

Draft Local Plan No. 4 (Redditch Local Plan)



Transport Assessment and Mitigation Proposals

Worcestershire County Council

Purpose of Presentation



Update Councillors on work underway to:

- Identify the travel demand generated by the Draft Local Plan No. 4 (Draft RLP) developments
- Assess the cumulative impact on transport network of the Draft RLP developments
- Identify the strategic transport infrastructure and service measures needed to accommodate the growth generated by the Draft RLP

Background - Methodology



- Draft RLP development assumptions provided by LPA including location, quantum and type
- Establish existing and forecast future (2030) transport network baseline conditions
- Forecast travel demand for 2030 - Background growth / RLP generated growth
- Forecast traffic growth along highway links / key junctions
- Identify mitigation schemes (at strategic level)

Background - Methodology



- Proposals are work in progress detailed design to follow
- Proposals focus upon draft RLP development assumptions, therefore does not include the additional c3,000 units within the Draft Bromsgrove District Plan post 2022
- Proposals do not include input from the HA (M42 Junctions)
- Proposals seek to support the RLP process, in particular the test of “soundness” e.g. :
 - Technical approach (DfT compliant & HA agreed)
 - Scale of ambition
 - Strategic issues

Methodology I : Network Impact



- Vehicle/Trip Generation Model: Forecast number of development trips by all modes of transport
- Highway trips assigned to highway links & cumulative impact on highway network performance assessed
- Forecast demand for walk, cycle and passenger transport network identified
- Schemes developed to mitigate adverse impacts on network performance

Methodology 2 : Scheme Identification



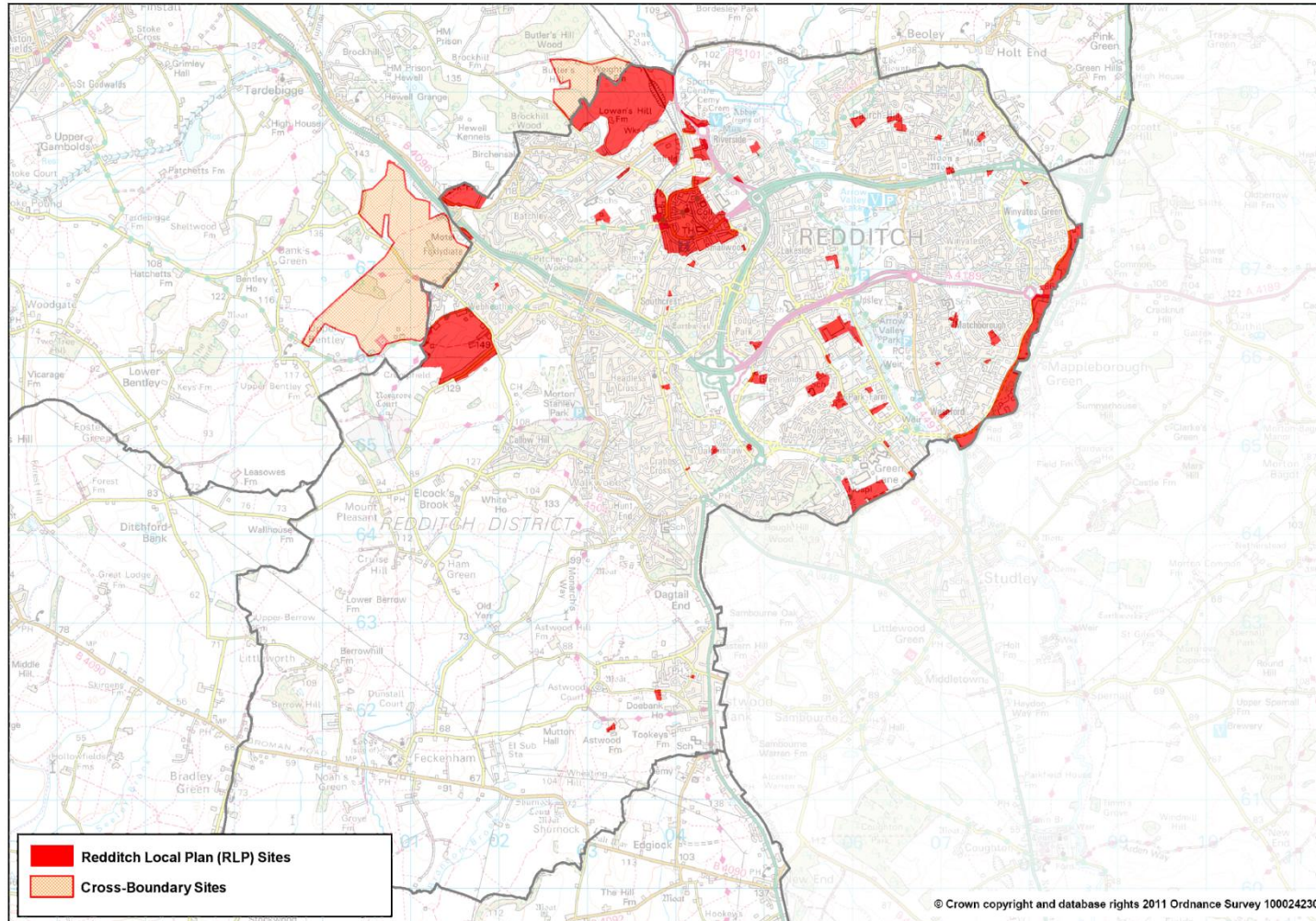
- Identify mitigation schemes through:
 - Assessment of type and scale of problem,(e.g. Congestion, poor accessibility)
 - Review of existing schemes
- Estimate infrastructure capital costs (excluding land, if required) and maintenance costs
- Estimate passenger transport operating costs

RLP Core Planning Assumptions

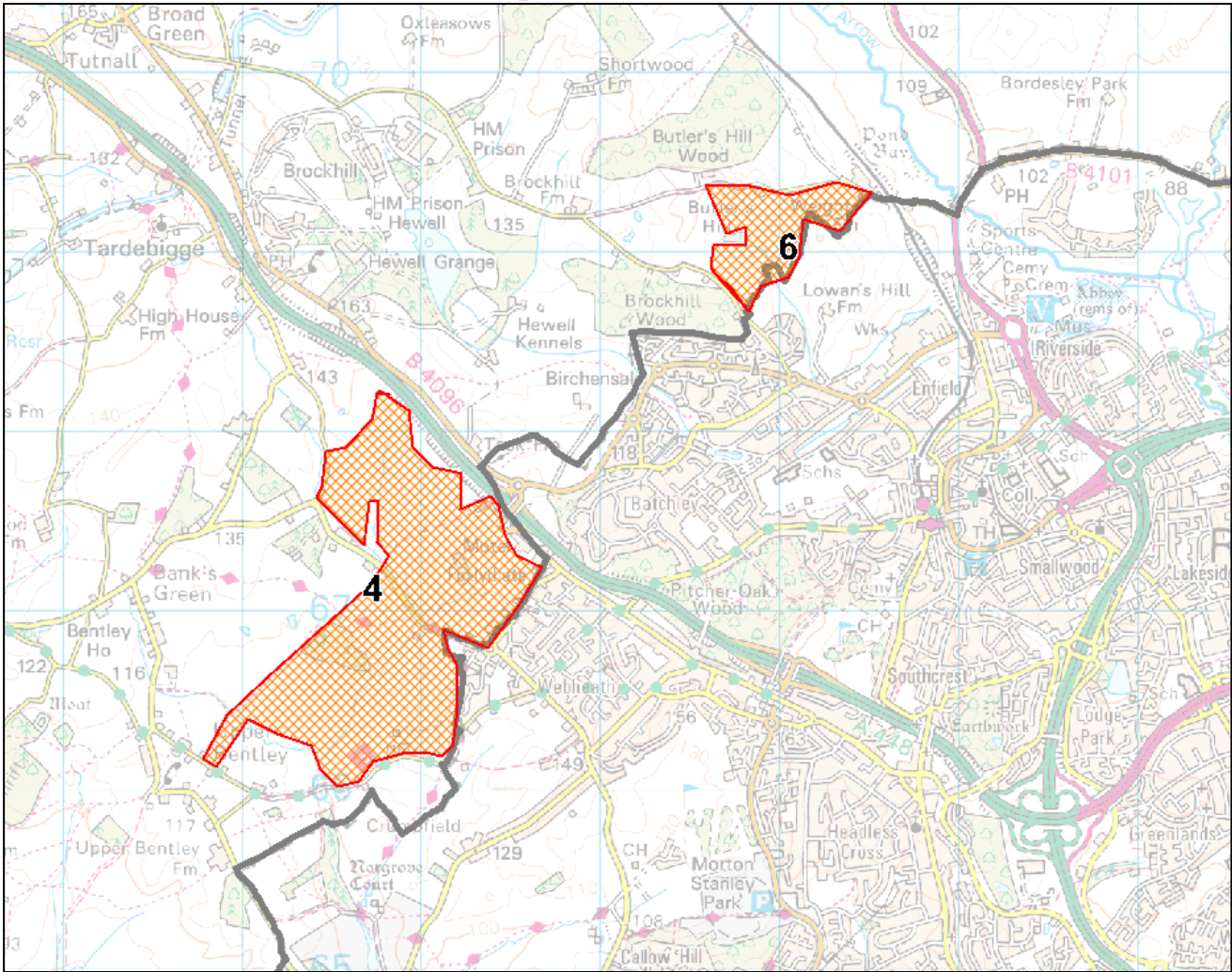


Local Plans	Residential (Dwellings)	Employment (Ha)
Redditch Core Scenario	2,951	30
Cross Boundary	3,400	n/a

Final RLP Planning Assumptions



Cross-Boundary Sites



Overview of Findings (I):



Without mitigation RLP planned growth:

- The key issue is development access to the Primary Road Network (A Roads) in Redditch Borough
- Some adverse impact at a number of key pinch points across the whole of the Borough network and across all modes of transport

If the network performance is not to deteriorate:

- Mitigation measures needed across all transport modes
- Need to maximise use of sustainable modes, particularly to/from within Redditch urban areas

The Evidence

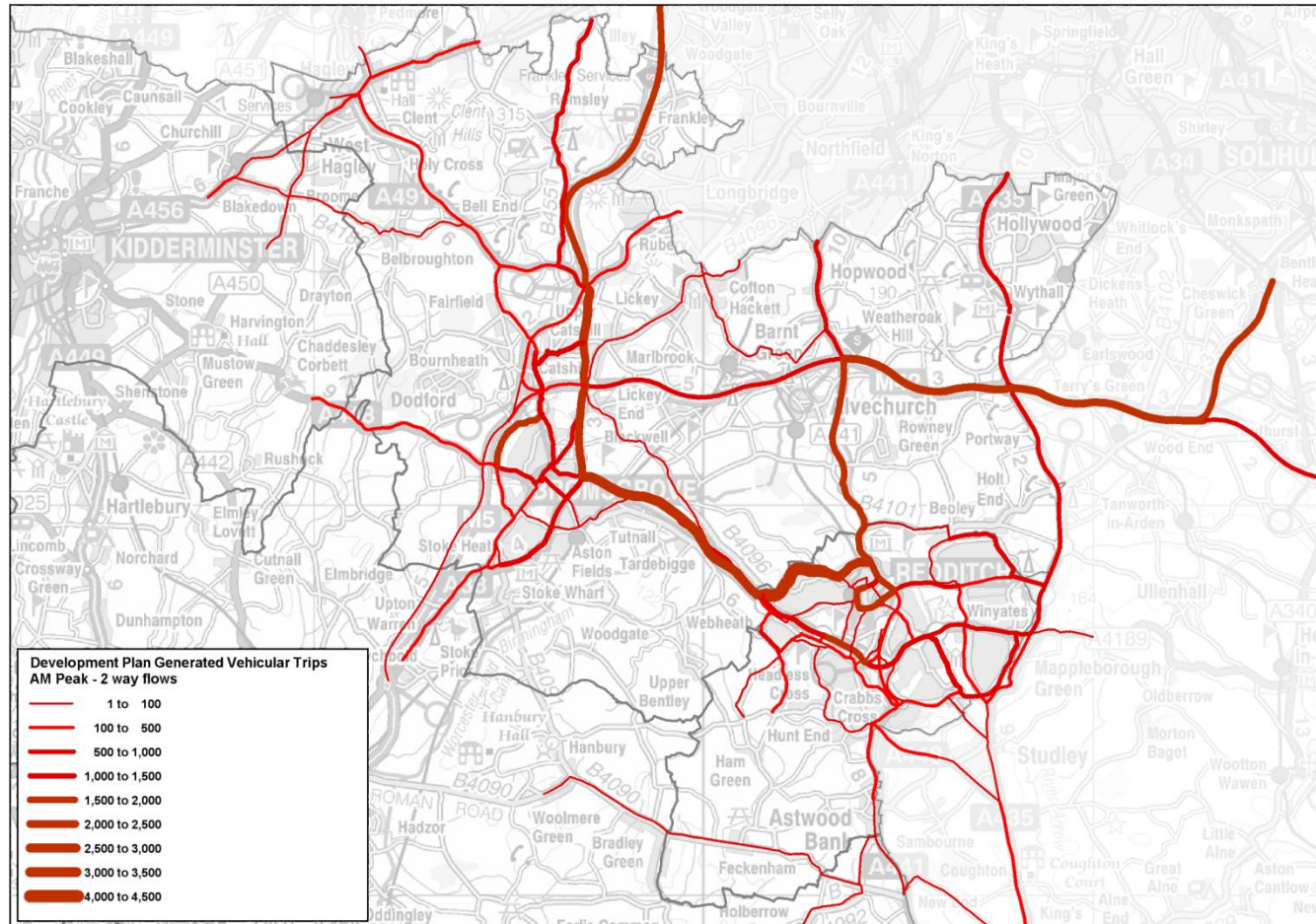
Forecast Additional Vehicular Trips Generated by Planned Growth



Link		Additional Vehicular Trips	
		AM Peak Hour	PM Peak Hour
A441 Alvechurch Highway (Weights Lane-Dagnell End Junction)	N	899	976
A441 Alvechurch Highway (Weights Lane-Dagnell End Junction)	S	690	785
A441 Birmingham Rd (Dagnell End Junction-M42 J2)	N	908	1013
A441 Birmingham Rd (Dagnell End Junction-M42 J2)	S	731	792
A441 Alvechurch Highway (Riverside R'about-Weights Lane)	N	912	1001
A441 Alvechurch Highway (Riverside R'about-Weights Lane)	S	712	804
A435 Alcester Road (South)	N	273	869
A435 Alcester Road (South)	S	631	277
A435 Haydon Way	N	104	76
A435 Haydon Way	S	90	109
A448 Bromsgrove Highway (Bromsgrove Rd-Windmill Drive)	E	1016	572
A448 Bromsgrove Highway (Bromsgrove Rd-Windmill Drive)	W	437	1508
B4184 Brockhill Drive	E	2153	1963
B4184 Brockhill Drive	W	2114	2056
B4184 Brockhill Drive (East)	E	1856	1444
B4184 Brockhill Drive (East)	W	1297	1595

The Evidence

Forecast Distribution of Planned Growth Demand



Overview of Findings (2):



Mitigation scheme costs:

Highways: £20.4m

Walk, Cycle and
Passenger Transport: £0.5m

TOTAL: £20.9m

Note; does not include post 2022 BDP Growth or Highways Agency works

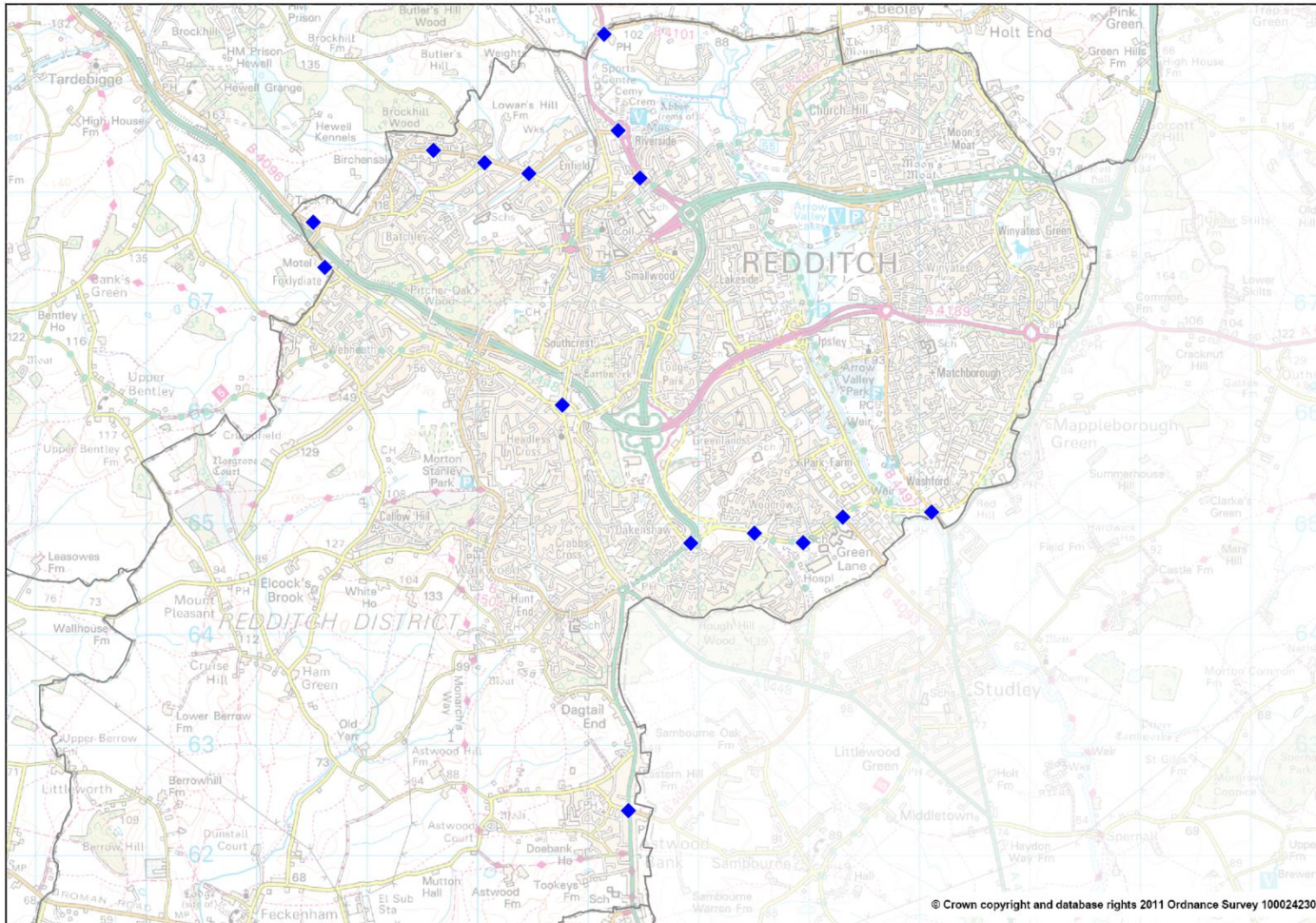
Overview of Findings (3):



- Highway mitigation schemes include:
 - Major corridor works to improve traffic flows and support pedestrian movements (e.g. Brockhill Drive)
 - Traffic signals enhancement and optimisation (e.g. Dagnell End)
 - Safety schemes (to deal with additional traffic flows)
 - Proposed junction re-configuration (e.g. south-east Redditch) – consistent with recent Warwickshire CC PARAMICS study

The Schemes

Highway schemes – Redditch Borough



The Schemes



Highway Schemes – Junction Re-configuration

- Capacity enhancements through:
 - Additional approach lanes
 - Extended turning lanes
 - Exit widening
- Consolidate pedestrian crossing points

The Schemes

Highway Schemes – Traffic Signal Enhancements



Capacity and system management enhancements through:

- Dynamic signal control system (signals optimisation)
- MOVA
- Selective vehicle detection
- Consolidated/Enhanced pedestrian facilities

The Schemes

Highway Schemes – Safety Schemes



- Safety Zones (Schools) – Traffic Management, including TROs
- Controlled approaches to priority junctions

The Schemes



Passenger transport mitigation schemes include:

- Improved facilities at rail stations
- Improved infrastructure along key corridors (e.g. Route 143 Corridor)
- Improved information (e.g. real time)
- Improved services linking developments with key destinations (incl. Rail Stations)

The Local Passenger Transport Schemes



- Infrastructure - focus on key corridors (e.g. I43, X3)
- Information provision (including real time) – focus on key trip attractors/generators
- Inter-urban and town services linking developments to key trip attractors/generators, including Redditch railway station

The Walk & Cycle Schemes



- Additional walk & cycle routes and facilities
- Improved information & signage
- Additional/Consolidated crossings to overcome severance issues
- Cycle facilities at key trip attractors/generators
- Improved/new walk & cycle access to railway station

Next Steps



- Continue detailed design work
- Assess phasing issues in conjunction with planners
- Assess funding opportunities (including public sector)
- Seek to quantify post 2022 issues
- Work with Highways Agency to understand and mitigate impact upon key junctions
- Prepare next iteration of transport evidence in support of Draft Local Plan No.4 (Draft RLP)