

TRAFFIC ASSESSMENT

Commercial Garage Block to Residential at
Dickens Avenue, Hillingdon, UB8 3DN

1. Executive Summary

This provisional traffic assessment evaluates the vehicular movements associated with the proposed conversion of an existing 11-unit commercial garage block (builder/trades vehicle storage with early morning and evening access) to a single 4-bedroom self-build residential house at Dickens Avenue, Hillingdon, UB8 3DN.

Key Findings:

- Existing use: 11-unit commercial garage block to be lost out of a total of 16 present (7 actively occupied)
- Current usage: Builders' vehicles - early morning pickups (7am+) and evening dropoffs (materials/ladders)
- Access frequency: Highly variable - daily to weekly depending on work schedules
- Existing traffic pattern: Concentrated early morning (06:00-08:00) and evening (17:00-20:00) peaks
- Proposed use: Retirement-age household (60+) working from home + son (working from home Mon-Fri)
- Proposed traffic: 3.5 two-way movements/day with NO early morning or evening peaks
- Net change: Significant REDUCTION in early morning and evening commercial traffic + distributed residential traffic

2. Site and Household Details

2.1 Location

Address: Dickens Avenue, Hillingdon, UB8 3DN

Local Authority: London Borough of Hillingdon

2.2 Existing Use Commercial Garage Block (Builders' Storage)

The site proposed to be developed comprises an 11-unit commercial garage block used for builder/trades vehicle storage and equipment access. Detailed current usage pattern:

Characteristic	Description
Total Units	11 car-sized garages (undersized)
Active Occupancy	7 (64% occupancy)
Primary Users	Builders, tradespeople
Morning Access	Early (6:00-8:00am) - vehicle pickups, daily-weekly
Evening Access	Evening (5:00-8:00pm) - material/ladder dropoff
Vehicle Types	Vans, pickup trucks (commercial vehicles)

2.3 Proposed Development - Household Composition

The proposal involves demolition of the garage block and development of a single 4-bedroom self-build residential dwelling with the following household:

Occupant	Age Group	Work Pattern
Resident 1	60+	Works from home
Resident 2	60+	Works from home
Son	Adult	WFH Mon-Fri; weekends free

3. Methodology

This assessment compares garage usage patterns (early morning and evening commercial access) with the proposed residential household working patterns (primarily daytime and mid-day activities).

3.1 Existing Commercial Garage Usage Patterns

- 7 actively occupied garages used by builders/trades
- Early morning access: 6:00-8:00am - vehicle pickups before work (peak commercial activity)
- Evening access: 5:00-8:00pm - material/ladder dropoff after work (secondary peak)
- Frequency: Variable - daily to weekly depending on builder schedules
- Daily average: 1.5 movements calculated on 1-2 visits/week per garage
- BUT: Peak hour concentrations (morning 6-8am, evening 5-8pm) are significant

3.2 Proposed Residential Use Patterns

- 3 occupants, all working from home majority of time
- NO early morning commute (6-8am = 0 movements)
- NO typical evening commute peak (5-8pm = minimal movements)
- Daytime-distributed access: shopping, healthcare, leisure
- Daily average: 3.5 movements distributed throughout day

4. Traffic Generation Analysis

4.1 Existing Use - Commercial Garage Early Morning and Evening Peaks

The existing garage block creates distinct early morning and evening peaks due to builder/trades access patterns:

Time Period	Garage Activity	Movements
06:00-08:00 (AM PEAK)	Builder vehicle pickups - HIGH activity	0.6-1.0 (variable)
08:00-17:00 (Daytime)	Minimal - garages in use elsewhere	0.2-0.3
17:00-20:00 (EVENING PEAK)	Material/ladder dropoffs - SIGNIFICANT	0.4-0.7
20:00-06:00 (Night)	None	0
TOTAL 24-HOUR		1.5

Key observation: Although daily average is 1.5 movements, the TIMING is concentrated in two sharp peaks: early morning (6-8am) and evening (5-8pm). This creates potential for: (1) Disturbance to nearby residential properties through early morning commercial vehicle noise, and (2) Evening peak-hour congestion pressure.

4.2 Proposed Use - Residential Household (Working From Home/ retired)

Time Period	Household Activity	Movements
06:00-09:00	Work-from-home setup - no commute	0
09:00-12:00	Mid-morning shopping/services	1.0
12:00-17:00	Lunch/afternoon activities	0.5
17:00-22:00	Evening leisure/social - WFH households at home	1.0
22:00-06:00	Sleep	0
TOTAL 24-HOUR		2.5

Conservative estimate based on: 3-occupant household, all WFH majority of time, distributed daytime activity, minimal evening (no double commute peak)

Note: Using 2.5 rather than 3.5 to reflect the reduced traffic compared to standard household, but accounting for weekend leisure trips and son's occasional weekend activities.

Further note- the site is situated close to public transport buses and various train stations (West Drayton, Hayes, Heathrow Central, Uxbridge) and two of the three occupants qualify for free bus passes, thus reducing the need for vehicular movements further.

4.3 Comparison Summary

Metric	Existing (Garages)	Proposed (Residential)
Use Type	Commercial (7 active garages)	Residential (3 WFH occupants)
Daily Movements (2-way)	1.5	2.5
Early Morning (6-8am)	0.6-1.0 (HIGH)	0 (ELIMINATED)
Evening (5-8pm)	0.4-0.7 (SIGNIFICANT)	0.3 (MINIMAL)
NET DAILY CHANGE	–	+1.0 (but BENEFICIAL pattern)

4.4 Critical Finding - Peak Hour Comparison

This is the most significant aspect of the traffic impact assessment:

Peak Period	Existing (Garages)	Proposed (House)
06:00-08:00 (Early AM)	0.6-1.0 movements	0 movements

17:00-20:00 (Evening)	0.4-0.7 movements	0.3 movements
IMPACT	Undesirable commercial peaks	Eliminates early AM; reduces evening

4.5 Monthly Traffic Estimate

Metric	Existing	Proposed
Daily Average	1.5	2.5
Monthly (30 days)	45	75
Net Monthly Increase	–	+30

5. Impact Assessment

5.1 Overall Assessment - BENEFICIAL CHANGE

The proposed residential conversion brings MATERIAL BENEFITS despite a modest net increase in total daily movements (1.5 to 2.5). The existing commercial garage facility creates significant disturbance during unsociable hours that would be eliminated:

- ELIMINATION of early morning (6-8am) commercial vehicle movements and noise disturbance to adjacent residential properties
- SIGNIFICANT REDUCTION in evening (5-8pm) peak hour traffic and associated noise/pollution
- REPLACEMENT with quiet daytime residential activity (work-from-home household)
- IMPROVED AMENITY for surrounding residential properties through removal of commercial vehicle access

IMPORTANT FURTHER NOTE – It should be noted that there is scope for the intensity of early morning and evening traffic to increase considerably above these quoted figures, if more of the existing garages were renovated and occupancy reached 100%, at some point into the future, if conversion to a domestic home were not allowed to progress here.

5.2 Highway Network Impact

Net increase of 1.0 daily movement is negligible in highway network terms. Dickens Avenue accommodates typical residential traffic easily. The shift away from early morning and evening peak concentration reduces localised congestion potential.

5.3 Parking Provision

Reduction from 11 garage spaces (7 actively used, mostly for builder storage) to 2 off-road residential spaces is appropriate. The work-from-home household generates minimal parking demand. On-street parking impact is negligible.

5.4 Residential Amenity

The conversion from commercial use to residential is BENEFICIAL from a planning perspective. It removes a commercial facility that generates early morning disturbance (commercial vehicles, noise) and replaces it with a low-impact residential dwelling occupied by home-working residents who are present most of the time and generate daytime activity patterns.

6. Conclusions and Recommendations

6.1 Conclusion

This provisional traffic assessment concludes that the proposed conversion of a commercial garage block to a residential house is ACCEPTABLE and BENEFICIAL from a traffic perspective. Although daily vehicle movements increase modestly from 1.5 to 2.5 (net +1.0), the QUALITY and TIMING of traffic improves significantly. The elimination of early morning commercial vehicle movements (6-8am) and reduction of evening peaks represents a marked improvement in local traffic character and residential amenity. The proposed work-from-home household generates quiet daytime activity suitable for a residential location. Overall assessment: ACCEPTABLE with POSITIVE BENEFITS for the surrounding residential area.

6.2 Recommendations

- Provide 2 off-road parking spaces as proposed
- Provide secure bicycle parking for leisure/services trips

6.3 Assessment Limitations

This assessment is based on: (1) observed garage occupancy (7 of 11 units), (2) stated builder access patterns (early morning and evening), (3) confirmed household composition (retirement-age WFH residents + son WFH Mon-Fri). If these circumstances change materially, the assessment should be revalidated.

7. Document Information

Title: Provisional Traffic Assessment – Commercial Garage Block Conversion to Residential (Work-from-Home Household)

Location: Dickens Avenue, Hillingdon, UB8 3DN

Date: March 2026

Version: 3.0 (Revised with Commercial Peak Hour Analysis)