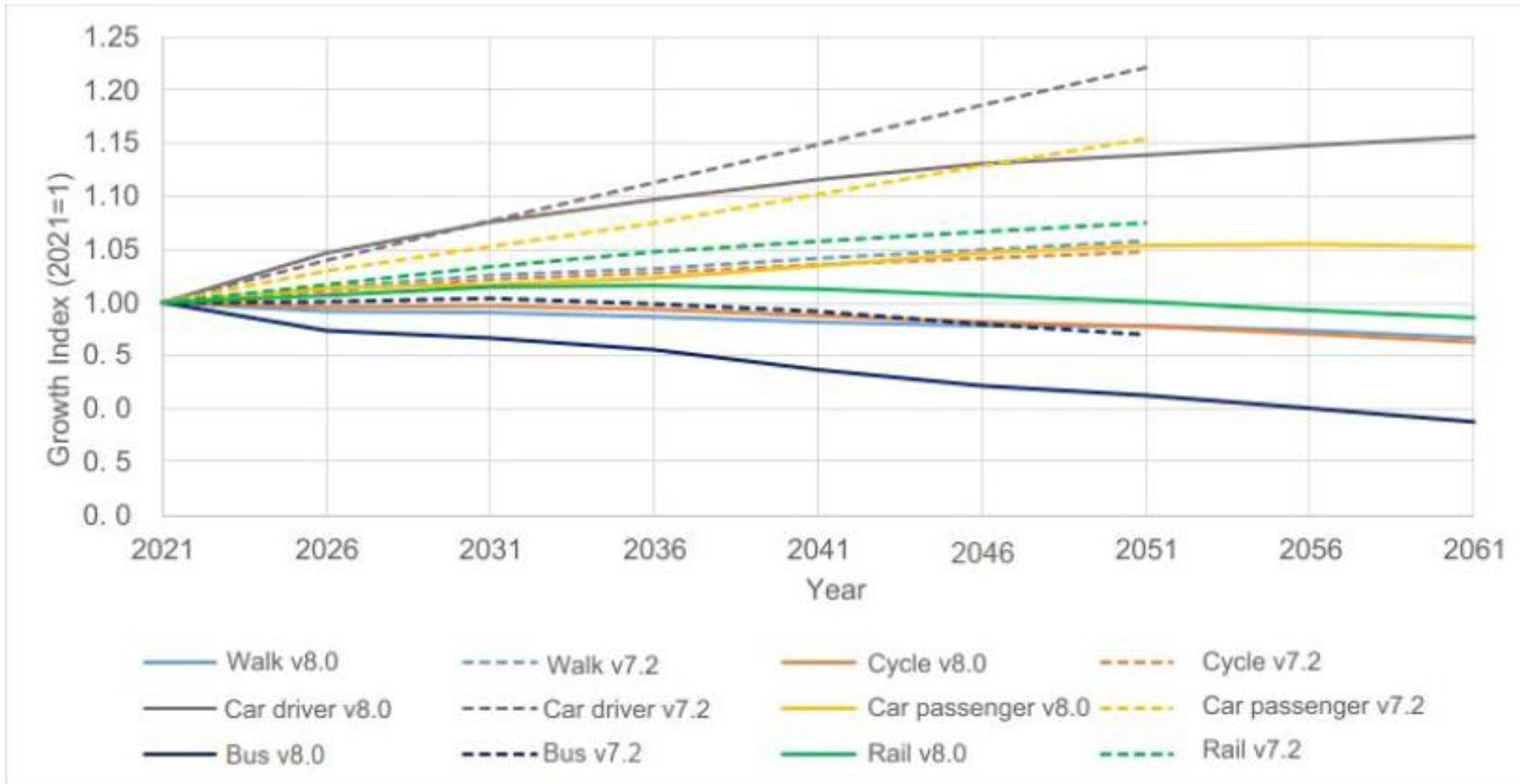
## Households



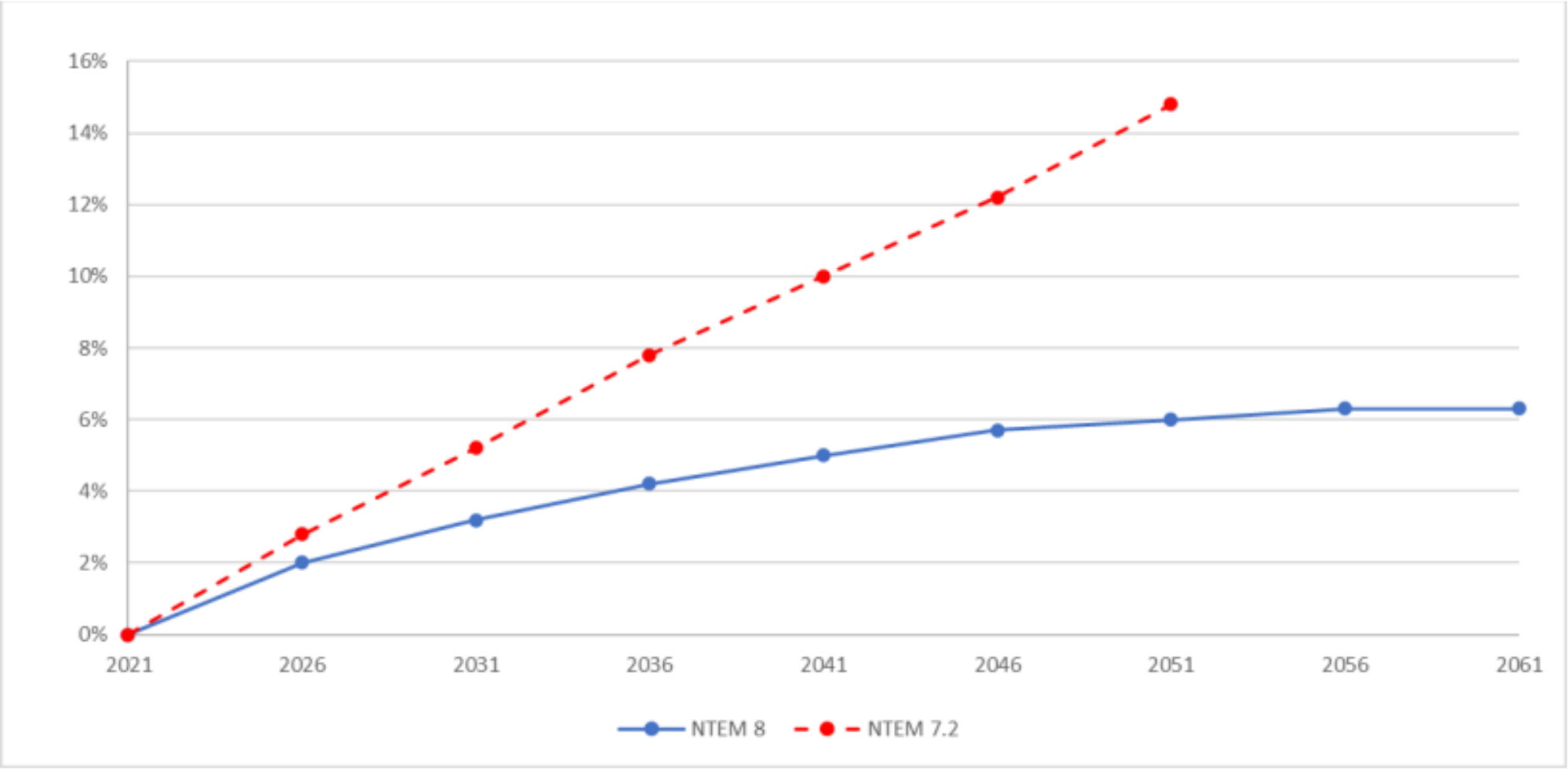
## Employment



# Growth in trip productions by mode

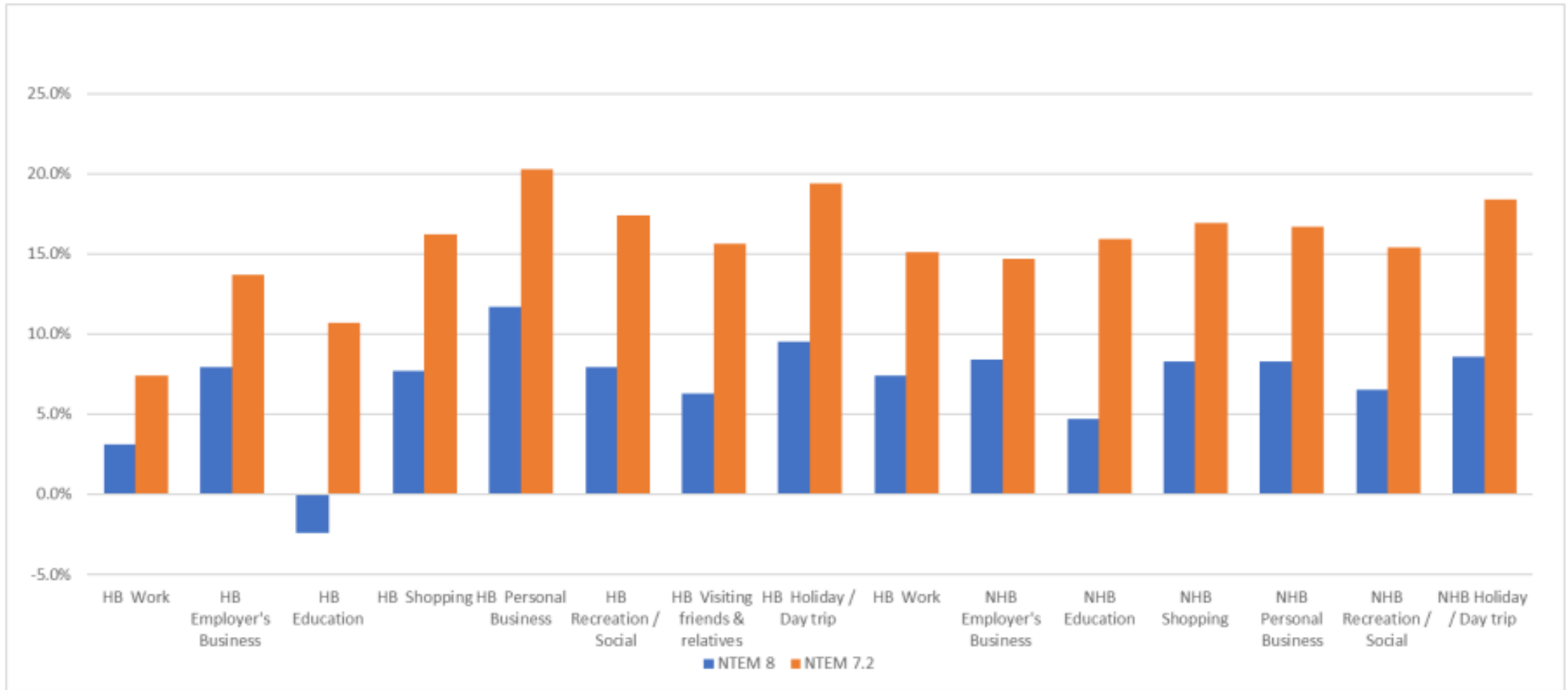


# Growth in all trip productions through time

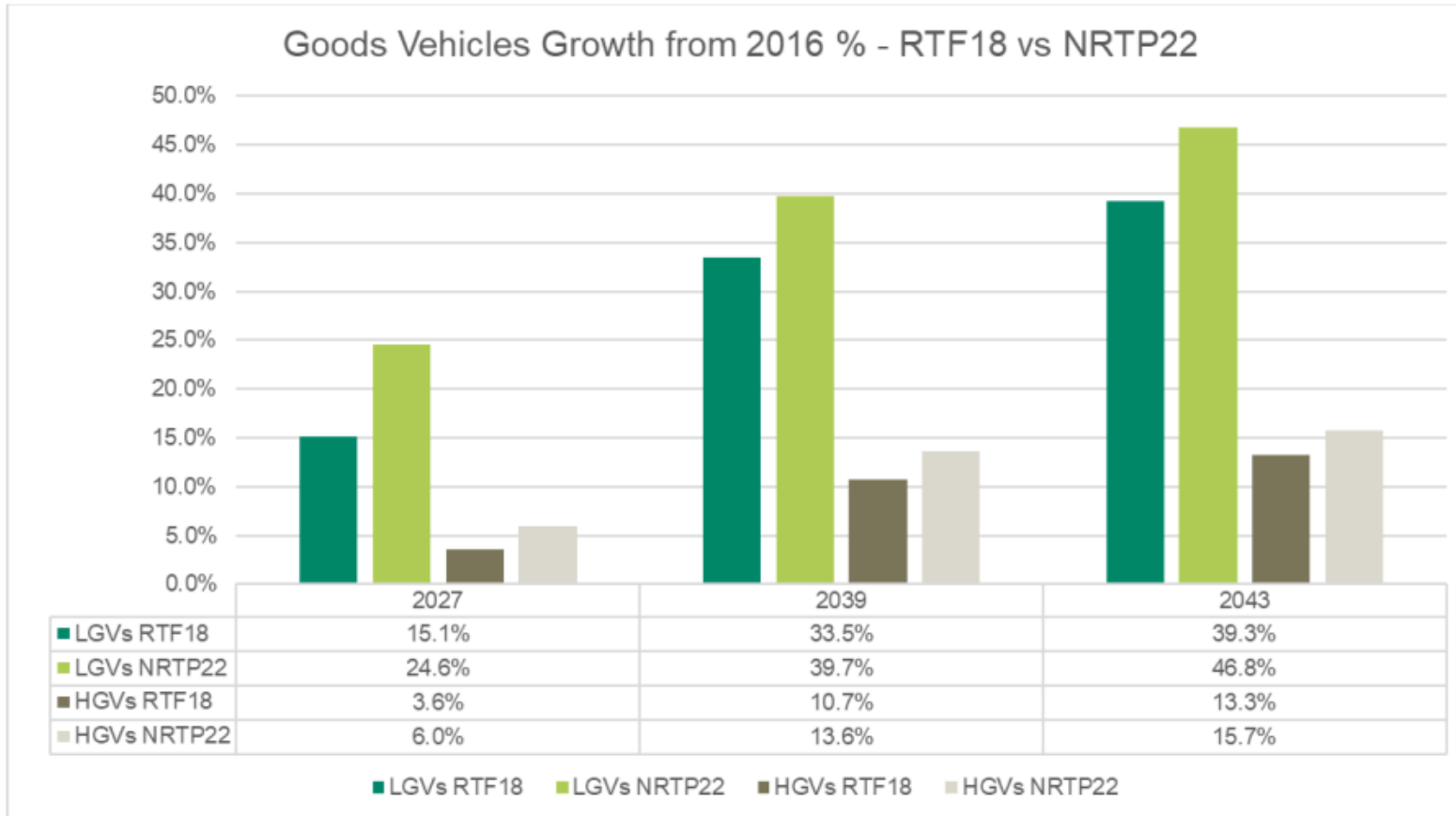




# Trip productions by purpose - % change 2021-2051



# NRTP22 growth versus RTF18 growth for East of England



LGVs and HGVs represent smaller portions of overall traffic and would not result in significant increases in total all-vehicle volumes





## Future years modelling updates – summary

- Uncertainty logs updated and shared
- NTEM8 and NRTP22 growth processed
- Analysis of NTEM8/NRTP22 growth (prior to model runs) indicates possibility of slightly reduced traffic flows when compared with flows within DCO documents (based on previous NTEM7.2/RTF18 growth) – will depend on the results from processing the updates via the demand model and highway assignment model
- Demand model and highway assignment model runs taking place for reporting in October, including new 2023 forecast year and comparison with count data



## Initial conclusions

- Updated forecasts may possibly be slightly lower than in DCO documents
- May be a case for subsequent slight downward adjustment to forecasts based on the trends analysis, although noting limitations on available data
- Initial risk assessment – ‘low’ - due to possible slightly reduced traffic flows, plus potential further downward adjustment, and therefore mitigation measures can be considered as ‘robust’ and TRIMMA will trigger measures on a ‘need/impact’ basis
- Raises the question on whether *‘Task 16: Produce adjusted FY road and rail forecasts (if required and subject to TN2)’* will be needed – to be discussed and confirmed, following completion of the trends analysis (for LBC data) and updated model runs, at next round of engagement



## Next steps

- Complete trends analysis for LBC traffic count data
- Complete CBLTM-LTN model runs for 2023, 2027, 2039 & 2043
- Compare CBLTM-LTN 2023 forecasts with 2023 observed data
- Risk assessment
- Meeting to discuss