



M11 Junction 8

Frequently Asked Questions
October 2018

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Changes to the Road Layout

Why is Essex Highways proposing improvements to Junction 8 of the M11 and A120/A1250 Dunmow Road junction?

The M11 and A120 are important north-south and east-west routes respectively for the region, connecting Essex to the rest of the country and providing access to one of the region's major airports, London Stansted Airport, at M11 Junction 8.

However, Junction 8 of the M11 and the adjacent A120/A1250 Dunmow Road roundabout suffer from congestion and are severely lacking capacity at AM and PM peak time periods. These traffic issues will worsen in the future because of additional traffic on the road network from planned developments in the north of Bishop's Stortford, as well as local growth planned in east Hertfordshire and Uttlesford, and the continued growth of London Stansted Airport.

What are the proposals?

We have planned a series of improvements to create additional lane capacity on the off-slips of the M11 at Junction 8 and replace the roundabout at the junction of the A120 / A1250 Dunmow Road with a staggered signalised junction. We will also introduce a reduced speed limit of 50mph (A120 and A1250) and signal-controlled crossings.

The details of the proposed changes at each location are as follows:

South-west of M11 Junction 8 (Northbound Off-Slip)

- An additional inside approach lane from the M11 Junction 8 northbound exit slip onto the A120, with dedicated access into Birchanger Green Services
- Install upgraded traffic signals that will be elevated on mast-arm gantries.

West of M11 Junction 8 (A120/A1250/Birchanger Roundabout)

- Replace the existing A120/A1250 Dunmow Road roundabout with a signalised junction
- Widen the A120 eastbound and westbound to three lanes on the approach to the new junction with A1250, introducing a dedicated lane for A1250 traffic, and a new right turn lane for traffic for Birchanger Lane
- Realign Birchanger Lane at the new A120 junction within the highway boundary
- Install toucan crossings (shared pedestrian and cycle crossing) to connect both sides of the A120, with new footway extending to Birchanger Village and provision of on and off ramp to the on-road cycleway
- Realign the bus laybys on A1250 Dunmow Road with uncontrolled pedestrian crossing
- Create spur link off Birchanger Lane for direct access to Bishop's Stortford / A120 (West) for buses/taxis/ambulances
- Reduce the speed on the A120 to 50mph through the scheme area.

North-east of M11 Junction 8 (Southbound Off-Slip)

- Add an additional outside approach lane on the M11 Southbound slip road to separate traffic to London Stansted Airport, the A120, Takeley, the services, and Bishop's Stortford
- Upgrade traffic signals that will be elevated on mast-arm gantries and overhead signage.

What are the benefits of these proposed improvements?

These changes will:

- Improve access from the M11 to the A120, London Stansted Airport, Bishop's Stortford, Birchanger Services and Takeley, and improve access from A1250 to M11 and A120 (eastbound and westbound movements)
- Reduce congestion experienced at peak times particularly between 07:00-08:00 and 17:00-18:00
- Improve capacity to address congestion, encourage streamlined traffic and better lane discipline
- Enhance traffic movement for regional residents and businesses from M11, A1250 and A120
- Support local plan delivery and future investment
- Provide better facilities for people who walk and cycle.

Why are you proposing to replace the A120/A1250 Dunmow Road roundabout with a signalised junction?

As part of the preparation for the scheme we have undertaken traffic modelling, which allowed us to test different junction scenarios using predicted traffic flows up to 2036.

Our traffic modelling shows that the best option for the A120 / A1250 Dunmow Road junction is a combination of a signalised junction (replacing the roundabout), widening the existing carriageway to three lanes in each direction and on the approach to the A1250 Dunmow road junction, and overall control of traffic flow using traffic lights.

This plan will reduce queueing experienced at peak times, improve capacity, and enhance traffic movement for residents and businesses. The traffic lights at the new A120 / A1250 junction will include toucan crossings, enabling safer journeys for people who walk and cycle to travel between Birchanger Lane and Dunmow Road.

What is the long-term solution? How long will that take? Why aren't you proposing a more radical solution?

The most likely long-term solution would be either to create a new junction located to the north of Junction 8, or a major upgrade of the existing structure Junction 8. These options continue to be investigated, however, we need to do something in the short to medium term to ensure that traffic movements are maintained.

The short to medium term improvements of widened slip roads and signalised A120 / A1250 junction offer the most benefits to traffic movements in helping to meet existing and future traffic growth up to 2036.

The issues are caused by Junction 8, not the A120 / A1250 roundabout. Why can't something be done about Junction 8 or the Motorway Services?

- The A120 / A1250 is connected to Junction 8 so the issues on both roundabouts cannot be considered in isolation
- A few options are being considered for Junction 8 (in addition to widened slip lanes) such as improving the signal timings, road markings and an improved exit from motorway services. The long-term solution is a new junction north of Junction 8, or a major upgrade of Junction 8
- These short to medium term improvements of widened slip roads and signalised A120 / A1250 junction offer the most traffic benefits to 2036, helping to meet existing and future traffic growth.

Why can't you move Birchanger Services?

This is not currently being considered but may be part of a long-term solution (e.g. new junction north of Junction 8 with amenities).

The proposed addition of a dedicated slip lane into the services in combination with the private application by the owner of Birchanger Services for a potential HGV exit onto Dunmow Road will help alleviate congestion problems on Junction 8.

Have you considered creating an earlier dedicated exit for northbound traffic to the motorway services direct from the M11?

Constructing an earlier dedicated exit upstream would mean this road would be adjacent to a significant section of embankment that protects a section of woodland in front of Bishop's Stortford Golf Club. The difference in the levels between the motorway and the suggested early entry point would make this proposed solution difficult to achieve.

In addition, a fuel station is located at the southern end of Birchanger Services and an access road in this location would be tightly constrained.

How will the HGV exit from the Motorway Services be safely controlled? Will an additional set of signals on the A1250 cause delays to traffic to and from Bishop's Stortford?

The HGV exit would be signal controlled so traffic on the A1250 will be stationary before allowing HGVs to safely exit. The signalised exit would also be linked to the main A120 / A1250 signalisation to minimise any potential delay on Dunmow Road, for both traffic to and from Bishop's Stortford.

What is being done to stop poor driving/poor lane discipline around Junction 8?

The problem of drivers changing lanes too late and blocking other approach lanes around the roundabout at Junction 8 is known about and was further highlighted in the feedback we received at the recent exhibitions attended by Takeley and Birchanger residents.

We have since raised this concern with Highways England. We will also be looking at improvements which may include the modification of signal timings as well as guiding lines through the yellow boxes.

What other options have you looked at? Why is the Birchanger arm affected?

Other A120 / A1250 roundabout options were considered including:

- Roundabout enlargement
- Widened approaches
- Spiral markings.

These alternative options have not been taken forward as they required private land take or did not fully meet the scheme objectives of addressing existing congestion issues, future traffic growth, and did not offer the same opportunities to make improvements to facilities for walking and cycling.

This scheme can be delivered by making changes within the existing highways boundaries and offers the most benefits as a combined package across both M11 J8 and A120 / A1250 / Birchanger Lane junction.

Please see the next page for mitigation on the Birchanger arm of the junction we are considering in relation to this issue.

What happens if nothing is done?

Without intervention, the existing roundabout will be close to reaching practical capacity in 2021 and is likely to be failing by 2036 on the A120 approaches.

Increased traffic will add to the deterioration in performance of Junction 8 and the A120 / A1250 roundabout causing further congestion, tail-backs, air quality issues, accidents and extended journey times.

The current high levels of congestion are not limited to the rush hour, or two hours per day; congestion peaks in the AM between 07:00 - 08:00, and in the evening PM between 17:00-18:00, but is busy overall in both AM / PM periods.

Doing nothing would result in disadvantages for all, with all arms of the existing A120 / A1250 roundabout becoming gridlocked and exit from Birchanger Lane made more difficult by congestion in peak hours.

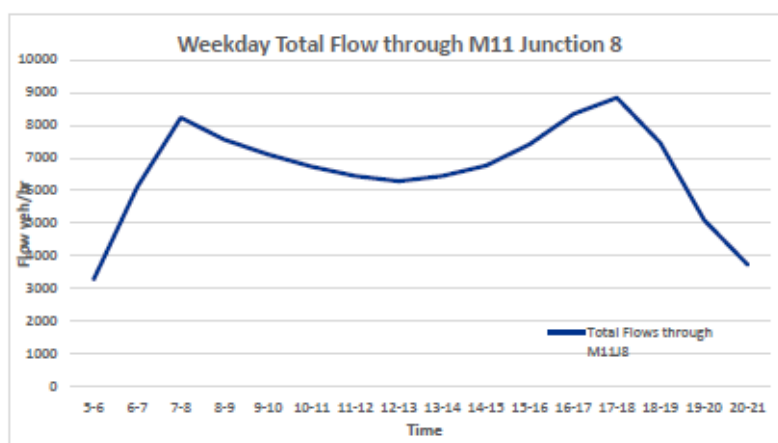


Figure 3 : M11 Junction 8 Weekday Flow Profile

Why are you proposing to make the Birchanger Lane / A120 junction left-turn only? *

- If the plan were to allow traffic leaving Birchanger Lane to turn right, it would need an additional stage in the traffic signals (adding over 15 seconds). This would lead to queueing on A120 / A1250 that would increase journey times and cause delays. This would reduce the benefits of signalisation to 2036. Over 20,000 vehicles use the A1250 / A120 roundabout, with less than 1,000 from Birchanger
- Our traffic modelling data from 2014 and forecast for the years 2021 and 2036 shows that most of the movements from Birchanger Lane are vehicles turning left towards the M11, followed by vehicles straight ahead to Bishop's Stortford
- Traffic for Bishop's Stortford from the south end of Birchanger Lane will be directed via the Junction 8 roundabout, and journeys will be slightly longer. The worst possible forecast waiting times are no worse than the forecast if a 'do-minimum' scenario were employed (retaining existing roundabout) resulting in stationary traffic on the roundabout in the AM and PM causing tailbacks/delays
- The impact on Birchanger residents has had to be carefully balanced with the benefits for the busiest arms of the junction. Doing nothing would result in disadvantages for all, with the existing roundabout becoming gridlocked and exit from Birchanger Lane made difficult by congestion in peak hours.

** A bus corridor link is being considered for buses/taxis direct to Bishop's Stortford and A120 westbound, with the options being considered for all traffic using the link for a period. Our planned design has been reviewed to accommodate this link (please see updated illustration at www.essex.gov.uk/m11junction8 for further details).*

How are these improvements going to be funded?

- Essex Highways has been granted funding from the Department for Transport's National Productivity Investment Fund, along with a number of other partners including London Stansted Airport and SELEP.
- Financial support is being provided by The Greater Cambridge & Greater Peterborough Local Enterprise Partnership (£1.0m), Manchester Airports Group - Stansted Airport – support for scheme, including financial (£1.0m), DfT (£4m) SELEP – support, and growth fund £2.7m.

Have the owners of Birchanger Service Station been involved financially in your decision?

No, the owner of Birchanger Services is not providing any financial contribution to the scheme.

Financial support is being provided by The Greater Cambridge & Greater Peterborough Local Enterprise Partnership (£1.0m), Manchester Airports Group - Stansted Airport – support for scheme, including financial (£1.0m), DfT (£4m) SELEP – support, and growth fund (£2.7m)

The scheme will be beneficial to road users accessing the services by providing a dedicated lane at Junction 8 to access the Services from the northbound slip. This will help to ensure that road users for other destinations are not delayed by traffic for the Services (currently the case) and will improve capacity at the junction for all traffic.

Can restrictions be enforced at Birchanger Lane to stop HGVs and large vehicles routing through the village?

Signage indicating that Birchanger Lane is unsuitable for HGVs will be reinstalled on the entrance to Birchanger Lane at the junction with A120.

Why can't the existing A120 / A1250 Dunmow Road roundabout be signalised?

Signalising the existing A120 / A1250 roundabout would only provide short term benefits for five years, at which point further intervention would be required to keep traffic movement flowing. The planned scheme to replace the roundabout with a new staggered signalised junction will provide medium term benefits for 15 years, while a long- term plan is investigated.

The additional lane approaches on the A1250 and A120 will also help to reduce queuing by improving capacity at the junction.

Will this scheme cause an increase in 'rat-running' through Birchanger village by encouraging traffic to London Stansted Airport to take a short-cut when the A120 or M11 is congested or closed?

No we do not expect that additional motorised traffic from B1383 Stansted Road would be diverted through the village as a result of these changes, as the journey time via Birchanger Lane (with 30mph speed limits and a number of bends and exit signals) will be higher than the time taken to travel via B1383 roundabout and A120 eastbound (with 50mph speed limit and with additional approach lane and junction signals).

A “rat-run” scenario from the B1383 is not expected once the scheme is completed, as B1383 traffic for the M11 will not encounter two sets of red lights (compared to one for Birchanger exit), as the A120 eastbound traffic lights and toucan crossing will be linked on a green phase allowing through traffic to progress through.

However, we do appreciate that incidents which occur on B1383 Stansted Road sometimes lead traffic to make a diversion through Birchanger Lane. These improvements are not expected to increase the frequency of these diversions.

Why haven't you considered the needs of Birchanger residents?

We have considered all M11 J8 and Birchanger Roundabout users including the needs of all regional residents and businesses, road users, those who walk / cycle, and bus passengers when considering the best overall design of the scheme.

The scheme includes improvements to sustainable travel in the local area which will benefit Birchanger residents; including a footpath extending to Birchanger Village, improved pedestrian and cyclist crossing facilities, and improvements to bus facilities which will improve safety for residents travelling on foot, bicycle, or by bus.

We have modelled traffic flows at both ends of Birchanger Lane – and considered the effect on journey times for residents – however, we must balance the small number of journeys that are affected for Birchanger residents with the immediate benefits of the scheme for all the other users of the junction.

Doing nothing will lead to greater problems accessing the road network for all residents, including delays for Birchanger residents. These would be evident by as soon as 2021. Including a right turn from Birchanger Lane onto the new junction design would remove any overall benefit of the scheme as this would require another phase of signalling at

the junction. However, in response to the concerns of Birchanger residents we have agreed to consider the introduction of a spur link road for buses, taxis, and emergency vehicles.

We are looking at whether it would be possible to make this spur link road accessible for local traffic for a trial period.

Won't this scheme cause extra congestion through the other side of Birchanger village to Stansted Road?

Residents may choose to use the other access point (the junction to the north of Birchanger Lane with Stansted Road). Our traffic modelling shows that residents switching entry and exit points would not compromise traffic flow at the Stansted Road junction (53 vehicles switching from south to the north in AM peak and 23 in PM peak).

Residents choosing to use the southbound exit of Birchanger Lane would experience longer journey times, however, even at worst, these journey times would be no longer than the 'do-minimum' scenario.

A sustainable corridor link is being considered for buses/taxis for direct access south and options are being considered for use by local village traffic.

How would forcing extra traffic onto the Junction 8 roundabout relieve congestion on the roundabout?

The number of vehicles which would make the left only turn from Birchanger towards the M11 J8 roundabout is a small proportion of the overall traffic flow through junction. The overall signalisation of the A120 / A1250 junction will improve traffic flows across the combined junctions of A120 and J8.

Improvements to junction traffic (such as the extra lanes eastbound and westbound on A120, and additional lane on the Junction 8 roundabout for the services) will more than compensate for the small increase in traffic redirected onto the Junction 8 roundabout from Birchanger.

What is London Stansted Airport's involvement in the scheme, and what will happen if the airport expands further?

- These works are being contributed to financially by the airport (along with other contributing parties) under legal agreements relating to the current planning permission. This allows for up to 35 million passengers. The current scheme will provide the required capacity in the short-medium term (until approximately 2036)
- A further package of works for M11 J8 are proposed to be funded by the airport, if planning permission is granted by Uttlesford District Council for up to 43 million passengers
- A larger scheme that would better serve the expected longer-term future growth in the local area, such as another junction, may be more appropriate and all options for funding this will be considered at the appropriate time.

When did you get your data? And what area did you use to monitor data?

Traffic data used to inform the scheme at M11 Junction 8 was gathered in surveys carried out on 15th July 2014 at the following locations: M11 Junction 8, (ANPR survey) and A120 / A1250 (MCC survey).

The Harlow Transport Model was used, with the data from 2014 as the “base year”. This model was used to provide an assessment of traffic levels for future years 2021, and 2036. Further assessments (Linsig, TUBA, and VISSIM) also incorporated Junction 7A.

Have you taken housing development into account?

Yes, the impacts of committed local housing developments have been considered in the changes and the design will accommodate the expected increase in traffic to 2036.

Without these improvements the road network will reach capacity by 2021. These improvements will provide a short-medium term solution until 2036 to accommodate local growth. We will look to fund longer term schemes for improved capacity which will address the existing problem and committed local developments.

Why is there no northbound M11 slip road from the westbound A120 which would remove a large percentage of traffic from the junction 8 roundabout?

The additional lane on northbound slip into the Services will increase capacity in other lanes for the movement of westbound A120 traffic northbound on the M11.

I have concerns over potential detrimental impact on existing green or wooded space, including Birchanger Wood

There will be no impact on Birchanger Wood, to the west of the junction.

Our environmental studies have shown that protected species of animal or plant will not be affected by the scheme.

There will be more green space created at the junction of the A120 with the A1250, as the removal of the existing roundabout will afford the opportunity to return some of the land to greenery.

Sustainable Transport (Walking, Cycling, and Bus Services)

Why are you improving links for cycling and walking at the A1250 / A120 junction with Birchanger Lane when most residents use cars?

While pedestrian and cyclist counts are currently low, the addition of safe toucan-crossings, a controlled crossing to improve access to the bus stops on the A1250 Dunmow Road, new footways, and safer cycle links will promote more sustainable journeys in the local area to help reduce the reliance on car journeys for residents. Those making short journeys by foot or by cycle will find it easier to access amenities in Bishop's Stortford.

The toucan crossings will be timed to allow crossing in line with appropriate signal phasing and will not cause an additional delay to traffic flow.

In addition, improved signage will provide better guidance for connectivity to the National Cycle Network and the M11 bridleway crossing (overbridge).

The improvements to cycling and walking facilities are not being built at the expense of existing motorised road users. They are intended to give residents safer alternative options to make short journeys by foot or by bicycle.

What kind of crossing will be provided on A1250 Dunmow Road? Is this Pelican, Puffin or Toucan?

The new uncontrolled crossing between bus stops on Dunmow Road is proposed to be upgraded to a "Puffin" crossing by the private developer of the planned HGV exit at Birchanger Serviced. This is designed to make access to buses safer for pedestrians.

What is being provided for people who cycle?

The existing cycle markings and signage on Birchanger Lane will remain. These existing measures will be accompanied with on/off ramps at the new Toucan controlled crossings at the junction with A120 to allow safer/easier transition for cyclists across the A120.

What has happened to the proposed cycle route linking Stansted through to Bishop's Stortford?

The National Cycle Route (NCN) from Birchanger Village to Stansted via the bridleway overbridge has been upgraded and resurfaced on the approach, with additional cycling signage installed.

Further opportunities to improve cycle links in the area will be considered.

As part of the M11 Junction 8 improvements, a safer signal-controlled Toucan crossing on the A120 and on/off ramps on Birchanger Lane will be provided for pedestrians and cyclists connecting to Bishop's Stortford.

What is going to happen to bus services?

We are aware of the concerns regarding local bus services (particularly the direct service through Birchanger Village to Bishop's Stortford).

We are seeking to maintain existing bus journey times and reliability of the services by considering additional measures such as a sustainable corridor link allowing buses and taxis to continue straight ahead or right turns at the junction of Birchanger Lane with the new junction with the A120 and A1250.

The traffic modelling of the proposed bus spur link road (allowing for an hourly bus service with on-demand signal phase) shows no negative impact to the signalisation benefits, and so this will be considered within the design and submitted within the revised application to Uttlesford District Council.

What happens if bus priority is not provided as part of the scheme?

Bus services overall would be relatively unaffected by the proposed changes. However, bus services linking Birchanger with Bishop's Stortford would take longer on the leg of the journey towards Bishop's Stortford which we appreciate could possibly result in additional running costs.

We will work with bus companies to help avoid / mitigate this scenario and will be considering other options to reduce the impact on bus travel times, such as bus priority during peak hours, signal priority, etc.

Have you talked to the bus companies about the scheme?

We have contacted bus companies and will aim to work with them as the scheme progresses to maintain bus journey times through the junction during the works, and in the long term.

Why are you proposing to remove the crossing points at Junction 8 of the M11?

The current informal crossings used by pedestrians and cyclists around the roundabout at Junction 8 are more direct than alternative routes but are not considered to be safe. Motorised vehicles from the junction enter the northbound on-slip towards Cambridge at an accelerated speed after the green signals, making it hazardous for pedestrians to cross at these points.

While there is currently an uncontrolled crossing point on the northbound on-slip of the M11, motor vehicles accelerate quickly when the roundabout traffic lights turn green. Between both slip roads (northbound and southbound) the gap between the parapet and safety barrier is not formal or an adequate width for safe crossings.

The proposed addition of an extra lane on the southbound approach to the M11 junction 8, which is where the dropped kerbs crossing currently is, means that the new carriageway at the junction will be five lanes wide. This will become unsafe to cross.

The option of adding a controlled crossing is not viable, as this would add a further 15-18 second delay to traffic on the roundabout.

Construction

When will construction begin? How long will it last?

We anticipate that advance works will commence this winter (2018/19), with full construction phase commencing in late spring 2019 and lasting approximately two years, however the start dates, and duration of works may be subject to change.

Residents and businesses will be kept updated with regular updates to the website, and letters (where appropriate) where construction is expected to have any direct impact.

Why are you removing vegetation and trees on the A120 southern verge?

Site clearance is necessary to enable advance works including BT to divert / set-back fibres ahead of the main works involving widening of the A120 to three lanes. This work was carried out under ecological supervision in accordance with the arboriculture report and necessary protection measures.

A landscaping plan is part of the main works and this will involve re-seeding and tree-planting the areas that have been cleared.

Further information on advance works will be published on the website in due course.

Coordination of works with Hertfordshire County Council (HCC)

Over the coming months HCC will begin a programme of improvement works on the A120 corridor in Hertfordshire between the junction with the A10 and Bishop's Stortford, which aims to reduce journey times and improve journey time reliability.

These works will culminate in the construction of the A120 Little Hadham Bypass which is also planned to commence in spring 2019 in a similar time-frame to the M11 J8 Improvements. We will continue to work closely with HCC to ensure that any traffic management for the schemes is coordinated and traffic disruption is kept to a minimum.

For further information on Hertfordshire County Council's plans please visit the HCC website: <https://www.hertfordshire.gov.uk/services/Highways-roads-and-pavements/Roadworks-and-road-closures/Major-roadwork-projects/A120-Little-Hadham-bypass/Little-Hadham-A120-bypass-and-flood-alleviation-scheme.aspx>

During construction, can temporary traffic lights be implemented at the junction of Birchanger Lane and Stansted Road to allow villagers to exit Birchanger Lane?

This suggestion will be considered as part of the pre-construction traffic management plan.

We will specify to the awarded contractor that all arm movements (including Birchanger Lane) to and from the roundabout will need to be kept open to traffic.

There may be temporary disruptions involving overnight closures during construction, but residents will be notified in advance and any disruption will be kept to a minimum.

Further information

Where can I find more information?

The background to the scheme including full details of the plans for each arm of the new junction layout, and M11 slip roads is available at www.essex.gov.uk/m11junction8.

The website will be kept updated with details of progress, construction time-lines and latest information.

Is there an opportunity to comment on these proposals?

We held two public information events for residents and businesses on 13 and 14 September 2018 to listen to local feedback on the scheme.

Whilst there is not any formal consultation for these works, as the changes are being carried out as a “permitted development” within the existing highway boundary, we have been careful to consider the views of residents and businesses and will continue to carefully listen to any feedback on the scheme as the plans progress.

You can let us know if you have any comments of the scheme via the feedback link on the webpage. We will continue to review any messages sent to us online before the construction phase begins.

The website will be updated with details of progress, construction time-lines and latest information.